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Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: February 6, 2013

ADDENDUM # 5

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

We are enclosing Addendum No. 5 for the subject requisition:

Below are notes that are meant to clarify sections of the RFP. Attached is a list of proposer questions with corresponding answers provided by the CTA.

1. **Reference: PROPOSER QUESTIONS**

Attached is a list of proposers' questions and CTA's answers.

2. **Reference: CONTRACT FOR SUPPLIES: SPECIAL CONDITIONS**

Attached is an updated Contract For Supplies: Special Conditions. These pages shall replace the existing **Contract For Supplies: Special Conditions** pages. All updated language has been highlighted, no other changes have been made to this section.

Please acknowledge receipt of Addendum No. 5 on the Proposal page titled Bidders Signature Page. Failure to acknowledge receipt of any addenda may cause your bid to be non-responsive.

The proposal due date remains Thursday, February 14, 2013, 3:30 p.m., local Chicago time.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

Ellen McCormack
Vice-President, Purchasing

Enclosures (11)

cc: E. McCormack
K. Brosnan
Contract File (C12RI101317082)

C12RI101317082

#	Subject	PROPOSER QUESTION:	CTA RESPONSE
1	Firm Finances	<p>The RFP requires, "Documents supporting a firm's and subcontractor(s)' financial stability and ability to perform the contract must be included as well. Respondent must provide audited financial statements or any other documentation demonstrating sufficient financial capacity to successfully complete this project."</p> <p>Our concern is that certain of our subcontractors (especially DBE's) may not be required to issue audited financial statements since they are not publically traded.</p> <p>Accordingly, the question is, could we not provide the suppliers financial statements in the tender phase?</p> <p>Naturally is up to the Prime Contractor to verify and identify the capability of the subcontractors. (Section III.B.2.d.)</p>	A financial statement will be required from the prime contractor alone. CTA shall forgo the requirement for subcontractor financial statements.
2	Indemnification	<p>The indemnification requirement is very broad. Would Chicago Transit Authority delete this section in its entirety, and replace it with the following:</p> <p>3. INDEMNIFICATION: "The Contractor shall indemnify, defend, and save harmless the Chicago Transit Authority and all its officers, agents, and employees against all suits, claims, or liability of every name and nature, for or due to any injuries to persons or damage to property arising out of or in consequence of the negligent acts or negligent failure to act of the Contractor in the performance of the work covered by the Contract or failing to comply with the terms and conditions of the Contract, whether by the Contractor or the Contractor's employees or Subcontractors."</p>	No, the language shall remain as it is currently written in the RFP.
3	Disputes	<p>The Disputes provision does not allow for arbitration, which is more efficient than filing an action in court. Would Chicago Transit Authority delete this section in its entirety, and replace it with the following:</p> <p>12. DISPUTES Any controversy, claim or dispute arising out of or relating to this Agreement, either during the existence of the relationship or afterwards, between the parties hereto shall be submitted to the authorized representative of each party. In the absence of agreement between the parties after submission to the authorized representative of each party, any dispute shall be finally settled pursuant to the Commercial Arbitration Rules of the American Arbitration Association ("AAA") which are in force at that time. The sole and exclusive venue for any disputes, claims, causes of action, legal or equitable shall be arbitration. The arbitration proceedings shall be conducted in the State of Illinois. The parties consent to this jurisdiction and shall not contest venue or personal jurisdiction in this forum. The arbitrator's finding shall be final and binding. Judgment upon the award may be entered in any court of competent jurisdiction in the United States.</p>	No, the language shall remain as it is currently written in the RFP.
4	Warranty	<p>The requirement as listed goes beyond the industry standard warranty requirement. Would Chicago Transit Authority delete this section in its entirety, and replace it with the following:</p> <p>5. WARRANTY "For a period of twelve months following delivery of any part, Contractor warrants, to Chicago Transit Authority only, that goods and services associated with that part will conform to the Original Equipment Manufacturer (OEM) specification. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE SAID DESCRIPTION, NOR ANY SUCH WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE OR MERCHANTABILITY. Such express warranty is given on behalf of the Contractor only, and is expressly in lieu of and excludes and supersedes any warranty of merchantability or fitness for any particular purpose, and all other warranties, express or implied from any other person or entity, including the manufacturer of any component part. In accordance with this warranty, Contractor will correct either by repair, or by the supply of a replacement part, or compensate therefore by equitable adjustment of the contract price, at Contractor's sole option, any defect which may be discovered after delivery or during proper use of the goods, and which is due solely to faulty design, materials, or workmanship not in accordance with the said description; provided, however, that Chicago Transit Authority gives Contractor written notice of such defect promptly after it is discovered or within a reasonable time after it should have been discovered, and in any event, not later than twelve (12) months after the delivery. If such notice of defect is not so given, Contractor's obligation to correct such defect or compensate therefore shall terminate. Parts that are repaired, modified, or replaced shall be warranted for the remainder of the warranty period of the part originally supplied. In any event, the foregoing obligation to correct or compensate constitutes the exclusive remedy for any such defect or breach of warranty, and constitutes Contractor's entire liability, and neither Contractor, nor the manufacturer or their employees or agents shall be liable for any injury, loss, or damage whatsoever, which Chicago Transit Authority may suffer or incur by reason of any such defect or of the necessity of correcting the same, whether a claim is based on breach of contract, negligence, strict tort or any other theory."</p>	No, the language shall remain as it is currently written in the RFP.

5	Additional Liability Language	<p>The RFP excludes consequential or incidental damages, but only with respect to late deliveries and intellectual property indemnification. Would Chicago Transit Authority consider insertion of a new section in the Special Conditions as follows?:</p> <p>"EXCLUSION OF LIABILITY FOR CONSEQUENTIAL LOSS OR DAMAGE Notwithstanding any other provision of this Contract, Contractor shall not be liable to the Chicago Transit Authority by way of indemnity or by reason of any breach of this Contract or of statutory duty or by reason of any liability (including, but not limited to negligence) for loss of profit, loss of subsidy, loss of production, loss of any tax benefit, financing costs, or for any financial or economic loss or for any indirect or consequential damage or loss whatsoever that may be suffered by the Chicago Transit Authority or any third party."</p>	No, the language shall remain as it is currently written in the RFP.
6	Limitation of Liability	<p>The Contractor's Liability under the Contract is unlimited. Bidders will have to price in this risk accordingly. Would Chicago Transit Authority consider insertion of a new section in the Special Conditions as follows?:</p> <p>"LIMITATION OF LIABILITY Contractor's total aggregate liability under the contract whether based upon contract, tort (including negligence and strict liability) or otherwise, shall in no event exceed one hundred percent (100%) of the total contract value. All claims by the Chicago Transit Authority against the Contractor arising under the contract shall be brought within three (3) years after the end of the warranty under this contract."</p>	See the Limitation of Liability that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
7	Statutory and Implied Warranties	<p>There is no mention about statutory and implied warranties in the Contract. The Contractor should be able to rely upon the scope of warranty expressly set out in the Contract so that it may establish its costs. We suggest for greater clarity, please include the following language in the Contract: <u>"The warranties, guarantees, obligations and liabilities of the Contractor set forth in this Contract are expressly in lieu of any other warranty, express or implied, including any implied warranty of merchantability and fitness for a particular purpose."</u></p>	See the revised special conditions included with Addendum 5.
8	Prompt Payment to Subcontractors	<p>The Contract states that the Contractor is required to pay all Subcontractors for all work that the Subcontractor has satisfactorily completed, no later than 7 calendar days after the Contractor has received payment from CTA. This timeline to pay Subcontractors is quite aggressive. We are requesting that the timeline to all Subcontractors be changed from 7 calendar days to 30 calendar days.</p>	The Prompt Payment language can be discussed at preaward negotiations.
9	Other Damages Liability	<p>Though the Contractor should expect to bear the consequences for its own acts or omissions, it should not be exposed to seemingly unlimited liability. As the Contract is written, there is no limitation on the Contractor's contractual liability. Therefore we propose that the following be language be added to the Contract: "In no event shall the parties be liable for special, indirect, incidental or consequential damages, including loss of profits, interests or revenue."</p>	See the Limitation of Liability that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
10	Limitation of Liability II	<p>It appears as though the Contractor's current liability under the RFP document is unlimited, presenting an inordinate risk to the Contractor and which may have an adverse impact on price. As it is common practice in the industry, we suggest capping the aggregate liability of the Contractor under the Contract to 100% of the total Contract value. Please include the following language in the Contract: "Notwithstanding anything to the contrary contained herein or in any other contractual document, the Contractor's liability under the Contract shall be limited to 100% of the total contract value."</p>	See the Limitation of Liability that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
11	Liquidated Damages	<p>Can you please confirm the following under the liquidated damage clause: item (1) applies to the first 24 sets of materials including the 2 prototypes; item (2) applies to all subsequent (sets 25 and on) deliveries in increments of 8 kits per delivery (monthly or bimonthly), and that item 3 applies to all deliveries.</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
12	Liquidated Damages	<p>Would the CTA consider rewording item 1 to say "\$2,000 per business day of delay beyond 3 business days that the initial shipment or material to overhaul 24 cars has not been delivered as scheduled, not to exceed an aggregate amount of 5% of the total contract value"?</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
13	Liquidated Damages	<p>Would the CTA consider rewording item 2 to say "\$500 per business day of delay for the first 20 business days, then \$1,000 per business day for all other shipments that are delayed beyond the approved delivery schedule, not to exceed an aggregate of 5% of the total contract value"?</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
14	Liquidated Damages	<p>Would the CTA consider rewording item 3 to say "Liquidated damages will be \$500 per business day of delay beyond the three business days allowed for delivery of the replacement parts for up to the first 20 business days, then \$1,000 per business day of delay not to exceed an aggregate of 5% of the total contract price."</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
15	Liquidated Damages	<p>Would the CTA consider removing any Liquidated Damages for those items where they have "Sole Sources Listed?" (Bidders) will have very little leverage commercially or schedule wise if a supplier is sole sourced. It may be difficult, if not impossible to flow down Liquidated Damages as part of a purchase order for these suppliers as well.</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.
16	Liquidated Damages	<p>Under liquidated damages, are the dollar amounts of liquidated damages the same regardless of the number of kits bid?</p>	Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.

17	Liquidated Damages-Alternative Language	<p>In order to provide an equitable balance between the Contractor's exposure to liquidated damages (LDs) assessment and the Customer's actual damages, and in accordance with industry standards, the Proposer suggests that the total amount of LDs set out in the Contract be capped at 5% of the total Contract value. Moreover, the specific amounts of liquidated damages for late deliveries referenced in the Special Conditions items 1, 2 and 3 should be reduced as follows:</p> <ol style="list-style-type: none">1. References in item 1 of \$30,000 per business day should be changed to \$5,000 per business day;2. References in item 2 of \$500 per business day of delay be changed to \$100; and references to \$30,000 per business day of delay for all other shipments be changed to \$ 5,000;3. References in item 3 of \$500 per business day of delay be changed to \$ 100; and reference to \$30,000 per day of delay be changed to \$ 5,000. <p>For greater clarity, the references in items 1, 2 and 3 of "not to exceed an aggregate of \$900,000" should be deleted and the following language should be inserted in this provision: "In no event shall the performance standards and financial consequences assessed under this Contract be greater than five percent (5 %) of the total Contract value."</p>	<p>Please see the updated Liquidated Damages language that has been added to the revised Contract for Supplies: Special Conditions that have been included with Addendum 5.</p>
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CONTRACT FOR SUPPLIES**SPECIAL CONDITIONS****SCOPE OF WORK ("Work")**

This is a Definite-Delivery Contract to supply overhaul kits and various other parts so that CTA can complete an extended life overhaul ("C-Lite") for 100 of CTA's 2600 series railcars. The work includes a delivery plan that will ensure that CTA will have the parts it needs to perform the overhauls at a rate of eight (8) cars per month. The Contractor will supply all the material necessary to complete twenty-four (24) cars for the initial delivery and then provide a delivery schedule that must support the production rate of eight (8) cars per month.

ELECTRONIC FUND TRANSFER

CTA has adopted Electronic Fund Transfer (EFT) as the preferred method of payment for vendor invoices. An EFT enrollment form will be provided upon request to the successful proposer(s) with the executed contract and must be completed to enable payment of vendor accounts by this method. If awarded a contract, provide the completed EFT form to the CTA Purchasing Administrator identified on the title page.

PERFORMANCE/PAYMENT BOND

None required.

INSURANCE

None required.

DEFINITIONS

Unless defined otherwise herein, the following definitions apply to this Order and its attachments:

- (a) Chicago Transit Authority, CTA, Authority and Buyer are synonymous herein.
- (b) Proposer, Bidder, Seller, Vendor, Contractor and the company, organization or person(s) to whom the Order is addressed are synonymous herein.
- (c) Purchase Contract, Contract, Purchase Order and Order are synonymous herein.
- (d) Overhaul Kit, Master Kit, Part, Item, Kit, Component, Subsystem, Sub-assembly and Assembly are synonymous herein.
- (e) Day is synonymous with Calendar Day unless specified otherwise.

ACCOUNTING SERVICES

The Contract issued to the successful Bidder will state the total expenditure authorization on the signed acceptance page. Contractor shall not accept any requests for services in excess of the total Contract expenditure authorization unless authorized in writing by the Director of Purchasing. Contractor shall be liable for any costs incurred as a result of his failure to either notify the Authority or accept requests not authorized by the Director of Purchasing.

AVAILABILITY OF FUNDS

This procurement is subject to the availability of funding from financial assistance contracts between the Illinois Department of Transportation, Regional Transportation Authority and the Chicago Transit Authority. The CTA's obligation hereunder is contingent upon the availability of appropriated funds from which payment for the Contract purposes can be made. No legal liability on the part of the CTA for any payment shall arise until funds are made available to the Contracting Officer for this Contract and until the Contractor receives notice of such availability and approval, to be confirmed in writing by the Contracting Officer. Any award of Contract (including the exercise of options, if any) hereunder will be conditioned upon said availability of funds for the Contract.

DURATION OF CONTRACT

This Contract shall become effective upon Contract execution and shall remain in effect until all material specified in the Bills of Material have been delivered and accepted by the CTA.

DELIVERY

Delivery shall be FOB, destination and completed according to the final Delivery Plan proposed by the Vendor and accepted by the CTA. The individual listed below shall be the Contractor's contact for establishing delivery at CTA's Skokie Shops facility. Contractor shall provide a minimum of seven (7) days advance notice prior to delivery. Deliveries are to be made weekdays, except CTA recognized holidays, between the hours of 7:00 AM and 3:00 PM to:

CTA Skokie Shop, Rail – Heavy Maintenance

Attn: Mr. Julian Sandu or his designee

3701 W. Oakton Street

Skokie, Illinois 60076-3498

☎ (847) 982-5141, e-mail: jsandu@transitchicago.com

PAYMENT

The Contractor shall submit an invoice for each delivery of acceptable and approved material delivered. Invoices will be paid subsequent to formal acceptance of material by CTA. Original invoices shall be forwarded to CTA Accounts Payable Department, 567 W. Lake St., Chicago, Illinois 60661. Payments will be made in Net 30 days after final acceptance of material or receipt of Contractor's invoice by CTA or in accordance with the terms of Contractor's invoice whichever is most favorable to the CTA. Payment date(s) shall be calculated from receipt of invoice or final acceptance of goods, whichever is later.

Invoices must be presented only by the vendor to which a purchase order is awarded. Invoices received from a third party will not be honored unless prior written approval from the purchasing agent has been obtained.

LIQUIDATED DAMAGES FOR LATE DELIVERIES

It is mutually understood and agreed by and between the parties to the Contract that time is of the essence with respect to the completion of the Work and that in case of any failure on the part of the Contractor to deliver the material within the time specified in the Contractor's final "Delivery Schedule" as approved by CTA, except for any excusable delays as provided in "Excusable Delays/Force Majeure" or any extension thereof, the Chicago Transit Authority will be damaged thereby. The amount of said damages, being difficult if not impossible of definite ascertainment and proof, it is hereby agreed that the amount of such damages due to the Chicago Transit Authority shall be fixed at the following schedule:

1. If the initial delivery of materials for 22 railcars is delayed past the defined delivery date, liquidated damages will be charged at a rate of \$10,000 per business day for the first 10 days of delay. Beginning on the 11th day thru the 20th business day, liquidated damages will be charged at a rate of \$20,000 per day. Any delay beyond the 21st business day a liquidated damage rate of \$30,000 per business day will apply, not to exceed an aggregate of \$900,000.
2. If any of the subsequent monthly deliveries of materials for 8 railcars are delayed past the defined date, liquidated damages in the amount of \$500 per business day will apply for the first 20 business days. Beginning on the 21st business day thru the 30th business day, liquidated damages will be charged at a rate of \$10,000 per day. Beginning on the 31st business day thru the 40th business day, liquidated damages will be charged at a rate of \$20,000 per day. Any delay beyond the 41st business day a liquidated damage rate of \$30,000 per business day will apply, not to exceed an aggregate of \$900,000.
3. If a kit is delivered as scheduled, but at inspection for acceptance, it is discovered that the kit is either incomplete or contains a defective part, CTA's Project Manager will notify the Contractor and the contractor will have three business days to provide the part(s) to complete the kit or replace the defective part. Liquidated damages will be \$500 per business day of delay beyond the three business days allowed for delivery of the replacement parts for up to the first 20 business days. Beginning on the 21st business day thru the 30th business day, liquidated damages will be charged at a rate of \$10,000 per day. Beginning on the 31st business day thru the 40th business day, liquidated damages will be charged at a rate of \$20,000 per day. Any delay beyond the 41st business day a liquidated damage rate of \$30,000 per business day will apply, not to exceed an aggregate of \$900,000.

The Contractor hereby agrees to pay the aforementioned amounts as fixed, agreed and liquidated damages, and not by way of penalty, to the Chicago Transit Authority and further authorizes the Chicago Transit Authority to deduct the amount of the damages from money due the Contractor under the Contract, computed as aforesaid. If the money due the Contractor is insufficient or no money is due the Contractor, then the Contractor shall pay the Chicago Transit Authority the difference or the entire amount, whichever may be the case, within thirty (30) days after receipt of a written demand by the Contracting Officer.

The payment of aforesaid fixed, agreed and liquidated damages shall be in lieu of any damages for any loss of profit, loss of revenue, loss of use, or for any other direct, indirect, special or consequential losses or damages of any kind whatsoever that may be suffered by the Chicago Transit Authority arising at any time from the failure of the Contractor to fulfill the obligations referenced in this clause in a timely manner.

LIMITATION OF LIABILITY

In carrying out any of the provisions of this Contract or in exercising and power or authority granted to them thereby, there will be no liability upon the board members, officials, agents or employees of the Authority, including without limitation to the Director of Purchasing and the Project Manager, either personally or as officials of the Authority, it being understood that in such matters they act as representatives of the Authority.

With respect to all claims, actions, and causes of action arising out of, under or in connection with this Contract (including, but not limited to those arising under Part B, paragraph 8.3.1) regardless of the form of action, Contractor's liability shall not exceed, in the aggregate, three times the total Contract value.

Notwithstanding any provision to the contrary, in no event shall Contractor be liable to the Authority for losses or damages suffered by the Authority for any indirect, special, incidental or consequential damages, whether foreseeable or not.

EXCUSABLE DELAYS/FORCE MAJEURE

If the Contractor is delayed at any time during the progress of the Work by the neglect or failure of the Chicago Transit Authority or by a cause as described below, then the time for completion and/or affected delivery date(s) shall be extended by the Chicago Transit Authority subject to the following cumulative conditions:

- a. The cause of the delay arises after the Notice of Award and neither was nor could have been anticipated by the Contractor by reasonable investigation before such award. Such cause may also include force majeure events such as any event or circumstance beyond the reasonable control of the Contractor, including but not limited to acts of God; earthquake, flood and any other natural disaster; civil disturbance, strikes and labor disputes; fires and explosions; war and other hostilities; embargo; or failure of third parties, including Suppliers or Subcontractors, to perform their obligations to the Contractor;
 - b. The Contractor demonstrates that the completion of the Work and/or any affected deliveries will be actually and necessarily delayed;
 - c. The Contractor has taken measures to avoid and/or mitigate the delay by the exercise of all reasonable precautions, efforts and measures, whether before or after the occurrence of the cause of delay; and
 - d. The Contractor makes written request and provides other information to the Chicago Transit Authority.
- A delay in meeting all of the conditions of this section shall be deemed an excusable delay. Any concurrent delay that does not constitute an excusable delay shall not be the sole basis for denying a request hereunder.

None of the above shall relieve the Contractor of any liability for the payment of any liquidated damages owing from a failure to complete the Work by the time for completion that the Contractor is required to pay pursuant to "Liquidated Damages" for delays occurring prior to, or subsequent to the occurrence of an excusable delay.

WARRANTY

The proposed product furnished under this Contract shall be covered for a period of one (1) year against manufacturing defects for both labor and material. Should the manufacturer's standard warranty coverage exceed the minimum requirement, said manufacturer's standard warranty shall apply. Warranty period shall begin when the material is accepted by the CTA. Contractor shall be responsible for all warranty claims for the parts and assemblies provided under this contract.

The warranties of the Contractor set forth in this Contract are expressly in lieu of any other warranty, express or implied, including any implied warranty of merchantability and fitness for a particular purpose.

WARRANTY CLAIMS

In the event that a vendor fails to pay approved or partially approved warranty claims within 60 days of submission, the CTA shall send the vendor written notice seeking immediate payment of the outstanding claims. If the vendor fails to pay the outstanding claims within 5 days of vendor's receipt of the written notice, the Purchasing Department shall issue a notice to cure letter providing the vendor with 10 days to cure the default. If the vendor fails to cure the default, the CTA may, at its discretion, deduct the CTA's costs from 1) any unpaid contract funds, 2) any contract retainage amounts or 3) a maintenance or performance bond. If the deductions do not fully satisfy the outstanding claims, the CTA may seek additional remedies. All remedies shall be inclusive of applicable interest payments.

REIMBURSEMENT FOR LABOR AND OTHER RELATED COSTS

The CTA shall be reimbursed by the Contractor for labor. The amount shall be determined by the Chicago Transit Authority for a qualified mechanic at a straight time wage rate of \$89.38 per hour, which includes fringe benefits and overhead adjusted for the CTA's most recently published rate in effect at the time the Work is performed. These wage and fringe benefit rates shall not exceed the rates in effect in the CTA's service terminal at the time the Defect correction is made. If the straight time wage rate increases during the contract period, then those rates will apply.

REIMBURSEMENT FOR PARTS

The CTA shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus eighteen and one half (18.5) percent handling costs. Handling costs shall not be paid if part is supplied by Contractor and shipped to CTA. If the handling cost percent increases during the contract period, then that percentage will apply.

The CTA may require that the Contractor supply parts for warranty-covered repairs being performed by the CTA. Those parts may be remanufactured but shall have the same form, fit and function, and warranty. The parts shall be shipped prepaid to the CTA from any source selected by the Contractor within fourteen (14) days of receipt of the request for said parts and shall not be subject to a CTA handling charge.

CONTRACTUAL AUTHORITY

This Contract shall, under no circumstances grant Contractor exclusivity for providing the items and/or services as specified in this Contract and/or added during the term of this Contract. In addition, this Contract shall not prejudice the right of the CTA to seek competitive bids on such items and/or service, which cannot be provided by the Contractor in an expedited manner that are required to meet CTA needs to maintain service to the riding public during the term of this Contract that have been found to be available from alternate acceptable sources. If items are determined to be available from other sources (not identified as an O.E.M. maintenance and repair part and/or an approved equal part), such items may be purchased at will to meet CTA immediate needs and subsequently obtained through appropriate CTA procurement procedures, as applicable.

PROPRIETARY INFORMATION

All CTA specifications, drawings, blueprints, Photostats and all other information furnished to the Contractor in connection with this Order are and shall remain the property of the CTA. Contractor will keep the same confidential and will not use or reproduce the same except for the performance of this Order, and on completion or termination of this Order or upon the written demand of the CTA, Contractor shall return same. CTA reserves the right to withhold final payment until such return is made.

TERMINATION FOR DEFAULT

CTA may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other provisions of the Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 (ten) days (or such longer period as the Purchasing Manager or designee may authorize in writing) after receipt of notice from the Purchasing Manager or designee specifying such failure.

In the event that CTA elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by CTA shall not limit Procuring Agency's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

If the Contract is terminated in whole or in part for default, CTA may procure, upon such terms and in such manner as the Purchasing Manager or designee may deem appropriate, supplies or services similar to those so terminated. The Contractor shall be liable to CTA for any excess costs for such similar supplies or services, and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

Payment for completed supplies delivered to and accepted by CTA shall be at the Contract price. CTA may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the Purchasing Manager or designee determines to be necessary to protect CTA against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to termination for convenience of CTA.

The rights and remedies of CTA provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

TERMINATION FOR CONVENIENCE

The CTA may terminate this Agreement, in whole or in part, without cause, at any time, by written notice to the Contractor whenever the CTA determines that such termination is in the best interest of the CTA. Upon receipt of written notice of termination, all services and any other performance hereunder by the Contractor shall cease to the extent specified in the notice of termination. In the event of termination in whole, the Contractor shall prepare a final invoice within thirty (30) days of such termination reflecting the services actually furnished pursuant to this agreement to the satisfaction of the CTA and for which no previous invoice was submitted to the CTA. The Contractor shall be paid costs, including closeout costs, and profit for the services performed up to the time of termination. The Contractor shall promptly submit, in accordance with the terms hereof, a termination claim to the CTA and the parties shall negotiate a termination settlement to be paid the Contractor. If the Contractor has any property in his possession belonging to the CTA, the Contractor will account for same, and dispose of it in the manner the CTA directs.

COMPLIANCE WITH LAWS, REGULATIONS AND CODES

If any part of this Specification shall be at date of issue, or shall later become in non-conformity with current or future City, County, State or Federal Laws and/or Codes or Regulations, because of materials or requirements specified therein, Chicago Transit Authority shall have the right to negotiate for and accept or reject substitute materials and/or requirements.

PROMPT PAYMENT TO SUBCONTRACTORS

- A) The Contractor is required to pay all Subcontractors for all work that the Subcontractor has satisfactorily completed, no later than 7 calendar days after the Contractor has received payment from CTA. All of the Contractor's contracts with its Subcontractors must state that the Subcontractor will receive payment within 7 calendar days of the date that the Contractor has received payment from CTA.
- B) In addition, all Retainage amounts must be paid by the Contractor to the Subcontractor no later than 14 calendar days after the Subcontractor has, in the opinion of the CTA's authorized representative, satisfactorily completed its portion of the Work. All of the Contractor's contracts with its Subcontractors must state that the Subcontractor will receive payment of Retainage within 14 calendar days of the date that the Subcontractor has, in the opinion of the CTA's authorized representative, satisfactorily completed its portion of the Work.
- C) A delay in or postponement of payment to the Subcontractor requires good cause and prior written approval of the Director of Purchasing.
- D) The Contractor is required to include, in each subcontract, a clause requiring the use of appropriate arbitration mechanisms to resolve all payment disputes.
- E) CTA will not pay the Contractor for work performed unless and until the Contractor ensures that the Subcontractors have been promptly paid for the work they have performed under all previous payment requests, as evidenced by the filing with CTA of lien waivers, canceled checks (if requested), and the Contractor's sworn statement that it has complied with the prompt payment requirements. Prime Contractors must submit a prompt payment affidavit, (form to be provided by CTA) which identifies each subcontractor (both DBE and non-DBE) and the date and amount of the last payment to such subcontractor, with every payment request filed with CTA, except for the first payment request, on every contract with CTA.
- F) Failure to comply with these prompt payment requirements is a breach of the Contract which may lead to any remedies permitted under law, including, but not limited to, Contractor debarment. In addition, Contractor's failure to promptly pay its Subcontractors is subject to the provisions of 50 ILCS 505/9.

ACCESS TO RECORDS AND REPORTS

The Contractor shall permit and agree to cooperate with the authorized representatives of the CTA, including but not limited to, the CTA's auditors, who may inspect and audit all data and records of the Contractor relating to the Contractor's performance and Subcontractor contracts under this Contract from the date of this Contract through and until the expiration of five (5) years after completion of this Contract.

CTA ETHICS ORDINANCE

The Contractor must comply with the CTA's Ethics Ordinance posted on CTA's website at http://www.transitchicago.com/assets/1/procurement/ethics_code_2009.pdf, the provisions of which are hereby incorporated into this Contract. The Contractor agrees that, any Contract negotiated, entered into, or performed in violation of the Ethics Ordinance must be void as to the CTA.

OTHER AGENCIES

Other local government agencies may negotiate their own agreements with the Contractor based on other terms and conditions in this Agreement. Other such agencies will issue their own contracts directly to the Contractor. Participation by other agencies shall have no adverse effect on the CTA. The CTA will not be responsible for any obligation due from any other agency to the Contractor. The CTA will have no liability for the acts or omissions of any other agency.

OBLIGATION TO COMPLY WITH STATE AND FEDERAL LAW AND REGULATIONS AND CHANGES

The Contractor must at all times comply with all applicable IDOT, RTA and FTA regulations, policies, procedures, and directives, including without limitation those listed directly or by reference in the "Master Agreement" (Form FTA MA (18) dated October 2011 between the Authority and FTA, and any agreements between IDOT and RTA and RTA and CTA, as they may be amended or promulgated from time to time during the term of this Contract. The Contractor's failure to so comply will constitute a material breach of this contract.

SUSPENSION AND DEBARMENT

This Contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C, and must include the requirement to comply with 49 CFR 29, Subpart C, in any lower-tier covered transaction it enters into.

WAIVER

A waiver by the CTA of a breach of any provision hereof by Contractor or CTA failure to insist on strict performance or observance by Contractor of any provision of this Contract or CTA's rights in any one or more instances, shall not constitute a waiver by CTA in any other instance.

GOVERNING LAW AND CHOICE OF FORUM

The Contractor hereby irrevocably submits to the original jurisdiction of those State or Federal courts located within the County of Cook, State of Illinois, with regard to any controversy arising out of, relating to, or in any way concerning the execution or performance of this Contract. The Contractor agrees that service of process on the Contractor may be made, at the option of the Authority, either by registered or certified mail addressed to the applicable office as provided for in this Contract, by registered or certified mail addressed to the office actually maintained by the Contractor, or by personal delivery on any officer, director, or managing or general agent of the Contractor. The Contract will be governed in accordance with the laws of the State of Illinois, without regard to choice of law principles.

CONFLICTS OF INTEREST

No Board member, officer or employee of the Authority or other unit of local government, who exercises any functions or responsibilities in connection with the carrying out of the Work or the carrying out of the Work to which this Contract pertains, may have any personal interest, direct or indirect, in this Contract or the proceeds thereof.

In accordance with 41 USC § 22, the Contractor agrees that no member of or Delegate to the Congress of the United States, or the Illinois General Assembly and no members of the Chicago Transit Board or Authority employees, may be admitted to any share or part of this Contract or to any private financial interest, profit, or benefit arising here from.

The Contractor covenants that it, its officers, directors and employees, and the officers, directors, and employees of such of its members if a joint venture, and subcontractors presently have no interest and must not acquire any interest, direct or indirect, in the Work to which this Contract pertains, which would conflict in any manner or degree with the performance of the Work hereunder. The Contractor further covenants that in the performance of this Contract, no person having any such interest must be employed by the Contractor.

The Contractor is prohibited from performing any work or services for the Authority under this contract that conflict with work or services that the Contractor performs under any other contract with the Authority. Such conflicts include, but are not limited to, design work for the Project under another contract, supervision or management for the Project under another contract, and review or audit work for the Project under another contract. The restrictions in this paragraph are applicable to all subcontractors. The Contractor has sole responsibility for compliance with this provision. Any violation of this provision is a material breach of the Contract, which is cause for termination.

WAIVER

In the event that either party elects to waive its remedies for any breach by the other party of any covenant, term or condition of this Contract, such waiver shall not limit the waiving party's remedies for any succeeding breach of that or of any other term, covenant or condition of this Contract.

REMEDIES NOT EXCLUSIVE

The rights and remedies of the CTA provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

COUNTERPARTS

This Contract may be executed in any number of counterparts. All such counterparts shall be deemed to constitute one and the same instrument, and each of said counterparts shall be deemed an original thereof.

SEVERABILITY

Whenever possible, each provision of the Contract shall be interpreted in a manner as to be effective and valid under applicable law. However, if any provision, or part of any provision, should be prohibited or invalid under applicable law, such provision, or part of such provision, shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions of the Contract.

THIRD-PARTY BENEFICIARIES

No provisions of the Contract shall in any way inure to the benefit of any third party, including the public at large, so as to constitute such person a third-party beneficiary of the Contract or of any one or more of the terms and conditions of the Contract or otherwise give rise to any cause of action in any person not a party to the Contract, except as expressly provided elsewhere in the Contract.

INDEPENDENT PARTIES

The Contractor is an independent contractor with respect to the performance of all Work hereunder, retaining control over the detail of its own operations, and the Contractor shall not be considered the agent, employee, partner, fiduciary or trustee of the CTA.

INTELLECTUAL PROPERTY INDEMNIFICATION

The Chicago Transit Authority shall advise the Contractor of any claim or impending patent suit related to this Contract against the Chicago Transit Authority and provide all information available. The Contractor shall defend any claim suit or proceeding brought against the Chicago Transit Authority based on a claim that any equipment, or any part thereof, furnished under this Contract constitutes an infringement of any patent, and the Contractor shall pay all Chicago Transit Authority damages and costs resulting therefrom, excluding incidental and consequential damages. In case said equipment, or any part thereof, is in such suit claimed to constitute infringement and use of said equipment or parts is enjoined, the Contractor shall, at its own expense and at its option, either procure for the Chicago Transit Authority the right to continue using said equipment or part, or replace same with non-infringing equipment, or modify it so it becomes non-infringing.

ASSURANCE OF COMPLIANCE WITH 49 CFR PART 26

The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the Authority deems appropriate.

The Contractor agrees to include this assurance in all subcontracts.

CIVIL RIGHTS REQUIREMENTS

The following requirements apply to the underlying Contract:

1. **Nondiscrimination:** In accordance with Title VI of the Civil Rights Act, as amended, 42 USC § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 USC § 12132, and Federal transit law at 49 USC § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
2. **Equal Employment Opportunity:** The following equal employment opportunity requirements apply to the underlying Contract:
 - a. **Race, Color, Creed, National Origin, Sex:** In accordance with Title VII of the Civil Rights Act, as amended, 42 USC § 2000e, and Federal transit laws at 49 USC § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 USC § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - b. **Age:** In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 USC §§ 623 and Federal transit law at 49 USC § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - c. **Disabilities:** In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 USC § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

CHICAGO TRANSIT AUTHORITY
Advertisement for Professional Services

NOTICE OF TIME EXTENSION WITH ADDENDUM TO FOLLOW

Notice is hereby given that the proposal date heretofore advertised as Thursday, February 7, 2013 has been extended to Thursday, February 14, 2013 no later than 3:30 P.M. in the Bid Office, 2nd Floor, 567 W. Lake, Chicago, IL 60661-1498 for the following items:

Req. C12RI101317082

Request for Proposals (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

For additional information, please contact Timothy Polacek, Procurement Administrator, at (312)681-2481.

Any contract resulting from this bid is subject to a financial assistance between the Chicago Transit Authority, the United States Department of Transportation and the Regional Transportation Authority.

The contractor will be required to furnish certified copies of any and all Insurance Policies required in relation to this contract prior to CTA's execution.

Contractor will be required to comply with all applicable Equal Employment Opportunity laws and regulations and affirmative action requirements of the Federal Transit Administration and Illinois Human Rights Commission.

All bidders will be required to certify that they are not on the Comptroller General's list of ineligible contractors.

Chicago Transit Authority hereby notifies all bidders that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.

PLEASE NOTE: Where bids are sent by mail, delivery service or delivered in-person to the CTA Bid Office, the bidders shall be responsible for their delivery only to the Bid Office before the advertised date and hour for the opening of the bids. The Bid Office hours are Monday through Friday from 8:00 a.m. to 4:30 p.m. Chicago time, except holidays.

The right is reserved to accept any bid or any part or parts thereof or to reject any and all bids.

All inquiries should be directed to and copies of bid documents obtained from the Bid Office - 2nd Floor, 567 W. Lake Street, Chicago, Illinois 60661-1498.

CHICAGO TRANSIT AUTHORITY

By: Ellen McCormack
Vice President
Purchasing

February 4, 2013



CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: January 31, 2013

TIME EXTENSION

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

The bid opening date for C12OP101249251 will hereby be extended from Thursday February 7, 2013 to Thursday February 14, 2013 at 3:30 p.m., local Chicago time.

Addendum with responses to vendor questions to follow.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

Gelene Brown
Director of Purchasing

cc: E. McCormack
G. Brown
K. Brosnan
Contract File (C12RI101317082)



CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: January 22, 2013

ADDENDUM # 4

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

We are enclosing Addendum No. 4 for the subject requisition:

Below are notes that are meant to clarify sections of the RFP. Attached is a list of proposer questions with corresponding answers provided by the CTA.

1. Reference: PROPOSER QUESTIONS

Attached is a partial list of proposers' questions and CTA's answers. More proposer questions will be answered in subsequent addenda.

2. Reference: DRAWINGS

These previously excluded drawings have been attached to this addendum:

R-2-1316
R-2-679
4509.04.066.003
R-1-1611
R-3-1621

3. Reference: SPECS

These previously excluded Detailed Specification have been attached to this addendum:

Spec 9626-08
Spec 9751-11

Please acknowledge receipt of Addenda's No. 1, No. 2, No. 3 & No.4 on the Proposal page titled Bidders Signature Page. Failure to acknowledge receipt of any addenda may cause your bid to be non-responsive.

The proposal due date remains Thursday, February 7, 2013, 3:30 p.m., local Chicago time.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

Ellen McCormack
Vice-President, Purchasing & Supply Chain

Enclosures (8)

cc: E. McCormack
K. Brosnan
Contract File (C12RI101317082)

C12R101317082

#	Subject	PROPOSER QUESTION:	RESPONSE
1	Obsolete Items	What will be the process if any of the parts included in the bill of materials are obsolete or out of production?	If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers
2	Approved Sources	(Proposer) has noted that in several cases vendors which have supplied CTA lot numbers under existing or past contacts are not necessarily noted. Will the CTA allow a detailed discussion of this after award of the contract to increase the potential supply sources?	Only the manufacturers noted in the BOM and/or any subsequent addenda can be used, unless a drawing number is provided on the BOM.
3	Re-Engineering	Can it be assumed that parts requested will not require any re-engineering and/or design?	Yes
4	Distributor	Do we have the ability to use the distributor of the OEM? We have reached out to the OEM, they have referred us to their distributors. Is this okay with CTA?	Yes
5	Alternate Sources	Are there local vendors that can be used instead of sending the RFQ's to European or other vendors that no longer exist?	See the approved parts list or use the drawing to procure locally.
6	Part Confirmation (2)	The vendor Camfil cannot ID this mfg part number "403383300" can you please reconfirm this number.	The updated CAMFIL MPN is 314000-300
7	Part Confirmation (3)	CAMFIL-FARR # 403383300 CAMFIL does not recognize this part number you provided.	The updated CAMFIL MPN is 314000-300
8	Quantities	I would like further clarification on the table of quantities for each part. The table seems to have more data than what is necessary and should only include one column for "quantity/truck" and then another column for the "number of trucks to complete" (not "trucks/kit" and "qty/kit"). If this isn't the way the table is supposed to be read please advise as to how to properly gather the required numbers	See Revision to the pricing table provided by purchasing which spells out that we need parts to overhaul 100 tailcars. Some BOMs are for a unit, some BOMs are for a car and some are piece part quantities for the entire project.
9	Additional MPNs	Do you have additional part numbers to clarify which parts are actually required for the following lot numbers (the ones provided are not complete)? Atlanta India Rubber CO #4163518. Bauer Springs #4003011. Beiden MFG #3104674. Catamount (not Calamount) #3148353 Camfil Farr #4482612 Conover #4163055	For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-010 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.

10	Additional Info MPNs	Do you have technical specifications and drawings for the following products (the part numbers provided do not exist in their systems)? Boeing #4003192, 4003207, 4183010, 4003174, 4003177, 4183008, 4183017, 4003173. Bombardier #4002610, 5142676, 3072618. Bowers #4003087. Budd CO #3072626, 3104677, 3104678, 4162610, 5142621, 5142622, 5142626, 5142628, 5142634, 5142656, 5142659, 3102623, 4003299, 3072615, 3072616, 3072619, 3072620, 4002610, 5142680, 5142676, 3072618, 4183008. Continental Arrow #4003049 and 11171715 Delta Screw #4003005 Dennison MFG #3148353 DJ Metal #4002673 Engineering Products #4003023	For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-010 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
11	Extending Initial Delivery Date	Would CTA be interested in extending the delivery of the 22 cars to ensure that all material initially delivered and ordered is correct (based on our initial clarifications to date) so that we are not scrambling to re-order the material if CTA finds that the material ordered meets the specifications but is not what is required? I think that it would be advantageous for all parties involved to deliver the first two cars, gain approval of the material from CTA or make any necessary changes to quantities or material specifications, then allow for the lead time (which will be provided with the bid documents) of the material before delivering the 22 car order and subsequent 8 cars/month.	This is not acceptable to CTA. Contractual delivery dates need to be adhered to.
12	Overhaul Plan	Has CTA already taken these cars out of service or will you be removing them from service as new cars are delivered, and if so would my suggestion work more appropriately with such a timeframe?	Cars will be removed from service as needed and put back into service when completed.
13	Alternate Sources II	Can (Proposer) use their own suppliers using CTA's drawings instead of sending the RFQ's to European suppliers or other vendors that no longer exist? If so is a FAI required?	Supplier may go to any manufacturer with CTA print to obtain parts. The FAI will be the sample kit, however CTA would entertain some pre-production samples prior to the kits, within reason.
14	Supplier Source	Lot Num. 1608022 TERMINAL: KNIFE CONNECTOR, SPECIAL, CRIMP TYPE 2/0 CABLE, STYLE A, 2 PIN. Can you please provide vendor name & contact or drawing? (R-BOM-002-Hardware)	AMP, MAC Products, Trans Technik all listed as approved alternate sources on the BOM.
15	Supplier Source II	Lot Num. 4156565 SEAL: FLARETITE, FOR 3/8", 37 DEGREE JIC FLARE FITTING. Can you please provide vendor name & contact or drawing? (R-BOM-002-Hardware)	Eaton or Parker could supply this item.
16	Part Number	Lot Num. 4303086 WASHER: PLAIN, TYPE B, 5/16" BOLT SIZE, .344" ID, .875" OD, STAINLESS STEEL, TYPE 302, 303 OR 304, REF: BOEING STANDARD ST 72101-C35. Is Boeing Standard ST 72101-C35 the approved vendor and part number? (R-BOM-002-Hardware)	This is commercial hardware.
17	Hydraulic Adapter II	Hydraulic adapter with quick release. Can you please provide drawing & specification? (R-BOM-002- Mechanical)	Please reference Addendum 3 item # 5.
18	Mounting Bracket	Lot Num. 4003218 BRACKET, MOUNTING, QUICK DISCONNECT Morrison-Knudsen no longer supplying, is alternative possible? Need drawing. (R-BOM-002- Mechanical)	See Drawing R-2-1316 attached to Addendum 4.

	Locking Nut	Lot Num. 4183066 & 4183064 NUT: LOCKING, 2-1/4"-11, BRITISH PIPE THREAD, 1018 STEEL Vendor needs more info: Is this a top lock or nylon lock nut? What finish is needed? (R-BOM-002-Track Brake Suspension)	4183066 - Spring for the track brake suspension (3 vendors listed) 4183064 - Should be made with the can as an assembly. NUT: LOCKING, SPECIAL, 2-1/4" - 11 BRITISH STANDARD PIPE THREAD, 1018 STEEL USED WITH COMPRESSION SPRING SUSPENSION UNIT. FOR MAGNETIC TRACK BRAKE. REF: KNORR BRAKE DWG. #ENAG05053. SPEC. NO: 5165 DRAW. NO: R-2-679
19			
20	Cotter Pin	Lot Num. 1190241 PIN: COTTER, 3/16" X 1-1/4" STEEL Vendor needs more info - stainless steel or zinc plated? (R-BOM-002-Horizontal Motor Suspension)	Zinc Plated Steel
	Steel Stud	Lot Num. 5202601 STUD: STEEL, CADMIUM OR ZINC PLATED, 3/4 - 16 X 2-3/4", THREADED 5/8" ON TAP END AND 3/4" ON NUT END, FOR MOUNTING HYDRAULIC SYSTEM BRACKET ON CALIPER Can you please provide vendor with more info: drawing or a manufacturing PN? Unable to quote with just the description. (R-BOM-002-Mechanical)	Zinc Plated Steel Rod with 2 different thread pitches on each end as described
21			
22	Lock Nut	Lot Num. 1111715 NUT: LOCK, 3/4-10-3B STEEL, GRADE B, PREVAILING TORQUE NYLON TOP INSERT TYPE, HEAVY, THIN HEIGHT. PER IFI 100/107 WITH APPROPRIATE MARKINGS (WHICH IS COMPARABLE TO GR-5 PER SAE J995.) ZINC ELECTROPLATED Vendor would like to know if the finish is cadmium, zinc or plain? (R-BOM-002-Hardware)	PER THE DESCRIPTION: Zinc Plated
23	Lock Nut II	Lot Num. 4003049 ELECTROPLATED, GRADE "C" OR "8", IFI 100/107NUT: LOCK, HEAVY THIN HEX, 1"-8 (3B) NYLON INSERT, PREVAILING TORQUE, ZINC Vendor would like to know if the finish is cadmium, zinc or plain? (R-BOM-002-Gear Suspension)	Zinc Plated
24	Rod Assembly	Lot Num. 4003109 ROD: ASSEMBLY, CONNECTING, ROLL SUPPORT What division of Siemens? & contact information. (R-BOM-002-Mechanical)	Siemens Transportation has the wegmann part rights. Previously purchased from HALL INDUSTRIES 4003109
	Conical Spring Type Washer	Lot Num. 4003256 WASHER: CONICAL SPRING TYPE, SPECIAL REQUIREMENTS (SEE CTA SPEC. 9626-07 OR LATEST), FOR NOMINAL BOLT SIZES OF 12MM OR 1/2", USED FOR MOTOR SAFETY CATCH. MATERIAL CERTIFICATIONS REQUIRED WITH EACH SHIPMENT AS SPECIFIED IN SPEC. 9626-07 OR LATEST. What division of Siemens? Need contact information & Spec 9626-07 (R-BOM-002-Mechanical)	Spec 9626-08 has been attached to Addendum 4. Use this Specification and Description.
25			
26	Nut	Lot Num. 4003204 NUT, HYDRAULIC SYSTEM INSTALLATION, FOR WEGMANN TRUCK ASSEMBLY. REF: BOEING VERTOL PARTS LIST 3-4-58. Can you provide BOEING Spec? (R-BOM-002-Mechanical)	Cannot provide the Boeing Spec. There are 2 approved sources list on the BOM.
27	Contact	Lot Num. 5155040 CONTACT: FINGER, FOR TRUCK COUPLER PLUG SYSTEM 17MP10K2, GE CONTACT FINGER P/N 41A265467P2 SPEC. NO: 9751 DRAW. NO: R-2-1679 REV. NO: 3. Can you please provide CTA Spec # 9751? (R-BOM-002-Hardware)	See Spec 9751-11 attached to Addendum 4.
28	Elbow	Lot Num. 4162675 ELBOW 90 DEG. 7/16 ORB 3/8 TUBE (ADJ.)/37 DEG. Checked with Aeroquip, the proposed manufacturing PN 2062-4-65 does not exist. The number corresponds with the description is 2062-16-12. Can you please confirm? (R-BOM-080)	Flow Products provided the Aeroquip 2062-4-65 to CTA as late as Sept-2012.

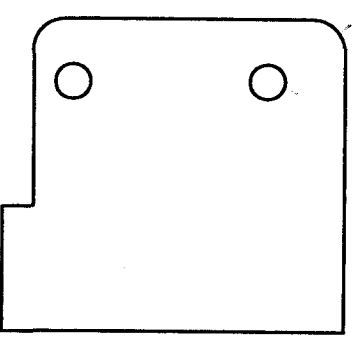
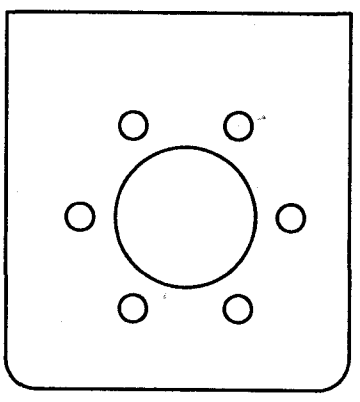
29	Mounting Bracket II	Lot Num. 4003102 BRACKET, MOUNTING, STOPPING BUFFER Wegmann US cannot identify the part as Wegmann Germany had sold the rights to other company. Can you please provide vendor info OR drawing? (R-BOM-002- Mechanical)	Drawing provided: 4509.04.066.003. has been attached to addendum 4.
30	Neoprene Hose	BLACK NEOPRENE HOSE 4099-0754/60-2 Vendor sells this item in 50 ft rolls. 1 pc is one 50 ft roll. What length is needed? (lot item 1928013 on R-BOM-040)	100 FT.
31	Shim	Lot Num. 5141316 SHIM: BETWEEN STOP AND CAM. 0-030" THK. GE (6703140P1) -this part has never been supplied by GE to CTA and is obsolete. Can you please provide alternative vendor & drawing? (R-BOM-030)	Drawing R-1-1611 has been attached to addendum 4.
32	Cam	Lot Num. 5141164 CAM: LOADING, WITH DIAL INDICATING Moore Addison will not supply the Alum. Dial plate. Has part has been supplied in the past to CTA without plate? (R-BOM-030)	Lot number is to be removed from BOM per Addendum 4.
33	ATC Junction Box	Can you please provide Drawing and or spec for the ATC Junction Box Assembly including Terminal Board? (R-BOM-002- Electrical)	Drawing is listed in BOM R-3-1621, see drawing attached to Addendum 4. Terminal board has approved sources listed on BOM.
34	Polyvinyl Chloride Tubing	Lot Num. 3148298 Tubing: Polyvinyl Chloride. CTA provided HS105C as the ordering information but this is the name of the type of tubing. For us to provide a quote we need the spec including the inside Dia. Wall thickness & color. Can you provide us with this information? (R-BOM-002-Electrical)	Per the description: TUBING: POLYVINYLCHLORIDE, FLEXIBLE, 50% HEAT SHRINKAGE. NOMINAL SIZE EXPANDED 0.375" NOMINAL SIZE AFTER SHRINKAGE 0.1875", BLACK. PCK. INFO: FT 1 FT Expanded .375" and Shrunk .1875, color black.
35	Electric Wire	Lot Num. 3102622 WIRE: ELECTRIC, 600V, ONE CONDUCTOR, WHITE EXANE INSULATED, #12, STRANDED COPPER WIRE. What drawing should be used R-4-1556 or R-4-1590? (R-BOM-002-Electrical)	3102622 is wire. NEED ASSEMBLY found on drawing R-4-1590.
36	Proximity Sensor	Lot Num. 5143206 Proximity Sensor Part number DW-AD-603-M18-718 does not jive with the specifications despite being an approved part according to Section 5.1, can you please confirm we have the correct part number? (99 Mixed Items Materials)	Continex part number DW-AD-603-M18-718 is correct. It is a part specially made for the CTA.
37	Proximity Sensor II	Lot Num. 5143206 Proximity Sensor Part number DW-AD-603-M18-718 can you please confirm the temperature range of -40C to MINIMUM of 110C, is this correct? (99 Mixed Items Materials)	Operating Temp. Range of -40 deg. C to + 110 deg. C is correct.
38	Approved Supplier Webpage	Are these suppliers listed on your "approved supplier" webpage?	We are unfamiliar with the existence of a CTA Purchasing "approved suppliers" webpage.

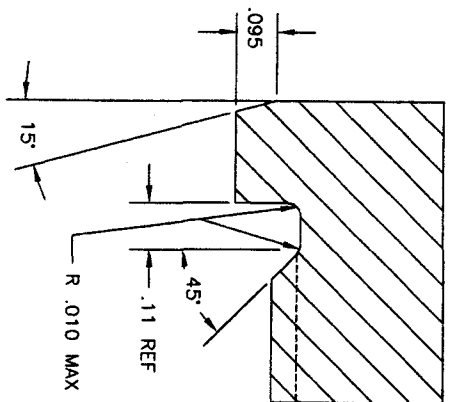
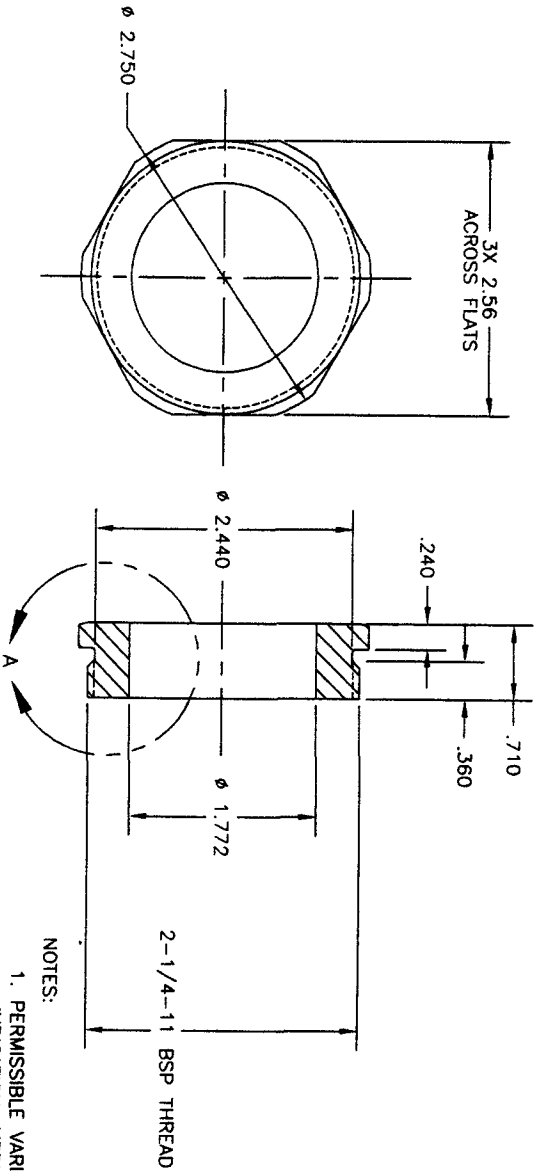
38	Approved Supplier Webpage	Are these suppliers listed on your "approved supplier" webpage?	We are unfamiliar with the existence of a CTA Purchasing "approved suppliers" webpage.
	RFP Paperwork/Signatures	<p>"Signed copies of all CTA certification forms provided in Appendix H. Additionally, please include completed Ownership, Lower-Tier Debarment Certification forms and Subcontractor RFP Non-Disclosure forms, as required, for any proposed subcontractors."</p> <p>It is request "Additionally" the Appendix H to include Ownership, Lower-Tier etc... These documents seem already included in the list of Appendix H so it is not clear if there are some missed documents.</p> <p>To avoid any misunderstanding we request to CTA to confirm that the requested documents are the follow:</p> <ul style="list-style-type: none"> • Certification Regarding a Drug-free Workplace • Certification of Primary Participant Regarding Debarment • Certification of Lower Tier Participant(s) Regarding Debarment • Certification Regarding Lobbying • Proposer's Execution Signature Page • Disclosure of Ownership • RFP Non-Disclosure Statement • RFP Non-Disclosure Statement sub-consultant. <p>Please, confirm as well that the below documents must be signed by all suppliers:</p> <ul style="list-style-type: none"> • Certification of Lower Tier Participant(s) Regarding Debarment • RFP Non-Disclosure Statement sub-consultant. 	<p>The referenced statement pertains to the Price Proposal for this contract. All forms in Appendix H should be filled out in full by the prime vendor as stated. The "additional" language is to note that the Ownership, Lower-Tier Debarment Certification forms and Subcontractor RFP Non-Disclosure forms should be filled out for ALL subcontractors as well.</p> <p>To confirm your statement, the documents you have listed are all the documents in Appendix H and must be completed.</p> <p>Also, we confirm that both the Lower-Tier Debarment Certification forms and Subcontractor RFP Non-Disclosure forms must be completed by all suppliers.</p>
40	DBE Suppliers List	In the DBE package the Bidder List template is attached. This opportunity will involve a lot of suppliers and part of them proposed by CTA; based on that, is it necessary to provide the complete suppliers list?	Yes, a complete suppliers list will be required. If the list is longer than the 8 lines provided on the template, you can attach an excel printout with all of the required information for each firm.
41	Consistency of Language	Could the Chicago Transit Authority please elaborate on the precedence of the various documents within the RFP? For example the issue of warranty is addressed in the "Detail Specification", the "Contract for Supply Special Conditions" and the language in each section is not fully consistent. (pages 26 and 87)	The special conditions take precedence over Detail Specifications. Warranty requirements will be the sole exception . If an individual detailed specification calls for a longer warranty, the longer warranty will be required for that item.
42	Individual Part Proposals	Can (Proposer) bid the complete contractors and LV66 relays directly to CTA in an effort to have these parts competitively bid and result in a lower cost for CTA?	No, only items listed on the Proposal Page can be bid individually. With kits, the entire kit must be bid, no proposals containing only pieces from this kit will be accepted.

43	Weighted Matrix for Criteria	In Section IV (Evaluation Criteria) of the RFP, the discussion is mentioned on "Delivery Plan Commitment" and "Qualifications of Firm and Personnel". Can the CTA provide a weighting matrix on these attributes along with cost weighting so we have a clear idea of the total evaluation method to get to the "Best Value"?	The technical criteria of "Delivery Plan Commitment" and "Qualifications of Firm and Personnel" will be evaluated at equal importance. Price will be evaluated after the technical evaluation.
44	Junction Box Info	Lot Num. 3072618 Cover Assy, ATC Junction Box On drawing R-3-1622, there is no vendor information for the gasket used on the junction box cover. Can you please provide complete specifications for the gasket material including type of neoprene (solid or sponge, closed cell, open cell, durometer etc.)?	This has been updated for ease of installation and procurement. The gasket and adhesive should be procured as one assembly and applied to the cover.
45	Junction Box adhesive	The adhesive (3072618) used to glue the gasket to the cover is specified as MIRACLE – TYPE P. We cannot identify this adhesive. Can you please provide complete manufacturer's data sheet for the adhesive?	Correct part should be: Pres-On MPN -P8112. Pres-On, Addison, IL 60101, 800-323-7647
46	Approved Source	Based upon the provided proof of order information as both a prime and subcontractor, will the CTA identify (vendor) as an approved vendor for their components as shown with our designated "AA" part numbers required for the C12R1101317082 requisition?	Part list provided is not associated or included in this project. These parts are not included in this project and will not be addressed at this time.
47	Approved Source II	If the information is too comprehensive, will the CTA simply identify (vendor) as a vendor for their approved components?	See response to #46 above.
48	Initial Delivery	"The initial material delivery must contain enough material for the overhaul of 22 cars." Does CA envisage the delivery of all 22 sets at one time in the initial delivery? Could CTA provide more detail regarding the project start up? (page 6)	The 22 sets should all be delivered at one time.

Addendum #4

304
STAINLESS STEEL
CNC 1.180





NOTES:

1. PERMISSIBLE VARIATION FOR DIMENSIONS WITHOUT TOLERANCE INDICATION: MEDIUM DIN 7168 (PS-U107)
2. CORNERS TO BE TURNED TO 2-3/4 O.D. AS SHOWN.
3. BREAK ALL CORNERS AND EDGES.
4. DIMENSIONS SHOWN ARE AFTER PLATING.

VIEW A
SCALE: 4/1

NUT: LOCKING, SPECIAL, USED WITH COMPRESSION SPRING SUSPENSION UNIT
2-1/4-11 BRITISH STANDARD PIPE THREAD
QUANTITY REQUIRED: 1
CAR SERIES: 2400, 2600 & 3200
C.T.A. ITEM NO. 4183064

MATERIAL:
STEEL, CARBON, COLD FINISHED, BAR, ASTM A108:
1018 (REF: UNS G10180)
2.562 HEX STOCK

SURFACE TREATMENT:
ZINC PLATE, ASTM B633:
TYPE Fe/Zn8.

ORIGINAL DRAWING: KNORR # ENAG05053

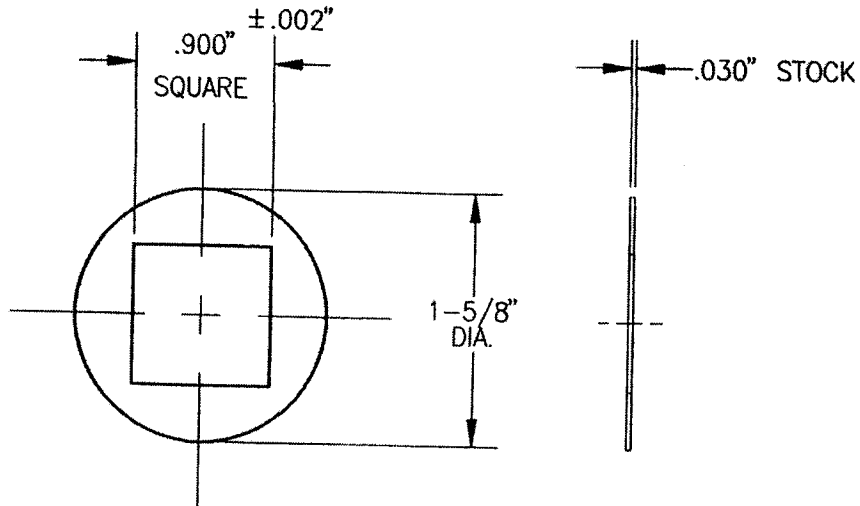
<p>cta RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</p>		<p>DIMENSIONING & TOLERANCING PER ANSI (Y32.5) Y14.5</p>
<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES SURFACE FINISH: 250/ TOLERANCES: ANGLES: \pm1 DECIMALS: XX \pm0.03 XXX \pm0.010</p>		<p>NUT: LOCKING, SPECIAL, 2-1/4-11 BRITISH STANDARD PIPE THREAD CAR SERIES: 2400, 2600 & 3200 C.T.A. ITEM NO. 4183064</p>
<p>Checked/Drawn <i>[Signature]</i> Date 5/20/00</p>	<p>Approved/Reviewed <i>[Signature]</i> Date 5/20/00</p>	<p>R-2-679</p>

BRI DRAWING I.D.: 0231-001.DWG

DRAWING NUMBER

PLAN HOLD CORPORATION

ENGINEERING AND TECHNICAL SERVICES



SHIM: BETWEEN STOP & CAM, .030" THK.
 FOR G.E. 17KM48L1 CONTROLLER
 ONE (1) REQ'D. PER CONTROLLER
 CAR SERIES : 2400
 C.T.A. LOT NO. 5141316

MATERIAL: .030" THICK VULCANIZED FIBER
 PER ASTM D 710, ELECTRICAL
 GRADE, MEDIUM DENSITY

ORIGINAL G.E. PART NO. 6703140P1

DIMENSIONING & TOLERANCING
 PER ANSI (USASI) Y14.5

UNLESS OTHERWISE SPECIFIED
 SURFACE FINISH \sim
 DIMENSIONS ARE IN INCHES

TOLERANCES : ANGLES $\pm \sim$
 FRACTIONS: $\pm 1/32"$
 DECIMALS: .XX $\pm \sim$
 .XXX $\pm \sim$

RIVET & BOLT MARGIN: $\pm .05$
 BEND RADIUS: $\pm .02$ ON .03 & .06
 $\pm .03$ ON .09 & GREATER

SHEET METAL CORNER RADIUS:
 INT .19 EXT .25
 .16 .00



RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES

SHIM: BETWEEN STOP & CAM, .030" THICK,
 FOR G.E. 17KM48L1 CONTROLLER
 CAR SERIES: 2400

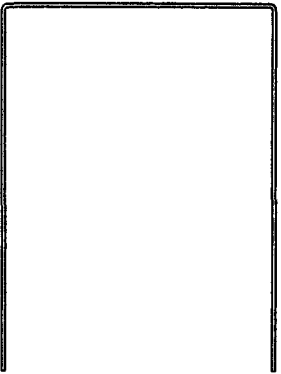
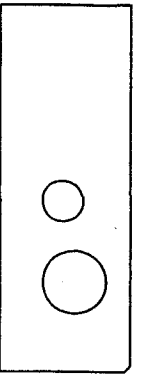
Drawn M.D. Scale FULL Date 4-19-94

Checked *Joseph J. [Signature]*
Mike [Signature] 4-24-95
 Manager, Technical Services

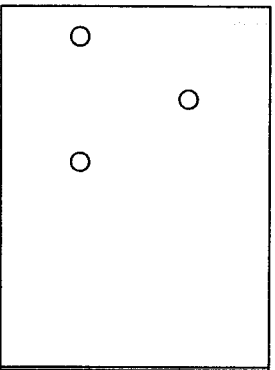
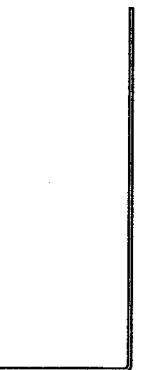
Approved *[Signature]* 4/24/95
 General Manager, Engrg. & Technical Services

R-1-1611

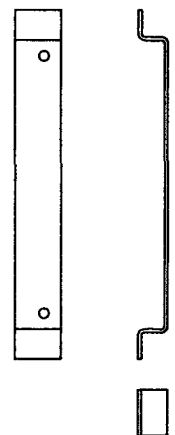
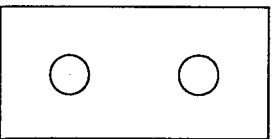
Next G.E. P/L GEG-25501
 Assy. PAGE 5, REF NO. 221



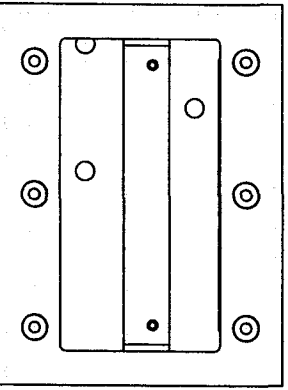
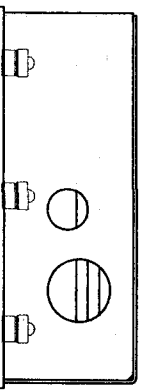
ITEM 2
CHANNEL, 21.65x2.81x.075
MATERIAL: STAINLESS STEEL, 304 L
(1) REOD PER ASSY



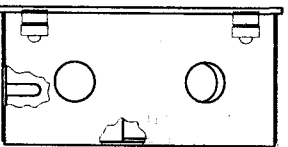
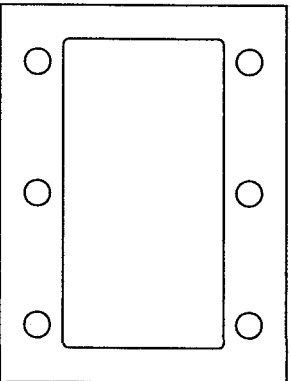
ITEM 1
ANGLE, 10.35x5.93x.075 THICK
MATERIAL: STAINLESS STEEL, 304 L



ITEM 4
ROD, ø25x6.68
MATERIAL: STAINLESS STEEL, 304 L
(2) REOD PER ASSY



ITEM 3
TOP PLATE, 8.25x6.25x.125 THICK
MATERIAL: STAINLESS STEEL, 304 L
(1) REOD PER ASSY



ITEM 5
HAT WELDMENT
MATERIAL: STAINLESS STEEL, 304 L
(1) REOD PER ASSY



ITEM 6
BRACKET, 7.88x1.00x.075 THICK
MATERIAL: STAINLESS STEEL, 304 L
(1) REOD PER ASSY



ITEM	DESCRIPTION	ITEM NO.	QTY
1	ANGLE	1	1
2	CHANNEL	1	1
3	TOP PLATE	1	1
4	ROD	1	2
5	BRACKET & ROD WELDMENT	1	1
6	RECEPLATE (SOUTH)	85-35-311-55	6

TRUCK MOUNTED ATC JUNCTION BOX
WELDMENT
(1) REOD PER CAR
CAR SERIES: 2400, 2600, 3200
ITEM NO. 3072613
MATERIAL: STAINLESS STEEL 304 L

Rev.2: Added missing dimension on item 1, C.P. 6/19/02.

Rev.1: Item 6, Receplate (85-35-311-55) was 85-35-308-55; removed item 7 - Cup (85-43-101-41), C.P. 04/18/02.

<p>DIMENSIONING & TOLERANCING PER ANSI (ASME) Y14.5</p> <p>UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: ANGLES ± .5° FRACTIONS .XX/64 DECIMALS .XXX ± .001 RND & BOLT HATCH .031 BEND RADIUS .047 SHEET METAL CORNER RND: .031</p>		<p>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</p> <p>TRUCK MOUNTED ATC JUNCTION BOX WELDMENT</p> <p>CAR SERIES: 2400, 2600, 3200</p> <p>Drawn: C.P. Scale: HALF Date: 01/08/02</p> <p>Checked: _____ Approved: _____</p> <p>Design: Technical Services</p> <p>Serial Manager: (Eng & Technical Services)</p> <p>File: R-3-1621</p>	
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CHICAGO TRANSIT AUTHORITY
DETAIL SPECIFICATION
FOR
WASHERS: CONICAL SPRING, VARIOUS SIZES
SPECIFICATION NO. CTA 9626-08

1. SCOPE

- 1.1 This specification will describe the requirements for a Contractor to furnish various sizes of conical spring washers, also known in the industry as heavy duty safety washers for bolting applications, to be used with SAE Grade 5 and Grade 8 bolts and screws (metric property classes 8.8 and 10.9) fastening assemblies.

2. GENERAL INFORMATION

- 2.1 The size of the washer to be furnished, and the approved manufacturers and their part numbers will be indicated in the Bid Proposal pages of the Contract Documents under the respective CTA Item Number (part no.).
- 2.2 The Contractor shall use the most recent version of the industrial standards referenced in this specification that are published as of the time of Invitation for Bid.

3. DETAILED REQUIREMENTS

- 3.1 Except for the special requirements specified in Article 3.1.1 and 3.1.3, the conical spring washers shall meet the dimensional and tolerance requirements specified in DIN 6796. In addition, the conical spring washers furnished shall meet the Technical delivery conditions per DIN 267, Part 26 for steel spring washers conforming to DIN 6796.
- 3.1.1 The washers furnished shall be manufactured from 51CrV4 spring steel per DIN 17221 or 17222 (or AISI/SAE 6150 spring steel), rather than the commonly used C60 spring steel per DIN 17222 (or SAE 1060 spring steel).
- 3.1.2 As specified in Table 1 of DIN 267, Part 26, conical spring washers shall exhibit a Hardness Vickers (HV) of 420 to 510 (43 to 49 HRc).
- 3.1.3 The conical spring washers furnished shall be suitable for a working temperature range of -50°C to +100 °C (-58°F to 212°F) rather than the normal -20°C to +100 °C (-4°F to 212°F) commonly exhibited by standard conical spring washers.

3. DETAILED REQUIREMENTS(Cont.)

CTA 9626-08

- 3.2 Washers to be cold stamped, tumbled, and fully deburred. The tests for permanent set and permanent load shall be performed as specified in DIN 267, Part 26. Washers that have been machined to obtain their convex and concave features shall not be accepted.
- 3.3 The protective surface coating shall be Dacromet® 320, Dacromet® 320 LC or Geomet (ASTM F1136 & ASTM F1136M).
- 3.4 Alternate materials and coatings to those specified in Articles 3.1 and 3.3 must be approved in writing by the Manager of Rail Technical Services.

4. MARKINGS

- 4.1 All conical spring washers furnished shall be legibly marked with indelible ink on the concave surface of the washer, with the following information.
- The Manufacturer's company name and/or logo (if Manufacturer has a logo).
or
 - The Supplier's company name and/or logo (if Manufacturer and Supplier are not one in the same).
 - The date of manufacture for each batch of washers.
NOTE: Date shall not be in Supplier's or Manufacturer's code. Date shall be identified by month (numerical is acceptable), day, and year (last two digits of year is acceptable).
- 4.2 Gummed labels are unacceptable.
- 4.3 Markings shall be printed using a color of ink that will be easily read against the color of the protective coating.

5. RECORD OF CONFORMANCE

- 5.1 The Contractor shall supply a Record of Conformance with each lot of conical spring washers delivered.
- 5.2 The Record of Conformance shall contain the following information:
- a) The name and address of the Manufacturer, or the name and address of the Supplier if the Manufacturer and Supplier are not one in the same.
 - b) A description and nominal size of the conical spring washer.
 - c) The CTA item number.

5. RECORD OF CONFORMANCE (Cont.)

CTA 9626-08

5.2 Required Record Information (Cont.)

- d) The CTA requisition number.
- e) The standards or specifications to which the lot of conical spring washers has been manufactured, including the date, number, revision and other information sufficient to identify the particular standards or specifications being referenced.
- f) The chemistry and grade of material.
- g) The results, or a summary of results, of any tests performed for the purpose of verifying that the lot of conical spring washers furnished conform to the requirements specified in Section 3 of this specification.
- h) The coating material, method of application.
- i) Verification that the proper procedures were performed after surface preparation prior to coating, to ensure the washers furnished are absent of hydrogen embrittlement, and a detailed description of the tests performed for brittle failure.

6. APPROVED AND NON-APPROVED ITEM INFORMATION

- 6.1 Under the terms of a given contract, the Contractor shall only furnish and deliver CTA approved conical spring washers found in the Approved Manufacturers list associated with the respective CTA Item Number description.
- 6.2 Should a potential Contractor wish to offer for CTA consideration an alternate conical spring washer not currently approved, the potential Contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process.
- 6.3 The time required for reviewing and/or testing each conical spring washer offered will vary and depend on applicable procedures.
- 6.4 Approval of the proposed conical spring washer(s) does not guarantee an order under a currently proposed or future contract.
- 6.5 Upon award of a contract, each conical spring washer furnished by the Contractor shall be identical to the conical spring washer(s) that was (were) approved.

7. ADDITIONAL INFORMATION FOR POTENTIAL BIDDERS

- 7.1 Bidders requiring additional information shall contact the Procurement Administrator listed on the front page of the Contract Document or the Commodity Buyer listed in the RFQ. Potential Bidders requiring additional information from a person or persons listed in the Special Conditions must route their requests through the Procurement Administrator or Commodity Buyer. Potential Bidders who contact any Authority personnel other than the Procurement Administrator, or Commodity Buyer will be considered in violation of the provisions of the Contract Document.

Distribution: Mgr., Technical Services - Rail.

MD/md - Initial Specification - 11/13/07

MD (Q.A.)/CJ/cj (T.S. Rail) - 1st Revision - 02/29/08

CHICAGO TRANSIT AUTHORITY

**DETAIL SPECIFICATION
FOR**

CONTACT FINGERS; GE 17MP10K1 COUPLER PLUG APPLICATION

**SPECIFICATION NO. CTA 9751-11
CTA ITEM NOS. 5155040 & 5155041**

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver contact fingers which are used in the General Electric (GE) Brand Model 17MP10K1 coupler plugs found on 2400, 2600, & 3200 series rail cars in operation at the Chicago Transit Authority (CTA).

2. DETAIL REQUIREMENTS

- 2.1 The contact fingers shall be manufactured per the information on CTA Drawing R-2-1679.
- 2.2 As indicated on CTA Drawing R-2-1679, the contact fingers furnished shall be fabricated from UNS C11000 Electrolytic Tough Pitch (ETP) copper, and have an electrodeposited silver finish.
- 2.3 The ETP copper used in the fabrication of the contact fingers shall meet the requirements specified in ASTM B 187 for H04 tempered copper bar. The contact fingers shall be prepared for silver electroplating per standard practices outlined in ASTM B 281. The silver electrodeposited coating shall be a minimum of 0.0002" thick, and meet the following classifications as specified in ASTM B700.
- Type 1 purity
 - Grade A or D surface appearance
 - Class S supplementary surface treatment.
- 2.4 The current revision or version of the CTA Drawing number mentioned above, and the current revision or version of the ASTM standards mentioned above, in effect at the time of a given Invitation For Bid (IFB) is posted, shall apply.
- 2.5 When indicated in the Contract Documents or in the IFB package, the contractor shall submit, with each shipment, Certificate of Compliance paperwork verifying that the material and the silver electroplating used in the contact finger's manufacture meet all the requirements presented in CTA Drawing R-2-1679 and in this specification.

CTA 9751-11

3. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 3.1 Potential contractors requiring additional information shall contact the Procurement Administrator or Buyer whose name is listed in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

DISTRIBUTION: Mgr., Technical Services - Rail

MD/md - Initial Specification – 08/22/08
HHP / hhp – 1st Revision – 11/23/11



CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: January 17, 2013

ADDENDUM # 3

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

We are enclosing Addendum No. 3 for the subject requisition:

Below are notes that are meant to clarify sections of the RFP. Attached is an updated Price Proposal Form that includes changes. Also attached is an illustrated Parts Catalog for R-BOM-060. Finally attached is an initial list of proposer questions with corresponding answers provided by the CTA.


1. **Reference: Price Proposal Form**
Attached is an updated Price Proposal Form. This form shall replace the price proposal form that was originally included in the RFP bid package. This updated form includes a note of clarification that states, "All Quantities Required Represent Enough Material to Perform 100 Railcar Overhauls".
2. **Reference: Price Proposal Form**
Additionally, on the attached updated Price Proposal Form, the Quantity Required for Line # 11 "Sensor: Proximity" has been increased from 1,400 sensors to 1,600 sensors. The changes to this page have been highlighted.
3. **Note: MIXED ITEM MATERIAL LIST**
The Quantity Required for Lot Number 5143206 should be increased from 1,400 to 1,600 on the BOM titled MIXED ITEM MATERIAL LIST.
4. **Note: R-BOM-002- ELECTRICAL page 13**
The quantity per kit of Lot Number 4243298, which was previously increased in Addendum 1, should be decreased from 6 to 5 on page 13 of R-BOM-002-ELECTRICAL.
5. **Note: R-BOM-002- MECHANICAL page 10**
The line with the description "Hydraulic adapter with quick release" will not be needed for this kit and should be removed from page 10 of R-BOM-002- MECHANICAL.
6. **Reference: PROPOSER QUESTIONS**
Attached is a partial list of proposers' questions and CTA's answers. More proposer questions will be answered in subsequent addenda.
7. **Reference: R-BOM-060 ILLUSTRATED PARTS CATALOG**
Attached is an illustrated parts catalog for the GE Control Group Kit R-BOM-060 in reference to proposer question #7.

Please acknowledge receipt of Addendum No. 3 on the Proposal page titled Bidders Signature Page.
Failure to acknowledge receipt of **any addenda** may cause your bid to be non-responsive.

The proposal due date remains Thursday, February 7, 2013, 3:30 p.m., local Chicago time.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Johnson', with a stylized, flowing script.

David Johnson
Vice-President, Purchasing

Enclosures (18)

cc: D. Johnson

K. Brosnan

Contract File (C12RI101317082)

Price Proposal Form

Line #	Description	BOM #	Qty Req'd	Extended Price *	Avg Unit Price **
1	Kit: Truck overhaul	R-BOM-002	50	\$	\$
2	Kit: Master controller overhaul	R-BOM-010	50	\$	\$
3	Kit: CAM group overhaul	R-BOM-020	50	\$	\$
4	Kit: Cams, plates, gears, spacers	R-BOM-030	50	\$	\$
5	Kit: Traction motor	R-BOM-040	50	\$	\$
6	Kit: A/C unit overhaul	R-BOM-050	100	\$	\$
7	Kit: Control group contactors	R-BOM-060	50	\$	\$
8	Kit: Door relays and switches	R-BOM-070	50	\$	\$
9	Kit: HPCU Rebuild	R-BOM-080	100	\$	\$
10	Kit: Threshold, self-cleaning		400	\$	\$
11	Sensor: Proximity		1,600	\$	\$
12	Encoder: Incremental		100	\$	\$
13	Track: Side door		800	\$	\$
14	Operator: Door, complete		400	\$	\$
15	Spring: Carbody, inner		400	\$	\$
	Spring: Carbody, outer		400	\$	\$
16	Reverser: New style		100	\$	\$

Notes

All Quantities Required Represent Enough Material to Perform 100 Railcar Overhauls

* Basis of Evaluation

** (Extended Price / Qty Req'd)

Individual Pricing Proposal

Discount for Bundling Line Items

Discount	Line items included (1 through 16)
%	
%	
%	

Complete Sourcing Pricing Proposal

All material required	All Lines	\$
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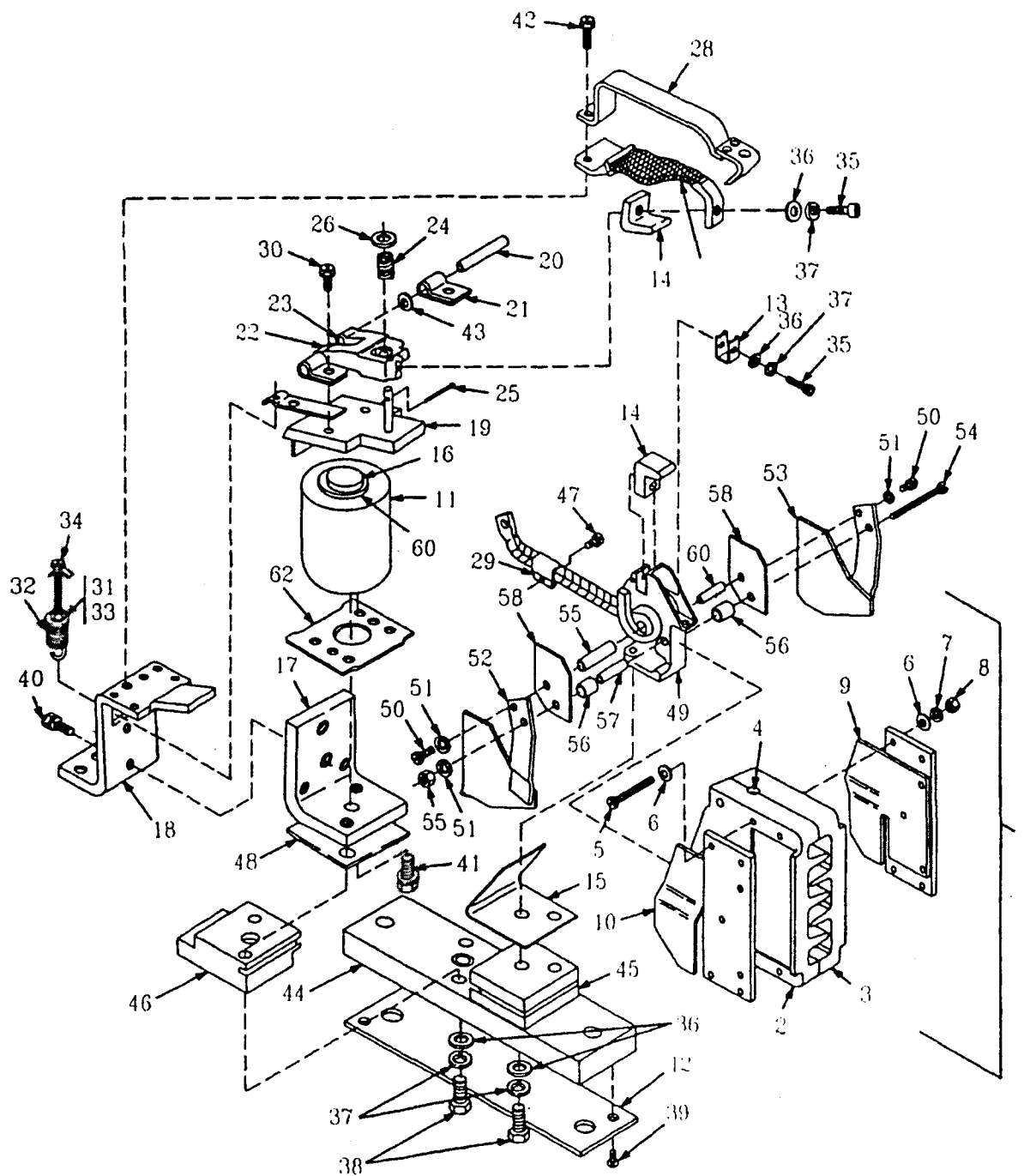
Signature of Authorized Official

Date

GE CONTROL GROUP KIT - R-BOM-060

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
	GE (17JM7S421)	NA	NA			
BREAKER: U/E LINE, ASSEMBLY, USED ON CONTROL	GE (17CM53AF18)	NA	NA	5153200	PC	2
CONTACTOR: U/E SERIES "S" AND "M3" FOR CONTROL	GE (17LV66DR51D)	NA	NA	5153248	PC	4
RELAY: U/E CONTROL ASSEMBLY, GE17V66DR510	GE (17CM57BB5)	NA	NA	5153009	PC	2
CONTACTOR: FS 1-4, FOR 26, 32 MAIN	GE (17CM57BC5)	NA	NA	5020110	PC	8
CONTACTOR: RC 1-4, FOR 26, 32	GE (17CM57AW6A)	NA	NA	5020109	PC	8
CONTACTOR: U/E TBC, USED ON 2600 MAIN	GE (17LV66AV1)	NA	NA	5153043	PC	2
RELAY: U/E ASSEMBLY, GE17LV66AV1 USED AS	GE (41D750493G11)	NA	NA	4243206	PC	4
UNIT: U/E CONTACT, P1 & P2 SWITCH, WITH				5142462	PC	4

7/26/2012

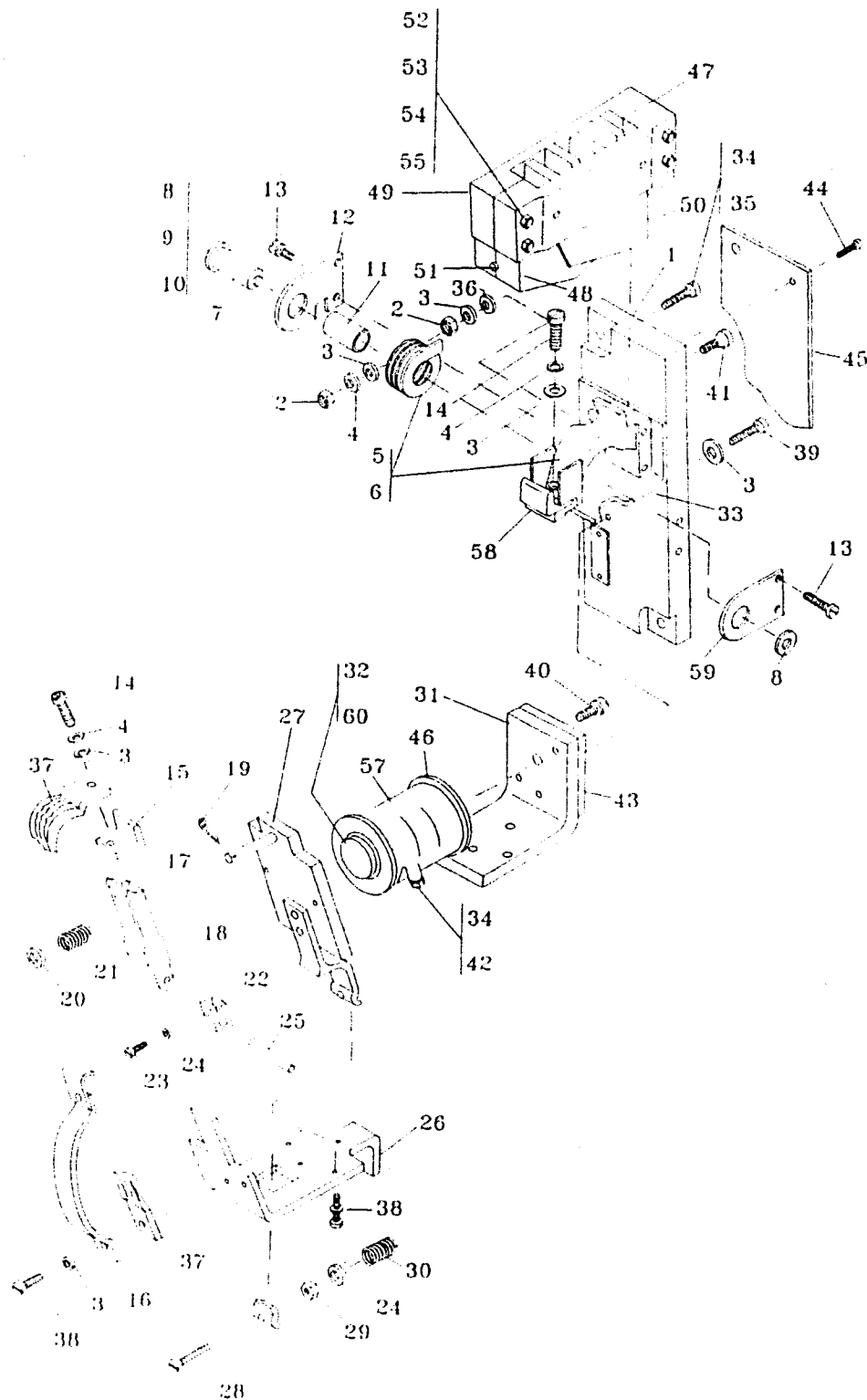


CONTACTOR ASSEMBLY 17CM53AF18
FIG. 4A2 C

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.6	17CM53AF18	3831			5153248	CONTACTOR: Assembly		2
1	41C655653G1	3831			5153038	.CHUTE: Arc		1
2	41C662171P5	3831				..SIDE: Arc Chute		1
3	41C662171P6	3831			5142153	..SIDE: Arc Chute		1
4	311V889P1	3831			5142097	..PIN:		2
5	N668P16036813	3831				..SCREW: Slotted HEX HD, NO. 10-32 X 2 1/4 IN. Lg		4
6	N402P9813	3831				..WASHER: NO. 10 (Narrow)		8
7	N405P39813	3831				..LOCK WASHER: NO. 10		4
8	N210P16813	3831				..NUT: HEX, NO. 10-32		4
9	482A583G5	3831				..POLE PIECE:		1
10	482A583G6	3831				..POLE PIECE:		1
11	41A250388G2	3831				.COIL: OPERATING		1
12	41A271219P2	3831				.SHIELD: Insulation, 3 IN. Wide X 11.31 IN. Lg		1
13	8814851P1	3831			5142007	.HORN: Arcing		1
14	8867977P1	3831			5143002	.TIP: Contact		2
15	4710409P1	3831			5030429	.INSULATION: 2-1/4 IN. Lg		1
16	4710372P1	3831			5030407	.CORE: Magnet		1
17	4768834P1	3831			5030405	.FRAME: Magnet		1
18	9960149P1	3831			5142052	.STOP:		1
19	8839157G5	3831				.ARMATURE: Assembly		1
20	8814797P1	3831			5142060	.PIN: 5/16 IN. DIA X 2 7/8 IN. Lg, SS		1
21	8814696P1	3831			5142061	.CLAMP:		2

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.6								
22	3368640P7	3831			5142056	.ARM: Assembly		1
23	N2113P177A	3831				..BUSHING: Plain, 0.313 IN. I.D., Bronze		2
24	8862956P1	3831			5142058	.SPRING:		1
25	N503P908B13	3831				.COTTER PIN: 3/32 IN. DIA X 1/2 IN. Lg		1
26	8814853P1	3831			5142059	.SEAT: Spring		1
27	9960690G1	3831			5012005	.SHUNT: Flexible		1
28	488A47G1	3831				.HORN: With Spring		1
29	41A257680P1	3831			5153037	.CLAMP:		1
30	8823750P236	3831			1382020	.SCREW: With Lock Washer, NO. 10-32 X 1/2 IN. Lg		2
31	N210P16B13	3831				.NUT: HEX, NO. 10-32		1
32	8823898G1	3831			5142054	.SPRING: With Plug		1
33	N403P25B13	3831				.LOCK WASHER: 1/4 IN, STL		1
34	6706033G1	3831				.SCREW: Calibrating, NO. 10-32 X 2 7/16 IN. Lg		1
35	N170P23020B13	3831				.SCREW: HEX SCH, 5/16 IN.-18 X 1 1/4 IN. Lg		2
36	N402P12B13	3831				.WASHER: 5/16 IN., Narrow		6
37	N405P42B13	3831				.LOCK WASHER: 5/16 IN.		6
38	498A829P1	3831				.BOLT: Slotted Hex HD, 5/16 IN.-18 X 2 1/4 IN. Lg		4
39	N125P1306B13	3831				.SCREW:		2
40	8823750P263	3831			5153030	.SCREW: With Lock Washer, 1/4 IN.-20 X 3/4 IN. Lg		2
41	8823750P285	3831				.SCREW: With Lock Washer, 3/8 IN.-16 X 1-1/4 IN. Lg		1

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.6								
42	8823750P273	3831				.SCREW: With Lock Washer 5/16 IN.-18 X 5/8 IN. Lg		2
43	N401P12	3831				.WASHER: 5/16 IN., Br		2
44	41D754144P3	3831			5153026	.BASE:		1
45	418560687P1	3831			5153036	.SPACER: 2.25 IN. Lg, 0.860 IN. Thk		1
46	418560687P2	3831			5153028	.SPACER: 4.38 IN. Lg X 0.860 IN. Thk		1
47	N125P1510B13	3831			1440703	.SCREW: Slotted FILH, NO. 8-32 X 5/8 IN. Lg		1
48	41A272792P1	3831			5153029	.SHIM: 0.035 IN. Thk		1
49	6750247G9	3831			5142064	.COIL: With Stationary Contact Support		1
50	N44P16008B13	3831				..SCREW: Slotted FILH, NO. 10-32 X 1/2 IN.		2
51	N405P39B13	3831				..LOCK WASHER: NO. 10		3
52	6725027G1	3831			5142065	..POLE PIECE:		1
53	6725027G2	3831			5142066	..POLE PIECE:		1
54	N40P16048	3831				..SCREW: Slotted FILH, NO. 10-32 X 3 IN. Lg, Br		1
55	N210P16B13	3831				..NUT: HEX, NO. 10-32		1
56	4710385P1	3831			5030425	..TUBE: Insulation, 0.546 IN. Lg		2
57	4710386P1	3831			5030424	..TUBE: Insulation, 2.230 IN. Lg		1
58	4710809P1	3831			5030423	..SHIELD: 0.060 IN. Thk		2
59	41A251641P23	3831				..TUBE: Insulation, 2.227 IN. Lg		1
60	4710381P1	3831			5030419	..CORE: Blowout Coil		1
61	N1819-020	5145	41A250114P2	3831	5142617	.WASHER: Spring 1.40 IN. I.D., Steel, Zinc PLD		1
62	41A323432P1	3831			5142616	.PLATE: Locking		1

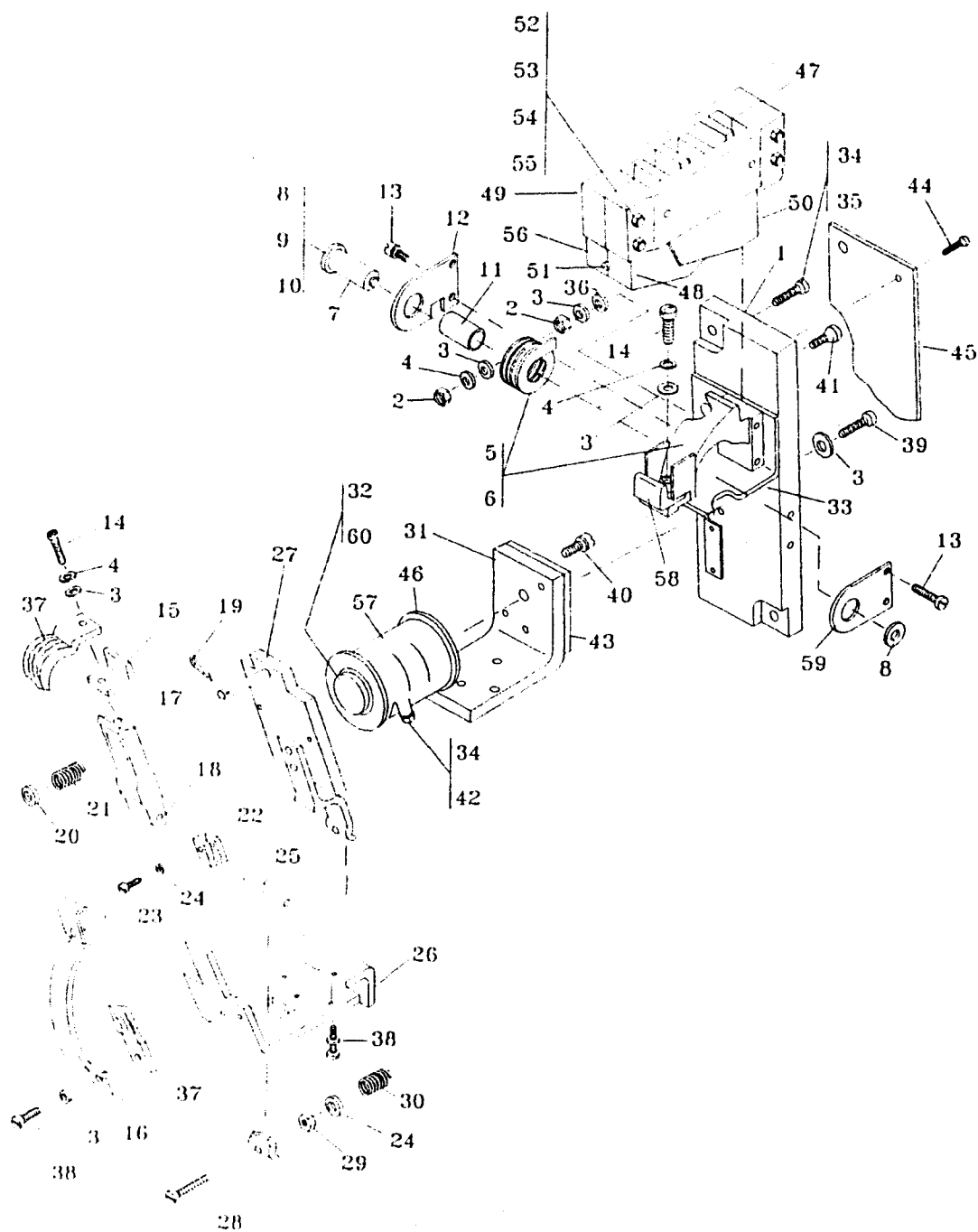


CONTACTOR ASSEMBLY 17CM57BR5
FIG: 4A2.3

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.3	17CM578B5	3831			5153245	CONTACTOR: Assembly		4
1	9963423P3	3831			5142068	.BASE:		1
2	N258P21B13	3831				.NUT: HEX, 1/4 IN.- 20		2
3	N402P11B13	3831				.WASHER: 1/4 IN., Narrow		7
4	N405P41B13	3831				.LOCK WASHER: 1/4 IN., Steel, Zinc PLD		3
5	41B564511G1	3831				.BLOWOUT COIL: And Support		1
6	4735488G3	3831				.SUPPORT: Blowout Coil		1
7	41A279282P1	3831				.CORE:		1
8	41A279283P1	3831				.HEAD: Core		2
9	N51P12008B13	3831				.SCREW: Slotted Flat HD, NO. 6-40 X 1/2 IN. Lg, Steel, Zinc PLD		2
10	41B562849P181	3831				.SEALER:		1
11	41A251641P24	3831				.INSULATION TUBE: 1 3/8 IN. Lg		1
12	4715165P1	3831				.FLANGE:		1
13	8823750P236	3831				.SCREW: With Lock Washer, NO. 10-32 X 1/2 IN. Lg		4
14	N170P21012B13	3831				.SCREW: HEX SCH, 1/4 IN.-20 X 3/4 IN. Lg		2
15	187V471P1	3831				.TIP: Contact, Movable		2
16	9963437G1	3831				.GUARD: Shunt, With Arcing Horn		1
17	8839974G1	3831				.ARM: Contact, With Bushing		1
18	41B562849P384	3831				.BUSHING: 0.190 IN. I.D.		1
19	N503P606B13	3831				.COTTER PIN: 1/16 IN. DIA X 3/8 IN. Lg		1
20	8817580P1	3831				.SEAT: Spring		1
21	9963909P1	3831				.SPRING: Compression		1

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.3								
22	8817548P1	3831				.BLOCK: Clamping		2
23	N668P16014B13	3831				.SCREW: Slotted HEX HD, NO. 10-32 x 7/8 IN. Lg		2
24	N405P39813	3831				.LOCK WASHER: NO. 10		3
25	8817579P1	3831			5142080	.PIN: Hinge		1
26	8839997P1	3831			5142075	.FRAME:		1
27	8834202G1	3831			5142077	.ARMATURE: With Spring Post and Bracket		1
28	6700342G1	3831			5142078	.SCREW: Adjusting		1
29	N210P16B13	3831				.NUT: HEX, NO. 10-32		5
30	482A486G1	3831				.SPRING: Tension, With Plug		1
31	4768903ACP1	3831			5142070	.FRAME: Magnet		1
32	4709833AAP1	3831			5142072	.CORE: Magnet		1
33	4709831P1	3831				.SHEILD: Insulation		1
34	N402P9813	3831				.WASHER: NO. 10 (Narrow)		12
35	498A829P7	3831				.BOLT: HEX HD, 1/4 IN.-20 X 1 3/4 IN. Lg		1
36	187V146P1	3831				.SPACER: 9/32 IN. Thk		1
37	41A260370G2	3831				.SHUNT: Assembly		1
38	8823750P262	3831				.SCREW: With Lock Washer, 1/4 IN.-20 X 5/8 IN. Lg		3
39	8823750P263	3831				.SCREW: With Lock Washer, 1/4 IN.-20 X 3/4 IN. Lg		2
40	8823750P275	3831				.SCREW: With Lock Washer, 5/16 IN.-18 X 1 IN. Lg		1

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.3								
41	8823750P241	3831				.SCREW: With Lock Washer, NO. 10-32 X 1 IN. Lg		2
42	8823750P234	3831				.SCREW: With Washers, NO. 10-32 X 3/8 IN.		2
43	6713726P1	3831			5142071	.SPACER: 0.030 IN. Thk		1
44	N125P1306813	3831				.SCREW: Slotted Flat HD, NO. 6-20 X 3/8 IN. Lg		2
45	8817451P1	3831			5142069	.SHIELD: Insulation		1
46	418551988P1	3831				.WASHER: Spring		1
47	426C844G2	3831			5142015	.CHUTE: Arc		1
48	426C848P5	3831			5142094	..SIDE:		1
49	426C848P6	3831			5142093	..SIDE:		1
50	6702734G2	3831				..PIECE: Pole, Right Side		1
51	311V889P1	3831				..PIN:		2
52	N405P39813	3831				..LOCK WASHER: NO. 10		4
53	N210P16813	3831				..NUT: HEX, NO. 10-32		4
54	N402P9813	3831				..WASHER: NO. 10 (Narrow)		8
55	N668P16032813	3831				..SCREW: Slotted Hex HD, NO. 10-32 X 2 IN.		4
56	6702733G2	3831				..PIECE: Pole, Left Side (NOT SHOWN ON ILLUSTRATION)		1
57	4739316G2	3831			5153044	.COIL: Operating		1
58	41A278788P1	3831			5142090	.TIP: Contact, Stationary		1
59	4715162P1	3831			5142090	.FLANGE:		1
60	3515-36-01	N/A	41A250114P1	3831		.WASHER: Spring, (Shakeproof Co., Illinois Tool)		1



CONTACTOR ASSEMBLY 17CM57BC5
FIG: 4A2.5

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.5	17CM57BC5	3831				CONTACTOR: Assembly		4
1	9963423P3	3831			5142068	.BASE:		1
2	N258P21B13	3831				.NUT: HEX, 1/4 IN.- 20		2
3	N402P11B13	3831				.WASHER: 1/4 IN., Narrow		7
4	N405P41B13	3831				.LOCK WASHER: 1/4 IN., Steel, Zinc PLD		3
5	41B564511G1	3831				.BLOWOUT COIL: And Support		1
6	4735488G3	3831				.SUPPORT: Blowout Coil		1
7	41A279282P1	3831				.CORE:		1
8	41A279283P1	3831				.HEAD: Core		2
9	N51P12008B13	3831				.SCREW: Slotted Flat HD, NO. 6-40 X 1/2 IN. Lg, Steel, Zinc PLD		2
10	41B562849P1B1	3831				.SEALER: (USE AS REQUIRED)		1
11	41A251641P24	3831				.INSULATION TUBE: 1 3/8 IN. Lg		1
12	4715165P1	3831				.FLANGE:		2
13	8823750P236	3831				.SCREW: With Lock Washer, NO. 10-32 X 1/2 IN. Lg		4
14	N170P21012B13	3831				.SCREW: HEX SCH, 1/4 IN.-20 X 3/4 IN. Lg		2
15	187V471P1	3831			5012019	.TIP: Contact, Movable		1
16	9963437G1	3831			5142084	.GUARD: Shunt, With Arcing Horn		1
17	8839974G1	3831			5142079	.ARM: Contact, With Bushing		1
18	41B562849P384	3831				..BUSHING: 0.190 IN. I.D.		1
19	N503P606B13	3831				.COTTER PIN: 1/16 IN. DIA X 3/8 IN. Lg		1
20	8817580P1	3831			5142083	.SEAT: Spring		1
21	9963909P1	3831			5142014	.SPRING: Compression		1

SECTION FIGURE INDEX	OEM PART NO.	OEM ID CODE	VENDOR PART NO.	VENDOR ID CODE	CTA LOT NO.	NOMENCLATURE	USAGE CODE	QTY PER ASSY
4A2.5								
22	8817548P1	3831				.BLOCK: Clamping		2
23	N668P16014813	3831				.SCREW: Slotted HEX HD, NO. 10-32 x 7/8 IN. Lg		2
24	N405P39813	3831				.LOCK WASHER: NO. 10		3
25	8817579P1	3831				.PIN: Hinge		1
26	8839997P1	3831			5142075	.FRAME:		1
27	8834202G1	3831			5142077	.ARMATURE: With Spring Post and Bracket		1
28	6700342G1	3831			5142078	.SCREW: Adjusting		1
29	N210P16813	3831				.NUT: HEX, NO. 10-32		1
30	482A486G1	3831			5142013	.SPRING: Tension, With Plug		1
31	4768903ACP1	3831			5142070	.FRAME: Magnet		1
32	4709833AAP1	3831			5142072	.CORE: Magnet		1
33	4709831P1	3831				.SHEILD: Insulation		1
34	N402P9813	3831				.WASHER: NO. 10 (Narrow)		4
35	498A829P7	3831				.BOLT: HEX HD, 1/4 IN.-20 X 1 3/4 IN. Lg		1
36	187V146P1	3831			5142092	.SPACER: 9/32 IN. Thk		1
37	41A260370G2	3831			5142402	.SHUNT: Assembly		1
38	8823750P262	3831			1382009	.SCREW: With Lock Washer, 1/4 IN.-20 X 5/8 IN. Lg		3
39	8823750P263	3831			5153030	.SCREW: With Lock Washer, 1/4 IN.-20 X 3/4 IN. Lg		2
40	8823750P275	3831			5142074	.SCREW: With Lock Washer, 5/16 IN.-18 X 1 IN. Lg		1

PB-65002-012B



GE Renewal Parts

Use original equipment parts for reliability
PARTS BULLETIN

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See On-Line Master for Current Revision

CONTACTOR, 17CM57AW6

05-JUN-2002

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 CONTACTOR, 17CM57AW6
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PB-65002-012B

FIG. NO.	REF. NO.	PART NO.	QTY	DESCRIPTION
1	1	17CM57AW6	1	CONTACTOR (SEE PB-65002-012)
1	2	9963423P3	1	BASE
1	3	N258P21B13	2	NUT, HEX, 1/4 IN-20
1	4	N402P11B13	7	WASHER, 1/4 IN (NARROW)
1	5	N405P41B13	3	LOCKWASHER, 1/4 IN
1	6	41B564511G1	1	BLOWOUT COIL AND SUPPORT
1	7	4735488G3	1	SUPPORT, BLOWOUT COIL
1	8	41A279282P1	1	CORE
1	9	41A279283P1	2	CORE HEAD
1	10	N51P12008B13	2	SCREW, SL FL HD, NO 6-40, 1/2 IN LONG, ZINC PL
1	11	41B562849P181	AR	SEALER
1	12	41A251641P24	1	INSULATION TUBE, 1.370 IN LONG
1	13	4715165P1	1	FLANGE
1	14	4715162P1	1	FLANGE
1	15	8823750P236	4	SCREW WITH LOCKWASHER, NO 10-32, 1/2 IN LONG
1	16	N170P21012B13	2	SCREW, HEX SOC HD, 1/4 IN-20, 3/4 IN LONG
1	17	187V471P1	2	CONTACT TIP
1	18	9963437G1	1	SHUNT GUARD WITH ARCING HORN
1	19	8839974G1	1	ARM WITH BUSHING, CONTACT
1	20	41B562849P384	1	BUSHING, 0.190 IN ID
1	21	N503P606B13	1	COTTER PIN, 1/16 IN DIA, 3/8 IN LONG
1	22	8817580P1	1	SPRING SEAT
1	23	9963909P1	1	SPRING, COMPRESSION
1	24	8817548P1	2	BLOCK, CLAMPING
1	25	N668P16014B13	2	SCREW, SL HEX HD, NO 10-32, 7/8 IN LONG
1	26	N405P39B13	2	LOCKWASHER, NO 10
1	27	8817579P1	1	HINGE PIN, 3/16 IN OD, 2 IN LONG
1	28	8839997P1	1	FRAME
1	29	8834202G1	1	ARMATURE WITH SPRINGPOST AND BRACKET
1	30	6700342G1	1	SCREW, ADJUSTING
1	31	N210P16B13	1	NUT, HEX, NO. 10-32
1	31A	N403P19B13	1	LOCKWASHER, EXTERNAL TOOTH, NO 10
1	32	482A486G1	1	TENSION SPRING WITH PLUG
1	33	4768903ACP1	1	MAGNET FRAME
1	34	4709833AAP1	1	CORE, MAGNET
1	34A	41A250114P8	1	WASHER, SPRING, 1 IN
1	35	4709831P2	1	INSULATION SHIELD
1	36	N402P9B13	4	WASHER, NO 10 (NARROW)
1	37	498A829P7	1	BOLT, HEX HD, 1/4 IN-20, 1 3/4 IN LONG
1	38	187V146P1	1	SPACER, 9/32 IN THICK
1	39	41A260370ABC2	1	SHUNT ASSEMBLY
1	40	8823750P262	3	SCREW W/LOCKWASHER, 1/4 IN-20, 5/8 IN LONG
1	41	8823750P263	2	SCREW W/LOCKWASHER, 1/4 IN-20, 3/4 IN LONG
1	42	8823750P275	1	SCREW W/LOCKWASHER, 5/16 IN-18, 1 IN LONG
1	43	8823750P241	2	SCREW W/LOCKWASHER, NO 10-32, 1 IN LONG
1	44	8823750P234	2	SCREW W/LOCKWASHER, NO 10-32, 3/8 IN LONG
1	45	6713726P1	1	SPACER, 0.030 IN THICK
1	46	N125P1306B13	2	SCREW, SL FL HD, NO 6-20, 3/8 IN LONG
1	47	8817451P2	1	INSULATION SHIELD

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CONTACTOR, 17CM57AW6
See On-Line Master for Current Revision

PB-65002-012B

FIG. NO.	REF. NO.	PART NO.	QTY	DESCRIPTION
1	48	41B551988P1	1	LOCKING PLATE
1	49	426C844G2	1	ARC CHUTE
1	50	426C848P5	1	SIDE
1	51	426C848P6	1	SIDE
1	52	6702734G2	1	POLE PIECE
1	53	311V889P1	2	PIN
1	54	N405P39B13	4	LOCKWASHER, NO 10
1	55	N210P16B13	4	NUT, HEX, NO. 10-32
1	56	N402P9B13	8	WASHER, NO 10 (NARROW)
1	57	N668P16032B13	4	SCREW, SL HEX HD, NO 10-32, 2 IN LONG
1	58	6702733G2	1	POLE PIECE
1	59	4739318G1	1	COIL, OPERATING, 41.3 VDC

05-JUN-2002

C12RI101317082

#	Subject	PROPOSER QUESTION:	CTA RESPONSE
1	Overhaul Process	Can you briefly explain the production process utilized to overhaul the 2600 series cars at the Skokie facility? For example, how many cars are overhauled at one time and what sequentially is the job element flow (e.g., trucks, traction motors, car body, doors, HVAC etc.)?	8 cars per month, but working on 6 cars at any time on different systems.
2	Delivery Requirements	Does the CTA prefer to have sets of materials delivered necessary to overhaul a complete car on a per car basis or would it be preferred to have materials delivered by functional work element (e.g., trucks, doors, HPCU rebuilds etc.) as detailed in the RFP?	As detailed in the RFP Project and Delivery Schedule. (page 7 of 13)
3	Horizontal Suspension Kit	R-BOM-002 – Hardware appears to be calling out the Horizontal Suspension Kit (BOM references CTA Lot No. 4003000 but the mini BOM doesn't specifically call out this lot number on the document. Could the CTA clarify this and add it to that BOM?	Material needed for the horizontal suspension kit are listed under "Horizontal Motor Suspension" on BOM R-BOM-002.
4	Gear Unit Kit	R-BOM-002 – Hardware appears to be calling out Gear Unit Kit CTA Lot No. 4003043 but there is no exact BOM called by this name. There is a BOM called "R-BOM-002 Gear Suspension". Is CTA trying to say the Gear Unit Kit CTA Lot No. 4003043 is this Gear Suspension BOM?	Material needed for the gear unit kit are listed under "Gear Unit Kit" on BOM R-BOM-002.
5	Vertical Motor Suspension	(Proposer) assumes the R-BOM-002 Vertical Motor Suspension is really CTA Lot No. 4003050. Could this lot number be added to the Min-BOM to clarify this point?	Material needed for the motor suspension kit are listed under "Vertical Motor Suspension" on BOM R-BOM-002.
6	Hydraulic Adapter	Page 10 of 15 of the Truck Mechanical BOM R-BOM-002 at the bottom of the sheet the CTA is calling out a part called "Hydraulic Adapter with Quick Release" @ 1/truck and 4/kit. There is no CTA lot number or any other vendor information. Can the CTA provide this info?	This line should be removed from the bill of material. All pieces of this Hydraulic adapter with quick release are already on the BOM.
7	Parts Catalog	<ul style="list-style-type: none"> In the GE Control Group Kit – R-BOM-060 we need a little more illustrated parts catalog info to ensure the right contactors are quoted for the following: 17CM53AF18 17CM57BB5 17CM57AW6A 17CM57BC5	R-BOM-060- Illustrated Parts Catalog attached to addendum 3.
8	Packaging	Could CTA accept reusable packages? Can we forecast to draw the empty packages when we drop off the complete kits?	Reusable packaging will be considered for this RFP; details to be discussed during contract negotiations.
9	Previous Purchase- Carsets	(Proposer) previously provided 300 Carsets for all material under R-BOM-002 (Truck Kit Mechanical and Truck Kit Mechanical). Since this program was considered a success with minimal issues, would the CTA add a note in Addendum 1 indicating the (Proposer) is considered an approved source for all items under the electrical and mechanical kit listings as long as we supply the same parts?.	Please refer to Addendum # 2 section 5. Reference: COMPANIES USED FOR PREVIOUS C-LITE PROJECTS.
10	Scope of Service- Number of Kits	CTA Specification No. 8157-12, 8158-12, 8156-12, 8154-12, 8155-12, 8179-12 "Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor." If we have understood well for these components we should have 100 kits; one per car. But in the Appendix A the quantity of the kits is 50. Could CTA clarify the point?	Each kit contains material for 2 cars. That would be an overall all quantity of 50 kits.
11	Discrepancies	Not all listed as 100% replacement and quantity per kit is listed as such (Lot # 5153700, 25% replacement, total required 1). What is the plan to handle quantity discrepancies at point of installation? (R-BOM-002: Mechanical & Electrical)	Supply only quantity requested.
12	First Time Product Sample	In 5/5.1 of (SPEC 6794-12), reference is made to "First time pre-production sample furnishing" and that a first time furnisher must provide samples before any mass production & approval is required by CTA Rail Tech Svcs. Dept. Does this only apply when called out in a specific specification?	Pre-Production Samples covers this scenario for any kit/part.
13	Scope of Service- Number of Kits	Overhaul Material Requirements: CTA has listed the requirements for the overhaul of 100 2600 series railcars. In the "Qty Required" field, it has listed 50 kits for the Truck overhaul, R-BOM-002. Are the kits for a married pair of railcars or is CTA looking to overhaul 50 railcars? Please clarify.	The "Qty Required" filed of the proposal page represents enough material to overhaul 100 railcars. In the case of Truck overhaul, R-BOM-002, each kit is enough material for two railcars.
14	Certificates	Certification: Is it required for all the items from R-BOM-010?	No, this kit is from GE (OEM).
16	Cable Length	Lot Num. 4002653 CABLE, S1, CARBODY TO BEAM, 95" Drawing R-3-1582 specifies cable length of 95". R-BOM-002 specifies 7.9' (94.8"). Which length should we use?	The measurements from the drawing should be used.
17	Cable Length II	Lot Num. 4242745 CABLE, ASSY., TRUCK FRAME TO BRUSH BOX Drawing R-3-1582 specifies cable length of 52". R-BOM-002 specifies 4' (48"). Which length should we use?	The measurements from the drawing should be used.

18	Cable Length III	Lot Num. 5142708 CABLE, TRUCK FRAME TO BOLSTER. 26" LONG Drawing R-3-1582 specifies cable length of 26". R-BOM-002 specifies 2.2' (26.4"). Which length should we use?	The measurements from the drawing should be used.
19	Cable Length IV	Lot Num. 5143029 CABLE, ASSEMBLY, BOLSTER TO CARBODY. 41" L Drawing R-3-1582 specifies cable length of 41". R-BOM-002 specifies 3.25' (39"). Which length should we use?	The measurements from the drawing should be used.
20	Cable Length V	Lot Num. 4002444 CABLE, ASSY., 40V #1 On drawing R-4-1590, Item 6 wire refers to Lot Num. 3102622. This wire is item 6 on drawing R-4-1556. There is one length of wire at 6'-9" and a second length at 8' not including additional length required to terminate in the connector. R-BOM-002 specifies a length of only 1'. What lengths of wire should we provide?	The measurements from the drawing should be used.
21	Cable Length VI	Lot Num. 4002445 CABLE, ASSY., 40V #2 On drawing R-4-1591, Item 6 wire refers to Lot Num. 3102622. This wire is item 6 on drawing R-4-1556. There is one length of wire at 6'-9" and a second length at 8' not including additional length required to terminate in the connector. R-BOM-002 specifies a length of only 1'. What lengths of wire should we provide?	The measurements from the drawing should be used.
22	Junction Box Info	Lot Num. 3072618 Cover Assy, ATC Junction Box On drawing R-3-1622, there is no vendor information for the gasket used on the junction box cover. Please provide complete specifications for the gasket material including type of neoprene (solid or sponge, closed cell, open cell, durometer etc.). Also, the adhesive used to glue the gasket to the cover is specified as MIRACLE – TYPE P. We cannot identify this adhesive. Please provide complete manufacturer's data sheet for the adhesive.	ITW Miracle Type P adhesives.



567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: January 10, 2013

ADDENDUM # 2

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

We are enclosing Addendum No. 2 for the subject requisition:

Below are notes that are meant to clarify sections of the RFP. Attached is a list of vendors who provided material for previous C-Lite overhauls. Also attached is an initial list of proposer questions with corresponding answers provided by the CTA. Finally, attached is a list of lot numbers that have neither a drawing or approved manufacturer, along with corresponding companies who have provided this material to the CTA in the past.

1. Note: INITIAL DELIVERY

Throughout the RFP where there is reference to an initial delivery of material for 24 cars; this number represents both the initial delivery of material for 22 cars and the material used to complete a prototype installation for a married pair of railcars.

2. Note: ADDITIONAL INFORMATION

In addition to the list of manufacturer abbreviations provided in Addendum #1, below is a list of additional manufacturer abbreviations:

- ELMHRSTM- Elmhurst Mfg.
- FLXIBLE- Flxible
- GEDCON- Gedcon Inc.
- NATLDISC- National Disc Spring
- OEMSAFEW- OEM Safeway
- PHOENIXN- Phoenix North America, Inc.
- PLASTICD- Plastic Dip Moldings
- SACHS- Sachs
- SOHVRB- (Please disregard, manufacturer is not in CTA database)
- WAGGONFA- Waggonfabrik Talbot (Germany)
- WEATHRHE- Weatherhead Co.

3. Note: R-BOM-002 – HARDWARE

There will be no manufacturer part numbers or drawings provided for items listed in R-BOM-002- Hardware. The item description should be sufficient. If there are any lot numbers outside of this section for which we have not provided either a manufacturer part number, or drawing, please notify the Procurement Administrator.

4. Reference: PROPOSER QUESTIONS

Attached is a partial list of proposers' questions and CTA's answers. More proposer questions will be answered in subsequent addenda.

5. **Reference: COMPANIES USED FOR PREVIOUS C-LITE PROJECTS**

Attached you will find a list of companies that have sold the CTA parts for previous C-Lite projects. In past projects, CTA has purchased all parts through existing blanket IFBs and one-time IFBs. This will be the first time that the CTA uses an RFP for the entire project.

6. **Reference: LOT NUMBERS WITH ONLY DRAWINGS**

Attached is a list of lot numbers that had only drawings listed, with no approved manufacturers. We have included sources that CTA has purchased this material from in the past.

Please acknowledge receipt of Addendum No. 2 on the Proposal page titled Bidders Signature Page.
Failure to acknowledge receipt of any addenda may cause your bid to be non-responsive.

The proposal due date remains Thursday, February 7, 2013, 3:30 p.m., local Chicago time.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Johnson', with a stylized, flowing script.

David Johnson
Vice-President, Purchasing

Enclosures (7)

cc: D. Johnson
K. Brosnan
Contract File (C12RI101317082)

C12RI101317082- PROPOSER QUESTIONS

Addendum 2

#	Subject	PROPOSER QUESTION:	CTA RESPONSE
1	Approved Source	<p>"C12RI101317082 Request for Proposals (RFP) for Sourcing and Delivery of Parts required to Perform In-House Overhauls on (100) of the 2600 Series Railcars" does not list (an alternate) approved source for these items in R-BOM-002 (lot numbers 4003003, 4003046, 4003052, and 4003053). This omission will not direct potential bidders to potentially source this material from (alternates), depriving CTA the opportunity for savings similar to that which were realized with the award of B12OP03189.</p>	<p>Alternate manufacturer lot numbers:</p> <p>4003003- Vulcanite- VP 2963</p> <p>4003046- Vulcanite- VP 2855</p> <p>4003052- Vulcanite- VP 2853</p> <p>4003053- Vulcanite- VP 2857</p>
2	Drawings List	<p>The drawings attached to the RFP cover just a part of the requested components.</p> <p>In order to identify the correct package for each kit we need to evaluate the dimensions and the weights for each item.</p> <p>Could CTA provide drawings (with weight indication) and packaging information for all listed parts?</p>	<p>We are unable to provide weights on each item in the kit. The successful supplier will need to determine combined weights.</p>
3	2600 Series Updates	<p>Have there been any configuration changes to the 2600 series cars that we should be aware of, since the last overhaul in 1998?</p>	<p>There have not been any configuration changes that would impact this project.</p>
4	Quantity Per Component	<p>Our understanding to evaluate the complete number of components is based on the following approach:</p> <p>For the subsystem in kits: Number of component indicated in the BOM x (times) number of kits.</p> <p>Components not organized in kit: just the number indicate in the RFP (example: Sensor=1,400 components)</p> <p>Is our understanding correct?</p>	<p>Correct</p>
5	Quantity Per Car	<p>The project schedule is organized in (number) of cars per month.</p> <p>For the components not arranged in kit is it correct to consider the quantity per car as the total component quantity divided 100 cars?</p> <p>Example: Sensor = 1,400</p> <p>It means 140 per car.</p>	<p>Correct</p>
6	Mixed Items List	<p>The Mixed Item Material List seems to give full quantity amounts to overhaul 100 cars. This is unlike how aforementioned kits are put together, either to overhaul one (1) or two (2) rail cars. Can we get a specification on how each of these kits will be packaged, should they be separated as single car kits, or dual car kits? (Appendix D)</p>	<p>Each kit should be packaged for the completion of two cars.</p>

C12R1101317082- PROPOSER QUESTIONS

Addendum 2

#	Subject	PROPOSER QUESTION:	CTA RESPONSE
7	Assemblies	<p>In this section there are assemblies with its subcomponents and quantities. Is the expectation that we provide the subcomponents or the full assemblies?</p> <p>Ex: Are we to provide assembly "CABLE, GROUND BRUSH TO MOTOR - 3102220" or just its subcomponents "CABLE 2/0 – 3104468" and "TERMINAL – 1608099" for CTA to build. (Appendix D R-BOM-002: Electrical Assemblies)</p>	<p>The expectation is that the successful bid will provide full assemblies.</p>

Companies Used for Previous C-Lite Projects

Company	Products
ACME GEAR COMPANY, INC.	Gear Shafts
ANSALDO STS USA, INC.	UNION SWITCH AND SIGNAL, Inc. Parts
BBA PROJECT, INC.	Fasteners/ Screws
BEARINGS & INDUSTRIAL SUPPLY CO., INC.	Ball and Roller Bearings
CERTIFIED PRODUCTS, INC.	Washers
CHICAGO JACK SERVICE, INC.	Lubrication Fittings
DIESEL ELECTRICAL EQUIPMENT, INC	Contact Tips
ELLCON-NATIONAL, INC.	Doors, Door Tracks
GMI, LLC	Truck Kits (complete)
INNOVATIVE COMPONENT SALES, INC.	Bolts, Rods, Fasteners, and Gaskets
J.P. SIMONS & COMPANY	Solderless Terminals and Connectors
KC ELECTRONICS DISTRIBUTORS, INC	Terminals, Connectors, Insulators
K-IV ENTERPRISES, LLC	Wheels
L.A. FASTENERS, INC.	Fasteners, Bolts, Screws, Washers
METROPARTS	Bushings, Covers for Hydraulic Pressure Control, Disc Brake Rotors, Bushings
MOORE-ADDISON CO.	Cams
MULTI-SOURCE ELECTRICAL & INDUSTRIAL CORPORATION	Tube/ Screw
MUNCIE RECLAMATION & SUPPLY CO.	Rotron Motors, Marine Pumps
PCS INDUSTRIES, INC.	Extractor Cleaning Machines
PENN MACHINE COMPANY, LLC	Flexible Pads
PREMIUM TRANSIT SERVICES, INC.	Vapor Corporation Parts
PROGRESSIVE INDUSTRIES, INC.	Door Track Assemblies
QUALITY TOOL, INC	Armature Shafts, Bearing Retainer Collars
RBC, INC.	Fasteners, Screws
RI-DEL MANUFACTURING, INC.	Armature Punching Sets, Supports
ROTAN, INC	Breathers, Rotan, Inc. Parts

Companies Used for Previous C-Lite Projects

Company	Products
SAINT-GOBAIN PERFORMANCE PLASTICS CORP.	Teglon Creepage Bands
SKF USA, INC.	Primary Springs
SWIGER COIL SYSTEMS, INC.	Armature Rewind Kits
TEC TRAN, A DIVISION OF WABTEC	HPCU, Disc Brake Caliper Parts
TRANSIT ASSOCIATES SERVICES, LLC	Door Panels, Sensitive Edges
TUREK & SONS, LLC	Cap Screws
VAPOR STONE RAIL SYSTEMS (VSRS)	Door Systems and Door Operator Kits
WABTEC GLOBAL SERVICES	G.E. Parts, Gear Cases

Lot numbers with only drawings

Lot Number	Description	Spec Number	Drawing Number	Supplier	Supplier	Supplier	Supplier	Supplier	Supplier
	BOX, ASSEMBLY, ATC JUNCTION, REF: MK MANUAL, 3N-1, PAGE 3-								
3072613	132 WIRE: ELECTRIC, 600V, ONE CONDUCTOR, WHITE EXANE INSULATED, #12, STRANDED COPPER WIRE.		R-3-1621	SAN MATEO, INC	QUALITY TOOL, INC				
3102622			R-4-1556	ELECTRO WIRE, INC.	J.P. SIMONS & COMPANY				
4000279	PLATE: SUPPORT, FOR HYDRAULIC LINE INSTALLATION USED ON 2400, 2600 AND 3200 TRUCKS		SKR-1-080805CA	CTA has never purchase this part prior to RFP.					
4002415	BRACKET, #1 "I" SHAPED, W/ 7/16" DIA. HOLE, FOR CLAMSHELL CABLE SUPPORT		R-2-1259	MUNICE RECLAMATION & SUPPLY CO.	INNOVATIVE COMPONENT SALES, INC.	SYMBOL TOOL, INC.	HALL INDUSTRIES, INC.		
4002416	ANGLE, SECURING, MOTOR LEAD CLEAT BLOCK		R-1-1663	D.E. SPECIALTY TOOL & MANUFACTURING	HALL INDUSTRIES, INC.	RI-DEL MANUFACTURING,			
4002433	BRACKET : 40V TRUCK HARNESS		SK-1-052107CA	CTA has never purchase this part prior to RFP.					
4002448	BRACKET : SPEED SENSOR CONNECTOR		MK B00-411, REV.A	CTA has never purchase this part prior to RFP.					
4002672	STUD, THREADED, FOR MOUNTING CLEAT BLOCK AND ROCK SHIELD.		R1-1203	HALL INDUSTRIES EQUIPMENT	INNOVATIVE COMPONENT SALES, INC.				
4003131	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE & TRACK TRIP CABELS.	1308	R-2-1288	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4004564	Spring: Carbody, Inner	6794-12	R-4-1100	BARBER SPRING COMPANY	QUALITY RAILWAY SERVICES & SUPPLY CO.				
4004566	Spring: Carbody, Outer	6794-12	R-4-1099	BARBER SPRING COMPANY	QUALITY RAILWAY SERVICES & SUPPLY CO.				
4013502	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA1", "AA3" & SHOE TIE CABLE.	1308	R-2-1291	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013503	BLOCK, CLEAT, GROUND BRUSH CABLES	1308	R-2-1292	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013505	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "FF2", "FF3", "A2", "A3" CABLES AT CLAM SHELL.	1308	R-2-1294	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				

Lot numbers with only drawings

Lot Number	Description	Spec Number	Drawing Number	Supplier	Supplier	Supplier	Supplier	Supplier	Supplier
4013515	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	1308	R-2-1295	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013516	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	1308	R-2-1296	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013517	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "FF2", "FF3", "A2", "A3", TRACTION MOTOR CABLES.	1308	R-2-1297	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013518	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR TRACTION MOTOR CABLES AT MOUNTING PLATE.	1308	R-2-1298	METROPARTS	INNOVATIVE COMPONENT SALES, INC.	Z&L MACHINING, INC.			
4013519	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR TRACTION MOTOR CABLES AT MOUNTING PLATE.	1308	R-2-1299	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013520	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE AND TRACK TRIP CABLES.	1308	R-2-1300	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013521	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	1308	R-2-1301	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013522	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA" AND "F" CABLES.	1308	R-2-1302	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4013523	BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA" AND "F" CABLES.		R-2-1303	METROPARTS	INNOVATIVE COMPONENT SALES, INC.				
4181233	NUT, TRACK BRAKE		R-1-1184 (CTA)	QUALITY TOOL, INC	EZTECH MANUFACTURING, INC./EMI	BBA PROJECT, INC.	INNOVATIVE COMPONENT SALES, INC.	HALL INDUSTRIES, INC.	IL MACHINE CO., INC.
4183062	HOUSING, SPRING		R-3-1167 (CTA)	QUALITY TOOL, INC	METROPARTS	SYMBOL TOOL, INC.	D.E. SPECIALTY TOOL & MANUFACTURING CO., INC.	KNORR BRAKE CORP.	TEC TRAN, A DIVISION OF WABTEC

Lot numbers with only drawings

Lot Number	Description	SPEC Number	Drawing Number	Supplier	Supplier	Supplier	Supplier	Supplier	Supplier
5153700	PLATE: CABLE RETAINING, FOR TRACTION MOTOR COUPLER PLUG MP10, SUPERTRUCK, SLOTTED, UNIVERSAL, FOR USE IN ALL CAR SERIES.		R-2-1682	Z&L MACHINING, INC.	NAK-MAN, CORP.	RI-DEL MANUFACTURING, INC.			

CHICAGO TRANSIT AUTHORITY
Advertisement for Professional Services

NOTICE OF TIME EXTENSION

Notice is hereby given that the proposal date heretofore advertised as Friday, January 18, 2013 has been extended to Thursday, February 7, 2013 no later than 3:30 P.M. in the Bid Office, 2nd Floor, 567 W. Lake, Chicago, IL 60661-1498 for the following items:

Req. C12RI101317082

Request for Proposals (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

Written questions will hereby be extended from Monday, January 7, 2013, to Monday, January 14, 2013 till 9:00 a.m., local Chicago Time, via email to tpolacek@transitchicago.com.

Any contract resulting from this bid is subject to a financial assistance between the Chicago Transit Authority, the United States Department of Transportation and the Regional Transportation Authority.

The contractor will be required to furnish certified copies of any and all Insurance Policies required in relation to this contract prior to CTA's execution.

Contractor will be required to comply with all applicable Equal Employment Opportunity laws and regulations and affirmative action requirements of the Federal Transit Administration and Illinois Human Rights Commission.

All bidders will be required to certify that they are not on the Comptroller General's list of ineligible contractors.

Chicago Transit Authority hereby notifies all bidders that it will affirmatively ensure that in regard to any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.

PLEASE NOTE: Where bids are sent by mail, delivery service or delivered in-person to the CTA Bid Office, the bidders shall be responsible for their delivery only to the Bid Office before the advertised date and hour for the opening of the bids. The Bid Office hours are Monday through Friday from 8:00 a.m. to 4:30 p.m. Chicago time, except holidays.

(2)

The right is reserved to accept any bid or any part or parts thereof or to reject any and all bids.

All inquiries should be directed to and copies of bid documents obtained from the Bid Office - 2nd Floor, 567 W. Lake Street, Chicago, Illinois 60661-1498.

CHICAGO TRANSIT AUTHORITY

By: David Johnson
Vice President
Purchasing & Warehousing

January 4, 2013



CHICAGO TRANSIT AUTHORITY

567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: January 2, 2012

TIME EXTENSION

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

The final day for vendor questions will hereby be extended from Monday, January 7, 2013, to Monday January 14, 2013 at 9:00 a.m., local Chicago time. All prospective bidders are encouraged to submit their questions as they arise.

The bid opening date for C12OP101249251 will hereby be extended from Friday, January 18, 2013, to Thursday February 7, 2013 at 3:30 p.m., local Chicago time.

Addendum with responses to vendor questions to follow.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

David Johnson
Vice President, Purchasing & Warehousing

cc: D. Johnson
K. Brosnan
Contract File (C12RI101317082)



567 West Lake Street
Chicago, Illinois 60661-1498
TEL 312 664-7200
www.transitchicago.com

Date: December 21, 2012

ADDENDUM # 1

Subject: **Requisition No. C12RI101317082** – Request for Proposal (RFP) for Sourcing and Delivery of Parts Required to Perform In-House Overhauls on (100) of the 2600 Series Railcars.

We are enclosing Addendum No. 1 for the subject requisition:

The existing Bills of Material are hereby revised according to the changes specified below. The drawings specified in this Addendum are attached and should be included in your RFP. Attached is a list of manufacturer names to correspond with the manufacturer abbreviations found on the Bills of Material in the RFP.

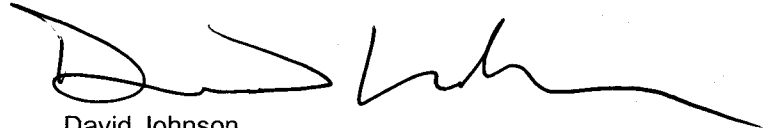
1. **Note: *** SECTION I. BACKGROUND & INTRODUCTION**
CTA has decided to extend the final date for vendor questions. The final day for vendor questions will be **JANUARY 7, 2013**. We encourage all proposers to send questions as they arise. This will ensure timely responses via addenda to be issued by CTA.
2. **Note: BOM-002- ELECTRICAL page 12**
Lot Number 4013515 will not be needed for this kit and should be removed from R-BOM-002-ELECTRICAL.
3. **Note: BOM-002- ELECTRICAL page 12**
Lot Number 4013521 will not be needed for this kit and should be removed from R-BOM-002-ELECTRICAL.
4. **Note: BOM-002- ELECTRICAL page 14**
Lot Number 4243232 (Assembly) will not be needed for this kit and should be removed from R-BOM-002- ELECTRICAL.
5. **Note: BOM-002- ELECTRICAL page 13**
The quantity per kit of Lot Number 4243298 should be increased to 6.
6. **Note: R-BOM-002 – HARDWARE**
The minimum grade requirement for all hardware listed in R-BOM-002-HARDWARE will be grade 5.
7. **Reference: DRAWINGS**
These previously excluded drawings have been attached to this addendum:
R-1-1181
R-2-1271
R-2-1276
R-2-1629
R-2-1679
R-4-1076
8. **Note: ADDITIONAL INFORMATION**
Attached is a list of manufacturer abbreviations along with the full manufacturer name associated with each abbreviation.

Please acknowledge receipt of Addenda No. 1 on the Proposal page titled Bidders Signature Page.
Failure to acknowledge receipt of any addenda may cause your bid to be non-responsive.

The proposal due date remains Friday, January 18, 2013, 3:30 p.m., local Chicago time. The due date may be extended via subsequent addenda, if warranted.

If you have any questions, please contact Mr. Timothy Polacek of my office at (312) 681-2481.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Johnson', with a long horizontal flourish extending to the right.

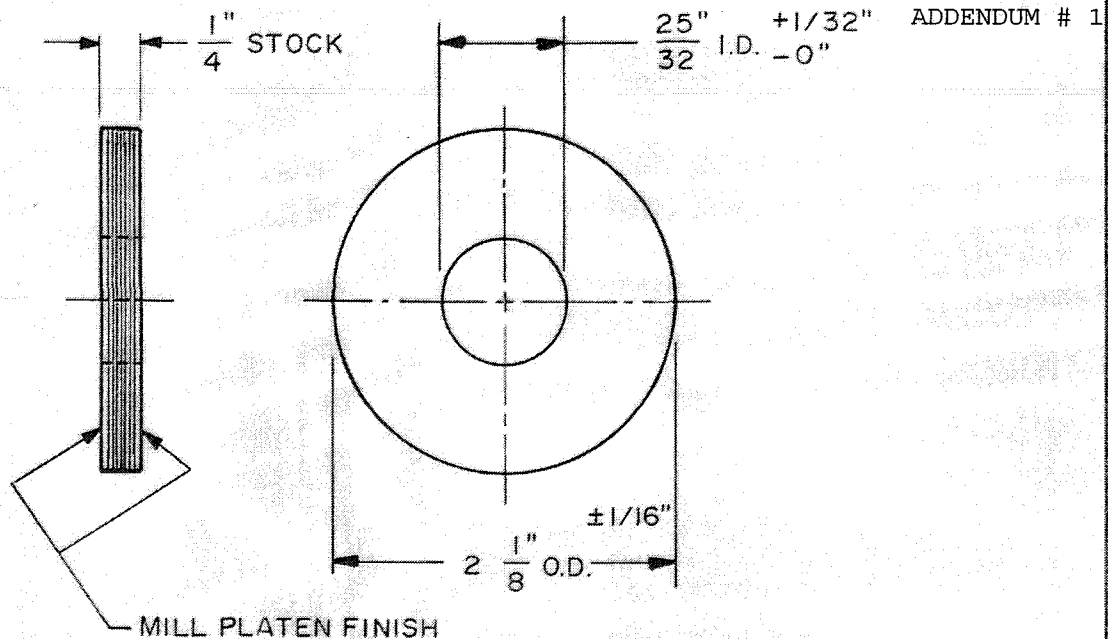
David Johnson
Vice-President, Purchasing

Enclosures (10)

cc: D. Johnson

K. Brosnan

Contract File (C12RI101317082)





WASHER: INSULATING, FOR MOUNT'G. GRAVITY TYPE
CURRENT COLLECTOR BEAM ASSY. TO TRUCK
FOUR (4) REQ'D. PER ASSY.
C.T.A. LOT NO. 4003301

MATERIAL: 1/4" THICK HIGH PRESSURE LAMINATED COTTON FABRIC
REINFORCED PHENOLIC RESIN SHEET, CONFORMING TO
NEMA GRADE "CE".

NOTE:

1. BREAK ALL SHARP EDGES.
2. APPLY THREE (3) COATS OF AN EPOXY RESIN/HARDENER MIXTURE TO THE PERIPHERY OF THE WASHER; MIXTURE TO CONSIST OF GLYPTAL NO. 74004 EPOXY RESIN AND GLYPTAL NO. 74010A HARDENER, MIXED IN PROPORTIONS RECOMMENDED BY MANUFACTURER: SPECIALTY COATINGS; CHELSEA, MA.

DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5	 	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
TOLERANCES: ANGLES ± ∇ FRACTIONS: ± ∇ DECIMALS .XX ± ∇ DECIMALS .XXX ± ∇ RIVET & BOLT EDGE MARGIN ± .05 BEND RADII .01 ON .03 & .06 ± .03 ON .09 & GREATER	WASHER: INSULATING, FOR MOUNTING GRAVITY TYPE CURRENT COLLECTOR BEAM ASSEMBLY TO TRUCK	
SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	Drawn M.D. Scale FULL Date 3-30-94 Checked <i>Michael J. H. [Signature]</i> Manager, Technical Services	R-1-1181 Next R-5-1006 Assy. ITEM 48
Approved <i>John A. [Signature]</i> General Manager, Eng & Tech Services		

1811

-1

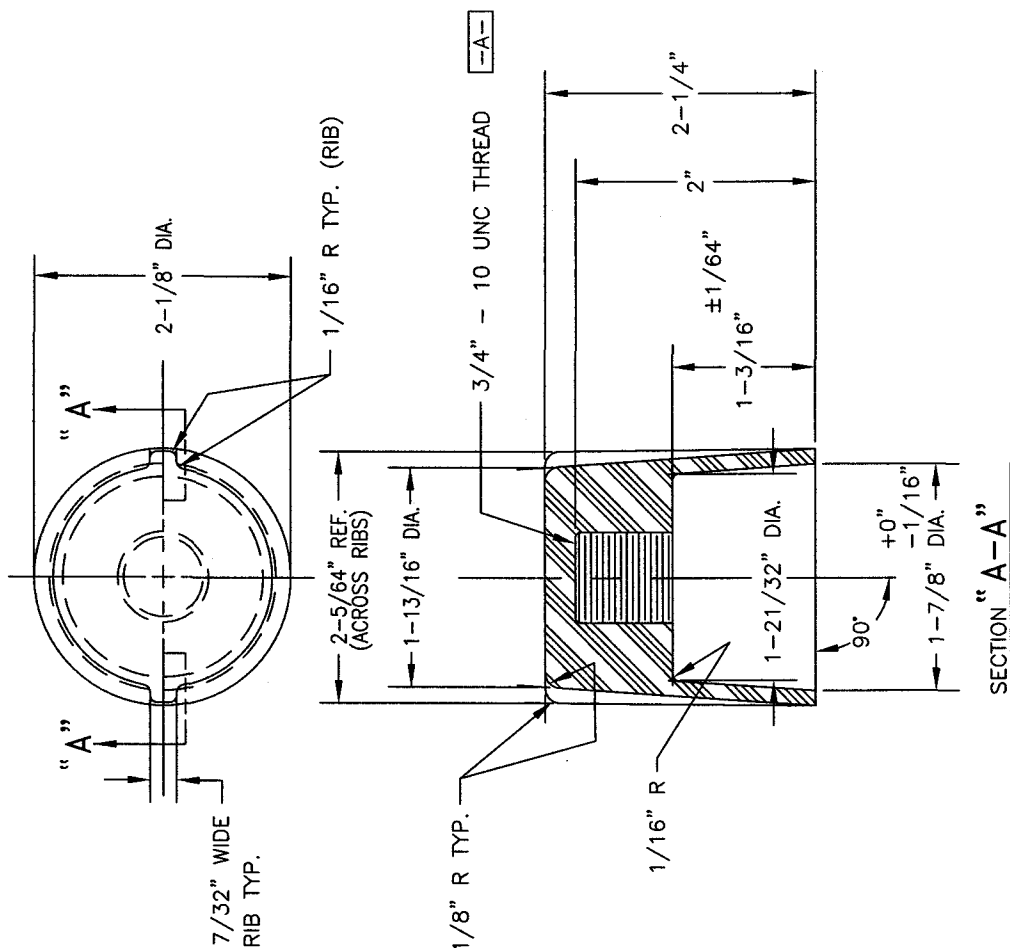
ADDENDUM # 1

NOTE:

- 1.) CONCENTRICITY OF DIAMETERS TO BE WITHIN .010" TRUE POSITION OF THREAD DIAMETER -A-
- 2.) MATERIAL : NORYL NO. SEIX THERMOPLASTIC RESIN BY G.E.
- 3.) VENDOR TO SUBMIT A TRACEABLE PLASTIC DATA SHEET FROM SUPPLIER OF PLASTIC RESIN WITH ORDER.

2.) MATERIAL : NORYL NO. SE1X THERMOPLASTIC RESIN BY G.E.

3.) VENDOR TO SUBMIT A TRACEABLE PLASTIC DATA SHEET FROM SUPPLIER OF PLASTIC RESIN WITH ORDER.



SECTION "A-A"

CAP : MOUNTING BOLT INSULATOR ; FOR TROLLEY
BEAM ASSY. TO TRUCK FRAME INSTALLATION
(4) REQ'D PER DEVICE
USED ON 42" AND 56" TROLLEY BEAMS
C.T.A. LOT NO. 4240055

SUPERSEDES R-1-1162

REV. 1 REMOVED CLASS 3B FROM THREAD NOTATION, REMOVED NOTES FOR MECHANICAL/ELECTRICAL & GENERAL PROPERTIES REQUIREMENTS. MATERIAL WAS NORYL NO. SE1780. ADDED NOTE 3; M.D. /MMQA. 4-19-95

cta

RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES

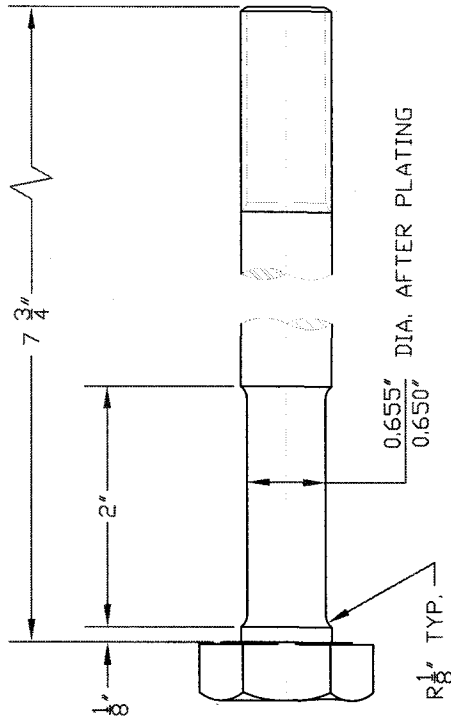
Drawn M.D. Scale FULL Date 1-3-95

Checked <i>[Signature]</i>	Approved
----------------------------	----------

checked ~~by~~ *Mr. S. M.* *11/11* approved

R-5-1006
ITEM 17

R-2-1271



BOLT: MODIFIED, 3/4"-10 UNC x 7 3/4" LONG
 HEX HEAD, FOR MOUNTING GRAVITY TYPE
 CURRENT COLLECTOR BEAM ASSEMBLY TO TRUCK
 FOUR (4) REQUIRED PER ASSEMBLY
 USE WITH CTA ITEM NO. 4003306

MATERIAL: UNPLATED 3/4"-10 UNC 2A x 8" LONG HEX
 HEAD CAP SCREW (FINISHED HEX HEAD BOLT)
 GRADE 5 PER LATEST SAE J429 STANDARD.

NOTES:

1. REMOVE ALL BURRS & SHARP EDGES.
2. APPLY PROTECTIVE ZINC COATING TO MODIFIED BOLT BY MECHANICAL DEPOSITION METHOD PER ASTM B695, CLASS 12, TYPE II LATEST STANDARD.
3. BOLT TOLERANCES & GEOMETRY TO COMPLY WITH ANSI/ASME B18.2.1 LATEST STANDARD.
4. FINISHED PART SHOWN ON CTA DRAWING R-1-1182

REV. 2 ADDED REF. TO COMPLETED PART DRAWING R-1-1182, 2-17-10 GM
 REV. 1. REDRAWN USING AUTOCAD, ADDED ISOLATION INFO. LR, 12-06-00.

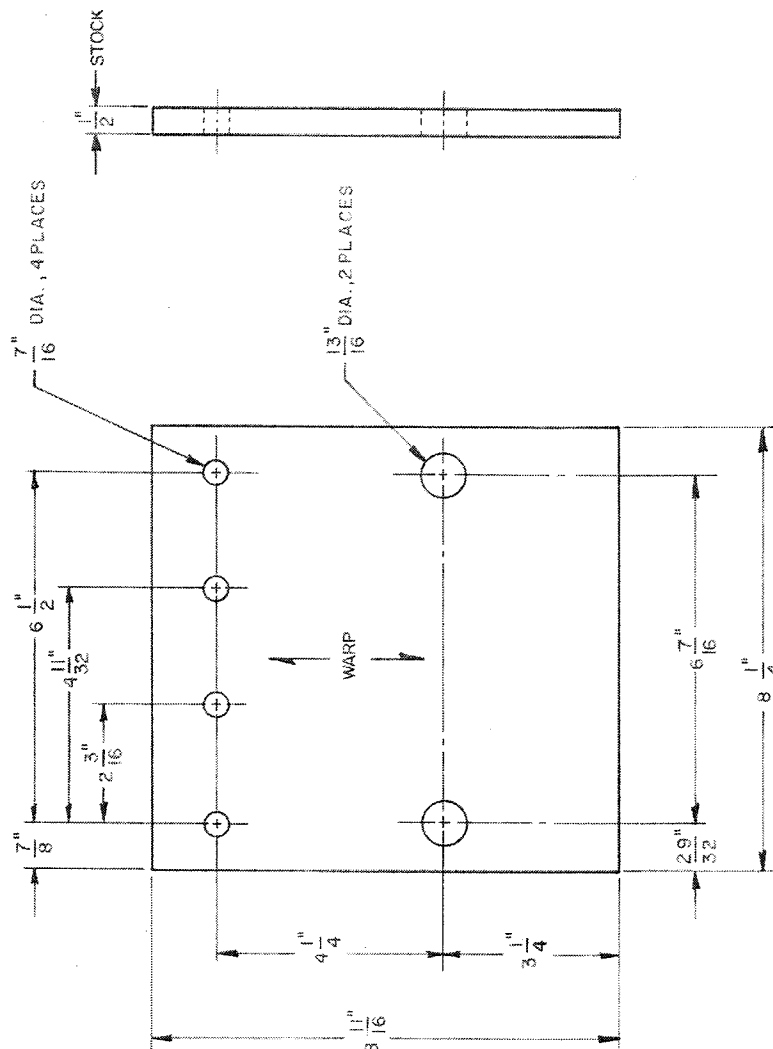
cta <small>RAIL OPERATIONS & TECHNICAL SERVICES</small>	RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
	BOLT: MODIFIED, 3/4"-10 UNC x 7 3/4" LONG HEX HEAD, FOR MOUNTING GRAVITY TYPE CURRENT COLLECTOR BEAM ASSEMBLY TO TRUCK	
DIMENSIONING & TOLERANCING PER ANSI (Y14.5) Y14.5	Drawn: <u>LR</u> Scale: <u>FULL</u> Date: <u>12-6-00</u>	Checked: <u>[Signature]</u> Approved: <u>[Signature]</u>
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	TOLERANCES: ANGLES ± FRACTIONS: ± 1/32" DECIMALS: .XX ± .XXX ± RIVET & BOLT MARGIN: ±.05 BEND RADIUS: ±.02 ON .03 & .06 ±.03 ON .09 & GREATER	Manager, Technical Services General Manager, Eng & Technical Services
SHEET METAL CORNER RADIUS: INT .16 EXT .25 .00	6-26-97	Head Army

REV. 2	R-2-1276
--------	----------

DRAWING NUMBER
R-2-1629

DRAWING NUMBER
R-2-1629

ADDENDUM # 1



NOTE: BREAK ALL SHARP CORNERS $1/32" \times 45^\circ$
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS: $\pm 1/32"$
ANGLES: $\pm 1^\circ$

cta Engineering & Maintenance Division
Equipment Engineering and
Maintenance Department

PLATE: MOUNTING,
FOR TRACK TRIP SWITCH
CARS: 2401-2600, 2601-3200

Drawn M.D. Scale HALF Date 4-30-85
Checked *[Signature]* Approved *[Signature]*
DIRECTOR EQUIPMENT ENG. MANAGER EQUIP. ENG. & MAINT.

R-2-1629


REVIEW: MAT'L WAS COTTEN PHENOLIC "CE", T.M.L. 8-22-91

ORIGINAL ON BUDD DWG. 699-61391

PLATE: MOUNTING
FOR TRACK TRIP SWITCH
ONE REQ'D. PER CAR
CARS: 2401-2600, 2601-3200
C.T.A. LOT NO. 4183004, S.R. 42
MATERIAL: GLASS REINFORCED EPOXY SHEET
CONFORMING TO NEMA GRADE "G10/FR4"

ADDENDUM # 1

NOTES:

- 1: REMOVE ALL BURRS AND SHARP EDGES
2. METAL STAMP MFG. MARK HERE 
3. USE THIS DRAWING IN CONJUNCTION WITH CTA SPECIFICATION CTA 9751.

MATERIAL:

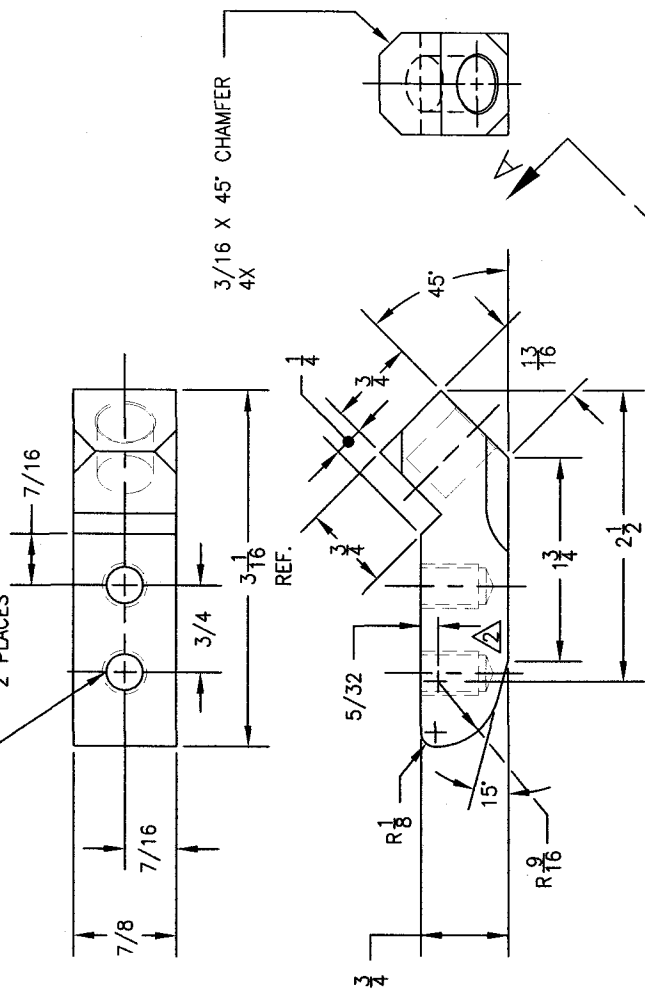
ELECTROLYTIC TOUGH PITCH (ETP) COPPER 110
UNS C11000 99.9± COPPER.

FINISH:

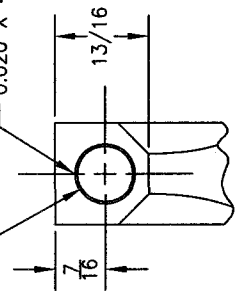
SILVER PLATE, 0.0002" MIN. THICKNESS

CTA ITEM NO.	"D" BORE DIA. AFTER PLATING
5155040	0.567"



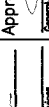
DRILL 0.257 DIA. (#F DRILL) X 9/16 DEEP
TAP 5/16-18 UNC-2B X 1/2 DEEP
2 PLACES



"D" BORE DIA. X 0.625 DEEP
0.020 X 45° CHAMFER



REV.3: DELETED ITEM 5155041 AND CORRECTED BORE HOLE DIA. FOR 5155040, WAS 0.469", CA - 4/6/12
REV.2: BORE DIAMETERS WERE 0.567" FOR 1/0 CABLE FINGER - ITEM NO. 5155040, AND 0.594" FOR 2/0 CABLE FINGER - ITEM 5155041.
REVISED TITLE IN TABLE FOR D: BORE & CABLE SIZE TO "D" BORE DIA. AFTER PLATING AND CABLE SIZE. REVISED DRAWING TITLE
BLOCK TO NEW STYLE LOGO AND ADDED DRAWING NO./REV. NO. TO BORDERS, ADDED DRILL SIZE TO 5/16-18 TAPPED HOLES,
ADDED NOTE 3 - REFERENCE TO CTA SPEC. 9751. M.D., 11/09/09
REV.1: ADDED CTA ITEM NO. 5155041, THE TABLE, AND THE WORD DEEP TO THE WIRE BORE NOTE, C.A/M.D. - 08/22/08

	RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	CONTACT: FINGER, FOR GE 17MP10K2 COUPLER PLUG CAR SERIES: 2400, 2600 & 3200 CTA ITEM NO'S: 5155040	
		Drawn: TUL	Scale: FULL Date: 03/01/00
DIMENSIONING & TOLERANCING PER ANSI (UNITS) 11.1.5		Approved:  / General Manager, Design & Technical Services	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES: ± 1° FRACTIONS: ± 1/32 DECIMALS: .XX ± 0.03 DECIMALS: .XXX ± 0.010		Checked:  / Manager, Technical Services	
RIVET & BOLT MARGIN: ± ON .03 & .06 BEND RADIUS: ± ON .09 & GREATER SHEET METAL CORNER RADIUS: ± ON .09 & GREATER		REV. 3	

R-2-1679

S:\Engineer\Drawings\21679

Technical drawing of a mechanical part. The main view shows a cylindrical part with a diameter of $\phi 1.06$. A cross-section view shows a cylindrical part with a diameter of $\phi .375$ DRILL and a radius of $R .38$. The main view also shows a fillet with a radius of $R 1.75$ and a dimension of 2.06 . The total length of the part is $6.75 \pm .25$, and the distance from the end to the start of the fillet is 4.88 REF.

DETAIL 7. CAM PIN,
2 REQ'D PER DEVICE
C.T.A. LOT NO. 424203

MATERIAL: ϕ 1-1/16 COLD ROLLED STEEL.

DETAIL 12. INSULATING TUBE,
4 REQ'D PER DEVICE
C.T.A. LOT NO. 424308

MATERIAL: ROLLED, ROUND, LAMINATED THERMOSETTING TUBING, NEWA CORP. OF

NOTES:

1. SURFACES TO BE FLAT AND FREE OF BURRS AND CASTING PROTRUSIONS.

2. HOLES TO BE ROUND AND FREE OF BURRS.
3. PIVOTS MADE FROM AISI 1025 STEEL OR EQUAL MUST BE CARBONIZED TO A DEPTH OF .020 AND HARDENED TO R15N 80-83 ON THE SURFACE. CORE HARDNESS NOT TO EXCEED Rc30. MATERIALS THAT MEET REQUIRED WEAR PROPERTIES IN PIVOT AREA AS CAST ARE EXEMPT.
4. CASTING TO CONFORM TO MIL-C-6021H, CLASS 4, GRADE D.

DISCUSSION A. TON CONSUMING

RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

**DETAILS: SLEET SCRAPER
FOR GRAVITY TYPE CURRENT
COLLECTOR BEAM**

Drawn: BRI Inc. Scale: 1/2 Date: 3-1-96
Checked: GM Approved: R-4-1076

REDRAWN FROM DRAWING: GRS-184

Technical drawing of a pipe fitting. The drawing shows a side view of the fitting with dimensions in inches. The overall length is 3.75. The distance from the end to the first bend is 1.500. The distance between the two bends is 1.38. The distance from the second bend to the end is .69. The diameter of the pipe is $\phi .562$. The drawing also shows a top view of the fitting with dimensions. The overall width is 1.88. The distance from the centerline to the edge is .56. The distance from the centerline to the bend line is 1.50. The distance from the centerline to the bend line is 3.31. The drawing is labeled with "BENT LEFT", "BENT RIGHT", "BEND LINE", and "1/4 STOCK". A note indicates "SEE NOTE 2".

DETAIL 2. SCRAPER BLADE: ABRASION RESISTING STEEL,
REFERENCE HARDNESS 235 BHN
8 REQ'D PER DEVICE
4 BENT RIGHT, 4 BENT LEFT, TO BE MADE
OF 1/4 X 3-3/4 X 3-5/16 STOCK
C.T.A. LOT NO. R.H. 4243090
L.H. 4243089

NOTES:
1. REMOVE ALL BURRS AND SHARP EDGES.
2. HOLES TO BE ROUND, FREE OF BURRS,
AND WITHIN .010 TRUE POSITION.

Technical drawing of a mechanical part, likely a valve or actuator component, showing a side view and a cross-sectional view. The side view shows a cylindrical body with a flange at the top and a mounting bracket at the bottom. The cross-sectional view shows the internal components, including a central shaft and a valve mechanism. Dimensions are provided in inches, with some values in parentheses indicating tolerances. Key dimensions include a total length of 2.62 inches, a mounting bracket height of 1.50 inches, and a central shaft diameter of .562 inches. A note at the bottom right states "SEE NOTE 2".

DETAIL 5. SCRAPER SLIDE ROD
2 REQ'D PER DEVICE
PATTERN NO. 8003-3
C.T.A. LOT NO. 4490092

GRADE 60-30 ANNEALED
CAST STEEL PER LATEST
ASTM A-27 SPEC.

DETAIL 8. CAST STEEL PIVOT,
4 REQ'D PER DEVICE
PATTERN NO. 4759-4
C.T.A. LOT NO. 449210

**MATERIAL: AISI 1025 CAST STEEL OR EQUIVALENT
WITH FOLIAR OR HIGHER MECHANICAL PROPERTIES**

[illegible]

DETAIL 3. SPACER: CAM PIN
4 REQ'D PER DEVICE
C T A LOT NO 4242028

C.I.A. LOI NO: 4242029

MATERIAL: RUBBER, SBR COMPOUND
PER ASTM SPEC. R-425 BFI
DUROMETER 40-45, SHORE A

DETAIL 10. ANTI RATTLER; SHOE TIE-UP HOOK
ONE REQ'D PER DEVICE
C T A LOT NO. 4242716

**MATERIAL: MILD STEEL, D.O.M.
MECHANICAL ROUND TUBING
1-5/16 O.D. X 1-1/16 I.D.**

Supplier Abbreviation	Supplier Name
*BBA PROJECT, INC.	BBA PROJECT, INC.
ABBOTTIN	ABBOTT INDUSTRIAL SUPPLY
ABBOTTRU	ABBOTT RUBBER CO.
ABCONNECT	AB CONNECTORS LIMITED
ABILITYE	ABILITY ENGINEERING
ABILITYM	ABILITY METAL
ADMSWSTL	ADAMS & WESTLAKE, LTD.
ADVANCTR	ADVANCE TRANSIT SERVICE INC.
AEROQUIP	AEOQUIP CORP.
AEROSTOP	AERO STOP NUT CORP.
ALBATROS	ALBATROS NORTH AMERICA
ALCOCNTR	ALCO CONTROLS CORP.
ALCOVALV	ALCO VALVE
ALEMITE	ALEMITE CO.
ALERTMFG	ALERT MFG AND SUPPLY
ALLIANCEH	ALLIANCE HOSE
ALLORCOR	ALLOR CORP.
AMCABLE	AMERCABLE
AMERCABL	AMERCABLE
AMETEK	AMETEK COMPANY
AMP	AMP, INC.
AMPINDST	AMP INDUSTRIES
AMSPECL	AMP SPECIALTY PRODUCTS
AMUNITED	AMERICAN UNITED TOOL
APACHEHO	APACHE HOSE & RUBBER INC.
APPLTNEL	APPLETON ELECTRIC CO.
ATLATNTAI	ATLANTA INDIA RUBBER CO.
AUTOCLUT	AUTO CLUTCH & PARTS SERVICE INC.
BALDOR	BALDOR MOTORS
BAUERSPR	BAUER SPRINGS
BBA PROJECT, INC.	BBA PROJECT, INC.
BBAPRO	BBA PROJECT, INC.
BEARINGH	BEARING HEADQUARTERS
BEI Ind.	B.E.I INDUSTRIAL, ENCPDER DIV.
BELDENMF	BELDEN MFG
BERRYBER	BERRY BEARING CO.
Bey Electronics	Bey Electronics
BOEINGVR	BOEING VERTOL
BOMBARDI	BOMBARDIER CORP.
BOWERSMF	BOWERS MFG. CO.
BREEZE	BREEZE FITTINGS
BUDD	BUDD CO THE RAILWAY DIV

BURNDY	BURNDY CORP.
CALAMOUN	CALAMOUNT
CAMFIL FARR	CAMFIL FARR, INC.
CANUSA	CANUSA-EMI/JSG ELECTRIC CO.
CARBONE	CARBONE USA
CHGORAWH	CHICAGO RAWHIDE CO.
CHIEFTAI	CHIEFTAIN
CONCORD	CONCORD FOUNDRY INC.
CONOVER	CONOVER, CE & CO
CONTAERO	CONTINENTAL-AERO
CONTINEN	CONTINENTAL
CONTMFG	CONTINENTAL MFG.
CONTNTWE	CONTINENTAL WELDING CORP.
Contrinex	CONTRINEX, INC.
COPLAND	COPELAND
CORTINGA	COURTIN GASKET & RUBBER CO
CTA	CHICAGO TRANSIT AUTHORITY
DANACORP	DANA CORP
DELTASCR	DELTA SCREW CO.
DENNISON	DENNISON MFG CO
DEVILBIS	DE VILBISS CO
DIESEPC	DIESEL POWER & CONTROL CO.
DJMETAL	D & J METAL CRAFT
DURALAST	DURA-LAST
ELASSTPN	ELASTIC STOP NUT/DIV. OF HARVARD
Elcon National	Elcon National
ELCTROLO	ELECTROLOCK INC.
ELECTROC	ELECTRO CORPORATION
ELMMACHI	ELM MACHINE CORP.
ENGNRPRO	ENGINEERING PRODUCTS CO
ESNA	AMERACES - AMERACE-ESNA CORP.
FACEFIL	FACET FILTER PROD.
FACET	FACET ENTERPRISES, INC.
FILPRO	FILPRO CORP.
FLOWPROD	FLOW PRODS CO
FRNKLNEI	FRANKLIN FIBRE
FULMER	FULMER
GE	GENERAL ELECTRIC
GENCABLE	GEN CABLE CORP
GENERCAB	GENERAL CABLE
GM	GENERAL MOTORS CORP
GRAYLINE	GRAYLINE
GREERSMR	GREER SMYRNA

HAMPSHIR	HAMPSHIRE SPECIALTY PROD. CO.
HILINE	HI-LINE MFG CO.
HOLNGSWR	HOLLINGSWORTH SOLDERLESS TERMINAL CO
HUNTINGTON	HUNTINGTON ELECTRIC
ICMINDUS	ICM INDUSTRIES
ICS	INSULATION CONTRACTORS SUPPLY
INDELECT	INDUSTRIAL ELECTRIC WIRE & CABLE
INOVCMP	INNOVATIVE COMPONENT SALES, INC.
INTFILT	INTERNATIONAL FILTER MFG.
JBINDUST	J B INDUSTRIES
JERGENSM	JERGENS MFG CO
JERGNSM	JERGENS MFG CO
JMDIND	JMD INDUSTRIES
JOHNSMNV	JOHNS-MANVILLE SALES CORP
KNORR	KNORR BRAKE CORP.
KONI	KONI SHOCKS
KULKEL	KULKA ELEC CORP
LCOMP	L-COMP
LICON	LICON DIV OF ILLINOIS TOOL WORKS
LITTON	LITTON VEAM
LITTON VEAM	LITTON VEAM
LORD	LORD MFR CORPORATION
LORDMFG	LORD MFG CO
MCMASTER	MCMASTER-CARR SUPPLY CO
MERSEN USA	MERSEN USA
MK	MORRISON-KNUDSEN CO., INC.
MOLEX	MOLEX
MOORE ADDISON	MOORE-ADDISON
MOOREADD	MOORE-ADDISON
MORRISON	MORRISON-KNUDSEN CO., INC.
MOTIONSE	MOTION SENSOR, INC.
NATIONAL	NATIONAL SEMICONDUCTOR
NEWARKEL	NEWARK ELEC CO
NTN	NTN BEARING
NYAIRBRA	NEW YORK AIR BRAKE
OKONITE	OKONITE CO.
PANDUIT	PANDUIT CORP.
PARKSEAL	PARKER SEALS GNP
POLYMER	THE POLYMER CORP
POWERPAR	POWER PARTS CO
POWERPART	POWER PARTS CO
PREMIUMT	PREMIUM TRANSIT SERVICE
PYLENATN	PYLE NATIONAL CO

QUALITYTO	QUALITY TOOL, INC
REMKE,J	REMKE,JOHN INC.
Ri-del	RI DEL MANUFACTURING, INC.
RIDELMFG	RI DEL MANUFACTURING, INC.
RIMAR	RI-MAR, INC.
ROCKBEST	ROCKBESTOS
ROTAN	ROTAN, INC.
RUKLICSC	RUKLIC,JP SCREW CO
SAINTGOB	SAINT-GOBAIN
SECURITYL	SECURITY LOCKNUT, INC.
SIEMENS	SIEMENS
SIMONS,J	SIMONS,J. P. CO.
SKF	SKF INDUSTRIES
SMTHOPH	SMITH OF PHILADELPHIA
SONIC	SONIC INC.
SOUTHCO	SOUTHCO INC
SOUTHHAV	SOUTH HAVEN RUBBER
SPACECRA	SPACECRAFT COMPONENTS CORP.
SPCTECH	SPC TECHNOLOGY
SPORLAN	SPORLAN
STRANCO	STRANCO PROD. INC.
SUPRENAN	SUPRENANT
SUPVUTRO	SUPER VU-TRON
TAMFG	TA MFG CORP
TECTRAN	TEC TRAN CORP.
THERMIKING	THERMO-KING
THOMSBET	THOMAS & BETTS CO
TRANSAME	TRANSIT AMERICA
TRANSTEC	TRANSTEC (FORMERLY RINGSDORFF)
TRISON	TRISON ASSOCIATES, INC.
TRUARC	WALDES KOHINOOR INC
TTAMFG	TTA MANUFACTURING
TYCOELEC	TYCO ELECTRONICS
UMPCO	UMPCO
UNIONSWT	UNION SWITCH & SIGNAL CO
VAPOR	VAPOR CORP
VEAMCO	VEAM CO.
VIKING	VIKING PUMPS
VOSSENG	VOSS ENGINEERING, INC.
WABCO	WABCO - ATLANTA, GA.
WEGMANN	WEGMANN AND COMPANY
ZLMACHIN	Z & L MACHINING



CHICAGO TRANSIT AUTHORITY
REQUISITION NO. C12RI101317082

Request for Proposals (RFP)

for

**Sourcing and delivery of parts required to perform in-house “C-Lite”
overhauls on 2600 series railcars**

Confidentiality and Non-Disclosure: Firms requiring assistance shall contact only Tim Polacek, Procurement Administrator, 312-681-2481; or, Karen Brosnan, Manager, Purchasing, 312-681-2487. Firms, including all team sub-consultants, who contact any CTA personnel, either verbally or in writing, concerning this solicitation package, are in violation of the procedures for this procurement and any submitted proposals may be disqualified. Prime consultants are required to sign and submit the “RFP Non-Disclosure Statement Contractor” (Appendix I) with the proposal and to require all sub-consultants to submit signed copies of the “RFP Non-Disclosure Statement Sub-Contractor” (Appendix I) with the proposal.

ISSUED BY
Purchasing Department, Chicago Transit CTA
567 West Lake Street, Chicago, Illinois 60661-1498
David Johnson, Vice President, Purchasing and Warehousing
Forrest Claypool, President
Terry Peterson, Chairman

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II. Scope of Services	5
III. Proposal Requirements	8
IV. Evaluation Criteria and Process	12

APPENDICES

Appendix A	Price Proposal Forms <i>Price Proposal Form</i> <i>Cost Component Form</i>
Appendix B	Contract for Parts <i>General Conditions</i> <i>US DOT/FTA Contractual Requirements</i> <i>Special Conditions</i>
Appendix C	Special Conditions: DBE Requirements
Appendix D	Bills of Material (BOMs)
Appendix E	Detail Specifications
Appendix F	CTA Drawings
Appendix G	Bid Protest Procedures
Appendix H	Certifications, Execution, Disclosures & Acceptance <i>Certification Regarding a Drug-free Workplace</i> <i>Certification of Primary Participant Regarding Debarment</i> <i>Certification of Lower Tier Participant(s) Regarding Debarment</i> <i>Certification Regarding Lobbying</i> <i>Proposer's Execution Signature Page</i> <i>Disclosure of Ownership</i> <i>Acceptance</i>
Appendix I	RFP Non-Disclosure Statements
Appendix J	Vendor Reference Form
Appendix K	Table of Exceptions

I. BACKGROUND & INTRODUCTION

The Chicago Transit Authority ("CTA") plans to perform an in-house overhaul of 100 of its 2600-series rail cars. The 2600 series, totaling 600 cars numbered 2601-3200, were built and delivered between 1981-1987. 598 of these cars received their midlife overhaul between 1998-2002. Over the past three years, CTA has conducted an in-house overhaul program ("C-lite") at its Skokie Shop Rail Heavy Maintenance facility, performing life-extending overhauls on 300 rail cars. Based on current fleet projections and service requirements for the next several years, CTA has determined that 100 additional 2600-series rail cars should be overhauled.

With this Request for Proposals ("RFP"), CTA seeks to obtain the services of an experienced and capable railcar parts supplier to take responsibility for the sourcing and delivery of the parts and materials required to perform these 100 additional overhauls. CTA has developed several comprehensive Bills of Material ("BOMs") specifying the material required.

Contract award selection will be made on a "best value" basis; while the total price paid is the primary consideration, CTA will weigh price proposals against technical criteria such as the delivery plan and the qualifications and experience of the proposing firm. (see **IV. Evaluation Process and Criteria**). CTA may award one or more contracts as a result of this RFP, based on what represents the best value to the CTA. If possible, CTA's preference is to award a single contract. The RFP will proceed according to the following timeline, subject to revision by CTA:

Solicitation of Request for Proposals	Thursday, December 6, 2012
Final date for vendor questions	Friday, December 21, 2012
CTA addendum response to questions	Friday, January 4, 2013
Proposal Due Date	Friday, January 18, 2013

PROPOSAL SUBMITALS

All proposals must be submitted by 3:30 pm, Chicago local time, on the due date listed above to:

Chicago Transit Authority
Bid Office, 2nd Floor
567 W. Lake Street
Chicago, Illinois 60661-1498

Each package submitted must have the RFP requisition number, C12RI101317082, printed on the outside of the package as well as a listing of the package's contents.

QUESTIONS, CLARIFICATIONS AND OMISSIONS

All correspondence, communication and contact in regard to any aspect of this solicitation or offers shall be only with the Senior Procurement Administrator, identified on page 4. Proposers and their representatives shall not make any contact with or communicate with any member of the CTA, or its employees and consultants, other than the designated Senior Procurement Administrator, in regard to any aspect of this solicitation or offers. Telephone calls may be used to expedite communications but shall not be official communications unless confirmed in writing.

At any time during this procurement up to the time specified in "Background & Introduction", Page 3 of 11, Proposers may request, in writing, a clarification or interpretation of any aspect, a change to any requirement of the bid document, or any addenda to the bid document. Such written requests shall be made to the Senior Procurement Administrator.

Any request for a change to any requirement of the Contract documents must be fully supported with technical data, test results or other pertinent information showing evidence that the exception will result in a condition equal to or better than that required by the bid document, without a substantial increase in cost or time requirements. If it should appear to a prospective Proposer that the performance of the Work under the Contract, or any of the matters relating thereto, is not sufficiently described or explained in the bid document or Contract documents, or that any conflict or discrepancy exists between different parts of the Contract or with any federal, state, local or CTA law, ordinance, rule, regulation or other standard or requirement, then the proposer shall submit a written request for clarification to the CTA within the time period specified in "Background & Introduction", Page 3 of 13.

ADDENDA

The Chicago Transit Authority reserves the right to amend the RFP document at any time. Any amendments to the document shall be described in written addenda. Notification of or the addenda also will be distributed to all such prospective Proposers officially known to have received the RFP document. Failure of any prospective Proposers to receive the notification or addenda shall not relieve the Proposer from any obligation under the RFP document therein. All addenda issued shall become part of the RFP document.

Prospective Proposers shall acknowledge the receipt of each individual addendum in their RFP document on the form "Proposers Execution Signature Page" in Appendix H. Failure to acknowledge in the RFP document receipt of addenda may at the CTA's sole option disqualify the Proposal.

If the CTA determines that the addenda may require significant changes in the preparation of proposals, the deadline for submitting the proposals may be postponed no less than five (5) days from the date of issuance of addenda or by the number of days that the CTA determines will allow Proposers sufficient time to revise their proposals. Any new due date shall be included in the addenda.

INQUIRIES

Refer all inquiries about this procurement to T. Polacek Procurement Administrator, telephone (312) 681-2481. E-mail: tpolacek@transitchicago.com

II. SCOPE OF SERVICES

Overhaul Material Requirements

CTA has identified the following material requirements for the light overhaul of 100 2600-series cars. Many items are grouped into kits containing many items that must be delivered together. The full Bill of Material listings, including identification of all approved manufacturers for each item, detail specifications, and applicable CTA Drawing Nos. for machined items, can be found in **Appendices D, E, & F**.

Description	BOM #	Qty Required	Includes Drawings*
Kit: Truck overhaul	R-BOM-002	50	Y
Kit: Master controller overhaul	R-BOM-010	50	
Kit: CAM group overhaul	R-BOM-020	50	
Kit: Cams, plates, gears, spacers	R-BOM-030	50	
Kit: Traction motor	R-BOM-040	50	
Kit: A/C unit overhaul	R-BOM-050	100	
Kit: Control group contactors	R-BOM-060	50	
Kit: Door relays and switches	R-BOM-070	50	
Kit: HPCU Rebuild	R-BOM-080	100	
Kit: Threshold, self-cleaning		400	Y
Sensor: Proximity		1,400	
Encoder: Incremental		100	
Track: Side door		800	
Operator: Door, complete		400	
Spring: Carbody, inner		400	Y
Spring: Carbody, outer		400	Y
Reverser: New style		100	

CTA ideally seeks to award a single contract for the sourcing and delivery of the entire material requirement listed above. However, in recognition of the broad range of sources for these components, CTA will also evaluate proposals offering a portion of the required materials, provided such an offer can meet CTA's project schedule requirements. The number of items offered will be evaluated. The more items offered, the higher the score.

Vendors will propose pricing for any of the sixteen items listed on the Price Proposal Form, (see **Appendix A**). They will then be given the opportunity to offer discounts for offering multiple items. For example, a Proposer may choose to price five of the sixteen items. The Proposer would then have the opportunity to offer a discount should CTA choose to award that Proposer all five of the items. Proposers who seek award for the entire material requirement must also enter pricing for each of the sixteen items. They will then submit a price under "Complete Sourcing Pricing Proposal" for all material required. Listing a discount is unnecessary as it will hopefully be reflected in the "All Material Required" pricing.

Approved manufacturers and item numbers

Where approved manufacturers and manufacturers' part numbers are given in **Appendix D**, these are the only items currently approved for the relevant application by CTA's Rail Technical Services department.

Conditions, Exceptions, Reservations or Understandings

Proposers are cautioned to limit exceptions, conditions and limitations to the provisions of this RFP, as they may be determined to be so fundamental as to cause rejection of the proposal for not responding to the requirements of the RFP.

Any and all deviations must be explicitly, fully and separately stated in the proposal by completing **Table of Exceptions** (APPENDIX K), setting forth, at a minimum, the specific reasons for each exception so that it can be fully considered and, if appropriate, evaluated by the Chicago Transit Authority. All exceptions shall be evaluated in accordance with the appropriate evaluation criteria and procedures and may result in the Proposer receiving a less favorable evaluation than without the exception.

Table of Exceptions Form, (APPENDIX K.), shall be included in the Technical package.

Items with Drawings

Several items listed do not have any approved manufacturers or part numbers but rather are given only with a CTA drawing. These items will need to be manufactured to CTA's specifications. Any item, to be manufactured from a shop not previously approved by CTA engineers, will require an initial inspection for conformance to CTA's drawing and specification.

Project Manager

Proposers must identify their Project Manager, who will serve as the primary point of contact with whom CTA will arrange and schedule individual shipments, communicate project status and any ongoing requirements.

Delivery

Shipments

The selected vendor(s) will be responsible for shipping all contracted items to the attention of Julian Sandu, or his designee, CTA's Skokie Shops facility at 3701 Oakton, Skokie IL. 60076-3498. Mr. Sandu must be contacted one week prior to each shipment at 847-682-5141, e-mail: jsandu@transitchicago.com

A key goal of this RFP is to mitigate the risk of CTA lacking certain components necessary to perform car overhauls while simultaneously holding significant on-hand quantities of overhaul material.

Shipments are therefore expected to include all material necessary for CTA to initiate the overhaul program and maintain its production rate. The Contractor may arrange for items to be delivered directly from manufacturers to CTA, when warranted and with approval of the CTA Project Manager. However, all material must, if applicable, be kitted or packaged as required and specified in **Appendices D-F**.

The Contractor may invoice for material upon CTA's receipt and acceptance of each shipment. Acceptance shall be at the discretion of CTA's Project Manager, including consideration of those items requiring additional quality inspection/assurance measures.

Pre-Delivery Kit Approval

One month prior to the delivery date for the initial delivery of material for the overhaul of 22 cars, Contractor will ship to the CTA enough material to overhaul one married pair of railcars. CTA will inventory the material and complete a prototype installation on the two railcars. Within two weeks of the delivery of the parts, or, at the completion of the prototype installation, whichever occurs first, CTA will notify the Contractor of any necessary changes that must be made to the kits prior to the start of the delivery schedule as planned.

Project and Delivery Schedule

CTA seeks to begin the overhaul program in Q2 2013, with a production rate of approximately 8 cars/month.

The initial material delivery must contain, enough material for the overhaul of 22 cars. Subsequent deliveries on a monthly or bi-monthly (every 2 months) basis must support a production rate of 8 cars/month.

Any deviations from the contractual delivery schedule must be pre-arranged and accepted in writing by CTA's Project Manager to avoid incurring liquidated damages.

Delivery Plan & Commitment

Proposers are to specify their initial delivery date for the delivery of material for the initial 22 cars, as well as their delivery plan to support continuous production of 8 cars/month for the duration for the project.

In the interest of minimizing schedule risk and maximizing predictability, Proposers will be subject to a rate of liquidated damages that will accrue should delivery deviate beyond certain thresholds. (See Special Conditions in APPENDIX B)

III. PROPOSAL REQUIREMENTS

A. Format

Submittals shall be prepared on standard size paper (8 ½" x 11"); if any binding is used, it should be removable and on the left side. The proposal shall contain sufficient detail to enable the CTA to evaluate it according to the criteria outlined in **Section IV, Evaluation Process and Criteria**. The CTA may request additional written information and/or oral presentations.

Each proposal is to consist of three parts, to be packaged separately, as follows:

Part 1 - Technical Proposal (Original plus 4 copies)

Part 2 - Price Proposal (Original plus 4 copies)

Including completed: Price Proposal forms (Appendix A), Disclosure(s) of Ownership, Certification(s) Regarding Primary and Lower Tier Debarment, Lobbying Certification(s), Drug Free Workplace Certification(s), History of Firm(s), Contract Execution, Non-Disclosure Statement form(s), and Vendor Reference Form(s), (Appendices H – J)

Part 3 - Disadvantaged Business Enterprise (DBE) Proposal (Original plus 3 copies)

Submittal cover letters must contain a commitment to provide the parts and services described in this RFP. Each cover letter must include the name and address of your company, the requisition number & the project name, and the name, title, address and telephone numbers and signature of a representative of the vendor who is authorized to negotiate a contract with Authority and/or whom we may contact with questions regarding your response.

Proposers should refrain from using expensive materials for their Submittals. All Submittals become the property of CTA and will not be returned. All costs incurred in the preparation and presentation of the proposal are the responsibility of the Proposer. Issuance of this RFP does not commit CTA to pay any cost incurred in the preparation of this proposal. Proposers are advised to adhere to the submittal requirements. Failure to comply may be cause for rejection of the submission.

B. Content

PART 1 TECHNICAL PROPOSAL

The following elements shall be addressed in the technical proposal:

1. Delivery Plan

a) Startup Date

Proposers should state the date to which they will commit to begin deliveries to CTA (see **Section II – Scope of Service – Delivery**). CTA seeks to begin the overhaul program in Q2 2013, and considers this a baseline target to begin material deliveries.

b) Delivery Scheduling & Approach

Proposers should describe their approach to ensuring material is delivered to CTA according to the scheduling needs of its overhaul program. This should include discussion of, at minimum:

- Plan to meet requirements for startup and ongoing production
- Method of grouping/splitting shipments
- Preliminary schedule of deliveries based on Startup Date and CTA's stated production rate

c) Liquidated damages for late delivery

CTA seeks to minimize uncertainty in scheduling the overhaul program. Liquidated damages will accrue for significant deviations from the delivery schedule, to be assessed in accordance with the contract terms (see **Appendix B**). Damages are to be based on a fixed rate per calendar day beyond the commitment delivery dates, and would begin accruing three business days after a committed delivery date without prior written approval for a rescheduled delivery by the CTA Project Manager. Therefore, Proposers should describe how they plan to safeguard against late deliveries.

2. Qualifications of Firm & Personnel

a) Supply chain facilities & resources

Proposers should identify and describe the facilities and resources that will support the sourcing and delivery of material. This includes, but is not limited to:

- The location, size, and staffing of any warehouse/inventory facilities that will be used to inspect, store, kit, package, and ship materials.
- In-house or contracted technical expertise on rail transit vehicle parts, including expertise in propulsion systems, truck assemblies, and other sub-systems.
- Existing relationships with original equipment manufacturer(s) (OEM) for required materials. Identify these OEMs. If possible, provide a statement from each OEM that they will be able to support your delivery schedule for this project.
- Relationships with machine shops and other fabricators to produce items based on CTA's specifications and drawings, as needed. Identify the shop(s) that you will partner with to fabricate parts as necessary.

b) Key Staff Qualifications

This section must contain the resumes for all key personnel who will be involved in the engagement, including the proposed Project Manager. The Proposer must identify the contractor representatives, their specialized experience, and professional qualifications as it relates to this contract as described in **Section II. Scope of Services**.

Proposed personnel are expected to have demonstrable successful experience in the following areas, at minimum:

- Sourcing and distribution of rail transit vehicle parts
- Project management and scheduling

c) Firm Experience

Applicable Firm qualifications must be presented in this section covering the Proposer's experience on similar or related rail vehicle sourcing projects. CTA would ideally expect Proposers to demonstrate at least three comparable major rail vehicle parts sourcing projects that it has successfully completed in the past 5 years.

Proposers shall provide client references for such projects using the attached Vendor References Form provided in **Appendix J**.

d) Firm Finances

Documents supporting a firm's and subcontractor(s)' financial stability and ability to perform the contract must be included as well.

Respondent must provide audited financial statements or any other documentation demonstrating sufficient financial capacity to successfully complete this project. Also provide any information pertaining to any past bankruptcy, contract defaults and violations of any regulatory acts. This information will be used to determine vendor responsibility. The primary responsibility consideration will be the firm's financial capacity to acquire, hold, and deliver all material offered in its proposal, and its ability to meet delivery commitments and potential penalties.

3. Table of Exceptions/Deviations

The summary must state whether the Proposal does or does not fully comply with the requirements as defined in this RFP and shall provide a detailed list of exceptions to the Scope of Services or other RFP requirements including all exhibits and appendices. This list must be in table form (**Appendix K**) and must identify the page, section number, provision and the specific exception, non-conformance and/or substitute language proposed. **Failure to identify any specific items of non-compliance will result in CTA assuming compliance.** The CTA, at its sole discretion may reject any exception within the proposal.

PART 2 PRICE PROPOSAL

A fully completed Price Proposal must include the following items:

1. A letter of transmittal signed by a representative of the consultant authorized to negotiate with the CTA, specifying the validity period of the Price Proposal.
NOTE: The Price Proposal must be valid for a minimum of one hundred eighty (180) days following the final Proposal Due Date and be signed by an authorized representative of the proposing firm. Each succeeding proposal, revised proposals or BAFOs, must be valid for a minimum of one hundred eighty (180) days following the date that CTA has established as the due date for the revised proposal or BAFO.
2. A completed Price Proposal sheet (see **Appendix A**).
 - Proposers are not required to submit pricing for all lines on the Price Proposal sheet, however, the number of lines priced will be factored into the Proposal evaluation.
3. A completed Cost Proposal sheet (see **Appendix A**). CTA seeks to ensure that the cost factors of this procurement are fair and reasonable, and therefore requests disclosure of the key cost components within the pricing offered:
 - Cost of materials
 - Cost of overhead (management, delivery, etc.)
 - Profit margin
4. Signed copies of all CTA certification forms provided in **Appendix H**. Additionally, please include completed Ownership, Lower-Tier Debarment Certification forms and Subcontractor RFP Non-Disclosure forms, as required, for any proposed subcontractors.

PART 3 DISADVANTAGED BUSINESS ENTERPRISE (DBE) INVOLVEMENT PROPOSAL

Proposers must complete the DBE requirements as required by **Appendix C** - DBE Requirements and **submit separately** from Technical Proposal and Price Proposal. Proposers must describe their firm's policy and approach to utilize disadvantaged firms in order to comply with the DBE Requirements. The CTA encourages any team arrangements that will work to the benefit of this project. If such arrangements are made, the contractor must assume full responsibility for the work performed by all sub-contractors.

All proposed DBE firms must be certified as DBE's by the Illinois Unified Certification Program (IL UCP).

IV. EVALUATION CRITERIA AND PROCESS

Evaluation Criteria

In reviewing and evaluating the Technical Proposals submitted to this RFP, the CTA will consider the following primary criteria, which are considered to be equally important. Under each primary criteria are sub-criteria which are listed in the order of their relative importance, beginning with the most important.

1. Delivery Plan Commitment

- Date of first delivery
- Schedule of delivery to maintain production
- Safeguards for on-time delivery
 - Number and type of exceptions
- Number of items offered

2. Qualifications of Firm and Personnel

- Firm's experience on similar projects
- Firm's finances
- Facilities and resources
- Key staff qualifications

Evaluation Process

All responses will be evaluated by one or more evaluation committee(s) to determine the competitive range of Proposers. After determining which Proposers are in the competitive range, the CTA may conduct negotiations with those Proposers to discuss any deficiencies in their proposal and to ensure that the Proposers fully understand all the requirements of this RFP and have, or can obtain, all required equipment, personnel, materials, etc. required to successfully perform.

However, CTA may elect to award one or more contracts based only on the initial proposals submitted, with no negotiations.

Should negotiations occur, CTA may request additional information, including but not limited to revised pricing or delivery schedules, and to determine the veracity of information submitted. A proposal found to be based on inaccurate or misrepresented information may be dismissed from further consideration. Firms successfully completing negotiations may be invited to submit a Best and Final Offer (BAFO) reflecting final pricing and delivery based on all clarifications and discussions.

Selection Basis

CTA will award one or more contracts on the basis of the best value to CTA, with a side-by-side evaluation of each Proposer's Technical Score and total pricing. CTA may elect to award to other than the lowest priced Proposer on the basis of superior qualifications and/or a more favorable delivery plan (earlier delivery start and a more secure plan for on-time delivery).

APPENDICES

Appendix A	Price Proposal Forms <i>Price Proposal Form</i> <i>Cost Component Form</i>
Appendix B	Contract for Parts <i>General Conditions</i> <i>Special Conditions</i> <i>US DOT/FTA Contractual Requirements</i>
Appendix C	Special Conditions: DBE Requirements
Appendix D	Bills of Material (BOMs)
Appendix E	Detail Specifications
Appendix F	CTA Drawings
Appendix G	Bid Protest Procedures
Appendix H	Certifications & Disclosures <i>Certification Regarding a Drug-free Workplace</i> <i>Certification of Primary Participant Regarding Debarment</i> <i>Certification of Lower Tier Participant(s) Regarding Debarment</i> <i>Certification Regarding Lobbying</i> <i>Proposer's Execution Signature Page</i> <i>Disclosure of Ownership</i> <i>Acceptance</i>
Appendix I	RFP Non-Disclosure Statements
Appendix J	Vendor Reference Form
Appendix K	Table of Exceptions

APPENDIX A

PRICE PROPOSAL FORM

Price Proposal Form

Individual Pricing Proposal

Line #	Description	BOM #	Qty Req'd	Extended Price *	Avg Unit Price **
1	Kit: Truck overhaul	R-BOM-002	50	\$	\$
2	Kit: Master controller overhaul	R-BOM-010	50	\$	\$
3	Kit: CAM group overhaul	R-BOM-020	50	\$	\$
4	Kit: Cams, plates, gears, spacers	R-BOM-030	50	\$	\$
5	Kit: Traction motor	R-BOM-040	50	\$	\$
6	Kit: A/C unit overhaul	R-BOM-050	100	\$	\$
7	Kit: Control group contactors	R-BOM-060	50	\$	\$
8	Kit: Door relays and switches	R-BOM-070	50	\$	\$
9	Kit: HPCU Rebuild	R-BOM-080	100	\$	\$
10	Kit: Threshold, self-cleaning		400	\$	\$
11	Sensor: Proximity		1,400	\$	\$
12	Encoder: Incremental		100	\$	\$
13	Track: Side door		800	\$	\$
14	Operator: Door, complete		400	\$	\$
15	Spring: Carbody, inner		400	\$	\$
	Spring: Carbody, outer		400	\$	\$
16	Reverser: New style		100	\$	\$

Notes

* Basis of Evaluation

** (Extended Price / Qty Req'd)

Discount for Bundling Line Items

Discount	Line items included (1 through 16)
%	
%	
%	

Complete Sourcing Pricing Proposal

All material required	All Lines	\$
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Signature of Authorized Official

Date

Cost Component Disclosure

For each *Extended Price* quoted on the Price Proposal form, please disclose the percentage of each of these primary cost component factors:

- Cost of Materials (%)
 - Direct cost of obtaining or producing materials
- Cost of overhead (%)
 - Cost of management, administration, storage, delivery, analysis, etc.
- Profit

Percentages disclosed may be rounded to the nearest full number/integer

For example,

Cost of Materials	-	74%
Cost of overhead	-	17%
Profit	-	9%

APPENDIX B

CONTRACT FOR PARTS

CONTRACT FOR SUPPLIES

GENERAL CONDITIONS

1. NON-DISCRIMINATION:

The Contractor, in performing under this Contract, shall not discriminate against any worker, employee or applicant or any member of the public, because of race, creed, color, age, sex ancestry, handicap or national origin, nor otherwise commit an unfair employment practice. The Contractor further agrees that this Article will be incorporated by the Contractor in all contracts entered into with suppliers of materials or services, contractors and subcontractors, and all labor organizations furnishing skilled, unskilled and craft union skilled labor, or who may perform any such labor or services in connection with the Contract.

The Contractor's attention is called to the provisions of the Illinois Human Rights Act, which are hereby incorporated by reference.

To demonstrate compliance, the Contractor and his subcontractors will furnish such reports and information as requested by Chicago Transit Authority or any Federal, State or local government or agencies that may require such information as a condition of financial assistance in whole or in part.

2. DISADVANTAGED BUSINESS ENTERPRISES:

All parties are hereby notified that in regard to any contract resulting from this invitation to bid, Disadvantaged Business Enterprises will be afforded full opportunity to participate, and will not be discriminated against because of race, color, sex, or national origin in consideration for an award.

3. INDEMNIFICATION:

The contractor shall indemnify, keep and hold harmless the Chicago Transit Authority, its officers, employees and agents against all injuries, deaths, losses, damages, claims, suits, liabilities, judgments, costs and expenses, of whatever kind, including but not limited to attorney's fees, which may accrue against the Chicago Transit Authority, its officers, employees and agents arising out of, as a result of, or in consequence of the acts or omissions of the Contractor in furtherance of the contract, including acts or omissions of the Contractor's servants, employees, subcontractors, agents, or officers, in the performance of the work covered by the contract.

4. SUBLETTING OR ASSIGNMENT OF CONTRACT OR CONTRACT FUNDS:

No contracts shall be assigned or sublet in whole or in part without the written approval of the Purchasing Agent, and in no case shall such written approval relieve the Contractor from his obligations or change the terms of the Contract Documents.

The Contractor shall not transfer or assign any contract funds or claims due or to become due without the written approval of the Purchasing Agent having been first obtained.

5. GUARANTEES AND WARRANTIES:

All guarantees and warranties required shall be furnished by the Contractor and shall be delivered to the Purchasing Agent or his designee before final payment on the contract is issued.

6. DELIVERY:

All materials shipped to the Chicago Transit Authority must be shipped F.O.B. destination location. Chicago Metropolitan Area, Illinois. If prior delivery notification is specified, arrangements must be made by the vendor with the Authority's designated receiving location at least 24 hours in advance to arrange for receipt of the materials. The material must then be delivered where directed and as agreed upon.

Unless otherwise specified or agreed upon, truck deliveries to locations other than 567 W. Lake will be accepted not earlier than 7:00 A.M. and not later than 3:00 P.M. on weekdays only. No deliveries will be accepted on Saturdays, Sundays or Holidays. Deliveries to 567 W. Lake shall be made between 8:00 A.M. and 4:00 P.M., on weekdays only.

The quantity of material delivered by truck shall be ascertained from a weight certificate issued by a duly licensed Chicago Public Weigh-Master upon request. In the case of delivery by rail, weight will be ascertained from bill-of-lading from originating line, but the Authority reserves the right to re-weigh at the nearest available railroad scale.

7. DEMURRAGE AND RE-SPOTTING:

The Authority will be responsible for demurrage charges only when such charges accrue because of the Authority's failure to unload the material.

The Authority will pay railroad charges due to the re-spotting of cars, only when such re-spotting is ordered by the Authority.

8. MATERIALS INSPECTION AND RESPONSIBILITY:

The Purchasing Agent, or his designee, shall have a right to inspect any materials to be used in carrying out this contract.

The Authority does not assume any responsibility for the availability of any controlled materials or other materials and equipment required under this contract. All materials and equipment furnished under the contract shall be new, unless otherwise specifically stated.

The Contractor shall be responsible for the contracted quality and standards of all materials, components or completed work furnished under this contract.

Materials, components or completed work not complying therewith may be rejected by the Purchasing Agent or his designee and shall be replaced by the Contractor at no cost to the Authority.

Any materials or components rejected shall be removed within a reasonable time from the premises of the Authority, at the entire expense of the Contractor, after written notice has been mailed by the Authority to the Contractor that such materials or components have been rejected.

9. PAYMENT:

Payment to Contractor shall be as specified in Special Conditions of this contract.

10. CASH BILLING DISCOUNT:

Cash Billing or percentage discount for payment of invoices within a specified period of time will **not** be considered by CTA in evaluating bids. When determining if it has earned a cash billing discount offered by the contractor, CTA will consider the date of the invoice plus two days for mailing or the date of receipt of the goods or services, whichever is later, and will end on the date the check is mailed in payment of the invoice. If a discount period ends on a Saturday, Sunday or legal holiday, the discount periods will be extended to the next succeeding workday.

11. INVOICES:

Invoices must be sent to the Chicago Transit Authority, Accounts Payable, 567 W. Lake Street, Chicago, IL 60661-1465. Invoices must bear the order number and, if an annual contract, release number as issued. Invoices must not cover more than one order or release number.

12. DISPUTES:

Any dispute concerning a question of fact arising under the Contract Documents that is not resolved by an agreement between the CTA and the Contractor will be decided by the General Manager of Purchasing. The General Manager of Purchasing will reduce the decision to writing and send a copy of it by certified mail, return receipt requested, to the Contractor.

The decision of the General Manager of Purchasing will be final and binding on the Contractor unless, within thirty (30) days after receipt of a copy of a decision, the Contractor sends by certified mail, return receipt requested, a written appeal to the CTA's Vice President, Purchasing and Warehousing. In connection with such an appeal, the Contractor will have an opportunity to be heard and to offer evidence in support of its appeal. The decision of the Vice President, Purchasing and Warehousing will be final and binding on the Contractor unless the Contractor files an action to challenge the decision in a court of competent jurisdiction in Chicago, Illinois and the court determines the decision to be arbitrary and capricious or obtained by fraud. If the Contractor does not commence such an action for judicial review within 60 days after the Contractor receives a copy of the decision of the Vice President, Purchasing and Warehousing, the Contractor waives all right to seek judicial review. Nothing in this relieves the Contractor from diligently proceeding with the Work under the Contract, as directed by the CTA.

13. EXECUTION:

All business which submit responses or bids and all businesses awarded contracts by the CTA are hereby notified that no contract, modification, amendment, change order or extension, if any, shall be effective, or in any way obligate the CTA, until it has been executed by the CTA signatory duly authorized by the CTA's Regulations, By Laws, and Procedures.

STANDARD GOVERNMENT REQUIREMENTS FOR MATERIAL AND EQUIPMENT PURCHASES

This contract is subject to financial assistance contracts between the U.S. Department of Transportation (DOT), Federal Transit Administration (FTA), the State of Illinois Department of Transportation (IDOT), Division of Public Transportation (DPT), and the Chicago Transit Authority (CTA).

The following clauses are included as part of the specification for the proposed contract and for each of its related subcontracts.

- A. CONTRACT CHANGES.** Any proposed change in this contract shall be submitted to the Chicago Transit Authority for its prior written approval.
- B. INTEREST OF MEMBERS OF CONGRESS.** No members of, or delegate to, the Illinois General Assembly or the Congress of the United States shall be admitted to any share or part of this contract or to any benefit arising therefrom.
- C. PROHIBITED INTERESTS.** No member, or officer, or employee of Chicago Transit Authority or a local public body with financial interest or control in this contract during his tenure or for one year thereafter shall have any interest, direct or indirect, in this contract or the proceeds thereof.
- D. INELIGIBLE CONTRACTORS.** A prospective Contractor who is debarred, suspended or deemed ineligible for contracting by CTA shall not be awarded a contract. Furthermore, for federally funded contracts, a Contractor who is suspended or debarred from federal programs under DOT regulations, "Nonprocurement Suspension and Debarment," 2 CFR Parts 180 and 1200, or under the FAR at 48 CFR Chapter 1, Part 9.4 shall not be awarded a contract. The Procurement Administrator will check the System for Award Management, www.sam.gov and document the results in the contract file.
- E. NONDISCRIMINATION.** In connection with the execution of this contract, the contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, ancestry or handicap. The contractor shall take affirmative actions to insure that applicants are employed and that employees are treated during their employment, without regard to their race, religion, color, sex, national origin, ancestry or handicap. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection of training, including apprenticeship.
- F. ILLINOIS HUMAN RIGHTS ACT – Equal Employment Opportunity.** During the performance of this contract, the contractor agrees as follows.
1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
 2. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
 3. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
 4. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

G. ENVIRONMENTAL AND ENERGY PROTECTION AND CONSERVATION REQUIREMENTS. All facilities and equipment will meet the criteria for air and water pollution control and energy conservation as follows:

"All facilities and equipment acquired, constructed, reconstructed, or improved using FTA and DPT grant funds, shall be designed and equipped to prevent or control air and water pollution in accordance with criteria issued by the Department of Health, Education and Welfare. However, in those locations where State or local air and water pollution regulations are in force, the more restrictive criteria shall govern."

"All contractors and suppliers must submit evidence to CTA that the governing air and water pollution criteria will be met. This evidence and related documents will be retained by the sponsor for on site examination by FTA and DPT representatives."

"All contractors and suppliers shall recognize mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. § 6321 et seq.)."

H. SPECIFIC MATERIALS AND/ OR SPECIFIC EQUIPMENT. Wherever in these Specification an article, equipment or material is defined by describing a proprietary product or by using the name of a manufacturer or vendor or trade name including catalogue numbers and/ or part numbers and/ or drawing numbers, the term "or equal" if not inserted shall be implied. The specific article, equipment or material mentioned shall be understood as establishing the type, function and minimum standard of design, efficiency, quality and performance desired and shall not be construed in such a manner as to exclude manufacturer's products or comparable design, efficiency, quality and performance. CTA engineers shall decide whether or not the article, equipment or material proposed by the bidder or contractor is equal to that specified in the Specification and acceptable to the CTA.

I. CARGO PREFERENCE – USE OF UNITED STATES-FLAG VESSELS. The contractor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, materials or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
2. To furnish within 20 days following the date of loading for shipments originating within the United States, or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (1) above to the Grantee (through the prime contractor in the case of subcontractor bill-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, 400 Seventh Street, S.W., Washington, D.C. 20590, marked with appropriate identification of the Project.

CONTRACT FOR SUPPLIES

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL TRANSIT ADMINISTRATION REQUIREMENTS

In addition to the Standard Government Requirements for Material and Equipment Purchases, the Contractor is also required to comply with the following clauses required by the U.S. Department of Transportation Federal Transit Administration as applicable.

1. **Seismic Safety Requirements** – The Contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 CFR Part 41 and will certify to compliance to the extent required by regulation. The Contractor also agrees to ensure that all work performed under this contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.
2. **Recycled Products** – The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.
3. **No Obligation by the Federal Government** – The Contractor acknowledges and agrees that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to the Contractor, or any other party pertaining to any matter resulting from the underlying contract.
4. **Privacy Act** – The following requirements apply to a Contractor and its employees that administer any system of records on behalf of the Federal Government under any contract.
 - A) The Contractor agrees to comply with, and assure the compliance of its employees with, the information restrictions and other applicable requirements of the Privacy Act of 1974, 5 USC subsection 552a. The Contractor agrees to obtain the express consent of the Federal Government before the Contractor or its employees operate a system of records on behalf of the Federal Government. The Contractor understands that the requirements of the Privacy Act, including the civil and criminal penalties for violation of the Act, apply to those individuals involved, and that failure to comply with the terms of the Privacy Act may result in termination of the underlying contract.
 - B) The Contractor also agrees to include these requirements in each subcontract to administer any system of records on behalf of the Federal Government financed in whole or in part with FTA funding.
5. **Access to Records and Reports** – The following access to records requirement apply to this Contract.
 - A) The Contractor agrees to provide the Authority, the FTA Administrator, the Comptroller General of the United States or any other authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this Contract for the purposes of making audits, examination, excerpts and transcriptions. Contractor also agrees, pursuant to 49C.F.R. 633.17 to provide the FTA Administrator or his authorized representatives access to Contractor's records and construction sites pertaining to a major capital project, defined at 49U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49U.S.C. 5307, 5309, or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at \$100,000.
 - B) For any contract for a capital project or improvement entered into which was not the result of competitive bidding, the Contractor shall make available records related to the Contract to the Authority, the FTA and the Comptroller General or any authorized officer or employee of any of them for the purposes of conducting an audit and inspection.

- C) The Contractor agrees to permit the authorized representatives to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonable needed.
- D) The Contractor agrees to maintain all books, records, accounts and reports required under this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same under the Authority, the FTA Administrator, the Comptroller General, or any of their fully authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

6. Fraud and False or Fraudulent Statements or Related Acts – The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. subsection 3801 et seq and U.S. Department of Transportation and FTA regulations, “Program Fraud Civil Remedies”, 49 C.F.R. Part 31, apply to its actions pertaining to this Contract.

By submitting a proposal and execution of the Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it may make, or causes to be made, pertaining to the Contract Documents. In addition to other penalties that may be applicable the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor. The Contractor also acknowledges that it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. subsection 5307, the Government reserves the right to impose the penalties of 18 U.S.C. subsection 5307, the Government reserves the right to impose the penalties of 18 U.S.C. subsection 1001 and 49 U.S.C. subsection 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate. The Contractor agrees to include the above language in each subcontract without modification, except to identify the subcontractor who will be subject to the provisions.

7. Incorporation of Federal Transit Administration (FTA) Terms – The preceding provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in the latest revision of FTA Circular 4220.1 are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any Authority requests which would cause the Authority to be in violation of the FTA terms and conditions.

8. Clean Air – (1) The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. (7401et seq.). The Contractor agrees to report each violation to the Purchaser and understands and agrees that the Purchaser will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. (2) The Contractor also agrees to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FTA

CONTRACT FOR SUPPLIES

SPECIAL CONDITIONS

SCOPE OF WORK ("Work")

This is a Definite-Delivery Contract to supply overhaul kits and various other parts so that CTA can complete an extended life overhaul ("C-Lite") for 100 of CTA's 2600 series railcars. The work includes a delivery plan that will ensure that CTA will have the parts it needs to perform the overhauls at a rate of eight (8) cars per month. The Contractor will supply all the material necessary to complete twenty-four (24) cars for the initial delivery and then provide a delivery schedule that must support the production rate of eight (8) cars per month.

ELECTRONIC FUND TRANSFER

CTA has adopted Electronic Fund Transfer (EFT) as the preferred method of payment for vendor invoices. An EFT enrollment form will be provided upon request to the successful proposer(s) with the executed contract and must be completed to enable payment of vendor accounts by this method. If awarded a contract, provide the completed EFT form to the CTA Purchasing Administrator identified on the title page.

PERFORMANCE/PAYMENT BOND

None required.

INSURANCE

None required.

DEFINITIONS

Unless defined otherwise herein, the following definitions apply to this Order and its attachments:

- (a) Chicago Transit Authority, CTA, Authority and Buyer are synonymous herein.
- (b) Proposer, Bidder, Seller, Vendor, Contractor and the company, organization or person(s) to whom the Order is addressed are synonymous herein.
- (c) Purchase Contract, Contract, Purchase Order and Order are synonymous herein.
- (d) Overhaul Kit, Master Kit, Part, Item, Kit, Component, Subsystem, Sub-assembly and Assembly are synonymous herein.
- (e) Day is synonymous with Calendar Day unless specified otherwise.

ACCOUNTING SERVICES

The Contract issued to the successful Bidder will state the total expenditure authorization on the signed acceptance page. Contractor shall not accept any requests for services in excess of the total Contract expenditure authorization unless authorized in writing by the General Manager, Purchasing. Contractor shall be liable for any costs incurred as a result of his failure to either notify the Authority or accept requests not authorized by the General Manager, Purchasing.

AVAILABILITY OF FUNDS

This procurement is subject to the availability of funding from financial assistance contracts between the Illinois Department of Transportation, Regional Transportation Authority and the Chicago Transit Authority. The CTA's obligation hereunder is contingent upon the availability of appropriated funds from which payment for the Contract purposes can be made. No legal liability on the part of the CTA for any payment shall arise until funds are made available to the Contracting Officer for this Contract and until the Contractor receives notice of such availability and approval, to be confirmed in writing by the Contracting Officer. Any award of Contract (including the exercise of options, if any) hereunder will be conditioned upon said availability of funds for the Contract.

DURATION OF CONTRACT

This Contract shall become effective upon Contract execution and shall remain in effect until all material specified in the Bills of Material have been delivered and accepted by the CTA.

DELIVERY

Delivery shall be FOB, destination and completed according to the final Delivery Plan proposed by the Vendor and accepted by the CTA. The individual listed below shall be the Contractor's contact for establishing delivery at CTA's Skokie Shops facility. Contractor shall provide a minimum of seven (7) days advance notice prior to delivery. Deliveries are to be made weekdays, except CTA recognized holidays, between the hours of 7:00 AM and 3:00 PM to:

CTA Skokie Shop, Rail – Heavy Maintenance
Attn: Mr. Julian Sandu or his designee
3701 W. Oakton Street
Skokie, Illinois 60076-3498
☎ (847) 982-5141, e-mail: jsandu@transitchicago.com

PAYMENT

The Contractor shall submit an invoice for each delivery of acceptable and approved material delivered. Invoices will be paid subsequent to formal acceptance of material by CTA. Original invoices shall be forwarded to CTA Accounts Payable Department, 567 W. Lake St., Chicago, Illinois 60661. Payments will be made in Net 30 days after final acceptance of material or receipt of Contractor's invoice by CTA or in accordance with the terms of Contractor's invoice whichever is most favorable to the CTA. Payment date(s) shall be calculated from receipt of invoice or final acceptance of goods, whichever is later.

Invoices must be presented only by the vendor to which a purchase order is awarded. Invoices received from a third party will not be honored unless prior written approval from the purchasing agent has been obtained.

LIQUIDATED DAMAGES FOR LATE DELIVERIES

It is mutually understood and agreed by and between the parties to the Contract that time is of the essence with respect to the completion of the Work and that in case of any failure on the part of the Contractor to deliver the material within the time specified in the Contractor's final "Delivery Schedule" as approved by CTA, except for any excusable delays as provided in "Excusable Delays/Force Majeure" or any extension thereof, the Chicago Transit Authority will be damaged thereby. The amount of said damages, being difficult if not impossible of definite ascertainment and proof, it is hereby agreed that the amount of such damages due to the Chicago Transit Authority shall be fixed at the following schedule:

1. \$30,000 per business day of delay for each day beyond three business days that the initial shipment of material to overhaul 24 railcars has not been delivered as scheduled, not to exceed an aggregate of \$900,000.
2. \$500 per business day of delay for the first 20 business days, then \$30,000 per business day of delay for all other shipments that are delayed from the approved delivery schedule, not to exceed an aggregate of \$900,000.
3. If a kit is delivered as scheduled but, at inspection for acceptance, it is discovered that the kit is either incomplete or contains a defective part, CTA's Project Manager will notify the Contractor and the contractor will have three business days to provide the part(s) to complete the kit or replace the defective part. Liquidated damages will be \$500 per business day of delay beyond the three business days allowed for delivery of the replacement parts for up to the first 20 business days, then \$30,000 per day of delay not to exceed an aggregate of \$900,000.

The Contractor hereby agrees to pay the aforementioned amounts as fixed, agreed and liquidated damages, and not by way of penalty, to the Chicago Transit Authority and further authorizes the Chicago Transit Authority to deduct the amount of the damages from money due the Contractor under the Contract, computed as aforesaid. If the money due the Contractor is insufficient or no money is due the Contractor, then the Contractor shall pay the Chicago Transit Authority the difference or the entire amount, whichever may be the case, within thirty (30) days after receipt of a written demand by the Contracting Officer.

The payment of aforesaid fixed, agreed and liquidated damages shall be in lieu of any damages for any loss of profit, loss of revenue, loss of use, or for any other direct, indirect, special or consequential losses or damages of any kind whatsoever that may be suffered by the Chicago Transit Authority arising at any time from the failure of the Contractor to fulfill the obligations referenced in this clause in a timely manner.

EXCUSABLE DELAYS/FORCE MAJEURE

If the Contractor is delayed at any time during the progress of the Work by the neglect or failure of the Chicago Transit Authority or by a cause as described below, then the time for completion and/or affected delivery date(s) shall be extended by the Chicago Transit Authority subject to the following cumulative conditions:

- a. The cause of the delay arises after the Notice of Award and neither was nor could have been anticipated by the Contractor by reasonable investigation before such award. Such cause may also include force majeure events such as any event or circumstance beyond the reasonable control of the Contractor, including but not limited to acts of God; earthquake, flood and any other natural disaster; civil disturbance, strikes and labor disputes; fires and explosions; war and other hostilities; embargo; or failure of third parties, including Suppliers or Subcontractors, to perform their obligations to the Contractor;
- b. The Contractor demonstrates that the completion of the Work and/or any affected deliveries will be actually and necessarily delayed;
- c. The Contractor has taken measures to avoid and/or mitigate the delay by the exercise of all reasonable precautions, efforts and measures, whether before or after the occurrence of the cause of delay; and
- d. The Contractor makes written request and provides other information to the Chicago Transit Authority.

A delay in meeting all of the conditions of this section shall be deemed an excusable delay. Any concurrent delay that does not constitute an excusable delay shall not be the sole basis for denying a request hereunder.

None of the above shall relieve the Contractor of any liability for the payment of any liquidated damages owing from a failure to complete the Work by the time for completion that the Contractor is required to pay pursuant to "Liquidated Damages" for delays occurring prior to, or subsequent to the occurrence of an excusable delay.

WARRANTY

The proposed product furnished under this Contract shall be covered for a period of one (1) year against manufacturing defects for both labor and material. Should the manufacturer's standard warranty coverage exceed the minimum requirement, said manufacturer's standard warranty shall apply. Warranty period shall begin when the material is accepted by the CTA. Contractor shall be responsible for all warranty claims for the parts and assemblies provided under this contract.

WARRANTY CLAIMS

In the event that a vendor fails to pay approved or partially approved warranty claims within 60 days of submission, the CTA shall send the vendor written notice seeking immediate payment of the outstanding claims. If the vendor fails to pay the outstanding claims within 5 days of vendor's receipt of the written notice, the Purchasing Department shall issue a notice to cure letter providing the vendor with 10 days to cure the default. If the vendor fails to cure the default, the CTA may, at its discretion, deduct the CTA's costs from 1) any unpaid contract funds, 2) any contract retainage amounts or 3) a maintenance or performance bond. If the deductions do not fully satisfy the outstanding claims, the CTA may seek additional remedies. All remedies shall be inclusive of applicable interest payments.

REIMBURSEMENT FOR LABOR AND OTHER RELATED COSTS

The CTA shall be reimbursed by the Contractor for labor. The amount shall be determined by the Chicago Transit Authority for a qualified mechanic at a straight time wage rate of \$89.38 per hour, which includes fringe benefits and overhead adjusted for the CTA's most recently published rate in effect at the time the Work is performed. These wage and fringe benefit rates shall not exceed the rates in effect in the CTA's service terminal at the time the Defect correction is made. If the straight time wage rate increases during the contract period, then those rates will apply.

REIMBURSEMENT FOR PARTS

The CTA shall be reimbursed by the Contractor for defective parts and for parts that must be replaced to correct the defect. The reimbursement shall be at the current price at the time of repair and shall include taxes where applicable, plus eighteen and one half (18.5) percent handling costs. Handling costs shall not be paid if part is supplied by Contractor and shipped to CTA. If the handling cost percent increases during the contract period, then that percentage will apply.

The CTA may require that the Contractor supply parts for warranty-covered repairs being performed by the CTA. Those parts may be remanufactured but shall have the same form, fit and function, and warranty. The parts shall be shipped prepaid to the CTA from any source selected by the Contractor within fourteen (14) days of receipt of the request for said parts and shall not be subject to a CTA handling charge.

CONTRACTUAL AUTHORITY

This Contract shall, under no circumstances grant Contractor exclusivity for providing the items and/or services as specified in this Contract and/or added during the term of this Contract. In addition, this Contract shall not prejudice the right of the CTA to seek competitive bids on such items and/or service, which cannot be provided by the Contractor in an expedited manner that are required to meet CTA needs to maintain service to the riding public during the term of this Contract that have been found to be available from alternate acceptable sources. If items are determined to be available from other sources (not identified as an O.E.M. maintenance and repair part and/or an approved equal part), such items may be purchased at will to meet CTA immediate needs and subsequently obtained through appropriate CTA procurement procedures, as applicable.

PROPRIETARY INFORMATION

All CTA specifications, drawings, blueprints, Photostats and all other information furnished to the Contractor in connection with this Order are and shall remain the property of the CTA. Contractor will keep the same confidential and will not use or reproduce the same except for the performance of this Order, and on completion or termination of this Order or upon the written demand of the CTA, Contractor shall return same. CTA reserves the right to withhold final payment until such return is made.

TERMINATION FOR DEFAULT

CTA may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other provisions of the Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 (ten) days (or such longer period as the Purchasing Manager or designee may authorize in writing) after receipt of notice from the Purchasing Manager or designee specifying such failure.

In the event that CTA elects to waive its remedies for any breach by Contractor of any covenant, term or condition of this Contract, such waiver by CTA shall not limit Procuring Agency's remedies for any succeeding breach of that or of any other term, covenant, or condition of this Contract.

If the Contract is terminated in whole or in part for default, CTA may procure, upon such terms and in such manner as the Purchasing Manager or designee may deem appropriate, supplies or services similar to those so terminated. The Contractor shall be liable to CTA for any excess costs for such similar supplies or services, and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

Payment for completed supplies delivered to and accepted by CTA shall be at the Contract price. CTA may withhold from amounts otherwise due the Contractor for such completed supplies such sum as the Purchasing Manager or designee determines to be necessary to protect CTA against loss because of outstanding liens or claims of former lien holders.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to termination for convenience of CTA.

The rights and remedies of CTA provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

TERMINATION FOR CONVENIENCE

The CTA may terminate this Agreement, in whole or in part, without cause, at any time, by written notice to the Contractor whenever the CTA determines that such termination is in the best interest of the CTA. Upon receipt of written notice of termination, all services and any other performance hereunder by the Contractor shall cease to the extent specified in the notice of termination. In the event of termination in whole, the Contractor shall prepare a final invoice within thirty (30) days of such termination reflecting the services actually furnished pursuant to this agreement to the satisfaction of the CTA and for which no previous invoice was submitted to the CTA. The Contractor shall be paid costs, including closeout costs, and profit for the services performed up to the time of termination. The Contractor shall promptly submit, in accordance with the terms hereof, a termination claim to the CTA and the parties shall negotiate a termination settlement to be paid the Contractor. If the Contractor has any property in his possession belonging to the CTA, the Contractor will account for same, and dispose of it in the manner the CTA directs.

COMPLIANCE WITH LAWS, REGULATIONS AND CODES

If any part of this Specification shall be at date of issue, or shall later become in non-conformity with current or future City, County, State or Federal Laws and/or Codes or Regulations, because of materials or requirements specified therein, Chicago Transit Authority shall have the right to negotiate for and accept or reject substitute materials and/or requirements.

PROMPT PAYMENT TO SUBCONTRACTORS

- A) The Contractor is required to pay all Subcontractors for all work that the Subcontractor has satisfactorily completed, no later than 7 calendar days after the Contractor has received payment from CTA. All of the Contractor's contracts with its Subcontractors must state that the Subcontractor will receive payment within 7 calendar days of the date that the Contractor has received payment from CTA.
- B) In addition, all Retainage amounts must be paid by the Contractor to the Subcontractor no later than 14 calendar days after the Subcontractor has, in the opinion of the Chief Infrastructure Officer, satisfactorily completed its portion of the Work. All of the Contractor's contracts with its Subcontractors must state that the Subcontractor will receive payment of Retainage within 14 calendar days of the date that the Subcontractor has, in the opinion of the Chief Infrastructure Officer, satisfactorily completed its portion of the Work.
- C) A delay in or postponement of payment to the Subcontractor requires good cause and prior written approval of the General Manager, Purchasing.
- D) The Contractor is required to include, in each subcontract, a clause requiring the use of appropriate arbitration mechanisms to resolve all payment disputes.
- E) CTA will not pay the Contractor for work performed unless and until the Contractor ensures that the Subcontractors have been promptly paid for the work they have performed under all previous payment requests, as evidenced by the filing with CTA of lien waivers, canceled checks (if requested), and the Contractor's sworn statement that it has complied with the prompt payment requirements. Prime Contractors must submit a prompt payment affidavit, (form to be provided by CTA) which identifies each subcontractor (both DBE and non-DBE) and the date and amount of the last payment to such subcontractor, with every payment request filed with CTA, except for the first payment request, on every contract with CTA.
- F) Failure to comply with these prompt payment requirements is a breach of the Contract which may lead to any remedies permitted under law, including, but not limited to, Contractor debarment. In addition, Contractor's failure to promptly pay its Subcontractors is subject to the provisions of 50 ILCS 505/9.

ACCESS TO RECORDS AND REPORTS

The Contractor shall permit and agree to cooperate with the authorized representatives of the CTA, including but not limited to, the CTA's auditors, who may inspect and audit all data and records of the Contractor relating to the Contractor's performance and Subcontractor contracts under this Contract from the date of this Contract through and until the expiration of five (5) years after completion of this Contract.

CTA ETHICS ORDINANCE

The Contractor must comply with the CTA's Ethics Ordinance posted on CTA's website at http://www.transitchicago.com/assets/1/procurement/ethics_code_2009.pdf, the provisions of which are hereby incorporated into this Contract. The Contractor agrees that, any Contract negotiated, entered into, or performed in violation of the Ethics Ordinance must be void as to the CTA.

OTHER AGENCIES

Other local government agencies may negotiate their own agreements with the Contractor based on other terms and conditions in this Agreement. Other such agencies will issue their own contracts directly to the Contractor. Participation by other agencies shall have no adverse effect on the CTA. The CTA will not be responsible for any obligation due from any other agency to the Contractor. The CTA will have no liability for the acts or omissions of any other agency.

OBLIGATION TO COMPLY WITH STATE AND FEDERAL LAW AND REGULATIONS AND CHANGES

The Contractor must at all times comply with all applicable IDOT, RTA and FTA regulations, policies, procedures, and directives, including without limitation those listed directly or by reference in the "Master Agreement" (Form FTA MA (18) dated October 2011 between the Authority and FTA, and any agreements between IDOT and RTA and RTA and CTA, as they may be amended or promulgated from time to time during the term of this Contract. The Contractor's failure to so comply will constitute a material.

SUSPENSION AND DEBARMENT

This Contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C, and must include the requirement to comply with 49 CFR 29, Subpart C, in any lower-tier covered transaction it enters into.

WAIVER

A waiver by the CTA of a breach of any provision hereof by Contractor or CTA failure to insist on strict performance or observance by Contractor of any provision of this Contract or CTA's rights in any one or more instances, shall not constitute a waiver by CTA in any other instance.

GOVERNING LAW AND CHOICE OF FORUM

The Contractor hereby irrevocably submits to the original jurisdiction of those State or Federal courts located within the County of Cook, State of Illinois, with regard to any controversy arising out of, relating to, or in any way concerning the execution or performance of this Contract. The Contractor agrees that service of process on the Contractor may be made, at the option of the Authority, either by registered or certified mail addressed to the applicable office as provided for in this Contract, by registered or certified mail addressed to the office actually maintained by the Contractor, or by personal delivery on any officer, director, or managing or general agent of the Contractor. The Contract will be governed in accordance with the laws of the State of Illinois, without regard to choice of law principles.

CONFLICTS OF INTEREST

No Board member, officer or employee of the Authority or other unit of local government, who exercises any functions or responsibilities in connection with the carrying out of the Work or the carrying out of the Work to which this Contract pertains, may have any personal interest, direct or indirect, in this Contract or the proceeds thereof.

In accordance with 41 USC § 22, the Contractor agrees that no member of or Delegate to the Congress of the United States, or the Illinois General Assembly and no members of the Chicago Transit Board or Authority employees, may be admitted to any share or part of this Contract or to any private financial interest, profit, or benefit arising here from.

The Contractor covenants that it, its officers, directors and employees, and the officers, directors, and employees of such of its members if a joint venture, and subcontractors presently have no interest and must not acquire any interest, direct or indirect, in the Work to which this Contract pertains, which would conflict in any manner or degree with the performance of the Work hereunder. The Contractor further covenants that in the performance of this Contract, no person having any such interest must be employed by the Contractor.

The Contractor is prohibited from performing any work or services for the Authority under this contract that conflict with work or services that the Contractor performs under any other contract with the Authority. Such conflicts include, but are not limited to, design work for the Project under another contract, supervision or management for the Project under another contract, and review or audit work for the Project under another contract. The restrictions in this paragraph are applicable to all subcontractors. The Contractor has sole responsibility for compliance with this provision. Any violation of this provision is a material breach of the Contract, which is cause for termination.

WAIVER

In the event that either party elects to waive its remedies for any breach by the other party of any covenant, term or condition of this Contract, such waiver shall not limit the waiving party's remedies for any succeeding breach of that or of any other term, covenant or condition of this Contract.

REMEDIES NOT EXCLUSIVE

The rights and remedies of the CTA provided herein shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract.

COUNTERPARTS

This Contract may be executed in any number of counterparts. All such counterparts shall be deemed to constitute one and the same instrument, and each of said counterparts shall be deemed an original thereof.

SEVERABILITY

Whenever possible, each provision of the Contract shall be interpreted in a manner as to be effective and valid under applicable law. However, if any provision, or part of any provision, should be prohibited or invalid under applicable law, such provision, or part of such provision, shall be ineffective to the extent of such prohibition or invalidity without invalidating the remainder of such provision or the remaining provisions of the Contract.

THIRD-PARTY BENEFICIARIES

No provisions of the Contract shall in any way inure to the benefit of any third party, including the public at large, so as to constitute such person a third-party beneficiary of the Contract or of any one or more of the terms and conditions of the Contract or otherwise give rise to any cause of action in any person not a party to the Contract, except as expressly provided elsewhere in the Contract.

INDEPENDENT PARTIES

The Contractor is an independent contractor with respect to the performance of all Work hereunder, retaining control over the detail of its own operations, and the Contractor shall not be considered the agent, employee, partner, fiduciary or trustee of the CTA.

INTELLECTUAL PROPERTY INDEMNIFICATION

The Chicago Transit Authority shall advise the Contractor of any claim or impending patent suit related to this Contract against the Chicago Transit Authority and provide all information available. The Contractor shall defend any claim suit or proceeding brought against the Chicago Transit Authority based on a claim that any equipment, or any part thereof, furnished under this Contract constitutes an infringement of any patent, and the Contractor shall pay all Chicago Transit Authority damages and costs resulting therefrom, excluding incidental and consequential damages. In case said equipment, or any part thereof, is in such suit claimed to constitute infringement and use of said equipment or parts is enjoined, the Contractor shall, at its own expense and at its option, either procure for the Chicago Transit Authority the right to continue using said equipment or part, or replace same with non-infringing equipment, or modify it so it becomes non-infringing.

ASSURANCE OF COMPLIANCE WITH 49 CFR PART 26

The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the Authority deems appropriate.

The Contractor agrees to include this assurance in all subcontracts.

CIVIL RIGHTS REQUIREMENTS

The following requirements apply to the underlying Contract:

1. **Nondiscrimination:** In accordance with Title VI of the Civil Rights Act, as amended, 42 USC § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 USC § 12132, and Federal transit law at 49 USC § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.
2. **Equal Employment Opportunity:** The following equal employment opportunity requirements apply to the underlying Contract:
 - a. **Race, Color, Creed, National Origin, Sex:** In accordance with Title VII of the Civil Rights Act, as amended, 42 USC § 2000e, and Federal transit laws at 49 USC § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 CFR Parts 60 *et seq.*, (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 USC § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - b. **Age:** In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 USC §§ 623 and Federal transit law at 49 USC § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
 - c. **Disabilities:** In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 USC § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

APPENDIX C

SPECIAL CONDITIONS DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS

**SPECIAL CONDITIONS
DISADVANTAGED BUSINESS ENTERPRISE COMMITMENT
REQUEST FOR PROPOSALS (RFP)
REQUISITION NUMBER:**

I. POLICY AND TERMS

- A.** The policy of the Chicago Transit Authority is to create a level playing field on which Disadvantaged Business Enterprises (DBE) as defined in United States Department of Transportation (USDOT) Regulation 49 C.F.R. Part 26 can compete fairly for contracts financed **in whole or in part with federal funds**.
- B.** The Authority has established the following DBE participation goal for this project:

Disadvantaged Business Enterprise Goal:

- C.** The submitted RFP proposal is to include a written commitment that the proposer will comply with the DBE goal.
- D.** The DBE participation goal shall be expressed as a percentage of the total contract price. However, in the event this is a revenue generating contract, the DBE participation goal is based on the proposer's operating expenses and not on the total anticipated revenue to be generated by the contract. The proposer may also meet the goal by showing good faith efforts to meet the goal as described in 49 C.F.R. Part 26 and as set forth in Section V below.
- E.** The DBE participation goal shall apply to the total dollar value of this contract, inclusive of all amendments, modifications, options and change orders. The proposer agrees to make its best effort to include DBE participation in any contract modification work.
- F.** The goal may be met, as further explained in Section IV hereof, by proposer's status as a DBE, by a joint venture with one or more DBEs, by subcontracting a portion of the work to one or more DBEs, by the purchase of materials used in the performance of the contract from one or more DBEs or by any combination of the above or through a showing of good faith efforts as defined in Section V hereof.
- G.** All documentation of good faith efforts by a proposer **must** be included in the envelope or package containing the proposal.
- H.** The Authority prohibits agreements between a proposer and a DBE in which the DBE promises not to provide subcontracting quotations to other proposers.

II. DEFINITIONS

- A. **“Area of Specialty”** means the description of the DBE’s business, which has been determined by the IL UCP, to be most reflective of the DBE’s claimed specialty or expertise. Credit toward the DBE participation goal for this contract shall be limited to the participation of firms performing within their Area of Specialty. The Authority reserves the right to investigate and determine active DBE participation and applicable DBE credit specifically identified for this contract prior to award.
- a. **NOTICE: The Authority does not make any representations concerning the ability of any DBE to perform work within its Area of Specialty. It is the responsibility of the proposer to determine the capability and capacity of the DBE firms to satisfactorily perform the work proposed.**
- B. **“Disadvantaged Business Enterprise” or “DBE”** means a small business certified by the Illinois Unified Certification Program (IL UCP) as a business owned and controlled by socially and economically disadvantaged individuals in accordance with USDOT Regulation 49 CFR, Part 26.
- C. **“Directory”** means the Directory of Certified Disadvantaged Business Enterprises maintained and published by IL UCP and entitled the “IL UCP DBE Directory”. The directory is available at the Authority’s web site... Proposers are responsible for verifying the current certification status of all proposed DBE’s.
- D. **“Good Faith Efforts”** means efforts to achieve a DBE contract goal as specified in 49 CFR, Part 26 and Section V hereof.
- E. **“IL UCP”** means the Illinois Unified Certification Program.
- F. **“Joint Venture”** means an association of two or more businesses to carry out a single business enterprise for profit, and for which purpose they combine their expertise, property, capital, efforts, skill and knowledge. Proposers may develop joint venture agreements as an instrument to provide participation by DBEs in contract work. A joint venture seeking to be credited for DBE participation may be formed among DBE firms or between a DBE firm and non-DBE firm.
- a. In order to qualify for credit as a DBE, the DBE must be responsible for a distinct, clearly defined portion of the work and the DBE must share in the capital contribution, control, management, risks and profits of the joint venture commensurate with its ownership interest.
- G. **“LIQ”** means a Letter of Interest and Qualifications.
- H. **“Proposal”** includes the following Authority purchasing requests: Request for Proposals (RFP).
- I. **“Proposer”** includes bidders, consultants and contractors as well as proposers. The terms “Proposer,” “Consultant,” “Bidder” and “Contractor” may be used interchangeably in these Special Conditions.

- J. **“Purchasing Agent”** means the Authority employee who holds the position of General Manager, Purchasing, or the successor position.
- K. **“Small Business Concern”** means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto except that a small business concern shall not include any concern or groups of concerns controlled by the same socially and economically disadvantaged individual or individuals which has annual average gross receipts in excess of \$22.41 million, or as revised from time to time, over the three (3) previous fiscal years.
- L. **“Socially and Economically Disadvantaged Individuals”** means any individual who is a citizen of the United States (or lawfully admitted permanent residents) and who is in the following groups, the members of which are rebuttably presumed to be socially and economically disadvantaged:
1. **“Black Americans”**, which includes persons having origins in any of the Black racial groups of Africa;
 2. **“Hispanic Americans”**, which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
 3. **“Native Americans”**, which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
 4. **“Asian-Pacific Americans”**, which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Thailand, Malaysia, Indonesia, Vietnam, Laos, Cambodia (Kampuchea), the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific (Republic of Palau), and the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Jauvlu, Nauru, Federated States of Micronesia or Hong Kong; and
 5. **“Subcontinent Asian Americans”**, which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.
 6. **Women.**
 7. Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

The General Manager, DBE Program, may determine on a case-by-case basis that individuals who are not members of one of the above-listed groups are socially and economically disadvantaged.

III. JOINT VENTURES

Contractors may develop joint venture agreements. A joint venture seeking to be credited for DBE participation may be formed among DBE firms or between a DBE firm and a non-DBE firm. The General Manager, DBE Program, will evaluate the joint venture agreement submitted on behalf of

the proposed joint venture and all related documents to determine whether the DBE requirements have been satisfied. In addition, the General Manager, DBE Program, will consider the record of the joint venturers as joint venturers on other CTA contracts, if any. The decision of the General Manager, DBE Program, regarding eligibility of the joint venture shall be final.

A joint venture is eligible to receive DBE credit if, and only if, all of the following requirements are satisfied:

1. the DBE joint venturer(s) share in the 1) ownership, 2) control, 3) management responsibilities, 4) risks and 5) profits of the joint venture in proportion with the DBE ownership percentage; and
2. the DBE joint venturer(s) are responsible for a clearly defined portion of the work to be performed in proportion with the DBE ownership percentage.

NOTE: DBE/non-DBE joint venturers are creditable at any tier. Whenever a joint venture is proposed as the prime contractor, the Authority requires that each joint venturer sign the proposal submitted to the Authority.

IV. COUNTING DBE PARTICIPATION TOWARD THE CONTRACT GOAL

The inclusion of any DBE by the proposer in its proposal documents shall not conclusively establish the proposer's eligibility for full DBE credit for the firm's participation in the contract. The amount of DBE participation credit shall be based upon an analysis by the General Manager, DBE Program, of the specific duties, which will be performed by the DBE.

The proposer may count toward its DBE goal only expenditures to firms which are currently certified with the IL UCP and which perform a commercially useful function. A firm is considered to perform a commercially useful function when it is responsible for the performance of a distinct element of the work and carries out its responsibilities by actually performing, managing and supervising the work involved.

To determine whether a firm is performing a commercially useful function, the General Manager, DBE Program, will evaluate the amount of work subcontracted, industry practices and other relevant factors. The General Manager, DBE Program, reserves the right to deny or limit DBE credit to the proposer where any DBE is found to be engaged in substantial pass-through activities with others. DBE participation shall be counted toward the DBE goal in the contract as follows:

- A. Once a DBE is determined to be eligible in accordance with these rules, the total dollar value of the contract awarded to the DBE may be counted toward the DBE goal except as indicated below.
- B. A proposer may count toward its DBE goal that portion of the total dollar value of a contract with an eligible joint venture equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces.

- C. Consistent with normal industry practices, a DBE may enter into subcontracts. If a DBE subcontracts more than thirty percent (30%) or a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the DBE shall be presumed not to be performing a commercially useful function. Evidence may be presented by the proposer involved to rebut this presumption.
- D. When a DBE subcontracts a part of the work under the contract to another firm, the value of the subcontracted work may only be counted towards the DBE goal if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count towards the DBE goal.
- E. The proposer may count one-hundred percent (100%) of its expenditures for materials and supplies required under the contract and which are obtained from a DBE manufacturer towards the DBE goal. The proposer may count sixty percent (60%) of its expenditures for material and supplies under the contract obtained from a DBE regular dealer towards its DBE goal. The terms "manufacturer" and "regular dealer" are defined in 49 C.F.R. Part 26.55(e) (1)(ii) and (2)(ii).
- F. The proposer may count towards its DBE goal expenditures to DBEs which are not manufacturers or regular dealers, such as fees or commissions charged for services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies and transportation charges as set forth in 49 C.F.R. Part 26. However, the General Manager, DBE Program, must determine the fee or charge to be reasonable and not excessive as compared with fees or charges customarily allowed for similar services.
- G. The proposer must use good business judgment when negotiating with subcontractors and take a DBE's price and capabilities into consideration. The fact that there may be some additional costs involved in finding and using DBE firms is not sufficient reason to fail to meet the DBE goal set forth in the contract, as long as such costs are reasonable.

V. GOOD FAITH EFFORTS

In order to be determined responsible, a proposer must make good faith efforts to meet the DBE participation goal set forth in the contract. The proposer must document the good faith efforts it made in that regard. Thus, the Proposal submitted to the Authority must be accompanied by written documentation prepared by the proposer evidencing all of its sufficient and reasonable good faith efforts toward fulfilling the goal. These efforts must be active steps, and ones, which could reasonably be expected to lead to sufficient DBE participation to meet the contract DBE participation goal. Mere *pro forma* efforts are not acceptable and will be rejected by the General Manager, DBE Program.

Good Faith Efforts require that the proposer consider all qualified DBEs, who express an interest in performing work under the contract. This means that the proposer cannot reject a DBE as unqualified unless the proposer has sound reasons based on a thorough investigation of the DBE's capabilities. Further, the DBE's standing within its industry, membership in specific groups, organizations or associations and political or social affiliation (for example, union vs. non-union employee status), are not legitimate causes for the rejection or non-solicitation of proposals in the

Contractor's efforts to meet the contract DBE participation goal.

The following list, which is not exclusive or exhaustive, sets forth the types of actions, which indicate good faith efforts on the part of a proposer to meet the DBE goal. The extent and type of actions required will vary depending on such things as industry practice; the time available for submitting a proposal and the type of contract involved.

- A.** Attendance at a pre-proposal meeting, if any, scheduled by the Authority to inform DBEs of subcontracting opportunities under a given solicitation.
- B.** Advertisement in general circulation media, trade association publications, and minority-focus media for at least twenty (20) days before proposals are due. If 20 days are not available, publication for a shorter reasonable time is acceptable.
- C.** Written notification to capable DBEs that their interest in the contract is solicited.
- D.** Documentation of efforts to negotiate with DBEs for specific sub-contracts including at a minimum:
 - 1.** The names, addresses, and telephone numbers of DBEs that were contacted and the date(s) of contact.
 - 2.** A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
 - 3.** A statement explaining why additional agreements with DBEs were not reached.
- E.** For each DBE the proposer contacted but rejected as unqualified, the reason for the proposer's conclusion.
- F.** Documentation of efforts made to assist the DBEs contacted that needed assistance in obtaining bonding or insurance required by the proposer or the Authority.
- G.** Documentation of efforts to utilize the services of small business organizations, community and contractor groups to locate qualified DBEs.
- H.** Documentation that the proposer has broken out contract work items into economically feasible units in fields where there are available DBE firms to perform the work.
- I.** Evidence that adequate information was provided to interested DBEs about the plans, specifications and requirements of the contract, and that such information was communicated in a timely manner.
- J.** Documentation of any efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services.
- K.** Documentation of use of DBEs on other contracts with the Authority.

VI. PROCEDURE TO DETERMINE PROPOSAL COMPLIANCE

The proposer **MUST** complete and sign Schedule D to the Contract documents and must sign Schedule C. If the proposer is a joint venture, the proposer **MUST** complete and sign Schedule B. Schedule C **MUST** be completed and signed by the DBE subcontractor(s). The Schedules **MUST** be submitted at the same time as or prior to submittal of the sealed proposal or promptly upon request from the Authority, when applicable. In addition, any documentation evidencing the proposer's good faith efforts to meet the contract DBE goal must be submitted concurrently with submission of said Schedules. Any proposers submitting proposals without completed and executed Schedules B, C & D and/or evidence of good faith efforts, if applicable will be deemed non-responsible. Proposers who have not submitted Schedules B, C and D with their proposals and who do not submit such Schedules promptly upon request from the Authority will have their proposals rejected by the Authority.

A. Letters of Certification

1. A copy of each proposed DBE firm's current Letter of Certification or Re-certification from the IL UCP should be submitted with the proposal. ALL CERTIFICATIONS BY THE IL UCP MUST BE PRE-CERTIFICATIONS. This means that the DBE's certification must be issued by the IL UCP before the due date for proposals.
2. All Letters of Certification or Re-certification issued by the IL UCP include a statement of the DBE firm's area of specialization (see Section IV. COUNTING DBE PARTICIPATION TOWARD THE CONTRACT GOAL). The DBE firm's scope of work set forth on Schedule C must conform to its stated area of specialization. Where a DBE is proposed to perform work not covered by its area of specialization, the DBE firm must request an expansion of its area of specialization from its certifying agency in writing prior to the time set by the Authority for proposal opening. Further, the DBE's request must be agreed to by the General Manager, DBE Program, and the DBE firm must be certified prior to the **DUE DATE FOR PROPOSALS**.

B. Joint Ventures

1. Where the proposer proposes to include in its proposal a DBE, which is a joint venturer, the proposer must submit a fully executed copy of the joint venture agreement as well as a completed Schedule B with its proposal. The joint venture agreement must show that the DBE firm will be responsible for a clearly defined portion of the work to be performed, and that the DBE firm's capital contribution, control, management, risks and profits are commensurate with its ownership interest.
2. Further, the proposed joint venture agreement shall include specific details related to:
1) contributions of capital and equipment; 2) work items to be performed by the DBE's own forces; 3) work items to be performed under the supervision of the DBE; 4) the DBE management, supervisory and operating personnel to be dedicated to the performance of the project; and 5) the authority of each joint venturer to contractually obligate the joint venture and to expend funds. Failure to submit a copy of the joint venture agreement will cause the firm to be considered by the Authority to be non-responsible.

VII. REPORTING REQUIREMENTS DURING THE TERM OF THE CONTRACT

- A. The proposer shall, within five (5) business days of contract award, or prior to any work being performed by the DBE subcontractor, execute written subcontracts or purchase orders with the DBE subcontractors included in the proposal. In the event the proposer cannot complete the agreement with one or more DBE subcontractors within this five day period, the proposer must provide a written explanation for the delay and an estimated date by which the written agreement will be completed to the General Manager, DBE Program. These written agreements shall be made available to the General Manager, DBE Program, upon request. All contracts between the proposer and its subcontractors must contain a prompt payment clause as required by the Local Government Prompt Payment Act, 50 ILCS 505/9. (See section X.C. hereof.)
- B. During the term of annual contracts, the Contractor must utilize the “Chicago Transit Authority’s Disadvantaged Business Enterprise System (B2GNOW)” <https://cta.dbesystem.com/> which provides the Contractor an easy to use web-based service for reporting payments rendered to all Subcontractors. The frequency with which these reporting will vary based on each individual contract, but in no event will reporting be required less frequently than quarterly. **Failure to follow these directions may delay payment.**
- C. In the case of a one-time procurement with either a single or multiple deliveries, the contractor must utilize the “Chicago Transit Authority’s Disadvantaged Business Enterprise System (B2GNOW)” <https://cta.dbesystem.com/> which provides the Contractor with an easy to use web-based service for reporting payments rendered to all Subcontractors. The required entries on B2GNOW must be completed prior to or concurrently with the Contractor’s submittal of its final invoice to the Authority user department identified in the contract. PLEASE NOTE: Two different processes must be followed. (1)The original invoices must be submitted directly to the Authority department identified in the contract and (2) a report of Subcontract Payments must be entered onto B2GNOW. **Failure to follow these directions may delay final payment.**

The address for the General Manager, DBE Program, is: **CTA DBE-General Manager, Diversity Department, 567 W. Lake Street, Chicago, IL 60661-1465.**

VIII. DBE SUBSTITUTIONS

- A. Arbitrary changes by the proposer of the commitments previously indicated in **Schedule D** are prohibited. No changes may be made by the proposer to the DBE firms listed on Schedule D after the opening of proposals but prior to contract award without prior approval of the General Manager, DBE Programs. Moreover, in the event the Purchasing Agent, after consulting with the DBE Department, determines that a critical DBE subcontractor is non-responsible, the Authority may require that proposer replace the non-responsible DBE subcontractor prior to contract award. In that event, proposer must replace the non-responsible DBE subcontractor with a responsible, certified DBE subcontractor or show adequate good faith efforts as set forth Section V hereof, must submit all information required in subsection C.5 hereof, and must receive the prior written approval of the General Manager, DBE Program for such substitution.

- B. Further, after entering into each approved DBE subcontract, the Contractor shall neither terminate the subcontract for convenience, nor reduce the scope of the work to be performed by the DBE, nor decrease the price to the DBE, without receiving prior written approval of the General Manager, DBE Program. Such approval is required even if the DBE agrees with the change to the DBE's contract desired by the Contractor.
- C. It may become necessary, at times, to substitute a new subcontractor in order to complete the contract work. The substitution procedure to be followed is:
1. The Contractor must immediately notify the General Manager, DBE Program, in writing, of the proposed substitution of subcontractor. The Contractor's notification must include the specific reasons it intends to reduce the scope of or terminate a DBE subcontract; adequate documentation to support the Contractor's proposed action; and a proposed substitute firm to complete the DBE's portion of work.
 2. The following is a non-exclusive list of the types of reasons, which justify substitution: the DBE was found not to be able to perform, or not to be able to perform on time; the DBE's work product was not acceptable; the DBE demands an unreasonable escalation of its price.
 3. The following is a non-exclusive list of the types of reasons which do not justify substitution: a replacement firm has been recruited by the Contractor to perform the same work under more advantageous terms; performance issues by the DBE were disputed and every reasonable effort to have the dispute resolved or mediated has not been taken; the DBE has requested a reasonable price escalation which may be justified due to unforeseen circumstances (e.g., a change in scope of DBE's work).
 4. If the subcontractor to be substituted for the DBE is not a DBE, the Contractor must show adequate good faith efforts as set forth in Section V hereof.
 5. The Contractor's request for approval of a substitution must include the name, address, and principal official of the proposed substitute subcontractor and the dollar value and scope of work of the proposed subcontract. If the new subcontractor is a DBE, all DBE affidavits and documents required by **Schedule C** shall be attached.
 6. The Authority will evaluate the submitted documentation and respond within fifteen (15) business days to the request for approval of a substitution. The Authority's response may approve the request, seek more information, and request an interview to clarify the problem or reject the proposed DBE substitution, with the reasons for the rejection stated in the Authority's response. In the case of an expressed emergency need to receive the necessary decision for the sake of job progress, the Authority will respond as soon as practicable.
 7. Actual substitution by the Contractor may not be made prior to the Authority's approval. Once notified of the Authority's approval, the substitute subcontract must be executed within five (5) business days, and a copy submitted to the General Manager, DBE Program.

- D. The Authority will not approve extra payment for escalated costs incurred by the Contractor when a substitution of subcontractors becomes necessary in order to comply with the DBE requirements of the contract.

IX. NON-COMPLIANCE

- A. Failure to comply with the DBE requirements of the contract or failure to use DBEs as stated in the proposal constitutes a material breach of contract. The General Manager, DBE Program, shall have the discretion to recommend to the Authority's Purchasing Agent that the Purchasing Agent apply suitable sanctions to the Contractor if the Contractor is found to be in non-compliance with the DBE requirements. Such sanctions include, but are not limited to, withholding payment to the Contractor until corrective action is taken; suspension and/or termination of the contract, in whole or in part; and debaring or suspending the Contractor from entering into future contracts with the Authority.
- B. The failure by the Contractor to use a DBE subcontractor to the extent the Contractor committed to use said DBE gives the underutilized DBE subcontractor specific contract remedies, including the right to damages, the right to resolve the dispute by binding arbitration before an independent arbitrator and the right to recover its reasonable expenses, including attorneys' fees, if the DBE is the prevailing party, as follows:
 - 1. Damages. In the event the Contractor has not complied with the contractual DBE percentage and the change to the contractual DBE usage has not been approved by the Authority, an affected DBE may recover from the Contractor damages suffered by said DBE as a result of being underutilized. This provision is intended for the benefit of any DBE affected by underutilization and grants such entity third party beneficiary rights. Any rights conferred by this provision are non-waivable and take precedence over any conflicting provisions in the agreement between the Contractor and the DBE.
 - 2. Arbitration procedures. If requested by the DBE, the DBE shall have the right to initiate binding arbitration of any dispute concerning damages suffered as a result of being underutilized. A DBE desiring to arbitrate must notify the Contractor in writing to initiate the arbitration process. Unless the affected parties agree to a different schedule in writing, within ten (10) days of receipt by the Contractor of the intent to arbitrate from the DBE, the above-described disputes must be arbitrated in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"), a not-for-profit agency, with an office at 225 North Michigan Avenue, Suite 2527, Chicago, Illinois 60601-7601. All such arbitrations must be initiated by the DBE filing a demand for arbitration with the AAA; must be conducted by the AAA; and must be held in Chicago, Illinois.
 - 3. Fees. All fees of the arbitrator are the initial responsibility of the DBE; provided, however, that the arbitrator is authorized to award reasonable expenses, including attorneys' and arbitrator fees, as damages to a prevailing DBE.

4. Entry of judgment. Judgment upon the award rendered by the arbitrator may be entered in any court of competent jurisdiction.
- E. If the Contractor does not pay any subcontractor or material supplier listed on a pay request, or if a subcontractor or material supplier does not pay any lower tier subcontractor or supplier, within the 15 day time limit set forth in the Local Government Prompt Payment Act, 50 ILCS 5055/9 ("Prompt Payment Act") , the Contractor must pay the subcontractor/material supplier an additional amount for interest at the rate of two percent (2%) per month (or, the amount provided in the Prompt Payment Act, as amended) on the outstanding balance, for each month, prorated per diem for any partial month, that the Contractor fails or refuses to pay the subcontractor/supplier. Provided that, in the event the Contractor receives less than full payment from the Authority and/or the Contractor has rejected the subcontractor/supplier's work or materials, the Contractor's obligations to make payment are limited by the provisions of the Prompt Payment Act. All agreements between the Contractor and its subcontractors/supplier and with lower tier subcontractors/suppliers must provide for payment and interest as set forth herein.
- F. The Contractor agrees to include the following assurance in all of its subcontracts: "The Contractor and subcontractor shall comply with the requirements of the Illinois Human Rights Act (775 ILCS 5/1-100, et seq.) and the Illinois Public Works Employment Discrimination Act (775 ILCS 5/10/0.01, et seq) and shall refrain from unlawful discrimination under Illinois law in the performance of this contract. The failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Authority deems appropriate."
- G. In addition, federal and state laws apply to false representations, deception and fraud:
 1. Illinois Law. Under Illinois law, it is a Class 2 felony to make certain false representations as to the status of a person or entity in obtaining a governmental contract. In addition, any person convicted of this felony offense must pay to the governmental unit that issued the contract a penalty equal to one and a half times the amount of the contract. 720 ILCS 5/17-29.
 2. Federal Law. False, fraudulent, or deceitful statements made in connection with DBE participation in federal Department of Transportation assisted programs could also result in liability under 49 CFR Part 31, Program Fraud and Civil Remedies and possible prosecution under 18 U.S.C. 1001.

X. RECORD KEEPING

The Contractor shall maintain records of all relevant data with respect to the utilization of DBEs and shall retain these records for a period of at least three (3) years after final acceptance of the work. Full access to said records shall be granted to the Authority and its Inspector General, its Federal and/or State funding agencies, the U.S. Department of Justice, the USDOT and any duly authorized representatives thereof. In addition, the Contractor shall, at all times, cooperate with the Authority's Inspector General.

The Proposer must also create a bidders list, consisting of information about all subcontractors that submitted a proposal or a quote. The bidders list must include the name, address, DBE/non-DBE status, age of firm and the appropriate range of annual gross receipts. The form for the bidders list suggested by the Authority can be found in the DBE forms section of the IFB documents. Failure to submit this information will result in the firm being deemed non-responsible for the contract.

XI. MINORITY FINANCIAL INSTITUTIONS

The proposer is encouraged to utilize financial institutions owned and controlled by socially and economically disadvantaged individuals. Use of such institutions may be considered by the Authority as evidence of proposer's willingness to do business with DBEs. Information about such institutions is available in the Authority's DBE Program Directory, which is available on-line at <http://www.federalreserve.gov/releases/mob/current/default.htm>.

DBE Assistance Agencies

The following agencies are available to prospective bidders for assistance.

<p>Alliance of Business Leaders & Entrepreneurs (ABLE) 150 N. Michigan Ave., Suite 2800 Chicago, IL 60601 Contact: Donna Gaines Phone: (312) 624-7733 Fax: (312) 275-7841 Email: dgaines@ablechicago.com Website: www.ablechicago.com Services</p> <ul style="list-style-type: none"> • Business Development 	<p>Black Contractor United (BCU) 400 W. 76th St., Suite 200 Chicago, IL 60620 Contact: Belinda Henderson Phone: (773) 483-4000 Fax: (773) 483-4150 Email: belinda_bcu@att.net Website: www.blackcontractorsunited.com Services</p> <ul style="list-style-type: none"> • Business Development
<p>Chatham Business Association (CBA) 8441 S. Cottage Grove Ave. Chicago, IL 60619 Contact: Melinda Kelly Phone: (773) 994-5006 Fax: (773) 994-9871 Email: melkelcba@sbcglobal.net Website: www.cbaworks.org Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance 	<p>Chicago Minority Business Development Council, Inc. (CMBDC) 105 W. Adams Chicago, IL 60603 Contact: Shelia C. Hill Morgan Phone: (312) 755-8880 Fax: (312) 755-8890 Email: shillmorgan@chicagomsdc.org Website: www.cmbdc.org Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance
<p>Chicago Urban League (CUL) 4510 S. Michigan Ave. Chicago, IL 60653 Contact: Kenya Spann Phone: (773) 285-5800 Fax: (773) 285-7772 Email: kspann@thechicagourbanleague.org Website: www.thechicagourbanleague.org Services</p> <ul style="list-style-type: none"> • Business Development 	<p>Federation of Women Contractors (FWC) 5650 S. Archer Ave. Chicago, IL 60638 Contact: Joan Anderse Phone: (312) 360-1122 Fax: (312) 360-0239 Email: joan@andersenpump.com Website: www.fwcchicago.com Services</p> <ul style="list-style-type: none"> • Business Development
<p>Hispanic-American Construction Industry Association (HACIA) 901 West Jackson Blvd., Suite 205 Chicago, IL 60607 Contact: Jorge Perez Phone: (312) 666-5910 ext. 22 Fax: (312) 666-5692 Email: jperez@haciaworks.org Website: www.haciaworks.org Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance 	<p>Illinois Hispanic Chamber of Commerce (IHCC) 855 W. Adams, Suite 100 Chicago, IL 60607 Contact: Omar Duque Phone: (312) 425-9500 Fax: (312) 425-9510 Email: oduque@hccbusiness.net Website: www.ihccbusiness.net Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance

DBE Assistance Agencies (Continued)

<p>Latin American Chamber of Commerce (LACC) 3512 W. Fullerton Avenue Chicago, IL 60647 Contact: D. Lorenzo Padron Phone: (773) 252-5211 Cellular: (847) 894-5722 Fax: (773) 252-7065 Email: D.LorenzoPadron@latinamericanchamberofcommerce.com Website: www.latinamericanchamberofcommerce.com</p> <p>Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance 	<p>Philippine American Chamber of Commerce of Greater Chicago (PACCGC) 3413 N. Milwaukee Ave. Chicago, IL 60641 Contact: James Villar Phone: (773) 545-4330 Fax: (773) 545-4373 Email: jamesvillar@paccgc.org Website: www.paccgc.org</p> <p>Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance
<p>Women's Business Development Center (WBDC) 8 S. Michigan Ave., 4th Floor Chicago, IL 60603 Contact: Freida Curry Phone: (312) 853-3477 Fax: (312) 853-0145 Email: fcurry@wbdc.org Website: www.wbdc.org</p> <p>Services</p> <ul style="list-style-type: none"> • Business Development • Certification Assistance • Technical Assistance 	

Project information and current DBE directory of certified local and out-of-state companies are available.

<p>Chicago Transit Authority Project Information c/o Marina Popovic Purchasing Department 567 W. Lake St. Chicago, IL 60661-1465 Phone: (312) 681-2420 Fax: (312) 681-2405 E-mail: djohnson@transitchicago.com</p>	<p>Chicago Transit Authority DBE Directory c/o Omar A. Brown Diversity Programs Department 567 W. Lake St. Chicago, IL 60661-1465 Phone: (312) 681-2600 Fax: (312) 681-2605 E-mail: obrown@transitchicago.com</p>
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Schedule B

AFFIDAVIT OF DBE/NON-DBE JOINT VENTURE

This Schedule B need not be submitted if all joint venturers are DBEs. In such a case, however, the written joint venture agreement and a copy of the current IL UCP Letter of Certification for each DBE must be submitted.

ALL INFORMATION REQUESTED BY THIS SCHEDULE MUST BE ANSWERED IN THE SPACES PROVIDED BY JOINT VENTURERS AT ANY TIER. ADDITIONAL SHEETS MAY BE ATTACHED.

I. Name of joint venture: _____

Address of joint venture: _____

Phone number of joint venture: _____

II. Identify each non-DBE venturer(s):

Name of Firm: _____

Address: _____

Phone: _____

Contact person for matters concerning DBE compliance: _____

III. Identify each DBE venturer(s):

Name of Firm: _____

Address: _____

Phone: _____

Contact person for matters concerning DBE compliance: _____

IV. Describe the role(s) of the DBE venturer(s) in the joint venture:

V. Attach a copy of the joint venture agreement. In order to demonstrate the DBE venturer's share in the ownership, control management responsibilities, risks and profits of the joint venture, the proposed joint venture agreement must include specific details related to: (1) the contributions of capital and equipment; (2) work items to be performed by the DBE's own forces, (3) work items to be performed under the supervision of the DBE venturer; and (4) the commitment of management, supervisory and operative personnel employed by the DBE to be dedicated to the performance of the project.

VI. Attach a copy of the current IL UCP Letter of Certification for each DBE joint venturer.

VII. Ownership of the Joint Venture:

A. What is the percentage(s) of DBE ownership in the joint venture?

DBE ownership percentage(s): _____

Non-DBE ownership percentage(s): _____

Schedule B

AFFIDAVIT OF DBE/NON-DBE JOINT VENTURE

VII. Ownership of the Joint Venture *(continued)*:

B. Specify DBE/non-DBE percentages for each of the following (provide narrative descriptions and other detail as applicable):

1. Sharing of profit and loss: _____

2. Capital contributions:

(a) Dollar amounts of initial contribution: _____

(b) Dollar amounts of anticipated on-going contributions: _____

3. Contributions of equipment (*specify types, quality and quantities of equipment to be provided by each venturer*):

4. Other applicable ownership interests, including ownership options or other agreements, which restrict or limit ownership and/or control:

5. **Provide copies of all written agreements between venturers concerning this project.**

6. Identify each current Chicago Transit Authority contract and each contract completed during the past two (2) years by either of the joint venture partners participating in this joint venture:

VIII. Control of and Participation in the Joint Venture. Identify by name and firm those individuals who are, or will be, responsible for and have the authority to engage in the following management functions and policy decisions. (Indicate any limitations to their authority such as dollar limits and co-signatory requirements.):

A. Joint venture check signing:

B. Authority to enter contracts on behalf of the joint venture:

Schedule B
AFFIDAVIT OF DBE/NON-DBE JOINT VENTURE

C. Signing, co-signing and/or collateralizing loans:

D. Acquisition of lines of credit:

E. Acquisition and indemnification of payment and performance bonds:

F. Negotiating and signing labor agreements:

G. Management of contract performance. *(Identify by name and firm only):*

1. Supervision of field operations:

2. Major purchases:

3. Estimating:

4. Engineering:

IX. Financial Controls of Joint Venture:

A. Which firm and/or individual will be responsible for keeping the books of account?

B. Identify the "managing partner," if any, and describe the means and measure of their compensation:

C. What authority does each venturer have to commit or obligate the other to insurance and bonding companies, financing institutions, suppliers, subcontractors, and/or other parties participating in the performance of this contract or the work of this project?

Schedule B
AFFIDAVIT OF DBE/NON-DBE JOINT VENTURE

- X. State the approximate number of personnel (by trade) needed to perform the joint venture's work under this contract. Indicate whether they will be employees of the majority firm, DBE firm, or the joint venture.

[illegible]

If **any** personnel proposed for this project will be employees of the joint venture:

- A. Are **any** proposed joint venture employees currently employed by either venturer? _____
Employed by non-DBE (number): _____ Employed by DBE: _____
- B. Identify by name and firm the individual who will be responsible for joint venture hiring: _____

- XI.** Please state any material facts and additional information pertinent to the control and structure of this joint venture.

Schedule B

AFFIDAVIT OF DBE/NON-DBE JOINT VENTURE

The undersigned affirm that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operations of our joint venture and the intended participation of each venturer in the undertaking. Further, the undersigned covenant and agree, under which work is done for CTA by the venturers, to provide to CTA current, complete and accurate information regarding actual joint venture work and the payment therefor, and any proposed changes to any provision of the joint venture, or those of each venturer relevant to the joint venture by authorized representatives of CTA, its Inspector General or any of its funding agencies.

Any misrepresentation regarding the status of a person or an entity in order to qualify for DBE status may result in conviction for a Class 2 felony, including a penalty for one and a half times the value of the contract. Material misrepresentation on any matter will also be grounds for terminating any contract which may be awarded, and for initiating action under federal or state laws concerning false statements.

NOTE: *If, after filing this Schedule B and before the completion of the joint venture's work on the project, there is any change in the information submitted, the joint venture must inform the General Manager, DBE Program directly in writing or through the prime contractor if the joint venture is a subcontractor.*

Name of DBE Partner Firm

Name of Non-DBE Partner Firm

Signature of Affiant

Signature of Affiant

Name and Title of Affiant (Type or Print)

Name and Title of Affiant (Type or Print)

Date

Date

On this _____ day of _____, 20____, the above-signed Officers of

(Name of Joint Venture)

personally known to me as the persons described in the foregoing Affidavit, acknowledged that they executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS OF, I hereunto set my hand and official seal.

Signature of Notary Public

My Commission Expires: _____

SEAL

Schedule C:
LETTER OF INTENT FROM DBE TO PERFORM AS
SUBCONTRACTOR, SUPPLIER AND/OR CONSULTANT
Bidder's or Proposer's failure to submit both pages of this form
with its bid will result in the bid being rejected in its entirety

Requisition No.: _____

From: _____
(Name of DBE Firm)

The DBE status of the undersigned is confirmed by the attached Letter of Certification from the IL UCP dated _____. (If proposing to perform as a DBE/non-DBE Joint Venture, the Letter of Certification from the DBE venturer is attached along with a completed Schedule B and joint venture agreement).

[illegible]

SPECIFY ANNUALLY or TOTAL VALUE

Diversity Department/DBE Schedules B, C, and D (Rev. 4.24.12)

Schedule C: LETTER OF INTENT FROM DBE

Sub-Contracting Levels

%_____ of the dollar amount of the DBE's subcontract will be sublet to non-DBE contractors.

%_____ of the dollar amount of the DBE's subcontract will be sublet to DBE contractors.

NOTICE: IF THE DBE WILL NOT BE SUB-SUBCONTRACTING ANY OF THE WORK DESCRIBED IN THIS SCHEDULE, A ZERO (0) MUST BE SHOWN IN EACH BLANK ABOVE.

NOTICE: IF ANY DOLLAR AMOUNT OF THE DBE's SCOPE OF WORK WILL BE SUBLET, A BRIEF EXPLANATION AND DESCRIPTION OF THE WORK TO BE SUBLET MUST BE ATTACHED TO THIS SCHEDULE.

NOTICE: Any misrepresentation regarding the status of a person or an entity in order to qualify for DBE status may result in conviction for a Class 2 felony, including a penalty for one and a half times the value of the contract. Material misrepresentation on any matter will also be grounds for terminating any contract which may be awarded, and for initiating action under federal or state laws concerning false statements.

The undersigned will enter into a formal written agreement for the above work with you as Prime Contractor, conditioned upon your execution of a contract with the Chicago Transit Authority, and will do so within (5) five calendar days of your receipt of a signed contract from the Chicago Transit Authority.

(Signature of Owner, President or Authorized Agent of DBE)

Name/Title (Print)

Date

Phone

If proposing to perform as a DBE/non-DBE Joint Venture:

(Signature of Owner, President or Authorized Agent of non-DBE)

Name/Title (Print)

Date

Phone

On this _____ day of _____, 20____, the above-signed Officer

(Name of DBE company)

personally known to me as the persons described in the foregoing Affidavit, acknowledged that h/she executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS OF, I hereunto set my hand and official seal.

Signature of Notary Public

My Commission Expires: _____

SEAL

Schedule D: DBE UTILIZATION PLAN

Bidder's or Proposer's failure to submit both pages of this form with its bid will result in the bid being rejected in its entirety

Name of Project/Contract: _____

Requisition No.: _____

Job Order No.: _____

State of _____

County (City) of _____

In connection with the above captioned contract, I HEREBY DECLARE AND AFFIRM that I am the

_____ and duly authorized representative of
(Title of Affiant)

(Name of Prime Contractor)

and that I have personally reviewed the material and facts set forth in and submitted with the attached Disadvantaged Business Enterprises (DBE) Schedules for each DBE. Listed below is/are the agreement(s) that correspond(s) with the Schedule C submitted by **each** DBE and **listed separately** for **each** DBE participating on the above mentioned contract:

[illegible]

Total Dollar Amount for All DBE Contracts Listed Above: \$ _____
SPECIFY ANNUALLY or TOTAL VALUE

**Schedule D:
AFFIDAVIT OF PRIME CONTRACTOR**

I hereby acknowledge that I have been advised of the following: Any misrepresentation regarding the status of a person or an entity in order to qualify for DBE status may result in conviction for a Class 2 felony, including a penalty for one and a half times the value of the contract. Material misrepresentation on any matter will also be grounds for terminating any contract which may be awarded, and for initiating action under federal or state laws concerning false statements.

To the best of my knowledge, information and belief, the facts and representations contained in the aforementioned attached Schedules are true and no material facts have been omitted.

The undersigned will enter into formal agreements with all listed DBE firms for work as indicated by this Schedule D and accompanying Schedules, and will enter into such agreements within five (5) calendar days after receipt of the contract executed by the Chicago Transit Authority. In the event the Prime Contractor cannot meet said five (5) day schedule, it must provide a written explanation for the delay and an estimate date by which the written agreement will be completed.

The Prime Contractor designated the following person as their DBE Liaison Officer:

(Name - Please Print or Type)

(Phone)

I do solemnly declare and affirm under penalty of perjury that the contents of the foregoing document are true and correct, and that I am authorized on behalf of the Prime Contractor to make this affidavit.

(Name of Prime Contractor – Print or Type)

(Signature)

(Name and Title of Affiant – Print or Type)

(Date)

On this _____ day of _____, 20____, the

(Title of Affiant)

(Name of Company)

personally known to me as the person described in the foregoing Affidavit, acknowledged that he/she executed the same in the capacity therein stated and for the purpose therein contained.

IN WITNESS OF, I hereunto set my hand and official seal.

Signature of Notary Public

My Commission Expires: _____

SEAL

NAME OF PRIME BIDDER

BIDDERS LIST

BID NO. _____

DATE: _____

JOB ORDER NO. _____

BID DUE DATE: _____

BUS. PHONE NO. _____

ADDRESS: _____

CITY: _____

STATE: _____

CONTACT PERSON: _____

As the prime bidder, listed below is the information about (Name of Firm) _____
that is requested by the Authority.

Also, included on the following list are all firms who responded to a solicitation by submitting a bid or quote as a subcontractor. Furthermore, included on the list are all firms who submitted a bid or quote on their own. Under gross receipt column list range using the following: **Under \$500,000, \$500,000-\$1,000,000, \$1,000,000-\$2,000,000, \$2,000,000-\$2,500,000, \$2,500,000-\$3,000,000, \$3,000,000-\$3,500,000, \$3,500,000-\$4,000,000, over \$4,000,000.**

FIRM NAME	FIRM ADDRESS	DBE OR NON-DBE	AGE OF FIRM	GROSS RECEIPT RANGE

GUIDANCE CONCERNING GOOD FAITH EFFORTS (49 CFR – 26.53)

In order to be responsive, a bidder must make good faith efforts to meet the DBE participation goal set forth in the contract. The bidder must document the good faith efforts it made in that regard. Thus, the Bid submitted to the Authority must be accompanied by written documentation prepared by the bidder evidencing all of its sufficient and reasonable good faith efforts toward fulfilling the goal. These efforts must be active steps, and ones, which could reasonably be expected to lead to sufficient DBE participation to meet the contract DBE participation goal. Mere *pro forma* efforts are not acceptable and will be rejected by the General Manager, DBE Program. Good Faith Efforts require that the bidder consider all qualified DBEs, who express an interest in performing work under the contract. This means that the bidder cannot reject a DBE as unqualified unless the bidder has sound reasons based on a thorough investigation of the DBE's capabilities. Further, the DBE's standing within its industry, membership in specific groups, organizations or associations and political or social affiliation (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the contract DBE participation goal. The following list, which is not exclusive or exhaustive, sets forth the types of actions, which indicate good faith efforts on the part of a bidder to meet the DBE goal. The extent and type of actions required will vary depending on such things as industry practice; the time available for submitting a bid and the type of contract involved.

- Attendance at a pre-bid meeting, if any, scheduled by the Authority to inform DBEs of subcontracting opportunities under a given solicitation.
- Advertisement in general circulation media, trade association publications, and minority-focus media for at least twenty (20) days before bids are due. If 20 days are not available, publication for a shorter reasonable time is acceptable.
- Written notification to capable DBEs that their interest in the contract is solicited.
- Documentation of efforts to negotiate with DBEs for specific sub-contracts including at a minimum:
 - The names, addresses, and telephone numbers of DBEs that were contacted and the date(s) of contact.
 - A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
 - A statement explaining why additional agreements with DBEs were not reached.
- For each DBE the bidder contacted but rejected as unqualified, the reason for the bidder's conclusion.
- Documentation of efforts made to assist the DBEs contacted that needed assistance in obtaining bonding or insurance required by the bidder or the Authority.
- Documentation of efforts to utilize the services of small business organizations, community and contractor groups to locate qualified DBEs.
- Documentation that the bidder has broken out contract work items into economically feasible units in fields where there are available DBE firms to perform the work.
- Evidence that adequate information was provided to interested DBEs about the plans, specifications and requirements of the contract, and that such information was communicated in a timely manner.
- Documentation of any efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services.

APPENDIX D

BILLS OF MATERIAL

Bidders may propose the use of items that are not currently approved by the CTA but must obtain approval from Technical Services- Rail for all such items prior to use in the "Overhaul" of the 100 2600 Series Rail Cars. If any item is disapproved by Technical Services- Rail, Contractor is required to use one of the currently approved parts for such work. Contractor is required to identify each item they intend on using during the "Overhaul". Items shall be in accordance with the tables as follows:

• <i>Truck Overhaul Kit</i>	<i>R-BOM-002</i>
• <i>Master Controller Overhaul Kit</i>	<i>R-BOM-010</i>
• <i>CAM Group Overhaul Kit</i>	<i>R-BOM-020</i>
• <i>Cams,Plates,Gears,Spacers Kit</i>	<i>R-BOM-030</i>
• <i>Traction Motor Kit</i>	<i>R-BOM-040</i>
• <i>A/C Unit Overhaul Kit</i>	<i>R-BOM-050</i>
• <i>Control Group Contactors Kit</i>	<i>R-BOM-060</i>
• <i>Door Relays and Switches Kit</i>	<i>R-BOM-070</i>
• <i>HPCU Rebuild Kit</i>	<i>R-BOM-080</i>
• <i>Mixed Items Material List</i>	

[illegible]

[illegible]

R-BOM-002 - HORIZONTAL MOTOR SUSPENSION						
DESCRIPTION	APPROVED VENDORS			LOT NO.	UOM	QTY. PER KIT
CAP: SUSPENSION, 1/4" THICK	41A232494 (GE)			4003002	PC	16
PAD: FLEXIBLE, 2/1/2" OD	41A233752 (GE)	J-13278-3 (LORDMFG)		4003003	PC	32
SPACER: 1-3/4" LONG	41A233735 (GE)			4003004	PC	16
NUT: LOCK, 3/4"-10, 3B STEEL, GR. B, PREVAILING TORQUE NYLON TOP INSERT, HEAVY, THIN PER IFI 100/107	42-NTU-120 (ELASSTPN)	1111715 (CONTINEN)	2A41NTU1210 (AEROSTOP)	1111715	PC	8
PIN: COTTER, 3/16" X 1-1/4" STEEL				1190241	PC	8

R-BOM-002 - GEAR SUSPENSION						
DESCRIPTION	APPROVED VENDORS			LOT NO.	UOM	QTY. PER KIT
SPACER: GEAR UNIT	41A231571P1 (GE)			4003047	PC	16
NUT: LOCK, HEAVY THIN HEX, 1"-8 (3B) NYLON INSERT, PREVAILING TORQUE, ZINC ELECTROPLATED, GRADE "C" OR "8", IFI 100/107	59NTU8-168DN (CONTAERO)	59NTU168 (GREERSMR)		4003049	PC	8
PAD: FLEXIBLE	J-6144-23A (LORDMFG)	4478093 (ICS)	41A233755P2 (GE)	4003046	PC	32

R-BOM-002 - HARDWARE

ITEM NO.	DESCRIPTION	QTY./KIT
1110658	NUT: HEX, 3/4-10 STEEL, HEAVY, SINGLE CHAMFER, HOT PRESSED, ZINC ELECTROPLATED. PER ANSI/ASME B18.2.2.	32
1111032	LOCKNUT: HEX, 10-32, 18-8 STAINLESS STEEL, STANDARD HEIGHT, W/NYLON LOCKING INSERT (250 DEG. F MAX. PERFORMANCE)	80
1111705	NUT: LOCK, 3/8-16-3B STEEL, PREVAILING TORQUE NYLON TOP	100
1111715	NUT: LOCK, 3/4-10-3B STEEL, GRADE B, PREVAILING TORQUE NYLON TOP INSERT TYPE, HEAVY, THIN HEIGHT. PER IFI 100/107 WITH APPROPRIATE MARKINGS. (WHICH IS COMPARABLE TO GR-5 PER SAE J995.) ZINC ELECTROPLATED	12
1111794	NUT: HEX, 5/16-18 MADE OF ZYTEL 101, GENERAL PURPOSE NYLON, WHITE. USED TO SECURE TROLLEY BEAM ARC SHIELD TO FLASHBOARD	24
1111958	NUT: LOCK, 1/4-20-3B STEEL, GRADE B, PREVAILING TORQUE NYLON TOP INSERT TYPE. PER IFI 100/107 W/APPROPRIATE MARKINGS. (WHICH IS COMPARABLE TO GR-5 PER SAE J995). ZINC ELECTROPLATED	32
1116359	NUT: LOCK, 1/2-13-3B STEEL, PREVAILING TORQUE NYLON TOP INSERT TYPE. PER IFI 100/107 WITH APPROPRIATE MARKINGS. ZINC ELECTROPLATED	50
1116363	NUT: LOCK, 5/8-11 STEEL, GR-B, PREVAILING TORQUE NYLON TOP INSERT TYPE. PER IFI 100/107 WITH APPROPRIATE MARKINGS. (WHICH IS COMPARABLE TO GR-5 PER SAE J995). ZINC ELECTROPLATED	64
1116364	NUT: LOCK, 5/16-18 STEEL, PREVAILING TORQUE NYLON TOP INSERT TYPE. PER IFI 100/107 WITH APPROPRIATE MARKINGS. ZINC ELECTROPLATED	50
1116369	NUT: LOCK, 1-8-3B STEEL, PREVAILING TORQUE NYLON TOP INSERT TYPE. PER IFI 100/107 WITH APPROPRIATE MARKINGS. ZINC ELECTROPLATED	8
1120021	WASHER: FLAT, 1-1/4" SCREW, 1-3/8" ID X 2-1/2" OD X .140 THK HI-STRENGTH STEEL, ZINC PLATED, FOR KONI HORIZONTAL SHOCK ABSORBER	4
1120055	WASHER: FLAT, 3/8 BOLT SIZE, TYPE A, NARROW, STEEL, PER ANSI/ASME B18.22.1, ZINC ELECTROPLATED	125
1120057	WASHER: FLAT, 1/2 BOLT SIZE, TYPE A, NARROW, STEEL, PER ANSI/ASME B18.22.1, ZINC ELECTROPLATED	70
1120061	WASHER: FLAT, SPECIAL, 1.0625 ID X 1.750 OD X 0.1875 THICK, STEEL, MAT'L PER ANSI/ASME B18.22.1, ZINC ELECTROPLATED	16

1120062	WASHER: 3/4" FLAT, SPECIAL, HARDENED, C1040/C1046 STEEL THRU HARDENED TO ROCKWELL C38-45. 13/16"ID X 1-3/4"OD X 0.2" THICK, ZINC MECHANICALLY DEPOSTED COATING PER ASTM B695, CLASS 8, TYPE I. CERTIFICATION AND PROOF OF TEST OF MATERIAL COMPOSITION, ZINC COATING PROCESS AND RELIEF OF HYDROGEN EMBRITTLEMENT	96
1121060	WASHER: LOCK, 3/8 BOLT SIZE STL, HELICAL SPRING TYPE, MED, .657 OD X .375 ID X .094 THICK. ZINC ELECTROPLATED. PER ANSI B18.21.1	75
1121066	WASHER: LOCK, 3/4 BOLT SIZE STL, HELICAL SPRING TYPE, MED, 1.271 OD X .75 ID X .188 THICK, ZINC ELECTROPLATED. PER ANSI B18.21.1	32
1121170	WASHER: FLAT, SPECIAL, 1/2 BOLT SIZE, WROUGHT STL, 7/8 OD X 17/32 ID X 3/32 THICK. ZINC ELECTROPLATED	48
1123021	WASHER: FLAT, 3/8 BOLT SIZE, STEEL, 1-1/4 OD X 13/32 ID X .086 THICK. ZINC ELECTROPLATED PER ASTM F436 HARDENED	32
1380148	SCREW: CAP, 1/4-20 X 7/8 HEX HEAD, GRADE 5, ZINC ELECTROPLATED MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPP- J429	10
1380162	SCREW: MACHINE, 10-32 X 5/8 STAINLESS STEEL, SLOTTED INDENTED HEX HEAD. AUSTENITIC TYPE, PER AISI 302. MINIMUM TENSILE STRENGTH 70,000 PSI	80
1380297	SCREW: CAP, 3/8-16 X 3/4 HEX HEAD, GRADE 5, ZINC ELECTROPLATED MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	50
1380299	SCREW: CAP, 3/8-16 X 1 HEX HD GR-5 ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	50
1380301	SCREW: CAP, 3/8-16 X 1-1/4 HEX HEAD, GRADE 5, PER ANSI/ASME B18.2.1. ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	50
1380303	SCREW: CAP, 3/8-16 X 1-1/2 HEX HEAD, GRADE 5, ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	50
1380305	SCREW: CAP, 3/8-16 X 1-3/4 HEX HEAD, GRADE 5, ZINC ELECTROPLATED MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	50
1380313	SCREW: CAP, 3/8-16 X 2-3/4 HEX HEAD, GRADE 5, ZINC ELECTROPLATED MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	25
1380324	SCREW: CAP, 3/8-16 X 4-1/2 HEX HEAD GRADE 5 ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	25
1380409	SCREW: CAP, 1/2-13 X 2-1/4 HEX HD GR-5 ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	24

1380457	SCREW: CAP, 1/2-13 X 2 HEX HD GR-5 ZINC ELECTROPLATED. MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	16
1380461	SCREW: CAP, 1/2-13 X 2-1/2 HEX HEAD GR-5 ZINC ELECTROPLATED MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	20
1380549	SCREW: CAP, 5/8-11 X 1-3/4 HEX HEAD, GRADE 5, ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	32
1380563	SCREW: CAP, 5/8-11 X 3/1/2 HEX HD GR-5 ZINC ELECTROPLATED. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	24
1380568	SCREW: CAP, 5/8-11 X 4-1/2 HEX HD GR-5 ZINC ELECTROPLATED. MATL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	16
1381066	SCREW: CAP, 5/16-18 X 1-1/4 HEX HD NYLON, MADE FROM ZYTEL 101 GENERAL PURPOSE NYLON, WHITE	24
1381209	SCREW: CAP, 3/8-16 X 7/8 HEX HEAD GR-5 W/NYLON PATCH SELF-LOCKING ELEMENT. MECH ZINC COATED PER ASTM B695 CLASS 12, TYPE I	16
1382035	SCREW: CAP, 1/2-13 X 2-3/4 HEX HD GR-5 NYLON PATCH, SELF-LOCKING ELEMENT. ZINC ELECTROPLATED MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	32
1383972	SCREW: CAP, 5/8-11 X 1-1/2 HEX HEAD GR-8 W/NYLON PATCH SELFLOCKING ELEMENT ZINC ELECTROPLATED	96
1387288	SCREW: CAP, 5/16-18 X 1-1/8, SOCKET HEX HEAD, PER ANSI/ASME B18.3 AND ASTM A574, ALLOY STEEL, ZINC ELECTROPLATED	48
1389203	SCREW: CAP, 1/2-13 X 7/8 HEX HD GR-5 NYLON PATCH SELF LOCKING ELEMENT ZINC ELECTROPLATED	24
1389204	SCREW: CAP. 1/2-13 X 1-1/4 HEX HEAD GR-5, NYLON PATCH SELF-LOCKING ELEMENT ZINC ELECTROPLATED	25
1389206	SCREW: CAP, 5/8-11 X 2-1/4 HEX HD GR-8 NYLON PATCH SELFLOCKING ELEMENT ZINC ELECTROPLATED MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	72
1389214	SCREW: CAP, 5/8-11 X 1-1/4 HEX HD GR-5 NYLON PATCH SELFLOCKING ELEMENT ZINC ELECTROPLATED MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429	26
1608022	TERMINAL: KNIFE CONNECTOR, SPECIAL, CRIMP TYPE 2/0 CABLE, STYLE A, 2 PIN	8
3148354	TIE: CABLE, STANDARD, SELF-LOCKING, 1/16" X 3" BUNDLE DIA. 11-1/2" APPROX. LENGTH	80
4003000	HORIZ. SUSPENSION KIT	8
4003028	WASHER: 1-1/8" FLAT, USED BETWEEN NYLON WASHER AND DISC SPRINGS THAT MOUNT CURRENT COLLECTOR "H" FRAME TO TRUCK FRAME 1-1/4" I.D. X 2-3/4" O.D. X 11/64" THICK, STEEL, ZINC OR CAD. PLATED	16
4003043	GEAR UNIT KIT	8

4003050	VERTICAL SUSPENSION KIT	8
4003057	SCREW: CAP, 3/8"-16 X 7/8", HEX HEAD SPECIAL WITH CONTINUOUS 5/64" HOLE THROUGH SIDE OF HEAD, CENTERED TO ACCEPT 18 GAGE WIRE, GR. 8, UNC 2A THREAD, CADMIUM PLATED, MARKED WITH 6 RADIAL DASHES 60 DEG. APART ZINC DICHROMATE ACCEPTABLE NOTE"X": INSP. CERT. MUST BE SUPPLIED FREED OF HYD. EMBRITTLEMENT PER ASTM STD	4
4003301	WASHER: INSULATING, 1/4" THICK, HIGH PRESSURE LAMINATED COTTON FABRIC REINFORCED PHENOLIC RESIN SHEET. MUST CONFORM TO NEMA GRADE "CE", FOR USE WITH TROLLEY BEAM TO TRUCK FRAME BOLT. DRAW. NO: R-1-1181	64
4003306	BOLT: HEX HEAD, 3/4"-10UNC X 7-3/4"L, STEM MODIFIED PER CTA DWG. R-2-1276 LATEST REV. MUST CONFORM TO ASTM J429 LATEST, GR. 5, MARKED WITH 3 RADIAL DASHES 120 DEG. APART & MFG. ID. MECHANICALLY DEPOSITED ZINC COATING PER ASTM B695, CLASS 12, TYPE II. PROOF OF TEST OF BASE MATERIAL & FREEDOM FROM HYDROGEN EMBRITTLEMENT MUST BE FURNISHED WITH EACH SHIPMENT. DRAW NO: . "LATEST REV"	32
4156565	SEAL: FLARETITE, FOR 3/8", 37 DEGREE JIC FLARE FITTING	18
4183004	PLATE: MOUNTING, FOR TRACK TRIP SWITCH INSTALLATION. REF: BOEING PARTS LIST 3-3-2. DWG. NO: R-2-1629	2
4240055	CAP: MOUNTING BOLT INSULATOR, FOR TROLLEY BEAM ASSEMBLY, TO TRUCK FRAME INSTALLATION, USED ON 42" AND 56" TROLLEY BEAMS. THE CONTRACTOR SHALL SUBMIT WITH EACH SHIPMENT, CERTIFICATION OF INSPECTION/TESTING FOR COMPLIANCE TO SPECIFIED INSULATOR CAP MATERIAL. DRAW. NO: R-2-1271	32
4243086	SCRAPER: SLEET, INSULATING TUBE FOR GRAVITY TYPE CURRENT COLLECTOR BEAM. DWG. NO: R-4-1076, DET. 12 CURRENT REVISION	32
4303161	WASHER: PLAIN TYPE B, NARROW #10 .190, CARBON STEEL, CADMIUM PLATED	80
5142621	CLAMP: CUSHIONED LOOP, 5/8"	15
5142622	CLAMP: CUSHIONED LOOP, 11/16"	20
5142637	CLAMP: CUSHIONED LOOP, 1/4"	20
5142676	CLAMP: CUSHIONED LOOP, 9/16" DIA	20
5152023	SCREW: CAP, 5/16" X 18 X 1-1/2", SLOTTED HEX HEAD, GRADE 5, MECH. ZINC COATED, PER ASTM B695, CLASS 12, TYPE I	20
5155040	CONTACT: FINGER, FOR TRUCK COUPLER PLUG SYSTEM 17MP10K2, GE CONTACT FINGER P/N 41A265467P2 SPEC. NO: 9751 DRAW. NO: R-2-1679 REV. NO: 3	8

R-BOM-002: BOM for 2600-Series Truck Overhaul Kit - Mechanical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% of rep/truck	trucks/kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
BOLT: STRUCTURAL, ASTM A490, 3/4"-10, 4-1/2" LONG, TYPE 1. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT TO COMPLY WITH ASTM A490.	1041518			PC	2	100	4	100	8	BBAPRO	BV75C72PA49								
LOCKNUT: ASTM A194 GRADE 2H, 3/4"-10 SIZE, METAL (SPRING STEEL) INSERT. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT TO COMPLY WITH ASTM A194 GRADE 2H.	1110082			PC	2	100	4	100	8	SECURITYL	SH515G2H								
SCREW: CAP, 3/4-10 X 3-1/4 HEX HD GR-8 ZINC ELECTROPLATED WITH DICHROMATE DIP. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429 FOR COUPLER KIT AND MOTOR MOUNTING BOLTS.	1384475	213		PC	10	100	4	100	40	*BBA PROJECT, INC.	IFC BH75C52YG8								
SCREW: CAP, 5/8-11 X 2-5/8 HEX HD GR-8 NYLON PATCH SELFLOCKING ELEMENT ZINC ELECTROPLATED MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429.	1389208		N/A	PC	4	100	4	100	16	*BBA PROJECT, INC.	BH62C42YG8NY								
CLAMP, HOSE, 11/16" TO 1 1/4" DIA. RANGE	1921055	-	-	PC	4	100	4	100	16	BREEZE	62012HC	FLXIBLE	97-1829-00153	GEIBINDU	5412	IDEALIND	5412		
SCREW: CAP, 5/16-18 X 2 STAINLESS STEEL HEX HEAD, PER ANSI/ASME B18.2.1 TYPE 304, CL 2, IDENTIFICATION SYMBOL B8, PER ASTM A193. MATERIAL CERTIFICATION AND PROOF OF TEST MUST BE SUPPLIED PER ASTM F593, 100,000 MIN YIELD STRENGTH, 125,000 MIN TENSILE STRENGTH.	3069505	N/A	N/A	PC	4	50	4	100	8										
CLAMP, MOUNTING, ATC	3072623	-	-	PC	4	50	4	100	8	INOVCMPO	3547670	WESTERNI	3072623						
INSULATOR, ROLL SUPPORTING CONNECTING ROD BOLT PLATE: SUPPORT, FOR HYDRAULIC LINE INSTALLATION USED ON 2400, 2600 AND 3200 TRUCKS	4000041	-	-	PC	2	100	4	100	8	INOVCMPO	1002143								
WASHER: FLAT, .510" ID X 1.250" OD X 0.100" TH, TYPE 3, HARDENED TO 30-35RC, PER ASTM F436, ZINC COATED PER ASTM B695 CLASS 50 TYPE II, FREE	4002420	N/A	N/A	PC	8	100	4	100	32										
WASHER, 1 1/2"OD, 1"ID, 1/8"TH, THRUST	4002610	-	-	PC	8	100	4	100	32	BOMBARDI	X99-61711	BUDD	X99-61711	BUNTING	TT1502				
INSULATOR, FRAME, SIDE SHIM: "H" FRAME, LATERAL STOP, 1/8" TH., FOR WEGMANN TRUCKS	4002669	-	-	PC	2	100	4	100	8	ICMINDUS	H3200-A	INOVCMPO	1002031						
INSULATOR: PANEL, USED ON #1 TRUCKS, TO ISOLATE TRACK TRIP SUPPORT	4002716		R-1-1122	PC	4	65	4	100	10	DJMETAL	4002673	SONIC	8182015	ZLMACHIN	4002673				
SCREW, CAP, 3/4: - 10 X 28 3/8" HEX HD	4003005			PC	2	100	4	100	8	DELTASCR	4003005	GE	41A238206P2	RUKLICSC	4003005				
WASHER: 0.67" ID X 1.125" OD X 0.173" THICK, SAFETY, HS 16 BELLEVILLE. REF: WEGMANN DRWG. 4.4509.04.052.007	4003011	-	-	PC	24	100	4	100	96	BAUERSPR	12116	NATLDISC	XSP 391540	WAGGONFA	4.4509.04.052.007	WEGMANN	4.4509.04.052.007		
WASHER,SLIDING	4003023	-	-	PC	8	100	4	100	32	ENGNRPRO	4003023	INOVCMPO	4478070	MOOREADD	4478070	WEGMANN	4.4509.60.001.016		
ABSORBER: SHOCK VERTICAL	4003030	-	-	PC	2	100	4	100	8	KONI	96V-1244	KONI	97V-1010	SACHS	401700123549				
ABSORBER: SHOCK HORIZONTAL	4003061	-	-	PC	1	100	4	100	4	KONI	96H-1243	KONI	97H-1009	SACHS	401300020070	VIBRATEC	712768-001		
STOP: LONGITUDINAL, FOR CURRENT COLLECTOR BEAM SUPPORT ASSEMBLY.	4003080	N/A	R-2-1137 RV, 2	PC	4	100	4	100	16	ALLORCOR	4003080	POWERPAR	30297	WEGMANN	3.4513.60.001.021	ZLMACHIN	4003080		
USED ON WEGMANN/DUEWAY TRUCKS.	4003081	-	-	PC	4	100	4	100	16	INOVCMPO	4478128	PHOENIXN	741861	POWERPAR	18578	WEGMANN	3.4513.60.001.016		
STOP, VERTICAL UPPER SHIM: LONGITUDINAL STOP REF: CTA BULLETIN RM-12-031 WEGMANN 4.4513.60.001.019 (REV. 01)	4003085	#REF!	-	PC	4	100	4	100	16	INOVCMPO	4478129	PHOENIXN	741767	POWERPAR	30308	WEGMANN	4.4513.60.001.004		
WASHER: CONICAL SPRING TYPE, SPECIAL REQUIREMENTS (SEE CTA SPEC. 9626-07 OR LATEST), FOR NOMINAL BOLT SIZES OF 20 MM OR 3/4", USED FOR H-FRAME ANCHOR BOLTED JOINT. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT AS SPECIFIED IN SPEC. 9626-07 OR LATEST.	4003086	9626		PC	4	100	4	100	16	BAUERSPR	SPEC - 113916	WEGMANN	4.4513.60.001.020						
WASHER: FLAT, 2 OD X 21/32 ID X 3/8 THICK, STEEL, ZINC ELECTROPLATED, PER CTA DRAWING R-2-1144, REV. 1 FOR CURRENT COLLECTOR BEAM SUPPORT ASSY.	4003087	N/A	R-2-1144	PC	4	100	4	100	16	BOWERSMF		WEGMANN	4.4513.60.001.023						
WASHER: CONICAL SPRING TYPE, SPECIAL REQUIREMENTS	4003093	9626	-	PC	8	30	4	100	10	WEGMANN	4.4513.53.000.006	ZLMACHIN	4093						
BUFFER, STOPPING, RUBBER	4003101	-	-	PC	2	100	4	100	8	ICS	4478148	PHOENIXN	741763	POWERPAR	30310	WEGMANN	3.4509.04.066.002		
BRACKET, MOUNTING, STOPPING BUFFER	4003102	-	-	PC	1	25	4	100	1	WEGMANN	3.4509.04.066.003								
RUBBER, BEARING	4003106	-	-	PC	2	100	4	100	8	ALERTMFG	4003106	INOVCMPO	4003106	MINORUBB	4003106	POWERPAR	4003106.00		
ROD: ASSEMBLY, CONNECTING, ROLL SUPPORT	4003109	-	-	PC	2	100	4	100	8	SIEMENS	1.4509.04.058.004	HALLIND	4003109						
SHIM: TRANSVERSE SUSPENSION,	4003123	-	R-3-1164	PC	4	100	4	100	16	ABILITYM	4003124	INOVCMPO	4478171						
SHIM: TRANSVERSE SUSPENSION, .149" THICK (4MM THK. IS ACCEPTABLE.	4003124	-	R-3-1164	PC	4	100	4	100	16	ABILITYM	4003124	INOVCMPO	4478171						
SPRING: DISC, FOR CURRENT COLLECTOR BEAM ASSEMBLY. WEGMANN TRUCK, SPRING MUST CONFORM TO DIN 2093 STANDARD. MATERIAL CERTIFICATION AND MANUFACTURER MARKING REQUIRED WITH EACH SHIPMENT.	4003135	-	-	PC	36	100	4	100	144	BAUERSPR	60,0X30,5X3,5	NATLDISC	4003135	ROLEX	CTA4003135	WEGMAN	60X30-5X3-5		
BRACKET, MOUNTING, HYDRAULIC SYSTEM INSTALLATION, FOR WEGMANN TRUCK, SERIES 2400 & 2600. REF: B/V P.L. 3-5-51, B/V ORIGINAL P/N 335-11165-83	4003192	6803	R-3-1160	PC	1	100	4	100	4	BOEINGVR	335-11165-83	ELMHRSTM	D22-6425	INOVCMPO	4478239				
T-BULKHEAD, HYDRAULIC SYSTEM, FOR WEGMANN TRUCK ASSEMBLY, REF: BOEING VERTOL PARTS LIST 3-4-57.	4003202	-	-	PC	1	100	4	100	4	FLOWPROD	203002-6-6S	FLOWPROD	C5725-6	WEATHRHE	C5725-6				

R-BOM-002: BOM for 2600-Series Truck Overhaul Kit - Mechanical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% of repl/truck	trucks/kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
NUT, HYDRAULIC SYSTEM INSTALLATION, FOR WEGMANN TRUCK ASSEMBLY. REF: BOEING VERTOL PARTS LIST 3-4-58.	4003204	N/A	N/A	PC	1	100	4	100	4	AUTOCLUT	210212-85	WEATHRHE	C5924-6						
SPACER, PLATE, STOP	4003207	-	-	PC	4	100	4	100	16	BOEINGVR	335-11165-70	FULMER	SA-1-1104	INOVCMPO	4478254	SONIC	6225429		
BRACKET, MOUNTING, QUICK DISCONNECT	4003218	-	-	PC	2	100	4	100	8	MK	D00-185-06								
MOUNTING; FLANGE; TYPE 304 STAINLESS STEEL, TRUCK HYDRAULIC SYSTEM. WABCO PARTS LIST 6-H-7	4003225			PC	3	100	4	100	12	WABCO	674240								
WASHER; FLAT, 1/2 BOLT SIZE, 15/16 OD X 9/16 ID X .0890 THICK. SPECIAL, THRU HARDENED STEEL. ZINC MECHANICALLY DEPOSITED COATING PER ASTM B695-91, TYPE II, CLASS 50, YELLOW CHROMATE ACCEPTABLE.	4003232	-	-	PC	12	100	4	100	48	GE	41B537660P6	GEDCON	41B537660P6						
WASHER; CONICAL SPRING TYPE, SPECIAL REQUIREMENTS (SEE CTA SPEC. 9626-07 OR LATEST). FOR NOMINAL BOLT SIZES OF 12MM OR 1/2". USED FOR MOTOR SAFETY CATCH. MATERIAL CERTIFICATIONS REQUIRED WITH EACH SHIPMENT AS SPECIFIED IN SPEC. 9626-07 OR LATEST.	4003256	9626	-	PC	2	100	4	100	8	SIEMENS	A2202700								
WASHER, SPRING, RUBBER	4003277	-	-	PC	8	100	4	100	32	INOVCMPO	4478324	PHOENIXN	86421108	WEGMANN	2.4513.04.025.006				
BELT, MOUNTING, ATC	4153210	-	-	PC	2	50	4	100	4	INOVCMPO	4628257	MK	A01-743-05	VOSSENG	VH2010FLEX				
ROD, CALIPER LINK ROD	4162476	-	-	PC	2	100	4	100	8	Ri-del	RDM4162476								
TUBE, HYDRAULIC LONG	4162500	-	-	PC	1	100	4	100	4	MK	E00-820-01								
TUBE, HYDRAULIC SHORT	4162501	-	-	PC	1	100	4	100	4	INOVCMPO	4637548	MK	E00-821-01						
COUPLER; FEMALE, QUICK DISCONNECT, WITH ADAPTER, TO ACCEPT 1/4 JIC 37 DEG. FLARE FEMALE	4162510			PC	2	100	4	100	8	FLOWPROD	82448	OEMSAFEW	S35-2P-6						
COUPLING, QUICK DISCONNECT. MALE	4162511	-	-	PC	2	100	4	100	8	FLOWPROD	82447	MOTIONIN	MIIL300427006	OEMSAFEW	S31-2P-6W				
HOSE, HYDRAULIC BRAKING SYSTEM	4162606	-	-	PC	1	100	4	100	4	BUDD	B91-13584	PARKERHO	F3010606060606-28	STRATFLX	AA3702D0280DD	STRATO	S301002		
HOSE; ASSEMBLY, FOR HYDRAULIC BRAKING SYSTEM. PARKER P/N F302-06-06-4-4-4-19-25-SG-066. COMPRISES PARKER PARTS: HOSE P/N 302-4, FITTINGS P/N 10643-4-4 & SPRING GUARD P/N SG-066.	4162617	-	-	PC	2	100	4	100	8	BUDD	B99-61428	PARKRHAN	K301060640404-SG						
BUSHING, NYLON, 5/8"OD, .38"ID, .406"L	4162641	-	R-3-1135	PC	2	100	4	100	8	HAMPSHIR	4162641	INOVCMPO	4637688						
NUT, LOCK, 3/8-16	4162643	-	-	PC	4	100	4	100	16	MCMaster	90652A040								
GASKET; RUBBER FOR MOUNTING FLANGE, QUICK DISCONNECT. REF. 3200 SEC. 6-67 ITEM 34.	4165829			PC	3	100	4	100	12	WABCO	675829								
SPOOL, INDICATOR	4172093	-	-	PC	4	100	4	100	16	BUDD	A99-62222	INOVCMPO	4647140						
SCREW: CAP, 1/2-13 X 6-1/2 HEX HD GR-8, PER ANSI/ASME B18.2.1, WITH TWO 5/64 DIAMETER DIAGONAL SAFETY WIRE HOLES CROSS DRILLED THROUGH HEAD, ZINC COATED PER ASTM B-695 CLASS 50 TYPE II, AND FREE OF HYDROGEN EMBRITTLEMENT, MATL CERT AND PROOF OF TEST MUST BE SUPPLIED PER SAE J429, SPEC. NO: 213, PCK. INFO: PK 50 PC	4182407	-	-	PC	8	100	4	100	32	BBA PROJECT, INC.	BBA BH50C104MG5D								
STEEL: SPHERICAL, SELF-ALIGNING, MATERIAL: LOW CARBON STEEL, HEAT TREAT: CASE HARDENED, FINISH: BLACK OXIDE, BOLT SIZE 5/8", 21/32" ID, 1-3/8" OD, 3/8" NOMINAL THICKNESS. FOR KNORR TRACK BRAKE SUSPENSION ROD ASSEMBLY, FURNISHED IN SET OF 2 PC	4182606	-	-	PC	4	100	4	100	16	JERGENSM	41106								
WASHER, FLAT, 5/8"ID, 1 1/8"OD, 3/32"TH, NEOPRENE	4182612	-	-	PC	4	100	4	100	16	ALERTMFG	4182612	BOMBARDI	A99-62221	INOVCMPO	4657659				
STOP, BRAKE ACTUATOR ARM	4182624	5785	R-2-1201	PC	2	100	4	100	8	CONCORD	SB2603	CPWCASIT	SB2603	INOVCMPO	4657671	POWERPAR	30312.00		
WASHER; FLAT, 0.407ID X 1-3/4OD X 0.105 THK, SPECIAL, STEEL, ZINC DEPOSITED OR CADPLATED MECHANICALLY	4183008	-	R-3-1135	PC	4	100	4	100	16	ADVANCTR	A99-61530	BOEINGVR	335-11143-9	BUDD	A99-61530	INOVCMPO	4658055		
BUSHING, BRASS, ROD ASSY.	4183009	-	-	PC	4	100	4	100	16	INOVCMPO	4658056	SONIC	6305221						
BUSHING, NYLON, USED AT BRAKE RELEASE ROD TO IDLER ARM CONNECTION PER CTA DRW G. R-3-1135 ITEM A LATEST REVISION. REF: BOEING PARTS LIST 3-3-14 & 16.	4183010	N/A	R-3-1135	PC	4	100	4	100	16	BOEINGVR	335-11143-10	SONIC	6305232	WESTERNI	5294121				
WASHER, FLAT, 49/64"ID, 1 5/16"OD, .093"TH, NYLON	4183011	-	-	PC	8	100	4	100	32	ZLMACHIN	Z-4111								
BUSHING, NYLON, 5/8"OD, .380"ID, .470"L	4183017	-	R-3-1135	PC	2	100	4	100	8	ABILITYE	4183017	BOEINGVR	335-11143-12	HENROMFG	5745	INOVCMPO	4658064		
WASHER; FLAT, 5/8 BOLT SIZE, LOW CARBON STL, TYPE B, WIDE, PER ANSI B18.22.1, ZINC ELECTROPLATED	4183027	-	-	PC	14	100	4	100	56	KNORR	2236006	WILLIEWA	4183027						
UNION, HYDRAULIC SYSTEM INSTALLATION. REF: BOEING PARTS LIST 6-1-10	4183075	N/A	N/A	PC	2	100	4	100	8	FLOWPROD	C5306X6	WEATHRHE	C5306X6						
INSULATOR, SPRING, LEFT HAND	4242747	-	-	PC	2	100	4	100	8	INOVCMPO	1002150								
INSULATOR, SPRING, RIGHT HAND	4242748	-	-	PC	2	100	4	100	8	INOVCMPO	1002151	PLASTICD	PDM1920						
WASHER; PLAIN, TYPE B, 5/16" BOLT SIZE, .344" ID, .875" OD, STAINLESS STEEL, TYPE 302, 303 OR 304. REF: BOEING STANDARD ST 72101-C35.	4303086	4758	-	PC	8	50	4	100	16										
NUT, SS, ELASTIC, 3/8"-16	4496106	-	-	PC	4	50	4	100	8	ESNA	79NE-0-86								
WASHER, SPRING	5142073	-	-	PC	4	100	4	100	16	GE	41A250114P1								
O-RING	5155063	-	-	PC	2	100	4	100	8	GE	41A230956P5								
STUD: STEEL, CADMIUM OR ZINC PLATED, 3/4 - 16 X 2-3/4", THREADED 5/8" ON TAP END AND 3/4" ON NUT END. FOR MOUNTING HYDRAULIC SYTEM BRACKET ON CALIPER	5202601	N/A	N/A	PC	2	100	4	100	8										
Hydraulic adapter with quick release		N/A	N/A	PC	1	100	4	100	4										

Mechanical Assemblies

R-BOM-002: BOM for 2600-Series Truck Overhaul Kit - Mechanical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% of repl/truck	trucks/kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
LEVER, ASSY. PIVOT ASSEMBLY, FOR MAGNETIC TRACK BRAKE, KNORR PART LIST REF. 5, PAGE 1 RAIL RECLAMATION ITEM ORDER ON SHOP - SKOKIE	4183059		N/A	PC	4	100	4	100	16	KNORR	STG 05013	SONIC	6305247						

R-BOM-002: BOM 2600-Series Truck Overhaul Kit - Electrical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% OF REPLASSY	truck/ kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
COVER, HEAT SHRINK, 6" L	1601004	-	-	PC	2	100	4	100	12	AMPINDST	53711-3						
COVER, HEAT SHRINK, 9" L	1601072	-	-	PC	4	100	4	100	36	AMPINDST	53712-3	CANUSA	CFW-11009D-BLK-PR	SIMONS,J	HS-4-306		
TERMINAL, RING TONGUE, 22/16 AWG, #8	1608004	-	-	PC	6	100	4	100	28	AMPINDST	31886						
HOSE, AIR, 5/16" ID X 5/8" OD	1923014	-	-	FT	20	100	4	100	40	ABBOTTIN	THERMOID G/S	APACHEHO	10036025	DEVILBIS	H-1901-1110	JBINDUST	7193-31250
TUBING, RUBBER, 3/4" ID, 1" OD	1928013	-	-	PC	25	100	4	100	100	ABBOTTRU	4099-0754/60-2	ALLIANCEH	TN-1202-NC				
TUBING, RUBBER, 1 1/8" ID, 1 3/8" OD	1928021	-	-	PC	25	100	4	100	100	ALLIANCEH	TW-1802						
COIL, RECEIVER, AUTO TRAIN CONTROL	3069829	-	-	PC	2	50	4	100	4	UNIONSWT	N451136-2702						
CONNECTOR,ATC JUNCTION BOX	3072626	-	-	PC	1	50	4	100	2	BUDD	X87-62056	PYLENATN	DB-1413				
CONNECTOR, ATC JUNCTION BOX	3072628	-	-	PC	4	50	4	100	2	BUDD	X87-87006	PYLENATN	DB-8	REMKE,J	RSR106		
CHANNEL, SUPPORT, ELECTRIC CABLE, TRUCK WIRING, .090LT, REF: BUDD PARTS LIST 3-6-28. SIZE 12-13/16" X 1-1/4" X 1/16" THK.	3104677	-	R-2-1223	PC	1	75	4	100	4	BUDD	A87-84035	CTA	1709608				
ANGLE, SUPPORT, ELECTRIC CABLE, TRUCK WIRING, LEFT HAND. ORDER ON SHOP - SKOKIE, ORGANIZATION 2430.	3104678	-	R-2-1224	PC	1	75	4	100	4	BUDD	A87-89425	CTA	1706509				
BUSHING, PLASTIC, FOR 1/2" RIGID CONDUIT	3131311	-	-	PC	4	100	4	100	10	THOMSBET	222						
BUSHING, FIBER, FOR 1" RIGID CONDUIT	3131324	-	-	PC	1	100	4	100	4	APPLTNEL	BBU-100						
RING,O, SEALING TIGHT CONNECTOR, 1"	3146008	-	-	PC	1	100	4	100	2	THOMSBET	5264						
BRACKET, #1 "L" SHAPED, W/ 7/16" DIA. HOLE, FOR CLAMSHELL CABLE SUPPORT	4002415	-	R-2-1259	PC	1	75	4	100	4								
ANGLE, SECURING, MOTOR LEAD CLEAT BLOCK STUD, THREADED, FOR MOUNTING CLEAT BLOCK AND ROCK SHIELD.	4002416	-	R-1-1663	PC	1	75	4	100	4								
	4002672	-	R1-1203	PC	4	100	4	100	16								
PLATE, CLEAT BLOCK	4002731	-	-	PC	2	100	4	100	8	TTAMFG	B-0000-117-18						
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE & TRACK TRIP CABELS.	4003131	1308	R-2-1288	PC	7	75	4	100	24								
BLOCK, CLEAT, TRUCK MADE FROM RED SILICONE COMPOUND, FOR "A1", "A4", "F1", "F4", "AA", "F", SLIP SLIDE CABLES AND 40V HARNESS AT ROCK SHIELD.	4003133	-	R-2-1290	PC	4	100	4	100	16								
PLATE, BOLSTER, GROUND	4003173	-	R-4-1081	PC	1	75	4	100	4	ADVANCTR	335-11165-49	BOEINGVR	335-11165-49	INOVCMPO	4478220	SONIC	6225395.00
PLATE, TRUCK, GROUND	4003174	-	R-4-1081	PC	1	75	4	100	8	BOEINGVR	335-11165-131	INOVCMPO	4478221	SONIC	6225396		
BRACKET, ATC CABLE SUPPORT FOR WEGMANN TRUCK ASSEMBLY.	4003177	-	R-4-1081	PC	1	75	4	100	2	BOEINGVR	335-11165-104	INOVCMPO	4478224				
PLATE, GROUND, BOLSTER TO CARBODY AND TRUCK, CLAM SHELL, SIDE CARS 2401-3200.	4003178	-	R-2-1197	PC	1	75	4	100	4	CTA		INOVCMPO	4478225	SONIC	6225390		
PLATE, CLEAT BLOCK	4003253	-	-	PC	2	75	4	100	8	CENTSALE	E01-121-15	MORRISON	E01-121-15				
PLATE, CLEAT BLOCK	4003255	-	-	PC	1	75	4	100	8	CENTSALE	E01-121-30	MORRISON	E01-121-30				
BRACKET, "Z" CONFIGURATION	4003262	-	-	PC	3	75	4	100	12	CENTSALE	E00-694-03	MORRISON	E000-694-03				
PLATE, CLEAT BLOCK	4003265	-	-	PC	7	75	4	100	26	CENTSALE	E01-121-17	MORRISON	E01-121-17				
COVER, SPEED SENSOR	4004300	-	-	PC	1	100	4	100	4	INOVCMPO	ICS-1002263	VOSSENG	VH20-GAA	ZLMACHIN	Z-2096		
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA1", "AA3" & SHOE TIE CABLE.	4013502	1308	R-2-1291	PC	8	100	4	100	32								
BLOCK, CLEAT, GROUND BRUSH CABLES	4013503	1308	R-2-1292	PC	28	100	4	100	112								
BLOCK, CLEAT, TRUCK , MADE FROM RED SILICONE COMPOUND, FOR "FF2", "FF3", "A2", "A3" CABLES AT CLAM SHELL.	4013505	1308	R-2-1294	PC	2	100	4	100	8								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	4013515	1308	R-2-1295	PC	0	100	4	100	0								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	4013516	1308	R-2-1296	PC	2	100	4	100	8								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "FF2", "FF3, "A2", "A3", TRACTION MOTOR CABLES.	4013517	1308	R-2-1297	PC	2	100	4	100	8								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR TRACTION MOTOR CABLES AT MOUNTING PLATE.	4013518	1308	R-2-1298	PC	2	100	4	100	8								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR TRACTION MOTOR CABLES AT MOUNTING PLATE.	4013519	1308	R-2-1299	PC	2	100	4	100	8								
BLOCK: CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE AND TRACK TRIP CABLES.	4013520	1308	R-2-1300	PC	3	100	4	100	12								
BLOCK: CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR SHOE TIE CABLES.	4013521	1308	R-2-1301	PC	0	100	4	100	0								
BLOCK, CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA" AND "F" CABLES.	4013522	1308	R-2-1302	PC	2	100	4	100	8								
BLOCK: CLEAT, TRUCK, MADE FROM RED SILICONE COMPOUND, FOR "AA" AND "F" CABLES.	4013523	N/A	R-2-1303	PC	2	100	4	100	8								
CLAMP, LOOP, 3/8"	4162610	-	-	PC	2	100	4	100	30	BUDD	X87-84238	INOVCMPO	4637657	TAMFG	TA02234C006CR	UMPCO	S451WSSG6

R-BOM-002: BOM 2600-Series Truck Overhaul Kit - Electrical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% OF REPLASSY	trucks/ kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
CONNECTOR, KNIFE	4183111	-	-	PC	4	25	4	100	18	AMPINDST	32161	KNORR	U 10496	LCOMP	32161				
TUBING, HEAT SHRINK, 1/8" EXPANDED, 48" LONG	4222667	-	-	PC	3	100	4	100	12	NEWARKEL	03F3530	SPCTECH	FPS-008-4025-BLK						
PLATE, INSULATING, 12" X 4" X 7/32, COTTON-PHENOLIC, USED ON WEGMANN TRUCKS.	4242420	-		PC	2	75	4	100	8	MK	E00-694-01	MOOREADD	MA5290						
PLATE, INSULATING, 12" X 4" X 7/32",COTTON-PHENOLIC, USED ON WEGMANN TRUCKS.	4242421	-		PC	2	75	4	100	8	MK	E00-694-02	MOOREADD	MA5390						
STRAP, GROUND, COUPLING TO MOTOR	4242699	-	-	PC	2	75	4	100	8	GE	41A232584G1								
SPACER: CLEAT, FOR SHOE TIE & SLIP SLIDE TRUCK TO CARBODY CABLES USED ON 24, 26R & 32 SUPER TRUCKS	4242727	N/A	N/A	PC	1	100	4	100	4	ADMSWSTL	23-2-78	TTAMFG	B-0000-124-03						
SENSOR,SPEED,w/CABLE,AXLE #1 "A" TRUCK, 2600/3200 & B	4243298	-	-	PC	1	100	4	100	3	ELECTROC	725806CBL	GE	41B581503P1	MOTIONSE	PC55-22E	VAPOR	19010329-10		
CLAMP, LOOP, 5/8"	5142621	N/A	N/A	PC	1	100	4	100	10	BUDD	X87-84240	INOVCMPO	5617668	TAMFG	TA02234C010CR	UMPCO	S451WSSG10		
CLAMP, LOOP, 11/16"	5142622	-	-	PC	16	100	4	100	90	BUDD	X87-84241	INOVCMPO	5617669	TAMFG	TA02234C011CR	UMPCO	S451WSSG11		
PLATE, SUPPORT, .187"	5142626	-	-	PC	10	75	4	100	32	BUDD	A87-84993	INOVCMPO	V5617673	RIDELMFG	2543				
ANGLE, CLEAT BLOCK, HOLD DOWN ELECTRIC CABLE INSTALLATION, .187 ASTM-A-36.	5142628	N/A	R-1-1149	PC	2	75	4	100	24	BUDD	A87-84033	ELMMACHI	R-1-1149	INOVCMPO	5617675				
PLATE, CABLE SUPPORT	5142634	-	-	PC	4	75	4	100	12	BUDD	A87-89561	INOVCMPO	5617681						
PLATE, SUPPORT, .187"	5142656	-	-	PC	9	75	4	100	8	BUDD	A87-84996	INOVCMPO	5217703						
PLATE, SUPPORT	5142659	-	-	PC	3	75	4	100	4	BUDD	A87-85021	INOVCMPO	5617706						
PLATE, SPACER, CABLE SUPPORT ASSY.	5142660	-	-	PC	1	75	4	100	2	ADVANCTR	ATS 04 3645	BUDD	A87-83463	TRISON	A87-83463				
CLAMP, LOOP, 9/16" DIA.	5142676	-	-	PC	1	100	4	100	20	BOMBARDI	X87-86158	BUDD	X87-86158	TRANSAME	TA02234C009CR	UMPCO	S451WSSG9		
PLATE, CABLE RETAINING, FOR TRACTION MOTOR COUPLER PLUG MP10, SUPERTRUCK, SLOTTED, UNIVERSAL, FOR USE IN ALL CAR SERIES.	5153700		R-2-1682	PC	1	25	4	100	1										
SHUNT, COPPER	5202607			PC	2	75	4	100	8	INOVCMPO	5677654								
SHUNT, COPPER	5202608			PC	2	75	4	100	8	INOVCMPO	1041539								

Electrical Assemblies

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% of repl/truck	trucks/ kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
CABLE, GROUND BRUSH TO MOTOR	3102220	N/A	R-3-1582	PC	2	100	4	100	8										
CABLE, 2/0	3104468			FT	2.29	100				AMERCABL	37-119-212	GENCABLE	81920	ROCKBEST	R-58-3016	SUPVUTRO	81920		
TERMINAL	1608099			PC	2	100				RIMAR	53161	THOMSBET	53161						
CABLE, ASSY. FOR ATC "A" TRUCK, 2600/3200	3103204	N/A	ALSTOM 26C-454001	PC	1	100	4	100	1										
CONNECTOR : PLUG FOR ATC TRUCK TO CARBODY CABLE	3071011			PC	1	100				LITTONVE	CIR06LCF22421PF80	SPACECRA	SCPB06LCF-24-21P-F80-0T8						
CABLE : ATC,3 PAIRS SHIELDED 16 AWG	3103203			FT.	8	100				MK	A01-668-01	ROCKBEST	DAC06ACBU						
TERMINAL : TERMINAL TONGUE,SOLDERLESS,PRE-INSULATED	1608155			PC	9	100				AMPINDST	320565	RIMAR	XR1902SN	THOMSBET	RB863	HOLNGSWR	R1902S		
TUBING : POLYVINYL CHLORIDE	3148298			FT	0.6	100				GRAYLINE	HS105C	STRANCO	GH90375BLK						
TIE : CABLE,MINIATURE,SELF-LOCKING	3148353			PC	16	100				THOMSBET	TY524M	CALAMOUN	L-5-30-9-M	DENNISON	8383.00	PANDUIT	PLT1.5M		
HEAT SHRINK	4222667			BK	0.02	100				NEWARKEL	03F3530	SPCTECH	FPS-008-4025-BLK						
HEAT SHRINK	1601004			PC	1	100				AMPINDST	53711-3								
CABLE, ASSY FOR ATC, "B" TRUCK, 2600/3200	3103208	N/A	ALSTOM 26C-454001; ITEM 2	PC	1	100	4	100	1										
CONNECTOR : PLUG FOR ATC TRUCK TO CARBODY CABLE	3071011	6172		PC	1	100				LITTONVE	CIR06LCF22421PF80	SPACECRA	SCPB06LCF-24-21P-F80-0T8						
CABLE : ATC,3 PAIRS SHIELDED 16 AWG	3103203			FT.	8	100				MK	A01-668-01	ROCKBEST	DAC06ACBU						
TERMINAL : TERMINAL TONGUE,SOLDERLESS,PRE-INSULATED	1608155			PC	6	100				AMPINDST	320565	RIMAR	XR1902SN	THOMSBET	RB863	HOLNGSWR	R1902S		
TUBING : POLYVINYL CHLORIDE	3148298			FT	0.4	100				GRAYLINE	HS105C	STRANCO	GH90375BLK						
TIE : CABLE,MINIATURE,SELF-LOCKING	3148353			PC	16	100				THOMSBET	TY524M	CALAMOUN	L-5-30-9-M	DENNISON	8383.00	PANDUIT	PLT1.5M		
HEAT SHRINK	4222667			BK	0.02	100				NEWARKEL	03F3530	SPCTECH	FPS-008-4025-BLK						
HEAT SHRINK	1601004			PC	1	100				AMPINDST	53711-3								
CABLE, ASSEMBLY, "AA" MOTOR LEAD	4002436	N/A	R-3-1583, REV. 4	PC	1	100	4	100	4										
TERMINAL : KNIFE CONNECTOR	1608022			PC	2	100				AMPINDST	52595-3	TRANSTEC	49600 K						
CABLE : ELECTRIC,2/0,325 STRANDS	3104468			FT	1	100				AMERCABL	37-119-212	GENCABLE	81920	ROCKBEST	R-58-3016	SUPVUTRO	81920.00		
WIRE : ELECTRIC,NO.2 CABLE,93.5"	3104478			FT	8	100				AMERCABL	37-119-209	GENCABLE	81902	OKONITE	DEL-026				
SPLICE,TAP,"C" TAP	1728991			PC	1	100				THOMSBET	54755								
CONNECTOR : CABLES,AA1 AND AA2	5151084			PC	1	100				GE	41D75847G2								
TUBING,SHRINK,30 DEG.SIDE-BREAKOUT	4153286			PC	1	100				TYCOLEEC	362A014-25/86-0								
CABLE, ASSY., 40V #1	4002444	N/A	R-4-1590	PC	1	100	4	50	2										
CONNECTOR : FEMALE,8 PIN	5152536			PC	1	100				LITTONVE	CIR008F-22-22S-F80	ADVANCTR	X87-8391	LITTON	CIR08F-14S-6S-F80	SPACECRA	SCPB08F14S-6S-F80	VEAMCO	CIR08F-14S-6S-F80
PLUG : AMPHENOL	3145911			FT	1	100				ABCONNECT	ABCIR0808F-14SCNF8	SUPRENAN	DAC-02A-AQV						
WIRE : ELECTRIC,12 AWG,2 CONDUCTOR	3102623			FT	12.25	100				BUDD	X87-84094								
WIRE: ELECTRIC, 600V, ONE CONDUCTOR, WHITE EXANE	3102622			FT	1	100													
INSULATED, #12, STRANDED COPPER WIRE.	3102621		R-4-1556	PC	14.39	100				GENERCAB	375600.41.01	INDELECT	375600						
CABLE : ELECTRIC,3 CONDUCTOR,16 AWG	4183111			PC	2	100				AMPINDST	32161	KNORR	U 10496	LCOMP	32161				
CONNECTOR : KNIFE	4242741			PC	2	100				LITTON	10-101033-13								
PLUG : FILLER,YELLOW	4242741			PC	2	100				LITTON	10-101033-12								
PLUG : FILLER,BLUE	4242742			PC	3	100				LITTON	10-101033-12								
BRACKET : 40V TRUCK HARNESS	4002433			PC	1	100				LITTONVE	27964-26T9								
CONTACT : ELECTRICAL,FEMALE (SOCKET)	7304808		BK-1-052107CA	PC	3	100				VEAMCO	46808-16								
FILLER : PLUG	3103159			PC	3	100				AMPINDST	53711-3								
COVER : SPLICE	1601004			PC	1	100				AMPINDST	53711-3								
TERMINAL : RING TONGUE	1608128			PC	2	100				AMPINDST	35109	HOLNGSWR	R5109	MOLEX	C-828-10	RIMAR	XR5109N		

R-BOM-002: BOM 2600-Series Truck Overhaul Kit - Electrical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% OF REPLASSY	truck/ kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
CABLE, ASSY., 40V #2	4002445	N/A	R-4-1591	PC	1	100	4	50	2										
CABLE : ELECTRIC	3102621			FT	1.5	100				GENERCAB	375600.41.01	INDELECT	375600						
WIRE : ELECTRIC, 600V, ONE CONDUCTOR, WHITE EXANE INSULATED, #12, STRANDED COPPER WIRE.	3102622			FT	1	100													
PLUG:AMPHENOL	3145011			PC	2	100				ABCONNECT	ABCIRH08F14SCNF8	ADVANCTR	X87-8391	LITTON	CIR08F-14S-6S-F80	SPACECRA	SCPB08F14S-6S-F80	VEAMCO	CIR08F-14S-6S-F80
CONNECTOR : FEMALE,8 PIN	5152536			PC	1	100				LITTONVE	CIR008F-22-23S-F80								
RECEPTACLE : FOR PROPULSION	4013500			PC	1	100				LITTONVE	CIR00CFZ10SL3PF80	SPACECRA	SCP800CFZ10SL-3P-F80						
CABLE : 2/C #16,TWISTED SHIELDED	3104674			FT	5.33	100				BELDENMF	8760								
COVER : SPLICE SHRINKABLE	1601024			PC	1	100				AMPINDST	53711-3								
BRACKET : SPEED SENSOR CONNECTOR	4002448		MK 800-413 , REV.A.	PC	1	100													
BRACKET : 40V TRUCK HARNESS	4002433		SK-1-052107CA	PC	1	100													
SCREW : MACHINE, 4-40 X 1/2 STAINLESS STEEL, ROUND HEAD, SLOTTED, PER ANSI B18.6.3.S STEEL.	1369376			PC	8	100				*BBA PROJECT, INC.	SMSR04C08P18								
NUT : LOCK	4213010			PC	8	100				AEROSTOP	79NM0440	ELASSTPN	79NM-40						
PLUG: FILLER, YELLOW, LITTON CONNECTOR PLUGS	4242741			PC						LITTON	10-101033-13								
CONTACT : ELECTRICAL, FEMALE (SOCKET)	7304608			PC						LITTONVE	27064-26T9								
FILLER : PLUG	3103159			PC	3	100				VEAMCO	46808-16								
CONNECTOR : KNIFE	4183111			PC	3	100				AMPINDST	32161	KNORR	U 10496	LCOMP	32161				
CABLE, ASSY., S1, BEAM TO BEAM	4002615	N/A	R-3-1582	PC	1	100	4	100	4										
TERMINAL : CRIMP TYPE,4/0 CABLE SIZE,5/8" STUD SIZE	1608106			PC	1	100				THOMSBET	58166								
TERMINAL : FLAG, 90 DEGREE 5/8" STUD FOR 250 MCM CABL	1608039			PC	1	100				DIESELPC	RYB250J58G2-DPC								
CABLE : ELECTRIC,4/0,OKONITE	3103372			FT	12.50	100				AMCABLE	37-119-214	GENCABLE	81940	OKONITE	DEL-040				
CABLE, S1, CARBODY TO BEAM, 95"	4002653	N/A	R-3-1582	PC	1	100	4	100	4										
CABLE : ELECTRIC, 4/0	3103372			FT	7.90	100				AMCABLE	37-119-214	GENCABLE	81940	OKONITE	DEL-040				
TERMINAL : CRIMP TYPE,4/0 CABLE SIZE,5/8" STUD SIZE	1608106			PC	1	100				THOMSBET	58166								
TERMINAL : KNIFE CONNECTOR,4/0 CABLE	1608003			PC	1	100				AMPSPECL	53631-1	RIDELMFG	1608003	TRANSTEC	49600 F				
CABLE, ASSY., TRUCK FRAME TO BRUSH BOX	4242745	N/A	R-3-1582	PC	2	100	4	100	8										
CABLE: ELECTRIC, 2/0, 325 STRANDS, 24 AWG, 3/64" NEOPRENE OR CPE JACKET	3104468			FT	4	100				AMERCABL	37-119-212	GENCABLE	81920	ROCKBEST	R-58-3016	SUPVUTRO	81920		
TERMINAL 3/8	1608259			PC	1	100				AMPINDST	36923								
TERMINAL 3/8	1608099			PC	1	100				RIMAR	53161	THOMSBET	53161						
SENSOR, SPEED, ASSY., AXLE #3, PROPULSION, 2600/3200	4243232	N/A	MK C00-475	PC	1	100	4	50	2										
SENSOR : SPEED,PROPULSION	4243298			PC	1	100				ELECTROC	725806	ELECTROC	725806CBL	GE	418581503P1	MOTIONSE	PC55-22E	VAPOR	19010329-10
RECEPTACLE	4003299			PC	1	100				BUDD	X87-84324	SPACECRA	SCPB00CFZ10SL-3S-F80	VAPOR	57326247-20	VEAMCO	CIR06CFZ-14-10SL-3S-F80		
TUBING : POLYVINYLCHLORIDE	3148298			FT	0.40	100				GRAYLINE	H5105C	STRANCO	GHS0375BL-K						
TUBING : BRAT,1/8" X .48"	4222667			BX	0.04	100				NEWARKEL	03F3530	SPCTECH	FPS-008-4025-BLK						
CABLE, TRUCK FRAME TO BOLSTER, 26" LONG	5142708	N/A	R-3-1582	PC	2	100	4	100	8										
TERMINAL 3/8	1608259			PC	2	100				AMPINDST	36923								
CABLE: ELECTRIC, LOCOMOTIVE, TINNED COPPER, 2/0, XLPO, 325 STRAND, 24 GA.,110 DEG. C, 2000 V INS.	3102696	3793		FT	2.2	100				ROCKBEST	TXE-2/0-2KV								
CABLE, ASSEMBLY, BOLSTER TO CARBODY, 32" , 2600	5142709	N/A	R-3-1582	PC	1	100	4	100	4										
CABLE	3104468			FT	2.66	100				AMERCABL	37-119-212	CTA	3102696 - 36"	GENCABLE	81920	SUPVUTRO	81920	ROCKBEST	R-58-3016
TERMINAL	1608259			PC	2	100				AMPINDST	36923	CTA	1928013 - 16"	CTA	3102696 - 39"				
TUBING	1928013			PC	1	100				ABBOTTRU	4099-0754/60-2	ALLIANCEH	TN-1202-NC						

R-BOM-002: BOM 2600-Series Truck Overhaul Kit - Electrical

DESCRIPTION	LOT NUM.	Spec #'s	Drawing #	UNIT	Qty/truck	% OF REPL/ASSY	Trucks/ kit	% of SCOPE	QTY/KIT	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER	APPROVED VENDOR	VENDOR PART NUMBER
CABLE ASSEMBLY, BOLSTER TO CARBODY, 41" L	5143029	N/A	R-3-1582	PC	1	100	4	100	4										
CABLE/ELECTRIC 2/0	3104468			FT	3,250	100				AMERCABL	37-119-212	CTA	3102696 - 36"	GENCABLE	81920	SUPVUTRO	81920	ROCKBEST	R-58-3016
TERMINAL	1608259			PC	1	100				AMPINDST	36923	CTA	1928013 - 16"		3102696 - 39"				
TERMINAL- 90 DEG., FLAO RING TORQUE FOR 2/0 CABLE, 3/8 STUD.	1608265			PC	1	100				AMPINDST	321584								
ASSEMBLY: ATC JUNCTION BOX INCLUDING TERMINAL BOARD				PC	1	100	4		1										
BOX, ASSEMBLY, ATC JUNCTION, REF: MK MANUAL, 3N-1, PAGE 3-132	3072613	6136	R-3-1621	PC	1	100	4	100	2										
BLOCK: TERMINAL, 9 POSITION TERMINAL BOARD	3140477			PC	1	100	4		1	KULKEL	812-2202-9								
SCREW: CAP, SZ. 10-32 X 1"L, SOCKET HEAD, ALLOY STEEL, CADMIUM PLATING PER ASTM A165-55, TYPE TS	4302416			PC	2	100	4		2										
WASHER: FLAT, #10 BOLT SIZE, WROUGHT STEEL, .500 OD X .219 ID X .049 THICK, TYPE A, PER ANSI B18.22.1 ZINC ELECTROPLATED.	1126063	4758		PC	2	100	4		2										
WASHER: LOCK, #10 BOLT SIZE STAINLESS STEEL, HELICAL SPRING TYPE, REG. PER ANSI B18.21.1.	1126075	4758		PC	2	100	4		2										
RECEPTACLE: PRESS-IN ATC JUNCTION BOX. BUDD REF. 3-5-8	3072615			PC	6	100	4		6	BUDD	X87-83617	SOUTHCO	85-35-308-55						
CAP: SEALING, PRESS-IN RECEPTACLE	3072616			PC	6	100	4		6	BUDD	X87-83618	SOUTHCO	85-43-101-41						
STRIP: MARKER, ATC JUNCTION BOX BUDD REF. 3-5-6			SKR-1-020808CA	PC	1	100	4		2										
COVER: ASSY., ATC JUNCTION BOX	3072618		R-3-1622						1	BOMBARDI	87-84580	BUDD	B87-84580						
COVER: ASSY., ATC JUNCTION BOX			R-3-1622	PC	1	100	4	100	2										
GASKET - 1/8" THICK NEOPRENE, AFFIXED TO COVER WITH ADHESIVE (MIRACLE - TYPEP)			R-3-1622	PC	1	100	4		1										
RETAINER: ATC, PUSH-ON ATC JUNCTION BOX	3072619		R-3-1622	PC	6	100	4		6	BUDD	X87-83622	SOUTHCO	85-34-201-20						
WASHER: CUP, 0.305ID X 5/8OD X 0.025 THK X 7/64 HEIGHT, SPECIAL, NYLON, WEAR, INTAKE GRILLE ASSEMBLY.	4114477		R-3-1622	PC	6	100	4		6	SOUTHCO	85-46-101-39								
SPRING: EJECTOR COVER STUD	8521589		R-3-1622	PC	6	100	4		6	GM	650136	SOUTHCO	14-18-150-24						
STUD: HEAD, OVAL HEAD, SLOTTED, ATC JUNCTION BOX PUSH-ON RETAINER.	3072620		R-3-1622	PC	6	100	4		6	BUDD	X87-83621	SOUTHCO	85-11-420-20						
SEALING WASHER			R-3-1622	PC	6	100	4		6	SOUTHCO	85-43-201-38								

MASTER CONTROLLER KIT > R-BOM-010

[illegible]

CAM GROUP REBUILD KIT (GE) > R-BOM-020

DESCRIPTION	APPROVED VENDORS (PART #S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
BRUSH: WITH PIGTAIL & TERMINAL,	GE (2X4079)			5141099	PC	8
SPRING: FOR GE 175M48L1 CONTROLLER.	GE (41A251680P1)			5141456	PC	8
PIN: ROLLER, 1-1/8" LONG,	GE (41A251731P10)	NO VENDOR LISTED IN ORACLE		5141453	PC	8
BEARING: LEVER BALL, FOR GE 17KM48	GE (41A251791P2)			5141501	PC	8
CLIP: COIL, BLOWOUT, FOR GE	GE (41A255709P1)			5141478	PC	26
WASHER: CAM RETAINING, 0.120" THICK,	GE (41A255722P1)			5141314	PC	2
HOOD: SUPPORT, BLOWOUT COIL	GE (41A257911P1)			5142239	PC	4
CONTACT: STATIONARY, WITH INSERT,	GE (41A258094G2)			5141123	PC	20
SPRING: ARM, CONTACT ARM, FOR	GE (41A324627P1)			5141416	PC	4
CONTACT: STATIONARY, 1-1/8"W, FOR R1, R2 R3, R	GE (41B551721P4)			5141006	PC	22
CONTACT: STATIONARY, 1-1/8" WIDE, WITH	GE (41B551996G3)			5141488	PC	4
STOP: FEMALE, SPLINED CAMSHAFT, 4-3/16"	GE (41C653385G1)			5142404	PC	2
CONTACT: U/E UNIT, WITH SUPPORT, LEVER, ARM,	GE (41C665209G1)			5142458	PC	22
CONTACT: U/E UNIT, WITH SUPPORT, LEVER, ARM,	GE (41C665209G2)			5142461	PC	20
KIT: MARKER, FOR GE CONTROL GROUP	GE (41C667289P1)			5152657	PC	2
PIN: PIVOT, PAWL, WITH WICK,	GE (482A764G20)			5141455	PC	8
SCREW: CORE TO FRAME, 1-1/4" LONG, WITH	GE (8823750P285)			5153027	PC	8
SPRING: CONTACT, LEVER, FOR GE 17KM48L1	GE (8823849P1)			5141362	PC	42
BEARING: BALL, SINGLE ROW 0.7874" ID,	GE (8835857P23)			1613007	PC	4
BEARING: BALL, LIGHT SERIES, CONTACT	GE (8835857P24)			1615004	PC	8
BEARING: BALL 1.181" ID,	GE (8835857P25)			5141277	PC	2
GEAR: FOR GE 17KM48L1 CONTROLLER.	GE (9960135P1)			5141093	PC	2
SCREW: CAP, 5/16-18 X 1-3/4, SCKT. HEX	GE (N170AP23028B13)			5141430	PC	8
SCREW: CAP, 5/16-18 X 3-1/4 SCKT HEX HD	GE (N170AP23052B13)			5141433	PC	4
BUSHING: "OILITE TYPE", FOR INSPECTION	GE (N2113P229A)			5142269	PC	8
KEY: 1/8" THICK X 5/8" LONG X 1/4" HIGH,	GE (N3400P405)	NO VENDOR LISTED IN ORACLE		1323811	PC	2
KEY: GEAR TO SHAFT, 5/8" X 5/32",	GE (N3400P505)	NO VENDOR LISTED IN ORACLE		5141282	PC	2
KEY: STOP TO SHAFT, WOODRUFF NO. 9,	GE (N3400P606)			5151132	PC	2
SCREW: SLOTTED, FILH. # 8-36 X 1 3/4"LG.	GE (N44P14028B13)			5141139	PC	2
RING: RETAINING, MOTOR GEAR RETAINING,	GE (N900P75)			5141280	PC	2
RING: RETAINING, 0.781" DIA., SHAFT,	GE (N900P78B)			5141328	PC	2
RING: STOP RETAINING, 0.083" THICK, EXTERNAL T	GE (N922P75P)			5144461	PC	2
SHAFT: REF: SECTION.4A2.9.3N ITEM 1,	GE (41C667437P1)			5141153	PC	2
PLATE: INDICATING, CAM	GE (41A255092P2)			5151202	PC	2

7/24/2012

CAMS & FIBER PARTS > R-BOM-030

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
CAM: LOADING, WITH DIAL INDICATING	MOORE ADDISON (5141164MA)	NA	NA	5141164	PC	2
CAM: LOADING, WITH DIAL INDICATING	GE (41B567986P101)	NA	NA	5141161	PC	2
CAM: LOADING, FOR 3200 SERIES CAM GROUP	GE (41C667400P1)	NA	NA	5141154	PC	2
CAM: LOADING, FOR 3200 SERIES CAM	GE (41C667401P1)	NA	NA	5141155	PC	2
CAM: R1 USED ON 2600 & 3200 SERIES CAM CONTRO	MOORE ADDISON (5020065MA)	NA	NA	5020065	PC	2
CAM: KM29 USED ON 2600 AND 3200 SERIES CAM CO	MOORE ADDISON (5020048MA)	NA	NA	5020048	PC	2
CAM: RP1 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020062MA)	NA	NA	5020062	PC	2
CAM: B2 USED ON 2600 & 3200 SERIES CAM CONTRO	MOORE ADDISON (5020051MA)	NA	NA	5020051	PC	2
CAM: M2 USED ON ALL SERIES RAIL CARS CAM CONT	MOORE ADDISON (5020056MA)	NA	NA	5020056	PC	2
CAM: R7 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020077MA)	NA	NA	5020077	PC	2
CAM: R9 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020081MA)	NA	NA	5020081	PC	2
CAM: R8 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020079MA)	NA	NA	5020079	PC	2
CAM: RP1 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020062MA)	NA	NA	5020062	PC	2
CAM: R13 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020088MA)	NA	NA	5020088	PC	2
CAM: R12 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020086MA)	NA	NA	5020086	PC	2
CAM: R5 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020073MA)	NA	NA	5020073	PC	2
CAM: R11 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020084MA)	NA	NA	5020084	PC	2
CAM: R3 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020069MA)	NA	NA	5020069	PC	2
CAM: P1 & P2 USED ON 24, 26 & 32 SERIES CAM CO	MOORE ADDISON (5020058MA)	NA	NA	5020058	PC	4
CAM: RB1 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020060MA)	NA	NA	5020060	PC	2
CAM: B1 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020049MA)	NA	NA	5020049	PC	2
CAM: R2 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020067MA)	NA	NA	5020067	PC	2
CAM: R4 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020071MA)	NA	NA	5020071	PC	2
CAM: R6 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020075MA)	NA	NA	5020075	PC	2
CAM: R14 USED ON 2400, 2600 & 3200 SERIES CAM	MOORE ADDISON (5020089MA)	NA	NA	5020089	PC	2
CAM: M1 USED ON 2400, 2600 & 3200 SERIES CAM C	MOORE ADDISON (5020055MA)	NA	NA	5020055	PC	2
PLATE: ASSEMBLY, CAMSHAFT SUPPORTING, FOR GE	MOORE ADDISON (5151178MA)	NA	NA	5151178	PC	6
GEAR: CAMSHAFT DRIVE	MOORE ADDISON (5151178MA)	GE (332B514P1)	NA	5141278	PC	2
GEAR: MOTOR DRIVE	FRNKLNEI (09-38-0231)	GE (9960138P1)	QUALITYTO (Q5141279)	5141279	PC	2
WASHER: CAM SPACING, 1/8" THICK,	FRNKLNEI (09-38-0686)	GE (41A323716P2)	NA	5141307	PC	4
WASHER: CAM SPACING, 0.250" THICK,	FRNKLNEI (09-38-0687)	GE (41A323716P3)	NA	5141308	PC	4
SPACER: CAM, 5/8" THICK,	GE (41A323716P4)	MOORE ADDISON (5152417-MA)	NA	5142417	PC	68
SHIM: BETWEEN STOP AND CAM. 0-030" THK	GE (6703140P1)			5141316	PC	2

7/24/2012

TRACTION MOTOR KIT > R-BOM-040

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
FITTING COMM BEARING CAP	610 - CHIEFTAI	1610-BL -ALEMITE	500168-2 - DANACORP	1580002	PC	8
BEARING COMM	8864950P67 - GE	6308ZC3 - NTN	6308ZJ/C3 - SKF	1619616	PC	8
BEARING COUPLING	8864951P55 - GE	NU212L1BC4 - NTN	NU212M/C4 - SKF	1622003	PC	8
GASKET COMM	41A232391P1 - GE			5140017	PC	8
BUSHING RUBBER	481A539P29 - GE	5615071 - ICS	HL9913 - HILINE	5140024	PC	32
GASKET COUPLING	41A232423P2 - GE			5142172	PC	8
FITTING PINION END	N2800P1 - GE			5153675	PC	8
BRUSHES	41A330117P1 - GE	C-2428 - MERSEN USA	62000118 - NATIONAL	5202003	PC	64
COLLAR BEARING RETAINER	41A239859P1 - GE	R-2-1687 - CTA		5140086	PC	8
TERMINAL 5/16" STUD SIZE 1/0 AWG		36916 - AMP		1608256	PC	16
SHIM PARR CONNECTOR		36948 - AMP		1607002	PC	40
HYLUG TERMINAL 1/4" SIZE #1 AWG		YA3C-LB - BURNDY		3143030	PC	32
LOCK WASHER COUNPLING END SPECIAL	41A238183P2 - GE			1126051	PC	8
LOCK WASHER COMM END	8864959P108 - GE	Y-909 - ALLORCOR	M-140 - AMUNITED	5140022	PC	8
OIL SEAL COUPLING END	494A352P12 - GE	PPC 13704 - POWERPART	0400-9458-LPDW - JOHNSMNV	5155064	PC	8
SPRING BRUSHHOLDER	3X2813 - GE	1040-SP - FULMER	CL-PE-4257-01B - CARBONE	5012035	PC	64
SCREW 10-32 X1/2" SLOTTED HEX HEAD		1040-5HS - FULMER	87644-2 - JMDIND	1380993	PC	64
EPOXY 2 PART 5 0GRAMS		2483-1FA - ELCTROLO	958-12-50-TP - SMTHOPFH	1009018	PC	8
BAND CREEPAGE TEFLON	41B537080P5 - GE	7011P - PARKSEAL	12505 - SAINTGOB	5152608	PC	8
CLAM SHELL CONTACT	41A265467P2	R-2-1679 - CTA		5155040	PC	8
BLACK BOOT STANDARD CTA	41A265440P2			4240117	PC	8
BLACK NEOPRENE HOSE		4099-0754/60-2 - ABBOTTRU	TN-1202-NC - ALLIANCEH	1928013	PC	8

7/26/2012

A/C UNIT REBUILD KIT - R-BOM-050

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
EXPANSION VALVE	654D006 - ALBATROS	TCLE5HW100 - ALCOVALV		4483319	PC	2
RETURN AIR FILTER	FP4482612 - FILPRO	403383300 - CAMFIL FARR	IFMK14254 - INTFILT	4482612	PC	2
CONDENSER FILTER	N-35923 - DURALAST	FPE5712116FR - FILPRO	PTA4482619 - PREMIUMT	4482619	PC	2
FILTER DRYER	306-221 - THERMIKING	C-41E3 - SPORLAN	911007501 - VAPOR	4483446	PC	2
SOLENOID VALVE KIT	KS30321 - ALCOCNTR			4482617	PC	2
LATCH	V2-0025-52 - SOUTHCO			4482670	PC	4
COMPRESSOR	ZR-81KC-TF5-965 - COPLAND	652A061 - ALBATROS		4483391	PC	2
BLOWER MOTOR	07H871W789 - BALDOR	646B196 - ALBATROS		4482801	PC	1
CONDENSER MOTOR	07H873W787G1 - BALDOR	646B200 - ALBATROS		4482802	PC	1

7/26/2012

GE CONTROL GROUP KIT - R-BOM-060

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
BREAKER: U/E LINE, ASSEMBLY, USED ON CONTROL	GE (17JM7S421)	NA	NA	5153200	PC	2
CONTACTOR: U/E SERIES "S" AND "M3" FOR CONTROL	GE (17CM53AF18)	NA	NA	5153248	PC	4
RELAY: U/E CONTROL ASSEMBLY, GE17V66DR510	GE (17LV66DR51D)	NA	NA	5153009	PC	2
CONTACTOR: FS 1-4, FOR 26, 32 MAIN	GE (17CM57BB5)	NA	NA	5020110	PC	8
CONTACTOR: RC 1-4, FOR 26, 32	GE (17CM57BC5)	NA	NA	5020109	PC	8
CONTACTOR: U/E TBC, USED ON 2600 MAIN	GE (17CM57AW6A)	NA	NA	5153043	PC	2
RELAY: U/E ASSEMBLY, GE17LV66AV1 USED AS	GE (17LV66AV1)	NA	NA	4243206	PC	4
UNIT: U/E CONTACT, P1 & P2 SWITCH, WITH	GE (41D750493G11)	NA	NA	5142462	PC	4

7/26/2012

DOOR RELAY SWITCH KIT - R-BOM-070

DESCRIPTION	APPROVED VENDORS (PART #'S)			LOT NUM.	UOM	QTY PER UNIT/ KIT
RELAY: U/E FOR OVERHEAD RELAY PANEL	VAPOR (35840015)	NA	NA	5154079	PC	2
RELAY: DEAD MAN.	VAPOR (57920985)	NA	NA	4213569	PC	2
RELAY: DC, 4 FORM C, ZIR RELAY,	VAPOR (37531650)	NA	NA	4073629	PC	2
RELAY: VOLTAGE, DC VOLTAGE, 1 FORM C	VAPOR (36530117-45)	NA	NA	4072998	PC	2
RELAY: VOLTAGE, DC VOLTAGE	VAPOR (37530117-63)	NA	NA	4073474	PC	16
SWITCH: SNAP-ACTION WITH LEVER. ENVIROMENTAL	VAPOR (58510962-00)	NA	NA	4073119	PC	32
SWITCH: SNAP ACTION, ENVIRONMENTAL	VAPOR (58510961)	NA	NA	4073548	PC	4
SWITCH: TOGGLE.	VAPOR (47610098)	NA	NA	4073466	PC	16
ROLLER: NYLON FOR SIDE DOOR MULTIPLYING	VAPOR (56410008)	NA	NA	4152410	PC	16
SHAFT: HEXAGON FOR SIDE DOOR MULTIPLYING	VAPOR (57010287)	NA	NA	4272400	PC	16
VARISTOR: ASSEMBLY	VAPOR (57620108-04)	NA	NA	4073476	PC	12
VARISTOR: ASSEMBLY.	VAPOR (17620640-13)	NA	NA	4213564	PC	2
RELAY: DISCONTINUE/USE L/N 4073629, 15A/10A RES	VAPOR (37530117-83)	NA	NA	4073011	PC	10
RESISTOR: ADJUSTABLE, 100 W, 5 OHM	VAPOR (57320333-02)	HUNTINGTON (ASE100-5)	NA	4073251	PC	4
RESISTOR: ADJUSTABLE, 100 W, 10 OHM,	VAPOR (57320333)	HUNTINGTON (ASE100-10)	NA	4073252	PC	4
SWITCH: PUSHBUTTON, FOR EXIT DOOR, 3/8"	LICON (14-300009)	VAPOR (56410212)	NA	8581014	PC	8

7/24/2012

HPCU REBUILD KIT > R-BOM-080

DESCRIPTION	APPROVED VENDORS (PART #S)			LOT NUM.	UOM	QTY PER KIT
GEAR PUMP ASSEMBLY	GP-0518-G10 - VIKING			4163535	PC	1
OIL SEAL PUMP ASSEMBLY	P302-03 - TECTRAN			4163048	PC	1
O-RING PRESSURE CONTROL VALVE	P200-09 - TECTRAN			4163054	PC	1
ELEMENT ASSEMBLT 10 MICRON HIGH PRESSURE	FP799ACC10CB - FILPRO	038062 - FACET	10636 - TECTRAN	4163098	PC	1
BRUSHLESS MOTOR 36 VDC 1/2 HP	150101-00 - AMETEK			4162007	PC	1
SEALING GASKET	11292 - TECTRAN	749614 - NYAIRBRA		4163511	PC	1
COVER GASKET	749619 - KNORR	W121-0000-36024 - ATLATNTAI		4163518	PC	3
FILTER BREATHER 40 MICRON 1/4 " NPT	1321-19-00 - ROTAN	569020-01 - FACETFIL	P452-01 - TECTRAN	4163026	PC	1
SUCTION FILTER 3/8" NPT	P451-02 - TECTRAN	749533 - KNORR		4163045	PC	1
RESILIEN MOUNT	200P-35 - LORD	P170-02 - TECTRAN		4163051	PC	4
O-RING 1-23/32" OD	755559 - NYAIRBRA			4163570	PC	1
COIL 12 V POTTED	749596 - NYAIRBRA			4163411	PC	1
O-RING 3/4" OD X 1/16" ID	756718 - NYAIRBRA			4163618	PC	1
O-RING .487" ID +/- .005"	P200-94 - TECTRAN			4163531	PC	5
BRASS SHIM	10615 - TECTRAN			4163069	PC	1
WIRING HARNESS WITH SEALING GASKET				4183253	PC	1
	WIRE #2 WHITE STRANDED 600V			3102622	FT	6
	TERMINAL RING 12-10 AWG CONNECTOR RECEPTACLE WITH PINS	35109 - AMP		1608128	PC	6
	SEALING GASKET	CIR020R-15S-F80 - LITTON VEAM		4183248	PC	1
SQUARE KEY CARBON STEEL CADMIUM PLATED	P351-02 - TECTRAN			4183249	PC	1
BRASS ROD	4638107 - ICS			4163038	PC	1
NYLON 6 TUBE .110" ID X 3/16" OD X .387" WALL CLEAR		10728 - TECTRAN	749589 - KNORR	4163060	PC	2
TERMINAL FITTING CARBON STEEL	10338 - TECTRAN			4163061	PC	2
O-RING	10338 - TECTRAN	749590 - KNORR		4163062	PC	2
O-RING	P200-41 - TECTRAN			4163063	PC	2
RESERVOIR GASKET NEOPRENE	13664 - TECTRAN	749623 - KNORR		4163014	PC	1
PUSH-ON RING CARBON SPRING STEEL	5115-87 - TRUARC	P507-01 - TECTRAN		4163071	PC	1
ELBOW 7/16-20, 1/2-14 PIPE	P643-02 - TECTRAN			4163538	PC	1
MESH FILTER CYLINDER STAINLESS STEEL	11409 - TECTRAN	749625 - KNORR		4163087	PC	1
RETAINING RING 3/16" X .42"	N5000-91ZF - TRUARC	N5000-91ZF - BERRYBER	3000X812DST - BEARINGH	4163595	PC	1
SET SCREW 6-32 X 1/8" NYLON TIP 1/16" HEX SOCKET 1/32" TIP LENGTH STAINLESS	P867-07 - TECTRAN			4163039	PC	2
ELBOW 90 DEG. 7/16 ORB 3/8 TUBE (ADJ.) /37 DEG.	2062-4-6S - AEROQUIP			4162675	PC	1
O-RING .346" ID X .070 W	P200-23 - TECTRAN	755368 - KNORR		4163175	PC	1
O-RING	P-200-87 - CONOVER	P200-87 - TECTRAN		4163055	PC	5
O-RING	P200-09 - TECTRAN			4163054	PC	1

8/22/2012

MIXED ITEM MATERIAL LIST

ITEM Description	LOT #	SPEC #	DRAWING #	Approved Mfg.	Mfg. P/N	UOM	QTY Required
Sensor: Proximity	5143206	4664-12		Contrinex	DW-AD-603-M18-718	pc	1400
Encoder: Incremental	4240099	9870-12		BEI Ind.	924-01002-10302	pc	100
Track: Side Door	4152770	9173-12		Elcon National	EN106193	pc	800
Operator: Door, Complete	4073502	7363-12		Vapor	57867114-10	pc	400
Spring: Carbody, Outer	4004566	6794-12	R-4-1099			pc	400
Spring: Carbody, Inner	4004564	6794-12	R-4-1100			pc	400
Reverser: Complete	5153242	8171-12		Bey Electronics	22375	pc	100
Door Threshold Kit		9757-12	R-2-740			KIT	400
			R-2-741				
			R-1-629				
			R-1-630				
			R-2-742				

APPENDIX E

DETAIL SPECIFICATIONS

• <i>Truck Overhaul Kit</i>	<i>CTA 8170-12</i>
• <i>Master Controller Kit</i>	<i>CTA 8157-12</i>
• <i>CAM Group Kit</i>	<i>CTA 8158-12</i>
• <i>Cam, Plates, Gears, Spacers Kit</i>	<i>CTA 8156-12</i>
• <i>Traction Motor Kit</i>	<i>CTA 8161-12</i>
• <i>A/C Unit Overhaul Kit</i>	<i>CTA 8153-12</i>
• <i>Control Group Contactors Kit</i>	<i>CTA 8154-12</i>
• <i>Door Relays Kit</i>	<i>CTA 8155-12</i>
• <i>HPCU Rebuild Kit</i>	<i>CTA 8179-12</i>
• <i>Door Threshold Kit</i>	<i>CTA 9757-12</i>
• <i>Proximity Sensor</i>	<i>CTA 4664-12</i>
• <i>Incremental Encoder</i>	<i>CTA 9870-12</i>
• <i>Side Door Track</i>	<i>CTA 9173-12</i>
• <i>Door Operator</i>	<i>CTA 7363-12</i>
• <i>Carbody Spring Inner/Outer</i>	<i>CTA 6794-12</i>
• <i>New Style Reverser</i>	<i>CTA 8171-12</i>

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, RAIL CAR TRUCK, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8170-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete rail car truck overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car truck was Wegmann & Co. Waggonfabrik u. Fahrzeugbau of Kassel, Germany.

3. REQUIREMENTS

- 3.1 Each complete rail car truck overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-002, which shall be contained in the Contract Documents.
- 3.2 Each kit furnished shall include a total of seven (7) sub-kits for each rail car truck. The seven (7) sub-kits are to be called: Mechanical, Electrical, Hardware, Gear Suspension, Horizontal Motor Suspension, Vertical Motor Suspension, and Track Brake Suspension.
- 3.3 Each box/container for a given sub-kit furnished shall be legibly labeled on its top outside surface as to its contents with the words, as applicable, "MECHANICAL PARTS", "ELECTRICAL PARTS", "HARDWARE PARTS", "GEAR SUSPENSION PARTS", "HORIZONTAL MOTOR SUSPENSION PARTS", "VERTICAL MOTOR SUSPENSION PARTS", and "TRACK BRAKE SUSPENSION PARTS".

3. REQUIREMENTS (Continued)

- 3.4 EACH master pallet/container furnished by the contractor comprising of a complete truck overhaul kit shall have all the required sub-kits to do FOUR (4) RAIL CAR TRUCKS. Each master pallet/container used by the contractor shall be of a design that can be easily handled by a fork lift. If a pallet is used with all the sub-kit boxes placed atop the pallet, then the contractor shall use stretch wrap plastic, in a suitable amount of layers, to overall wrap the boxes for secure shipment. Each master pallet/container shipped to the CTA shall have the following information on at least two (2) of its outside surfaces in reasonably sized characters and easily readable:

“CTA 2600 OVERHAUL KIT – (4) TRUCKS”

Contractor’s Name & Kit Part Number Information

- 3.5 Each box/container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box/container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.
- 3.6 All components or parts provided in the required sub-kits shall be packaged in their original equipment manufacturer (OEM) packaging, whenever possible, for part identification and protection against possible shipping damage. Each component or part furnished in a given sub-kit shall be labeled with its applicable CTA Item Number. If a given component or part in a sub-kit is difficult to label, then its packaging shall be labeled with its applicable CTA Item Number. In addition, contractor shall also include quantity information in the labeling requirements for a given component or part in a furnished sub-kit.
- 3.7 All like fasteners and loose parts shall be furnished packaged in a given sub-kit per the labeling requirements mentioned in Section 3.6 above. There shall be no loose parts whatsoever furnished inside the box/container of a given sub-kit.
- 3.8 Each component or part furnished in the kit shall be ready for installation on a rail car’s truck. No type of alteration or modification of a given component or part furnished, or to the rail car’s truck, shall be allowed.
- 3.9 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-002, found in the Contract Documents.

3. REQUIREMENTS (Continued)

- 3.10 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-002 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.11 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-002 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.12 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-002 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

- 3.13 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the overhaul kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-002 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.

4. CERTIFICATIONS & TEST REPORTS (Continued)

- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete overhaul kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

- 6.2 Each overhaul kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity

6. DELIVERY REQUIREMENTS (Continued)

Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

- 6.3 If possible, the CTA would like to receive on one (1) pallet/container having all the necessary kits to perform the overhaul operation on a total four (4) rail car trucks. (One (1) married pair of CTA rail cars).

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar overhaul similar kits as described herein, for transit/transportation companies. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/03/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, MASTER CONTROLLER, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8157-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete master controller overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car master controller was General Electric (GE) Company.

3. REQUIREMENTS

- 3.1 Each complete master controller overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-010, which shall be found in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

"CTA 2600 OVERHAUL KIT – (2) MASTER CONTROLLER KITS FOR (2) RAIL
CARS"

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-010, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-010 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-010 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-010 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-010 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/06/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, CAM GROUP, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8158-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete cam group overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car cam group was General Electric (GE) Company.

3. REQUIREMENTS

- 3.1 Each complete cam group overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-020, which shall be contained in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

"CTA 2600 OVERHAUL KIT – (2) CAM GROUP KITS FOR (2) RAIL CARS"

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-020, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-020 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-020 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-020 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-020 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/06/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, CAM GROUP CAMS, PLATES, GEARS, & SPACERS, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8156-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete cam group cams, plates, gears, & spacers overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car cam group and related parts was General Electric (GE) Company.

3. REQUIREMENTS

- 3.1 Each complete cam group cams, plates, gears, & spacers overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-030, which shall be found in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

“CTA 2600 OVERHAUL KIT – (2) CAM GROUP CAMS, PLATES, GEARS, &
SPACERS KITS FOR (2) RAIL CARS”

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-030, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-030 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-030 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-030 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-030 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/06/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, TRACTION MOTOR, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8161-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete traction motor overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car traction motor was General Electric (GE) Company.

3. REQUIREMENTS

- 3.1 Each complete traction motor overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-040, which shall be found in the Contract Documents.
- 3.2 Each pallet / skid furnished by the contractor shall contain one (1) complete kit, which shall be for a total of eight (8) traction motors. (For one (1) married pair of rail cars). Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid shall have its items appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each pallet / skid shipped to the CTA shall have the following information on at least two (2) of its outside surfaces in reasonably sized characters and easily readable:

“CTA 2600 OVERHAUL KIT – (8) TRACTION MOTORS FOR A MARRIED PAIR
OF RAIL CARS”

Contractor's Name & Kit Part Number Information

- 3.3 If applicable, any “loose” items in a given kit shall be appropriately boxed or packaged before being placed atop a given pallet / skid.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-040, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-040 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-040 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-040 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-040 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/06/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, AIR CONDITIONING UNIT, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8153-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete air conditioning unit overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The current original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car air conditioning unit is Albatros, S.L. of Madrid, Spain.

3. REQUIREMENTS

- 3.1 Each complete rail car air conditioning unit overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-050, which shall be found in the Contract Documents.
- 3.2 One (1) complete kit for one (1) rail car shall be furnished per pallet/skid. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid shall have its kit appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each pallet / skid shipped to the CTA shall have the following information on at least two (2) of its outside surfaces in reasonably sized characters and easily readable:

“CTA 2600 OVERHAUL KIT – (1) A/C UNIT”

Contractor's Name & Kit Part Number Information

- 3.3 If applicable, each box / container used by the contractor for a kit shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers / suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-050, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-050 for that given part. CTA will make available the latest version / revision of any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-050 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-050 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If, during the course of a given awarded contract, the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-050 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit / transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/03/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, CONTROL GROUP CONTACTORS, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8154-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete control group contactor overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car control group contactors was General Electric (GE) Company.

3. REQUIREMENTS

- 3.1 Each complete rail car control group contactor overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-060, which shall be found in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

"CTA 2600 OVERHAUL KIT – (2) CONTROL GROUP CONTACTOR KITS FOR (2)
RAIL CARS"

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-060, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-060 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-060 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-060 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-060 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

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HHP / hhp – 1st Revision – 08/06/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, HYDRAULIC POWER CONTROL UNIT (HPCU), COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8179-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete hydraulic power control unit (HPCU) overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car HPCU was New York Air Brake (NYAB) Company.

3. REQUIREMENTS

- 3.1 Each complete HPCU overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-080, which shall be contained in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

"CTA 2600 OVERHAUL KIT – (2) H.P.C.U. KITS FOR (2) RAIL CARS"

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box / container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-080, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-080 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-080 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-080 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-080 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

HHP / hhp - Initial Specification - 08/20/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; THRESHOLD GUIDE, SELF-CLEANING, COMPLETE, RAPID TRANSIT RAIL CAR APPLICATION

CTA SPECIFICATION NO. 9757-12

1. SCOPE

- 1.1 This specification will cover the requirements for a contractor to furnish and deliver a complete, self-cleaning, threshold guide kit used to divert debris from the threshold track of the sliding side passenger doors on Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The latest version or revision of an applicable specification, drawing, standard, regulation, etc. at the time a given Invitation for Bid (IFB) is posted shall apply.

3. DRAWINGS

- 3.1 The following CTA Rail Engineering / Technical Services Department drawings make up a part of this specification and are referenced herein.
- CTA Drawing R-2-740 - Right Side Pocket Guide
 - CTA Drawing R-2-741 - Left Side Pocket Guide
 - CTA Drawing R-1-629 - Filler Bar
 - CTA Drawing R-1-630 - Disc Threshold Guide
 - CTA Drawing R-2-742 - Oval Threshold Guide

4. REQUIREMENTS

- 4.1 Each kit furnished shall contain the following items:
- One (1) Oval Threshold Guide per CTA Drawing R-2-742
 - Two (2) Disc Threshold Guides per CTA Drawing R-1-630
 - One (1) Right Side Pocket Guide per CTA Drawing R-2-740
 - One (1) Left Side Pocket Guide per CTA Drawing R-2-741
 - Two (2) Filler Bars per CTA Drawing R-1-629

4. REQUIREMENTS (Continued)

4.2 Material - Kit components shall be fabricated from the following materials.

- 4.2.1 The pocket guides shown on CTA Drawing R-2-740 and R-2-741 shall be fabricated from 16 GA AISI Type 304 stainless steel sheet having a maximum of 0.08% carbon content and also AISI Type 304 stainless steel bar stock that meets ASTM A 484/A 484M. It is recommended that AISI Type 304L be used in this application. The stainless steel sheet shall meet ASTM A 666.
- 4.2.2 As indicated on CTA Drawing R-1-629, the filler bars shall be fabricated from AISI Type 304 stainless steel bar stock that meets ASTM A 484/A 484M.
- 4.2.3 The disc threshold guide shown on CTA Drawing R-1-630, and the oval threshold guide shown on CTA Drawing R-2-742, shall be fabricated from AISI Type 304 stainless steel bar stock that meets ASTM A 484/A 484M.
- 4.2.4 The use of any alternate material(s) to that specified shall not be allowed without prior written approval from the CTA Manager of Rail Technical Services.
- 4.3 Welds - The welding practices used to fabricate the pocket guide shown on CTA Drawing R-2-740 and R-2-741 shall be in accordance with the recommended practices outlined in the American Society for Metals (ASM) Source Book on Stainless Steel, under the section titled "Resistance Welding of Stainless Steel".
- 4.4 All parts shall be free of distortion, sharp edges, burrs, or any other defects that can be harmful to the installer, or can adversely affect the installation and/or operation of the part.
- 4.5 All parts shall be stamped with the manufacturer's name and part number.
- 4.6 All parts shall be packaged together to make a kit. The kit's containers shall be sturdy cardboard boxes sized to fit all items, and of a design proven to support the total weight of the kit without rupture, sagging, or bulging when stacked on top of each other a minimum of four (4) high.
- 4.6.1 Packaging shall be such that all steel components are protected and tightly packed to prevent possible damage during shipping and handling.

5. MARKINGS

- 5.1 The kit's cardboard container shall be marked in accordance with the requirements specified in the Special Conditions section of the Contract Documents.

6. WARRANTY & PRODUCT SUPPORT

- 6.1 The original equipment manufacturer (OEM) standard warranty against a potential defect in material and workmanship and the OEM standard product support service shall apply for each kit furnished.

7. SAMPLE KIT SUBMISSION

- 7.1 For each contract, a pilot or sample kit shall be furnished by the contractor for CTA Technical Services Department review and written approval by the CTA Manager of Rail Technical Services before any mass production commences.

8. DELIVERY REQUIREMENTS

- 8.1 Contractor shall ship the required kits to the CTA location stated in the Contract Documents for a given contract.
- 8.2 Each shipment of kits furnished by the contractor to the CTA shall include a complete packing list. Each packing list shall include, but not necessarily be limited to, the following information.

Description of Item
Quantity
CTA Item Number (If applicable)
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can cause shipment rejection and/or delay in payment.

9. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 9.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

DISTRIBUTION: Mgr., Technical Services - Rail

GM / gm (R.T.S) - Initial Specification - 08/07/08
HHP / hhp - 1st Revision - 08/07/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

SENSOR; PROXIMITY, FLUSH MOUNTED, THREADED CYLINDRICAL BODY

CTA SPECIFICATION NO. 4664-12 CTA ITEM NO. 5143206

1. SCOPE

- 1.1 This specification will cover the requirements for a contractor to furnish and deliver a flush mounted proximity sensor having a fully threaded cylindrical metal body that is used for control group movement monitoring in various series of rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The proximity sensor described in this specification is used to monitor movement in the propulsion control group located underneath the car body of Series 2600 and 3200 rapid transit rail cars.

3. REQUIREMENTS

- 3.1 Contractor shall furnish and deliver, as and if requested, a proximity sensor that has been tested and approved by the CTA under CTA Item Number 5143206, under the terms of a given contract.
- 3.2 Each proximity sensor furnished shall be a PNP normally open unit.
- 3.3 Each proximity sensor unit furnished shall be equipped with one (1) light emitting diode (LED) for indicating output energized.
- 3.4 Each proximity sensor unit furnished shall have the following characteristics or features:

Temperature Range	-40° C to a minimum of +110°C
Sensing Range	5 mm (0.2 inches)
Ripple Voltage	≤10%
Voltage Range	10 VDC to 30 VDC

3. REQUIREMENTS (Continued)

Supply Current	≤10 mA
Load Current (Max.)	100 mA – 200mA
Voltage Drop Across Sensor	≤2.4 V
Leakage Current (Max.)	10 μA
Switching Frequency	1000 Hz
Hysteresis	≤15%
Temperature Drift	≤10%
Repeatability	0.5 mm (0.02 inches)
Front Cap Material	PBTB or equivalent
Metal Body Threading, Full	M18

- 3.5 Each proximity sensor unit furnished shall be equipped with an 18 inches long, 3-conductor, polyurethane material, fixed cable or equivalent. Each conductor shall be terminated with a #10 hole size, tinned brass, crimp-type, insulated ring terminal and shall be labeled with the following markings.

- Brown Wire: ++ (positive, positive)
- Black Wire: 00 (zero, zero)
- Blue Wire: - - (negative, negative)

- 3.6 Each proximity sensor unit shall include two (2) brass material, nickel-plated, locknuts.
- 3.7 The proximity sensor's design shall include protection against short circuiting, overloading, and possible reverse polarity.
- 3.8 Contractor shall ship each proximity sensor in appropriate packaging to the CTA location stated in the Contract Documents for a given contract.
- 3.9 Each proximity sensor shipment by the contractor to the CTA shall include a complete packing list. Each packing list furnished shall include, but not necessarily be limited to, the following information.

Description of Item
Quantity
Manufacturer's Name & Part Number
CTA Item Number
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

4. APPROVED & NON-APPROVED CTA ITEM NUMBER INFORMATION

- 4.1 Due to the critical nature of the proximity sensor's function, contractor shall only furnish and deliver CTA approved items listed in the Contract Documents under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.
- 4.2 Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.
- 4.3 Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.
- 4.4 Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.
- 4.5 Complete technical information shall be furnished with each proximity sensor submitted by the contractor for possible CTA approval.

5. EXAMPLE(S) OF CTA APPROVED PROXIMITY SENSOR(S)

- 5.1 Example(s) of proximity sensor(s) CTA has tested and approved for use in its intended application is/are:
- Altech Brand, Part Number 9964-6032-18
 - Contrinex Brand, Part Number DW-AD-603-M18-718

See the Contract Documents for possible other proximity sensors that have been CTA tested and approved for use in their intended application.

6. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 6.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

Distribution: Mgr., Technical Services - Rail

FKH / dsd - Initial Specification - 06/06/00
HHP / hhp - 9th Revision - 07/20/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

ENCODER; INCREMENTAL, CAM POSITION INDICATION, RAPID TRANSIT RAIL CAR APPLICATION

CTA SPECIFICATION NO. 9870-12 CTA ITEM NO. 4240099

1. SCOPE

- 1.1 This specification will cover the requirements for a contractor to furnish and deliver an incremental encoder which indicates cam positions on Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The purpose of the incremental encoder is to send an electrical signal to the computer-cam-magnetic (CCM) system to indicate cam positions.
- 2.2 The CTA is not in the possession of any drawing or tooling necessary for the fabrication of the incremental encoder described herein. If a potential contractor chooses to fabricate an incremental encoder instead of furnishing an already CTA tested and approved incremental encoder listed in the Contract Documents, then a sample incremental encoder will be made available for viewing by the potential contractor for reverse engineering purposes through the CTA's Rail Engineering & Technical Services Department. Contact the Procurement Administrator or Buyer listed in the Contract Documents for initial additional information concerning the viewing of an approved incremental encoder.

3. REQUIREMENTS

- 3.1 Contractor shall furnish and deliver, as and if requested, an incremental encoder under CTA Item Number 4240099 for the term of a given contract.
- 3.2 Each incremental encoder furnished shall be equal in form, fit, and function to that of a CTA tested and approved incremental encoder that is listed in the Contract Documents.

3. REQUIREMENTS (Continued)

- 3.3 Each incremental encoder furnished shall have a temperature rating of -40°C to +105°C (-40°F to 221°F).
- 3.4 Each incremental encoder furnished shall consist of a protective housing, a light emitting diode (LED), a photo sensor, an electronics board, a bearing housing, a mask, a glass coded disk connected to an input shaft, and a standard seven (7) pin, MIL-C-5015 box mount, circular receptacle with solder contacts, equal to Amphenol® Part Number MS3102R16S-1F, with insert arrangement 16S-1.
- 3.5 Each incremental encoder furnished shall have a permanent manufacturer's label attached on its outer surface. All printing on the label shall be legible and permanent. The manufacturer's label shall include, but not necessarily limited to, the following information.

Manufacturer's Name and/or Logo
 Manufacturer's Address & Phone Number
 Manufacturer's Model and/or Part Number
 The Encoder's Manufacturing Date in "MM/DD/YY" Format
 The Encoder's Serial Number
 The CTA Item Number of "4240099"

- 3.6 Each incremental encoder furnished shall be properly packaged for shipping, handling, and storage.
- 3.7 Each incremental encoder required shall be shipped to the CTA location stated in the Contract Documents for a given contract.
- 3.8 Each shipment of incremental encoders by the contractor to the CTA shall include a complete packing list. Each packing list shall include, but not necessarily be limited to, the following information.

Description of Item
 Quantity
 Manufacturer's Name and Part Number
 CTA Item Number
 CTA Purchase Order Number
 CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

4. EXAMPLE

- 4.1 An example of an incremental encoder that meets the requirements of this specification and has been CTA tested and approved for use in its intended application is

Model Number H25E-F1-SS-30-ABZ-28V/V-SM16-S
 Part Number 01002-10302
 Manufactured by BEI, Inc., Industrial Encoder Div., Goleta, CA 93117

See the Contract Documents for possible other incremental encoders that have been CTA tested and approved for their intended application.

5. APPROVED AND NON-APPROVED ITEM NUMBER INFORMATION

- 5.1 Contractor shall only furnish and deliver CTA approved items listed in the Contract Documents under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.
- 5.2 Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.
- 5.3 Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.
- 5.4 Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

6. REVISION TO AN APPROVED INCREMENTAL ENCODER

- 6.1 If a given incremental encoder that has been CTA tested and approved undergoes any type of revision by its manufacturer, then the manufacturer shall inform the CTA of the revision. Each revision made shall require re-approval by the CTA, following Sections 5.2 through 5.4 above.

7. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 7.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents

Distribution: Mgr., Technical Services, Rail

EM / em - Initial Specification - 08/10/09
HHP / hhp - 2nd Revision - 07/26/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

TRACK ASSEMBLY; COMPLETE, SIDE PASSENGER DOORS, RAPID TRANSIT RAIL CAR APPLICATION

CTA SPECIFICATION NO. 9173-12 CTA ITEM NO. 4152770

1. SCOPE

- 1.1 This specification will cover the requirements for a contractor to furnish and deliver a complete door track assembly used in Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The door track assembly is used to support the side passenger entry/exit doors and allow the doors to slide open and slide close.
- 2.2 Each rail car side passenger door requires two (2) complete track assemblies.

3. REQUIREMENTS

- 3.1 Each door track assembly furnished shall consist of the following items.
- One (1) 48" long welded track assembly, with four (4) 1/2"-13 steel mounting studs that protrude 2-1/4" from the top.
 - Two (2) matching zinc-plated steel hex nuts per stud.
 - One (1) matching zinc-plated steel jam nut per stud.
 - Two (2) matching stainless steel flat washers per stud.
 - One (1) 31" long bearing retainer cage with ball bearings.
 - One (1) 17-5/8" long door hanger bar.
 - One (1) 5/16"-18 zinc plated steel cap screw inserted through the top at the end that is installed at the center of the door opening, and a threaded steel bushing attached to the cap screw inside the track to act as a stop.
 - One (1) 1/2"-13 special set screw with 3/8" dia. x 1/2" dog, 1/4" hex drive, 3" overall length. Ellcon-National, Inc. part number EN610202 (3200) or equivalent.

3. REQUIREMENTS (Continued)

- 3.2 Each door track assembly furnished under this specification shall be equal in form, fit, and function to the rail car's original equipment manufacturer (OEM) door track assembly from Ellcon-National, Inc. under their Part Number EN106193, and be completely interchangeable with existing door track assemblies found in Series 2600 rail cars in operation at the CTA.
- 3.3 Each door track assembly furnished shall be individually boxed. Hardware items such as nuts and washers shall be furnished in a re-closable, see-through, plastic bag placed inside the box.
- 3.4 The standard OEM warranty and OEM product support shall apply for each door track assembly furnished.
- 3.5 Each complete door track assembly furnished shall be shipped to the CTA location stated in the Contract Documents for a given contract.
- 3.6 Each shipment of door track assemblies shipped to the CTA by the contractor shall include a complete packing list. Each packing list furnished shall include, but not necessarily be limited to, the following items.

Description of Item
Quantity
Manufacturer's Name & Part Number
CTA Item Number
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

4. APPROVED AND NON-APPROVED ITEM INFORMATION

- 4.1 Contractor shall only furnish and deliver CTA approved items under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

5. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 5.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

Distribution: Mgr., Technical Services-Rail

MD / md - Initial Specification - 04/26/05

HHP / hhp - 5th Revision - 07/25/12

CHICAGO TRANSIT AUTHORITY
DETAIL SPECIFICATION
FOR
REPLACEMENT COMPONENTS & PARTS; VAPOR BRAND
CTA SPECIFICATION NO. 7363-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver replacement Vapor Brand, or a CTA approved technical equivalent, components and parts used to repair and maintain rapid transit rail cars and buses in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The latest version or revision of an applicable specification, drawing, standard, regulation, etc. at the time a given Invitation for Bid (IFB) is posted shall apply.

3. REQUIREMENTS

- 3.1 The contractor shall furnish and deliver, as and if requested, genuine, factory new, Vapor Brand components and parts, or a possible CTA approved technical equivalent, as described in the Contract Documents, or in a Release Form issued against a given contract, under the terms of a given contract.
- 3.2 Each replacement component or part furnished by the contractor under this specification shall be in its original equipment manufacturer (OEM) sealed packaging.
- 3.3 The packaging for each component or part furnished shall have the OEM's name and OEM's part number clearly visible on the packaging's outer surface.
- 3.4 The CTA shall be the final judge of adequate and appropriate identification of each component or part furnished by the contractor under this specification and the decision of the CTA shall be final.
- 3.5 Each replacement component or part furnished by the contractor under this specification shall be covered under the OEM's standard warranty and product support program.

4, DELIVERY REQUIREMENTS

- 4.1 Contractor shall ship the required components and/or parts to the CTA location stated in the Contract Documents for a given contract.
- 4.2 Each shipment of components and/or parts furnished by the contractor to the CTA shall include a complete packing list. Each packing list furnished shall include, but not necessarily be limited to, the following information.

Description of Item(s)
Quantity Information
Manufacturer's Name & Part Number
CTA Item Number (If applicable)
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment to the CTA can result in shipment rejection and/or delay in payment.

5. APPROVED AND NON-APPROVED ITEM INFORMATION

- 5.1 Contractor shall only furnish and deliver CTA approved items listed in the Contract Documents under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.
- 5.2 Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.
- 5.3 Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.
- 5.4 Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

6. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 6.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

Distribution: Manager, Bus Technical Services
Manager, Rail Technical Services

PWH - Initial Specification - 1992
HHP / hhp - 8th Revision - 07/19/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

SPRINGS; BOLSTER, COIL TYPE, INNER AND OUTER, RAPID TRANSIT RAIL CAR APPLICATION

CTA SPECIFICATION NO. 6794-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver inner and outer, coil type, bolster springs used on trucks of Series 2400, 2600, and 3200 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The latest version or revision of an applicable specification, drawing, standard, regulation, etc. at the time a given Invitation for Bid (IFB) is posted shall apply.
- 2.2 Outer spring CTA Item Numbers
 - 2.2.1 4004565 : 'Blue' color code
 - 2.2.2 4004566 : 'Black' color code
- 2.3 Inner spring CTA Item Numbers
 - 2.3.1 4004563 : 'Blue' color code
 - 2.3.2 4004564 : 'Black' color code

3. REQUIREMENTS

- 3.1 Contractor shall furnish and deliver, as and if requested, inner and/or outer, coil type bolster springs per the requirements presented in this specification and in the Contract Documents for a given contract.
- 3.2 Each coil type, bolster spring furnished by the contractor shall be of new manufacture. Used or refurbished springs shall be rejected by the CTA.

3. REQUIREMENTS (Continued)

- 3.1 Each outer spring furnished shall be manufactured according to the requirements presented in CTA Drawing R-4-1099.
- 3.2 Each inner spring furnished shall be manufactured according to the requirements presented in CTA Drawing R-4-1100.
- 3.3 Upon request by the CTA, the contractor shall furnish reports and material certifications that verify a given batch of furnished springs were manufactured, tested, and inspected to the requirements presented in a given spring's applicable CTA Drawing.

4. DELIVERY REQUIREMENTS

- 4.1 Contractor shall ship the required springs to the CTA location stated in the Contract Documents for a given contract.
- 4.2 Each shipment of springs by the contractor to the CTA shall include a complete packing list. Each packing list furnished shall include, but not necessarily be limited to, the following information.

Description of Item(s)
Quantity
CTA Item Number(s)
CTA Purchase Order Number
CTA Release Number(s) (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

5. FIRST TIME PRE-PRODUCTION SAMPLE FURNISHING

- 5.1 If the contractor is a first time furnisher of a given CTA Item Number made from a CTA Drawing, then the contractor shall provide for a pre-production sample or samples of each applicable item for CTA Rail Technical Services Department written approval before any mass production commences. The applicable CTA Procurement Administrator or Buyer shall be the initial contact person and then the coordinator of the CTA Item Number sample approval process. See the Contract Documents for the name of the CTA Procurement Administrator or Buyer that is handling a given contract.

6. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 6.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

DISTRIBUTION: Mgr., Rail Technical Services
Coord., Quality Inspection

Initial Specification - 7/9/90
HHP / hhp - 6th Revision - 07/19/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

REVERSER; COMPLETE, TRACTION MOTOR ROTATION CONTROL, RAPID TRANSIT RAIL CAR APPLICATION

CTA SPECIFICATION NO. 8171-12 CTA ITEM NO. 5153242

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete reverser unit used in Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. BACKGROUND INFORMATION

- 2.1 The reverser unit is an electro-mechanical device used to control the rotational direction of an electric traction motor found in rapid transit rail cars.

3. ITEM REQUIREMENTS

- 3.1 Contractor shall furnish and deliver, as and if requested, a complete reverser unit per the requirements presented in this specification and in the Contract Documents for the term of a given contract.
- 3.2 Each reverser unit furnished shall meet the following requirements or have the following features.
 - 3.2.1 The reverser shall be light weight and compact in its design.
 - 3.2.2 The reverser shall be designed for operation in a high vibration, high shock, and high temperature environment.
 - 3.2.3 The reverser shall be able to conduct electrical currents up to 2000 amps.
 - 3.2.4 The reverser shall be able to withstand an electric potential of up to 1000 DC volts.

3. ITEM REQUIREMENTS (Continued)

- 3.2.5 The reverser shall be able to simultaneously switch electrical current to multiple rail car traction motors.
- 3.2.6 The reverser shall be able to accept a control voltage in the range of 25 DC volts to 50 DC volts.
- 3.2.7 The reverser shall incorporate electronic position sensors and monitoring capability.
- 3.2.8 The reverser shall have a spark extinguish chamber.
- 3.2.9 The reverser shall have replaceable contactor tips.
- 3.2.10 The reverser shall have a proven track record in rapid transit rail car applications. The CTA reserves the right to request documentation from the potential contractor that the requirement presented in this section has been met. The decision of the CTA shall be final.
- 3.2.11 The reverser shall be furnished complete, ready for installation in a CTA Series 2600 rapid transit rail car.

4. DELIVERY REQUIREMENTS

- 4.1 Contractor shall ship the required reversers to the CTA location listed in the Contract Documents for a given contract.
- 4.2 Each reverser furnished shall be appropriately packaged in order to minimize potential damage due to shipping and handling.
- 4.3 Each shipment of reversers furnished by the contractor and shipped to the CTA shall include a complete packing list. Each packing list furnished shall include, but not necessarily be limited to, the following items.

Description of Item
Quantity
Manufacture's Name & Part Number
CTA Item Number
CTA Purchase Order Number
CTA Release Number (If applicable)

4. DELIVERY REQUIREMENTS (Continued)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

5. WARRANTY & PRODUCT SUPPORT

- 5.1 The standard warranty and product support package of the original equipment manufacturer (OEM) shall apply for each reverser furnished.

6. EXAMPLE REVERSER

- 6.1 An example of a reverser which meets the requirements presented in this specification and has been CTA tested and approved for use in its intended application is

Part Number 22375 by
Bey Electronics, Corp., Paterson, NJ 07503

See the Contract Documents for other possible reversers that meet the requirements of this specification and have been CTA tested and approved for use in its intended application.

7. APPROVED & NON-APPROVED ITEM NUMBER INFORMATION

- 7.1 Contractor shall only furnish and deliver CTA approved items listed in the Contract Documents under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

8. ADDITIONAL INFORMATION FOR POTENTIAL CONTRACTORS

- 8.1 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

HHP / hhp – Initial Specification – 08/03/12

CHICAGO TRANSIT AUTHORITY

DETAIL SPECIFICATION FOR

KIT; OVERHAUL, DOOR RELAYS & SWITCHES, COMPLETE, CTA 2600 SERIES RAIL CAR

CTA SPECIFICATION NO. 8155-12

1. SCOPE

- 1.1 This specification will describe the requirements for a contractor to furnish and deliver a complete door relays & switches overhaul kit for Series 2600 rapid transit rail cars in operation at the Chicago Transit Authority (CTA).

2. GENERAL INFORMATION

- 2.1 The initial original equipment manufacturer (OEM) for the CTA Series 2600 rapid transit rail car door relays & switches was Vapor Corporation.

3. REQUIREMENTS

- 3.1 Each complete rail car door relays & switches overhaul kit, hereafter simply referred to as 'kit', shall include the parts in the quantities listed in CTA Document R-BOM-070, which shall be found in the Contract Documents.
- 3.2 Two (2) complete kits for two (2) rail cars shall be furnished in one (1) box / container by the contractor. Each pallet / skid used by the contractor shall be of a design that can be easily handled by an appropriate fork lift / lift truck. Each pallet / skid of kits shall be appropriately wrapped in clear plastic stretch wrap for shipping purposes. Each kit's box / container shipped to the CTA shall have the following information on its top outside surface in reasonably sized characters and easily readable:

"CTA 2600 OVERHAUL KIT – (2) DOOR RELAYS & SWITCHES KITS FOR (2)
RAIL CARS"

Contractor's Name & Kit Part Number Information

- 3.3 Each applicable box / container used by the contractor shall be suitably sized and have the appropriate bursting strength to properly carry the weight of its internal contents. Any remaining volume inside each box/container furnished after all of its contents have been added shall be occupied by appropriate filler material in order to prevent content shifting during shipping and handling.

3. REQUIREMENTS (Continued)

- 3.4 Each kit furnished by the contractor shall be ready for installation on a given Series 2600 rail car. No type of alteration or modification of a given component or part furnished, or to a given rail car, shall be allowed.
- 3.5 For each kit furnished, contractor shall only furnish CTA approved items for a given CTA Item Number. Approved manufacturers/suppliers for a given CTA Item Number shall be listed in CTA Document R-BOM-070, found in the Contract Documents.
- 3.6 For a given component or part that has no CTA approved manufacturer listed, the given component or part shall meet the requirements of its applicable CTA Item Number Description, CTA Specification and/or CTA Drawing listed in CTA Document R-BOM-070 for that given part. CTA will make available any such needed CTA Specification or CTA Drawing to the awarded contractor.
- 3.7 Potential contractors proposing a deviation or supersession to a part number that is listed in CTA Document R-BOM-070 shall provide proof that the proposed deviation or supersession are those of the approved manufacturer associated with the given part. The proof documentation shall be on the approved manufacturer's letterhead, executed at the corporate level, and state that the approved manufacturer will honor all warranties and product support as required for the given part supplied.
- 3.8 Contractor shall only furnish CTA approved items listed in CTA Document R-BOM-070 under the terms of a given contract. Should a potential contractor wish to offer for CTA consideration an alternate item not currently approved, the potential contractor shall first contact the CTA Procurement Administrator or Buyer for details on the CTA's item approval process. The time required for reviewing and/or testing each item offered will vary and depend on applicable procedures. Approval of an item does not guarantee an order under a currently proposed or future contract. Upon award of a contract, each item furnished by the contractor shall be identical to the item that was approved.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall be at no cost to the CTA.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall become property of the CTA and will not be returned to the contractor.

Any submitted sample(s) furnished by the contractor for possible CTA approval shall not reduce the quantity count of any CTA order with the contractor.

3. REQUIREMENTS (Continued)

- 3.9 If during the course of a given awarded contract the contractor encounters a problem manufacturing or procuring a given part in the kit that will result in any type of delay in supplying the kit under the terms of a given contract, then the contractor is to immediately contact the applicable CTA Procurement Administrator of the problem, who will in turn contact appropriate CTA Technical & Maintenance Managers.

4. CERTIFICATIONS & TEST REPORTS (IF APPLICABLE)

- 4.1 The contractor shall include all material certifications, test reports, mill heat reports, Records of Conformance, and any other certificate, report, or paperwork required per a given CTA Item Number description, CTA Specification, or CTA Drawing listed in CTA Document R-BOM-070 found in the Contract Documents.
- 4.2 Each applicable document required and furnished shall identify the specific CTA Item Number it is associated with.
- 4.3 All required documentation shall be packaged in a re-closable plastic pouch. The plastic pouch shall be labeled "MATERIAL REPORTS", and shall be placed within each given kit that contains the part the documentation is associated with.

5. WARRANTY

- 5.1 Contractor shall warrant each component or part furnished for a given kit against any defect in material or workmanship for a period of one (1) year after a given kit has been delivered to the CTA. Any defective component or part furnished by the contractor during the warranty period shall be replaced at no cost to the CTA. This warranty shall include the labor to remove and replace a given defective part as well as all shipping costs. See the Contract Documents for possible additional warranty requirements.

6. DELIVERY REQUIREMENTS

- 6.1 Contractor shall ship each complete kit to the following CTA facility:

Chicago Transit Authority (CTA)
Skokie Rail Shops – Storeroom 34
3701 W. Oakton St.
Skokie, IL 60076

6. DELIVERY REQUIREMENTS (Continued)

- 6.2 Each kit shipment to the CTA shall include a complete packing list. Each packing list furnished for a given shipment shall include, but not necessarily be limited to, the following information.

Description of Kit
Quantity
Bill of Material (BOM) Checklist w/Quantities
CTA Purchase Order Number
CTA Release Number (If applicable)

Failure by the contractor to furnish a complete packing list for a given shipment can result in shipment rejection and/or delay in payment.

7. FINAL REQUIREMENTS & INFORMATION FOR POTENTIAL CONTRACTORS

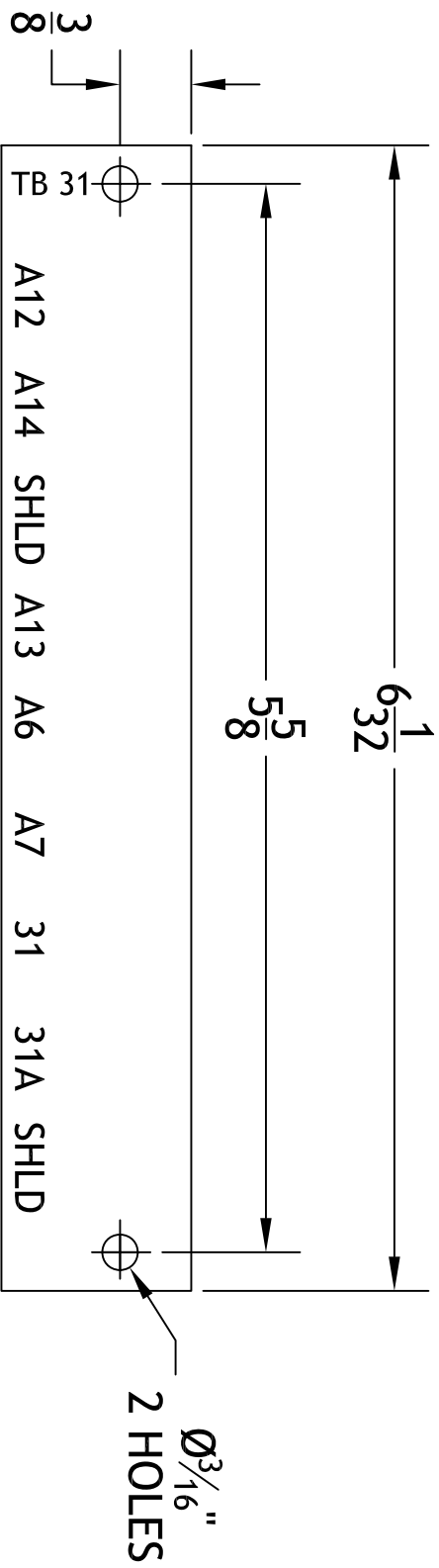
- 7.1 Potential Contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, previous verifiable experience creating same or similar kits as described herein for public transit/transportation entities. In addition, potential contractors shall state in their bid response package, or within five (5) calendar days after being so requested by the CTA, a list of the names, addresses, and contact information of at least three (3) previous customers as references.
- 7.2 Potential contractors requiring any additional information shall contact the Procurement Administrator or Buyer whose name is stated in the Contract Documents. Potential contractors requiring additional information from a person or persons potentially listed in the Special Conditions section of the Contract Documents must route their request through the Procurement Administrator or Buyer. Potential contractors who contact any CTA personnel other than the Procurement Administrator or Buyer during the open bidding period will be considered to be in violation of the provisions set forth in the Contract Documents.

MD, CH / md - Initial Specification - 02/08/08
HHP / hhp – 1st Revision – 08/06/12

APPENDIX F

CTA DRAWINGS

- *Truck Overhaul Drawings*
- *Door Threshold Drawings*
- *Carbody Springs Drawings*



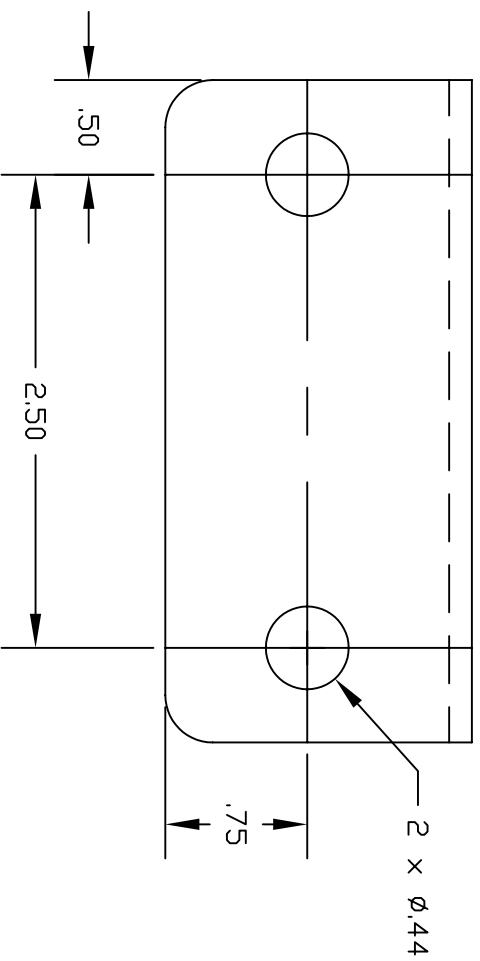
MATERIAL: FLAME RESISTANT LAMINATE, .31" THICK

MARATHON SPECIAL PRODUCTS P/N: MS-812-XXXPR-9-1A

NOTE: THE MARKER STRIP SHALL BE WHITE WITH BLACK LETTERING.

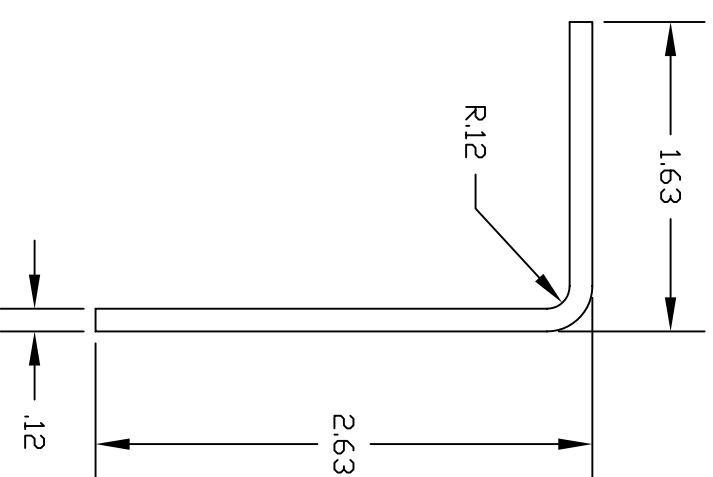
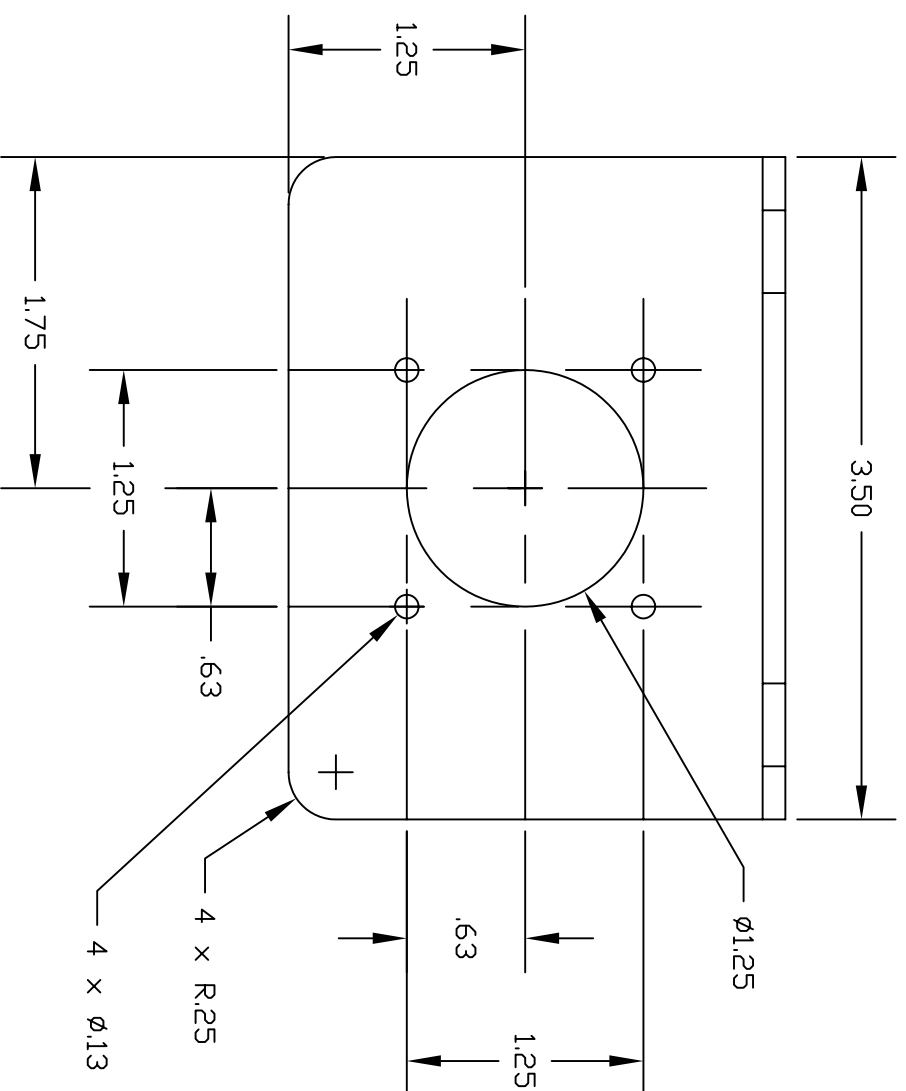
MARKER STRIP AND TERMINAL BLOCK
 CAR SERIES: 2600, 3200
 ITEM # 3072614

SKR-1-020808CA

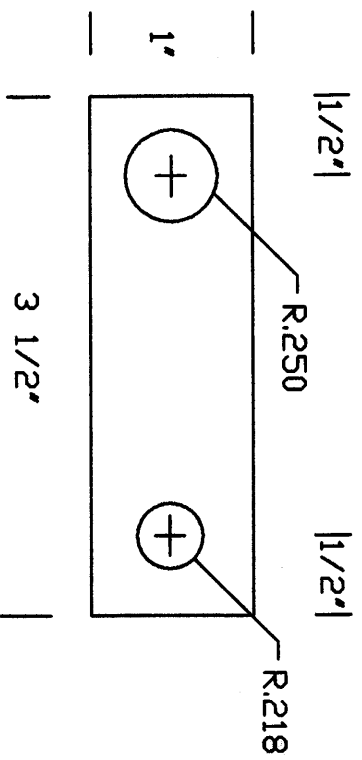


Material: 304 SST
 1.63 X 2.63 X 3.50
 X .1200 Thk

CTA Item # 4002433

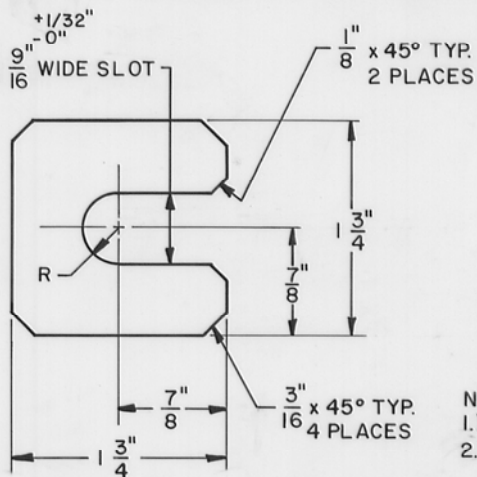


SK-1-052107CA



Material: .125" Stainless Steel

SKR-1-080805CA



NOTE:
 1.) REMOVE ALL SHARP EDGES AND BURRS.
 2.) TOLERANCES UNLESS OTHERWISE SPECIFIED
 FRACTIONS: $\pm 1/32"$
 ANGLES : $\pm 1^\circ$

SHIM: LONGITUDINAL STOP, FOR MOUNTING
 CURRENT COLLECTOR BEAM TO TRUCK
 CARS: 2401-2600, 2601-3200
 C.T.A. LOT NO. 4002673, S.R. 42

MATERIAL: HOT DIPPED GALVANIZED
 STEEL SHEET, #11GA. (0.123")

REF: C.T.A. BULLETIN RM-12-031

cta Engineering & Maintenance Division
 Equipment Engineering and
 Maintenance Department

SHIM: LONGITUDINAL STOP, FOR MOUNTING
 CURRENT COLLECTOR BEAM TO TRUCK
 CARS: 2401-2600, 2601-3200

Drawn M.D. Scale FULL Date 5-28-87

Checked *[Signature]* Approved *[Signature]*

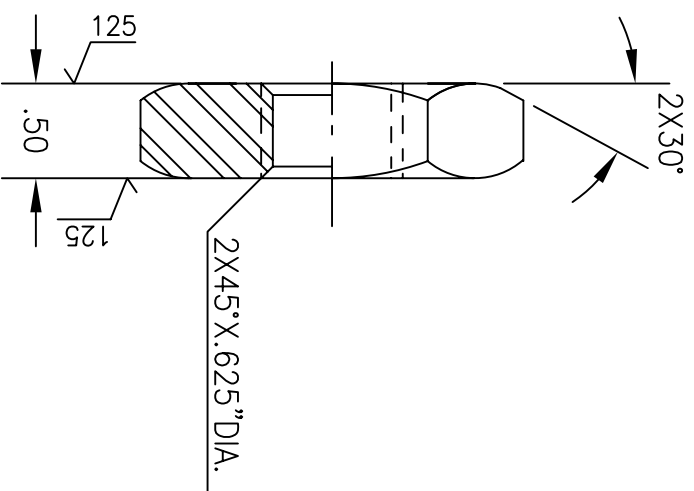
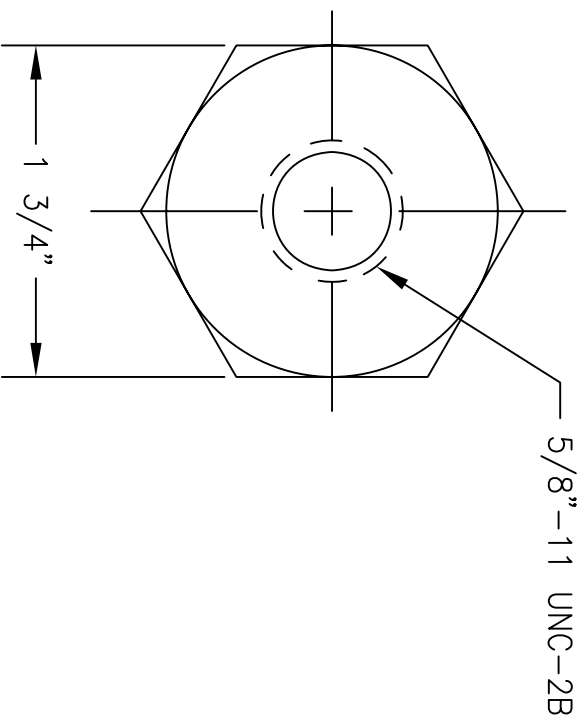
DIRECTOR, EQUIPMENT ENG.

MANAGER, EQUIP. ENG. & MAINT.

R-1-1122

FOR METRIC EQUIVALENT SEE WEGMANN DWG. 4.4513.60.001.019

DRAWING NUMBER
R-1-1122



C.I.A. LOT NO. 4181233

MATERIAL: COLD DRAWN STEEL
 AISI C-1045
 HEAT TREATED TO
 240/300 BRINELL

PROTECTIVE COATING:
 ZINC PLATED WITH CHROMATE
 COATING PER ASTM B 695.

ALTERNATE PROTECTIVE COATINGS:
 DACROMET 320, DACROMET 320 LC,
 OR GEOMET (ASTM F 1136 &
 ASTM F 1136M).

BASED ON DWG. PCC 1526

REV. 1: ADDED ASTM B 695 TO PROTECTIVE COATING NOTE, ADDED ALTERNATE PROTECTIVE COATINGS
 OF DACROMET 320, DACROMET 320 LC, & GEOMET. M.D./G.M. - 3/8/10

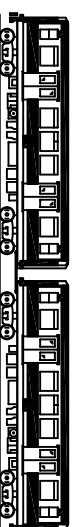
DIMENSIONING & TOLERANCING
 PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
 SURFACE FINISH
 DIMENSIONS ARE IN INCHES

TOLERANCES : ANGLES ±
 FRACTIONS: ±
 DECIMALS: .XX ±
 .XXX ±

RIVET & BOLT MARGIN: ±.05
 BEND RADII: ±.02 ON .03 & .06
 ±.03 ON .09 & GREATER

SHEET METAL CORNER RADII:
 INT .19 EXT .25
 .16 .00



RAIL OPERATIONS
 ENGINEERING & TECHNICAL SERVICES

NUT: TRACK BRAKE SUSPENSION
 CAR SERIES: 2400, 2600, 3200

Drawn H.L. Scale FULL Date 1-7-98

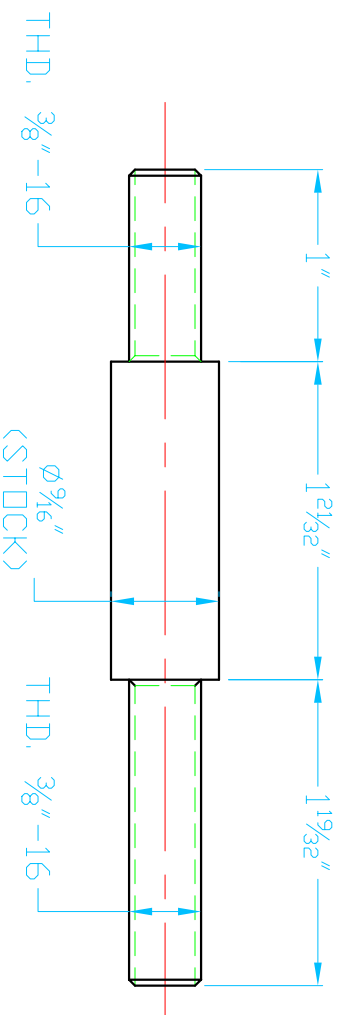
Checked W. Macey
 Grant Macey
 Manager, Technical Services

Approved Christopher M. Hegarty
 General Manager, Engrg & Technical Services

Next : R-1-1184
 Assy. : R-1-1112


REV.

1



MATERIAL: AISI 1040, OF STEEL ROUND
OR EQUIVALENT

NOTE: BREAK ALL SHARP EDGES.

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5			
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
TOLERANCES: ANGLES: $\pm .5^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS: .XX $\pm .01$ DECIMALS: .XXX $\pm .005$		STUD: THREADED, CLEAT BLOCK & ROCK SHIELD CAR SERIES: 2400, 2600, & 3200 C.T.A. ITEM NO. 4002672	
RIVET & BOLT MARGIN: $\pm .05$ BEND RADII: $\pm .03$ ON .03 & .06 $\pm .03$ ON .09 & GREATER SHEET METAL CORNER RADII: INT .19 EXT .25 .16 .00		Drawn <u>C.P.</u> Scale <u>FULL</u> Date <u>10/27/03</u>	
Checked <u>Paul Chen</u> <u>Mike Swadlow</u> Manager, Technical Services		Approved <u>Chris Miller</u> General Manager, Engng & Technical Services	
R-1-1203		Next Assy.	

R-1-1663

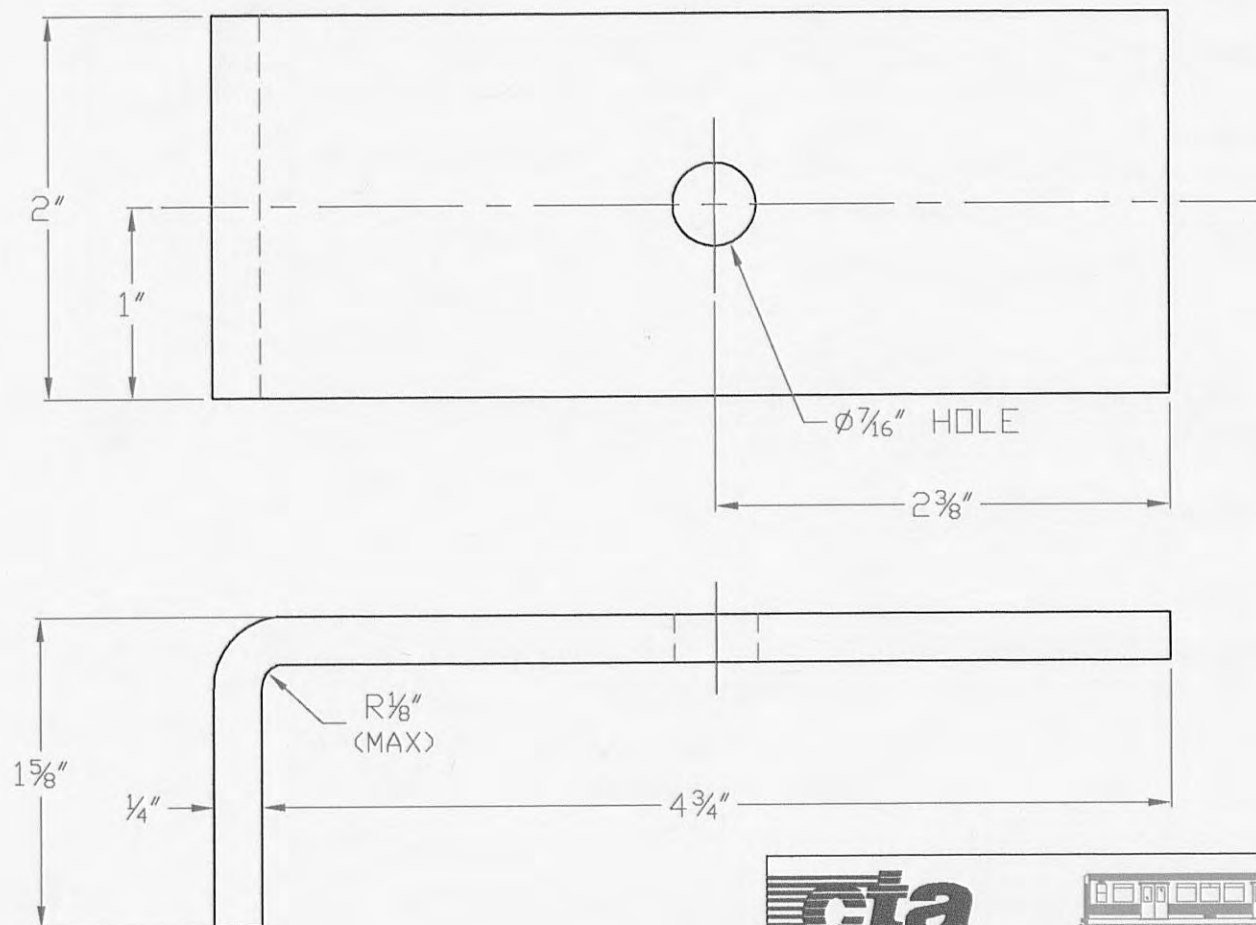
O PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

POSITION EDGE OF PRINT ON THIS LINE

R-1-1663

SAFCO PRODUCTS • NEW HOPE, MINNESOTA
REORDER BY PART NUMBER 6552

POSITION EDGE OF PRINT ON THIS LINE



NOTE: BREAK ALL SHARP EDGES

MATERIAL: $\frac{1}{4}" \times 2"$ HOT ROLLED CARBON STEEL
(C.T.A. ITEM #1700253)RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

ANGLE: SECURING, FOR MOTOR LEAD

CLEAT BLOCK INSTALLATION

CAR SERIES: 2400, 2600, 3200;

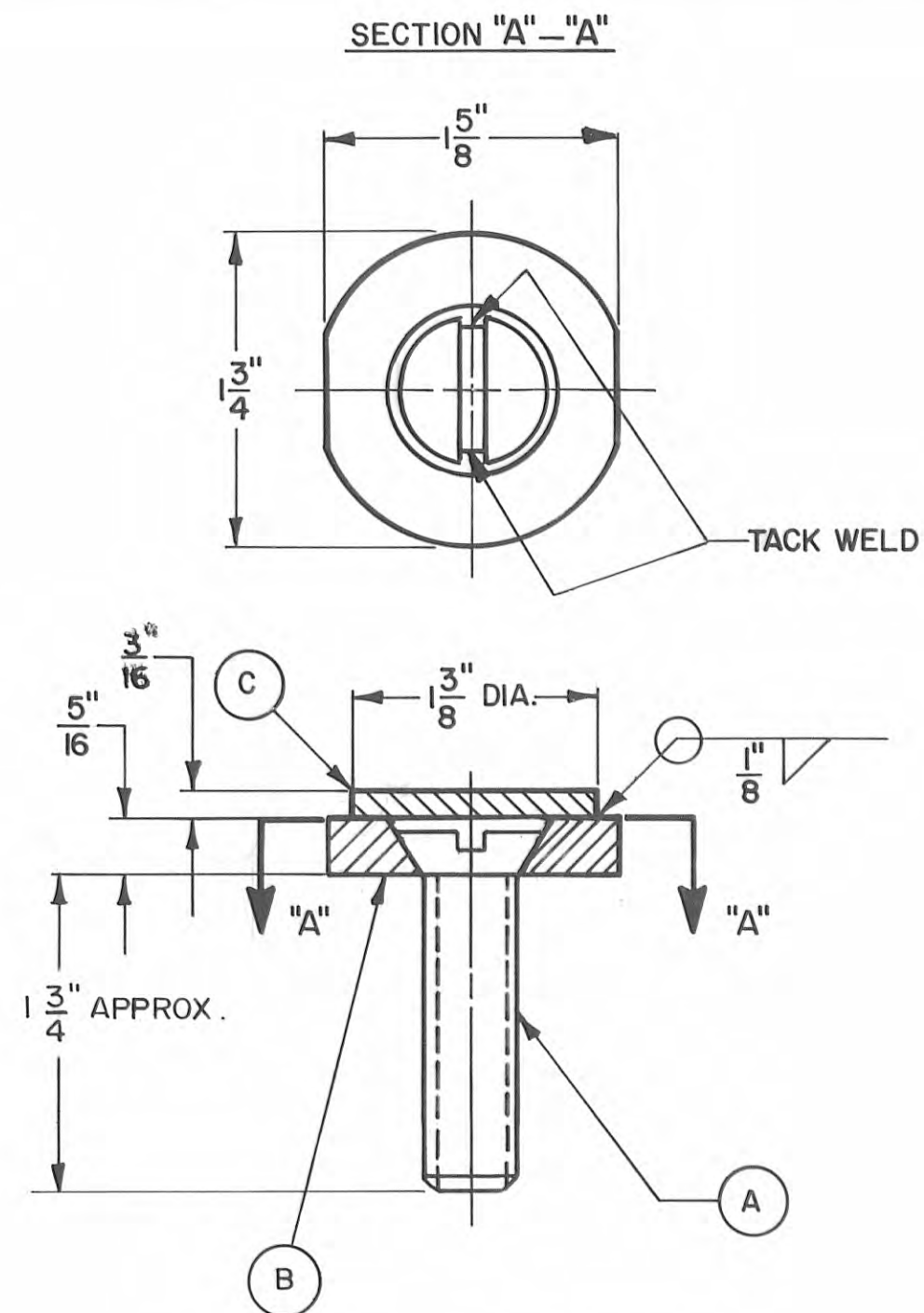
CTA ITEM # 4002416

Drawn C.P. Scale FULL Date 09/09/04Checked CA 9-9-04
Julian Sauer 9/9/04
Manager, Technical ServicesApproved R.E. Malec 9/9/04
General Manager, Engrg & Technical Services

R-1-1663

Next
Assy.

S:\Engineer\Data\Drawings\Ctarail\11663



STOP: LONGITUDINAL, FOR CURRENT
COLLECTOR BEAM SUPPORT ASSY.,
USED ON WEGMANN/DUEWAG TRUCKS
FOUR REQ'D. PER TRUCK
CAR SERIES: 2400, 2600 & 3200
C.T.A. LOT NO. 4003080

MATERIAL:

- (A) 1/2" - 13 UNC X 2" LONG, SLOTTED FLAT
HEAD, STEEL MACHINE SCREW
- (B) STEEL, FLAT HOT ROLLED MERCHANT
QUALITY AISI 1020 THICKNESS 5/16"
- (C) HADFIELD AUSTENITIC MANGANESE STEEL
SHEET 11.5 TO 14% MG. SIZE 3/16" THICK.

DIMENSIONAL TOLERANCES
UNLESS OTHERWISE SPECIFIED

Fractional: $\pm 1/32"$
Decimal: AS SHOWN
Angular: $\pm 1^\circ$

REV 2 3/16" WAS 1/8

REV. 1: ADDED 2600 & 3200 SERIES; SCREW WAS 1-1/2" LONG; 1-3/4" APPROX.
WAS 1-1/2" MIN.; ADDED WEGMANN P/N; M.D. 4-30-93

cta General Operations Division
Maintenance Department

STOP: LONGITUDINAL, FOR CURRENT
COLLECTOR BEAM SUPPORT ASSY.,
USED ON WEGMANN/DUEWAG TRUCKS
CAR SERIES: 2400, 2600 & 3200

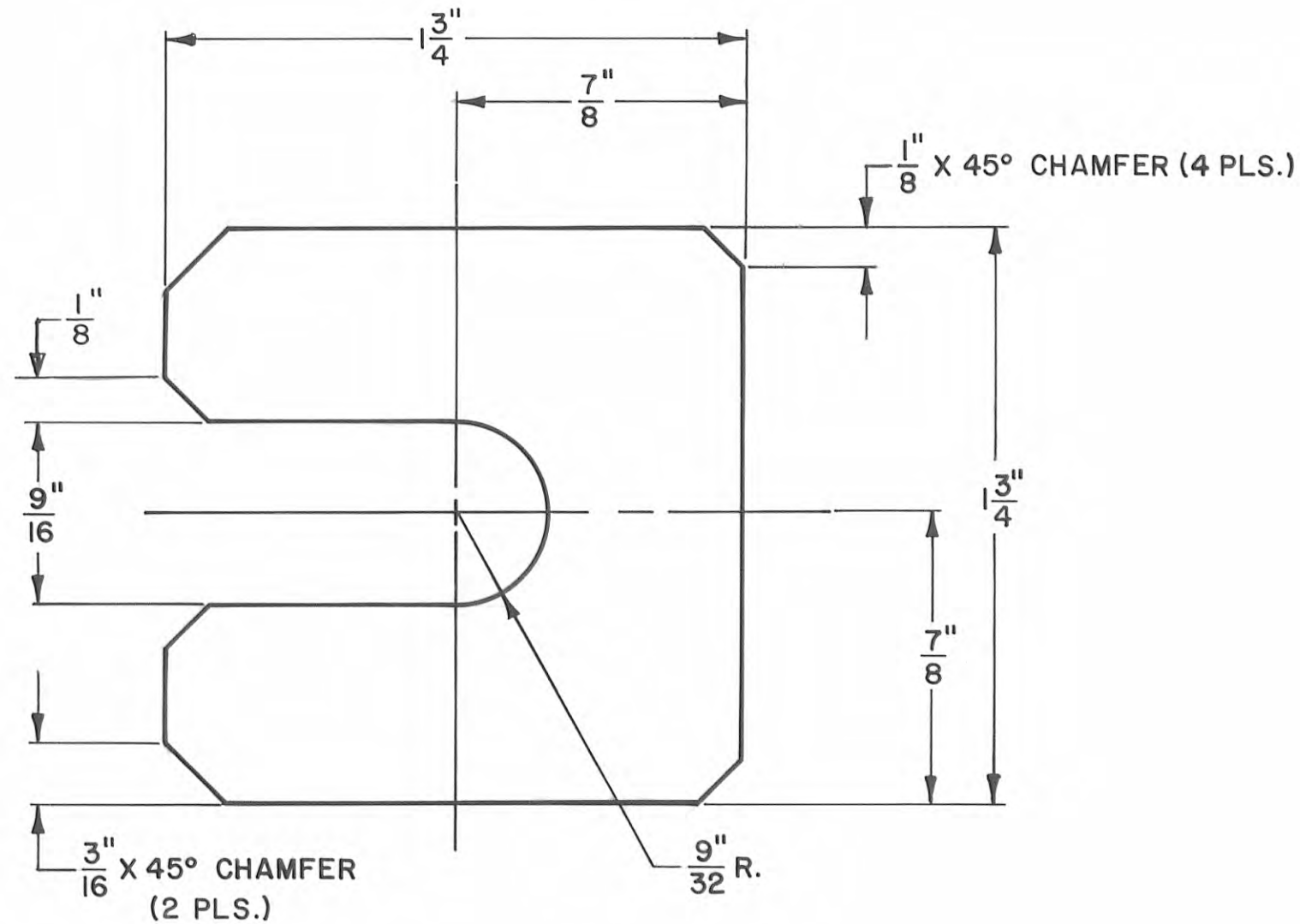
Drawn JC(EAS) Scale FULL Date 5/27/81

Checked *Joseph Jay* Approved *William*

Director, Vehicle Maintenance Manager, Maintenance

R-2-1137

ORIGINAL WEGMANN P/N : 3.4513.60.001.021



SHIM, LONGITUDINAL STOP FOR CURRENT
COLLECTOR BEAM ASSY., WEGMANN TRUCK
CARS 2401-2600
FOURTEEN TO TWENTY REQUIRED PER TRUCK
C.T.A. LOT NO. 4003085, S.R. 42

MATERIAL: STEEL, STRIP, COLD ROLLED,
COMMERCIAL QUALITY ASTM A-366
(0.036" THK.) 20 GA. CADMIUM PLATED
PER ASTM A-165

DIMENSIONAL TOLERANCES
UNLESS OTHERWISE SPECIFIED

Fractional: $\pm 1/32"$
Decimal: AS SHOWN
Angular: $\pm 1^\circ$

ORIGINAL ON WEGMANN & CO. DWG. NO. 4.4513.60.001.019

cta General Operations Division
Maintenance Department

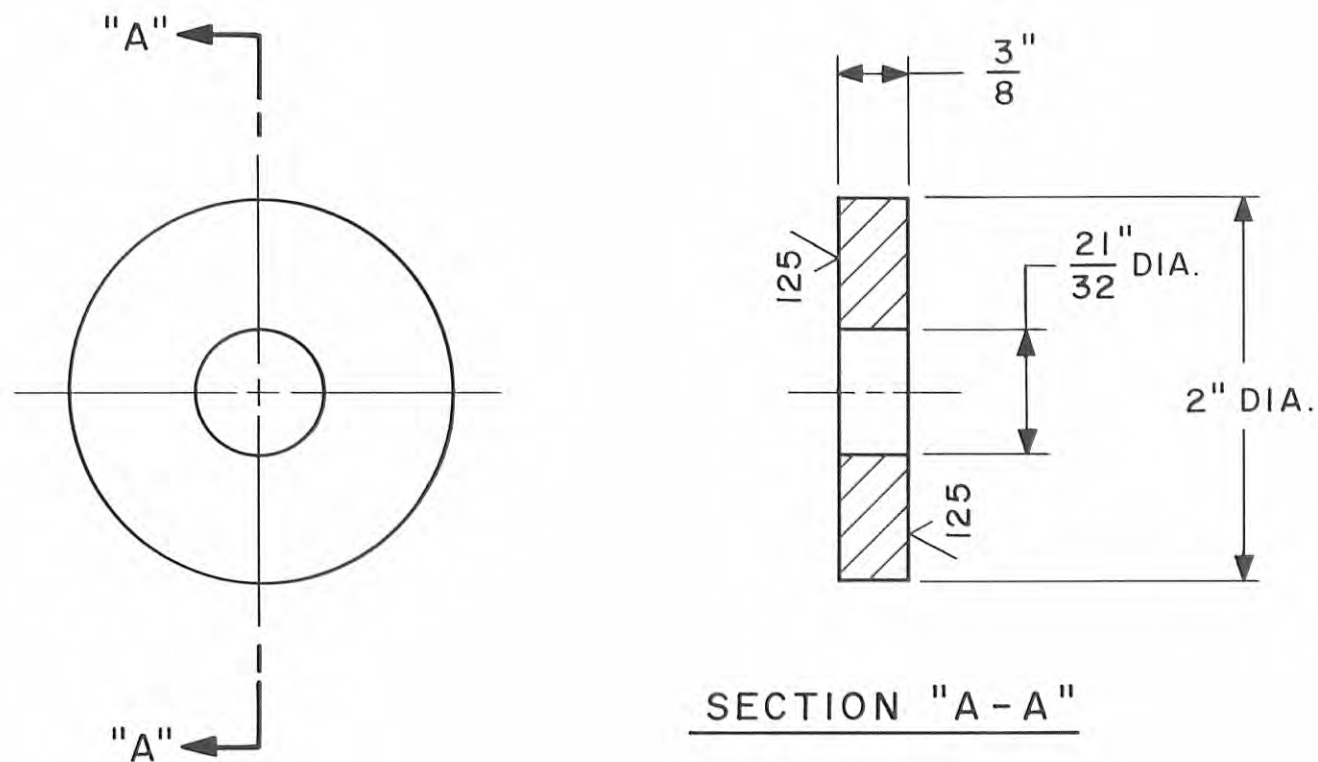
DETAIL, SHIM, LONGITUDINAL STOP WEGMANN
TRUCK CARS 2401-2600

Drawn JC(EAS) Scale 2/1 Date 6/10/81

Checked *[Signature]* Approved *[Signature]*

[Signature] 8-28-81 *[Signature]* 8-1-81
Director, Vehicle Maintenance Manager, Maintenance

R-2-1142



NOTES:

1. WASHER TO BE FLAT AND FREE OF DRAG EDGES AND BURRS.
2. CADMIUM OR ZINC PLATE PER ASTM B766, CLASS 25, TYPE II OR ASTM B633, SC4, TYPE II RESPECTIVELY.
3. CLEAN FLAME CUT OF O.D. IS PERMISSIBLE WHEN FABRICATING FROM 3/8" PLATE.

WASHER: FLAT, FOR CURRENT
COLLECTOR BEAM SUPPORT ASSEMBLY
(WEGMANN TRUCK)


4 REQUIRED PER TRUCK
CAR SERIES: 2400, 2600 & 3200
C.T.A. LOT NO. 4003087

MATERIAL: 2" O.D. x 1/2" I.D. (.750" WALL),
COLD DRAWN SEAMLESS MECHANICAL
STEEL ROUND TUBING, CONFORMING
TO ASTM A519.

ALT. MATERIAL 1: 2" DIA., COLD FINISHED STEEL
ROUND PER AISI 1018

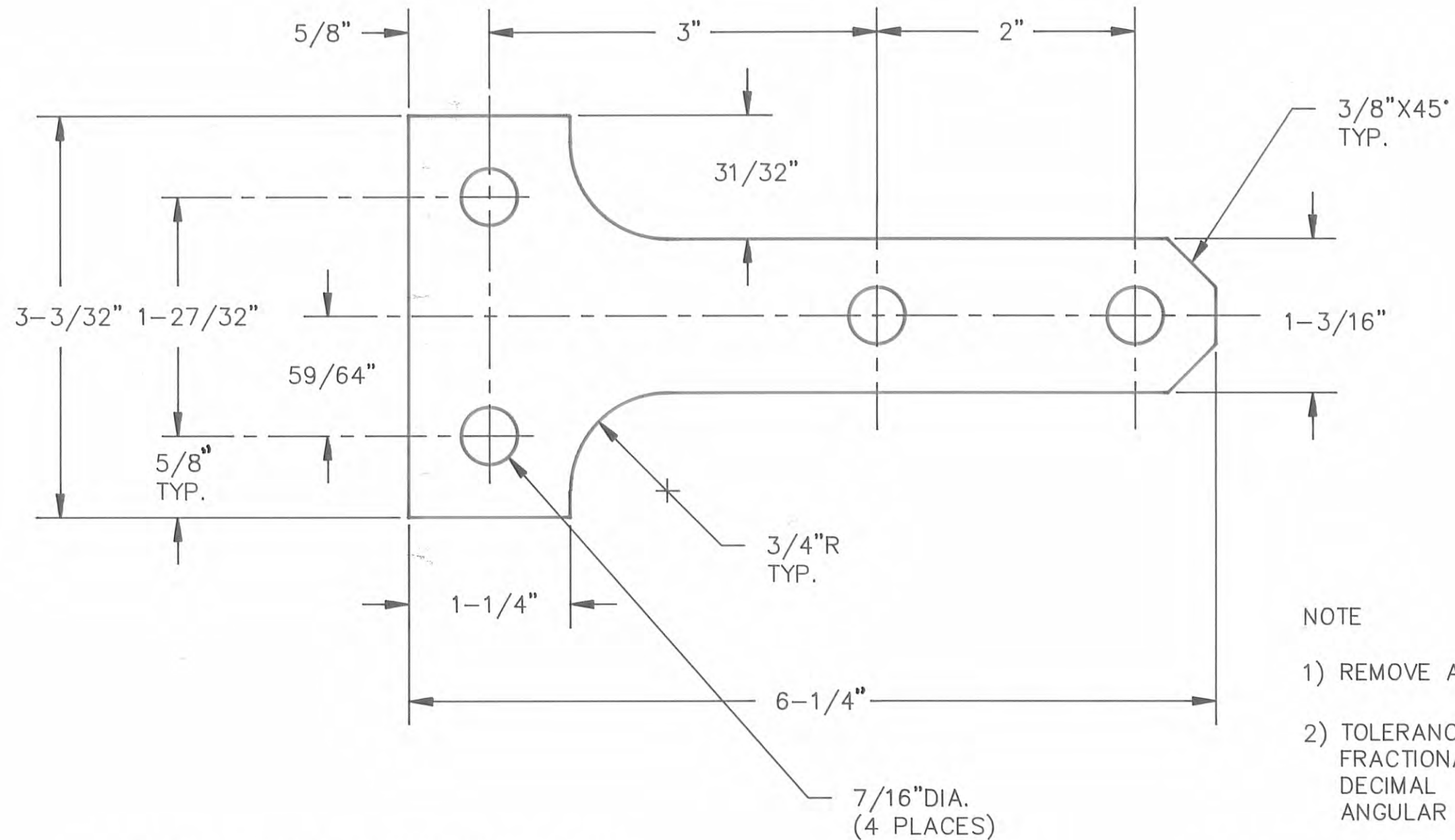
ALT. MATERIAL 2: 3/8" THICK, LOW CARBON
STEEL PLATE (SEE NOTE 3)

REV. 1: REDRAWN, ADDED 2600 & 3200 SERIES, CORRECTED MATERIAL
WALL THICKNESS, ADDED NOTES, ADDED ALT. MATERIAL AND
ZINC PLATING, UPDATED CADMIUM PLATE NOTE, M.D. (MES)10-18-93

<p>DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5</p>	<p>cta </p>									
<p>UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: ANGLES $\pm \sim$ FRACTIONS: $\pm 1/32$" DECIMALS .XX $\pm \sim$ DECIMALS .XXX $\pm \sim$ RIVET & BOLT EDGE MARGIN $\pm .05$ BEND RADII .01 ON .03 & .06 $\pm .03$ ON .09 & GREATER</p> <p>SHEET METAL CORNER RADII</p> <table border="1"> <tr> <td>INT</td> <td>.19</td> <td>EXT</td> <td>.25</td> </tr> <tr> <td></td> <td>.16</td> <td></td> <td>.00</td> </tr> </table>	INT	.19	EXT	.25		.16		.00	<p>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</p> <p>WASHER: FLAT, FOR CURRENT COLLECTOR BEAM SUPPORT ASSEMBLY (WEGMANN TRUCK) CAR SERIES: 2400, 2600 & 3200</p> <p>Drawn MES Scale FULL Date 10-18-93</p> <p>Checked <i>M. Dettler 11-16-93</i> Approved <i>Mike Suelker 11/17/93</i></p> <p>Manager, Technical Services General Manager, Eng & Tech Services</p> <p>R-2-1144</p> <p>Next : <i>~</i> Assy. :</p>	
INT	.19	EXT	.25							
	.16		.00							

2-1144

DRAWING NUMBER



NOTE

- 1) REMOVE ALL BURRS AND SHARP EDGES.
- 2) TOLERANCES UNLESS OTHERWISE SPECIFIED.
 FRACTIONAL $\pm 1/32$ "
 DECIMAL $\pm .03$ "
 ANGULAR $\pm 1^\circ$

PLATE, GROUND: BOLSTER TO CAR BODY
 AND TRUCK FRAME, CLAM SHELL SIDE
 CARS: 2401 - 3200
 ONE REQUIRED PER TRUCK
 C.T.A. LOT NO. 4003178, S.R.42

MATERIAL: $3/16$ " THICK COPER PLATE
 SOFT NO. 102, PER ASTM B-152
 LATEST SPECIFICATION

cta Engineering & Maintenance Division
 Equipment Engineering and
 Maintenance Department

PLATE, GROUND: BOLSTER TO CAR BODY
 AND TRUCK FRAME, CLAMSHELL SIDE
 CARS: 2401 - 3200

Drawn CDC	Scale FULL	Date 4/14/87	Rev.
Checked <i>[Signature]</i>	Approved <i>[Signature]</i>		R-2-1197
DIRECTOR, EQUIPMENT ENG.		MANAGER, EQUIP. ENG. & MAINT.	

DRAWING NUMBER
R-2-1201

DRAWING NUMBER
R-2-1201

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA

REORDER BY NUMBER 075AR

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA

REORDER BY NUMBER 075AR

POSITION EDGE OF PRINT ON THIS LINE

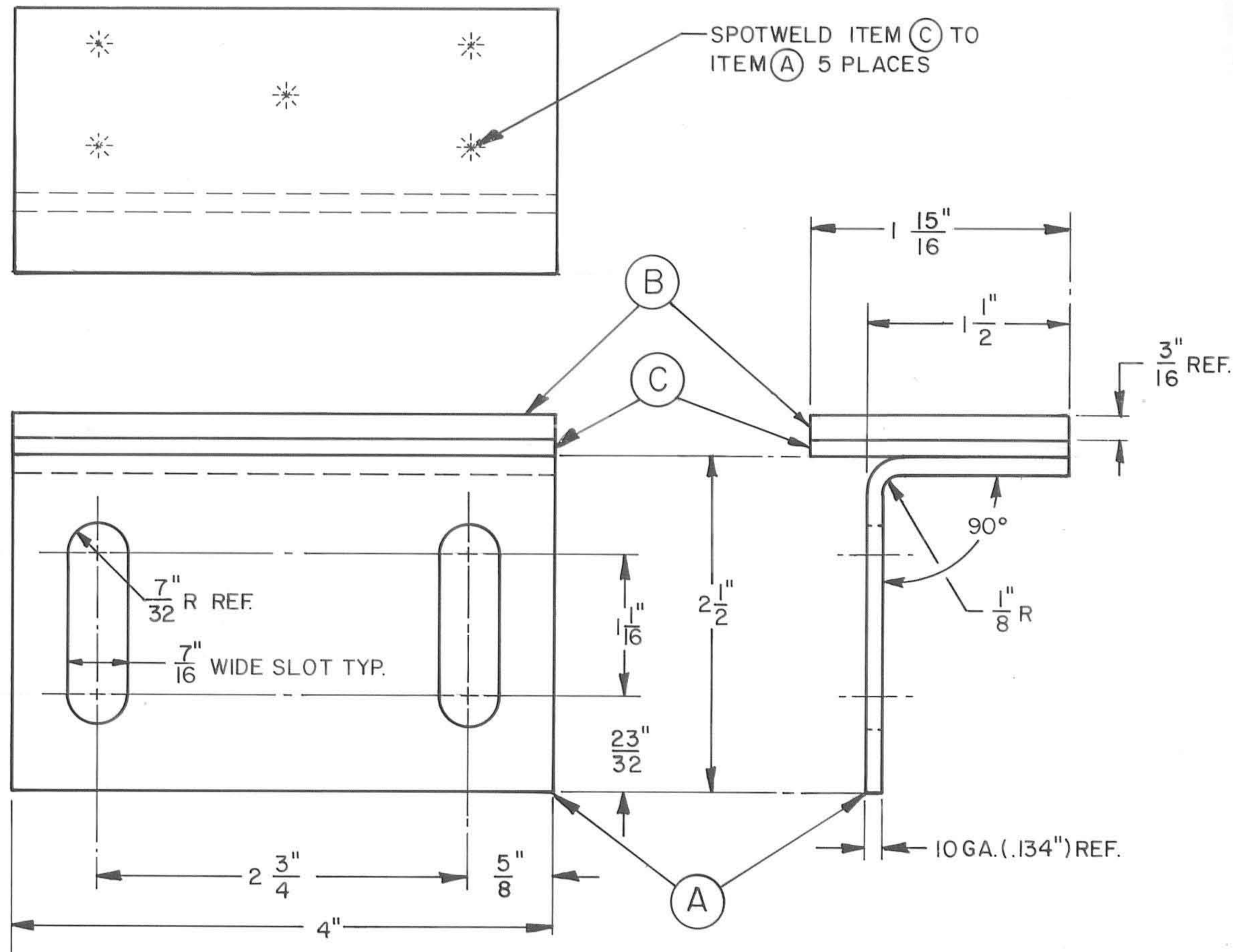
POSITION EDGE OF PRINT ON THIS LINE

REV. 1: ADDED ITEM "C" AND WIDENED ITEM "B" (WAS 1 1/4"). R.J.K., 01-05-88.
REV. 2: 1 15/16" WAS 2 1/16". H.L., 6-26-89.
REV. 3: ADHESIVE IN NOTE 2 WAS 3M RUBBER AND VINYL ADHESIVE 80. R.V.P., 3-26-93.
REV. 4: MATERIAL FOR ITEM A & C WAS CADMIUM PLATED. C.P. 4-21-03.
REV. 5: CORRECTED DUROMETER FOR ITEM B. WAS 5, NOW 75±5. C.P. 5-7-03.
REV. 6: ADDED "OR MOLDED" TO NOTE 2. C.J. 6-17-08
REV. 7: REMOVED "ITEM B TO BE BONDED TO ITEM C WITH LOCTITE BLACK MAX NO.380 (CTA L/N 1009422) OR MOLDED" FROM THE NOTE 2. CJ 12/17/09

NOTE:
1). BREAK ALL SHARP CORNERS
2). ITEM "B" TO BE MOLDED TO ITEM "C"
3). TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS +/-1/32"
ANGLES +/-1/2 DEG.

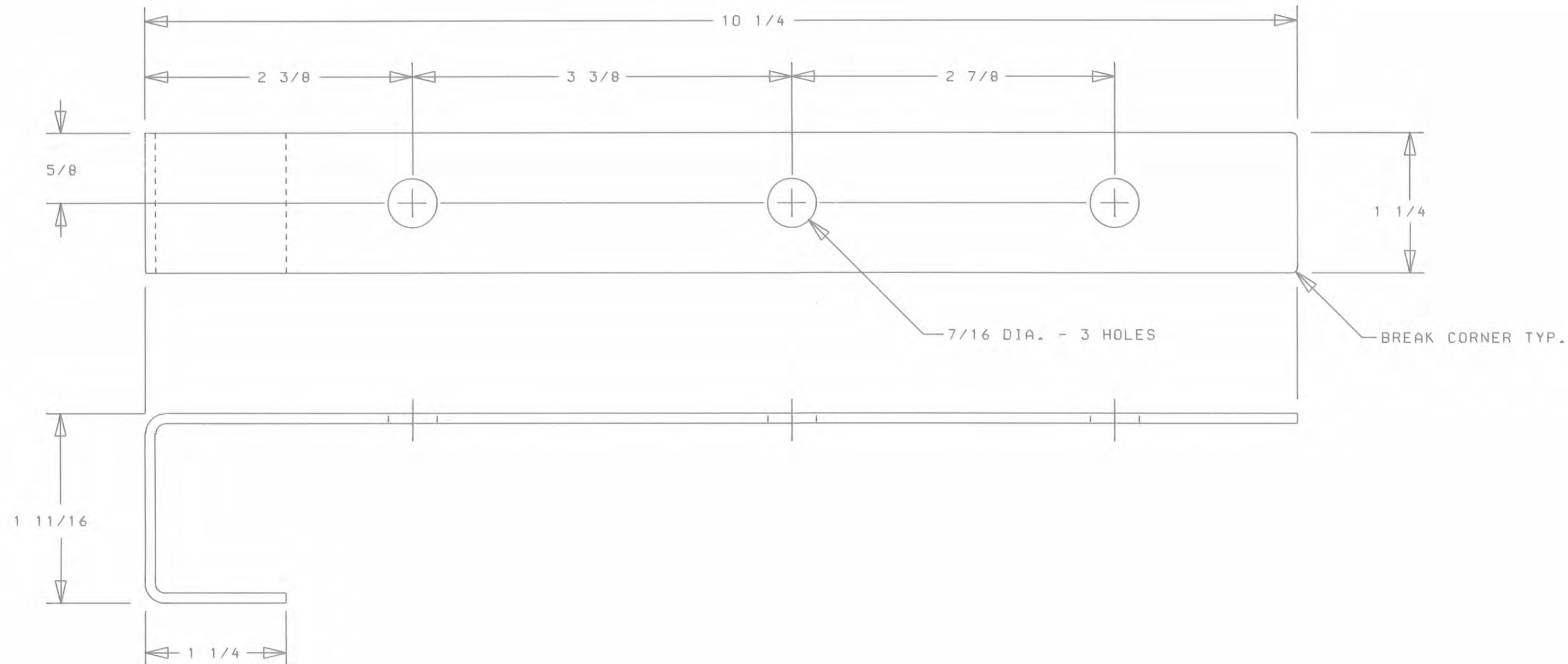
REF. ENGINEERING BULLETIN RM-25-056

cta Engineering & Maintenance Division Equipment Engineering and Maintenance Department			
STOP: BRAKE ACTUATOR ARM, FOR WEGMANN TRUCK			
Drawn M.D. <i>[Signature]</i> DIRECTOR, EQUIPMENT ENG.	Scale FULL <i>[Signature]</i>	Date 3-23-87 <i>[Signature]</i> MANAGER, EQUIP. ENG. & MAINT.	R-2-1201



STOP: BRAKE ACTUATOR ARM,
FOR WEGMANN TRUCK
CTA ITEM NO. 4182624

MATERIAL:
ITEM (A) AND (C): 10 GA (.134") CARBON STEEL
ZINC PLATED PER ASTM B-633
ITEM (B): 3/16" THICK NEOPRENE,
75±5 DUROMETER, SHORE A
PER LATEST ASTM 2000 SPEC



CHANNEL: ELECTRIC CABLE CLEAT BLOCK SUPPORT
 ONE REQ'D PER CAR
 CAR SERIES: 2600
 CTA LOT NO. 3104677, S.R. 42.

MAT'L 136A(.090) TYPE 304 STAINLESS STEEL

NOTES:

- 1) REMOVE DRAG EDGES INCLUDING HOLES.
- 2) PART MUST BE FLAT.
- 3) TOLERANCES UNLESS OTHERWISE SPECIFIED
 FRACTIONAL $\pm 1/16$
 ANGULAR $\pm 1^\circ$

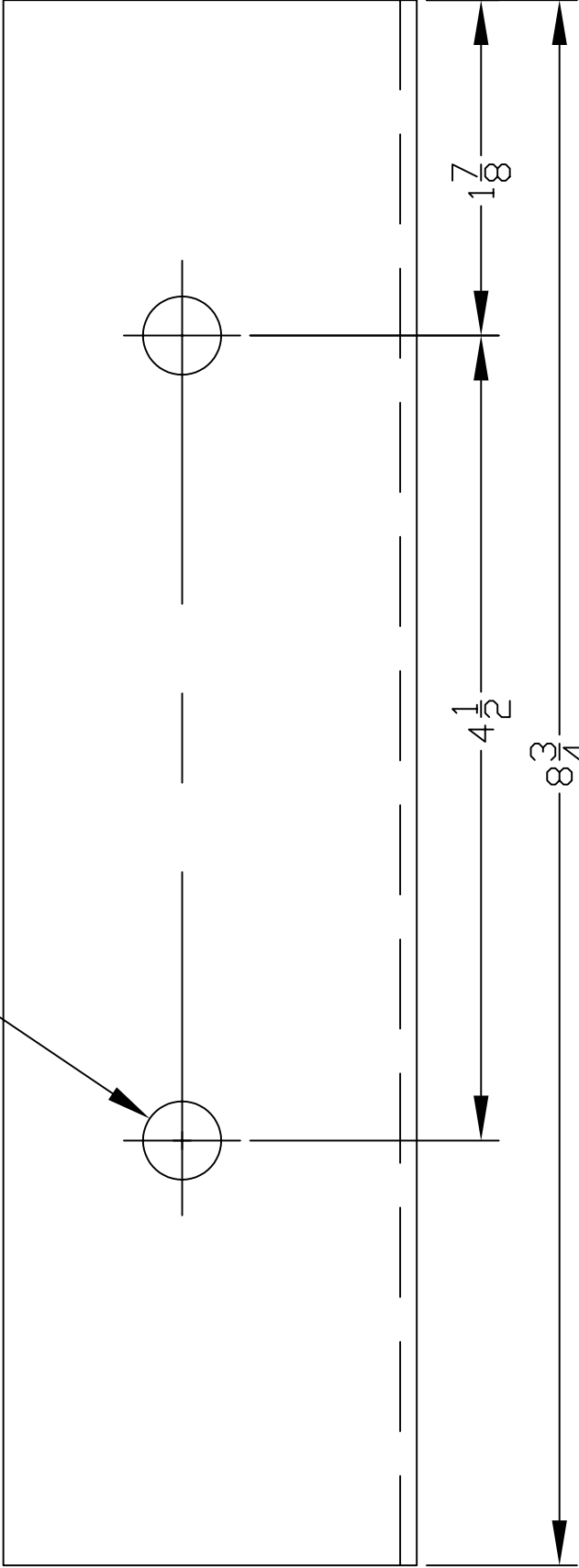
ORIGINAL ON BUDD DWG. A87-84035

cta ENGINEERING & MAINTENANCE DIVISION EQUIPMENT ENGINEERING AND MAINTENANCE DEPARTMENT	
CHANNEL: ELECTRIC CABLE CLEAT BLOCK SUPPORT CAR SERIES: 2600	
Drawn <u>NTK</u> Scale <u>FULL</u> Date <u>01/89</u>	Checked <u>M. Daitch</u> DIRECTOR, EQUIPMENT ENG.
Approved <u>J. J. Lopez</u>	R-2-1223

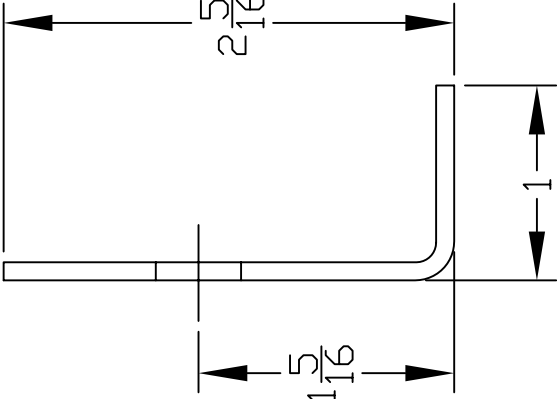
DRAWING NUMBER
R-2-1223

PLANTHOLD CORPORATION • IRVINE, CALIFORNIA
 PREPARED BY N. WARR, 07/84

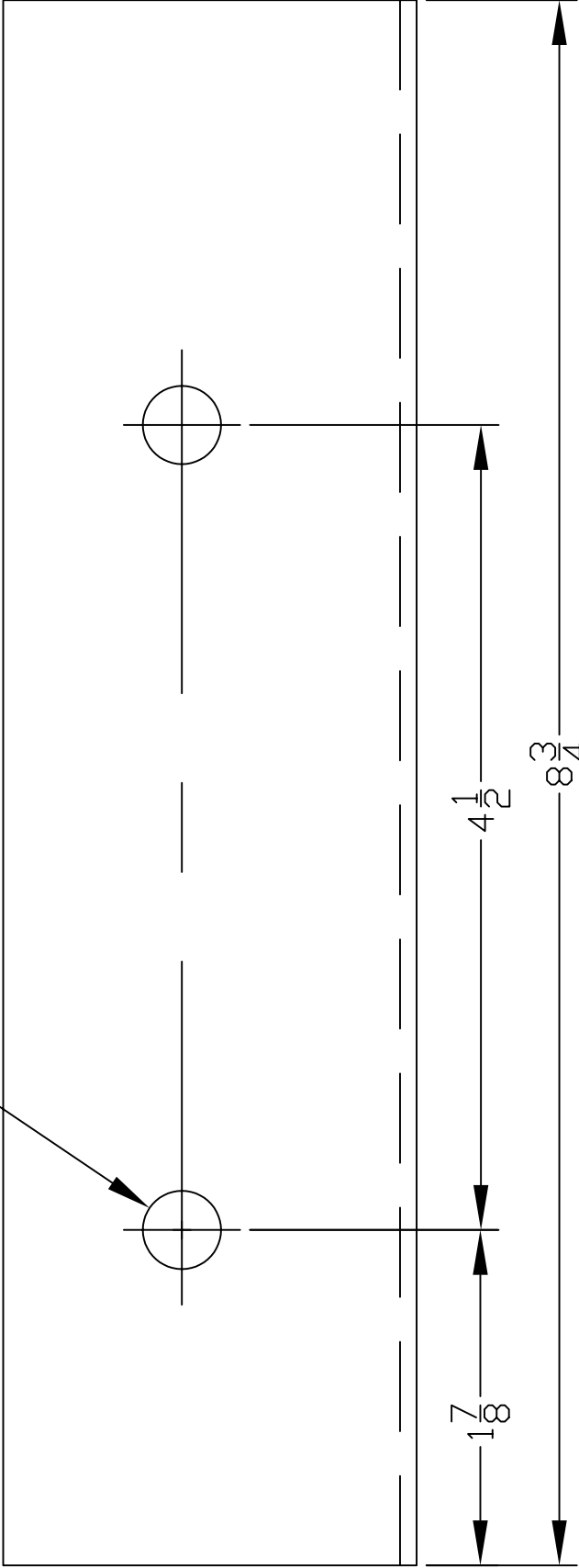
ϕ7/16 - 2 HOLES



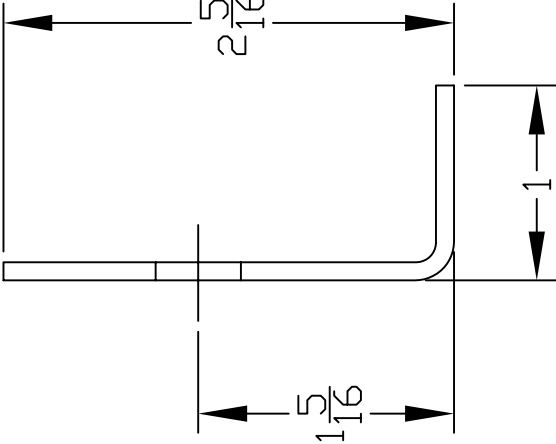
LH
ITEM NO. 3104678



ϕ7/16 - 2 HOLES

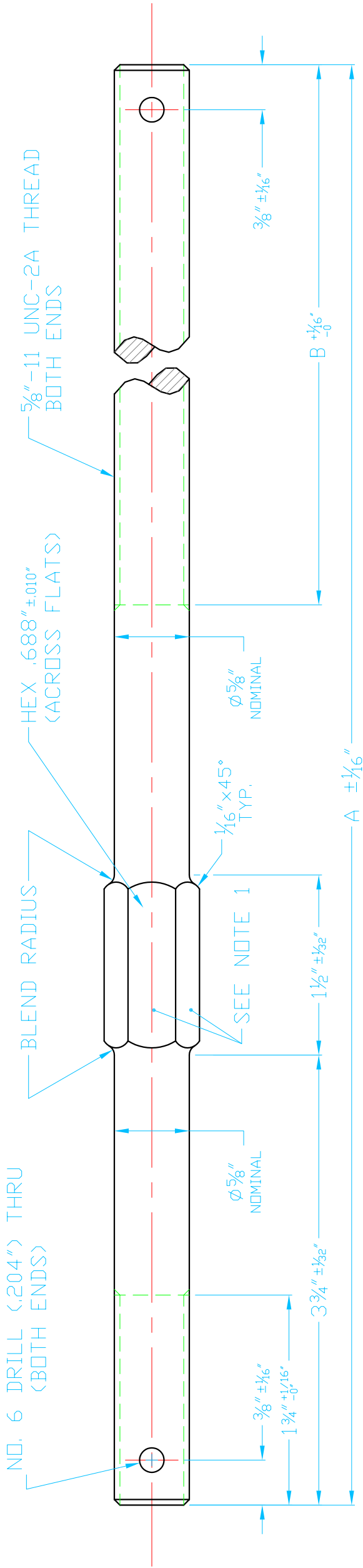


RH
ITEM NO. 4000044



<div><div></div><div>cta</div></div>	DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5	
	UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	
	TOLERANCES : ANGLES ± FRACTIONS: ±1/32 DECIMALS: .XX ± .XXX ±	
RIVET & BOLT MARGIN: ±.05 BEND RADI: ±.02 ON .03 & .06 ±.03 ON .09 & GREATER		
SHEET METAL CORNER RADI: INT .19 EXT .25 .16 .00		
RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES		<div><div></div><div></div></div>
ANGLE: ELECTRIC CABLE SUPPORT, USED ON TRUCK WIRING CAR SERIES: 2400, 2600, 3200		
Drawn <u>LR</u> Scale <u>FULL</u> Date <u>5-4-07</u>	Approved <u>JS</u> Date <u>5-4-07</u>	
Checked <u>Julian Sande</u> Manager, Technical Services		General Manager, Engg & Technical Services <u>R-2-1224</u>

MATERIAL: ASTM A36 .093 THK STEEL
ITEM NO. 1706509



REV.6: REVISION TO PART MARKING REQUIREMENTS IN NOTE #1. HP 10/14/11.
REV.5: "ELEC." WAS "MECH." AND "B633" WAS "B695" IN MATERIAL DESCRIPTION. LR 5/12/11.
REV.4: CORRECTED TYPO IN MATERIAL DESCRIPTION. LR 7/8/10.
REV.3: REVISED MATERIAL & FINISH. C.P. 12/02/04.
REV.2: CORRECTED THE DATE, ADDED COLUMN FOR USER IN THE TABLE, ADDED ADDITIONAL SPECIFICATION FOR MATERIAL FINISH. C.P. 09/16/02.
REV.1: REDRAWN IN AUTOCAD. REMOVED 6000 AND ADD 2200, 2400, 2600, 3200 CAR SERIES. L.R. 08/05/02.

ITEM NO.	DIM. "A"	DIM. "B"	CAR SERIES
4182609	14 3/4"	6 1/2"	24, 26, 32
4181234	13"	5 1/2"	22

ROD: ADJUSTING / SUPPORT, 13" AND 14 3/4" LG.
FOR TRACK BRAKE INSTALLATION
(2) REQ'D PER DEVICE
C.T.A. ITEM NO. 4182609 FOR 2400, 2600, 3200 CAR SERIES
4181234 FOR 2200 CAR SERIES
MATERIAL: STEEL, MED. CARBON, 1144 STRESS RELIEVED,
ASTM A311 CLASS B, ZINC ELEC. DEPOSIT AFTER
MACHINING PER ASTM B633 CLASS 8, TYPE II
COLOR CHROMATE.

NOTES:
1.) EACH ROD TO BE MARKED ACCORDING TO REQUIREMENTS
STATED IN CTA SPECIFICATION 7625 UNDER "PART MARKINGS".
2.) REMOVE ALL BURRS AND SHARP EDGES

SUPERCEDES PCC-1017 REV.7
R-2-1176 REV.1

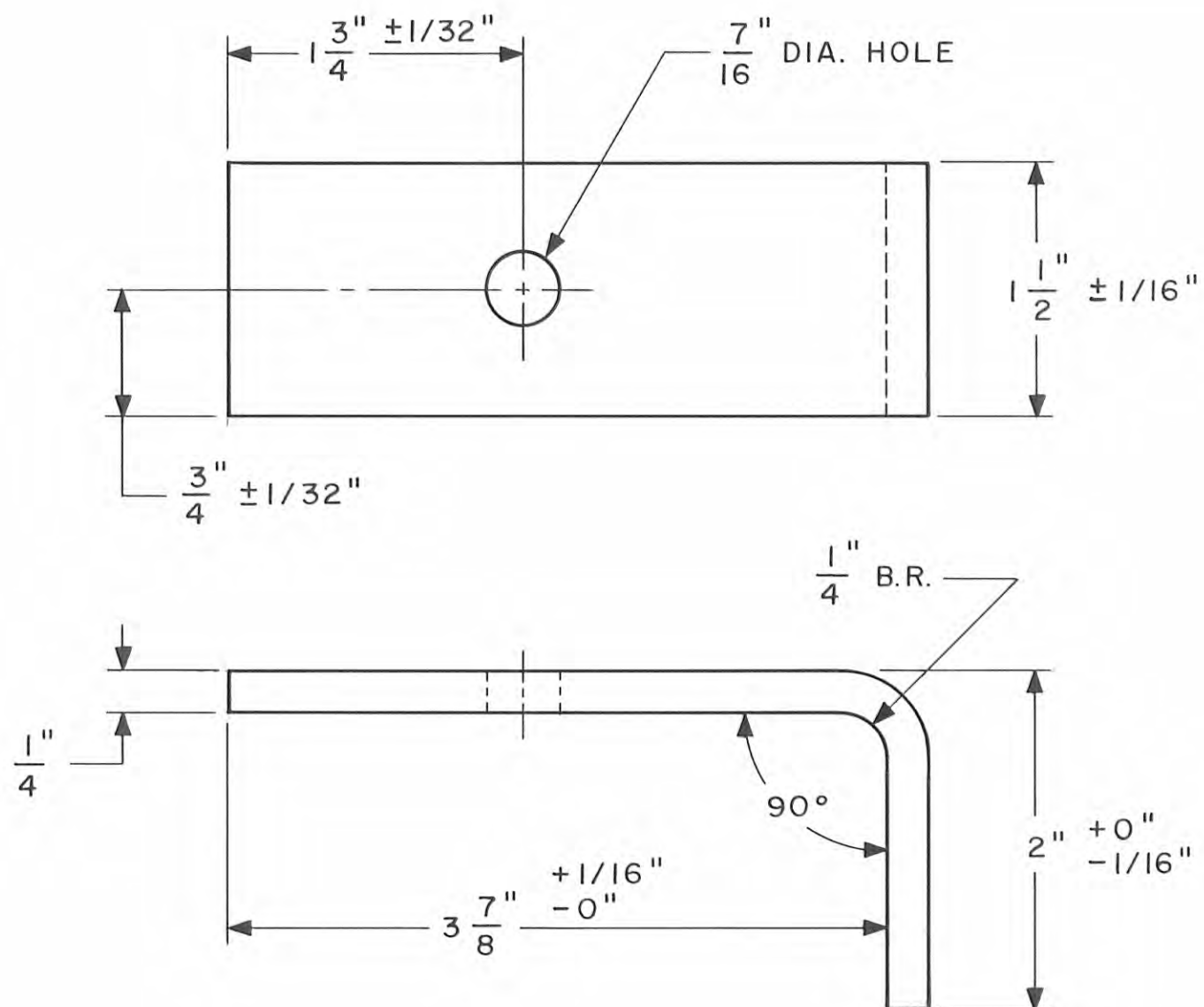


RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

ROD: ADJUSTING / SUPPORT, 13" AND 14-3/4" LG.
FOR TRACK BRAKE INSTALLATION

CAR SERIES: ALL

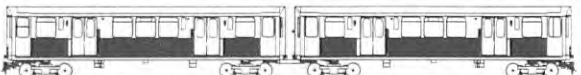
Drawn <u>M.D.</u> Scale <u>FULL</u> Date <u>4/5/91</u>	Approved <u>Al Hing</u>	R-2-1244
Checked <u>R.J.K.</u>	General Manager, Engng & Technical Services	Next Assy.
<u>Mike Schellberg</u> Manager, Technical Services		



NOTES:

1. ANGLE TO BE FREE OF ALL BURRS, DRAG EDGES AND DISTORTION, INCLUDING AROUND HOLE.
2. SOLVENT CLEAN OF ALL FOREIGN MATTER AND PAINT WITH ONE (1) COAT OF RUSTOLEUM X60 RED PRIMER AND TWO(2) COATS OF RUSTOLEUM R470 ALUMINUM ENAMEL.

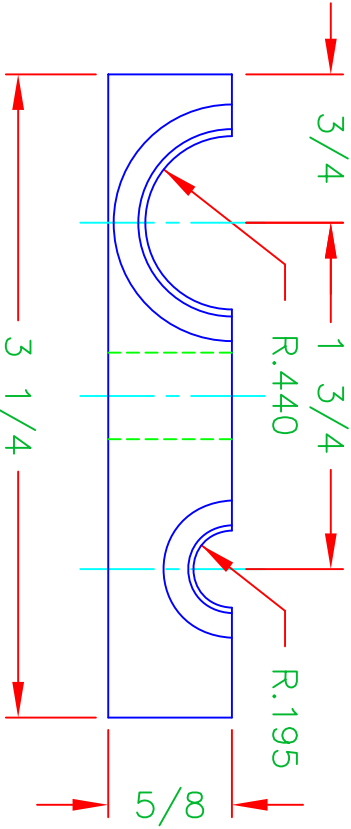
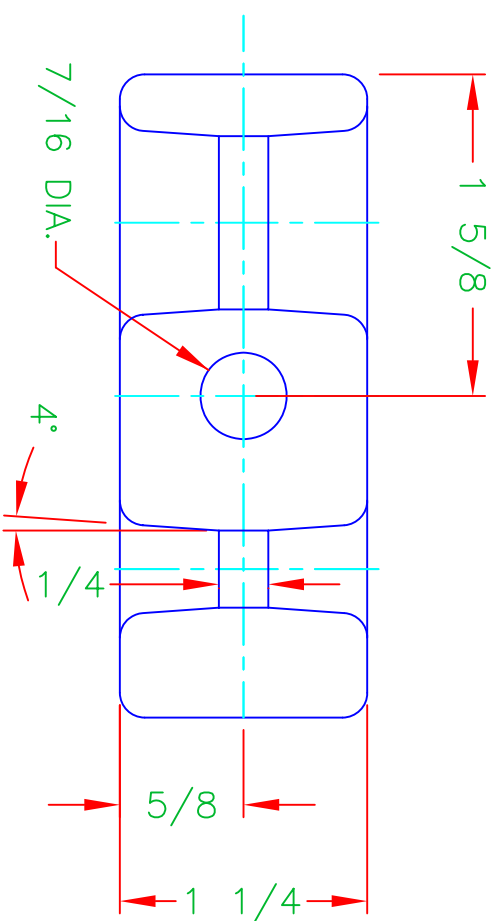
ANGLE: SECURING, FOR MOTOR LEAD
CLEAT BLOCK INSTALLATION
(MODIFIED WEGMANN TRUCK)
1 REQUIRED PER TRUCK
CAR SERIES: 2400
C.T.A. LOT. NO. 4002415
MATERIAL: 1/4" THICK, LOW CARBON
STEEL

<p>DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5</p>	<p>cta </p>
<p>UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± FRACTIONS: ± DECIMALS .XX ± DECIMALS .XXX ± RIVET & BOLT EDGE MARGIN ± .05 BEND RADII .01 ON .03 & .06 ± .03 ON .09 & GREATER</p>	<p>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</p> <p>ANGLE: SECURING, FOR MOTOR LEAD CLEAT BLOCK INSTALLATION (MODIFIED WEGMANN TRUCK) CAR SERIES: 2400</p>
<p>SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00</p>	<p>Drawn MES Scale FULL Date 9-21-93</p> <p>Checked <i>L.B. 9-23-93</i> Approved <i>J.A. Hruby 9-23-93</i></p> <p><i>Mike Luedtke 9/23/93</i> General Manager, Ehg & Tech Services</p> <p>R-2-1259</p> <p>Next : <i>x</i> Assy.</p>

SUPERSEDES SK-I-020892, L.B.

2-1259





DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	



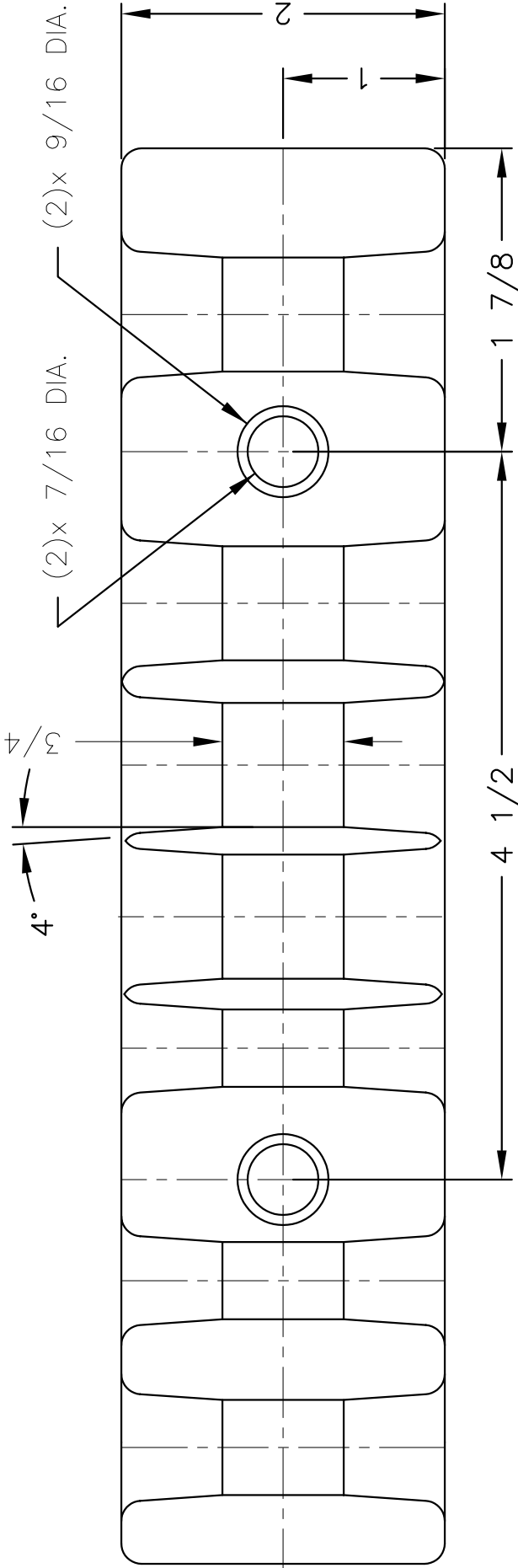
- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK, SHOE TIE
AND TRACK TRIP CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1300)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4003131
(12) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-642
ORIGINAL ON M & K E01-121-58
REPLACES CTA ITEM NO. 4003274

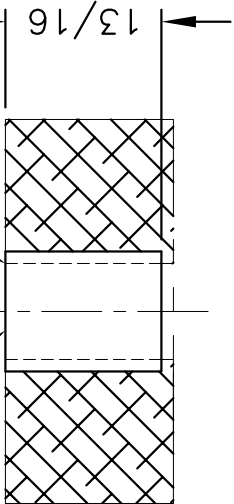
DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	
 		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
BLOCK: CLEAT, TRUCK, SHOE TIE AND TRACK TRIP CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4003131		Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>12/16/99</u>	
Checked <u></u>	Approved <u></u>	Next : General Manager, Eng & Tech Services	
Manager, Technical Services		R-2-1288	

DETAIL	MATERIAL DESCRIPTION	QTY
1	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	1
2	SPACER: STEEL TUBING, ZINC COATED PER ASTM B633, TYPE II, CLASS Fe/Zn 5 OR 300 FAMILY STAINLESS STEEL, 5/16" O.D. x .065" WAL x 13/16" LG.	2



THIS SIDE FACES
MATING SURFACE

BREAK SHARP EDGES
BOTH ENDS



DETAIL 2

SHOWN ASSEMBLED WITH SPACER

NOTES:

1. EMBOSS ITEM NO. ON BLOCK.
2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

DETAIL 1

SHOWN LESS SPACERS

BLOCK: CLEAT, TRUCK,"A1","A4","F1","F4","AA","F",
SLIP SLIDE CABLES AND 40V HARNESS
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4003133
(8) REQ'D PER CAR

REV.2: ADDED MATERIAL AND FINISH FOR DET.2
IN BOM. C.P. 03/21/05.

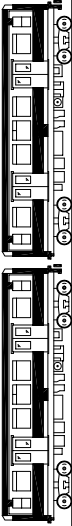
DRAWN ON AUTOCAD FROM R-3-1169 REV.2
REPLACES CTA ITEM NO. 4002680 & 4002681

DIMENSIONING & TOLERANCING
PER ANSI (USASI) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH IS IN MICROMETERS
DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES ± 1/2°
FRACTIONS: ± 1/64
DECIMALS .XX±
DECIMALS .XXX±
RIVET & BOLT EDGE MARGIN ±.05
BEND RADII .01 ON .03 & .06
±.03 ON .09 & GREATER
SHEET METAL CORNER RADII
INT .19 EXT .25
 .16 .00

REV.2: ADDED MATERIAL AND FINISH FOR DET.2
IN BOM. C.P. 03/21/05.

REV.1: CORECTED TYPING ERROR (QTY. FOR
DET.2 IN BOM). J.J. 03/01/02.



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

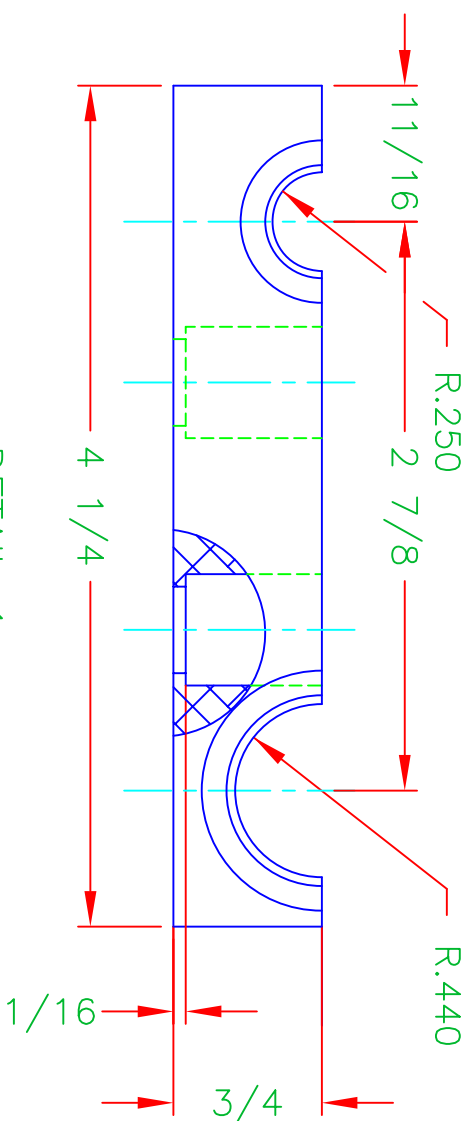
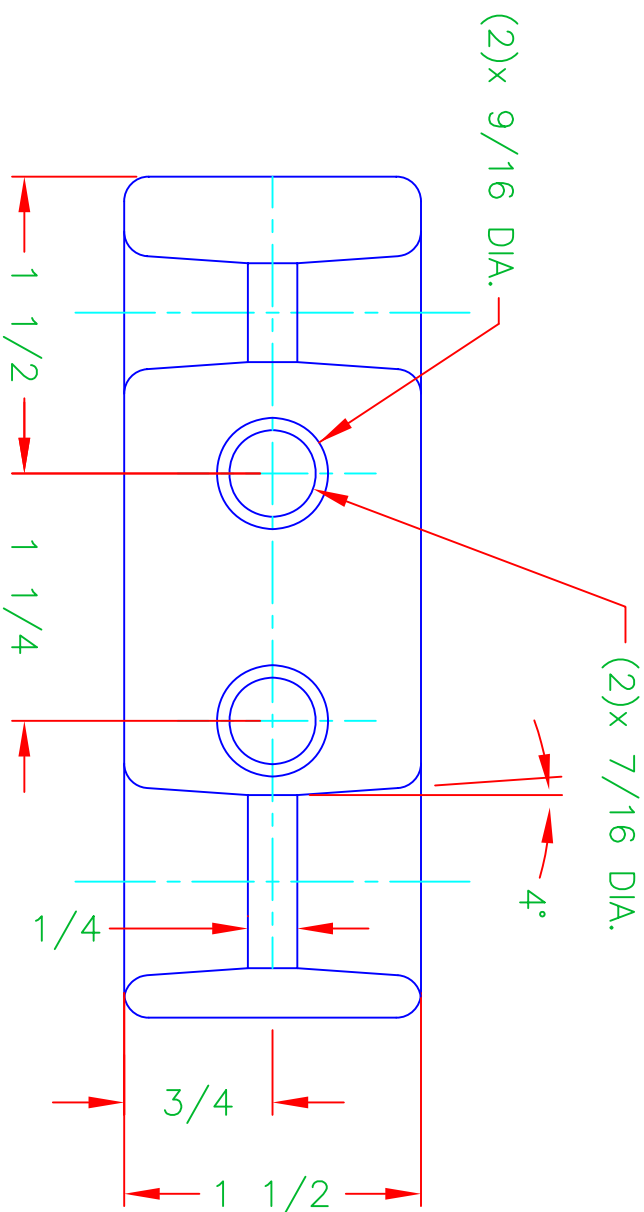
BLOCK: CLEAT, TRUCK,"A1","A4","F1","F4","F",
"AA", SLIP SLIDE CABLES AND 40V HARNESS
CARS: 2400, 2600, 3200
C.T.A. ITEM NO. 4003133

Drawn JJ Scale FULL Date 12/20/99

Checked *Mike Sueberry* Approved *SAH* Next :
Manager, Technical Services General Manager, Eng & Tech Services Assy.

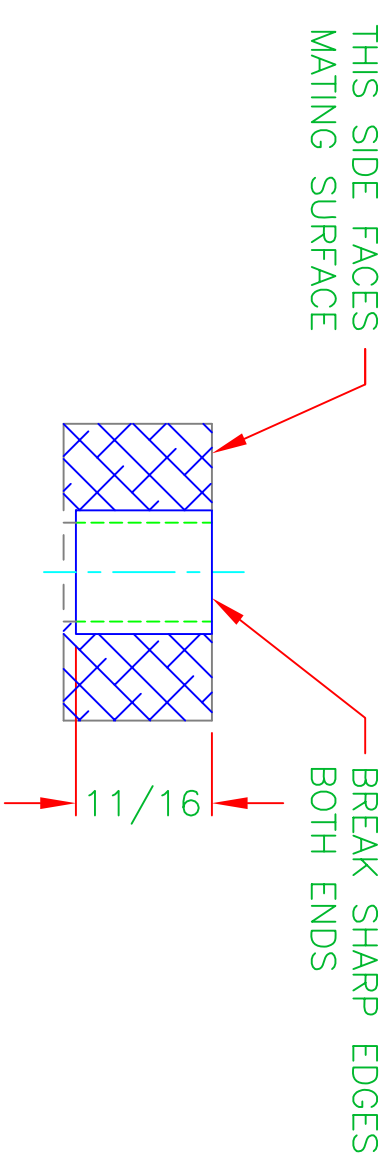
R-2-1290

DETAIL	MATERIAL DESCRIPTION	QTY
1	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	1
2	SPACER: STEEL TUBING 9/16 O.D. x .065 WALL	2



DETAIL 1

SHOWN LESS TWO SPACERS





DETAIL 2

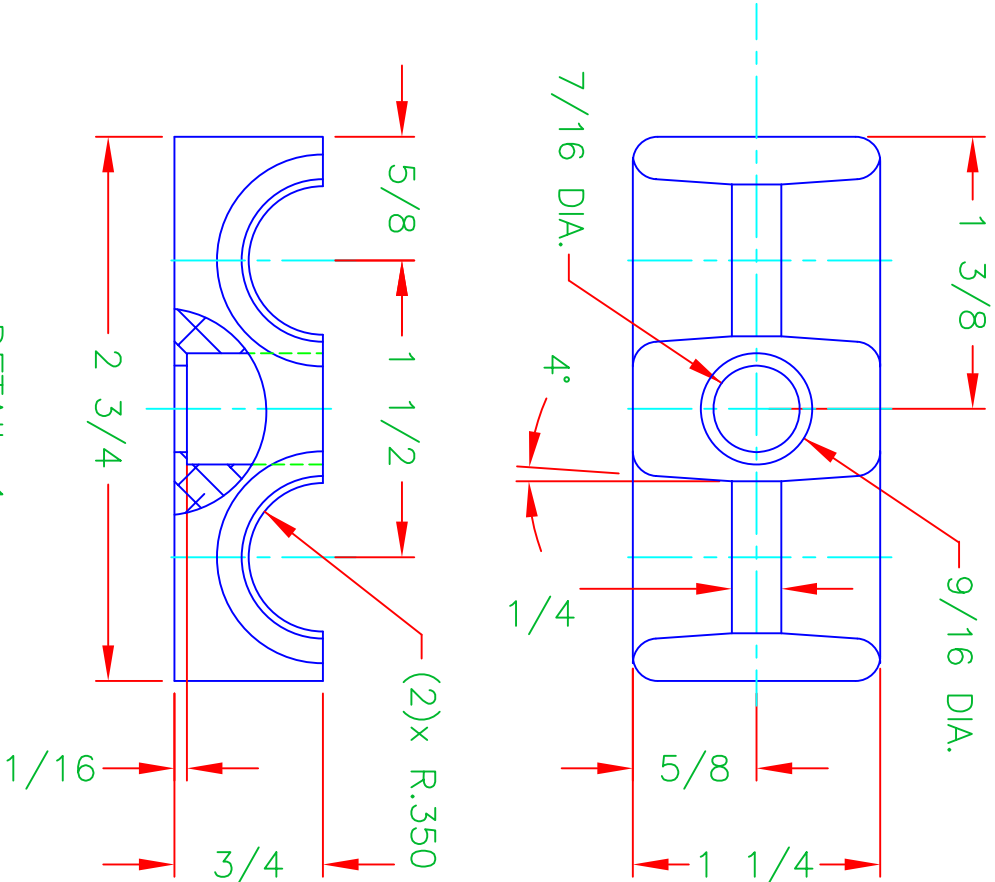
SHOWN ASSEMBLED WITH SPACER

NOTES:

1. EMOSS ITEM NO. ON BLOCK.
2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES $\pm 1/2^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS: .XX \pm DECIMALS: .XXX \pm RIVET & BOLT EDGE MARGIN $\pm .05$ BEND RADII .01 ON .03 & .06 $\pm .03$ ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	
			
RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES		BLOCK: CLEAT, TRUCK, "AA1", "AA3", AND SHOE TIE CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013502	
Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>12/16/99</u>	Checked <u>Mike Schaefer</u> Manager, Technical Services	Approved <u>SAH</u> General Manager, Eng & Tech Services	Next Assy:
R-2-1291			

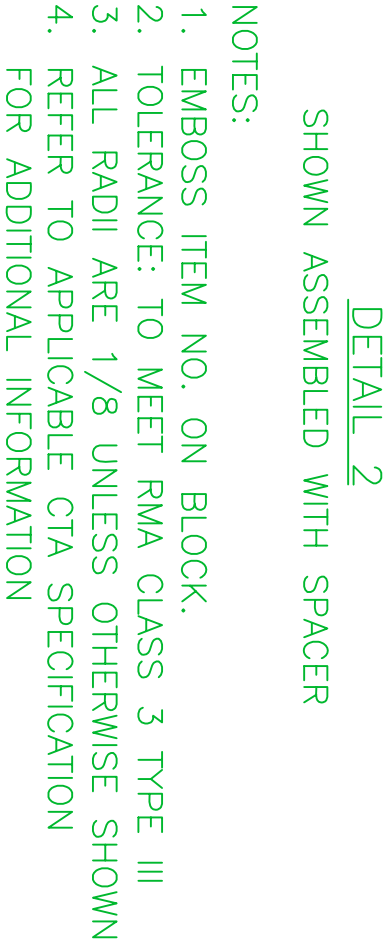
DETAIL	MATERIAL DESCRIPTION	QTY
1	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	1
2	SPACER: STEEL TUBING 9/16 O.D. x .065 WALL	1



SHOWN LESS SPACER

BLOCK: CLEAT, TRUCK, GROUND BRUSH CABLES
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013503
(4) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-1-1164
ORIGINAL ON BUDD A87-89480
REPLACES CTA ITEM NO. 4002644



NOTES:

1. EMBOSS ITEM NO. ON BLOCK.
2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

BLOCK: CLEAT, TRUCK, GROUND BRUSH
CABLES

CARS: 2400, 2600, 3200
C.T.A. ITEM NO. 4013503

Drawn JJ Scale FULL Date 12/21/99

Checked <u>[Signature]</u> Manager, Technical Services	Approved <u>[Signature]</u> General Manager, Eng & Tech Services	Next : Asy.
--	--	----------------

R-2-1292

DIMENSIONING & TOLERANCING
PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH IS IN MICROMETERS
DIMENSIONS ARE IN INCHES

TOLERANCES: ANGLES ± 1/2°
FRACTIONS: ± 1/64

DECIMALS .XX ±

DECIMALS .XXX ±

RIVET & BOLT EDGE MARGIN ±.05
BEND RADII .01 ON .03 & .06

±.03 ON .09 & GREATER
SHEET METAL CORNER RADII

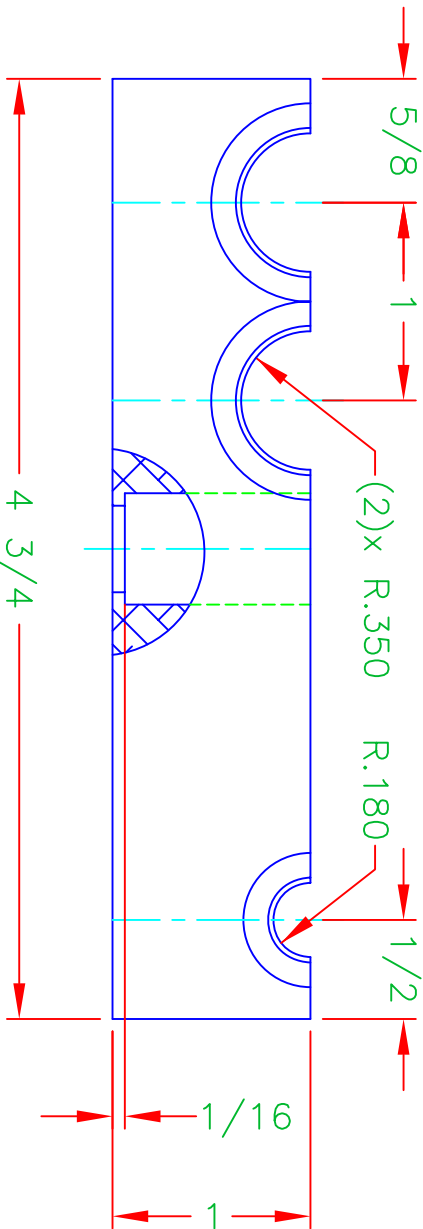
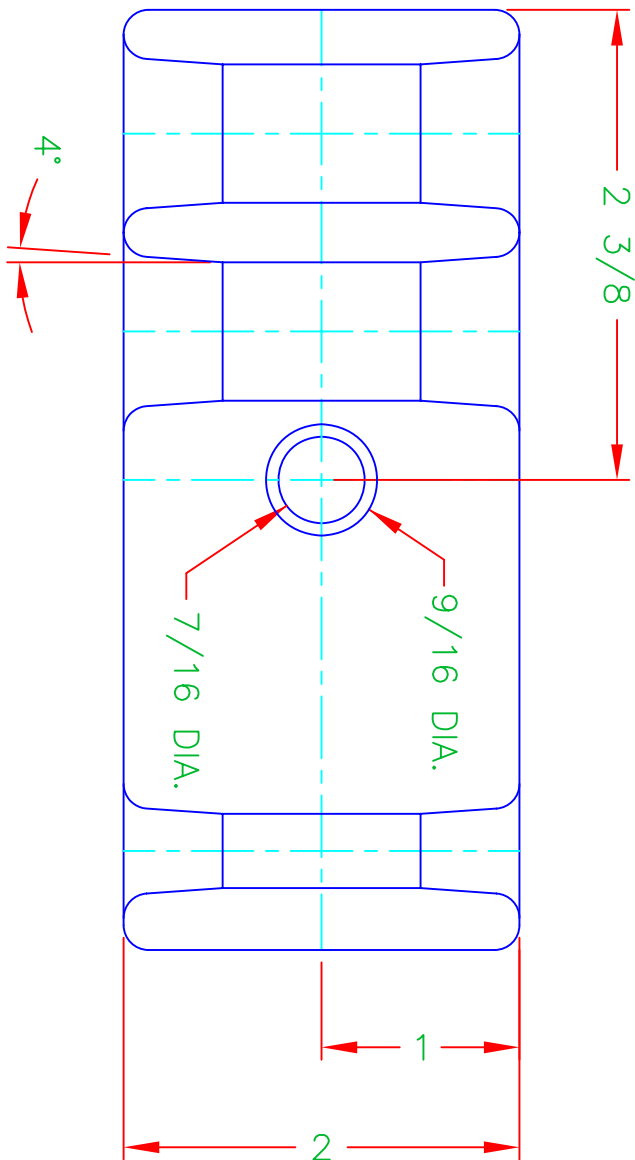
INT

EXT

.16

.25

.00



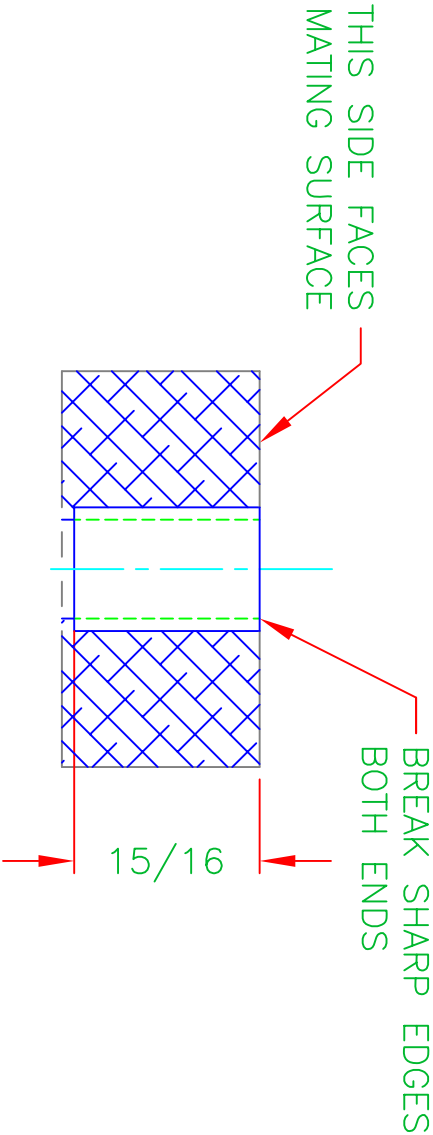
DETAIL 1

SHOWN LESS SPACER

BLOCK: CLEAT, TRUCK, "FF2", "FF3", "A2", "A3"
CABLES AT CLAM SHELL
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013505
(4) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-1257
REPLACES CTA ITEM NO. 4002411

DETAIL	MATERIAL DESCRIPTION	QTY
1	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	1
2	SPACER: STEEL TUBING 9/16 O.D. x .065 WALL	1



DETAIL 2

SHOWN ASSEMBLED WITH SPACER

- NOTES:
- EMBOSS ITEM NO. ON BLOCK.
 - TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 - ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 - REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

BLOCK: CLEAT, TRUCK, "FF2", "FF3", "A2", "A3"
CABLES AT CLAM SHELL
CARS: 2400, 2600, 3200
C.T.A. ITEM NO. 4013505

Drawn JJ Scale FULL Date 12/24/99

Checked <u>Mike Quek</u> Manager, Technical Services	Approved <u>John King</u> General Manager, Eng & Tech Services	Next : Asy.
--	--	----------------

R-2-1294

DIMENSIONING & TOLERANCING
PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH IS IN MICROMETERS
DIMENSIONS ARE IN INCHES

TOLERANCES: ANGLES ± 1/2°
FRACTIONS: ± 1/64

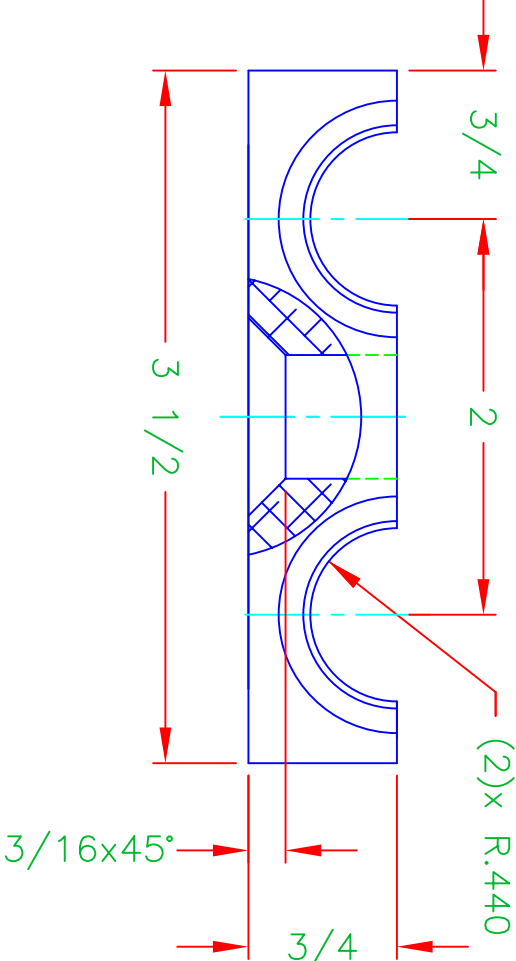
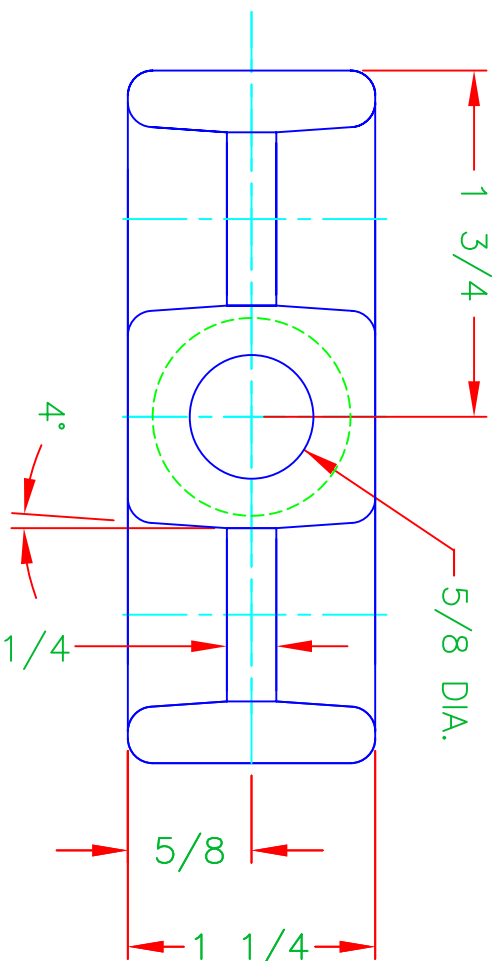
DECIMALS .XX ±
DECIMALS .XXX ±
RIVET & BOLT EDGE MARGIN ±.05
BEND RADII .01 ON .03 & .06

±.03 ON .09 & GREATER
SHEET METAL CORNER RADII

INT .19 EXT .25

.16 .00

DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	



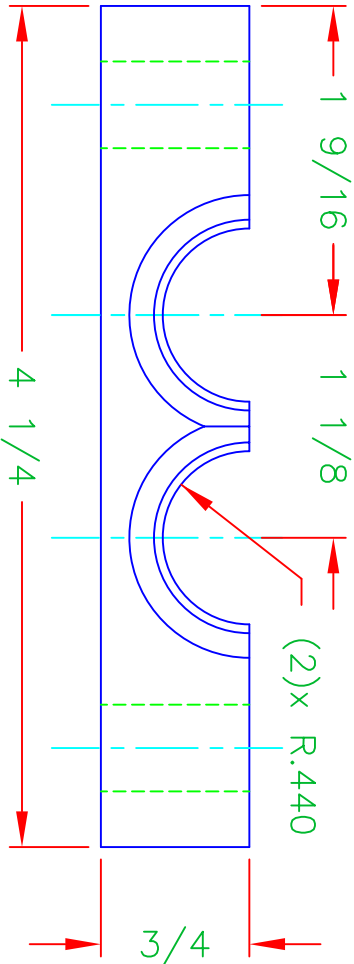
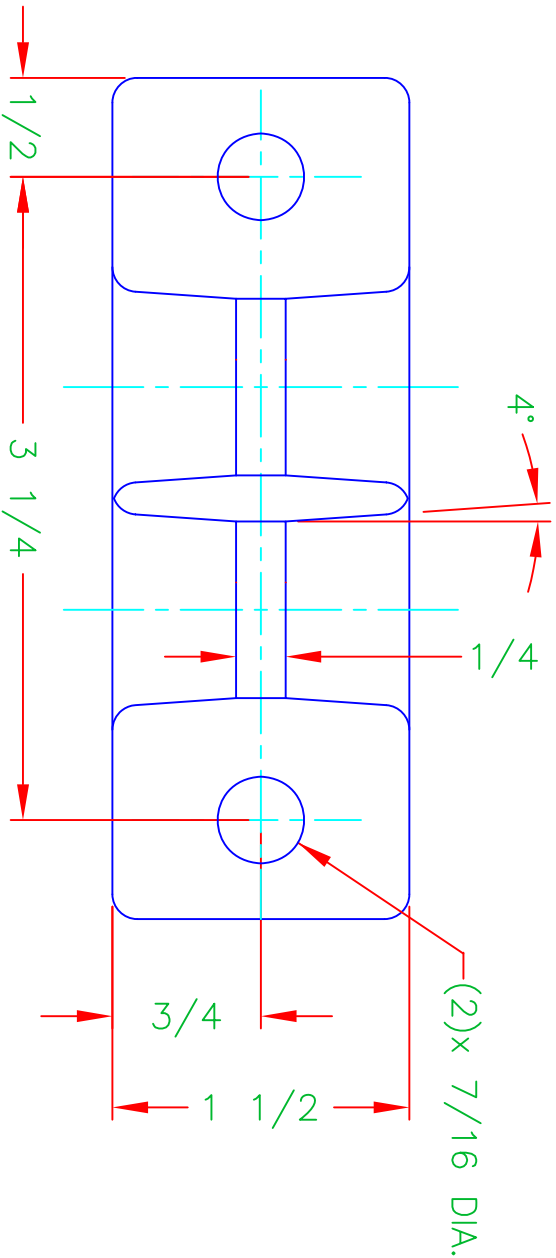
- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK, SHOE TIE CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1301)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013515
(12) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-636
ORIGINAL ON M & K E01-121-34
REPLACES CTA ITEM NO. 4003249

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		
UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00		
<div><div>cta</div><div>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</div></div>		
Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>12/27/99</u>	Checked <u><i>Mike Sue Berg</i></u> Approved <u><i>SAH/ing</i></u> Manager, Technical Services General Manager, Eng & Tech Services	
BLOCK: CLEAT, TRUCK, SHOE TIE CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013515		
R-2-1295		

DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	

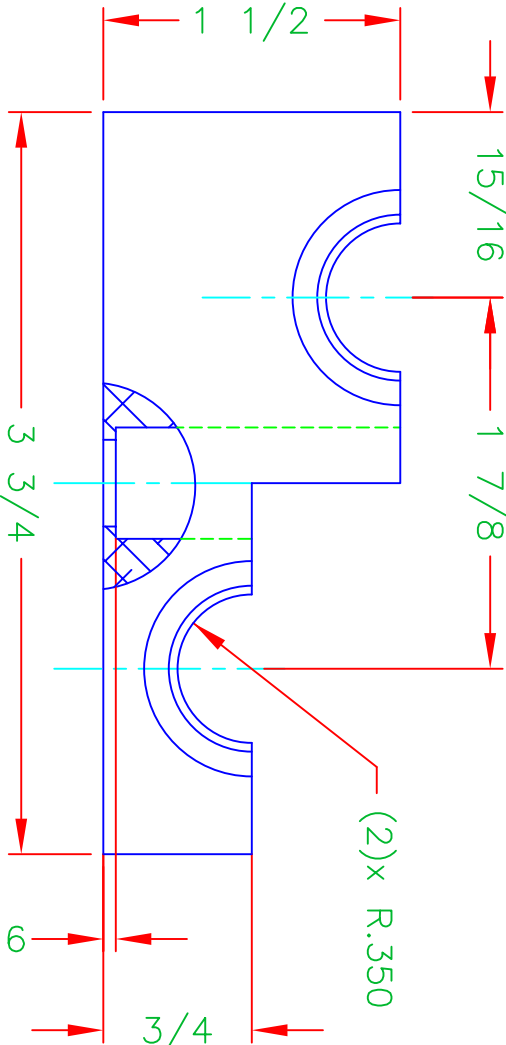
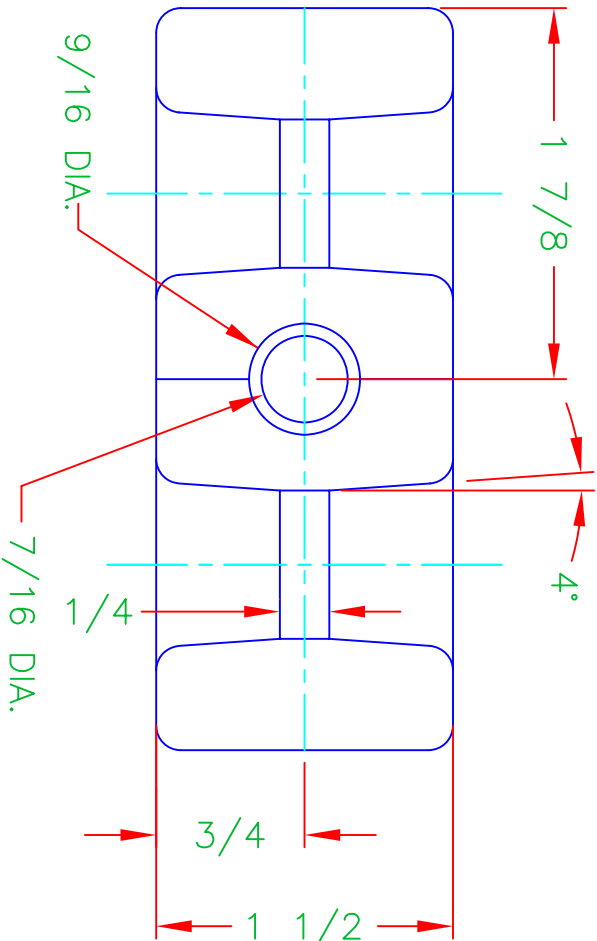


- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK SHOE TIE CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1302)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013516
(8) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-637
ORIGINAL ON M & K E01-121-49
REPLACES CTA ITEM NO. 4003254

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	
<div><div>cta</div><div></div></div>		BLOCK: CLEAT, TRUCK SHOE TIE CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013516	
Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>12/27/99</u>		R-2-1296	
Checked <u>[Signature]</u> Manager, Technical Services		Approved <u>[Signature]</u> General Manager, Eng & Tech Services	
		Next : Asy.	

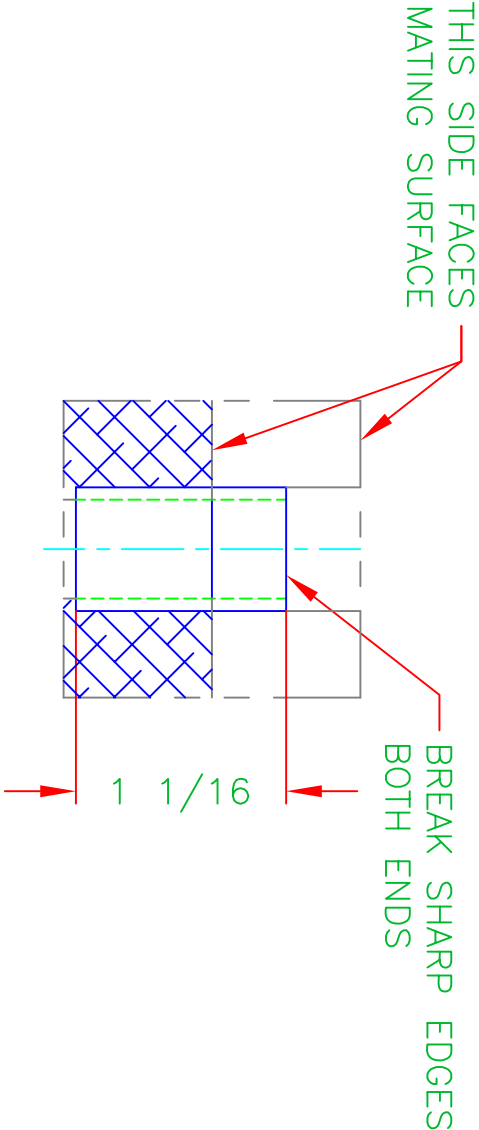


DETAIL 1
SHOWN LESS SPACER

BLOCK: CLEAT, TRUCK, "FF2", "FF3", "A2", "A3"
TRACTION MOTOR CABLES
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013517
(4) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-1256
REPLACES CTA ITEM NO. 4002410

DETAIL	MATERIAL DESCRIPTION	QTY
1	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	1
2	SPACER: STEEL TUBING 9/16 O.D. x .065 WALL	1



DETAIL 2

SHOWN ASSEMBLED WITH SPACER

- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

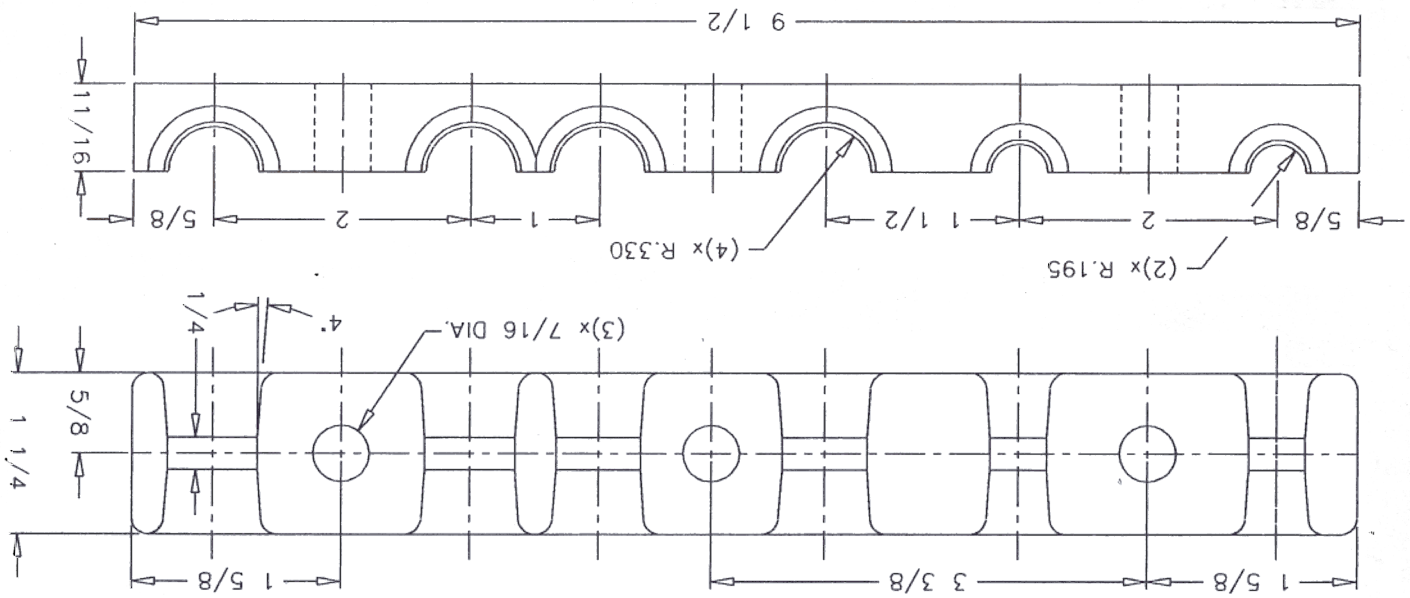
BLOCK: CLEAT, TRUCK, "FF2", "FF3", "A2", "A3"
TRACTION MOTOR CABLES
CARS: 2400, 2600, 3200
C.T.A. ITEM NO. 4013517

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5			
UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES			
TOLERANCES: ANGLES		± 1/2°	
FRACTIONS: ±		1/64	
DECIMALS .XX ±		.005	
DECIMALS .XXX ±		.005	
RIVET & BOLT EDGE MARGIN ±		.05	
BEND RADII .01 ON		.03 & .06	
±.03 ON .09 & GREATER			
SHEET METAL CORNER RADII			
INT	.19	EXT	.25
	.16		.00

Drawn <u>JJ</u>	Scale <u>FULL</u>	Date <u>12/28/99</u>	R-2-1297
Checked <u>[Signature]</u>	Approved <u>[Signature]</u>	Next : <u>Asst.</u>	
Manager, Technical Services			
General Manager, Eng & Tech Services			



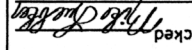

DRAWN ON AUTOCAD FROM R-3-1171
REPLACES CTA ITEM NO. 4242430

BLOCK: CLEAT, TRUCK, "AA", "A", "FF", "F"
AND TRACK TRIP CABLES AT MOUNTING PLATE
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1299)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013518
(4) REQ'D PER CAR



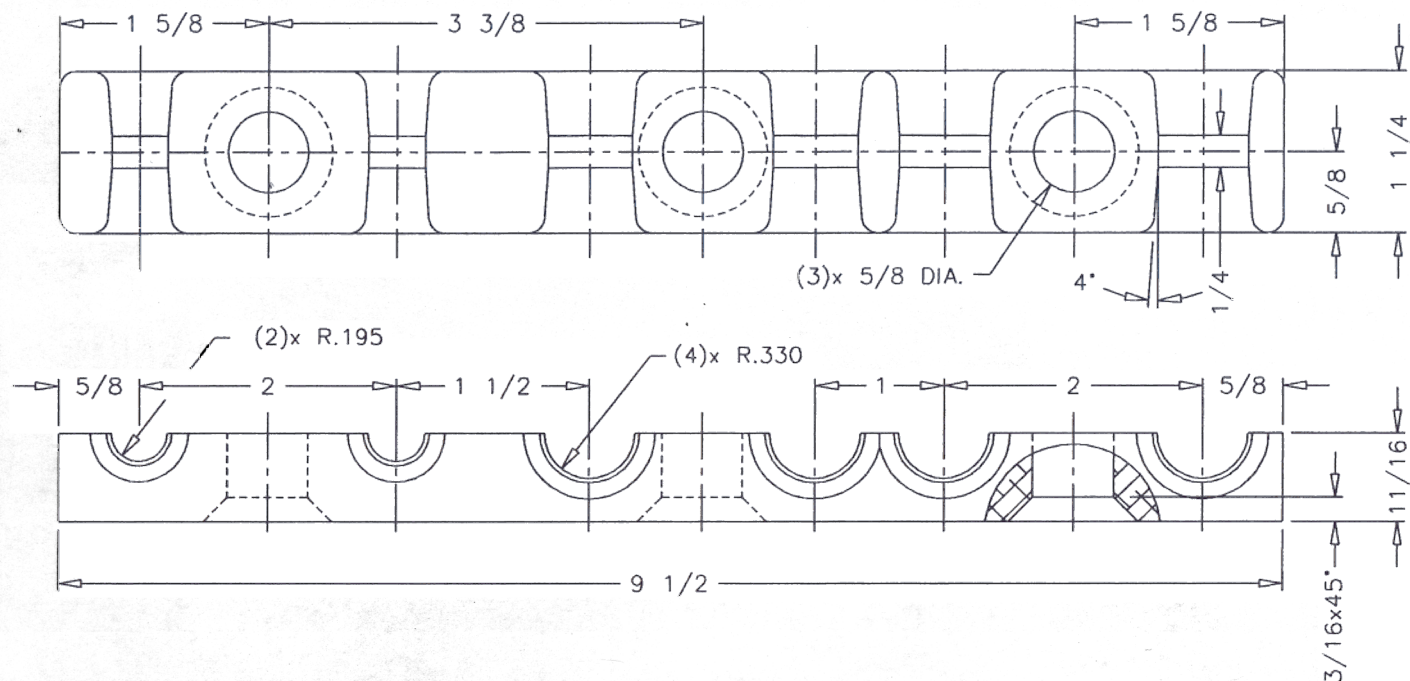
DIMENSIONING & TOLERANCING
PER ANSI (USASI) Y14.5
UNLESS OTHERWISE SPECIFIED
SURFACE FINISH IS IN MICROMETERS
DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES $\pm 1/2^\circ$
FRACTIONS: $\pm 1/64$
DECIMALS: .XX $\pm .005$
RIVET & BOLT EDGE MARGIN: .05
BEND RADIUS: .01 ON .03 & .06
 $\pm .03$ ON .09 & GREATER
SHEET METAL CORNER RADIUS
INT .19 EXT .25
INT .16 EXT .25

- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADIUS ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
	
BLOCK: CLEAT, TRUCK, "AA", "A", "FF", "F" & TRACK TRIP CABLES AT MOUNTING PLATE CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013518	
Drawn: JJ	Scale: FULL
Date: 12/29/99	Approved: 
Checked: 	Manager, Technical Services
Next: 	General Manager, Eng & Tech Services
R-2-1298	

DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	

RAILWORKS
K-27-1
HOLD CORPORATION
IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR
PROCTIM: ENDS OF SHEET ON THIS LINE





DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	

NOTES:

1. EMBOSS ITEM NO. ON BLOCK.
2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

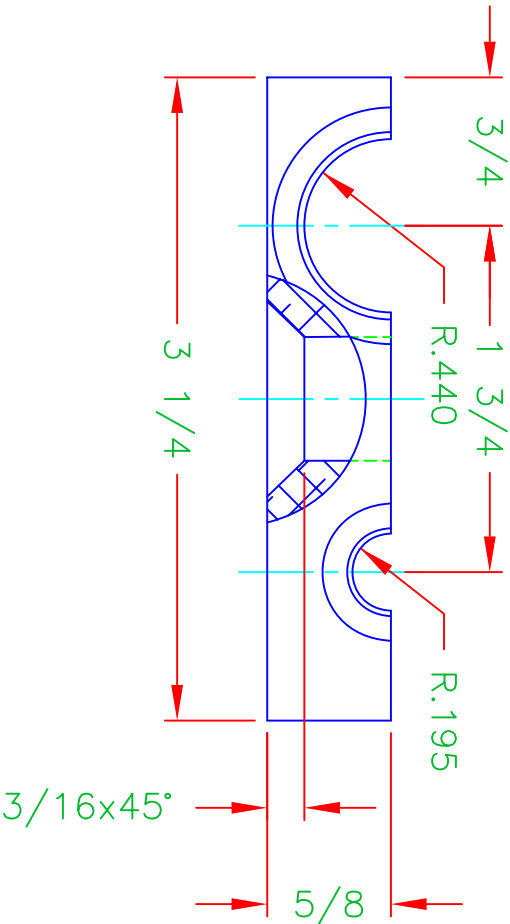
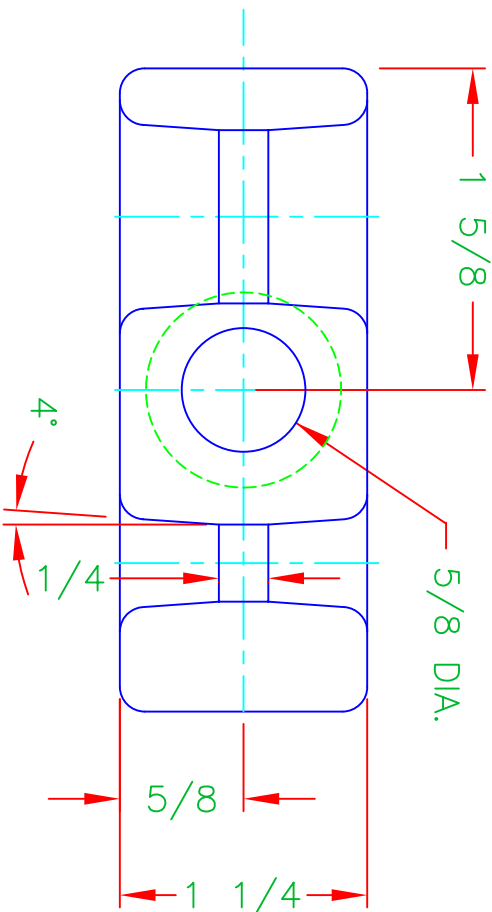
BLOCK: CLEAT, TRUCK, "AA", "A", "FF", "F"
AND TRACK TRIP CABLES AT MOUNTING PLATE
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1298)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013519
(4) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-3-1172
REPLACES CTA ITEM NO. 4242431

DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5		 	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES $\pm 1/2^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS .XX \pm .005 DECIMALS .XXX \pm .005 RIVET & BOLT EDGE MARGIN $\pm .05$ BEND RADII .01 ON .03 & .06 $\pm .03$ ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES BLOCK: CLEAT, TRUCK, "AA", "A", "FF", "F" & TRACK TRIP CABLES AT MOUNTING PLATE CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013519	
Drawn <u>LL</u> Scale <u>FULL</u> Date <u>12/29/99</u>		R-2-1299	
Checked <u>Mike Suetterlin</u> Manager, Technical Services		Approved <u>Mike Suetterlin</u> General Manager, Eng & Tech Services	

R-2-1298
 PLANT HOLD
 ORDER BY NUMBER 075AR
 IRVINE, CALIF.
 92614



DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	



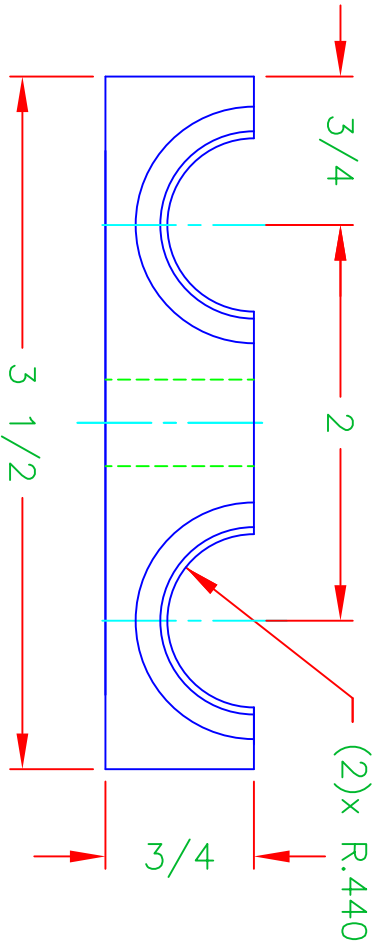
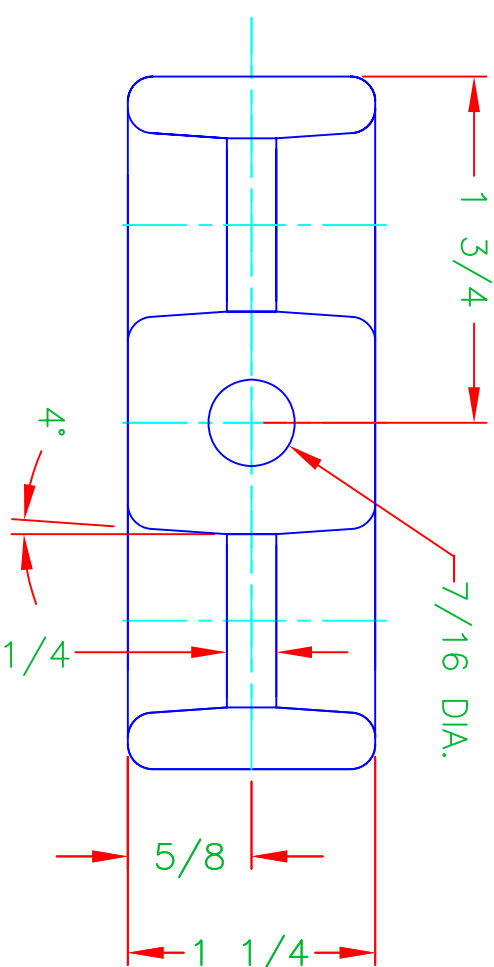
- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK, SHOE TIE
AND TRACK TRIP CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1288)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013520
(12) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-643
ORIGINAL ON M & K E01-121-59
REPLACES CTA ITEM NO. 4003273

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	
 		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
BLOCK: CLEAT, TRUCK, SHOE TIE AND TRACK TRIP CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013520		Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>01/04/00</u>	
Checked <u>[Signature]</u> Manager, Technical Services		Approved <u>[Signature]</u> General Manager, Eng & Tech Services	
		Next : Asy.	
		R-2-1300	

DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	



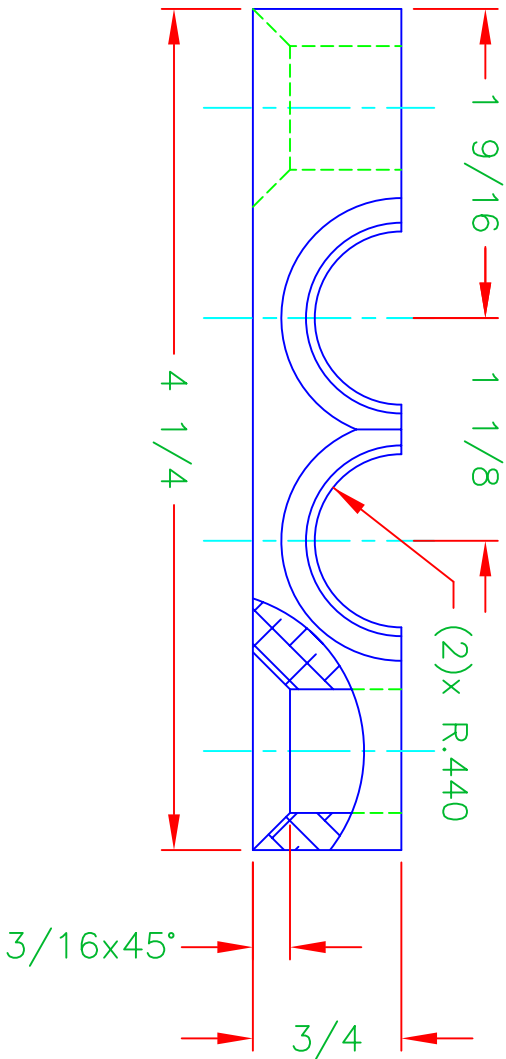
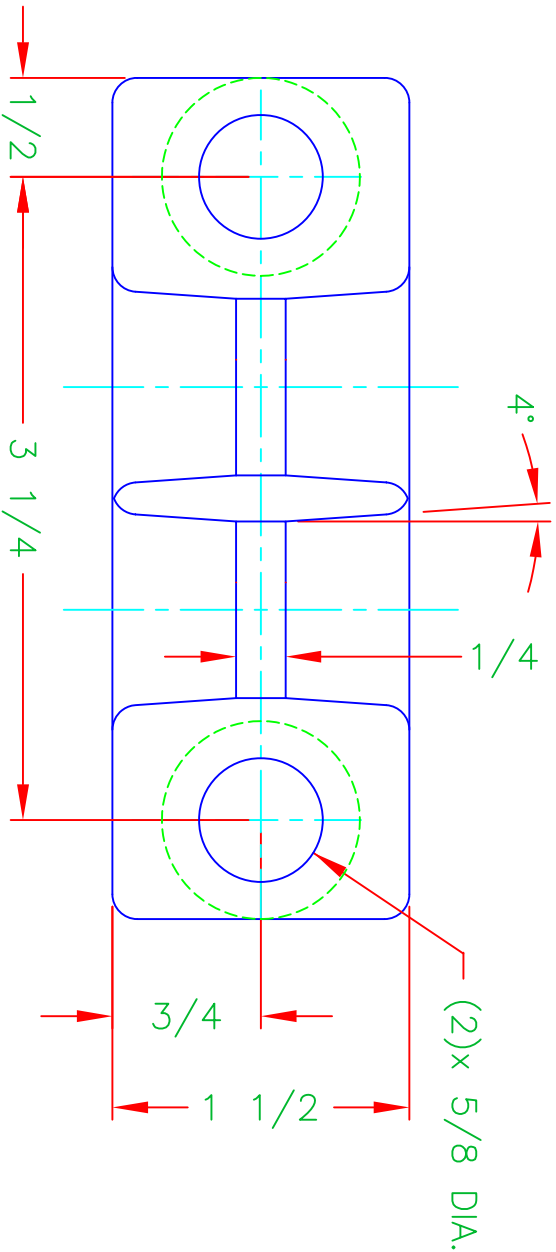
- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK, SHOE TIE CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1295)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013521
(12) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-636
ORIGINAL ON M & K E01-121-34
REPLACES CTA ITEM NO. 4003249

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		
UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± .005 DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00		
<div><div><div>cta</div><div></div></div></div>		
Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>01/10/00</u>	Checked <u>[Signature]</u> Approved <u>[Signature]</u>	Next : R-2-1301
Manager, Technical Services General Manager, Eng & Tech Services		


DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000	
	M3FE408A19B37C12C20EA14F19 COLOR RED	



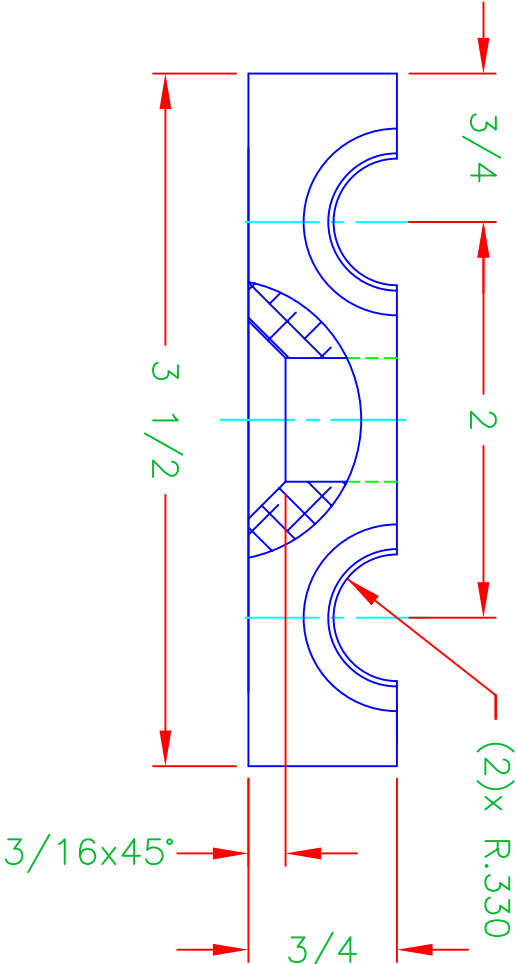
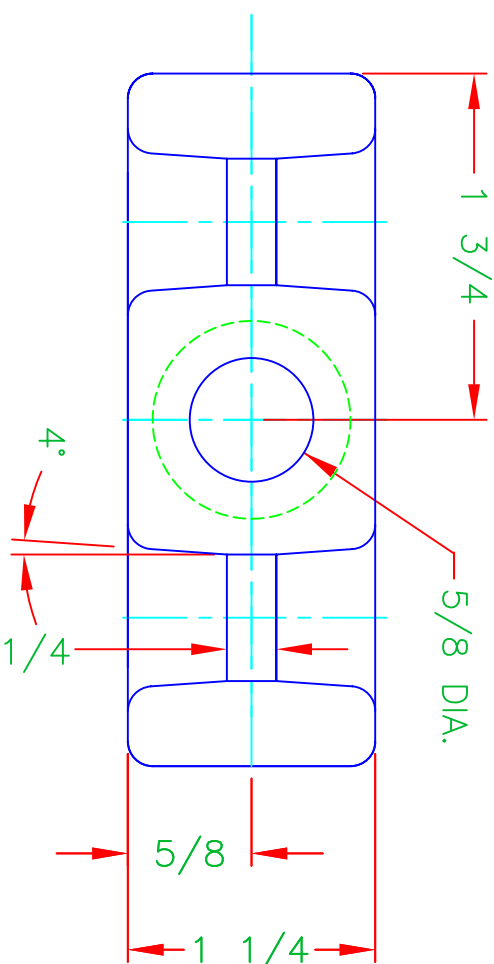
BLOCK: CLEAT, TRUCK SHOE TIE CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1296)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013522
(8) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-637
ORIGINAL ON M & K E01-121-49
REPLACES CTA ITEM NO. 4003254

- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00	
<div><div>cta</div><div></div></div>		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
BLOCK: CLEAT, TRUCK SHOE TIE CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013522		Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>01/10/00</u>	
Checked <u>[Signature]</u> Manager, Technical Services		Approved <u>[Signature]</u> General Manager, Eng & Tech Services	
		Next : Asy.	
		R-2-1302	


DETAIL	MATERIAL DESCRIPTION	QTY
	BLOCK: SILICONE RUBBER COMPOUND PER ASTM D2000 M3FE408A19B37C12C20EA14F19 COLOR RED	

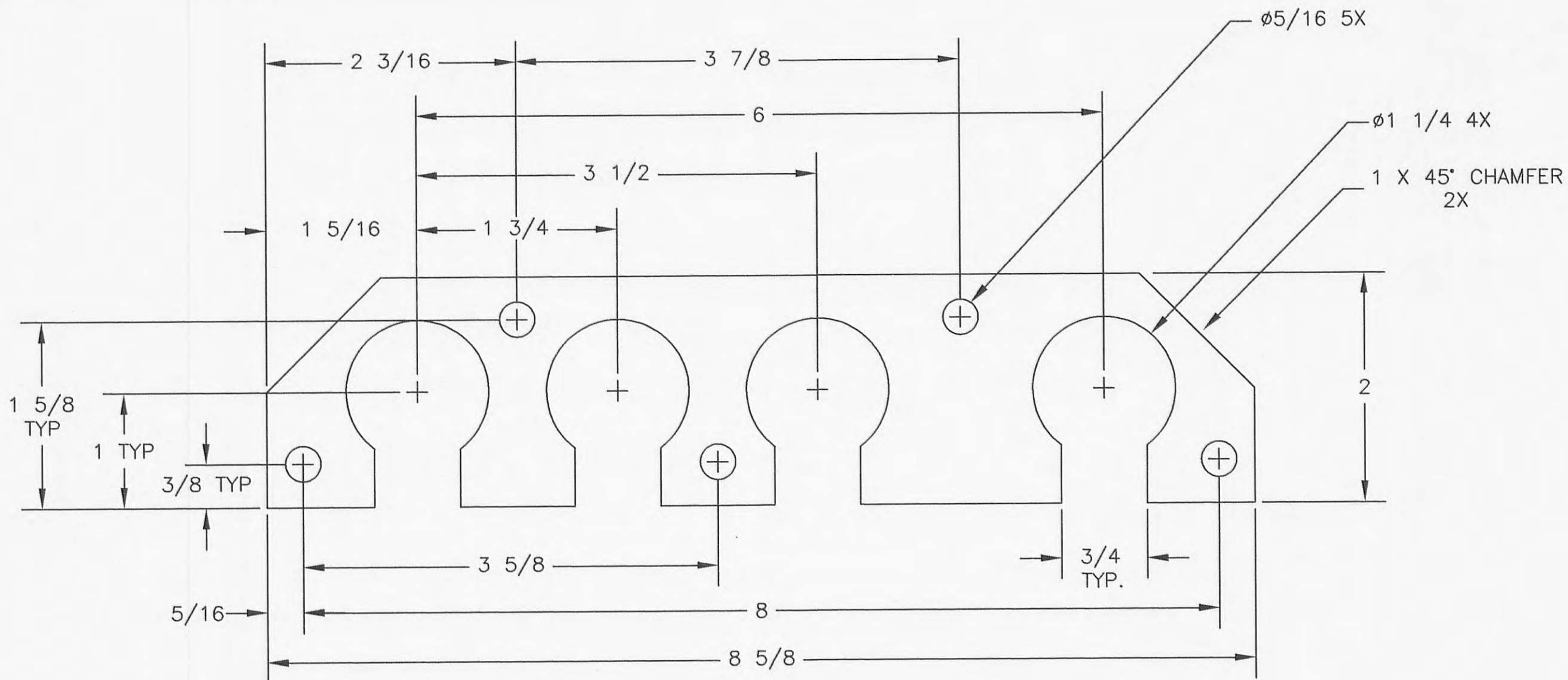


- NOTES:
1. EMBOSS ITEM NO. ON BLOCK.
 2. TOLERANCE: TO MEET RMA CLASS 3 TYPE III
 3. ALL RADII ARE 1/8 UNLESS OTHERWISE SHOWN
 4. REFER TO APPLICABLE CTA SPECIFICATION FOR ADDITIONAL INFORMATION

BLOCK: CLEAT, TRUCK, "AA" AND "F" CABLES
(USE WITH ITEM SHOWN ON CTA DWG. R-2-1304)
CAR SERIES: 2400, 2600, 3200
C.T.A. ITEM NO. 4013523
(12) REQ'D PER CAR

DRAWN ON AUTOCAD FROM R-2-636
ORIGINAL ON M & K E01-121-34
REPLACES CTA ITEM NO. 4003249

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		
UNLESS OTHERWISE SPECIFIED SURFACE FINISH IS IN MICROMETERS DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES ± 1/2° FRACTIONS: ± 1/64 DECIMALS .XX ± DECIMALS .XXX ± .005 RIVET & BOLT EDGE MARGIN ±.05 BEND RADII .01 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00		
<div><div><div>cta</div><div></div></div><div>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</div></div>		
Drawn <u>JJ</u> Scale <u>FULL</u> Date <u>12/27/99</u>	BLOCK: CLEAT, TRUCK, "AA" AND "F" CABLES CARS: 2400, 2600, 3200 C.T.A. ITEM NO. 4013523	
Checked <u>[Signature]</u>	Approved <u>[Signature]</u>	Next : R-2-1303
Manager, Technical Services		General Manager, Eng & Tech Services



MATERIAL
STEEL: CARBON, 3/16 PLATE, COR-TEN

NOTE:

1. FINISHED PIECE SHALL BE FREE OF TOOL MARKS, BURRS, DRAG EDGES, SHARP CORNERS AND DISTORTION, INCLUDING AROUND HOLES.
2. FINISH: ZINC ELECTROPLATE AND NICKEL UNDERPLATE PER ASTM B633, CLASS A. PREPARE PIECE FOR PLATING PER ASTM B322.

DIMENSIONING & TOLERANCING
PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH
DIMENSIONS ARE IN INCHES
TOLERANCES: ANGLES $\pm 1^\circ$
FRACTIONS: $\pm 1/32$
DECIMALS .XX \pm
DECIMALS .XXX \pm
RIVET & BOLT EDGE MARGIN $\pm .05$
BEND RADII .01 ON .03 & .06
 $\pm .03$ ON .09 & GREATER
SHEET METAL CORNER RADII
INT .19 EXT .25
.16 .00



**RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES**

PLATE: CABLE RETAINING, FOR TRACTION MOTOR
COUPLER PLUG MP10, SUPER TRUCK
CAR SERIES: 2400, 2600R & 3200
C.T.A. ITEM NO. 5153700

Drawn RE Scale FULL Date 3/2/00

Checked Mike Suebber
Manager, Technical Services

Approved General Manager
General Manager, Eng & Tech Services

R-2-1682

Next
Assy.

DRAWING NUMBER
R-2-1682
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER
R-2-1682
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 075AR

DRAWING NUMBER

DRAWING NUMBER

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA

REORDER BY NUMBER 075AR

CONTINUE FIRST OF SHEET ON THIS LINE

PLAN HOLD CORPORATION • IRVINE, CALIFORNIA

REORDER BY NUMBER 075AR

POSITION FIRST OF SHEET ON THIS LINE

NOTES:

1. REMOVE ALL BURRS AND SHARP EDGES.

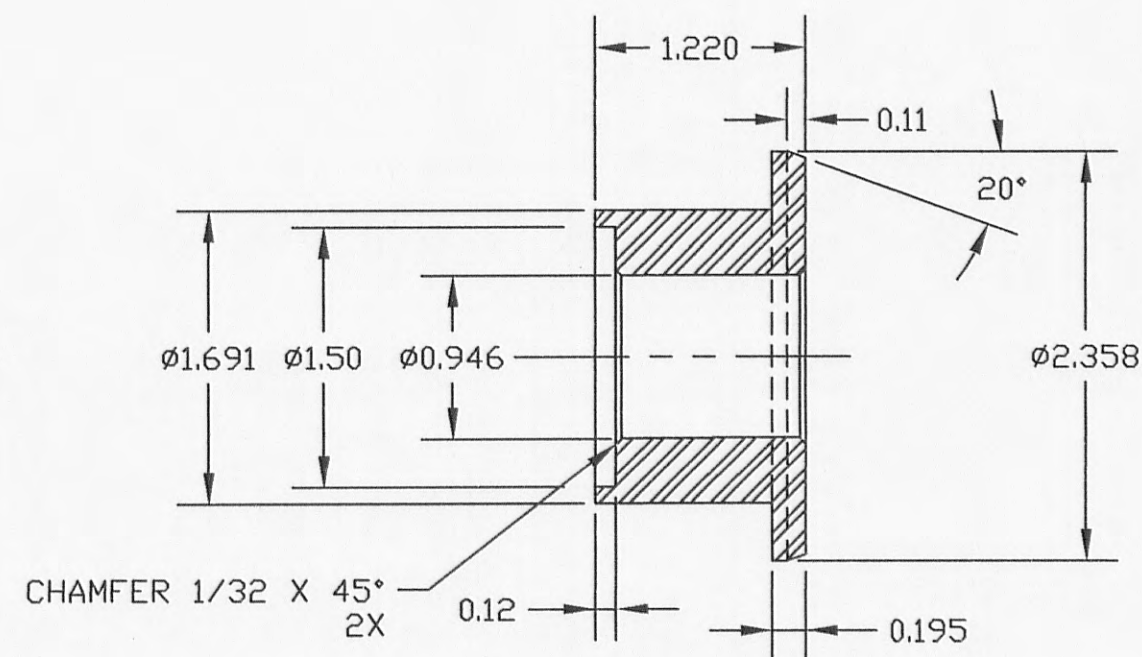
MATERIAL:

STEEL, CARBON, COLD FINISHED, ROUND,
 AISI 1018 (REF: UNS G10180)
 2.375 ROUND STOCK

SURFACE TREATMENT:

ZINC PLATE, ASTM B633:
 TYPE II

Fe/Zn 8



SECTION A-A

DIMENSIONING & TOLERANCING
 PER ANSI (USASI) Y14.5M-1982

UNLESS OTHERWISE SPECIFIED
 SURFACE FINISH
 DIMENSIONS ARE IN INCHES
 TOLERANCES: ANGLES ± 1
 FRACTIONS: $\pm 1/32$
 DECIMALS .XX ± 0.03
 DECIMALS .XXX ± 0.010
 RIVET & BOLT EDGE MARGIN ± 0.05
 BEND RADII .01 ON .03 & .06
 ± 0.03 ON .09 & GREATER
 SHEET METAL CORNER RADII
 INT .19 EXT .25
 .16 .00

cta



RAIL OPERATIONS
 ENGINEERING & TECHNICAL SERVICES

BUSHING: FLANGE COMPRESSION SPRING
 SUSPENSION UNIT, FOR TRACK BRAKE
 CAR SERIES 2400, 2600, 3200
 C.T.A. ITEM NO. 4183063

Drawn TJL Scale NONE Date 6/15/00

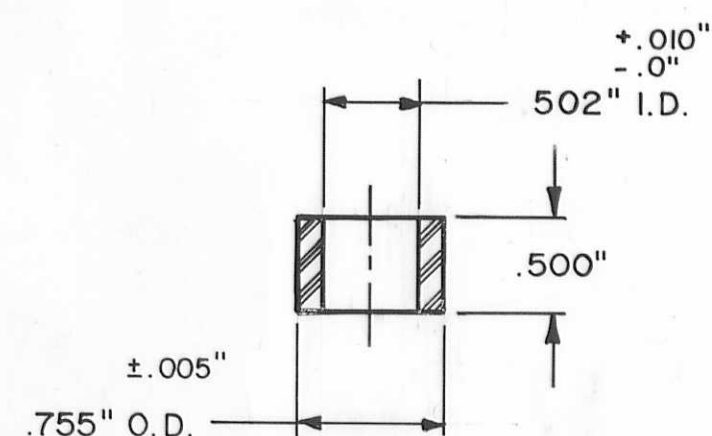
Checked *[Signature]*
 Manager, Technical Services

Approved *[Signature]*
 General Manager, Eng & Tech Services

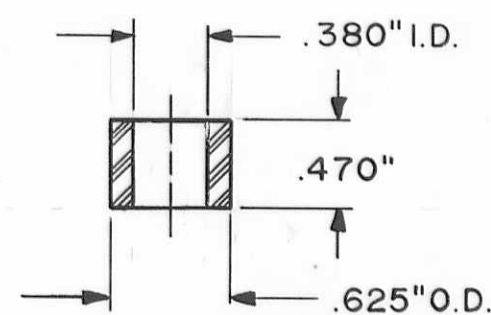
R-2-680

Next
 Assy.

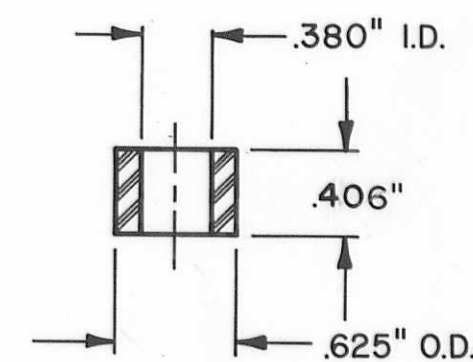
DRAWN FROM SAMPLE PART. KNORR P/N G05052/1



ITEM A
NYLON BUSHING, USE AT RELEASE ROD
TO IDLER ARM CONNECTION
C.T.A. LOT NO. 4183010

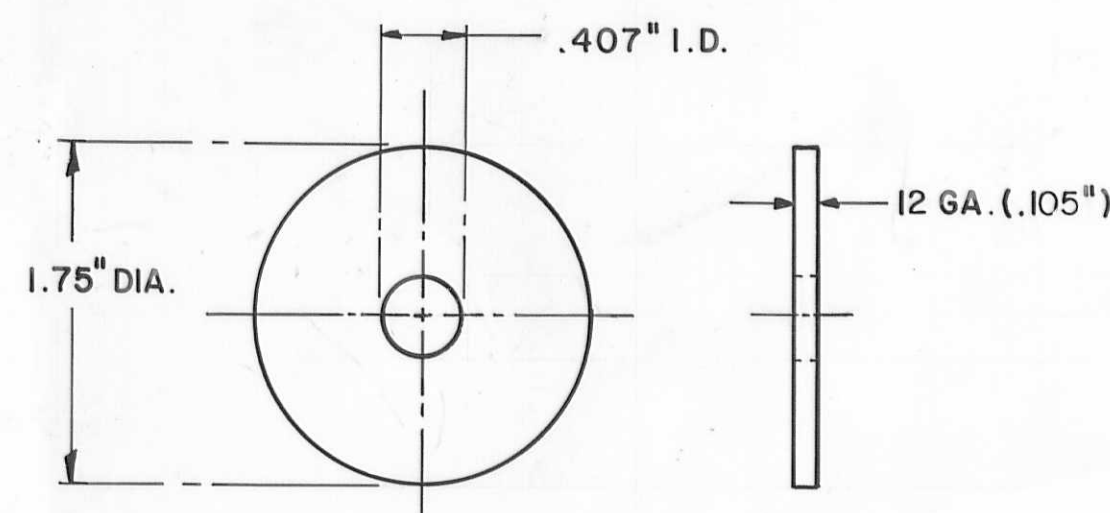


ITEM B
NYLON BUSHING, USED AT LINK
ROD ASSY. TO CALIPER CONNECTION
C.T.A. LOT NO. 4183017



ITEM D
NYLON BUSHING, USED AT LINK
ROD ASSY. TO IDLER ARM CONNECTION
C.T.A. LOT NO. 4162641

- NOTES: 1 NYLON 101 BAR, POLYMER CORP., READING
PENNA. OR EQUIVALANT
2 CADMIUM PLATE PER ASTM B-696
LATEST REVISION FOR MECHANICAL DEPOSIT
ALTERNATE:
ZINC PLATE PER ASTM B-695 LATEST
REVISION FOR MECHANICAL DEPOSIT



ITEM C
WASHER, STEEL, USED AT RELEASE
ROD TO IDLER ARM CONNECTION
C.T.A. LOT NO. 4183008

A99-61529	4	D	BUSHING	.625" DIA.	1	
335-11143-9	8	C	WASHER	12 GA. (.105") x 1.75" DIA. ASTM A-606 STL.	2	
335-11143-12	4	B	BUSHING	.625" DIA.	1	
335-11143-10	4	A	BUSHING	.875" DIA.	1	
BOEING & BUDD PART NO.	QTY./ TRUCK	IDENTIFYING NUMBER	DESCRIPTION	MATERIAL AND SPECIFICATION	FINISH	
PARTS LIST						

TOLERANCES UNLESS OTHERWISE SPECIFIED:
DECIMALS .XX ± .020"
.XXX ± .010"

REV.5: ADDED QTY. PER TRUCK AND WHERE USED,
ITEM "A" QTY. WAS 8, ITEM "B" WAS .406" LG.,
ADDED ITEM "D", M.D., 4-10-92
REV.4: ITEM "B" WAS .470" LONG, M.D., 10-16-91
ADDED 2600 & 3200 SERIES
REV.3: ITEM "A" O.D. WAS .750", I.D. WAS .500"
UPDATED FINISH NOTE 2, J.J., 8-16-91

REV.2: ITEM "C" WAS 10 GA. ASTM A-325 STEEL,
M.D., 12-1-88
REV.1: ITEM "C" WAS AISI 1008 STL., M.D., 5-1-85

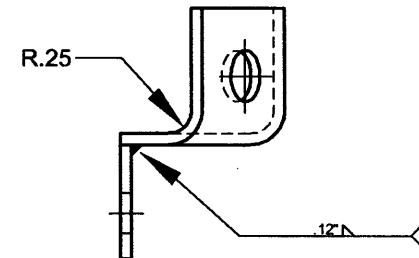
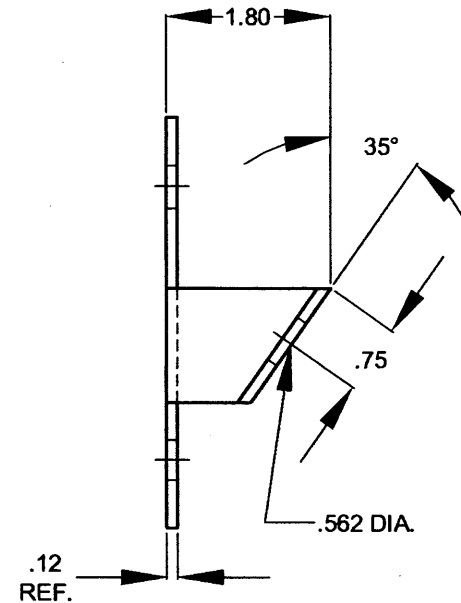
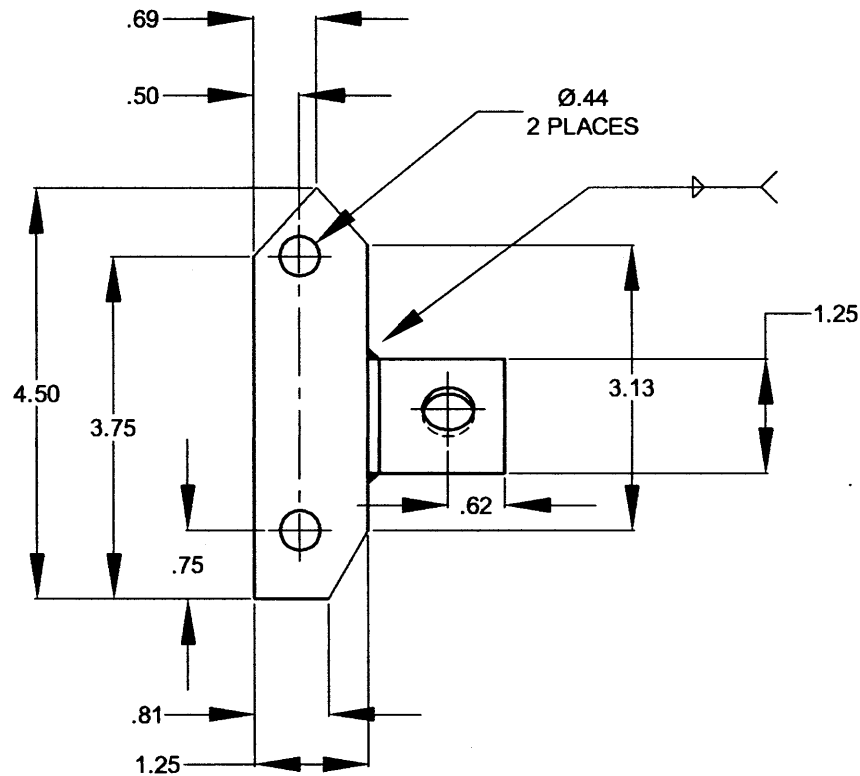
cta Engineering & Maintenance Division
Equipment Engineering and
Maintenance Department
HARDWARE, LEVER ASSEMBLY, IDLER BRAKE
MANUAL CONTROL DISC
CAR SERIES: 2400, 2600 & 3200

Drawn NAG(EAS) Scale FULL Date 12-4-84
Checked *[Signature]* Approved *[Signature]*
DIRECTOR, EQUIPMENT ENG. MANAGER, EQUIP. ENG. & MAINT.

R-3-1135

DRAWING NUMBER
R-3-1135
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07549

DRAWING NUMBER
R-3-1135
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07549





BRACKET: MOUNTING HYDRAULIC SYSTEM INSTALLATION FOR
WEGMANN TRUCK
ONE REQUIRED PER TRUCK
CAR SERIES: 2400, 2600, & 3200
CTA LOT NO. 4003192

MATERIAL: .12" THK. (11 GA.) AISI 1010/1020 LOW CARBON STEEL.

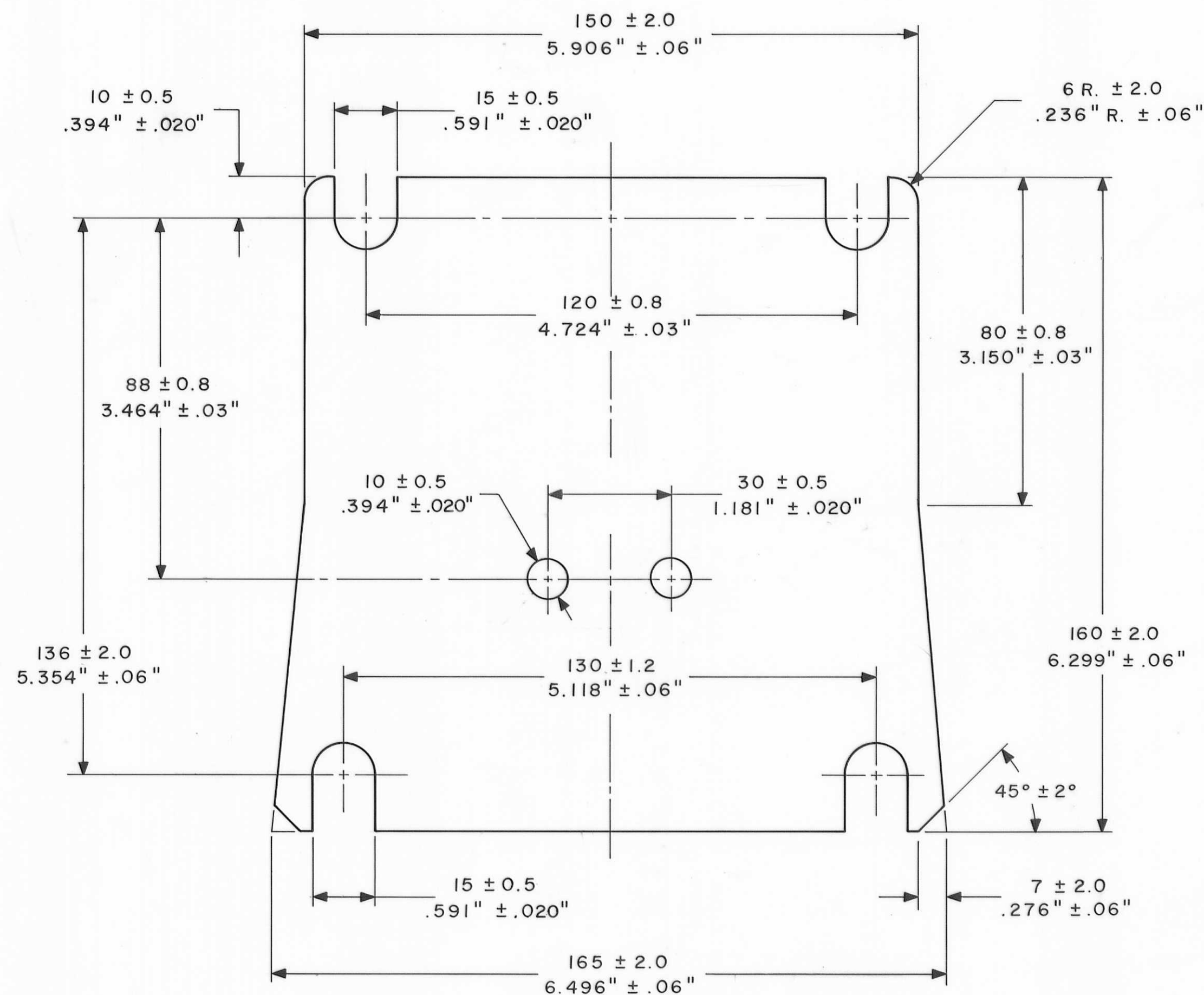
NOTE:

1. PUNCHED SURFACES TO BE FLAT AND FREE OF ANY BURRS OR SHARP EDGES INCLUDING AROUND HOLES.
2. SOLVENT CLEAN OF ANY FOREIGN MATTER AND REMOVE ANY WELD SPLATTER, PAINT WITH ONE COAT OF RUSTOLEUM RED PRIMER X-60, TWO COAT OF CLEAR LACQUER.
3. TOLERANCES UNLESS OTHERWISE SPECIFIED:
DECIMAL: .XXX ± .3"
XXX ± .010"
ANGULAR ± 2°
4. REFERENCE BV P.L. 3-4-51

REV. 2: DIMENSIONS: 4.5 WAS 4.37, 3.75 WAS 3.62, AND .81 WAS .75. PT 03/31/08
REV. 1: REDRAWN ON AUTOCAD. REVISED PART FOR BETTER FIT AND FUNCTION. PT 12/14/07


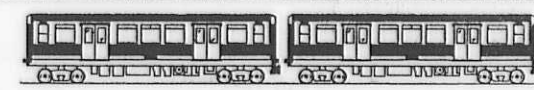
DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		 	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
TOLERANCES: ANGLES: ± 5° FRACTIONS: ± 1/64 DECIMALS: .XX ± .01 DECIMALS: .XXX ± .005		BRACKET: MOUNTING HYDRAULIC SYSTEM INSTALLATION FOR WEGMANN TRUCK	
Rivet & Bolt Margin: ± .05 Bend Radii: ± .03 ON .03 & .06 ± .03 ON .09 & GREATER SHEET METAL CORNER RADIUS: .15		CAR SERIES: 2400, 2600, 3200	
Drawn: <u>NAG</u> Scale: <u>NONE</u> Date: <u>12/14/2007</u>		R-3-1160	
Checked: <u>M.D.</u>		Approved: <u>[Signature]</u>	
SHEET METAL CORNER RADIUS: .15		S:\Engineer\Drawings\Ctairail\31160	

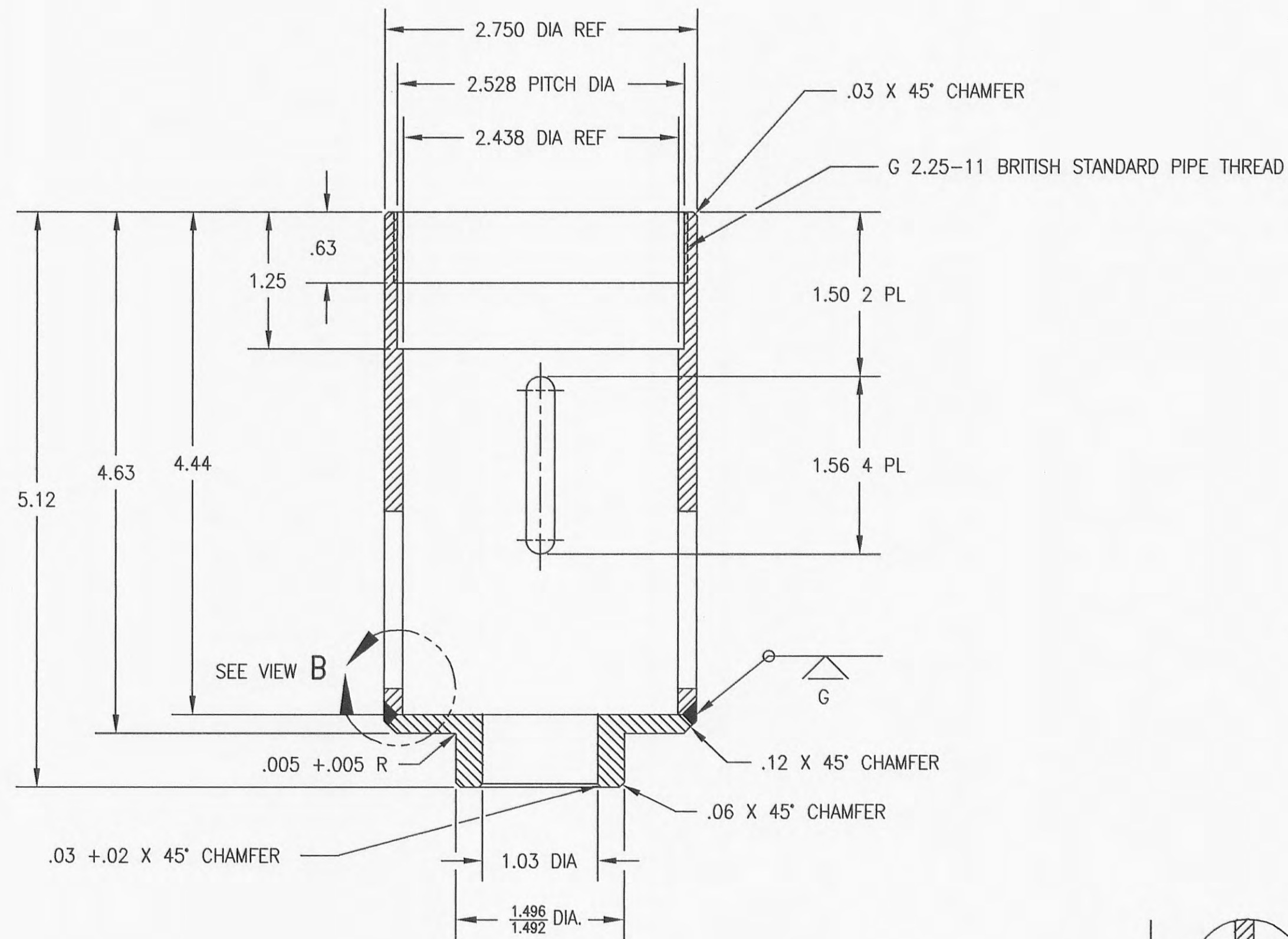
ITEM	LOT NO.	THICKNESS
A	4003123	3 mm / 11 GA. (.120")
B	4003124	4 mm / 9 GA. (.149")



SHIMS: VARIOUS, FOR
TRUCK TRANSVERSE SUSPENSION
QUANTITY: AS REQUIRED
CAR SERIES: 2400, 2600 & 3200
MATERIAL: AISI 1010/1020 LOW
CARBON STEEL SHEET

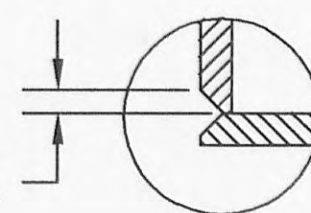
- NOTES:
1. CLEAN FLAME CUT (DESCALED AND DEBURRED) IS PERMISSIBLE.
 2. SHIMS TO BE FLAT AND FREE OF DISTORTION, BURRS AND SHARP DRAG EDGES.
 3. SOLVENT CLEAN OF ALL FOREIGN MATTER AND PAINT WITH ONE COAT OF RUSTOLEUM X60 RED PRIMER (20 μ THICKNESS) AND TWO COATS OF RUSTOLEUM R470 ALUMINUM PAINT (30 μ THICKNESS EACH)
 4. ALL DIMENSIONS ARE SHOWN $\frac{\text{MM}}{\text{INCHES}}$.

DIMENSIONING & TOLERANCING PER ANSI (USASI) Y14.5		 	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH 800 DIMENSIONS ARE IN INCHES TOLERANCES: ANGLES \pm FRACTIONS: \pm DECIMALS .XX \pm DECIMALS .XXX \pm RIVET & BOLT EDGE MARGIN \pm .05 BEND RADII .01 ON .03 & .06 \pm .03 ON .09 & GREATER SHEET METAL CORNER RADII INT .19 EXT .25 .16 .00		RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES SHIMS: VARIOUS, FOR TRUCK TRANSVERSE SUSPENSION CAR SERIES: 2400, 2600 & 3200	
Drawn MES Checked <i>[Signature]</i> 11-3-92 11-4-92 Manager, Technical Services	Scale FULL Date 10-8-92 Approved <i>[Signature]</i> 11-4-92 General Manager, Eng & Tech Services	R-3-1164 Next Assy. <i>[Signature]</i>	



SECTION A-A

.12 X 45° CHAMFER 2 PL
PRIOR TO WELDING

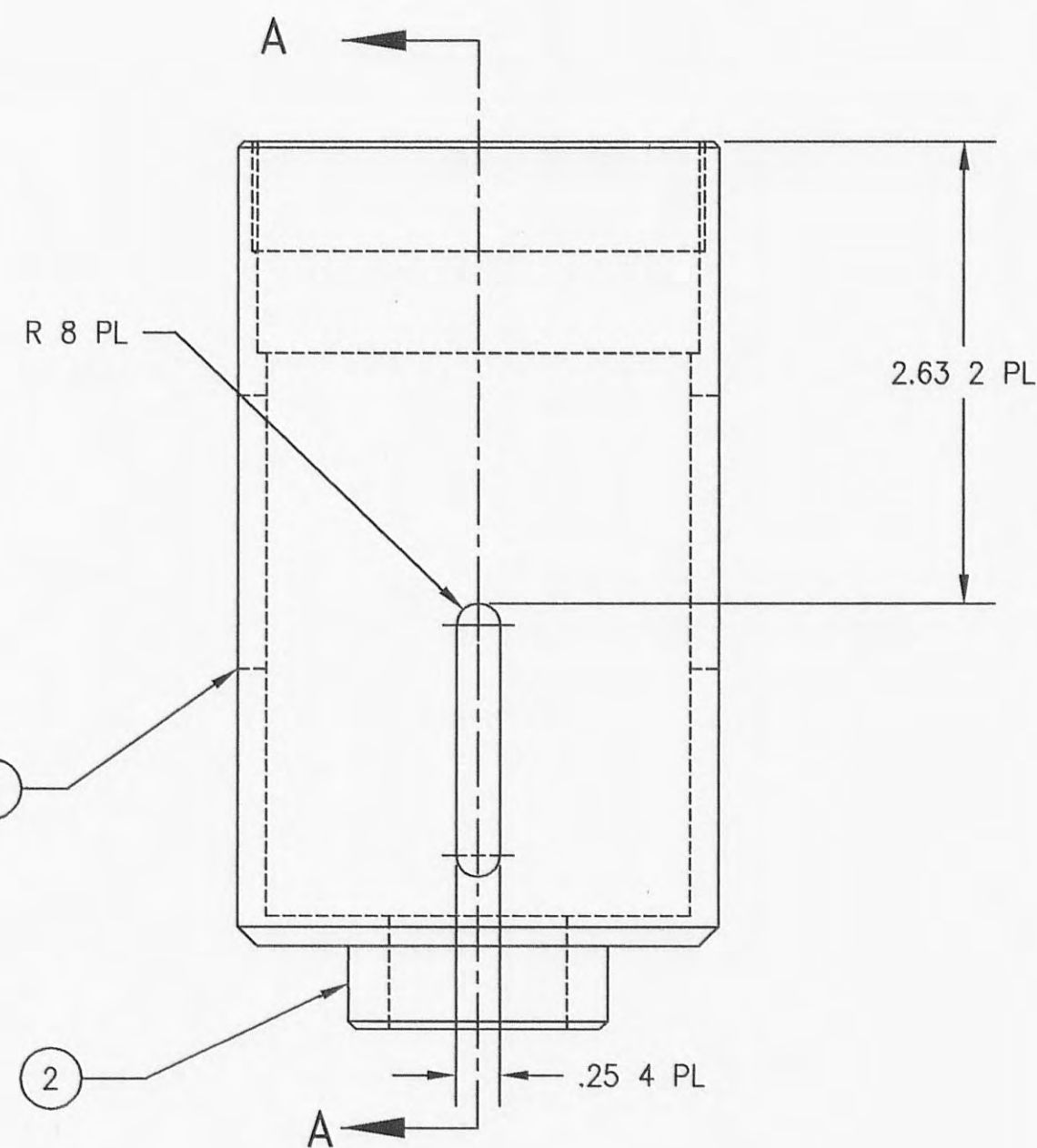


VIEW B

HOUSING: SPRING, COMPRESSION; USED ON
SUSPENSION UNIT FOR MAGNETIC TRACK BRAKE.
4 REQUIRED PER TRUCK ASSEMBLY
CTA LOT NO. 4183062.

MATERIAL:

- ① MECHANICAL TUBING, CARBON, SEAMLESS, ASTM A519:
1026. 2.750 O.D. X 2.438 I.D.
- ② STEEL, CARBON, ASTM A576:
1018 (REF: UNS 10180)
2.750 DIA.



NOTES:

1. REMOVE ALL BURRS AND SHARP EDGES.
2. DIMENSIONS SHOWN ARE AFTER WELDING,
MACHINING AND PLATING.
3. FINISH: AFTER MACHINING, ZINC PLATE PER
ASTM B633, SC 3, TYPE II.

DRAWN FROM SAMPLE
KNORR PART NO. 3G05048

REV.1: REVISED TOLERANCE ON A-A SECTION: WAS 1.4969/1.4944,
NOW 1.496/1.492. P.T. 2/24/03.

DIMENSIONING & TOLERANCING
PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH DIMENSIONS
ARE IN INCHES

TOLERANCES: ANGLES $\pm 2^\circ$
FRACTIONS: \pm
DECIMALS: .XX $\pm .03$
.XXX $\pm .010$

RIVET & BOLT MARGIN: $\pm .05$
BEND RADI: $\pm .02$ ON .03 & .06
 $\pm .03$ ON .09 & GREATER

SHEET METAL CORNER RADII:
INT .19 EXT .25
.16 .00



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

HOUSING: SPRING COMPRESSION, USED ON
SUSPENSION UNIT FOR MAGNETIC TRACK BRAKE
CAR SERIES: 2400, 2600 & 3200

Drawn BRI Inc. Scale FULL Date Oct. 18, 1994

Checked *[Signature]*
Manager, Technical Services

Approved *[Signature]*
General Manager, Engrg & Technical Services

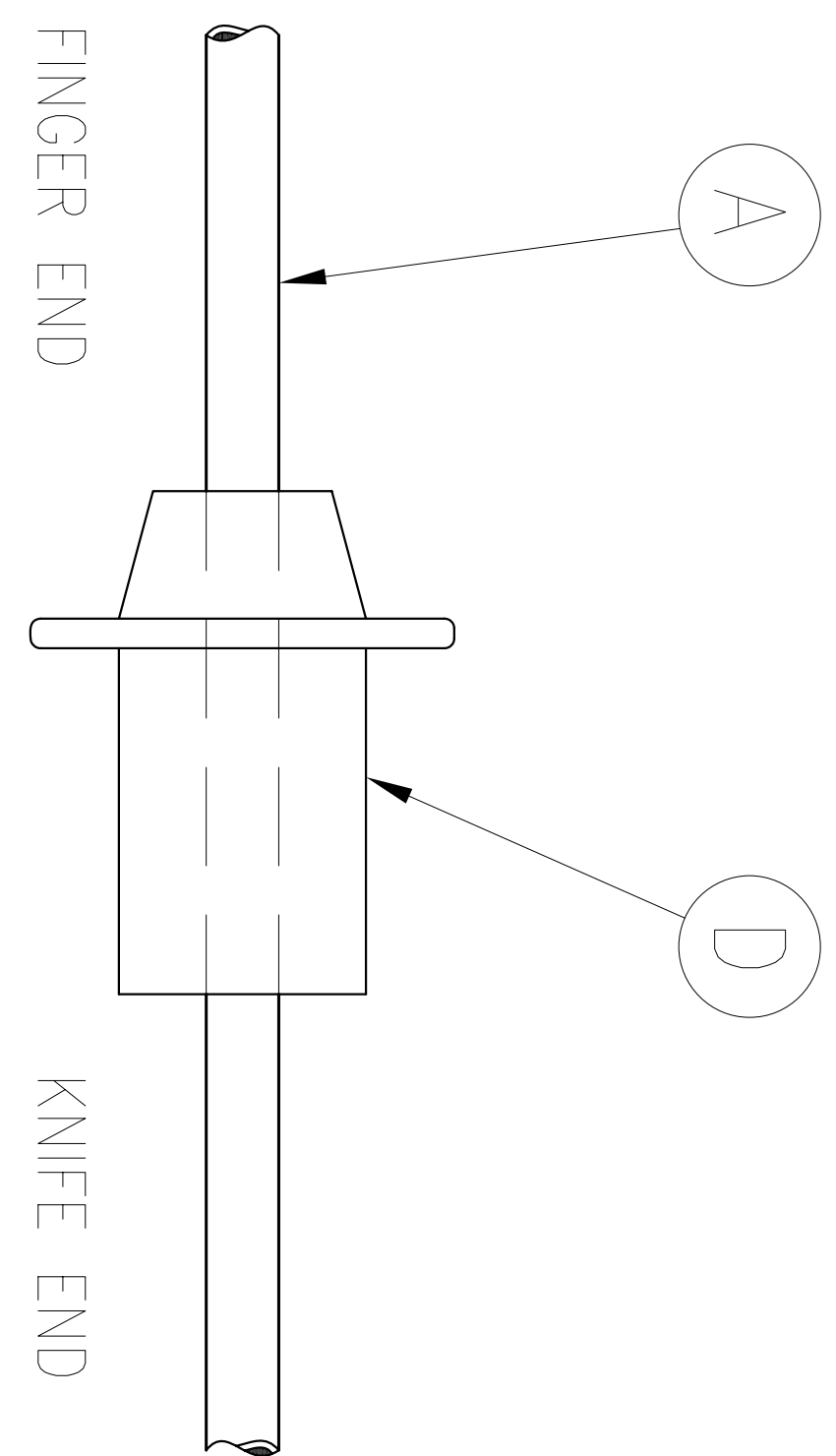
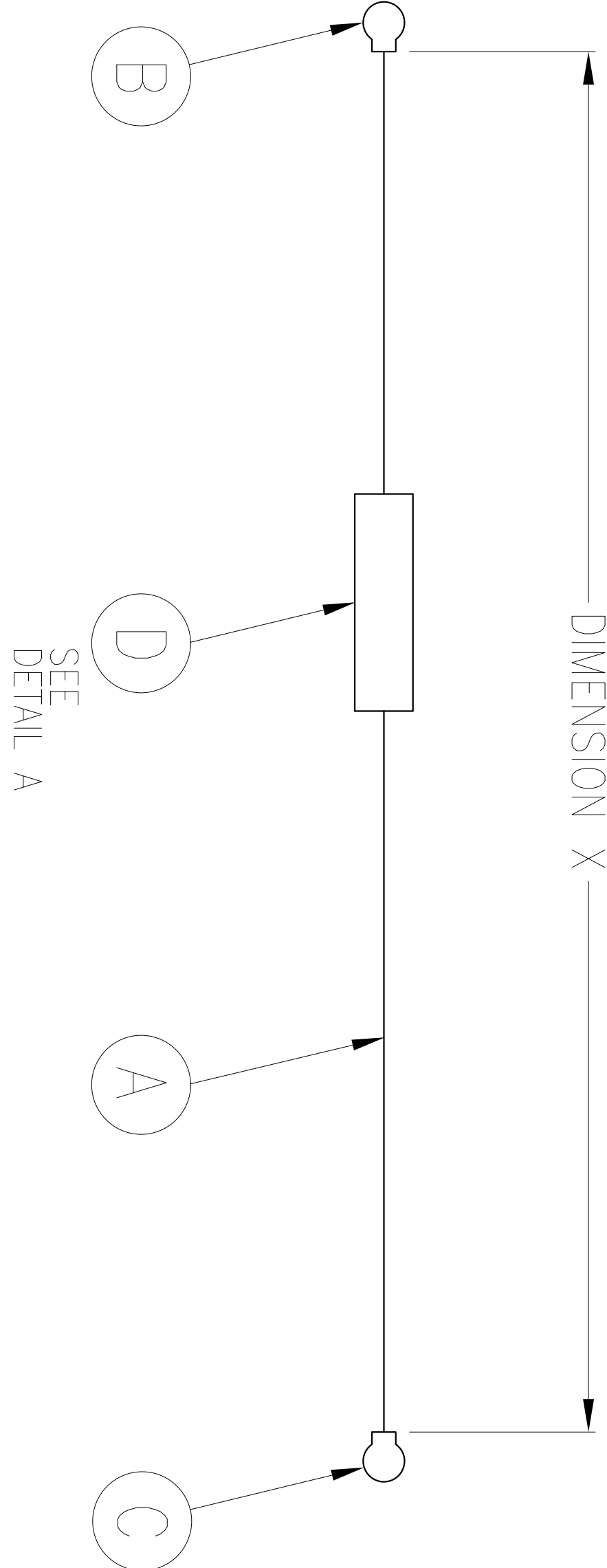
R-3-1167

NEXT: KNORR P.L.
ASSY.: 6-2, PG.7

DRAWING NUMBER
R-3-1167
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548
POSITION EDGE OF PRINT ON THIS LINE

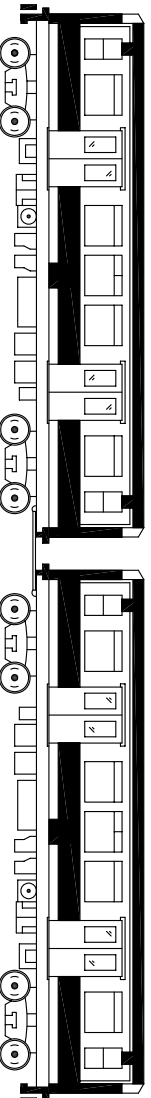

DRAWING NUMBER
R-3-1167
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548
POSITION EDGE OF PRINT ON THIS LINE

CABLE DESCRIPTION	ITEM NO.	CAR SERIES	DIM. X	ITEM A	ITEM NO.	ITEM B	ITEM C	ITEM NO.	ITEM D	LENGTH	ITEM NO.
S1 CABLE, BEAM TO CARBODY	4002653	26	95"	CABLE, NEOPRENE 4/0	3103372	5/8" TERMINAL	KNIFE CONNECTOR	1608003	N/A	N/A	N/A
S1 CABLE, BEAM TO CARBODY	4002654	24	100"	CABLE, NEOPRENE 4/0	3103372	5/8" TERMINAL	KNIFE CONNECTOR	1608003	N/A	N/A	N/A
S1 CABLE, BEAM TO CARBODY	3103202	32	103"	CABLE, NEOPRENE 4/0	3103372	5/8" TERMINAL	KNIFE CONNECTOR	1608003	N/A	N/A	N/A
S1 CABLE, BEAM TO BEAM	4002615	ALL	150"	CABLE, NEOPRENE 4/0	3103372	5/8" FLAG TERMINAL	5/8" TERMINAL	1608039	N/A	N/A	N/A
"H" FRAME TO TRUCK FRAME CABLE POSITION 1 OR 4	4242754	ALL	27"	CABLE, NEOPRENE 1/0	3104471	3/8" TERMINAL	3/8" TERMINAL	1608263	N/A	N/A	N/A
"H" FRAME TO TRUCK FRAME CABLE POSITION 1 OR 4	4242755	ALL	54"	CABLE, NEOPRENE 1/0	3104471	3/8" TERMINAL	3/8" TERMINAL	1608263	N/A	N/A	N/A
A1-4 & F1-4 CLAMSHELL CABLE	5142702	ALL	67"	CABLE, NEOPRENE 2/0	3104468	CONTACT FINGER	KNIFE CONNECTOR	1608022	BUSHING (see Detail A)	N/A	4240117
FF JUMPER CABLE	4002660	ALL	96.75"	CABLE, NEOPRENE 2/0	3104468	KNIFE CONNECTOR	KNIFE CONNECTOR	1608022	N/A	N/A	N/A
TRUCK FRAME TO BOLSTER CABLE	5142708	ALL	26"	CABLE, NEOPRENE 2/0	3104468	3/8" TERMINAL	3/8" TERMINAL	1608259	N/A	N/A	N/A
BOLSTER TO CAR BODY CABLE	5142709	26	32"	CABLE, NEOPRENE 2/0	3104468	3/8" TERMINAL	3/8" TERMINAL	1608259	HOSE, 3/4" ID	12"	1928013
TRUCK FRAME TO BRUSH BOX CABLE	4242745	ALL	52"	CABLE, NEOPRENE 2/0	3104468	3/8" TERMINAL	3/8" HD TERMINAL	1608099	N/A	N/A	N/A
BOLSTER TO CAR BODY CABLE (CLAMSHELL SIDE)	3102315	26	55"	CABLE, NEOPRENE 2/0	3104468	3/8" FLAG TERMINAL	3/8" TERMINAL	1608259	HOSE, 3/4" ID	20"	1928013
BRUSH BOX TO MOTOR CABLE	3102220	ALL	27.5"	CABLE, NEOPRENE 2/0	3104468	3/8" HD TERMINAL	3/8" HD TERMINAL	1608099	N/A	N/A	N/A
BOLSTER TO CAR BODY CABLE	5143028	24, 32	36"	CABLE, NEOPRENE 2/0	3104468	3/8" TERMINAL	3/8" TERMINAL	1608259	HOSE, 3/4" ID	12"	1928013
BOLSTER TO CAR BODY (CLAMSHELL SIDE)	5143029	24, 32	41"	CABLE, NEOPRENE 2/0	3104468	3/8" FLAG TERMINAL	3/8" TERMINAL	1608259	HOSE, 3/4" ID	16"	1928013



DETAIL A: BUSHING ORIENTATION

- REV. 9: REMOVED DISCONTINUED ITEM 5143027, REVISED 5142708 TO ALL AND CORRECT LENGTH FOR 5143029 WAS 39" NOW 41" CA 5-8-07
- REV. 8: RENSTATED THE ITEM NUMBERS FOR THE 2400, AND 3200 SI BEAM TO CARBODY ASSEMBLIES. CA 5-15-06
- REV. 7: SPECIFIED CAR SERIES IN A SEPARATE COLUMN, ADDED THREE CABLES SPECIFIC TO 24 AND 32 ONLY. CA. 01/21/04.
- REV. 6: REMOVED NARROW RADIUS BEND FLAG TERMINAL (ITEM # 1608131). ADDED WIDE RADIUS BEND FLAG TERMINAL (ITEM # 1608039). CA. 01/21/04.
- REV. 5: DELETED DISCONTINUED CABLE ITEM NOS. 4002654 (S1 BEAM-TO-BEAM), 5142704 (FF2-3), 5142705 (A2-3), 5142706 (F1-4)& 5142707 (A1-4). ADDED NEW CABLE ITEM NOS. 4002615 (S1 BEAM-TO-BEAM) & 5142702 (A & F1-4). INCREASED CABLE LENGTH FOR 4002653 (S1 BEAM TO CARBODY). CA. 7/18/02.
- REV. 4: ADDED CABLES 4002653, 4002654, 4242754 & 4242755. ALSO ADDED BUSHING 4240117 TO CABLES 5142704, 5142705, 5142706 & 5142707. T.E.B. 7/11/88.
- REV. 3: ADDED BRUSH BOX TO MOTOR CABLE. ITEM NO. 3102315 WAS 5143029, WAS 39" LONG AND USED ITEM NO. 1608259 FOR "B" END TERMINAL. "ITEM D" WAS ITEM NO. 1923225. M. OSULLIVAN. 08/18/87.
- REV. 2: FF JUMPER CABLE WAS ITEM NO. 4242744. T.E.B.07/08/86.
- REV. 1: CABLE 5143029 WAS ITEM NO. 5142710. 66" LONG AND RECD "ITEM E" (8" I.D. x 6" LONG HOSE M/F 1923225), "ITEM D" WAS 12" LONG. T.E.B. 06/04/86.



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

CABLE ASSY'S
SUPER TRUCK WIRING
CAR SERIES: 2400, 2600, 3200

Drawn C.P. Scale - Date 03/05/02

Checked Walter Chaffin
Manager, Technical Services

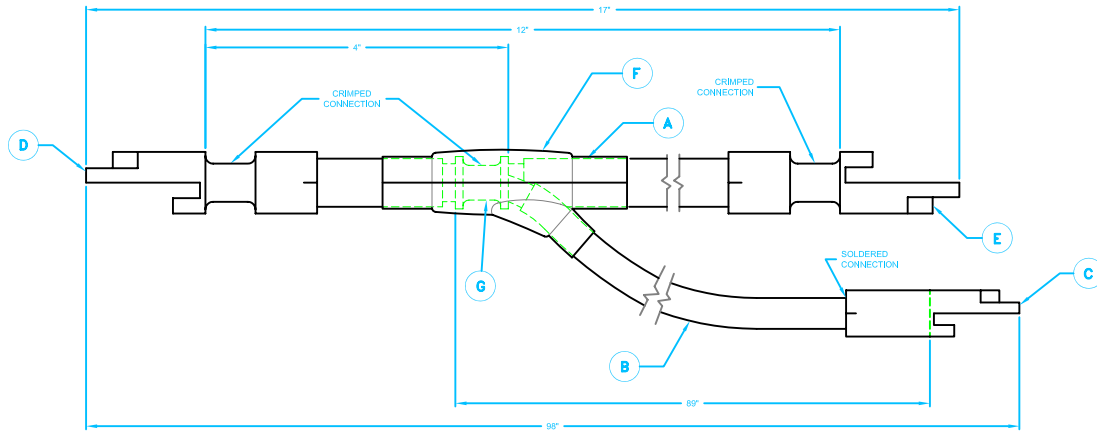
Approved Shawn King
General Manager, Eng'g & Technical Services

Next Assy. R-3-1582

CABLE ASSY'S: TRUCK WIRING
FABRICATE IN SKOKIE SHOP AS NEEDED
CAR SERIES: 2400, 2600, 3200

NOTE: BUSHING TO BE INSTALLED PRIOR TO EITHER
FINGER CONTACT OR KNIFE CONNECTOR
ATTACHMENT

ITEM	ITEM NO.	CUT LENGTH	CABLE DESIGNATION
Cable Assembly	4002436	-	-
A	3104468	12"	"A" TO "A" JUMPER
B	3104478	89"	SLIP SLIDE
C	5151084	-	-
D	1608022	-	-
E	1608022	-	-
F	4153286	-	-
G	1728391	-	-



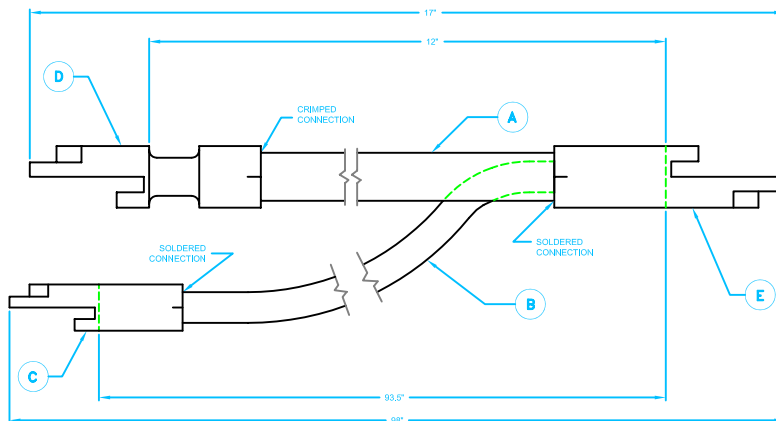
2400, 2600 & 3200 TRUCKS CABLE ASSEMBLY

AA JUMPER CABLE: TRUCK WIRING
FABRICATE IN SKOKIE SHOPS AS NEEDED
CAR SERIES: 2400, 2600 & 3200
(1) REQ'D PER TRUCK

REV. 4: JUNCTION WAS RELOCATED AWAY FROM CONNECTOR, ADDED HEAT-SHRINKING
"Y" SLEEVE (ITEM "F") AND CRIMPED CONNECTION (ITEM "G"). CA. 02/03/01.
REV. 3: INCREASED LENGTH (C) FOR ITEM B, ADDED CONNECTION TYPE, CUT CABLE
LENGTHS AND CABLE DESIGNATION. CA. 7/16/02.
REV. 2: REPAIRS USING AIRFOAM FROM ALUMINUM 260-43800-01, SOLDERWICKED
CABLE FOR USE ON ALL SUPER TRUCKS. LR. 02-07-01.
REV. 1: CORRECTED DIM. Y, 2600 CABLE WAS LPT NO 4242752. TEL. 7-8-96.

RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
AA JUMPER CABLE: TRUCK WIRING C.T.A. ITEM # 4002436 CAR SERIES: 2400, 2600 & 3200	
Drawn: L.R. Checked: <i>[Signature]</i> Title: <i>[Signature]</i>	Scale: NONE Date: 02/06/01 Approved: <i>[Signature]</i> Title: <i>[Signature]</i>
R-3-1583	

ITEM	ITEM NO	CUT LENGTH	CABLE DESIGNATION
CABLE ASSEMBLY	4002436	-	-
A	3104468	12"	"A" TO "A" JUMPER
B	3104478	93.5"	SLIP SLIDE
C	5151084	-	-
D	1608022	-	-
E	5140444	-	-

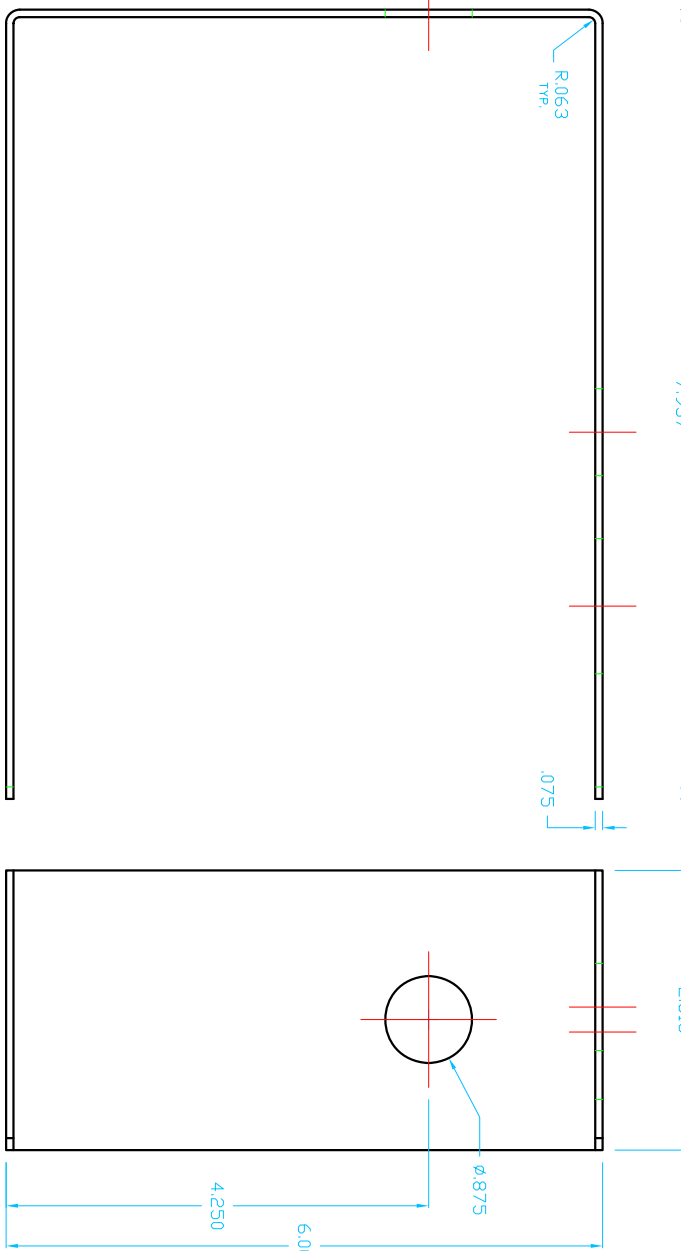
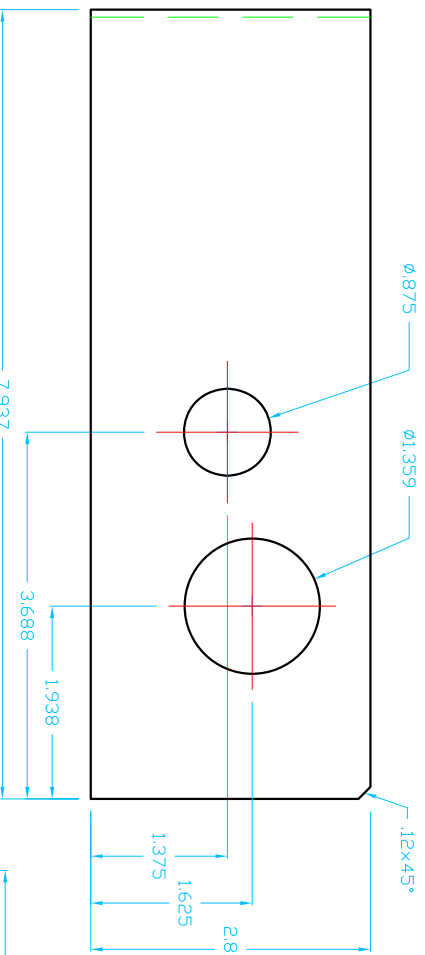


2400, 2600 & 3200 TRUCKS CABLE ASSEMBLY

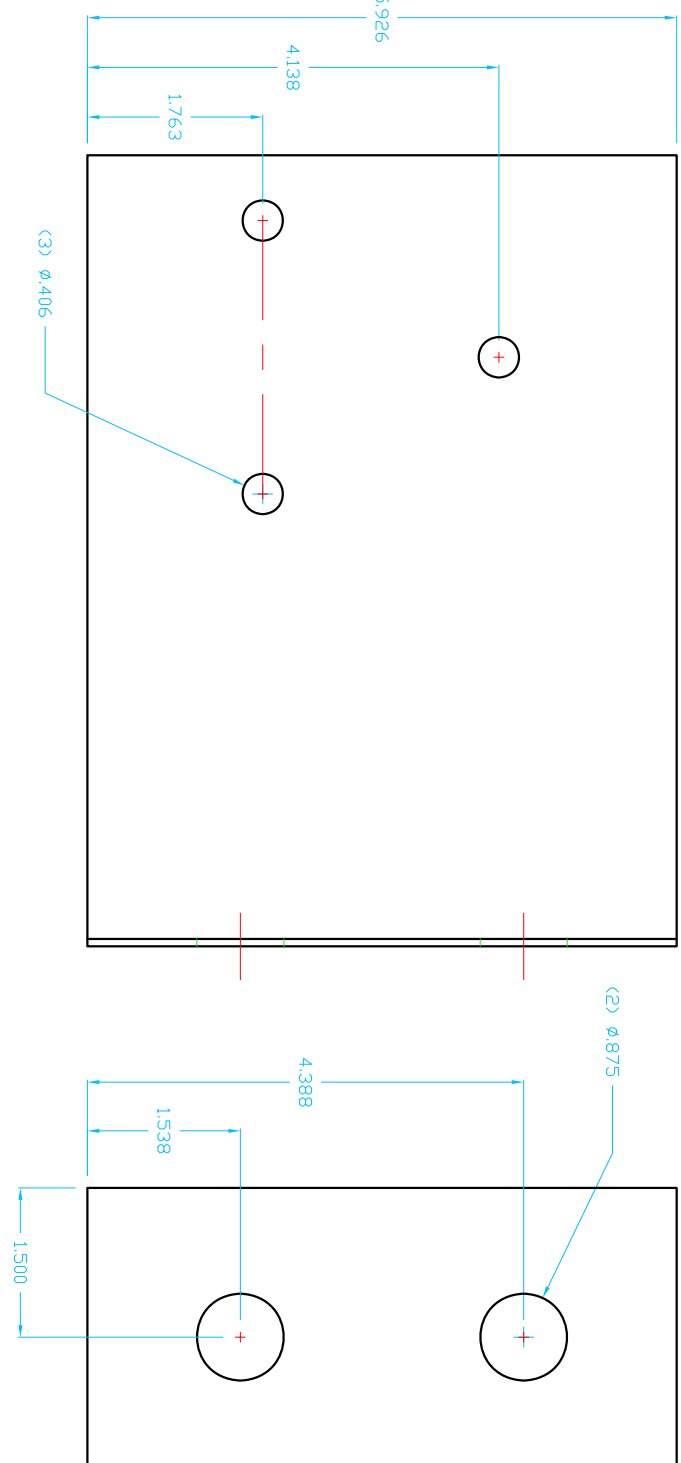
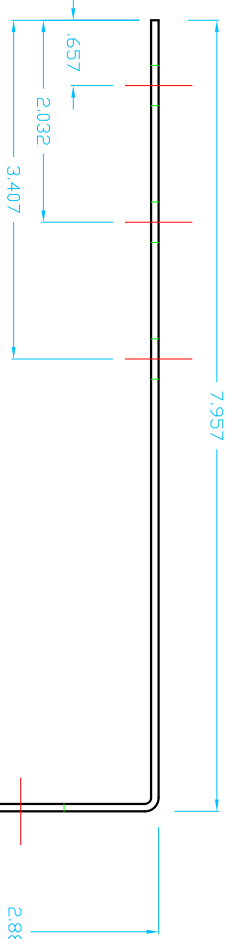
AA JUMPER CABLE: TRUCK WIRING
FABRICATE IN SKOKIE SHOPS AS NEEDED
CARS: 2400, 2600 & 3200

REV. 3: INCREASED LENGTH FOR ITEM B 12", ADDED CONNECTION TYPE, CUT CABLE LENGTHS
AND CABLE DESIGNATION. CA. 7/16/02.
REV. 2: REPAIRS USING AIRFOAM FROM ALUMINUM 260-43800-01, SOLDERWICKED CABLE
FOR USE ON ALL SUPER TRUCKS. LR. 02-07-01.
REV. 1: CORRECTED DIM. Y, 2600 CABLE WAS LPT NO 4242752. TEL. 7-8-96.

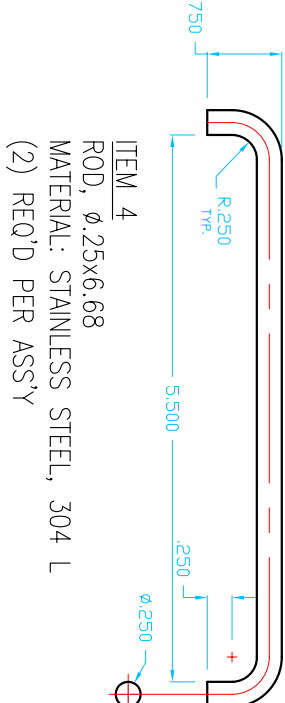
RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
AA JUMPER CABLE: TRUCK WIRING CARS: 2400, 2600 & 3200	
Drawn: L.R. Checked: <i>[Signature]</i> Title: <i>[Signature]</i>	Scale: NONE Date: 02-08-01 Approved: <i>[Signature]</i> Title: <i>[Signature]</i>
R-3-1583	



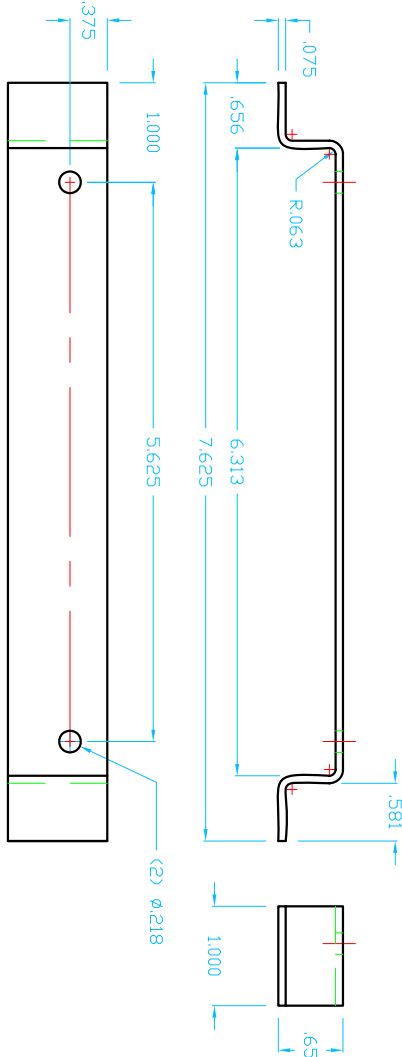
ITEM 2
CHANNEL, 21.65x2.81x.075
MATERIAL: STAINLESS STEEL, 304 L
(1) REQ'D PER ASS'Y



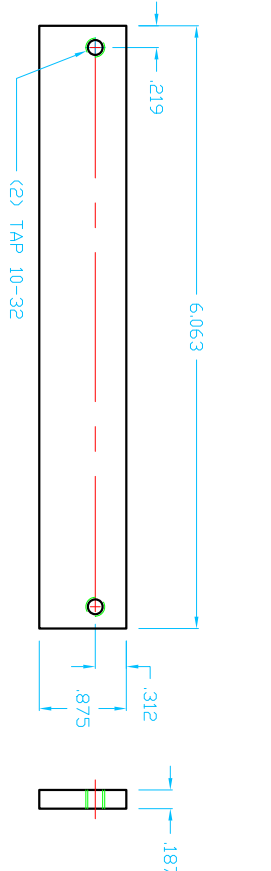
ITEM 1
ANGLE, 10.85x5.93x.075 THICK
MATERIAL: STAINLESS STEEL, 304 L



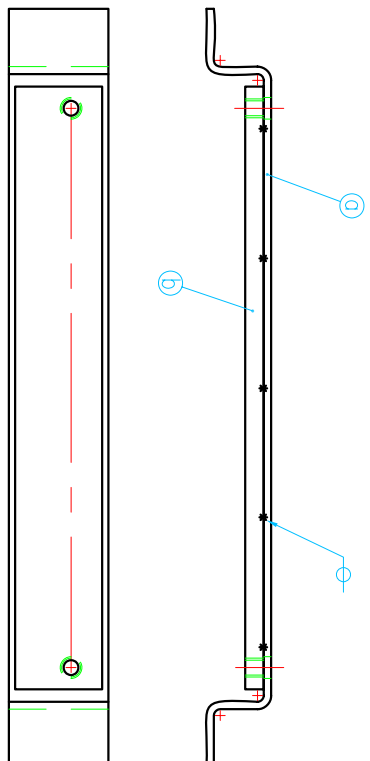
ITEM 4
ROD, 0.25x6.68
MATERIAL: STAINLESS STEEL, 304 L
(2) REQ'D PER ASS'Y



BRACKET, 7.88x1.00x.075 THICK
MATERIAL: STAINLESS STEEL, 304 L
(1) REQ'D PER ASS'Y



ITEM 5
HAT WELDMENT
MATERIAL: STAINLESS STEEL, 304 L
(1) REQ'D PER ASS'Y



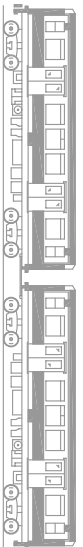
ITEM 5
HAT WELDMENT
MATERIAL: STAINLESS STEEL, 304 L
(1) REQ'D PER ASS'Y

ITEM	DESCRIPTION	ITEM NO.	QTY.
1	ANGLE		1
2	CHANNEL		1
3	TOP PLATE		1
4	ROD		2
5	BRACKET & ROD WELDMENT		1
6	RECEPTACLE (Southco)		6

TRUCK MOUNTED ATC JUNCTION BOX
WELDMENT.
(1) REQ'D PER CAR
CAR SERIES: 2400, 2600, 3200
ITEM NO. 3072613
MATERIAL: STAINLESS STEEL 304 L.

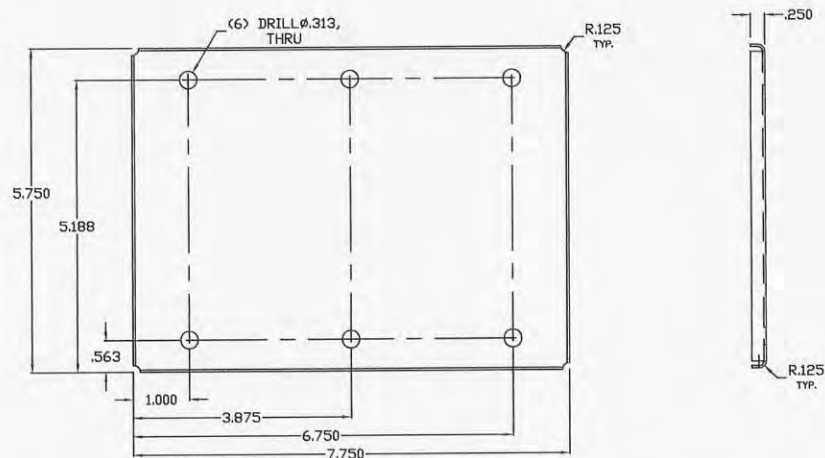
Rev.2: Added missing dimension on Item 1. C.P. 6/19/02.
Rev.1: Item 6, Receptacle (85-35-311-55) was 85-35-308-55; removed item 7 - Cup (85-43-101-41). C.P. 04/18/02.

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	
TOLERANCES: ANGLES ± 5° FRACTIONS: ± 1/64 DECIMALS: .XX ± .01 DECIMALS: .XXX ± .001		RIVET & BOLT MARGIN: .031 BEND RADI: .047 SHEET METAL CORNER RADI: .031	
Drawn <u>C.P.</u> Scale <u>HALF</u> Date <u>01/08/02</u>		Checked <u>Sheep</u> Approved <u>Colby</u>	
Next <u>Montger, Technical Services</u>		General Manager, Engrg & Technical Services	
R-3-1621			

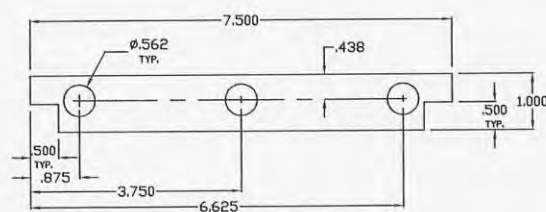


RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

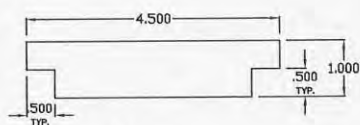
TRUCK MOUNTED ATC JUNCTION
BOX WELDMENT
CAR SERIES: 2400, 2600, 3200



ITEM 1
COVER
(1) REQ'D PER ASS'Y
MATERIAL: STAINLESS STEEL, 304 L, 8.125x6.125x.04 THICK



①
(2 pcs)

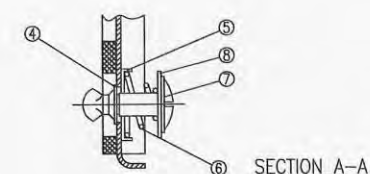
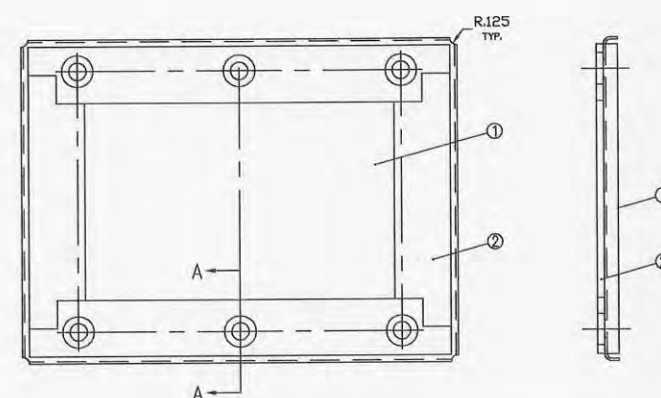


②
(2 pcs)

ITEM 2
GASKET
(1) REQ'D PER ASS'Y
MATERIAL: 1/8" THICK NEOPRENE

Rev.1: Item 7, 85-11-500-20 was 85-11-420-20;
added item 8. C.P. 04/18/02.

ITEM	DESCRIPTION	ITEM NO.	QTY.
1	Cover	-	1
2	Gasket	-	1
3	Adhesive (Miracle-TypeP)	-	-
4	Retainer, Push-on (Southco)	85-34-201-20	6
5	Nylon Wear Washer (Southco)	85-46-101-39	6
6	Ejector Spring (Southco)	14-18-150-24	6
7	Stud, Oval Slotted (Southco)	85-11-500-20	6
8	Sealing Washer (Southco)	85-43-201-38	6



COVER ASS'Y WELDMENT, ATC JUNCTION BOX.
(1) REQ'D PER CAR
CAR SERIES: 2400, 2600, 3200
ITEM NO. 3072618

DIMENSIONING & TOLERANCING
PER ANSI (USAS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH
DIMENSIONS ARE IN INCHES

TOLERANCES:
ANGLES: $\pm .5^\circ$
FRACTIONS: $\pm 1/64$
DECIMALS: .XX $\pm .01$
DECIMALS: .XXX $\pm .001$

RIVET & BOLT MARGIN: .031
BEND RADIUS: .047

SHEET METAL CORNER RADIUS: .031

cta



RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

COVER: ATC JUNCTION BOX
CAR SERIES: 2400, 2600, 3200

Drawn: C.P. Scale: HALF Date: 01/08/02

R-3-1622

Checked: *[Signature]*
Manager, Technical Services

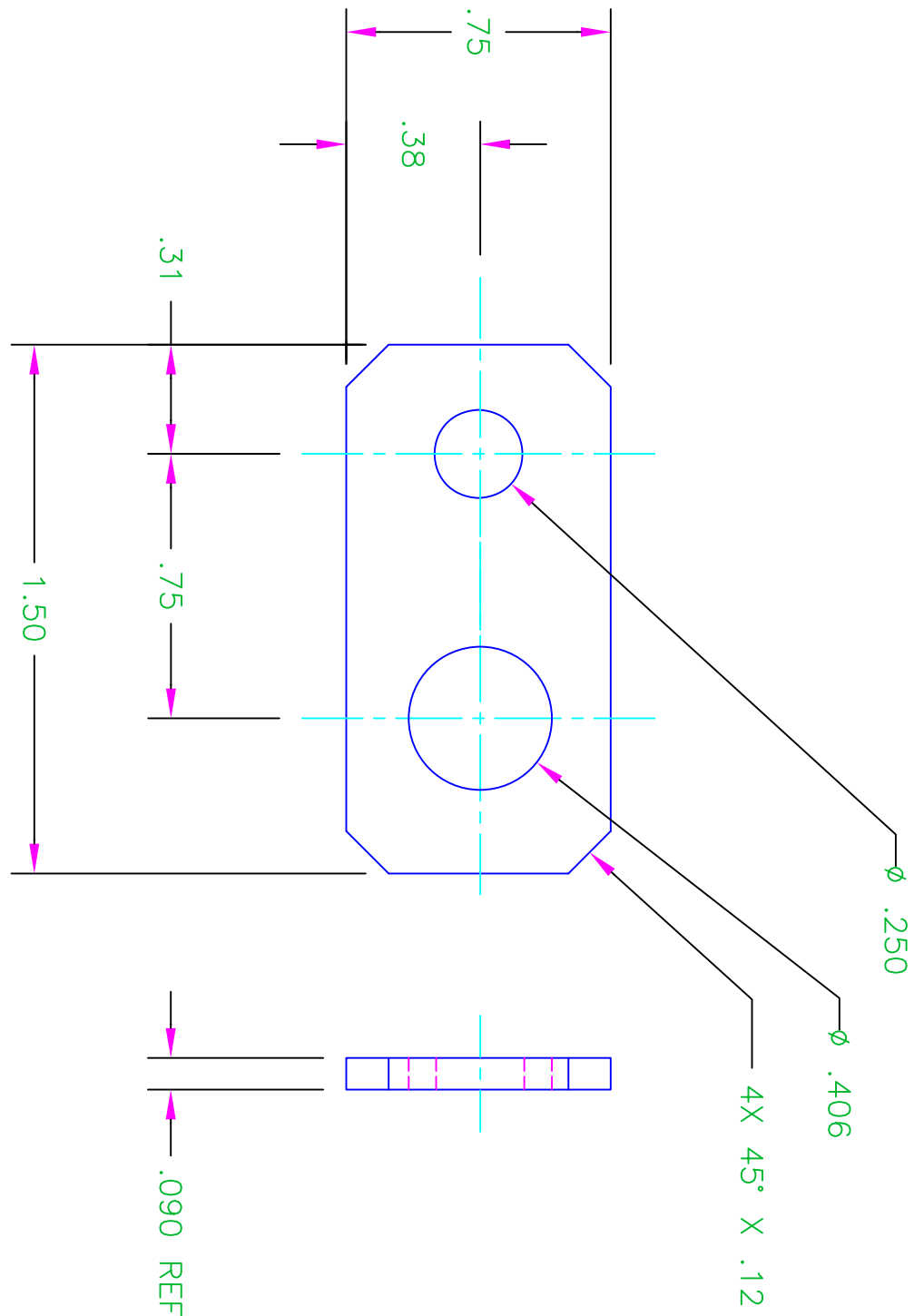
Approved: *[Signature]*
General Manager, Engrg & Technical Services

Next
Any.

R:\Drawings\Ctarail\31622

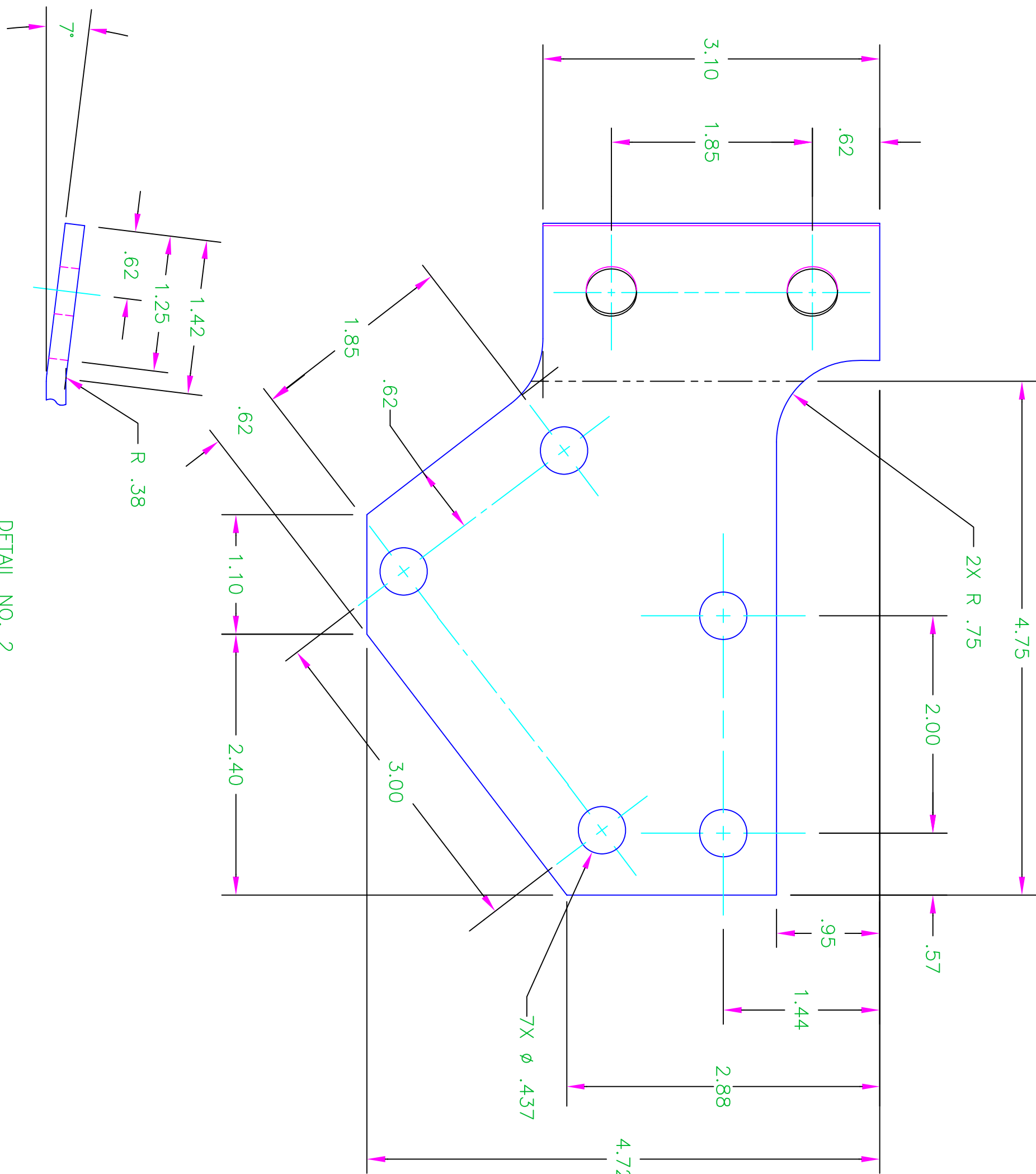
DRAWING NUMBER
R-3-1622
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548

DRAWING NUMBER
R-3-1622
PLAN HOLD CORPORATION • IRVINE, CALIFORNIA
REORDER BY NUMBER 07548



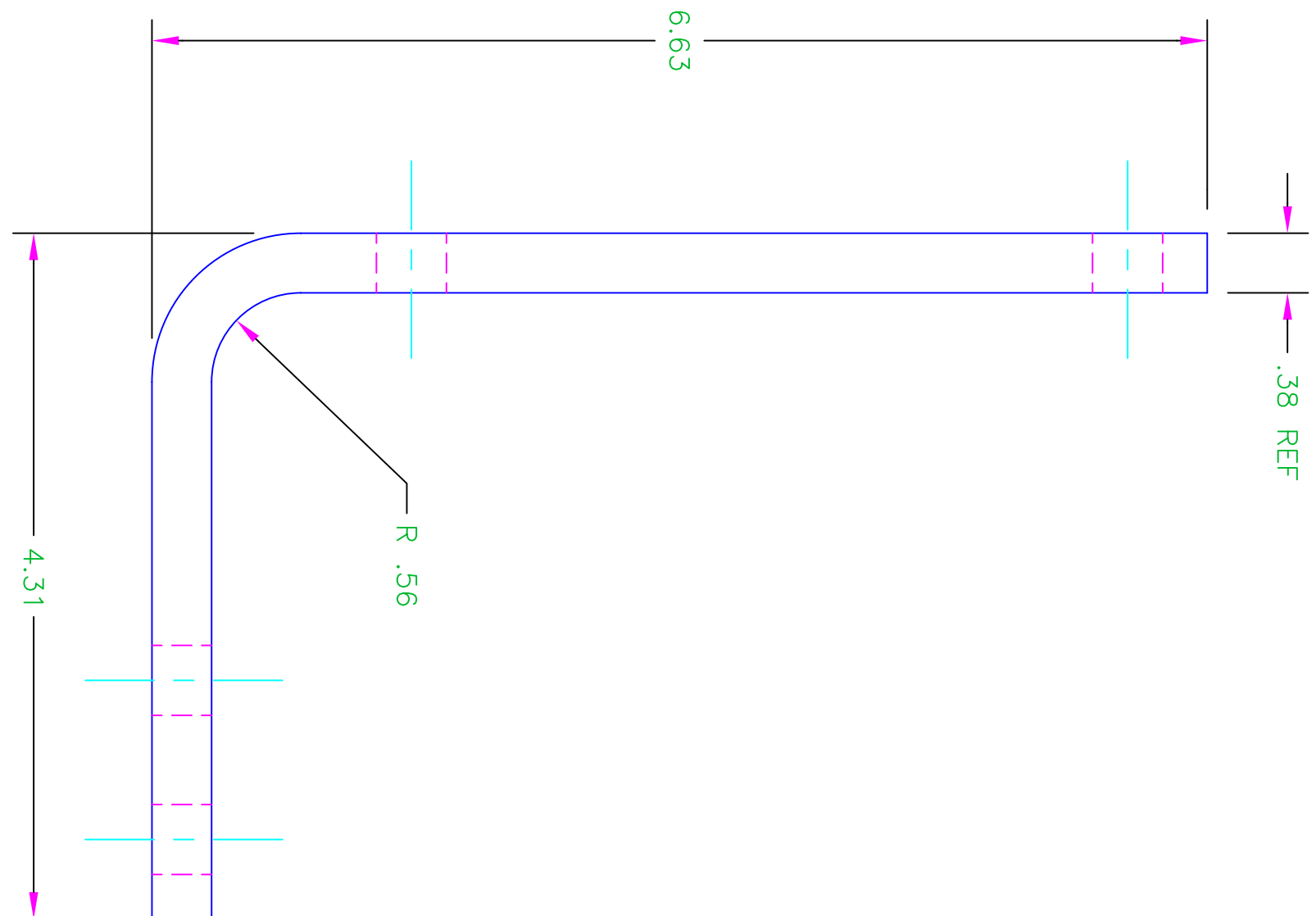
DETAIL NO. 1
SCALE: 2/1
LINK: CLEAT BLOCK,
TRANLINE CABLE
C.T.A. LOT NO. 3144099
BOEING PARTS LIST 2-1-19 CHANGE 1
SCALE 2/1

MATERIAL:
AISI 404 STAINLESS STEEL
.090 THICK
HEAT TREAT TO Rc 30-32



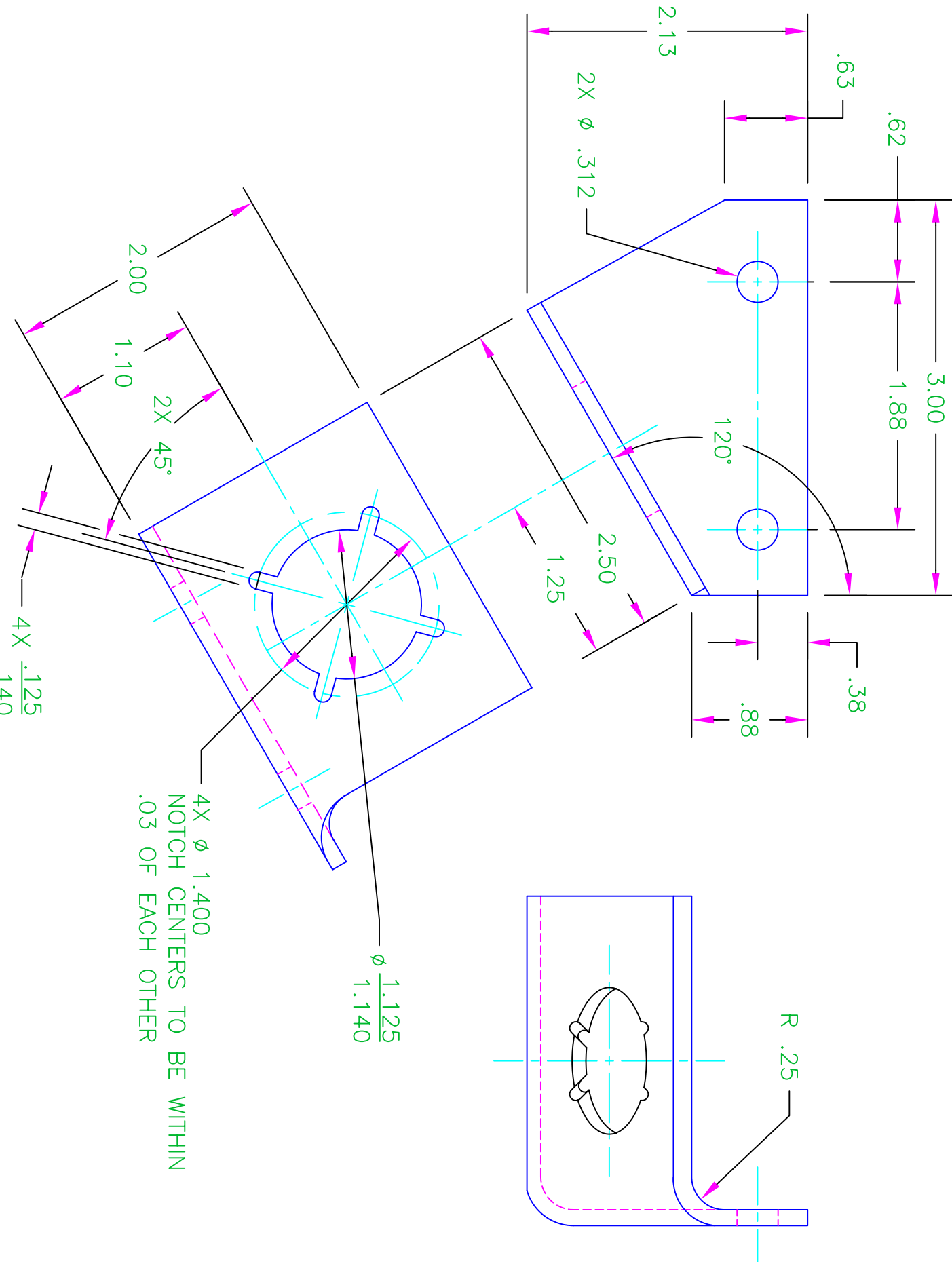
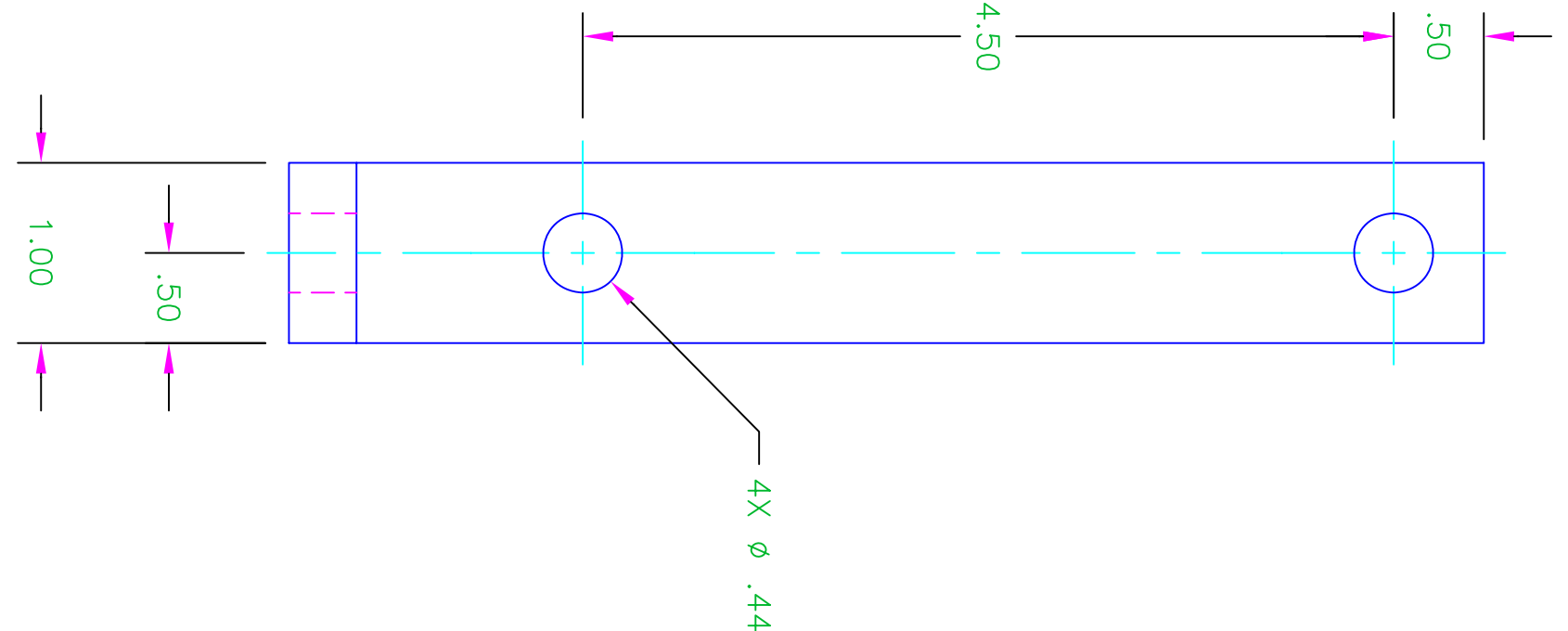
DETAIL NO. 2
PLATE: TRUCK GROUND
C.T.A. LOT NO. 4003174
BOEING PARTS LIST 3-4-36 CHANGE 4

MATERIAL:
ASTM B152 SOFT NO. 102 (COPPER)
.18 THICK



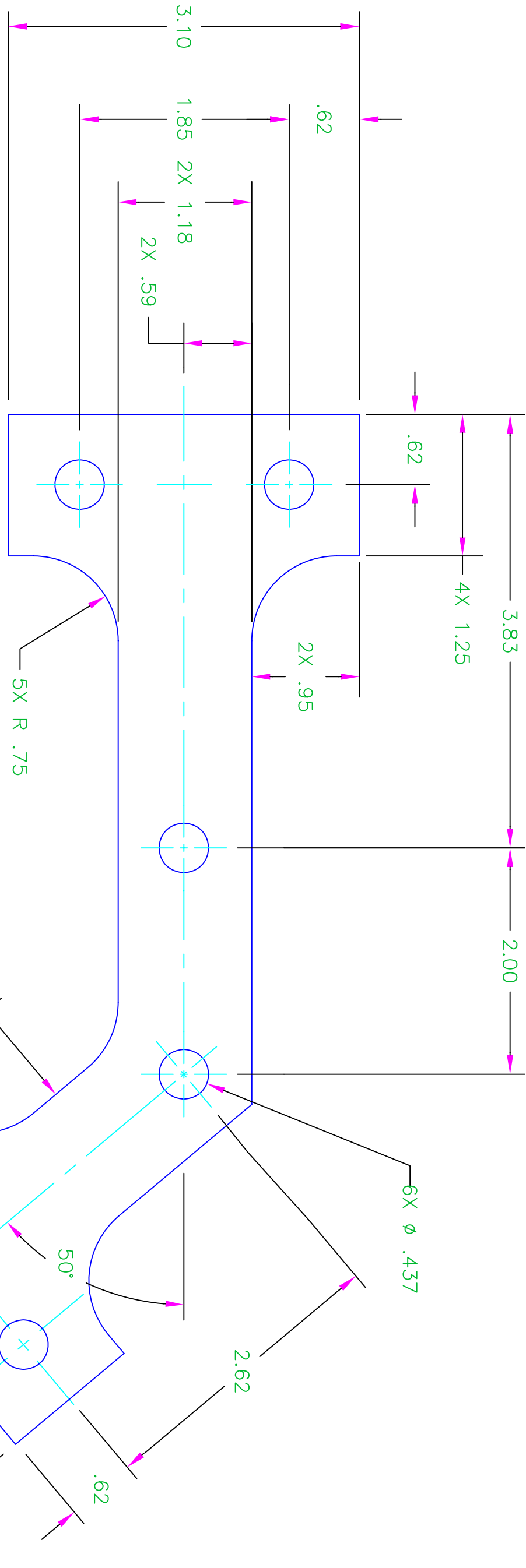
DETAIL NO. 3
BRACKET: A.T.C. CABLE SUPPORT
C.T.A. LOT NO. 4003177
BOEING PARTS LIST 3-4-39 CHANGE 1

MATERIAL:
AISI 1020 AS ROLLED
.375 THICK
ALTERNATE MATERIAL:
AISI 1010 CRS



DETAIL NO. 4
BRACKET: CALPER HARNESS PLUG MOUNTING
C.T.A. LOT NO. 4003208
BOEING PARTS LIST 3-4-61 CHANGE 1

MATERIAL:
AISI 1020 AS ROLLED
.120 THICK
ALTERNATE MATERIAL:
ASTM A36 AND AISI 1010 CRS



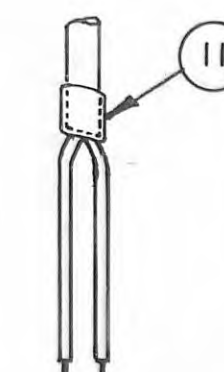
DETAIL NO. 5
PLATE: BOLSTER GROUND
C.T.A. LOT NO. 4003173
BOEING PARTS LIST 3-4-35 CHANGE 1

MATERIAL:
ASTM B152 SOFT NO. 102 (COPPER)
.18 THICK

REV. 6: REPAIR USING AUTOCAD (BR),
M.D. 11-8-96
REV. 5: CHGD. TOLERANCES PER BOEING
ORIGINAL SPEC., M.D., 9-29-89
REV. 4: STAINLESS STL. MED. TENSILE,
ALT. 1/2 HARD, J.U., 9-16-88
REV. 3: AT DET. 3, 4.31" WAS 4.13",
M.D., 7-28-88
REV. 2: M.D., 7-28-88
REV. 1: REMOVED DET. 5, ADDED TITLES
THE 2.13" DIMENSION AT DET. 4
WAS 2.25", M.D., 3-19-87

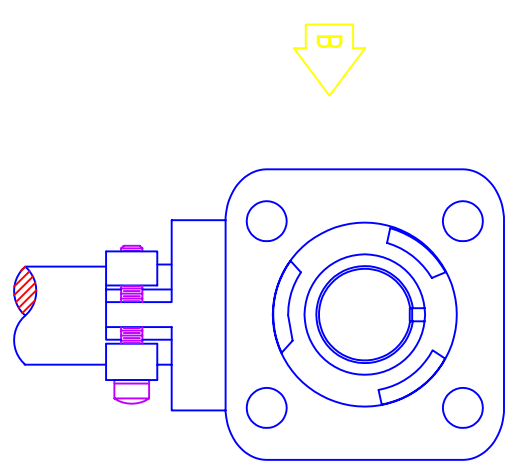
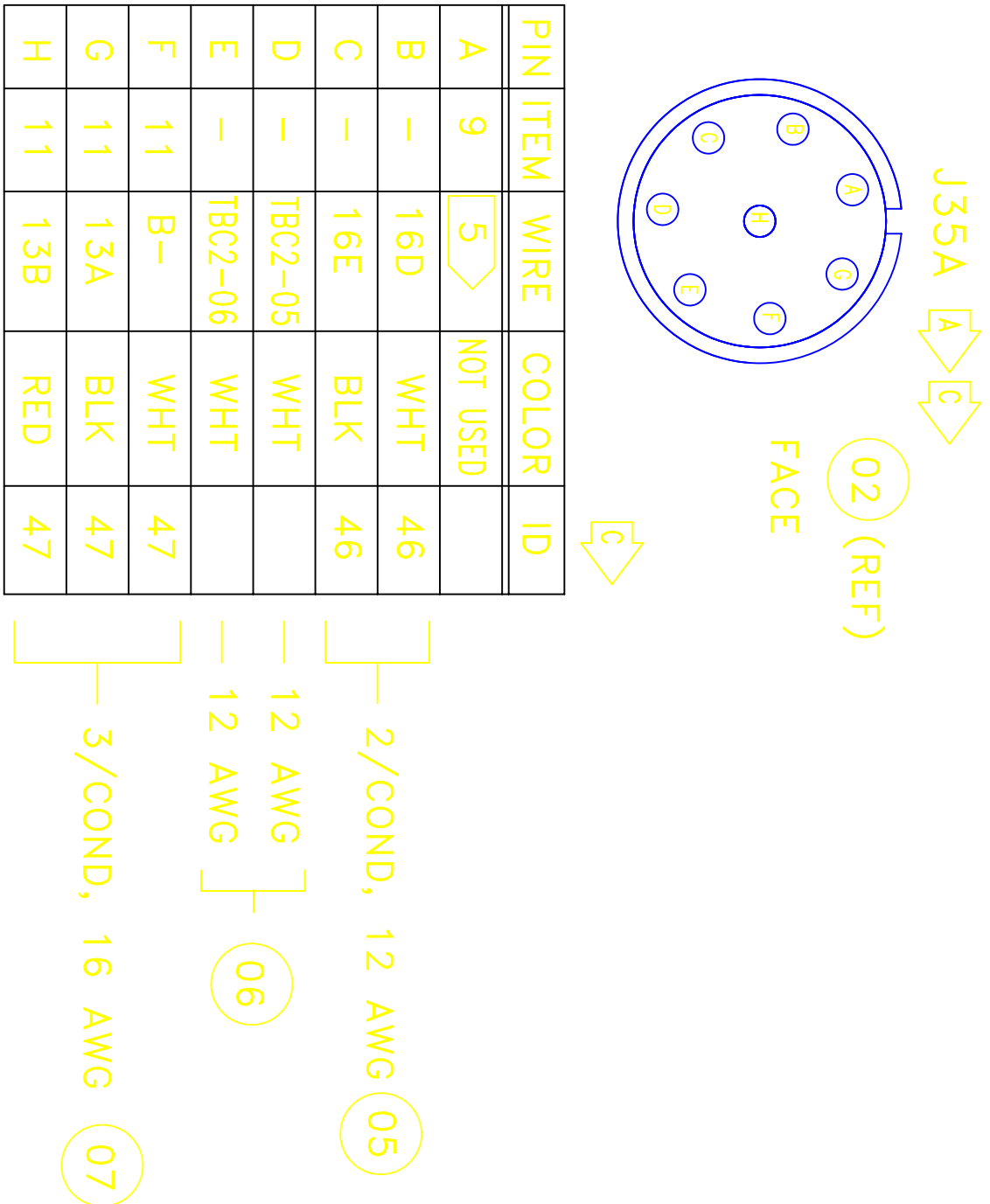
NOTES:
1. REMOVE ALL BURRS AND SHARP EDGES.

DIMENSIONING & TOLERANCING PER ANSI (DIN) 1143		UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES SURFACE FINISH: --✓ TOLERANCES: FRACTIONS: XX ±.03 DECIMALS: XX ±.010	
cra ENGINEERING & TECHNICAL SERVICES		RAIL OPERATIONS BRACKETS: TRUCK WIRING CAR SERIES: 2400	
Drawn: BRL Inc. Scale: FULL	Date: 11-8-96	Checked: GMC 11-28-96	Approved: [Signature]
R-4-1081		NEXT ASSEMBLY SEE DETAILS	



ORIGINAL SHOWN ON BUDD DRAWING C87-84228 REV. F, 5-29-81

GENERAL NOTES	
NOTE	CONTENTS
1	BREAK ALL SHARP CORNERS AND EDGES UNLESS OTHERWISE SPECIFIED.
2	KNIFE TERMINALS (SUPPLIED BY TTA) AT THE ENDS OF TBC WIRES WILL BE APPLIED BY THE TRUCK SHOP AT THE TIME OF HARNESS INSTALLATION. (AMP 3216 01 #S&MG)
3	CUT HEAT SHRINK, ITEM 08, INTO ONE 2.00 INCH LONG PIECE AND ONE 3.00 INCH LONG PIECE. APPLY 2.00 INCH LONG PIECE FIRST. THEN APPLY 3.00 INCH LONG PIECE AS SHOWN IN DETAIL E.
4	PUT PLUGS, ITEM 10, INTO CONNECTOR GROMMET POSITIONS BEHIND INSERT PLUGS. (SEE DETAIL A). PUT PLUGS, ITEM 12, INTO CONNECTOR INSERT (SEE DETAIL A).
5	PUT PLUG, ITEM 09, INTO THE CONNECTOR GROMMET AND INSERT.
6	STRIP JACKET BACK 5.00 INCHES AT THE ENDS OF WIRES (ITEMS 05 & 07) AT RECEPTACLE (ITEM 02).
7	ITEM 03 CAN BE REUSED IF IN GOOD CONDITION.
8	EACH WIRE GOING INTO CONNECTOR IS TO HAVE 1.00" OF HEAT SHRINK (ITEM 14) APPLIED.
9	HEAT SHRINK TUBING (ITEMS 08, 13 & 14) TO BE APPLIED PER MANUFACTURER SPECS.



PL36B

03 (REF)

WIRING
SIDE

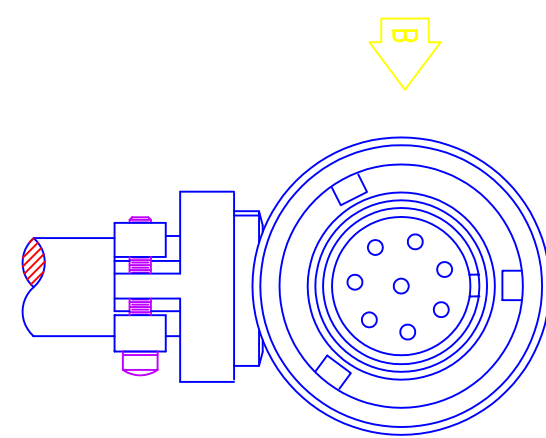
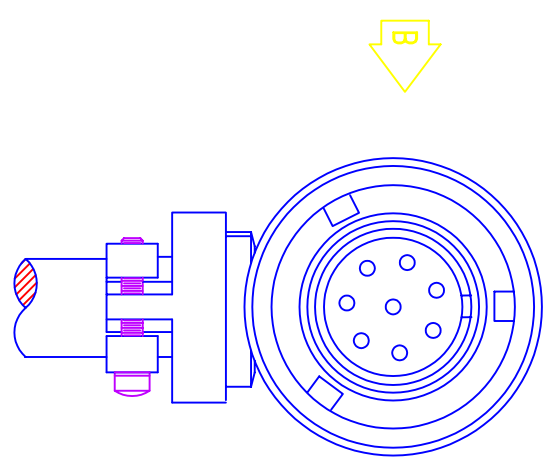
PIN	ITEM	WIRE	COLOR	ID
A	—	B—	WHT	47
B	—	13A	BLK	47
C	—	13B	RED	47
D	—	13B	RED	48
E	—	13A	BLK	48
F	—	B—	WHT	48

3/COND, 16 AWG 07

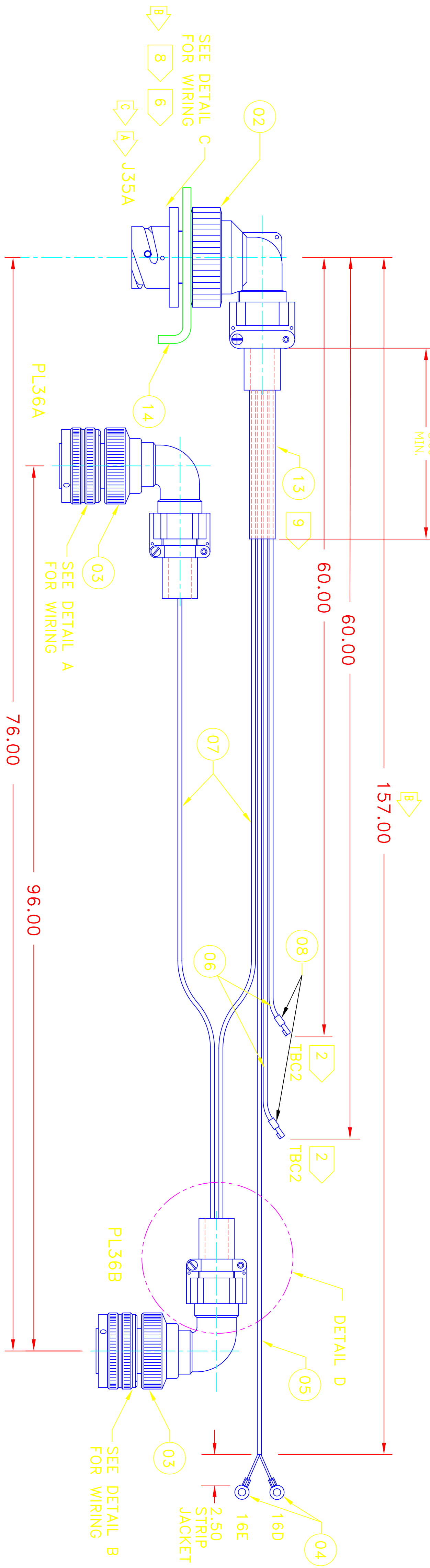
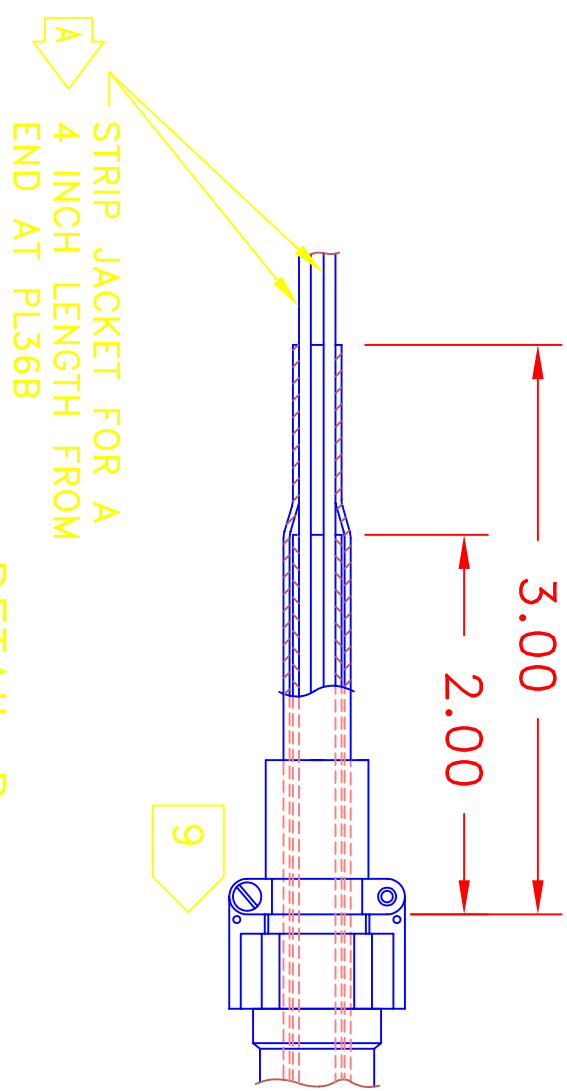
3/COND, 16 AWG 07

PIN	ITEM	WIRE	COLOR	ID
A	—	B—	WHT	48
B	—	13A	BLK	48
C	—	13B	RED	48
D	12	4	NOT USED	
E	12	4	NOT USED	
F	12	4	NOT USED	

3 / COND, 16 AWG 07



LIST OF MATERIALS						
QTY	ITEM	ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATION	WEIGHT
X	01	4002444	260-438003-01	ASSEMBLY	HARNES, #1 TRUCK	
1	02	5152536	A01-535-01	RECEPTACLE	TRUCK, 90 DEGREE (VEAM CIR-038FF-22-23S-F80)	
2	03	3145011	A01-532-01	PLUG	BRAKE CALIPER, 90 DEGREE (VEAM CIR-08F-14S-6S-F80)	
2	04	1608128	A00-347-03	TERMINAL	RING, 10/12 AWG, #10 STUD (AMP 36161)	
2	05	3102623	A01-560-01	WIRE	12 AWG, 2 CONDUCTOR (BELDEN 19201)	
1	06	3102622	TK-01	PACK	WIRE	
14.3	07	3102621	A01-557-01	CABLE	16 AWG, 3 CONDUCTOR (INDUSTRIAL ELECTRIC 0316C1-CTA)	
2	08	4163111		TERMINAL	KNIFE, TRACK BRAKE (AMP 3216 01 #8 AWG)	
2	09	4242741	A01-851-02	PLUG	FILLER, YELLOW (LITTON 10-101033-13)	
3	10	4242742	A01-851-01	PLUG	GROMMET, BLUE (LITTON 10-101033-12)	
3	11	7304608	A01-878-04	CONTACT	SOCKET, 12/16 AWG (LITTON-VEAM 27964-22-19)	
3	12	3103159	A01-851-04	INSERT	PLUG, BLUE (LITTON V&M 46808-16)	
.96	13	1601004	A02-216-06	TUBING	HEAT SHRINK, 1.50 INCH EXPANDED, .75 INCH RECOVERED	
1	14	4002433		BRACKET	BRACKET: TRUCK RECEPTACLE, STAINLESS STEEL	



PIN	ITEM	WIRE	COLOR	ID
A	9	5	NOT USED	
B	-	16D	WHT	46
C	-	16E	BLK	46
D	-	T8C2-05	WHT	
E	-	T8C2-06	WHT	
F	11	B-	WHT	47
G	11	13A	BLK	47
H	11	13B	RED	47

2/COND, 12 AWG (05)

12 AWG


12 AWG

(06)

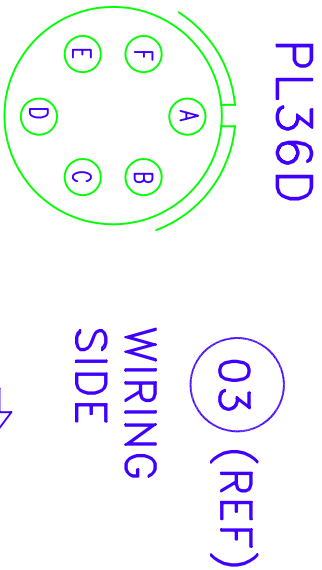
3/COND, 16 AWG (07)

REV.2 Bracket to item 02. CA 5-8-07

REV.1 Corrected Detail D Jacket was Stripped At 7". CA 8/31/04

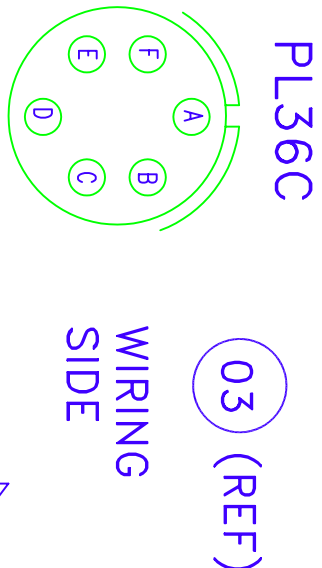
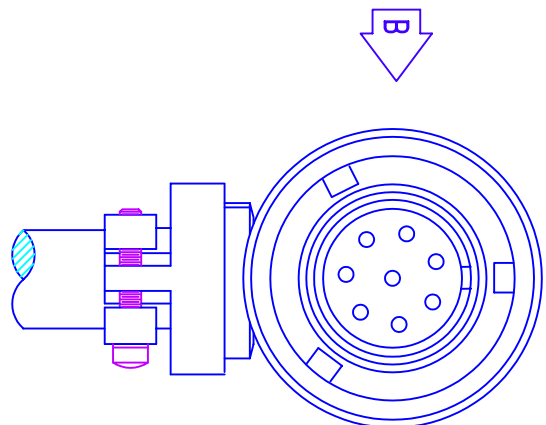
DIMENSIONING & TOLERANCING PER AND (USAS) 114.5	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH SHALL BE DIMENSIONS ARE IN INCHES	
TOLERANCES : ANGLES ±1° FRACTIONS: ±1/16" DECIMALS: .XXXX-0.10 PUNCH & BOLT MACHIN: ±.05 RND PUNCH ±.02 ON .05 & .06 ±.03 ON .09 & GREATER SHEET METAL CONNR RAD: .03 INT .19 EXT .25 .16	
	
RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
HARNESSE ASSEMBLY #1 TRUCK CAR SERIES: 2400, 2600, 3200 ITEM NO. 4002444	
Drawn: LR Scale: NONE Date: 02-13-01	Checked: CA <i>Mr. Chubb</i> General Manager Design & Technical Services
Approved: <i>SAHAG</i> General Manager, Design & Technical Services	Date: _____ Title: _____
R-4-1-1590	

GENERAL NOTES	
CONTENTS	
NOTE	
1	BREAK ALL SHARP CORNERS AND EDGES UNLESS OTHERWISE SPECIFIED
2	KNIFE TERMINALS (SUPPLIED BY TTA) AT END OF TBC WIRES WILL BE APPLIED BY THE TRUCK SHOP AT TIME OF HARNESS INSTALLATION. (AMP 3216 01 #8 AWG)
3	CUT HEAT SHRINK, ITEM 08, INTO ONE 2.00 INCH LONG PIECE AND ONE 3.00 INCH LONG PIECE. APPLY 2.00 INCH PIECE FIRST. THEN APPLY 3.00 INCH PIECE AS SHOWN IN DETAIL E.
4	PUT PLUG, ITEM 09, INTO CONNECTOR GROMMET POSITIONS BEHIND CONNECTOR INSERT (SEE DETAIL A).
5	STRIP JACKET FROM CABLE, ITEM 05, FOR A DISTANCE OF 2.00 INCHES FROM THE END AT PL39. COVER STRIPPED PORTION WITH HEAT SHRINK ITEM 13 (2 LAYERS).
6	TWIST BRADED SHIELD AND INSTAL DIRECTLY INTO THE PIN.
7	ITEM 03 CAN BE REUSED IF IN GOOD CONDITION.
8	STRIP JACKET FROM CABLE (ITEM 05 & 07) , FOR A DISTANCE OF 5.00" FROM THE END AT J37B.
9	EACH WIRE GOING INTO CONNECTOR IS TO HAVE 1.00" OF HEAT SHRINK (ITEM 18) APPLIED.
10	HEAT SHRINK TUBING (ITEMS 08, 12, 13 & 18) TO BE APPLIED PER MANUFACTURER SPECS.



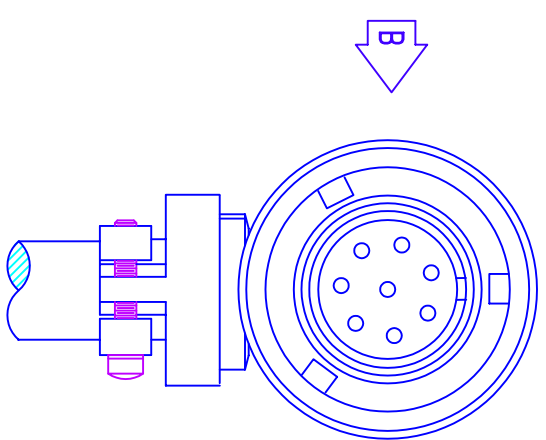
PIN	ITEM	WIRE	COLOR	ID
A	-	B-	WHT	51
B	-	13A	BLK	51
C	-	13B	RED	51
D	11	4.	NOT USED	
E	11	4.	NOT USED	
F	11	4.	NOT USED	

DETAIL A

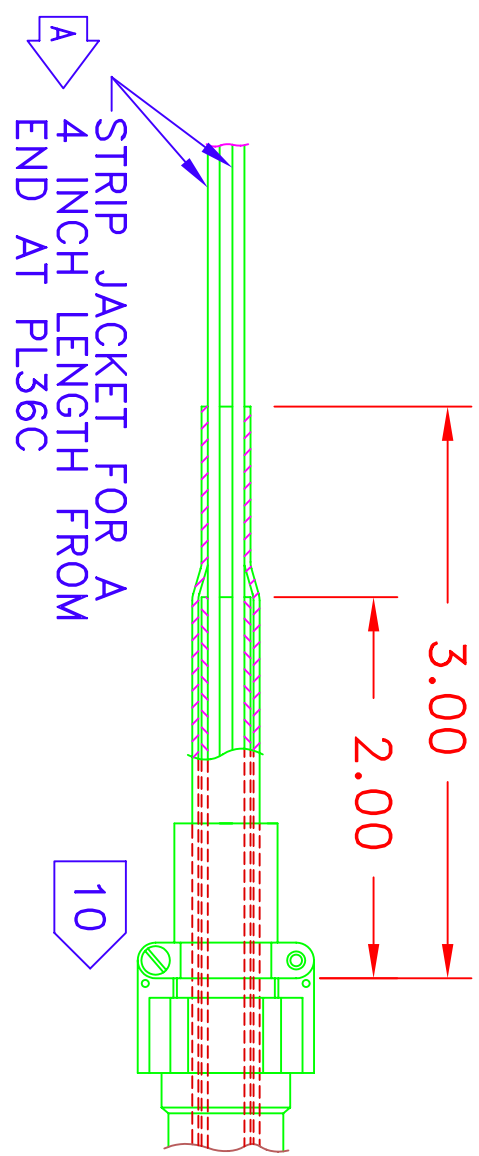


PIN	ITEM	WIRE	COLOR	ID
A	-	B-	WHT	50
B	-	13A	BLK	50
C	-	13B	RED	50
D	-	13B	RED	51
E	-	13A	BLK	51
F	-	B-	WHT	51

DETAIL B



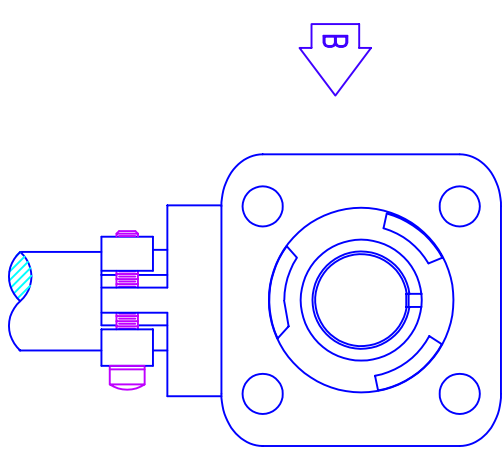
LIST OF MATERIALS						
QTY	ITEM	ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATION	WEIGHT
X	01	4002445	26D-438004-01	ASSEMBLY	HARNESS, #2 TRUCK	
1	02	5152536	A01-535-01	RECEPTACLE	TRUCK, 90 DEGREE (LITTON-VEAM CIR-038FP-22-23S-F80)	
2	03	3145011	A01-532-01	PLUG	BRAKE CALIPER, 90 DEGREE (LITTON-VEAM CIR-08F-14S-6S-F80)	
2	04	4013500	A01-533-02	RECEPTACLE	SPEED SENSOR (LITTON-VEAM CIR00CFZ-10S1-3P-F80)	
5.33	05	3104674	A01-559-01	CABLE	18 AWG, 2 CONDUCTOR, TWISTED SHIELDED PAIR	
1	06	3102622	TK-02	PACK	WIRE	
14.33	07	3102621	A01-557-01	CABLE	16 AWG, 3 CONDUCTOR (INDUSTRIAL ELECTRIC 0316CU-CTA)	
3	09	4242741	A01-851-01	GROMMET	PLUG, BLUE (LITTON-VEAM 10-101033-12)	
6	10	7304608	A01-878-04	CONTACT	SOCKET, 12/16 AWG (LITTON-VEAM 2796-22-19)	
3	11	3103159	A01-851-04	INSERT	PLUG, BLUE (LITTON-VEAM 46808-16)	
.96	12	1601004	A02-216-07	TUBING	HEAT SHRINK, 1.00" EXPANDED; .75" RECOVERED)	
2	13	4183111		TERMINAL	KNIFE, TRACK BRAKE (AMP 3216 01 #8 AWG)	
1	14	4002448	B00-411-02	BRACKET	SPEED SENSOR CONNECTOR	
4	15	1369376	A00-222-A008A	SCREW	SLOTTED PAN HEAD, #4-40 X .50" LONG, SST, GRADE 5	
4	16	4213010	A00-324-01A1	LOCK NUT	NYLON INSERT, #4-40 SST, GRADE B	
1	17	4002433		BRACKET	BRACKET, TRUCK RECEPTACLE STAINLESS STEEL	



DETAIL E

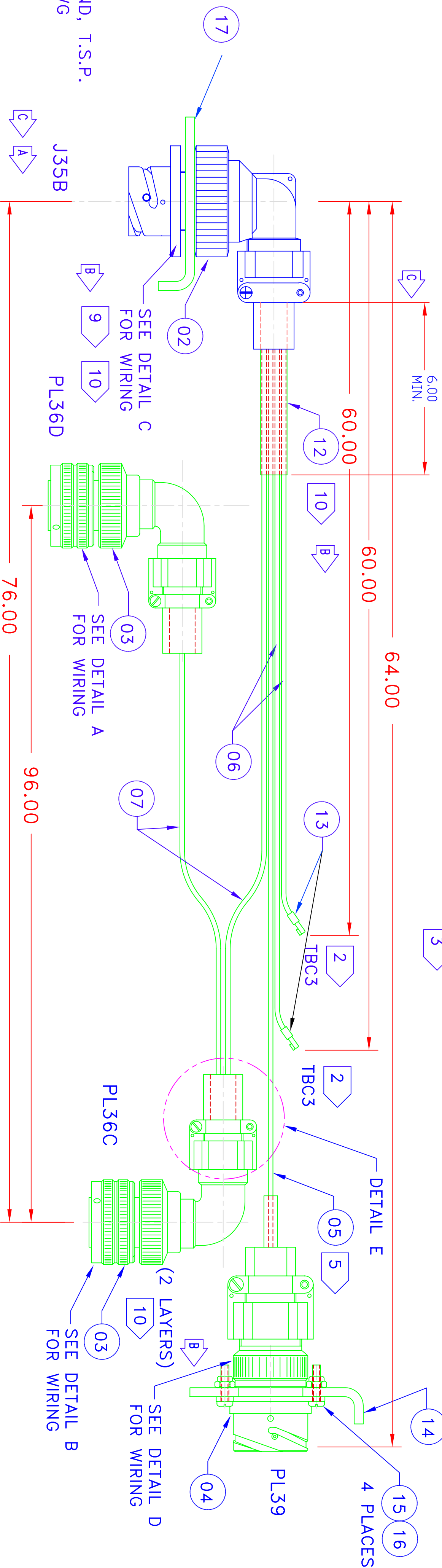
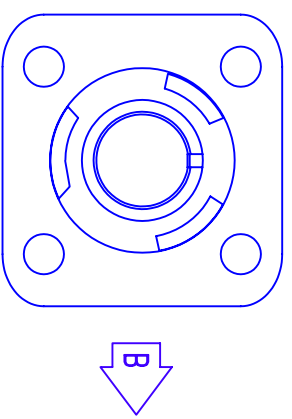
PIN	ITEM	WIRE	COLOR	ID
A	10	10AK-03	WHT	89A
B	10	SS3COM	BLK	89A
C	10	SS3SHD	SHIELD	89A
D	-	TBC3-05	WHT	
E	-	TBC3-06	WHT	
F	10	B-	WHT	50
G	10	13A	BLK	50
H	10	13B	RED	50

DETAIL C



PIN	ITEM	WIRE	COLOR	ID
A	-	10AK-03	WHT	89A
B	-	SS3COM	BLK	89A
C	-	SS3SHD	SHIELD	89A

DETAIL D



DIMENSIONING & TOLERANCING
PER ANSI (UNITS) Y14.5

UNLESS OTHERWISE SPECIFIED
SURFACE FINISH
DIMENSIONS ARE IN INCHES

cta
RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

cta
RAIL OPERATIONS
ENGINEERING & TECHNICAL SERVICES

HARNESS ASSEMBLY #2 TRUCK
CAR SERIES: 2400, 2600, 3200
ITEM NO. 4002445

TOLERANCES : ANGLES ±1°
FRACTIONS: ±1/16
DECIMALS: .XXX±0.10
RIVET & BOLT MARGIN: ±.05
BEND RADIUS: ±.02 ON .03 & .06
±.03 ON .09 & GREATER
SHEET METAL CORNER RADIUS:
INT .19 EXT .25

Drawn: LR Scale: NONE Date: 02-13-01
Checked: CA
Approved: *Shiloh*
Witness: *Shiloh*
Special Review: *Shiloh*

R-4-1591

Rev.2 Added bracket to item 02, CA 5-8-07

Rev.1 Corrected Detail E. Jacket was Stripped At 7", CA 8/31/04

PROPRIETARY NOTICE

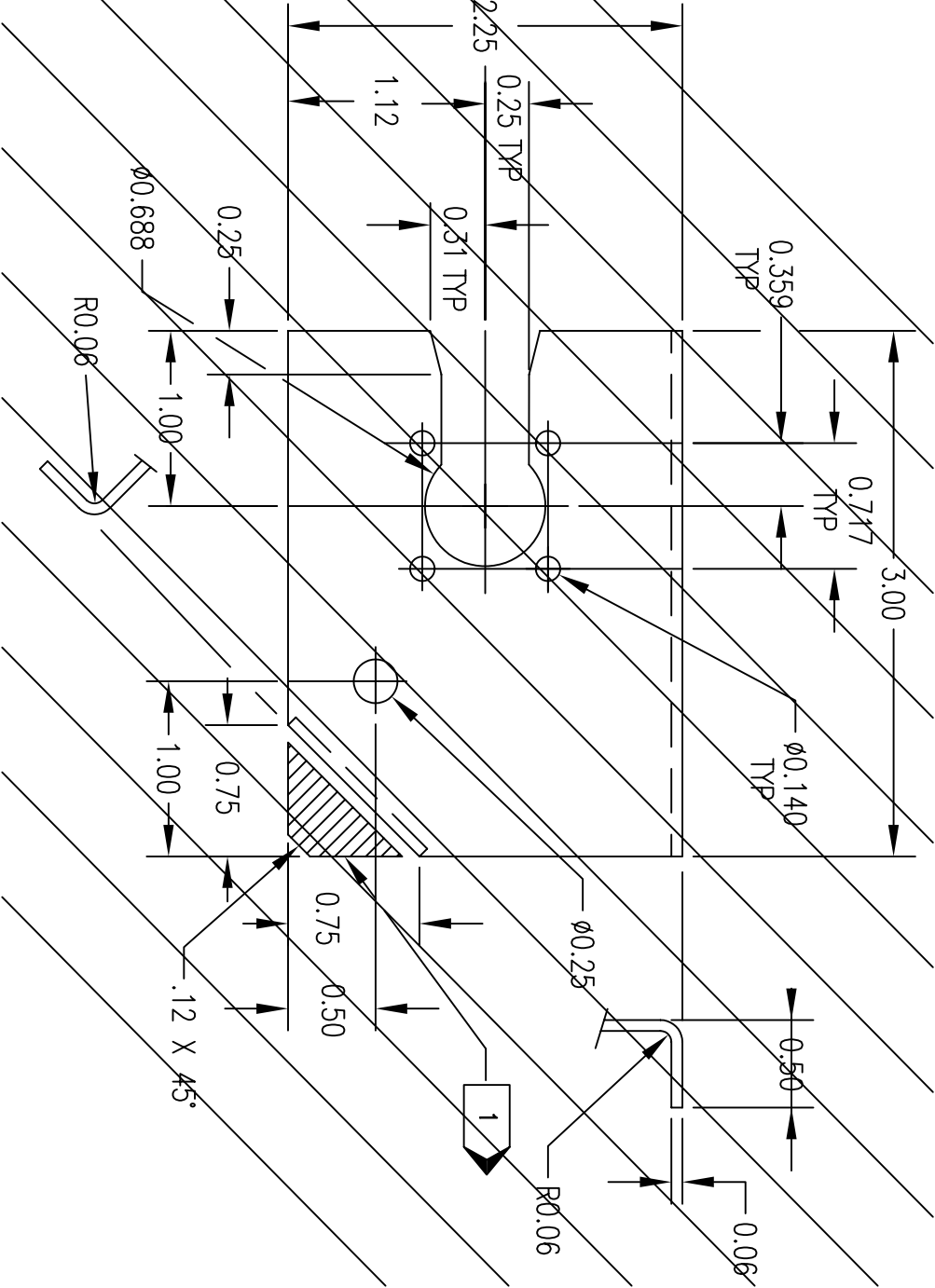
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GENERAL NOTES

NOTE

CONTENTS

CROSSHATCHED AREA IS BEFORE FORMING.



ITEM 01

BRACKET, SPEED SENSOR CONNECTOR

SCALE 1:1

A	DELETED NOTE 1 & ITEM 1. ADDED ITEM 2.	9/23/92	LRS\
	ADDED "NEXT ASSEMBLY".		
REV	DESCRIPTION	DATE	APPROVAL
REVISIONS			

SIZE

DRAWING NUMBER

REVISION

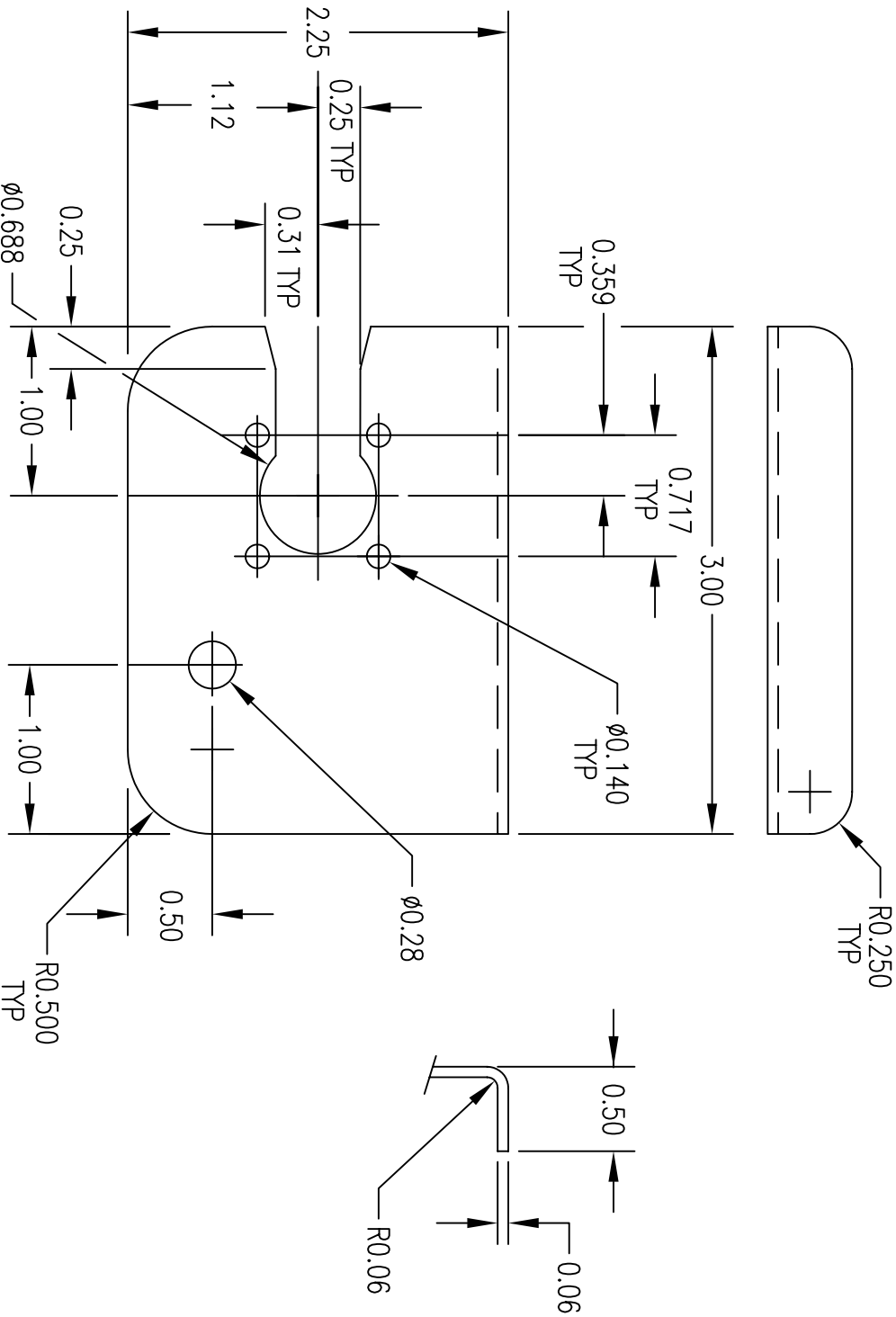
B

B00-411

A

LIST OF MATERIALS

QTY	ITEM	REMARKS	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATION
—	01	—	B00-411-01	BRACKET SPEED SENSOR CONNECTOR	STN STL 304/ .062 THK X 3.00 X 2.25
—	02	—	B00-411-02	BRACKET SPEED SENSOR CONNECTOR	STN STL 304/ .062 THK X 3.00 X 2.25



ITEM 02

BRACKET, SPEED SENSOR CONNECTOR

SCALE 1:1

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE AS FOLLOWS		CONTRACT NO 3200 SERIES		DRAWING TITLE MORRISON-KNUDSEN COMPANY INC. RAIL SYSTEMS GROUP HORNBELL, NEW YORK, 14843	
DECIMALS .XX ± .06	ANGULAR ± 1°	DRAWN BY SUDA	DATE 3/26/92	BRACKET, SPEED SENSOR CONNECTOR	
FRACTIONAL .XXX ± .005	± 1/16	CHECKED BY RUITER	3/26/92		
DO NOT SCALE		ENGINEER ALIMOSSY	3/27/92	REVISION A	
FINISH		APPROVED BY			
CUSTOMER APPROVAL		CUSTOMER	CTA	SCALE 1:1 WEIGHT — SHEET 01 OF 01	

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GENERAL NOTES

CONTENTS

NOTE	
1	BREAK ALL SHARP CORNERS AND EDGES UNLESS OTHERWISE SPECIFIED.
2	APPLY CLOSED END SPLICES TO WIRES 31-02, 31A-02 AND THEIR SHIELD ON ASSEMBLY 02.
3	ITEM 09 GOES IN POSITION "E" IN THE PLUG. FILLER PLUG, ITEM 10, GOES INTO PLUG GROMMET DIRECTLY BEHIND ITEM 09.
4	FILLER PLUG, ITEM 12, GOES INTO THE PLUG GROMMET DIRECTLY BEHIND ITEM 11. POSITIONS ARE AS NOTED BELOW.
5	PIN CONTACTS ARE SUPPLIED WITH THE MULTIPIN CONNECTORS.
6	SPLIT HOSE, ITEM 13, LENGTHWISE AND APPLY TO CABLE AS SHOWN. WIRE TIES, ITEM 08, SHALL BE 1/4" - 1/8" FROM THE HOSE ENDS AND APPROXIMATELY EVENLY SPACED BETWEEN.
7	TWIST BRAID SHIELD AND INSTALL DIRECTLY INTO THE PIN.
8	TO BE SUPPLIED TO TTA BY ALSTOM.
9	TO BE SHIPPED TY WRAPPED TO THE JUMPER.
10	CLEAT BLOCK (ITEM 14) IS USED ON CARS 1 THRU 100 AND THE SILICONE CLEAT BLOCK (ITEM 16) IS USED ON ALL CARS 101 AND UP. CTA WILL REPLACE ALL NEOPRENE CLEAT BLOCKS WITH SILICONE CLEAT BLOCKS ON THE FIRST 100 CARS.

QTY	ITEM	REMARKS	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATION	WEIGHT
	02	01	26C-454001-01	ASSEMBLY	CABLE, TRUCK ATC, A-CAR	
		02	26C-454001-02	ASSEMBLY	CABLE, TRUCK ATC, B-CAR	
	1	03	A01-407-01	PLUG	TRAINLINE (VEAM CIR06-LCZ-24-21P-F80)	
	8	04	A01-668-01	WIRE	TWISTED, SHIELDED PAIR (96")	
	2	05	A00-681-05	SLEEVE	SOLDER (FARGHEM S063-5-00)	
	6	06	A00-345-07	TERMINAL	RING, 16/14 AWG, #8 STUD (AMP 320560)	
	3	07	A00-613-03	SPLICE	CLOSED END (AMP 35115)	
	9	08	A01-806-04	WIRE TIE	T&B TY528HX	
	1	09	A01-851-03	PLUG	WHITE, FOR INSERT (LITTON-VEAM 10-305045)	
	1	10	A01-851-05	PLUG	WHITE, FOR GROMMET (LITTON-VEAM 10-101033-14)	
	3	11	A01-851-04	PLUG	BLUE, FOR INSERT (LITTON-VEAM 46808-16)	
	3	12	A01-851-01	PLUG	BLUE, FOR GROMMET (LITTON-VEAM 10-101033-12)	
	1	13	A01-899-01	HOSE	1.00 I.D. X 1.25 O.D.	
	2	14	B-0000-116-20	CLEAT BLOCK	NEOPRENE / TTA	
	1	15	B-0000-117-10	CLEAT BLOCK PLATE	SST / TTA	
	1	16	B-0000-202-20	CLEAT BLOCK ASSY.	SILICONE / TTA	

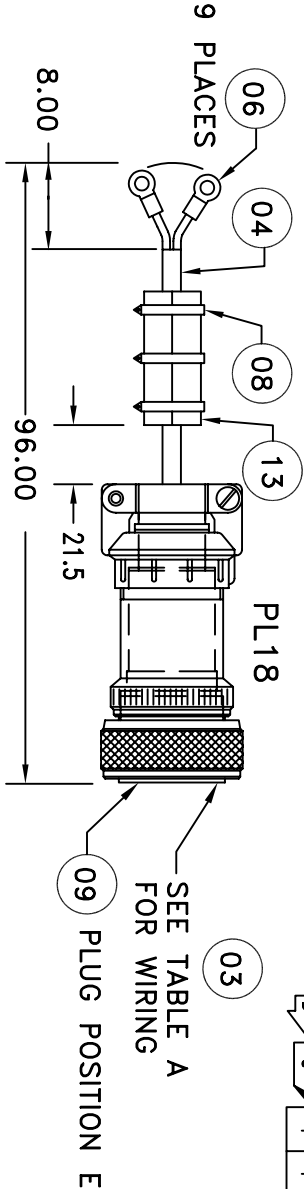


TABLE A

PL18

PIN	WIRE	COLOR
A	A6-03	D. GRY
B	A7-03	WHT
C	SHLD-9B	SHIELD (A6 & A7)
D	SHLD-40	SHIELD (31 & 31A)
E	---	---
F	A12-02	RED
G	A13-02	GRN
H	SHLD-9A	SHIELD (A12 & A13)
J	31-03	BLU
K	31A-03	ORN

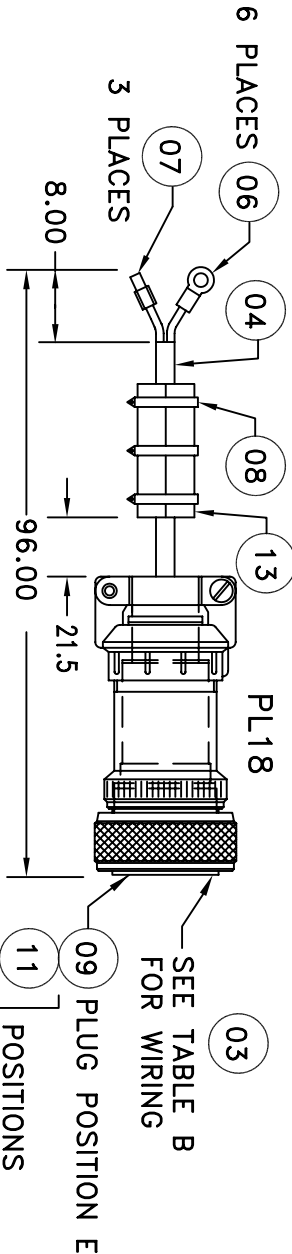


TABLE B

PL18

PIN	WIRE	COLOR
A	A6-03	D. GRY
B	A7-03	WHT
C	SHLD-9B	SHIELD (A6 & A7)
D	---	---
E	---	---

PIN	WIRE	COLOR
F	A12-02	RED
G	A13-02	GRN
H	SHLD-9A	SHIELD (A12 & A13)
J	---	---
K	---	---

1	D	ADDED ITEM 16 & NOTE #10, ECO #CTA-0865EC.	07/22/99	DDD/
1	C	ADDED ITEMS 14 & 15, NOTE 09, CHANGED PART NO. OF ITEM 08.	11/25/98	GMM
1	B	INCORPORATED ECN CTA-0233EC, CHANGED ITEM 04, DELETED ITEM 05, CHANGED NOTE 7.	10/20/98	GMM
1	A	INCORPORATED ECN 0.01 & 0.02	9/28/98	GMM/
SHT/ZONE	REV	DESCRIPTION	DATE	APPROVAL
REVISIONS				

26E-499011-03
26E-499011-01
NEXT ASSEMBLIES

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE AS FOLLOWS		CUSTOMER	CONTRACT NO	GEC ALSTHOM TRANSPORTATION INC. 1 TRANSIT DRIVE HORNBELL, NEW YORK			
DECIMALS .XX ± .06	ANGULAR ± 1/16	CTA	2600-97				
		DRAWN BY	DATE				
		P. HOFFFNER	9/4/98				
		CHECKED BY					
DO NOT SCALE				DRAWING TITLE CABLE ASSEMBLY TRUCK ATC			
TREATMENT	MANUFACTURING ENGINEER						
FINISH	ENGINEER						
	S.KNAPP	9-9-98					
CUSTOMER APPROVAL	APPROVED BY	9-10-98					
	S.CHARLES			SIZE 26C-454001 REVISION D			
		SCALE					
		1 = 2	WEIGHT				

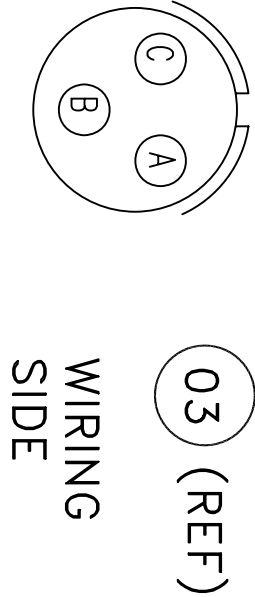
A

26C-454001

C SET
DRAWING NUMBER

D
REVISION

GENERAL NOTES	
NOTE	CONTENTS
1	SPEED SENSOR IS SUPPLIED WITH A 6 FT. LONG PIGTAIL. CUT TO 14 INCHES BEFORE ASSEMBLY.
2	ITEM 03 IS PURCHASED AT A 50% LEVEL. THE REMAINING CONNECTORS ARE TO BE TAKEN FROM THE "NO-MOTION" SPEED SENSOR, P/N B00-023-011, AND USED ON THIS ASSEMBLY.
3	SOCKET CONTACTS ARE SUPPLIED WITH THE RECEPTACLE ITEM 03. THE CONTACTS ARE TO BE USED IN THE MULTIPIN RECEPTACLE

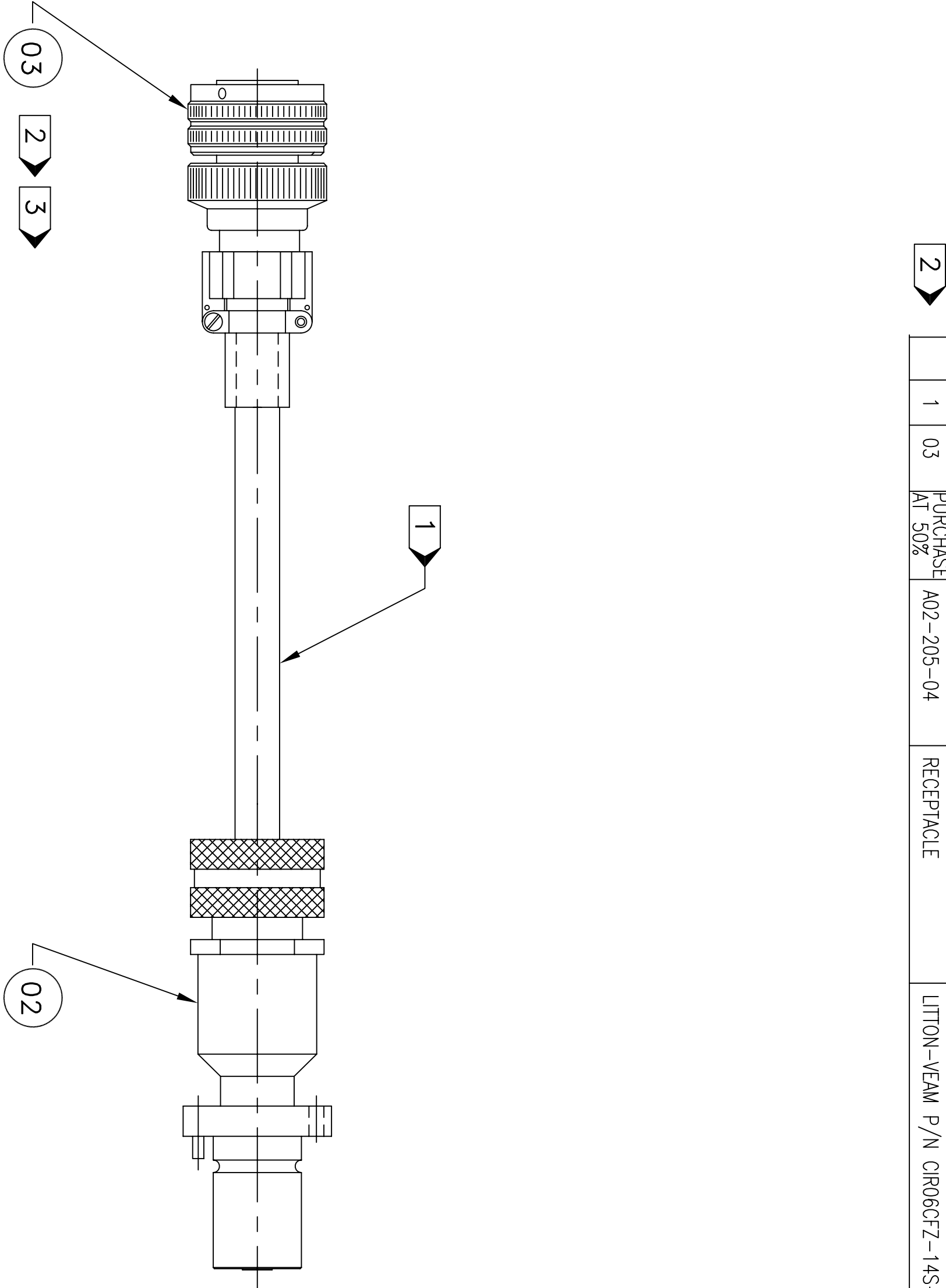


PIN	WIRE	COLOR
A	10AK-	WHT
B	B--47	BLK
C	SHIELD	SHIELD

1

DETAIL A

QTY	ITEM	REMARKS	PART NUMBER	DESCRIPTION	MATERIAL / SPECIFICATION
01	01	—	C00-475-01	ASSEMBLY	PROPULSION
1	02	—	B00-097-01	SENSOR	PROPULSION SPEED/GE 41B581503P1
1	03	PURCHASE AT 50%	A02-205-04	RECEPTACLE	LITTON-VEAM P/N CIR06CFZ-14S-10SL-3S-F80



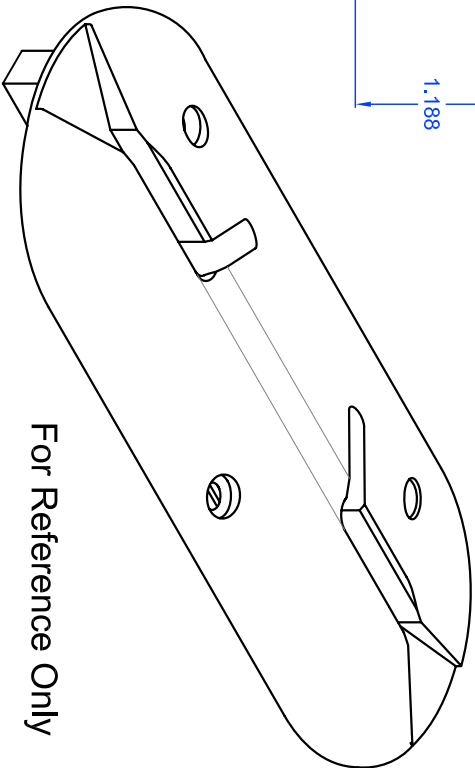
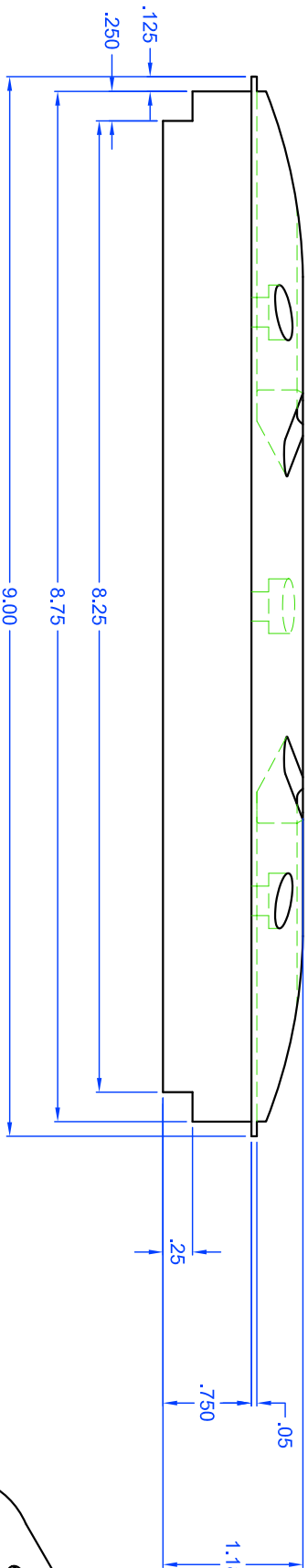
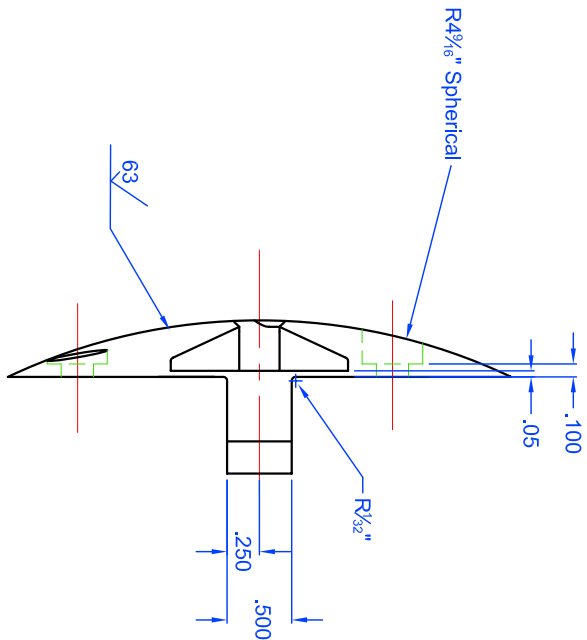
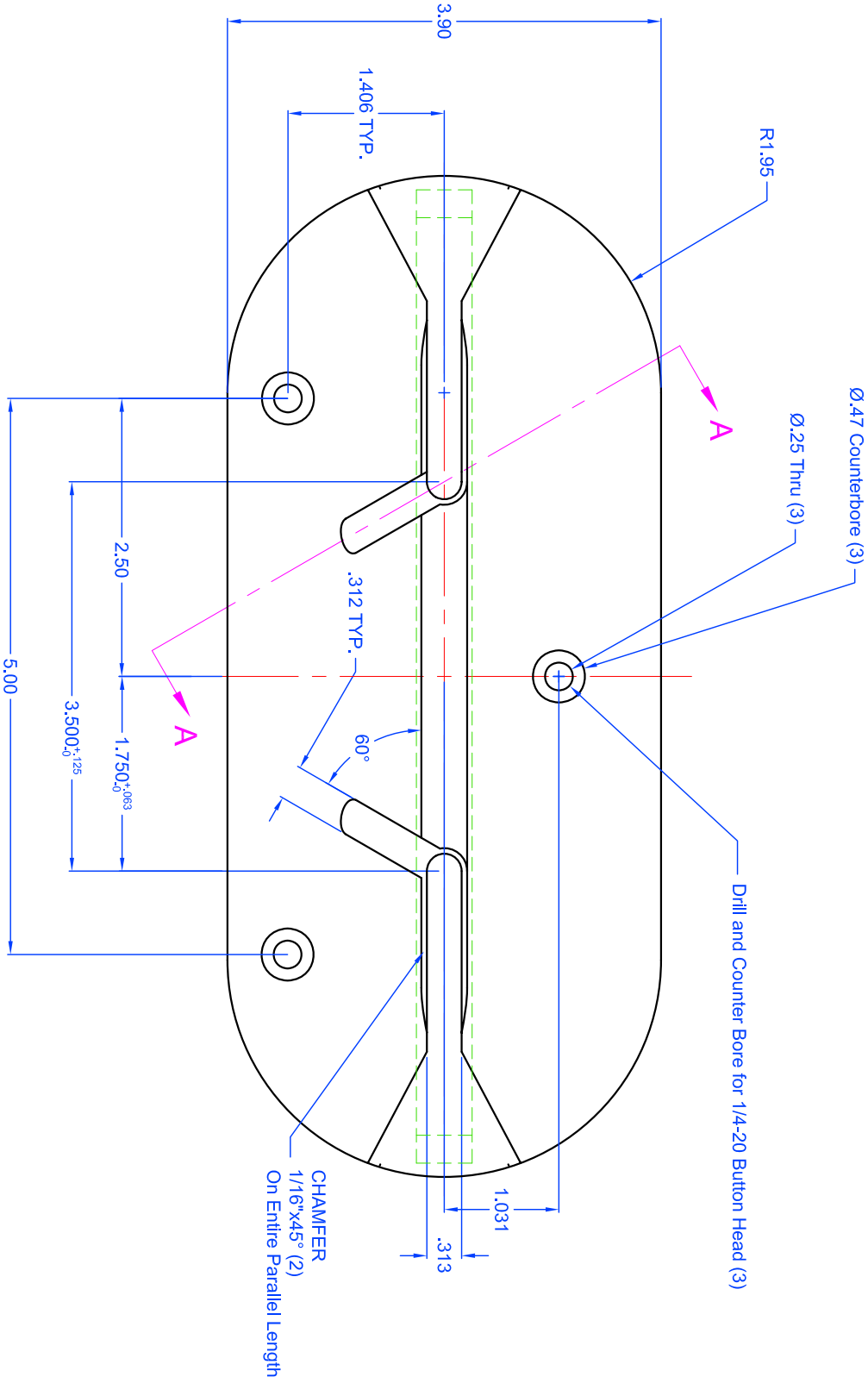
DETAIL A
FOR WIRING

B	INCORPORATED ECN A.01, A.02	93AUG12	DEH/
L/M	A DELETED ITEM 04, ADDED NOTE 3 ITEM 03 WAS P/N A02-205-01	051592	WJC/SCK
ZONE	REV DESCRIPTION	DATE	APPROVAL

REVISIONS

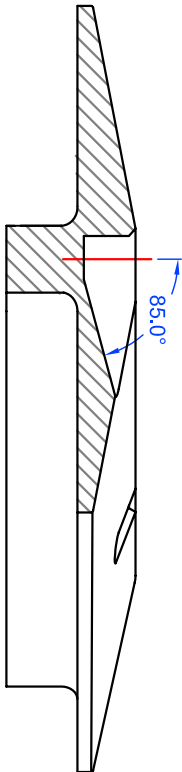
E00-600
NEXT ASSEMBLIES

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES, TOLERANCES ARE AS FOLLOWS DECIMALS ANGULAR .XX ± .06 ± 1° .XXX ± .010 FRACTIONAL ± 1/16	CONTRACT NO 3200 SERIES		DRAWING TITLE MORRISON-KNUDSEN COMPANY INC. RAIL SYSTEMS GROUP HORNBELL, NEW YORK 14843		
DO NOT SCALE	DRAWN BY SUDA	DATE 3/13/92	ASSEMBLY, PROPULSION SPEED SENSOR		
TREATMENT	CHECKED BY HARRINGTON	3/13/92			
FINISH	ENGINEER ALIMOSSY	3/13/92			
CUSTOMER APPROVAL		APPROVED BY S.KNAPP	6/2/92	SIZE C	
CUSTOMER		CTA		C00-475	
NEXT ASSEMBLIES		SCALE	NTS	WEIGHT	—
		SHEET	1	OF	1
		REVISION	B		







For Reference Only

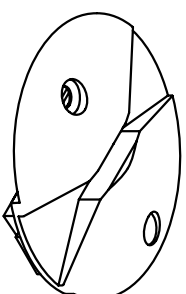
SECTION A-A



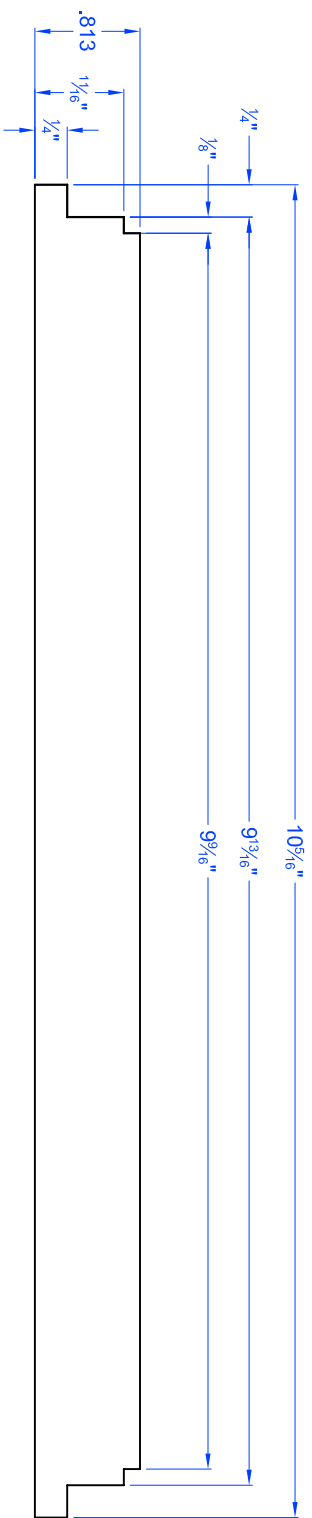
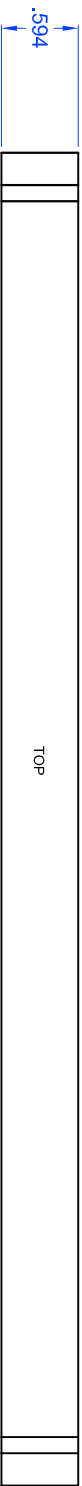
Notes:
Break All Sharp Edges
Spec: 9757
Material: AISI 304 Stainless Steel
1 1/2" x 4" Bar Stock

Rev. 1: 2 mounting holes were 1.359" from center line now 1.406" GM 1/30/09

DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5			
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES			
TOLERANCES: ANGLES: ±.5° FRACTIONS: ±1/64 DECIMALS: .XX ±.01 DECIMALS: .XXX ±.005		Oval Center Stop Self Cleaning Threshold CAR SERIES: 2600	
RIVET & BOLT MARGIN: ±.05 BEND RADI: ±.03 ON .03 & .06 ±.03 ON .09 & GREATER SHEET METAL CORNER RADI: INT .19 EXT .25		Drawn: GM Scale: Date: 08/04/08	Approved:  General Manager, Engineering & Technical Services
Checked:  Manager, Technical Services		R-2-742	





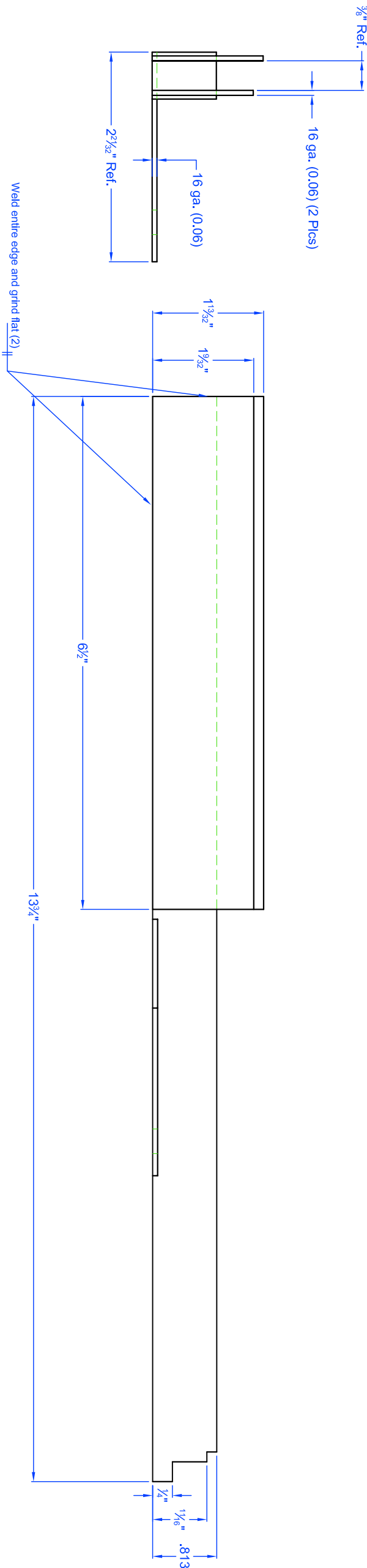
DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	
TOLERANCES: ANGLES $\pm 5^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS: .XX $\pm .01$ DECIMALS: .XXX $\pm .005$	
RIVET & BOLT MARGIN: $\pm .05$ BEND RADIUS: $\pm .03$ ON .03 & .06 $\pm .03$ ON .09 & GREATER SHEET METAL CORNER RADIUS: .015 .03 .06 .125 .1875 .25 .3125 .375 .4375 .5 .5625 .625 .6875 .75 .8125 .875 .9375 1.0 1.125 1.25 1.375 1.5 1.625 1.75 1.875 2.0 2.125 2.25 2.375 2.5 2.625 2.75 2.875 3.0 3.125 3.25 3.375 3.5 3.625 3.75 3.875 4.0 4.125 4.25 4.375 4.5 4.625 4.75 4.875 5.0 5.125 5.25 5.375 5.5 5.625 5.75 5.875 6.0 6.125 6.25 6.375 6.5 6.625 6.75 6.875 7.0 7.125 7.25 7.375 7.5 7.625 7.75 7.875 8.0 8.125 8.25 8.375 8.5 8.625 8.75 8.875 9.0 9.125 9.25 9.375 9.5 9.625 9.75 9.875 10.0 10.125 10.25 10.375 10.5 10.625 10.75 10.875 11.0 11.125 11.25 11.375 11.5 11.625 11.75 11.875 12.0 12.125 12.25 12.375 12.5 12.625 12.75 12.875 13.0 13.125 13.25 13.375 13.5 13.625 13.75 13.875 14.0 14.125 14.25 14.375 14.5 14.625 14.75 14.875 15.0 15.125 15.25 15.375 15.5 15.625 15.75 15.875 16.0 16.125 16.25 16.375 16.5 16.625 16.75 16.875 17.0 17.125 17.25 17.375 17.5 17.625 17.75 17.875 18.0 18.125 18.25 18.375 18.5 18.625 18.75 18.875 19.0 19.125 19.25 19.375 19.5 19.625 19.75 19.875 20.0 20.125 20.25 20.375 20.5 20.625 20.75 20.875 21.0 21.125 21.25 21.375 21.5 21.625 21.75 21.875 22.0 22.125 22.25 22.375 22.5 22.625 22.75 22.875 23.0 23.125 23.25 23.375 23.5 23.625 23.75 23.875 24.0 24.125 24.25 24.375 24.5 24.625 24.75 24.875 25.0 25.125 25.25 25.375 25.5 25.625 25.75 25.875 26.0 26.125 26.25 26.375 26.5 26.625 26.75 26.875 27.0 27.125 27.25 27.375 27.5 27.625 27.75 27.875 28.0 28.125 28.25 28.375 28.5 28.625 28.75 28.875 29.0 29.125 29.25 29.375 29.5 29.625 29.75 29.875 30.0 30.125 30.25 30.375 30.5 30.625 30.75 30.875 31.0 31.125 31.25 31.375 31.5 31.625 31.75 31.875 32.0 32.125 32.25 32.375 32.5 32.625 32.75 32.875 33.0 33.125 33.25 33.375 33.5 33.625 33.75 33.875 34.0 34.125 34.25 34.375 34.5 34.625 34.75 34.875 35.0 35.125 35.25 35.375 35.5 35.625 35.75 35.875 36.0 36.125 36.25 36.375 36.5 36.625 36.75 36.875 37.0 37.125 37.25 37.375 37.5 37.625 37.75 37.875 38.0 38.125 38.25 38.375 38.5 38.625 38.75 38.875 39.0 39.125 39.25 39.375 39.5 39.625 39.75 39.875 40.0 40.125 40.25 40.375 40.5 40.625 40.75 40.875 41.0 41.125 41.25 41.375 41.5 41.625 41.75 41.875 42.0 42.125 42.25 42.375 42.5 42.625 42.75 42.875 43.0 43.125 43.25 43.375 43.5 43.625 43.75 43.875 44.0 44.125 44.25 44.375 44.5 44.625 44.75 44.875 45.0 45.125 45.25 45.375 45.5 45.625 45.75 45.875 46.0 46.125 46.25 46.375 46.5	



Notes:
 Break All Sharp Edges
 Spec: 9757
 Material: AISI 304 Stainless Steel
 Top Face to be Free of Tool Marks



Rev 1: Removed 1 3/16" from the overall length

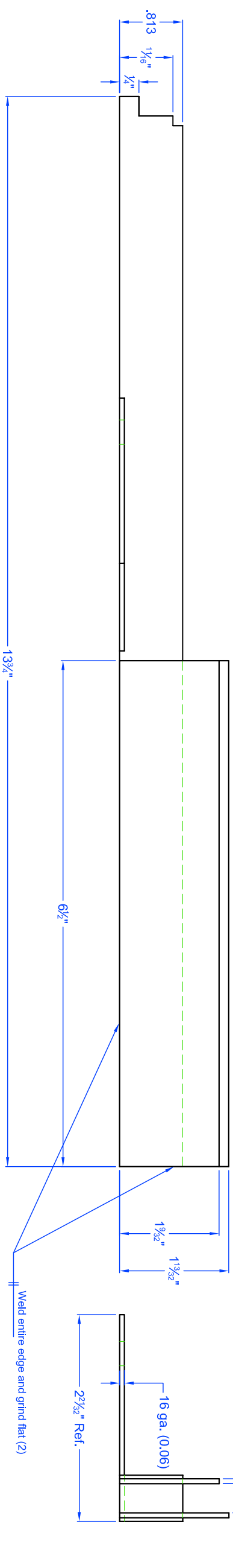
DIMENSIONING & TOLERANCING PER ANSI (USAS) Y14.5		 RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES		 Filler Bar Self Cleaning Threshold CAR SERIES: 2600	
TOLERANCES: ANGLES: ±.5° FRACTIONS: ±1/64 DECIMALS: .XX ±.01 DECIMALS: .XXX ±.005		Drawn <u>GM</u> Scale <u> </u> Date <u>08/05/08</u>	
RIVET & BOLT MARGIN: ±.05 BEND RADI: ±.03 ON .03 & .06 SHEET METAL CORNER RADI: INT .18 EXT .20 .00		Checked <u>Charles N. Ingerty</u> Approved <u>Charles N. Ingerty</u> Manager, Technical Services General Manager, Engng & Technical Services	
		Next Assy.	
		R-1-629	





Notes:
Break All Sharp Edges
Spec: 9757
Material: AISI 304 Stainless Steel
Top Face to be Free of Tool Marks

Rev. 2: Distance between the vertical plates was $1\frac{1}{32}$ " Ref. GM-9.15.09
Rev. 1: Hole $\varnothing\frac{1}{16}$ was $\varnothing\frac{5}{16}$. Overall length was increased by 1". Dimensions locating the tab increased by 1" GM-2.13.09

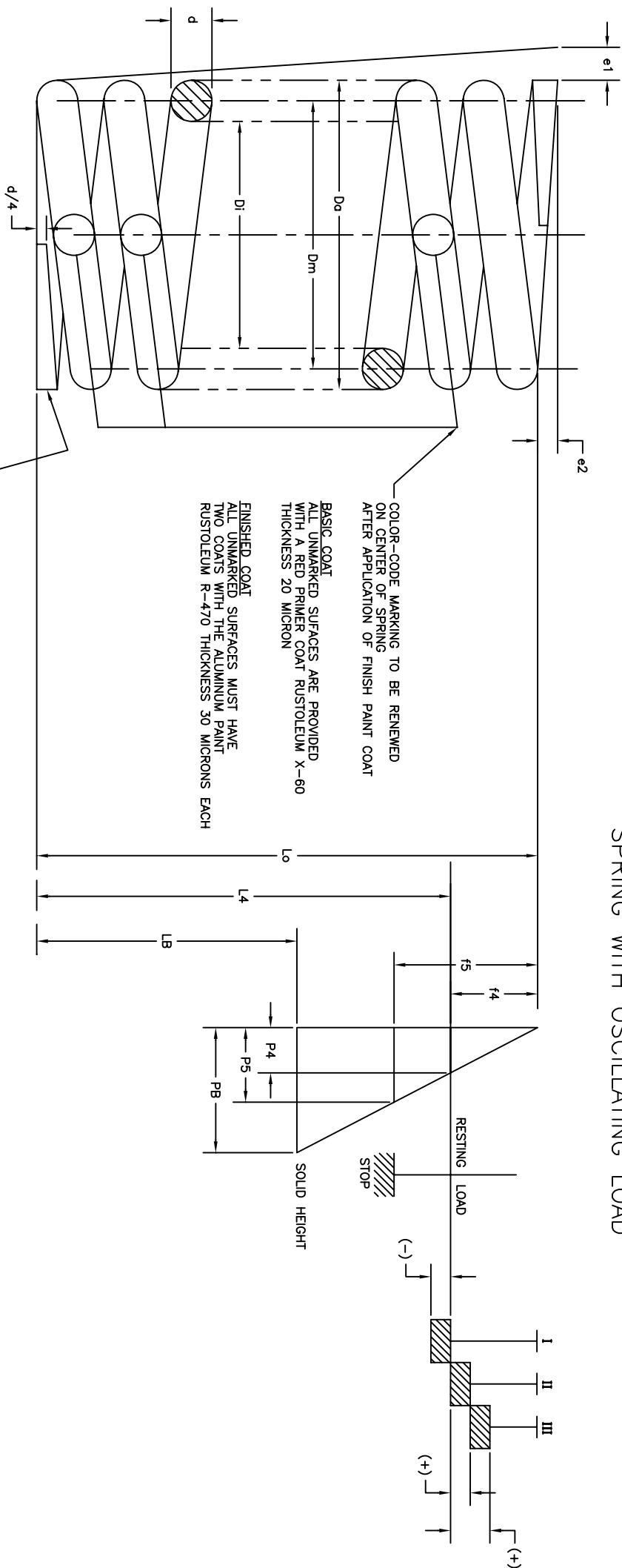
DIMENSIONING & TOLERANCING PER ANSI (Y54.5) Y14.5	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	
TOLERANCES: ANGLES: $\pm .5^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS: .XX $\pm .01$ DECIMALS: .XXX $\pm .005$	
R/NET & BOLT MARGIN: $\pm .05$ BEND R/NET: $\pm .03$ ON .03 & .06 $\pm .03$ ON .09 & GREATER	
SHEET METAL CORNER R/NET: IN: .16 EX: .00	
	
	
<h1>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</h1>	
<h2>Pocket Guide-Left Hand Self Cleaning Threshold CAR SERIES: 2600</h2>	
Drawn: <u>GM</u>	Scale:
Checked: <i>Christopher N. Hapich</i>	Date: <u>08/05/08</u>
Approved: <i>Clifford M. Moore</i>	
Manager, Technical Services	General Manager, Engineering & Technical Services
Meet	Any.
<h1>R-2-741</h1>	



Rev. 2: Distance between the vertical plates was $1\frac{1}{32}$ " Ref. GM-9;15;09
Rev. 1: Hole $\varnothing\frac{1}{16}$ was $\varnothing\frac{5}{16}$. Overall length was increased by 1". Dimensions locating the tab increased by 1" GM-2;13;09

DIMENSIONING & TOLERANCING PER ANSI (Y54.5) Y14.5	
UNLESS OTHERWISE SPECIFIED SURFACE FINISH DIMENSIONS ARE IN INCHES	
TOLERANCES: ANGLES: $\pm .5^\circ$ FRACTIONS: $\pm 1/64$ DECIMALS: .XX $\pm .01$ DECIMALS: .XXX $\pm .005$	
R/NET & BOLT MARGIN: $\pm .05$ BEND R/NET: $\pm .03$ ON .03 & .06 $\pm .03$ ON .09 & GREATER SHEET METAL CORNER R/NET: IN: .16 OUT: .00	
<div style="text-align: center;">  <h1>RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES</h1>  </div>	
<div style="text-align: center;"> <h2>Pocket Guide-Right Hand Self Cleaning Threshold</h2> <h3>CAR SERIES: 2600</h3> </div>	
Drawn <u>GM</u> Scale _____ Date <u>08/05/08</u>	Checked _____ <i>Charles H. Hays</i> Manager, Technical Services
Approved <u>Charles H. Hays</u> General Manager, Engineering & Technical Services	Next _____ Any,
<h1>R-2-740</h1>	

SPRING WITH OSCILLATING LOAD



TOLERANCE GROUP	
II	III
0 TO +0.1	+0.1 TO +0.3
COLOR CODING	
BLUE	BLACK
ITEM NO. 4004565	ITEM NO. 4004566

SPRING DATA			FLEXICOIL SPRING		
SER. NO.	DESCRIPTION	SYMBOL	DIM.	NOMINAL VALUE	ALLOWABLE DEVIATION + INCH -
1	SPRING RATE	c	LB./INCH	1172.8	- -
2	SPECIFIC SPRINGING 1/c	c	INCH/LB	.000853	- -
3	WIRE DIAMETER	d	INCH	1.5	+0 - .004
4	MEDIUM DIAMETER OF SPRING	Dm	INCH	11.50	- -
5	INSIDE DIAMETER	Di	INCH	10.00	- -
6	OUTSIDE DIAMETER	Do	INCH	13.00	+ .110 + .012
7	ALLOWABLE DEVIATION FROM THE VERTICAL ENVELOPE LINE, MEASURED ON UNLOADED SPRING	e1	INCH	.26	- -
8	ALLOWABLE DEVIATION FROM PARALLELISM OF THE GROUND SPRING PAD SURFACE IN INCHES, MEASURED FROM Do	e2	INCH	.17	- -
9	SPRING TRAVEL AT RESTING LOAD (SERVICE WEIGHT)	f4	INCH	4.90	- -
10	SPRING TRAVEL UP TO STOP	f5	INCH	7.70	- -
11	NUMBER OF ACTING TURNS	if		4	- -
12	TOTAL NUMBER OF TURNS	ig		5.5	- -
13	LENGTH OF UNLOADED SPRING	Lo	INCH	17.11	- -
14	LENGTH OF SPRING AT RESTING LOAD	L4	INCH	12.20	- -
15	LENGTH OF SPRING AT BLOCK CONDITION	LB	INCH	7.78	- -
16	SPRING FORCE AT RESTING LOAD (SERVICE WEIGHT, OPERATING LOAD)	P4	LB	5749	- -
17	SPRING FORCE AT STOP	P5	LB	9027	- -
18	SPRING FORCE AT BLOCK CONDITION (TEST LOAD)	P8	LB	NOT PERMISSIBLE	- -

SPRING MARKING AND STAMP OF APPROVAL
IMRESSED AT THIS LOCATION

ON ONE END OF EACH SPRING A SPRING MARKING IS IMPRESSED

EXAMPLE	X-000	6.96	24/26/32
---------	-------	------	----------

CAR SERIES

MONTH AND YEAR OF MANUFACTURE

NAME OR BRAND OF MANUFACTURE

- NOTES:**

1. SPRINGS TO BE R.H. WOUND, MANUFACTURED PEE LATEST AAR M-114 SPEC. EXCEPT AS SHOWN IN SPRING DATA AND TOLERANCE GROUP TABLES.
2. IT IS REQUIRED THAT ON EACH TRUCK SPRINGS OR SPRING SETS OF THE SAME TOLERANCE GROUP ONLY ARE USED.

SPRING: OUTER BOLSTER, TRUCK SUSPENSION



CAR SERIES: 2400, 2600, 3200

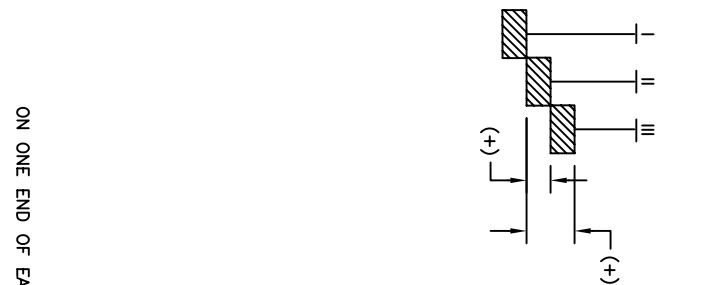
ITEM NO. 4004565 - BLUE, ITEM NO.4004566 - BLACK

MATERIAL: CENTERLESS GROUND BAR,

PER ASTM A125 AND ASTM A304

CHECK FOR CRACKS AND SHOT PEEN

DIMENSIONING & TOLERANCING PER AWS (D15.9) 114.5	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
 	
RAIL OPERATIONS ENGINEERING & TECHNICAL SERVICES	
SPRING, OUTER BOLSTER TRUCK SUSPENSION ITEM NO. 4004565 & ITEM NO. 4004566 CAR SERIES: 2400, 2600, 3200	
Drawn: BRI Inc. Scale NONE Date 3-1-96	R-4-1099
Checked: <i>WJL</i> <i>WJL</i> Date: <i>3-1-96</i>	Approved: <i>WJL</i> Date: <i>3-1-96</i>
(Designer, Technical Services)	(Chief Engineer, Design & Technical Services)
Date: _____	Date: _____



ON ONE END OF EACH SPRING A SPRING MARKING IS IMPRESSED

EXAMPLE

X-000	1.91	24-32	
			CAR SERIES
			MONTH AND YEAR OF MANUFACTURE
			NAME OR BRAND OF MANUFACTURE

SPRING: INNER BOLSTER, TRUCK SUSPENSION
 FOUR REQ'D PER CAR
 CAR SERIES: 2400, 2600, 3200
 ITEM NO. 4004563 - BLUE, ITEM NO. 4004564 - BLACK
 MATERIAL:
 CENTERLESS GROUND BAR
 SAE 6150H OR SAE 5160H MILD ALLOY SPRING STEEL
 PER ASTM A125 and ASTM A304
 HEAT TREAT TO 198,700-242,200 P.S.I.
 CHECK FOR CRACKS AND SHOT PEENED

REV. 8: MODIFIED THE UPPER TOLERANCE
 6M, 06-09-09
 REV. 7: ADDED ALTERNATE MATERIAL, S
 06-09-09
 REV. 6: CHANGED TOLERANCE GROUND

SPRING: INNER BOLSTER, TRUCK SUSPENSION
FOUR REQ'D PER CAR
CAR SERIES: 2400, 2600, 3200
ITEM NO. 4004563 - BLUE, ITEM NO. 4004564 - BLACK

MATERIAL:

CENTERLESS GROUND BAR
SAE 6150H OR SAE 5160H MILD ALLOY SPRING STEEL
PER ASTM A125 AND ASTM A304
HEAT TREAT TO 198,700-242,200 P.S.I.
CHECK FOR CRACKS AND SHOT PEELED

ORIGINAL SHOWN ON WEGMANN DWG. 2.4513.04.055.008

APPENDIX G

BID PROTEST PROCEDURES

CTA's protest procedures for all RFPs, IFBs and LIQs are available on-line in Chapter 15 of the following document:

http://www.transitchicago.com/assets/1/procurement/Procurement_Policy_and_Procedures_Version_4.pdf

Any protest regarding the solicitation, evaluation or award must be submitted in accordance with these protest procedures.

APPENDIX H

CONTRACTOR CERTIFICATIONS AND ACCEPTANCE

- *Certification Regarding a Drug-free Workplace*
- *Certification of Primary Participant Regarding Debarment*
- *Certification of Lower Tier Participant(s) Regarding Debarment*
- *Certification Regarding Lobbying*
- *Proposer's Execution Signature Page*
- *Disclosure of Ownership*
- *Acceptance*

CERTIFICATION REGARDING A DRUG FREE WORKPLACE

Pursuant to the definitions regarding a Drug Free Workplace provided in the Drug-Free Workplace Act of 1988, the Illinois Drug Free Workplace Act, 30 ILCS 580/1 *et seq.*, the Illinois Substance Abuse Prevention on Public Works Projects Act, 820 ILCS 265/1 *et seq.*, the Federal Acquisition Regulation System ("FAR"), Procedures for Transportation Workplace Drug & Alcohol Testing Programs, 49 CFR 40, and Prevention of Alcohol Misuse & Prohibited Drug Use in Transit Operation, 49 CFR 655, _____ ("Contractor") certifies to the best of its knowledge and belief that it and its principals:

1. Maintain a workplace(s) (i.e. the site(s) for the performance of work done by the Contractor in connection with this contract) safe and free from "controlled substances" as described in the Controlled Substances Act (21 U.S.C. 812) and as further described in regulations 21 CFR 1308.11 - 1308.15.
2. Have neither been convicted, including entering a plea of 'nolo contendere,' nor had sentence imposed by any judicial body charged with the responsibility to determine violations of Federal or State criminal drug statutes.
3. Publish and give notice to its employees and sub-contractors that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace, and also that actions will be taken against any and all employees and sub-contractors found to be violation of same.
4. Provide that all employees engaged in the performance of the contract receive a copy of the above statement, that the employee will abide by the terms of this statement, and that the employee will notify the employer in writing of the employee's conviction no later than five (5) calendar days after such conviction.
5. Provide for appropriate action against an employee for violation of any and all of these rules and that an employee convicted of drug abuse must satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by Federal, State, or local health or law enforcement or other appropriate agency.
6. Comply with all drug and alcohol policies, testing programs and reporting requirements set forth in 49 CFR 40 and 49 CFR 655 whenever the Contractor, its employees, or sub-contractor(s) perform one or more of the following functions considered "safety-sensitive", as defined in 49 CFR 655:
 - a. Operating a revenue service vehicle, including when not in revenue service;
 - b. Operating a non-revenue service vehicle, when required to be operated by a holder of a Commercial Driver's License;
 - c. Controlling dispatch or movement of a revenue service vehicle;
 - d. Maintaining (including repairs, overhaul and rebuilding) a revenue service vehicle or equipment used in revenue service; or
 - e. Carrying a firearm for security purposes.
7. Have in place a written program which meets or exceeds the program requirements of the Substance Abuse Prevention on Public Works Projects Act (820 ILCS 265/1 *et seq.*) to be filed with the Authority and made available to the general public, or have in place a collective bargaining agreement which deals with the subject matter of the Substance Abuse Prevention on Public Works Projects Act (820 ILCS 365/1 *et seq.*).
8. Will otherwise comply with all drug and alcohol policies set forth in applicable Federal, State and local laws and regulations, including, but not limited to the Drug-Free Workplace Act of 1988, FAR, Illinois Drug Free Workplace Act, 49 CFR 40 and 49 CFR 655 in such version, prior or subsequent to amendment or revision, as is currently enforced or enforceable at and during the execution and performance of this Contract.

In addition to other remedies, the Contractor's failure to comply with any part of the requirements of the Drug-Free Workplace Act of 1988, FAR, Illinois Drug Free Workplace Act, the Illinois Substance Abuse Prevention on Public Works Projects Act, 49 CFR 40 or 49 CFR 655, may render the Contractor subject to any or all of the following: suspension of payments, termination of contract for default, suspension or debarment.

Signature and Title of Authorized Official

Date

**CERTIFICATION OF PRIMARY PARTICIPANT
REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS**

_____, certifies to the best of our knowledge and belief that it and

(Company's name)

its principles:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

THE PRIMARY PARTICIPANT (APPLICANT OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT) _____ CERTIFIES OR AFFIRMS THE

(Company name)

TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 *ET SEQ.* ARE APPLICABLE THERETO.

(Signature and Title of Authorized Official)

If you are unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.

**CERTIFICATION OF LOWER TIER PARTICIPANT
REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS**

_____, certifies to the best of our knowledge and belief that it and

(Company's name)
its principles:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of frauds or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. Are not presently indicated for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

THE LOWER TIER PARTICIPANT (APPLICANT OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT) _____ CERTIFIES OR AFFIRMS THE
(Company name)
TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS
CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 *ET SEQ.* ARE
APPLICABLE THERETO.

(Signature and Title of Authorized Official)

If you are unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.

LOBBYING CERTIFICATION

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, and contracts under grants, loans and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Executed this _____ day of _____, 20_____.

By: _____
(Type or print name of contractor)

(Signature of authorized officer)

(Title of authorized officer)

Proposer's Execution Signature Page

The undersigned hereby acknowledges having received a full set of CONTRACT DOCUMENTS (Section 1 "Background and Introduction", Section 2 "Scope of Services", Section 3 "Proposal Requirements", Section 4 "Evaluation Criteria and Process", Appendix A "Price Proposal Forms", Appendix B "Contract for Parts", Appendix C "DBE Requirements", Appendix D "Bills of Material", Appendix E "Detail Specifications", Appendix F "CTA Drawings", Appendix G "Bid Protest Procedures", Appendix H "Contractor Certifications and Acceptance", Appendix I "RFP Non-Disclosure Statements", Appendix J "Vendor Reference Form" and Appendix K "Table of Exceptions") AND ADDENDA NUMBERS:

Bidder Must Insert Addenda Numbers Here

and the undersigned agrees, if awarded the Contract, to perform the Contract in accordance with the terms and conditions of the Contract and Addenda, if any, thereto. Notice to the undersigned may be served by mailing to the address hereinafter set forth.

FURTHER, THE UNDERSIGNED, BEING DULY SWORN, DEPOSES AND STATES ON OATH THAT the undersigned has not entered into any agreement with any other Bidder or prospective Bidder or with any other person, firm, or corporation relating to the price or prices named within the undersigned's Bid, or any other Bid, or any agreement or arrangement under which any person, firm, or corporation is to refrain from bidding, or any agreement or arrangement for any act or omission in restraint of free competition among Bidders, and has not disclosed to any person, firm, or corporation the terms of the undersigned's Bid, or the price or prices named herein. As required by Section 33E-11 of the Illinois Criminal Code of 1961, as amended (the "Act"), the undersigned certifies that the below named Bidder or any agent, partner, employee, or officer of the Bidder is not barred from contracting with any unit of state or local government as a result of engaging in or being convicted of either bid-rigging in violation of Section 3, Article 33E or bid-rotating in violation of Section 4, of Article 33E of the Act, or any similar offenses of any state or the United States that contain the same elements as the offenses of bid-rigging or bid-rotating.

Bidder: _____
(Print or Type Name of Corporation, Limited Liability Co., Sole Proprietor, Partnership, or Joint Venture)

Business Address (Print or Type Street, City, State and Zip Code): _____

By: _____
Signature of Authorized Officer¹, Managing Member¹, Bidder¹, Partner(s)² or Joint Venturer(s)²

Title and Name of Signatory: _____
(Print or Type Title and Name)

1. If signed by any person other than the corporate President or Vice President, a certified copy of a resolution or by-law authorizing such person to sign must accompany this Bid.
2. All Partners or Joint Venturers of the Firm must sign this bid unless one Partner or Joint Venturer is authorized to sign for the Partnership or Joint Venture. Use additional copies of this Attachment if more than one signatory.

State of _____
County of _____

Signed and Sworn to before me by the signatory whose name appears above on this :

_____ day of _____ 20_____
(day) (month) (year)

(Signature of Notary Public)

(NOTARY SEAL)

DISCLOSURE OF OWNERSHIP AND INTERESTS AFFIDAVIT

Every Bidder or Proposer (referred to as "Bidder") submitting a Bid or Proposal to the Authority for a Contract shall submit this Disclosure of Ownership and Interests Affidavit (hereafter Disclosure Affidavit or "Affidavit"). If the Bidder is a joint venture, the joint venture and each of the joint venture partners shall complete a Disclosure Affidavit.

Please print or type all responses clearly and legibly. If you need additional space for a response, attach extra pages. Please indicate the question to which you are responding on any extra pages you attach.

For purposes of this Disclosure Affidavit, the term "Contract" refers to the Contract, concession, agreement, modification, amendment, extension, or other section in connection with which you are submitting the Disclosure Affidavit.

After reviewing your completed Disclosure Affidavit, the Authority's General Counsel or GM, Purchasing may require additional information to achieve full disclosure relevant to the Bid, or other applications.

Requisition Number: _____ Bidder Name: _____

Bidder Business Address: _____

Authority departments to which you are submitting this form (check one):

☐ Purchasing ☐ Other: _____

The undersigned _____, as _____, and on behalf
(Name) (Title)
of _____ ("Bidder" or "Contractor"), having been duly sworn
(Business Address)
under oath certifies as follows:

DISCLOSURE OF OWNERSHIP INTERESTS

Indicate below whether the Bidder is an individual or a legal entity and, if a legal entity, indicate the type of entity. Then complete Part (A), (B), (C), or (D) below as applicable. All Bidders shall complete Part (E). For Bidders that are sole proprietorships, Part (E) is the only section of Part I that shall be completed. For Bidders that are joint venturers, the joint venture and each member must complete a separate form. Identify all layers of ownership if the firm has a parent firm.

<input type="checkbox"/> Individual	<input type="checkbox"/> Limited liability company
<input type="checkbox"/> Business corporation	<input type="checkbox"/> Partnership
<input type="checkbox"/> Not-for-Profit corporation	<input type="checkbox"/> Joint Venture
<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Limited Liability Partnership
	{ } Other: _____

A. CORPORATIONS (FOR-PROFIT AND NOT-FOR-PROFIT)

This information must be provided for the corporation and for any parent corporation.

- Incorporated in the State of _____.
- List below the name and title of all officers of the corporation:

Name	Title
_____	_____

_____	_____
_____	_____

3. List below the name and title of all directors of the corporation:

Name	Title
_____	_____
_____	_____
_____	_____

TO BE COMPLETED BY FOR -PROFIT CORPORATIONS ONLY:

1. Is the Corporation listed on the New York Stock Exchange? [] Yes [] No

If the Corporation is listed on an exchange other than the New York Stock Exchange, the name of the exchange is: _____

2. If there are fewer than 100 shareholders, list below the name, business address, and percentage of ownership interest of each shareholder:

Name	Business Address	Ownership Interest
_____	_____	_____ %
_____	_____	_____ %
_____	_____	_____ %

3. If there are 100 or more shareholders, list below the name, business address, and percentage of ownership interest for each shareholder who owns shares or options equal to or in excess of 5% of the ownership of the corporation:

Name	Business Address	Ownership Interest
_____	_____	_____ %
_____	_____	_____ %
_____	_____	_____ %

TO BE COMPLETED BY NOT-FOR-PROFIT CORPORATIONS ONLY:

List below the name and business address of officers, trustees and board members.

Name	Business Address	Title
_____	_____	_____
_____	_____	_____
_____	_____	_____

B. PARTNERSHIPS

List below the name and business address and the percentage of ownership interest for each general, limited, or individual partner entitled to receive 5% or more of the profit derived from partnership activities. The names of all individuals in such partnerships must be listed.

Name	Business Address	Ownership Interest
_____	_____	_____ %
_____	_____	_____ %
_____	_____	_____ %

C. LIMITED LIABILITY COMPANIES

1. List below the names and titles of the officers, if any. If there are no officers, write "none":

Name	Title
_____	_____
_____	_____
_____	_____

2. List below the name, business address, and percentage of ownership interest of each (i) member and (ii) manager.

Name	Business Address	Ownership Interest
_____	_____	_____ %
_____	_____	_____ %
_____	_____	_____ %

D. LAND TRUSTS, BUSINESS TRUSTS, ESTATES, AND OTHER SIMILAR ENTITIES

1. Trust name and number, or other information identifying the trust: _____

2. List below the name and business address of all trustees:

Name	Business Address
_____	_____
_____	_____
_____	_____

3. List below the name, business address, and percentage of ownership interest of all beneficiaries:

Name	Business Address	Ownership Interest
_____	_____	_____ %
_____	_____	_____ %
_____	_____	_____ %

E. ADDITIONAL INFORMATION - TO BE COMPLETED BY ALL BIDDERS

1. Is any ownership interest in the Bidder held by one or more agents or nominees on behalf of another individual or legal entity? ☐ Yes ☐ No

If Yes, list below each principal's name, business address, percentage of ownership interest, and the name of the principal's agent or nominee:

Name	Business Address	Ownership Interest	Agent/Nominee
_____	_____	_____ %	_____
_____	_____	_____ %	_____
_____	_____	_____ %	_____

2. Is the Bidder or any ownership interest in the Bidder, constructively controlled by another individual or legal entity, other than an agent or nominee disclosed above? ☐ Yes ☐ No

If Yes, list below the name and business address of each individual or entity possessing constructive control, the party whose interest is controlled, and the relationship between the two under which the control is or may be exercised:

Name	Business Address	Name of Party Whose Interest is Controlled	Relationship
_____	_____	_____ %	_____
_____	_____	_____ %	_____
_____	_____	_____ %	_____

3. Is any stock or beneficial interest in the Bidder held by a corporation or other legal entity? ☐ Yes ☐ No

If Yes, each such corporation or other legal entity shall make all disclosures requested in this Disclosure Affidavit and shall certify all information provided or, in the alternative, the Bidder must complete and sign an additional Disclosure Affidavit for each such corporation or other legal entity.

4. Is any ownership interest held by a current or former CTA employee? ☐ Yes ☐ No

If Yes, provide names and amount of ownership interest:

Name	Ownership Interest
_____	_____ %
_____	_____ %
_____	_____ %

5. Is any current or former CTA employee employed by the Bidder: ☐ Yes ☐ No

If Yes, provide name, title and areas of responsibility:

Name	Title	Areas of Responsibility
_____	_____	_____
_____	_____	_____
_____	_____	_____

NOTE: The information provided in this form, shall be kept current. In the event of material changes, the Bidder shall supplement this Affidavit, up to the time the Authority takes action on the Bid, or other application for which this Affidavit is being submitted.

BIDDER:

By _____
(If a corporation and signed by any person other than the President or Vice-President, a certified copy of a resolution or by-law authorizing such person to sign, must accompany this contract)

NOTARIZATION - REQUIRED

State of _____

County of _____

Signed and Sworn to before me on
this _____ day of _____, 200__

By _____
(Signature of Notary Public)

(NOTARY'S SEAL)

ACCEPTANCE

The undersigned, on behalf of Chicago Transit Authority, A Municipal Corporation of the State of Illinois, hereby accepts the foregoing bid items as identified in the Proposal.

Contract Number

Total Amount of Contract \$

Dated this _____ **day of** _____, **2012, at Chicago, Illinois**

Vice President, Purchasing

President

Approved as to form and legality, for the sole benefit of CTA. Subject to proper authorization and execution thereof:

Attorney

APPENDIX I
NON-DISCLOSURE STATEMENT

RFP NON-DISCLOSURE STATEMENT

In connection with the Proposal submitted herewith in response to the Chicago Transit Authority's ("CTA") Request for Proposal ("RFP"), **Requisition No. C12R101317082 Request for Proposal (RFP) for Sourcing and delivery of parts required to perform in-house "C-Lite" overhauls on 2600 series railcars:** _____ ("Company") acknowledges and agrees that the evaluation process conducted by the CTA on all Proposals submitted is confidential and sensitive. Company further agrees not to take any action(s) that would frustrate the process, provide any unfair advantage to itself, or provide any advantage or disadvantage to any other proposer in connection with the RFP.

Therefore, Company states as follows:

1. All substantive details of the Proposal submitted by Company and all materials and information provided, discussed, disclosed or otherwise conveyed, whether in writing or orally, by the CTA or Company or between Company and CTA during demonstrations, presentations, meetings or negotiations in connection with the CTA's evaluation of Company's Proposal, including cost or price information, technical information or any other proposal information or conditions with respect to the possible procurement transaction contemplated by the RFP (the "Transaction"), the identity of the CTA's evaluation committee, the name of the proposers, or any sub-contractor, and the number of proposers are hereby referred to as "Confidential Evaluation Material" for purposes of this Statement. Confidential Evaluation Material shall also include all communications regarding the Transaction with Authorized CTA Personnel, including: (i) requests for additional information, (ii) requests for tours or management meetings, (iii) discussions or questions regarding the Transaction, (iv) the occurrence, existence, or lack thereof, of any such communication, discussion or negotiation, (v) the status of discussions or negotiations and (vi) the fact that any Confidential Evaluation Material has been made available to Company. The term Confidential Evaluation Materials does not include statements informing another of the submission or existence of the Proposal.
2. Company will limit knowledge of and access to the Confidential Evaluation Materials to only those of its principals, directors, officers, employees and representatives, who have a need to know such information (collectively the "Company Parties") and such Confidential Evaluation Materials shall be used solely in connection with negotiations with Authorized CTA Personnel regarding the Transaction. When the Company discloses Confidential Evaluation Material to any of the Company Parties, it shall be the Company's responsibility to ensure that all Company Parties recognize the confidential nature of such information, together with the restrictions on use and disclosure contained herein.
3. Company will not disclose any Confidential Evaluation Material to any employee, officer or Board member of the CTA who is not named as Authorized CTA Personnel. Additionally, Company will not contact any employee, officer or Board member of the CTA other than the Authorized CTA Personnel on any matter involving this Transaction. Authorized CTA Personnel shall mean only the CTA Procurement Administrator for the Transaction, the General Manager – Purchasing, the Vice President – Purchasing and Warehousing and any other CTA person or position specifically authorized in writing by either the CTA's Procurement Administrator, General Manager - Purchasing, or Vice President – Purchasing and Warehousing.
4. The Company shall not disclose any Confidential Evaluation Material to, or use any such information for the advantage or disadvantage of, any third person. The term "third person" shall be broadly interpreted to include without limitation any corporation, company, group, partnership or an individual other than the Company Parties and Authorized CTA Personnel.

- 5 Notwithstanding the above, the obligations of Company regarding the Confidential Evaluation Material do not apply to information which in the opinion of Company's counsel is otherwise required to be disclosed by law. In such event, Company shall provide CTA with written notice of such a determination, and a supporting statement from its counsel, prior to disclosure.
6. Company shall advise the CTA in writing if it learns of any unauthorized use or disclosure of Confidential Evaluation Material.
7. The CTA shall be entitled to equitable relief, including injunction, if any provision of this Statement is breached. Additionally, the CTA reserves the right to disqualify the Company from further consideration for the Transaction in the event of a breach of the terms of this Statement.
8. This Statement is governed by the laws of the State of Illinois and any lawsuits involving this Statement shall be filed in courts of competent jurisdiction located in Cook County, Illinois.
9. This Statement shall be effective as of the date signed and shall continue in full force and effect until the date on which a contract award for the Transaction is made by the CTA's Board.

Agreed to and Accepted:

Company

By: _____

Name: _____

Title: _____

Date: _____

RFP NON-DISCLOSURE STATEMENT SUB-CONSULTANT

In connection with the Proposal submitted herewith in response to the Chicago Transit Authority's ("CTA") Request for Proposal ("RFP") **Requisition No. C12R1101317082 Request for Proposal (RFP) for Sourcing and delivery of parts required to perform in-house "C-Lite" overhauls on 2600 series railcars:** _____ ("Company") acknowledges and agrees that the evaluation process conducted by the CTA on all Proposals submitted is confidential and sensitive. Company further agrees not to take any action(s) that would frustrate the process, provide any unfair advantage to itself, or provide any advantage or disadvantage to any other proposer in connection with the RFP.

Therefore, Company states as follows:

1. All substantive details of the Proposal submitted by Company and all materials and information provided, discussed, disclosed or otherwise conveyed, whether in writing or orally, by the CTA or Company or between Company and CTA during demonstrations, presentations, meetings or negotiations in connection with the CTA's evaluation of Company's Proposal, including cost or price information, technical information or any other proposal information or conditions with respect to the possible procurement transaction contemplated by the RFP (the "Transaction"), the identity of the CTA's evaluation committee, the name of the proposers, or any sub-contractor, and the number of proposers are hereby referred to as "Confidential Evaluation Material" for purposes of this Statement. Confidential Evaluation Material shall also include all communications regarding the Transaction with Authorized CTA Personnel, including: (i) requests for additional information, (ii) requests for tours or management meetings, (iii) discussions or questions regarding the Transaction, (iv) the occurrence, existence, or lack thereof, of any such communication, discussion or negotiation, (v) the status of discussions or negotiations and (vi) the fact that any Confidential Evaluation Material has been made available to Company. The term Confidential Evaluation Materials does not include statements informing another of the submission or existence of the Proposal.
2. Company will limit knowledge of and access to the Confidential Evaluation Materials to only those of its principals, directors, officers, employees and representatives, who have a need to know such information (collectively the "Company Parties") and such Confidential Evaluation Materials shall be used solely in connection with negotiations with Authorized CTA Personnel regarding the Transaction. When the Company discloses Confidential Evaluation Material to any of the Company Parties, it shall be the Company's responsibility to ensure that all Company Parties recognize the confidential nature of such information, together with the restrictions on use and disclosure contained herein.
3. Company will not disclose any Confidential Evaluation Material to any employee, officer or Board member of the CTA who is not named as Authorized CTA Personnel. Additionally, Company will not contact any employee, officer or Board member of the CTA other than the Authorized CTA Personnel on any matter involving this Transaction. Authorized CTA Personnel shall mean only the CTA Procurement Administrator for the Transaction, the General Manager – Purchasing, the Vice President – Purchasing and Warehousing and any other CTA person or position specifically authorized in writing by either the CTA's Procurement Administrator, General Manager - Purchasing, or Vice President – Purchasing and Warehousing.
4. The Company shall not disclose any Confidential Evaluation Material to, or use any such information for the advantage or disadvantage of, any third person. The term "third person" shall be broadly interpreted to include without limitation any corporation, company, group, partnership or an individual other than the Company Parties and Authorized CTA Personnel.

5. Notwithstanding the above, the obligations of Company regarding the Confidential Evaluation Material do not apply to information which in the opinion of Company's counsel is otherwise required to be disclosed by law. In such event, Company shall provide CTA with written notice of such a determination, and a supporting statement from its counsel, prior to disclosure.
6. Company shall advise the CTA in writing if it learns of any unauthorized use or disclosure of Confidential Evaluation Material.
7. The CTA shall be entitled to equitable relief, including injunction, if any provision of this Statement is breached. Additionally, the CTA reserves the right to disqualify the Company from further consideration for the Transaction in the event of a breach of the terms of this Statement.
8. This Statement is governed by the laws of the State of Illinois and any lawsuits involving this Statement shall be filed in courts of competent jurisdiction located in Cook County, Illinois.
9. This Statement shall be effective as of the date signed and shall continue in full force and effect until the date on which a contract award for the Transaction is made by the CTA's Board.

Agreed to and Accepted:

Company

By: _____

Name: _____

Title: _____

Date: _____

APPENDIX J

VENDOR REFERENCE FORM

Vendor References Form

Reference Contact Information

Reference Name		Initial Date of Work with Contact	
Contact Name		Original Contract Term	
Address		Any Contract Extensions	
		Termination Date of Contract	
		Reason for Termination	
Contact Title		Telephone Number	
E-mail		Fax Number	

Nature of Relationship with Company

Approximate \$ Size of the Contract	
Services provided/Software Implemented	
Name of Vendor Project Manager and Client Project Manager	

Detailed Description of Your Responsibilities

Roles & Responsibilities:	
Were you the Prime Contractor?	
Subcontractors & Responsibilities:	

APPENDIX K

TABLE OF EXCEPTIONS

Table of Exceptions

Vendor must identify the page, section number, provision and the specific exception, non-conformance and/or substitute language proposed. Failure to identify any specific items of non-compliance will result in CTA assuming compliance. The CTA, at its sole discretion may reject any exception or specifications within the proposal.

[illegible]