

ORIGINAL



State of South Carolina

Invitation for Bid Amendment 4

Solicitation Number: **5400004167**
 Date Issued: **05/18/2012**
 Procurement Officer: **CHERYL PATRICK, CPPB**
 Phone: **803-737-5717**
 E-Mail Address: **CPatrick@mmo.sc.gov**

RECEIVED

DESCRIPTION: **Type C Conventional School Buses - Statewide**

USING GOVERNMENTAL UNIT: **Statewide Term Contract**

JUN 05 2012

The Term "Offer" Means Your "Bid" or "Proposal". Unless submitted on-line, your offer must be submitted in a sealed package. Solicitation Number & Opening Date must appear on package exterior. See "Submitting Your Offer" provision.

Materials Management Office

SUBMIT YOUR SEALED OFFER TO EITHER OF THE FOLLOWING ADDRESSES:

MAILING ADDRESS:
 Materials Management Office
 PO Box 101103
 Columbia SC 29211

PHYSICAL ADDRESS:
 Materials Management Office
 Capitol Center
 1201 Main Street, Suite 600 – MMO Conference Rm
 Columbia SC 29201

SUBMIT OFFER BY (Opening Date/Time): **06/05/2012 -- 11:00 AM** (See "Deadline For Submission Of Offer" provision)

QUESTIONS MUST BE RECEIVED BY: **05/23/2012 – 4:00pm - (Questions Limited to Amended Parts Only)**
(See "Questions From Offerors" provision)

NUMBER OF COPIES TO BE SUBMITTED: **FOUR (4) – 1 Original & 3 Copies; clearly marked "COPY"**

CONFERENCE TYPE: **Intentionally Deleted**
DATE & TIME:

LOCATION: **Intentionally Deleted**

(As appropriate, see "Conferences - Pre-Bid/Proposal" & "Site Visit" provisions)

AWARD &
AMENDMENTS

Award will be posted on **06/19/2012**. The award, this solicitation, any amendments, and any related notices will be posted at the following web address: <http://www.procurement.sc.gov>

Unless submitted on-line, you must submit a signed copy of this form with Your Offer. By submitting a bid or proposal, You agree to be bound by the terms of the Solicitation. You agree to hold Your Offer open for a minimum of thirty (30) calendar days after the Opening Date.
(See "Signing Your Offer" and "Electronic Signature" provisions.)

NAME OF OFFEROR
Carolina International Trucks, Inc.

(full legal name of business submitting the offer)

Any award issued will be issued to, and the contract will be formed with, the entity identified as the Offeror. The entity named as the offeror must be a single and distinct legal entity. Do not use the name of a branch office or a division of a larger entity if the branch or division is not a separate legal entity, i.e., a separate corporation, partnership, sole proprietorship, etc.

AUTHORIZED SIGNATURE

Richard Kester
(Person must be authorized to submit binding offer to contract on behalf of Offeror.)

TAXPAYER IDENTIFICATION NO.

57-0739608
(See "Taxpayer Identification Number" provision)

TITLE
Bus Sales Manager

(business title of person signing above)

STATE VENDOR NO.

7000083474
(Register to Obtain S.C. Vendor No. at www.procurement.sc.gov)

PRINTED NAME
Richard Kester

(printed name of person signing above)

DATE SIGNED

6-4-2012

STATE OF INCORPORATION

South Carolina
(If you are a corporation, identify the state of incorporation.)

OFFEROR'S TYPE OF ENTITY: (Check one)

(See "Signing Your Offer" provision.)

Sole Proprietorship Partnership Other _____

Corporate entity (not tax-exempt) Corporation (tax-exempt) Government entity (federal, state, or local)

COVER PAGE (NOV. 2007)

ORIGINAL

PAGE TWO

(Return Page Two with Your Offer)

HOME OFFICE ADDRESS (Address for offeror's home office / principal place of business)

Carolina International Trucks, Inc.
1619 Bluff Road
Columbia, SC 29201

NOTICE ADDRESS (Address to which all procurement and contract related notices should be sent.) (See "Notice" clause)

779-4923 _____ Area Code - Number -
803 Extension 7291 Facsimile 779-6585
rkester@carolinainternational.com
_____ E-
mail Address

PAYMENT ADDRESS (Address to which payments will be sent.)
(See "Payment" clause)

Payment Address same as Home Office Address
 Payment Address same as Notice Address (check only one)

ORDER ADDRESS (Address to which purchase orders will be sent)
(See "Purchase Orders and "Contract Documents" clauses)

Order Address same as Home Office Address
 Order Address same as Notice Address (check only one)

ACKNOWLEDGMENT OF AMENDMENTS

Offerors acknowledges receipt of amendments by indicating amendment number and its date of issue. (See "Amendments to Solicitation" Provision)

| Amendment No. | Amendment Issue Date |
|---------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|
| 1 | 4-23-2012 | 2 | 5-1-2012 | 3 | 5-18-2012 | 4 | 5-18-12 |
| | | | | | | | |

| | | | | |
|---|----------------------|----------------------|----------------------|------------------------|
| DISCOUNT FOR PROMPT PAYMENT (See "Discount for Prompt Payment" clause) | 10 Calendar Days (%) | 20 Calendar Days (%) | 30 Calendar Days (%) | ____ Calendar Days (%) |
|---|----------------------|----------------------|----------------------|------------------------|

PREFERENCES - **DO NOT APPLY TO THIS SOLICITATION**

PREFERENCES - **DO NOT APPLY TO THIS SOLICITATION**

PAGE TWO (SEP 2009)

End of PAGE TWO

ORIGINAL

IV. INFORMATION FOR OFFERORS TO SUBMIT

INFORMATION FOR OFFERORS TO SUBMIT -- GENERAL (JAN 2006)

Offeror shall submit a signed Cover Page and Page Two. Offeror should submit all other information and documents requested in this part and in parts II.B. Special Instructions; III. Scope of Work; V. Qualifications; VIII. Bidding Schedule/Price Proposal; and any appropriate attachments addressed in section IX. Attachments to Solicitations. [04-4010-1]

DOCUMENTS REQUIRED WITH BID

Bidder must furnish with the bid the documents listed below.

- (a) Completed questionnaire for each line item offered.
- (b) Scale drawings of body layout, showing all seating positions for all body configurations identified in the bid.
- (c) Drawings of specific components or subassemblies, as may be required elsewhere herein.
- (d) Calculations, as may be required elsewhere herein.
- (e) Manufacturer's unaltered published literature describing standard chassis and body, including listing of standard exterior colors. It is understood that the standard bus described in such literature may not be exactly the same as the equipment offered herein.
- (f) Listing of locations of stocks of repair parts for chassis, powertrain, and body.
- (g) Warranty specimens, if requested elsewhere herein. If not so requested by execution of bid, bidder agrees that any such warranty specimens included with the bid will be considered for informational purposes only, and will not be considered in the determination of the contract award.
- (h) Lists of equipment to be furnished with the vehicle(s) are NOT required, and if provided with the bid will not be considered in the determination of the contract award.
- (i) Any other documentation that may be elsewhere required herein.

Bids which do not comply with these requirements may be subject to rejection.

****NOTE:** The State reserves the right to request additional drawings and documentation as it deems necessary. Any additional drawings or documentation requested must be provided within 5 days of request at no charge to the State.

MINORITY PARTICIPATION (JAN 2006)

Is the bidder a South Carolina Certified Minority Business? [] Yes [] No

Is the bidder a Minority Business certified by another governmental entity? [] Yes [] No

If so, please list the certifying governmental entity: _____

Will any of the work under this contract be performed by a SC certified Minority Business as a subcontractor? [] Yes [] No

If so, what percentage of the total value of the contract will be performed by a SC certified Minority Business as a subcontractor? _____

Will any of the work under this contract be performed by a minority business certified by another governmental entity as a subcontractor? [] Yes [] No

If so, what percentage of the total value of the contract will be performed by a minority business certified by another governmental entity as a subcontractor? _____

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VIII. BIDDING SCHEDULE / PRICE-BUSINESS PROPOSAL

CONFLICTS BETWEEN OPTION SOLICITATIONS AND SPECIFICATION REQUIREMENTS:

The following pages contain bid sheets and questionnaires. In cases where inadvertently there is a request herein for a price for a feature as an option, when in fact such feature is required in the base vehicle per the attached specifications, the requirement for the feature to be in the base vehicle takes precedence. That is, there shall be no extra charge for the feature, and instead it shall be furnished with the base vehicle.

BIDDING SCHEDULE (NOV 2007)

| Item | Estimated Quantity | Unit of Measure | Base Unit Price | Extended Price |
|------|--------------------|-------------------------------------|-----------------|----------------|
| 1 | 25 | Each**WITH LIFT, WITHOUT CSRS SEATS | \$82,282.00 | \$2,057,050.00 |
| 1A | 25 | Each** WITH LIFT & 3 CSRS Seats | \$83,574.00 | \$2,089,350.00 |
| | | | | |

Product Catg.: 55640 - Passenger School Bus

Item Description: 41-42 Passenger School Bus – WITH AIR CONDITIONING

| Question | Response |
|---|--------------------|
| BODY MAKE: | IC-Bus |
| BODY MODEL: | PB10500 |
| CHASSIS MAKE: | International |
| CHASSIS MODEL: | |
| DELIVERY TIME - DAYS AFTER RECEIPT OF PURCHASE ORDER (ARO) | 180 days |
| HORSE POWER: | 215 |
| WHEELBASE: | 218 |
| CSRS SEAT MFR: | IMMI |
| CSRS SEAT MODEL: | BTI CRS |
| CSRS Seat \$ 431.00 Each | \$ 431.00 each |
| Maximum # of CSRS seat rows (one row includes both sides of aisle) which can be furnished before any passenger capacity is lost: 6.5 CSRS seat rows | 6.5 CSRS Seat Rows |
| Number of individual seating positions lost (vs. default seating configuration) if all allowable seat rows are CSRS: 0 | 0 |

ORIGINA

| Item | Estimated Quantity | Unit of Measure | Base Unit Price | Extended Price |
|---|--------------------|--|-----------------|-----------------|
| 2 | 25 | Each | \$ 82,757.00 | \$ 2,068,925.00 |
| 2A | 25 | Each** WITH 4 CSRS Seats | \$84,502.00 | \$2,112,550.00 |
| Product Catg.: 55640 - Passenger School Bus | | | | |
| Item Description: 65-66 Passenger School Bus – WITH AIR CONDITIONING | | | | |
| Question | | Response | | |
| BODY MAKE: | | IC-Bus | | |
| BODY MODEL: | | PB10500 | | |
| CHASSIS MAKE: | | International | | |
| CHASSIS MODEL: | | 3000 Series | | |
| DELIVERY TIME - DAYS AFTER RECEIPT OF PURCHASE ORDER (ARO) | | 180 days | | |
| HORSE POWER: | | 215 | | |
| WHEELBASE: | | 254 | | |
| CSRS SEAT MFR: | | IMMI | | |
| CSRS SEAT MODEL: | | BTI CRS | | |
| CSRS Seat \$ 436.00 Each | | \$436.00 each | | |
| Maximum # of CSRS seat rows (one row includes both sides of aisle) which can be furnished before any passenger capacity is lost: 10 CSRS seat rows | | 10 CSRS Seat Rows | | |
| Number of individual seating positions lost (vs. default seating configuration) if all allowable seat rows are CSRS: _0 | | Total capacity remains at 66 passenger, only 1 row of CSRS seats are lost to emergency exit windows 0 | | |

ORIGINAL

| Item | Estimated Quantity | Unit of Measure | Base Unit Price | Extended Price |
|------|--------------------|-----------------------------|-----------------|----------------|
| 3 | 25 | Each | \$76,096.00 | \$1,902,400.00 |
| 3A | 25 | Each** WITH 4 CSRS Seats | \$ 77,841.00 | \$1,946,025.00 |
| | | | | |

Product Catg.: 55640 - Passenger School Bus

Item Description: 65-66 Passenger School Bus – WITHOUT AIR CONDITIONING

| Question | Response |
|---|---|
| BODY MAKE: | IC-Bus |
| BODY MODEL: | PB10500 |
| CHASSIS MAKE: | International |
| CHASSIS MODEL: | 3000 Series |
| DELIVERY TIME - DAYS AFTER RECEIPT OF PURCHASE ORDER (ARO) | 180 Days |
| HORSE POWER: | 215 |
| WHEELBASE: | 254 |
| CSRS SEAT MFR: | IMMI |
| CSRS SEAT MODEL: | BTI CRS |
| CSRS Seat \$ 436.00 Each | \$ 436.00 each |
| Maximum # of CSRS seat rows (one row includes both sides of aisle) which can be furnished before any passenger capacity is lost: 10 CSRS seat rows | 10 CSRS Seat Rows |
| Number of individual seating positions lost (vs. default seating configuration) if all allowable seat rows are CSRS: _0 | Total capacity remains 66 passenger, only 1 row of CSRS seats are lost due to emergency exit windows 0 |

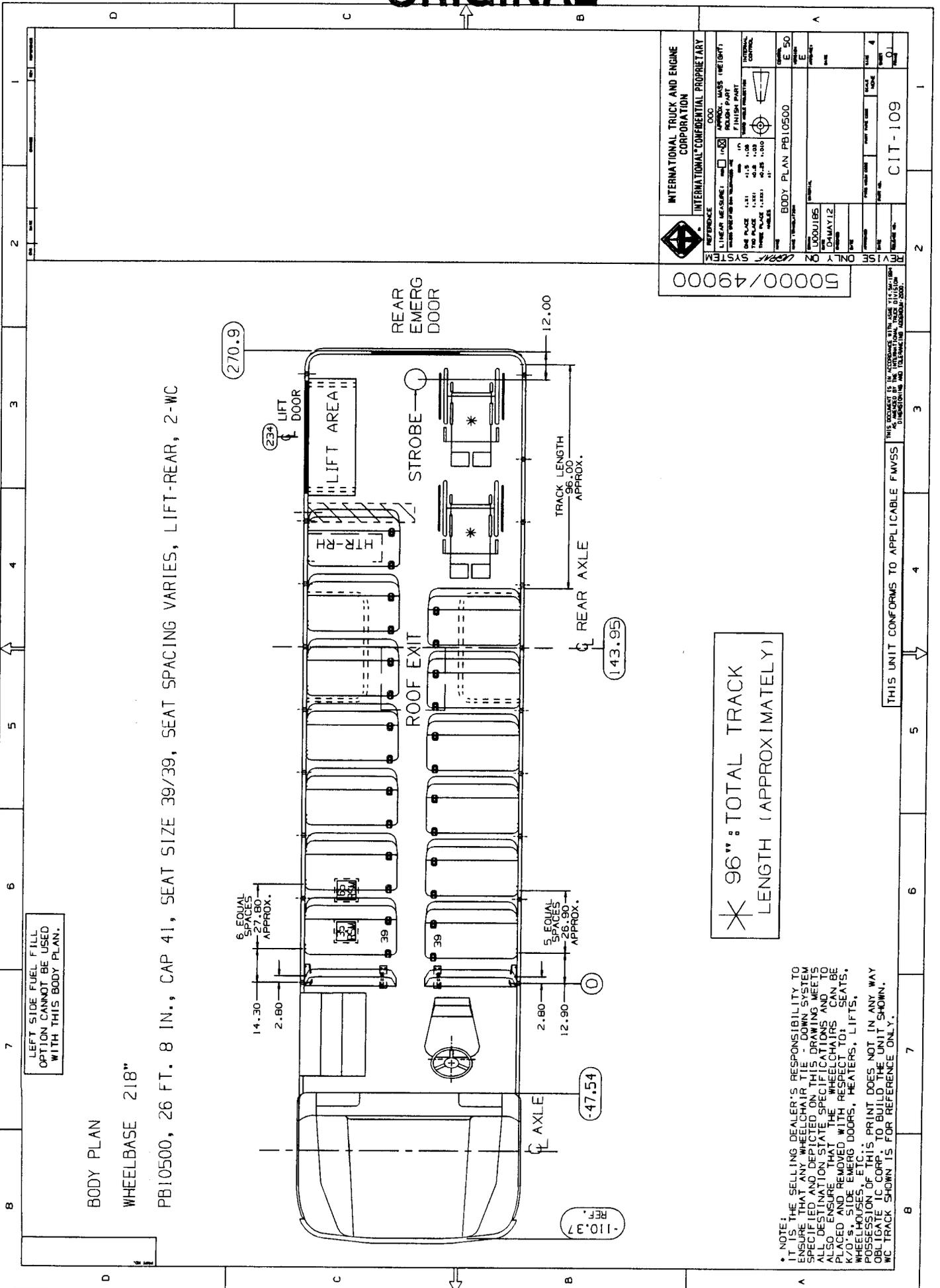
OPTIONAL EQUIPMENT FOR CONVENTIONAL SCHOOL AND ACTIVITY BUSES (Where Applicable)

The items listed below are optional only. The State may or may not award these items. There is no guarantee that items will be purchased. The bid prices offered below will not be considered in the evaluation of offers, however, items may not be awarded if the pricing is deemed excessive in the State's sole judgment.

ORIGINAL

| ITEM | QTY. | UOM | DESCRIPTION | UNIT COST |
|------|------|------|---|------------|
| 1. | 1 | Each | FMVSS 210 compliant 39" seat to replace standard 39" seat. | \$ 0 |
| 2. | 1 | Each | FMVSS 210 compliant 30" seat to replace standard 30" seat. | \$ 0 |
| 3. | 1 | Each | Lap/shoulder belt equipped seat (3 positions) to replace standard 39" seat. | \$1,010.00 |
| 4. | 1 | Each | Lap/shoulder belt equipped seat (2 positions) to replace standard 30" seat. | \$920.00 |
| 5. | 1 | Each | Maximum seat spacing to better accommodate high school students for 66 Passenger Bus – Show Deduct Price Revised Bus Capacity: | \$-135.00 |
| 6. | 1 | Each | Shop Manuals -- (additional per unit ordered) | \$10.00 |
| 7. | 1 | Each | Parts Manuals -- (additional per unit ordered) | \$10.00 |

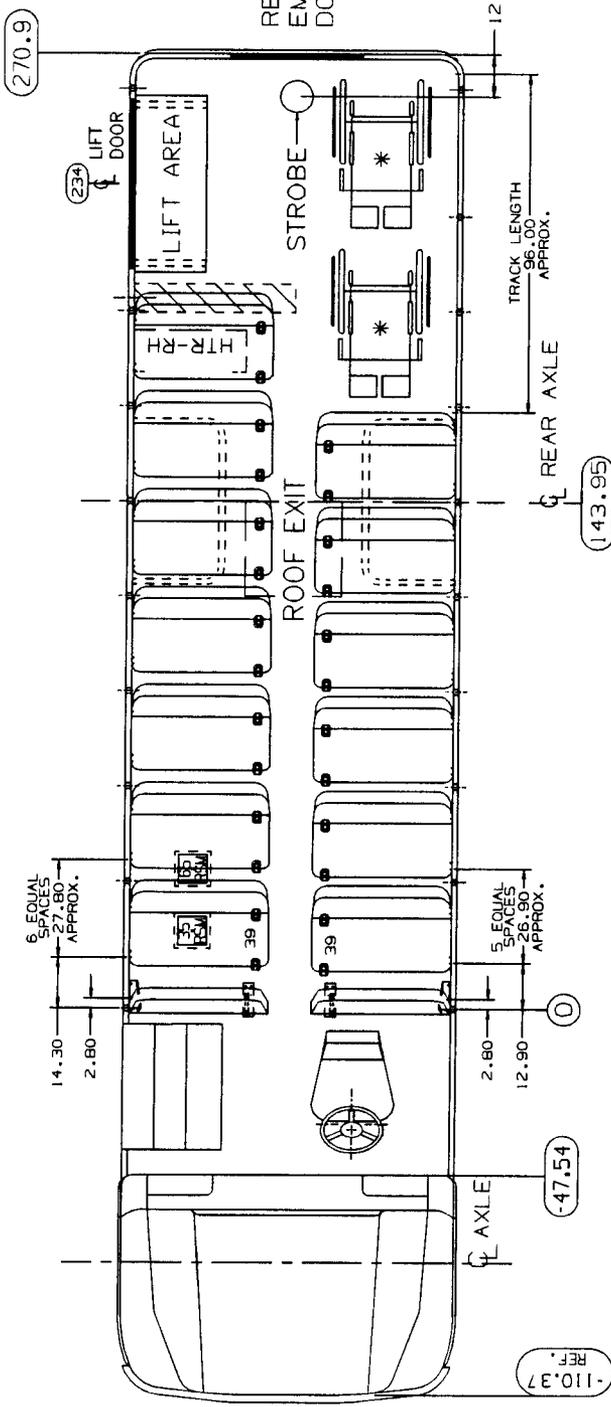
ORIGINAL



LEFT SIDE FUEL FILL OPTION CANNOT BE USED WITH THIS BODY PLAN.

BODY PLAN
WHEELBASE 218"

PB10500, 26 FT. 8 IN., CAP 41, SEAT SIZE 39/39, SEAT SPACING VARIES, LIFT-REAR, 2-WC



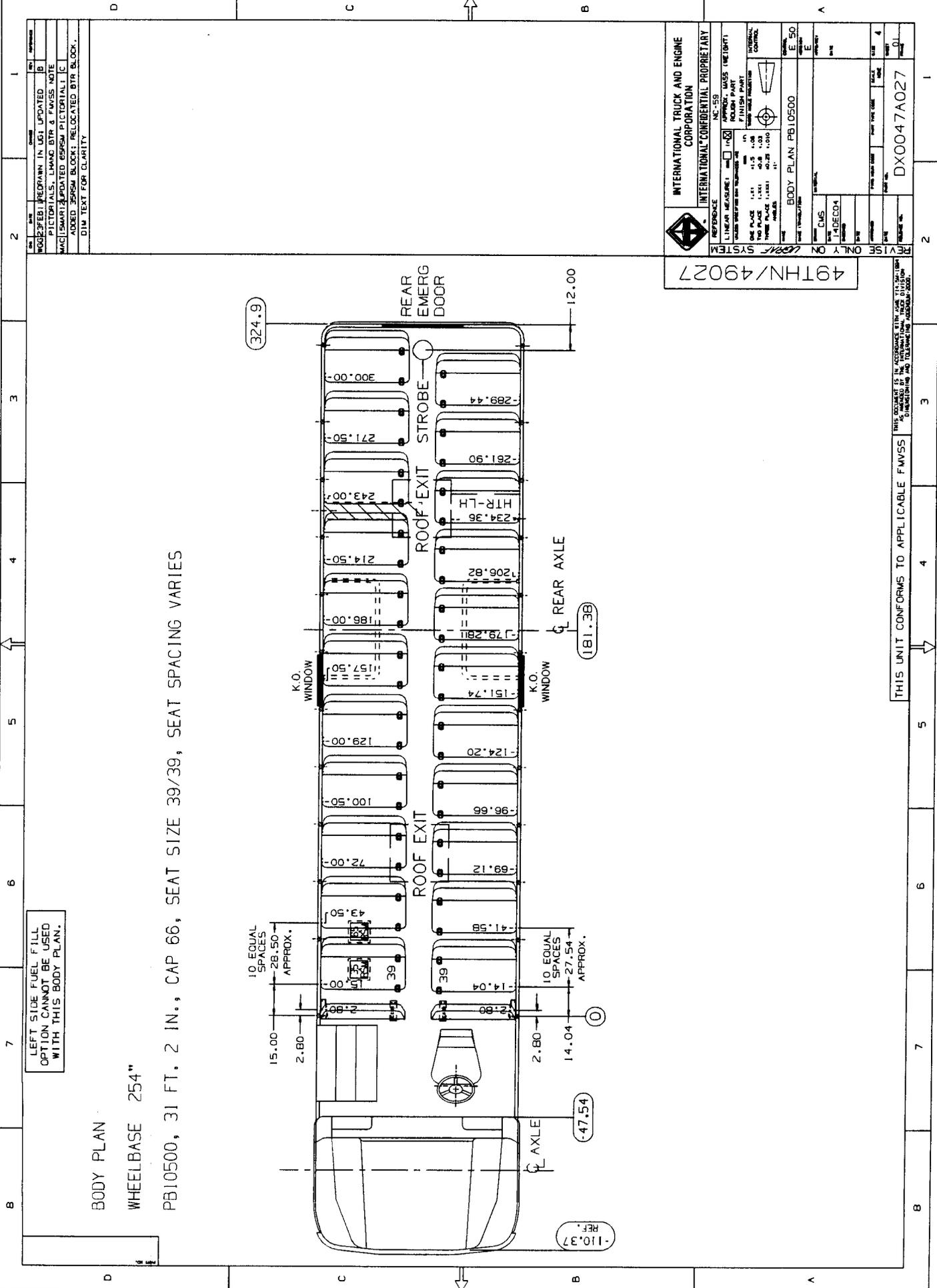
* 96" TOTAL TRACK LENGTH (APPROXIMATELY)

NOTE: THE SELLING DEALER'S RESPONSIBILITY TO ENGINEER AND WHEELCHAIR TIE-DOWN SYSTEM SPECIFICATIONS LISTED ON THIS DRAWING MEETS ALL DESTINATION SPECIFICATIONS AND TO ALSO ENSURE THAT THE WHEELCHAIRS CAN BE PLACED AND REMOVED WITH RESPECT TO SEATS, K/O'S, SIDE EMERG DOORS, HEATERS, LIFTS, WHEELHOUSES, ETC.
POSSESSION OF THIS PRINT DOES NOT IN ANY WAY OBLIGATE IC CORP. TO BUILD THE UNIT SHOWN. WC TRACK SHOWN IS FOR REFERENCE ONLY.

| | | | |
|--|------------------------------|--|----------------------|
| INTERNATIONAL TRUCK AND ENGINE CORPORATION | | INTERNATIONAL CONFIDENTIAL PROPRIETARY | |
| REFERENCE: 000 | APPROX. GROSS WEIGHT: 10,000 | FINISH PART: 00 | INTERNAL CONTROL: 00 |
| LINEAR MEASURE: 1.21 | ONE PLACE: 1.21 | TWO PLACE: 1.21 | THREE PLACE: 1.21 |
| FOUR PLACE: 1.21 | FIVE PLACE: 1.21 | SIX PLACE: 1.21 | SEVEN PLACE: 1.21 |
| BODY PLAN PB10500 | | SCALE: E 50 | DATE: 4 |
| UNITS: 0000LBS | DATE: 04MAY12 | DESIGNER: [blank] | CHECKER: [blank] |
| 50000/49000 | | CIT-109 | |

THIS UNIT CONFORMS TO APPLICABLE FMVSS. THIS DRAWING IS IN ACCORDANCE WITH THE 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300.

ORIGINAL



| | | | | |
|-----|------|---------|----|--------|
| NO. | DATE | CHANGED | BY | REASON |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |

WORKSHEET REDRAWN IN UG1 UPDATED PICTORIALS, LHMCD BTR & FVSS NOTE
 MACI SHARIZATED 65PSM PICTORIAL C
 ADDED 39/39M BLOCK; RELOCATED BTR BLOCK.
 DIM TEXT FOR CLARITY

INTERNATIONAL TRUCK AND ENGINE CORPORATION
 INTERNATIONAL CONFIDENTIAL PROPRIETARY

REFERENCE: NC-59
 LINEAR MEASURE: APPROX. VALUES (HEIGHT)
 OTHER REFERENCE: FINISH PART

ONE PLACE 1.21
 TWO PLACE 1.21
 THREE PLACE 1.21
 FOUR PLACE 1.21

INTERNAL CONTROL SYSTEM

DATE: 1/1/80
 BODY PLAN: PB10500
 SCALE: E 50

REVISE ONLY ON THIS SYSTEM

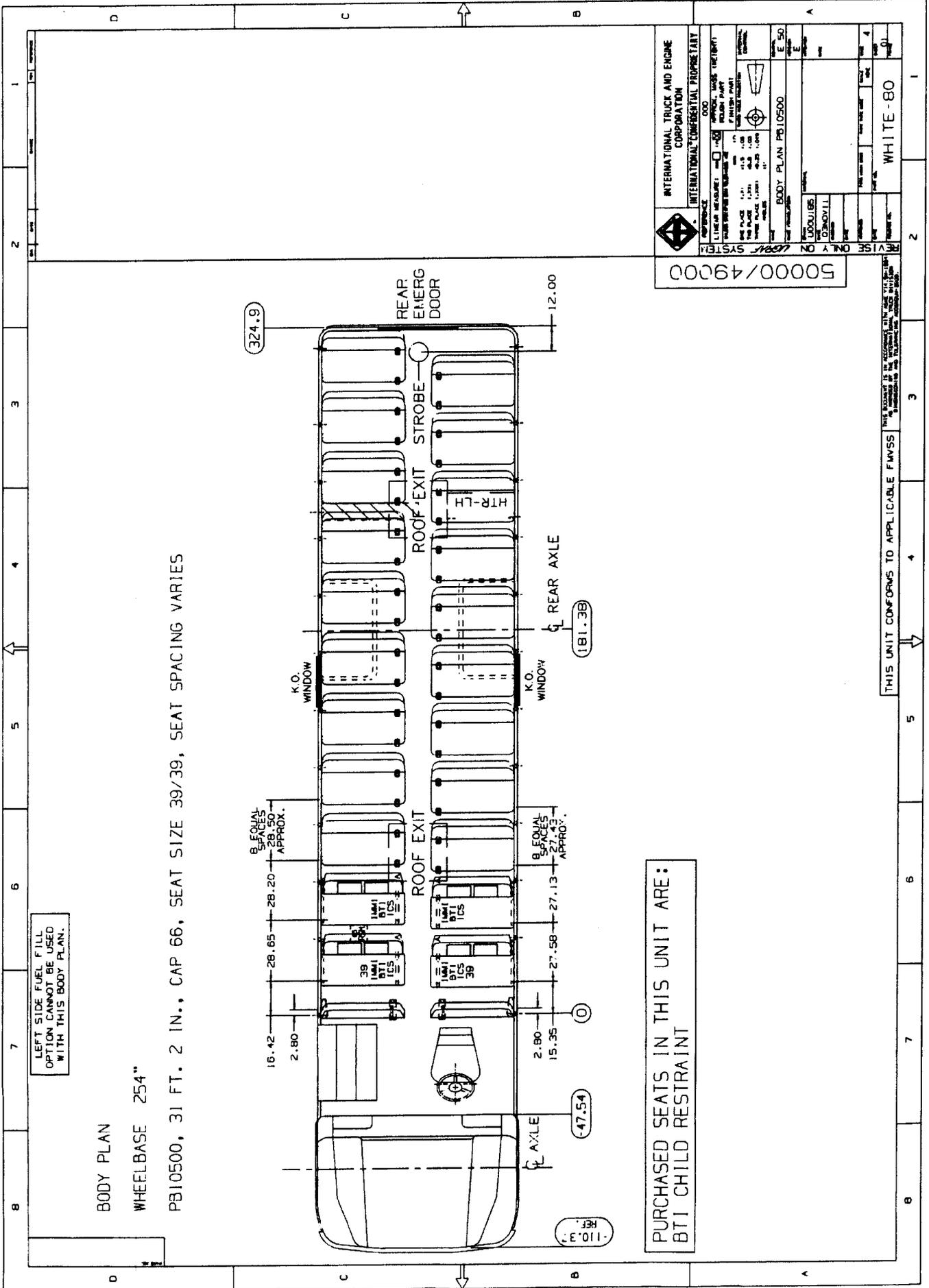
DATE: 1/1/80
 DRAWING NO.: 49THN/49027
 PART NO.:
 PART TYPE CODE:
 QUANTITY:
 UNIT:

49THN/49027

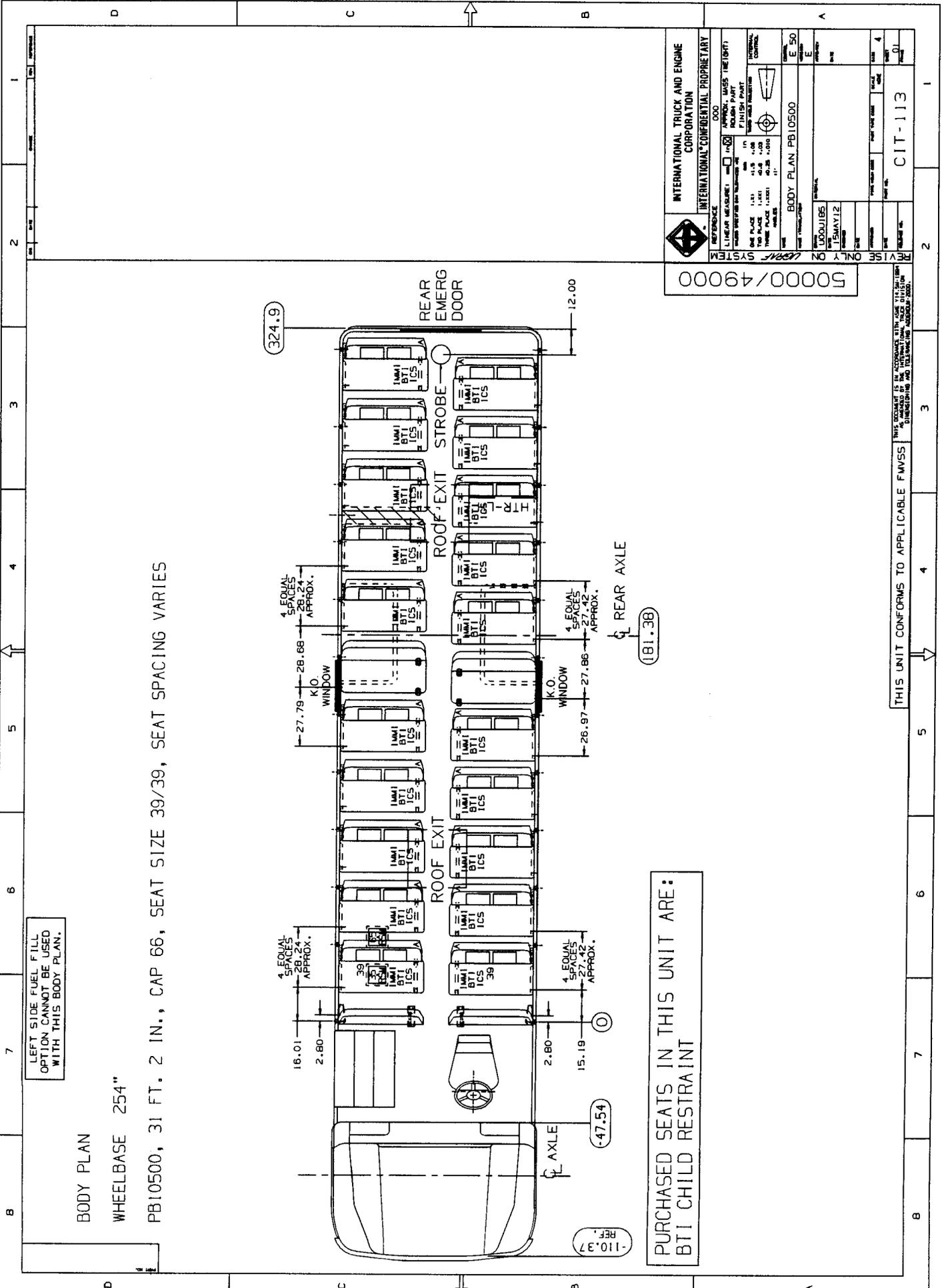
THIS DOCUMENT IS THE PROPERTY OF INTERNATIONAL TRUCK AND ENGINE CORPORATION. IT IS TO BE USED ONLY FOR THE MANUFACTURE AND REPAIR OF THE EQUIPMENT AND TO BE DESTROYED WHEN NO LONGER REQUIRED.

THIS UNIT CONFORMS TO APPLICABLE FVSS

ORIGINAL



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LEFT SIDE FUEL FILL OPTION CANNOT BE USED WITH THIS BODY PLAN.

BODY PLAN

WHEELBASE 254"

PB10500, 31 FT. 2 IN., CAP 66, SEAT SIZE 39/39, SEAT SPACING VARIES

PURCHASED SEATS IN THIS UNIT ARE:
BTI CHILD RESTRAINT

| | | | |
|--|----------------|--|------------------|
| INTERNATIONAL TRUCK AND ENGINE CORPORATION | | INTERNATIONAL-CONFIDENTIAL PROPRIETARY | |
| REFERENCE: LINEAR MEASURE: APPROX. MASS (NET WT): FINISH PART: 115 | 115 | 115 | 115 |
| ONE PLACE: 1.37 | 41.5 | 4.00 | INTERNAL CONTROL |
| TWO PLACE: 1.41 | 41.8 | 4.00 | INTERNAL CONTROL |
| THREE PLACE: 1.46 | 42.2 | 4.00 | INTERNAL CONTROL |
| FOUR PLACE: 1.51 | 42.6 | 4.00 | INTERNAL CONTROL |
| BODY PLAN PB10500 | | | |
| LOCATIONS: ISMAY12 | DATE: 11/11/11 | SCALE: 1/4" = 1'-0" | REV: 4 |
| PROJECT NO.: CIT-113 | DATE: 11/11/11 | SCALE: 1/4" = 1'-0" | REV: 4 |
| PROJECT NO.: CIT-113 | DATE: 11/11/11 | SCALE: 1/4" = 1'-0" | REV: 4 |
| PROJECT NO.: CIT-113 | DATE: 11/11/11 | SCALE: 1/4" = 1'-0" | REV: 4 |

THIS UNIT CONFORMS TO APPLICABLE FMVSS

510000/49000

ORIGINAL

VERTICAL HINGED K/O
OPTION CANNOT BE USED
WITH THIS BODY PLAN.

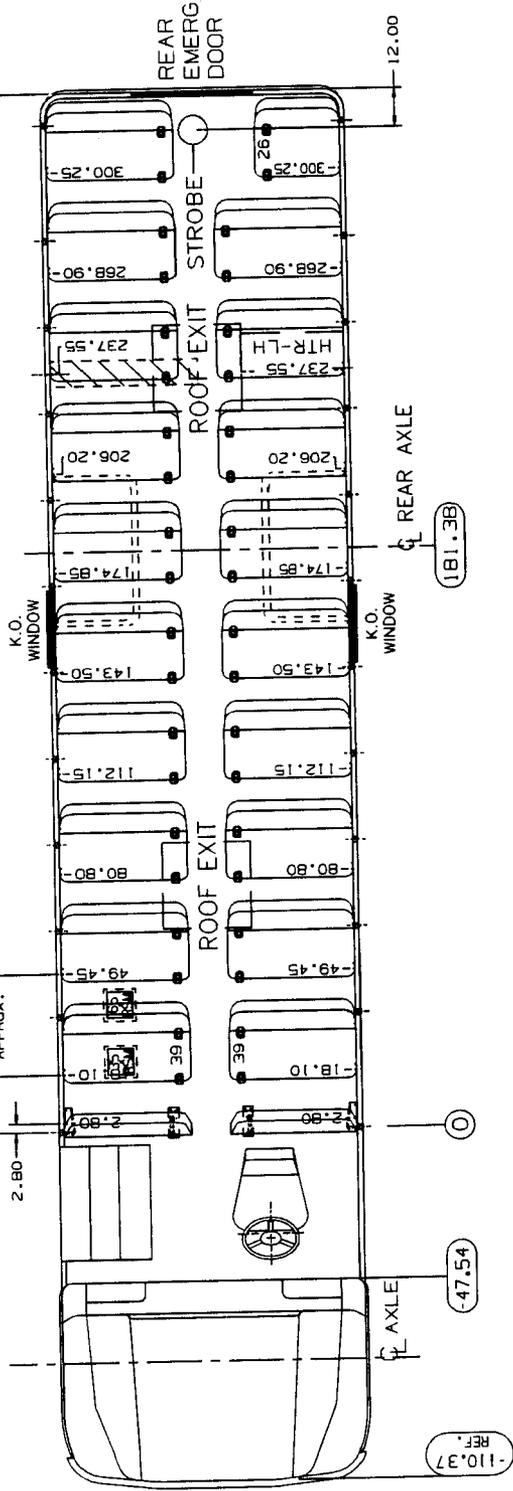
Max Seat Spacing

BODY PLAN

WHEELBASE 254"

PB10500, 31 FT. 2 IN., CAP 59, SEAT SIZE 39/39, SEAT SPACING 31.35

9 EQUAL
SEAT SPACES
31.35
APPROX.



50000/49000

INTERNATIONAL TRUCK AND ENGINE CORPORATION
INTERNATIONAL CONFIDENTIAL PROPRIETARY

DESIGN: 00000 / CIT-110
LINEAR MEASURE: 1183
FINISH PART: POLISH PART
BODY PLAN PB10500

DATE: 31 MAY 12
CIT-110A

THIS UNIT CONFORMS TO APPLICABLE FMVSS

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SERVICE CAPABILITY AND LOCATIONS:

Vehicles purchased from this contract will be stationed throughout the State. Therefore, it is necessary that service/repair coverage be available throughout the State for prompt and adequate services for the vehicles offered. The State expects the contractor to have numerous service locations throughout the state in areas that will allow the optimum number of users to easily access these locations without excessive travel. These facilities must be ready to perform services for this contract within 90 days of contract award. **Bidders must furnish a list of branch offices and/or authorized servicing facilities that will render services under this contract.** The State reserves the right to satisfy itself by inquiry or otherwise as to bidder's capabilities in this regard.

******* THE FOLLOWING MUST BE RETURNED WITH BID*******

Names, addresses and telephone numbers of service/repair facilities which will render services under this contract (use additional sheets if necessary): Names, addresses and telephone numbers of service/repair facilities which will render services under this contract (use additional sheets if necessary):

| | |
|--|--|
| Company Name: Carolina International Trucks, Inc. | Contact Person: Sam Scarborough |
| Address: 1619 Bluff Rd | Phone/803-251-7238 Fax: 803-251-7207 |
| City, State, Zip: Columbia, SC 29201 | Email: sscarborough@carolinainternational.com |
| Company Name: Carolina International Trucks, Inc. | Contact Person: Mike Duchane |
| Address: 2520 HWY 14 S | Phone/ 864-848-0050 Fax:864-848-0063 |
| City, State, Zip: Greer, SC 29651 | Email: mduchane@carolinainternational.com |
| Company Name: Carolina International Trucks, Inc. | Contact Person: John Shook |
| Address: 2580 Oscar Johnson Dr | Phone/ 843-747-3040 Fax: 843-747-7815 |
| City, State, Zip: Charleston, SC 29406 | Email: jshook@carolinainternational.com |

MOBILE SERVICE TRUCKS:

Contractor shall operate several mobile service trucks as necessary for statewide coverage in South Carolina. These trucks must run on a timely schedule and be fully equipped for service and repairs as necessary. These trucks must be manned with trained repair personnel and shall be driven to user's site, anywhere in the state, for purpose of immediately diagnosing and repairing any problem occurring with units purchased from the contractor, including for example; recall work, air conditioning service, minor engine and body repairs, and electrical troubleshooting. It is not expected that the service truck will be equipped to perform major repair operations or complex diagnostic work. Mobile service trucks must be ready to perform services for this contract within 90 days of award of contract. Contractor's service trucks shall be so operated for a minimum period of five (5) years after award of contract. Service trucks shall arrive at user's site within 2 work days after request by user. All service truck calls shall be documented by contractor with date and time of initial service request and date and time of response. Contractor shall provide this information, when requested, in an electronic format within

ORIGINAL

SERVICE CAPABILITY AND LOCATIONS:

Vehicles purchased from this contract will be stationed throughout the State. Therefore, it is necessary that service/repair coverage be available throughout the State for prompt and adequate services for the vehicles offered. The State expects the contractor to have numerous service locations throughout the state in areas that will allow the optimum number of users to easily access these locations without excessive travel. These facilities must be ready to perform services for this contract within 90 days of contract award. **Bidders must furnish a list of branch offices and/or authorized servicing facilities that will render services under this contract.** The State reserves the right to satisfy itself by inquiry or otherwise as to bidder's capabilities in this regard.

***** THE FOLLOWING MUST BE RETURNED WITH BID*****

Names, addresses and telephone numbers of service/repair facilities which will render services under this contract (use additional sheets if necessary): Names, addresses and telephone numbers of service/repair facilities which will render services under this contract (use additional sheets if necessary):

| | |
|--|--|
| Company Name: Carolina International Trucks, Inc. | Contact Person: Randy Hempel |
| Address: 308 E Campground Road | Phone/843-468-9560 Fax: 843-468-9599 |
| City, State, Zip: Florence, SC 29506 | Email: rhempel@carolinainternational.com |
| Company Name: | Contact Person: |
| Address: | Phone/ Fax: |
| City, State, Zip: | Email: |
| Company Name: | Contact Person: |
| Address: | Phone/ Fax: |
| City, State, Zip: | Email: |

MOBILE SERVICE TRUCKS:

Contractor shall operate several mobile service trucks as necessary for statewide coverage in South Carolina. These trucks must run on a timely schedule and be fully equipped for service and repairs as necessary. These trucks must be manned with trained repair personnel and shall be driven to user's site, anywhere in the state, for purpose of immediately diagnosing and repairing any problem occurring with units purchased from the contractor, including for example; recall work, air conditioning service, minor engine and body repairs, and electrical troubleshooting. It is not expected that the service truck will be equipped to perform major repair operations or complex diagnostic work. Mobile service trucks must be ready to perform services for this contract within 90 days of award of contract. Contractor's service trucks shall be so operated for a minimum period of five (5) years after award of contract. Service trucks shall arrive at user's site within 2 work days after request by user. All service truck calls shall be documented by contractor with date and time of initial service request and date and time of response. Contractor shall provide this information, when requested, in an electronic format within 5 days of request.

ORIGINAL

The State reserves the right to require a minimum number of service trucks if contractor does not meet the above expectations. The State also reserves the right to satisfy itself by inquiry or otherwise as to bidder's capabilities in meeting these requirements.

For information purposes only, please indicate the number of service trucks that will be used for this contract.

Number of Service Trucks: 6

ORIGINAL

QUESTIONNAIRE FOR TYPE C BUSES

For your convenience in replying to the questions below, they generally follow the sequence of provisions in the associated specifications. The answers to the questions in the first section, "Features common to all bus body sizes," are expected to apply to same, and therefore need to be answered only one time. However, if there ARE differences in the answers for different bus body sizes, please fully explain in your answer. The second section, "Features which vary, or may vary, with bus body size," shall be duplicated by bidder as required, in order to answer separately by bus body size.

Section 1: Features common to all bus body sizes

1. Bidder: Carolina International Trucks, Inc.

2. Bidder address: 1619 Bluff Road Columbia, SC 29201

3. Engine: Make INTERNATIONAL Model MaxxForce DT

Rated HP 215, Rated torque 560

Engine meets 2010 EPA emissions level standards yes (yes/no)

Engine is certified by engine manufacturer to be B20 compatible as furnished on buses under this contract; yes (yes/no)

4. Transmission, number of speeds forward 5 with overdrive

5. Brake size, front 15 " x 4 " Brake size, rear 6 1/2 " x 7 "

6. Rear axle ratio: School bus: 5.57 Activity bus 5.57

7. Battery CCA each 650, Number of batteries 3, Battery BCI group 31

8. Service brake air compressor, rating 3.2 CFM. Make: Bendix Model: Tru-Flo 550

9. Are automatic slack adjusters provided in accordance with ("in accordance with" abbreviated henceforth as "IAW") requirements herein? yes (yes/no)

10. Is antilock braking system provided IAW requirements herein? yes (yes/no)

11. Front bumper thickness: 1/4 "

12. Is exhaust system provided IAW requirements herein? yes (yes/no)

13. Chassis frame rails: Is each of one-piece construction? yes (yes/no),

Yield strength of chassis frame rails: 50,000 psi

14. Is all chassis wiring and grounding furnished IAW requirements herein? yes (yes/no)

15. Will fuel system as provided, including tank(s), filters, water separators, fuel bowls, water sensors, primer, pumps, and all other components, meet all requirements for configuration, construction, and component mounting, and for fueling, under "Fuel Tank" in the attached specification"? yes (yes/no)

Fuel fill rate without activation of automatic shut-off feature before tank is filled to minimum of 80% full rated capacity, when bus is elevated 5" from level on side AWAY from fueling port, per requirement herein 25 gal per minute.

16. Alternator output 320 amps

ORIGINAL

17. Type of electrical system furnished is (check one):

conventional fuses/circuit breakers, or multiplexing/electronic system control

18. Noise level at driver seat when test IAW 2005 National Standards for School Transportation, or latest revision thereof, Appendix B 78 decibels.

19. Is chassis rear suspension of the "air ride" type? yes (yes/no)

20. Is bus equipped with driver-controlled adjustment for tilt of the steering wheel? yes (yes/no)

21. Tire size conventional floor buses: 11R22.5, ply rating 16, load range H

Manufacturer Goodyear, Model G661HSA

22. Rim width, conventional floor 8.25"

23. Transmission: Make Allison, Model 2500PTS

Is load-based shift scheduling provided? yes (yes/no)

24. In connection of parts of the body structure (frame members to one another), in any case where adhesives are used, are they used IN COMBINATION WITH welds, rivets, or high-strength bolts (or a combination of these fastening methods), as required herein? yes (yes/no)

25. Does all cold-formed and hot-rolled steel meet the design requirements called for herein? yes (yes/no)

26. Are all coated and uncoated steel components provided IAW thicknesses required herein in all cases where thickness gauges are specified for such components? yes (yes/no)

27. Is floor designed to support all fixed and changeable loads using values therefore as required herein? yes (yes/no)

28. Body floor: Metal gauge: 14, Plywood grade (A,B, etc.): B, No of plies: 5.

Is plywood of the Marine type? yes (yes/no)

29. Main floor sill gauge: 14, Intermediate floor sill gauge (if applicable): 14

30. Sill spacing 9"

31. Describe mfr's substantiation that the strength of any joint or gusset connection in the bus body transverse and longitudinal frame members is equal to or greater than that of a continuous member:

Certified to meet/Exceed FMVSS121

32. Thickness (in gauge) of steps in stepwell 14 GA

33. Is floor covering under seats, over wheel housings, and in driver's compartment in accordance with all requirements herein? yes (yes/no)

Is floor covering in aisle and entrance area in accordance with all requirements herein? yes (yes/no)

34. Body posts/bow frames:

Depth 1.5"", Thickness 12GA GA, Spacing between centers 27"

Section modulus of cross section 0.245in.

Have detailed engineering drawings showing size and shape of cross section and detailed calculations verifying that section meets requirements been submitted? yes (yes/no)

ORIGINAL

35. Is each set of side post members and bow frame one continuous piece? yes (yes/no). If not, has bidder submitted detailed drawing of the joint? _____ (yes/no)
36. Has roof stringer system as designed and built been subjected to the static load test called for herein (via FMVSS), and successfully passed same? yes (yes/no)
37. Side stringer: Width before forming 4.8 ", Thickness 16 GA
38. If applicable, cowl post thickness 12 GA, Attaching member thickness 14 GA
39. Emergency door post thickness 10 GA
40. Skirt reinforcement cross-sectional dimensions: 5"x 14½"
41. Is window framing constructed IAW requirements herein? yes (yes/no)
42. Exterior sheet metal skin thickness (except cowl panel, wheel housing, and body hoods) 16 GA
43. If applicable, cowl panel thickness 12 GA, Cowl panel framing thickness 14 GA
44. Wheel housing thickness 16 GA
45. Guard rail thickness 6 GA
46. Does body fully meet all applicable FMVSS requirements, specifically including FMVSS 220 and FMVSS 221? yes (yes/no)
47. Interior roof sheet metal lining thickness 20 GA
48. Panels from window sill to seat rail, thickness 22 GA
49. Does all material used in seat cushions and backs meet FMVSS 302? yes (yes/no)
- Is all seat material of the type known as "fire-block"? yes (yes/no)
- Do all seats meet FMVSS 222? yes (yes/no)
- Do all seating configurations offered herein meet requirements for seat depth, seat width, kneespace dimension, and aisle spacings? yes (yes/no)
50. Are Child Safety Restraint Systems (CSRS) provided and installed IAW requirements herein? yes (yes/no)
- CSRS Make: IMMI Model: ICS
51. Are passenger seat cushion pads and seat back pads provided IAW requirements herein? yes (yes/no)
52. Is driver's seat of high-back air suspension type? yes (yes/no)
- Make National, Model 2000
- Is driver's seat, with integrated 3-point lap and shoulder harness provided IAW requirements herein, including length of useable belt as defined herein? yes (yes/no)
53. Is the upholstery material used to cover all seat cushions and backs provided IAW all detailed requirements therefor herein? yes (yes/no)
- Finished weight of upholstery material 42 oz./yd²
54. Does crash barrier meet FMVSS 222 and 302, and is its covering of the fire-block type? yes (yes/no)

ORIGINAL

55. Is electrical system, including wiring, grounding, control panel, relays (or multiplexing, if offered), interior lights, clearance/marker lights, eight-light warning system, flashing stop arm, turn signals, tail/stop lights, strobe light, back-up lights, license plate lights, backup warning alarm, emergency door buzzer, accessory power point receptacle, electrical panels, and all other electrical system components provided IAW requirements herein? yes (yes/no)
56. When tested IAW The Bus Body Heating System Test as defined in Appendix B of the 2005 National School Bus Transportation Specifications and Procedures, and when the bus is soaked in an ambient temperature of 0°F for 15 hours, does the bus body heating system offered create a temperature rise to 50°F inside the body shell in 20 minutes, as called for herein? yes (yes/no)
57. Is cabin heating system provided in accordance with all requirements herein for each bus configuration? yes (yes/no)
58. Are body insulation, entrance door, emergency door, and safety roof vents provided IAW requirements herein? yes (yes/no)
59. Do windshield and all other windows and glass meet all requirements applicable thereto as specified herein? yes (yes/no)
60. Are all mirror systems and all components thereof provided IAW requirements herein? yes (yes/no)
61. Is all metal used in construction of bus body coated and painted IAW the applicable requirements under "Metal Treatment and Painting" herein? yes (yes/no)
62. In lift-equipped buses, make and model of power lift: Ricon S5510
63. Will mobility aid securement (wheelchair anchor) and occupant securement systems, where provided (including button type track installation where called for herein), meet all requirements therefore as stated herein? yes (yes/no)
64. In lift equipped school bus, is continuous button tracking for wheelchair and passenger securement provided in accordance with all requirements herein? yes (yes/no)
65. Does engine coolant meet all requirements herein? yes (yes/no)
66. Will air conditioning system as furnished reduce school bus inside air temperature by 20°F in 20 minutes? yes (yes/no)

In all units where air conditioning system is required, will system be fully in accordance with all requirements herein? yes (yes/no)

Location of air conditioning system rear blower unit left side (drivers side) in rear

41-passenger bus: 60,000 BTU, No. of compressors 1, No. of condensers 1,
No. of flush mounted free blow units: 0 Make: Trans Air Model: TA73 (Free Blow side mounted(1))

66-passenger bus: 120,000 BTU, No. of compressors 2, No. of condensers 2,

No. of roof mounted free blow units: 0 Make: N/A Model: N/A
No. of flush mounted units: N/A Make: N/A Model: N/A

* No. of Free Blow side mounted units (2) Make Trans Air Model TA73

SEE NOTE

ORIGINAL

Section 2: Features which vary, or may vary, with bus body size

67. Line item number(s): _____ 94

68. Chassis dimensions:

Basic pupil load 41 students

GVWR 27,500 lbs.

Wheelbase 218 "

Front axle capacity, rated 10,000 lbs.

Rear axle capacity, rated 17,500 lbs.

69. Body dimensions:

Overall outside body width 94.6 "

Height of body from top of finished floor to underside of ceiling at centerline 78 "

Overall length of body 26'8 "

70. Capacity of fuel tank(s), each: tank #1 65 gal, tank #2 (if applicable) _____ gal

Fuel tank(s) location: _____ Right front side mounted

71. Rear cabin heater Make: Bergstrom Model: 1000044208 Rated

BTU's: 84,500

END OF QUESTIONNAIRE

ORIGINAL

Section 2: Features which vary, or may vary, with bus body size

67. Line item number(s): _____ *bk*

68. Chassis dimensions:

Basic pupil load 66 students

GVWR 29,800 lbs.

Wheelbase 254 "

Front axle capacity, rated 10,000 lbs.

Rear axle capacity, rated 19,800 lbs.

69. Body dimensions:

Overall outside body width 94.6 "

Height of body from top of finished floor to underside of ceiling at centerline 78 "

Overall length of body 31'2 "

70. Capacity of fuel tank(s), each: tank #1 65 gal, tank #2 (if applicable) _____ gal

Fuel tank(s) location: Right front side of frame rail

71. Rear cabin heater Make: Bergstrom Model: 1000044208 Rated

BTU's: 84,500

END OF QUESTIONNAIRE



ORIGINAL

1619 Bluff Road
Columbia, SC 29201
Phone: (803) 799-4923
Fax: (803) 252-4064
www.CarolinaInternational.com



2011 ATD Truck Dealer of the Year

June 4, 2012

Ms. Cheryl Patrick, CPPB
Material Management Office
Capitol Center
1201 Main Street, Suite 600
Columbia, SC 29201

RECEIVED

JUN 05 2012

Materials Management Office
11:00 A.M.

Dear Ms. Patrick,

Enclosed are all required documents for solicitation #: 5400004167. We meet and or exceed all specifications as outlined in this solicitation. We also acknowledge that we have received all amendments to this solicitation and have applied them to our bid.

Carolina International Trucks thanks The SC Department of Education for the opportunity to quote this solicitation.

Richard Kester
Bus Sales Manager
Carolina International Trucks, Inc.

Columbia • Charleston • Florence
Gaffney • Greenville • Greer



ORIGINAL



IC BUS, LLC
751 SOUTH HARKRIDER
CONWAY, AR 72034

May 21, 2012

This is to certify that IC Bus CE model has been tested to Kentucky Pole Test as described on specification page 14 and meets the requirements of that test as stated.

Shawn Finkbeiner

A handwritten signature in cursive script that reads 'S Finkbeiner'.

Chief Engineer
IC Bus, LLC

ORIGINAL



IC BUS, LLC
751 SOUTH HARKRIDER
CONWAY, AR 72034

May 21, 2012

This is to certify that IC Bus CE model has been tested to Colorado Racking Test using the complete bus body and meets the requirements as stated on specifications pages 11 through 13.

Shawn Finkbeiner

A handwritten signature in black ink that reads 'S Finkbeiner'. The signature is written in a cursive, flowing style.

Chief Engineer
IC Bus, LLC

ORIGINAL

NAVISTAR, INC.

SAMPLE CUSTOM SERVICE CONTRACT FOR SOUTH CAROLINA
BUS CHASSIS INCLUDING BODY (EXCLUDES ENGINE, TRANSMISSION, CLUTCH)
(SCHOOL BUS APPLICATION)
XX MONTHS OR XX MILES
CONTRACT NO. **SAMPLE VERBIAGE**

WARRANTY COVERAGE

Vehicle Service Contract Coverage is extended for XX months or XX miles from vehicle delivery date, whichever comes first. During this period selected, Navistar will repair or replace the following components which proves defective in material and/or workmanship in normal use, with new or renewed parts.

FRAME:

Bumper System: bracket or mounting, bumper, bumper fascia, bumper frame, bumper stop cable, hinge, latch assembly.

Frames: crossmember, engine crossmember, bus platform mounting outrigger, frame side rail, reinforcements and gussets.

FRONT AXLE:

Non-Driving Front Axle: steering arm, fitting (zerk), front axle I-beam, king pin and bushings, steering knuckle, king pin seal.

SUSPENSION:

Springs/Suspension: air bag assembly, rubber biscuit (shear or compression), center bolt, spring bracket assembly, shock absorber mounting bracket, control (air suspension only), rear suspension crossmember, equalizer/rocker arm and bushing, spring leaf assembly, pins and bushing shackles, lift spring, axle stop, sway bar assembly, torque arm and bushing assembly, trailing arm and bushing assembly, walking beam and bushing assembly.

Suspension Controls: suspension air control manifold assembly, ECM suspension

BRAKES:

Wheel Brake Components: automatic adjuster assembly, slack adjuster, backing plate/anchor/dust shield, brake chamber bracket, caliper, chamber, chamber diaphragm, wheel brake actuating linkage/cam/camshaft, brake spider, brake shoe return spring.

ABS Components: electronic control unit (ECU), harness, relay/magnetic switch, wheel sender, steering angle sensor, stability control sensor, modulator valve.

Air Brake System Components: accumulators, air brake air compressor, master cylinder, air dryer end cover/unloader valve, air governor and mounting, harness, front end harness, PDM distribution harness, parking brake lever/pedal, brake actuating linkage/pedal/spring, pulley, relay/magnetic switch, solenoid valves, spring applied air release canister (SAAR), air or vacuum tank, foot control or pedal valve, front wheel limiting and mounting valve, hand control valve, other valve, quick release valve, relay valve, spring brake control valve, tractor protection valve.

Hydraulic Brake System Components: accumulators, air brake air compressor, hydraulic brake air compressor, hydraulic brake air compressor (electric), drive line brake assembly, parking brake cable/linkage, master cylinder, self actuating hydraulic release cylinder (SAHR), air dryer end cover/unloader valve, harness, front end harness, PDM distribution harness, hydraulic power brake unit (HPB), parking brake lever/pedal, brake actuating linkage/pedal/spring, monitor module, back-up motor, power assist unit, pulley, back-up pump (less motor), pumps, relay/magnetic switch, reservoir, solenoid valves, back-up motor switch, flow switch, fluid level switch, pressure differential switch, air or vacuum tank, foot control or pedal valve, hand control valve, spring brake control valve.

Steering System: pitman arm, steering gear bracket/mounting, steering column assembly and mounting, oil cooler assembly, steering shaft coupling/u-joint, cylinder assembly and valves, power steering pump mounting gasket, steering gear assembly, drag link, pulley, pump assembly, reservoir assembly, pump seals, steering gear seals, control valve, telescoping steering wheel mechanism, tilt steering wheel mechanism, steering wheel.

PROPSHAFT:

Propeller Shafts: slip joint boot/clamp, universal joint, shaft, yoke/spline.

Center Bearing Assembly: bearing, bearing mounting.

EXHAUST:

Muffler: basic assembly, mounting bracket/support, guard/heat shield.

Pipes: mounting bracket/support, stack cap, guard/heat shield, tail pipe/stack, exhaust pipe and flange, crossover pipe, flex pipe, exhaust gas cooler tail pipe.

Exhaust or Compression Brake: exhaust brake actuator, switch pack actuator, basic assembly, brake (engine) piston actuator, compressor brake, brake control pressure sensor (BCP) compression brake, compression brake shut-off valve, mechanical control/mounting, harness, PDM distribution harness, Allison transmission interlock, exhaust brake module, relay/magnetic switch, exhaust brake servo, air solenoid, switch pack (base), accelerator pedal switch, clutch switch, on/off switch, selector switch.

ELECTRICAL:

Generation System: alternator assembly, harness, PDM distribution harness, pulley, voltage regulator, relay/magnetic switch.

Instruments, Electrically Operated: pyrometer amplifier, bezel/cover plate, circuit board/instrument cluster, speedometer/tachometer circuit housing, ammeter gauge, coolant temperature (electric) gauge, engine oil temperature gauge, fuel level gauge, oil pressure (electrical) gauge, other gauge, pyrometer gauge, rear axle oil temperature gauge, electrical speedometer (electrical) gauge, tachometer (electrical) gauge, transmission oil temperature gauge, voltmeter gauge, harness, PDM distribution harness, hourmeter, ammeter module, pyrometer module, multiplex signal module (MSM), odometer, programming, air pressure sender, fuel level sender, other sender, pyrometer sender, rear axle oil temperature sender, transmission oil temperature sender, speedometer/tachometer dip switch (reprogramming only), tachometer/trip recorder (electrically driven).

ORIGINAL

Body Electrical System Controller Components: ESC controller, programming.

Cranking System: harness, PDM distribution harness, starter motor, relay/magnetic switch, starter motor solenoid, clutch switch, key/ignition switch, neutral start switch, push button starter switch.

Battery Run Down Protection: jumper cable batteries, clean power cable (battery to Trans), clean power cable (battery to cab), clean power cable (battery to engine), module monitor, battery run down protection monitor, solenoid, low oil pressure switch.

Lighting Systems: switch pack actuator, back-up alarm, automatic headlight sensor, flasher, harness, front end harness, PDM distribution harness, lamp assembly, mounting, relay/magnetic switch, switch pack (base), back-up light switch, daytime running light switch (DRL), dimmer switch, headlight switch, interior light-door jam mounted switch, interior light-lamp mounted switch, interior light-panel mounted switch, marker/interrupt switch, other switch, stoplight-air switch, stoplight-hydraulic switch, turn signal switch, electric mirror switch.

Warning Lights and Signals: high water temperature/low oil pressure alarm, hydraulic brake warning beeper, low air pressure beeper, warning other beeper, harness, PDM distribution harness, lamp assembly, coolant probe module, coolant level probe, relay/magnetic switch, front axle engaged switch, high water temperature switch, low air pressure switch, low coolant level switch, low oil pressure switch, other switch, parking brake switch, power divider engaged switch.

Horn (Electric): horn contract ring/button, harness, coiled ribbon harness (clock spring), front end harness, PDM distribution harness, horn assembly, mounting, relay/magnetic switch.

Window (Electric): harness, regulator and motor assembly, relay/magnetic switch, other switch.

Two Speed Axle/Power Divider Lock (Electric): switch pack actuator, circuit board/instrument cluster, harness, PDM distribution harness, relay/magnetic switch, air solenoid, switch pack (base), other switch.

Accident Avoidance Radar System: antenna and lead-in, central processing unit (CPU), side sensor display, harness, front end harness, side sensor harness, turn sensor assembly magnet, driver display unit monitor, side sensor, turn assembly sensor.

Wheel Chair Lift Gate Accommodation: battery run down protection monitor, relay/magnetic switch, other switch.

Vehicle System Controller Components-Prognostics: tire pressure monitor antenna, brake stroke chamber w/sensor, vehicle information display, fuel filter restriction globe w/sensor, vehicle sensor module, tire pressure monitor module/controller, programming, brake pad wear sensor, tire pressure monitor wheel module.

Steering Wheel Switches: air horn switch, cruise on/off switch, cruise set/reset switch, engine brake on/off switch, headlight interrupt switch, marker interrupt switch, radio switch, transmission mode switch, transmission shift switch.

Miscellaneous (Electrical): clock, electronic compass, harness, driver display unit monitor, circuit breaker/relay/fuse panel mounting, circuit breaker/relay/fuse panel, pneumatic accessory solenoid base, pneumatic accessory solenoid unit, electronic thermometer.

COOLING:

Hybrid/Electric Drive Cooling: coolant recovery bottle and hose, core, fan module, motor/pump.

Radiator: coolant recovery bottle and hose, shroud clamp, in tank oil cooler, radiator core, sight glass, radiator hose/pipe, radiator mounting, shroud seal, radiator recirculation seals, shroud, shroud mounting bracket, engine mounted shroud, surge tank and mounting, radiator tank and neck.

Shutters: actuating cylinder assembly, harness, PDM distribution harness, relay/magnetic switch, control rod assembly, shutter assembly, shutterstat, solenoid, temperature switch.

Charge Air Cooler: chassis mounted charge air cooler, charger air cooler pipe.

Hydraulically Driven Cooling Fan: fan blade assembly, electronic fan controller, hydraulic fluid reservoir, motor, oil cooler (oil-to-air), pump assembly, solenoid valves.

Instruments (Direct Reading Mechanical Gauges): head assembly.

Engine Fans: fan blade assembly, fan clutch control, on/off fan drive, viscous fan drive, fan pulley, relay/magnetic switch, fan shaft and mounting (for all gear driven fan hub assembly), solenoid, temperature switch.

Engine Mounting: front mount/bolt, rear mount/bolt.

Accessory Drive Systems: air compressor mounting bracket, alternator mounting bracket, power steering pump mounting brackets, refrigerant compressor mounting bracket, fuel pump drive cam, accessory drive coupling, power steering pump driver gear, pulley/idler/bearing, belt tensioner.

Non-Allison TRANSMISSION:

Lubrication System: oil cooler (oil-to-air), oil cooler line fittings, oil cooler line.

Electronic Controls: resistor block, harness, PDM distribution harness.

Controls: remote shift control linkage/cable.

Mounting: mounting.

Automatic and Autoshift Transmissions: mechanical shift controls.

REAR AXLE:

Basic Axle Components: carrier, companion flange/yoke, carrier gasket, axle housing.

Axle Carrier Components: internal bearings, limited slip differential, differential gears/bushings/cross, oil pump, wheelend gearboxes.

Axle Gear Set: ring gear bolt, helical gears, planetary gears, ring and pinion gears.

Shafts and Seals: pinion oil seal, helical drive gear shaft.

Controls: sliding clutch, air shift control, air shift cylinder, shift fork, air shift motor.

Electrical: relay/magnetic switch, harness, air solenoid.

Non-driving rear axle: axle tube.

FUEL SYSTEM:

Air Inlet System: air intake grille, air inlet box/water separator, stack mounting bracket, air inlet cap/scoop, air inlet temperature control system, air restriction indicator, air inlet pipe.

Air Cleaner: body (gasket), mounting bracket and bolts, air cleaner snow valve motor, air cleaner snow valve switch.

Fuel Tanks: mounting bracket and bolts, filler neck/cap and gasket, finish (metal), crash guard, chassis skirt, tank body, electric transfer pump (tank to tank), fuel outlet tube, fuel tank valve/control, air vent.

ORIGINAL

FRONT END BODY:

Front End Sheet Metal: air intake baffle/water separation baffle, hood cable, lift cylinder, hood/engine access door, grille assembly, hood handle, front hood mounting hinge/bracket, hood/engine access door hatch hinge, hood, hood guides, engine compartment insulation, doghouse panel/engine latch, engine access door latch, hood latch, splash panel, hood reinforcement, rivet/fastener, seal, sealant, sound shield, hood stop, hood assist torsion bar, hood trim, weld.

Platform Structure: reinforcement brace (bus chassis), cowl/firewall/SC or FC platform, air deflector mounting, doghouse panel/engine cover, panel/skin, back panel, engine surround panel, floor panel, halo panel, instrument panel, rocker panel, rivet/fastener, roof, sealant, sill, structure, ventilator, weld.

Doors, Assemblies, and Controls: glass run channel, lift cylinder, door, hinge, latch and exterior handle, passenger door map pocket, window regulator and handle, door remote control/cable, rivet/fastener, seal, door-leading edge seal, sealant, door stop assembly, vent window and seal, weld.

Mounting: mounting crossmember, lift cylinder, latch assembly, mounting, intermediate body mounting, spring/shock absorber and mounting, sub-frame, control valve.

Interior Appointments: arm rest, console, grab handle, cup holder, insulation, manifest box/door pouch, interior mirror, door trim-driver/passenger side panel, rear trim panel, interior trim, ventilator, sun visor.

Exterior Appointments: head or tail lamp bezel, mirror bracket, sun shade mounting bracket, cowl tray, radiator access door assembly, grab handle, harness, mirror heater, mirror light, exterior mirror (basic), other mirror, spot mirror, mirror motor, relay/magnetic switch (electric mirror), sun shade, bus step, switch (electric mirror) wiper fascia.

Wheels: disc wheel, hub (disc wheel), rim (demountable), spoke wheel.

Air Conditioning: auxiliary electric ac/heater module, accumulator/dryer, motor/door-air distribution actuator, motor/door-blend air actuator, motor/door-fresh air actuator, air conditioning o-ring, resistor block, compressor clutch, compressor/reciprocating, compressor/rotary, condenser, air conditioner/heater/defroster ducting, evaporator, fitting, hose/pipe, harness, under bus to rear HVAC hose, blower speed LPM module, diagnostic-APADS module, HVAC control module, motor, mounting/housing (main case), relay/magnetic switch, high side schrader valve, low side schrader valve, refrigerant pressure sensor, switch (ether start), on/off bunk switch, bunk-temperature control switch, high pressure switch, low pressure switch, thermostatic switch, thermistor-inlet, thermistor-outlet, orifice tube, expansion valve, blower wheel, refrigerant compressor mounting bracket.

Heating System: auxiliary electric ac/heater module, motor/door-air distribution actuator, motor/door-blend air actuator, motor/door-fresh air actuator, resistor block, core (heater), air conditioner/heater/defroster ducting, defroster fan, harness, under bus to rear HVAC hose, blower speed LPM module, diagnostic-APADS module, HVAC control module, motor, mounting/housing (main case), relay/magnetic switch, switch (ether start), bunk-on/off switch, bunk-temperature control switch, radiator fan/shutter override switch, blower wheel.

Air Horns: harness, horn assembly, pneumatic solenoid, air horn switches, control valve.

Windshield Wiper System: mounting bracket, harness, wiper linkage, motor, wiper-air or vacuum motor, relay/magnetic switch, switch (ether start), intermittent switch, control valve, boost pump.

Windshield Washer System: harness, front end harness, pump, reservoir, switch (ether start), low fluid level switch.

Radio-Entertainment (only applicable if factory installed): amplifier, CD changer, harness, radio-basic assembly, satellite module-basic assembly, speaker, subwoofer.

Cruise Control: harness, coiled ribbon harness (clock spring), vehicle personality module (VPM), relay/magnetic switch, switch (ether start), clutch switch, set-resume switch.

Seats: seat adjuster assembly, electric seat air compressor, air bag, seat belt, air seat control, seat frame, arm rest, seat belt retractor, seat shock.

Engine Attachments/Floscan: ether start assembly, harness, engine heater assembly, engine meter assembly, relay/magnetic switch, engine heater socket, switch (ether start), temperature-ether start switch.

Chassis Attachments: air solenoid pack, air solenoid, auxiliary air tank.

Miscellaneous Attachments: air deflector-roof mounted, air deflector-side mounted and brackets, back-up camera.

Bus Body Covered Components:

Air Conditioning: A/C electrical control panel, accumulator/dryer, air conditioner o-ring, compressor clutch, rotary compressor, condenser, fan condenser, air conditioning ducting, evaporator, A/C fitting/pipe, A/C hose, motor, relay/magnetic switch, high side schrader valve, low side schrader valve, refrigerant pressure sensor, switch, high pressure switch, low pressure switch, radiator fan/shutter override switch, thermostatic switch, inlet thermistor, outlet thermistor, orifice tube, expansion valve, water valve (internal to the dash mounted A/C-heat unit), blower wheel.

Heaters: cable control, heater core, hose covers/trim, defroster duct, driver's heater, defroster fan, under seat heater, heater motor, booster heater pump, rear wall mounted heater, stepwell heater.

Body Frame: bows, front bumper, rear bumper, front cowl, driver's seat sub-frame (K frame), rear frame, entrance door header, drip rails, seat rails, bow spacers, steps, entrance door frame, side emergency door frame, rear emergency door frame, lift door frame, body to cab floor frame, body to cab roof frame, davenport frame.

Body-Inside: light bars, inside caps, lower lining, overhead lining, luggage racks, grab rails, shoulder rails.

Body-Outside: outside caps, post caps, engine door, fuel door, windshield wiper door, engine service doors, front fiberglass panel, front sheet metal, grille, access handles, side panel, rear inside window panels, rub rails, snow rails, roof panel (Topping), side sheets, rear outside skins, skirts, transition panel/cowl filler panel.

Compartments: battery compartment, designation sign compartment, electrical access compartment, luggage compartment, spare tire compartment, tool compartment.

Doors: buzzer boxes, air controls, electric controls, manual controls, hold back devices, emergency rear doors, emergency side doors, entrance doors, lift-single/double doors, door handles, hinges door locks, air pump, vandallocks.

Electrical: tie down bolt/plates, master solenoid disconnect, electrical panel, flashers, fuse panel, harness (wires, connectors, and terminals), body options external (engine) harness, dash harness, flasher plate harness, flasher to cowl harness, front cap harness, front end harness, left hand body harness, LH switch panel harness, overhead switch panel harness, power distribution (on flasher plate) harness, rear cab harness, RH switch panel harness, right hand body harness, horns, light monitors, strobe power packs, switches.

Floor: wheel-pocket cover, cove molding, floor panels, plywood, floor sills, steel, tie downs, wheel pocket assembly.

ORIGINAL

Floor Covering: step treads, wear plates.

Glass and Windshield: driver's window, kickout window, rear stationary window, right hand stationary window, split sash window, split sash storm window, windshield.

Lifts and Panels: modesty panels, ceiling assist rail, shields, stanchions, wheel chair tie downs, lift units.

Lights: back-up light, clearance light, directional light, directional side light, dome light, flood light, fog light, headlights, indicator light, instrument cluster light, license plate light, marker light, red light, stop/tail light, stop light, strobe light, warning light, interior lift door light, exterior lift door light.

Mirrors: cowl mount mirror, cross view mirror, rear mount mirror/rear view, heated mirror, inside rear view mirror, spy mirror.

Paint-Inside: lettering, paint.

Paint-Outside: lettering, paint, rustproofing.

Safety equipment: backing alarms, child check mate, reflective tape, destination signs, sun visors, wig-wag.

Seats: anchors, barriers, driver's seat, flipseat, cushion passenger seat foam, passenger seat frame.

Stop Arms: arms, base, fittings, crossing gates, stop arm motor, stop arm motor module, light lens, lights.

Vents: power vent, static vent.

Windshield Wipers: drive motor, washer.

Note: Transferability of this service contract is subject to approval by Navistar, Inc. by emailing: servicecontracts@navistar.com

OBTAINING SERVICE

To obtain service under this Service Contract, return this vehicle to any Navistar Truck Dealer authorized to service this model vehicle and engine.

WHAT IS NOT COVERED

Components / Items:

- Correction of loose fasteners, squeaks, rattles and unusual noises.
- Adjustments (e.g., headlights, brake/clutch adjustments, steering system adjustments, coolant levels).
- Items warranted by their respective manufacturers (e.g., non-Navistar brand engines, tires & tubes, Allison Transmissions, clutch, batteries, radios, lubricants, etc).
- Any part that is not a Navistar part number.
- Unauthorized parts other than Navistar service parts or ReNewed® parts.
- Bodies, equipment and accessories installed by other than authorized Navistar employees at Navistar manufacturing plants.
- Front and rear axle alignment.
- Engine, Engine Electronics, Injectors, Turbocharger.
- Hybrid Electric Components (except Hybrid/Electric Drive Cooling).

Repairs:

- Maintenance-related items/ repairs or those as a result of normal wear and tear, including tune-ups, brake/clutch lining, windshield wiper blades, gaskets, belts, seals, tire balancing, lubrication, batteries and other similar procedures/parts required to keep bus in good working condition.
- But not limited to: oil changes, oil filters, air filters, desiccant cartridge, fuel filters, tire rotation, cleaning/polishing, engine tune-up, adding oils, tightening of air intake and coolant clamps, ash tray, cigarette lighter element, fire extinguishers, fluorescent ballast and tubes, fuses, gladhand and gladhand rubbers, trailer hoses, hose tenders, trailer electrical cables, mattress, mud flaps, mud flap mounting bracket.
- Repairs to any part of the bus subjected to misuse, negligence, improper maintenance, improper operation, or which is the result of an accident.
- Fades, runs, mismatch or damage to paint, trim items, upholstery, chrome, polished surfaces, etc., resulting from environmental causes, improper polishes, cleaners or washing solutions, or chemical and industrial fallout.
- No coverage will be granted if Power Train, Propshaft and Suspension sales guidelines (specifications) are not strictly adhered to by all owners and operators of this bus.
- Accidents, acts of nature or other events beyond control of Navistar.
- Any single repair requiring less than \$40.00 parts and labor to complete.

Other:

- Buses sold and/or operated outside the United States or Canada.
- Buses/components which have had unauthorized alterations or modifications.
- Buses on which the odometer reading has been altered.
- Incidental or consequential costs or expenses which the owner may incur as a result of a malfunction or failure covered by this warranty, such as bus damage, communication expenses, meals, lodging, overtime, loss of use of engine or bus ("downtime"), loss of time, inconvenience, cargo loss or damage, and other similar costs and expenses.
- Replacement of defective parts, which were, not authorized Navistar equipment when first installed.
- Towing, unless additionally purchased.

NOTE TO THE SERVICING LOCATION: Should there be questions while providing this coverage, call the Warranty Claims Center for clarification. For this purpose, the following phone number is provided to be used weekdays during normal working hours in the 48 contiguous states, Hawaii and Canada, call 800-336-4500, option #5.

ORIGINAL

Technical Service Information



A NAVISTAR COMPANY

TSI-08-12-07

This TSI replaces TSI-05-12-21

Date: May 2008

Subject File: Engine

Subject: Biodiesel Fuel and Biodiesel Blends

Engine Family: All International® Diesel Engines

Engine Family: All International® MaxxForce™ Diesel Engines 2007-up Model Years

Description

This TSI contains policy and position statements for biodiesel fuel, biodiesel blends, recommendations for storage and use of biodiesel blends, warranty coverage, and the impact of biodiesel fuels on engine emissions.

Policy and Position Statements

Navistar, Inc. understands and supports customer interest in renewable fuel resources and recognizes the rapidly growing biodiesel industry and the availability of government incentives which promote biodiesel use.

Navistar agrees with the official position of the Engine Manufacturers Association (EMA) on the use of biodiesel fuel. See www.enginemanufacturers.org, for more information.

Navistar's position regarding biodiesel blends is as follows:

Biodiesel Blends (up to B5)

Currently, all blends up to B5 have characteristics that are indistinguishable from diesel fuel. Work is

underway to include specifications for blends up to B5 in the ASTM D975 standard. Navistar approves of blends up to B5, provided that the two components satisfy current specifications ASTM D6751 and ASTM D975. Quality biodiesel blends up to B5 should not cause engine or fuel system problems.

Biodiesel Blends (B6-B20)

Biodiesel blends B6-B20 have different characteristics than diesel fuel. B20 is used by fleets in the United States, because B20 balances performance, emission levels, cost, and availability. B20 is also the minimum blend level that qualifies as an alternative fuel, in compliance with the Energy Policy act of 1992. Blends lower than B20 are used regionally, depending on favorable tax incentives that vary from state to state.

There is no ASTM standard for B6-B20 blends, which makes it difficult for consumers to determine fuel quality. The ASTM is working on a standard for B6-B20 blends; in the interim, the EMA released a B20 Test Fuel Specification (June 2006) defining characteristics for fuel quality and consistency.

Policy and Position Statements (cont.)

Until the ASTM B6-20 standard is issued, the EMA B20 Test Fuel Specification is recommended for users requesting quality and consistency of B20 blends.

The National Biodiesel Board (NBB) has established a voluntary biodiesel BQ9000 Quality Management Program to train, certify, and accredit biodiesel producers and sellers. This program should significantly promote product quality and consistency in the emerging biodiesel industry. See www.nbb.org, for more information.

If customers want to use B6-B20 biodiesel blends, Navistar recommends the following:

- Biodiesel blends should meet the EMA B20 Test Fuel Specification.
- Biodiesel blends should be procured from a BQ9000 accredited producer or distributor.
- The customer should follow Navistar's recommendations for biodiesel blends described in this TSI.

Biodiesel Blends (over B20)

Navistar does not recommend biodiesel blends higher than B20; higher proportions of biodiesel in the blend can cause problems during engine operation.

Warranty Coverage

Navistar unconditionally warrants use of biodiesel blends up to and including B5 blends meeting ASTM D6751 and ASTM D975 specifications.

Use of B6-B20 blends in International® MaxxForce™ Diesel Engines, 2007-up, is at the discretion of the customer/operator and will not automatically void an engine warranty. However, if engine component failure can be directly attributable to use of a B6-B20 blend not provided by a BQ9000 certified fuel supplier, not meeting the EMA B20 Test Fuel Specification or not used per recommendations in this TSI, Navistar may, at its option, deny warranty on the affected engine or engine component.

Biodiesel Fuel

The American Society for Testing and Materials (ASTM) defines biodiesel as a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100.

Esters are oxygenated organic compounds that can be used in diesel engines, because some of their key properties are comparable to those in diesel fuel.

Raw or refined vegetable oil or recycled greases that **have not been processed** into biodiesel are not biodiesel and should be avoided.

Regardless of the biomass feedstock used to produce biodiesel B100 (neat), the final product must meet the requirements of ASTM D6751 or European EN14214 specifications.

Soy Methyl Ester (SME) biodiesel, derived from soybean oil, is the most common biodiesel produced in the United States. Rape Methyl Ester (RME) biodiesel, derived from rapeseed oil, is the most common biodiesel produced in Europe. Collectively these fuels are sometimes referred to as Fatty Acid Methyl Esters (FAME).

Biodiesel fuels are produced by a process called transesterification, in which various oils (triglycerides) are converted into methyl esters through a chemical reaction with methanol in the presence of a catalyst, such as sodium or potassium hydroxide. The by-products of this chemical reaction are glycerols and water, both of which are undesirable and need to be removed from the fuel along with traces of methanol, unreacted triglycerides and catalyst. Biodiesel fuels naturally contain oxygen, which reduce fuel stability during storage. Although biodiesel feedstock does not inherently contain sulfur, this element may be present in biodiesel fuel if contaminated during transesterification and storage.

B100 biodiesel may be blended with diesel fuel. Biodiesel blends are designated BXX, where XX represents the percentage of B100 in the biodiesel blend (e.g. B5, B20).

Recently, ASTM D6751 has been revised to include fuel stability criteria and measurement. Future revisions are upcoming to improve the quality and cleanliness of B100.

Recommendations for Use of Biodiesel Blends

Navistar recommends that users of B20 select a BQ9000 certified fuel supplier and request proof from the supplier that the fuel meets the EMA B20 Test Fuel Specification. Fuels not meeting the EMA specification may cause fuel system deposits,

ORIGINAL

Recommendations for Use of Biodiesel Blends (cont.)

plugged filters, contaminated engine oil, and fuel degradation.

If providers and customers follow correct storage and maintenance procedures for fuel and equipment, blends up to B20 that meet the EMA B20 Test Fuel Specification should perform satisfactorily in International® and International® MaxxForce™ diesel engines.

Navistar recommends the following:

- Storage tanks should be thoroughly cleaned of residue and microbial growth before storing biodiesel fuel and tanks should be inspected periodically for cleanliness. Residue, water or microbial growth will compound in stored biodiesel fuel, causing increased fuel deposits that clog fuel filters prematurely. Adding biocides will reduce microbial growth during storage, but this is not a substitute for cleaning storage tanks.
- Vehicle fuel tanks should be thoroughly cleaned and dried before using biodiesel blends.
- Since biodiesel blends tend to dissolve deposits in fuel tanks and fuel lines, new fuel filters should be installed on used engines, before using biodiesel blends.
- Install new fuel filter during every oil change (at half the normal service interval), when using biodiesel to improve water separation.
- Because biodiesel has a higher boiling point, check oil level more frequently and shorten oil change interval when fuel dilution raises the oil level under the following conditions:
 - Use of aftertreatment systems
 - Biodiesel blends closer to B20
 - Low Load usage
- For cold climate conditions, Navistar recommends that an appropriate fuel heater be installed.

- Water separation from biodiesel fuel blends is more difficult than water separation from diesel fuel. Users should be careful to prevent water from accumulating in the fuel system. If possible, an additional fuel filter/water separator should be installed in the fuel system to remove water.
- Biodiesel blends should be used within six months of the date of manufacture, because the oxidation stability of biodiesel is lower than diesel fuel.
- If equipment fueled with biodiesel is to be stored for more than three months, the fuel system should be drained, cleaned, and dried.
- Fuel system seals, used in 2006 and earlier engines may degrade prematurely. When replacing seals, Viton® seals or equivalent seals are recommended.
- The following materials should be monitored if older engines operate with biodiesel: Natural rubber, butyl rubber, nitrile, copper, tin, and lead. These materials can degrade prematurely and cause deposits that clog fuel lines and filters.

Impact of Biodiesel Blends on Engine Emissions

B20 biodiesel blends are used in fleets in nonattainment areas to reduce visible smoke, particulate emissions, and diesel exhaust odor.

Biodiesel blends can reduce emission levels of HC (hydrocarbons) and CO (carbon monoxide); however, biodiesel blends may somewhat increase emission levels of NO_x (oxides of nitrogen) in some engines.

Biodiesel blends, used in new, low emissions engines do not significantly affect emissions.

Tests have shown that biodiesel blends help the self-regeneration of diesel particulate filters.



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ROTELLA Products

[x close](#)

Shell ROTELLA® ELC Extended Life Coolant/Anti-Freeze

Shell Rotella® ELC Extended Life Coolant/Anti-Freeze is a "fill for life" ethylene glycol based coolant for heavy-duty diesel, gasoline and natural gas powered engines.

Shell Rotella® ELC contains a unique extended life carboxylate inhibitor system and nitrite / molybdate as secondary Shell Rotella® ELC meets all the requirements of CAT EC-1, TMC RP 329 and RP 338.

Shell Rotella® ELC is available as a concentrate and as 50/50 and 60/40 volume mixtures of Shell Rotella® ELC with deionized water.

Applications

Shell Rotella ELC Extended Life Coolant/Anti-Freeze has been proven, with over 100 million miles of fleet testing, to provide complete protection of all cooling system components.

The inhibitors in ROTELLA ELC, due to their special chemistry, are designed to go 600,000 miles on-road or 12,000 hours off-road with only one Shell Rotella ELC Extender addition at 300,000 miles or 6,000 hours. After 600,000 miles or 12,000 hours it is recommended that the coolant be tested for continued use. Shell Rotella ELC's patented inhibitors, while providing complete cooling system component protection, also help reduce water pump failures, hard water scale deposits, silicate "green goo" and improve heat transfer. Tests with ROTELLA ELC show that heat transfer is about 8% better with RELC than with conventional heavy duty, silicate-containing coolants.

Maintenance is simple with ROTELLA ELC. To use this product just follow your OEM's instructions on how to drain, flush and refill your cooling system. Top up only with Shell Rotella ELC Pre-diluted 50/50 or an equivalent brand of ELC like Fleetrite® ELC.

At every PM, or at least twice per year, check the color and freeze point of your coolant. If coolant is red, has no deposits and has a freeze point of between -15°F and -60°F then the coolant is considered in suitable condition for further use. See index on Tech Data Sheet for freeze point adjustment chart.

Please note that dilution of Shell Rotella ELC by more than 15% with non-equivalent coolants or water is not recommended. Over-dilution will require initiating SCA use or draining and refilling the cooling system with Shell Rotella ELC.

If contamination with non-equivalent /non-extended life coolants is suspected, it is recommended the ELC Contamination Test Strip Kit be used to confirm satisfactory carboxylate inhibitor content.

Features and Benefits

- minimum coolant life of 600,000 miles with only one Shell Rotella ELC Extender addition at 300,000 miles.
- no regular Supplemental Coolant Additives (SCA's) required
- Improved water pump seal life due to low dissolved solid levels
- Excellent pitting protection for wet sleeve cylinder liners
- Excellent, long-term corrosion protection of all cooling system metals including aluminum, brass, cast iron, steel, solder, and copper
- Excellent heat transfer
- Reduced hard water scale
- Reduced overall coolant and cooling component maintenance
- No silicate dropout or gel formation during use or storage
- Compatible with conventional coolants
- Dilution/mixing with non-equivalent coolants will reduce or eliminated extended life properties. DO NOT DILUTE THIS PRODUCT BY MORE THAN 15% WITH CONVENTIONAL COOLANTS or water
- Can be used for top-up of cooling systems containing conventional coolants
- When Shell Rotella ELC is used as top-up for conventional coolants SCA's must still be added

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OMNOVA
SOLUTIONS INC.

ORIGINAL

Decorative Products

133 Yorkville Road East
Columbus, MS 39702
Tel: 662-327-1522
www.omnova.com

November 17, 2011

Navistar
Mr. Ron Briggler

Dear Mr. Briggler:

This letter is to certify that OMNOVA's Prevail Bus seating materials are designed to meet the requirements of FAR 25.853 (a).

Any results reported pursuant to the Standards listed above do not necessarily reflect the hazards presented by these materials or any other materials under actual fire conditions.

If you have any questions, please call me at 662-329-7775.

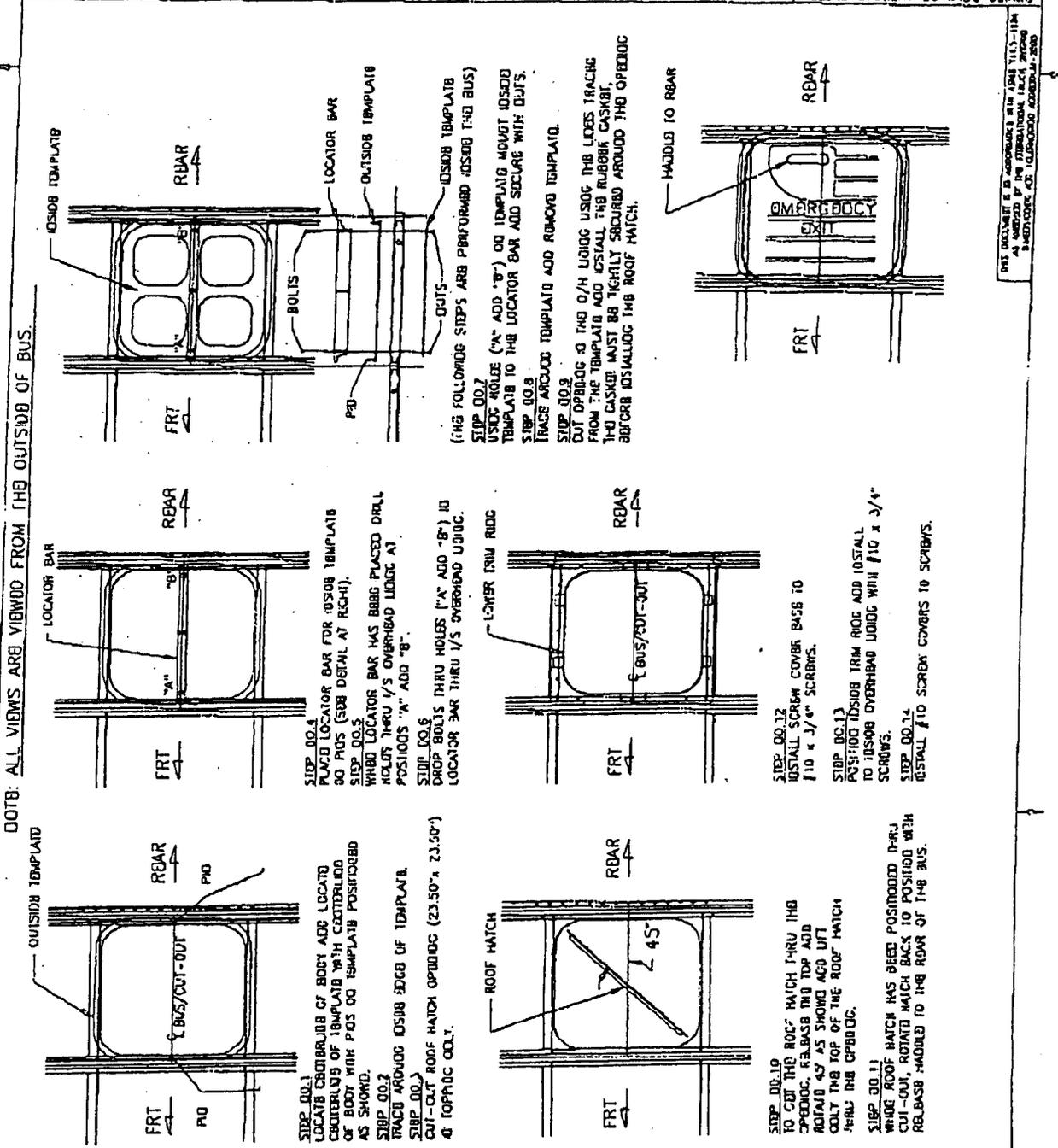
Sincerely,

Steve Rye
Senior Product Development Engineer

3 of 3

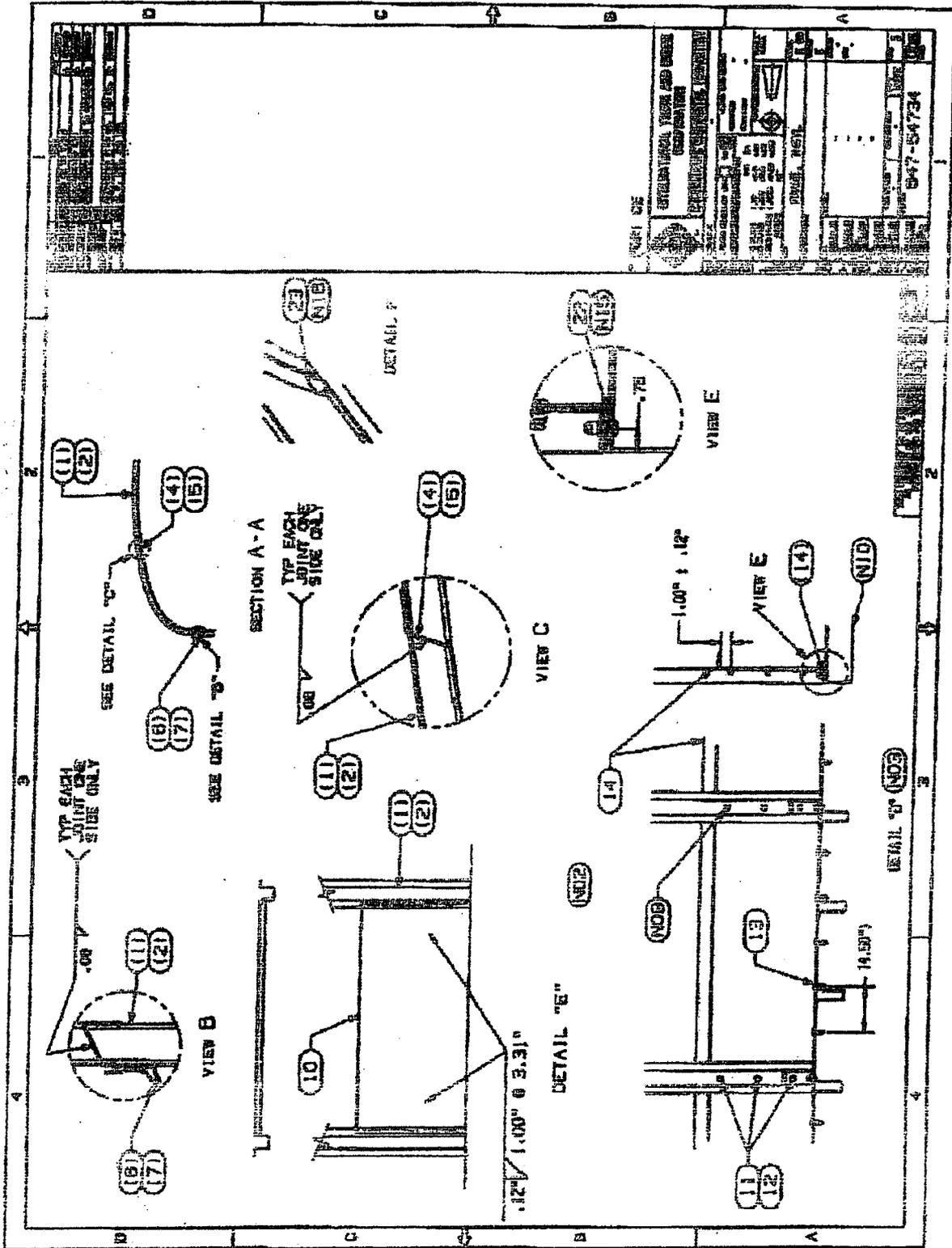
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| INTERNATIONAL TRUCK AND EQUIPMENT CORPORATION INTERNATIONAL CONFIDENTIAL PROPRIETARY | | PART DOCUMENT IS TO BE MAINTAINED WITH THIS VEHICLE AS PART OF THE INTERNATIONAL TRUCK RECORDS. THIS DOCUMENT IS TO BE MAINTAINED WITH THIS VEHICLE. | |
| PART NO. 158110 PART NAME: ROOF HATCH COVER QUANTITY: 1 UNIT: EA DRAWN BY: J. J. ... CHECKED BY: ... DATE: ... | PART NO. 158110 PART NAME: ROOF HATCH COVER QUANTITY: 1 UNIT: EA DRAWN BY: J. J. ... CHECKED BY: ... DATE: ... | PART NO. 158110 PART NAME: ROOF HATCH COVER QUANTITY: 1 UNIT: EA DRAWN BY: J. J. ... CHECKED BY: ... DATE: ... | PART NO. 158110 PART NAME: ROOF HATCH COVER QUANTITY: 1 UNIT: EA DRAWN BY: J. J. ... CHECKED BY: ... DATE: ... |



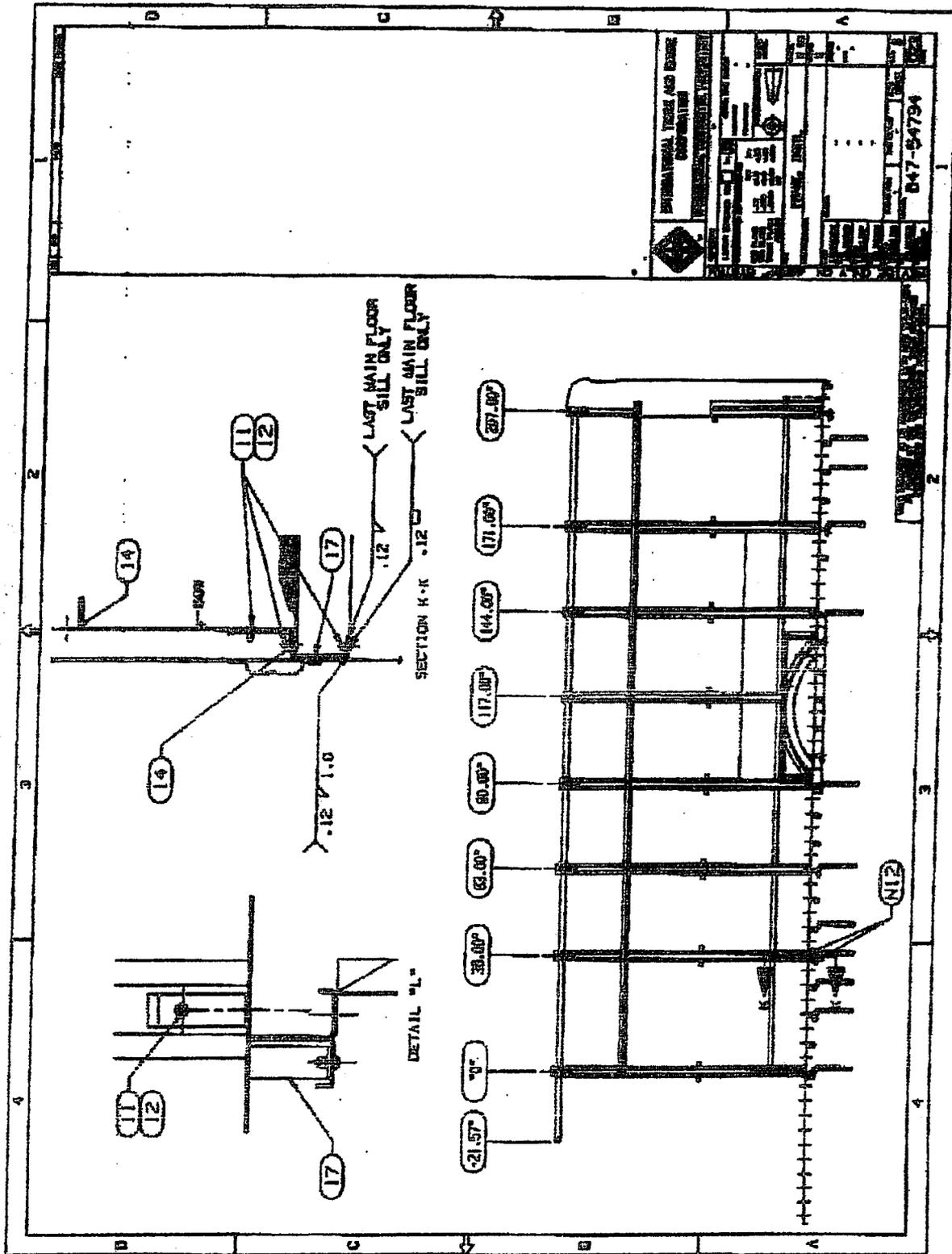
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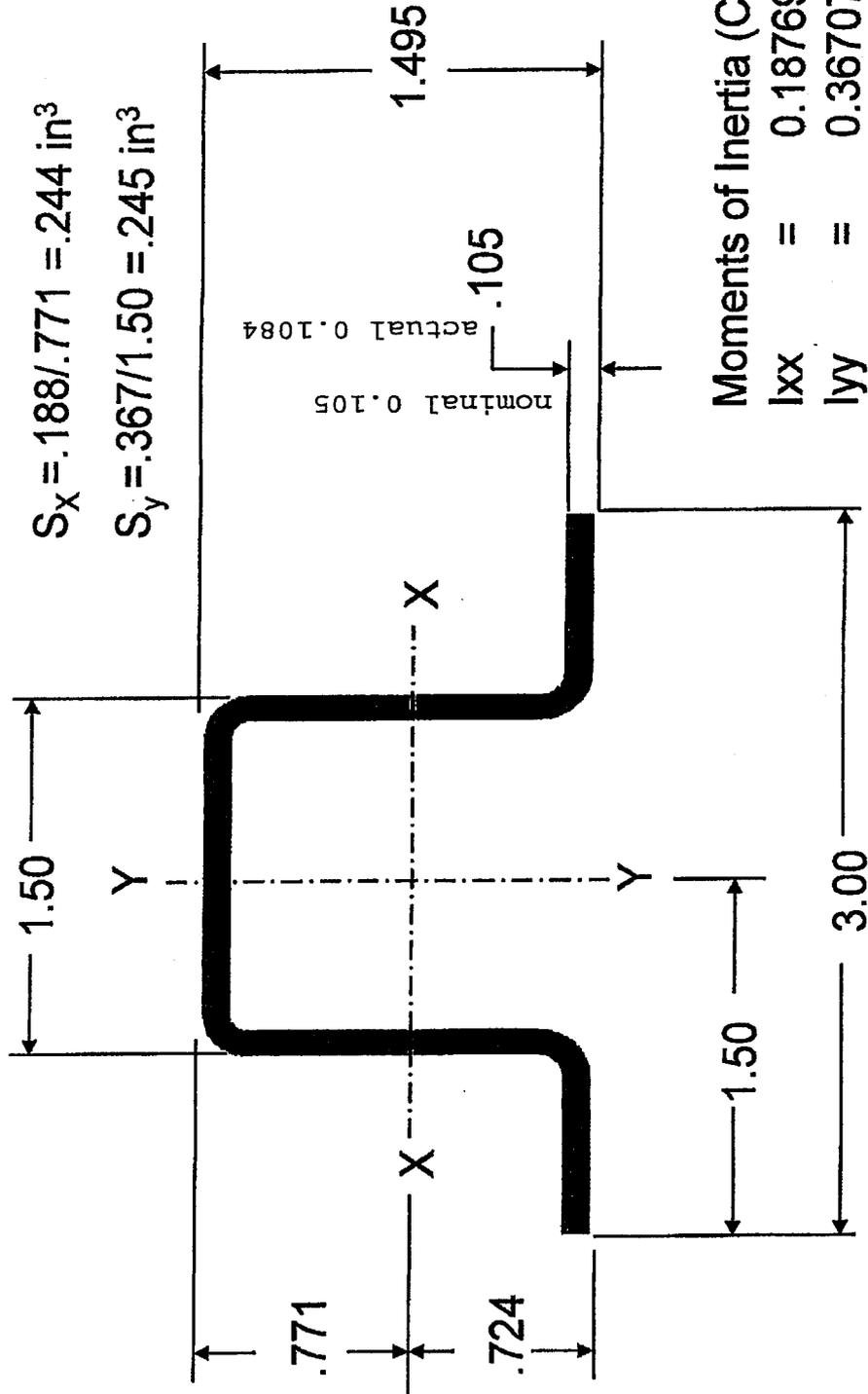
Joint Connection

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Joint Connection

Section Modulus IC 12 GA Roof Bow

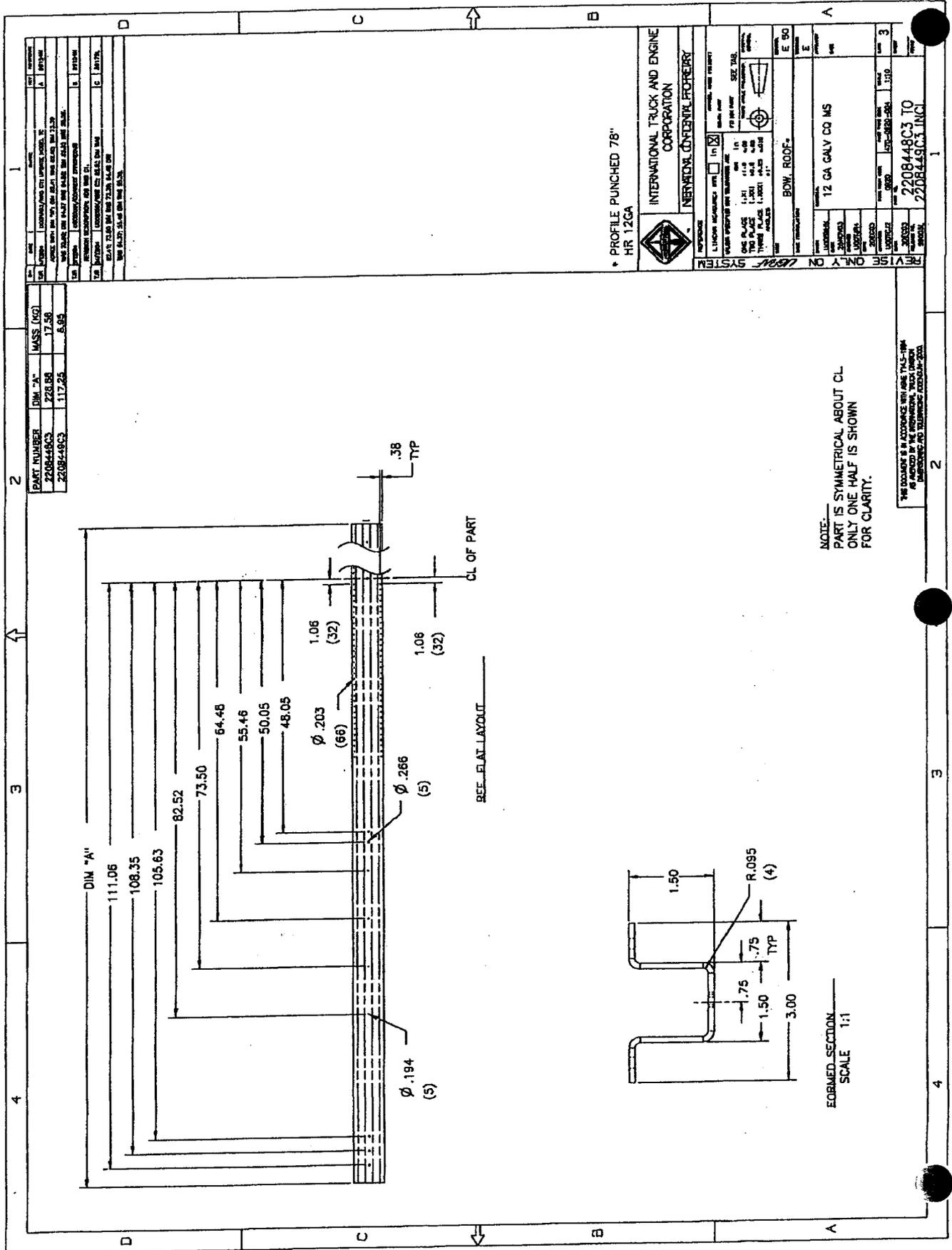


Moments of Inertia (Centroidal)
 $I_{xx} = 0.18769113859320$
 $I_{yy} = 0.36707166511415$

Center of Mass
 $X_{bar} = 1.50$
 $Y_{bar} = 0.77147336584834$

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| PART NUMBER | DIM. "A" | MASS (KG) |
|-------------|----------|-----------|
| 2208448C3 | 226.68 | 17.58 |
| 2208449C3 | 117.25 | 8.89 |

| REV | DATE | DESCRIPTION |
|-----|----------|---|
| 1 | 10/15/88 | ISSUED FOR PRODUCTION |
| 2 | 11/15/88 | REVISED TO REFLECT CHANGES TO THE DRAWING |
| 3 | 12/15/88 | REVISED TO REFLECT CHANGES TO THE DRAWING |

NOTE:
PART IS SYMMETRICAL ABOUT CL
ONLY ONE HALF IS SHOWN
FOR CLARITY.

FORMED SECTION
SCALE 1:1

PROFILE PUNCHED 78"
HR 12GA

INTERNATIONAL TRUCK AND ENGINE CORPORATION
INTERNATIONAL CONFIDENTIAL PROPERTY

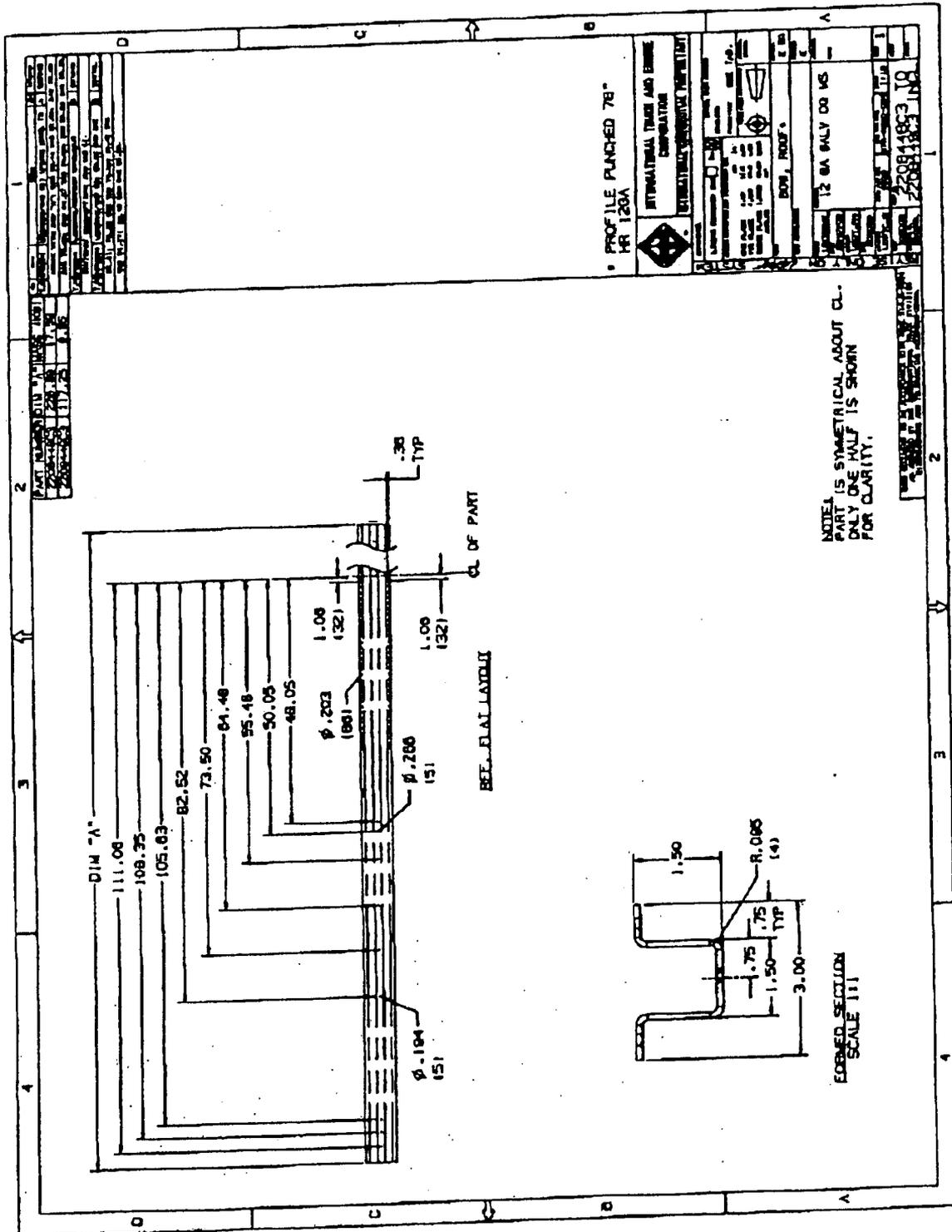
REVISIONS ONLY ON ORIGINAL SYSTEM

| REV | DATE | DESCRIPTION |
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| 3 | 12/15/88 | REVISED TO REFLECT CHANGES TO THE DRAWING |

2208448C3 TO 2208449C3 INCL

THIS DOCUMENT IS IN ACCORDANCE WITH THE TMS-1000
AS APPLICABLE TO THE INTERNATIONAL TRUCK ENGINE
CORPORATION'S PRODUCT DEVELOPMENT

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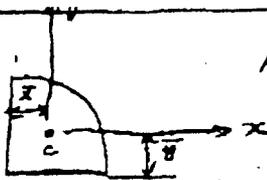
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| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 |
| 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 |
| 53 | 54 | 55 | 56 |
| 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 |
| 65 | 66 | 67 | 68 |
| 69 | 70 | 71 | 72 |
| 73 | 74 | 75 | 76 |
| 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 |
| 85 | 86 | 87 | 88 |
| 89 | 90 | 91 | 92 |
| 93 | 94 | 95 | 96 |
| 97 | 98 | 99 | 100 |

| | | | |
|----|----|----|-----|
| 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | 32 |
| 33 | 34 | 35 | 36 |
| 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 |
| 45 | 46 | 47 | 48 |
| 49 | 50 | 51 | 52 |
| 53 | 54 | 55 | 56 |
| 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 |
| 65 | 66 | 67 | 68 |
| 69 | 70 | 71 | 72 |
| 73 | 74 | 75 | 76 |
| 77 | 78 | 79 | 80 |
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12 GA GALV CO MS

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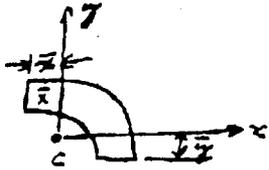
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$$A = \frac{\pi r^2}{4}$$

$$\bar{x} = \bar{y} = \frac{4r}{3\pi} \quad I_y = I_x = 0.05488 r^4$$

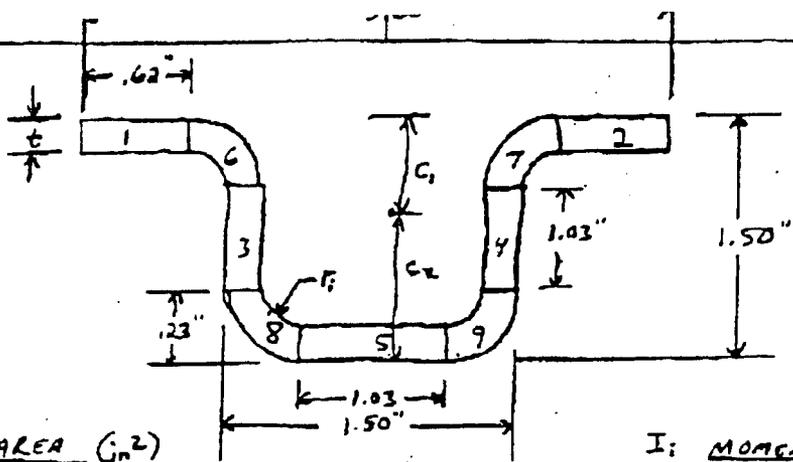
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$$A = \frac{\pi(r_1^2 - r_2^2)}{4}$$

$$\bar{x} = \bar{y} = \frac{4(r_1 - r_2)}{3\pi}$$

$$I_y = I_x = 0.05488 (r_1^4 - r_2^4)$$



$t = 0.1084$
 $r_f = 0.125$
 $r_0 = 0.2334$

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AREA (in²)

I: MOMENT OF INERTIA (Components)

- 1 $.62t = 0.0672$
- 2 $.62t = 0.0672$
- 3 $1.03t = 0.1117$
- 4 $1.03t = 0.1117$
- 5 $1.03t = 0.1117$
- 6 $\frac{\pi}{4}[r_0^2 - r_f^2] = 0.0305$
- 7 $\frac{\pi}{4}[r_0^2 - r_f^2] = 0.0305$
- 8 $\frac{\pi}{4}[r_0^2 - r_f^2] = 0.0305$
- 9 $\frac{\pi}{4}[r_0^2 - r_f^2] = 0.0305$

- 1 $bL^3/12 [(.62)(t^3)/12] = 6.58 \times 10^{-5}$
- 2 $bL^3/12 [(.62)(t^3)/12] = 6.58 \times 10^{-5}$
- 3 $bA^3/12 [t(1.03)^3/12] = 9.87 \times 10^{-5}$
- 4 $bA^3/12 [t(1.03)^3/12] = 9.87 \times 10^{-5}$
- 5 $bA^3/12 [(1.03)(t^3)/12] = 1.09 \times 10^{-4}$

$A_{TOT} = .5916$



$6-7 \quad .1098 (r_0^4 - r_f^4) - \frac{.283 r_0^2 r_f^2 (r_0 - r_f)}{r_0 + r_f}$
 $= 2.262 \times 10^{-4}$



$8-9 = 2.262 \times 10^{-4}$

Centroid

$Q = 5916 C_1 = 2(Area_1)(.0073) + 2(Area_2)(.1664) + (Area_5)(.1615)$
 $+ 2(Area_6)(.23 - .424 \frac{r_0^3 - r_f^3}{r_0^2 - r_f^2}) + 2(Area_8)(1.5 - .23 + .424 \frac{r_0^3 - r_f^3}{r_0^2 - r_f^2})$

0.0069

0.0846

$C_1 = 0.7213$

$C_2 = 1.5 - C_1 = 0.7787$

$I_x = 2 [I_1 + A_1 d_1^2] + 2 [I_3 + A_3 d_3^2] + [I_5 + A_5 d_5^2] + [I_{6-7} + A_{6-7} d_{6-7}^2]$
 $+ [I_{8-9} + A_{8-9} d_{8-9}^2]$

$= 0.1886$

$d_1 = C_1 - \frac{t}{2} = 0.6671$

$d_3 = C_1 - r_0 - \frac{1.03}{2} = -.0271$

$d_5 = 1.5 - C_1 - \frac{t}{2} = 0.7245$

$d_{6-7} = C_1 - 0.23 + .424 \frac{r_0^3 - r_f^3}{r_0^2 - r_f^2} = 0.6087$

$d_{8-9} = 1.5 - C_1 - .23 + .424 \frac{r_0^3 - r_f^3}{r_0^2 - r_f^2} = 0.6661$

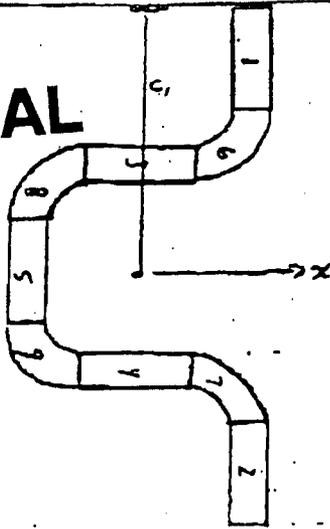
$\bar{z} = \frac{I_x}{\max(C_1, C_2)} = 0.2422$

$t = 0.1087$

$r_0 = 0.125$

$r_0 = 0.2337$

ORIGINAL



I: MOMENT OF INERTIA (components)

- 1 $bA^3/12$ $[(t)(.62)]^3/12 = 2.15 \times 10^{-3}$
- 2 $bA^3/12$ $[(t)(.62)]^3/12 = 2.15 \times 10^{-3}$
- 3 $bA^3/12$ $[(1.02)(t^3)]/12 = 109 \times 10^{-6}$
- 4 $bA^3/12$ $[(1.02)(t^3)]/12 = 109 \times 10^{-6}$
- 5 $bA^3/12$ $[(t)(1.02)]^3/12 = 9.87 \times 10^{-3}$
- 6 $0.05488 (r_0^4 - r_i^4) = 149 \times 10^{-6}$
- 7 $0.05488 (r_0^4 - r_i^4) = 149 \times 10^{-6}$
- 8 $0.05488 (r_0^4 - r_i^4) = 149 \times 10^{-6}$
- 9 $0.05488 (r_0^4 - r_i^4) = 149 \times 10^{-6}$

BY SYMMETRY, $c_1 = c_2 = 1.50''$

$$I_x = \sum_{i=1}^9 [I_i + A_i d_i^2]$$

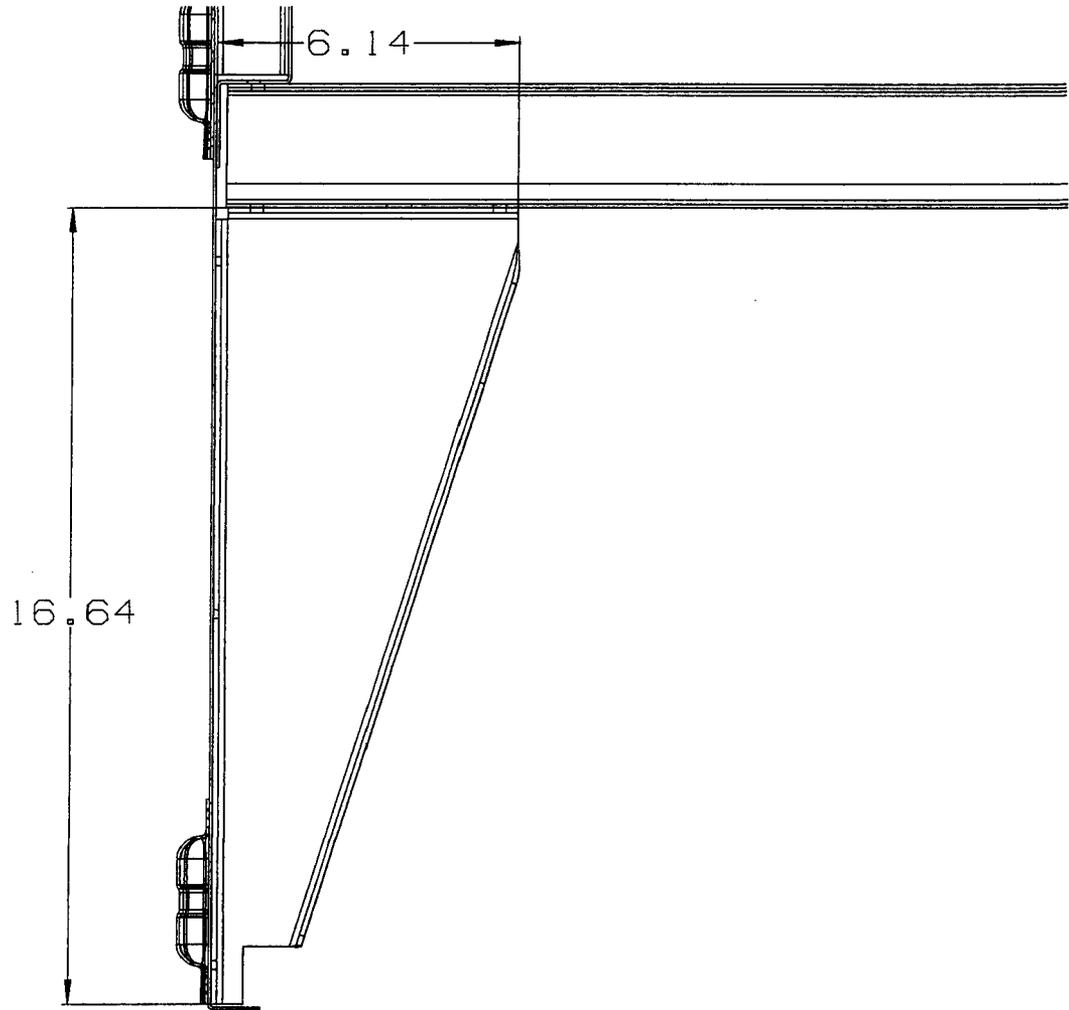
- $d_1 = c_1 - .62/2 = 1.1900$
- $d_2 = 3 - c_1 - .62/2 = 1.1900$
- $d_3 = c_1 - (.62 + r_0 - t/2) = 0.7008$
- $d_4 = 3 - c_1 - (.62 + r_0 - t/2) = 0.7008$
- $d_5 = 0$
- $d_6 = c_1 - .62 - \frac{4(r_0 - r_i)}{3\pi} = 0.8396$
- $d_7 = 3 - c_1 - .62 - \frac{4(r_0 - r_i)}{3\pi} = 0.8396$
- $d_8 = c_1 - .62 - r_i - r_0 + \frac{4(r_0 - r_i)}{3\pi} = 0.5676$
- $d_9 = 3 - c_1 - .62 - r_i - r_0 + \frac{4(r_0 - r_i)}{3\pi} = 0.5676$

$I_x = 0.3771$

$$z = \frac{I_x}{\max(c_1, c_2)} = \boxed{0.2449}$$

ORIGINAL

Skirt Gusset



FRAMES

■ FRAME RAILS

■ ■ *Standard*

- Chassis Painted Prior to Body Mounting
- All holes Laser Aligned and Machine Punched, Powder Coated Prior to Full Assembly, Assembled in Fixture using "Grade 8" Bolts

01CAC

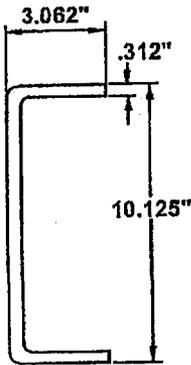
FRAME RAILS High Strength Low Alloy Steel
(50,000 PSI Yield); 10.125" x 3.062" x 0.312"
(257.2mm x 77.8mm x 8.0mm); 471.1" (11965mm)
Maximum OAL

Crossmembers and components attached to the frame are bolted to the web of the frame rails to produce a clean, straight rail top with no bolt heads or rivets to interfere with equipment mounting.

The frames on the Integrated Bus models are designed to provide extraordinary resistance to the twists and turns of loaded operation over varying road surfaces. All frames are full depth, with full depth crossmembers. Crossmembers and components attached to the frame are bolted to the web of the frame rails to produce a clean, straight rail top with no bolt heads or rivets.

To achieve proper frame squaring frame rails, all crossmembers and spring hangers are placed in a preset fixture where they are clamped tightly into place before being bolted together. Fine threaded, Grade 8 flange head bolts and torque control nutrunners are used to ensure maximum frame strength.

■ FRAME RAIL CROSS-SECTION



01CAC

01_0109

Side Rail Descriptions

| Feature Code | Dimensions (Inches) | | | Yield Strength Nominal (psi) | Material # | Section Modulus ⁽¹⁾ (Inches ³) | | Resisting Bending Moment (In.-lbs.) | |
|--------------|---------------------|--------|-----------|------------------------------|------------|---|---------|-------------------------------------|---------|
| | Depth | Width | Thickness | | | Maximum | Nominal | Maximum | Design |
| | 01CAC | 10.125 | 3.062 | 0.312 | 50,000 | B | 13.31 | 12.64 | 665,500 |

JTES:

B = High Strength Low Alloy Steel

[1] = Section Modulus:

Maximum Tolerance: All frame dimensions are at maximum tolerance; used by some competitors as advertised values.
 Nominal: Calculated using design dimensions – indicates the design load capacity of the frame.

■ FRAME REINFORCEMENT, SPECIAL

■ ■ *Standard*

CE

- 3.30" x 1.80" x 0.312" x 31.50" Inverted "L" in Front Shock Absorber Mounting Area

■ CROSSMEMBER, INTERMEDIATE

The number of intermediate crossmembers depends on the wheelbase. All crossmembers have a wide bolt span and are attached to the frame rails with premium quality grade 8 high strength flange head bolts. This design offers superior strength while at the same time conserving weight.

■ CROSSMEMBER, REAR, AF

For applications which require more AF, additional crossmembers are available. The number required depends on the AF dimension.

■ ■ *Optional*

01SAL

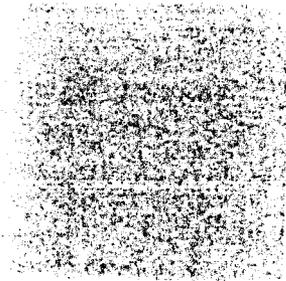
CROSSMEMBER, REAR, AF (01)

01SAM

CROSSMEMBER, REAR, AF (2)

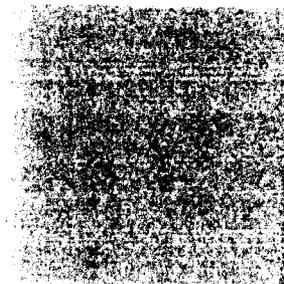
Standard Colors

ORIGINAL

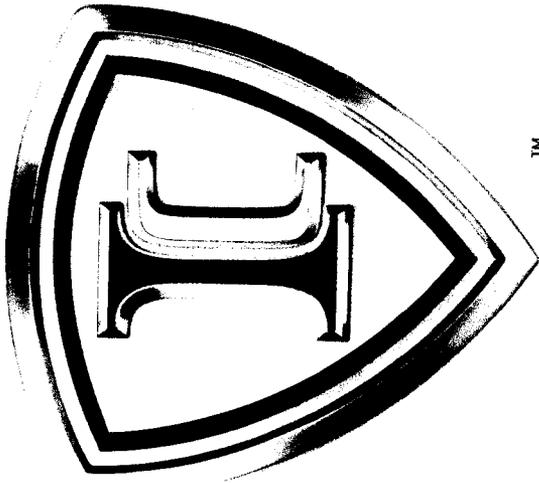


4421
School Bus Yellow

Non-Reflective Colors



4422
School Bus Yellow Non-Reflective



IT BEYOND™

INTRODUCING THE SUPPORT, REWARDS AND RESOURCES YOU NEED.

A NEW PROGRAM THAT SUPPORTS YOU BEYOND THE BUS.

▶ YOU GO A STEP BEYOND FOR YOUR PASSENGERS. NOW WE'RE GOING A STEP BEYOND FOR YOU.

IC Bus understands the responsibility you have to transport your passengers safely. That's why we created IC Beyond especially for you. This brand-new program goes further than any other bus manufacturer to make sure you have the support and resources you need to properly operate, manage and maintain your buses. Instant access to parts and service information, hands-on and online training, business management resources, networking tools and more—they're all yours as a member of IC Beyond.

**BEST OF ALL, ENROLLMENT IN IC BEYOND IS FREE.
FOR MORE INFORMATION, GO TO JOINICBEYOND.COM/DEALER**

▶ HOW DO WE GO BEYOND THE BUS FOR YOU?

By giving you all the tools you need to easily and effectively keep your bus operations moving. Membership benefits include:

ONCOMMAND SERVICE INFORMATION

Simply enter a VIN, and this online system provides real-time access to repair procedures, warranty information, service bulletins and other vehicle specific service information to help facilitate better vehicle maintenance and uptime.

ONCOMMAND PARTS INFORMATION

Online portal providing instant, free access to the complete VIN-based parts lists, illustrated component drawings, parts information letters and convenient electronic ordering for the parts you need.

ONCOMMAND EDUCATION

Educate your technicians, operators and fleet managers on how to properly maintain your buses and use our powerful business tools with online education courses specific to your products.

IC BUS[®] UNIVERSITY

A unique opportunity to get valuable on-site, hands-on training from IC Bus' top technicians at the IC Bus facility in Tulsa, OK. All members receive full access to all bus components, allowing you to practice the skills required on the job. IC Beyond members receive 50% off IC Bus University enrollment.

OTHER IC BEYOND BENEFITS INCLUDE:

- ▶ Informational webinars
- ▶ Bi-monthly e-newsletters
- ▶ Constant access and networking via Facebook

▶ BE SURE TO ACTIVATE YOUR MEMBERSHIP AT JOINICBEYOND.COM/DEALER





THE CE SERIES SCHOOL BUS





THE PEOPLE WHO SET THE STANDARD IN PARTNERSHIP BRING YOU THE BENCHMARK OF SAFETY AND RELIABILITY.



The IC Bus™ CE Series school bus is the industry standard for safe and reliable student transportation. Every feature found on this bus was developed with decades of learning from drivers, passengers, mechanics, fleet supervisors and school administrators. And every one of these features shares one common attribute: its ongoing partnership with IC Bus. This partnership begins before purchase and continues throughout the lifecycle of every CE Series school bus, and beyond.

Through extensive collaboration with its customers, IC Bus has been able to enhance what was already an amazingly safe and reliable school bus. You'll find an ergonomically intuitive environment for drivers, a safe interior for students, a bus optimized for the maintainer, and the same efficient parts and service network for which IC Bus is known. Plus, the fully integrated CE Series is also available in an industry-leading hybrid configuration.

For over 90 years, IC Bus has provided safe, functional vehicles with low operational costs and, most importantly, the honest-to-goodness partnership that sets us apart from the competition, now and for years to come.



BY TRULY UNDERSTANDING DRIVERS, WE MADE A BUS THAT'S COMPLETELY DRIVER-FRIENDLY.



Not all drivers are built the same. But their school bus needs are identical: they all need optimal comfort, control and convenience. That's why they love the IC Bus CE Series school bus.

IC Bus designed the driver's compartment with ergonomic wisdom that thoroughly facilitates safe operation, no matter the size of the driver. Drivers find ample foot room, a higher three-piece windshield and driver's side window, as well as optimally located mirrors, which are all designed to maximize visibility.

Plus, every control was designed to be easily accessible so drivers can maintain their essential forward view. Lighted, steering wheel mounted controls for the entrance door and warning lights are designed to keep the driver's hands on the steering wheel and eyes on the road. Ergonomically located switches are within easy reach, requiring minimal to no lean.

By studying school bus drivers, we've developed intuitive functions on the CE Series school bus. One example of this is found in the headlights, which turn on whenever the wipers are engaged. Also, the automotive-style wiper control is conveniently located on the turn signal stalk and features five intermediate speeds, two wash modes, overlapping wiper patterns, more wiper coverage and a 25% longer system life.

Further evidence of our understanding of drivers and how the CE Series' design follows their function can be found in the "One-Button Stop" feature, raised entrance door and expanded driver storage area.

Bottom line, you won't find a more driver-friendly school bus than the CE Series school bus from IC Bus.



IC BUS
We measured 1,500 drivers of all shapes and sizes. Then we arrived at the optimum seat position and placement of pedals, switches and controls — yielding that just right feel that's an ergonomic marvel for all.

KIDS CAN BE HARD ON SEATS, WHICH IS WHY THESE ARE EASY TO MAINTAIN.

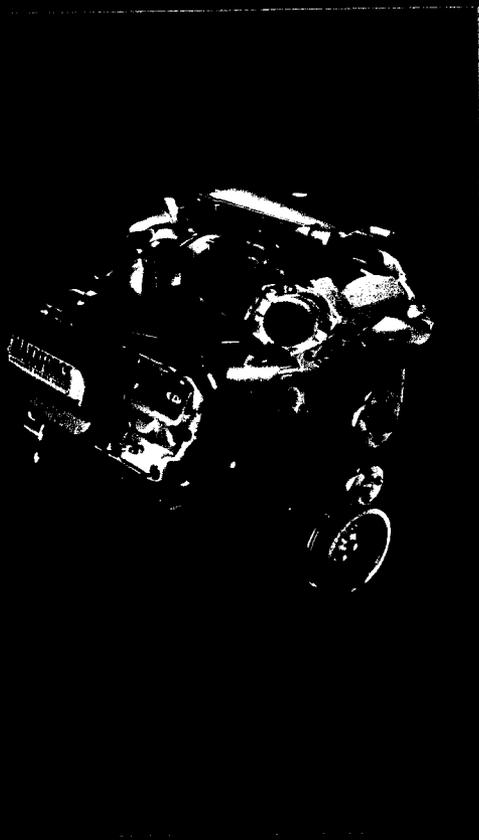


For the first time, all CE Series' seats have removable bolt-on seat backs for easier cleaning or seat cover replacement without the need to remove the entire seat. And all of the CE Series seating uses common parts across the base, dual riser, anchor seat and UCRA seat, which means customers will need to stock fewer parts for potential repairs.

Plus, all seats now have custom-stamped seat legs, which have 58% fewer welds, making them far more durable. Finally, all seats are seatbelt ready and can accommodate child-restraint seats and infant carriers. Upgrades are available for UCRA seats and three point belts.

All of this is further proof of the complete serviceability IC Bus strives to incorporate in every aspect of every bus produced.

POWERFUL AND RELIABLE DURABILITY: PERFORMING TO THE MAXX.



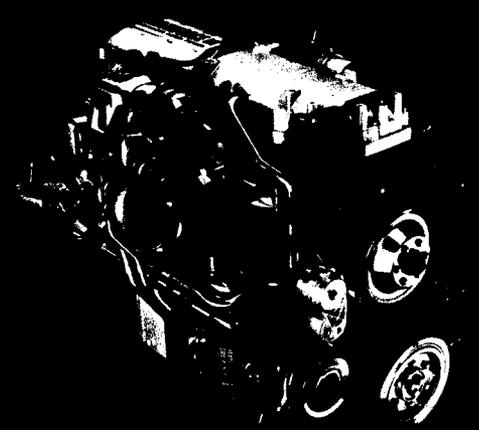
Every CE Series school bus comes with a MaxxFace engine. Built on uncompromised performance, while meeting tough environmental regulations, they're backed by the #1 selling medium commercial diesel engine manufacturer: Navistar Engine Group.

The MaxxFace 7 is an all-new V-8 turbodiesel that incorporates advanced design elements and new components engineered by Navistar. These include a high-pressure, common rail fuel system, dual-sequential turbochargers and compacted graphite iron block. These features deliver a better performing engine with outstanding power, performance, reliability and fuel economy.

The MaxxFace DT has long been known in the industry as "The Legend." The legend grew from a big idea: bring to the mid-range diesel market traditional Big Bore features like wet sleeve design, in-chassis rebuild capability and other premium design features. The resulting durability and performance provide high residual value and have made the engine the market share leader for decades.

The advantages of both these engines ensure your CE Series bus will perform reliably, powerfully and for the long run.

THE ADVANTAGES OF MAXXFORCE ADVANCED EGR MAKE BUSINESS COMPLIANCE EASY TO DO.



MaxxFace Advanced EGR is the smartest solution to EPA emission requirements because it doesn't require urea-fluid, so you don't have to deal with the hassles and costs that come with compliance. It's also the easiest solution because MaxxFace Advanced EGR doesn't require any additional driver or service technician training. And it's also the cleanest engine we've ever built – it's compliant and environmentally effective from the moment you start driving.

NO UREA

MaxxFace Advanced EGR doesn't require urea fluid, so you don't have to deal with the costs that come with it, including:

- The price of urea fluid itself.
- The cost of training drivers and technicians on how to handle urea fluid.

NO D

The driver interface hasn't changed.

MaxxFace Advanced EGR doesn't require the hassle of adding urea fluid to your bus.

The operation of your buses won't be restricted by progressive warning systems or engine de-rates caused by issues with urea fluid.

NO D

Advanced EGR is compliant and environmentally effective from the moment you start driving.

MAXXFORCE 7

MAXIMIZE YOUR POWER AND DURABILITY

Higher torque, faster speed and clutch engagement make MaxxForce 7 a powerful force to be reckoned with. The facts don't lie.

| Model | HP @ 1500 | GV (ft/lb) | GV (kg/m) | GV (ft/lb) @ 1500 |
|------------------|------------|------------|-----------|-------------------|
| 2007 MaxxForce 7 | 300 @ 1500 | 2500 | 300 @ 300 | 300 @ 300 |
| 2008 MaxxForce 7 | 320 @ 1500 | 2500 | 300 @ 300 | 300 @ 300 |
| 2009 MaxxForce 7 | 360 @ 1500 | 2500 | 300 @ 300 | 300 @ 300 |

MAXIMIZE YOUR RELIABILITY

Preventive maintenance intervals that lead the industry. See how we help you.

PREVENTIVE MAINTENANCE INTERVALS
10 and 150,000 miles (160,000 km) - 90 hours
1200 gallons (4,546 liters) of oil

REPAIR & SERVICE
30,000 miles (48,280 km) - 12,000 hours

REPAIR & SERVICE
30,000 miles (48,280 km) - 12,000 hours

MAXXFORCE 7 SPECS

DISPLACEMENT
6.7L (411 cu in.)
382 mm x 413 mm
698.2 mm x 105 mm

COMPRESSION RATIO
16.1:1
DIRECT INJECTION

VALVE TRAIN
Overhead Valve

MAXXFORCE DT

DURABILITY TO THE MAXX

MaxxForce DT is built to last with impressive durability. The proof is when you put your MaxxForce DT to work.

| Model | HP @ 1500 | GV (ft/lb) | GV (kg/m) | GV (ft/lb) @ 1500 |
|-------------------|------------|------------|-----------|-------------------|
| 2007 MaxxForce DT | 300 @ 1500 | 2400 | 300 @ 300 | 300 @ 300 |
| 2008 MaxxForce DT | 320 @ 1500 | 2400 | 300 @ 300 | 300 @ 300 |
| 2009 MaxxForce DT | 360 @ 1500 | 2400 | 300 @ 300 | 300 @ 300 |
| 2010 MaxxForce DT | 360 @ 1500 | 2400 | 300 @ 300 | 300 @ 300 |

MAXXFORCE DT SPECS

DISPLACEMENT
6.7L (411 cu in.)
382 mm x 413 mm
698.2 mm x 105 mm

COMPRESSION RATIO
16.1:1
DIRECT INJECTION

RELIABILITY TO THE MAXX

Industry leading preventive maintenance intervals. Repair & Service:

PREVENTIVE MAINTENANCE INTERVALS
10 and 150,000 miles (160,000 km) - 90 hours
1200 gallons (4,546 liters) of oil

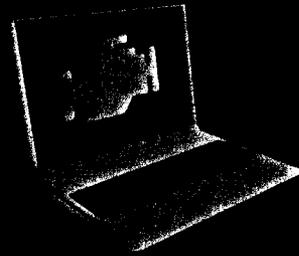
REPAIR & SERVICE
30,000 miles (48,280 km) - 12,000 hours

REPAIR & SERVICE
30,000 miles (48,280 km) - 12,000 hours

PREVENTIVE MAINTENANCE INTERVALS
10 and 150,000 miles (160,000 km) - 90 hours
1200 gallons (4,546 liters) of oil

REPAIR & SERVICE
30,000 miles (48,280 km) - 12,000 hours

GOING BEYOND THE BUS, BEFORE, DURING



NAVISTAR CAPITAL

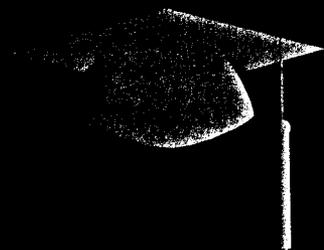
No IC Bus[®] brand bus is complete without the proper financing from Navistar Capital, a GE Capital program. With a legacy in transportation financing dating back nearly 60 years, the team knows the ins and outs of the bus industry. They can simplify your financing decisions by finding solutions and showing you options. To obtain financing quickly and avoid unwanted surprises and costly oversights, call 1 877-450-7579 to speak to an experienced Navistar Capital representative.

BUS ISIS[™] PROGRAM

A prime example of how IC Bus goes beyond the bus for our customers is our Bus ISIS[™] program. This all purpose, online informational service site is a tool thoroughly unlike any other in the industry. The Bus ISIS program contains virtually every aspect of vehicle information a service technician could ever need.

By simply entering the VIN number of any IC Bus brand bus, customers can access instantaneous vehicle and product information. Details provided include complete vehicle information, product diagrams, service manuals and service history. The Bus ISIS program also features the iKNOW troubleshooting search feature, which allows customers to simply type in their questions and receive recommended diagnostic solutions.

HAND AFTER THE RUBBER MEETS THE ROAD.



IC BUS UNIVERSITY

IC Bus University provides service technicians with invaluable education that's so rare in the industry. Its curriculum provides extensive training to help technicians stay up to speed on electronics, engines, bus care and maintenance, transmissions, full power brake systems and fully integrated air conditioning.

Technicians also receive hands-on training with the one-of-a-kind IC Bus Training Bus, a fully operational bus on which every kind of diagnostic can be performed, taught and evaluated. The Training Bus has cross sections that display all electrical and mechanical elements present in an IC Bus brand bus.

NAVISTAR PARTS AND SERVICE

Wherever you are, we are. With the largest dealer network in the industry, IC Bus dealers service all school bus models virtually anywhere, anytime. They also offer recommended parts and expert service to keep your business up and running. No matter the make, you'll get back to uptime in no time.

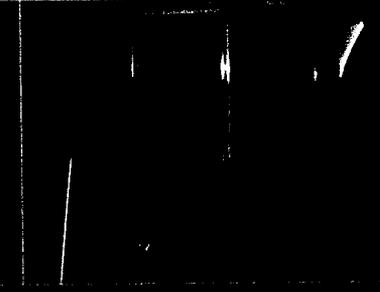
When your buses are on the road, you need fast, reliable and affordable parts support. With nearly 200 dealer parts locations and eight parts distribution centers located throughout North America, IC Bus has the parts and service support you need.



HOOD WITH THREE LATCHES



HOOD WITH ONE LATCH



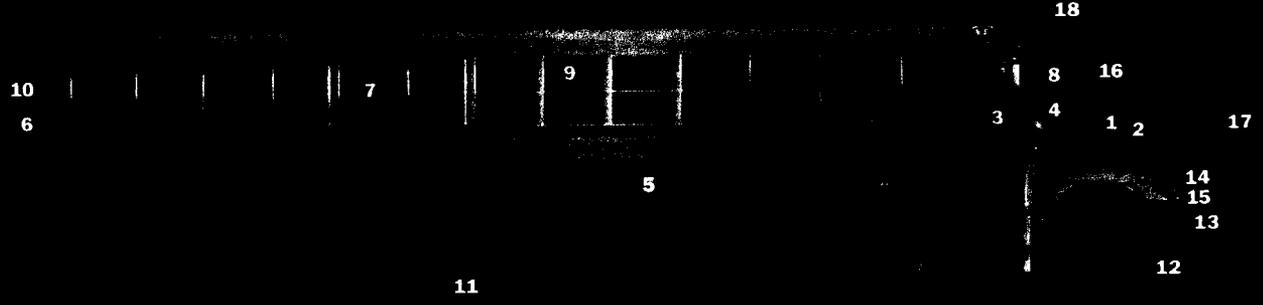
HOOD WITH ONE LATCH



HOOD WITH ONE LATCH

CE SERIES OVERVIEW

- 1) **HOOD WITH THREE LATCHES**
Allows for easy view/hood checks and requires just 15 pounds of effort to open.
- 2) **HOOD WITH ONE LATCH**
Includes a replaceable pulley and cable, expensive to repair than single piece hoods.
- 3) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Located on the steering wheel.
- 4) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Cover a larger windshield surface area.
- 5) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Delivers long lasting good looks and road corners with 16-gauge extra smooth side sheets and joints.
- 6) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Delivers outstanding maneuverability.
- 7) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Improved to offer greater durability.
- 8) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Features a higher, wider windshield with no center bar, lowered console and enlarged side and door windows.
- 9) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Protect against leaks.
- 10) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Prevent weather and road damage for longer life.
- 11) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Provide up to 6" border stopping distances.
- 12) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Delivers outstanding maneuverability.
- 13) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Mounted within the bumper for protection.
- 14) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Come standard on the H-Box CE Series, but.
- 15) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Protects headlights, and built replacement tool free.
- 16) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Prevents improved head of tow.
- 17) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Offer added durability to your work horse.
- 18) **HOOD WITH ONE LATCH AND HOOD PROTECTORS**
Allows the external hood check to be performed by just one person.



SPECIFICATIONS

MODELS

Low 1600 193 217 230 254 276

SEATING

29-37 passengers

WEIGHT

19,500-31,000 lbs.

EXTERIOR FEATURES

8-way seat adjustment
 10 tie-downs available

INTERIOR FEATURES

18 solid lbs. with 100 rate
 floor padding available
 10 tie-downs available
 10 tie-downs available

ENGINE

220hp, 560 lb ft
 240hp, 620 lb ft
 260hp, 660 lb ft

215hp, 560 lb ft
 230hp, 620 lb ft
 240hp, 660 lb ft
 245hp, 660 lb ft
 260hp, 660 lb ft

TRANSMISSION

Allison 1000 P15
 Allison 2500 P15
 Allison 3000 P15

WHEELS

Full power hydraulic brakes with ABS and
 ATC optional air brakes with ABS

EXTRAS

- 78" interior headroom
- Easy tilt, three piece fiberglass hood
- Powered parking brake (hydraulic brakes only)
- Lighted steering wheel mounted door control
 and eight way light switches
- Visual and audible alarms for low fuel, oil,
 voltage, coolant and high temperature
- Fuel filter restriction gauge
- Top mounted, no-drip fuel and oil filter
- Optional hybrid system available in charge
 (staying in charge, depleting, plug in)
- Leave No Student Behind - post top
 inspection alarm system
- Labeled, widest entry door in the industry
- Optional factory installed W. Air
- Optional factory installed
 ADA compliant wheelchair lift
- 16 gauge side sheets
- Electric entrance door
- Water in fuel sensor
- Climate control



VISIT ICBUS.COM OR CALL 1-800-892-7761

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ICBUS. THE DIFFERENCE.