



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 5

List View

General Information

Contact

Default Values

Discount

Document Information

Clarification Request

Procurement Folder: 1084224

Procurement Type: Central Master Agreement

Vendor ID: VS0000004719

Legal Name: Rohrer Enterprises Inc

Alias/DBA:

Total Bid: \$0.00

Response Date: 09/01/2022

Response Time: 12:53

Responded By User ID: TClawson

First Name: Teresa

Last Name: Clawson

Email: tclawson@rohrerbus.com

Phone: 800-735-3900

SO Doc Code: CRFQ

SO Dept: 0810

SO Doc ID: DMT2300000003

Published Date: 8/19/22

Close Date: 9/1/22

Close Time: 13:30

Status: Closed

Solicitation Description: Passenger Type Dual Rear Tire Van (Non Raised Roof)

Total of Header Attachments: 5

Total of All Attachments: 5



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder: 1084224
Solicitation Description: Passenger Type Dual Rear Tire Van (Non Raised Roof)
Proc Type: Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2022-09-01 13:30	SR 0810 ESR08312200000001089	1

VENDOR
VS0000004719
Rohrer Enterprises Inc

Solicitation Number: CRFQ 0810 DMT2300000003
Total Bid: 0
Response Date: 2022-09-01
Response Time: 12:53:51
Comments:

FOR INFORMATION CONTACT THE BUYER
David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor
Signature X **FEIN#** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Passenger Type Dual Rear Tire Van (non-raised Roof)	0.00000	EA	3956000.000000	0.00

Comm Code	Manufacturer	Specification	Model #
25101502			

Commodity Line Comments: Thank you for the opportunity to respond to this bid.
David M Clawson
Senior Vice President
Rohrer Bus Sales

Extended Description:
Passenger Type Dual Rear Tire Van (non-raised Roof)

ROHRER

School & Commercial Bus Sales

September 1, 2022

Department of Administration
Purchasing Division
2019 Washington St. E
Charleston, WV 25305

RE: CRFQ 0810 DMT2300000003 Passenger Type Dual Rear Tire Van (Non-Raised Roof)

Dear Mr. Pauline,

Rohrer Bus Sales appreciates the opportunity to submit a proposal for RFQ DMT23*03 Passenger Type Dual Rear Tire Van (Non-Raised Roof). Our offerings, a Ford Transit with a Mobility Trans conversion meets the intent and letter of your specifications with the following documentation, clarifications and/or explanations set forth in the RFQ.



Documents uploaded include:

Enclosure 1
Enclosure 2
Enclosure 3

Enclosure 3
Enclosure 4
Enclosure 5
Enclosure 6

Exhibit A Pricing Page
Signed Bid Forms and Certification
No Debt Affidavit and Addendum
Acknowledgement
Supporting Docs 3.3.1.1 thru 4.4
Proposed Warranty
Misc. Additional documentation
Weights Dimensions and Buy America

Please contact us immediately at (800) 735-3900 if any additional documentation is required.

Thank you for your consideration.

David

David M Clawson, Jr.
Senior Vice President of Sales



ROHRER

1.800.735.3900 x 1363

540.729.3751 Cell

717.957.4884 Fax

dclawson@rohrerbus.com

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

BID FORM #1

Location(s) of the Technical Service Representative(s) and parts distribution center(s) closest or in the State of West Virginia.

Location(s) of the technical service representative(s).

Name: Ryan Renninger

Address: 1515 State Road PO Box 100

Duncannon, PA 17020

Telephone: 800-735-6700

Name: David M Clawson

Address: 2075 B West Main Street

Waynesboro, VA 22980

Telephone: 540-729-3751

Location(s) of parts distribution center(s).

Name: Rohrer Bus Sales

Address: 1515 State Road PO Box 100

Duncannon, PA 17020

Telephone: 800-735-6700

Name: _____

Address: _____

Telephone: _____

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

BID FORM #2

CERTIFICATION FOR AIR & WATER POLLUTION

The Vendor certifies that the vehicles proposed:

ARE X in compliance with the regulations in 40 CFR Part 85, 40 CFR Part 86, 40 CFR Part 600, Clean Water Act and the air/water pollution criteria established by the Environmental Protection Agency of the United States Government.

ARE NOT _____ in compliance with the regulations in 40 CFR Part 85, 40 CFR Part 86, 40 CFR Part 600, Clean Water Act and the air/water pollution criteria established by the Environmental Protection Agency of the United States Government.

9-1-22

Date

Authorized Signature

Senior Vice President Sales

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Company Name

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

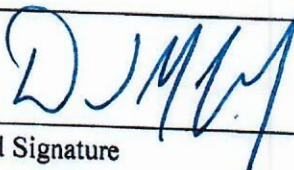
BID FORM #3

DISADVANTAGED BUSINESS ENTERPRISE
VENDORS/ MANUFACTURERS CERTIFICATION

(Check appropriate statement)

____ The Vendor, if a transit vehicle manufacturer, hereby certifies that it has complied with the requirements of 49 CFR Section 26.49 by submitting an annual DBE goal to the Federal Transit Administration (FTA). The goal has either been approved or not disapproved by FTA.

☒ The Vendor, if a non-manufacturing supplier, hereby certifies that the manufacturer of the transit vehicle to be supplied has complied with the above-referenced requirement of 49 CFR Section 26.49.

9-1-22
Date 

Authorized Signature

Senior Vice President Sales
Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company Name

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

BID FORM #4

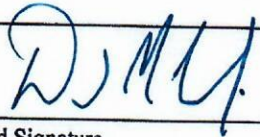
**BUY AMERICA CERTIFICATION
ROLLING STOCK**

Certificate of Compliance

The bidder or offeror hereby certifies that it will comply with the requirements of section 165(b) (3), of the Surface Transportation Assistance Act of 1982, as amended, and the applicable regulations of 49 CFR 661.11:

9-1-22

Date



Authorized Signature

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company Name

David M Clawson
Name

Senior Vice President Sales
Title

Certificate for Non-Compliance

The bidder or offeror hereby certifies that it cannot comply with the requirements of section 165(b) (3) of the Surface Transportation Assistance Act of 1982, as amended, but may qualify for an exception to the requirement consistent with section 165(b) (2) or (b) (4) of the Surface Transportation Assistance Act, as amended, and the applicable regulations in 49 CFR 661.7.

Date

Authorized Signature

Company Name

Name

Title

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

BID FORM #5

**FEDERAL MOTOR VEHICLE
SAFETY STANDARDS CERTIFICATION**

The vendor hereby certifies that it shall submit, as required by Title 49 of the CFR, Part 663 - Subpart D, it's self-certification information stating that the vehicle(s) will comply with the relevant Federal Motor Vehicle Safety Standards issued by the National Highway Traffic Safety Administration in Title 49 of the Code of Federal Regulations, Part 571.

9-1-22

Date



Authorized Signature

Senior Vice President Sales

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company Name

BID FORM #6
U.S. Comptroller's Debarment List Certification

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company Name

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

BID FORM #7

**CERTIFICATION OF PRIMARY PARTICIPANT REGARDING
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS**

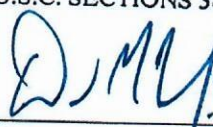
The Primary Participant (applicant for an FTA grant or cooperative agreement, or potential contractor for a major third-party contract),

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales (COMPANY NAME) certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

If the primary participant (applicant for an FTA grant, or cooperative agreement, or potential third party contractor) is unable to certify to any of the statements in this certification, the participant shall attach an explanation to this certification.)

THE PRIMARY PARTICIPANT (APPLICANT FOR AN FTA GRANT OR COOPERATIVE AGREEMENT, OR POTENTIAL CONTRACTOR FOR A MAJOR THIRD PARTY CONTRACT), Rohrer Enterprises, Inc. DBA Rohrer Bus Sales, CERTIFIES OR AFFIRMS THE TRUTHFULNESS AND ACCURACY OF THE CONTENTS OF THE STATEMENTS SUBMITTED ON OR WITH THIS CERTIFICATION AND UNDERSTANDS THAT THE PROVISIONS OF 31 U.S.C. SECTIONS 3801 ET SEQ. ARE APPLICABLE THERETO.


Senior Vice President Sales
Signature and Title of Authorized Official

Revised 10/27/2014

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof


BID FORM #8

***VENDOR'S CERTIFICATION OF
UNDERSTANDING AND ACCEPTANCE***

The Vendor hereby certifies that all Technical Specifications and Contract Terms and Conditions have been carefully reviewed, are fully understood, and shall be adhered to in performance and completion of any contract resulting from this bid.

9-1-22

Date


Authorized Signature

Senior Vice President Sales

Title

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company Name

SPECIFICATION COMPLIANCE

NOTE: Please check if what is offered is in exact compliance with specifications. Any discrepancies must be listed as an attachment to the bid proposal. Exact dimensions and/or descriptions must be provided as a part of the Vendor's bid proposal when submitted.

X

Bid proposal submitted meets and/or exceeds all specification requirements.

Bid proposal submitted contains deviations from specification requirements. Detailed descriptions of these deviations have been provided with this bid proposal.

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

BID FORM #9

CERTIFICATION OF RESTRICTIONS ON LOBBYING

The undersigned (Vendor, Contractor) certifies, to the best of his or her knowledge and belief, that:

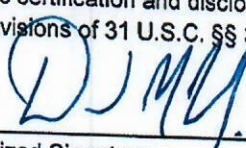
1. No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influence or attempt to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress regarding the award of a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance, or the extension, continuation, renewal, amendment, or modification of any Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance.
2. If any funds other than Federal appropriated funds have been or will be paid to any person to influence or attempt to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with any application for a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance, the undersigned assures that it will complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," Rev. 7-97; and
3. The undersigned understands that the language of this certification shall be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, sub agreements, and contracts under grants, loans (including a line of credit), cooperative agreements, loan guarantees, and loan insurance.

Undersigned understands that this certification is a material representation of fact upon which reliance is placed by the Federal government and that submission of this certification is a prerequisite for providing a Federal grant, loan (including a line of credit), cooperative agreement, loan guarantee, or loan insurance for a transaction covered by 31 U.S.C. 1352. The undersigned also understands that any person who fails to file a required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The (Vendor, Contractor) Rohrer Enterprises, Inc. DBA Rohrer Bus Sales, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the (Vendor, Contractor) understands and agrees that the provisions of 31 U.S.C. §§ 3801, et seq., apply to this certification and disclosure.

9-1-22

Date


Authorized Signature

Senior Vice President Sales

Title

BID FORM #10

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

REQUIRED BID DOCUMENTATION CHECKLIST

Model Year: 2023

Model: Ford Transit
w/ Mobility Trans Conversion

Bid Forms

- ☒ Bid Form #1: Locations of Technical Service Representatives and Parts Distribution Centers
- ☒ Bid Form #2: Certification for Air & Water Pollution
- ☒ Bid Form #3: Disadvantaged Business Enterprise Vendors/Manufacturers Certification
- ☒ Bid Form #4: Buy America Certification Rolling Stock
- ☒ Bid Form #5: Federal Motor Vehicle Safety Standards Certification
- ☒ Bid Form #6: U.S. Comptroller's Debarment List Certification
- ☒ Bid Form #7: Certification of Primary Participant Regarding
Debarment, Suspension, and Other Responsibility Matters
- ☒ Bid Form #8: Vendor's Certification of Understanding and Acceptance
- ☒ Bid Form #9: Certification of Restrictions on Lobbying
- ☒ Exhibit A Pricing Page

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

Documentation – Required before award:
Referenced

- ☒ 3.3.1.1 Engine: 3.5 Liter EcoBoost V-6 gasoline engine – provide product description, warranty information and product literature.
- ☒ 3.3.2 High Idle System: provide product description, warranty information and product literature.
- ☒ 3.5.3 Transmission (separate cooling system): provide product description, warranty information and product literature.
- ☒ 3.6.1 Back Up Camera System: provide product description, warranty information and product literature.
- ☒ 3.11 Tires: provide product description, warranty information and product literature.
- ☒ 3.12.1 Alternator: provide product description, warranty information and product literature.
- ☒ 3.16.1 Exterior Vinyl Colors: provide samples/chart of available colors.
- ☒ 3.17.1 Undercoating and Rustproofing: provide product description, warranty information and literature.
- ☒ 3.18.3 Ambulatory Passenger Entrance/Exit: provide location, size, door operating details.
- ☒ 3.20.2 Stepwell Heater: provide product description, warranty information and product literature.
- ☒ 3.23.5 Floor Covering: provide samples of floor covering and colors to be provided.
- ☒ 3.27 Seating: provide product description, warranty information, product literature and color charts for all of the seating products to be utilized. **Proposed floor plans.**
- ☒ 3.27.16 Driver's Seat: provide description of product.
- ☒ 3.30.3 Exterior Mirrors: provide product description, warranty information and product literature.
- ☒ 3.31.1 Dual Purpose Safety Vent: provide product description, warranty information and product literature.
- ☒ 3.22 Wheelchair Securement System: provide product description, warranty information and product literature.

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

- ☒ 3.27.14 Strap/Buckle Storage: provide description and location of product.
- ☒ 3.33 Wheelchair Occupant Restraint System: provide product description, warranty information and product literature.
- ☒ 3.34.1 Wheelchair Lift: provide Make, Model #, product description, warranty information and product literature.
- ☒ 3.36 AM/FM Radio/CD: provide product description, warranty information and product literature.
- ☒ 3.39 Training: submit letter of understanding to the terms in this Section.
- ☒ 4.4 Fare box Provisions: provide description of proposed location.
- ☒ 4.4 Destination Signs: provide product description, warranty information and product literature.
- ☒ 4.4 PA System: provide product description and product literature.
- ☒ 4.4 Strobe Light: provide product description and product literature.
- ☒ 3.28.5 Security Cameras Only: provide product description, warranty information and product literature.
- ☒ 5.9.1 Warranty on complete vehicle.
- ☒ 5.9.2 Warranty on Basic Vehicle Structure.
- ☒ 5.9.4 Warranty: warranties to be provided on subsystems and components.
- ☒ 6.8.2 Complete two (2) bids in binder form – one (1) marked for DPT.
- ☒ 10.2 A. Complete mechanical description of vehicle, its construction and equipment including manufacturer's model name and /or number. Include description of front and rear air conditioning and heat systems.
- ☒ 10.2 B Proposed interior floor plans, showing detailed dimensions including the location of the wheelchair securement system and stanchions.
- ☒ 10.2 C. Curb weight (empty weight) and gross vehicle weight rating (GVWR) of vehicle.
- ☒ 10.2 D. Samples or paint charts of available exterior paint colors and vinyl.

REQUEST FOR QUOTATION
Passenger Type, Dual Rear Wheel Van Non-Raised Roof

- ☒ 10.2 H. Identification of the conversion location of the van.
- ☒ 10.2 I. A list of five (5) users names, addresses, emails, and telephone numbers who have been provided similar equipment by the Vendor.
- ☒ No Debt Affidavit
- ☒ Addendum Acknowledgement



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
05/19/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Aon Risk Services Central, Inc.
Chicago IL Office
200 East Randolph
Chicago IL 60601 USA

CONTACT

NAME:

PHONE (A/C No. Ext): (866) 283-7122

FAX (A/C No.): (800) 363-0105

E-MAIL

ADDRESS:

INSURED
H.E. Rohrer, Inc.
P.O. Box 100
Duncannon PA 17020 USA

INSURER(S) AFFORDING COVERAGE

NAIC #

INSURER A: Zurich American Ins Co 16535

INSURER B: American Zurich Ins Co 40142

INSURER C:

INSURER D:

INSURER E:

INSURER F:

COVERAGES

CERTIFICATE NUMBER: 570093140513

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS.

INSR LTR	TYPE OF INSURANCE	ADDITIONAL INSURED	SUBROGATION	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS shown as requested
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GENERAL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			GLO651054827	04/01/2022	04/01/2023	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COM/OP AGG \$4,000,000
A	AUTOMOBILE LIABILITY ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			BAP 6510812-27 BAP 6510547-27	04/01/2022 04/01/2022	04/01/2023 04/01/2023	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION						EACH OCCURRENCE AGGREGATE
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER MEMBER (Mandatory in NJ) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WC651054627	04/01/2022	04/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: State of WV - CRFQ -0810-DMT2300000003 - Passenger Type Dual Rear Tire Van (Non Raised Roof). Division Public Transit is included as Additional Insured in accordance with the policy provisions of the General Liability policy.

CERTIFICATE HOLDER

West Virginia Division of Public Transit
Purchasing Division
Attn: David Pauline
2019 Washington St. East
Charleston WV 25305 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Central, Inc.

Holder Identifier:

570093140513

Certificate No:



U.S. Department
Of Transportation
**Federal Transit
Administration**

Headquarters

East Building, 5th Floor – TCR
1200 New Jersey Avenue, SE
Washington, DC 20590

September 23, 2021

Dave Brown
Mobility TRANS
12633 Inkster Road
Livonia, MI

Re: TVM DBE Goal Concurrence/Certification Letter – Fiscal Year 2022

Dear Mr. Brown:

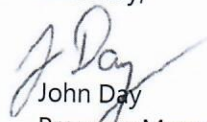
This letter is to inform you that the Federal Transit Administration's (FTA) Office of Civil Rights has received Mobility TRANS's Disadvantaged Business Enterprise (DBE) goal and methodology for FY 2022 for the period of October 1, 2021–September 30, 2022. This goal submission is required by the U.S. Department of Transportation's DBE regulations at 49 CFR Part 26 and must be implemented in good faith.

We have reviewed your firm's FY 2022 DBE goal and determined that it complies with DOT's DBE regulations. Your firm is eligible to bid on FTA-funded transit contracts. This letter or a copy of the TVM listing on FTA's website may be used to demonstrate your firm's compliance with DBE requirements when bidding on federally funded vehicle procurements.

FTA reserves the right to remove/suspend this concurrence if your DBE program or FY 2022 DBE goal is not implemented in good faith. In accordance with this good faith requirement, you must submit your DBE Uniform Report to FTA by December 1, 2021. This report should reflect all FTA-funded contracting activity for the second period of FY 2021 (i.e., from April 1 to September 30).

Also note that your FY 2023 DBE goal methodology must be submitted to FTA by August 1, 2022. Any significant updates to the program plan must be submitted to FTA as they occur. If you have any questions, please contact the FTA DBE Team via email at FTATVMSubmissions@dot.gov.

Sincerely,


John Day
Program Manager
Office of Civil Rights

***Mobility*TRANS**

Paratransit & Passenger Vans

To Whom It May Concern,

MobilityTRANS is a second stage vehicle manufacturer specializing in Paratransit and Ambulatory passenger transportation vehicles. MobilityTRANS is Ford QVM and TVM certified for our upfits and modifications along with our own standards for quality control and production conformity. We will upfit both wagon chassis and cargo van chassis. We are the final assembly point for all of our products. MobilityTRANS strictly follows all applicable NHTSA and FMVSS guidelines including, but not limited to, FMVSS 207, 208, 209, 210, 201U, and 302 . All conversion and installations are done at our location at 12633 Inkster Rd, Livonia, MI 48150. For further information please visit our website at www.mobilitytrans.com or call us at 734-453-6452

Sincerely,



Dave Brown,
President, MobilityTRANS

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Rohrer Enterprises, Inc. DBA/ Rohrer Bus Sales

Authorized Signature: [Signature] Date: 8/31/22

State of Pennsylvania

County of Perry, to-wit:

Taken, subscribed, and sworn to before me this 31st day of August, 2022.

My Commission expires March 4, 2025.

AFFIX SEAL HERE

Commonwealth of Pennsylvania - Notary Seal
Kay Hornberger, Notary Public
Perry County
My commission expires March 4, 2025
Commission number 1214103
Member, Pennsylvania Association of Notaries

NOTARY PUBLIC

[Signature]
Purchasing Affidavit (Revised 01/19/2018)



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130


State of West Virginia
Centralized Request for Quote

Proc Folder: 1084224			Reason for Modification:
Doc Description: Passenger Type Dual Rear Tire Van (Non Raised Roof)			
Proc Type: Central Master Agreement			
Date Issued	Solicitation Closes	Solicitation No	Version
2022-08-16	2022-09-01 13:30	CRFQ 0810 DMT2300000003	1

BID RECEIVING LOCATION
BID CLERK DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON ST E CHARLESTON WV 25305 US

VENDOR
Vendor Customer Code: VS0000004719 Vendor Name : Rohrer Enterprises, Inc. DBA Rohrer Bus Sales Address : 1515 State Road PO Box 100 Street : City : Duncannon State : PA Country : USA Zip : 17020 Principal Contact : David M Clawson, Senior Vice President Sales Vendor Contact Phone: 1-800-735-3900/540-729-3751 Extension:

FOR INFORMATION CONTACT THE BUYER David H Pauline 304-558-0067 david.h.pauline@wv.gov

Vendor Signature X 	FEIN# 23-2059976	DATE 9-1-22
---	------------------	-------------

All offers subject to all terms and conditions contained in this solicitation

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title) David M Clawson, Senior Vice President Sales

(Printed Name and Title) David M Clawson, Senior Vice President Sales


(Address) 1515 State Road PO Box 100 Duncannon PA 17020

(Phone Number) / (Fax Number) 800-735-3900/540-729-3751

(email address) dclawson@rohrerbus.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
(Company)  Senior Vice President Sales

(Authorized Signature) (Representative Name, Title)
David M Clawson, Senior Vice President Sales 9-1-22

(Printed Name and Title of Authorized Representative) (Date)
800-735-3900/540-729-3751

(Phone Number) (Fax Number)
dclawson@rohrerbus.com

(Email Address)

REQUEST FOR QUOTATION – CRFQ DMT23*03
Passenger Type Dual Rear Tire Van (Non-Raised Roof)

19. MISCELLANEOUS:

- 19.1 No Substitutions:** Vendor shall supply only Vehicles as submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 19.2 Vendor Supply:** Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.
- 19.3 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: David M Clawson

Telephone Number: 540-729-3751

Fax Number: 800-735-3900

Email Address: dclawson@rohrerbus.com

19.4 NOTIFICATION OF FEDERAL PARTICIPATION

Federal funding for this project is being provided by the Federal Transit Administration through various CFDA grants for 80% of the project cost. CFDA grants will be specified after award.



Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Request for Quote

Proc Folder: 1084224

Doc Description: Passenger Type Dual Rear Tire Van (Non Raised Roof)

Reason for Modification:
Addendum No. 1

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2022-08-19	2022-09-01 13:30	CRFQ 0810 DMT2300000003	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Customer Code: VS0000004719

Vendor Name: Rohrer Enterprises, Inc. DBA Rohrer Bus Sales

Address: 1515 State Road PO Box 100

Street:

City: Duncannon

State: PA

Country: USA

Zip: 17020

Principal Contact: David M Clawson, Senior Vice President Sales

Vendor Contact Phone: 800-735-3900/540-729-3751 Extension:

FOR INFORMATION CONTACT THE BUYER

David H Pauline
304-558-0067
david.h.pauline@wv.gov

Vendor
Signature X

FEIN# 23-2059976

DATE 9-1-22

All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION

Addendum No. 1

To provide responses to the vendor technical questions, see attached.

Bid opening remains September 1, 2022 at 1:30 pm est.

No other changes

INVOICE TOPUBLIC TRANSIT DIVISION
OF
BLDG 5 RM 6631900 KANAWHA BLVD E
CHARLESTON
US

WV

SHIP TOPUBLIC TRANSIT DIVISION
OFKANAWHA VALLEY
REGIONAL
TRANSPORTATION
AUTHORITY1550 FOURTH AVE
CHARLESTON
US

WV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Passenger Type Dual Rear Tire Van (non-raised Roof)	0.00000	EA		

Comm Code

Manufacturer

Specification

Model #

25101502

Ford Transit w/ Mobility Trans Conversion

Extended Description:

Passenger Type Dual Rear Tire Van (non-raised Roof)

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Vendor Technical Questions Due By 2:00 pm est.	2022-08-19

	Document Phase	Document Description	Page
DMT2300000003	Draft	Passenger Type Dual Rear Tire Van (Non Raised Roof)	3

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

SOLICITATION NUMBER: CRFQ DMT2300000003

Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as CRFQ DMT2300000003 to reflect the change(s) identified and described below.

Applicable Addendum Category:

- ☐ Modify bid opening date and time
- ☐ Modify specifications of product or service being sought
- ☒ To respond to technical questions
- ☐ Attachment of pre-bid sign-in sheet
- ☐ Correction of error
- ☐ Other

Additional Documentation:

1. To respond to vendor technical questions, see attached.
2. Bid opening date and time remains September 1, 2022, at 1:30 pm
3. No other changes.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

CRFQ 0810 DMT 23-3

Passenger Type Dual Rear Tire Van (Non-Raised Roof)

Question: Specification 3.15.11 asks for one-piece stainless stepwell with Talon Tread-Type Step. The conversion that we offer does not have a stepwell. Please remove this specification.

Answer: The Division understand this request and will remove it.

Question: Specification 3.23.5 Will the Division accept Gerflor as equal?

Answer: The Division will accept Gerflor as equal.

Question: Specification 3.34 is asking for a Millennium 2 Series 1000 lb., 37" x 51" wheelchair lift. A millennium 2 series 37" X 51" isn't available with a 1000lb rated lift capacity. Will the Division accept a Braun Century 2, 37" x 51" with a 100 lb. rated lift. capacity, NL1000IB3751HB-2 as equal?

Answer: The Division will accept the Braun Century 2- NL1000IB3751HB-2 as equal.

Question: Specification 4.4 Class D Destination Sign. Will the Division accept Trans Sign as equal?

Answer: The Division will accept Trans Sign as equal.

Question: Specification 5.9.4, will the Division accept the warranty as 1 – year on the conversion, unlimited mileage?

Answer: The Division will accept this request.

Question: The following items on this Bid are OEM chassis options. With the global supply chain issues that Ford has been experiencing having these items as standard specifications might reduce the chances of having the vans produced by Ford. We recommend that these items be added as options for the specifications.

3.3.1 3.5 Liter Eco Boost engine. Make the 3.5L PFDI V6 as standard

3.75 Cruise control

3.13.15 Dual electric horns

3.27.16 10-way power adjustable seat

3.13.1 Make Sync 3 With AM/FM, Bluetooth, 2 USB ports, 4" Display radio as Standard

Answer: The Division understands the issue with the supply chain and these items are not an absolute necessity and take away of the functionality and usefulness of the vehicle.

Specification 3.3.1 3.5 Liter Eco Boost Engine the Division will accept 3.5L PFDI V6 as equal.

Specification 3.75 Cruise control can be omitted if it's due to supply issue as well as Specification 3.13.15 Dual electric horns.

As for Specific ion 3.27.16 an adjustable seat would be needed for the comfort of the driver. Specification 3.13.1 Sync 3 with AM/FM Bluetooth, 2- usb posts with 4" display is acceptable.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFO DMT2300000003

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Rohrer Enterprises, Inc. DBA Rohrer Bus Sales
Company

Authorized Signature

9-1-22
Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

COLOR & TRIM AVAILABILITY

INTERIOR MATERIAL	CODE	Cargo Van	Crew Van	Passenger Van XL	Passenger Van XLT	Cutaway	Chassis Cab
Ebony Cloth	CB	O	O	S	O	O	O
Ebony Leather	LB	O	-	-	O	O	-
Dark Palazzo Grey Cloth	CK	O	O	-	S	O	O
Dark Palazzo Grey Vinyl	VK	S	S	O	-	S	S
Dark Palazzo Grey Vinyl (Driver Seat) + Ebony Vinyl (Passenger Seats)	VB	O	-	-	-	O	O

Note: Unlike the Driver Seat, dual Passenger Seat insert and bolster material will be identical



Ebony Cloth



Ebony Leather



Dark Palazzo Grey Cloth

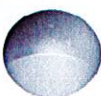


Dark Palazzo Grey Vinyl

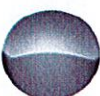
EXTERIOR COLOR	CODE	Cargo Van	Crew Van	Passenger Van XL	Passenger Van XLT	Cutaway	Chassis Cab
Oxford White	YZ	■	■	■	■	■	■
Race Red	PQ	■	■	■	■	■	■
School Bus Yellow (Fleet only)	BY	■	■	■	■	■	■
Agate Black Metallic	UM	■	■	■	■	■	■
Ingot Silver	UX	■	■	■	■	■	■
Carbonized Gray Metallic	M7	■	■	■	■	■	■
★Blue Metallic	FT	■	■	■	■	■	■
Avalanche Gray Metallic	DR	■	■	■	■	■	■
Abyss Gray Metallic	ME	■	■	■	■	■	■
★Blue Mist	MT	■	■	■	■	■	■



AGATE BLACK



INGOT SILVER



CARBONIZED GRAY



OXFORD WHITE



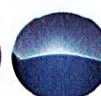
RACE RED



BLUE MIST



ABYSS GRAY



BLUE METALLIC



AVALANCHE GRAY



SCHOOL BUS YELLOW

Ford Transit Chassis Equipment

Chassis

2023 T-350 High Roof 148EL Sliding Door GVWR 10,360# GVWR

Oxford White Paint

Engine

3.5L PFDi V6

Note: Includes port injection and E-85 Flex-Fuel capability.

Engine Auto Start-Stop

Exterior

16" Silver Steel Wheel with Black Hubcap-SRW For Std Front Axle

Tires - 195/75R16C 107/105 R BSW all-season

50/50 Hinged Rear Door, 253-degree Opening

Body Side Moldings - Carbon Black

Honeycomb Mesh Grille With Carbon Black Surround

Front License Plate Bracket

Front Bumper - Carbon Black, Body Colored with Lower Valence

Rear Bumper - Carbon Black, without Integral Step

Sliding Passenger-side Door

Halogen Headlamps

Head Lamp Courtesy Delay

Roof Marker Lamps

Rear Center High Mount Reflector

Auxiliary Fuel Port

Side Mirrors - Short Arm Power Adjustable Manual-Folding Heated With Turn Signal

Rear Tow Hook

Full-size Spare Tire and Wheel

Windows All-around

Rear-window

Solar Tinted Glass

Extended Range Fuel Tank - Capless Fuel Fill, 31 U.S. gallons (midship)

Rear-Window Defroster

Interior

Ebony Cloth, 10-way Power Heated Driver and Passenger Seats With Armrests

Less Rear Seats

Power Equipment Group (Power Locks and Windows) with Remote Key less-Entry

Manual Driver-side Lumbar Support

Manual Passenger-side Lumbar Support

Medium Center Console

Note: Includes an integrated shifter and a dual cup holder

Glove Box - Locking

Rear Cargo Door - Locking

Step Well Pads - Black

Vinyl, Front and Rear Floor Covering

Rearview Mirror

Front Dome Lamp with Map Lights and Theater Dimming

Rear Compartment Lighting
Accessory Delay - 30 minutes
Front Overhead Shelf
A-Pillar Assist Handles (Driver and Passenger- side)
B-Pillar Assist Handle (Passenger-side)
Headliner - Cloth, Full-length
Rear View Camera
Sun Visors
Horn - Dual-note
Modified Vehicle Wiring System
SYNC 3 with 4" multi-function display, AM/FM stereo, Bluetooth, and Dual USB ports
8 speakers (4 front/4 rear)
Builder's Prep Package

Functional

Transmission - 10-Speed Automatic Overdrive with Select Shift®. Auxiliary Transmission Oil Cooler is standard.
Alternator - 250 amp (3.5L PFDiV6 and 3.5L EcoBoost® V6 engines)
Horn - Single-note
Suspension: Front-Independent MacPherson-strut, Stabilizer Bar, Rear-Leaf Springs, Heavy-duty Gas Shock Absorbers
Suspension: Front-Independent MacPherson-strut, Stabilizer Bar, Rear-Leaf Springs, Heavy-duty Gas Shock Absorbers
Antenna - Fender Mounted
AM/FM stereo, Bluetooth, Dual USB ports and a 4.0" multi-function display (Audio Pack #18)
Brakes - 4-wheel Anti-lock Disc Brakes Note: Depending on driving habits and configuration, the brake pad life is up to 50% improved. In addition, brake pad wear indicators are now included and will send a warning message to the cluster if brake pads reach a certain wear threshold.
Hand Brake
FordPass™ Connect / Telematics Modem Note: Ford Telematics ™and Data Services Prep included for Fleet ONLY: FordPass™ Connect 4G Wi-Fi Modem provides data to support telematics and data services including but not limited to vehicle location, speed, idle time, fuel , vehicle diagnostics and maintenance alerts. Device enables telematics services through Ford or authorized providers. Activate at www.fleet.ford.com or call 833-FCS-Ford (833-327-3673).
Tachometer, Fuel Level and Coolant Temperature
PowerPoint - 12V Note: One is located in the instrument panel and one in center console.
USB Ports - 5 amps Note: Depending on seating configuration, one each in 2nd row, 3rd row, 4th row and 5th row.
Electric Power Assisted Steering (EPAS)
Steering Wheel - Tilt and Telescoping
Front- Independent MacPherson-strut, Stabilizer Bar
Rear - Leaf Springs, Heavy-duty Gas Shock Absorbers
Front- Independent MacPherson-strut, Stabilizer Bar

Automatic Rain-Sensing Windshield Wipers
Dual AGM Batteries. (70 amp-hr each)
16" Heavy-Duty White Steel Wheel with Exposed Lug Nuts (Standard Front Axle configurations)

Safety/Security

Autolocking Drive Away with Crash Unlocking. Not available with Manual Locks.
AdvanceTrac® w/Roll Stability Control™ (RSC®) Safety Belts
Belts - 3-point , All Positions
SecuriLock® Passive Anti-Theft System (PATS) with engine immobilizer
SOS Post-Crash Alert System™. Not available with Radio Prep Package (58T) and Audio Pack #18 (58U). Note: Automatically flashes the hazard lights and intermittently sounds the horn when the airbag deploys.
Tire Pressure Monitoring System (TPMS).
Driver and Passenger Airbags

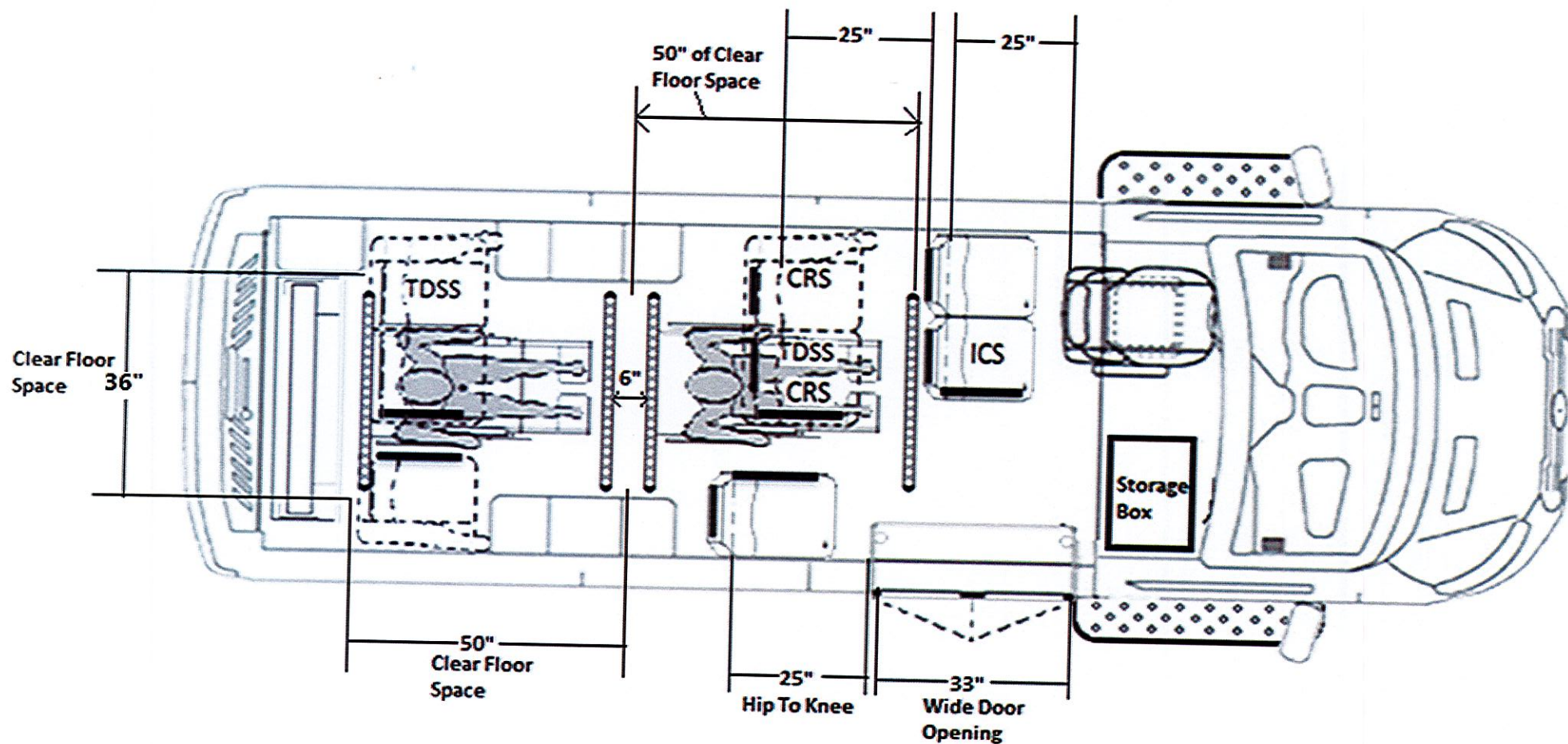
Ford Co-Pilot360™

Forward Collision Warning
Hill Start Assist
Post-Collision Braking Note: Can potentially lessen the severity of a secondary collision by automatically applying moderate brake pressure when an initial collision event is detected.
Side Wind Stabilization
Pre-Collision Assist with Automatic Emergency Braking (AEB) Note: If a potential collision is detected, a warning flashes and an alert sounds, and if the driver's response is not sufficient, the system can automatically apply the brakes to help minimize a frontal collision.
Lane-Keeping System Note: Includes Lane-Keeping Alert and Driver Alert. This feature can alert the driver, during day or night, if their vehicle is unintentionally leaving its intended lane.
Auto High-Beam Headlamps
Rear View Camera with Trailer Hitch Assist. Note: Camera will be high-mount for Medium Roof and High Roof.

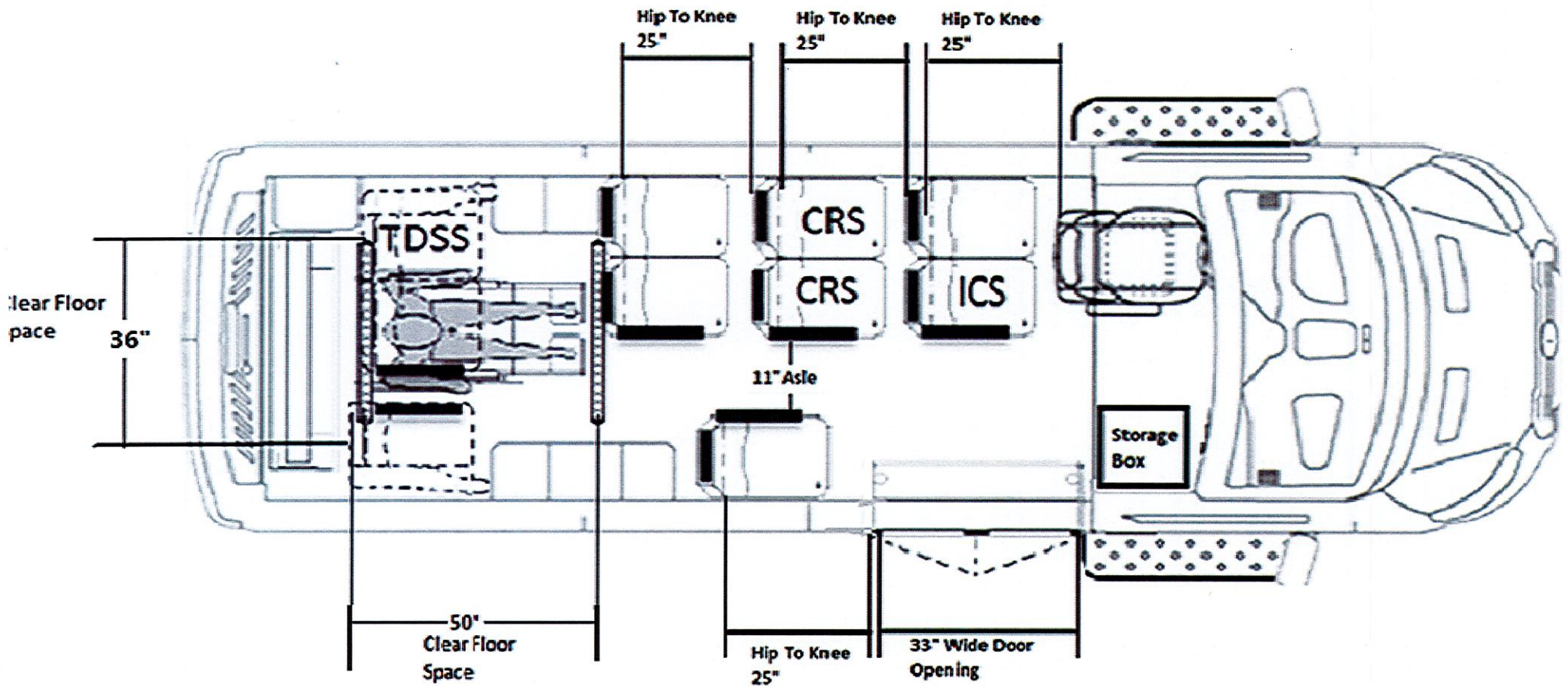
Warranty

Powertrain Limited Warranty - 5 years or 60,000 miles, whichever comes first
3-year/36,000-mile (whichever comes first) bumper-to-bumper; no deductible
5-year/unlimited-mileage (whichever comes first) Corrosion Perforation
5-year/60,000-mile (whichever comes first) Safety Restraint Warranty

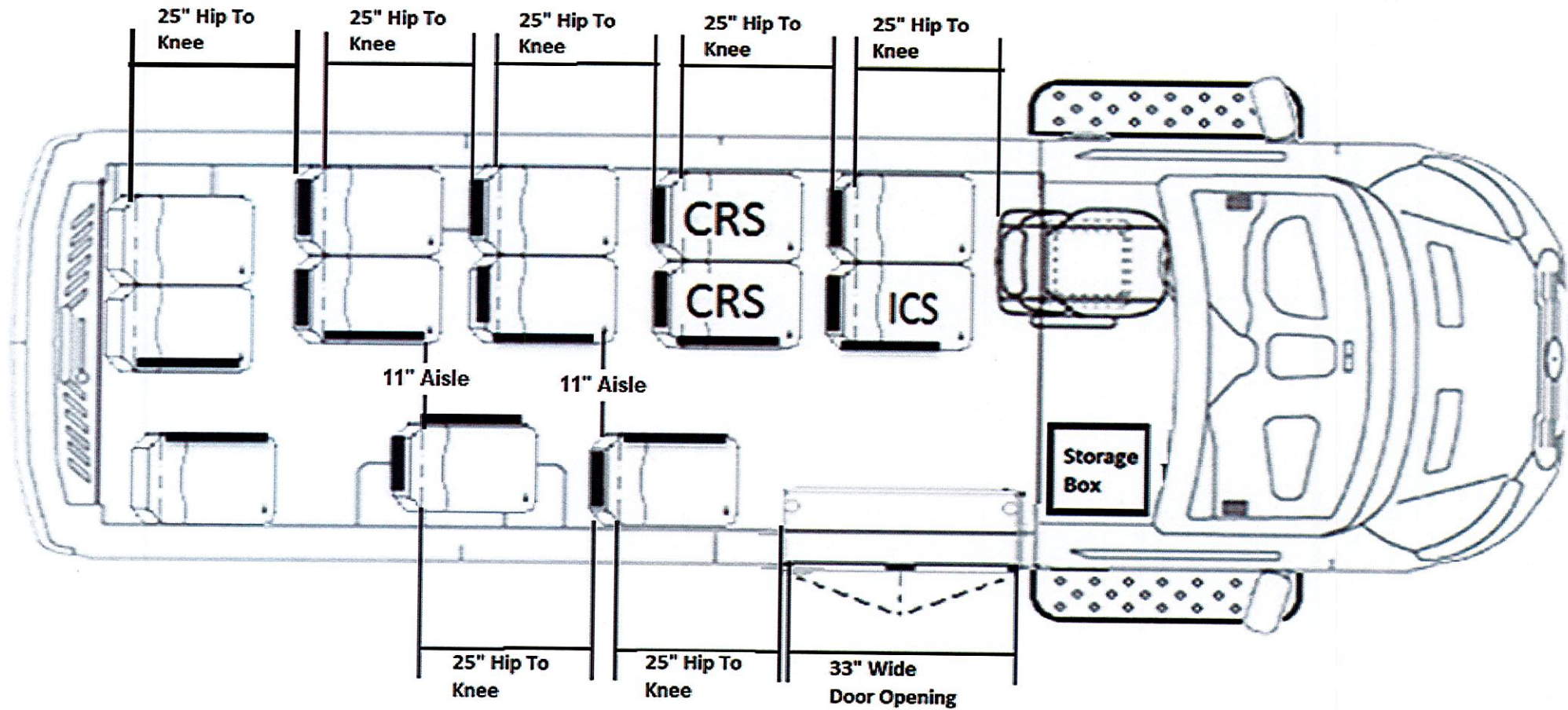
Ford Transit 350, High Roof, 22' Long, 148" WB, DRW



Ford Transit 350, High Roof, 22' Long, 148" WB, DRW



Ford Transit 350, High Roof, 22' Long, 148" WB, DRW





2018 Product Application Guide • 3-7-18



NCL1000-2 CENTURY SERIES™

NCL1000-2 Century Series™ Features

- Fully automatic NHTSA compliant lift, operated by an attendant
- Loading position - either direction
- Interfaces with OEM interlocks
- Lift mounted lights - platform illuminated as it deploys
- Hand control with illuminated functions
- Locking mechanical Inboard Barrier (IB), powder coated yellow for safety and high visibility, prevents movement if occupied
- Pump design prevents platform folding when occupied, quiet operation and low current draw
- Durable redesigned baseplate reduces lift weight and allows for quicker and easier service of hose/wiring
- Easily installed, step-by-step installation instructions, no peripheral hardware required
- Visual and audible warning provides notification of unsafe conditions
- Spring-loaded outer barrier that will transition to the fully up position as the platform leaves the ground, has durable rubber nose guard and is powder coated yellow for safety and high visibility
- Parallel arms lift with hydraulic cylinders
- Side or rear door application
- Several platform widths and lengths
- Dual handrails for security and convenience
- Bridging feature permits the wheelchair user to board the lift from sidewalks or inclines
- Floor to ground travel is 48"
- Lifting capacity is 1000 lbs
- Integrated back-up pump
- Equipped with an adjustable anti-rattle feature to avoid unpleasant noise in the vehicle during transit
- Durable high-gloss powder coated finish
- Lift-Tite system stows the lift platform securely while the vehicle is in transit
- Pump module with removable cover offers easy access to all components

NCL1000-2 Century Series™ Models

NCL1000IB3351-2

NHTSA Compliant Usable Platform: 33" x 51"

NCL1000IB3451-2

NHTSA Compliant Usable Platform: 34" x 51"

NCL1000IB3451HB-2

NHTSA Compliant Usable Platform: 34" x 51"

NCL1000IB3454-2

NHTSA Compliant Usable Platform: 34" x 54"

NCL1000IB3454HB-2

NHTSA Compliant Usable Platform: 34" x 54"

NCL1000IB3751HB-2

NHTSA Compliant Usable Platform: 37" x 51"

NCL1000IB3754HB-2

NHTSA Compliant Usable Platform: 37" x 54"

For a front-mounted pump assembly, add "F" to the model number when ordering (example: NCL1000FIB3351-2).

IB = Inboard Barrier HB = Handrail Belt

General Function: Electrohydraulic, power up/gravity down operation

Operation: Hydraulic pump with two lifting cylinders

Control: hand-held control box

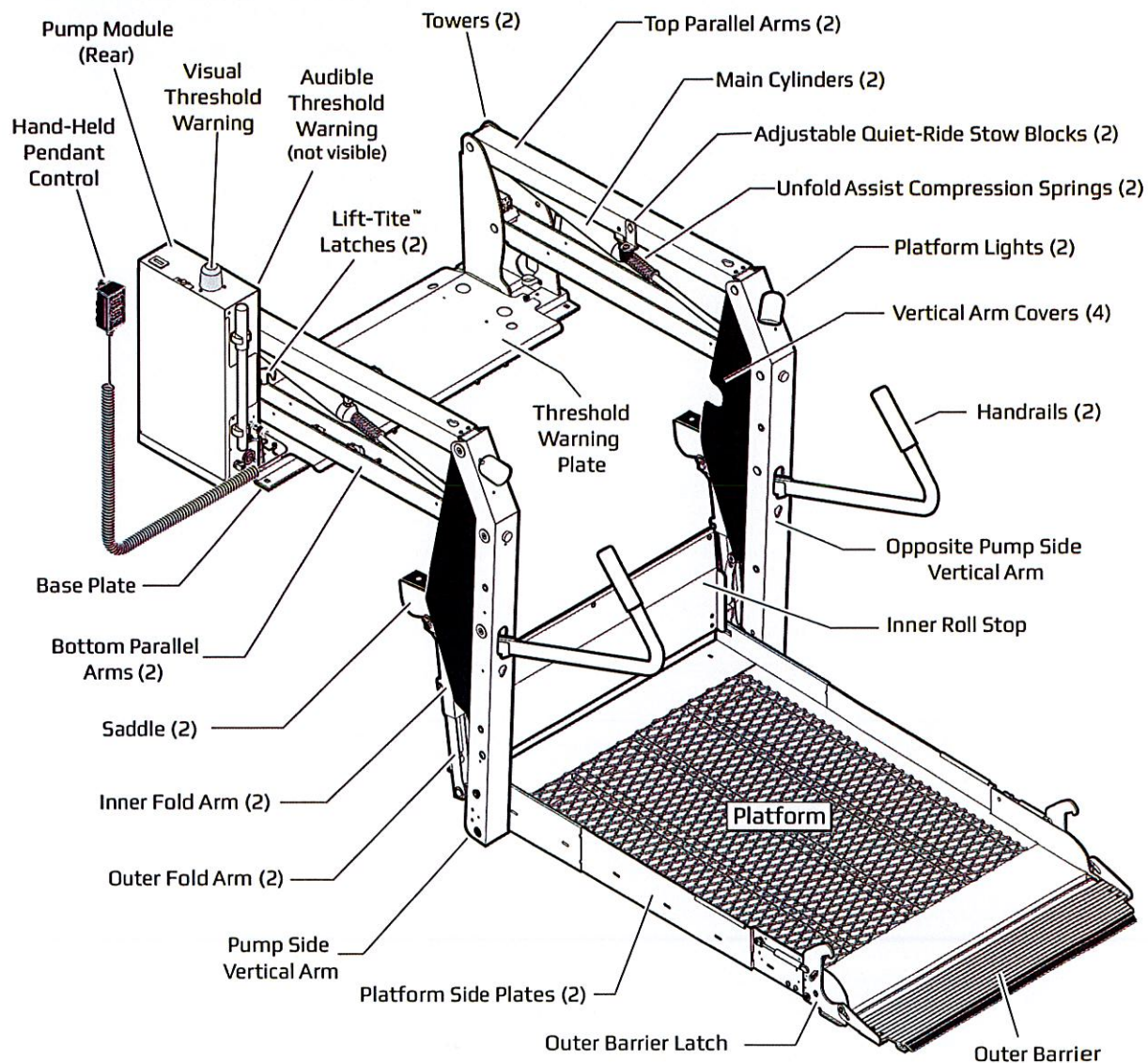
Hydraulic: Pressure Max. 2,495 psi, Fluid is Univis HVI 26, oil reservoir is .33 gal

Construction: Steel structure with powder coat finish

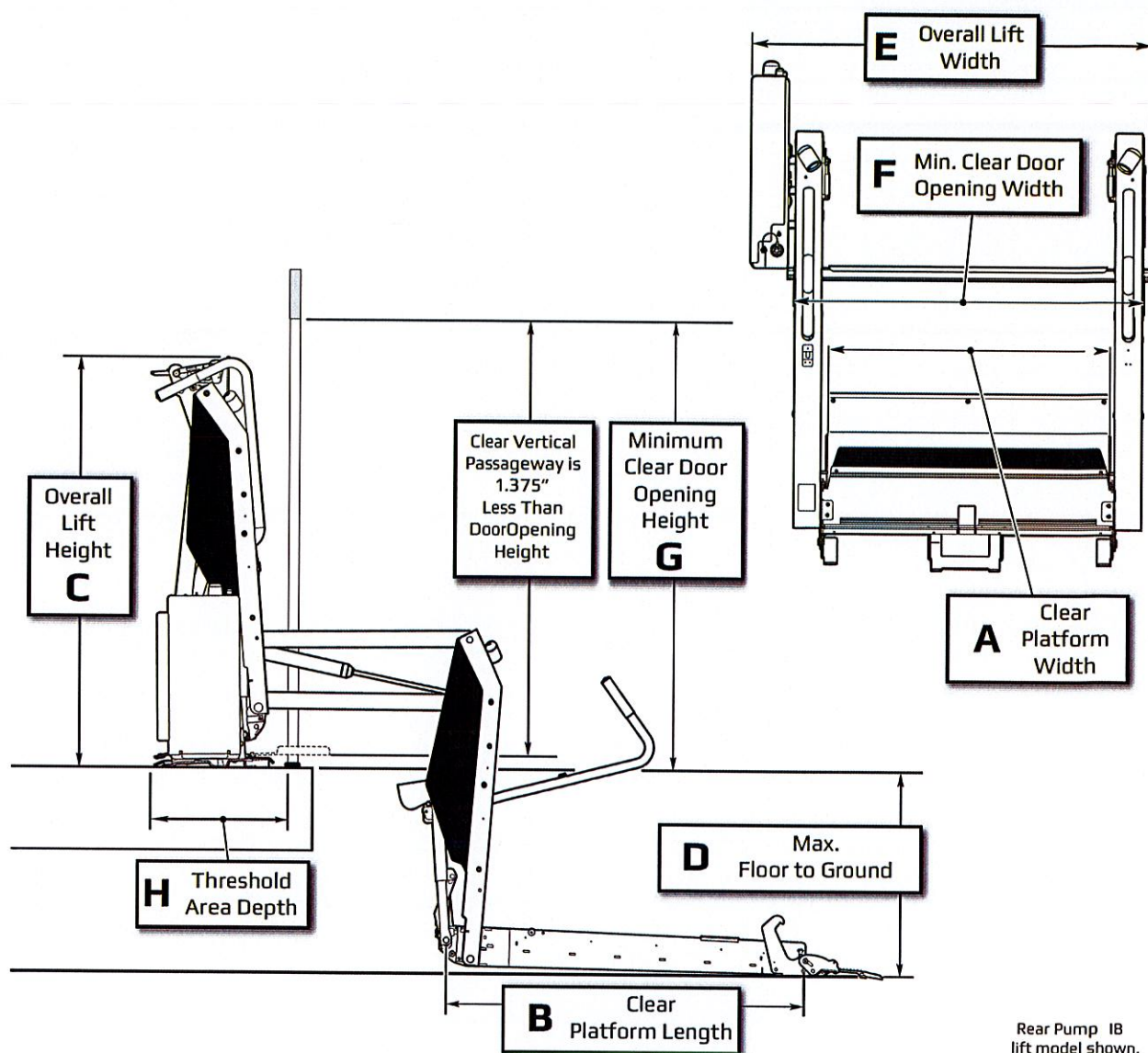
Operating Temperature: 0°F to 140°F

Power Supply: 12VDC

Current Consumption: Max. 70A (12V)



NCL1000-2 Century Series™ Dimensions



Rear Pump 1B
lift model shown.

All dimensions are for reference only.

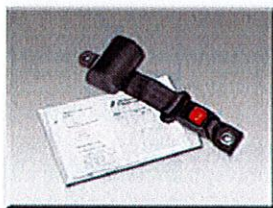
NCL1000-2 Century Series™			A	B	C	D	E	F	G	H
Lift Model Number	Lift Weight lbs	Lifting Capacity lbs	Clear Platform Width	Clear Platform Length	Overall Lift Height	Max. Floor to Ground	Overall Lift Width	Min. Clear Door Opening Width	Min. Clear Door Opening Height	Threshold Area Depth
NCL1000IB3351-2	358	1000	33"	51"	56.25"	48"	46"	42"	57.375"	18"
NCL1000IB3451-2	358	1000	34"	51"	56.25"	48"	47"	43"	57.375"	18"
NCL1000IB3451HB-2	358	1000	34"	51"	61.25"	48"	47"	43"	62.375"	18"
NCL1000IB3454-2	358	1000	34"	54"	59.25"	48"	47"	43"	60.375"	18"
NCL1000IB3454HB-2	358	1000	34"	54"	66.25"	48"	47"	43"	67.375"	18"
NCL1000IB3751HB-2	380	1000	37"	51"	61.25"	48"	50"	46"	62.375"	18"
NCL1000IB3754HB-2	385	1000	37"	54"	66.25"	48"	50"	46"	67.375"	18"

NCL1000-2 Century Series™ NHTSA Installation Kits

	Std. Length Rear Door	Ext. Length Rear Door
Ford Transit (2015)	400774KS	400773KS
Ford Transit Template (2015)	400778KS	400778KS
Sprinter (2014 & up)		401174KS
Sprinter Template (2014 & up)		401177KS

Van Mounting Kits contain floor reinforcements for 403/404 compliance.

NCL1000-2 Century Series™ Accessories



◀ **31579KS**
Handrail Restraint
Retractable -
for 51" Platforms

35533KS
Handrail Restraint
Retractable -
for 54" Platforms

35331KS
Handrail Restraint
Non-Retractable



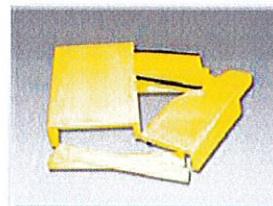
◀ **35295K**
Upper Tower Support Kit



◀ **33659KS**
Replacement
Hand-Held
Control



◀ **23708A913**
"Full Curtain"
Lift Cover
(NCL917-2)



◀ **402605KS**
Padding Kit
NCL2 Series

NCL1000-2 Century Series™ Specifications

COMMERCIAL WHEELCHAIR LIFT SPECIFICATIONS - IN COMPLIANCE WITH United States Department of Transportation Rules and Regulations 49CFR, Part 38. FROM THE AMERICANS WITH DISABILITIES ACT OF 1990 and NHTSA Rule 403 (2004) "Provided to make your spec writing easier."

The wheelchair lift is compliant with Federal Motor Vehicle Safety Standard 403 for platform lift systems for motor vehicles. The lift shall have been tested to a minimum static load of 2400#. The lift shall have 1000# rated lifting capacity. The base plate shall be a corrugated designed member to provide rigidity to minimize lift deflection when placed under load.

The power supply shall be a 12 volt electro-hydraulic system operating two single-acting cylinders. The hydraulic power pack system shall be of modular design allowing for easy removal and field replacement, if needed. The operation of the unit shall provide a smooth, jerk-free ride in both up and down directions. The power operation of the hydraulic cylinders shall be of a pull-type design for smooth lifting operation and improved synchronous arm movement. The pivot pins in the trunnion (knuckle) of the pivot arms shall be of stationary design. The hydraulic system shall be regulated by two separate relief valves, one of which is designed to prevent accidental stowing when occupied.

The hand control for lift operation shall be of a one-hand operation design made of durable plastic. The hand control will provide user with illuminated functions. The hand control cable shall be coiled with quick-change connections for ease of maintenance or field change.

A manual back-up system shall be provided to ensure operation of the lift in case of electrical failure. The back-up system shall provide a reliable means of manually raising and lowering the lift while occupied. The back-up system shall fold and unfold the platform. The back-up pump shall be integrated with the hydraulic power pack system such that no hydraulic lines or fittings are required.

The platform shall be of steel construction and the surface shall be of see-through grating allowing for improved visibility and safer use in inclement weather. The platform shall have a minimum usable wheelchair passageway width of 33 inches and a minimum usable length of 51 inches requiring a 57 inch vertical clear door opening. The sides of the platform shall be a minimum of 2.5 inches high.

The platform shall be automatically folded and unfolded and fully automatic in operation. The platform shall allow both inboard and outboard facing of wheelchair and mobility aid users. The platform entrance ramp shall be extruded aluminum for weight savings, have a rubber leading edge and raised ribs for traction. The outer barrier must not raise if occupied with 25 lbs. The outer barrier shall be the sole outboard wheelchair retention device and shall be interlocked and comply with the FMVSS 403 requirements. Dual handrails shall be provided to add security and convenience. These handrails shall be 1.25 inch minimum diameter, minimum 30 inches in height, minimum of 8 inches in length, and withstand a 100# force in any direction (including vertical) without permanent deformation. The lift must have a fail safe system to prevent stowing if solenoid welds. The platform shall have "built in" lighting to meet 404 platform lighting requirements with no auxiliary lighting.

All lift components shall be finished with a baked-on powder coating, which will meet a salt spray test of 1000 hours, to provide corrosion resistance and a long service life. BraunAbility Century Series to include but not limited to the following model numbers:

- NCL1000IB3351-2, NCL1000FIB3351-2, NCL1000IB3451-2, NCL1000FIB3451-2, NCL1000IB3451HB-2, NCL1000FIB3451HB-2, NCL1000IB3454-2, NCL1000FIB3454-2, NCL1000IB3454HB-2, NCL1000FIB3454HB-2, NCL1000IB3751HB-2, NCL1000FIB3751HB-2, NCL1000IB3754HB-2, NCL1000FIB3754HB-2



braunability.com

800.THE.LIFT

ISO 9001:2008

631 West 11th Street, Winamac, IN 46996, USA

© 2018 BraunAbility. All rights reserved. All illustrations, descriptions and specifications in this brochure are based on the latest product information at the time of publication. BraunAbility reserves the right to make changes at any time without notice.



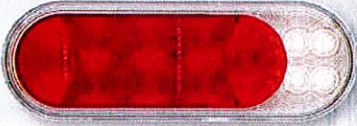
Gp**tr**ONICS®

Better Value • Better Options • Better Lighting

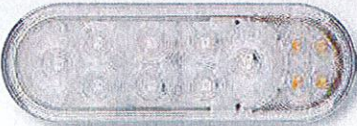
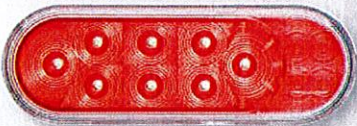




STL211X SERIES FUSION™ 6" Oval Sealed LED Stop/Turn/Tail/Back-Up Lights



STL211XRB



STL211XRCB



TLL211XRTMK

PATENTED TECHNOLOGY

- DOT-compliant back-up light built into stop/turn/tail light
- Sonically sealed, waterproof
- Multi-function: Stop, turn, tail and back-up, all in one light
- Accepts industry standard PL-3 plugs

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
RED STOP/TURN/TAILO/BACK-UP LIGHT - 16 DIODES			
STL211XRB	STL211XRBP	Red lens, PL-3 connection	10
STL211XRCB	STL211XRCBP	Clear lens, PL-3 connection	10
ACCESSORIES			
A70GB	A70GBP	Grommet, flush mount	50
A45PB	A45PBP	Pigtail, 3-wire	100
A47PB	A47PBP	Right angle pigtail, 3-wire	100
A45CB	A45CBP	Pigtail, 2-wire	100
A49PB	A49PBP	Right angle pigtail, 2-wire	100
A77S1B	A77S1BP	Gray, flat design steel bracket	50
BK70BB	BK70BBP	Black steel bracket	10

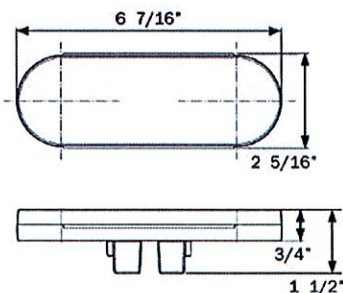
RETAIL

TLL211XRTMK



Try Me Retail Kit: (2) ea. STL211XRB, A70GB, A45PB, A45CB, and (1) A30W5BLB 5-way harness, clam

FMVSS	S2 T2 I6 (2)R
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	12.8VDC - .375A Stop/Turn, .020A Tail, .242A Back-Up
WT/DIMS	.35 lbs. / 6.438" x 2.313" x 1.50"
WARRANTY	Lifetime LED Warranty



HOLE CUT-OUT: 6.85" X 2.5"
(1.25" R)



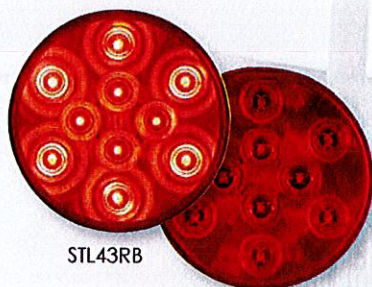
Standard PL3 connections



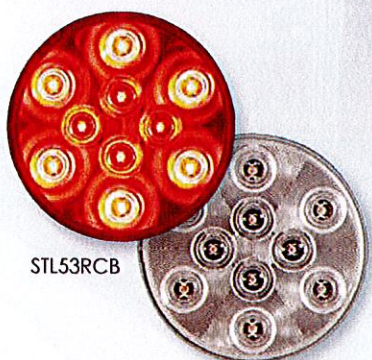
STL43 SERIES

4" Round Sealed LED Lights

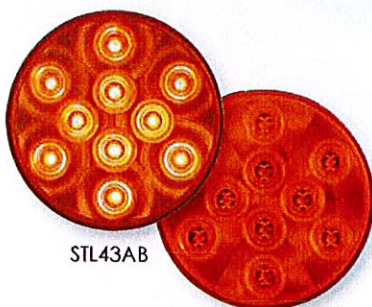
- Sonically sealed, waterproof
- Kits include grommet and plug
- Mount in any 360 degree position
- Available in 12-24V models
- Available with standard PL-3 or optional weathertight connection



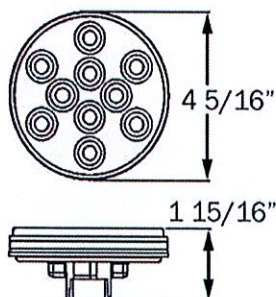
STL43RB




STL53RCB



STL43AB



HOLE CUT-OUT: 4.5"

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
RED STOP/TURN/TAIL LIGHT - 10 DIODES			
STL43RB	STL43RBP	PL-3 connection, 12V	10
STL43RKB	STL43RKBP	Kit with A45GB & A47PB, PL-3, 12V	10
STL43R24B	STL43R24BP	PL-3 connection, 12-24V	10
STL43RMB	STL43RMBP	Weathertight connection, 12V	10
STL53RCB	STL53RCBP	Clear lens, red diode, PL-3, 12V	10
YELLOW PARKING/TURN SIGNAL - 10 DIODES			
STL43AB	STL43ABP	PL-3 connection, 12V	10
STL43A24B	STL43A24BP	PL-3 connection, 12-24V	10
STL43AKB	STL43AKBP	Kit with A45GB & A47PB, PL-3, 12V	10
ACCESSORIES			
A45GB	A45GBP	Grommet	50
A45PB	A45PBP	Pigtail, 3-wire PL-3	100
A47PB	A47PBP	Right angle pigtail, 3-wire PL-3	100
A45PMB	A45PMBP	Weathertight pigtail	100
AL45PWTB	AL45PWTBP	Weathertight to PL-3 adaptor	50
BK45BB	BK45BBP	Black steel bracket	10
A45BB	A45BBP	Black plastic flange	100
A45SB	A45SBP	Stainless steel mounting flange	20
A45CGB	A45CGBP	Chrome grommet cover	20
RETAIL			
STL43RK		12V kit with A45GB & A47PB, clam	6


FMVSS	Red S T I P2; Yellow I6 P
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	Red: 12.8VDC - .360A Stop/Turn, .030A Tail Yellow: 12.8VDC - .310A Turn, .046A Parking
WT/DIMS	.265 lbs. / 4.313" x 4.313" x 1.938"
WARRANTY	Lifetime LED Warranty

LED TRUCK & TRAILER LIGHTING

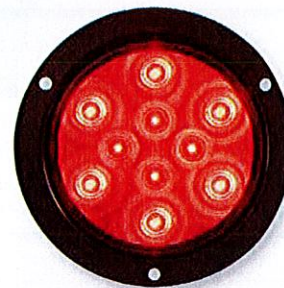
STL42 SERIES

4" Round Sealed LED Lights with Mounting Flange

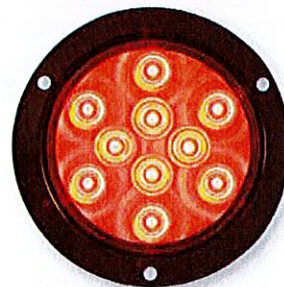
- Sonically sealed, waterproof
- Flange mount for security, theft reduction
- Available with standard PL-3 or optional weathertight connection

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
RED STOP/TURN/TAIL LIGHT - 10 DIODES			
STL42RB	STL42RBP	Black flange, PL-3	10
STL42RMB	STL42RMBP	Black flange, weathertight	10
YELLOW PARKING/TURN SIGNAL - 10 DIODES			
STL42AB	STL42ABP	Black flange, PL-3	10
STL42AMB	STL42AMP	Black flange, weathertight	10
ACCESSORIES			
A45PB	A45PBP	Pigtail, 3-wire PL-3	100
A47PB	A47PBP	Right angle pigtail, 3-wire PL-3	100
A45PMB	A45PMBP	Weathertight pigtail	100
AL45PWTB	AL45PWTBP	Weathertight to PL-3 adaptor	50
BK45BB	BK45BBP	Black steel bracket	10
A42FCB	A42FCBP	Chrome flange cover	100
A5TRSSB	A5TRSSBP	Stainless steel trim ring	100
A42GB	A42GBP	Mounting gasket, black	100
RETAIL			
STL42RS		Light only, clam	6

FMVSS	Red S T I P2; Yellow I6 P
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	Red: 12.8VDC - .413 Stop/Turn, .026A Tail Yellow: 12.8VDC - .310 Turn, .046A Parking
WT/DIMS	.617 lbs. / 5.5" x 5.5" x 1.938"
WARRANTY	Lifetime LED Warranty



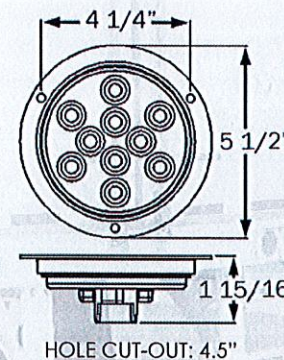
STL42RB



STL42AB



A42GB



LED SEALED STOP/TURN/TAIL & PARKING/TURN SIGNALS

LED LIFETIME WARRANTY
NO BULBS TO REPLACE, EVER!

Gptronics

Graphic Films for Opaque Applications

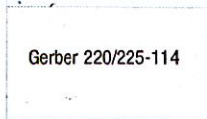
- 3M™ Scotchcal™ ElectroCut™ Graphic Film Series 7125, 7725, and 7725SE
- 3M™ Controltac™ Plus Graphic Film with Comply™ Adhesive Series 180C



Satin Aluminum
180C-120
7725-120, 7125-120
PANTONE® 877 C



Satin Gold
180C-131
7725-131, 7125-131
PANTONE 872 C



Gerber 220/225-114

Transparent
180C-114
7725-114, 7125-114



White
180C-10



White
7725-10, 7125-10



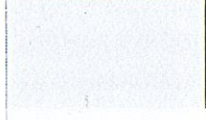
Matte White
7725-20, 7125-20



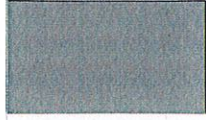
Eggshell
7725-130



Antique White
7725-90, 7125-90



Pearl Gray
7725-11, 7125-11
PANTONE Cool
Gray 2 C



Medium Gray
180C-31
7725-31, 7125-31
PANTONE Cool
Gray 7 C



Dark Gray
180C-41
7725-41, 7125-41



Black
180C-12
7725-12, 7125-12
PANTONE Process
Black C



Matte Black
180C-22,
7725-22, 7125-22,
PANTONE Black C



**Deep Mahogany
Brown**
180C-19
7725-19, 7125-19
PANTONE 4625 C



Russet Brown
7725-29, 7125-29
PANTONE 175 C



Saddle Brown
7725-139, 7125-139



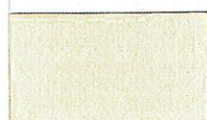
Tan
180C-39
7725-39, 7125-39



Putty
7725-59, 7125-59



Sandstone
7725-89, 7125-89



Fawn
7725-99, 7125-99



Beige
180C-49
7725-49, 7125-49



Mauve
7725-193



Salmon Pink
7725-173



Magenta
7725-103, 7125-103
PANTONE 205 C



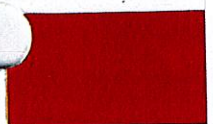
Process Magenta
7725-273
PANTONE 214 C



Perfect Match Red
7725-263, 7125-263
PANTONE 186 C



Tomato Red
180C-13
7725-13, 7125-13
PANTONE 1795 C



Geranium
180C-63
7725-63, 7125-63



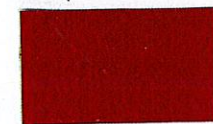
Deep Red
180C-23
7725-23, 7125-23



Cardinal Red
180C-53
7725-53, 7125-53



Burgundy
180C-58
7725-58, 7125-58



Terra Cotta
7725-24, 7125-24



Bright Orange
180C-14
7725-14, 7125-14
PANTONE Orange
021 C



Apricot
7725-64




Light Orange
180C-54
7725-54, 7125-54



Harvest Gold
7725-105, 7125-105
PANTONE 7510 C



Sunflower
180C-25
7725-25, 7125-25
PANTONE 1235 C



Bright Yellow
180C-15
7725-15, 7125-15
PANTONE 109 C



Vista Yellow
7725-85




Apple Green
180C-196
7725-196, 7125-196



Kelly Green
180C-46
7725-46, 7125-46



Bright Green
180C-186
7725-186, 7125-186
PANTONE 348 C




Dark Green
180C-56
7725-56, 7125-56
PANTONE 3425 C




Bottle Green
7725-276, 7125-276



Forest Green
7725-66, 7125-66
PANTONE 3302 C



Bermuda Blue
7725-357, 7125-357
PANTONE 323 C




Teal
180C-96
7725-96, 7125-96
PANTONE 322 C



Dark Aqua
7725-307




Aqua
7725-176



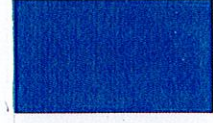
Peacock Blue
180C-77
7725-77, 7125-77
PANTONE 298 C



Robin Egg Blue
7725-86




Olympic Blue
180C-57
7725-57, 7125-57
PANTONE 7461 C



Intense Blue
180C-47
7725-47, 7125-47
PANTONE 301 C



Vivid Blue
180C-17
7725-17, 7125-17



Sapphire Blue
180C-37
7725-37, 7125-37
PANTONE 2747 C



Wedgewood Blue
7725-187



Shadow Blue
7725-177, 7125-177

Other Product Series:

Most colors are available in other product series.

Can't find your color?

Allow us to custom match your color with our three-day, no-



Light Navy
7725-197, 7125-197
PANTONE 289 C



Indigo
180C-27
7725-27, 7125-27
PANTONE 2767 C



Royal Purple
180C-38
7725-38, 7125-38



Purple
7725-48, 7125-48



Dark Violet
7725-98



Violet
7725-88

Metallic Graphic Film



**Sage Green
Metallic**
180C-216



**Dark Blue
Metallic**
180C-217



**Bright Blue
Metallic**
180C-227



**Silver Blue
Metallic**
180C-237



**Light Silver
Metallic**
180C-220
PANTONE 877 C



**Slate
Metallic**
180C-201



**Gray
Metallic**
180C-221



**Charcoal
Metallic**
180C-211



**Dark Burgundy
Metallic**
180C-228



**Gold
Metallic**
180C-241



**Copper
Metallic**
180C-229

Fluorescent Graphic Film



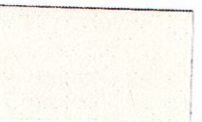
Yellow-Orange
7725SE-404



Red-Orange
7725SE-414



Fuchsia
7725SE-413



Yellow
7725SE-405



Green
7725SE-406

Films for application to opaque surfaces

The components used in sign construction, including sources of illumination, adhesives and substrates, affect color. Although color variation is usually slight, certain components have a more obvious effect, particularly with shades of white. PANTONE® color numbers are based on reflective light measurements of product samples applied to a standard white substrate.

Vulcan™ Series V12 HD/IP Mobile DVR

12-CHANNEL DVR

DIMENSIONS

- Height: 3.5 inches
- Width: 8.7 inches
- Depth: 11.6 inches
- Weight: 5.7 pounds

TWELVE (12) A/V INPUTS

- 8 channels D1, WD1, 720P, or up to 1080P
- + 4 channels IP up to 1080P

VIDEO OUTPUTS

- 2 channels

AUDIO OUTPUTS

- 2 channels

CAMERA COMPATIBILITY

- 8 channels D1, WD1, 720P, or up to 1080P (see NTSC)
- 4 channels IP up to 1080P

STORAGE MEDIA

RECORDING MEDIUM

- One (1) 2.5" SATA hard drive and one (1) optional solid-state SD card

CAPACITY

- 1TB (standard) up to 2TB (capable) (optional) 64GB SD card up to 512GB

RECORDING OPTIONS

- SD card slot for redundant recording

INTERFACE

NETWORK DATA CONNECTION

- One RJ45 x 1 (10/100 M/1000M)

EXPANSION

- RS232 x 2, RS485 x 2

GPS INTERFACE

- Built-in, compatible with optional GPS antenna

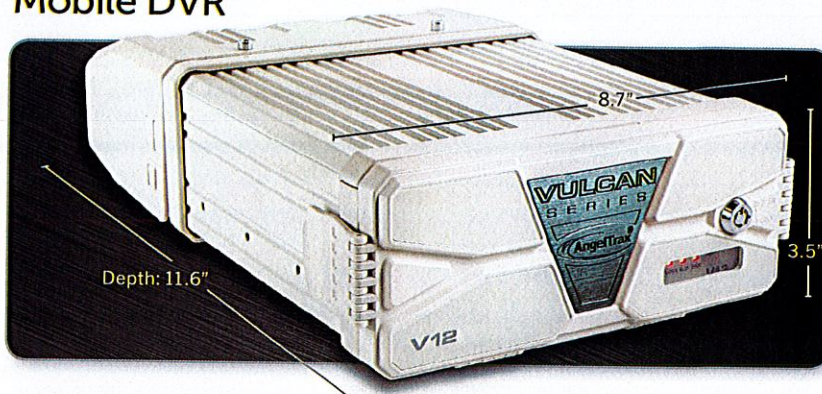
DRIVER ACTION DETECTION

PANIC BUTTON

- The remote status indicator (panic button) can be connected to show DVR power/record status without using a video monitor
- The driver-operated panic button has the following functions:
 - Solid green LED indicates that the unit has power and is recording
 - Event marker (panic button)

DRIVER ACTION DETECTION WIRES

- 8 signal wires individually programmable to indicate alarm or event



BUILT-IN G-FORCE SENSOR

COMPRESSION FORMAT

- Video: H.264
- Audio: ADPCM, G.711A G.711U

RECORD RESOLUTION

NTSC

- 1080P, 720P, WD1(928X480), WHD1(928X240), WCIF(464X240), D1(704X480), HD1(704X240), CIF(352X240)

PAL

- 1080P, 720P, WD1(928X576), WHD1(928X288), WCIF(464X288), D1(704X576), HD1(704X288), CIF(352X288)

RECORDING OPTIONS

- **Continuous record:** System will record all channels continuously while vehicle is running (factory setting).
- **Alarm record:** System will record when an alarm is triggered.
- **Motion record:** System will record when the cameras detect motion while vehicle is running.
- **Schedule record:** System will boot and record according to user-selectable schedule.

ELECTRICAL & OPERATING REQUIREMENTS

AUTO ON/OFF DETECTION

- ACC detection

DELAY OFF SETTING

- User selectable up to 24 hours

OPERATING VOLTAGE

- 8~36VDC

OPERATING TEMPERATURE

- -14°F (-25°C) ~ +158°F (+70°C);
- 40°F (-40°C) ~ +158°F (+70°C) with heater

POWER CONSUMPTION

- 0W-105.3W

POWER SUPPLY

INPUT RANGE

- DC 8-36V

OUTPUT RANGE

- DC5V/DC12V

OUTPUT CURRENT

- 5V@500mA, 12V@500mA

BUILT-IN POWER PROTECTION

LOW VOLTAGE PROTECTION

- User selectable and programmed at installation

HOUSING/CASING

- Removable, shock-mounted
- Vandal-resistant locking front cover
- Shock-resistant: MIL-STD-810F
- Aluminum
- Optional fan with filter, removable for cleaning

BUILT-IN WI-FI MODULE

OPTIONAL COMPONENTS

VIRTUAL SYNCHRONIZED MAPPING

- External Virtual Synchronized Mapping™ module with North American maps
- Includes GPSV1 antenna
- Embeds GPS tracking information synchronized with recorded video footage

GPS ANTENNA

FIREPROOF BOX BACKUP

CELLULAR MODEM

Specifications, features and applications of use are subject to change without notice. ▼ 4/2017



1.800.673.1788 | www.angeltrax.com

WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class A	Date: 8/31/2022
VIN: 1FDVU4X88PKA05986	Performed By: Jason

Max # Of Ambulatory Passengers	Max # Of Wheelchairs
9	0

OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR	Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight		
148"-EL	10360	4130	6725	Gas	3.5L Gas	2970	3093	3772	6865
							Front	Rear	Total

	Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)	1404.10	1404.10	2384.80	2217.00	7390.00
WEIGHT OF THE OCCUPANTS (lbs)	310.50	310.50	378.00	351.00	1350.00
WEIGHT OF Full Tank Of Gas	44.10	33.08	45.68	34.85	157.50
ADJUSTED 4 CORNER WEIGHT	1758.70	1747.68	2788.48	2802.85	8897.50

TOTAL FRONT 3506.38 623.63 **TOTAL REAR** 5391.13 1333.88
 IS THE FRONT GAWR OVER **NO** IS THE REAR GAWR OVER **NO**

PASS/FAIL Analysis

Front GAWR (lbs) 4130 divided by 2= 2065.00

Rear GAWR (lbs) 6725 divided by 2= 3362.50

GVWR (lbs.) 10360

Is Lft-Frt/2 Exceeded? NO

Is Rt-Frt/2 Exceeded? NO

Is Lft-Rr/2 Exceeded? NO

Is Rt-Rr/2 Exceeded? NO

LOADED WEIGHT (lbs.) 8897.50 Is GVWR Exceeded? NO

1462.50

Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is N/A lbs..

(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)

The actual completed weight (UVW) of this vehicle is 7390.00 lbs. Is Maximum UVW Exceeded? NO

DEFINITIONS

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.

WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class B	Date: 8/31/2022
VIN: 1FDVU4X88PKA05986	Performed By: Jason

					Max # Of Ambulatory Passengers	Max # Of Wheelchairs			
					11	0			
OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR	Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight		
148"-EL	10360	4130	6725	Gas	3.5L Gas	2881	3093	3772	6865
							Front	Rear	Total
					Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)					1421.01	1421.01	2393.28	2243.70	7479.00
WEIGHT OF THE OCCUPANTS (lbs)					379.50	379.50	462.00	429.00	1650.00
WEIGHT OF Full Tank Of Gas					44.10	33.08	45.68	34.65	157.50
ADJUSTED 4 CORNER WEIGHT					1844.61	1833.59	2900.96	2707.35	9286.50

TOTAL FRONT	3678.20	451.81	TOTAL REAR	5608.31	1116.70
IS THE FRONT GAWR OVER	NO		IS THE REAR GAWR OVER	NO	

PASS/FAIL Analysis		Is Lft-Frt/2 Exceeded?	Is Rt-Frt/2 Exceeded?
Front GAWR (lbs) 4130	divided by 2= 2065.00	NO	NO
Rear GAWR (lbs) 6725	divided by 2= 3362.50	NO	NO
GVWR (lbs.) 10360	LOADED WEIGHT (lbs.) 9286.50	Is GVWR Exceeded? NO	
		1073.50	
Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is N/A lbs..			
(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)			
The actual completed weight (UVW) of this vehicle is 7479.00 lbs.		Is Maximum UVW Exceeded? NO	

DEFINITIONS

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.

WEIGHT ANALYSIS WORKSHEET

(4-CORNER)

Enduser: West Virginia Class C	Date: 8/31/2022
VIN: 1FDVU4X88PKA05986	Performed By: Jason

Max # Of Ambulatory Passengers	Max # Of Wheelchairs
14	0

OEM Wheelbase	OEM GVWR	OEM FRT GAWR	OEM RR GAWR	Fuel Type	Engine Type	Payload Capacity	Unmodified Curb Weight		
148"-EL	10360	4130	6725	Gas	3.5L Gas	2896	3093	3772	6865
							Front	Rear	Total

	Lft-Frt (lbs)	Rt-Frt (lbs)	Lft-Rr (lbs)	Rt-Rr (lbs)	Total (lbs)
ACTUAL COMPLETED WEIGHT OF VEHICLE (UVW)	1418.16	1418.16	2388.48	2239.20	7464.00
WEIGHT OF THE OCCUPANTS (lbs)	483.00	483.00	588.00	546.00	2100.00
WEIGHT OF Full Tank Of Gas	44.10	33.08	45.68	34.65	157.50
ADJUSTED 4 CORNER WEIGHT	1945.26	1934.24	3022.16	2819.85	9721.50

TOTAL FRONT	3879.50	250.51	TOTAL REAR	5842.01	883.00
IS THE FRONT GAWR OVER	NO		IS THE REAR GAWR OVER	NO	

PASS/FAIL Analysis

Front GAWR (lbs.) 4130	divided by 2=	2065.00	Is Lft-Frt/2 Exceeded?	NO	Is Rt-Frt/2 Exceeded?	NO
Rear GAWR (lbs.) 6725	divided by 2=	3362.50	Is Lft-Rr/2 Exceeded?	NO	Is Rt-Rr/2 Exceeded?	NO
GVWR (lbs.) 10360	LOADED WEIGHT (lbs.) 9721.50		Is GVWR Exceeded? NO			
			638.50			
Maximum UVW from Tables A & B of the Incomplete Vehicle Manual (IVM) is			N/A lbs..			
(NOTE: UVW does not apply to certification of vehicles with a GVWR above 10,000 lbs.)						
The actual completed weight (UVW) of this vehicle is 7464.00 lbs.			Is Maximum UVW Exceeded? NO			

DEFINITIONS

"UVW" - Completed weight of the vehicle with maximum capacity of all fluids necessary for operation of the vehicle, but without cargo, occupants or accessories that are normally removed when the vehicle is not in use.

"GAWR" and "GVWR" are found on the label affixed to the cover of the Incomplete Vehicle Manual (IVM).

"LOADED VEHICLE WEIGHT" - Completed weight of the vehicle with maximum capacities of all fluids necessary for operation of the vehicle plus 150 lbs. (or 70 kg.) for each designated seating position and appropriate allowance for cargo. Vehicles with tanks for water and/or LP gas must also account for the weight of these fluids in the cargo calculations.



Contract:	WVDOT
Agency:	Class A
VIN:	0
Date:	5/7/2021

**BUY AMERICA DOMESTIC Certification Statement
Certificate Of Compliance With Section 165(b)(3)**

MobilityTRANS hereby certifies that it complies with the requirements of section 165(b)(3), of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 CFR 661.11

Final assembly of completed vehicles is done at 16233 Inkster Rd, Livonia, MI 48150

<u>Component/Manufacturer</u>		Manufacturing Location	Domestic Content %
Chassis	Ford Motor Company	U.S.	70.06%
77.35% U.S. Content			
Entrance Door	A&M Door Systems	U.S.	2.19%
Greater Than 65% U.S. Content			
Floor Covering	GerFlor, Inc	Foreign	0.00%
Foreign			
Rear Passenger Seating	Freedman Seating	U.S.	5.40%
Wheelchair Lift	Braun Ability	U.S.	8.19%
Greater Than 65% U.S. Content			
Wheelchair Tiedowns	Q'Straint	U.S.	1.38%
79% U.S. Content			
Vehicle Interface Module	LGS Group, Inc	U.S.	0.46%
87% U.S. Content			
Running Boards	Penguin Bus And Truck Accessories	U.S.	0.26%
100% U.S. Content			
Lighting	Peterson Manufacturing	U.S.	0.11%
Greater Than 65% U.S. Content			
Final Assembly	MobilityTrans	U.S.	3.54%
Final Assembly In Livonia, MI			
Misc		Unaccounted	0.00%
Domestic Content Not Evaluated			
		Net Domestic Content %	91.60%

President,
MobilityTRANS



Contract:	WVDOT
Agency:	Class B
VIN:	0
Date:	5/7/2021

**BUY AMERICA DOMESTIC Certification Statement
Certificate Of Compliance With Section 165(b)(3)**

MobilityTRANS hereby certifies that it complies with the requirements of section 165(b)(3), of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 CFR 661.11

Final assembly of completed vehicles is done at 16233 Inkster Rd, Livonia, MI 48150

Component/Manufacturer		Manufacturing Location	Domestic Content %
Chassis	Ford Motor Company	U.S.	70.20%
77.35% U.S. Content			
Entrance Door	A&M Door Systems	U.S.	2.19%
Greater Than 65% U.S. Content			
Floor Covering	GerFlor, Inc	Foreign	0.00%
Foreign			
Rear Passenger Seating	Freedman Seating	U.S.	5.87%
Wheelchair Lift	Braun Ability	U.S.	8.20%
Greater Than 65% U.S. Content			
Wheelchair Tiedowns	Q'Straint	U.S.	0.70%
79% U.S. Content			
Vehicle Interface Module	LGS Group, Inc	U.S.	0.47%
87% U.S. Content			
Running Boards	Penguin Bus And Truck Accessories	U.S.	0.26%
100% U.S. Content			
Lighting	Peterson Manufacturing	U.S.	0.11%
Greater Than 65% U.S. Content			
Final Assembly	MobilityTrans	U.S.	3.53%
Final Assemblt In Livonia, MI			
Misc		Unaccounted	0.00%
Domestic Content Not Evaluated			
		Net Domestic Content %	91.54%

President,
MobilityTRANS



Contract:	WV DOT
Agency:	Class C
VIN:	0
Date:	5/7/2021

**BUY AMERICA DOMESTIC Certification Statement
Certificate Of Compliance With Section 165(b)(3)**

MobilityTRANS hereby certifies that it complies with the requirements of section 165(b)(3), of the Surface Transportation Assistance Act of 1982, as amended, and the regulations of 49 CFR 661.11

Final assembly of completed vehicles is done at 16233 Inkster Rd, Livonia, MI 48150

Component/Manufacturer		Manufacturing Location	Domestic Content %
Chassis	Ford Motor Company	U.S.	77.44%
77.35% U.S. Content			
Entrance Door	A&M Door Systems	U.S.	2.28%
Greater Than 65% U.S. Content			
Floor Covering	GerFlor, Inc	Foreign	0.00%
Foreign			
Rear Passenger Seating	Freedman Seating	U.S.	6.91%
Vehicle Interface Module	LGS Group, Inc	U.S.	0.26%
87% U.S. Content			
Running Boards	Penguin Bus And Truck Accessories	U.S.	0.28%
100% U.S. Content			
Lighting	Peterson Manufacturing	U.S.	0.01%
Greater Than 65% U.S. Content			
Final Assembly	MobilityTrans	U.S.	3.50%
Final Assemblt In Livonia, MI			
Misc		Unaccounted	0.00%
Domestic Content Not Evaluated			
		Net Domestic Content %	90.69%

President,
MobilityTRANS

Daimler

Truck Financial

Used Vehicle Condition Report

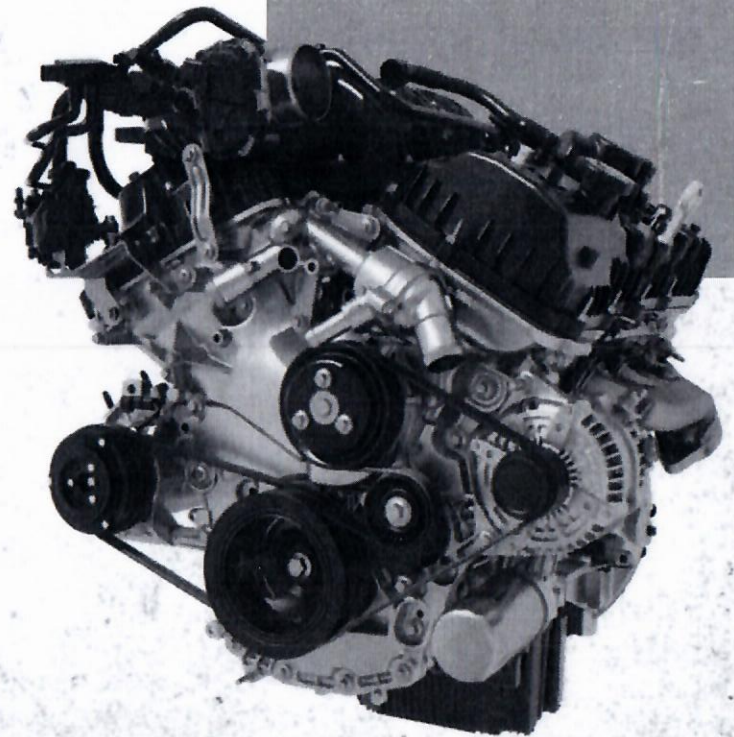
DEALER NAME ROHRER ENTERPRISES INC			DATE 9/2/2022
YEAR 2018	MAKE THOMAS BUILT BUSES	MODEL SAF-T-LINER C2	SLEEPER SIZE & CONFIGURATION N/A
ECM MILEAGE		ODOMETER MILEAGE 60,718	COLOR YELLOW & BLACK
FULL VIN (17 Characters) 4UZABRFC3JCJN1219			ENGINE SERIAL NUMBER

DRIVE TRAIN	ENGINE MODEL: CUMMINS B6.7	CAB EXTERIOR	PAINT: <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR
	ENGINE HORSEPOWER: 200		SLEEPER: N/A <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR
	TRANSMISSION: ALLISON 2500 PTS		FAIRINGS: N/A <input type="checkbox"/> FULL <input type="checkbox"/> PARTIAL <input type="checkbox"/> NONE
CHASSIS	FIFTH WHEEL: N/A <input type="checkbox"/> AIR-SLIDE <input type="checkbox"/> STATIONARY	CAB INTERIOR	CAB INTERIOR: <input checked="" type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR
	EXHAUST: <input checked="" type="checkbox"/> SINGLE <input type="checkbox"/> DUAL		SLEEPER INTERIOR: N/A <input type="checkbox"/> GOOD <input type="checkbox"/> FAIR <input type="checkbox"/> POOR
WHEELS	WHEELS - FRONT <input type="checkbox"/> ALUMINUM <input checked="" type="checkbox"/> STEEL	MISC	OIL LEAKS: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	WHEELS- REAR <input type="checkbox"/> ALUMINUM <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> ALUM/STEEL		
SIGNATURES	APPRAISER NAME (PRINT)		ADDITIONAL COMMENTS:
	MELINDA RENNINGER		
	TITLE SALES ADMINISTRATOR		
	SIGNATURE X _____		

2020MY TRANSIT NEW STANDARD GAS ENGINE

/// 3.5L PFDI NATURALLY ASPIRATED V6

- Custom-designed for Transit
- Based on 3.3L PFDI in 2018 in F-150
- DI for increased compression ratio and downsizing – helps reduce fuel consumption
- Available dual alternator option – 2 x 250A



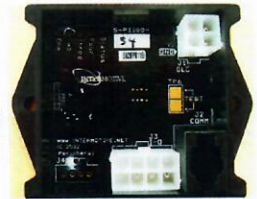
AFIS507VSX-B Advanced Fast Idle System—Transit Application

2011-2016 Ford F250 - F550

2017-2019 Ford F250 - F550*

2016-2017 Ford F650/F750

***May Use the Ford 24-Pin "T" Gateway Harness (option B-AFIS507VSX-BP)**



System Operation

The Advanced Fast Idle System (AFIS) elevates engine idle speed in response to a number of triggers in order to assist electrical or mechanical systems on the vehicle.

IMPORTANT—READ BEFORE INSTALLATION

It is the installer's responsibility to route and secure all wiring harnesses where they cannot be damaged by sharp objects, mechanical moving parts and high heat sources. Failure to do so could result in damage to the system or vehicle and create possible safety concerns for the operator and passengers. Avoid placing the module where it could encounter strong magnetic fields from high current cabling connected to motors, solenoids, etc. Avoid radio frequency energy from antennas or inverters next to the module. Avoid high voltage spikes in vehicle wiring by always using diode clamped relays when installing upfitter circuits.

Installation Instructions

Disconnect vehicle battery before proceeding with installation.



WARNING

Disconnect the battery to prevent setting a check engine light.

AFIS507VSX Module

Remove the lower dash panel below the steering column area and find a suitable location to mount the module so that the Diagnostic LED's can be viewed with the lower dash panel removed. Secure using 2-sided foam tape, screws or wire ties. Locate the module in an area away from any high heat sources. Do not actually mount the module until all wire harnesses are routed and secure (last step of the installation is to mount the module).

Data Link Harness Options

24 Pin Gateway "T" Connector	16 Pin OBDII "T" Connector	16 Pin OBDII Connector
B-AFIS507VSX-BP	A-AFIS507VSX-BP	A-AFIS507VSX-B B-AFIS507VSX-B

OBDII Data Link Harness (A-AFIS507VSX-B or B-AFIS507VSX-B)

1. Locate the vehicle's OBDII Data Link Connector, mounted below the lower left dash panel.
2. Plug the Red connector from the AFIS Data Link Harness into the vehicle OBDII connector. Ensure the connection is fully seated and secured with the supplied wire tie.
3. Secure the AFIS Data Link harness so that it does not hang below the lower dash and plug the (4-pin connector) from the Data Link Harness into the 4-Pin connector on the AFIS module.



OBDII "T" Data Link Harness (A-AFIS507VSX-BP)

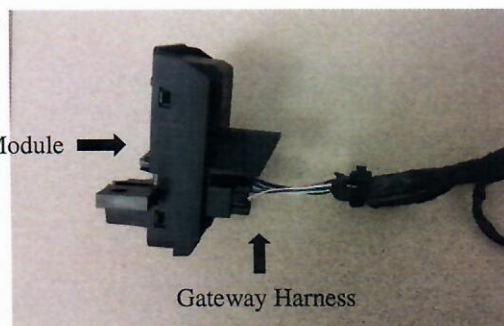
1. Locate the vehicle OBDII Data Link Connector, mounted below the lower left dash panel.
2. Remove the mounting screws for the OBDII connector. Plug the Red connector from the AFIS507VSX-B-P Data Link Harness into the vehicle's OBDII connector. Ensure the connection is fully seated and secure with the supplied wire tie.
3. Mount the Black pass through connector from the AFIS507VSX-B-P Data Link Harness in the former location of the vehicle's OBDII connector.
4. Secure the AFIS507VSX-B-P Data Link harness so that it does not hang below the lower dash and plug the 4-pin connector from the Data Link Harness into the 4-Pin connector on the AFIS507VSX-B module.



Ford 24-pin "T" Gateway Harness - 2017-2018 Ford F250 - F550 (B-AFIS507VSX-BP)

1. Locate the vehicles Gateway Module. It will be mounted below the lower left dash panel.
2. Remove the harness behind the Gateway module by pressing the locking tab and pulling outward.
3. Plug the Female side of the Intermotive Gateway Harness into the back of the Gateway module. Ensure the connection is fully seated and secured by the locking tab.
4. Plug the Male side of the Intermotive Data Link Harness into the Gateway harness.
5. Secure the AFIS Gateway harness so that it does not hang below the lower dash panel.

Gateway Module



Gateway Harness

AFIS Harness (8-Pin Connector)

Fast Idle Engage Input, Green wire

1. Attach the AFIS Harness connector Pin #8 Green wire to any equipment that provides a ground signal when the fast idle needs to be engaged. (PTO, pump, etc....)
2. Plug the 8-pin connector from the AFIS Harness into the 8-Pin connector on the module.

Note: The Green wire can also be connected to equipment providing a 12V signal, if programmed. See below for programming instructions.



VBAT Low Fast Idle Trigger Disable, Black wire loop

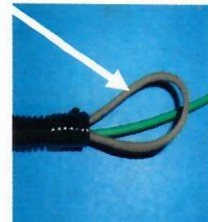
The system is configured from the factory for Fast Idle to be triggered when the battery voltage (VBAT) drops below 12.5V. If the VBAT Low Fast Idle Trigger is not desired, it can be disabled by cutting the Black wire loop on the 8-Pin connector between Pin #1 and Pin #3.



Configurable Idle Speed, Gray wire

The AFIS507VSX-B allows the user to change the fast idle RPM during installation. The default speed is 1500 RPM gas / 1200 Diesel, but any speed between 900 RPM and 2000 RPM can be selected in 50 RPM increments.

1. To change the idle speed, locate the Gray wire in the harness which connects to the 8 pin Molex connector.
2. Pull this wire out of the loom to expose the bare copper end. Place the vehicle in Fast Idle by grounding the Manual Trigger Green wire.
3. With the engine in Fast Idle, momentarily grounding the Gray wire (RPM Configuration input) increases the idle speed by 50 RPM. When the idle speed reaches the maximum allowable speed for the particular engine, it will roll back around to 900 RPM. Wherever the user stops, this RPM becomes the new default Fast Idle speed, even through key cycles.
4. After the vehicle is set to the desired fast idle speed, insert the end of the Gray wire into the harness tubing and use tape to secure.



Note: Some vehicle PCM's will limit Fast Idle to less than 2000 RPM. Continue to momentarily ground the Gray wire and the RPM will eventually roll back around to 900 RPM. Do not leave the RPM's set in a range that the engine RPM is not responding to, as this may cause Fast Idle issues.

Park Brake Fast Idle Trigger Enable/Disable

The AFIS507VSX-B is configured from the factory for Fast Idle **not** to be triggered when the Park Brake is applied. If the Park Brake Fast Idle trigger is desired, it may be enabled (or disabled) by the following procedure:

With key on, place the transmission in neutral, apply the Park Brake and press the Service Brake three times within 5 seconds.

Upon successful reprogramming, the on-board LEDs will briefly flash as a confirmation. Cycle the key for the change to take affect.

A/C Fast Idle Trigger

The AFIS507VSX-B is configured from the factory for Fast Idle to be triggered when the A/C clutch is engaged and will stay engaged until the next key cycle, or a precondition is violated.

Fast Idle Pin-8 Trigger, Active: Ground or 12V signal Enable/Disable

The module is configured from the factory for an active ground fast idle trigger. To change this to an active 12V trigger:

Turn the key on, place the transmission in neutral, apply the Service Brake, pull out on the Park Brake release and apply the Park Brake four times within 5 seconds.

Upon successful reprogramming, the LEDs will flash as a confirmation. Cycle the key for the change to take affect. Repeat to reverse back to a ground trigger.

Leave in vehicle
Operating Instructions AFIS507VSX-B Advanced Fast Idle System—Transit Application
2011-2019 Ford F250 - F550
2016-2017 Ford F650/F750

System Operation

The AFIS507VSX-B Advanced Fast Idle System (AFIS) elevates engine idle speed in response to a number of triggers in order to assist electrical or mechanical systems on the vehicle.

Fast Idle may be initiated by either a manual trigger (Green wire being grounded), a low battery voltage (low VBAT) condition, the A/C clutch engaging, or if enabled, by setting the Park Brake.

Fast Idle will only occur when the required preconditions are met, as listed below. Fast Idle operation will be terminated by a loss of **any** of the preconditions, or removal of the trigger(s).

Fast Idle Triggers		
Trigger Name	Trigger Conditions	Disable Conditions
Manual Engage	Fast Idle Engage Green wire grounded Or 12V input enabled (based on setting)	Fast Idle Engage Green wire not grounded Or not 12V based on setting
VBAT Low	VBAT < 12.5V	Precondition Violation
Parking Brake	Parking Brake applied	Parking Brake Released
A/C Boost	A/C Clutch (engaged)	Precondition Violation

Fast Idle Preconditions

The following preconditions must be met prior to initiating Fast Idle operation:

- Vehicle speed zero
- Transmission in Park
- Accelerator pedal must not be applied
- Engine Coolant temperature must be less than 230°F
- Engine RPM must be greater than 200 and less than 2800.
- Service Brake not applied

Factory Options - The following are configurable at the factory for OEM customers. The default values are shown.

AFIS507VSX-B

Idle RPM: 1500 gas / 1200 Diesel

VBAT Low: 12.5V

A/C Trigger: Enabled

Parking Brake Trigger: Disabled

Post Installation System Operation Test

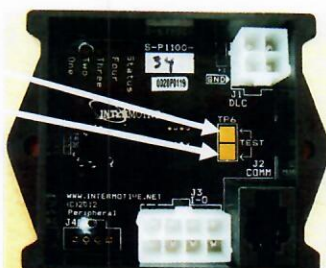
Perform the following tests before actually mounting the module, to allow easy viewing of the diagnostic LED's, if needed.

1. Place transmission in Park and start the engine. **NOTE:** Vehicle may enter Fast Idle if VBAT is low. Either wait to see if the battery charges and Fast Idle stops, or place a charger on the vehicle to disable the VBAT low trigger to allow testing of other triggers.
2. Manually engage Fast Idle by having aftermarket vehicle equipment ground the Green wire. Engine speed will increase to the set RPM level. If this does not occur, check harness connections. Also see diagnostics below.
3. When Fast Idle is engaged, keep the Green wire grounded, and depress the Service Brake for 1 second. Fast idle will temporarily disengage anytime the Service Brake is depressed, but will automatically reengage after approximately 2 seconds once the Brake pedal is released.
4. Place transmission shift lever in the "Neutral" position. (Green wire still grounded). Verify the system does not activate Fast Idle.

If the AFIS507VSX-B fails any of the above tests, check harnesses and review instructions, or check diagnostics below. If necessary, call InterMotive Technical Support at (530) 823-1048.

Diagnostics

Diagnostic mode is entered by momentarily shorting the two gold "Test" pads together on the module. The module provides diagnostic LEDs which illuminate according to the following table. To exit this mode, cycle the key or momentarily ground the "Test" pad again.



Fast Idle Status Codes

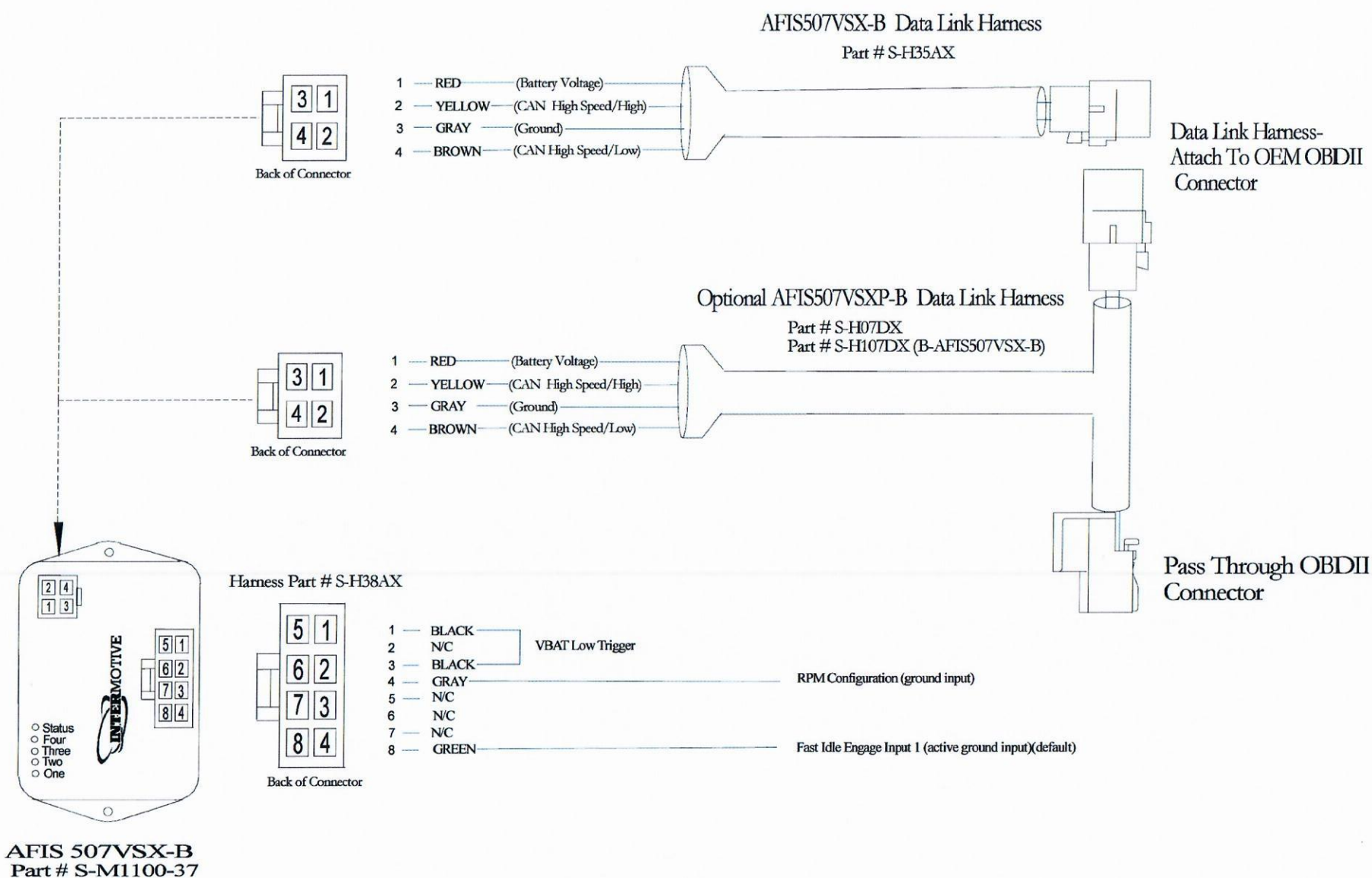
Status Codes provide the current status of the Fast Idle system. The on-board "Status" LED will flash a 2-digit code as shown in the table. The first digit will flash, wait half a second, flash the second digit, then wait one second before the next code. The Status Codes continue to flash until the module is reset (cycle key), or the test input is momentarily grounded again.

LED #	Diagnostic Mode LED Descriptions
1	On when fast idle is engaged
2	On when Green trigger wire is active
3	On when Gray RPM set wire is grounded
4	On when the Parking Brake is applied with the parking brake trigger enabled
STATUS	Continuously flashes two digit status codes. See Status Code table

AFIS Status Codes	
Status Code	Description
1-1	Ready for fast idle
2-3	Triggered: Parking Brake
2-4	Triggered: VBAT Low
2-5	Triggered: A/C Boost
2-8	Triggered: Manual Input
3-1	RPM > 2800
3-2	RPM < 200
3-3	TR not = to PARK
3-4	VSS not = to 0 MPH
3-5	Service Brake applied
3-7	Unsafe; Need to cycle TR
3-8	ECT > 230°F

Module Mounting

Ensure all harnesses are properly connected and routed, and are not hanging below the dash area. Mount the AFIS507VSX-B module using screws or double sided tape. Reinstall the lower dash panel.



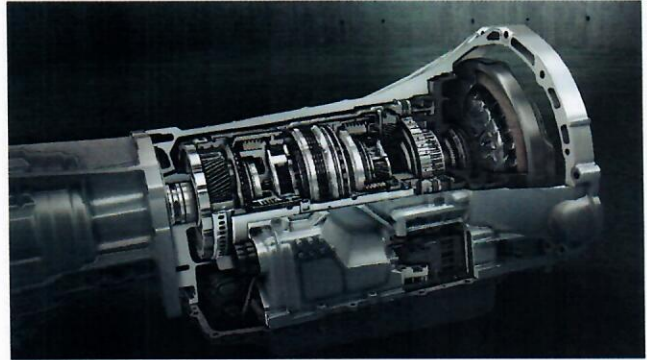
Submit product registration at www.intermotive.net

If the AFIS507VSX-B fails any step in the Post Installation Test, review the installation instructions and check all connections.
If necessary call InterMotive Technical Support at (530) 823-1048.

2021 Transit > Performance and Capability

10-Speed Automatic with Selectable Drive Modes

- This transmission is paired with all Transit engines
- Three overdrive gears and a wide 7.4:1 gear ratio span
- Integrated torque converter/turbine clutch helps reduce weight, while also reducing the packaging size of the transmission
- High-speed, one-way clutch helps deliver smooth and responsive shifting
- Engine rpm matching on coast-down shifts provides a seamless transition to lower gears — effective when cornering
- Integrated electric pump works with Auto Start-Stop Technology for seamless restarts
- Ultra-low viscosity transmission fluid and off-axis variable-displacement pump maximize transmission performance
- Utilizes real-time adaptive shift schedule algorithms which monitor more than a dozen powertrain- and driver-control signals to help ensure the transmission is in the right gear at the right time
- Progressive Range Select



DRIVE MODES

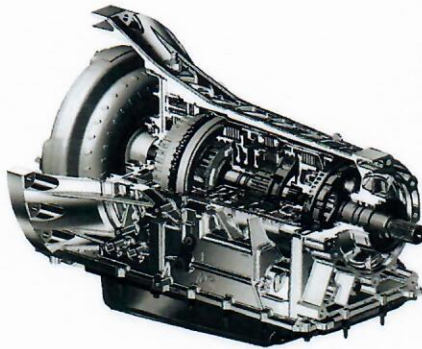
Drive modes change the performance of electronic stability control, traction control, engine throttle response, transmission shifting and steering feel. Select the desired mode using the button on the instrument panel.

- Normal — Balanced combination of comfort and handling for everyday driving
- ECO — Helps deliver enhanced fuel efficiency with trade-offs in performance and comfort
- Slippery — Designed for driving in slippery conditions
- Tow/Haul — Improves transmission operation with trailers and heavy loads, especially over steep grades
- Mud/Ruts — Ideal for muddy or rutted surfaces, such as a rain-soaked job site (All-Wheel Drive only)



MAKE THE POINT: SMART SHIFT LOGIC

Customers may notice that an Transit with the 10-speed transmission does not always shift sequentially. For example, the indicator gauge may change from displaying 1st to displaying 3rd. This is because of the smart shift logic with real-time-adaptive shift-scheduling algorithms which monitor more than a dozen powertrain-control and driver-control signals to ensure the right gear at the right time.



NOTE: For availability of product features, please see Availability by Model and/or the [Dealer Ordering Guide](#).

DINITROL 4941

Thixotropic Underbody coating

DINITROL 4941 / Car is an underbody coating used for complete or partial applications on the underbody of vehicles and other objects.

- » OEM references
- » Robust, universal film
- » Self-healing
- » Easy applied
- » Good abrasion resistance
- » Component protection



Equipment

DINITROL Spray Tool HS 1-P
Art. No. 1700700

DINITROL Pump unit for 20 L Pails
Art. No. 1705100

DINITROL Spray Tool UBS/HR GSI
Art. No. 1701900

DINITROL Airless Pump 1:26
Art. No. 1705900

DINITROL 4941

Art. No.	Size	Package	Color
11163	500 ml	Spray can	Black
11179	1 L	Can	Black
11160	5 L	Pail	Black
11178	20 L	Pail	Black
11177	60 L	Drum with plastic liner	Black
11176	60 L	Drum	Black
11175	208 L	Drum with plastic liner	Black
11174	208 L	Drum	Black
11480	900 L	Container	Black

a brand of



DINOL GmbH Pyrmonter Straße 76, D-32676 Lügde, Germany
Tel. +49 (0) 5281-98 2 98-0, Fax +49 (0) 5281-98 2 98-60, www.dinol.com

09.2019

All data and recommendations are the result of careful tests by our laboratories. They only can be considered as recommendation which correspond to the level of experience of today. The data are given in good faith. However, in view of the multiplicity of possible application and working methods we are not in a position to assume any responsibility or obligations deriving from the misuse of our products. Therefore, a contractual legal relationship is not justified, and there are no secondary obligations arising from any purchase contracts.

DINITROL 4941

Technical Details

Product description

DINITROL 4941 / CAR is a long term protective product. The product leaves a firm, black film with short drying time and good adhesion and flexibility on all metal surfaces, rubber and plastic parts.

Applications

DINITROL 4941 / CAR is an underbody product for use in the treatment of vehicles during production, at import plants and in aftermarket applications. When applied to a clean, dry surface, it adheres to both painted surfaces and those coated with a layer of PVC or similar material. Zinc, rubber and plastics are completely unharmed by the product. A clean and econo-

mic treatment on the line is assured by the product's ease of application and high dry matter content. DINITROL 4941 is also designed for use on spare parts, machines and iron and steel structures in highly corrosive environment. DINITROL 4941 is also very suitable as an anticorrosive coating for transport and ware-housing under extremely corrosive conditions.

Method of use

DINITROL 4941 can be applied by manual or automatic application equipment, airless or airmix. Recommended application and product temperature is 15 – 30°C.

Pre-treatment Substrates

DINITROL 4941 can be applied directly to clean, dry and corrosion free surfaces. If corrosion is present, DINITROL ML or a DINITROL cavity wax shall be applied before.

Over-Coating / 2-Layer-Application

DINITROL 4941 can not be over-painted. For additional information, please consult DINOL GmbH.

Technical Data

Colour	black
Type of film	hard, waxy
Density at 23°C	approx. 1100 kg/m ³
Viscosity at 23°C	800 mPas
Dry matter content	69% by weight
Flash point	36°C
Aromatic content in solvent	0,5%
Recommended film thickness wet	700 µm
Recommended layer thickness	300 – 500 µm
Drying time	6 – 12 Stunden through dry
Low temperature adhesion	-20°C
Removability	Hydrocarbon solvents
Heat resistance	130°C
Salt spray resistance, 300 µm	1500 hours
Available in	1 L Mini service / 20 L Pail / 60 L Drum / 208 L Drum / Container

For all relevant safety advices please read the material safety data sheet or the packaging label.



SERVING THE BUS TRANSPORTATION INDUSTRY
4121 Eastland Dr
Elkhart, IN 46516
Phone: 574-522-5000; FAX: 574-522-9099

Care and Keeping of the A&M Systems Door Actuator System

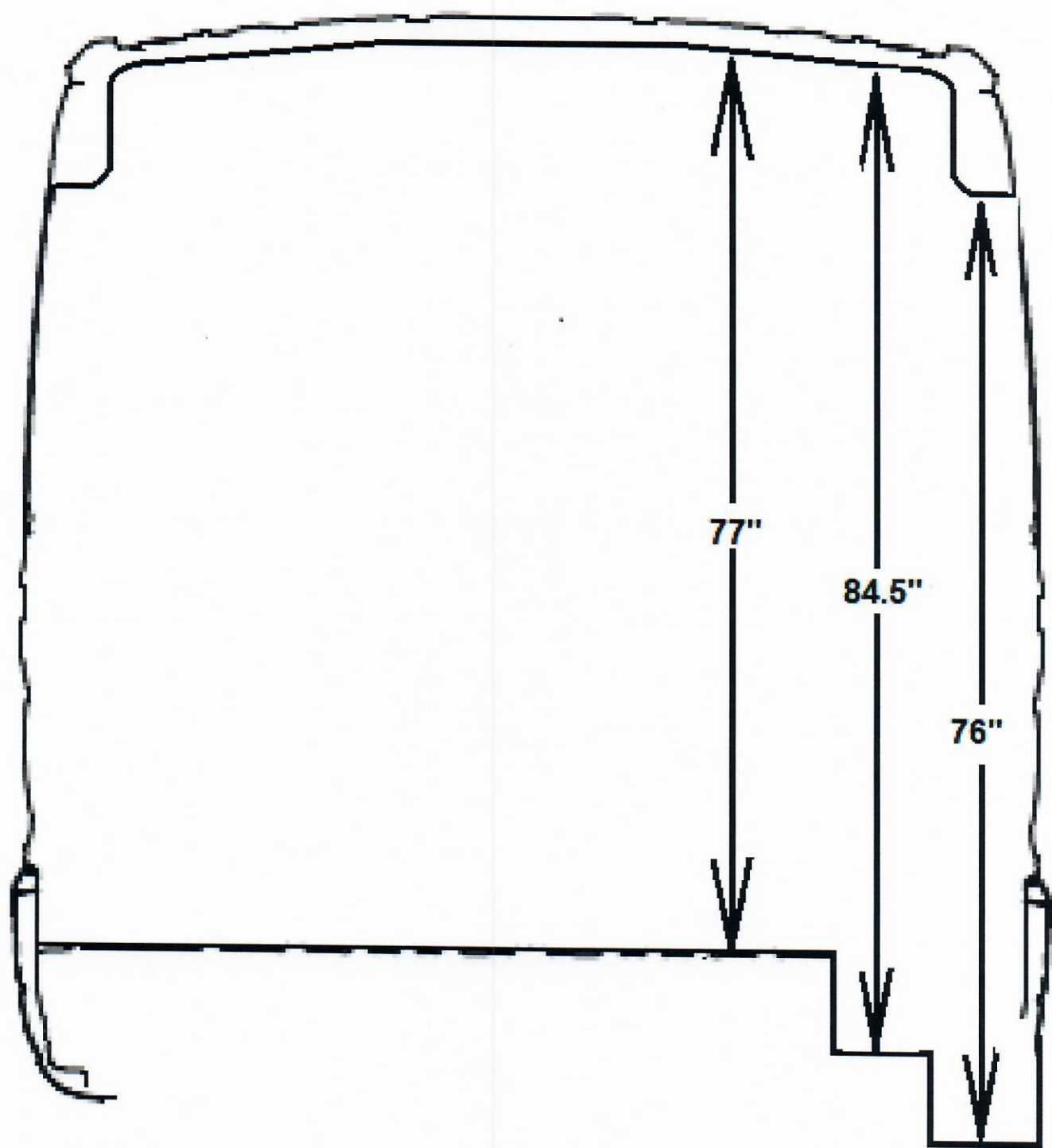
Six-month Actuator Maintenance Schedule

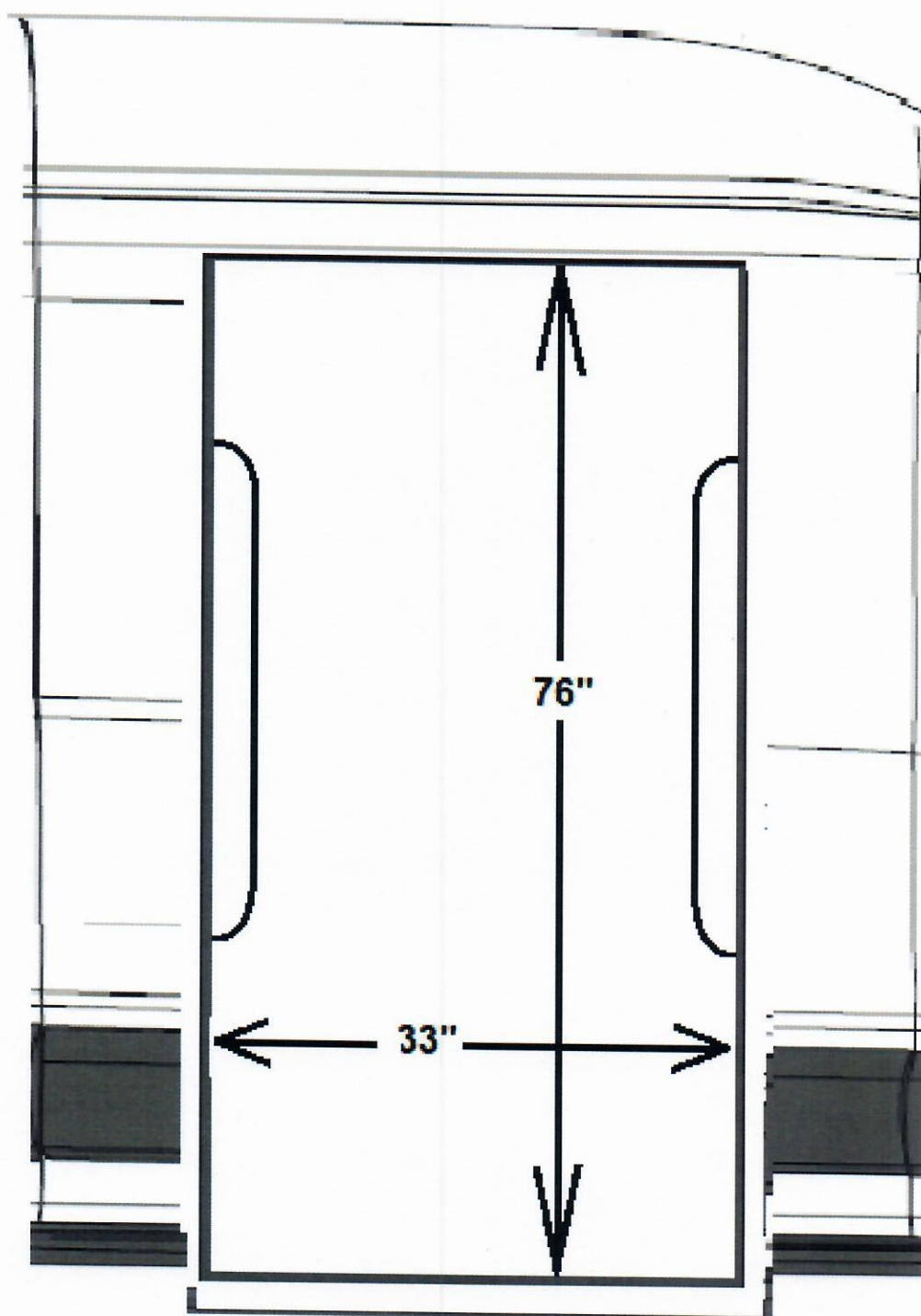
1. Lubricate the main gears with white lithium aerosol grease at time of installation of the door system and each 6 month interval.
2. Lubricate all other moving parts with white lithium grease.
3. Inspect the open limit switch actuating tab for proper adjustment. Ensure that it is limiting the operator from driving the doors past 90° open position. Ensure that there is a gap between the bolt assembly on the gears and the gear stabilizer. Adjust as required, see DOC00007 Electric Rigging Instructions.
4. Inspect the operation of the current sensing system built into the motor control board. The red LED must illuminate when the door reaches the fully closed position.
5. Test the Auto Reopen (if equipped). Place a solid non-marring object approximately 12" across in the door travel and close the door. The door should reopen after making contact with the object. Inspect for adjustment and repair/replace as necessary.
6. Inspect for bent push-pull rods; replace as necessary.
7. Inspect entire system for lost motion and worn mechanical components. Replace or adjust as required.
8. Inspect the entire system for loose fasteners or components. Repair as required. See DOC00112 Service Bulletin 3-8-17
9. Inspect for tightness of the set screws binding the actuator arms to the door leaf drive hex. Tighten or replace as needed.
10. Inspect manual release lever for proper operation. Lubricate the shaft running through the center of the body with white lithium grease.
11. With manual release lever pulled inspect doors for smooth unobstructed operation by hand. Repair/Lubricate as necessary.
12. Inspect motor and gears for missing, cracked, and/or broken teeth.
13. Inspect actuator arms for bent or cracked parts. Replace as necessary.
14. Check circuit board operation. See DOC00033 - Quick-Check PC Board Troubleshooting Guide
15. Inspect for frayed, broken, and/or pinched wires. Replace as required.

Six-month Door Leaf Maintenance Schedule

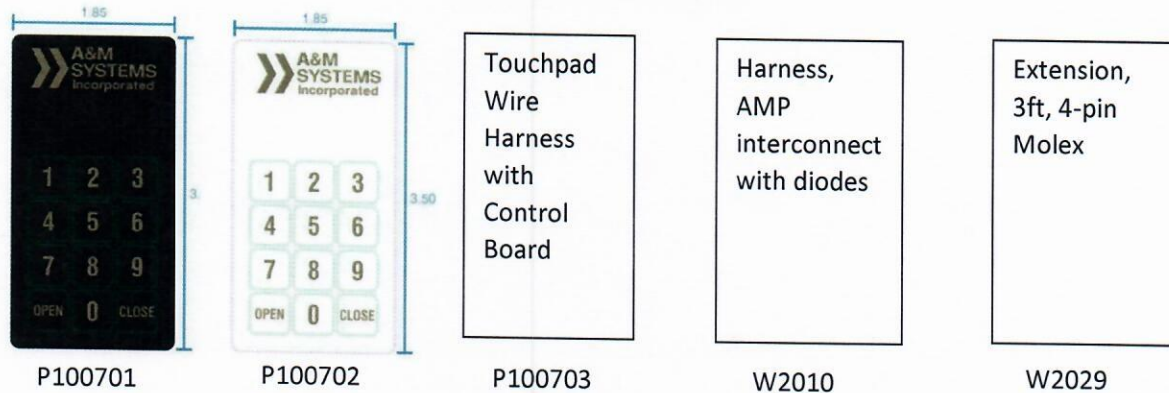
1. Inspect all door frame mechanical joints for looseness. Tighten as required.
2. Inspect Torque Arm attaching rivets for looseness. Replace as required.
3. Inspect Torque Arm shaft for twisting or distortion. Replace as required.
4. Inspect lower door hinge pivot for any defects and repair or replace as required.
5. Inspect door assembly bolts for corrosion. Replace as necessary.
6. Inspect lower pivot mounting bolts for corrosion and replace as necessary.
7. Inspect door leaf center overlap seal for damage. Clean only with a mild detergent.

For additional detail information please visit our website at: www.anmsystems.com





Touchpad Installation and Programming Instructions

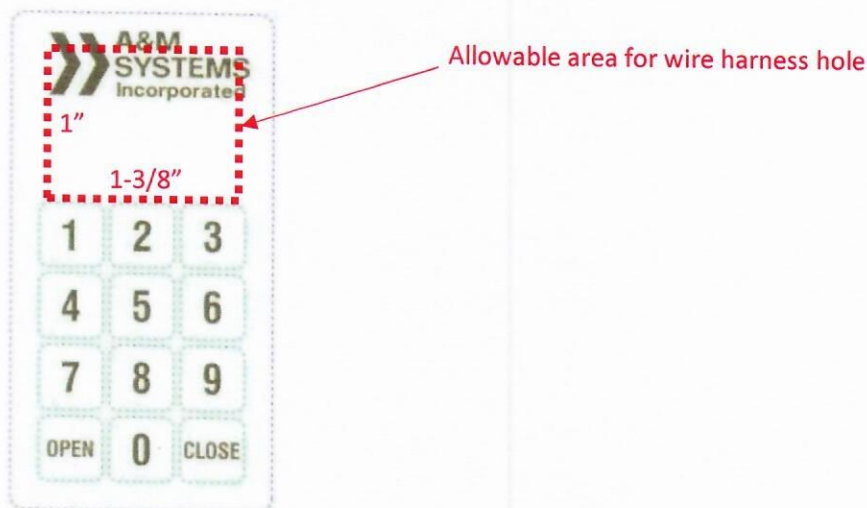


General Information

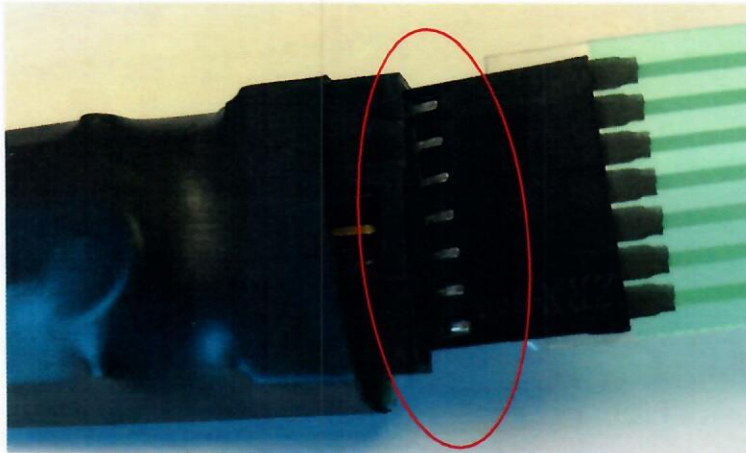
The adhesive used in these touchpads is 3M 9500PC PET adhesive. This is ideal for bonding metals, glass, and plastics both coated or non-coated and has good chemical resistance. Adhesion to wood or other porous materials is not recommended.

Touchpads are available in black or white, each with gold lettering. See above for valid part numbers.

Touchpads must be mounted on a clean, oil-free, smooth, burr free solid surface. A hole or slot of at least 7/8" should be located in such a way that is covered completely by the top of the touchpad and at least 1/4" of adhesive is between the hole and the outside of the touchpad.



Careful consideration should be taken when feeding the ribbon cable through to hole in the vehicle. Best installation practice would be to not allow the ribbon cable to come into contact with the edge of the hole. If fretting is a concern, reinforce the cable with nylon-reinforced tape to avoid damage to the ribbon cable. When connecting the ribbon cable to the controller harness, press firmly. If disconnection is a concern, tape the connection together to avoid disconnection in the wall. The ribbon cable is able to be plugged-in upside down. Doing so will change the button presses and it will not function correctly. Use the diagram below to be sure the ribbon cable is plugged-in correctly.



The touchpad will still function if the ribbon cable is plugged-in upside-down but the inputs will be wrong. For instance, the code 4-1-2-1 will turn into "Close"-9-8-9 with the "4" button acting as the "Close" button and "6" acting as the "Open" button. A chart of the labeled buttons vs actual inputs is located at the end of this document. If this occurs, remove the ribbon cable and insert it right-side up as shown above and all will be well.

Route the harness in such a way to avoid sharp corners and other areas that would cause fretting of the insulation and potential failure. Use the provided double-sided tape and adhere the control box to a solid surface somewhere where it will be accessible when needed but out of the way of any other parts that might be affected by it or that could affect its performance. The mounting surface should be clean, oil-free and smooth to provide the best adhesion. Insert coach 4-pin wire harness into female 4-pin plug on touchpad harness P100703. Plug male 4-pin connector from wire harness P100703 into A&M Systems PC Control Board.

NOTE: This device will back feed 12v +DC through the input signal. If this is not desired, use wire harness W2010 to eliminate the back feed. If your signal wires are grounded in the normal state, W2010 is also required.

Programming

The factory default code is 4-1-2-1.

By default, the touchpad is in a locked state. A code is entered to unlock the “Open” and “Close” functions. Once unlocked, if no key is pressed for 10 seconds, the touchpad will revert to a locked state and the programmed code will need to be re-entered.

Programming the Unlock Code

While the factory default code is set as 4-1-2-1, it is recommended that this be changed.

In order to do so, enter the following:

- 1) Enter the current programmed code (default code is 4-2-1-1) on the touchpad to place it in an unlocked state.
- 2) Enter 5-6-7-8 to enter the code reprogramming stage.
- 3) Enter your new 4-digit code. Only the last 4 numbers pressed will be recorded. Press Open when done.
- 4) Re-enter the same 4-digit code remembering that only the last 4 digits will be recorded. Press Close to confirm and save the code. Note: The new 4-digit code will only save with both codes entered are identical. If the codes are not identical, the previously programmed unlock code will remain in effect.
- 5) The touchpad will immediately go back to the locked state. Unlock it by entering the new code or if an error was made, the previous programmed code.

If the programmed code is not known or a new one desired:

- 6) Press and hold the button located on the top of the control box, attached to the interior wire harness by using a dull, non-metallic object for 5 seconds.
- 7) The code is now reverted to the default code of 4-1-2-1.
 - 8) If a new code is desired, follow the above directions 1-5 above.

For troubleshooting only. Use this table as a reference if touchpad is plugged-in incorrectly.

Touchpad Button Label	Actual Input
1	9
2	8
3	7
4	Close
5	0
6	Open
7	3
8	2
9	1
0	5
Open	6
Close	4

DRAWING NOT TO SCALE

W3131

W2029

36"

W2010 Pigtail MUST
Be Used With All
Systems With Signal
Wire Grounded In
Normal State. See
A&M Systems for Details
Before Use or Damage
Will Occur.

P100703, Wire Harness
and Control Board

P100701, Touchpad Black
P100702, Touchpad White

84"



TITLE
DOC00154, Touchpad Wiring, Flexible with
Control Board
MAT'L SPEC.

PART NUMBER

PAGE

1 OF 1

NEXT ASSY.:

SUPERSEDES:

DO NOT SCALE DRAWING

DRAWING NOT TO SCALE

THIS DRAWING IS THE PROPERTY OF A&M SYSTEMS, INC.
AND IS NOT TO BE DUPLICATED OR USED IN ANY WAY
DETRIMENTAL TO THEIR BEST INTEREST.

RELEASE TO PRODUCTION

DESCRIPTION

DRAWING INFORMATION

DRAWN: bmliller

DATE: 11/8/17

SCALE: 1:2

CKD:

SIZE: A

WT.:

TOLERANCE UNLESS SPECIFIED

Fractions: $\pm 1/32$

Decimals: $\pm .005$

Angles: ± 1 Deg.



Technical Information

The **WARM WELCOME**® silicone rubber-insulated heaters are produced in a wide variety of sizes and in various voltages, but all share certain important similarities.

The heaters consist of one or more wire elements laminated and vulcanized between two plies of .026" thickness silicone rubber-impregnated fiberglass cloth. The heater may have holes for mounting screw clearance, or may have an acrylic pressure-sensitive mounting adhesive on one side. Lead wires of a suitable gauge, length and exit location are crimped to the element wires, and the lead exit is patched with additional silicone/fiberglass cloth.

The silicone rubber/fiberglass cloth material is a unique inorganic rubber suitable for use at temperatures from 100°F to +400°F. The silicone rubber is extremely resistant to acid, alkalis, ozone, water, fungus and most common solvents. Silicone will swell after long-term contact with some hydrocarbons, and is degraded by Xylene and KOH.

Heaters made with silicone/fiberglass cloth insulation are routinely U.L./C.S.A.-listed at wattages of 5 watts per square inch (/sq. in.) and operational temperatures of 350°F. In special cases, watt density may exceed 20 watts/sq. in. The **WARM WELCOME**® heaters operate at less than 1 watt/sq. in. and can be considered to be very conservatively de-rated.

The silicone rubber used in our heaters is non-toxic, fire-retardant and self-extinguishing. The very thin, .026" thickness of the silicone rubber provides over 2000 volts dielectric strength—many times the operating voltages used by our customers. Other heaters we produce for industrial applications operate at 220 and 480 volts.

The wire element in our heaters may be damaged by rough handling; in particular, repeated foldings which may break the internal wires. In typical customer use, this is not characteristic. The heaters are designed to withstand a five-pound pull on the lead wires, and should be installed with appropriate attention to preventing excessive strain on the lead exit. Also, the heaters should not be cut or pierced with sharp tools and should be protected accordingly. The heaters are not adversely affected by pressure as they are basically void-free laminates of fiberglass cloth, rubber and wire, and have operated well at pressures of several hundred pounds per square inch.

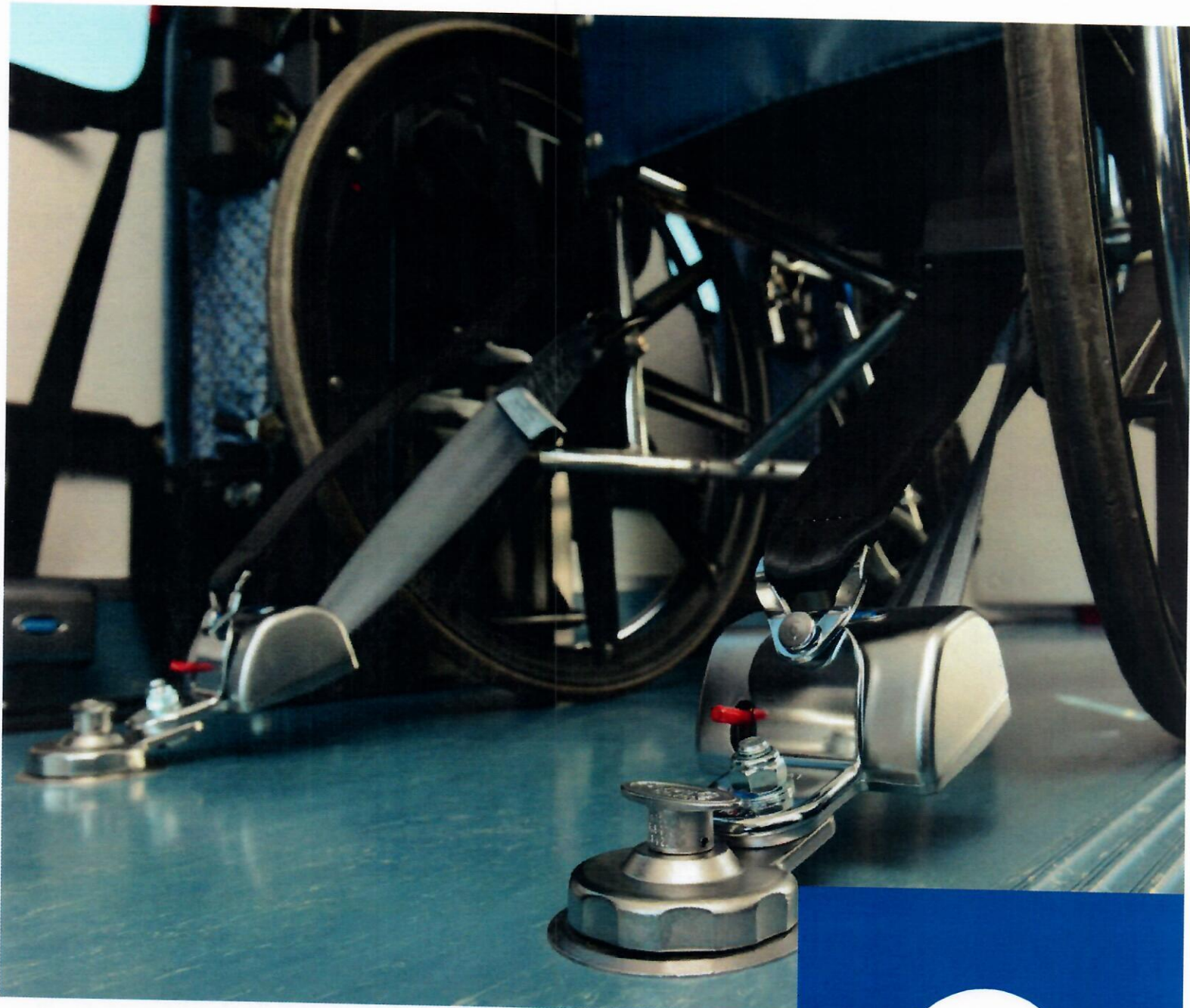
Lead wires are typically 19-strand, and may be insulated by Teflon® or silicone rubber. Other available constructions such as U.L.-type HPN cable or SJO-type cable are available. In general, the silicone rubber does not bond intimately with Teflon® or neoprene lead wire insulation, and heaters are not intended to be immersed in conductive liquids for long periods.

Heaters that have been damaged due to pulled-out lead wires may be repairable. Damage due to cuts through internal wires is not repairable. Punctures or scuffs that do not affect the heater resistance may be repaired with silicone RTV.

The superiority of the **WARM WELCOME**® Step Tread Heaters over other de-icing methods is evident in a number of ways:

1. **No moving parts** result in virtually maintenance-free operation.
2. **No more chipping ice** accumulations off the steps by your drivers.
3. **Eliminates the need for salt or other chemical de-icers** which compromise the integrity of your step wells.
4. **Eliminates the need for sand**—extends the life of your treads and helps enable you to meet air quality standards.
5. **Maintains the "grip" of your step treads**—prevents rubber from hardening in winter weather.
6. **Environmentally compatible**—virtually no environmental impact.
7. **Directly heats the treads**—far more efficient than indirect hot air employed by blowers.
8. **Reduces liability claims.**
9. **Available through all U.S. and Canadian manufacturers.**

QRT[®]-1 SERIES



MAX / DELUXE / STANDARD
4-POINT SECUREMENT
WHEELCHAIR RETRACTORS



QRT-1 SERIES

The Securement System That Changed Everything

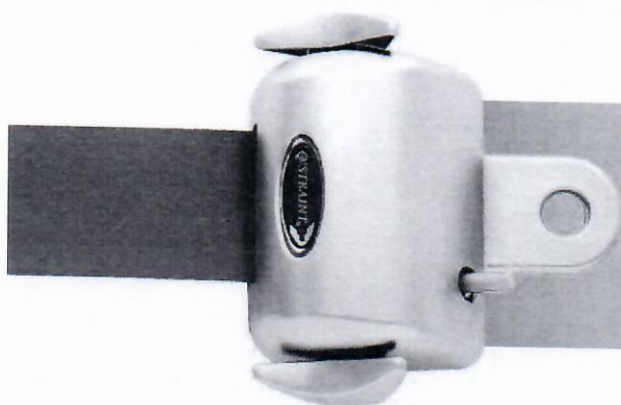
The original 4-point wheelchair securement system, QRT-1 Series retractors defined the way passenger safety devices are designed and tested.

With a range of 3 different options to fit every need and every budget, the QRT-1 Series of retractors offer easy to use, effective 4-Point securement of wheelchairs for virtually any vehicle application.



QRT MAX

FULLY AUTOMATIC, premium knobless retractor that allows for one-handed operation.



QRT DELUXE

SELF-LOCKING & SELF-TENSIONING retractor with ergonomic housing and dual tensioning knobs.



QRT STANDARD

SEMI-AUTOMATIC retractor that meets all industry standards and specifications.



More than 30 years ago, Q'STRAIT introduced the world's first fully integrated 4-Point wheelchair passenger securement system, now an industry standard the world over.

The QRT line of retractors are the linchpin of that system.



Every QRT retractor is fully ADA complaint, and meets or exceeds all standards and regulations, including:

- SAE J2249, ISO 10542,
- FMVSS 209, 302, 210, 222
- CMVSS 209
- CSA Z605
- and 30mph/20g crash testing

Anchorage Options

All QRT-1 Series Retractors are compatible with L-Track, L-Pockets and Slide 'N Click anchorages, or may be directly mounted to vehicle floors, seat legs or barriers.



L-TRACK / L-POCKETS

For kits that use L-Track or L-Pocket anchorages, QRT Series retractors feature our patented Positive Lock Indicator (PLI) that clearly indicates when the fitting is locked in the anchorage.

SLIDE 'N CLICK

For kits that include Slide 'N Click anchorages, QRT Series retractors feature a single-bolt SNC assembly and plunger that allows a full 360° rotation, eliminating anchorage alignment guesswork.

QRT-1 SERIES FEATURES COMPARISON

	MAX	DLX	STD	
No knobs to interfere with wheels and footrests.	○			
Provides additional tensioning if needed.		○		
Provides additional tensioning if needed.			○	
Allows easy, one-handed hook-up.	○	○		
Retractors automatically take up 'slack'.	○	○		
Patented feature clearly indicates when fitting is locked in anchorage.	○	○	○	
Eliminates confusion: no right, left, front or rear locations.	○	○	○	
Elimination of mounting bracket allows retractors to fit under most footrests.	○	○	○	
Reduced overall length leaves more room for wheelchairs.	○	○		
Hardened steel and coated zinc for maximum corrosion resistance.	○	○	○	
Accommodates virtually all wheelchair designs, including scooters.	○	○	○	
Reduces twisting of belts and ensures proper securement for all wheelchair designs.	○	○	○	
Easy release eliminates the stress of bending down.	○	○	○	



WWW.QSTRAINT.COM/QRT-1-SERIES

© 2017 Q'STRAIT®, All Rights Reserved.
Q'STRAIT®, Q'STRAIT® logo, QRT-SERIES® and QRT™ are registered trademarks of Q'STRAIT®, Inc.

Q'STRAIT EUROPE

72-76 John Wilson Business Park
Whitstable, Kent, CT5 3QT
United Kingdom
Tel: +44 (0)1227 773035
Fax: +44 (0)1227 770035
Email: info@qstraint.co.uk

Q'STRAIT AMERICA

5553 Ravenswood Road, #110
Ft. Lauderdale, FL 33312
Tel: 800-987-9987
Fax: 954-986-0021
Email: qstraint@qstraint.com

Q'STRAIT AUSTRALIA

Tramanco Pty Ltd.
21 Shoebury Street,
Rocklea, Australia, QLD. 4106
Tel: +61 7 3892 2311
Fax: +61 7 3892 1819
Email: info@tramanco.com.au

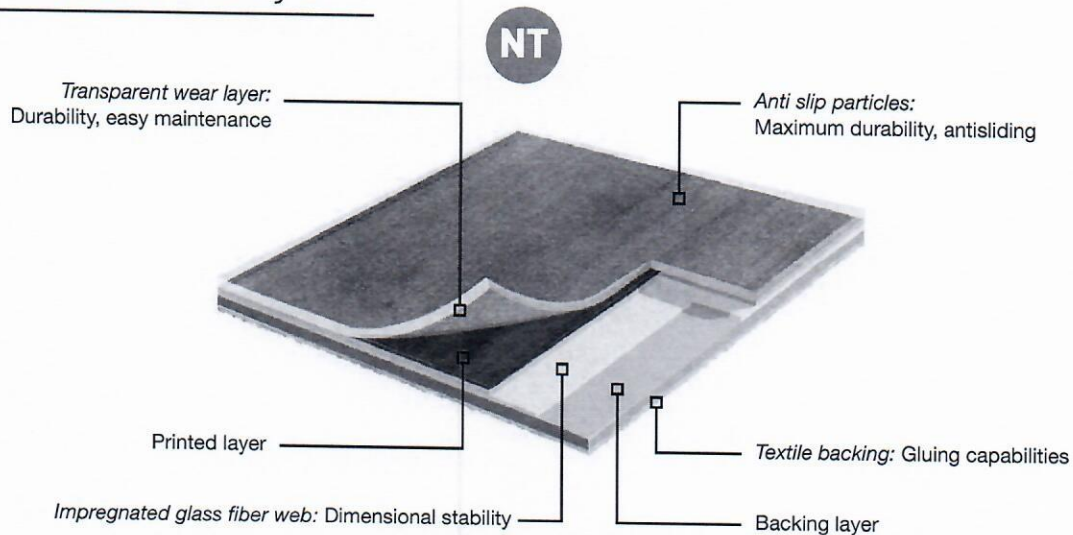


TARABUS

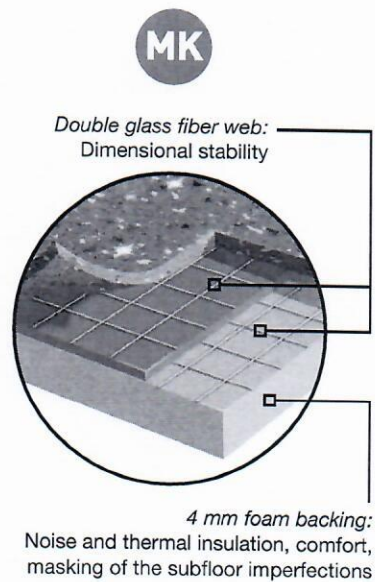
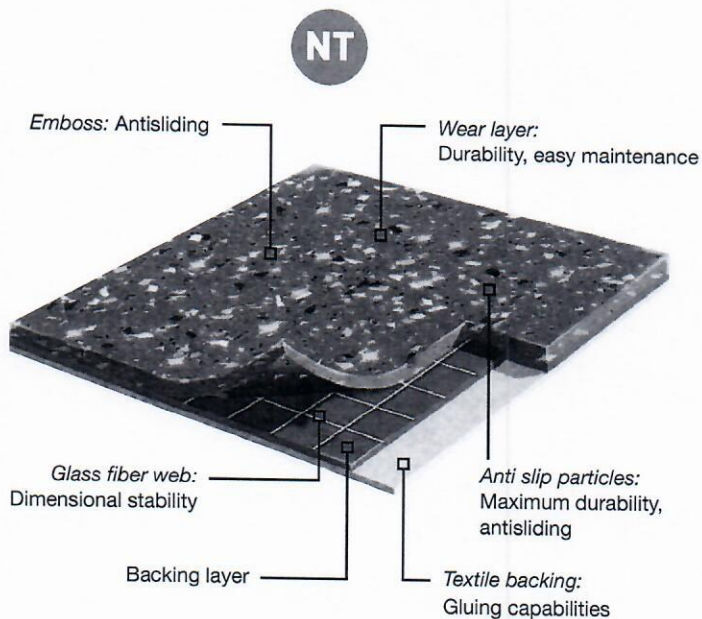
BUS & COACH FLOOR COVERINGS

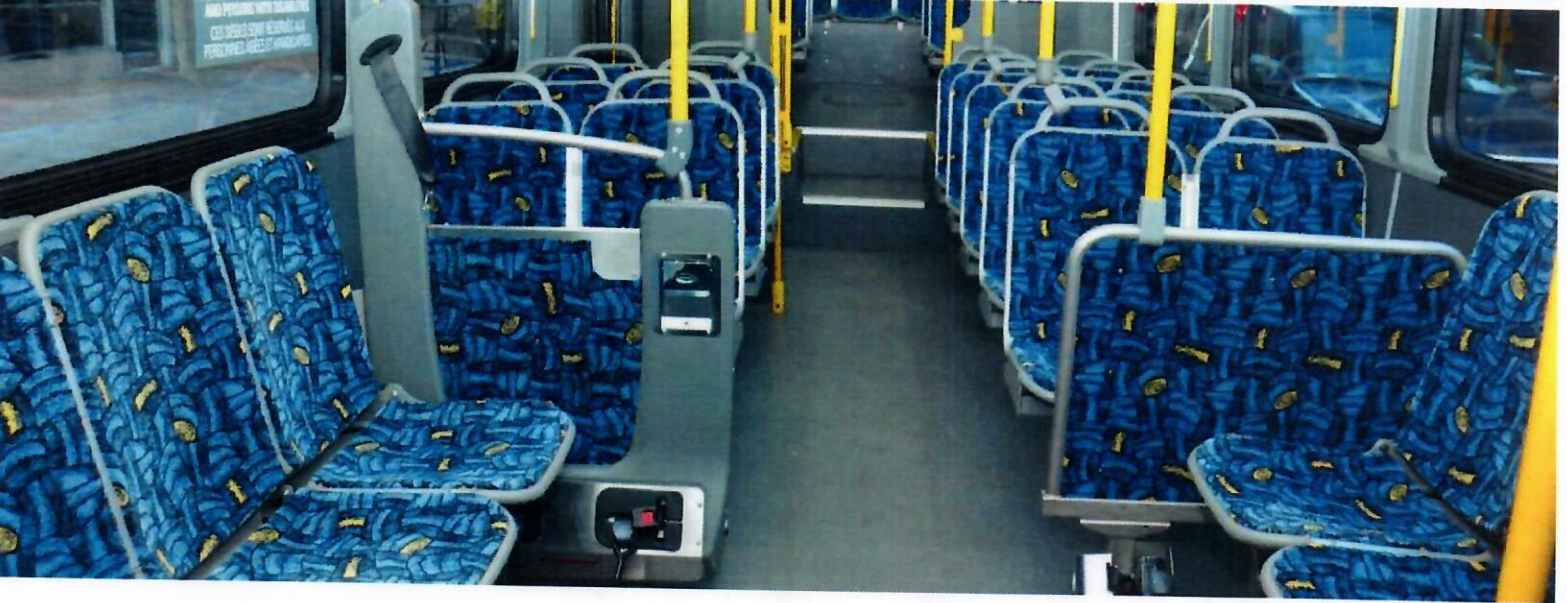
Gerflor®
theflooringroup

► Tarabus Gaya

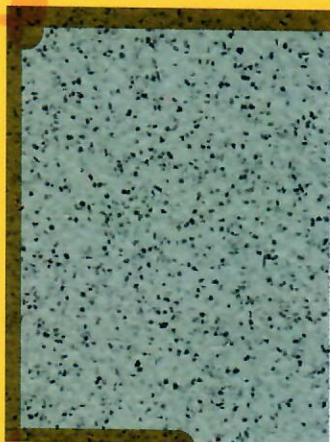


► Tarabus standard





SIRIUS



NT

6768 Griffon



NT

6782 Dune



NT

6451 Corsaire



NT

6727 Anthracite



NT

6801 Graphite

APOLLO



MK

NT

4776 Masan



MK

NT

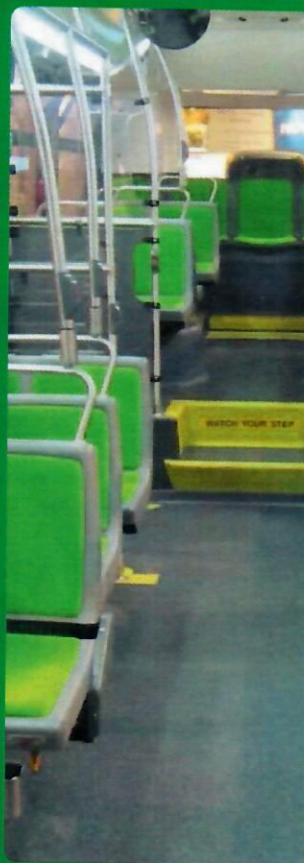
4479 Kilimanjaro



MK

NT

4517 Fuji



05/2012

GERFLOR USA

595 Supreme Dr

Bensenville 60106 IL USA

Tel: 877 GERFLOR (437 3567)

Fax: 847 394 3753

tarabus@gerflor.com

tarabusbygerflor.com

Gerflor[®]
theflooringgroup

FEATHER WEIGHT

**MID-HI SEAT
"ROCK SOLID"**



Sustainable Seating Solutions

Freedman Seating Company's Feather Weight seats are designed to be like feathers on a bird: light and airy to satisfy weight restrictions and ensure a smooth ride, yet durable for years of service and low maintenance.

Freedman Seating Feather Weight seats are the most severely tested in the company's history, and meet all applicable federal motor vehicle safety standards for strength and safety (including 210 for seat belts).

Less weight means one thing to bus builders and operators: they can get more passengers per bus.

And when we say more passengers, ***we mean more happy passengers.***



Not Just Seats



Seating Solutions™

THE FEATHER WEIGHT SERIES BY

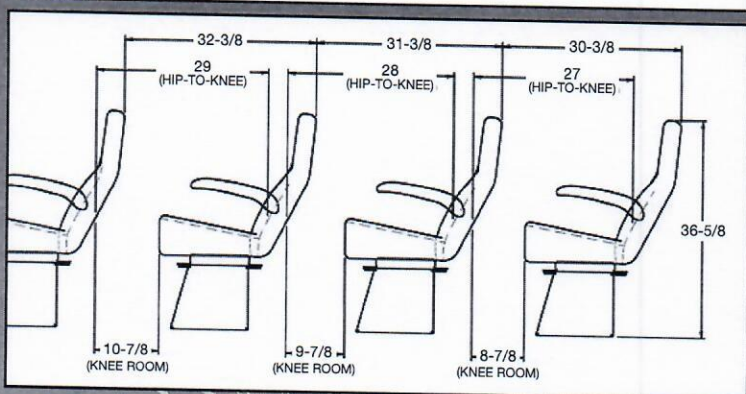
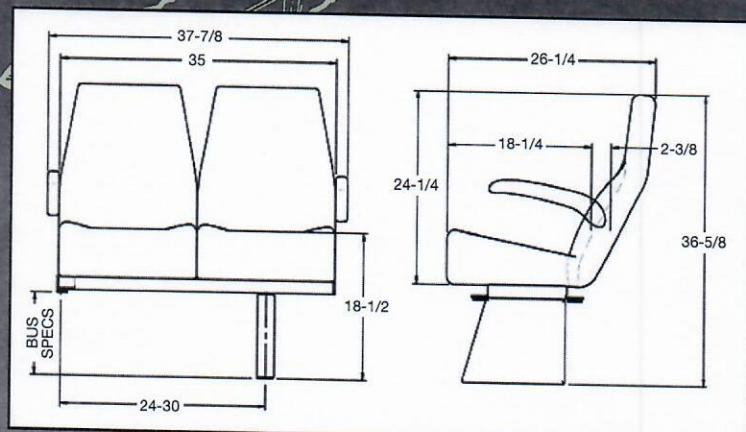
FREEDMAN

SEATING COMPANY

an ISO 9001:2000 certified company

FEATHER WEIGHT

MID-HI SEAT "ROCK SOLID"



OPTIONS



PILLOW SEAT



SNACK TRAY



FOOTREST



Not Just Seats



Seating Solutions™

FREEDMAN

SEATING COMPANY

an ISO 9001:2000 certified company

4545 W. Augusta Blvd., Chicago, IL 60651
(773) 524-2440 (800) 443-4540 Fax (773) 252-7450
e-mail: sales@freedmanseat.com
WWW.FREEDMANSEATING.COM

Sustainable Seating Solutions

Whether your bus is for tour/charter, para-transit, or shuttle, Feather Weight Mid-Hi works for you. Optional adjustable headrests and reclining back-rests give you luxuries for long journeys, while grab rails and ABS plastic backs provide the function and safety required for shorter trips. The ultra-thin backrest gives outstanding support and creates more hip-to-knee room than any other seat in its class. The steel frame system meets or exceeds all applicable government standards for safety and durability. And, it's light as a feather!

Feather Weight Mid-Hi features include:

- An ultra-thin *Knee-Saver* type backrest for added hip-to-knee room and lumbar support
- Molded polyurethane seat and back cushions for comfort and long lasting support
- 17½" wide seat cushions
- 22½" back height off the seat cushion, 37" off the floor
- Wire mesh-grid seat springs for even support
- FMVSS 210 compliance—all *Feather Weight* seats are seat belt ready
- Transit style—rigid backrests (starting weight without options—43 lbs.)
- Touring style—reclining backrests (starting weight without options—47 lbs.)
- Covers that can be removed and replaced easily and without the use of special tools

Feather Weight Mid-Hi options include:

- Black molded *U.S. Arms* or upholstered flip-up armrests
- Adjustable headrests
- Black or yellow corner AV grab rails
- Black or yellow top AV grab rails
- ABS plastic backs
- Mesh map pockets
- Vertical stitching
- FTA foam
- Snack trays
- Aluminum folding footrests
- Pillow seat cushions
- Rear row quick disconnect
- Side sliders
- 16", 18" or 19" wide seats available
- Rigid or reclining backrests
- Seat belts
 - Non-retracting seat belts
 - Retracting seat belts
 - USR (Under Seat Retractors)
- S3 Bio-Cushions (Made with vegetable oil)
- A wide variety of cloths and vinyls
- S3 cloths (Made with recycled yarn)

We are constantly updating and improving our seats; therefore we reserve the right to change or modify specifications or materials without notice. All Freedman Seating Company seats meet or exceed FMVS standards.

ISO 9001:2000 registered



Keops Verde
#62000105
Combo #107
w/Docca Beige



Docca Sand Beige
#62000106
Combo #107
w/Keops Verde



Keops Azul
#62000100
Combo #102
w/Tropicana Azul



Tropicana Azul
#62000101
Combo #102
w/Keops Azul



Tropicana Grey
#62000103
Combo #104 w/Keops
Azul Inserts

MEDALLION

LEVEL 3.5 VINYL

The Medallion vinyl product line by CMI offers the Bus market an excellent selection of patterns, and colors with long lasting durability.

FEATURES

- Antibacterial
- Antimicrobial
- Water Resistant
- Mildew Resistant

SPECS

- Abrasion: 30,000 double rubs
- Cold Crack: -10 degrees
- Weight: 29 oz. per linear yard
- Protected with double finish to achieve over 1,000 hours of ultraviolet resistance.

CLEANING

Wipe clean with a damp cloth or soap and water. Do not use harsh chemicals.

FREEDMAN

T.D.S.S.

Tie-Down Storage System

Tie-Down Storage System and Retrofit kits

- Eliminates need for bulky storage bags or boxes
- Belts storage is quick and easy on the bottom of a Foldaway Seat
- Belts stay clean and easily accessible
- Decreases wheelchair tie down time—belts are right there
- No belt storage on floor
- Less chance of lost belts
- Works with standard "L" track fittings and the Q'Straint Slide n' Click
- Available on Freedman Seating AM and BV Foldaways
- TDSS Retrofit kit is simple and easy to install with basic hand tools and requires no drilling or welding



Seat shown is a high/back BV Foldaway.



TDSS-L



TDSS-SC

- TDSS-L Option to have TDSS for "L" track fittings on a foldaway
- TDSS-LR Retrofit kit to add the TDSS for "L" track fitting on a foldaway
- TDSS-SC Option to have TDSS for Slide n' Click fittings on a foldaway
- TDSS-SCR Retrofit kit to add the TDSS for Slide n' Click fittings on a foldaway

Not Just Seats



Seating Solutions™

FREEDMAN

SEATING COMPANY

4545 W. Augusta Blvd., Chicago, IL 60651
 (773) 524-2440 (800) 443-4540 Fax (773) 252-7450
 WWW.FREEDMANSEATING.COM
 e-mail: sales@freedmanseat.com

We are constantly updating and improving our seats; therefore we reserve the right to change or modify specifications or materials without notice. All Freedman Seating Company seats meet or exceed FMVS standards.

Belts not included.

FEATHER WEIGHT

MID-HI FLIP SEAT "ROCK SOLID"



The *Feather Weight* Mid-Hi Flip Seat has everything you would expect in a fixed seat: comfort, strength, style and value, with none of the compromises you expect in a flip seat. Designed to take advantage of every inch of bus space, the angle of the backrest can be adjusted for either forward facing or aisle facing configurations. The seat cushion locks in both the up and down position, and is easily released with just the pull of one lever. And like all Freedman Seating *Feather Weight* Seats, the Mid-Hi Flip meets all applicable Federal Motor Vehicle Standards for strength and safety (including 210 for seat belts*).

The *Feather Weight* Mid-Hi Flip Seat...you'll flip for it!



Not Just Seats



Seating Solutions™

THE FEATHER WEIGHT SERIES BY

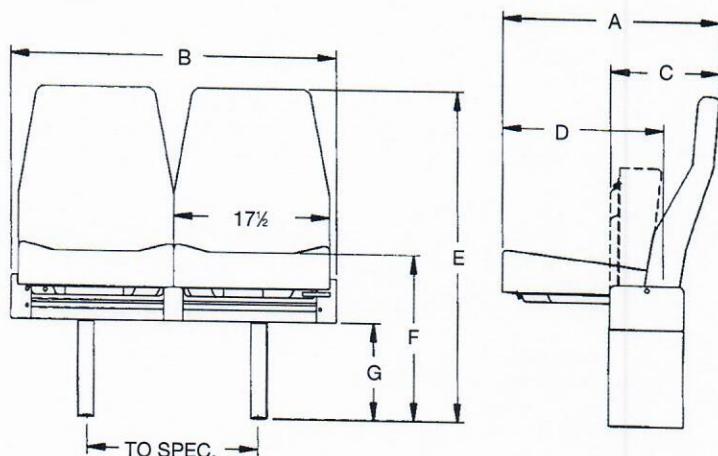
FREEDMAN

SEATING COMPANY

an ISO 9001:2000 certified company

FEATHER WEIGHT

MID-HI FLIP SEAT "ROCK SOLID"



MODEL	WEIGHT	A	B	C	D	E	F	G
Single Mid-Hi Flip Seat	40 lbs.	24-25%	18%	11%-13%	18	36%	18	10%
Double Mid-Hi Flip Seat	59 lbs.	24-25%	36%	11%-13%	18	36%	18	10%
3 Place Mid-Hi Flip Seat	82 lbs.	24-25%	53%	11%-13%	18	36%	18	10%

All sizes in inches.

The Freedman Feather Weight Mid-Hi Flip Seat gives your riders comfort and style where they never expect it - a flip seat! Available as a single, double, or triple, the Mid-Hi Flip can be ordered with grab rails (top or corner), flip arms, ABS plastic backs, and more. The seat cushion locks in both the up and down position and is protected by an attractive ABS trim piece when folded up. The legs are adjustable to facilitate easier installation, and the angle of the backrest can be adjusted to maximize every inch of space. The Feather Weight Mid-Hi Flip Seat...you'll flip for it!

Feather Weight Mid-Hi Flip Seat features:

- Seat belt ready (FMVSS 210 compliant*)
- "Knee Saver" style backrest providing increased hip-to-knee room, lumbar support, and back angle adjustment
- High quality polyurethane seat and back cushions for comfort and long lasting support
- Flex-o-lator grid seat springs for even support
- Positive locks to hold seat cushion up or down
- Bolt-on legs that are infinitely adjustable
- An ABS trim piece to protect the bottom of the seat, with a molded-in handle

Feather Weight Mid-Hi Flip Seat options:

- Black molded U.S. Arms or upholstered flip-up arms
- Top and corner grab rails (black or yellow)
- ABS plastic backs
- Mesh map pockets
- Vertical stitching
- FTA foam
- Pillow seat cushions
- Adjustable headrests



* FMVSS 210 only applies to forward facing applications.

Not Just Seats



THE FEATHER WEIGHT SERIES BY

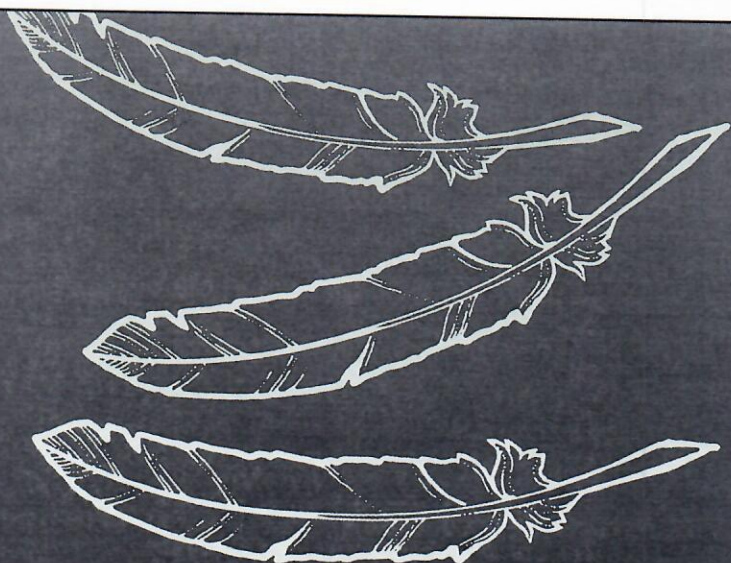
FREEDMAN
SEATING COMPANY

an ISO 9001:2000 certified company

4545 W. Augusta Blvd., Chicago, IL 60651
(773) 524-2440 (800) 443-4540 Fax: (773) 252-7450
WWW.FREEDMANSEATING.COM
e-mail: sales@freedmanseat.com

We are constantly updating and improving our seats; therefore we reserve the right to change or modify specifications or materials without notice. All Freedman Seating Company seats meet or exceed FMVSS standards.

Seating Solutions™



Vulcan™ Series V12 HD/IP Mobile DVR

12-CHANNEL DVR

DIMENSIONS

- Height: 3.5 inches
- Width: 8.7 inches
- Depth: 11.6 inches
- Weight: 5.7 pounds

TWELVE (12) A/V INPUTS

- 8 channels D1, WD1, 720P, or up to 1080P
- + 4 channels IP up to 1080P

VIDEO OUTPUTS

- 2 channels

AUDIO OUTPUTS

- 2 channels

CAMERA COMPATIBILITY

- 8 channels D1, WD1, 720P, or up to 1080P (see NTSC)
- 4 channels IP up to 1080P

STORAGE MEDIA

RECORDING MEDIUM

- One (1) 2.5" SATA hard drive and one (1) optional solid-state SD card

CAPACITY

- 1TB (standard) up to 2TB (capable) (optional) 64GB SD card up to 512GB

RECORDING OPTIONS

- SD card slot for redundant recording

INTERFACE

NETWORK DATA CONNECTION

- One RJ45 x 1 (10/100 M/1000M)

EXPANSION

- RS232 x 2, RS485 x 2

GPS INTERFACE

- Built-in, compatible with optional GPS antenna

DRIVER ACTION DETECTION

PANIC BUTTON

- The remote status indicator (panic button) can be connected to show DVR power/record status without using a video monitor
- The driver-operated panic button has the following functions:
 - Solid green LED indicates that the unit has power and is recording
 - Event marker (panic button)

DRIVER ACTION DETECTION WIRES

- 8 signal wires individually programmable to indicate alarm or event



BUILT-IN G-FORCE SENSOR

COMPRESSION FORMAT

- Video: H.264
- Audio: ADPCM, G.711A G.711U

RECORD RESOLUTION

NTSC

- 1080P, 720P, WD1(928X480), WHD1(928X240), WCIF(464X240), D1(704X480), HD1(704X240), CIF(352X240)

PAL

- 1080P, 720P, WD1(928X576), WHD1(928X288), WCIF(464X288), D1(704X576), HD1(704X288), CIF(352X288)

RECORDING OPTIONS

- **Continuous record:** System will record all channels continuously while vehicle is running (factory setting).
- **Alarm record:** System will record when an alarm is triggered.
- **Motion record:** System will record when the cameras detect motion while vehicle is running.
- **Schedule record:** System will boot and record according to user-selectable schedule.

ELECTRICAL & OPERATING REQUIREMENTS

AUTO ON/OFF DETECTION

- ACC detection

DELAY OFF SETTING

- User selectable up to 24 hours

OPERATING VOLTAGE

- 8~36VDC

OPERATING TEMPERATURE

- -14°F (-25°C) ~ +158°F (+70°C);
- 40°F (-40°C) ~ +158°F (+70°C) with heater

POWER CONSUMPTION

- 0W-105.3W

POWER SUPPLY

INPUT RANGE

- DC 8-36V

OUTPUT RANGE

- DC5V/DC12V

OUTPUT CURRENT

- 5V@500mA, 12V@500mA

BUILT-IN POWER PROTECTION

LOW VOLTAGE PROTECTION

- User selectable and programmed at installation

HOUSING/CASING

- Removable, shock-mounted
- Vandal-resistant locking front cover
- Shock-resistant: MIL-STD-810F
- Aluminum
- Optional fan with filter, removable for cleaning

BUILT-IN WI-FI MODULE

OPTIONAL COMPONENTS

VIRTUAL SYNCHRONIZED MAPPING

- External Virtual Synchronized Mapping™ module with North American maps
- Includes GPSV1 antenna
- Embeds GPS tracking information synchronized with recorded video footage

GPS ANTENNA

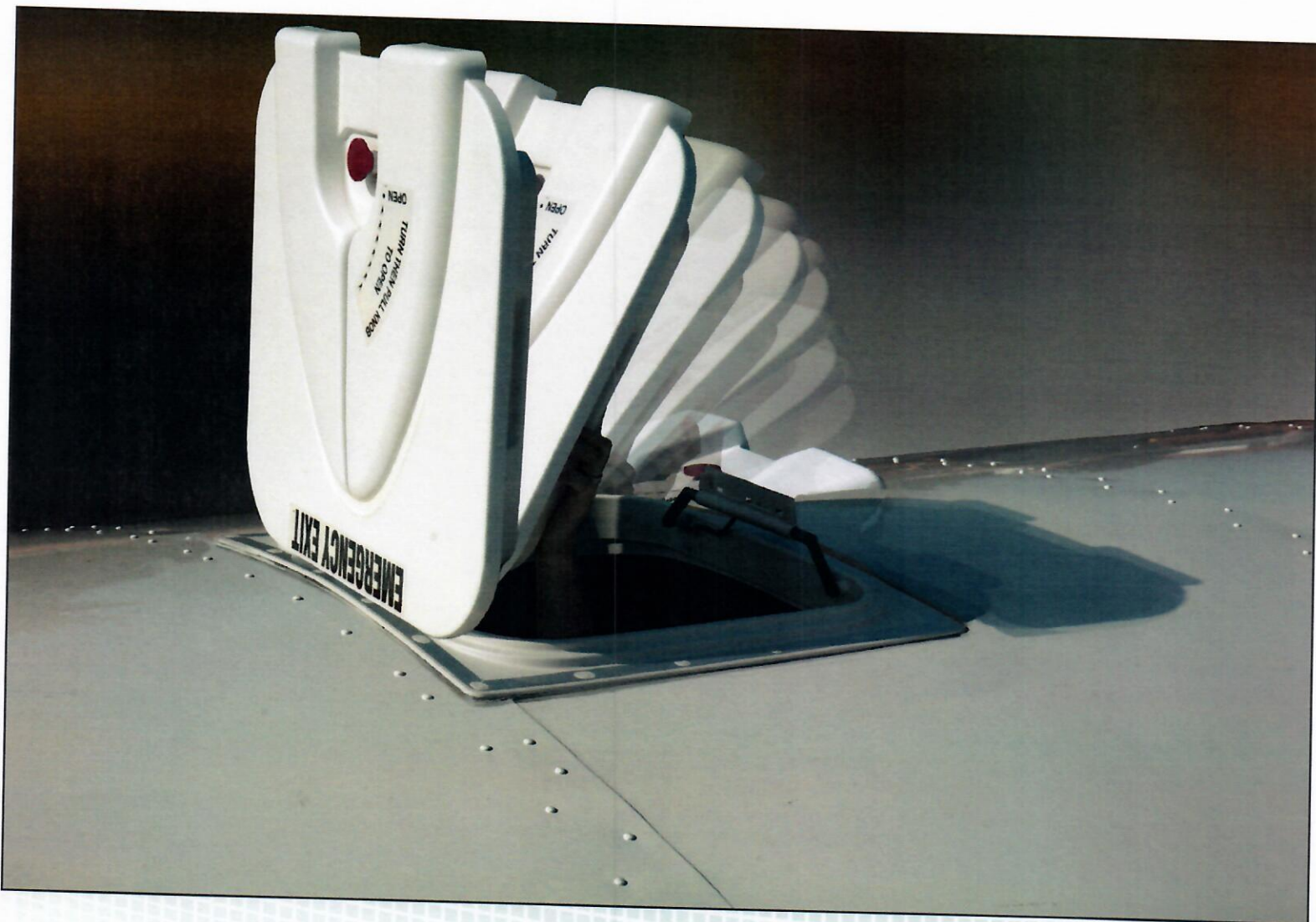
FIREPROOF BOX BACKUP

CELLULAR MODEM

SCHOOL AND SHUTTLE BUS ROOF HATCHES

TRANSPEC[®]
A Safe Fleet Brand

SAFE EGRESS. PROVEN PERFORMANCE.



ADAPTABLE

Low profile design
adapts to wide range of
roof surfaces



MADE IN THE USA

Proudly manufactured
in North Carolina
with 35 years proven
product performance



MAINTENANCE

No external fasteners
required for installation



WARRANTY

5 year



STRENGTH

Constructed of high
strength UV stable
materials



Serves as a vent on hot summer days

SPECIFICATIONS

SCHOOL AND SHUTTLE ROOF HATCHES

■ = Standard O = Optional

MODEL	STANDARD FEATURES & OPTIONS										APPLICATIONS				SIZES	
T1170 Series Triple Value Safety Vent II	White Light Gray Dark Gray	■	■	■	■	○	○	○	○		■		■		■	
T1670 Series Power Safety Vent II	White Light Gray Dark Gray Beige	■	■	■	■	○	○	○	○		■	■	■	■	■	
T1970 Series Standard Safety Vent II	White Light Gray Dark Gray Beige	■		■	■	○	○	○	○				■		■	
9245 Series Pro Lo Roof Hatch	White Light Gray Dark Gray	■		■	■	○	○	○	○		■		■		■	

T1170 Series / Triple Value Safety Vent II

The Triple Value Safety Vent II is a combination roof ventilator/emergency exit that provides 5-position fresh air ventilation as well as incorporating a built in non-closeable static exhaust vent. The product also includes a simple release handle that allows the hatch to hinge open for emergency exit.



Additional Features

- Static Vent provided with one piece outer cover designed to minimize leaks
- Interchangeable with earlier Transpec models
- Available in various radiuses to fit different roof curvatures
- Available with vandal lock feature
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape
- Meets D250 Standard for Canadian school bus

T1670 Series / Power Safety Vent II

The Power Safety Vent II provides all the features of the Triple Value Safety Vent II with the addition of an electric fan for extracting condensation, stale or hot air from inside the vehicle to improve passenger comfort.



Additional Features

- Interchangeable with earlier Transpec models
- Available in 12 and 24 volt
- Available in various radiuses to fit different roof curvatures
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape
- Meets D250 Standard for Canadian school bus

T1970 Series / Standard Safety Vent II

The Standard Safety Vent II is a combination roof ventilator/emergency exit that provides 5-position fresh air ventilation and a simple release handle that allows the hatch to hinge open for emergency exit.



Additional Features

- Retrofits to all hatch openings
- Interchangeable with earlier Transpec models
- Available in various radiuses to fit different roof curvatures
- Constructed of high strength UV stable materials
- Available with optional adhesive sealant and reflective tape

9245 Series / Pro Lo Roof Hatch

The Pro Lo is a combination roof ventilator/emergency exit that mounts nearly flush with the roof (0.75" above the roof). Designed to fit the roof curvature, it creates a tight seal virtually eliminating water intrusion. The hatch also incorporates a release handle allowing it to be opened as an emergency exit.



Additional Features

- Available in various radiuses to fit different roof curvatures
- Nearly flush at 0.75" above the bus
- Constructed of high strength UV stable materials
- No exterior screws for installation
- Available with vandal lock feature
- Meets D250 Standard for Canadian school bus

13501 S. Ridge Rd. • Charlotte, NC 28273 • Tel: 800 . 951 . 7867 • Fax: 704 . 889 . 2760 • sales@smiglobal.net
W W W . S M I G L O B A L . N E T

NCL-7.2-6003 | Rev A | 1-26-15



2018 Product Application Guide • 3-7-18



NCL1000-2 CENTURY SERIES™

NCL1000-2 Century Series™ Features

- Fully automatic NHTSA compliant lift, operated by an attendant
- Loading position - either direction
- Interfaces with OEM interlocks
- Lift mounted lights - platform illuminated as it deploys
- Hand control with illuminated functions
- Locking mechanical Inboard Barrier (IB), powder coated yellow for safety and high visibility, prevents movement if occupied
- Pump design prevents platform folding when occupied, quiet operation and low current draw
- Durable redesigned baseplate reduces lift weight and allows for quicker and easier service of hose/wiring
- Easily installed, step-by-step installation instructions, no peripheral hardware required
- Visual and audible warning provides notification of unsafe conditions
- Spring-loaded outer barrier that will transition to the fully up position as the platform leaves the ground, has durable rubber nose guard and is powder coated yellow for safety and high visibility
- Parallel arms lift with hydraulic cylinders
- Side or rear door application
- Several platform widths and lengths
- Dual handrails for security and convenience
- Bridging feature permits the wheelchair user to board the lift from sidewalks or inclines
- Floor to ground travel is 48"
- Lifting capacity is 1000 lbs
- Integrated back-up pump
- Equipped with an adjustable anti-rattle feature to avoid unpleasant noise in the vehicle during transit
- Durable high-gloss powder coated finish
- Lift-Tite system stows the lift platform securely while the vehicle is in transit
- Pump module with removable cover offers easy access to all components

NCL1000-2 Century Series™ Models

NCL1000IB3351-2

NHTSA Compliant Usable Platform: 33" x 51"

NCL1000IB3451-2

NHTSA Compliant Usable Platform: 34" x 51"

NCL1000IB3451HB-2

NHTSA Compliant Usable Platform: 34" x 51"

NCL1000IB3454-2

NHTSA Compliant Usable Platform: 34" x 54"

NCL1000IB3454HB-2

NHTSA Compliant Usable Platform: 34" x 54"

NCL1000IB3751HB-2

NHTSA Compliant Usable Platform: 37" x 51"

NCL1000IB3754HB-2

NHTSA Compliant Usable Platform: 37" x 54"

For a front-mounted pump assembly, add "F" to the model number when ordering (example: NCL1000FIB3351-2).

IB = Inboard Barrier HB = Handrail Belt

General Function: Electrohydraulic, power up/gravity down operation

Operation: Hydraulic pump with two lifting cylinders

Control: hand-held control box

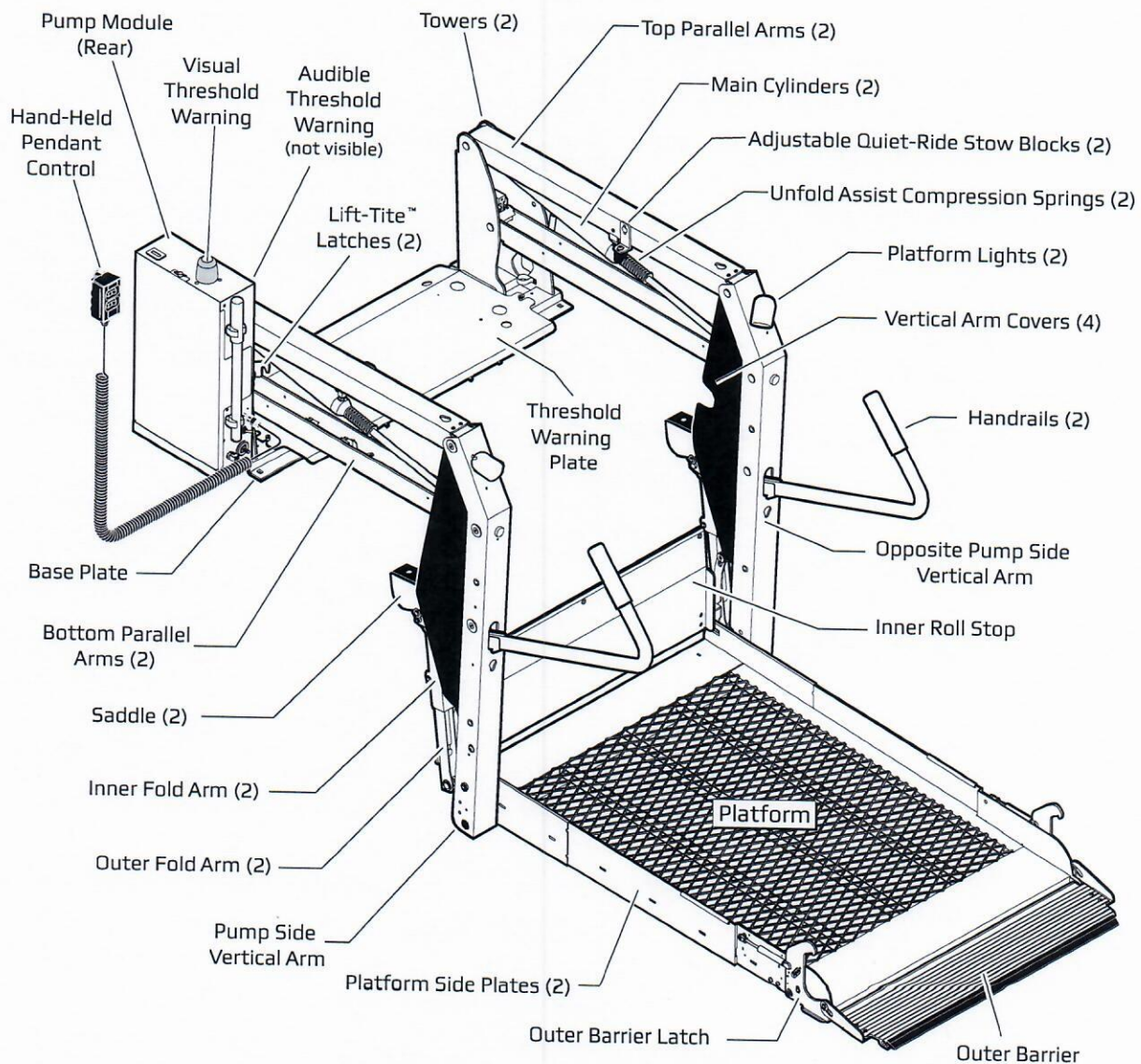
Hydraulic: Pressure Max. 2,495 psi, Fluid is Unis HVI 26, oil reservoir is .33 gal

Construction: Steel structure with powder coat finish

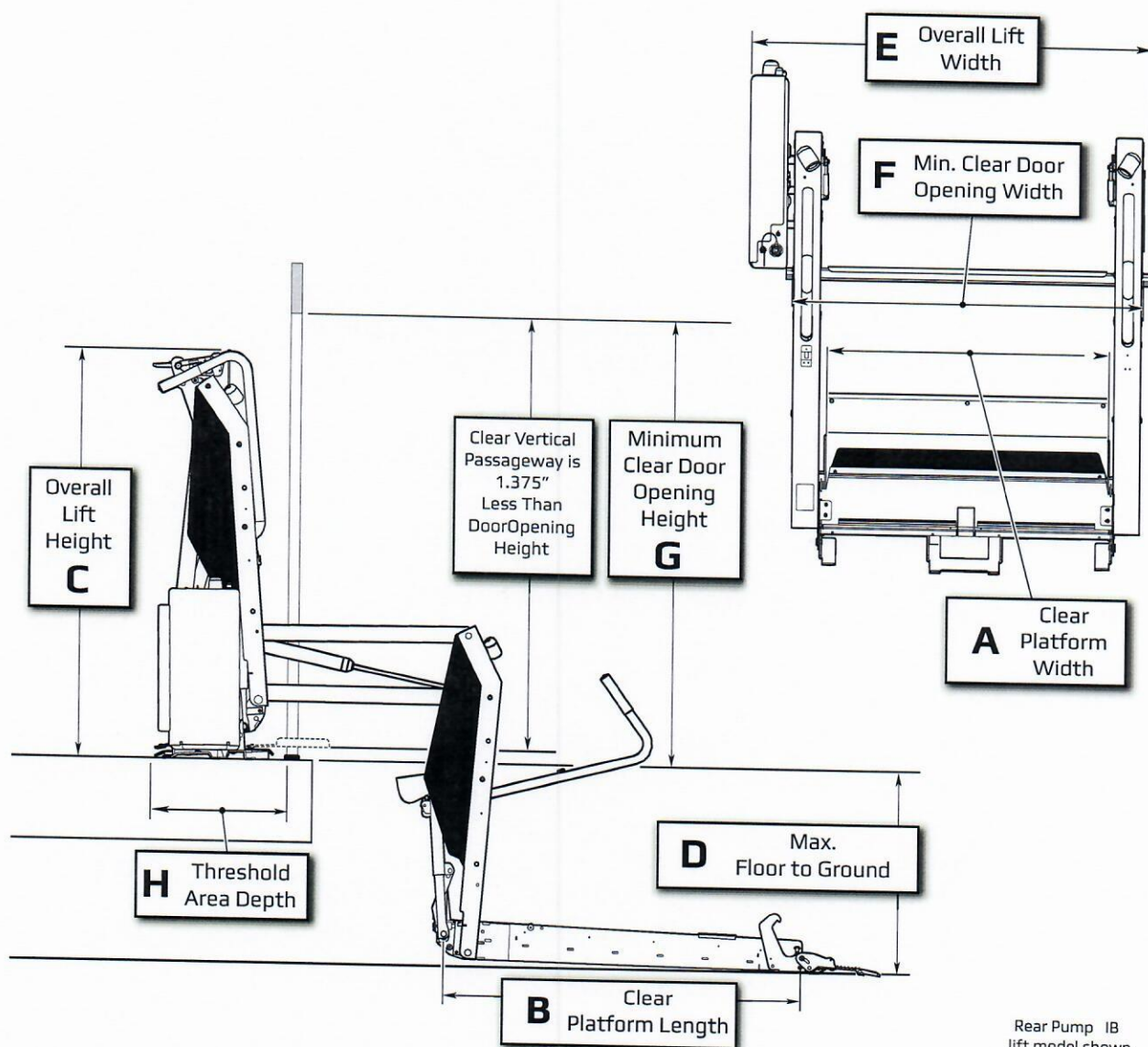
Operating Temperature: 0°F to 140°F

Power Supply: 12VDC

Current Consumption: Max. 70A (12V)



NCL1000-2 Century Series™ Dimensions



Rear Pump 1B
lift model shown.

All dimensions are for reference only.

NCL1000-2 Century Series™			A	B	C	D	E	F	G	H
Lift Model Number	Lift Weight lbs	Lifting Capacity lbs	Clear Platform Width	Clear Platform Length	Overall Lift Height	Max. Floor to Ground	Overall Lift Width	Min. Clear Door Opening Width	Min. Clear Door Opening Height	Threshold Area Depth
NCL1000IB3351-2	358	1000	33"	51"	56.25"	48"	46"	42"	57.375"	18"
NCL1000IB3451-2	358	1000	34"	51"	56.25"	48"	47"	43"	57.375"	18"
NCL1000IB3451HB-2	358	1000	34"	51"	61.25"	48"	47"	43"	62.375"	18"
NCL1000IB3454-2	358	1000	34"	54"	59.25"	48"	47"	43"	60.375"	18"
NCL1000IB3454HB-2	358	1000	34"	54"	66.25"	48"	47"	43"	67.375"	18"
NCL1000IB3751HB-2	380	1000	37"	51"	61.25"	48"	50"	46"	62.375"	18"
NCL1000IB3754HB-2	385	1000	37"	54"	66.25"	48"	50"	46"	67.375"	18"

NCL1000-2 Century Series™ NHTSA Installation Kits

	Std. Length Rear Door	Ext. Length Rear Door
Ford Transit (2015)	400774KS	400773KS
Ford Transit Template (2015)	400778KS	400778KS
Sprinter (2014 & up)		401174KS
Sprinter Template (2014 & up)		401177KS

Van Mounting Kits contain floor reinforcements for 403/404 compliance.

NCL1000-2 Century Series™ Accessories



◀ **31579KS**
Handrail Restraint
Retractable -
for 51" Platforms

35533KS
Handrail Restraint
Retractable -
for 54" Platforms

35331KS
Handrail Restraint
Non-Retractable



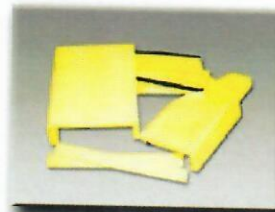
◀ **35295K**
Upper Tower Support Kit



◀ **33659KS**
Replacement
Hand-Held
Control



◀ **23708A913**
"Full Curtain"
Lift Cover
(NCL917-2)



◀ **402605KS**
Padding Kit
NCL2 Series

NCL1000-2 Century Series™ Specifications

COMMERCIAL WHEELCHAIR LIFT SPECIFICATIONS - IN COMPLIANCE WITH United States Department of Transportation Rules and Regulations 49CFR, Part 38. FROM THE AMERICANS WITH DISABILITIES ACT OF 1990 and NHTSA Rule 403 (2004) "Provided to make your spec writing easier."

The wheelchair lift is compliant with Federal Motor Vehicle Safety Standard 403 for platform lift systems for motor vehicles. The lift shall have been tested to a minimum static load of 2400#. The lift shall have 1000# rated lifting capacity. The base plate shall be a corrugated designed member to provide rigidity to minimize lift deflection when placed under load.

The power supply shall be a 12 volt electro-hydraulic system operating two single-acting cylinders. The hydraulic power pack system shall be of modular design allowing for easy removal and field replacement, if needed. The operation of the unit shall provide a smooth, jerk-free ride in both up and down directions. The power operation of the hydraulic cylinders shall be of a pull-type design for smooth lifting operation and improved synchronous arm movement. The pivot pins in the trunnion (knuckle) of the pivot arms shall be of stationary design. The hydraulic system shall be regulated by two separate relief valves, one of which is designed to prevent accidental stowing when occupied.

The hand control for lift operation shall be of a one-hand operation design made of durable plastic. The hand control will provide user with illuminated functions. The hand control cable shall be coiled with quick-change connections for ease of maintenance or field change.

A manual back-up system shall be provided to ensure operation of the lift in case of electrical failure. The back-up system shall provide a reliable means of manually raising and lowering the lift while occupied. The back-up system shall fold and unfold the platform. The back-up pump shall be integrated with the hydraulic power pack system such that no hydraulic lines or fittings are required.

The platform shall be of steel construction and the surface shall be of see-through grating allowing for improved visibility and safer use in inclement weather. The platform shall have a minimum usable wheelchair passageway width of 33 inches and a minimum usable length of 51 inches requiring a 57 inch vertical clear door opening. The sides of the platform shall be a minimum of 2.5 inches high.

The platform shall be automatically folded and unfolded and fully automatic in operation. The platform shall allow both inboard and outboard facing of wheelchair and mobility aid users. The platform entrance ramp shall be extruded aluminum for weight savings, have a rubber leading edge and raised ribs for traction. The outer barrier must not raise if occupied with 25 lbs. The outer barrier shall be the sole outboard wheelchair retention device and shall be interlocked and comply with the FMVSS 403 requirements. Dual handrails shall be provided to add security and convenience. These handrails shall be 1.25 inch minimum diameter, minimum 30 inches in height, minimum of 8 inches in length, and withstand a 100# force in any direction (including vertical) without permanent deformation. The lift must have a fail safe system to prevent stowing if solenoid welds. The platform shall have "built in" lighting to meet 404 platform lighting requirements with no auxiliary lighting.

All lift components shall be finished with a baked-on powder coating, which will meet a salt spray test of 1000 hours, to provide corrosion resistance and a long service life. BraunAbility Century Series to include but not limited to the following model numbers:

- NCL1000IB3351-2, NCL1000FIB3351-2, NCL1000IB3451-2, NCL1000FIB3451-2, NCL1000IB3451HB-2, NCL1000FIB3451HB-2, NCL1000IB3454-2, NCL1000FIB3454-2, NCL1000IB3454HB-2, NCL1000FIB3454HB-2, NCL1000IB3751HB-2, NCL1000FIB3751HB-2, NCL1000IB3754HB-2, NCL1000FIB3754HB-2



braunability.com

800.THE.LIFT

ISO 9001:2008

631 West 11th Street, Winamac, IN 46996, USA



Radio Engineering Industries, Inc.
6534 L Street, Omaha, NE 68117
800-228-9275 | Fax: 402-339-1704
www.radioeng.com

Panel Mounted PA System



SPECIFICATIONS

PA SYSTEM, 2"X7" MICRO PANEL W/MIC

REI PART No. 700829

GENERAL

Power Supply	12VDC, Negative Ground
Current Consumption	Standby 150mA; Max 2.5A @14.4VDC
Dimensions(W X H X D)	6.654" x 1.969" x 2.890" [169 mm x 50 mm x 73.4 mm]
Weight	1.6 lbs
Load Impedance	4-8 Ohms
Power Output	6W into 4 Ohms at 14.4V (1kHz 10% THD max.)
Frequency Response	75-10,000 Hz (-3 dB)



Radio Engineering Industries, Inc.
6534 L Street, Omaha, NE 68117
800-228-9275 | Fax: 402-339-1704
www.radioeng.com

Panel Mounted PA System



SPECIFICATIONS

PA SYSTEM, 2"X7" MICRO PANEL W/MIC

REI PART No. 700829

GENERAL

Power Supply	12VDC, Negative Ground
Current Consumption	Standby 150mA; Max 2.5A @14.4VDC
Dimensions(W X H X D)	6.654" x 1.969" x 2.890" [169 mm x 50 mm x 73.4 mm]
Weight	1.6 lbs
Load Impedance	4-8 Ohms
Power Output	6W into 4 Ohms at 14.4V (1kHz 10% THD max.)
Frequency Response	75-10,000 Hz (-3 dB)

LED STROBE LIGHT

ENHANCED BUS VISIBILITY

**SPECIALTY
MANUFACTURING**

A Safe Fleet Brand



4" model shown



Provides more
down angle light
to gain attention
of pedestrians and
motorists



SAFETY

Significantly improves
vehicle visibility in any
light conditions



EXTREME TEMP

Certified operation
between -30° and 130°



MAINTENANCE

LED tower and
circuit board are
field replaceable for
simplified maintenance



MOISTURE

Water resistant design
exceeds SAE J845/575



DOWN BEAM

Optical design provides more
down angle light to gain
attention of pedestrians and
motorists



SHOCK AND VIBRATION

Rough roads, potholes, and day-
to-day jarring are no match for
the solid state electronics. Tested
to SAE J845/575 standards



ADAPTABLE

Composite base with
rubber gasket adapts to
various roof surfaces

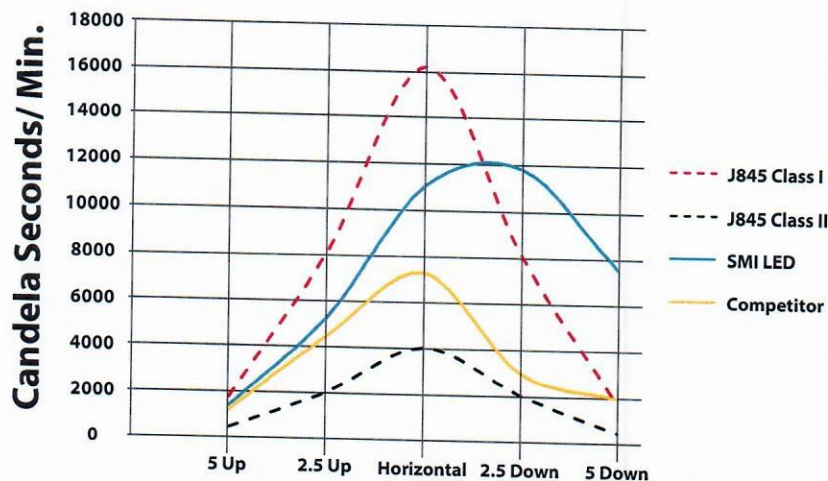


WARRANTY
5 year

- Exceeds SAE J845 Class II rating
- Composite base with rubber gasket adapts to various mounting surfaces
- Same hole pattern as Specialty Manufacturing's 515 model

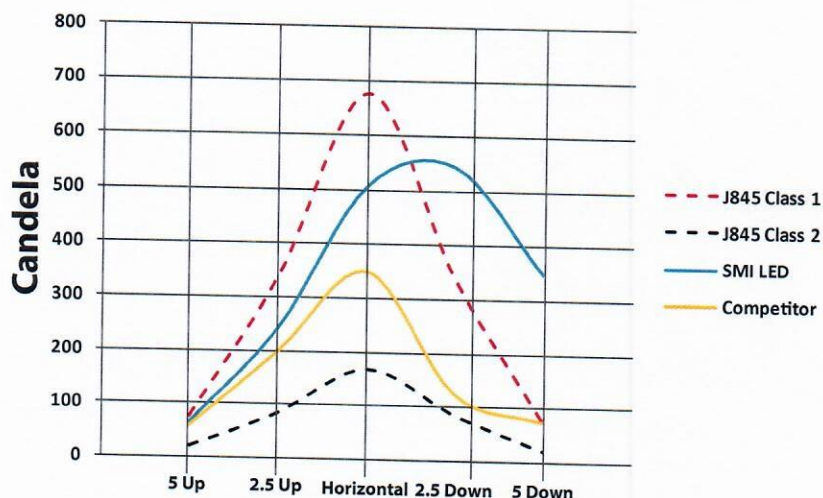
THE SPECIALTY DIFFERENCE

OPTICAL POWER



Optical Power is part of SAE J845. The purpose of this graph is to show the total energy emitted in a given length of time.

PEAK INTENSITY



This graph illustrates how the Specialty LED Strobe outperforms the leading competitor + SAE J845 requirements.

The optical design of the Specialty strobe provides *4x's more down angle light than the competitive solution* which enhances bus visibility to motorists and pedestrians. It provides *nearly 5x's more down angle light than SAE J845 requirements for Class II strobes.*

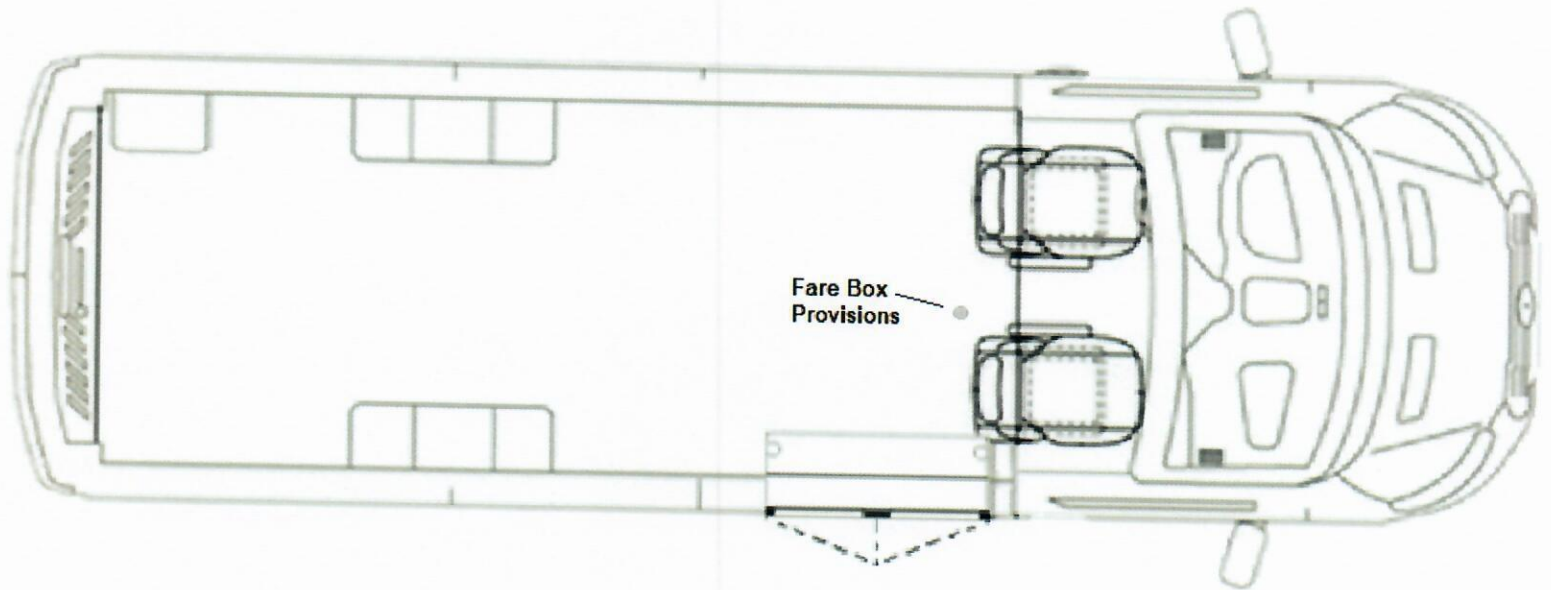


Coming soon...the low profile LED strobe!

13501 S Ridge Dr. • Charlotte, NC 28273 • Tel: 800 . 951 . 7867 • Fax: 704 . 889 . 2760 • sales@smiglobal.net
W W W . S M I G L O B A L . N E T

NCL-7.2-6000 | Rev A | 1-27-15

Fare Box Provisions



TRANSIGN®

YOUR DESTINATION BEGINS HERE



The LED Destinator® Series - perfect for fleets of all types - is available in a variety of sizes and colors to fit your installation and display needs. These versatile and highly adaptive signs offer full integration into Destination, Route, and Next Stop announcement services, always keeping your customers pointed towards their next destination.



STANDARD FEATURES

- Destination Messages
- Next Stop Announcements
- Public Relations Messaging
- Scrolling/Flashing/Stacked Messages

SOFTWARE AND PROGRAMMING

Our signs and control modules are pre-programmed and include FREE software. Advanced controllers are available for J1708/J1587 system integration and Hands-Free operation, ensuring the safest and most reliable performance for any fleet.



AVAILABLE ADVANCED FEATURES INCLUDE:

- Automated GPS message progression
- Hands-Free operation for safety
- Voice Announcements
- J1708/J1587 integration compatible
- Automatic brightness control
- Basic programming software included (USB)
- Maintenance free- ZERO cost of ownership
- Many OCU options to suit your needs



BUY AMERICA - MADE IN U.S.A.

Using the highest quality parts, our LED Destinator® Signs are proudly made in Detroit, Michigan USA in full compliance with the Buy America Act.

LED DESTINATOR™ WARRANTY INFO

With a lifetime warranty that outlasts the lifetime of most vehicles (100,000 hours at full brightness), our signs will exceed your expectations in reliability and performance.



ABOUT TRANSIGN

Established in 1959, Transign is a leading provider of high-quality signage for the transit industry. We remain committed to providing world-class U.S. based customer service and technical support.

Transign®, 281 Collier Road, Auburn Hills, Michigan 48326
Toll Free: 855.535.7446 | Main: 248.623.6400 | Fax: 248.623.2930
www.transignllc.com

TRANSIGN®

YOUR DESTINATION BEGINS HERE

LED Destinator® Electronic Signs - Dimensions

Signs	Pixel Count H x W (pixels)	Display H x W (in)	Enclosure H x W x D (in)
LD16160	16 x 160	6 1/2 x 63 1/8	9 1/2 x 64 5/8 x 2 3/8
LD16128	16 x 128	6 1/2 x 50 1/2	9 1/2 x 52 x 2 3/8
LD16112	16 x 112	6 1/2 x 44 1/8	9 1/2 x 45 3/4 x 2 3/8
LD1696	16 x 96	6 1/2 x 37 7/8	9 1/2 x 39 3/8 x 2 3/8
LD1680	16 x 80	6 1/2 x 31 5/8	9 1/2 x 33 x 2 3/8
LD1632	16 x 32	6 1/2 x 12 3/4	9 1/2 x 14 x 2 3/8
LD12112	12 x 112	4 7/8 x 44 1/8	8 x 45 3/4 x 2 3/8
LD1280	12 x 80	4 7/8 x 31 5/8	8 x 33 1/8 x 2 3/8
LD1232	12 x 32	4 3/4 x 12 3/4	8 x 14 x 2 3/8
LD896	8 x 96	3 1/4 x 37 7/8	6 1/8 x 39 3/8 x 2 3/8
LD864	8 x 64	3 1/4 x 25 1/4	6 1/8 x 26 3/4 x 2 3/8

Be sure to check out our other great products!



Stop Requested

Stop Request Signs

- Flush, ceiling or surface mount
- Any font/color combination
- Back-lit by efficient LED's



Interior Passenger Information Sign

- Easy to install
- ADA compliant
- LED's rated at 100K hours



Roller Curtain Signs

- High-res logos & graphics
- Perfect for large fleets
- Virtually maintenance free
- Reliable, efficient LED backlight
- Available in 12 and 24 VDC
- Up to 120 destinations



Run Number Box

- Metal or plastic frame
- Available in 2, 3, or 4 digits
- Easy to read 4" lettering
- Spring loaded return
- Reliable, efficient LED backlight
- Virtually maintenance free



LED Run Number Box

- Steel enclosure
- ADA compliant
- Reliable LED's
- Multiple colors
- Automatic brightness
- 12 and 24 VDC

Join Our Mailing List

www.transignllc.com/subscribe

Transign®, 281 Collier Road, Auburn Hills, Michigan 48326
Toll Free: 855.535.7446 | Main: 248.623.6400 | Fax: 248.623.2930
www.transignllc.com

©2019 Transign. Transign®, LED Destinator®, and EnCompass® are registered trademarks. All rights reserved.

Limited Warranty

IVS, Inc. dba AngelTrax, warrants its product to be free from manufacturer's defects in material and workmanship under normal use and service for the designated warranty period, as listed below, from the date of purchase. "Normal use" means the product was used for intended purposes, maintained properly and protected from deliberate damage. The following products are covered by the limited warranty for the following periods of time:

- Five (5) years from date of purchase parts and labor on the Vulcan Series V5SD™, V5™, V5X3™, V6X3™, VX7AI™, V8X3™, V12™, V16-35™ and V24™ MDVRs
- Five (5) years from date of purchase parts and labor on the Vulcan Series Hybrid Component V8HCNVR™, V12HCNVR™ and V16HCNVR™
- Five (5) years from date of purchase parts and labor on the Vulcan Series V32™ Commercial NVR
- Five (5) years from date of purchase parts and labor on the Hybrid Component Series Hybrid Quest™, Hybrid Quest Edge™, Hybrid Quest Edge Plus™ and Hybrid Vault™ MDVRs
- Five (5) years from date of purchase parts and labor on the HDX Hybrid™ MDVR
- Three (3) years from date of purchase parts and labor on the HDX™ and SDX™ MDVRs
- Three (3) years from date of purchase parts and labor on the CoPilot™, CoPilot-WA™ and CoPilot-RFID™ MDVRs
- Five (5) years from date of purchase full replacement on all solid-state hard drives
- Five (5) years from date of purchase parts and labor on all SD cards
- Three (3) years from date of purchase parts and labor on all SATA hard drives
- Three (3) years from date of purchase parts and labor on the Vulcan Series IP and HD Cameras
- Three (3) years from date of purchase parts and labor on the HD Quality Lens Cameras
- Three (3) years from date of purchase parts and labor on the WM Series and Student Transit PeriOptic Lens Cameras
- Three (3) years from date of purchase parts and labor on the CoPilot™ Camera
- Three (3) years from date of purchase parts and labor on the Virtual Synchronized Mapping™ internal and external units
- Three (3) years from date of purchase parts and labor on the GDA-7012 Kit and GDA-7012 Monitor
- Three (3) years from date of purchase parts and labor on the WLAN and AP Router
- One (1) year from date of purchase parts and labor on the MON7AT installation monitor, the Meraki MR74 Wi-Fi system and all accessories not listed above

This warranty gives the user specific rights, and those rights may vary from state to state. The terms and conditions of said warranty are as follows:

1. When the product is installed by, or purchased from an authorized AngelTrax dealer, IVS, Inc. will either repair, or replace at no charge to the original purchaser, any product that IVS, Inc. determines to be defective and under the warranty provided. The defect(s) must be reported within five (5) years from the date of purchase. This warranty is valid only with the original purchaser, and is non-transferable. The warranty does not cover removal or reinstallation of the product(s).
2. The date of purchase and proof of an authorized AngelTrax dealer installation must be established by the original sales receipt, which should accompany the product(s) that are returned for warranty services.
3. The warranty shall not apply to any product that has been altered in any way, or used for any unintended purpose.
4. IVS, Inc. does not authorize any other person to assume liability in connection with its products. This warranty is the only expressed warranty made by IVS, Inc. to its products. Any implied warranty of merchantability or fitness for a particular purpose applicable to IVS, Inc. products, is limited to the duration of this limited warranty. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, or limitation on how long an implied warranty lasts. Therefore, the above limitations may not apply.
5. If in the unlikely event warranty service becomes necessary, contact us directly and request a Return Merchandise Authorization (RMA) from the technical service department. Please call 1-800-673-1788 and ask for the technical service department to obtain a return merchandise authorization (RMA) number. Be sure to have the model number, serial number and the nature of the problem available for the technical service representative. Upon verification of a defect, IVS, Inc. will send a new or refurbished replacement unit via express shipping at no cost to the customer. The customer will receive a copy of the RMA and a Call Tag with their replacement unit. Once the customer has received the replacement unit, they have 30 days to ship the defective product back to IVS, Inc. or the customer will be charged for the replacement product. Once the unit is exchanged, the returned product shall become the property of IVS, Inc. The Call Tag included with the replacement unit allows the customer to ship the defective product back to IVS, Inc. at no cost.
6. Products must be returned to the factory in their original carton, or equivalent, and in original packaging conditions. Items shipped to IVS, Inc. without a clearly identified RMA number on the exterior of the packaging may be refused. If the product is received with the serial number removed or defaced, the warranty is void. The product will not be repaired under warranty and returned to the owner freight collect.

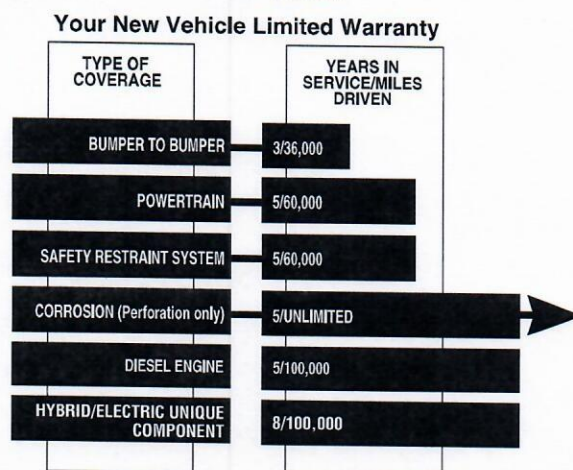
Send product to:
IVS, Inc. (AngelTrax)
Warranty Service Department
119 South Woodburn Drive
Dothan, Alabama 36305

QUICK REFERENCE: WARRANTY COVERAGE

This chart gives a general summary of your warranty coverage provided by Ford Motor Company under the **New Vehicle Limited Warranty**. Please refer to the description of warranty coverage for more specific information.

For each type of coverage, the chart shows two measures:

- years in service
- miles driven



The measure that occurs first determines how long your coverage lasts. For example: Your Bumper to Bumper Coverage lasts for three years - unless you drive more than 36,000 miles before three years elapse. In that case, your coverage ends at 36,000 miles.

For more details on coverage, see:

- **What is Covered?** (pages 9-14)
- **What is Not Covered?** (pages 14-19)



4545 W. Augusta Blvd
Chicago, Illinois 60651
Tel: (773) 524-2440
FAX: (773) 252-7450

Limited Warranty

WARRANTY:

Freedman Seating warrants to the original buyer that its seats are free from defects in material and workmanship for the following components:

Metal, plastic and foam Components – Two (2) years

Moving Components – Two (2) years

Upholstery – Two (2) years

Warranty period begins at time of installation

NON-PRORATED REPLACEMENT:

In the event that a warranty-covered failure should occur within the warranty period, Freedman Seating will repair or replace the seat without charge and without prorating, at Freedman Seating's option. This is the sole and exclusive remedy for breach of any warranty. Any replacement seat or part is only covered by this warranty for the remainder of warranty period applicable to the original seat.

EXCLUSIONS:

This warranty specifically excludes foam, upholstery material, belts, and items exposed to normal wear and tear such as metal finish and paint and does not apply to any seat that is damaged as result of accident, derailment, improper installation, structural defects, intentional damage, abuse, vandalism, negligence, misuse, improper operating conditions, or extreme natural phenomena. Seats exposed to toxic or corrosive materials are excluded from this warranty. This warranty is provided directly to the purchaser only and does not extend to any subsequent party and is solely for the Freedman Seating product as it is originally manufactured.

INCIDENTAL, CONSEQUENTIAL DAMAGES, & LIMITATIONS:

This warranty shall be in lieu of any other warranty, expressed warranty, expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. The purchaser's sole and exclusive remedy against Freedman Seating shall be for the repair and replacement of the defective product as provided herein. No other remedy; including but not limited to incidental or consequential damages for lost profits, lost sales, injury to person or property, shipping, freight, installation, removal, or any other incidental or consequential loss shall be available to the purchaser.

NOTIFICATION:

All reports, claims, or notices required by the warranty to be provided to Freedman Seating must be in writing and delivered to: Attention – Freedman Seating Warranty Claim Department, 4545 W. Augusta, Blvd. Chicago, IL 60651, or by fax to (773) 252-7450. Parts being claimed for warranty must be sent to Freedman Seating for prior approval and warranty acceptance before any warranty claims can be made.

INSPECTION AND VERIFICATION:

The owner must provide access to the failed seat so that Freedman Seating's authorized representative can perform an on-site inspection. Alternatively, Freedman Seating may ask the owner to ship the failed seat to Freedman Seating's laboratory for inspection. Within 30 days of the inspection, either on-site or in the laboratory, Freedman Seating will render an opinion as to whether or not the claimed failure is covered by the warranty.

DESIGN:

Freedman Seating reserves the right to modify parts and design specifications without notice as long as the seats meet general specifications, unless otherwise committed per contract. In case further non-conforming changes have to be incorporated, Freedman Seating will submit such changes to customer for prior approval.



Gerflor Commercial Flooring limited warranty agreement – 10 Year Warranty

GERFLOR, AS A MANUFACTURER, expressly warrants that the GERFLOR COMMERCIAL FLOORCOVERING shall be free from manufacturing defects for a period of ten (10) years from the date of sales by Gerflor, provided such floorcovering are subject to normal use and receive proper maintenance.

This entire warranty will become null and void if conditions of the subflooring and method of installation do not conform exactly to GERFLOR specifications.

This entire warranty does not cover damage caused, in whole or in part, by conditions beyond our control, including, but not limited to :

- Use for which material is not designated.
- Fire, explosion, weather conditions or natural disasters.
- Faulty installation.
- Casualties.
- Ordinary wear and tear.
- Abuse.
- Faulty design or construction of the buildings.
- Failure of the adhesive to adhere to the subfloor, whether concrete or other material because of moisture migration or water vapor transmission through the subfloor.
- Fault in the subfloor.
- Failure in the vapor barriers.
- Failure of the installation contractors to adhere to specifications.
- Failure of the seams.
- Uneven wear of sections of the floorcovering.
- Gloss reduction from use.
- Alteration of the initial appearance of the floorcovering, particularly in high traffic areas and areas exposed to excessive wear due to sand, grit or dirt in entrances to buildings.
- Fading or discoloration from sunlight or heat.
- Damage caused by neglect or improper maintenance procedures and other causes not specified but beyond the control of GERFLOR.
- Damage due to stains, cuts, scratches, gouges, scuffs, punctures, tears, indentations due to loads in excess of the specified static load limit, burns, accidents, discoloration caused by tracking residue from carpet dyes, rubber or synthetic backing used on rugs or mats, painted or asphalt surfaces such as driveways, damage resulting from lack of, or improper, furniture rests and floor protectors, rubber or synthetic backed rugs or mats, or any intentional misuse of the floorcovering

The presence of moisture between the GERFLOR floorcovering and the subfloor shall be considered proof of subfloor failure or faulty design or construction of the building because moisture will break the bond between the adhesive and the subfloor, causing bubbles to appear.



Gerflor Commercial Flooring limited warranty agreement – 10 Year Warranty

This warranty will be applied only if the product is admittedly the only cause of disorder. Your sole and exclusive remedy against GERFLOR arising from the purchase or use of floorcovering is limited to supply of material in replacement of the sole defective part of material (after examination, verification and approval by GERFLOR) with material of equivalent quality. All other compensation of whatever nature will be excluded. Warranty will only be valid if product and installation concerned by the warranty are clearly identified on this document and returned to Gerflor by mail with acknowledgement of receipt.

If the claim is accepted by GERFLOR, with respect to the warranty, GERFLOR will supply the material in replacement of defective one without any cost to you. More than 5 (five) years from the date of sale of the warranted product by Gerflor, until the expiration of this express warranty you will be responsible for 20 % (twenty per cent) per year of the cost of supplied materials.

WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY

THE ABOVE EXPRESSED MANUFACTURER'S WARRANTY SHALL BE THE EXCLUSIVE WARRANTY and LIMITED TO THE QUALITY OF THE PRODUCT, and GERFLOR MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. GERFLOR EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

IT IS AGREED THAT GERFLOR SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, including, but not limited to, loss of income, loss of use, damage to other property, the cost of removing and reinstalling GERFLOR floorcoverings, attorney's fees, and any liability you may have with respect to any other person.

TIME LIMIT ON COMMENCING LEGAL ACTION

It is agreed that you have 30 days from the accrual of a claim to inform GERFLOR by registered mail with acknowledgement of receipt.

It is agreed that you have one year from the accrual of a claim to commence any legal action arising from the purchase or use of GERFLOR floorcoverings, or be barred forever.

To the extent any provision of this Warranty Agreement contravenes the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of this Warranty Agreement shall not be affected thereby.

LIMITED WARRANTY

WARRANTY PERIOD

InterMotive warrants the product for the period of **one year** from the date the product was shipped from InterMotive (if not registered) or **two years** from the in-service date (if the warranty registration is completed on-line) for products that fail to function properly under normal use because of a manufacturing defect when installed and operated according to the manufacturer's instructions. The product will be repaired or replaced with a comparable product without charge.

- **Diagnostics** - A service facility diagnosing, installing, and/or repairing a product must follow the proper InterMotive procedures/documents – reference www.intermotive.net or call 530-823-1048.
- **Labor Reimbursement** - Contact InterMotive prior to commencing diagnostic/repair for information on allowable labor reimbursements.
- **Return Goods Authorization** - The customer must contact InterMotive with the product serial number and obtain an RGA number prior to shipping the product to InterMotive.
- **Return Packaging** - The part being returned must have the RGA number and a detailed description of the symptom(s) or issue(s) the product is exhibiting attached to it. Packages received without an RGA number written on the outside will be refused delivery and returned to the customer at their expense.
- **Shipping** – Shipping is the initial responsibility of the customer. If the product is determined to be warrantable and is repaired or replaced, InterMotive will pay for shipping to and from the repairing facility for the repaired/replaced product via ground shipping within the U. S. and Canada. If the product does not qualify for a warranty repair or replacement, the customer is responsible for return shipping costs.

LIMITATION ON LIABILITY

InterMotive will not be liable for personal injury, loss or damage to property or any incidental or consequential loss or expense from property damage due directly or indirectly from the use or installation of this product.



13395 New Airport Rd Suite A, Auburn, CA 95602

Phone: (530) 823-1048 Fax: (530) 823-1516

www.intermotive.net email – customerservice@intermotive.net

WARRANTY

LIGHTHOUSE INTERNATIONAL LTD. warrants the Warm Welcome® low voltage step heaters to the original purchaser against defects in workmanship and materials when used under normal operating conditions for a period of three years from the date of purchase. Lighthouse's obligation under this warranty is limited to repair of the Warm Welcome® step heater. Cost of removal and installation is not included. If failure should occur, return the worn out or defective step heater with a dated proof of purchase to Lighthouse International Ltd., for verification and repair or replacement under this warranty. Lighthouse International Ltd. shall replace the defective heater within 90 days after the defect is verified. This remedy does not apply to any defect arising out of abnormal use, negligence, alteration of the steps, or improper installation. Lighthouse makes no other representations or express warranties except those contained herein. Any implied warranties granted under state law, including warranties of merchantability and fitness for a particular purpose, are limited in duration to the express warranty granted hereunder. Lighthouse in no event shall be liable for direct, indirect, special or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitations of incidental or consequential damages, so the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. For further information regarding this warranty, you may contact Lighthouse International Ltd., at 423 E Cleveland Avenue, Suite B, Spokane, WA 99207.



Limited Warranty

End User _____ Vin # _____

Congratulations on the purchase of your MobilityTRANS converted vehicle. We are committed to excellence not only on the build of your product, but in the customer service after you have taken delivery. Please know that if any problems do arise on the installation of equipment or with materials fabricated by MobilityTRANS you are covered for the first year from the date you took ownership with no mileage restriction. Please refer to the information below for specifics on your coverage and claim procedures. Thank you for choosing MobilityTRANS.

Warranty Description

Warranty Period: One (1) Year from date of delivery, Unlimited Mileage

Coverage: The original owner is covered for any defects in the workmanship and/or materials used to convert your vehicle. This is limited to materials fabricated and installed by MobilityTRANS.

Coverage Limitations: This warranty is non-transferable. MobilityTRANS will not cover items we determine have been damaged by neglect, misuse, accidents, unauthorized alterations, or failure to provide reasonable maintenance. MobilityTRANS is also not responsible for reimbursement for travel to and from a repair facility.

Claim Procedure

TO START THE WARRANTY PROCEDURE, CONTACT YOUR SELLING DEALER BEFORE ATTEMPTING CORRECTIONS WITHOUT AUTHORIZATION.

The selling dealer must contact MobilityTRANS before any corrective action is taken. Notice must be by email or phone. **MobilityTRANS must respond and approve any corrective action before it is performed.** Once contacted MobilityTRANS will determine the best course of action to minimize time and inconvenience to you. All charges for repairs must be pre-approved. MobilityTRANS will pay the repair facility directly.

Additional Warranty Coverage: The chassis, engine, drivetrain, aftermarket air conditioning, seats, wheelchair lift, wheelchair tiedowns, aftermarket electronic components, lights and additional items not listed, are covered by separate warranties from their manufacturer. Warranty registration and claims procedures for these items are provided to the original owner in a delivery packet. MobilityTRANS does not warranty components not manufactured by MobilityTRANS. However, MobilityTRANS does warranty our installation of most equipment. Sometimes it's hard to be sure which warranty covers an issue, please contact your selling dealer for advice on how to proceed before having any repairs performed.

Please sign below to acknowledge this warranty:

Sign _____ Print Name: _____

Date: _____

Scan and email this form to:
jessica@mobilitytrans.com or
geri@mobilitytrans.com

THANK YOU FOR CHOOSING Q'STRAIT PRODUCTS!

The warranty registration process takes just a few minutes and will require the following information:

- Serial Numbers located on the Warranty Card(s) or Product(s), and
- Your Vehicle(s) information (i.e. VIN, Make, Model and Year)
- Your privacy matters to us! Please [click here to read our privacy policy](#).

Q'STRAIT'S WARRANTY POLICY

Limited Warranty: Q'Strait warrants this product conforms to our manufacturing specifications and is free from defects in materials and workmanship. Q'Strait or its authorized dealer will (at its sole option) repair or replace the defective component(s) free of charge. This warranty does not cover the cost of assembly or disassembly, transportation, labor, or any other incidental costs involved in the removal of a defective part or the installation of the replacement part.

Q'Strait or its authorized dealers reserves the right to inspect the product to verify the claimed defect has not been caused by non-Q'Strait approved maintenance or by foreign particles or substances. This warranty does not apply to defects that result from accident, misuse or abuse, intentional damage, fire, flood, alteration or modification of the product, negligence, exposure, or use of the product in a manner inconsistent with its intended use.

Product Coverage

5 Years*

Q'POD (US), QRT-360 (US), QRT-350 (UK), QRT-550 (UK)

3 Years*

QRT MAX, QRT Deluxe, QLK-150 and The Q'UBE (US)

2 Years*

QRT Standard, Q-5000, M-Series, QLK-100 (US), QLK-110 (UK)
(with proof of maintenance performed by a Q'Strait authorized dealer)

1 Year

All other Systems, Products & Accessories

**Only valid if product is registered with Q'Straint. Otherwise, a one (1) year warranty applies to all products. Products must be installed by authorized Q'Straint dealer.*

SECTION 1 – LIMITED WARRANTY

Specialty Manufacturing, Inc. d/b/a Safe Fleet Bus and Rail – Charlotte, NC Division (“Warrantor”) warrants to the original purchaser (“Customer”) of the new (not used) equipment and parts manufactured and sold by Warrantor under Warrantor’s Specialty Manufacturing™, SMI™, Pretoria™, and/or Transpac® brands (but excluding all video and/or telematics products and/or services, which are, instead, subject to the applicable warranty terms available at safefleet.net/product-and-service-warranties) to such Customer (collectively, the “Products”) that each of such Products will be free from manufacturing defects for the applicable period set forth in Section 2 below, in each case commencing on the Warranty Start Date (as defined below), provided that such Product is used under conditions of normal use, that regular periodic maintenance and service is performed, and that such Product was installed in accordance with the instructions published by the Warrantor or any of its affiliates, and all in accordance with the Product Documentation (as defined below) and subject to the other terms and conditions set forth below, and further provided that all warranties extend only to defective components, and not full assemblies (this “Limited Warranty”).

“Warranty Start Date” means the date of manufacture of the applicable Product, as designated by Warrantor.

This Limited Warranty is not transferable for any reason, including in the event the applicable Product is sold, traded, transferred or otherwise disposed of in any manner by the original purchaser to another party.

SECTION 2 - APPLICABLE WARRANTY PERIODS

2.1 The applicable warranty period for each Product shall be as follows (as measured from the date of manufacture, as evidenced by Warrantor labeling):

STOP ARMS AND CROSSING ARMS: 3 years for Defender series, 2 years for all others (including 7 Series and Air)

PROLO, TRIPLE VALUE, DUAL PURPOSE, STANDARD SAFETY VENT, POWER and MSV ROOF HATCHES: 2 years on all electrical components, and 5 years on all other components

LED ROOF-MOUNTED STROBE LIGHTS: 5 years

DRIVER ALERT AND MERGE ALERT: 5 years

LED INTERIOR LIGHTING SYSTEMS: 12 years on LED arrays and power supplies, and 1 year on all other components

STEP TREAD: 3 years

ALL OTHER PRODUCTS (Including all service/replacement parts): 1 year

2.2 Notwithstanding the foregoing, and further subject to Section 2.3 below, in no event shall the warranty period exceed years for the cost of any labor performed with respect to any claim for a Product still under warranty.

2.3 When Warrantor replaces any part which is a component of a product listed above in this Section 2, the warranty period for such replacement part equals the warranty period remaining on such product at the time of such part replacement (i.e., furnishing the replacement part does not extend the original warranty period or start a new warranty period), but in no event extending beyond 90 days after the delivery date of such part, and is subject to all other terms and conditions of this Limited Warranty.

SECTION 3 – CERTAIN EXCLUSIONS FROM WARRANTY

3.1 This Limited Warranty does not cover normal maintenance, service or adjustments, nor does it cover damage to Products relating to:

- a. Accident, alteration, misuse, negligence, abuse, vandalism or physical damage;
- b. Any repair, replacement or alteration by a facility not approved in advance by Warrantor;
- c. Improper installation (including electrical damage caused by improper installation) or failure to follow installation

- instructions provided by Warrantor;
- d. Use inconsistent with the instruction manual, safety warnings, product labeling, datasheets, specification sheets and/or other installation, use, operation and technical documentation provided and/or published by the Warrantor or its affiliate (collectively, "Product Documentation");
 - e. Use of equipment or parts not manufactured by Warrantor;
 - f. Fire, explosion, implosion, flood, earthquake, lightning strike, acid rain, chemical fallout, catastrophic event, or other act of God or nature;
 - g. Exposure to excessive heat, moisture, other severe environmental conditions, or unintended uses and/or substances;
 - h. Exposure to chemicals or other substances (other than cleaning agents specifically recommended in the Product Documentation);
 - i. Acts or omissions of any carrier delivering any Products;
 - j. Any failure to care for or maintain any Product in accordance with the Product Documentation;
 - k. With respect to LED interior lighting systems: (i) the malfunction of fewer than 14 adjoining LEDs in the same light fixture of any length in a solid state LED interior lighting system; (ii) the malfunction of less than 5% of the total LEDs in the same light fixture of any length in a solid state LED interior lighting system; and/or (iii) a reduction of LED light output of less than 30%;
 - l. Damage done to step treads caused in whole or in part by cuts, tears, damage from high heels, pivot points, spiked footwear, or sub-floor and/or substrate irregularities.

SECTION 4 – CERTAIN ADDITIONAL CONDITIONS OF WARRANTY

4.1 In addition to the other exclusions, limitations, exceptions, qualifications and conditions set forth herein, this Limited Warranty is conditioned upon, and will be invalidated by failure to comply with any of, the following conditions:

- a. All Products, and all ancillary equipment, components and parts, must be installed in accordance with the Product Documentation.
- b. Regular maintenance and service must be performed on all Products, in accordance with the Product Documentation.
- c. Products must be put to their intended use, in accordance with the Product Documentation.
- d. Replacement parts must be manufactured by Warrantor.
- e. Complete compliance with the claims procedure set forth in Section 5 below.
- f. Warrantor must have received full and timely payment of all invoices issued to Customer.

SECTION 5 - NOTICE OF CLAIMS AND REPLACEMENT POLICY

5.1 Claims under this Limited Warranty must be in writing and presented to and received by Warrantor within the applicable warranty period set forth in Sections 1 and 2 above. All claims must include the serial number of the applicable Product, the name of the Customer (which must be the original purchaser), and the date (as to which Warrantor may require written evidence) the alleged defect was discovered. Within 30 business days of receiving a written claim pursuant to this Section 5.1, a member of Warrantor's staff will contact Customer and arrange for a time and place for a Warrantor representative to inspect the applicable Product, if necessary, and/or Warrantor may require the return of the applicable Product. For clarity, in addition to the other provisions of this Section 5, all Limited Warranty claims MUST be fully approved by Warrantor, in its sole discretion, prior to the commencement of any repair or replacement work in respect of such claims. If Warrantor instructs Customer to return any Product to Warrantor, the item will be assigned a Return Goods Authorization ("RGA") number and must be returned to Warrantor, with transportation charges prepaid, within 30 days of the RGA number being assigned. If the item is not returned within such 30-day period, this Limited Warranty automatically will terminate (and Warrantor will have no further liability or obligation) with respect to that Product.

- 5.2 After a representative of Warrantor inspects the applicable Product or otherwise assesses the problem, Warrantor will determine and take appropriate action (if any), in its sole discretion, to remedy the alleged problem. If the claim is for a manufacturing defect, Warrantor must be satisfied, in its sole discretion, that such Product was defective at the time it left Warrantor's factory.
- 5.3 If Warrantor ships a replacement part prior to receipt of the allegedly defective part it is intended to replace, such replacement part at Warrantor's discretion will be invoiced FOB Warrantor's facility, and upon receipt of such allegedly defective part, Warrantor will credit Customer's account if Warrantor determines, in its sole discretion, that such returned part is covered by this Limited Warranty. Warrantor may, in its sole discretion, use new or refurbished replacement parts for repairs and/or replace affected Products or parts with Products or parts that are materially functionally equivalent to the replaced Products or parts.
- 5.4 Warranty coverage applies only to original equipment supplied by Warrantor. Except as otherwise agreed by Warrantor in writing in its sole discretion, Warrantor assumes no responsibility or liability for the expense incurred for removal or installation of product requiring service and/or repair or any other labor costs; or for the expense of shipping, packaging, or handling; travel; or for the handling of product returned to sender after necessary service or repair.

SECTION 6 – REMEDY

- 6.1 Customer's sole and exclusive remedy under this Limited Warranty is the repair or replacement of Products, as determined by Warrantor in its sole discretion, subject to the terms and conditions of this Limited Warranty.

SECTION 7 – INTERNATIONAL SHIPMENTS

- 7.1 For all repaired and replacement Products shipped outside of the United States under this Limited Warranty:
- Customer / recipient is responsible for all taxes, levies, customs fees, import duties and the like imposed by the destination country.
 - Customer / recipient is responsible for assuring lawful importation into the destination country.
 - Recipient is the importer of record and must comply with all laws and regulations of the destination country.
 - Product Documentation may not be in destination country languages.
 - Products, Product Documentation and other accompanying materials may not be designed in accordance with destination country standards, specifications, and labeling or other requirements.
 - Service / labor to repair or replace any Product or part thereof (whether configured or non-configured) is not covered (except that it is covered solely in Canada and solely in the case of configured parts).

SECTION 8 - LIMITATION OF LIABILITY

- 8.1 THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY OF ANY KIND WITH RESPECT TO PRODUCTS AND SHALL BE IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IN ANY MANNER RELATED TO ANY PRODUCTS, WHETHER ORAL, WRITTEN, OR ARISING BY COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE, OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY, NON-INFRINGEMENT, OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND NO DEALER, DISTRIBUTOR OR OTHER SUPPLIER OF PRODUCTS OR ANY OTHER PARTY HAS THE AUTHORITY TO MODIFY OR AMEND THIS LIMITED WARRANTY IN ANY RESPECT WITHOUT THE EXPRESS PRIOR WRITTEN CONSENT OF WARRANTOR (WHICH WARRANTOR MAY WITHHOLD AT ANY TIME AND FOR ANY REASON IN ITS SOLE DISCRETION).
- 8.2 IN NO EVENT SHALL WARRANTOR BE LIABLE FOR ANY OTHER DAMAGE OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES, WHETHER OR NOT SUCH DAMAGE WAS FORESEEABLE, AND EVEN IF INFORMED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER

REMEDY OF ITS ESSENTIAL PURPOSE, IN ALL CASES WHETHER AS THE RESULT OF OR BASED ON ACTUAL OR ALLEGED BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING ANY FORM OF NEGLIGENCE), STRICT LIABILITY, OR ANY OTHER THEORY, INCLUDING, WITHOUT LIMITATION, LABOR OR EQUIPMENT REQUIRED TO REMOVE AND/OR REINSTALL ORIGINAL OR REPLACEMENT PRODUCT(S) OR PARTS, LOSS OF TIME, PROFITS, SALES OR REVENUES, LACK OR LOSS OF PRODUCTIVITY, INTEREST CHARGES OR COST OF CAPITAL, COST OF SUBSTITUTE EQUIPMENT, SYSTEMS, SERVICES OR DOWNTIME COSTS, DEATH OR PERSONAL INJURY, DAMAGE TO OR LOSS OF USE OF PROPERTY OR EQUIPMENT, OR ANY INCONVENIENCE ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY OR ANY OBLIGATIONS HEREUNDER.

- 8.3 NO STATEMENT MADE BY ANY PERSON WITH RESPECT TO ANY PRODUCT SHALL CONSTITUTE A WARRANTY, BE RELIED UPON BY ANY CUSTOMER OR ANY OTHER PARTY, OR BE DEEMED PART OF THIS LIMITED WARRANTY OR ANY SALE AGREEMENT BETWEEN WARRANTOR AND ANY CUSTOMER.
- 8.4 WARRANTOR RESERVES THE RIGHT TO MODIFY OR DISCONTINUE THIS LIMITED WARRANTY AT ANY TIME AND FOR ANY REASON IN ITS SOLE DISCRETION, WITH OR WITHOUT NOTICE, PROVIDED THAT ANY SUCH MODIFICATION OR DISCONTINUANCE WILL BE EFFECTIVE ONLY WITH RESPECT TO ANY PRODUCT PURCHASED AFTER SUCH MODIFICATION OR DISCONTINUANCE HAS OCCURRED. IN ADDITION, WARRANTOR RESERVES THE RIGHT TO CHANGE ITS PRODUCTS (INCLUDING BUT NOT LIMITED TO THEIR DESIGN, MATERIAL COMPOSITION AND/OR COMPONENTS) FROM TIME TO TIME WITHOUT NOTICE AND WITH NO OBLIGATION TO MAINTAIN SPECIFIC SPARE PARTS OR TO MAKE CORRESPONDING CHANGES IN WARRANTOR'S PREVIOUSLY MANUFACTURED PRODUCTS.



SERVING THE BUS TRANSPORTATION INDUSTRY

**WARRANTY – 1 year /
Unlimited mileage**

Warranty File Date	Failure Date
Servicing Agency	Contact Name
Vehicle VIN	Contact Phone No
A&M Systems Model No	A&M Systems Serial No
A&M Systems Build Date	In-Service Date
Mileage	RGA Number
Warranty Claim No	

Description of Defect

Work Performed

All defective materials must be removed without additional damage to the unit and returned to A&M Systems, Inc. for evaluation before warranty will be issued.

A & M Systems
4121 Eastland Drive
Elkhart, IN 46516.

Ph. 574 -522-5000

REQUEST FOR QUOTATION

PASSENGER TYPE DUAL REAR TIRE VAN (NON-RAISED ROOF)

EXHIBIT A PRICING PAGE

CLASS	VEHICLE DISCRIPTION	UNIT PRICE PER VEHICLE	ESTIMATED QUANTITY	EXTENDED PRICE
A	Vehicle with Two Wheelchair (WC) Positions	\$88,200.00	5	\$441,000.00
B	Vehicle with One Wheelchair (WC) Position	\$87,800.00	5	\$439,000.00
C	Vehicle Non-Accessible	\$74,800.00	5	\$374,000.00
D	Vehicle/ Two WC / Fixed Route Package	\$94,150.00	5	\$470,750.00
E	Vehicle One WC / Fixed Route Package	\$93,750.00	5	\$470,750.00
F	Vehicle / No WC / Fixed Route Package	\$80,400.00	5	\$402,000.00
G	Vehicle / Two WC/ Fixed Route Package Exterior Paint Scheme	\$95,300.00	5	\$476,500.00
H	Vehicle / One WC / Fixed Route Package Exterior Paint Scheme	\$94,900.00	5	\$474,500.00
I	Vehicle / No WC / Fixed Route Package / Exterior Paint Scheme	\$81,500.00	5	\$407,500.00

TOTAL BID EVALUATION	\$3,956,000.00
----------------------	----------------

<i>*Complete form provided.</i>
<i>*Please note these are only estimated quantities and do not reflect any guarantee of purchase.</i>
<i>*The DPT may purchase more or less as needed.</i>
<i>*Please do not alter pricing page.</i>