



## STANDARD TERMS AND CONDITIONS — STATE OF OREGON — CONTRACTS FOR THE PURCHASE OF SUPPLIES AND/OR SERVICES

1. **DEFINITIONS:** "Contract" means the entire written agreement between the parties, including but not limited to the Invitation to Bid or Request for Proposal and its specifications, terms and conditions; solicitation instructions; solicitation addenda and contract amendments, if any; the purchase order or price agreement document.

"Contractor" means a person or organization with which the State of Oregon has contracted for the purchase of goods the terms "Contractor" and "Seller" as used in the Uniform Commercial Code (ORS chapter 72) are synonymous; "ORS" means the Oregon Revised Statutes;

"State" means the state agency making the purchase and is synonymous with "Buyer" as used in ORS chapter 12. "State" also means an ORCPP member if the purchase is being made under the State's cooperative purchasing program authorized by ORS 190.240.

2. **WORKERS' COMPENSATION:** The Contractor, its subcontractor, if any, and all employers providing work, labor or materials under this Contract are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656017, which requires them to provide Oregon workers' compensation coverage that satisfies Oregon law for all their subject workers.

3. **STANDARD AND SPECIAL TERMS AND CONDITIONS:** The terms and conditions printed on this page are standard to State of Oregon contracts for the purchase of goods. There may also be special terms and conditions in an Invitation to Bid or Request for Proposal which apply only to this contract.

4. **DELIVERY:** All deliveries shall be F.O.B destination with all transportation and handling charges paid by Contractor, unless specified otherwise in the solicitation documents. Responsibility and liability for loss or damage shall remain with Contractor until final inspection and acceptance when responsibility shall pass to the State except as to latent defects, fraud and Contractor's warranty obligations.

5. **INSPECTIONS:** Goods furnished under this contract shall be subject to inspection and test by the State at times and place determined by the State. If the State finds goods furnished to be incomplete or not in compliance with solicitation specifications, the State may reject the goods and require Contractor to either correct them without charge or deliver them at a reduced price, whichever is equitable under the circumstances. If Contractor is unable or refuses to cure any defects within a time deemed reasonable by the State, the State may reject the goods and cancel the contract in whole or in part. Nothing in this paragraph shall in any way affect or limit the State's rights as buyer, including the rights and remedies relating to rejection under ORS 72.6020 and revocation of acceptance under ORS 72.6080.

6. **WARRANTIES:** Unless otherwise stated, all goods shall be new and current model and shall carry full manufacturer warranties. Contractor warrants all goods delivered to be free from defects in labor, material and manufacture and to be in compliance with solicitation specifications. All implied and expressed warranty provisions of the Uniform Commercial Code (ORS chapter 72) are incorporated in this contract. All warranties shall run to the State.

7. **CASH DISCOUNT:** If the State is entitled to a cash discount, the period of computation shall commence on the date the entire order is delivered or the date the invoice is received, whichever is later.

8. **PAYMENT:** Payment for completion of State contracts is normally made within 30 days following the date the entire order is delivered or the date the invoice is received, whichever is later. After 45 days, Contractor may assess overdue account charges up to a maximum rate of two-thirds of one percent per month (8% APR) on the outstanding balance (ORS 293.462).

9. **TERMINATION:** This contract may be terminated by mutual consent of both parties or by the State at its discretion. The State may cancel an order for goods at any time with written notice to Contractor, stating the extent and effective date of termination. Upon receipt of this written notice, Contractor shall stop performance under this contract as directed by the State. If this contract is so terminated, Contractor shall be paid in accordance with the terms of the contract for goods delivered and accepted if Contractor's damages arising out of return of the goods cannot be mitigated by the resale as provided in the Uniform Commercial Code (ORS 72.7060).

10. **FORCE MAJEURE:** Neither party to this contract shall be held responsible for delay or default caused by fire, riot, acts of God and/or war, which is beyond the party's reasonable control. The State may terminate this contract upon written notice after determining such delay or default will reasonably prevent successful performance of this contract.

11. **BREACH OF CONTRACT:** Should Contractor breach any of the provisions of this contract, the State reserves the right to cancel this contract upon written notice to Contractor. Contractor shall be liable for any and all damages suffered by the State as the result of Contractor's breach of contract including but not limited to incidental and consequential damages, as provided in ORS 72.7110 to 72.7170 in the event of repeated breach of public and/or private contracts. Contractor shall be subject to disqualification on State of contracts, as provided in ORS chapter 279 and OAR chapter 137.

12. **HOLD HARMLESS:** Contractor shall indemnify, defend and hold harmless the State and its divisions, officers, employees, agents and members, from all claims, suits or actions of any nature arising out of or related to the activities of Contractor, its officers, subcontractors, agents or employees under this contract.

13. **ACCESS TO RECORDS:** The Contractor shall maintain all fiscal records relating to this contract in accordance with generally accepted accounting principle and shall maintain any other records relating to this contract in such a manner as to clearly document Contractor's performance hereunder. The State and its agencies, the Secretary of State Audits Division, the federal government and their duly authorized representatives shall have access to such fiscal records and to all other books, documents, papers, plans and writings of Contractor which relate to this contract, to

perform examination, and audits and make excerpts and transcripts.

14. **AMENDMENTS:** The terms of this contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever without prior written approval of the State.

15. **SEVERABILITY:** If any provision of this contract is declared by a court of competent jurisdiction to be illegal or in conflict with the law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as of the contract did not contain the particular provision held invalid.

16. **WAIVER:** Failure of the State to enforce any provision of this contract shall not be a waiver or relinquishment by the State of its right to such performance in the future nor of the right to enforce any other provisions of this contract.

17. **GOVERNING LAW; JURISDICTION, VENUE:** This contract shall be governed and construed in accordance with the laws of the State of Oregon, without resort to any jurisdiction's conflict of laws rules or doctrines. Any claim, action, suit, or proceeding (collectively, "the claim") between the State (and/or any other agency or department of the State of Oregon) and the contractor that arises from or relates to this contract shall be brought and conducted solely and exclusively within the Circuit Court of Marion County for the State of Oregon. Provided, however, if the claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. Contractor hereby consents to the in personam jurisdiction of said courts.

18. **ASSIGNMENT/SUBCONTRACT/SUCCESSORS:** Contractor shall not assign, sell, transfer, or subcontract rights or delegate responsibilities under this contract in whole or in part, without the prior written approval of this State. No such written approval shall relieve Contractor of any obligations of this contract, and any transferee or subcontractor shall be considered the agent of Contractor. Contractor shall remain liable to the State under the contract as if no such assignment, transfer, or subcontract had occurred. The provisions of this contract shall be binding upon and shall inure to the benefit of the parties to the contract and their respective successors and assigns.

19. **COMPLIANCE WITH APPLICABLE LAWS:** Contractor shall comply with all federal, state and local laws, codes, regulations and ordinances applicable to the provision of goods under this contract, including, without limitation, the provisions of ORS 279C.505, 279C.515, and 279B.235, as set forth below and the provisions of: (i) Title VI of the Civil Rights Act of 1964; (ii) Section V of the Rehabilitation Act of 1973; (iii) the Americans with Disabilities Act of 1990 (Pub L No 101-336), ORS 659.425, and all amendments of and regulations and administrative rules established pursuant to those laws; and (iv) all other applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations.

20. **PAYMENTS REQUIRED BY ORS 279C.505 AND 279B.220:** For all goods provided under this contract, Contractor shall (i) pay promptly, as due, all persons supplying labor or material; (ii) pay all contributions or amounts due the industrial Accident Fund from the contractor or any subcontractor; (iii) not permit any lien or claim to be filed or prosecuted against the state, county, school district, municipality, municipal corporation or subdivision thereof; and (iv) pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.

21. **STATE PAYMENT OF CONTRACTOR CLAIMS:** If Contractor fails, neglects or refuses to pay promptly is due, any claim for labor or services furnished to the Contractor or any subcontractor by any person in connection with the goods provided under this contract, the State may pay such claim and charge the amount of the payment against funds due or to become due the Contractor under this contract. The payment of a claim by the State pursuant to this paragraph 21 shall not relieve the Contractor or its surety, if any, from obligation with respect to any unpaid claims.

22. **HOURS OF LABOR:** No person shall be employed by the Contractor for more than eight hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where public policy absolutely requires it, and in such cases the laborer shall be paid at least time-and-a-half pay for all overtime in excess of eight hours a day and for work performed on Saturday and on any legal holiday specified in ORS 279B.020 and 279C.540.

23. **SAFETY AND HEALTH REQUIREMENTS:** Goods and services provided under this contract shall comply with all federal Occupational Safety and Health Administration (OSHA) requirements and with all Oregon safety and health requirements, including those of the State Workers' Compensation Division.

24. **AWARD TO FOREIGN CONTRACTOR:** If Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to this contract. The State shall withhold final payment under this contract until Contractor has met this requirement.

25. **RECYCLABLE PRODUCTS:** Contractor shall use recyclable products to the maximum extent economically feasible in the performance of this contract. Contractor shall specify the minimum percentage of recycled product in the goods provided.

26. **MATERIAL SAFETY DATA SHEET:** In accordance with the OR-OSHA Hazard Communication Rules in OAR chapter 437, division 155, Contractor shall provide the State with a Material Safety Data Sheet for any goods provided under this contract which may release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use (OAR 437- 155-005 (2); 437-155-025). In addition, Contractor must label, tag or mark such goods.

REVISED BY THE ATTORNEY GENERAL 9/94

DOCUMENT TITLE CHANGED AND ORS 279 REFERENCES UPDATED BY DAS FORMS COMMITTEE 04/05

# REQUEST FOR TRANSIT VEHICLE PRICE QUOTE (RFQ)

This is (check appropriate):

- Initial Request for Quote (from Requesting Agency to Vendors)  
Due Date: April 14, 2017 before 12 pm
- Response to RFQ (from Responding Vendor back to Requesting Agency)
- Grant Funded Purchase

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VENDOR (Business Name): SCHETKY NORTHWEST SALES, INC.

Vendor Contact Person: TOBI BASSETT Phone: 503-382-3119

Email Address: TOBIB@SCHETKYNW.COM Alt Phone: 503-287-4141

X Meets Buy America Standards (49 USC § 5323(j); 49 CFR part 661)

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## REQUESTING AGENCY INFORMATION

Agency: Yamhill County Transit Area

Date:

Contact Person: Cynthia Thompson

Phone: 503-995-7965

Email Address: [Thompson@co.yamhill.or.us](mailto:Thompson@co.yamhill.or.us)

Agency Address: 800 NE 2<sup>nd</sup> Street McMinnville, OR 97128

The above Agency, through its Public Transit program or public transit affiliate, is requesting price quotes from Oregon State Price Agreement Contract Vendors for the purchase of the following vehicle(s):

From (circle): Oregon State Price Agreement / Other No. of Vehicles Required: 4

PTD Vehicle Category (Check): (Please see PTD Vehicle Descriptions and Useful Life Standards)

Cat A  Cat B  Cat C  Cat D  Cat E \_\_\_ (select from 1 to 3)

Length (can be range): 30'-35' Regular Seats: 27 ADA Stations/Tiedowns: 3

Fuel Type:  Gasoline  Diesel  Bio-fuel  Hybrid  CNG  Propane

High Floor  Low Floor Other Comment: \_\_\_\_\_

**The general specification for vehicle is as follows:**

Four large (4) heavy-duty (30'-35'), low-floor buses that seat a minimum of 27 seated passengers and 3 ADA wheelchair stations with tie downs. The vehicles shall have a minimum expected life of 12 years or 500,000 miles and must be designed for the widest possible spectrum of passengers, including children, adults, the elderly and people with disabilities.

The Contractor shall comply with all applicable federal and state regulations. These shall include but not be limited to ADA, Buy America, Testing, and safety requirements. In addition, buses must meet all applicable FMVSS regulations in effect at the date of manufacture.

Please note, that the vendor will not be responsible for providing radio system, reader boards or hardware for GPS location technology but may be asked to work with YCTA to install these systems. If applicable, please outline the fixed cost or cost/hour for installation.

Additional specifications are outlined below – the base price MUST include specifications noted – if there are suggested changes to the specs (and the bid includes those changes), please note this in the vendor response section.

The vendor is also asked to provide three references related to warranty and service with the bid.

<b>A. VENDOR'S VEHICLE BASE PRICE INFORMATION</b>	<b>VEHICLE BASE PRICE</b>
<b><i>This Section to be completed by Vendor</i></b>	<b><i>Enter base price from State Price Agreement below</i></b>
Vehicle Make/Model: <b>ENC / E-Z Rider II</b>	<b>\$287,327.00</b>
Length: <b>32'</b>	
Fuel Type: <b>Diesel</b>	
Floor: <input type="checkbox"/> High Floor <input checked="" type="checkbox"/> Low Floor Other:	
No. of Regular Passenger Seats: <b>29</b>	
No. of ADA Stations w/Tie downs Desired: <b>3</b>	
Other Special Note:	

Please provide 3 previous customers reference contact numbers, we will inquire:

- How responsive the vendor has been to warranty issues?
- Have you used their maintenance or repair services? If yes, were they able to provide the service in a reasonable amount of time?
- Have you had any major issues with customer service or shop staff?
- Are there any other issues or concerns you've had with the vendor, shop staff, vehicle delivery, etc that you'd like to let me know about?

Negative feedback from previous customers will be discussed with ODOT Capital Programs; this may disqualify your bid.

## B. VEHICLE REQUIRED SPECIFICATIONS

	<b>VENDOR RESPONSE</b>
<b><i>Requesting Agency's Required Specifications Description</i></b>	<b><i>Vendor Suggestions (related to vehicle specs)</i></b>
12 Year Altoona Test Executive Summary	Comply – Altoona Test Report PTI-BT-R0107 E-Z Rider II
Vehicle should be approximately 30'-35' long with fully welded monocoque style frame structure.	Comply
ISO 9001 Certified manufacturing or comparable.	Comply
Diesel engine; emission compliant; minimum 6.0L.	Comply
Heavy duty Allison transmission or comparable	Comply
One-piece composite roof, with roof mounted AC	Comply
Low floor bus with ramp/no LIFT and kneeling feature; also looking for a manual bypass for ramp.	Comply
2 floor plan options with side or front load wheelchair access	Comply
Treated floor; undercoated and insulated	Comply
Removable composite side panels with no external connection points and side/rear windows that DO NOT wrap around.	Comply
Comfortable driver compartment that accommodates both large and small operators.	Comply
Exhaust routed to rear of bus	Comply
5 or 6 speed automatic transmission	Comply
Intermittent single switch windshield wipers	Comply
Back up lights & alarm	Comply
Molded plastic seats with cloth pop out covers.	Comply
HVAC system with separate driver controls for HVAC in driver area.	Comply
Stop request strip	Comply
Driver Stanchion with modesty panel	Comply
Diamond NV Farebox / 1 vault installed and keyed for YCTA buses	Comply
<b><i>Subtotal Cost of Vehicle Required Specs:</i></b>	<b>\$37,145.00</b>
<b><i>Total Vehicle Cost With All Options:</i></b>	<b>\$324,472.00 (incl. all required options)</b>
<b><i>Installation costs of YCTA provided Items.</i></b> (E.g. radios, reader boards, etc. Please note whether unit of fixed Cost)	<b>\$3750.00 (Estimate only; Dependent on systems selected)</b>

### C. VEHICLE PREFERRED OPTIONS

<b>Requesting Agency's Preferred Options Description</b>	<b>Included in Base Price?  YES / NO</b>	<b>\$Additional Cost for Option\$  (or Note Not Available)</b>	<b>Vendor Suggestions  (related to vehicle specs)</b>
Auto adjusted heated mirrors	Yes		Mirrors are auto heated and motorized with side turn signals integral with mirror heads
Accessory fans (2)	No	\$162	
Secure storage cubby for driver	Yes		
Cup holder	No	\$45	
Intercom – PA system with hand held microphone and speakers	No	N/C	
Outside Speaker	No	N/C	
Garbage can rack	No	\$49	
Media racks	No	N/C	
Interior notification display	No	\$650	Hanover
Seat belt extenders for wheelchair securements; and securement strips that run parallel to length (rather than width).	Yes		
Driver's seatbelt in a bright color	No	N/C	
Reverse lights and driving lights	No	N/C	
Colored lighting inside 1 <sup>st</sup> and 2nd banks	No	\$75	
Powder Coat Yellow- railings on entry doors, parallel to entrance, on ceiling and driver stanchion as listed above	No	\$495	
Extendable visor	No	N/C	
Upgraded Driver Seat for comfortable ride	No	N/C	
Automatic Tire Chains	No	\$3500	
Grip Rails with anti-slip material for front and ramp entry	No	\$100	
Bike rack (minimum 3 racks – willing to consider front racks, internal racks or other rack options – safety primary consideration) Sportswork or equivalent	No	\$2550	
Additional exterior lighting to enhance illumination around bike rack.	No	\$110	
Replacement Alternator	No	\$2850	

Q-Straint Self Secure Device (or similar self-secure restraint device)	No	N/C	
Need price for self-secure and Q-Straint or equivalent for 4 wheelchair securement storage on the bottom of foldaway seats.	No	*See Above	
Rear Tow hooks	No	\$290	
Digital Clock in driver area	No	\$90	
Availability of parts and service on a local level	Yes	*see attached After-The-Sales Support*	
<b>Subtotal Cost of Preferred Options:</b>		\$10,966.00	

**Vendor's Signature:** Jobi Bassett **Date Sent:** 4/20/17

**Please don't forget to sign and date your response here.**

**Sample Floor plan (Attach on back) – two (2) floor plans are included...one with w/c ramp in front/entrance door (base vehicle) and one with w/c ramp in rear/exit door (optional vehicle)**

**VENDOR INFORMATION**

Vendors are strongly encouraged to submit price quotes using the format provided. Vendors should specifically note if and how they meet the above specifications, and note any differences in what has been called out above, in their price quotes. This may be done on the form, or on an attached sheet. The vehicle(s) will be purchased with funding from the Oregon Department of Transportation, Public Transit Division and the Requesting Agency, and will follow applicable Federal and State procurement guidelines.

**Price Quote shall be submitted to the Requesting Agency contact person named on the first page on this form.**

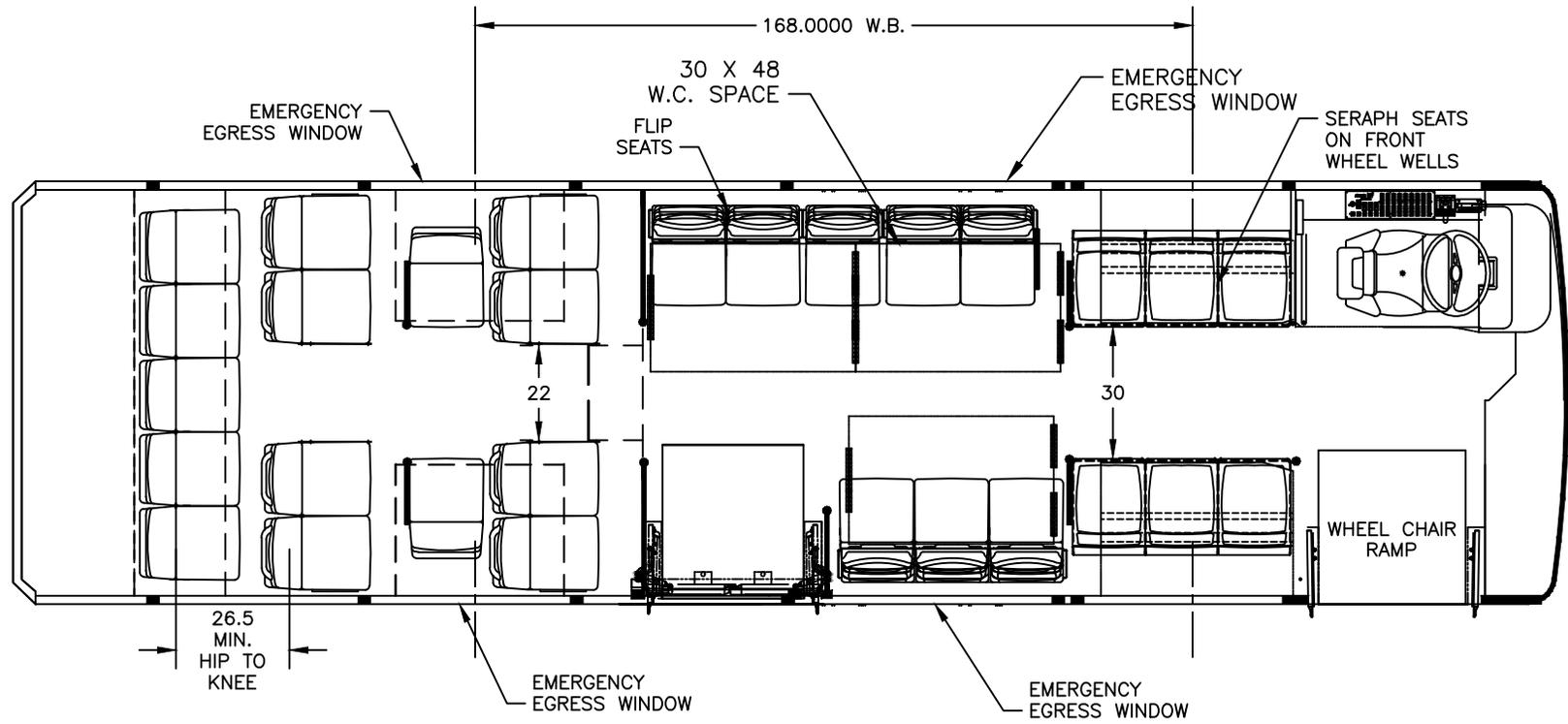
**Price Quotes may be sent by U.S. Mail, emailed, or faxed to the addresses for Requesting Agency noted on page 1 of this form. All Bids are due on or before April 14, 2017 at 12pm.**

**VEHICLE SELECTION INFORMATION**

Selection of the vehicle and successful price quote will be based on:

**Lowest Cost With Required Specifications (Lifecycle costs may be considered in price determination and may affect lowest bid determination)**

REVISIONS						
ECN No.	REV	LVL.	DESCRIPTION	DATE	ZONE	INITIAL



CAPACITY:  
 21 PASSENGERS WITH 3 WHEELCHAIR POSITIONS  
 OR  
 29 PASSENGERS PLUS DRIVER  
 USING FREEDMAN CITISEATS

FOR USE WITH  
 ISB DIESEL ENGINE  
 OR  
 ISL GAS ENGINE  
 ONLY

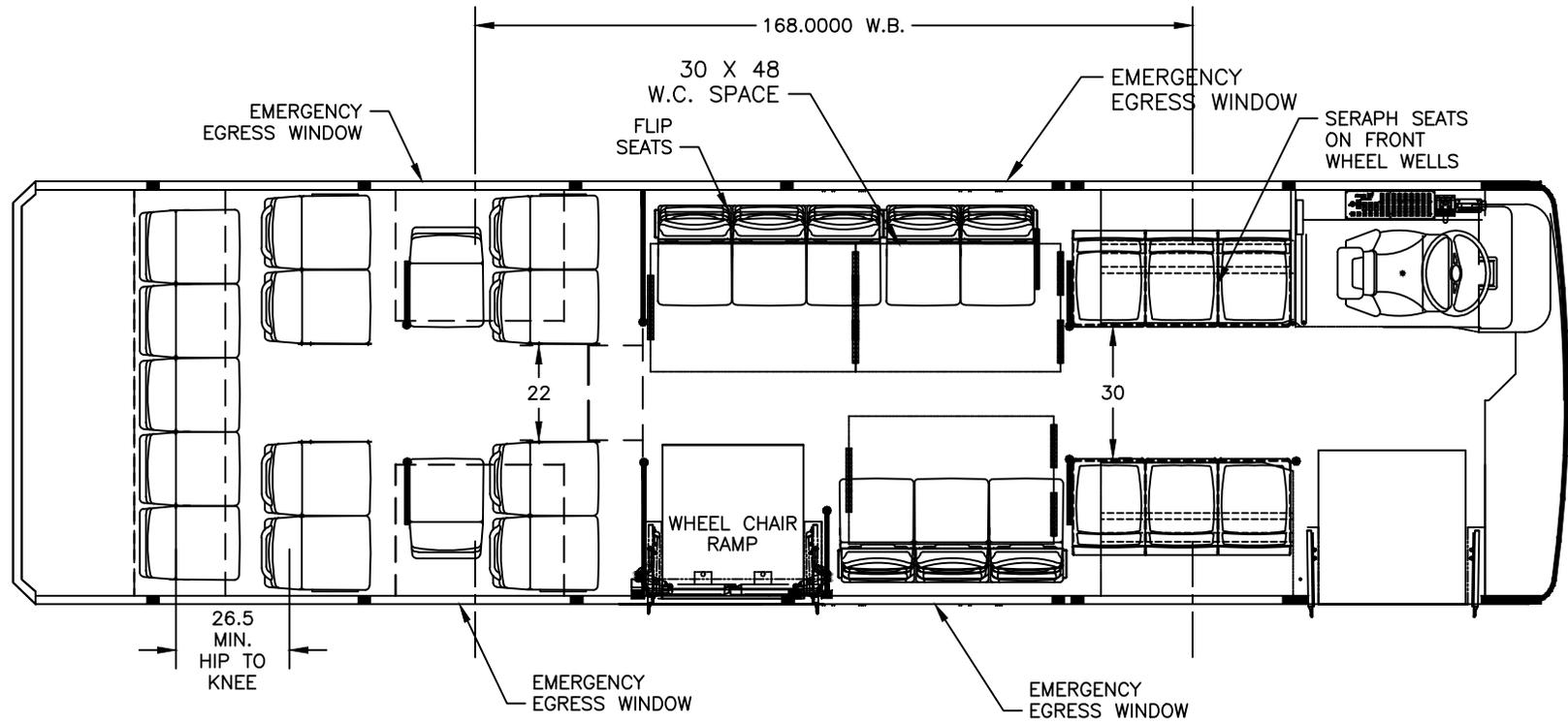
**CONCEPTUAL PROPOSAL ONLY**

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ITEM	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.
DRAWN BY LOREN L DATE 10/29/15 APPROVED SCALE 1=22 SIZE C TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DECIMAL DEGREES 1/32 0.03125 1/16 0.0625 1/8 0.125 3/16 0.1875 1/4 0.25 5/16 0.3125 3/8 0.375 1/2 0.5 5/8 0.625 3/4 0.75 7/8 0.875 1 1.0					
EIDorado National - California 9670 Galena Street Riverside, CA 92509 Phone (909) 591-9557			TITLE FLOOR PLAN EZRII 168"		
MODEL	EZRII	DWG NO.	E32F1AC0005	SHEET 1 OF 1	REV

NEXT ASSEMBLY	
AutoCAD FILE	E32F1AC0005

REVISIONS						
ECN No.	REV	LVL.	DESCRIPTION	DATE	ZONE	INITIAL



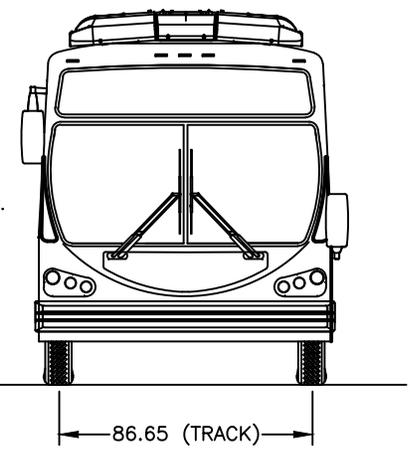
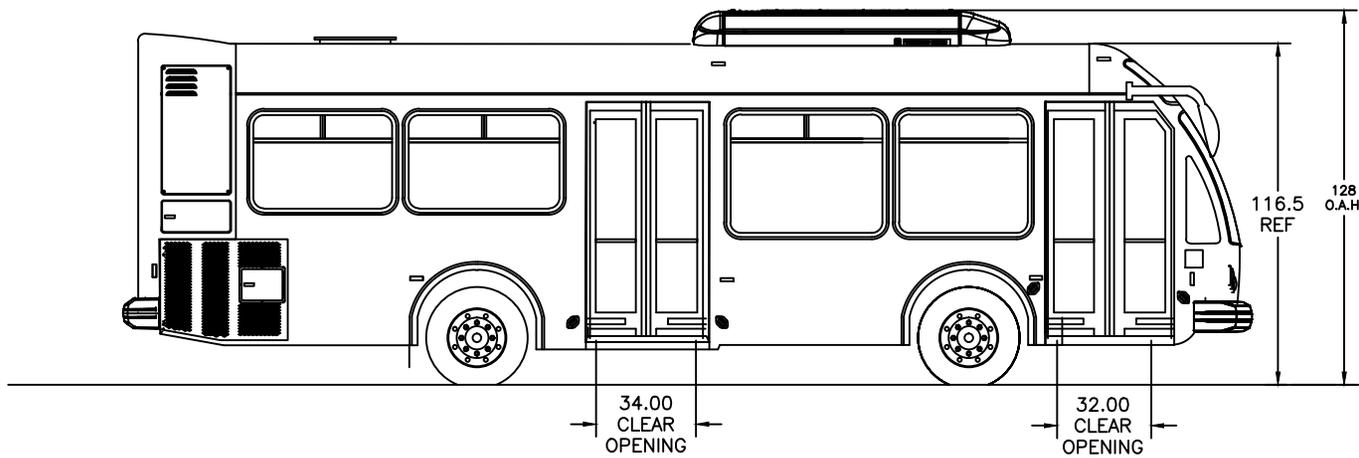
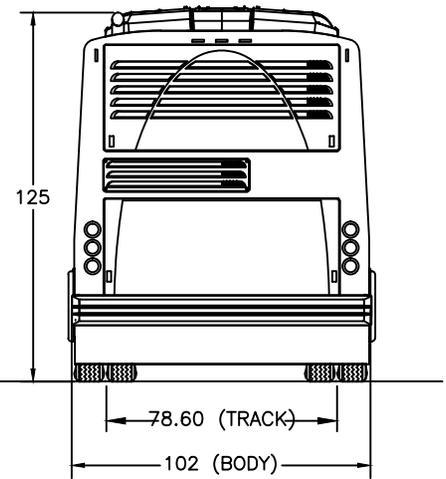
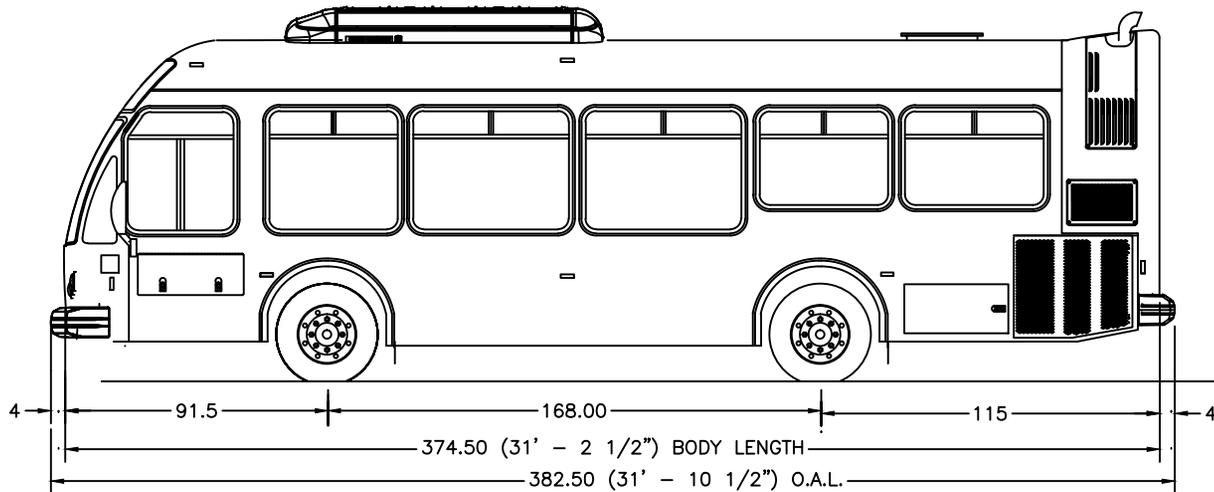
CAPACITY:  
 21 PASSENGERS WITH 3 WHEELCHAIR POSITIONS  
 OR  
 29 PASSENGERS PLUS DRIVER  
 USING FREEDMAN CITISEATS

FOR USE WITH  
 ISB DIESEL ENGINE  
 OR  
 ISL GAS ENGINE  
 ONLY

**CONCEPTUAL PROPOSAL ONLY**

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ITEM	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.
DRAWN BY LOREN L		DATE 7/1/15		Eldorado National - California	
APPROVED				9670 Galena Street Riverside, CA 92509 Phone (909) 591-9557	
NEXT ASSEMBLY		SCALE 1=22		SIZE C	
AUTOCAD FILE		TOLERANCES UNLESS OTHERWISE SPECIFIED		TITLE FLOOR PLAN	
E32F1AC0002		FRACTIONS DECIMAL DEGREES		EZRII 168"	
		± 1/32 .001 ± .03 ± .1		MODEL EZRII	
				DWG NO. E32F1AC0002	
				SHEET 1 OF 1	
				REV	



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REVISE ONLY ON CAD SYSTEM				ITEM	PART OR DWG. NO.	QTY.	SIZE	DESCRIPTION	SPEC.
DRAWN BY				DATE		<b>Eldorado National - California</b> 9670 Galena Street Riverside, CA 92509 Phone (909) 591-9557			
LOREN L				2/11/15					
ECN NO				REV		DATE		BY	
NEXT ASSEMBLY				APPROVED		TITLE			
AutoCAD FILE				SCALE		SIZE		ELEVATION	
				1=40		B		EZ-RIDER II MAX 32	
				DO NOT SCALE THIS DWG.					
				TOLERANCES UNLESS OTHERWISE SPECIFIED					
				FRACTIONS		DECIMAL		DEGREES	
				± 1/32		.00 ± .03		± 1°	
99530311-168-BRT				MODEL		DWG NO.		SHEET	
				EZRII MAX		99530311-168-BRT		1 OF 1	
								REV	

**EIDorado National**

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**E-Z RIDER II TECHNICAL SPECIFICATIONS  
for  
Yamhill County Transit Area  
off  
State of Oregon Contract #4729**



# Eldorado National

## E-Z RIDER II 32' LOW-FLOOR TRANSIT BUS DETAILED TECHNICAL SPECIFICATIONS

The E-Z Rider II is a sleek, streamlined, and aesthetically designed heavy-duty, rear engine transit bus conforming to all applicable ADA Regulations. The E-Z Rider II is designed and manufactured to save weight while maintaining high strength through the use of body materials integrated in fabrication. The E-Z Rider II 32' low-floor bus is a twelve (12) year 500,000 mile vehicle.

The E-Z Rider II detailed technical specifications are intended to provide a complete description of all components, systems, features, and options as selected

### PRINCIPAL DIMENSIONS

LENGTH, BODY	374.5"
WIDTH, BODY	102"
OVERALL HEIGHT, WITH ROOF A/C	125"
WHEELBASE	168"
OVERHANG, FRONT EXCLUDING BUMPER	91.5"
OVERHANG, REAR EXCLUDING BUMPER	115"
APPROACH ANGLE (DEG)	8.7
BREAKOVER ANGLE (DEG)	14.0
DEPARTURE ANGLE (DEG)	8.7
FLOOR HEIGHT	17.88"
HEIGHT, STEP FROM GROUND FRONT & REAR	
KNEELED	10.88"
UNKNEELED	13.88"
HEIGHT, INTERIOR (CENTER OF AISLE)	
@ FRONT AXLE	95"
@ REAR AXLE	78.25"
WIDTH BETWEEN DOOR PANELS	37.25"
HEIGHT, DOORWAY FRONT & REAR	78.5"
GVWR, (275/70R22.5 TIRES)	34,000 lbs.
GAWR, FRONT	11,000 lbs
GAWR, REAR (275/70R22.5 TIRES)	23,000 lbs.
TURNING RADIUS (CURB TO CURB)	27'-10"

In keeping with our dedication to quality and safety, Eldorado National Co. buses are constantly under review that may cause specifications to be changed without notice.

# **Eldorado National**

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## **POWER PLATFORM SPECIFICATIONS**

### **DIESEL ENGINE**

Rear T-mounted Cummins ISB-2017 6.7 liter turbo-charged and charge air-cooled in-line 6-cylinder electronic control medium/heavy-duty diesel engine.

- ◆ **PERFORMANCE** - Peak horsepower is 280 BHP @ 2,600 RPM and peak torque of 660 ft.-lbs. @ 1,600 RPM.
- ◆ **CERTIFICATION** - Current Federal EPA emissions standards certifications for 49 states with Ultra low sulfur diesel fuel, diesel particulate filter (DPF) and selective catalytic reduction (SCR). A ten (10) gallon diesel exhaust fluid (DEF) tank will be integrated into the emission after-treatment system.
- ◆ **OILING** - Engine oiling system includes a full flow spin-on two (2) quart capacity filter. Engine oil cooling is by internal mounted water to oil heat exchanger.

### **COOLING SYSTEM**

The cooling system is sized to maintain all engine and transmission fluids and engine intake air at safe, continuous operating temperatures during the most severe operations possible and in accordance with engine and transmission cooling system requirements.

- ◆ **RADIATOR** - a high capacity cross-flow radiator with 600 sq. in. core frontal area with stainless steel bolt-on inlet and outlet tanks. The radiator is baffled top and bottom and both sides.
- ◆ **BRASS DE-AERATION RESERVOIR (Surge Tank)** - mounted on the roadside with capacity of four (4) gallons.
- ◆ **FAN** - The nylon fan is 9-blade, 32-inch diameter.

### **MECHANICAL RADIATOR FAN DRIVE**

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Driven by a two-speed clutch and a 90-degree heavy-duty worm gear, connected to the engine crankshaft pulley. The fan clutch is controlled by engine ECM.

### **TRANSMISSION**

Allison B300R five (5) speed pushbutton automatic transmission with an integral output hydraulic brake retarder. The transmission has a duty cycle rating of 38,000 lbs. GVWR.

# Eldorado National

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- ◆ OIL FILTERS - Transmission is equipped with integral cartridge-type oil filters located in the transmission main oil supply and cooler return circuits. Access to each filter is through the bottom of transmission control module.
- ◆ OIL COOLER - Transmission oil, is cooled by a externally mounted heavy-duty water to oil heat exchanger
- ◆ CONTROLS - Transmission is controlled electronically.

## HYDRAULIC SYSTEM

The coach hydraulic system providing a hydraulic circuit for power steering.

## HYDRAULIC HOSE

Super Tough Parker Super Tough has multiple layers of steel wire reinforcement, a super tough polymeric cover, and understandable hose identification markings with Nitrile based rubber inner tube. Designed for plumbing hydraulic lines in close places.

## DIESEL FUEL SYSTEM

DOT approved diesel fuel storage system constructed of treated carbon steel, 76 gallon fitted with hex head drain plug, electric fuel gauge float switch.

- ◆ TANK- is located rearward of the rear axle. The fuel tank is supported by welded frame tubing member supports for maximum stability and safety.
- ◆ FILTER - A top load fuel filter with integrated water separator and water in fuel sensor mounted on the side of engine.
- ◆ FILLING - Fuel fill is located in a curbside access door aft of the rear axle.
- ◆ FMVSS 301 and ICC compliance with diesel fuel tank regulations.

## EXHAUST SYSTEM

High capacity stainless steel exhaust pipe and diesel particulate filtering system is installed with heat shields baffles and vibration mounts. The tailpipe is so designed to direct exhaust vertically at the rearmost roadside corner of the bus body.

## FRONT SUSPENSION

The E-Z Rider II air ride suspension provides the driver and passengers with the ultimate in ride quality and safety. The front suspension is trailing arm taper leaf with 11,500 lbs. capacity.

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- ◆ SPRINGS - Two (2) rolling lobe air springs per axle. The springs' air pressure is maintained by a single, time delayed height control valve. Air springs are internally equipped with jounce rubber stops.
- ◆ DAMPENING - Springs are dampened by two (2) hydraulic suspension valve Koni shock absorbers.

## **KNEELING**

The kneeling suspension features will lower the vehicle 3 inches from the designed ride height.

## **REAR SUSPENSION**

The E-Z Rider II air ride suspension provides the passengers with the ultimate in ride quality, safety and roll stability. The rear suspension is trailing arm taper leaf, has a gross axle weight rating of 23,000 lbs. capacity, controlled constant height air spring suspension.

- ◆ SPRINGS - Two (2) rolling lobe air springs per axle. Springs' air pressure is maintained by two (2) each zero delay height control valves. Air springs are internally equipped with jounce rubber stops.
- ◆ DAMPENING - Springs are dampened by two (2) hydraulic suspension valve Koni shock absorbers.

## **FRONT AXLE ASSEMBLY**

The front axle is manufactured by Meritor, Model MFS-12 I-Beam construction, providing a design load rating of 12,000 lbs. capacity.

- ◆ BUSHINGS - King pin bushings are replaceable bushings at all lateral joints with replaceable heavy-duty steering arm tie rod ends.
- ◆ LUBRICATION - Top and bottom king pin bushings and tie rod end joints are equipped with zerk type grease fittings. Front hub and spindle bearings are pre-packed grease type.

## **REAR DRIVE AXLE**

The rear drive axle is manufactured by Meritor Model RS 23 Series single reduction hub-piloted full floating type, drive axle with design load rating of 23,000 lbs. capacity.

- ◆ CARRIER - Separable carrier housing construction with bolted ring gear and magnetic internal hex head lubricant drain plug.
- ◆ LUBRICATION - Carrier and hubs are internally oil lubricated with multi-grade, multi-purpose gear oil.

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## WHEELS

All wheels are interchangeable wheels rims are hub-piloted.

- ◆ FRONT & REAR WHEELS (6) – Powder coat painted steel disc type 22.5" x 7.50 with 10-hole pattern and 285.75 mm bolt circle.

## TIRES

High capacity tires are the Michelin X INCITY Z urban/city rated tires size - 275/70R 22.5 single front and dual rear (6). Wheels and tires are balanced as an assembly per SAE J1986. Tires are rated for 65 MPH maximum speed.

## STEERING

Integral hydraulic power steering designed for the riggers of heavy transit with a 14,000 lb. rating; and a ratio of 18.9:1.

- ◆ STEERING GEAR - Manufactured by Sheppard, Model M100.
- ◆ STEERING COLUMN AND WHEEL - Driver's steering column is provided with a 6-way lever controlled tilt and telescopic adjustment. A padded, 20" diameter steering wheel will also be provided.

## AIR BRAKE SYSTEM

The air brake system is a combination of Bendix / Wabco ABS system meeting all FMVSS 121 requirements.

- ◆ FRONT BRAKES - The drum diameter is 15" brake lining Q Plus with automatic slack adjusters. The front lining width measures six inches (6"); and the brake chambers are 20".
- ◆ REAR BRAKES - The drum diameter is 16.5" brake lining Q Plus with automatic slack adjusters. The rear lining width measures seven inches (7"); and the brake chambers are 3030".
- ◆ PARKING/EMERGENCY BRAKE - Spring brake chamber controlled by a push-pull dash mounted control valve.

## AIR COMPRESSORS - DIESEL ENGINE

The coach air system operates all accessories and the braking system with reserve capacity.

- ◆ AIR COMPRESSORS - The Meritor/Wabco dual air compressors, as approved by Cummins has sufficient pumping capacity to maintain all system at rated pressures. The compressors are a naturally aspirated Wabco brand, with a minimum total CFM rating of 37.
- ◆ AIR DRYERS - The air system is equipped with dual Bendix, model AD-9 air dryers.
- ◆ AIR LINES - The compressor discharge line between the air dryer is a flexible Teflon hose with stainless steel braided jacket and stainless steel coiled tubing. Air lines connecting air control equipment are nylon tubing meeting SAE standard J-844.

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## **AIR CLEANER**

The air cleaner is a dry pleated paper disposable type. The air piping system is equipped with a filter minder indicator for ease of maintenance.

## **ENGINE HIGH IDLE SYSTEM**

An electronically controlled high idle system is provided as standard. The system is activated when transmission is in neutral, air conditioning is operating and/or driver switch is on. Idle rpm speed is programmable.

## **ENGINE GUARD (AUTOMATIC SHUTDOWN)**

An electronically controlled engine shutdown system will be provided. The system senses engine low oil pressure and high water temperature. The driver's console panel is equipped with an override switch to restart the engine.

## **DRIVELINE ASSEMBLY**

Spicer 1710 Series universal cross bearings with drive shaft guard.

## **HOURLY METER**

The engine is equipped with electronic hourmeter located in the rear runbox.

## **BACK-UP ALARM**

A waterproof, 12-volt DC, 97-dbA alarm is supplied. The alarm is controlled by the transmission reverse switch.

## **ENGINE BLOCK HEATER**

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The engine is equipped with a 120-volt AC, freeze plug block heater. The plug connection is located in the engine compartment, accessible through the side service doors.

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## BODY SPECIFICATIONS

### BODY FRAME STRUCTURE

The integrated body is structurally fabricated using Grade C, Hi-strength carbon steel. Rectangular tubing, plate and formed sheet steel is welded into a monocoque type space frame. The body frame structure as presented meets or exceeds the Federal rollover requirements of FMVSS 220 and crashworthiness of FMVSS 214D.

### CORROSION PROTECTION

The E-Z Rider II low-floor bus incorporates a state-of-the-art corrosion protection system on all steel structural members of the bus. Corrosion protection is included inside as well as the exterior of all tubular body structures. Complete details of our corrosion protection program are listed below.

- ◆ IN-TUBE CORROSION PROTECTION - The inside of all structural tubing is sprayed with Ziebart - Formula A, meeting C62218A.
- ◆ BODY CAGE PREPERATION - The steel cage structure and all related metals parts are welded into a complete frame assembly. This assembly is moved into a blast booth where it is blasted entirely with 40/50 mix of steel grit medial. This gives all steel parts a 1-mil physical profile for paint adhesion.
- ◆ BODY CAGE CORROSION PROTECTION - After blasting the cage it is moved to a cross-flow paint booth. The cage is prepared and primed using AkzoNobel/Sikkens corrosion resistant epoxy primer/sealer LV360. In critical corrosive areas PPG - Corashield is applied which has been ASTM tested to 1000 hours of salt spray. The protected cage is then baked at 140° for 20 minutes to ensure proper curing.
- ◆ BODY SEALING - All welded butt joints sealed with Sikaflex 221 a polyurethane adhesive sealant curing to a permanently elastic protective seal along the edges.
- ◆ BONDING MATERIAL - 3M double face tape is used between the body panels and the steel frame for bonding and separation of dissimilar metals.
- ◆ VEHICLE UNDERCOATING - The understructure of the vehicle floor and wheelwells are coated with BASF MasterSeal 631, heavy-duty undercoating.

### ENGINE FIREWALL

Rear engine firewall is a weld fabricated carbon steel panel design: to provide a superior fire resistant barrier. The panel is covered on the engine side with 1" Barymat sound and thermo blanket. The rear bulkhead/firewall is rated to Docket 90A recommended practice.

### FRONT TOW EYES

Two (2) towing eyes are provided, accessible under the front bumper.

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## **JACKING/HOISTING**

A service jack rated for the vehicle weight can be placed under the front and rear axle. The steel frame structure in specified locations supports the weight of the vehicle.

## **OPERATOR'S PLATFORM**

A raised platform is provided to ensure better visibility for the operator in a seated position.

## **DOOR WAY LOCATIONS**

Doorways are formed and weld fabricated, using 14-gauge coated mild steel in a single step design.

## **WHEELHOUSINGS**

Formed and fabricated 12-gauge coated mild steel rear and 14-gauge coated mild steel front for wheel housings are installed between the under-structure and the plywood sub-floor.

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## **EXTERIOR BODY PANELS**

Various lightweight, durable materials are used to provide the sleek, streamlined appearance. These panels are installed using methods allowing for a smooth surface without exposed fasteners.

- ◆ **SIDEWALL PANELS** – all-composite, non-corrosive sidewall panels are secured with 3M tape and Sika adhesive/sealant.
- ◆ **ROOF and ROOF CORNER PANELS** – The roof and roof shoulders are now integrated into a single piece contour molded, non-corrosive composite sheeting with 3M double-face tape and Sika adhesive/sealant around the perimeter edges.
- ◆ **FRONT AND REAR CROWNS** - Contoured and aesthetically molded, reinforced fiberglass. Sections are installed with structure caulking, rivets and moldings.
- ◆ **SEALING** - All panels are caulked with paintable sealants prior to prime treatment. Side panels are undercoated.

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## **REMOVABLE LOWER SKIRTS**

- ◆ **REMOVABLE SKIRTS** – The sidewall panels including lower skirt panels are fabricated from all-composite materials with the lower skirt panels being easily removed/replaced. The lower skirt panels are held by a sidewall ABS material and fastened under the bottom edge of the sidewalls.

## **RAIN GUTTERS**

Rain gutters are installed on each side to prevent water flowing from the roof on to passenger doors, operator's side window and exterior mirrors.

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## **FENDER TRIM**

Molded flexible rubber forming a smooth contoured wheel opening designed and installed to be easily replaceable. Fender trim does not interfere with wheel and tire removal.

## **FRONT AND REAR SPLASH APRONS**

Splash Aprons are installed behind the front tires to within 3” of the road surface. Rear splash aprons extend to within 3” of the road surface.

## **SERVICEABILITY AND ACCESS DOORS**

The E-Z Rider II low-floor bus was designed and is built with service in mind. The rear engine is accessible through service doors on the curbside and rear of the bus. This access provides for service to the following systems and components:

- ◆ Service check and addition of fluids for engine, transmission and power steering oils, engine and coolant.
- ◆ Components accessible for service are master battery switch, master lift circuit breaker, radiator, and electric control panel.
- ◆ Doors are latched by two (2).push to open latches.
- ◆ Engine accessibility is through rear and side service doors.
- ◆ Radiator accessibility is through rear and road side service doors.

## **BATTERY COMPARTMENT**

A stainless steel compartment is provided in the roadside to accommodate the size and weight of the batteries. The battery tray is vented and will pull out easily.

## **BUMPERS**

Front and rear bumpers are reinforced energy absorbing type providing protection at speeds of up to 6.5 mph for front impact and 5 mph for rear impact. Bumper material is corrosion-resistant and withstands repeated impacts of the specified loads without sustaining damage.

## **PAINT**

The entire exterior body surface is completely sealed, cleaned, sanded and primed before final finish. The final finish surface is low V.O.C. urethane high solids paint meeting all State and Federal Health and Safety Regulations. A solid purple paint will be applied to the entire exterior of the vehicle and included in the Base vehicle pricing.

## **EXTERIOR LIGHTING**

All exterior lighting conforms to all State regulations and FMVSS 108.

- ◆ **HEADLAMPS** - Dual round sealed beams of counter-sunk automotive type, controlled by a day night run dash mounted switch. The dimmer is a floor-mounted control.

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- ◆ FRONT DIRECTIONAL LIGHTS - Front directional lights are 4" diameter mounted horizontally, one (1) on each side corner controlled by a steering column mounted level.
- ◆ STOP AND TAIL LIGHTS - Red lens vertically mounted, 4" diameter in size, one (1) per side.
- ◆ BACK-UP - White lens vertically mounted 4" diameter in size one (1) per side.
- ◆ REAR DIRECTIONAL LIGHTS - Amber rear directional lights are vertically mounted 4" diameter in size, one (1) per side.
- ◆ MARKER LIGHTS - Side marker and ICC marker lights are roof mounted, five (5) each amber front, and seven (7) each red rear.
- ◆ ENTRANCE AND EXIT LIGHTS - Entrance and exit lights for ADA compliance.
- ◆ DOORWAY LIGHTS - Doorway lights are suitably mounted so that entire entrance and a portion of the ground area outside the bus sufficiently illuminated. The doorway lights are extinguished when the front door is closed.

## **SIDE DIRECTIONAL LIGHTS**

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Side directional lights are 1.75" x 4" mounted horizontally on each side of the bus above the front and rear tires on each side.

## **FLOOR MOUNTED DIRECTIONAL SIGNALS**

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The directional signals are floor mounted, to the left of the steering column. This allows for hands-free directional signaling.

## **INTERIOR BODY PANELS**

The interior body panels are selected from various types of materials providing a light gray color coordinated interior.

- ◆ SIDE WALL PANELS - Reinforced 1/10" thick laminated melamine panels installed sectional with adhesive and trim moldings.
- ◆ REAR WALL PANELS - Contoured 1/10" thick laminated melamine panels installed with adhesive and trim moldings.
- ◆ HEADLINING - Reinforced 1/10" thick laminated melamine panels installed with double face tape and trim molding.

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## **MODESTY PANELS AND BARRIERS**

Modesty panels and barriers when specified are ¼ "thick gray melamine fitted to the 1-1/4" O.D. stainless steel tubing passenger assists.

## **BODY INSULATION**

Roof, sidewalls, and rear crown are insulated with 2.5" thick fiberglass mat insulation. Mat is applied to the inter-surface of the exterior panels. Insulation provides maximum thermo-barrier and sound absorption.

## **SUB-FLOOR MATERIAL**

Marine grade, 3/4" 5-ply wood panels are installed over the floor framing. All edges are sealed and undercoated prior to installation with sealant caulking and fastened with corrosion resistant Floor-Tight brand Huck fasteners.

## **FLOOR COVERING**

RCA Transit rubber flooring, 3/16" ribbed in the aisle and 1/8" smooth under seats, and covered up the sidewalls to the side seat track. Driver's area is covered with 1/8" smooth and trimmed with anodized aluminum angle molding. The vestibule is covered with 3/16" ribbed rubber and mitered on a 90-degree angle toward the entrance steps. A three-inch (3") wide standee line is installed in-line with the back edge of the stepwell of contrasting color.

## **LED INTERIOR LIGHTING**

Ceiling cove located Pretoria LED interior lighting fixtures, mounted continuous front to rear on each side will be supplied. The first light fixture on each side is extinguished when the front door is closed. Each fixture is equipped with a separate electronic inverter/ballast.

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## **LED DRIVERS LAMP**

A single driver's overhead incandescent light fixture is provided with a separate control.

## **INTERIOR ACCESS DOOR AND PANELS**

- ◆ INTERIOR ACCESS DOOR - Offering capability to maintain and clean front sign and inside window area.
- ◆ ACCESS DOOR - To service passenger door operating system.
- ◆ ACCESS DOOR - To service A/C and return air filter.
- ◆ ACCESS PANELS - Provided at various locations to facilitate ease of maintenance such as windshield washer, driver's console and engine.

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## **PASSENGER SEATS**

40NE CitiSeat passenger seats with Level 5 fabric will be provided and included in the base vehicle pricing.

## **PASSENGER ASSISTS**

All stanchions, overhead grab rails and modesty panels are designed and produced using 1-1/4" diameter 304 stainless steel tubing. Stanchions are fitted floor to ceiling per floor plan. Overhead grab rails are fitted horizontally from the roof carline. A modesty panel assembly is fitted behind the door entrances and as specified by floorplan.

## **FRONT AND CENTER/REAR PASSENGER DOORS**

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Front passenger entrance door and center/rear passenger exit door are provided. The doors incorporate the Vapor brand, dual panel, air operated, slide/glide design transit doors. The doors provide a clear opening width of 32" for the front door opening and 34" clear opening width for the rear door opening, (inclusive of door mounted hand rails.)

- ◆ **DOOR GLAZING** - The door windows are glazed with 1/4" thick 73% density laminated safety sheet glass. Glazing is installed in the upper and lower portions of the passenger door panels.
- ◆ **EMERGENCY OPERATION** - Passenger doors can be activated by a driver's operated release control valve and/or by a red painted release valve at the door location.
- ◆ **DOOR CONTROLLER** - The door actuation is controlled via a five-position Vapor brand door controller, mounted within the driver's compartment.
- ◆ **BRAKE AND ACCELERATOR INTERLOCK** - The center door is interlocked by a door switch controlling the rear brakes and accelerator. The system requires the bus to be below 2 MPH before the doors may be opened. Once the doors are opened the interlocks engage.
- ◆ **EMERGENCY OPERATION** - Passenger doors can be activated by a driver's operated release control valve or by frangible panels & release valves at each door location.
- ◆ **SENSITIVE DOOR EDGES** - The center/rear door is equipped with sensitive door edges. This system will cycle the center door back to the open position, should an obstruction be encountered during the closing cycle.

## **WHEELCHAIR ACCESSIBILITY SYSTEM**

The E-Z Rider II low-floor bus is designed to meet all applicable Federal ADA regulations. This system provides for safe and comfortable accessibility for ambulatory as well as disabled passengers.

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## **RICON FOLDOVER RAMP**

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The front/entrance door is equipped with a Ricon, model FR2SS, 1:4 slope fold-over type wheelchair ramp. The Ricon ramp is fabricated of aviation grade anodized aluminum construction with non-skid covering. The ramp will deploy when the vehicle is at ride height or in the kneeling position. Ramp measures 48" x 30" with 600 lb. capacity. Ramp deployment interlocks brakes and throttle, and is equipped with a manual backup. This ramp design meets all applicable ADA requirements with a 1:4 ramp angle.

## **WHEELCHAIR AND PASSENGER RESTRAINT SYSTEM**

A Q-Straint QRT 8100-A1 Deluxe, four (4) point wheelchair restraint system is provided at each of the three (3) wheel chair positions. Belts are stored in a convenient storage compartment, when not in use. L-track floor anchors with floor pockets are provided.

## **OPERATOR'S AREA**

### **DRIVER WINDSHIELD SUN SHADE**

Driver sunshade will be provided on the windshield, operating on guides to keep them close and parallel to the windshield. The roller will allow easy deployment when pulled downward, remaining where placed until released.

### **DRIVER SIDE WINDOW SHADE**

Driver's sunshade will be provided on the streetside window operating on guides to keep them close and parallel to the window. The roller will allow easy deployment when pulled downward, remaining where placed until released.

### **DRIVER'S CONTROLS AND INSTRUMENTATION**

The driver's area consists of an ergonomically designed dash console complete with the following controls and instrumentation. The control panel provides labeled and illuminated system control switches:

#### **Normal Bus Operation Controls**

- Engine start switch
- Transmission selector
- Door control
- Turn signal
- Dash heater / defroster
- Windshield wiper
- Master run switch
- Parking brake
- High beam
- Hazard lights
- Kneeling ramp control
- Instrument lighting control

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## **Special Controls**

ABS diagnostic test  
Stop engine override  
Drivers fan (optional)  
Exterior mirror heater/remote controls (optional)  
Fire suppression (optional)  
Engine diagnostic test connectors  
Stop request chime  
Fast Idle  
P.A.  
Diagnostic light panel test  
Destination Sign control (optional)

## **Passenger Comfort Controls**

Climate control (temperature select)  
Interior HVAC (blower)  
Interior lights (passenger compartment)

## **Operator Foot Controls**

Accelerator pedal  
Brake pedal  
Turn signals  
High beam

## **The Driver's Instrument:**

Tachometer  
Speedometer  
Odometer  
Fuel gauge  
Oil pressure gauge  
Coolant temperature gauge  
Voltmeter  
Dual air gauge

## **Dash Mounted Telltale Lights:**

Low oil pressure  
Coolant temperature  
Ramp deployed  
Alternator fail  
Engine shutdown  
Park brake  
High beam  
Air conditioning inoperative  
Low air pressure

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## **WINDSHIELD WIPERS AND WASHERS**

Two speed electric wipers are provided, one (1) on each side with a single control.

- ◆ ARMS AND BLADES - Wiper arms are pantograph type 31" long and blades are 31-1/2" long. Blades park at center of windshield.
- ◆ WASHER - Electric pump, 3-gallon washer reservoir, supplying nozzles located on wipers wet arm.
- ◆ INTERMITTENT WIPERS - Variable speed control allowing timed intermittent windshield cleaning.

## **DRIVER'S SEAT**

A Recaro, model Ergo Metro air suspension driver's seat is provided. The seat provides for an upgraded driver's seat and features six-way adjustments with air actuated lower lumbar support.

## **EXTERIOR MIRRORS**

Fully adjustable 15" x 8" overall, two (2) part mirrors are supplied. The upper section utilizes a 8-1/2" section of flat glass. The lower section is 5-1/2" convex adjustable diminishing glass. The mirrors are installed with quick mount disconnects, and are supported by rigid adjustable black powder coated arms. Both mirror assemblies are outfitted with heat and remote adjustable feature as well as utilizing an integral LED turn signal.

## **INTERIOR MIRROR**

Driver's passenger viewing 8" x 15" convex fully adjustable rearview mirror mounted in easy reach.

## **CENTER DOOR VIEWING CONVEX MIRRORS**

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A 12" diameter convex mirror is installed behind and above the doorway. This mirror is viewed through a 6" diameter convex mirror mounted in the upper front interior corner of the bus.

## **BRT APPEARANCE PACKAGE**

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A BRT appearance package is available on the E-Z Rider II. This package includes a European design one-piece or three-piece slanted windshield(s), frameless appearing passenger windows and door panels.

## **WINDOWS**

All windows meet State and Federal Safety Regulations. Windshield is AS-1, driver's side windows are AS-2, and passenger windows are AS-3 in quality.

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- ◆ **WINDSHIELD** - The windshield utilizes contoured two (2) piece, 1/4" thick, 73% single density laminated safety float glass. The windshield has a dark tinted sun-shade across top for driver safety. The windshield is glazed with two (2) piece black ozone treated extruded locks and key rubber.
  
- ◆ **DRIVER'S WINDOW** - The driver's window incorporates black polyester painted, extruded aluminum sash with a single slider design in the lower ¾ of the window. The window is glazed with 1/4" nominal thick 73% single density laminated safety sheet glass.
  
- ◆ **DOOR WINDOWS** - Door windows are glazed with 1/4" nominal thick 73% density laminated safety sheet glass. Each window is installed in the upper and lower portions of the passenger door(s).
  
- ◆ **PASSENGER SIDE WINDOWS** - The passenger windows feature black polyester painted extruded aluminum sash frames with upper T-slide transom openings. The windows are glazed with 1/4" nominal thick, 31% gray density laminated safety sheet glass. An adequate number of windows on each side designed to meet FMVSS 217 for emergency egress.
  
- ◆ **SIDE DESTINATION SIGN WINDOW** - The first curbside passenger window behind the front door is glazed with 3/16" nominal thick clear tempered safety glass in the upper transom section for sign viewing

## **THERMO KING ATHENIA ROOF MOUNTED HVAC SYSTEM – DIESEL BUS**

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Heavy-duty Thermo King - Athenia rooftop mounted HVAC system is supplied for the Diesel propelled buses. This system has a heating system rating of 100,000 BTU. The air conditioning component of the Athenia is rated from 92,000 when utilizing R134a refrigerant and 113,000 BTU when utilizing R407C. The HVAC system incorporates a Thermo King, model X430 refrigerant compressor. The electronic climate control system is the Thermo King - Intelligaire III.

## **FRONT ENTRANCE HEATING**

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Heat from front heater defroster will be ducted to blow hot air to the front entrance door area.

## **DRIVER'S A/C HEATER AND DEFROSTER**

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Driver's area is heated and cooled by a heater, defroster and air conditioning system. The heater and defroster provide 60,000 BTU with 475 CFM of air flow. The driver's air conditioning provides 24,000 BTU with 475 CFM. Both heat and cool are controlled by electric over vacuum dash-mounted controls. The system has 4-speed fans with a fresh air intake mode. Windshield air flow is through molded dash air ducts providing even air diffusion.

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## **DRIVER'S AREA BOOSTER BLOWER**

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A driver's area booster blower located in the driver's side A/C duct is provided.

## **REAR POSITION ROOF HATCH**

A Transpec brand, model 1000 series, five (5) position roof ventilator and emergency escape hatch is installed in the roof over the rear axle of bus.

## **TOUCH TAPE PASSENGER SIGNAL SYSTEM**

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A passenger stop request system utilizing vertically mounted yellow touch tape switches mounted on each side of the bus is provided. The tape switches are 18" long and are mounted on all windows posts. The touch tape is accessible to all passengers and meets applicable ADA regulations.

## **PASSENGER STOP REQUEST CHIME**

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A two-tone chime is mounted overhead of the driver on the ceiling cove. The chime is activated by the passenger pull cords or touch tape. This system meets all applicable ADA regulations.

## **STOP REQUEST SIGN**

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A backlighted stop request sign is mounted overhead on the front ceiling bulkhead. The sign is designed as to remain illuminated when activated by the passenger signal system until it is extinguished by opening the front door and/or center doors.

# **ELECTRICAL, ELECTRONICS AND DATA COMMUNICATION SYSTEM**

## **24-VOLT ENGINE ELECTRICAL SYSTEM**

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The electrical system is designed to provide and distribute 24-volt DC power to all electrical components in the bus, excluding the subsystems requiring 12-volt power.

## **300 AMP, 24-VOLT ALTERNATOR**

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A V-belt driven, Niehoff brand, 300 amp, air cooled, 24-volt alternator is supplied. This alternator supplies electrical power to all systems on the bus, including the roof Thermo King HVAC system. Additionally, a Surepower, model 52206 battery equalizer rated at 60 amps is provided to supply current for 12-volt requirements.

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## **8-D BATTERIES**

Dual 8-D Series batteries, providing 1,100 cold cranking amps each are supplied. The batteries are located on the roadside of the vehicle and are accessible through a service access door. The batteries are supported on a slide-out tray fabricated from stainless steel.

- ◆ CABLES - Color coded for (RED) positive and (BLACK) negative #2 battery cables are provided. The cables are sleeved with high abrasive resistant Packard Electric flex-guard loom for added safety.
- ◆ MASTER BATTERY DISCONNECT SWITCH - A master switch is located in the front side of the battery compartment and is accessible through the battery compartment access door.

## **BASELINE ELECTRICAL WIRING**

All general purpose wiring is cross linked polyethylene insulated and number, (function) coded for positive identification, and meets the requirements of SAE recommended practice J878a, Type SXL. Precautions have been taken to avoid damage from heat, water, solvents or chafing by proper routing, clamping and the use of grommets or suitable elastomeric cushion materials. Harnesses are designed to resist abrasion by the use of machine mesh woven plastic loom. Harnesses are sectional, terminating at insulated multi-pin quick disconnects or junction blocks. All main electrical harnesses incorporate 10% spares.

- ◆ ELECTRICAL JUNCTION PANEL - Heavy-duty circuit junction panel is provided inside the bus accessible from outside through the access door under the driver's window. The panel is equipped with heavy-duty 12-volt DC 40/30 amp relays and 12-volt DC circuit breakers. Panel is equipped with a complete circuit legend.

## **I/O CONTROLS DINEX MULTIPLEXING SYSTEM**

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The electrical control and wiring system are the I/O Controls - DINEX #G2A Multiplex Systems. The system components are capable of performing reliable operation in an environment of between minus 30° C to plus 80° C while encountering mobile shock and vibrations. Each module is adequately shielded to prevent interference by EMI and RFI. The multiplex power source is isolated thereby avoiding any ground noise. The program for operating the bus is contained in the MBC (Master Bus Controller). A single downloading point is located on the bus for reprogramming.

The components of the multiplex system are of modular design, thereby providing for ease of replacement by field maintenance personnel. Furthermore, each module utilizes LED's to indicate input status, output status, circuit integrity and assist in rapid circuit diagnostics and verification of the load and wiring integrity. The internal control device is a solid-state device, which provides an extended life service cycle. Non-self-resetting circuit breakers or fuses are provided to protect each individual circuit. Programmable time delay functions and integrated flasher capabilities are contained in the control module.

# **Eldorado National**

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## **PUBLIC ADDRESS SYSTEM**

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A public address amplifier and hand-held microphone with four (4) baffled interior and one (1) waterproof exterior speaker. Interior speakers are mounted two (2) front and two (2) rear in the face of the ceiling cove. Exterior speaker is located at the front door entrance area.

## **AM/FM RADIO-CD PLAYER**

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AM/FM stereo cassette radio-CD player is included

## **REAR ENGINE COMPARTMENT CONTROLS**

Rear engine controls consist of engine start switch, ignition front/off/rear, engine stop, engine compartment light, oil pressure coolant temperature, voltmeter and hour meter.

## **EMERGENCY EQUIPMENT**

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The bus is equipped with a 5 lb. ABC rated fire extinguisher, 16-unit first aid kit (meets and exceeds the Oregon 10-unit kit) and a triangular hazard kit.

***END OF E-Z RIDER II TECHNICAL SPECIFICATIONS***

**STURAA TEST**

**12 YEAR**

**500,000 MILE BUS**

**from**

**ELDORADO NATIONAL**

**MODEL E-Z RIDER II**

**OCTOBER 2001**

**PTI-BT-R0107**

**PENNSTATE**



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**The Pennsylvania Transportation Institute**

201 Research Office Building (814) 865-1891  
The Pennsylvania State University  
University Park, PA 16802

**Bus Testing and Research Center**

6th Avenue and 45th Street (814) 949-7944

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## EXECUTIVE SUMMARY

EIDorado National submitted a model E-Z Rider II, CNG-fueled, 28 seat, 30-foot bus, for a 12-Year/500,000 mile, STURAA test. The odometer reading at the time of delivery was 662.0 miles. Testing started on April 15, 2001 and was completed on September 21, 2001. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability sections of the report. The Structural Durability Test was started on April 3, 2001 and was completed on August 29, 2001.

The interior of the bus is configured with seating for 28 passengers including the driver. Free floor space will accommodate 15 standing passengers, resulting in a potential load of 43 persons. At 150 lbs per person, the gross vehicle load is 6,450 lbs. The first segment of the Structural Durability Test was performed with the bus loaded to a GVW of 27,400 lbs. The middle segment was performed at a seated load weight of 25,130 lbs and the final segment was performed at a curb weight of 21,190 lbs. Durability driving resulted in unscheduled maintenance and failures that involved a variety of subsystems. A description of failures, and a complete and detailed listing of scheduled and unscheduled maintenance is provided in the Maintainability section of this report.

Accessibility, in general, was adequate, components covered in Section 1.3 (Repair and/or Replacement of Selected Subsystems) along with all other components encountered during testing, were found to be readily accessible and no restrictions were noted.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The failure data is also classified by severity as defined in Section 2. The test bus encountered no Class 1 or Class 2 failures. Of the 34 failures, 21 were Class 3 and 13 were Class 4.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 46.64 seconds.

The Shakedown Test produced a maximum final loaded deflection of 0.048 inches under a distributed static load of 16,125 lbs. There was essentially no permanent deflection after the load was removed. The Distortion Test was completed with all subsystems, doors and escape mechanisms operating properly. No water leakage observed throughout the test. All subsystems operated properly.

The Static Towing Test was to be performed using a target load (towing force) of 25,428 lbs. Testing was terminated during the 20° downward pull at approximately 20,000

# ElDorado National

a **THOR** company

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November 1, 2001

## MANUFACTURERS ANALYSIS OF UNSCHEDULED MAINTENANCE AND CORRECTIVE ACTIONS

**SUBJECT:** Altoona Test on ElDorado National EZ-Rider II - 12 year/500,000 miles

The E-Z Rider II successfully completed the 12-year/500,000 mile durability test and the following areas were identified and needed attention due to results from this test.

The left rear spring was broken and it was analyzed and determined by the manufacturers', Standen's Limited, that the test conditions were exceeding the design criteria by more than 10%. The production parts were resized and the spring profile was modified to conform with the new requirements (see letter dated October, 2001, from Standen's Limited).

The sheet metal mounted to the upper engine compartment showed fatigue due to moving fore and aft under stopping loads. By installing brackets for additional support to the sheet metal area this problem was easily eliminated.

The airbag, located at the rear suspension, was ruptured early in the test. It was found that the airbag was rubbing the head of a suspension bolt. The bolt was relocated and replaced using a round head type bolt.

The front suspension bolts were changed to fine thread to increase the clamping force.

In summary, the Altoona test identified a number of additional minor unscheduled maintenance items that were addressed for final production. Overall, we feel the bus performed very well in its class.

Engineering Department

# E-Z RIDER II



REV GROUP



## Unsurpassed Flexibility / Legendary Reliability

### HEAVY-DUTY 30', 32' AND 35' LOW-FLOOR BUS



#### BEST AESTHETICS

Swept windshield offers the superior aesthetics you demand with enhanced visibility and reduced wind noise for the driver and passengers.



#### HIGHEST CAPACITY

Best seated capacity in the business! The E-Z Rider II 35' seats as many as the competitors 40' bus! High capacity with superior maneuverability and greater fuel efficiency.



#### MOST WHEELCHAIRS

Up to four wheelchairs can be accommodated with ADA ramps at front, center or rear doors = total access! The available center door ramp is designed to accommodate even the largest electric scooters with ease.

The Eldorado National E-Z Rider II continues to be the mid-size, heavy-duty low-floor bus gold standard! Designed and built in the USA, the E-Z Rider II offers unmatched floor plan flexibility with ADA compliant wheelchair ramps at front, center or both doors for superior paratransit flexibility. With hundreds of options, the E-Z Rider II is custom built to meet your exacting needs. With the latest in exterior styling, the E-Z Rider II will separate your fleet from the ordinary!

DESIGNED AND BUILT IN THE USA!

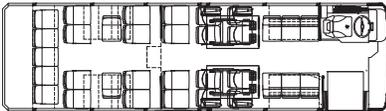
## POPULAR FLOORPLANS

(Note: this is only a partial listing of available floorplans. To find a floorplan meeting your exact needs, contact your ENC representative.)

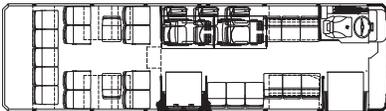
### 30' MODEL



20 Passengers w/2 Wheelchairs  
or 23 Passengers plus Standees

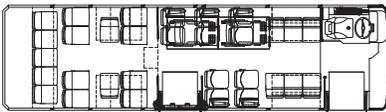


25 Passengers w/2 Wheelchairs  
or 33 Passengers plus Standees

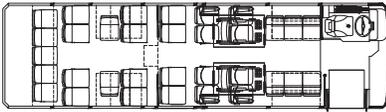


24 Passengers w/2 Wheelchairs  
or 30 Passengers plus Standees

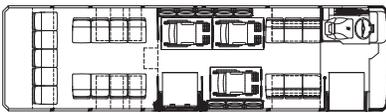
### 32' MODEL



25 Passengers w/2 Wheelchairs  
or 31 Passengers plus Standees

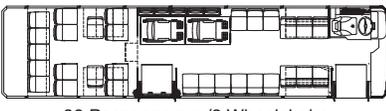


25 Passengers w/2 Wheelchairs  
or 33 Passengers plus Standees



19 Passengers w/3 Wheelchairs  
or 27 Passengers plus Standees

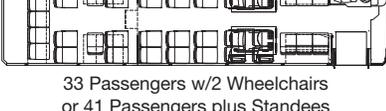
### 35' MODEL



30 Passengers w/2 Wheelchairs  
or 35 Passengers plus Standees



22 Passengers w/2 Wheelchairs  
or 28 Passengers plus Standees



33 Passengers w/2 Wheelchairs  
or 41 Passengers plus Standees

TECHNICAL SPECIFICATIONS	30' MODEL	32' MODEL	35' MODEL
GVWR	35,000 lbs.	35,000 lbs.	35,000 lbs.
Body Length	30' 7"	31' 3"	35' 7"
Body Width	102"	102"	102"
Wheelbase	160"	168"	220"
Approach Angle	8.7°	8.7°	8.7°
Breakover Angle	14°	14°	12°
Departure Angle	8.7°	8.7°	8.7°
Seating	Up to 33	Up to 33	Up to 41
Body Height	125" With Exhaust, 126" With Roof HVAC, 136" With CNG		
Interior Height	95" Over Front Axle, 78" Over Rear Axle		
Step Height-Front And Rear Doors	14" and 11" Kneeled		
Wheelchair Ramp Locations	Front And/Or Center Doors		
Available Engines	Cummins - Diesel, CNG, LNG, Diesel/Electric Hybrid		
Available Transmissions	Allison - B300R, B400R, Voith, ZF		
Passenger HVAC	Roof Or Rear Mounted Plus Dash Mounted Driver's HVAC		
Front And Rear Axles	ArvinMeritor		
Brakes	S-Cam Drum W/Automatic Slack Adjusters And ABS		
Tires	275/70R 22.5		
Front And Rear Doors	Vapor Air - Slide Glide		
Electrical System	I/O Controls Multiplex - G2A, G3 or G4		
Suspension	Air Suspension Front And Rear		



REVGROUP

9670 Galena Street • Riverside, CA 92509  
(909) 591-9557  
www.eldorado-ca.com

At ENC, we constantly improve our product; as a result all specifications and dimensions are subject to change without notice.





**SCHETKY NORTHWEST SALES, INC.**

*SERVING THE NORTHWEST SINCE 1942!*

## **REFERENCES**

LANE TRANSIT DISTRICT  
COSETTE REES  
PO BOX 7070  
SPRINGFIELD, OR 97475-0470  
541-682-6751

CITY OF WILSONVILLE  
SCOTT SIMONTON  
29799 SW TOWN CENTER LOOP E  
WILSONVILLE, OR 97070  
503-570-1541

JOSEPHINE COUNTY  
SCOTT CHANCEY  
201 RIVER HEIGHTS WAY  
GRANTS PASS, OR 97527  
541-474-5441

RIDE CONNECTION  
DEAN ORR  
9955 NE GLISAN  
PORTLAND, OR 97220  
503-528-1752



## AFTER-THE-SALE SUPPORT

When considering your next bus purchase, we believe there are three (3) areas of importance the buyer should look at: **the manufacturer**; **the distributor**; and **the product itself**.

SNWS recognizes the value and importance of qualified and timely after-the-sale support. Customers involved in the transportation industry routinely face operational obstacles such as unscheduled vehicle downtime, service accessibility, preventative maintenance, and parts availability which may negatively affect their service and operation. Recognizing this important aspect of your operation, SNWS has invested heavily to maintain the highest level of this necessary after-the-sale support. As a tangible benefit to our customers, we provide unequalled after-the-sale support by offering the largest, longest established sales/service/parts organization in the North American light-medium duty bus industry.

*Schetky Northwest* has a seventy-plus year commitment dedicated to customer service. With our proven track record in after-the-sale support, Schetky Northwest has received national recognition from such manufacturers as: Eldorado National Co.; Thomas Built Bus; Champion Mfg.; Heil Corp.; Toter Corp.; Carpenter Buses; Crown Mfg.; Superior Bus Co.; Ricon Corp.; Braun Corp.; Intec Corp.; and Kann Mfg. to name a few.

Whether your needs are for vehicle replacement, regular maintenance, parts replacement, technical advice, or operating assistance, *Schetky Northwest* is your "**best friend**" in the transportation industry!

### ➤ ELECTRONIC COMMUNICATIONS

The *Schetky Northwest* website allows for on-line warranty claim filing, requests for service, and parts ordering capabilities. For your review, you can visit our site at:  
<http://www.schetkynw.com/service/warranty.asp>.

### ➤ WARRANTY DEPARTMENT

Schetky Northwest sales provides warranty service that is most convenient and in the best interests of the customer. For specific warranty claims or anytime you may have a question regarding your warranty, we encourage you to contact our Warranty Administrator Ed Wakeman. Ed can be reached as follows:

- Ed Wakeman, Warranty Administrator (<mailto:edw@schetkynw.com>)  
Schetky Northwest Sales, Inc.  
503-382-3129 (Direct)  
800-255-8341 extension 129  
8430 NE Killingsworth St., Portland, OR 97220

8430 NE Killingsworth St. • Portland • Oregon • 97220  
2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)



Below describes the typical method of warranty adjustment<sup>1</sup>:

### COACH:

The Final-Stage Manufacturer Repair Station is available at: Schetky Northwest Sales, Inc., Portland, Oregon, or at our authorized service centers in Lakewood, WA. and Pasco, WA.; or through our affiliate dealer network nation-wide; or by reimbursing agency for expenses incurred at a repair facility mutually agreed upon; or reimburse agency for mutually agreed expenses incurred at the agency's maintenance facility. Please refer to the specific warranty terms and conditions for method of warranty adjustment.

### CHASSIS:

The chassis warranty repair station is available at any **authorized chassis dealership** in the United States. Our final-stage manufacturers produce vehicles built on light, medium, and heavy duty chassis' manufactured by Ford, Chevrolet, Chrysler, International, Freightliner, and Mercedes-Benz, as well as purpose-built chassis' manufactured by Thomas Built Bus, ElDorado National-Riverside, Mobility Ventures LLC MV-1 and ElDorado National-Riverside. Please consult your owner's manual or call Schetky Northwest for directions to your nearest service center.

Schetky Northwest further offers contractual warranty and repair facilities throughout the Country through our affiliation with various distributor networks, assuring our customers with the finest in after the sale support. For further information please contact our Warranty Department at (toll-free) 800-255-8341 extension 129.

## COMPLETE SERVICE FOR ALL TYPES OF EQUIPMENT

With three (3) facilities to better serve you, quality service and repairs are offered in such areas as electrical systems, hydraulic systems, wheelchair lift, air conditioning, body repair, preventative maintenance programs, complete vehicle refurbishing, and custom fabrication. To further meet the needs of our customers, Schetky Northwest also offers a convenient mobile field service program whereby our technician comes to your facility for those necessary repairs and service.

---

<sup>1</sup>ALL BODY RELATED WARRANTY REPAIRS MUST BE PRE-AUTHORIZED BY FINAL-STAGE MANUFACTURER.



- **CUSTOMER SERVICE DEPARTMENT**

Keeping with our philosophy and history to offer our customers the best product available as well as best possible service support, the *Schetky Northwest Service, Parts, & Warranty Department* staff of 28 employees at three (3) convenient locations dedicated to providing the finest in after-the-sale support:

- **Portland, OR:** With over 25,000 square feet of Service, Parts, Sales, and Administrative offices located just minutes away from the Portland International Airport, Schetky Northwest is conveniently located between Interstate 5 and interstate 205 at 8430 NE Killingsworth Street in Portland, Oregon.
- **Lakewood, WA:** Conveniently located just minutes from I-5 at 2624 112th St. So. in Lakewood Washington, Schetky Northwest maintains a 5,000 square foot service facility with four (4) dedicated service bays.
- **Pasco, WA:** Conveniently located just minutes from Hwy 12 at 4111 East B Circle in Pasco Washington, Schetky Northwest maintains a 6,000 square foot service and parts facility with four (4) dedicated service bays.

- **MOBILE FIELD SERVICE**

Recognizing that we cannot be everywhere, Schetky Northwest Service Department maintains a Mobile Field Service program that brings out technicians to you. In addition, additional contractual service agreements with other service facilities throughout the Northwest and Alaska are available to further provide our customers with convenient service alternatives. In addition, we provide for a network of service facilities nation-wide for qualified after-the-sale support, including service and parts.



8430 NE Killingsworth St. • Portland • Oregon • 97220  
2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)



**FOR SPECIFIC SERVICE NEEDS IN YOUR AREA OR TO SCHEDULE AN APPOINTMENT, PLEASE CONTACT THE SCHETKY NORTHWEST SERVICE CENTER NEAREST YOU:**

➤ **PORTLAND, OREGON**

Brett Hill, Service Manager  
Schetky Northwest Sales, Inc.  
503-607-3137 (Phone - Direct)  
800-255-8341 extension 137 (Toll-Free)  
8430 NE Killingsworth St., Portland, OR 97220  
<mailto:bretth@schetkynw.com>

• **LAKWOOD, WASHINGTON**

Ray Reynoldson, Service Manager  
Schetky Northwest Sales, Inc.  
(253) 507-5065 (Phone – Direct)  
2624 112th St. So., Bldg. A2, Lakewood, WA 98499  
<mailto:rayr.schetkynw@gmail.com>

• **PASCO, WASHINGTON**

Mr. Steve Standley, Service Foreman  
Schetky Northwest Sales, Inc.  
(509) 545-3378 (Phone – Direct)  
4111 East B Circle, Pasco, WA 99301  
[steves@schetkynw.com](mailto:steves@schetkynw.com)

## **PARTS DEPARTMENT**

Complementing our Sales and Service departments, Schetky Northwest offers the largest parts distribution network in 11 western states representing over 237 Manufacturers. Staffed by a total of 6 representatives, our Parts Department is available from 7:30am to 5:00pm with 24 hour on call availability for those unexpected emergency situations.

• **FOR PARTS INQUIRIES AND SALES, PLEASE CONTACT:**

Schetky Northwest Sales, Inc.  
800-769-0902 (Toll-Free)  
8430 NE Killingsworth St.  
Portland, OR 97220  
<http://www.schetkynw.com/service/parts.asp>

8430 NE Killingsworth St. • Portland • Oregon • 97220  
2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)



WE VALUE YOUR BUSINESS AND WELCOME THE OPPORTUNITY TO BE OF SERVICE. DO NOT HESITATE TO CONTACT US WHENEVER WE CAN BE OF ASSISTANCE.

**THANK YOU FOR CONSIDERING  
SCHETKY NORTHWEST  
TO MEET YOUR TRANSPORTATION NEEDS.**

**SCHETKY**  
NORTHWEST SALES, INC.

8430 NE Killingsworth St. • Portland • Oregon • 97220  
2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)

# REQUEST FOR TRANSIT VEHICLE PRICE QUOTE (RFQ)

This is (check appropriate):

- Initial Request for Quote** (from Requesting Agency to Vendors)  
Due Date: April 14, 2017 before 12pm
- Response to RFQ** (from Responding Vendor back to Requesting Agency)
- Grant Funded Purchase**

---

**VENDOR (Business Name):** \_\_SCHETKY NORTHWEST SALES, INC.\_\_\_\_

**Vendor Contact Person:** \_TOBI BASSETT\_\_      **Phone:** \_503-382-3119\_\_

**Email Address:** \_TOBIB@SCHETKYNW.COM\_\_\_\_      **Alt Phone:** \_503-287-4141\_

**Meets Buy America Standards** (49 USC § 5323(j); 49 CFR part 661)

---

## REQUESTING AGENCY INFORMATION

**Agency:** Yamhill County Transit Area

**Date:** March 21, 2017

**Contact Person:** Cynthia Thompson

**Phone:** 503-995-7965

**Email Address:** [Thompson@co.yamhill.or.us](mailto:Thompson@co.yamhill.or.us)

**Agency Address:** 800 NE 2<sup>nd</sup> Street McMinnville, OR 97128

The above Agency, through its Public Transit program or public transit affiliate, is requesting price quotes from Oregon State Price Agreement Contract Vendors for the purchase of the following vehicle(s):

**From (circle):** Oregon State Price Agreement / Other      **No. of Vehicles Required:** 2  
**PTD Vehicle Category (Check):** (Please see *PTD Vehicle Descriptions and Useful Life Standards*)

Cat A     Cat B     Cat C     Cat D     Cat E \_\_\_\_ (select from 1 to 3)

**Length (can be range):** 24-28" \_\_\_\_\_      **Regular Seats:** \_16\_\_      **ADA Stations/Tiedowns:**  
\_3\_\_

**Fuel Type:**  Gasoline     Diesel     Bio-fuel     Hybrid     CNG     Propane

High Floor  Low Floor Other Comment: \_\_\_\_\_

**The general specification for vehicle is as follows:**

Two (2) medium size, medium-duty (24-28'), low-floor buses that use gasoline fuel and seat a minimum of 16 seated passengers and 3 ADA wheelchair stations with tie downs. The vehicles shall have a minimum expected life of seven (7) years or 200,000 miles, and must be designed for the widest possible spectrum of passengers, including children, adults, the elderly and people with disabilities.

The Contractor shall comply with all applicable federal and state regulations. These shall include but not be limited to ADA, Buy America, Testing, and safety requirements. In addition, buses must meet all applicable FMVSS regulations in effect at the date of manufacture.

Please note, that the vendor will not be responsible for providing radio system, reader boards or hardware for GPS location technology but may be asked to work with YCTA to install these systems. If applicable, please outline the fixed cost or cost/hour for installation.

Additional specifications are outlined below – the base price MUST include specifications noted – if there are suggested changes to the specs (and the bid includes those changes) please note this in the vendor response section. The vendor is also asked to provide three references for warranty and service with the bid.

A. VENDOR'S VEHICLE BASE PRICE INFORMATION	VEHICLE BASE PRICE
<i>This Section to be completed by Vendor</i>	<i>Enter base price from State Price Agreement below</i>
Vehicle Make/Model: CHAMPION LF/FORD E450	
Length: 27'	
Fuel Type: GAS	
Floor: <input type="checkbox"/> High Floor <input checked="" type="checkbox"/> Low Floor Other:	
No. of Regular Passenger Seats: 16	
No. of ADA Stations w/Tiedowns Desired: 3	
Other Special Note:	\$93,119.00

Please provide 3 previous customers reference contact numbers, we will inquire:

- How responsive the vendor has been to warranty issues?
- Have you used their maintenance or repair services? If yes, were they able to provide the service in a reasonable amount of time?
- Have you had any major issues with customer service or shop staff?
- Are there any other issues or concerns you've had with the vendor, shop staff, vehicle delivery, etc that you'd like to let me know about?

Negative feedback from previous customers will be discussed with ODOT Capital Programs; this may disqualify your bid.

## B. VEHICLE REQUIRED SPECIFICATIONS

	<b>VENDOR RESPONSE</b>
<b><i>Requesting Agency's Required Specifications Description</i></b>	<b><i>Vendor Suggestions (related to vehicle specs)</i></b>
Altoona Test Executive Summary	
Vehicle should be approximately 24-28' long with a freightliner chassis or equivalent	FORD E450
Gas Engine preferred; Diesel accepted; emission compliant; minimum 6.0L.	FORD E450/6.8L
Heavy duty transmission	
Heavy duty suspension system; air suspension front and rear with kneeling feature	
Low floor bus with ramp/no LIFT and kneeling feature; also, looking for a manual bypass for ramp.	
Steel cage, low floor "body on chassis" dual rear wheels	
34" x 62" ADA compliant wheelchair entry Braun ramp or equivalent (minimum 800 lb. capacity)	
2 floor plan options with side or front load wheelchair access and up to 4 wheelchair stations (provide info on maximum # of wheelchair stations with flip down seats feasible)	<b>3 W/C MAX, 2 FOLD SEATS INCLUDED</b>
Treated floor; undercoated and insulated	<b>PRESSURE TREATED</b>
Large windows that DO NOT wrap around	<b>SOLID PROVIDED, T-SLIDERS AVAILABLE AT ADD'L COST</b>
Comfortable driver compartment that accommodates both large and small operators.	
Exhaust routed to rear of bus, drivers side	
6-speed automatic transmission with auxiliary transmission cooler	
Intermittent single switch windshield wipers	
Back up lights & alarm	
Dashboard AC, Defroster and Heat (No AM/FM Radio) and Rear AC & Heat – A/C 70,000 BTU, 65,000 BTU Heater	
Molded seats with cloth pop out covers.	
2 Heavy Duty 12 V 700 CCA batteries	750 CCA
Auxiliary Battery Compartment w/ tray and door	
Merge/Yield Sign (LED)	
Diamond NV Farebox / 1 vault installed and keyed for YCTA buses	
Grab Rails on entry doors, parallel to entrance and on ceiling	

**Subtotal Cost of Vehicle Required Specs:** \$30,478.00

**Total Vehicle Cost With All Options:** \$123,597.00

**Installation costs of YCTA provided Items.**  
(E.g. radios, reader boards, etc. Please note whether unit of fixed Cost)

\$3,750.00 (ESTIMATE ONLY,  
DEPENDENT ON SYSTEMS  
SELECTED)

### C. VEHICLE PREFERRED OPTIONS

<b>Requesting Agency's Preferred Options Description</b>	<b>Included in Base Price?  YES / NO</b>	<b>\$Additional Cost for Option\$  (or Note Not Available)</b>	<b>Vendor Suggestions  (related to vehicle specs)</b>
Auto adjusted heated mirrors	N	\$425	
Accessory fans	N	\$189	3 FANS
Secure storage cubby for driver	N	\$271	LOCKING FRONT GLOVE BOX
Cup holder	Y		
Level floor throughout passenger seating area. No interior ramps or steps.	N	N/A	N/A
Intercom – PA system with hand held microphone and speakers	N	\$450	
Outside Speaker	N	\$113	
Garbage can rack	N	\$65	
Media racks	N	\$174	
Interior notification display	N	N/A	*INSTRUCTED TO ENSURE SPACE FOR READER BOARD PER 4/4/17 EMAIL
Seat belt extenders for wheelchair securements; and securement strips that run parallel to length (rather than width).	N	\$40	
Driver's seatbelt in a bright color	N	\$150	*ORANGE ONLY, WOULD SIGNIFICANTLY DELAY CHASSIS LEAD TIME
Reverse lights and driving lights	Y/N	\$65	REVERSE LIGHTS STD, CHARGE IS FOR DAYTIME RUNNING LIGHTS
Colored lighting inside 1 <sup>st</sup> and 2 banks	N	N/A	N/A ON CUTAWAY
Powder Coat Yellow- railings on entry doors, parallel to entrance, on ceiling and driver stanchion as listed above	N	\$755	
Extendable visor	N	N/A	OEM ONLY
Upgraded Driver Seat for comfortable ride	N	\$1350	USSC G2ELP
Driver Stanchion with modesty panel	N	\$146	
Automatic Tire Chains	N	\$2995	

Grip Rails with anti-slip material for front and ramp entry	N	\$150	
Bike rack (minimum 3 racks – willing to consider front racks, internal racks or other rack options – safety primary consideration) Sportswork or equivalent	N	\$2215	FRONT MOUNT
Additional exterior lighting to enhance illumination around bike rack.	N	N/A	
Stop request strip	N	\$750	
Replacement Alternator	N	\$240	
Q-Straint Self Secure Device (or similar self-secure restraint device)	N	\$192	3 W/C STATIONS, TDSS SYSTEM
Need price for self-secure and Q-Straint or equivalent for 4 wheelchair securement storage on the bottom of foldaway seats.	N	*SEE ABOVE	
Rear Tow hooks	N	\$146	
Digital Clock in driver area	Y		
Body Fluid Clean-up kit	N	\$35	
Safety Supplies: 5 lb. Fire Extinguisher, 16 unit first aid kit, triangle kit	Y		
Walker/Grocery Storage Area and wheelchair storage area	N	\$615	FLOORPLAN DOES NOT ALLOW FOR SPACE TO INSTALL STORAGE AREA
Total 5 keys per bus	N	\$145	2 SETS STD
		<b>Subtotal Cost of Preferred Options:</b>	<b>\$11,676.00</b>

Vendor's Signature: *Jobi Bassett* Date Sent: 4/20/17

**Please don't forget to sign and date your response here.**

**Sample Floor plan (Attach on back)**

**VENDOR INFORMATION**

Vendors are strongly encouraged to submit price quotes using the format provided. Vendors should specifically note if and how they meet the above specifications, and note any differences in what has been called out above, in their price quotes. This may be done on the form, or on an attached sheet. The vehicle(s) will be purchased with funding from the Oregon Department of Transportation, Public Transit Division and the Requesting Agency, and will follow applicable Federal and State procurement guidelines.

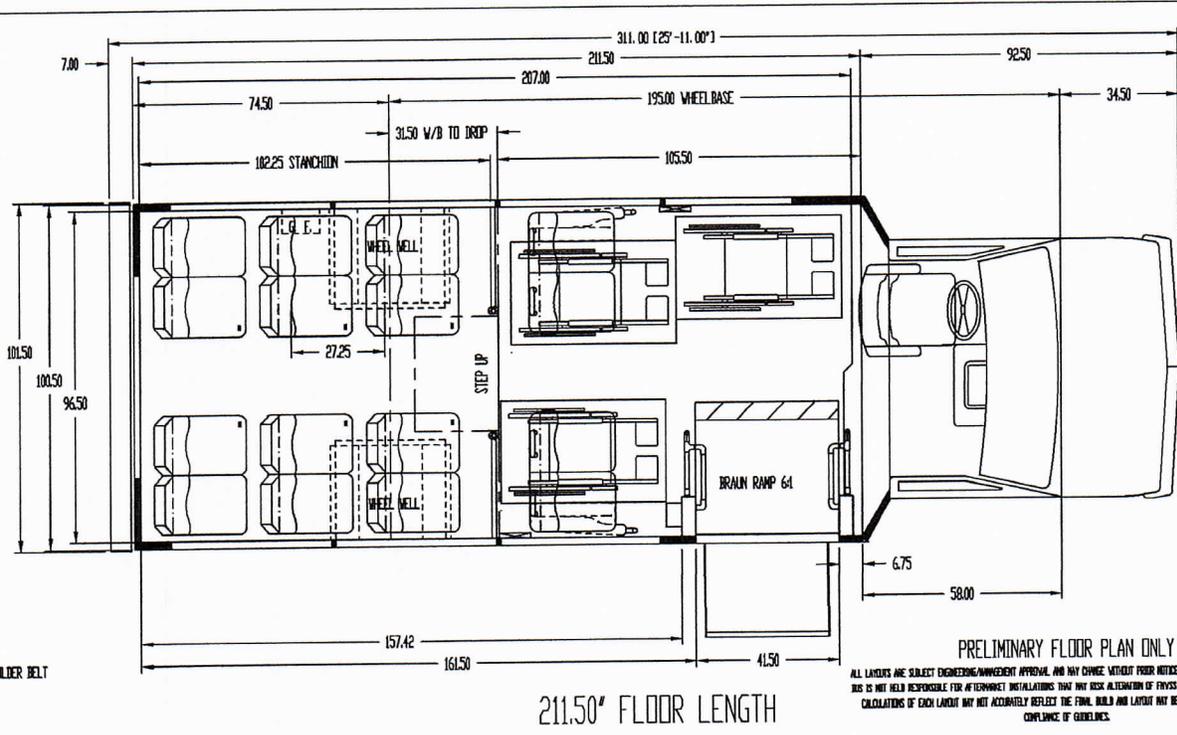
**Price Quote shall be submitted to the Requesting Agency contact person named on the first page on this form.**

**Price Quotes may be sent by U.S. Mail, emailed, to the addresses for Requesting Agency noted on page 1 of this form. Please note all Bids must be in on or before April 14, 2017 before 12pm.**

**VEHICLE SELECTION INFORMATION**

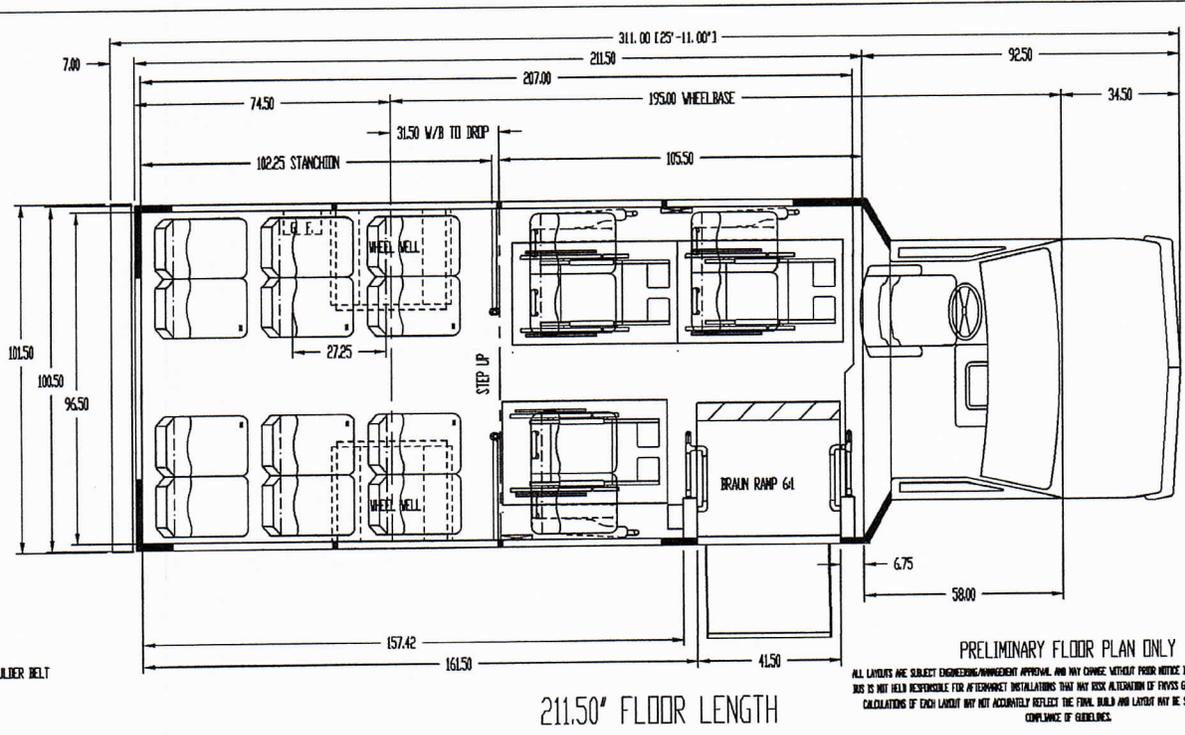
Selection of the vehicle and successful price quote will be based on:

- Lowest Cost With Required Specifications** *(Lifecycle costs may be considered in price determination and may affect lowest bid determination)*



PRELIMINARY FLOOR PLAN ONLY  
 ALL LAYOUTS ARE SUBJECT TO ENGINEERING/WEIGHT APPROVAL AND MAY CHANGE WITHOUT FURTHER NOTICE IF NEEDED NECESSARY. CHAMPION BUS IS NOT HELD RESPONSIBLE FOR ANY WEIGHT INSTIGATIONS THAT MAY OCCUR ALTHOUGH OF FINISH GUIDELINES. PRELIMINARY WEIGHT CALCULATIONS OF EACH LAYOUT MAY NOT ACCURATELY REFLECT THE FINAL BUILD AND LAYOUT MAY BE SUBJECT TO ALTERATION FOR COMPLIANCE IF GUIDELINES.

				PART NO. C8070736		SEATING: FREEDMAN SEATS - MID HIGH FEATHERWEIGHT		PURCH./MFG.: MFG.	
				CHAMPION REV GROUP		PASSENGER COUNT: (16) PASSENGERS & (3) W/C		TITLE: FLOORPLAN FORD LOW FLOOR-250 195.00" W/B	
A	4/17/17		DELETED REAR CENTER SEAT, ADDED TWO DBL FOLD-AWAYS	PR		TOLERANCES UNLESS OTHERWISE NOTED XX = .03 XXX = .020 X° = 1°		DATE: 4/17/17	
REL	DATE	ECN	DESC. OF CHANGES	BY	APP'D	ECN #	N/A	DO NOT SCALE	DATE:
								CHK.	MODEL FORD LOW FLOOR



PRELIMINARY FLOOR PLAN ONLY  
 ALL LAYOUTS ARE SUBJECT TO ENGINEERING/ANALYSIS APPROVAL AND MAY CHANGE WITHOUT PRIOR NOTICE IF DEEMED NECESSARY. CHAMPION BUS IS NOT HELD RESPONSIBLE FOR ANY INSTALLATIONS THAT MAY BE IN VIOLATION OF FMVSS GUIDELINES. PRELIMINARY WEIGHT CALCULATIONS OF EACH LAYOUT MAY NOT ACCURATELY REFLECT THE FINAL BUILD AND LAYOUT MAY BE SUBJECT TO ALTERATION FOR COMPLIANCE OF GUIDELINES.

211.50" FLOOR LENGTH

				PART NO. CB070736		SEATING: FREEDMAN SEATS - MID HIGH FEATHERWEIGHT		PURCH./MFG.: MFG.	
						PASSENGER COUNT: (18) PASSENGERS & (3) V/C		TITLE: FLOORPLAN FORD LOW FLOOR-250	
B	4/17/17	ADDED DBL. FOLD-AWAY ROADSIDE, WAS 16 PASS	PR			DRAWN BY: P RUHALA		DATE: 4/17/17	
A	4/17/17	DELETED REAR CENTER SEAT, ADDED TWO DBL. FOLD-AWAYS	PR			CHK.		DATE:	
REL. DATE	ECN	DESC. OF CHANGES	BY	APP'D	ECN #	N/A	DO NOT SCALE	TOLERANCES UNLESS OTHERWISE NOTED .XX = .03 .XXX = .020 X° = 1°	MODEL FORD LOW FLOOR

**STURAA TEST**

**7 YEAR**

**200,000 MILE BUS**

**from**

**CHAMPION BUS, INC. /THOR INDUSTRIES**

**MODEL U.L.F.**

**AUGUST 2012**

**PTI-BT-R1203**

PENNSSTATE

---



**The Thomas D. Larson  
Pennsylvania Transportation Institute  
Vehicle Systems and Safety Program  
201 Transportation Research Building  
The Pennsylvania State University  
University Park, PA 16802**

**(814) 865-1891**

**Bus Testing and Research Center**

**2237 Old Route 220 N.  
Duncansville, PA 16635**

**(814) 695-3404**



**MECHANICAL TESTING  
CERTIFICATE 3172.01**

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## EXECUTIVE SUMMARY

Champion Bus, Inc./Thor Industries submitted a model U.L.F., CNG-powered 15 seat/27-foot bus, for a 7 yr/200,000 mile STURAA test. The odometer reading at the time of delivery was 16,907 miles. Testing started on April 9, 2012 and was completed on July 30, 2012. The Check-In section of the report provides a description of the bus and specifies its major components.

The primary part of the test program is the Structural Durability Test, which also provides the information for the Maintainability and Reliability results. The Structural Durability Test was started on April 12, 2012 and was completed on June 22, 2012.

The interior of the bus is configured with seating for 15 passengers including the driver. **Note: this test bus is not designed to accommodate standing passengers.** At 150 lbs per person, this load results in a measured gross vehicle weight of 14,640 lbs. The test bus does not accommodate standing passengers; therefore Seated Load Weight (SLW) and Gross Vehicle Weight (GVW) are the same 14,640 lbs. **Note: at Gross Vehicle Load (GVL) the load is 50 lbs over the rear Gross Axle Weight Rating (GAWR) and 140 lbs over the Gross Vehicle Weight Rating (GVWR).** The first segment of the Structural Durability Test was performed with the bus loaded to a GVW of 14,640 lbs. The middle segment was performed at a seated load weight of 14,640 lbs and the final segment was performed at a curb weight of 11,250 lbs. Durability driving resulted in unscheduled maintenance and failures that involved a variety of subsystems. A description of failures and a complete and detailed listing of scheduled and unscheduled maintenance is provided in the Maintainability section of this report.

Effective January 1, 2010 the Federal Transit Administration determined that the total number of simulated passengers used for loading all test vehicles will be based on the full complement of seats and free-floor space available for standing passengers (150 lbs per passenger). The passenger loading used for dynamic testing will not be reduced in order to comply with Gross Axle Weight Ratings (GAWR's) or the Gross Vehicle Weight Ratings (GVWR's) declared by the manufacturer. Cases where the loading exceeds the GAWR and/or the GVWR will be noted accordingly. During the testing program, all test vehicles transported or operated over public roadways will be loaded to comply with the GAWR and GVWR specified by the manufacturer.

Accessibility, in general, was adequate, components covered in Section 1.3 (Repair and/or Replacement of Selected Subsystems) along with all other components encountered during testing, were found to be readily accessible and no restrictions were noted.

The Reliability section compiles failures that occurred during Structural Durability Testing. Breakdowns are classified according to subsystems. The data in this section are arranged so that those subsystems with more frequent problems are apparent. The problems are also listed by class as defined in Section 2. The test bus encountered no Class 1 or Class 2 failures. Of the 17 reported failures, 12 were Class 3 and five were Class 4.

The Safety Test, (a double-lane change, obstacle avoidance test) was safely performed in both right-hand and left-hand directions up to a maximum test speed of 45 mph. The performance of the bus is illustrated by a speed vs. time plot. Acceleration and gradeability test data are provided in Section 4, Performance. The average time to obtain 50 mph was 19.07 seconds. The Stopping Distance phase of the Brake Test was completed with the following results; for the Uniform High Friction Test average stopping distances were 25.83' at 20 mph, 52.88' at 30 mph, 89.39' at 40 mph and 115.83' at 45 mph. The average stopping distance for the Uniform Low Friction Test was 24.97'. There was no deviation from the test lane during the performance of the Stopping Distance phase. During the Stability phase of Brake Testing the test bus experienced no deviation from the test lane but did experience pull to the left during both approaches to the Split Friction Road surface. The Parking Brake phase was completed with the test bus maintaining the parked position for the full five minute period with no slip or roll observed in both the uphill and downhill positions.

The Shakedown Test produced a maximum final loaded deflection of 0.103 inches with a permanent set ranging between -0.002 to 0.003 inches under a distributed static load of 6,825 lbs. The Distortion Test was completed with all subsystems, doors and escape mechanisms operating properly. No water leakage was observed throughout the test. All subsystems operated properly.

The test bus was not equipped with any type of tow eyes or tow hooks, therefore Static Towing Test was not performed. The Dynamic Towing Test was performed by means of a front-lift tow. The towing interface was accomplished using a hydraulic under-lift wrecker. The bus was towed without incident and no damage resulted from the test. The manufacturer does not recommend towing the bus from the rear; therefore, a rear test was not performed. The Jacking and Hoisting Tests were also performed without incident. The bus was found to be stable on the jack stands, and the minimum jacking clearance observed with a tire deflated was 5.7 inches.

A Fuel Economy Test was run on simulated central business district, arterial, and commuter courses. The results were 0.82 M/lb, 0.73 M/lb, and 1.49 M/lb respectively; with an overall average of 0.91 M/lb.

A series of Interior and Exterior Noise Tests was performed. These data are listed in Section 7.1 and 7.2 respectively.

The Emissions Test was performed. These results are available in Section 8 of this report.



CHAMPION®  
BUS · INC.

# LF TRANSPORT™

With FLEXBUS™ Technologies



## LF TRANSPORT™

The LF Transport™ combination of patent and patent-pending technologies eliminates the need for hazardous interior steps and cumbersome lifts, producing equal access and a positive transit experience for all riders. The LF Transport™ line is equipped with an electronically controlled air-ride suspension system, Equalizer® Ramp, single slope entry and 102" wide true flat floor passenger area. Passengers and operators alike will be pleased with the spacious interior cabin, smooth vehicle ride and panoramic views seen through the large windows.

P 810.724.1753

F 810.724.1844

CHAMPIONBUS.COM

331 GRAHAM RD, IMLAY CITY, MI 48444

*Est. 53*



## SPECS

	FORD	CHEVROLET
CHASSIS	E-450	G4500
ENGINE	6.8L GAS	6.6L DIESEL AND GAS
TRANSMISSION	5 SPEED AUTOMATIC	6 SPEED AUTOMATIC
EXTERIOR HEIGHT	111"	111"
EXTERIOR WIDTH	102"	102"
INTERIOR HEIGHT	81"	81"
INTERIOR WIDTH	96.75"	96.75"
LENGTH	24.5', 25', 26', 27'	24.5', 25', 26', 27'
WHEELBASE	189", 208"	186", 208"
GVWR	14,500	14,200

### Ford Chassis Standards Features:

55 Gallon Fuel Tank  
225 Amp Alternator  
Dual 650 Cca Battery  
Power 4-Wheel Disc (Abs)  
Lt225/75Rx16e Tires  
Tilt/Cruise

### Chevrolet Chassis Standards Features:

Rear Axle Ratio 3.73  
Dual 145-Amp Alternator-Diesel  
Dual 770 Cca Battery  
57 Gallon Fuel Tank  
Power Disc Brakes  
Tires Lt225/75R 16E, Bsw All Season  
Tilt Cruise  
Chrome Appearance Package

### International Chassis Standards Features:

Automatic Allison Transmission  
Brake System, Hydraulic  
320 Amp Alternator  
225/70R19.5 R250f Tires  
40 Gallon Fuel Tank.

### Standard Bus Body Conversion:

Airporter Style Body W/Fiberglass Plug Window  
Electronic 4-Point Auto-Leveling Full-Kneel Suspension System  
Dc Driven Air Compressor  
Galvanized Steel Cage Construction  
Galvanized Wheelwells  
Street Side Exhaust  
Mud Flaps  
Engine Block Heater Oem  
Self Diagnosing 12 Volt Electrical Panel (Fuses)  
Door Activated Entrance Lighting  
Exterior Key Switch - Entrance Door  
Plywood Floor  
Gerflor Flooring  
London Smoke Interior  
Solid Windows  
Rear Egress Window  
Drip Rail Over Windows  
Composite Exterior  
Roof One Piece Composite  
Fuel Fill Door S/S With Thumb Lock  
Black Steel Powder Coated Rear Bumper  
Electric Passenger Entry Door  
Right And Left Hand Grab Rail At Entry  
Padded Modesty Panels  
Rosco Manual Mirrors  
Track Seating  
Driver's Seat Oem  
Full Body Undercoating

### FLEXBUSTM Technology features:

- IntelliSYNC® Electronically Controlled "Smart" Suspension system increases stability and ride quality for all passengers
- Automatic Self-Leveling floor throughout the passenger compartment regardless of the crown of the road at full kneel and ride height
- Equalizer Ramp™ automatically senses the height of the ramp deployment surface and adjusts to equate all sections of the ramp to provide all passengers with the easiest possible single-grade slope accessibility
- The innovative OverRise feature lifts the entire vehicle up to 2.5" inches higher than the OEM ride height at the push of a button
- Auxiliary Air Support System contains an emergency air support system which is separate and independent of the vehicle's main air operating system
- 3.5" LCD Digital Display for real-time ramp/suspension system performance and diagnostics
- Heavy-duty, high-capacity DC driven suspension compressor is made to kneel at every stop and continuously maintain air pressure. Due to the high CFM compression rate, full air system recovery from a full kneeled position to vehicle ride height within 3.5 seconds.



**SCHETKY NORTHWEST SALES, INC.**

*SERVING THE NORTHWEST SINCE 1942!*

## **REFERENCES**

LANE TRANSIT DISTRICT  
COSETTE REES  
PO BOX 7070  
SPRINGFIELD, OR 97475-0470  
541-682-6751

CITY OF WILSONVILLE  
SCOTT SIMONTON  
29799 SW TOWN CENTER LOOP E  
WILSONVILLE, OR 97070  
503-570-1541

SALEM AREA MASS TRANSIT  
GREGG THOMPSON  
555 COURT STREET NE, SUITE 5230  
SALEM, OR 97301  
503-391-7562

RIDE CONNECTION  
DEAN ORR  
9955 NE GLISAN  
PORTLAND, OR 97220  
503-528-1752



## AFTER-THE-SALE SUPPORT

When considering your next bus purchase, we believe there are three (3) areas of importance the buyer should look at: **the manufacturer**; **the distributor**; and **the product itself**.

SNWS recognizes the value and importance of qualified and timely after-the-sale support. Customers involved in the transportation industry routinely face operational obstacles such as unscheduled vehicle downtime, service accessibility, preventative maintenance, and parts availability which may negatively affect their service and operation. Recognizing this important aspect of your operation, SNWS has invested heavily to maintain the highest level of this necessary after-the-sale support. As a tangible benefit to our customers, we provide unequalled after-the-sale support by offering the largest, longest established sales/service/parts organization in the North American light-medium duty bus industry.

*Schetky Northwest* has a seventy-plus year commitment dedicated to customer service. With our proven track record in after-the-sale support, Schetky Northwest has received national recognition from such manufacturers as: Eldorado National Co.; Thomas Built Bus; Champion Mfg.; Heil Corp.; Toter Corp.; Carpenter Buses; Crown Mfg.; Superior Bus Co.; Ricon Corp.; Braun Corp.; Intec Corp.; and Kann Mfg. to name a few.

Whether your needs are for vehicle replacement, regular maintenance, parts replacement, technical advice, or operating assistance, *Schetky Northwest* is your "**best friend**" in the transportation industry!

### ➤ ELECTRONIC COMMUNICATIONS

The *Schetky Northwest* website allows for on-line warranty claim filing, requests for service, and parts ordering capabilities. For your review, you can visit our site at:  
<http://www.schetkynw.com/service/warranty.asp>.

### ➤ WARRANTY DEPARTMENT

Schetky Northwest sales provides warranty service that is most convenient and in the best interests of the customer. For specific warranty claims or anytime you may have a question regarding your warranty, we encourage you to contact our Warranty Administrator Ed Wakeman. Ed can be reached as follows:

- Ed Wakeman, Warranty Administrator (<mailto:edw@schetkynw.com>)  
Schetky Northwest Sales, Inc.  
503-382-3129 (Direct)  
800-255-8341 extension 129  
8430 NE Killingsworth St., Portland, OR 97220

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2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)



Below describes the typical method of warranty adjustment<sup>1</sup>:

### COACH:

The Final-Stage Manufacturer Repair Station is available at: Schetky Northwest Sales, Inc., Portland, Oregon, or at our authorized service centers in Lakewood, WA. and Pasco, WA.; or through our affiliate dealer network nation-wide; or by reimbursing agency for expenses incurred at a repair facility mutually agreed upon; or reimburse agency for mutually agreed expenses incurred at the agency's maintenance facility. Please refer to the specific warranty terms and conditions for method of warranty adjustment.

### CHASSIS:

The chassis warranty repair station is available at any **authorized chassis dealership** in the United States. Our final-stage manufacturers produce vehicles built on light, medium, and heavy duty chassis' manufactured by Ford, Chevrolet, Chrysler, International, Freightliner, and Mercedes-Benz, as well as purpose-built chassis' manufactured by Thomas Built Bus, ElDorado National-Riverside, Mobility Ventures LLC MV-1 and ElDorado National-Riverside. Please consult your owner's manual or call Schetky Northwest for directions to your nearest service center.

Schetky Northwest further offers contractual warranty and repair facilities throughout the Country through our affiliation with various distributor networks, assuring our customers with the finest in after the sale support. For further information please contact our Warranty Department at (toll-free) 800-255-8341 extension 129.

## COMPLETE SERVICE FOR ALL TYPES OF EQUIPMENT

With three (3) facilities to better serve you, quality service and repairs are offered in such areas as electrical systems, hydraulic systems, wheelchair lift, air conditioning, body repair, preventative maintenance programs, complete vehicle refurbishing, and custom fabrication. To further meet the needs of our customers, Schetky Northwest also offers a convenient mobile field service program whereby our technician comes to your facility for those necessary repairs and service.

---

<sup>1</sup>ALL BODY RELATED WARRANTY REPAIRS MUST BE PRE-AUTHORIZED BY FINAL-STAGE MANUFACTURER.



- **CUSTOMER SERVICE DEPARTMENT**

Keeping with our philosophy and history to offer our customers the best product available as well as best possible service support, the *Schetky Northwest Service, Parts, & Warranty Department* staff of 28 employees at three (3) convenient locations dedicated to providing the finest in after-the-sale support:

- **Portland, OR:** With over 25,000 square feet of Service, Parts, Sales, and Administrative offices located just minutes away from the Portland International Airport, Schetky Northwest is conveniently located between Interstate 5 and interstate 205 at 8430 NE Killingsworth Street in Portland, Oregon.
- **Lakewood, WA:** Conveniently located just minutes from I-5 at 2624 112th St. So. in Lakewood Washington, Schetky Northwest maintains a 5,000 square foot service facility with four (4) dedicated service bays.
- **Pasco, WA:** Conveniently located just minutes from Hwy 12 at 4111 East B Circle in Pasco Washington, Schetky Northwest maintains a 6,000 square foot service and parts facility with four (4) dedicated service bays.

- **MOBILE FIELD SERVICE**

Recognizing that we cannot be everywhere, Schetky Northwest Service Department maintains a Mobile Field Service program that brings out technicians to you. In addition, additional contractual service agreements with other service facilities throughout the Northwest and Alaska are available to further provide our customers with convenient service alternatives. In addition, we provide for a network of service facilities nation-wide for qualified after-the-sale support, including service and parts.



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4111 East B Circle • Pasco • WA • 99301  
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[www.schetkynw.com](http://www.schetkynw.com)



**FOR SPECIFIC SERVICE NEEDS IN YOUR AREA OR TO SCHEDULE AN APPOINTMENT, PLEASE CONTACT THE SCHETKY NORTHWEST SERVICE CENTER NEAREST YOU:**

➤ **PORTLAND, OREGON**

Brett Hill, Service Manager  
Schetky Northwest Sales, Inc.  
503-607-3137 (Phone - Direct)  
800-255-8341 extension 137 (Toll-Free)  
8430 NE Killingsworth St., Portland, OR 97220  
<mailto:bretth@schetkynw.com>

• **LAKWOOD, WASHINGTON**

Ray Reynoldson, Service Manager  
Schetky Northwest Sales, Inc.  
(253) 507-5065 (Phone – Direct)  
2624 112th St. So., Bldg. A2, Lakewood, WA 98499  
<mailto:rayr.schetkynw@gmail.com>

• **PASCO, WASHINGTON**

Mr. Steve Standley, Service Foreman  
Schetky Northwest Sales, Inc.  
(509) 545-3378 (Phone – Direct)  
4111 East B Circle, Pasco, WA 99301  
[steves@schetkynw.com](mailto:steves@schetkynw.com)

## **PARTS DEPARTMENT**

Complementing our Sales and Service departments, Schetky Northwest offers the largest parts distribution network in 11 western states representing over 237 Manufacturers. Staffed by a total of 6 representatives, our Parts Department is available from 7:30am to 5:00pm with 24 hour on call availability for those unexpected emergency situations.

• **FOR PARTS INQUIRIES AND SALES, PLEASE CONTACT:**

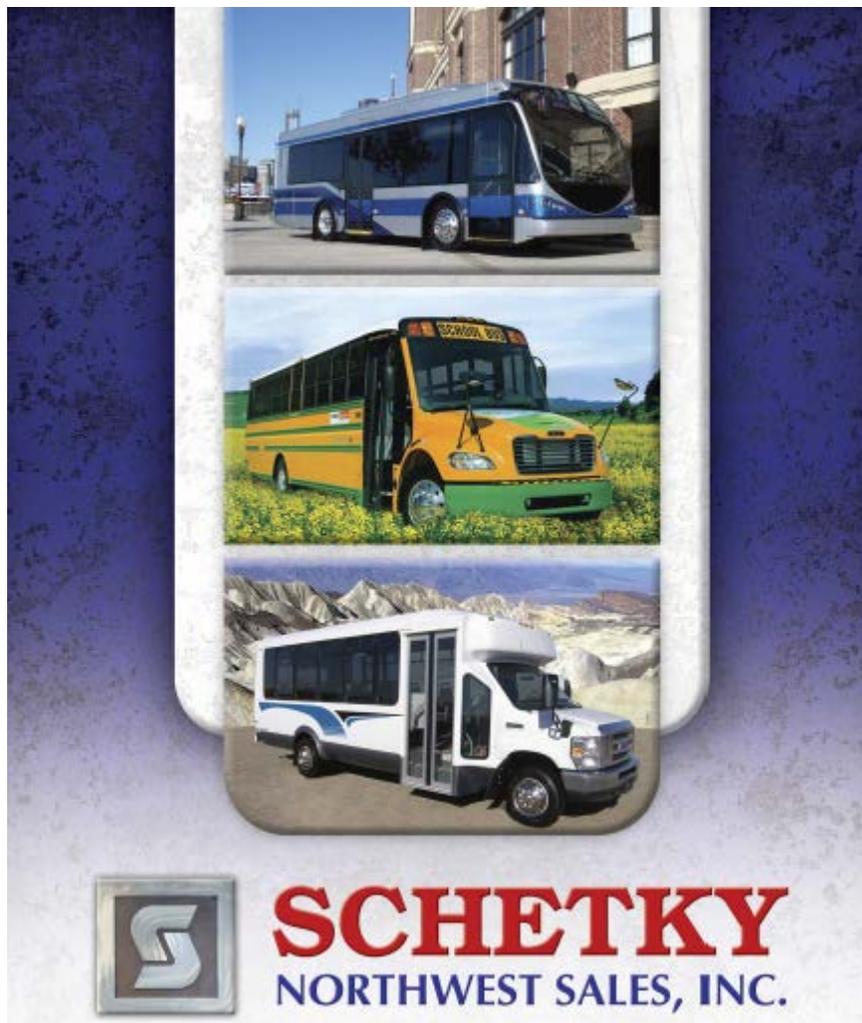
Schetky Northwest Sales, Inc.  
800-769-0902 (Toll-Free)  
8430 NE Killingsworth St.  
Portland, OR 97220  
<http://www.schetkynw.com/service/parts.asp>

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4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)



WE VALUE YOUR BUSINESS AND WELCOME THE OPPORTUNITY TO BE OF SERVICE. DO NOT HESITATE TO CONTACT US WHENEVER WE CAN BE OF ASSISTANCE.

**THANK YOU FOR CONSIDERING  
SCHETKY NORTHWEST  
TO MEET YOUR TRANSPORTATION NEEDS.**



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2624 112th St. So. • Lakewood • Washington • 98499  
4111 East B Circle • Pasco • WA • 99301  
{800} 255-8341 • {503} 287-4141 • FAX {503} 287-2931  
[www.schetkynw.com](http://www.schetkynw.com)

**SCHETKY NORTHWEST SALES, INC.**  
 8430 NE Killingsworth St., Portland, OR 97220  
 1 (800) 255-8341 Telephone (503) 287-4141 FAX (503) 287-2931

**SOLD TO**

YAMHILL COUNTY  
 535 NE FIFTH STREET  
 MCMINNVILLE, OR 97128

**\*\*ACKNOWLEDGEMENT ONLY\*\***

Page 1

PURCHASE ORDER NO.	TERMS	DATE WRITTEN	DATE SHIPPED	INVOICE NUMBER
YC 1-2017	NET 30	JUNE 16, 2017		CAM SYSTEM
SHIP VIA	F.O.B. POINT	PREPAID/COLLECT	DISTRIBUTION	INVOICE DATE
			44135-	
MAKE	MODEL	CHASSIS SERIAL	BODY SERIAL	ODOMETER
ASSISTANCE CAMERA QUOTE FOR 6 NEW VEHICLES @ \$1068.00/PER BUS – AS REQUESTED				6,408.00
<b>TOTAL DUE</b>				<b>\$6,408.00</b>

PURCHASER AGREES THAT THE ONLY WARRANTY GIVEN PURCHASER IS THE MANUFACTURERS WARRANTY, IF ANY. SELLER DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IF THE PERSONAL PROPERTY SOLD HEREUNDER IS ACCOMPANIED BY A MANUAL OF INSTRUCTIONS FOR ITS PROPER USE AND MAINTENANCE, SELLER SHALL NOT BE LIABLE IN TORT, CONTRACT OR OTHERWISE, FOR ANY DAMAGES, WHETHER FOR INJURY TO PERSONS OR PROPERTY OR OTHERWISE, ARISING FROM THE OWNERSHIP, USE OR OPERATION OF SUCH PERSONAL PROPERTY, WHEN SUCH PROPERTY IS OPERATED, MODIFIED OR MAINTAINED IN ANY FASHION OTHER THAN AS SPECIFIED IN SUCH A MANUAL OF INSTRUCTIONS, PURCHASER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS SELLER FROM ANY CLAIM OF LIABILITY OF ANY NATURE WHATSOEVER ARISING FROM THE USE, OPERATION OR OWNERSHIP OF THE PERSONAL PROPERTY OTHER THAN AS SPECIFIED IN THE MANUAL OF INSTRUCTIONS. SELLER SHALL IN NO EVENT BE LIABLE FOR CONSEQUENTIAL, COMMERCIAL OR ECONOMIC LOSSES.

# E-Z RIDER II



## Unsurpassed Flexibility / Legendary Reliability

HEAVY-DUTY 30', 32' AND 35' LOW-FLOOR BUS



### BEST AESTHETICS

Swept windshield offers the superior aesthetics you demand with enhanced visibility and reduced wind noise for the driver and passengers.

### HIGHEST CAPACITY

Best seated capacity in the business! The E-Z Rider II 35' seats as many as the competitors 40' bus! High capacity with superior maneuverability and greater fuel efficiency.

### MOST WHEELCHAIRS

Up to four wheelchairs can be accommodated with ADA ramps at front, center or rear doors = total access! The available center door ramp is designed to accommodate even the largest electric scooters with ease.

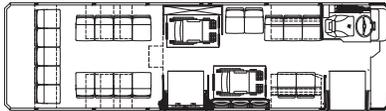
The E-Z Rider II continues to be the mid-size, heavy-duty low-floor bus gold standard! Designed and built in the USA, the E-Z Rider II offers unmatched floor plan flexibility with ADA compliant wheelchair ramps at front, center or both doors for superior paratransit flexibility. With hundreds of options, the E-Z Rider II is custom built to meet your exacting needs. With the latest in exterior styling, the E-Z Rider II will separate your fleet from the ordinary!

DESIGNED AND BUILT IN THE USA! 

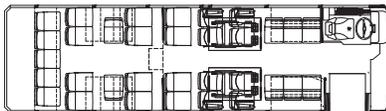
### POPULAR FLOORPLANS

(Note: this is only a partial listing of available floorplans. To find a floorplan meeting your exact needs, contact your EIDorado National representative.)

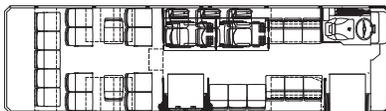
#### 30' MODEL



20 Passengers w/2 Wheelchairs  
or 23 Passengers

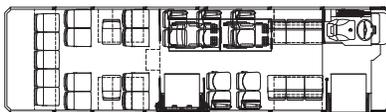


25 Passengers w/2 Wheelchairs  
or 33 Passengers

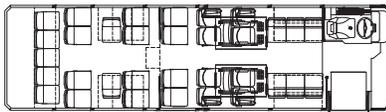


24 Passengers w/2 Wheelchairs  
or 30 Passengers

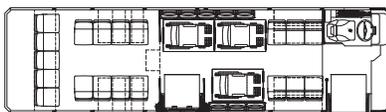
#### 32' MODEL



25 Passengers w/2 Wheelchairs  
or 31 Passengers

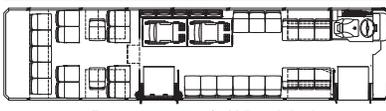


25 Passengers w/2 Wheelchairs  
or 33 Passengers

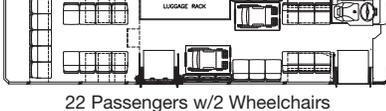


19 Passengers w/3 Wheelchairs  
or 27 Passengers

#### 35' MODEL



30 Passengers w/2 Wheelchairs  
or 35 Passengers



22 Passengers w/2 Wheelchairs  
or 28 Passengers



33 Passengers w/2 Wheelchairs  
or 41 Passengers

TECHNICAL SPECIFICATIONS	30' MODEL	32' MODEL	35' MODEL
GVWR	35,000 lbs.	35,000 lbs.	35,000 lbs.
Body Length	30' 7"	31' 3"	35' 7"
Body Width	102"	102"	102"
Wheelbase	160"	168"	220"
Approach Angle	9°	9°	9°
Breakover Angle	14°	14°	12°
Departure Angle	9°	9°	9°
Seating	Up to 33	Up to 33	Up to 41
Body Height	125" With Exhaust, 126" With Roof HVAC, 136" With CNG		
Interior Height	95" Over Front Axle, 78" Over Rear Axle		
Step Height-Front And Rear Doors	14" and 11" Kneeled		
Wheelchair Ramp Locations	Front And/Or Center Doors		
Available Engines	Cummins - Diesel, CNG, LNG,		
Available Transmissions	Allison - B300R, B400R, Voith, ZF		
Passenger HVAC	Roof Or Rear Mounted Plus Dash Mounted Driver's HVAC		
Front And Rear Axles	ArvinMeritor		
Brakes	S-Cam Drum W/Automatic Slack Adjusters And ABS		
Tires	275/70R 22.5		
Front And Rear Doors	Vapor Air - Slide Glide		
Electrical System	I/O Controls Multiplex - G2A or G3		
Suspension	Air Suspension Front And Rear		



At EIDorado National, we constantly improve our product; as a result all specifications and dimensions are subject to change without notice.

EIDorado   
National - California

9670 Galena Street • Riverside, CA 92509  
(909) 591-9557  
www.enconline.com



**CHAMPION®**  
BUS · INC.

**LF TRANSPORT**  
With FLEXBUS™ Technologies



## LF TRANSPORT

Champion. The name speaks for itself. Dedication. Performance. Achievement. That's what we do and who we are. Our customers deserve quality and the peace of mind that only a skilled workforce with an ever-onward dedication to safety can provide. From small to mid-size transit buses, Champion's product lines always earn a spot on the podium. Now that's something to be proud of.

This medium-duty shuttle bus boasts heavy-duty performance. In addition to single-step entry and no lifts, the LF Transports' wide body offers the greatest passenger capacity in the medium-duty category and its larger engine can handle the load.

P 810.724.1753  
F 810.724.1844

[CHAMPIONBUS.COM](http://CHAMPIONBUS.COM)

331 GRAHAM RD, IMLAY CITY, MI 48444

*Est. 53*



**SPECS**

	FORD	CHEVROLET	INTERNATIONAL
CHASSIS	E-450	G4500	INTERNATIONAL UC
ENGINE	6.8L GAS	6.6L DIESEL AND GAS	MAXXFORCE 7, 300HP
TRANSMISSION	5 SPEED AUTOMATIC	6 SPEED AUTOMATIC	ALLISON AUTOMATIC
EXTERIOR HEIGHT	111"	111"	113"
EXTERIOR WIDTH	102"	102"	102"
INTERIOR HEIGHT	81"	81"	88.5"
INTERIOR WIDTH	96.75"	96.75"	96.75"
LENGTH	24.5', 25', 26', 27'	24.5', 25', 26', 27'	27', 31'
WHEELBASE	189", 208"	186", 208"	240"
GVWR	14,500	14,200	19,500

**FORD CHASSIS STANDARDS:**

55 GALLON FUEL TANK  
225 AMP ALTERNATOR  
DUAL 650 CCA BATTERY  
POWER 4-WHEEL DISC (ABS)  
LT225/75RX16E TIRES  
TILT/CRUISE

**CHEVROLET CHASSIS STANDARDS:**

REAR AXLE RATIO 3.73  
DUAL 145-AMP ALTERNATOR-DIESEL  
DUAL 770 CCA BATTERY  
57 GALLON FUEL TANK  
POWER DISC BRAKES  
TIRES LT225/75R 16E, BSW ALL SEASON  
TILT CRUISE  
CHROME APPEARANCE PACKAGE

**INTERNATIONAL CHASSIS STANDARDS:**

AUTOMATIC ALLISON TRANSMISSION  
BRAKE SYSTEM, HYDRAULIC  
320 AMP ALTERNATOR  
225/70R19.5 R250F TIRES  
40 GALLON FUEL TANK.

**CONVERSION STANDARDS:**

AIRPORTER STYLE BODY W/FIBERGLASS PLUG WINDOW  
ELECTRONIC 4-POINT AUTO-LEVELING FULL-KNEEL SUSPENSION SYSTEM  
DC DRIVEN AIR COMPRESSOR  
GALVANIZED STEEL CAGE CONSTRUCTION  
GALVANIZED WHEELWELLS  
STREET SIDE EXHAUST  
MUD FLAPS  
ENGINE BLOCK HEATER OEM  
SELF DIAGNOSING 12 VOLT ELECTRICAL PANEL (FUSES)  
DOOR ACTIVATED ENTRANCE LIGHTING  
EXTERIOR KEY SWITCH - ENTRANCE DOOR  
PLYWOOD FLOOR  
GERFLOR FLOORING  
LONDON SMOKE INTERIOR  
SOLID WINDOWS  
REAR EGRESS WINDOW  
DRIP RAIL OVER WINDOWS  
COMPOSITE EXTERIOR  
ROOF ONE PIECE COMPOSITE  
FUEL FILL DOOR S/S WITH THUMB LOCK  
BLACK STEEL POWDER COATED REAR BUMPER  
ELECTRIC PASSENGER ENTRY DOOR  
RIGHT AND LEFT HAND GRAB RAIL AT ENTRY  
PADDED MODESTY PANELS  
ROSCO MANUAL MIRRORS  
TRACK SEATING  
DRIVER'S SEAT OEM  
FULL BODY UNDERCOATING

**FLEXBUS™ TECHNOLOGY FEATURES:**

- IntelliSYNC® Electronically Controlled "Smart" Suspension system - Increased stability and ride quality for all passengers
- Automatic Self-Leveling - Level floor throughout the passenger compartment regardless of the crown of the road at full kneel and ride height
- Equalizer Ramp - Automatically senses the height of the ramp deployment surface and adjusts to equate all sections of the ramp to provide all passengers with the easiest possible single-grade slope accessibility
- OverRise - The innovative OverRise feature lifts the entire vehicle up to 2.5" inches higher than the OEM ride height at the push of a button
- Auxiliary Air Support System - The air suspension system contains an emergency auxiliary air support system, which is separate and independent of the vehicle's main air operating system
- 3.5" LCD Digital display - For Real-Time Ramp / Suspension System Performance & Diagnostics
- Heavy-duty High-capacity DC Driven Suspension Compressor - Made to kneel at every stop and continuously maintain air pressure. Due to the high CFM compression rate, full air system recovery from a full kneeled position to vehicle ride height within 3.5 seconds...Industry's Best!