SECTION "L"
24' 15 Passenger Goshen Coach Metal Bus

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Kansas City, MO
800 Quik Trip Way Belton, MO 64012

Kearney, NE	Branson, MO	Malvern, AR
3710 Central Ave. Suite 5	171 Shady Oak Rd.	6592 Hwy 270
Kearney, NE 68847	Ozark, MO 65721	Malvern, AR 72104

<div align="center">

SECTION "L"
24' 15 Passenger Metal Bus
RESPONSE SHEET

</div>

BASE VEHICLE   **COST PER UNIT**

Transit Bus (gas engine) $__55,334.00__/ ea.

CHASSIS SPECIFICATIONS

Specify Overall Vehicle Length (outside of front bumper to outside of Rear bumper): 307"

Overall vehicle length: 282" minimum   _____
                          307"maximum   ___307"_____

Width: Exterior   95" minimum   __95"_____
            Interior   91" minimum   __91.25"_____

Height   Exterior   105" minimum   _____
                        124" maximum   ___115"_____
            Interior   76" minimum   ____79"_____

Wheelbase: 176" minimum   _____
                        190" maximum   ____190"_____

AIR CONDITIONING
Make and Model of Rear A/C Unit and Cooling Capacity of rear Unit BTU's/Hr.
Include literature on unit being proposed.

MAKE/MODEL _ACT 913/21_____

BTU/HR of Rear Unit only __97,000_____

HEATING

BTU/HR of Rear Unit only __65,000_____

OPTIONAL ITEMS   COST

1.	CNG Conversion Ford Chassis	$__21,010.00__/ea.
1.	CNG Bifuel Conversion Ford Chassis	$__NOT AVAILABLE__/ea.
2.	Propane Dedicated Conversion	$__14,380.00_____/ea.
3.	Propane Dual Fuel Conversion	$__13,420.00_____/ea.
5.	Back-Up Monitor System	$___463.00_____/ea.
6.	Two-way radio (UHF)	$___840.00_____/ea.
7.	Two-way radio (VHF)	$___840.00_____/ea.
8.	Two-way radio (800 MHZ)	$_NOT AVAILABLE__/ea.
9.	Driver's Shield	$__266.00_____/ea.
10.	Painted lower skirts	$__773.00_____/ea.
11.	Outside Passenger Door Switch	$___89.00_____/ea.
12.	Bus Camera System:	$__3,144.00_____/ea.
13.	Fabric Insert on Ceiling	$__600.00_____/ea.
14.	Street Side Exhaust	$__108.00_____/ea.
15.	Integrated Child Seats	$__502.00_____/ea.
16.	Vinyl Seats (Price Deduction)	$__(-70.00) PER SEAT_/ea.
17.	Public Address System	$___416.00_____/ea.
18.	Passenger Signal System Pull Cord	$__954.00_____/ea.
19.	Passenger Stop request Signs	$_INCLUDD IN #18_/ea.
20.	Fare Collection Box	$__13,680.00_____/ea.

21. Destination Signs $__7,080.00_____/ea.

22. Bicycle Racks $__2,172.00_____/ea.

23. Delete B pillar and copilot seat $__ADD 1,526.00___/ea.
(Price Deduction)

24. Delete GERFLOR Flooring $_ADD 165.00_____/ea.
(Price Deduction)

25. Delete Yellow Powder Coating on $__(-170.00)_____/ea.
Handrails, Grab Rails and Stanchions.
(Price Deduction)

1. **100%** Nida-Core® structure **$_NO BID_____/ea.**

27. Composite floor $_1,810.00_____/ea.

28. Side Door Slide Out Battery Box $__95.00_____/ea.

29. Diesel Engine: $_NOT AVAILABLE__/ea.

30. Rear Spare Tire Holder: $_82.00_____/ea.

31. Adjustable Rear Suspension System: $__1,007.00_____/ea.

A list of optional equipment and/or accessories shall be provided. The list must contain:
- Item
- Description and functionality detail
- Cost of item installed in final delivery of vehicle
- Any changes to listed specifications as outlined above to accommodate options

PROPOSAL EXECPTIONS:
Supplier must list any exceptions here to be used as a part of the Proposal evaluation and analysis. Please list the roman numerical on the standard specs or the number for the options when listing any Proposal exceptions.

I, page 1 of 44: Due to Ford and Chevrolet's chassis shortage the 120 calendar day delivery cannot be met. Delivery from Goshen Coach will be 120 calendar days from receipt of chassis.

XXIV, page 10 of 44: Air Conditioning, Carrier model AC-833MAX is no longer available for bus air conditioning systems. Since all other A/C systems were not approved we are quoting Goshen Coach standard air conditioning system manufactured by American Cooling Technology's. ACT is a major manufacture in the bus A/C industry.

Optional Items, #2: CNG Bi-fuel conversion is not available from Westport/BAF or IMPCO. No bid for CNG Bi-fuel for sections I, L, and N.

_____

Aisle ☐ ⌃ ⌃ ☐☐er **Seats**   **Cab** ☑ ⌃☐☐ ☐ ☐

☐ Std. Black Ribbed Rubber   ☐ Std. Grey Carpet   ☑ Std. Grey Vinyl

☐ Colored Ribbed Rubber   ☐ Black Smooth Rubber   ☐ Vinyl

  Color _____   ☐ Colored Smooth Rubber   Color _____

☐ Carpet   Color _____   ☐ Auto Cloth

  Color _____   ☑ Other GERFLOR   Color _____

☑ Other GERFLOR   ☐ Grey Silver Mist

Walls   **Ceiling**   **Pads**

☑ Std. Grey FRP   ☑ Std. Grey Silver Mist   ☑ Std. Grey Vinyl

☐ Vinyl   ☐ Grey FRP   ☐ Vinyl

  Color _____   ☐ Vinyl   Color _____

☐ Auto Cloth   Color _____   ☐ Auto Cloth

  Color _____   ☐ Auto Cloth   Color _____

☐ Carpet   Color _____   ☐ Grey Silver Mist

  Color _____   ☐ Carpet   ☐ Grey FRP

☐ Grey Silver Mist   Color _____

GLF308	1	**25.5' MODEL CONNECTION**
E496D	1	GCII **190**"WB/308" Ford **6.8L Gas**, GVWR 14,500 E-450
1453	1	**RUNNING BOARD - BOTH SIDES** DIAMOND PLATE, GCII DUAL DOOR ONLY (N/A ON LOW FLOOR)
2200	1	**TOW HOOKS**-REAR (N/A ON 159"WB / 263" OAL G4500 DUE TO FUEL TANK LOCATION)
1380	1	**FUEL TANK-ACCESS PLATE** OVER SENDING UNIT
1396	1	**ONE EXTRA SET OF KEYS, FORD E & F SERIES** (STD IS 2 SETS)
2180	1	TIRE-**SPARE & WHEEL** GCII & PII
7124	1	**WHEEL INSERTS**-4 WHEELS STAINLESS STEEL
2184	1	**EXTENSION-VALVES** FOR TWO INNER DUAL WHEEL
2110	1	BUMPER-REAR **ROMEO RIM**
2301	1	FLOOR-**ADVANTECH 3/4"**
YSN	1	**YELLOW** STEP NOSING
14991	1	**GERFLOR TARABUS SIRIUS** INCLUDES STEPS /NOSING
1609	1	**COVE MOLDING** (ALUMINUM) BETWEEN FLOOR & WALLS
4215	1	HEATER, REAR-**65000 BTU**
1933	1	MCC system AC-833MAX, EM-3 EVAP.,CM-3 COND, DUAL COMPRESSORS-**97000 BTU FORD GAS**
1535	1	ALARM-**BACK UP**
7030	1	SCHEMATICS-WIRING **AS BUILT**
3053	1	**ADD-ON PA SYSTEM** FOR AM/FM/CD RADIOS ONLY. INCLUDES EXTERNAL SPEAKER **(REQUIRES A RADIO OPTION)**
3232	1	LIGHTS-**ALL INTERIOR DOME LIGHTS ON WITH ENTRY DOOR OPEN**
1607	1	LIGHTS-**LED STEPWELL LIGHTS** IN LIEU OF STANDARD (2)
1643	1	LIGHTS-**LED INTERIOR DOME**, ONE (1) ADD'L
1612	1	LIGHTS-**LED DRIVER DOME LIGHT** IN LIEU OF INCANDESCENT
3179	1	BRAKE LIGHT-**REAR CENTER** MOUNTED **LED**
3203	1	EXTERIOR LIGHTS (PAIR) - 7" **AMBER LED** LOCATION: REAR TOP
31931	1	**ARMOR** FOR MARKER & CLEARANCE LIGHTS
31815	1	**MIDSHIP** TURN SIGNAL / MARKER LIGHT COMBINATION (ARMORED) - **LED**
1506	1	**OVERHEAD STORAGE** IN FRONT CAP **(N/A W/FRONT DESTINATION SIGN)**
4152	1	GRAB RAILS-ENTRANCE **PARALLEL** TO STEPS, BOTH SIDES
1520	1	GRAB RAILS-**CEILING (BOTH SIDES OF AISLE)**
4155	1	**YELLOW POWDER COATING-FOR ENTRANCE GRAB RAIL(S)**
4156	1	**YELLOW POWDER COATING - FOR STANCHIONS**

1561	1	YELLOW POWDER COATING - FOR **CEILING GRAB RAILS**
4130	1	MODESTY PANEL-DRIVER W/ **STAINLESS STEEL STANCHIONS**
1557	1	**FIRST AID KIT-24 UNIT** (CALIFORNIA CERTIFIED)
2276	1	**FIRE EXTINGUISHER-5 LB KIDDIE #FXBND9**
1549	1	**EMERGENCY TRIANGLES-**IN BOX
15174	1	**SKIN - ALUMINUM** IN LIEU OF FIBERGLASS (ROOF STILL FRP)
1524	1	**ROOF-ALUMINUM** IPO FIBERGLASS **(TWO LATERAL SEAMS)**
4878	1	MIRRORS-EXTERIOR, M715, **REMOTE CONTROL, HEATED, FORD DUAL DOORS**
4867	1	MIRRORS-EXTERIOR, ADD **LED TURN SIGNALS** TO ANY **ROSCO** MIRROR
1533	1	MIRRORS-**INTERIOR FLAT** 6"X16"
7200	1	**LENS-WIDE ANGLE** 11"X14" (ADHERES TO REAR WINDOW)
4355	1	DECAL-**"PRIORTY SEATING AREA" (ADA REQUIRED)**
4345	1	DECAL-INTERNATIONAL WHEELCHAIR SYMBOL-4"X4"
6050	1	PAINT **BLACK OUT WINDOWS**
4390	1	**INTERMOTIVE HIGHLOCK** FAST IDLE & INTERLOCK SYSTEM W/ DOOR AJAR LED PANEL, **FORD E-SERIES**
4281	1	WC DR, **SGL,** 1 WIND, INT LITE, AJAR PKG, EXT LITE UNDER LIFT DOOR & AT ENTRY DOOR, EXTRA SPRING
4272	2	**STORAGE POUCH** FOR TIE-DOWN BELTS **(GOSHEN COACH LOGO)**
43008	2	Q'STRAINT **QRT MAX SYSTEM FOR SLIDE 'N CLICK Q-8300-A1-SC** W/RETRACTABLE LAP/SHOULDER COMBO BELT W/HEIGHT ADJUSTMENT
4330	8	Q'STRAINT **WEBBING LOOP** Q5-7580 (EACH)
4366	2	Q'STRAINT **12" LAP BELT EXTENSION** Q5-6340-12-INT
4263	1	**BRAUN MILLENNIUM (SERIES 2)** NL919IB-2, 34" X 51"
4522	1	SEAT, DRIVER, FREEDMAN **SHIELD RECLINER,** RH ARM REST, ADJ LUMBAR, MAP POCKET, FORD & CHEVY
4523	1	SEAT, **CO-PILOT** DRIVER, FREEDMAN **SHIELD RECLINER,** LH ARM REST, ADJ LUMBAR, MAP POCKET, FORD & CHEVY
4787	1	SEAT, **MID-HIGH, RIGID, SGL,** FEATHERWEIGHT
4786	6	SEAT, **MID-HIGH, RIGID, DBL,** FEATHERWEIGHT
44801	3	SEAT, **BV FOLD AWAY,** DBL, 3 STEP, **FREEDMAN**
4680	2	**RE-COVER** OEM DRIVER SEAT, LEVEL 1, **FORD**
49551	2	SEAT, FABRIC UPGRADE TO LEVEL **5,** (1) DRIVER SEAT
4955	19	SEAT, FABRIC UPGRADE TO LEVEL **5,** (1) PASS SEAT
4676	13	SEAT BELT, **U.S.R.,** DOUBLE SEAT
4663	3	SEAT BELT, **U.S.R.,** DOUBLE 3-STEP FOLDAWAY
4746AV	4	**GRAB HANDLE, TOP MOUNT,** ANTIVANDAL, **BLACK**
4655	4	**ARMREST,** FLIP-UP, **US ARM**
7002	1	**PARTS MANUAL AS BUILT**
	1	**BATTERY BOX IN STEPS**
	1	**BODY GROUNDED TO FRAME IN TWO LOCATIONS**
	1	**NO BUTT CONECTORS**
	1	**RADIO SPEAKERS-KICKER KS #KS6930**
	1	**BODY FLUID KIT-CERTIFIED SAFETY #FK200-931**
	1	**CLEAR AREA FOR WHEELCHAIRS TO BE 3"x52"**
	1	**WHEELCHAIR LIFT GROUND TO FRAME**
	1	**ALUMINUM ROOF AND SIDES TO BE .060**
	1	**STANCHIONS AND HAND RAILS TO BE BOLTED**
	1	**WHEELCHAIR DOOR MINIMUM 48" x 70"**
	1	**FRONT LIFT**

Floor PLAN

WHEEL CHAIR LAYOUT

30
52
7
16
7

*=TOP GRABS
— INSTALL STORAGE BAGS X 2

65 1⁄2"
199"
196"
147"
86"
56 3⁄16"
4 3⁄16"
8 1⁄2"
41 1⁄2"
91 1⁄4"
19 3⁄4"

52" WIDE DOOR
3" REAR ROMEO

137⁄8"
37 3⁄4"
31 1⁄2"
31 1⁄2"
31 1⁄2"
10"
158 3⁄4"
83 5⁄16"
69 3⁄4"
36" WHEEL BASE
176" WHEEL BASE
307" OVERALL

BRAUN LIFT

SEAT SPACING 'A'
KNEE ROOM 'C'
HIP TO KNEE 'B'

SEAT STYLE	SEAT SPACING 'A'	HIP-TO-KNEE 'B'	KNEE ROOM 'C'
MID HI	31-1/2"	28-1/8"	10"
MID HI			

Reference:

Drawing Name / Description:
FLOOR PLAN, CONNECTION/ 14P/2WC/176WB/307BDY

SIZE A

Scale: N/A
Units: INCHES

Tolerances:
+/- 1/16"
+/- 1°
Unless Noted Otherwise

DO NOT SCALE

Rev.	Revision Description	By	Date	ECN / PPCN
A	DR & RFI			N/A

Revision: A

Sheet of 1

CONNECTION

GOSHEN COACH
Thor Industries Commercial Bus Division

Shown with optional graphics and stainless steel wheel inserts.

Committed to moving people ahead >

- Dual door chassis (driver & co-pilot)
- Up to 24 passengers including co-pilot
- ADA packages available
- Spacious interior
- Available on Ford E-350 and E-450 chassis

Parking Shuttle

Assisted Living

Church

Public Transit

Higher Education

Touring

CHASSIS

Ford E-350 & E-450:

- 11,500, 12,500, & 14,500 GVWR
- 5.4L & 6.8L Gas Engine
- 138", 158", 176", 186" or 190" Wheel Base
- Electronic 5-Speed Automatic Transmission
- OEM Dash A/C, Heater & Defroster
- Dual Batteries
- Power Steering/ABS Brakes/Tilt Wheel/Cruise
- OEM Alternator
- Chrome Front Bumper
- Driver & Co-Pilot Air Bags
- Driver & Co-Pilot Sun Visors
- Engine Block Heater
- Dual Rear Wheels
- All Wheels Painted White
- Power Outlets

CHASSIS OPTIONS

- Power Pedestal (driver only)
- Limited Slip
- Spare Tire
- Radio

Seating plans can be configured based on customer needs or specifications

15 Passenger, Rear Luggage
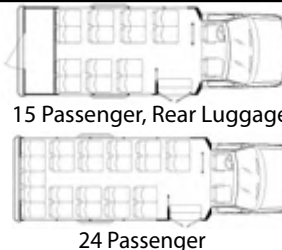
24 Passenger

STANDARD FEATURES

- Up to 26.5 Feet Long and 24 Passengers
- 91" Interior Width for Double Seating on Both Sides of Center Aisle
- 79" Interior Height at Aisle (75" with raised floor option)
- Fully Welded, Unitized Steel Cage Construction
- Vacuum Laminated and Fully Insulated Walls and Roof
- Electric Entry Door
- 36" Vertical Entry Grab on Left Side
- Stanchion Behind Co-Pilot Seat on Right Side
- 5/8" Exterior Plywood Sub-floor with Black Rubber Flooring & Carpet Under Seats
- FRP Interior Walls
- 6 Dome Lights and 2 Stepwell Lights
- One Piece, High Gloss, FRP Exterior Sidewalls
- LED Taillights, Clearance and Marker Lights
- Emergency Side and Rear Egress Windows
- Large Upper T-slider Windows w/Dark Tint
- Manual Exterior Breakaway Mirrors w/Convex
- One Piece Roof
- Rear Mud Flaps

Due to constant product improvements, specifications, component parts and optional equipment are subject to change without notice or obligation. See your dealer for details. Photos may show optional equipment.
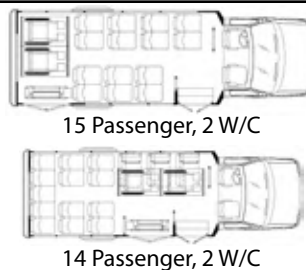
Breakaway Convex Mirror

Rear Wall (shown with optional light package)

High Gloss Exterior Fiberglass

Optional Equipment:

- Choice of Exterior Skin (Aluminum or Fiberglass)
- Choice of Rear Suspension Systems
- Audio/Visual Packages
- Luggage, Dedicated Rear and/or Overhead
- Rubber or Altro Flooring
- Choice of Interiors (Cloth, Vinyl, Carpet)
- Choice of Seat Material (Vinyl, Cloth, Leather)
- ADA Packages Available
- Custom Paint & Graphics Packages

Overhead Luggage

Rooftop Mount AC

Flip-down TV

Perimeter Seating

Rear Wheel Chair Lift

Driver & Co-Pilot

15 Passenger, 2 W/C

14 Passenger, 2 W/C

GOSHEN COACH
Thor Industries Commercial Bus Division

MSBMA MID-SIZE BUS MANUFACTURERS ASSOCIATION MEMBER

ISO 9001 CERTIFIED

QVM Ford

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(web) www.goshencoach.com

2015 FORD CHASSIS FOR
SHUTTLE BUS
APPLICATIONS

- E-350/450 Super Duty Cutaway Chassis
- F-450/550 Super Duty Chassis Cab
- Transit 350 HD Wagon
- Transit 350 HD Cutaway
- F-650 Chassis Cab

COMMERCIAL //// VEHICLES

BUILT Ford TOUGH

FORD HAS THE RIGHT CHASSIS TO FIT YOUR TRANSPORTATION NEEDS

		E-350/E-450 SUPER DUTY CUTAWAY CHASSIS							
PEP Code	**Body Code**	**2014 Model**			**Engine Code**	**Transmission Code***	**SRW/DRW**	**GVWR Code**	**GVWR (lbs.)**
		Model	**WB**	**Engine**					
780A	E3F	E-350	138" WB	5.4L Gas	99L	44T	SRW	20X	**10,050**
780A	E3F	E-350	138" WB	6.8L Gas	99S	44T	SRW	20X	**10,050**
780A	E3F	E-350	158" WB	5.4L Gas	99L	44T	SRW	20X	**10,050**
780A	E3F	E-350	158" WB	6.8L Gas	99S	44T	SRW	20X	**10,050**
780A	E3F	E-350	138" WB	5.4L Gas	99L	44T	DRW	20Y	**11,500**
780A	E3F	E-350	138" WB	6.8L Gas	99S	44T	DRW	20Y	**11,500**
780A	E3F	E-350	158" WB	5.4L Gas	99L	44T	DRW	20Y	**11,500**
780A	E3F	E-350	158" WB	6.8L Gas	99S	44T	DRW	20Y	**11,500**
780A	E3F	E-350	158" WB	5.4L Gas	99L	44T	DRW	20C	**12,500**
780A	E3F	E-350	158" WB	6.8L Gas	99S	44T	DRW	20C	**12,500**
780A	E3F	E-350	176" WB	5.4L Gas	99L	44T	DRW	20C	**12,500**
780A	E3F	E-350	176" WB	6.8L Gas	99S	44T	DRW	20C	**12,500**
782A	E4F	E-450	158" WB	5.4L Gas	99L	44T	DRW	205	**14,000**
782A	E4F	E-450	176" WB	5.4L Gas	99L	44T	DRW	205	**14,000**
782A	E4F	E-450	158" WB	6.8L Gas	99S	44T	DRW	20F	**14,500**
782A	E4F	E-450	176" WB	6.8L Gas	99S	44T	DRW	20F	**14,500**

* 44T = 5-speed Automatic Overdrive TorqShift® Transmission with Tow/Haul Mode

E-SERIES SUPER DUTY CUTAWAY
Wide Range of Available Gross Vehicle Weight Ratings (GVWR).

Shuttle Bus Prep Package (47B)

This package, available on E-350 and E-450 Cutaways, is designed for shuttle bus manufacturers and includes the following:

- High Series Exterior Upgrade Package (18A) which includes Front Chrome Bumper, Chrome Grille, Dual Sealed Beam w/fixed lens Headlamps
- Manual Pedestals, seats not included (21W)
- Power Door-locks and Windows Group (903) N/A with RH door delete (60X)
- Frame pucks (isolators – included when spacers not ordered)
- Front Max. GAWR on E-450 with 14,000 lbs. GVWR
- Engine block heater
- Front license plate bracket (153)
- Exterior Mirror Delete (54F)
- Heavy Duty 155-Amp Alternator (63M).

Deletes:
- Front headliner
- Front dome lamp
- Front vinyl floor covering (162)

Note 1 -   May add 162 front vinyl floor covering.
Note 2 -   May upgrade to optional Extra-Heavy Duty 225-Amp Alternator (63N).
Note 3 -   May add optional Power Seat Prep Package (21Z).

Dimension 'A'=
68.5" w/138" or 158" WB
50.5" w/176" WB

92.5
80/100/118
138/158/176
A
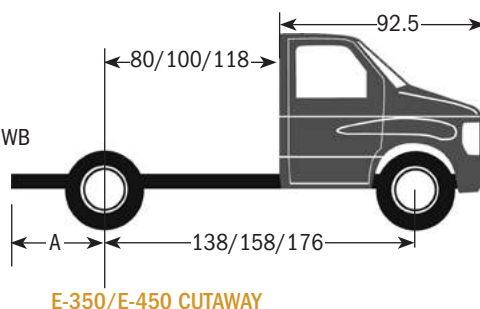
E-350/E-450 CUTAWAY

CNG   PROPANE

CNG/LPG Fuel Capability – Gaseous Engine Prep Package (91G) required for conversion to CNG or Propane (LPG) operation. See Dealer for details.

ITEM	E-350 SUPER DUTY CUTAWAY CHASSIS w/47B			E-450 SUPER DUTY CUTAWAY CHASSIS w/47B	
WHEELBASE (in.)	138	158	176	158	176
MAX. GVW RATINGS (lbs.)	10,050 (SRW) 11,500 (DRW)	10,050 (SRW) 12,500 (DRW)	12,500 (DRW)	14,000 (DRW w/5.4L Gas) 14.500 (DRW w/6.8L Gas)	
MAX. FRONT GAWR (lbs.)	5,000			5,000	
AXLE, FRONT (lbs.)	5,000 Twin-I-Beam IFS			5,000 Twin-I-Beam IFS	
AXLE, REAR (lbs.)	7,800 (SRW); 8,500 (DRW), Dana Full Floating			9,600, Dana Full Floating	
AXLE RATIO	4.10 (Std.); 4.10 LS (Opt.)			4.56 (Std.); 4.56 LS (Opt.)	
BRAKES, SERVICE	Power, Self Adjusting Hydro-Boost Assist (DRW), Vacuum Boost (SRW) Four Wheel Disc with Four Wheel Anti-Lock			Power, Self Adjusting, Hydro-Boost Assist Four Wheel Disc with Four Wheel Anti-Lock	
BRAKE, PARKING	Rear Axle Mounted Drum-In-Hat Type, Foot Operated			Rear Axle Mounted Drum-In-Hat Type, Foot Operated	
ELECTRICAL- ALTERNATOR (GAS ENGINE)	155-Amp Heavy Duty (Std.) 225-Amp (Opt.)			155-Amp Heavy Duty (Std.) 225-Amp (Opt.)	
- BATTERY (GAS ENGINE)	12-Volt, 650-CCA/72-Amp Hr (Std.) Dual 78-Amp Hr HD (Opt.)			12-Volt, 650-CCA/72-Amp Hr (Std.) Dual 78-Amp Hr HD (Opt.)	
ENGINE/HORSEPOWER/TORQUE	5.4L Triton® V8 - Flex Fuel Capable (Std.) 255 HP @ 4,500 RPM/350 lb.-ft. Torque @ 2,500 RPM 6.8L Triton® V10 (Opt.) 305 HP @ 4,250 RPM/420 lb.-ft. Torque @ 3,250 RPM			5.4L Triton® V8 - Flex Fuel Capable (Std.) 255 HP @ 4,500 RPM/350 lb.-ft. Torque @ 2,500 RPM 6.8L Triton™ V10 (Opt.) 305 HP @ 4,250 RPM/420 lb.-ft. Torque @ 3,250 RPM	
FRAME	Single Channel 36,000 PSI 5.73 Cu. In. Section Modulus			Single Channel 36,000 PSI 6.4 Cu. In. Section Modulus	
FUEL TANK	40.0 Gallon (140L) Aft-of-Axle (Std.) 55.0 Gallon (208L) Aft-of-Axle (Opt. w/158" DRW only)			55.0 Gallon (208L) Aft-of-Axle (Std.) 40.0 Gallon (140L) Aft-of-Axle (Opt.)	
SHOCK ABSORBERS	1.38" HD Gas-Type, Front and Rear			1.38" HD Gas-Type, Front and Rear	
SPRINGS, FRONT COIL TYPE (lbs.)	4,200 Max. (SRW) 4,600 Max. (DRW)	5,000 Max.	5,000 Max.	5,000 Max.	
SPRINGS, REAR (lbs.)	7,310 (SRW); 8,500 (DRW) Multi-Leaf/Single Stage			9,600 Multi-Leaf/Single Stage	
STABILIZER BAR, FRONT (in.)	1.0 (SRW); 0.91 (DRW) diameter			0.91 diameter	
STABILIZER BAR, REAR (in.)	1.125 (DRW) diameter			1.125 diameter	
STEERING	HD Power			HD Power	
TIRES	(4) LT245/75Rx16E (SRW); (6) LT225/75Rx16E (DRW)			(6) LT225/75Rx16E (Std.)	
WHEELS, 8-HOLE DISC	(4) 16.0x7, Gray (Std.), White (Opt.) (SRW) (6) 16.0x6, White 4 Hand Hole (DRW) (4) 16.0x7 Forged Aluminum (Opt.) (SRW)			(6) 16.0x6, White 4 Hand Hole	
TRANSMISSION	5-Speed. TorqShift® Automatic Overdrive (Std.) Tow/Haul Mode (Std.) Auxiliary Transmission Oil Cooler (Std.)			5-Speed. TorqShift® Automatic Overdrive (Std.) Tow/Haul Mode (Std.) Auxiliary Transmission Oil Cooler (Std.)	

*SRW - Single Rear Wheel   DRW - Dual Rear Wheel*

2015 TRANSIT 350 HD (DRW) LONG WHEELBASE EXTENDED-LENGTH (EL) HIGH ROOF WAGON

Major Features

- All new for 2015, the Transit 350 Wagon is available with a medium roof - 99.2" (9,500 lbs. maximum GVWR) or a high roof - 108.6" (10,360 lbs. maximum GVWR).
- Dual sliding side cargo doors (late availability)
- Comparing the Transit High Roof Extended Van to the E-350 Extended Van, the Transit offers up to 640 lbs. more payload (4,560 vs. 3,920 lbs.) and 209 cu.-ft. more volume (487 vs. 278 cu.-ft.)
- Two gasoline engines and one diesel engine are available:
  - 3.2L I-5 Power Stroke® diesel
  - 3.7L Ti-VCT V6, E85 Flex-Fuel Capable Standard on all SRW Van (late availability)
  - 3.5L EcoBoost® V6 (Standard on all DRW Van models) (late availability)
  - See your dealer for availability

Upgradeable Features/Options
(for an additional charge)

- Power Heated Mirrors with Turn Signals (544)
- Passive Anti-theft System (66P)
- Cruise Control with Message Center (60C)
- Keyless Entry Pad (52C)
- Remote Start (68B)
- Privacy Glass (92E) with Rear Defogger (57N)
- Dual Heavy-Duty Batteries (63E)
- Heavy-Duty Alternator (63C)
- Auxiliary Heater/AC Prep Package without Rear Controls (62C)
- Builders Prep Package (61A)
- Modified Vehicle Wiring System (53K)
- Front License Plate Bracket (153)
- Auxiliary Fuse Panel

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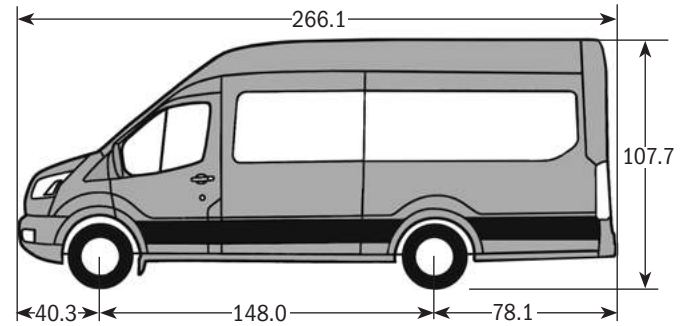
TRANSIT 350 HD LONG WB (EL) WAGON

ITEM	TRANSIT 350 HD (DRW) LONG WHEELBASE EXTENDED-LENGTH (EL) HIGH ROOF (108.6") WAGON
WHEELBASE (in.)	148
MAX. GVW RATINGS (lbs.)	10.360 (DRW)
MAX. FRONT GAWR (lbs.)	4,130
AXLE, FRONT (lbs.)	Independent McPherson Strut w/Stabilizer Bar
MAX. REAR GAWR (lbs.)	7,275
AXLE, REAR (lbs.)	7,275
AXLE RATIO	3.73 LS
BRAKES, SERVICE	Four Wheel Disc with Four Wheel Anti-Lock
ELECTRICAL - ALTERNATOR*	230-Amp (gas); 210 Amp (Diesel)
- BATTERIES	12-Volt, 70-Amp Hr, 610-CCA (Gas); 70-Amp Hr, 760-CCA (Diesel)
ENGINE/HP/TORQUE	3.7L Ti-VCT V6/275 HP @ 6,000 RPM/260 lb.-ft. @ 4,000 RPM 3.5L EcoBoost® V6/310 HP @ 5,500 RPM/400 lb.-ft. @ 2,250 RPM 3.2L I-5 Power Stroke® Diesel/185 HP @ 3,000 RPM/350 lb.-ft.@ 1,500-2,750 RPM
FUEL TANK (gallons)	25
SUSPENSION - FRONT	Independent McPherson Strut w/Stabilizer Bar
SUSPENSION - REAR	Solid Axle, Leaf Springs, Heavy-Duty Gas Shock Absorbers
STEERING	Hydraulic Power Rack-and-Pinion
TIRES - SINGLE REAR	235/65R 16C 121/119R BSW
- DUAL REAR	195/75R 16C 107/105R BSW
TRANSMISSION	6-Speed Automatic Overdrive w/SelectShift™
WHEELS	16" Steel

* Amperage output based on cold performance at 80° F. Actual output is temperature and application dependent.

Additional options are available. Consult your dealer or www.ford.com/commercial-trucks for a complete list.

(M) *Metric conversion - To obtain information in kilograms, multiply the pounds by .45; to obtain information in kilometers, multiply the miles by 1.6; to obtain information in centimeters, multiply the inches by 2.54.*

2015 TRANSIT 350 HD CUTAWAY FOR SHUTTLE BUS BUILDERS

Transit Cutaway Major Features
- All new for 2015, the Transit 350 Cutaway is available with a 10,360 lbs. maximum GVWR.
- 3.7L Ti-VCT V6, E85 Flex-Fuel Capable (Standard)
- 3.2L I-5 Power Stroke® diesel engine (Optional)

Transit Cutaway Shuttle Bus Prep Package (47S)
- Dual Heavy-Duty Batteries (63E)
- Heavy-Duty Alternator (63C)
- Auxiliary Heater/AC Prep Package without Rear Controls (62C)
- Front License Plate Bracket (153)
- Exterior Upgrade Package (18D)
- Engine Block Heater (41H)
- Trailer Wiring Provisions (59B)
- Auxiliary Fuse Panel (Included)

Upgradeable Features/Options
(for an additional charge)
- Long-Arm Exterior Mirrors (54B)
- Exterior Mirror Delete (54X)
- 3.73 Limited-Slip Axle
- Spare Tire and Wheel (51D)
- Modified Vehicle Wiring System (53K)
  - Requires HD Alternator (63C) and Dual HD Batteries (63E)
  - Includes Auxiliary Fuse Panel, Underhood Powertrain Circuit Tap-ins, Modified Vehicle Connections for Customized Wiring Harness Provisions

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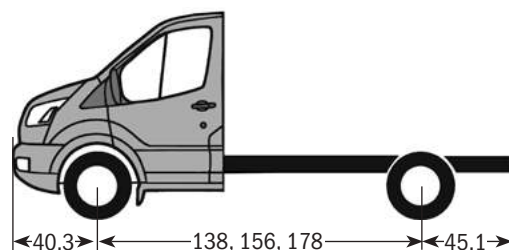
TRANSIT 350 HD CUTAWAY

ITEM	TRANSIT 350 HD CUTAWAY
WHEELBASE (in.)	138, 156, 178
MAX. GVW RATINGS (lbs.)	10,360 (DRW)
MAX. FRONT GAWR (lbs.)	4,130
AXLE, FRONT (lbs.)	Independent McPherson Strut w/Stabilizer Bar
MAX. REAR GAWR (lbs.)	7,275
AXLE, REAR (lbs.)	7,275
AXLE RATIO	3.73 LS
BRAKES, SERVICE	Four Wheel Disc with Four Wheel Anti-Lock
ELECTRICAL - ALTERNATOR*	230-Amp (gas); 210 Amp (Diesel)
- BATTERIES	12-Volt, Heavy Duty 70-Amp Hr, 760-CCA
ENGINE/HP/TORQUE	3.7L Ti-VCT V6/275 HP @ 6,000 RPM/260 lb.-ft. @ 4,000 RPM
	3.2L Power Stroke® Diesel/185 HP @ 3,000 RPM/350 lb.-ft.@ 1,500-2,750 RPM
FUEL TANK (gallons)	25
SUSPENSION - FRONT	Independent McPherson Strut w/Stabilizer Bar
SUSPENSION - REAR	Solid Axle, Leaf Springs, Heavy-Duty Gas Shock Absorbers
STEERING	Hydraulic Power Rack-and-Pinion
TIRES - SINGLE REAR	235/65R 16C 121/119R BSW
- DUAL REAR	195/75R 16C 107/105R BSW
TRANSMISSION	6-Speed Automatic Overdrive w/SelectShift™
WHEELS	16" Steel

* Amperage output based on cold performance at 80° F. Actual output is temperature and application dependent.

Additional options are available. Consult your dealer or www.ford.com/commercial-trucks for a complete list.

Ⓜ *Metric conversion - To obtain information in kilograms, multiply the pounds by .45; to obtain information in kilometers, multiply the miles by 1.6; to obtain information in centimeters, multiply the inches by 2.54.*

Wheelbase Choices

F-450/F-550 Super Duty Regular Cab Chassis models are available in 4 wheel-base lengths and 4 CA dimensions.

Selection of Gross Vehicle Weight Ratings (GVWRs) and Payload

Shuttle bus customers and builders can select GVWRs ranging from 16,500 lbs. to 19,500 lbs. and payloads ranging from 9,945 to 12,660 lbs. (Regular Cab).

Choice of Powertrains

Two responsive and dependable powertrains are available.

- The tough and reliable 6.8L Triton® V10 Gasoline engine mated to the durable TorqShift® 5-speed automatic transmission with overdrive: The TorqShift automatic includes Tow/Haul Mode which helps reduce gear hunting, improves power delivery and uses engine braking to help control vehicle speed when descending hills.
- The 6.7L Power Stroke® V8 Turbo Diesel engine offers great performance and fuel economy. The engine is mated to the TorqShift® Heavy-Duty 6-Speed SelectShift Automatic™ double overdrive transmission with Tow/Haul Mode which smoothly and automatically enables exhaust braking and reduces brake wear.

Airbag Delete Option for Front Entry Buses

In order to assist the builder with a front entry door, Ford offers a Frontal Passenger and Side Airbags/Curtains Delete Option (valid with Fleet FIN Code)-557 (XL).
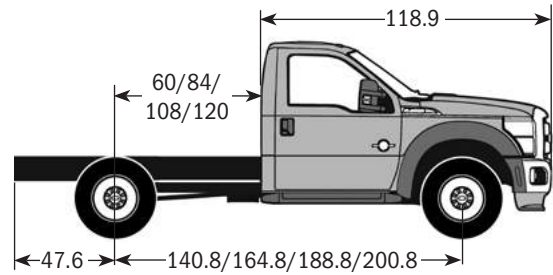
F-450/F-550 REGULAR CAB

CNG/Propane (LPG) Fuel Capability – Gaseous Engine Prep Package (98G) required for conversion to CNG or LPG operation. See Dealer for details.

ITEM	F-450 SUPER DUTY CHASSIS CAB	F-550 SUPER DUTY CHASSIS CAB
CAB CONFIGURATION	Regular Cab	Regular Cab
WHEELBASE (in.)	141, 165, 189, 201	141, 165, 189, 201
MAX. GVW RATINGS (lbs.)	16,500 (DRW)	19,500 (DRW)
AXLE, FRONT (lbs.)	7,000 Dana	7,000 Dana
AXLE, REAR (lbs.)	12,000 Dana S110	13,660 w/17,500 and 18,000 GVWR 14,706 w/19,500 GVWR
AXLE RATIO	Gas: 4.88 (Std.), 4.88 LS (Opt.); Diesel: 4.10 (Std.), 4.10 LS (Opt.)	Gas: 4.88 (Std.), 4.88 LS (Opt.); Diesel: 4.10 (Std.), 4.10 LS (Opt.)
BRAKES, SERVICE	Power, Self-Adjusting Hydro-Boost Assist Four Wheel Disc with Four Wheel Anti-lock	Power, Self-Adjusting Hydro-Boost Assist Four Wheel Disc with Four Wheel Anti-lock
BRAKE, PARKING	Rear Axle Mounted, 9.5" Drum-in-Hat Type, Foot Operated	Rear Axle Mounted, 9.5" Drum-in-Hat Type, Foot Operated
ELECTRICAL - ALTERNATOR	175-Amp Heavy Duty (Std. Gas) 200-Amp Extra Heavy Duty (Std. Diesel) Dual 357-Amp (Opt. Diesel)	175-Amp Heavy Duty (Std. Gas) 200-Amp Extra Heavy Duty (Std. Diesel) Dual 357-Amp (Opt. Diesel)
- BATTERY	12-Volt, 750-CCA/78-Amp Hr (Std. Gas) Two 12-Volt 750-CCA (1,500-CCA Total) 78-Amp Hr (Std. Diesel)	12-Volt, 750-CCA/78-Amp Hr (Std. Gas) Two 12-Volt 750-CCA (1,500-CCA Total) 78-Amp Hr (Std. Diesel)
ENGINE/HP/TORQUE	6.8L Triton® 3V SEFI V10 (Std.) 362 HP @ 4,750 RPM/457 lb.-ft. Torque @ 3,250 RPM 6.7L Power Stroke® V8 Turbo Diesel (Opt.) 300 HP @ 2,800 RPM/660 lb.-ft. Torque @ 1,600 RPM	6.8L Triton® 3V SEFI V10 (Std.) 362 HP @ 4,750 RPM/457 lb.-ft. Torque @ 3,250 RPM 6.7L Power Stroke® V8 Turbo Diesel (Opt.) 300 HP @ 2,800 RPM/660 lb.-ft. Torque @ 1,600 RPM
FRAME	Single Channel, 36,000 PSI, Ladder Type 10.1 or 17.2 cubic inches SM, Based on Wheelbase and Payload Package	Single Channel, 36,000 PSI, Ladder Type 10.1 or 17.2 cubic inches SM, Based on Wheelbase and Payload Package
FUEL TANK	40 Gallon (Std.); Dual 40 Gallon Aft-of Axle and 28 Gallon Mid-ship (Opt. with 6.7L Diesel)	40 Gallon (Std.); Dual 40 Gallon Aft-of Axle and 28 Gallon Mid-ship (Opt. with 6.7L Diesel)
SHOCK ABSORBERS	1.38" Dia. HD Gas-type, Front and Rear	1.38" Dia. HD Gas-type, Front and Rear
SPRINGS, FRONT COIL TYPE (lbs.)	4,800 to 7,000 (Computer Assigned)	4,800 to 7,000 (Computer Assigned)
SPRINGS, REAR (lbs.)	12,000 Multi-Leaf, Single Stage Main Plus Auxiliary	13,660 to 15,000 Multi-Leaf, Single Stage Main Plus Auxiliary
STABILIZER BAR, FRONT (in.)	1.26	1.26
STABILIZER BAR, REAR (in.)	1.06	1.06
STEERING	Power (Includes Steering Damper)	Power (Includes Steering Damper)
TIRES	225/70Rx19.5G BSW All-Season (Std.) 225/70Rx19.5G BSW Traction (4 Traction on Rear and 2 A/S on Front (Opt.); 225/70Rx19.5G BSW Max Traction 4x4) (4 Traction on Rear and 2 Traction on Front (Not Recommended for Over the Road)	225/70Rx19.5G BSW All-Season (Std.) 225/70Rx19.5G BSW Traction (4 Traction on Rear and 2 A/S on Front (Opt.); 225/70Rx19.5G BSW Max Traction 4x4) (4 Traction on Rear and 2 Traction on Front (Not Recommended for Over the Road)
WHEELS	(6) 19.5" x 6" RW Argent Painted Steel (Std. w/XL, XLT)	(6) 19.5" x 6" RW Argent Painted Steel (Std. w/XL, XLT)
TRANSMISSION	TorqShift® 5-Spd. Overdrive w/Tow Haul Mode; (Std. w/6.8L V10) TorqShift® 6-Speed SelectShift™ Overdrive w/Tow/Haul Mode & Integrated Automatic Engine Braking (Std. w/6.7L V8 Diesel)	TorqShift® 5-Spd. Overdrive w/Tow Haul Mode; (Std. w/6.8L V10) TorqShift® 6-Speed SelectShift™ Overdrive w/Tow/Haul Mode & Integrated Automatic Engine Braking (Std. w/6.7L V8 Diesel)

GASOLINE OR DIESEL ENGINE

The Right Chassis
F-650 Super Duty Straight Frame offers GVWRs up to 30,000 lbs.

260" Wheelbase
The 260" wheelbase is designed for shuttle bus and RV applications,.

Ford 6.8L V10 Gas Power
Ford 6.8L V10 Triton® 3-valve gas engine is available and is mated to the tough and durable TorqShift® 6-speed double overdrive transmission. The 6.8L engine is rated at 362 horsepower @ 4,750 RPM and 457 lb.-ft. of torque @ 3,250 RPM.

CNG/LPG Fuel Capability
Conversion to CNG or LPG operation requires 99D Engine Code. See Dealer for details.

Ford TorqShift® 6-Speed Automatic Double Overdrive
Heavy Duty transmission features 3.97 first gear to get moving.

Cummins® 6.7L Power
The 6.7L Cummins ISB 200 HP diesel engine is standard on all F-650 models. Ten different horsepower/torque ratings are available.

Allison® Automatic Transmission
All F-650 diesel chassis cabs can be equipped with an Allison automatic transmission. Allison PTS (Pupil Transportation/Shuttle) Series transmissions provide reliable performance and economical maintenance for shuttle bus fleets.

113

84/102/108/ 120 126/138/ 144/150/156/ 168/186

158/176/182/ 194/200/212/218/ 224/230/242/260

49/70/75/81/ 87/100/120
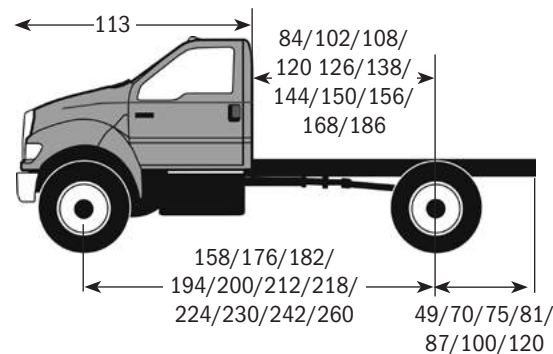
F-650 REGULAR CAB

ITEM	F-650 SUPER DUTY GAS ENGINE CHASSIS CAB	F-650 SUPER DUTY DIESEL ENGINE CHASSIS CAB
CAB CONFIGURATION	Regular Cab	Regular Cab
WHEELBASE (in.)	158, 176, 182, 194, 200, 212, 218, 224, 230, 242, 260	158, 176, 182, 194, 200, 212, 218, 224, 230, 242, 260
MAX. GVW RATINGS (lbs.)	30,000	29,000
AXLE, FRONT (lbs.)	8,500 (Std.); 10,000 (Opt.)	8,500 (Std.); 10,000 (Recommended Option)
AXLE, REAR (lbs.)	17,500 (Std.); 19,000 (Opt.)	17,500 (Std.); 19,000 (Recommended Option)
AXLE RATIO	5.13 to 7.17 Single-Speed Rear Axle	2.64 to 7.17 Single-Speed Rear Axle (6.14:1 Recommended)
BRAKES, SERVICE (Standard)	Power, Hydraulic, Automatic Adjusting, Full Power Four-Wheel Disc with Four-Wheel Anti-lock	Power, Hydraulic, Automatic Adjusting, Full Power Four-Wheel Disc with Four-Wheel Anti-lock
BRAKE, PARKING (Standard)	12" x 3" Rear Axle Mounted, Bosch DSSA Type	12" x 3" Rear Axle Mounted, Bosch DSSA Type (Recommended)
BRAKES, SERVICE (Optional)	Power, Full Air, Automatic Adjusting Four-Wheel Disc with Four-Wheel Anti-lock System	Power, Full Air, Automatic Adjusting, Full Power Four-Wheel Disc with Four-Wheel Anti-lock System
BRAKE, PARKING (Optional)	Spring Parking Brake Chambers Mounted Front of Rear Axle	Spring Parking Brake Chambers Mounted Front of Rear Axle
ELECTRICAL - ALTERNATOR	177-Amp - 2,495 Watt (Std.)	210-Amp - 2,835 Watt (Std.); 240-Amp - 3,240 Watt (Opt.) 320-Amp - 4,320 Watt (Opt.)
- BATTERY	One 950-CCA (Std.)	Two 700-CCA (1,400-CCA Total) (Std.) Three 700-CCA (2,100-CCA Total) (Opt.) Two 950-CCA (1,900-CCA Total) (Recommended Option) Three 950-CCA (2,850-CCA Total) (Opt.)
ENGINE/HP/TORQUE - GAS	6.8L Triton® 3V V10, 362 HP @ 4,750 RPM	Cummins (Std.) 200 HP @ 2,300 RPM (Std.) to 325 HP @2,600 (Opt.) Cummins 240 HP/560 Lb.-Ft. Torque (Recommended Option)
FRAME	Single Channel, 50,000 PSI (Std.)	Single Channel, 50,000 PSI (Std.)
FUEL TANK	42 Gal. (Std.) up to 60 Gal. Capacity (Opt.)	45 Gal. (Std.) up to 145 Gal. Capacity Dual Tanks (Opt.)
MIRRORS	—	Sail-mounted, Manual Folding, Heated and Motorized Glass
SHOCK ABSORBERS	Double Acting Front (Std.); Rear (Opt.)	Double Acting Front (Std.); Rear (Opt.) (Incl. w/Air Rear Suspension);
SPRINGS, FRONT TYPE (lbs.)	8,500 (Std.), 10,000 (Opt.) Parabolic Taper-leaf	8,500 (Std.), 10,000 (Opt.) Parabolic Taper-leaf
SPRINGS, REAR (lbs.)	17,500 (Std.), 15,500 (Opt.), 20,000 (Opt.) Vari-Rate Multi-leaf Incl. 4,500 Rubber Aux.	18,500 (Std.), 15,500 (Opt.), 20,000 (Opt.) Vari-Rate Multi-leaf Incl. 4500 Rubber Aux. 18,500 or 20,000 (Opt.) Air Suspension
SPRINGS, FRONT AUXILIARY	Rubber	Rubber
STEERING	Integral Power Steering	Integral Power Steering
TIRES	10R 22.5F 12PR (Std.); 225/70R19.5G 12PR (Opt.)	Goodyear 255/80R 22.5G Recommended; Other Tires Optional
WHEELS	10-Hole 22.5"x7.5" Steel Disc (Std.); 8-Hole 19.5"x6.75" Steel Disc (Opt.)	10-Hole 22.5"x7.5" Steel Disc (Std.); 8-Hole 19.5"x6.75" Steel Disc (Opt.)
TRANSMISSION - GAS	6-Speed TorqShift® Automatic	5- or 6-Speed Allison Automatic

M *Metric conversion - To obtain information in kilograms, multiply the pounds by .45; to obtain information in kilometers, multiply the miles by 1.6; to obtain information in centimeters, multiply the inches by 2.54.*

CUSTOMER SUPPORT //////

Roadside Assistance

This 24-hour, seven-days-a-week service is a standard feature on all Ford Commercial Chassis. By dialing 1-800-241-3673, Ford Commercial Truck customers also have access to:

- Flat tire change (requires usable spare tire)
- Battery jump-start
- Fuel delivery, if out of fuel
- Lockout assistance
- Warranty/non-warranty/collision towing
- Winch out

Note: F-650 is eligible for jump start, lockout and towing services.

- Coverage Period:
  - E-Series and F-Series Super Duty (F-250–550): 5-years/ 60,000 miles, whichever occurs first.
  - F-650/F-750: 2-years/unlimited miles

In-Dealership Service Support

- Approximately 3,500 Ford dealerships in the U.S. and Canada are available to provide service support.
- In-dealership certified service technicians backed by computerized diagnostics and national hotline support
- Dealers provide verification of available owner notification and recall information affecting Ford Commercial Chassis.

Warranty Information

- Ford Commercial Chassis (thru F-550) have a Bumper-to-Bumper limited warranty of 3-years or 36,000 miles, and a Powertrain limited warranty of 5-years or 60,000 miles, whichever occurs first.
- F-650 models have a limited warranty for 2-years and unlimited miles that provides Basic, diesel and Ford drivetrain (axles, driveshaft and transmission) coverage. See your dealer for F-650 gas engine/transmission warranty details.
- The Power Stroke® diesel engine has a limited warranty of 5-years or 100,000 miles, whichever occurs first.
- Parts of the vehicle manufactured and covered by Ford Motor Company are listed in the Warranty Information Booklet that comes with the vehicle. It states the vehicle owner's rights and responsibilities, and should be read carefully.
- Non-Ford diesel engines and transmissions are warranted by the manufacturer. Please refer to the manufacturer's limited warranty statement.
- Corrosion Protection – Sheet metal manufactured and installed by Ford is protected against rust through (perforation) for 5-years/ unlimited miles for commercial chassis (thru F-550) and 3-years/ unlimited miles for F-650.
- See dealer for details.

Ford QVM Program for Shuttle (Transit) Bus Builders

Ford is not only interested in providing safe, high-quality chassis, we also recognize the need for final-stage manufacturers to meet the special vehicle requirements of their customers. To promote reliability and quality of modified Ford products, we publish the Qualified Vehicle Modifier Program guidelines for final stage manufacturers.

We also provide technical assistance and assess builder's processes and quality operating systems.

We are proud to work with the best Vehicle Modifiers in the business to complete your personalized fleet requirements. Each one offers a unique lineup of bodies to match your Ford chassis.

- Ameritrans (TMC Group)
- Champion Bus, Inc. (ASV)*
- Coach & Equipment Mfg. Corp.*
- Collins Bus Corp. (ASV)*
- Diamond Coach Corp.*
- ElDorado National, Inc. (ASV)*
- Elkhart Coach (Forest River)*
- Executive Coach
- Glaval Bus (Forest River)*
- Goshen Coach (ASV)*
- Grech Motors
- MicroBird by Girardin*
- Prime Time Specialty Vehicles, Inc.
- Starcraft Bus (Forest River)*
- Supreme Corp.*
- Tiffany Coachworks
- Turtle Top*

  * Ford Pool Account

Note: If using biodiesel fuel, Ford recommends biodiesel fuel that is no higher than 20 percent (B20) biodiesel on F-Series Super Duty through F-550 and on F-650 Super Duty. Follow the Special Operating Conditions Maintenance Schedule if using biodiesel.

All incomplete vehicle packages listed in this document require further manufacture and certification by a final stage manufacturer. In addition, Ford urges shuttle (transit) bus manufacturers to follow the recommendations of the Ford Incomplete Vehicle Manual and the Ford Truck Body Builders Layout Book (and pertinent supplements).

Option Number:

ACT-913 /21

System Information:

The ACT EZ-91 free blow evaporator when combined with the ACT CS-3 skirt mounted condenser and TM-21 compressor combines to make the ACT-913/21. The system is BTU rated at 97,000 when combined with the OEM rating of 15,000 Btu.

COMPONENT SPECIFICATIONS

EZ-91 Evaporator

BTU'S:	93,000 Btu/hr IMACA Cooling Capacity
AIR MOVEMENT:	2400 CFM @ 0 static Pressure
VOLTAGE:	12 Volts DC
AMPERAGE:	27 Amps @ 13.5 Volts
SIZE:	W 59.25"x H 9.75"x D 22.125
WEIGHT:	95 Lbs.
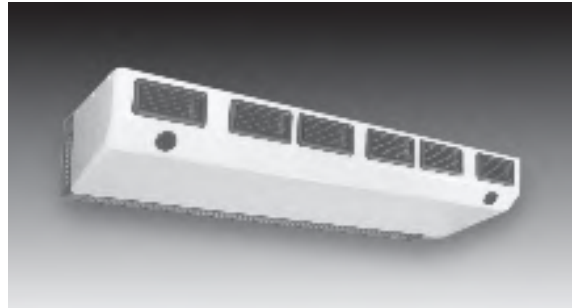
CS-3 CONDENSER

BTU'S:	82,000 Btu/hr IMACA Cooling Capacity
AIR MOVEMENT:	3690 CFM @ 0 static Pressure
VOLTAGE:	12 Volts DC
AMPERAGE:	32 Amps @ 13.5 Volts
SIZE:	W 49.5" x H 10.375"x D 13.750"
WEIGHT:	54 Lbs.
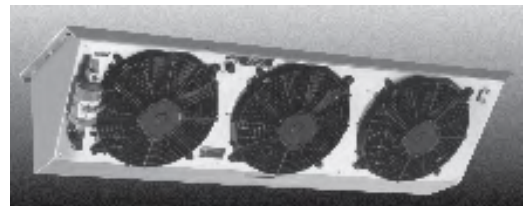
TM-21 COMPRESSOR DATA

PERMISSIBLE SPEED:	700-6000 RPM
DISPLACEMENT:	13 CUBIC INCH
REPORTED BTU CAPACITY:	65,000 BTU IMACA
REFRIGERANT:	R-134a

WARRANTY

ACT Systems by ProAir are covered by an industry-leading two-year warranty. Complete terms are outlined in our Warranty Statement, Consult ACT for detailed information.

American Cooling Technology, Inc.
715 Willow Spring Lane
York, PA 17406
Phone (717) 767-2775 / (877) 228-4247
Fax   717 767-3658
www.actusa.us.com

AMERICAN COOLING TECHNOLOGY, INC.
SYSTEM LIMITED WARRANTY

American Cooling Technology, Inc. (ACT) warrants against defects in materials and workmanship on systems manufactured new from (ACT) under normal use and operation for period of 24 months from the original date in service on the original vehicle. If in service date is not registered, or can not be determined the date of installation will be utilized to establish the 24-month warranty period. ACT will warrant repair and labor only if prior authorization is given from ACT.

To file a warranty claim you must contact ACT warranty department at (717) 767-2775 or the source where the system was purchased or installed within thirty (30) days of the defect. Please have the following information available:

> American Cooling Technology, Inc. serial number of part (required)
> Description of system
> ACT Part number
> Sales order number
> Nature of the defect

You must have prior written authorization from ACT in order to file a warranty claim or to return any item.

This warranty applies to components in continental North America, Hawaii, Alaska and Puerto Rico.

THE WARRANTY SET FORTH ABOVE IS EXCLUSIVE, AND NO OTHER WARRANTY, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED. ACT SPECIFICALLY DISCLAIMS THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PURPOSE.

LIMITATIONS OF LIABILITY

ACT will not warrant against improper installation, negligence, accident, lack of maintenance, or transportation. Incidental, consequential damages, or commercial losses from any cause are not the liability of ACT under any circumstances. Any alteration or repair to a component without prior written authorization from ACT will not be covered under the above warranty. ACT is not liable for towing, equipment rental, loss of time, or any other expenses or damages while the equipment is not operational.

During the warranty period, ACT will, at its option, either repair or replace the component that proves to be defective.

Form ACT (4) 5/17/2012 Rev. E

Simplicity... Redefined

MILLENNIUM2

THE BRAUN
CORPORATION.
mobility products

BRAUN MILLENNIUM2 SERIES

- fully automatic NHTSA compliant lift, operated by an attendant
- loading position - either direction
- interfaces with OEM interlocks
- lift mounted lights - active when interlocks are met and lift is powered
- hand-held control box with illuminated functions
- locking mechanical Inboard Barrier (IB), powder coated yellow for safety and high visibility, prevents operation if occupied
- pump design prevents platform folding when occupied, quiet operation & low current draw
- durable redesigned baseplate reduces lift weight and allows for quicker and easier service of hose/wiring
- easily installed, step-by-step installation instructions, no peripheral hardware required
- platform movement prevented during unsafe operation
- hydraulic outer barrier that will be in the fully up position before the platform leaves the ground, complete with durable rubber nose guard
- transition areas marked with durable high-gloss yellow powder coating for safety & visibility
- side or rear door application
- several platform widths and lengths
- dual handrails for security and convenience
- bridging feature permits the wheelchair user to board the lift from sidewalks or inclines
- floor to ground travel is 42" or 48"
- lifting capacity is 800 lbs
- integrated back-up pump
- equipped with an adjustable anti-rattle feature to avoid unpleasant noise in the vehicle during transit
- durable high-gloss powder coated finish
- Lift-Tite system stows the lift platform securely while the vehicle is in transit
- pump module with removable cover offers easy access to all components

Integrated dual handrails provide added security for wheelchair users and standees

Visual and audible warnings alert both passengers and attendants to unsafe conditions

Hydraulic roll stop engages and locks before the platform leaves the ground

THE BRAUN CORPORATION.
www.braunlift.com

MADE IN AMERICA

1-800-THE LIFT
For The Dealer Nearest You

Q'STRAINT

THE

QRTMAX

Wheelchair & Occupant Securement Systems

Our securement systems help make everything possible.

Q'STRAINT

Our vision is simple.

Continue to produce the most advanced securement systems.
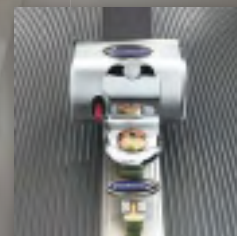
It all started over 20 years ago when Q'Straint introduced the integrated four-point wheelchair and occupant securement system. Since then Q'Straint has been recognized as a pioneer in the way wheelchair & occupant securement systems have been designed and tested.

Q'Straint maintains its high level of customer service and product quality simply by being the only company in the world that produces wheelchair & occupant securement systems exclusively. Since safety has always been a top priority at Q'Straint, our research and engineering along with our industry experience were used to establish industry standards for dynamic crash testing and static testing.

Q'Straint was also the first wheelchair and occupant securement company to be ISO 9000 registered and to offer a comprehensive training.

Now Q'Straint welcomes the newest product to our securement family, The QRT MAX. The QRT MAX is available with a variety of anchorages and your existing fleet can be retrofitted to use the unique QRT MAX.

With today's rapidly changing environment the QRT MAX innovative features will offer an even safer, simpler and easier method of use than ever before! This fast, safe, simple system will become synonymous in the industry with the term….Hook and Go!

The latest in a line of great innovations.

THE

QRTMAX

Introduction

What makes the QRT MAX so unique?

Outstanding performance and innovative features that help increase efficiency! Welcome to the next generation of wheelchair securements.
Q'Straint has made some significant steps in the advancement of wheelchair securement systems over the last few years but the new state of the art QRT MAX is the most significant to date. The QRT MAX is the first ever securement that can self-lock and self-tension itself automatically. It is so easy to use that it takes only one hand to operate.The QRT MAX has been designed with a low profile to allow most types of wheelchairs to easily move into place without encountering obstructions.
The next couple of pages will take you through these new features and more!

The QRT MAX shown here with the PLI

hook&go.

One hand operation

No tensioning device

Low profile

PLI - Positive lock indicator

One hand operation

Automatic.

The unique automatic, self-locking and self-tensioning features enables the retractor to be operated by one hand. A true one-hand operation for the attendant. This offers a simpler and easier method of use than ever before.

THE
QRTMAX

Products designed with the driver and passenger in mind.

No tensioning device

Self-Locking and Self-tensioning

As the innovator and leader of the automatic retractors, we take this responsibility very seriously and understand the meticulous quality that is required for this unique feature. No manual tensioning device is required, as the self-tensioning function will remove the slack from the retractors.

The QRT MAX fits easily under most footrests.

Low Profile
No knobs or handles to be used as an obstruction

One of the great improvements over other retractors is the low profile design. This new feature allows the wheelchairs' footrests to pass over the retractor. Now the driver can easily move the occupant in to place without having to remove or go around the retractors. Another time saving feature!

THE QRTMAX

PLI
Positive lock indicator

Red line indicator - clearly identifies the fitting in a locked position

A unique, patented feature that automatically provides another degree of reliability for the attendant. PLI removes any doubt as to whether the QRT MAX retractor is locked in the track or not by allowing the operator to view the red line indicator on the fitting. If the red lines are matched up the operator is ready to proceed! No guess work, a must for the operator, as they are responsible for properly securing the wheelchair passenger.

Locked
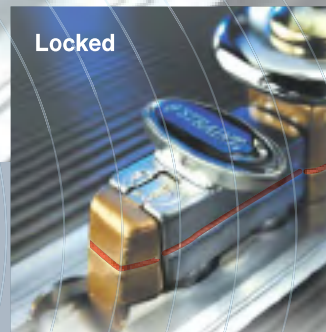
Un-Locked

QRTMAX

Additional features and specifications

Interchangeable retractors -
All securing retractors are the same in design,
size and shape to avoid confusion in placement.
Eliminates right, left, front or rear - NO GUESS WORK.

Successfully crash tested with surrogate chair.
Meets all SAEJ2249, ISO10542, FMVSS 209,302,
210,222, CMVSS 209, CSA Z605, AS2596 and
ADA requirements.
Crash tested at 30 mph at 20g's.

ISO 9000 Registered
Manufactured under the ISO 9000 Quality System.
Certificate submitted upon request

Outer casing made of hard durable metal

Foot release lever

J-Hook design

Complete driver training program available

Extended webbing length

Securing Retractors Swivel
Accomodates chairs of various widths

Mounting
The retractors can be mounted
using floor anchorages such as
L track, A track, Slide 'N Click or
bolted to floor.

Serialized for traceability
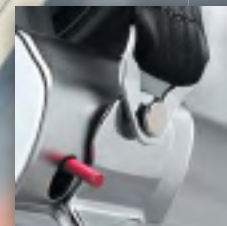
Pin Connector
Retractors are equipped with
pin connector brackets to
easily secure occupant
securement belts.
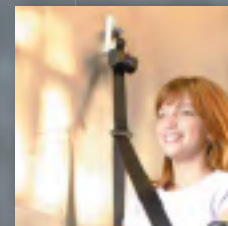
Retractable height adjuster
Retractors can be used with
a variety of shoulder and lap
belt combinations.

Patent Pending

Scooters

Small or large manual chairs

Electric

THE
QRT MAX

Additional information and options

The QRT MAX has been designed to be compatible with most wheelchairs and a variety of anchorages. The QRT MAX also comes available with a wide selection of accessories.
To view these and other products in use with video animation log on to our website at **www.qstraint.com.** For a complete selection of our products we also offer our interactive electronic catalogue.

Cable Release
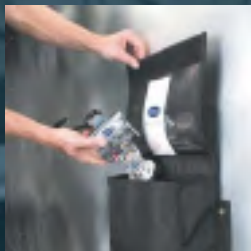
Storage Pouch
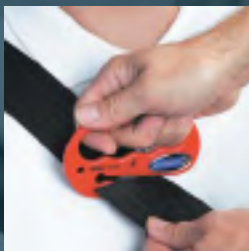
Belt Cutter

Webbing Loop

Our selection of accessories offer the operator more options to make the job easier.
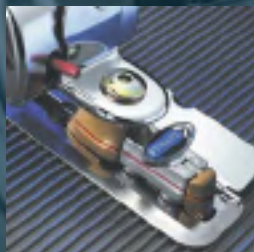
Covered Floor Pocket

L-Track

Oval Pocket

A-Track
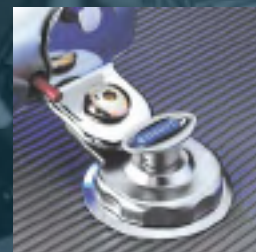
Slide N Click

We offer a wide selection of floor anchorages that compliment the QRT MAX.

Distributed by:

FEATHER WEIGHT

MID-HI SEAT
"ROCK SOLID"

S₃

Sustainable Seating Solutions

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

Freedman Seating Feather Weight seats are the most severely tested in the company's history, and meet all applicable federal motor vehicle safety standards for strength andsafety (including 210 for seat belts). Less weight means one thing to bus builders and operators: they can get more passengers per bus.

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

Not Just Seats

THE FEATHER WEIGHT SERIES BY

FREEDMAN
SEATING COMPANY
an ISO 9001:2000 certified company

Seating Solutions ™

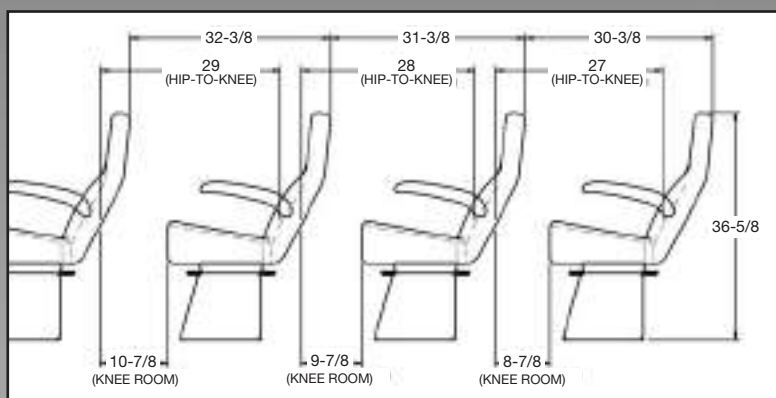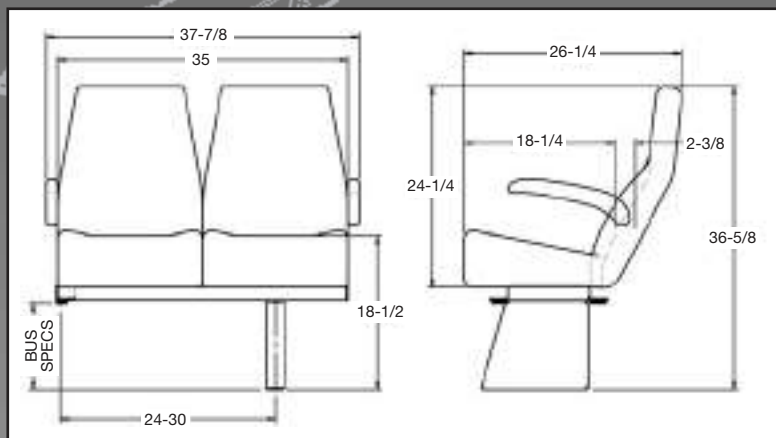# FEATHER WEIGHT S₃

MID-HI SEAT "ROCK SOLID"

Diagram measurements:
37-7/8, 35, 26-1/4, 18-1/4, 2-3/8, 24-1/4, 36-5/8, 18-1/2, BUS SPECS, 24-30

32-3/8, 29 (HIP-TO-KNEE), 31-3/8, 28 (HIP-TO-KNEE), 30-3/8, 27 (HIP-TO-KNEE), 36-5/8, 10-7/8 (KNEE ROOM), 9-7/8 (KNEE ROOM), 8-7/8 (KNEE ROOM)

OPTIONS

PILLOW SEAT

SNACK TRAY

FOOTREST

Not Just Seats

Seating Solutions™

FREEDMAN SEATING COMPANY
an ISO 9001:2000 certified company

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

Sustainable Seating Solutions

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

Feather Weight Mid-Hi features include:

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

Feather Weight Mid-Hi options include:

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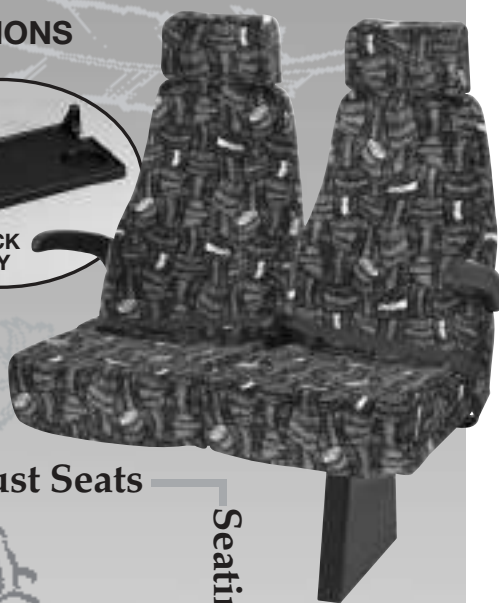- S3 cloths (Made with recycled yarn)

FREEDMAN SEATING ICS

(Integrated Child Seat)

KIDS & SAFETY

WHAT COULD BE MORE IMPORTANT?

Also available the ICS-10, for children up to 10 years old.

Not Just Seats

Seating Solutions™

THE FEATHER WEIGHT SERIES BY

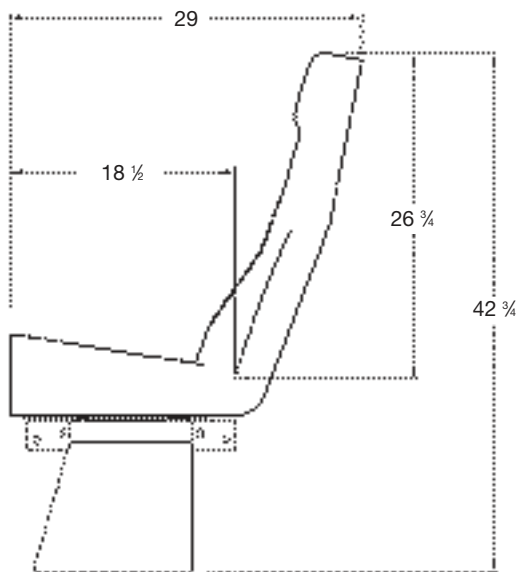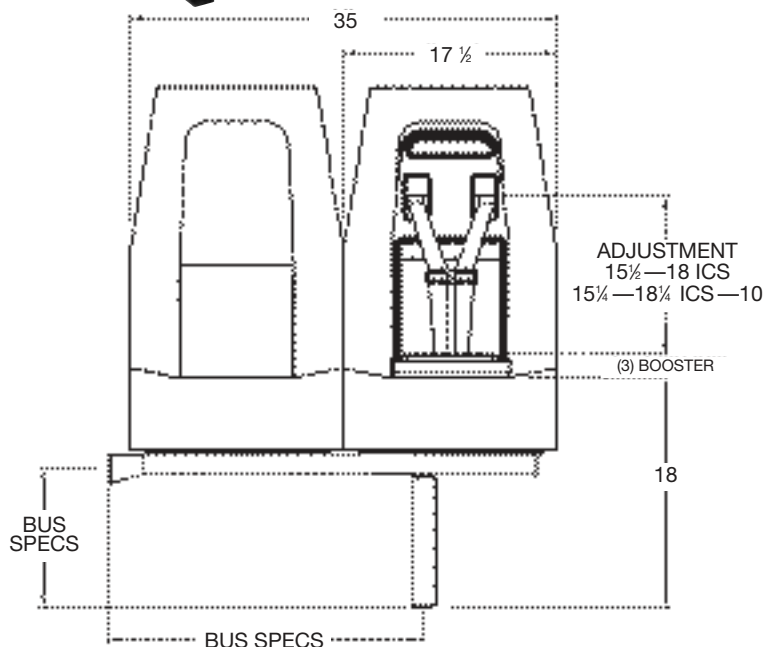FREEDMAN
SEATING COMPANY

an ISO 9001:2000 certified company

FREEDMAN SEATING
ICS
(Integrated Child Seat)

Kids and safety, what could be more important? Nothing!

That's the underlying principle behind the Freedman ICS (Integrated Child Seat) and ICS-10.

The ICS is designed for children from 22–51 lbs. and the ICS-10 can accommodate children up to 10 years old, 22–78 lbs. Both ICS seats are comfortable for adults and safe for children. A tapered back provides unrestricted viewing for drivers, and best of all, the shoulder belts can be adjusted in seconds without taking the seat apart or clumsy operations.

Standard Features:
- Accommodates children 22–51 lbs. (22–78 lbs for the ICS-10)
- Matching companion seat available
- Fold down tongue can be folded to act as a booster seat
- Easily adjustable shoulder straps
- Standard with FMVSS 213 and 210 seat belt anchorage compliance
- Retrofitable; Fits on most Feather Weight frames!

Options:
- Available in a wide variety of vinyls and cloths
- Upholstered or US Arms
- Adjustable footrests
- Freedman USR (Under Seat Retractor)
- Available as a single or double
- Grab rails

35

17 ½

ADJUSTMENT
15½—18 ICS
15¼—18¼ ICS —10

(3) BOOSTER

18

BUS SPECS

BUS SPECS

29

18 ½

26 ¾

42 ¾

Not Just Seats

Seating Solutions™

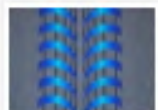**THE FEATHER WEIGHT SERIES BY**

FREEDMAN
SEATING COMPANY

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

FREEDMAN
SEATING COMPANY

Level 5

La France Mills

VIEW COLLECTION

FXE

VIEW COLLECTION

NPF cloth

VIEW COLLECTION

TARABUS
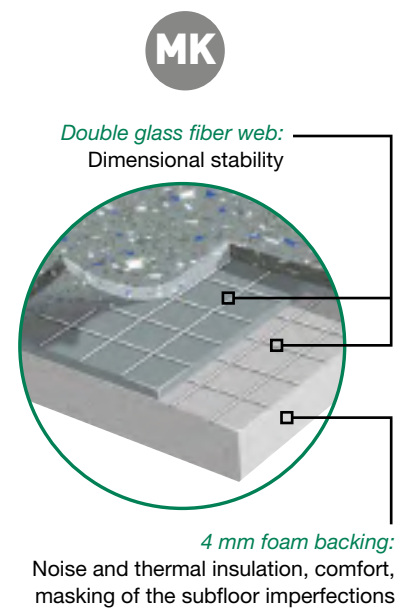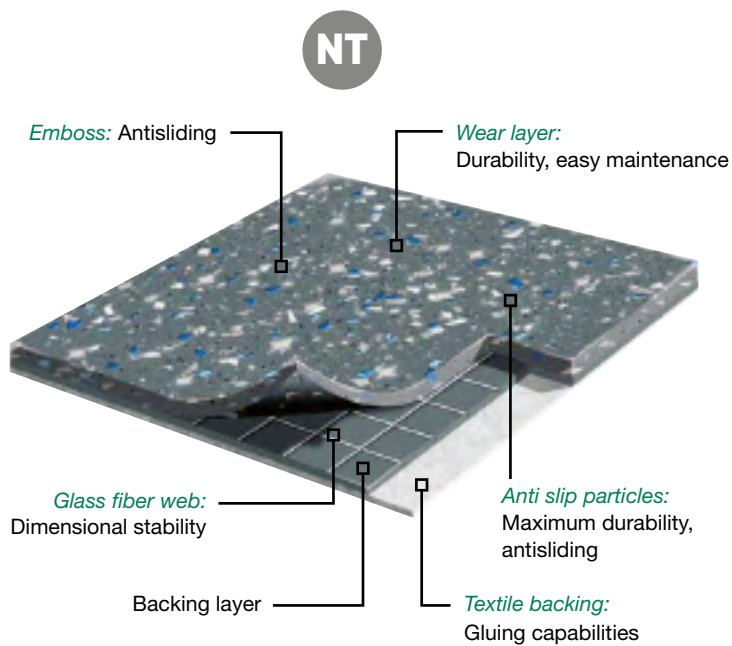
BUS & COACH FLOOR COVERINGS

WORLD LEADER
SINCE 1957
TARABUS
BUS & COACH FLOOR COVERINGS

Gerflor®

theflooringroup

Product Construction

▶ Tarabus Gaya

NT

Transparent wear layer: Durability, easy maintenance

Anti slip particles: Maximum durability, antisliding

Printed layer

Impregnated glass fiber web: Dimensional stability

Textile backing: Gluing capabilities

Backing layer

▶ Tarabus standard

NT

Emboss: Antisliding

Wear layer: Durability, easy maintenance

Glass fiber web: Dimensional stability

Backing layer

Anti slip particles: Maximum durability, antisliding

Textile backing: Gluing capabilities

MK

Double glass fiber web: Dimensional stability

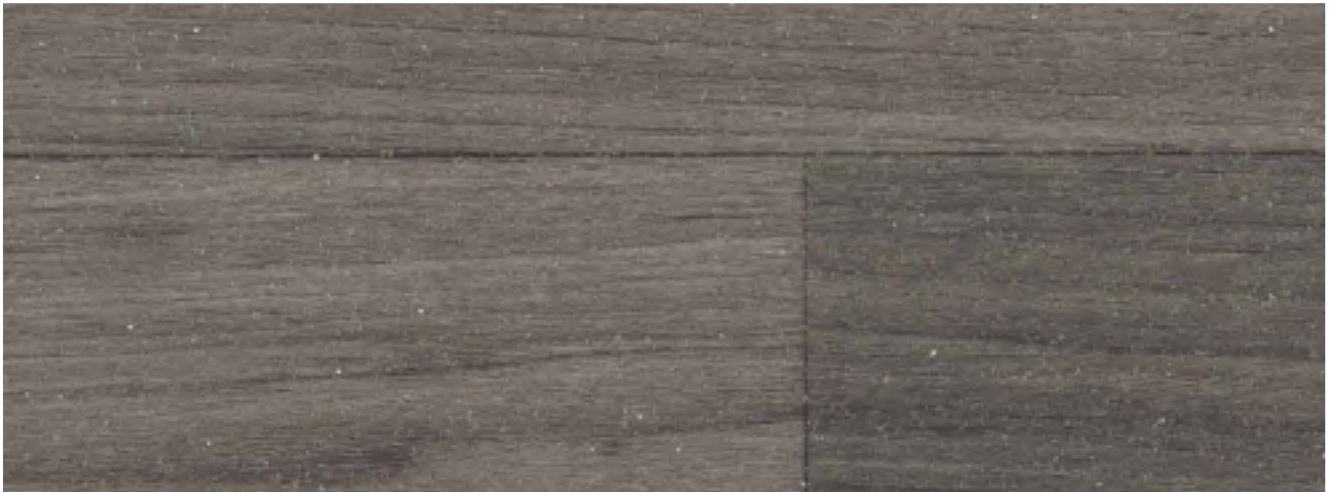*4 mm foam backing:* Noise and thermal insulation, comfort, masking of the subfloor imperfections
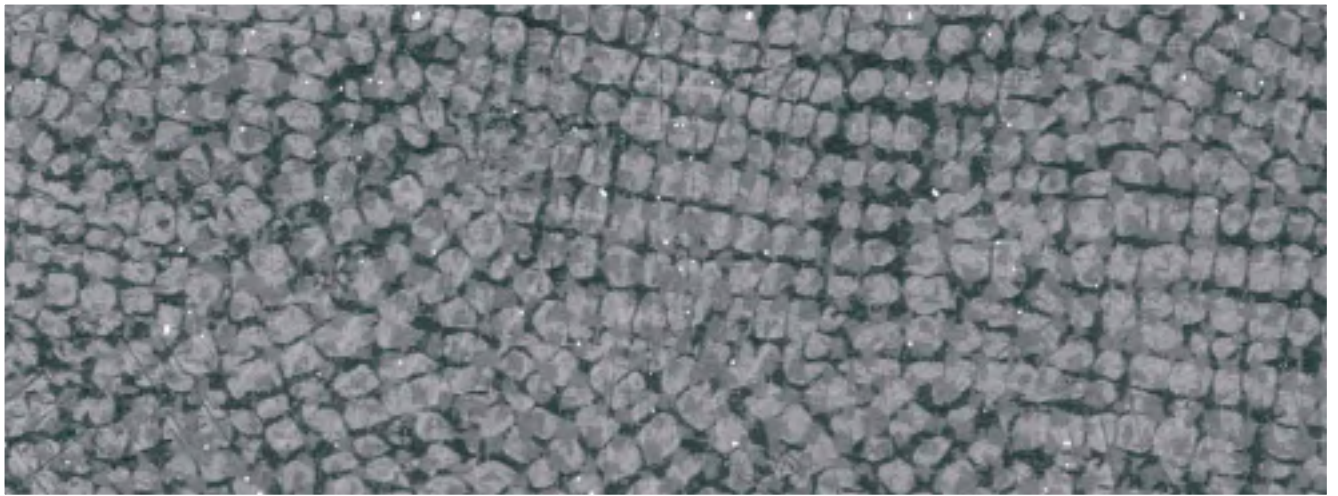
GAYA WOOD

6057 Everglades

4521 Yellowstone

3724 Kruger

GAYA MOSAIC

4482 Babel
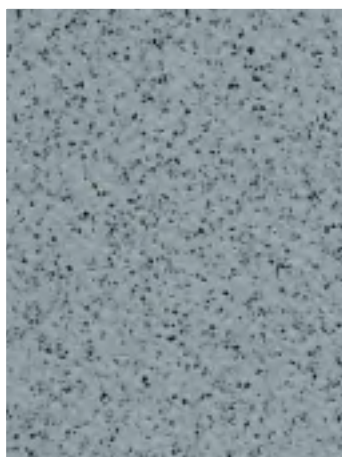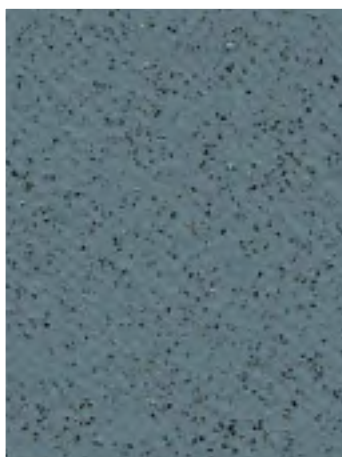

4519 Galata

SIRIUS

6768 Griffon

6782 Dune
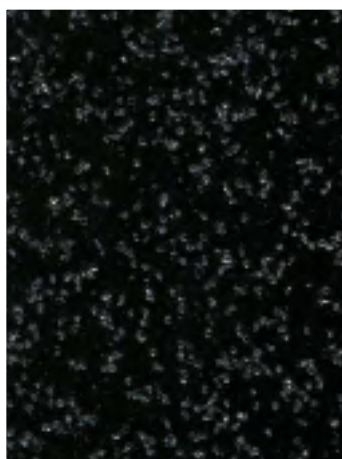
6451 Corsaire

6727 Anthracite

6801 Graphite

APOLLO

4776 Masan

4479 Kilimanjaro

4517 Fuji

HELIOS
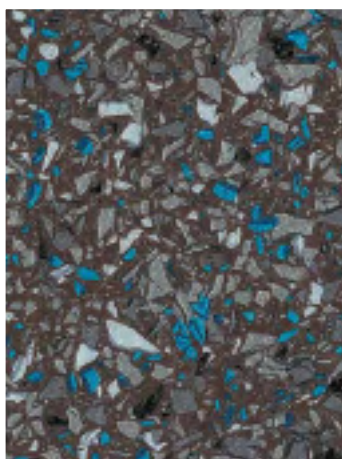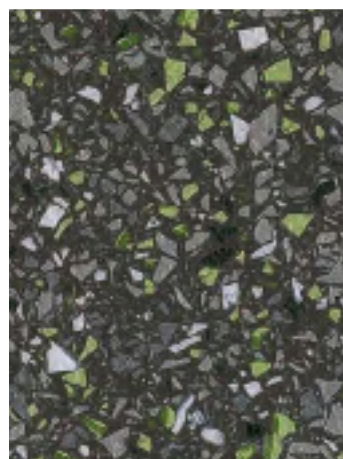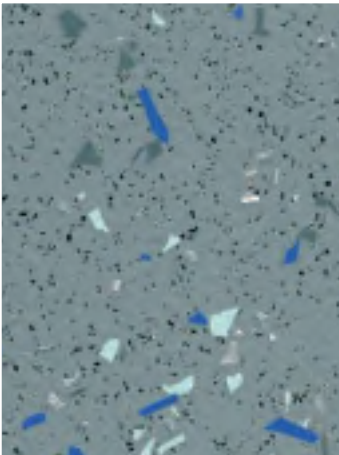
8804 Selenium
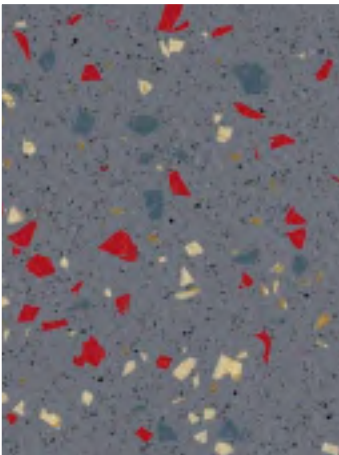
MK NT

4483 Dubnium
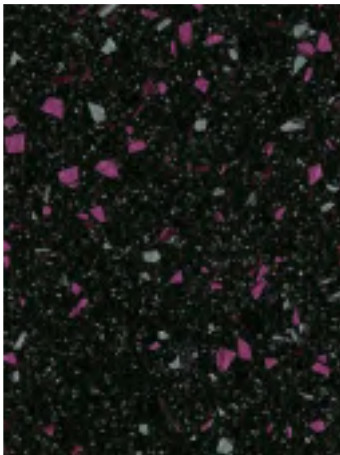
NT

3740 Indium
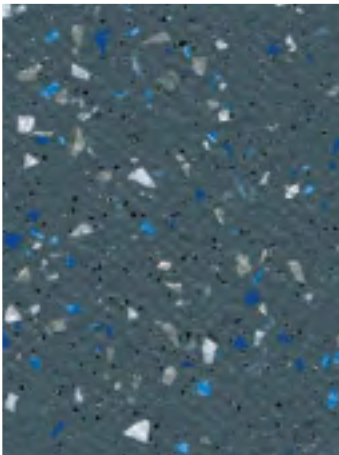
MK NT

8805 Palladium

MK NT

8031 Samarium
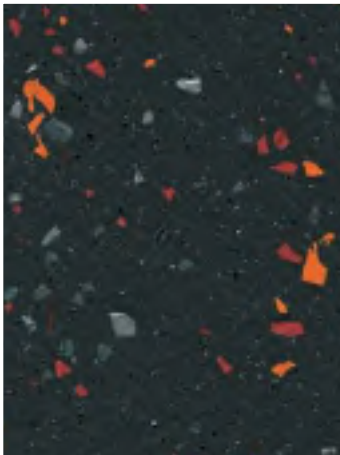
MK NT

8803 Gallium

MK NT

8806 Rhodium

MK NT

8486 Vanadium

NT
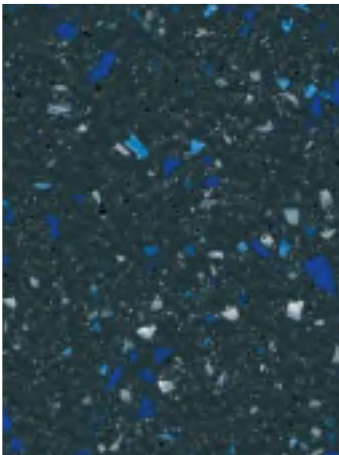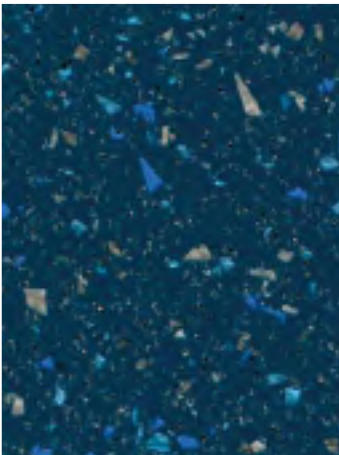
MK Foam backing

NT Textile backing

LUNA
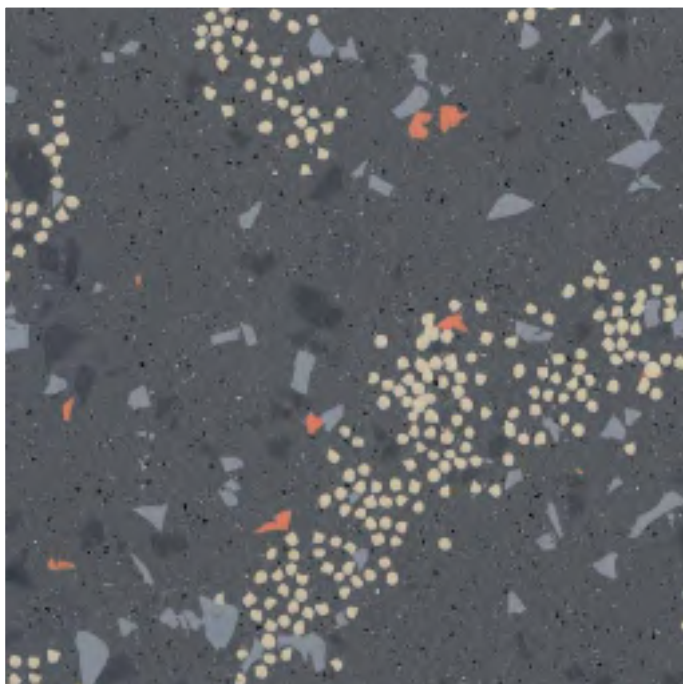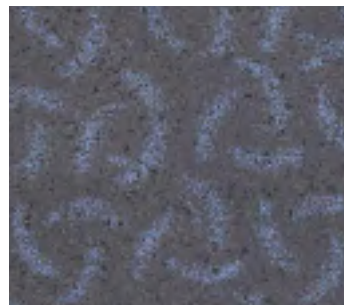
8816 Singapore

8729 Norway*

8816 Singapore*

▶ Safebus X'tra

6822 Dark Grey

▶ Venus

6727 Anthracite

▶ Safebus

6602 Caledonia

6203 Borneo

▶ Stepbus

Sealant strips

Slip resistant strip

Aluminum profile

L: 9.8'
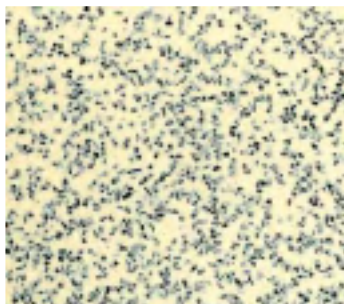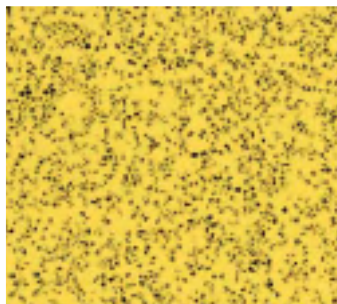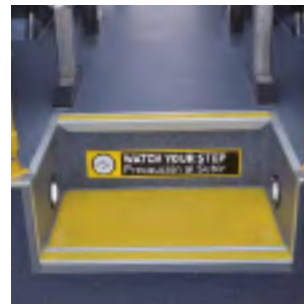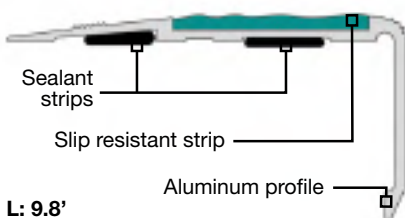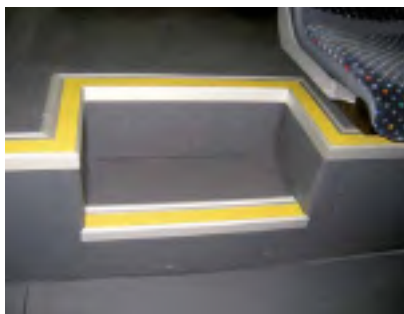
▶ Step nosing

Yellow

White

PVC profile

L: 9'

Safety

Installation
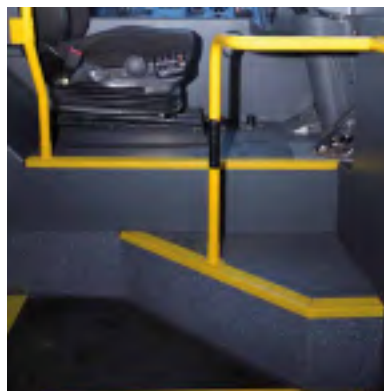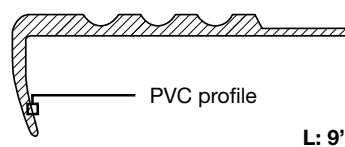
K·IT System

Pre-cut and pre-welded **TARABUS** floor covering system according to your drawings

1 Send us your floor plan layout
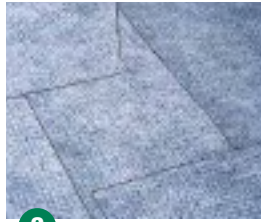
2 We cut with high precision
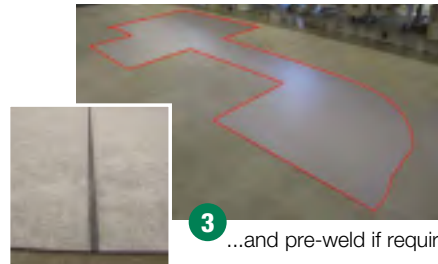
3 ...and pre-weld if required

TARABUS
Self-Adhesive

TARABUS floor covering with self-adhesive backing

> Environmental friendly bonding
> Ready to bond
> No curing time
> Safer work conditions
> Easy to use

TIME SAVING

Customization

▶ TARABUS LOGO

● Location for person with reduced mobility
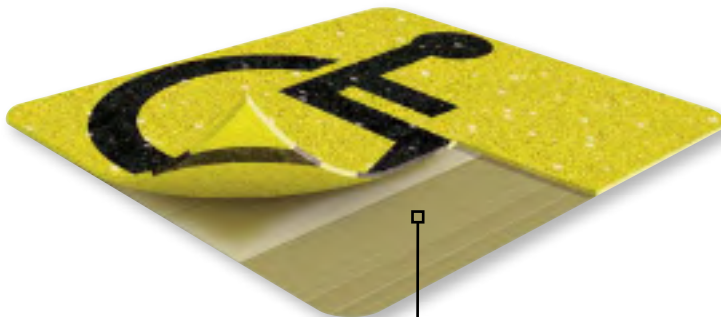
Laminate backing
for water resistance

● Advertising & Promotion

Almost unlimited
possibilities of
water-resistant
logos
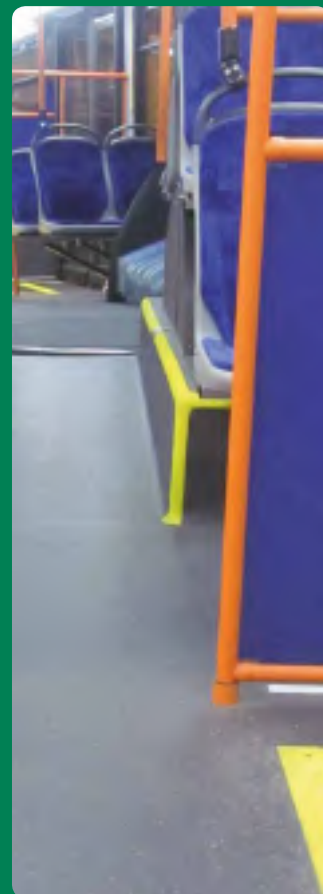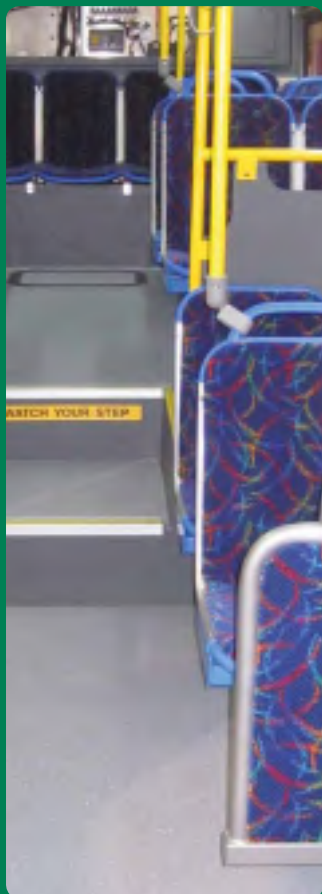
GERFLOR USA
595 Supreme Dr
Bensenville 60106 IL USA
Tel: 877 GERFLOR (437 3567)
Fax: 847 394 3753
tarabus@gerflor.com
tarabusbygerflor.com

Gerflor®
theflooringgroup

Backup Alarm: ECCO Model 530

102 DB(A)

Products > Reversing Safety > Back-Up Alarms > 500 Series

Part No:	530
Color:	
Category:	Reversing Safety
Product Type:	Back-Up Alarms
Series:	500 Series

Features	Specification	Documents

Compact size and universal mounting bracket maximizes location options, self grounding with stud terminal connections, sealed in epoxy for protection against dust, moisture, and vibration.

![VELVAC logo - In the Passing Lane Since 1934]

VELVAC, 2020 Deluxe Head

larger image

Specifications

Mirror Head	Black Heated Remote Contorl Adjustable Flat Glass - Manual Convex Glass

KICKER FULL-RANGE SPEAKERS

High-efficiency speaker system truly suitable for indoor and outdoor use!

FULL-RANGE SPEAKERS

Full-Range

KB6000 Black
KB6000 White

	SR203-046	S203-045	S203-099
	24R - National Standard School Bus Refill	24M - National Standard School Bus Metal	24PW - National Standard School Bus Poly White

QTY.	CSM #	UNIT #	DESCRIPTION	SIZE	PIECES
2	R211-002	622	Certi-Gauze Bandage Compress	2"	4/unit
5	R211-005	623	Certi-Gauze Bandage Compress	3"	2/unit
1	R211-024	634	Certi-Gauze Roll	2" x 6yd.	2/unit
2	R211-033	636	Triangular Bandage - w/Pins	40" x 40" x 56"	3/unit
3	R211-017	639	Certi-Gauze Compress	36" x 36"	1/unit
1	R216-004	650X	Certi-Tape	1" x 2-1/2 yd.	2/unit
3	C214-008		Eye Pad	Oval	1
1	R216-081		Gloves - Nitrile	Large	1 pair
1	R220-100		Certi-Strips - Plastic	3/4" x 3"	100/box
1	R231-212		Certi-Gauze Pads - SBK	3" x 3"	24/zlb
1	R237-010		Scissors- Bandage - Red Handle	4"	1
1	R270-026		CPRotector®- Plastic Bag		1
1	R234-009		First Aid Facts Guide	Card	1

	FK200-900	FK200-902	FK200-910
	10M - Body Fluid Kit Metal	10PW - Body Fluid Kit Poly White	Body Fluid Kit Heat Sealed Bag Refill

QTY.	CSM #	DESCRIPTION	SIZE
1	C206-001	Bag - Heat Seal	6" x 6"
1	C213-038	Antiseptic BZK Towelettes	5" x 7"
3	C213-042	Antimicrobial Towelette	5" x 8"
1	C216-090	Plastic Bag - Black - w/Tie	24" x 24"
1	C270-071	BioHazard Bag - w/Tie - 7-10 Gallons	24" x 24"
1/pair	R216-081	Gloves - Nitrile - ANSI	Large
1	R270-049	Absorbent Powder - Bag	2 oz.
1	R216-085	Bag - w/Scoop and Handle Scraper	5" x 11" x 3"/4" x 6.5"
2	C216-089	Towel - Paper - BFK	8" x 11"
1	R340-011	Mask	Face

	FKR200-906	FK200-931	FK200-906
	10R - Bloodborne Pathogen Deluxe Refill	10M - Bloodborne Pathogen Deluxe Metal	10PW - Bloodborne Pathogen Deluxe Poly White

QTY.	CSM #	UNIT #	DESCRIPTION	SIZE	PIECES
1	R216-070	810X	CPRotector® - Gloves	5.5" sq.	2/unit
1	R216-084	901X	Gown - Cap		2/unit
1	R216-078	902X	Eye Shield - Mask - Gloves		3/unit
1	R216-079	903X	Absorbent Powder - Scraper - Gloves	2 oz.	3/unit
1	R216-080	904X	BioHazard Bag - w/Tie - BZK - Antimicrobial		6/unit
1	R216-085	SBB-2	Bag - w/Scoop and Handle Scraper	5" x 11" x 3"/4" x 6.5"	2
2	C213-035		Alcohol Gel - ANSI Preferred but Not Required	1g	1

FKR200-906
10R - Bloodborne Pathogen Deluxe Refill

FK200-906
10PW - Bloodborne Pathogen Deluxe Poly White

FK200-931
10M - Bloodborne Pathogen Deluxe Metal

QTY.	CSM #	UNIT #	DESCRIPTION	SIZE	PIECES
1	R216-070	810X	CPRotector® - Gloves	5.5" sq.	2/unit
1	R216-084	901X	Gown - Cap		2/unit
1	R216-078	902X	Eye Shield - Mask - Gloves		3/unit
1	R216-079	903X	Absorbent Powder - Scraper - Gloves	2 oz.	3/unit
1	R216-080	904X	BioHazard Bag - w/Tie - BZK - Antimicrobial		6/unit
1	R216-085	SBB-2	Bag - w/Scoop and Handle Scraper	5" x 11" x 3"/4" x 6.5"	2
2	C213-035		Alcohol Gel - ANSI Preferred but Not Required	1g	1

QTY.	CSM #	DESCRIPTION	SIZE
1	C201-045	Bag - Ziplock	6" x 8"
1	R270-049	Absorbent Powder - Bag	2 oz.
1	C213-038	Antiseptic BZK Towelettes	5" x 7"
1	C213-042	Antimicrobial Towelette	5" x 8"
1	R216-121	Bag - w/Scoop and Small Scraper	5" x 11" x 3"/2" x 3.5"
1	C270-071	BioHazard Bag - w/Tie - 7-10 Gallons	24" x 24"
1	R216-115	Cap	
1	C213-035	Alcohol Gel - ANSI Preferred but Not Required	1g
1	R216-096	Eye Shield	
2	R216-081	Gloves - Nitrile - ANSI	Large
1	R216-095	Gown	
2	C216-089	Towel - Paper - BFK	
1	R340-011	Mask	

FK200-970
10PW - Bloodborne Pathogen Economy Poly White

FK200-969
ZLB - Bloodborne Pathogen Economy zlb

MADE IN AMERICA
WITH CERTIFIED PRIDE

STL43 REFLEX FLANGE SERIES
4" Round Sealed LED Lights with Reflex Mounting Flange

- Sonically sealed, waterproof
- Flange mount for security, theft reduction
- Accepts standard PL-3 connector
- Reflex flange meets SAE A for reflector

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
RED STOP/TURN/TAIL LIGHT - 10 DIODES			
STL43RBX	STL43RBXP	12V, red reflex flange, gasket	10
STL43RBHX	-	12V, red reflex flange, hard wire, gasket	10
YELLOW PARKING/TURN SIGNAL - 10 DIODES			
STL43ABX	STL43ABXP	12V, yellow reflex flange, gasket	10
ACCESSORIES			
A45PB	A45PBP	Pigtail, 3-wire	100
A47PB	A47PBP	Right angle pigtail, 3-wire	100

STL43RBX

STL43ABX

FMVSS	Red S T I; Yellow I6 P; Reflex A
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	Red: 12.8VDC - .413 Stop/Turn, .026A Tail
	Yellow: 12.8VDC - .310 Turn, .046A Parking
WT/DIMS	.397 lbs. / 5.75" x 5.75" x 1.625"
WARRANTY	Lifetime LED Warranty

4 7/8" diameter

5 3/4" diameter

3/4"
1 5/8"
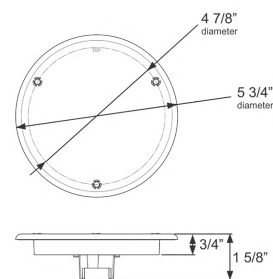
HOLE CUT-OUT: 4.5"

BUL11CBX
4" Round Sealed Clear DOT LED Back-Up Light

- Sonically sealed, waterproof
- Certified for back-up light function when installed as pair in two-lamp system [SAE (2)R]
- Flange features white reflex

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
CLEAR BACK-UP LIGHT WITH REFLEX - 10 DIODES			
BUL11CBX	BUL11CBXP	12V	10
ACCESSORIES			
A45CB	A45CBP	Pigtail, 2-wire	100
A49PB	A49PBP	Right angle pigtail, 2-wire	100

FMVSS	(2) R
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	12.8VDC - 0.26A
WT/DIMS	.353 lbs. / 5.75" x 5.75" x 1.625"
WARRANTY	Lifetime LED Warranty

4 7/8" diameter

5 3/4" diameter

3/4"
1 5/8"

HOLE CUT-OUT: 4.5"

CELEBRATING 40 YEARS optronics
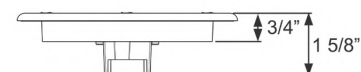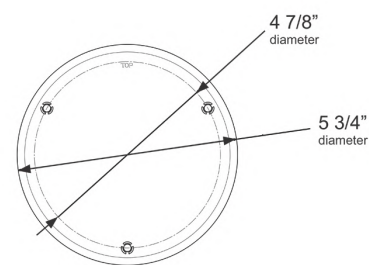
HOLE CUT-OUT: 4.5"

MCL66 SERIES
Sealed LED Surface Mount Marker/Clearance Lights

- Sonically sealed, waterproof
- Surface mount, mounts on 3" centers
- Includes both lead and gound wire

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
YELLOW - 6 DIODES			
MCL66AB	MCL66ABP	12V	20
MCL66APG	-	12V, .180 male bullets	20
MCL66A24B	MCL66A24BP	24V	20
MCL66CAB	-	12V, clear lens	20
RED - 6 DIODES			
MCL66RB	MCL66RBP	12V	20
MCL66RPG	-	12V, .180 male bullets	20
MCL66R24B	MCL66R24BP	24V	20
MCL66CRB	-	12V, clear lens	20
ACCESSORIES			
BK66DB	BK66DBP	Armored base, die cast metal	50
A66GB	A66GBP	Mounting gasket, black	100

FMVSS	P2
MATERIALS	MCL66 Polycarbonate lens and housing
	BK66DB Aluminum
VOLT/AMP	12.8VDC - 0.057A
WT/DIMS	MCL66 .088 lbs. / 4" x 1" x 1.125"
	BK66DB .132 lb. / 4.25" x 1.125" x 1.688"
WARRANTY	Lifetime LED Warranty

MCL66AB

MCL66CAB

MCL66CRB

MCL66RB

4"

1 3/16"

3"

BK66DB

3"

1 1/8"

1 11/16"

4 1/4"

CELEBRATING
40 YEARS
optronics
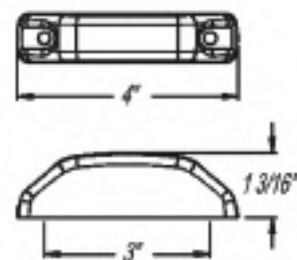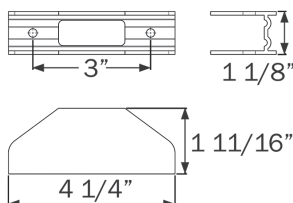
MCL48 SERIES
LED Intermediate Side Marker Light with Supplemental Mid-Ship Turn

- Sonically sealed, waterproof
- Surface mount, mounts on 4-13/16" centers
- Includes both lead and ground wires

MCL48AB

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
YELLOW - 16 DIODES			
MCL48AB	MCL48ABP	Light	20
MCL48CAB	-	Light, clear lens	20
ACCESSORIES			
A48CB	A48CBP	Chrome bezel	50

MCL48CAB

FMVSS	P2
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	12.8VDC - Side marker .074A; Turn signal .248A
WT/DIMS	.221 lbs. / 6" x 2.25" x 1.375"
WARRANTY	Lifetime LED Warranty

2-1/4"
6"
1-3/8"
4.8"
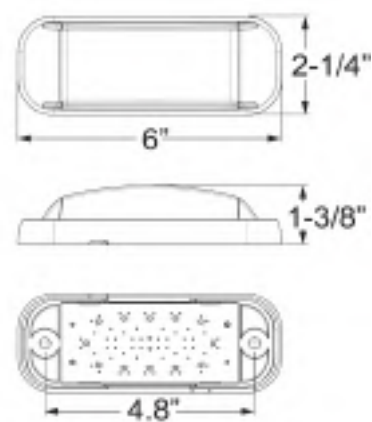
CBL22 SERIES
Sealed LED Triangular Cab/Clearance Light

PC Rated

- Sonically sealed, waterproof
- Design includes lead and ground wire
- Mounting gasket included

CBL22AB

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
YELLOW - 15 DIODES			
CBL22AB	CBL22ABP	Cab light	50
CBL22CAB	-	Cab light, clear lens	50

FMVSS	P2 PC
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	12.8VDC - 0.107A
WT/DIMS	.176 lbs. / 3.5" x 2.75" x 1.688"
WARRANTY	Lifetime LED Warranty

2 3/4"   1 1/2"

3 1/2"

1 11/16"

CELEBRATING 40 YEARS optronics
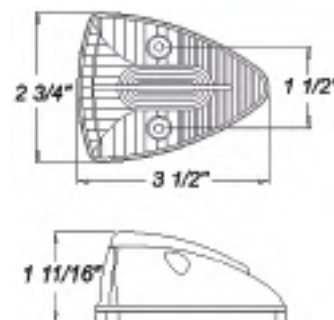
ILL70/71 SERIES
Opti-Brite™ LED Sealed Interior Strip Lights for Surface Mount

Opti-Brite™

- Low profile, slimline lights – only 1" wide by 5/8" thick
- Hard wired design includes both lead and ground wires
- Select from 9-inch and 16-inch models
- Sealed, waterproof

ILL70CB

Raw lumen output: 189 lm
Effective lumen output: 171 lm
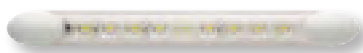
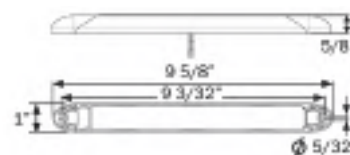| BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
9" STRIP LIGHT - 9 DIODES			
ILL70CB	ILL70CBP	Strip light	20/10
ILL70CSB	-	Strip light with on/off switch	10
ILL70CBAWN	-	Strip light with wedge base	10
ILL70ABAWN	-	Amber strip light with wedge base	10

ILL71CB

Raw lumen output: 370 lm
Effective lumen output: 342 lm

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
16" STRIP LIGHT - 18 DIODES			
ILL71CB	ILL71CBP	Strip light	20/10
ILL71CSB	-	Strip light with on/off switch	10
ILL71CBAWN	-	Strip light with wedge base	10
ILL71ABAWN	-	Amber strip light with wedge base	10
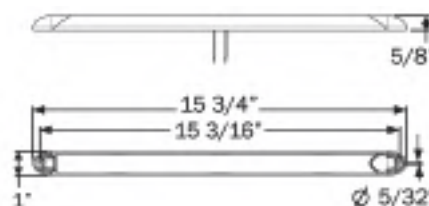
MATERIALS	Polycarbonate lens and housing
VOLT/AMP	ILL70: 12.8VDC - .150A
	ILL71: 12.8VDC - .300A
WT/DIMS	ILL70: .154 lb. / 9.625" x 1" x .625"
	ILL71: .187 lb. / 15.75" x 1" x .625"
WARRANTY	Lifetime LED Warranty

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EST. 1972

ILL31CB
LED Low Profile Dome Light

- Low profile dome light for semi-recess mount
- Durable steel housing and replaceable polycarbonate lens
- Hard wired design includes power and ground wires

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
DOME LIGHT - 10 DIODES			
ILL31CB	ILL31CBP	Dome light, standard LED	10

Raw lumen output:	70 lm
Effective lumen output:	53 lm

MATERIALS	Polycarbonate lens, plated steel housing
VOLT/AMP	12.8VDC - .024A
WT/DIMS	.243 lb. / 5.375" x 2.75" x .938"
WARRANTY	Lifetime LED Warranty

4 11/16"

2 3/4"

5 3/4"

15/16"
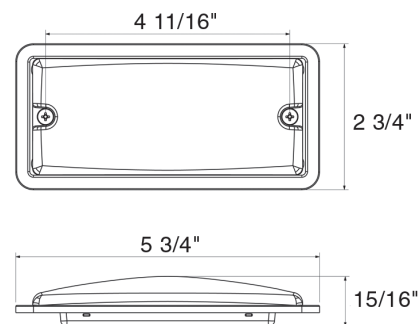
LPL31 SERIES
Mini LED License/Utility Light

- Polished, chrome plated housing
- Surface mount on 2" centers
- Design includes both lead and ground wire
- Two units required to meet DOT requirements for license light

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
LICENSE LIGHT - 2 DIODES			
LPL31CB	LPL31CBP	License light	20
LPL31CEZB	LPL31CEZBP	License light, .180 molded barrels	20

FMVSS	(2) L
MATERIALS	Polycarbonate lens, chrome plated stainless steel bezel
VOLT/AMP	12.8VDC - 0.027A
WT/DIMS	.066 lb. / 2.563" x 1.188" x .938"
WARRANTY	Lifetime LED Warranty
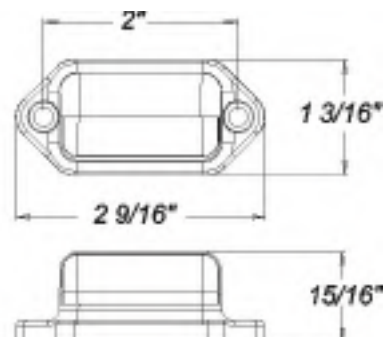
ILL85 SERIES
LED Exterior Step/Area Light

- Illuminate step well or pavement at base of steps or ramps
- Meets ADA lighting standard
- Surface mount, 3.662" mounting centers
- Hard wired design includes both lead and ground wires
- Operating voltage 8-30VDC, for use with 12VDC or 24VDC systems
- Polycarbonate construction with polished chrome finish
- Mounting gasket included

BULK P/N	POLYPACK P/N	DESCRIPTION	QTY
STEP/AREA LIGHT - 10 DIODES			
ILL85CB	ILL85CBP	Step/area light	10

MATERIALS	Polycarbonate lens and housing
VOLT/AMP	12.8VDC - .107A
WT/DIMS	.154 lb. / 4.25" x 1.24" x 1.69"
WARRANTY	Lifetime LED Warranty

4.25"
3.662"
dia. .412
dia. .200
1.69"
1.69"
1.24"

CELEBRATING
40 YEARS
optronics
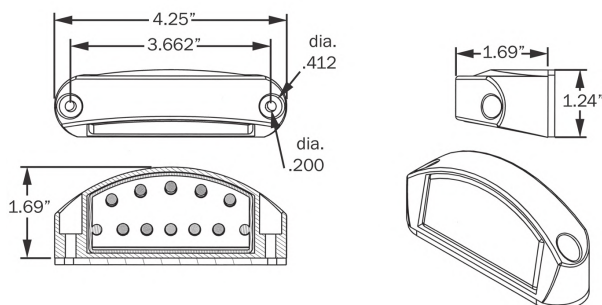
STL-79 Red Series
Streamline LED Stop/Turn/Tail Light

Sealed, surface mount, red LED stop/turn/tail light. Streamlined design with 11 super diodes for bright, dependable performance. Polycarbonate lens is sonic welded to housing for durability. All-weather molded plastic housing and durable lens protect against cor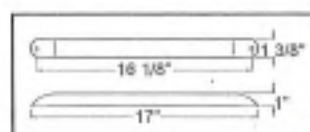rosion. STL-80RB functions as third brake light. Available in "plug-n-go" version (STL-89RCPG) with molded connectors (male); "plug-n-go" ensures an easy, watertight connection to the electrical harness.

STL-79RB/80RB feature red LED's and red lens. STL-89RCB/89RCPG/90RCB feature red LED's and Crystal Clear℠ lens.

CENTER BRAKE LIGHT (handwritten)

| Part No.	Description	Diodes	Amp Draw at 12.8V	Pkg.	Pack Qty.
STL-79RB	Red stop/turn/tail light	11	.342/.022A	Bulk	10
STL-80RB	Red, third brake light	11	.216A	Bulk	10
STL-89RCB	Red stop/turn/tail light, clear lens	11	.342/.022A	Bulk	10
STL-89RCPG	Red stop/turn/tail light with 180 molded connectors, clear lens	11	.342/.022A	Bulk	10
STL-90RCB	Red third brake light, clear lens	11	.216A	Bulk	10
A-79CB	Chrome cover	-	-	Bulk	10

GATEWAY^{AI}

High Idle & Lift Interlock
With Programmable Load Control

FEATURES & BENEFITS

- Fully compliant FMVSS 403/404 wheelchair lift interlock

- Dynamic Load Response (DLR) technology – monitors engine RPM & maintains speed at all load conditions

- Charge protect on gas & diesel engines

- Automatic engagement when on A/C command is detected

- *Heater Boost* for improved cabin heat on diesel engines

- Dash-mounted control panel has LEDs to display electrical system, Automatic Fast Idle (AFIS) & Intelligent Lift Interlock System (ILIS) status

- Simple, single-point "Plug & Play" connection.. Super fast installation & No cutting of factory wires

- Solid state microprocessor controller.. No additional solenoids, cables, or brackets

- Capable of providing "Real-Time" chassis data via the CAN Bus

- Diagnostic trouble codes can be retrieved for "hard" faults & intermittent faults in non-volatile memory

- Intermittent Fault Filter (IFF)® technology filters out all erroneous changes in sensor signals

- Multiple & configurable chassis electrical load inputs/outputs
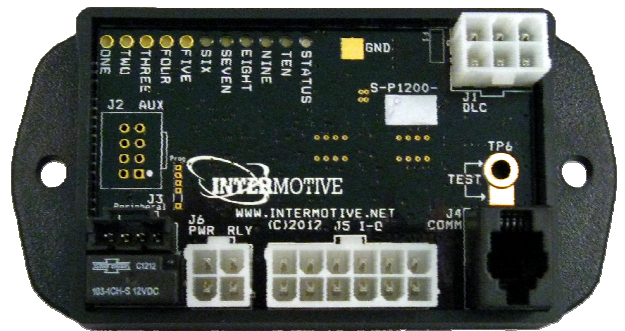
Gateway^{AI} Module

WHY GATEWAY^{AI}?

- Gateway^{AI} is a fully Compliant FMVSS 403/404 wheelchair interlock & fast idle system all in one, easy to install module!

- **Fast Idle**– monitors OEM sensor inputs from transmission, engine, charging system, air conditioner, ambient air temperature, & vehicle speed to determine if high idle is needed. Automatically maintained when loads are added or removed such as A/C or wheelchair lift.

- **Lift Interlock**– Controls shift interlock by processing signals from transmission, parking brake and lift door to electronically lock down the vehicles ability to move in unsafe conditions

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VEHICLE CONTROLS
An ISO 9001 Registered Manufacturer

www.InterMotive.net   800-969-6080

Rev. D

made in USA

NFPA MEMBER

MVP

GATEWAY^AI

Gateway^AI Options

THE GATEWAY^AI PRODUCT FAMILY

- **Gateway with BrakeMax Controller**
  - All of the features of the Gateway/ ILIS plus a controller for Ford & GM vehicles with Tow/ Haul mode. This controller engages the Tow/Haul mode on start-up of the vehicle thereby providing the fleet with maximum "Tow/ Haul" mode benefits without having the driver think about it.

- **Gateway with DuraTrans**
  - All of the features of the Gateway/ ILIS plus a controller for Ford & GM vehicles with an Overdrive button. Overdrive is disabled until the vehicle speed reaches 55 MPH. Overdrive will not be disabled until the vehicle speed drops below 30MPH

- **Gateway with Merlin**
  - All of the features of Gateway/ILIS plus the ability of the Merlin Multiplex System to use real-time chassis data to operate coach loads

- **Azure Option**
  - ILIS interlock functions for use on an Azure hybrid electric vehicle

Standard Gateway^AI LED Panel

Standard Gateway^AI Door Ajar LED Panel

Interlock Only LED Panel

Interlock Only Door Ajar LED Panel

SPECIFICATIONS

Physical Specifications:

Dimensions:	2.0"W x 4.0"L x 0.9"H
Weight:	.14 lbs
Operating Temperature:	40ºC to 85ºC

Electrical Specifications

Power Input:	+8 to 16 Vdc @ 1 amps for module control
	+8 to 16 Vdc @ 8 amps for lift enable
Lift Enable:	+12v @ 8 amps
Programmable Outputs:	Ground @ 0.5 amps each

US Patent No's. 6,594,565 / 6,965,819 / 7,274,980

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VEHICLE CONTROLS
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MOBILE VIDEO
SURVEILLANCE

Complete Fleet
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REI

Mobile Video Surveillance
Complete Fleet
Management Solutions

Choosing the Right Mobile Video Surveillance Solution:

REI's Mobile Video Surveillance system consists of a DVR, high resolution color cameras, user-friendly software and accessories. The driver simply has to turn on the vehicle for the system to start. The video, audio and vehicle data is then recorded to the REI mobile DVR's removable hard drive or SD card.

An REI representative or dealer can assist you with putting together a system that's right for you. Whether you need longer recording time, cameras on the exterior or interior of your vehicle, wireless fleet and vehicle management, automated stop-arm violation reporting, a panic button, GPS mapping, integrated AVL package or additional accessories, REI has the solution for you.

Finding the right system is important, but having after-sale support is just as vital. That's why REI's 24-7 support sets us apart from the competition. REI sales and customer service teams are dedicated to serving you years after the sale. We simply don't sell a system and walk away. We want you to be a satisfied REI customer for life.

DVR Features	SD40	DR40	HD420	HD420W	HD800	HD800W
Wireless	√*	√*	√*	√	√*	√
Stop-Arm Violator Information			√	√	√	√
GPS/AVL Tracking	√	√	√	√	√	√
Auto Download Server	√*	√*	√*	√	√*	√
DVR Diagnostics	√*	√*	√*	√	√*	√
Vehicle Diagnostics/J1939			√	√	√	√
Fleet & Vehicle Management	√	√	√	√	√	√
Cameras	4	4	4	4	8	8
Storage	Removable SD Card	Removable Hard Drive 320GB-1TB	Removable Hard Drive 320GB-1TB	Removable Hard Drive 320GB-1TB	Removable Hard Drive 320GB-1TB	Removable Hard Drive 320GB-1TB
Geo-fencing	√	√	√	√	√	√
Dual Streaming	√	√	√	√	√	√
Wake Button			√	√	√	√
Frame Rate	60 fps @ D1 Resolution	60 fps @ D1 Resolution	120 fps @ D1 Resolution	120 fps @ D1 Resolution	240 fps @ D1 Resolution	240 fps @ D1 Resolution
Video Compression	H.264	H.264	H.264	H.264	H.264	H.264
USB Auto Download	√	√	√	√	√	√
SD Download			√	√	√	√
Channels Independently Configurable	√	√	√	√	√	√
Operating Temperature Range	-40° to 155° F	-40° to 155° F	-40° to 150° F	-40° to 150° F	-40° to 150° F	-40° to 150° F
3G Compatible	√	√	√	√	√	√
Fanless Cooling Design	√	√	√	√	√	√
Industrial Extruded Aluminum Chassis	√	√	√	√	√	√

* Requires external wireless bridge.

DVR

REI's Mobile Video Surveillance Solution is powered by A.R.M.O.R.-VMS, our standard video management software, a DVR, camera(s) and accessories. Add A.R.M.O.R.-AVL, AutoPilot, Diagnostics, Insight and StopArm to enhance your system for comprehensive wireless surveillance coverage and fleet management in one robust solution. The proactive wireless fleet monitoring saves time and money while increasing passenger and fleet safety.

A.R.M.O.R.-VMS is the core of our mobile video surveillance solution offering a comprehensive view inside and outside your vehicle.

Camera

=

Mobile Video Surveillance Solution

Why REI's Mobile Video Surveillance Solution is Superior:

- 24-7 Technical Support. REI's in-house employees personally handle technical support day and night. Call Technical Assistance - 877.726.4617.

- REI has been a technology leader for over 75 years. REI products are designed and manufactured to ensure they are of the highest quality and value.

- REI builds a solid, durable, fanless DVR in an extruded aluminum chassis. Why? Our aluminum chassis disseminates heat without pulling in dust and dirt which ultimately shortens the lifespan of the DVR.

- REI's hard drive is engineered to "float" within the solid, durable chassis. This industrial grade mounting design protects the hard drive by absorbing the shocks and vibrations of the road.

- The convenient USB port allows you to easily download events and triggers without removing the hard drive.

- DVRs are easily configured to your needs and requirements.

- REI DVRs endure the harshest of conditions - temperature extremes, shock, vibration, dirt, dust, humidity or voltage fluctuations. Each of our DVR's hard drives include an internal heater to ensure optimal performance in the most severe environments.

- H.264 advanced video compression allows up to a 40% increase in record time, ultimately storing more video, audio and vehicle data on your hard drive or SD card.

- Choose from a variety of accessories and options to meet your needs. Whether you're looking for long or short recording times or an easily transportable memory unit, we have a DVR for you.

- Customize video quality settings and record video at different resolutions.

- Automatically downloads a pre-scheduled event AND sends it to you for viewing.

- Wireless, web-based A.R.M.O.R. software management solution which can be easily viewed wherever you have internet access...cell phone, home or anywhere on the go.

- Automatically downloads video when the vehicle returns to the yard, ultimately having the video available at your fingertips.

- At a moment's notice, you can set alerts for speed, door ajar, geo-fence, etc. and have that alert sent to your email. It's a convenient way to ensure safety is a priority at all times.

- Proactive wireless health checks of your fleet including status, repair history and DVR health.

- View alerts/errors for your fleet or on a specific vehicle... proactively custom configure your fleet and vehicles for improved maintenance and safety.

- Real time event triggering and monitoring in a live environment.

- Integrate a REI safety solution such as a Camera Observation System to record various camera views as well as helping eliminate blind spots.

- Automatically generates stop-arm violation report capturing offender's license plate, vehicle information, violation location and date/time.

- Executive dashboard helps manage your fleet and individual vehicles with easy-to-use customizable reporting tools.

- Automatic Download Server (ADS) manages the wireless downloading, reporting and messaging of pre-defined video events, as well as video download requests made while the vehicle is off-lot or in the lot.

- Vehicle and DVR diagnostics tool proactively monitors the health status of your wireless DVR(s), camera(s), and, with the J1939 CAN-BUS option, monitors the health of your vehicles. Locate and solve intermittent vehicle problems.

- Provides AVL/GPS tracking information for your fleet, giving you the ability to locate any vehicle at any time.

SPX®

> Where Ideas Meet Industry

CENTSaBILL

ELECTRONIC REGISTERING FAREBOX

The GFI CENTSaBILL Electronic Registering Farebox relies on performance-valued engineering and user-focused design to deliver the security, accuracy and reliability that have made it the best-selling farebox in North America.

The CENTSaBILL assures rapid fare collection and driver verification. Choose any combination of fare media: coins, dollar bills, tokens, tickets, and magnetically encoded documents. The farebox instantly records fare and passenger data. Collected fares are securely protected during passenger deposit through removal and transfer to your counting room. The CENTSaBILL makes sense.

GFI GENFARE

AN SPX DIVISION

FEATURES

❏ Large, easy-to-read 4-digit driver's display helps the driver determine that correct fares have been deposited into the farebox.

❏ Flexible reporting structure allows for the generation, storage, and reporting of data on multiple passenger classifications and other farebox operations.

❏ Interlinked cashbox, receiver, and vault equipment ensure secure, rapid, and easy transfer of collected revenue from the farebox to the vault.
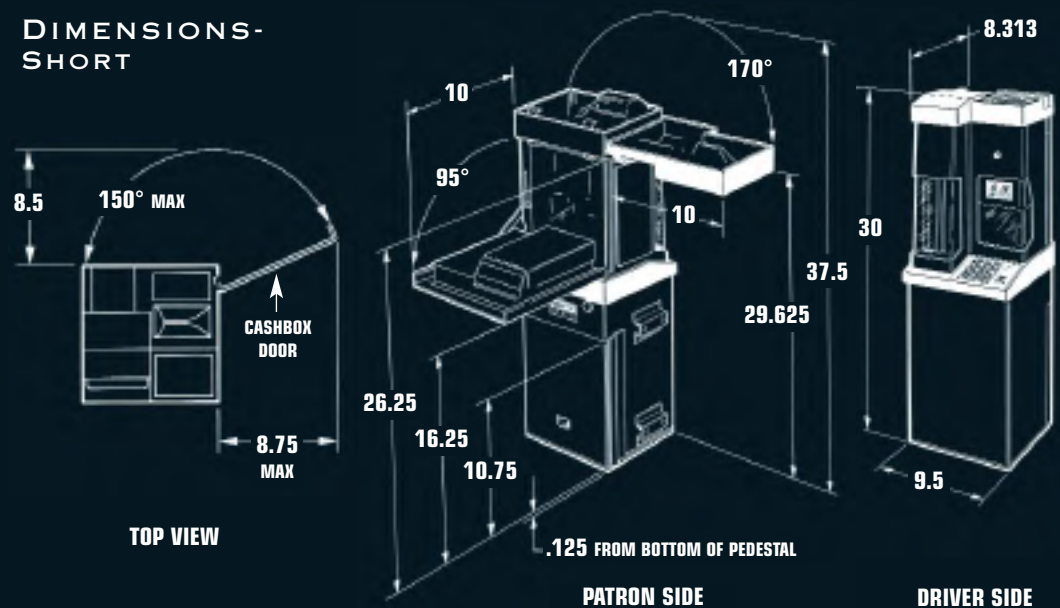
SIZES AVAILABLE

Choice of 3 farebox heights (41", 36", 30")

OPTIONS

❏ Dollar Bill Accelerator (DBA)
❏ Magnetic swipe pass reader
❏ Electronic cashbox door lock
❏ Electronic cashbox identification
❏ Passenger display (3 digits)
❏ Remote driver control keypad/display
❏ Driver Control Unit (DCU)
❏ Integration with passenger processing
❏ Ticket Reader/Issue Machine (TRiM)
❏ Silent Alarm
❏ Floor mount or stanchion pole (on 30" model only)
❏ Smart Card Reader

DIMENSIONS- SHORT

8.5
150° MAX
8.75 MAX

CASHBOX DOOR

TOP VIEW

10
170°
95°
10
8.313
30
37.5
29.625
26.25
16.25
10.75
9.5

.125 FROM BOTTOM OF PEDESTAL

PATRON SIDE   **DRIVER SIDE**

DIMENSIONS- STANDARD & REDUCED

X.XX = Standard
X.XX = Reduced

12.375
8.75 MAX
12.375

8.5
CASHBOX DOOR
150° MAX

TOP VIEW

170°
10
95°
10
8.313
48.5
43.5
40.875
35.875
40.5
35.5
9.5
37.25
32.25
18.75
14
27.125
22.125

2.75 FROM BOTTOM OF BASE

PATRON SIDE   **DRIVER SIDE**
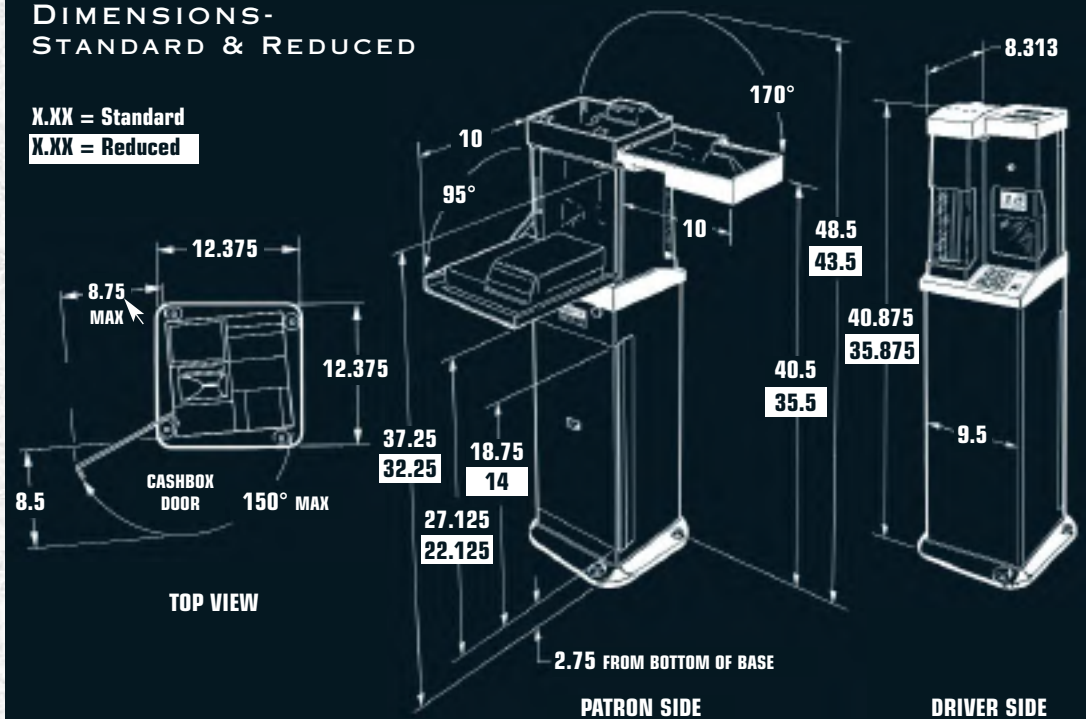
OPERATIONS

Fare Acceptance

Coins.	U.S. 1¢, 5¢, 10¢, 25¢, 50¢, SBA and Sacagawea (gold) $1 coins programmable for foreign coins
Tokens (standard)	5 sizes: .650", .800", .900", 1.0", 1.125"
Tickets (non-magnetic)	7 sizes: 2" x 2" up to 2" x 5"
Bills	One dollar bills
Coin validation insertion rate	10 coins per sec.
No. of coins/tokens coin mech. distinguishes. .	12
Programmable fare tables .	10
Dualport cashbox	separates bills & coins

Fare Registration Accuracy

Within . . . . +/- 1/2% per $300

Driver Keypad

16 pushbuttons	1-0 keys, *,# plus keys A-D
Dump button.	releases fares from viewing area
Optional Driver Control Unit (DCU)	27 buttons

Fare Data Reporting Functions

Route/Run segmenter	organizes passenger & revenue information
Data System.	reports on fare data (records data manually & automatically)
Memory	standard 256 KB (nonvolatile) memory registers and stores fare data with optional expansion to 1 meg

Electrical Power

	Volts DC	Range
Standard	12	11 to 15VDC
Optional	24	22 TO 29VDC
Max. current draw	8 amps peak (in operation) 0.8 amps (idle)@12 volts	
Power consumption	96 watts peak, 28 watts typical	

MECHANICAL

Cashbox (Fare Storage)

	Standard	Reduced	Short
Useful interior volume	730 cu. in.	500 cu. in.	300 cu. in.
Capacity in mixed coins	$700	$500	$300
Capacity without bill accelerator	$600	$400	$75
Capacity with bill accelerator	$800	$600	$150
Empty weight	17 lbs.	15 lbs.	13 lbs.

Construction

Upper & lower cabinet . . .	14-gauge, stainless steel, satin finish
Top, Center & Base	epoxy-coated cast aluminum

Security

Design.	vandal-resistant
High-security locks	pick-resistant/multi-tumbler magnetic
Driver log on	farebox disabled before log on
Cashbox alarms.	recorded by Data System

Driver Display

Numeric Display (revenue)	4 digits, LED
Alphanumeric Display	8 digits, dot matrix
Digit height	LED - 9/16" - 3/16"
Message	Upper - cash inserted/balance Lower - driver information

Optional Passenger Display

Numeric Display	3 digits, dot matrix
Digit height	1/4"
Message	revenue amount

Optional Magnetic Card Reader

Accepts cards	up to (.030") thick
Processing time.	less than 1/2 sec.
Accuracy	better than 99.0%

Optional Electronic Lock - Cashbox Access Door

Data Probe	sends security code to farebox to unlock cashbox access door
Cashbox ID	cashbox serial # identification

Environmental

Operating Temperature . . .	+0ºF to +110ºF -20ºC to +43ºC
Storage Temperature.	-25ºF to +140ºF -30ºC to +60ºC
Thermal Shock	1º per minute drop in temp. over 15ºF range between 110º and 60º
Relative Humidity Range . .	13% to 95% R.H. NC
Vibration	0.3g(rms), 5 to 200 Hz
Shock	Up to 5g (instantaneous)
Inclination	0º to 10º off vertical unsustained
Electromagnetic Interference	Immune to 400V spikes of up to 5 microseconds duration across incoming power supply lines

QA Testing

Each farebox is subject to numerous in-house mechanical, electronic, and environmental tests during production and burn-in.

Manufactured in an ISO9001-certified facility.

Specifications subject to change.

CENTSaBILL
ELECTRONIC REGISTERING FAREBOX

It takes approximately 2 seconds to complete a fare transaction using the CENTSaBILL Farebox.

The design makes it easy for passengers to deposit fares. The controls and data displays are designed for rapid learning and easy use by the operator – benefits that are especially important during peak operating hours. The 16-button keypad allows the driver to efficiently record all special fares. CENTSaBILL's route/run segmenter provides additional data reporting capabilities as well as a complete breakdown of passenger and revenue information. Our optional transactional database allows complete data storage on the farebox logic board and easy transfer to the expanded GFI Data System garage computer.

The CENTSaBILL high-security cashbox separates coins and bills. Separation is maintained until the contents of the locked cashbox are transferred to your counting room or bank. The cashbox automatically locks when it's removed from the farebox. It may be tracked using an optional tamper-proof electronic identification number.

CENTSaBILL ELECTRONIC REGISTERING FAREBOX OPTIONAL FEATURES:

- ❏ Electronic lock for keyless secure access to cashbox
- ❏ Electronic cashbox serial number identification
- ❏ Built-in illuminated magnetic pass reader
- ❏ Choice of heights: 41", 36" or 30"
- ❏ Ticket Reader/Issue Machine (TRiM)
- ❏ Passenger Display
- ❏ Dollar bill accelerator
- ❏ Driver Control Unit (DCU)
- ❏ Smart Card Reader

Like all GFI equipment, CENTSaBILL is engineered for maximum durability with minimum maintenance. Modular construction simplifies repair and permits easy, cost-efficient upgrading regardless of when the unit was purchased. This allows your investment to continue to pay dividends long after lesser equipment becomes obsolete. GFI Genfare products are engineered to perform both as stand-alone units and as part of fully integrated systems.

SPX

Where Ideas Meet Industry

Where Ideas Meet Industry   www.spx.com

simplifying **BUS**

TwinVision Smart Series Destination Sign System

Featuring a more advanced processing system, which has been integrated with our industry proven all-LED electronic destination sign systems, we believe that this product will become the new standard for the North American market. It utilizes state-of-the-art processors to monitor system health and solid-state LED devices to provide an extremely bright message with wide-angle
visibility both day and night. Since there are no moving parts in this product, maintenance costs and system diagnostic times are significantly reduced.

Sign Specifications ▶

Amber and White Front Signs

PRODUCT	Display Dimensions	Envelope Dimensions
24 X 200	9.25 X 63.75	12.0 X 65.0 X 2.25
16 X 160	7.9 X 62.75	11.5 X 65.0 X 2.5
16 X 160 (small pitch)	6.1 X 47.0	8.9 X 49.9 X 2.75
16 X 140 Gen 4	7.9 X 54.9	11.5 X 58.2 X 2.75

Amber and White Side Signs

PRODUCT	Display Dimensions	Envelope Dimensions
14 X 108	4.25 X 42.25	6.9 X 44.9 X 2.5
14 X 72	4.25 X 28.0	6.9 X 30.75 X 2.5
8 X 96	2.5 X 37.4	6.9 X 39.0 X 2.45

Amber and White Rear and Utility Signs

PRODUCT	Display Dimensions	Envelope Dimensions
16 X 48 Exterior Rear	6.1 X 17.0	11.5 X 23.6 X 3.9
16 X 48 Route Sign	6.1 X 17.0	11.5 X 23.6 X 3.9
14 X 36 Run Number	4.25 X 14.0	6.9 X 16.5 X 2.5

Features
- Advanced processing capacity to operate and monitor system health of EDSS
- Centralized data panel
- Industry-standard keypad Operating Console Unit with USB
- Open architecture for J1708, J1939 and RS232
- Easy integration with on-board IT systems
- High intensity light emitting-diodes
- Minimum operating life of 100,000 hours
- LEDs have automatic brightness adjustment
- Full readability for a total of 130 degrees
- ADA-compliant fonts and graphics
- Programmable to display independent messages
- Emergency messages activated by a push button
- Display messages readable from as far away as 350 feet

Benefits
- Ability to monitor health of entire electronic sign system
- Increased reliability due to a solid-state design
- Reduced operating and maintenance costs
- Flexibility in configurations and sizes
- Easy operation of signs and software
- Improved upload time of route data

Luminator ● **TwinVision**

900 Klein Road
Plano, Texas 75074
972-424-6511 ph
972-881-8940 fax

sportworks®

VeloPorter™ 2

Two position bicycle rack p/n 100634

Features & Benefits

- Modular Design — Reduce maintenance costs and lower the total cost of ownership with easily replaceable parts
- Energy Absorbing Wheel Trays — Provides a much safer product in the public arena
- Wider Wheel Trays — Accommodates bicycle tire widths up to three (3) inches
- Support Arm Design — Accepts wider variety of bicycle wheel sizes ranging from 16"-29" in diameter
- Stainless Steel & Composite Materials — Highly corrosion resistant
- Backwards Compatible — Upgrade to the VeloPorter using existing Sportworks hardware. Maximize your initial investment in Sportworks mounting brackets and DL2, DL2 S/S and Trilogy pivot plates.

Available Options

- Advertising Frame Kit, 13 x 32 P/N100756
- Multi-Language Decals-P/N various
- Deployment Kit-P/N 100634-DPLY or 100732 for existing rack
- Ten Second Bracket (TSB)-P/N various

Bid Specifications

Dimensions and Capacities	Benefit
1) The bicycle rack shall be capable of carrying two bicycles.	Allows customers with bicycles to access the transit system.
2) The two bicycle rack shall not be greater than 27 inches deep nor more than 59 inches wide.	A small footprint on the front of the bus.
3) The bicycle rack shall accommodate bicycles with wheel sizes from 16 inches to 29 inches, excluding tandems and recumbent bicycles.	Accommodates the majority of bicycle wheel sizes
4) The bicycle rack shall accommodate bicycles with a wheelbase dimension of up to 46 inches.	Accommodates the majority of bicycle frame sizes
5) The bicycle rack shall accommodate tire widths up to three inches.	Addresses the growing trend of wide mountain bike tires.
6) The bicycle rack shall secure bicycles up to 55 lbs. per wheel tray while the vehicle is moving. Additionally, the bicycle rack shall support a 250 pound (maximum) centrally located static load when it is deployed and the vehicle is not moving.	Accommodates large and heavily weighted commuter bikes, cruisers and some electric bike models that fall below the per wheel tray weight requirements. The static load feature takes into account non-intended use such as a person standing on the rack to wash the bus window.

Safety and Construction	Benefit
1) The bicycle rack shall utilize flexible molded thermoset composite wheel trays suitable for temperatures -40F to 140F degrees.	The wheel tray material is the same type as is used on the bumper of a transit bus. Provides an added measure of safety due its flexibility. Lighter weight than a conventional steel design.
2) The bicycle rack shall be of modular construction with removable wheel trays	Allows wheel tray and support arm assembly to be replaced due to collision damage or abuse. Eliminates the need to replace entire rack.
3) All parts of the moving portion of the bicycle rack shall be made of stainless steel, aluminum or other corrosion resistant materials. Plated steel components shall not be used.	Ensures a long corrosion free existence in an environment including constant exposure to the weather and to the bus wash.
4) Continuous support shall be provided for the rear wheel of the bicycle allowing it to be rolled into the position closest to the bus without lifting	Allows the rider to easily load and unload a bicycle in the position closest to the bus by rolling it into position rather than being forced to lift it into position risking possible back injury.
5) The bicycle rack shall be mounted to the front of the bus and shall have a deployed and a stowed position.	Increases rack and bicycle visibility for the operator and allows the bus to retain its maneuverability when in the stowed position.
6) The bicycle rack shall latch securely in both the stowed and the deployed positions.	Keeps bikes safe and secure while the coach is in motion and the rack securely stowed when not in use.
7) The bicycle rack shall include a molded support arm handle.	Provides multiple points of contact on most popular wheel diameters while accommodating wheels ranging from 16 inches to 29 inches in diameter.
8) The bicycle rack shall contact the bicycle's tires only - no contact shall be made with the frame of the bicycle.	This assures the bicycle rider a scratch free trip every time.
9) All outside corners of the bicycle rack shall be rounded.	Rounded corners are friendly to users' legs when loading and unloading their bicycle. This also reduces wear on bus washing systems.
10) Attaching a bicycle to the rack shall not require the use of any straps or cords.	No straps or cords to wear out during the service life of the unit, further minimizing maintenance costs.
11) The bicycle rack, when in use shall not interfere with bus access panels or windshield wipers.	The rack fits as closely as possible all the while reducing interference with the face of the coach, including, wipers, vents and access panels.
12) The bicycle rack support arm shall be self-storing, requiring no action from the bicycle rider for proper stowage.	The arm is simply pulled away from the bicycle tire and released. The latch prevents the support arm from hitting the front of the bus when the bicycle rack is folded up.
13) The bicycle rack shall be compatible with a mounting bracket that can be completely removed from the bus in less than ten seconds.	Allows the rack with the bracket attached to be quickly removed from the bus in the field for towing or in the shop for seasonal removal or repair.
14) Maintenance of the bicycle rack shall not require the use of any surface lubrication.	Eliminating the need for liquid lubricants greatly reduces the likelihood of binding due to road debris build-up on moving parts.
15) The bicycle rack shall be designed specifically for commercial transit use and not for consumer use.	The transit environment will quickly destroy a rack made for occasional consumer use.
16) The bicycle rack manufacturer shall have a sum of at least 10,000 racks installed at a minimum of 50 transit agencies in North America.	This insures the bicycle rack is a product which is proven in the marketplace
17) The bicycle rack shall include a warranty against manufacturing defects for a period of one year.	The manufacturer stands behind the product.

Operation	Benefit
1) The bicycles shall be able to be loaded and unloaded independent of each other.	Allows the user to remove only their bicycle, further promoting quick loading and unloading.
2) The bicycle rack shall be designed such that the bicycle rider is encouraged to load and unload the bicycle from either the "curb-side" or front of the vehicle.	Ensures the bicycle rider is in a safe location when using the rack.
3) Lifting weight to stow the bicycle rack shall be less than 20 pounds.	Allows easy one-hand operation and falls well below OSHA and NIOSH limits.
4) The bicycle rack shall be clearly marked with easy to follow instructions for operation.	Educates the user as to the correct orientation of the bike when loading, further ensuring the shortest loading and unloading time possible.
5) Orientation of the pedals by the bicycle rider shall not be required when using the rack.	Decreases potential damage to the bicycle being loaded and to a previously loaded bicycle. Reduces load and unload time insuring schedule compliance.
6) The bicycle rider shall be able to move the bicycle rack from the deployed to the stowed position or the reverse using only one hand.	Allows the bicycle rider to deploy the rack for loading or to stow the rack while using the other hand to hold their bicycle. This also reduces load and unload time insuring schedule compliance.

ROUGH ROADS AHEAD

SLOW

DANGER
BUS TURBULENCE
SECURE LUGGAGE NOW!

RIDERS BEWARE!

SMOOTH ROADS AHEAD

WHEN MOR/ryde IS INSTALLED

BECAUSE YOUR BUS DOESN'T HAVE TO RIDE LIKE A TRUCK!

Master's Transportation Inc.

Fuel Conversion Solutions

CNG   **PROPANE**

- Alternative Fuel Vehicle Conversions (CNG & LPG)
- Tank Inspections
- Alt Fuel Technician & First Responder Training

****

State of Oklahoma Solicitation #:SW797
STATEWIDE CONTRACT FOR ADA TRANSIT VEHICLES

****

SELECT CNG AND PERFORMANCE LLC, (SCP) an Oklahoma based company, provides the highest quality CNG/LPG conversions, offering outstanding customer service. SCP is an affiliate of Fuel Conversion Solutions which has four conversion facilities across the Midwest. Our certified technicians at our Oklahoma facility will be able to provide the warranty service work and assistance you need for your fleet.

The Founder and President of Fuel Conversion Solutions, Nick Wagoner, has been a natural gas trainer, inspector, and consultant for 20 years. Wagoner has provided trainings extensively throughout the United States and India at the request of the U.S. Department of Energy and the NAFTC. Utilizing the NAFTC curriculum, Mr. Wagoner can provide training to your technicians and fleet personnel so they can safely and effectively work on CNG vehicles.

Fuel Conversion Solutions and SCP are authorized installers of the EPA Certified system manufacturers:
LPG: ROUSH CleanTech, Impco, ICOM, CleanFuel USA, Bi-Phase, American Alternative Fuel
CNG: Landi Renzo, Impco, AGA, Altech Eco, NatGasCar, American Alternative Fuel

- *CNG Dedicated Option* - utilizing either IMPCO or Landi Renzo EPA Certified system for Ford E450, 6.8L
- *LPG Dedicated Option* - utilizing EPA Certified ICOM system for Ford E450, 6.8L
- *LPG Bifuel Option* - utilizing EPA Certified ICOM system for Ford E450, 6.8L

For additional details, please contact

Bob Tucker
Master's Transportation
Contract Manager - Government
Office: 800-783-3613 • Cell: 913-486-8282
BobT@MastersTransporation.com

FCS Fuel Conversion Solutions
ALTERNATIVE FUEL EXPERTS
Drummond, OK

OKLAHOMA MOTOR VEHICLE COMMISSION

Certificate of License
271

THE OKLAHOMA MOTOR VEHICLE COMMISSION
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MASTER'S TRANSPORTATION, INC.
800 QUIK TRIP WAY
BELTON, MISSOURI 64012

AS AN AUTHORIZED

Distributor

And is responsible for the management of its operations and
personnel as provided by the laws of the State of Oklahoma.

IN TESTIMONY WHEREOF WE SET OUR HAND AND CAUSE TO BE AFFIXED

THE SEAL OF THE

OKLAHOMA MOTOR VEHICLE COMMISSION

Richard Reynolds
Chairperson

Roy K Dockum
Executive Director

Issue Date: 05/29/2014
Expires: 06/30/2015

Ford Motor Company

Is proud to recognize

Goshen Coach, Div. (Thor)

as a participant in the
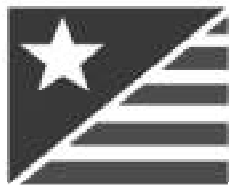
Transit Bus

Qualified Vehicle Modifier Program

Richard D. Cupka – SVE Quality Programs Mgr.

July, 2013

QUALIFIED VEHICLE MODIFIER

PERRY JOHNSON REGISTRARS, INC.

Certificate of Registration

Perry Johnson Registrars, Inc., has assessed the Quality Management System of:

Goshen Coach, Inc.
25161 Leer Drive, Elkhart, IN 46514 United States

(Hereinafter called the Organization) and hereby declares that
Organization is in conformance with:

ISO 9001:2008

This Registration is in respect to the following scope:

**Design and Manufacture of Small to Mid-Size
Passenger Buses and Para-Transit Vehicles**

This Registration is granted subject to the system rules governing the Registration referred to above, and the Organization hereby covenants with the Assessment body duty to observe and comply with the said rules.

For PJR:

Terry Boboige, President

Perry Johnson Registrars, Inc. (PJR)
755 West Big Beaver Road, Suite 1340
Troy, Michigan 48084
(248) 358-3388

UKAS MANAGEMENT SYSTEMS

ANAB ACCREDITED

PERRY JOHNSON REGISTRARS, INC.

The use of the UKAS accreditation symbol is in respect to the activities
covered by the Accreditation Certificate Number 105.

The validity of this certificate is dependent upon ongoing surveillance.

Effective Date:	Expiration Date:	Certificate No.:
June 18, 2013	June 12, 2016	C2013-01611

To: Whom It May Concern
From: Donall Hasty
Date: November 6, 2013
Re: Goshen Coach Certifies Compliance To The Following Motor Vehicle Safety Standards
             (FMVSS/CMVSS) Where Applicable for Each Make and Model for 2014

STD.	Description
ICE-002	Interference-Causing Equipment Standard
1106	Noise Emission
101	Controls and Displays
102	Transmission Shift Lever Sequence, Starter Interlock and Transmission Brake Effect
103	Windshield Defrosting and Defogging Systems
104	Windshield Wiping and Washing Systems
105	Hydraulic Brake Systems
106	Brake Hoses
108	Lamps, Reflective Devices and Associated Equipment
111	Rear View Mirrors
113	Hood Latch System
115	Vehicle Identification Number
116	Motor Vehicle Brake Fluids
119	New Pneumatic Tires for Motor Vehicles Other Than passenger Cars
120	Tire Selection and Rims for Motor Vehicles Other Than Passenger Cars
124	Accelerator Control Systems
125	Warning Devices
204	Steering Controls
205	Glazing Materials
206	Door Locks and Door Retention
207	Seating Systems
208	Occupant Crash Protection (Driver Only)
209	Seat Belt Assemblies
210	Seat Belt Assembly Anchorage
213	Child Restraint Systems
217	Bus Window Retention and Release
220	School Bus Rollover Protection (MFSAB also)
221	Joint Strength (MFSAB only)
222	School bus passenger seating and crash protection (MFSAB only)
301-301U	Fuel System Integrity (MFSAB only for 301U)
302	Flammability of Materials
403	Platform Lift Systems for Motor Vehicles
404	Platform Lift Installations in Motor Vehicles

_____
 Donall Hasty – Director of Engineering