

STATE OF SOUTH CAROLINA	)	<b>BEFORE THE CHIEF PROCUREMENT OFFICER</b>
COUNTY OF RICHLAND	)	
	)	DECISION
In the Matter of Protest of:	)	
	)	CASE No. 2012 - 101
	)	
Interstate Transportation Equipment, Inc.)	)	
	)	
	)	
Department of Corrections	)	POSTING DATE: March 2, 2012
IFB No. 5400003705	)	
Rear Engine Transit Buses	)	MAILING DATE: March 2, 2012
_____	)	

This matter is before the Chief Procurement Officer (CPO) pursuant to a letter of protest from Interstate Transportation Equipment, Inc. (Interstate). With this invitation for bids (IFB), the South Carolina Department of Corrections (SCDC) attempts to procure two rear engine transit buses. In the letter, Interstate protested SCDC's intent to award to Carolina International Trucks (Carolina) alleging Carolina's bid was nonresponsive to various specifications.

As the issues to be decided are clear, this decision is prepared based upon review of the procurement documents and email exchanges with Richard Kester of Carolina.

**NATURE OF PROTEST**

The letter of protest is attached and incorporated herein by reference.

**FINDINGS OF FACT**

The following dates are relevant to the protest:

1. On January 3, 2012, SCDC posted its intent to award to Carolina.
2. On January 10, 2012, the CPO received Interstate's protest.

**CONCLUSIONS OF LAW**

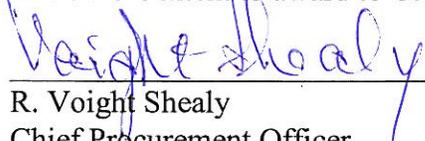
Interstate alleges that Carolina's bid was nonresponsive to various specifications included by SCDC in the IFB.

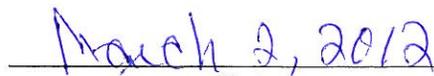
Regarding award of an IFB, the Consolidated Procurement Code (Code) reads, "notice of an award or an intended award of a contract to the lowest responsive and responsible bidders whose bid meets the requirements set forth in the invitation for bids must be given by posting the notice at a location specified in the invitation for bids." (11-35-1520(10)) The Code defines a responsive bidder as, "a person who has submitted a bid or offer which conforms in all material aspects to the invitation for bids or request for proposals." (11-35-1410(7))

After receiving the protest, the CPO was contacted by Richard Kester of Carolina. In an email to the CPO dated January 27, 2012, Mr. Kester wrote, "After speaking with Mr. Downs we have decided that we should withdraw our bid." In a second email to the CPO dated January 30, 2012, Mr. Kester wrote, "Carolina International Trucks agrees that the buses we bid for this procurement (solicitation # 5400003705) do not meet the specifications SCDC required in its solicitations and therefore request to withdraw its bid."

**DETERMINATION**

With Carolina's acknowledgement that its bid was not responsive to the SCDC specifications, the CPO grants the protest of Interstate. SCDC's intent to award to Carolina is cancelled.

  
\_\_\_\_\_  
R. Voight Shealy  
Chief Procurement Officer  
for Supplies and Services

  
\_\_\_\_\_  
Date

Columbia, S.C.

**STATEMENT OF RIGHT TO FURTHER ADMINISTRATIVE REVIEW**  
*Protest Appeal Notice (Revised July 2011)*

The South Carolina Procurement Code, in Section 11-35-4210, subsection 6, states:

(6) Finality of Decision. A decision pursuant to subsection (4) is final and conclusive, unless fraudulent or unless a person adversely affected by the decision requests a further administrative review by the Procurement Review Panel pursuant to Section 11-35-4410(1) within ten days of posting of the decision in accordance with subsection (5). The request for review must be directed to the appropriate chief procurement officer, who shall forward the request to the panel or to the Procurement Review Panel, and must be in writing, setting forth the reasons for disagreement with the decision of the appropriate chief procurement officer. The person also may request a hearing before the Procurement Review Panel. The appropriate chief procurement officer and an affected governmental body shall have the opportunity to participate fully in a later review or appeal, administrative or judicial.

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Copies of the Panel's decisions and other additional information regarding the protest process is available on the internet at the following web site: [www.procurementlaw.sc.gov](http://www.procurementlaw.sc.gov)

**FILE BY CLOSE OF BUSINESS:** Appeals must be filed by 5:00 PM, the close of business. *Protest of Palmetto Unilect, LLC*, Case No. 2004-6 (dismissing as untimely an appeal emailed prior to 5:00 PM but not received until after 5:00 PM); *Appeal of Pee Dee Regional Transportation Services, et al.*, Case No. 2007-1 (dismissing as untimely an appeal faxed to the CPO at 6:59 PM).

**FILING FEE:** Pursuant to Proviso 83.1 of the General Appropriations Act for Fiscal Year 2011-2012, "[r]equests for administrative review before the South Carolina Procurement Review Panel shall be accompanied by a filing fee of two hundred and fifty dollars (\$250.00), payable to the SC Procurement Review Panel. The panel is authorized to charge the party requesting an administrative review under the South Carolina Code Sections 11-35-4210(6), 11-35-4220(5), 11-35-4230(6) and/or 11-35-4410...Withdrawal of an appeal will result in the filing fee being forfeited to the panel. If a party desiring to file an appeal is unable to pay the filing fee because of hardship, the party shall submit a notarized affidavit to such effect. If after reviewing the affidavit the panel determines that such hardship exists, the filing fee shall be waived." PLEASE MAKE YOUR CHECK PAYABLE TO THE "SC PROCUREMENT REVIEW PANEL."

**LEGAL REPRESENTATION:** In order to prosecute an appeal before the Panel, a business must retain a lawyer. Failure to obtain counsel will result in dismissal of your appeal. *Protest of Lighting Services*, Case No. 2002-10 (Proc. Rev. Panel Nov. 6, 2002) and *Protest of The Kardon Corporation*, Case No. 2002-13 (Proc. Rev. Panel Jan. 31, 2003).



Interstate Transportation Equipment, Inc.

P.O. Box 9163 • 2511 Trotter Road • Columbia, SC 29290

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Telephone (803) 776-5041 • Toll Free (800) 726-0779 • Fax (803) 776-3527

January 10, 2012

Chief Procurement Officer  
Materials Management Office  
1201 Main St., Suite 600  
Columbia, SC 29201

Re: Solicitation # 5400003705  
Thomas Rear Engine Transit Bus (SCDOC)

Dear MMO,

Our company recently participated and bid on Solicitation # 5400003705 for "Item Description: 2012 Thomas Rear Engine Transit Bus" on page 37, Bidding Schedule. An Intent to Award was issued on 1/3/12 to Carolina International Trucks. We requested through the SC Freedom of Information Act copies of the bid proposal submitted by Carolina International Trucks (full copy attached) and after reviewing we have found items of serious concern that do not comply with the specifications set forth in this solicitation. Please review the following:

1. Page 15 of the specifications, CAPACITY, describes the requirements for the seat plan/interior, showing location of seats and spacing required by SCDOC to match their current fleet for installation of interior cages and doors and to maintain functionality. The seat/interior diagram shows 84.5" of space required from the front passenger seat to the entrance stanchion/driver's seat which SCDOC requires to match fleet. The seat/interior diagram submitted by Carolina International Trucks (see attached copy of their seat/interior plan submitted) does not comply as it only includes 66" of space from the front passenger seat forward. This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.
2. Page 16 of the specifications, SERVICE DOOR, requires a maximum door width of 28.5" for functionality. The bid submitted by Carolina International Trucks (see page 7 of their bid attached) included a 35" width door thus impacting the spacing detailed in item # 1 above. This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.

3. Page 18 of the specifications, FRAME, requires minimum dimensions of the frame to be 10" x 3 1/2" x 1/4" for durability. The frame offered by Carolina International Trucks (see page 3 of their bid attached) is lighter with dimensions of 10" x 3" x 1/4". This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.

4. Page 21/22 of the specifications, LAMPS and DIRECTIONAL LIGHTS, requires the Back-Up lamps, Stop/Tail, Directional Lamps to be 5"W x 8"H for maximum visibility and safety. The lights offered by Carolina International Trucks (see page 12 of their bid attached) are 7" round. This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.

5. Page 22 of the specifications, MIRRORS, requires a SINGLE integrated mirror assembly on both sides to include the flat/convex/crossview for maximum visibility and safety. The bid offered by Carolina International Trucks (see page 12 of their bid attached) offers 2 separate mirrors assemblies, one assembly for the flat/convex, and a second assembly for the crossview mirror. This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.

6. Page 25 of the specifications, STORAGE COMPARTMENTS, requires a driver's storage compartment of no less than 9" D x 26" L. The bid offered by Carolina International Trucks (see page 13 of their bid attached) included a compartment of 9" D x 20" L. This does not comply with the requirements set forth in the solicitation and was not approved prior to bidding.

Based on the items detailed above, Interstate Transportation Equipment is protesting the intent to award to Carolina International Trucks. We request the award be issued to Interstate Transportation Equipment as the only responsive and responsible bidder for this solicitation. None of these specifications/requirements above were changed in the solicitation prior to the bid deadline and would have impacted Interstate Transportation Equipment's bid price substantially if given the opportunity to offer a different seat/interior diagram, door, frame, lamp/directional and storage compartment.

I'll look forward to meeting or discussing further, thanks in advance for your time in reviewing. I can be reached at 776-5041 x 125 or [todd@interstatetransportation.com](mailto:todd@interstatetransportation.com).

Yours truly,



Todd B. Manuel  
Sales Manager

# CAROLINA INTERNATIONAL TRUCKS, INC.



12-18-2011

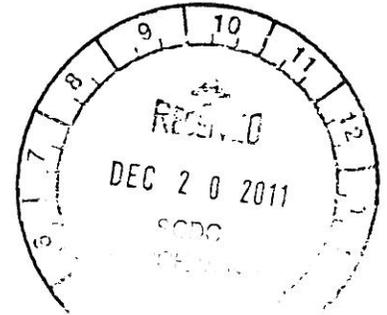
To: Laura Bagwell

Purchasing Department

SC Department of Corrections

Subject: Solicitation # 5400003705

Rear Engine Transit Buses



Dear Ms. Bagwell,

Enclosed please find all required documents required to meet the above solicitation. This will also serve as acknowledgement that we have received amendments 1, 2 and 3 of this solicitations. Our enclosed specifications meet your requirements for this solicitation with your acceptance of our request for approved equals.

Our delivery time frame for the buses would be 120 days from the receipt of your purchase order if our company was the awarded dealer.

We want to thank the SC Department of Corrections for the opportunity to bid this solicitation.

Richard J Kester

Richard J Kester  
Bus Sales Manager

# COPY

## Columbia

1619 Bluff Road  
P.O. Box 7548  
Columbia, SC 29202  
(803) 799-4923

## Charleston

2580 Oscar Johnson Drive  
P.O. Box 71144  
Charleston, SC 29415  
(843) 747-3040

## Greenville

2520 Highway 14, S.  
P.O. Box 12228  
Greenville, SC 29612  
(864) 848-0050

## Florence

350 East Campground Rd.  
Florence, SC 29506  
(843) 468-9560

## Summerville

153 Farmington Rd.  
Summerville, SC 29483  
(843) 821-6060





# **INTEGRATED RES BUS**

Sales Proposal For:

**South Carolina Department of Corrections**

Presented By:

**CAROLINA INTERNATIONAL TRUCKS, INC**

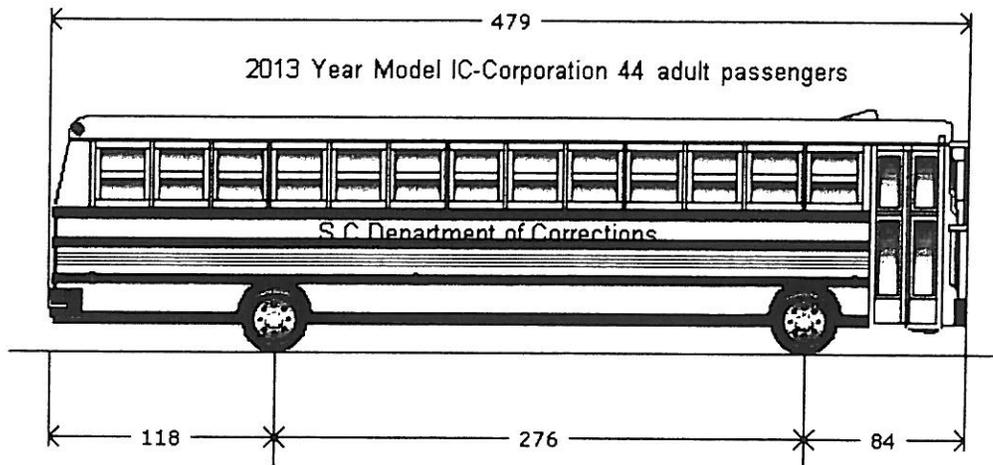


December 14, 2011

**Prepared For:**  
South Carolina Department of Corrections  
Ike Grey  
Broad River Road  
Columbia, SC 29209-  
(803)896 - 1695  
Reference ID: N/A

**Presented By:**  
CAROLINA INTERNATIONAL TRUCKS, INC  
Richard J Kester  
1619 BLUFF RD  
COLUMBIA SC 29201 -  
(803)799-4923

Thank you for the opportunity to provide you with the following quotation on a new American Transportation Corp. vehicle. I am sure the following detailed specification will meet your operational requirements, and I look forward to serving your business needs.



**Model Profile**  
**2013 INTEGRATED RE S BUS (PB305)**

<b>APPLICATION:</b>	Activity Trip
<b>MISSION:</b>	Requested GVWR: 36000. Calc. GVWR: 35350 Calc. Start / Grade Ability: 22.40% / 1.67% @ 55 MPH Calc. Geared Speed: 79.2 MPH
<b>FUEL ECONOMY:</b>	8.62 MPG @ 55 MPH
<b>DIMENSION:</b>	Wheelbase: 276.00, CA: N/A, Axle to Frame: 118.00
<b>ENGINE, DIESEL:</b>	{MaxxForce DT} EPA 10, 260 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed
<b>TRANSMISSION, AUTOMATIC:</b>	{Allison 3000_PTS} 4th Generation Controls; Close Ratio, 5-Speed, With Overdrive, Includes Oil Level Sensor, Less PTO Provision, Less Retarder, School Bus, With 80,000-lb GVW & GCW Max.
<b>CLUTCH:</b>	Omit Item (Clutch & Control)
<b>AXLE, FRONT NON-DRIVING:</b>	{Meritor MFS-14-122A} I-Beam Type, 14,000-lb Capacity
<b>AXLE, REAR, SINGLE:</b>	{Dana Spicer 23060SH R/O} Single Reduction, Pinion Up, 23,000-lb Capacity, 200 Wheel Ends Gear Ratio: 4.88
<b>TIRE, FRONT:</b>	(2) 11R22.5 G662 FUEL MAX (GOODYEAR) 497 rev/mile, load range G, 14 ply
<b>TIRE, REAR:</b>	(4) 11R22.5 G662 FUEL MAX (GOODYEAR) 497 rev/mile, load range G, 14 ply
<b>SUSPENSION, REAR, AIR, SINGLE:</b>	{International} Ride Optimized Suspension (IROS); 23,000-lb Capacity, 9.25" Ride Height, With Shock Absorbers
<b>PAINT:</b>	Cab schematic 100WC Location 1: 9219, Winter White (Std) Chassis schematic 932WC Wheel: 0001, Canyon Black (Std)

COPY

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
PB30500	Base Chassis, Model INTEGRATED RE S BUS with 276.00 Wheelbase, N/A CA, and 118.00 Axle to Frame.
1AGY	<p>— FRAME RAILS High Strength Low Alloy Steel (50,000 PSI Yield); 10.000" x 3.000" x 0.250" x 471.3" OAL; 276" WB</p> <p><u>Includes</u>            : CHASSIS PAINT Chassis Painted Prior to Body Mounting            : FRAME RAILS All holes Laser Aligned and Machine Punched, Powder Coated Prior to Full Assembly, Assembled in Fixture using "Grade 8" Bolts</p>
1LLE	<p>BUMPER, FRONT Full Width, Aerodynamic, Heavy Duty, Steel</p> <p><u>Includes</u>            : BUMPER, FRONT THICKNESS 1/4 Inch</p>
1LNT	CROSSING GATE, FRONT Omit Item
2AST	<p>AXLE, FRONT NON-DRIVING {Meritor MFS-14-122A} I-Beam Type, 14,000-lb Capacity</p> <p><u>Includes</u>            : AXLE, FRONT SQUARING to Plus or Minus .015 Inch, using a Special Fixture to Assure Parallelism of Springs</p> <p><u>Notes</u>            : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.</p>
3ADD	<p>SUSPENSION, FRONT, SPRING Parabolic, Taper Leaf; 14,000-lb Capacity; With Shock Absorbers</p> <p><u>Includes</u>            : SPRING PINS Smooth Pin with Lube Distribution Flats</p> <p><u>Notes</u>            : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.</p>
4091	<p>BRAKE SYSTEM, AIR Dual System for Straight Truck Applications</p> <p><u>Includes</u>            : BRAKE LINES Color and Size Coded Nylon            : DRAIN VALVE Twist-Type            : DUST SHIELDS, FRONT BRAKE            : DUST SHIELDS, REAR BRAKE            : GAUGE, AIR PRESSURE Single Gauge, Dual Needles            : INVERSION VALVE Bendix SR-1 and Double Check Valve            : PARKING BRAKE CONTROL Yellow Knob, Located on Instrument Panel            : PARKING BRAKE VALVE For Truck            : QUICK RELEASE VALVE Bendix On Rear Axle for Spring Brake Release: 1 for 4x2, 2 for 6x4            : SLACK ADJUSTERS, FRONT Automatic            : SLACK ADJUSTERS, REAR Automatic</p> <p><u>Notes</u>            : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.</p>
4193	<p>— BRAKES, FRONT, AIR CAM 16.5" x 6", Includes 24 Sqn Long Stroke Brake Chambers</p> <p><u>Notes</u>            : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.</p>
4722	<p>DRAIN VALVE {Bendix DV-2} Automatic; With Heater; for Air Tank</p> <p><u>Includes</u>            : DRAIN VALVE Mounted in Wet Tank</p>

**COPY**

Vehicle Specifications  
2013 INTEGRATED RE S BUS (PB305)

December 14, 2011

<u>Code</u>	<u>Description</u>
4AZA	AIR BRAKE ABS {Bendix AntiLock Brake System} Full Vehicle Wheel Control System (4-Channel)
4EBP	AIR DRYER {Bendix AD-9} Mounted Center of Double Crossmember in Front of Rear Axle
4ETE	BRAKE CHAMBERS, FRONT AXLE {Haldex} 24 SqIn
4EUB	BRAKE LININGS, FRONT {Meritor R301} Non-Asbestos for S-Cam Brake
4EUD	BRAKE LININGS, REAR {Meritor R301} Non-Asbestos for S-Cam Brake
4EVL	BRAKE CHAMBERS, REAR AXLE {Haldex GC3030LHDHO} 30/30 Spring Brake
	<u>Includes</u> : BRAKE CHAMBERS, SPRING (2) Rear Parking; WITH TRUCK BRAKES: All 4x2, 4x4; WITH TRACTOR BRAKES: All 4x2, 4x4; 6x4 & 6x6 with Rear Tandem Axles Less Than 46,000-lb. or GVWR Less Than 54,000-lb.
4LAA	SLACK ADJUSTERS, FRONT {Haldex} Automatic
4LGA	SLACK ADJUSTERS, REAR {Haldex} Automatic
4NCU	← BRAKES, REAR, AIR CAM S-Cam; 16.5" x 8.0"; Includes 30/30 Sq.In. Long Stroke Brake Chambers and Spring Actuated Parking Brakes
	<u>Notes</u> : The following features should be considered when calculating Front GAWR: Front Axles; Front Suspension; Brake System; Brakes, Front Air Cam; Wheels; Tires.
4SBC	AIR COMPRESSOR {Bendix Tu-Flo 550} 13.2 CFM Capacity
4VBX	AIR TANK LOCATION (2) Mounted Between Frame Rails and Over Front Axle
4WEA	PARKING BRAKE INTERLOCK Parking Brake Cannot be Released until Ignition Switch is in the "ON" Position and the Service Brake Pedal is Applied, Use with air brake chassis only.
5710	← <u>STEERING COLUMN Tilting and Telescoping</u>
5CAL	STEERING WHEEL 2-Spoke, 18" Diam., Black
5PRJ	STEERING GEAR {TRW (Ross) TAS-65} Power
7BDW	EXHAUST SYSTEM Single, Horizontal Aftertreatment Device Frame Mounted Outside Left Rail, Includes Long Horizontal Tail Pipe
	<u>Includes</u> ← : NOTE: The Horizontal Tailpipe Includes a Temperature <u>Control Device</u>
7WBL	TAIL PIPE Long Horizontal, Exits Left Side Through Bumper
8000	ELECTRICAL SYSTEM 12-Volt, Standard Equipment
	<u>Includes</u> : FUSES, ELECTRICAL SAE Blade-Type : HAZARD SWITCH Push On/Push Off, Located on Bottom of Steering Column Cover : HEADLIGHT DIMMER SWITCH Integral with Turn Signal Lever : MISCELLANEOUS FEATURES Modular, Loom Protected, Grommets in all Applicable Body Openings, Assembled in Computer Assisted Fixture which Verifies Continuity and Correct Assembly Prior to Installation : PARKING LIGHT Integral with Front Turn Signal and Rear Tail Light : STARTER SWITCH Electric, Key Operated : TURN SIGNAL FLASHER : TURN SIGNAL SWITCH Self-Cancelling with Lane Change Feature : TURN SIGNALS, FRONT Includes Reflectors; Flush Mounted : WINDSHIELD WIPER SWITCH 2-Speed with Wash Feature, Instrument Panel Mounted : WIRING, CHASSIS Color Coded and Continuously Numbered
8540	HORN, ELECTRIC (2)

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Vehicle Specifications  
2013 INTEGRATED RE S BUS (PB305)

December 14, 2011

<u>Code</u>	<u>Description</u>
8GWZ	ALTERNATOR {Leece-Neville 14923PAH} Brush Type; 12 Volt 220 Amp. Capacity, Pad Mounted, Includes 1-Gauge Protected Charging Circuit
8MKL	BATTERY SYSTEM (International) Maintenance-Free, (3) 12-Volt 1950CCA Total
8WCB	INDICATOR, LOW OIL PRESSURE / HIGH COOLANT TEMPERATURE / LOW COOLANT LEVEL Light and Audible Alarm; Electronic Controlled
8WPV	RUNNING LIGHT (2) Modifications to Include Headlights, Tail Lights, Park/Marker Lights, and Panel Lights To Function With Ignition Key Switch On and Headlight Switch Off, Wiring Included In Main Cab Harness
8WTK	STARTING MOTOR {Delco Remy 38MT Type 300} 12 Volt; less Thermal Over-Crank Protection
8XAH	CIRCUIT BREAKERS <u>Manual-Reset</u> (Main Panel) SAE Type III With Trip Indicators, Replaces All Fuses Except For 5-Amp Fuses
10020	CHASSIS PAINT Full Chassis
10060	PAINT SCHEMATIC, PT-1 Single Color, Design 100 <u>Includes</u> : PAINT SCHEMATIC ID LETTERS "WC"
10632	PAINT IDENTITY, PT-2 Single Color, Instruction No. 932. Wheels
10788	PAINT TYPE Urethane, One or Two Colors, Other than Imron or International.
10925	KEYS - ALL ALIKE, ID Variation E, D-250
10947	KEYS - ALL ALIKE Fleet, Ignition Only
10WTU	MULTI FUNCTIONAL BUS ID To be Used for Multi Functional School Activity Bus, Non Route Use Only, Letter of Compliance from End User is Required
11001	CLUTCH Omit Item (Clutch & Control)
12NUP	ENGINE, DIESEL {MaxxFORCE DT} EPA 10, 260 HP @ 2200 RPM, 660 lb-ft Torque @ 1300 RPM, 2400 RPM Governed Speed <u>Includes</u> : AIR COMPRESSOR AIR SUPPLY LINE Naturally-Aspirated (Air Brake Chassis Only) : ANTI-FREEZE Red Shell Rotella Extended Life Coolant; -40 Degrees F/ -40 Degrees C; for MaxxFORCE Engines : COLD STARTING EQUIPMENT Intake Manifold Electric Grid Heater with Engine ECM Control : CRUISE CONTROL Electronic; Controls Integral to Steering Wheel : ENGINE OIL DRAIN PLUG Magnetic : ENGINE SHUTDOWN Electric, Key Operated : FUEL FILTER Included with Fuel/Water Separator : FUEL/WATER SEPARATOR Fuel/Water Separator and Fuel Filter in a Single Assembly; With Water-in-Fuel Sensor; Engine Mounted : GOVERNOR Electronic : OIL FILTER, ENGINE Spin-On Type : WET TYPE CYLINDER SLEEVES
12THY	FAN DRIVE Hydraulic Pump & Motor with fixed speed, With Residual Torque for Disengaged Fan Speed <u>Includes</u> : FAN Nylon
12UAP	RADIATOR SIDE MOUNTED; Aluminum, Over Under System, 1296 SqIn, 332 SqIn CAC, Includes 385 SqIn Auxiliary Radiator <u>Includes</u> : DEAERATION SYSTEM with Surge Tank : RADIATOR HOSES Premium, Rubber

COPY

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
12UGN	THROTTLE, HAND CONTROL Electronic
12UXG	FEDERAL EMISSIONS for 2010; MaxxForce DT Engines
12VBC	AIR CLEANER Single Element  <u>Includes</u> : AIR CLEANER with Vacuator : GAUGE, AIR CLEANER RESTRICTION Air Cleaner Mounted
12VVN	CRUISE CONTROL Electronic
12VWH	GOVERNOR Electronic Road Speed Type; for International Electronic Engines and Bus Models; With 55 MPH Default
12WAE	HOSE CLAMPS, RADIATOR HOSES Constant Torque, for Engine Hoses 1.0" I.D. and Over
12WZE	EMISSION COMPLIANCE Federal, Does Not Comply With California Clean Air Regulations
13AJB	TRANSMISSION, AUTOMATIC {Allison 3000_PTS} 4th Generation Controls; Close Ratio, 5-Speed, With Overdrive, Includes Oil Level Sensor, Less PTO Provision, Less Retarder, School Bus, With 80,000-lb GVW & GCW Max.  <u>Includes</u> : OIL FILTER, TRANSMISSION Mounted on Transmission : TRANSMISSION OIL PAN Magnet in Oil Pan
13WBL	TRANSMISSION SHIFT CONTROL {Allison} Push-Button Type; for Allison 3000 & 4000 Series Transmission
13WLP	TRANSMISSION OIL Synthetic; 29 thru 42 Pints
13WUM	ALLISON SPARE INPUT/OUTPUT for Pupil Transportation Series (PTS)
13WYK	SHIFT CONTROL PARAMETERS Allison Load Based Shift Schedules (LBSS)
14AHR	AXLE, REAR, SINGLE {Dana Spicer 23060SH R/O} Single Reduction, Pinion Up, 23,000-lb Capacity, 200 Wheel Ends . Gear Ratio: 4.88  <u>Includes</u> : REAR AXLE DRAIN PLUG (1) Magnetic, For Single Rear Axle  <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires. : When Specifying Axle Ratio, Check Performance Guidelines and TCAPE for Startability and Performance
14TBT	SUSPENSION, REAR, AIR, SINGLE {International} Ride Optimized Suspension (IROS); 23,000-lb Capacity, 9.25" Ride Height, With Shock Absorbers  <u>Notes</u> : The following features should be considered when calculating Rear GAWR: Rear Axles; Rear Suspension; Brake System; Brakes, Rear Air Cam; Brake Shoes, Rear; Special Rating, GAWR; Wheels; Tires.
14WLA	AXLE, REAR, LUBE {EmGard 75W-90} Synthetic Oil; 1 thru 29.99 Pints
15LKG	FUEL/WATER SEPARATOR With Thermostatic Fuel Temperature Controlled Electric Heater, and Filter Restriction/Change Indicator, Includes Standard Equipment Water-in-Fuel Sensor
15SJX	FUEL TANK Rectangular, Steel; 105 U.S. Gal., 397 L Capacity, Mounted Between Frame Sidemembers and Ahead of Rear Axle, Includes Protective Cage  <u>Notes</u> : Requires 195" WB Min
16015	PLATFORM Standard Location

**COPY**

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
16HAA	GAUGE CLUSTER English with English Electronic Speedometer and with Tachometer for Air Brake Chassis  <u>Includes</u> : GAUGE, ENGINE OIL PRESSURE Electronic : GAUGE, WATER TEMPERATURE Electronic : VOLTMETER
16HCM	<u>GAUGES, COMPARTMENT, ENGINE</u> Includes; Voltmeter and Engine Temperature Gauge, Mounted in Engine Compartment
16HJB	<u>GAUGE PACKAGE</u> Includes Hourmeter, Oil Temperature Gauge (Automatic Transmission) and 150 Amp Ammeter
26DRA	WHEEL, SPARE, DISC 22.5" Painted Steel, 10 Stud (285.75MM BC Hub Piloted) 8.25 DC Rim
27DMA	WHEELS, FRONT DISC; 22.5" Painted Steel, 2 Hand Hole, 10 Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs  <u>Includes</u> : PAINT IDENTITY, FRONT WHEELS Black  <u>Notes</u> : Compatible Tire Sizes: 11R22.5, 12R22.5, 255/70R22.5, 255/80R22.5, 265/75R22.5, 275/70R22.5, 275/80R22.5, 295/75R22.5, 295/80R22,5
28DMA	WHEELS, REAR DUAL DISC; 22.5" Painted Steel, 2 Hand Hole, 10-Stud (285.75MM BC) Hub Piloted, Flanged Nut, Metric Mount, 8.25 DC Rims; With Steel Hubs  <u>Includes</u> : PAINT IDENTITY, REAR WHEELS Black  <u>Notes</u> : Compatible Tire Sizes: 11R22.5, 12R22.5, 255/70R22.5, 255/80R22.5, 265/75R22.5, 275/70R22.5, 275/80R22.5, 295/75R22.5, 295/80R22,5
29597	WHEEL SEALS, REAR {Stemco Voyager} Oil Lubricated Wheel Bearings
29598	WHEEL SEALS, FRONT {Stemco Voyager} Oil Lubricated Wheel Bearings ILO Standard Oil Seals
29BAA	WHEEL, FRONT, IDENTITY {Accuride} Front Disc Wheels; Light Weight, 5 Hand-Hole, With 285.75mm B.C. Hub Piloted Mounting, DC Rims
29BAB	WHEEL, REAR, IDENTITY {Accuride} Rear Disc Wheels; Light Weight, 5 Hand-Hole, With 285.75mm B.C. Hub Piloted Mounting, DC Rims
29WLA	WHEEL BEARING, FRONT, LUBE {EmGard 50W} Synthetic Oil
47ACG	BODY, BUS for RE; 78" Headroom, 39'11" Body Length, 84 Passenger, 276" WB  <u>Includes</u> : HEADER BUMPER Padded, Mounted Over All Doors; Upholstered to Match Passenger Seat Color
47AJA	BODY CERTIFICATION TAG Metal
47AJC	BODY TAG, METAL
47AKK	STEP, FRONT ENTRANCE DOOR 25 3/4" Depth; 14ga Steel  <u>Includes</u> : STEP, FRONT ENTRANCE DOOR OPENING, <u>35 Inch Width</u> ; Continuous Bottom to Top
47AMS	COMPARTMENT, DRIVER STORAGE for RE
47APN	<u>HEADLINER, BODY</u> for RE; Perforated Full Length With Sound Insulation Full Length
47APX	FASTENERS, HEADLINER Screws

**COPY**

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
47ARH	BOWS, ROOF 14 ga., One Piece Construction  <u>Includes</u> : BOWS, ROOF Positioned Floor Line to Floor Line, Threaded Through Roof Strainers and Drip Rail
47ARJ	REINFORCEMENT, BODY ROOF BOWS SPECIAL Construction Package, for Colorado, Utah, and Nebraska
47ARP	LIGHT BARS Plastic
47ARY	SKIRT, BODY for RE; 28", 16 ga  <u>Includes</u> : SKIRT, BODY Extra Smooth Steel Supported by Floor Gussets
47AUR	TIE DOWNS, BODY Grade 8 Bolts, Every Body Section  <u>Includes</u> : TIE DOWNS, BODY with Formed Tab that Fits into Floor Structure to Prevent Turning
47AVD	SKID PLATE Right Front Step Well Guard
47AXC	RUB RAILS, BODY (4) for RE; Steel, All Body Lengths Includes Snow Rail  <u>Includes</u> : RUB RAILS Full Length, Primer Coated (Both Sides), Attached to Body without Cuts or Splices
47AZJ	SIDE SHEET, BODY, EXTERIOR for RE, 16 ga., Smooth
47BAR	SUPPORTS, REAR BUMPER Bolted to Frame
47BAU	BUMPER, REAR Painted; 12" High, 3/16" Thick, With 7" Hole for Exhaust
47BAV	TOW HOOKS, FRONT (2) 1 Left, 1 Right
47BAW	TOW HOOK, LEFT REAR (01)
47BAX	TOW HOOK, RIGHT REAR (01)
47BBH	LINING, SIDE INTERIOR, LOWER Embossed Steel, Clear Coated
47BBN	HANDLE, ASSIST, OVER WINDSHLD Body Color
47BBW	LATCH, ACCESS DOOR Front, Lever Type
47BEX	SEALER Water-proof Sealer on all Floor Covering Seams
47DAA	CONTROL, ENTRANCE DOOR Electric Over Air, 2 Position Selector Switch Mounted left of Driver
47DBP	DOOR, ENTRANCE, FRONT Air, Outward Opening, With Split Pane Glass
47DCJ	DOOR, SIDE EMERGENCY, LEFT 25"; Installed Forward of Rear Wheel Pocket
47DCZ	HOLD BACK, LEFT SIDE Side Emergency Door, With Plastic Cover
47DDE	HANDLE, ASSIST, ENTRANCE DOOR Outside Entrance
47DDX	LATCH, EMERGENCY DOOR, LEFT One Point Slide Bar, Cam Operated, with One Inch Stroke
47DSC	COMPARTMENT, LUGG, PASS THRU (01) <u>114"</u>
47DXA	KEYS ALIKE, DRIVER STORAGE
47DZA	DUMP VALVE, AIR DOOR Interior, Above & Forward of Entrance Door, With Decals
47EAP	COMPARTMENT, BATTERY Mounted Behind Right Rear Wheel Pocket, 13" x 15" x 25 5"  <u>Includes</u> : BATTERY TRAY 14-1/2" x 24-3/4" Slide Out Tray with Nylon Rollers and Stops : DOOR - COMPARTMENT with Pin Style Hinge

**COPY**

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

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<u>Code</u>	<u>Description</u>
47EBD	LOCK, BATTERY COMPARTMENT Standard Location
47EBM	HOLD DOWN, BATTERY For (2) Standard Size Batteries
47KDA	STRIPING, SEATLINE {3M} 2" White, Fluorescent Diamond Grade
47KDG	STRIPING, REAR END {3M} 1" Horizontal and 2" Vertical, Fluorescent Diamond Grade White
47LAD	NOISE REDUCTION, ROOF BOW For RE; Insulation 1 1/2", All Body Lengths
47LAU	INSULATION, ROOF AND SIDES 1.50", All Models
47MAC	UNDERCOAT, FLOOR/STEPWLL/SIDES for Engine Noise Reduction
47MBA	UNDERCOAT, BODY Fire Resistant, Water Based, TT-C-730 Spec
	<u>Includes</u>
	: UNDERCOATING Performed Before and After Mounting on Chassis
47MBE	HEAT SHIELD, ENGINE Sandwich Insulation Between Two Panels to Protect From Hi-Pressure Cleaning
47MJG	LETTERS, DOOR, LT Decals; "EMERGENCY DOOR", 2" Black Letters Inside and Outside
47MNE	ARROW, SIDE DOOR, LT OUTSIDE Decal; Black, Indicating Handle Direction
47MSY	LOGO, ROOF LINE Omit
47MTD	STRIPING, PERIMETER, LEFT Side Emergency Door; Reflective, White
47MTY	WIRING DIAGRAM Schematic, Electrical
	<u>Includes</u>
	: ACCESS PANEL for Wiring Diagram Schematic Located on Body Exterior; Below Driver Window
47MVA	LETTERS, HEADER Decal; "WATCH YOUR STEP", 1" Black, Above Windshield
47MVC	LETTERS, STEPWELL Decal, "WATCH YOUR STEP", 2.5" Black, Behind Door on Step Riser
47MVZ	LOGOS EXTERIOR Omit, Logo Plate aft Entrance door, Logo Plate on Right side Rear of Bus, Logo Decal on Left side Rear of Bus
47MZL	LOGO, REAR BUMPER Omit, IC
47NGA	LETTERS, CAPACITY Decal; "MAX CAPS", 2"
47NGW	SEAL, RUB RAILS Top Edge, All Rails
47NJB	PAINT COLOR, BODY EXTERIOR 9219 Winter White
47NKR	PAINT COLOR, BODY INTERIOR Light Gray
47NKY	LETTERS, FUEL I.D. Decal; "DIESEL FUEL", 1" Black, on Fuel Filler Door
47NLD	HANDLE, EXTERIOR, LEFT Emergency Door; White
47NLL	HANDLE, EXTERIOR, RIGHT Emergency Door; White
47NMB	OPERATING INSTR, LEFT Decal, Inside Side Emergency Door
47NMR	ARROW, SIDE DOOR, LT INSIDE Decal; Red Indicating Handle Direction
47NTX	PAINT RUB RAILS To Match Body Exterior
47NXU	PAINT FLASHER BACKGRD To Match Body Color
47SAV	SUB FLOOR, PLYWOOD For RE, B-B Marine Grade, Less Sealed Edges, 5/8", 5 Ply, for All Body Lengths
47SLZ	POSITION DOOR, LEFT Side Emergency Door, Modified FWD Door Position Within Opening, With 25" Door, Located Forward of Rear Wheel Pocket

**COPY**

**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
48ACN	SEAT BELT, DRIVER, COLOR With Blaze Orange Seat Belt Webbing
48ALA	WINDOW, SIDE OFFSET, LT 18", Split Sash Type, With Modified Door Position
48ANT	WINDOW, DRIVER Laminated, Clear
48APL	WINDOW, STOPS 12" Opening, Only With 78" Headroom
48ATT	WINDOW, PASSENGER, TINT For RE; Clear, Laminated Glass, 78" Headroom, With All Body Lengths
48BJL	COLOR, WINDOW FRAME, PASS (26) Passenger Window, <u>Black Anodized</u>
48BJP	COLOR, WINDOW FRAME, DRIVER Window, <u>Black Anodized</u>
48CWZ	WINDOW, REAR Omit Kick-Out Window, for RE Without Rear Window
48DBJ	SHIELD, COURTESY, AFT/DRIVER Padded, 36", Mounted Under Stanchion
48DBN	SHIELD, COURTESY, AFT ENTR DR Padded, 30", Mounted Under Stanchion
48DBW	STANCHION, AFT DRIVER Stainless Steel, 36"
48DCE	STANCHION, AFT ENTRANCE DOOR Stainless Steel, 30"
48GGA	BRACKET, FIRE EXTINGUISHER Spring Clip Type; for 5 lb. Extinguisher
48GHC	HEATER, DRIVER 90,000 BTU, with Defroster and Without Rear Heat Duct
	<u>Includes</u>
	: AIR FILTER
	: HEATER HOSES Premium
	: HOSE CLAMPS, HEATER HOSE Mubea Constant Tension Clamps
48NAT	FITTINGS, AIR SEAT for Driver Seat
48NCM	UPHOLSTERY, PASS SEATS, TYPE Kevlar, <u>42 oz.</u> ; for (21-22) Seats
48PAA	WINDSHIELD 2 Curved Pieces, <u>73% Light</u> , With Shaded Band
48PAY	aisle POSITION Center, for balanced seating
48PBB	FLOOR COVERING, COLOR Black
48PJR	FLOOR COVERING, TRIM Aluminum
48PJZ	FLOOR COVERING, TYPE {Koroseal} All Body Lengths
48PKC	HOSE CLAMPS, HEATER HOSE Constant Torque for Heater System
48PKP	FAN, DEFOG LEFT CENTER 6.50" Diam. Metal Case, Mounted Left of Center Post, 2 Speed Switch in Panel
48PLK	GRILLE, STATIC VENT, FRONT Adjustable With Screen, Requires Vent
48PMJ	HEATER, PASS, LT REAR 84,500 BTU
	<u>Includes</u>
	: AIR FILTER
48PMW	GRILLE, STATIC VENT, REAR Adjustable, With Screen
48PNW	<u>HEATER</u> , WATER PUMP {2MPU 12} Self Priming, With <u>Plastic Housing</u>
48PPC	SWITCH, HTR FAN, REAR, LT With 84,500 BTU Rear Heater Only
48PPL	HEATER CUT OFF, VALVE Gate 3/4"
48PPS	ROOF VENT, FRONT Static
48PRH	ROOF VENT, REAR Static

**COPY**

Vehicle Specifications  
2013 INTEGRATED RE S BUS (PB305)

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<u>Code</u>	<u>Description</u>
48PTT	ARM REST, DRIVER, RIGHT {National}
48PUT	NUTS, BELT MOUNTING Standard Nuts For Seat Belt Mounting
48PVA	UPHOLSTERY, DRIVER SEAT, STYLE Plain, With Cloth Insert
48PVP	UPHOLSTERY, DRIVER SEAT, COLOR Drivers Seat, Black
48PWD	UPHOLSTERY, PASS SEATS, COLOR Gray, for Seats, Barriers and Head Bumpers
48PWT	UPHOLSTERY, DRIVER SEAT, TYPE Kevlar, 42 oz.
48RGE	HAND RAIL, ENTRANCE DOOR, FWD Stainless Steel; Curved
48RGR	HAND RAIL, ENTRANCE DOOR, AFT Stainless Steel, 4", Above Step
48RLX	CUSHION, SEAT 15" Depth
48RRA	UPHOLSTERY, SEAT, STITCHING Single
	<u>Includes</u>
	: WARRANTY Two Years
48RYW	SEAT, DRIVER {National 2000} Air Suspension, High Back With Integral Headrest, Cloth, Isolated, With 2 Position Front Cushion Adjustment, 6 to 17 Degree Seat Back Adjustment, Mechanical Lumbar Support, Includes Additional Back Padding For School Bus Use
	<u>Includes</u>
	: SEAT BELT, DRIVER Adjustable D-Loop Seat Belt, Single Locking Retractor
48RZJ	STEP TREADS {Koroseal} Pebble Top With White Nosing, With Non-Metal Backing
48SDR	SEAT,PASS,LT,39",2 LEG (08)
	<u>Notes</u>
	: BTI Seating System Base Seat. Retrofittable, Contact IC Bus Application Engineering for more information.
48SKL	SEAT,PASS,RT,39",2 LEG (10)
	<u>Notes</u>
	: BTI Seating System Base Seat. Retrofittable, Contact IC Bus Application Engineering for more information.
48SRA	SEAT,PASS,LT,39",4 LEG (01)
48TAV	SEAT,COMBO,FRONT,RIGHT (01) 2 Leg, 30" Cushion, 39" Back
48TSA	SEAT,DAVENPORT,LEFT (01) 39"
48TSH	SEAT,DAVENPORT,RIGHT (01) 39"
48UAH	SEAT,FLIP,LEFT Automatic, (01) 39"
48USV	SEAT BACK, PASSENGER High Back
49ADM	WIRING MOD, TAIL LIGHTS Lights to Operate With Daytime Running Lights
49ADR	HEADLIGHTS Halogen, Heavy Duty 5"x 7" Rectangular, With Turn Signal
49AJN	WIRING/SWITCH, STROBE LGHT RR Rear Section From Rear, Illuminated Switch
49AJY	STOP ARM, FRONT Omit
49AMB	WIRE, FEED 4 Gauge, Chassis To Body
49AMC	TERMINAL STRIP Chassis
49AMD	SWITCH, DRIVER PANEL, TYPE Rocker
49AMT	CIRCUIT, PROTECTION Breakers, Manual Reset in Lieu of Fuses

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Vehicle Specifications  
2013 INTEGRATED RE S BUS (PB305)

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<u>Code</u>	<u>Description</u>
	<u>Includes</u> : ACCESS PANEL for Body and Chassis Fuses/Circuit Breakers Located on Body Exterior; Below Driver Window
49AMV	ALARM, BACKING (Ecco #850) 112 db
49AMW	HORN, AIR Beneath Drivers Platform, Behind Grille
49ANH	SWITCH, MAGNETIC, DISCONNECT Master, Ignition Operated, All Body Circuits
49ANU	SOURCE, POWER 12 Volt DC, Mounted On Dash
49APD	LIGHTS, DOME for RE; Two Full Rows Recessed, Rectangular, All Body Lengths, Mounted in Light Bars <u>Includes</u> : WIRING HARNESS Main Body Wiring Harness Accessed by Removing Dome Light
49ARU	LIGHT, ELECTRICAL COMPARTMENT Interior, With Door Switch
49AUM	SWITCH, MASTER FLASHER Omit Master Flasher Switch, 8-Lamp System
49BAG	LIGHT, STROBE, GUARD Brush Guard; for Strobe Light 3" to 5.5" High, Aeroflash Model 101-0298
49BGH	LIGHTS, WARNING Omit All; To be Used for Multi Functional School Activity Bus, Non Route Use Only
49BGJ	FLASHER SYSTEM Omit; To be Used for Multi Functional School Activity Bus or Commercial Models Only, Non Route Use
49BJL	LIGHTS, BACK UP (2) (Sound Off ECV7561B2W) LED, 7" Clear
49BKG	LIGHTS, STOP (2) (Sound Off ECV7561SST) and Tail; 7", LED, Red
49BKH	LIGHTS, DIRECTIONAL, REAR (2) (Sound Off ECV7561ITY) LED, 7" Amber
49BLL	WIRING, VIDEO SYSTEM Power and Ground Connection Only; Connection in Flasher Plate Area with 20 Amp Fuse Protection
49BLM	WIRING, TWO WAY RADIO Power and Ground Connection Only; Connection in Flasher Plate Area with 20 Amp Fuse Protection
49CKB	LIGHT, INDIC, WARNING LIGHTS OMIT, To be Used for Multi Functional School Activity Bus, Non Route Use Only
49EAE	LIGHTS, MARKER, SIDE (Sound Off EVCML153Y) LED, Armored Type, Intermediate, Centered; Required for Units 30 Foot or Longer
49EGC	MIRROR, INSIDE 6" x 30", Clear Safety Glass, Metal Back, Round Corners
49EGL	MIRROR, CROSS VIEW, EXTERIOR Black, Rosco, Pair
49EHD	MIRROR, REAR VIEW, EXTERIOR Black, Rosco Eurostyle
49ENK	VISOR, INTERIOR, LEFT FRONT 6" x 30", Transparent, For Left Windshield
49ENV	VISOR, INTERIOR, DRIVER LEFT 6" x 20", With Brackets For Drivers Window
49EPM	LIGHT, STEP (Sound Off) LED, White, Wired to Clearance Lights, Operated by Entrance Door
49EPY	CUTTER, SEAT BELT (2) (Safecut) for Cutting Seat Belts
49EUB	KIT, FIRST AID Metal; 24 Unit, Spec State
49EVL	SWITCH, NOISE SUPPRESSION Actuator Legend States, "NOISE SUPP ", for Separate Solenoid, With Red Switch in Panel
49EWM	LIGHT, STROBE ECCO 6550C, low profile, double flash, 4.9" high
49EZC	CUTTER, SEAT BELT, LOCATION (2) Centered on Inside of Driver Compartment Lid

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Vehicle Specifications  
2013 INTEGRATED RE S BUS (PB305)

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<u>Code</u>	<u>Description</u>
49EZJ	LIGHTS, MARKER, FRONT, REAR {Sound Off} (4) Total, LED, Armored, (2) Amber Front and (2) Red Rear
49GBD	KIT, BODY FLUID North Carolina , San Diego
49GBM	SAFETY EQUIPMENT LOCATION Located in Bulkhead Overhead Compartment, Centered Above Windshield
49GCD	LOCATION, BODY FLUID KIT Located in Drivers Area
49GCH	LOCATION, FIRST AID KIT Right Side Front Bulkhead With Screws
49GCP	PADDING COMPART ABOVE DRIVER Window; Safety Equipment, Vandal Equip Compartment, Without Dome Light
49GDB	LATCH, DOOR BULKHEAD Lever Latch, for Bulkhead Mounted Safety Compartment or Destination Sign Access Doors
49GDS	COMPARTMENT ABOVE DRIVER Left of the Driver
	<u>Includes</u>
	: COMPARTMENT ABOVE DRIVER Compartment Size: 20" x 9" x 9"
	: HINGES Piano Type
49GDW	COMPARTMENT, OVER WINDSHIELD With Window and Locking With Latch, Centered Over Windshield
49GEK	SAFETY TRIANGLES, LUGGAGE COMP
49GGE	FIRE EXTINGUISHER, DRIVER AREA 5 lb 2A-40BC Minimum With Flexible Hose and Metal Nozzle
49GHL	REFLECTORS, SIDE, INTERMEDIATE (2) Amber, 4", Adhesive Back
49GHN	REFLECTORS, REAR (2) 3", Red, Adhesive Back
49GHS	REFLECTORS, SIDE, REAR (2) 4", Red , Adhesive Back
49GHW	REFLECTORS, SIDE, FRONT (2) 4" Amber; 1 Aft Driver Window Left, 1 Aft Entrance Door Right, Adhesive Back
49GKM	SAFETY TRIANGLES Omit, for States that Do Not Require more than one Set of Safety Triangles.
49GNJ	FUEL FILLER DOOR With Locking Latch
49GRS	LIGHTS, CLUSTER {Sound Off ATCVMLDP1R & ATCVMLDP1Y} LED; Amber Front and Red Rear
49GTR	WINDSHIELD WASHER Kit; 8 Quart Capacity, Bottle
	<u>Includes</u>
	: WINDSHIELD WASHER ELECTRICAL CONNECTIONS Sealed and Locking Type
49GTV	WINDSHIELD WIPERS (2) Bottom Mounted; Pantograph Type; Wet Arms, 28.5"
49GTY	SWITCH, WIPER CONTROL Single, to Control Both Wipers
49GUH	CERTIFICATE HOLDER (1) 9.375" x 6"; With Transparent Cover
49GUJ	FENDERS, RUBBER, FRONT (2)
49GUK	FENDERS, RUBBER, REAR (2)
49GUM	INSPECTION PLATE Fuel Sending Unit 8" x 8" Steel
49GUX	MUD FLAPS, FRONT WHEELS (2) Rubber
49GVC	MUD FLAPS, REAR WHEELS (2) Rubber; Behind Rear Wheels
49GZT	FUEL FILLER PIPE Neck Cap and Vent Hosing for Use With Right Side Fill 100 Gal. Between the Rails Fuel Tanks

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**Vehicle Specifications**  
**2013 INTEGRATED RE S BUS (PB305)**

December 14, 2011

<u>Code</u>	<u>Description</u>
49MKC	LIGHTS, TAIL, LICENSE PLATE (2) {Sound Off} 4" Dia. RED, LED, Includes Stop & Light Window, Includes Mounting Gasket
49MLN	LIGHTS, DIRECTIONAL, SIDE (4) {Sound Off} Armor Type, Amber LED, (2) ECVML153Y Amber Over Front Wheel Pockets and (2) ECVML153R Red Over Rear Wheel Pockets
49MZV	LATCH, COMPARTMENT Locking, for Overhead Storage Compartment
49UBW	STATE OF OPERATION South Carolina
49XHP	LIGHTS, STOP & TAIL ADDITIONAL (2) {Sound Off} Red, LED, 4" Diameter, With Flange
7372138108	(2) TIRE, FRONT 11R22.5 G662 FUEL MAX (GOODYEAR) 497 rev/mile, load range G, 14 ply
7372138108	(4) TIRE, REAR 11R22.5 G662 FUEL MAX (GOODYEAR) 497 rev/mile, load range G, 14 ply
OBD010	MISCELLANEOUS Add footman loop for drivers seat belt( 48cgt)
OBD011	LETTERS, SCHOOL BUS FRONT/REAR Letters, school Bus front/rear delete( This is a prison bus)
OBD013	MISCELLANEOUS Body plan, non- special needs, 276 wheel base, cap 44 passenger, seat sixe 39/39 see plan number CIT-96
OBD014	BODY PLAN, NON-SPECIAL NEEDS Body Plan non special needs see body plan CIT96
OBD016	ROOF HATCH, FRONT Omit roof hatches, this is a prison bus
OBD017	ROOF HATCH, REAR Omit roof hatches, thsi is a prison bus
OBD018	HANDLE, EXTERIOR, REAR Omit, thsi is a prison bus with no back emergency window
OBD019	STRIPING, K/O WINDOW, REAR Omit, This is a prison bus with no back window
OBD020	MISCELLANEOUS Add one additional <u>drivers</u> seat( 48ryw) shipped <u>loose</u> inside the bus for installation later by end user
OBD021	DOOR, SIDE EMERGENCY, RIGHT Right side emergency door,OMIT, this floor plan CIT-96 does not call for a right side door
<b>Services Section:</b>	
40GBV	SERVICES, TOWING To 24-Month/Unlimited Miles/km, Service Call to the Vehicle or Towing to the Nearest International Dealership for a Non-Drivable Unit in Conjunction with an International Warrantable Failure; \$500 (USA) Maximum Benefit per Incident  Switches,wiring

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SCDOC BFD SPEC. 5

### BUMPERS

All buses shall be equipped with heavy-duty, one-piece front and rear bumpers constructed from a minimum of three sixteenths inch (3/16") thick pressed channel steel. Openings in the front bumper for accessing tow hooks may be provided but must be no larger in size than is required to access hooks.

All bumpers shall extend to the outer edge of the bus body at bumper top-line. Any rear bumper not fitting within one-quarter inch (1/4") of body panels must have a securely fastened rubber or metal strip to eliminate gap.

All bumpers and bumper brackets shall be securely bolted to the ends of the frame rails and/or frame brackets and side members. Bumper construction and mounting shall be of sufficient strength to support the weight of the bus (as in lifting with a jack positioned near frame end attachment points) without requiring readjustment or causing permanent distortion to the bumper, chassis, or body.

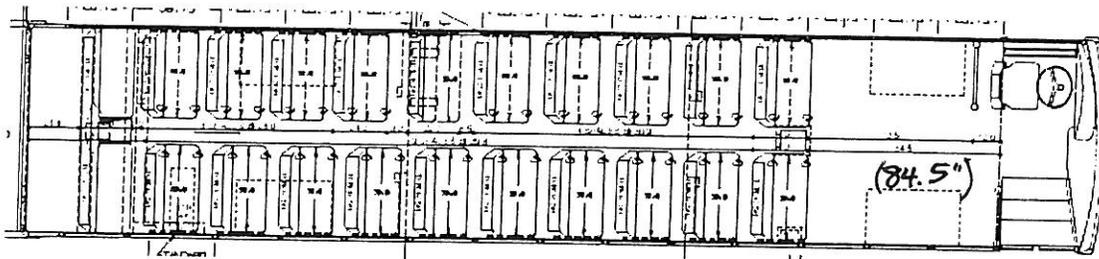
### CAPACITY

Capacity will be based on a minimum of RS: 29.7", LS: 28") forward facing seat centers (measured at seat level), overall width of at least ninety-six inches (96"), center aisle width of twelve inches (12"), and thirty-nine inch (39") seats. To match fleet.

#### BUS CAPACITIES

Capacity	Please see diagram below for seat locations.	44-passengers (2 per seat)
Wheelbase		277"
Length		40' (bumper-to-bumper)

#### Transit Bus Seating:



NOTE: Body to include additional structure/roof rafter to facilitate installation of interior cage/doors by SCDC. To match SCDC fleet.

### DOORS

1. BATTERY COMPARTMENT DOOR - Battery compartment shall be accessible through a door located in the right side skirt and hinged toward the front. This door shall be furnished with a flush mounted, adjustable, key-locking, metal latch (key number CH 545).
2. ELECTRICAL PANEL ACCESS DOOR - A weatherproof access door shall be provided on the left front corner of the body for servicing and repairing electrical components and wiring. This door shall be hinged to the front and will be furnished with a flush mounted push button activated, adjustable, key-locking, die-cast metal latch with black matte finish (key number CH 545).

A weatherproof wiring schematic (body and chassis) shall be permanently attached to the inside of the door. This schematic shall be applicable to the bus and identification of the circuits shall be consistent with the vehicle harness.

A hinged panel shall be provided at the exterior front of the bus to provide access to the front heater filter, and the front windshield wiper motors.

3. ENGINE ACCESS DOORS (TRANSIT ONLY) - Two (2) doors, one (1) located on each side of the bus shall be provided for access to the engine compartment, radiator, and accessories. These doors shall be hinged and sized to provide adequate working clearance and shall be furnished with flush mounted push button activated, adjustable, die-cast metal latches having a black matte finish. If these doors are covered by perforated steel mesh, the hole size in the mess shall not exceed one and one half inch (1 1/2"). Rear engine compartment door to include vents. Access doors to include locks.
4. FUEL FILLER DOOR - A suitable door of not less than sixteen (16) gauge steel shall be installed over fuel filler opening on the right side of body. This door shall be spring-loaded and shall remain in a closed or open position. Door to be hinged toward the front and equipped with a keyed type lock (key number CH 545).
5. SERVICE DOOR - Service door shall be air operated, 28.5" maximum width, outward opening, to match fleet. The door shall be located ahead of the front wheels on the right side of the bus and controlled by the driver. Door shall be equipped with an emergency release control located in or adjacent to the door header panel and designed to exhaust air supply from the operating mechanism. This control shall be clearly and permanently marked, including operating instructions. Door operating mechanism shall be fully adjustable, located overhead of door and concealed behind a removable access panel. Door to include pull handle on forward leaf.

A stainless steel assist rail (minimum 20" length) shall be installed on all units on the windshield side of the entrance stepwell. This rail shall be securely mounted and installed in such a manner as to afford easy accessibility to small children during bus entry and/or egress.

## **DRIVELINE**

Drive shafts shall be provided with adequate protective metal guards to prevent whipping through the floor or dropping to the ground in the event of shaft breakage. All drive shafts shall be properly phased and balanced to eliminate vibrations.

## **EMERGENCY EXIT**

1. SIDE EMERGENCY DOOR- Transit bus shall have a side emergency door installed on the left side of the bus. (Per diagram shown in "CAPACITY" section). Door to be 25" wide.

## **ENGINE**

Cummins 6.7L 260HP, 660 ft lbs Torque, in-line 6-cylinder diesel engine, 2010 EPA compliant diesel engine. All engines shall be equipped with a thermostatically controlled, hydraulically driven cooling fan. Engine to be compatible and capable of operating on up to B20 biodiesel with no impact on engine warranty.

exit at the bottom edge of the rear bumper. No part of the exhaust system shall be located within the angle of departure and at no point shall any part of the system be positioned closer to the ground than the body side skirts.

**FAN, ELECTRIC**

One, dual speed, six inch (6”), twelve-volt (12v) electric fan shall be provided for air circulation. This fan shall have a metal, corrosion resisting guard with metal blades and shall be individually switched. Location shall be near the center of the windshield, but shall not obscure visibility of the right side rear vision mirrors. Dash integrated forced air ventilation system is acceptable in lieu of electric fan.

**FLOOR**

1. FLOOR COVERING - The floor covering shall be smooth, black in color, and fire resistant. The flooring shall have a minimum overall thickness of one eighth inch (1/8”) and a minimum dry static coefficient of friction of 0.6 as determined by ASTM D 1894-93.

The floor covering over openings shall be cut in sections to conform to any removable floor panels. The covering shall be removable with the panel without disturbing the flooring in the other areas. The adhesive for laminating floor covering to the floor shall be a water and fire resistant type.

The aisle and entrance platform area shall be covered with an aisle type, ribbed flooring having a minimum thickness of three-sixteenths inch (3/16”). A yellow standee line shall be included in the floor at the front of the bus.

All joints in the floor covering area shall be sealed and covered with an approved one inch (1”) wide, sixteen (16) gauge rust proof metal strip or molding. An additional cover molding shall be provided around the body wall at the floor line to lap over the floor covering. The molding may be a separate applied molding or it may be a part of the body panel but, in either case, it shall fit snugly upon the floor covering so that dirt cannot readily work underneath the edges. A 5/8” plywood floor insulation/reinforcement to be installed over the steel floor and covered by the black floor covering.

**FRAME**

All chassis frames shall be formed from full depth, minimum 10”high x 3 1/2” x 1/4” thick “C” channel steel and shall comply with the specifications listed below.

***Frame Rail Specifications (Transit)***

<b>Yield Strength (Min.)</b>	<b>Section Modulus (Min.)</b>	<b>RBM (Min.)</b>
50,000 psi	11.23 cu/in (nom)	561,000 in/lbs

Section modulus shall be nominal calculations based on the design dimensions of the frame rail. This shall include any sections that may have been modified during assembly. Any notched areas of a frame rail shall be reinforced utilizing frame liners sufficient in size and strength to insure compliance with the minimum section modulus requirements. There shall be no extra holes drilled in the frame rails.

1. FRAME RAILS, MAIN - The main frame rails shall be a continuous section from front of vehicle to aft of rear axle spring hangers.

2. ROOF/SIDES – The space between all interior and exterior body panels shall be insulated using a minimum of one and one half inches (1 1/2") of insulation having a minimum R-6 rating. This insulating material shall also be installed in all voids created by roof bows, body caps, etceteras.
3. UNDERCOATING - The entire underside of the bus; to include body and wheelhousings shall be coated to a minimum depth of one sixteenth inch (1/16") with high quality automotive type underseal to protect the body and chassis from rust and to seal and insulate the floor. Precautions shall be taken to insure that color coded items (air supply tubing, wiring, etceteras) are not coated.

## **INTERIOR**

1. HEIGHT- The finished inside body height shall be a nominal seventy-seven inches (77") minimum measured at any point on the longitudinal centerline from the front vertical bow to the rear vertical bow.
2. (2) 12-volt accessory outlets shall be located in an area that is accessible to the driver to facilitate cellular phone installation. Outlets must be equipped with an attached plastic cover.

## **LAMPS AND DIRECTIONAL SIGNALS**

All lighting equipment shall be furnished to comply with applicable FMVSS. All LED (light emitting diode) lamps shall have a hard shell coating to protect from chemicals and abrasion. The lighting equipment provided shall at a minimum include:

1. BACK-UP LAMPS - Dual, minimum 5"W x 8"H, LED back up lamps shall be installed on rear of bus and activated by a switch on the transmission or transmission shift control.
2. CLEARANCE/MARKER LAMPS - Minimum of twelve (12) required; one (1) installed on each of the four (4) roof corners, two (2) clusters of three (3) mounted between the clearance marker lamps on the front and the rear of the bus at the roofline, and one (1) mounted on each side at the approximate centerline of bus. If lamps are not recessed they shall be armor type. The lamps positioned from the center of the bus forward shall be amber in color. The lamps positioned on the rear of the bus shall be red in color. All lamps shall be LED with sealed electrical plugs. Clearance/marker lamps shall be controlled by the chassis headlight switch and wired to burn with chassis parking lights or headlights.
3. CONTROL PANEL ILLUMINATION - All switches/controls located on the driver's control panel shall be lighted for easy identification. This shall be performed in such a manner that will not create excessive glare for the driver. If switches/controls are self-illuminated, individually replaceable bulbs or LED's must be used.
4. DAYTIME RUNNING LIGHTS – All buses shall be equipped with DRL (low beam headlights) that are wired to automatically operate anytime that the engine is running. These lights shall not turn off by applying the parking brakes.
5. ELECTRICAL ACCESS PANEL LAMP - The electrical access panel shall be equipped with two (2) clear lens or approved equal, type lamps to provide illumination for technician. These lamps shall be controlled by a switch inside the panel and shall operate only if the panel door is open.
6. ENGINE COMPARTMENT LAMPS (TRANSIT ONLY)- Minimum of two (2) engine compartment illuminating lamps shall be provided. If the opening of the engine compartment door(s) reduces the visibility of the stop/tail lamps from the rear of

- the bus, two (2) additional stop/tail lamps shall be provided. These lamps shall be positioned so as to be fully visible with the engine compartment door(s) open.
7. HAZARD LAMPS - The hazard lamp system shall be controlled by a heavy-duty switch, which is easily identifiable.
  8. HEADLAMPS - A headlamp system using Halogen, fleet/truck type, extended life, bulbs (minimum rating of 2,000 hours @ 14.0 volts) shall be installed. A single dash mounted headlight switch shall control the headlamps, park lights, clearance/marker lights, and dash/control panel lights. The headlight dimmer switch shall be located on the steering column.
  9. INTERIOR LIGHTING - Interior lighting shall consist of a minimum of eight (8) flush mounted dome lamps. Deluxe driver's prismatic dome light with a separate switch to be included.
  10. LICENSE PLATE LAMPS - Rear license plate lamp shall be provided.
  11. STOP/TAIL LAMPS - All buses shall be equipped with 5"W x 8"H stop/tail lamps. (2) Additional LED lamps four (4) inch in diameter shall be located at the approximate floor line and as near the outer edges of the bus as possible. Stop lamps shall be activated by the service brakes and shall emit a steady light when illuminated.
  12. STROBE LAMP - All buses shall be equipped with a white strobe lamp having a minimum rating of ten (10) joules, double flash, and a maximum height of six inches (6"). A protective guard angled from the front shall be designed and installed to allow limbs or low hanging objects to ride over the lamp. Strobe lamp controlled by a driver's on/off switch.
  13. TURN SIGNAL LAMPS - All buses shall be equipped 5"W x 8"H amber LED rear, 7" round LED amber front. All turn signal lamps shall be located as near the outer edges of the bus as possible. Additionally, (2) LED side mounted turn signal lamps shall be provided.

## **LETTERING/GRAPHICS**

NONE.

## **LOGOS, MANUFACTURER'S**

No manufacturer's logos or names may be placed on the bus exterior except a small nameplate may be installed on the front hood/access panel and on the rear engine compartment door or rear of bus.

## **LUBRICATION**

Chassis lubricating system shall be high-pressure type with standard hydraulic type grease fittings. Fittings shall quick attachment type and shall be positioned so as to be easily accessible for maintenance and service without removal of panels/components.

## **MIRRORS**

1. EXTERIOR MIRRORS - All buses shall be equipped with an exterior mirror system, the following specifications shall be met:
  - a. REAR VISION MIRROR SYSTEM - All buses shall be equipped with a Rosco Eurostyle integrated single rear vision mirror system, which incorporates independently adjustable convex and flat glass mirrors. These shall be mounted, (convex and flat glass and crossview) on both the left and right sides of the bus, single assembly on both sides of bus.

## STORAGE COMPARTMENTS

Underbody storage compartment to be installed, please see the minimum requirements shown below:

TRANSIT- A Single Deluxe "pass-thru" luggage compartment, minimum of 130 cubic feet. Doors to include pneumatic struts (8) to hold the door in the open position when loading/unloading. Compartment to be a minimum of 125" in length. (to match fleet)

DRIVER'S STORAGE COMPARTMENT- To be installed over left side driver's window. Compartment to be constructed of steel, Dimensions no less than 9" deep x 26" in length. Door to include a lock, CH751 key.

## SUN VISOR

Two (2), sun visors shall be mounted so as not to interfere with the opening and closing of overhead storage compartments. Visor must be easily adjustable by driver and must have all corners rounded. Location: (1) LS of driver, (1) front LS windshield.

## SUSPENSION, FRONT

Transit front suspension shall be spring with a minimum rating at ground of six thousand (13,200) pounds. Conventional front suspension to be 10,000 lbs.

## SUSPENSION, REAR

Rear suspension shall be air ride type and shall have a rating equivalent to the axle capacity. A single, load sensitive, self-leveling control valve shall be incorporated to maintain constant ride height. This valve shall be adjustable and shall be installed on the centerline of the bus.

Ride Height Dimension shall be defined as the distance from the centerline of the rear axle to the bottom of the frame rail when the bus is in an unloaded condition. All hanger/mounting brackets shall be fastened to frame with a minimum of grade eight bolts. A load distributing plate shall be provided at the attachment points for the torsion control arm.

## TIRES AND WHEELS/RIMS

All chassis shall be equipped with six (6) tires conforming to the following table. All tires shall be of the same manufacturer, size, and load rating.

*Tire Size*

Manufacturer	Type	Size	Load Range
	Highway Tread	11R x 22.5	G

All chassis shall be equipped with two (2) front and four (4) rear, ten (10) hole disc wheels (Accuride 8.25 x 22.5 or approved equal). Wheels shall be hub pilot type with a minimum of (2) hand holes. All wheels shall be fully painted with a hardened epoxy type paint to provide a uniform color.