

GCII

GOSHEN COACH

Thor Industries Commercial Bus Division



Shown with optional graphics package, destination signs, stainless steel wheel inserts, mid-ship turn signals and yellow step nosing.

Committed to moving people ahead >

- Up to 25 passengers
- Flexible wheel chair positions
- Spacious interior
- Fully welded steel cage for safety
- Available on Ford or Chevy chassis
- Altoona tested (7 years/200,000 miles)



Parking Shuttle



Assisted Living



Church



Public Transit



Higher Education



Touring

GCII

CHASSIS

Chevy G3500 & G4500

- 12,300 & 14,200 LBS GVWR
- 6.0L Gas or 6.6L Diesel Engine
- OEM Driver's Seat, High-back, Reclining, Bucket, Cloth w/Headrest & Right Arm
- Electronic 4-speed Automatic Transmission
- OEM Dash A/C, Heater & Defroster
- Dual Batteries (Diesel) or Single Battery (Gas)
- Power Steering/ABS Brakes/Tilt Wheel/Cruise
- Daytime Running Lights
- OEM Alternator (dual diesel)
- Chrome Front Bumper
- Driver Air Bag
- Engine Block Heater (diesel)
- Dual Rear Wheels
- All Wheels Painted White
- Power Outlets

Ford E-350 & E-450

- 11,500, 12,500 or 14,500 LBS GVWR
- 5.4L & 6.8L Gas
- Electronic 5-speed Automatic Transmission
- OEM Dash A/C, Heater & Defroster
- Dual Batteries
- Power Steering/ABS Brakes/Tilt Wheel/Cruise
- OEM 225 Amp Alternator
- Chrome Front Bumper
- Driver Air Bag
- Driver Side Sun Visor
- Engine Block Heater
- Dual Rear Wheels
- All Wheels Painted White
- Power Outlets



Seating plans can be configured based on customer needs or specifications



21 Passenger & Rear Luggage



24 Passenger

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

STANDARD FEATURES

- Up to 26 Feet Long and 25 Passengers
- 91" Interior Width for Double Seating on Both Sides of Center Aisle
- Interior Height 79" at Aisle (75" with flat floor option)
- Fully Welded, Unitized Steel Cage Construction
- One Piece High Gloss, FRP Exterior Sidewalls
- Large Upper T-slider Windows w/Dark Tint
- FRP Interior Walls
- 5/8" Exterior Plywood Sub-floor with Black Rubber Flooring & Carpeting Under Seats
- 6 Dome Lights and 2 Stepwell Lights
- LED Taillights, Clearance and Marker Lights
- Rear Mud Flaps
- Vacuum Laminated and Fully Insulated Walls and Roof
- Emergency Side and Rear Egress Windows
- One Piece Roof
- Manual, Exterior Breakaway Mirrors w/Convex
- Altoona Tested - 7 Years/200,000 Miles

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 Mirrors



High Gloss Exterior Fiberglass



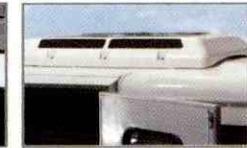
12 Passenger, 2 W/C



16 Passenger, 2 W/C



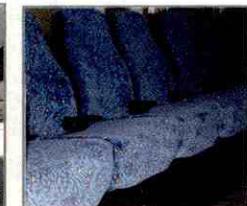
Overhead Luggage



Rooftop Mounted AC



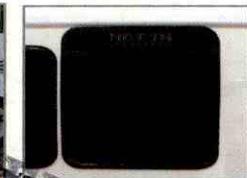
Flip-down TV



Perimeter Seating



Rear Wheel Chair Lift



Destination Sign

RECEIVED
 JUN 11 4 2015
 Materials Management Office
 11:00 A.M.
 National Bus Sales & Leasing
 6600 Reames Road
 Charlotte, NC 28216



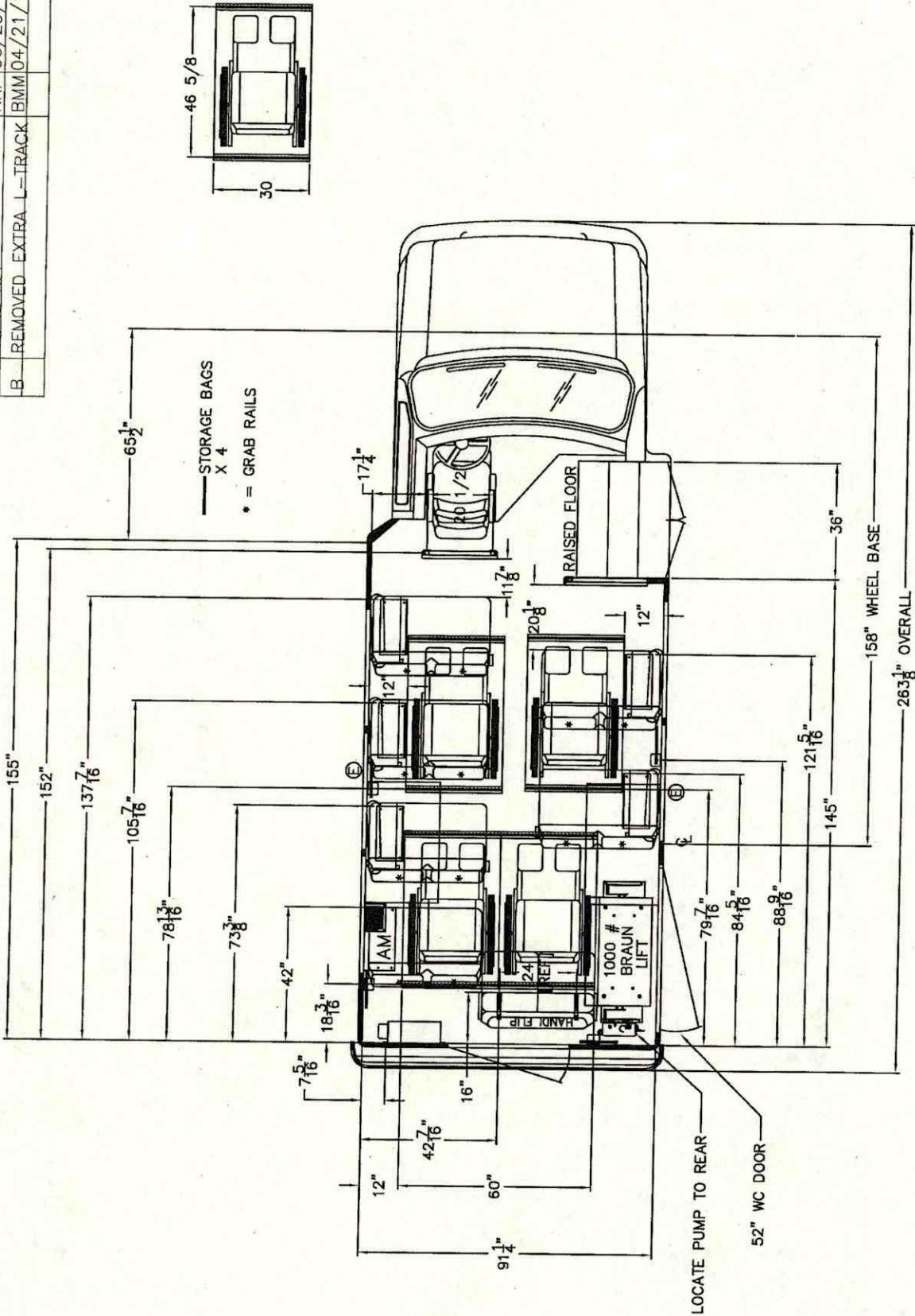
Thor Industries Commercial Bus Division



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 (e-mail) sales@goshencoach.com
 (web) www.goshencoach.com

NOTE: THIS FLOORPLAN REQUIRES BLACK RUBBER FENDER FLARES
 NOTE: LIFT TO SIT 1" CLOSER TO OPENING FROM STANDARD JIG LOCATION

Rev.	Revision Description	By	Date	ECN / PPCN
A	DR & REI	RRP	06/29/11	N/A
B	REMOVED EXTRA L-TRACK	BMM	04/21/15	N/A



Drawing Name / Description:
 FLOOR PLAN, GCII, 12P/4WC/158WB/263BDY

References:
 25161 Leer Drive
 Elkhart, IN 46514
 (574) 970-6300



Drawing Number/GC Part Number
0130022
 Class Code:
 File location: P/GCII/158/263/R

Revision:
B
 Sheet of 1

Scale: N/A
 Units: INCHES
 Drawn: RRP
 Date: 06/29/11

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

DO NOT SCALE
A



ACC Climate Control, Inc.

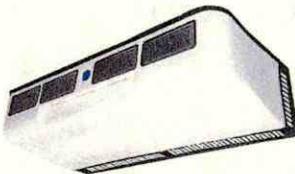
R236516—70,000 BTU/hr

The R236516 consists of (1) 23023 Rear Mount Evaporator, (1) 25065 skirt mount condenser with (1) TM-16 compressor, and is rated up to 55,000 BTU/hr (plus the OE Dash a/c capacity). The system is equipped with ACC's orifice tube/accumulator design for prolonged service life.

ACC's simplified relay board provides system operation with ground leg switching. LEDs for each circuit provide for easy diagnostics of electrical continuity.

Parallel flow condensers provide for lighter weight and higher efficiencies over copper tube condensers.

Combined with the OE package, the total system capacity rating up to 70,000 BTU/hr.



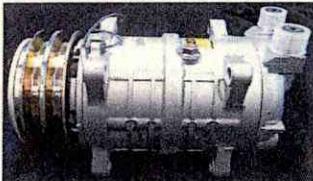
23023 Evaporator

- Up to 63,000 BTU/hr
- (2) dual blower assemblies @ 1600 cfm
- 30 amps @ 12 vdc
- 60 lbs



25065 Condenser

- 83,000 BTU/hr
- (2) 14 inch fans
- 22 amps @ 12 vdc
- 54 lbs



TM-16 Compressor

- 10 cubic inch displacement
- 3 amps @ 12 vdc



ACC ATCO Hose System

- ATCO 3800 Barrier Hose
- ATCO a/c Series Hybrid Elastomer Fittings
- Use with PAG oil
- Meets SAE-J2064 Specifications



ACC Climate Control—building **Rock Solid** relationships with **Rock Solid** performance and commitment!



AIR CONDITIONING SPECIFICATION

ACC Model R236516

This air conditioning system shall be an ACC Climate Control Model R236516.

Compressor: (1) TM-16 Compressor in addition to the OE Chassis supplied compressor driven off the vehicle engine.

Evaporator: One (1) ACC Model 23023 free blow evaporator rated up to 63,000 BTU/hr. The evaporator shall have two (2) dual shaft blower assemblies. The motor is minimum three (3) speed continuous duty permanent magnet and utilizes a resistor to limit amperage requirements. Drain pan shall not be part evaporator cover, but shall be part of the evaporator module with drain valleys to insure proper drains of the condensation. The return air filter is located at the coil and is easily accessible for maintenance without removal of the evaporator cover. The evaporator coil is copper tube design with aluminum fins. Evaporator assembly shall be a galvanized design. The evaporator shall utilize an orifice tube in lieu of a thermal expansion valve for a more trouble free operation. The evaporator cover have no sharp edges and must meet FMVSS 302 specification standards. High Pressure and Low Pressure (switch) protection are part of the evaporator assembly to maximize compressor and entire system protection. Evaporator air outlet louvers shall be adjustable to provide maximum directional airflow throughout the vehicle.

Driver's area in-dash evaporator: The OE Chassis supplied drivers in-dash evaporator shall be utilized and independent of the rear passenger area air conditioning system.

Condenser: One (1) ACC Model 23065 skirt mounted condenser rated @ 83,000 BTU/hr. The condenser shall have two (2) 14" high performance fan/motor assemblies with extended brush life motors. Each condenser assembly shall be designed to distribute air away from the vehicle floor. The condenser is installed in such a manner to assure the entire coil face area is exposed to fresh air from the outside of the vehicle skirt (the skirt of the vehicle will not in any way interfere with direct airflow through the coil). The system design shall use an accumulator with filter dessicant in lieu of a filter drier. The accumulator shall be mounted at the lowest point of the system (on the chassis frame rail) for maximum system protection. In addition, the accumulator shall include an oil pickup tube to insure proper compressor lubrication upon start up of the a/c system. The electrical connections shall be corrosion resistant.

This air conditioning system utilizes environmentally friendly R-134A. Refrigerant hoses are ATCO, Air-O-Crimp 3800 Barrier hose with one-piece stainless steel clamps, all designed to meet SAE-J2064.

The thermostat controls shall be located in an area easily accessible to the driver. All wiring is color coded. The entire electrical system shall utilize ACC's simplified relay board with ground leg switching. The relay board shall consist of LED's to aid in the diagnosis of electrical continuity. Each circuit shall be protected by individual fuses for greater protection of the relay board components. The system shall be protected with manual reset circuit breakers.

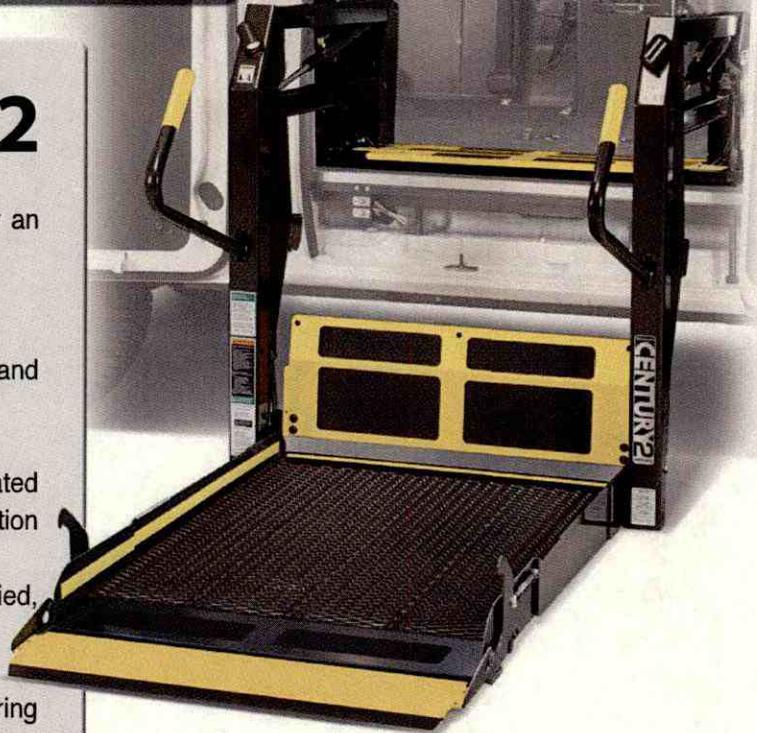


National Bus Sales & Leasing
6600 Reames Road
Charlotte, NC 28216

BRAUN CENTURY 2 SERIES

NCL954IB3454-2

- 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
- gas spring activated outer barrier detects roll stop occupancy as 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
- dual handrails for security and convenience
- bridging feature permits the wheelchair user to board the lift from sidewalks or inclines
- 34" x 54" Platform Size
- floor to ground travel is 48"
- lifting capacity is 1,000 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
- front or rear mounted pump available



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Q'STRAIN

Thinking Beyond

SLIDE 'N' CLICK

by Q'Strain

Introducing ... The SLIDE 'N' CLICK

Our floor anchorage addition is an added compliment to Q'Strain's product line. With the 360 degree swivel action and one-hand operation, the new anchorage is another alternative design to help you find solutions for those challenging floor plan requirements. This solution modernizes your pocket system!

Why/when the SLIDE 'N' CLICK hardware is worth considering:

Easy to Use – one hand operation

Easy to Install – standard single socket head cap screw

Easy to maintain

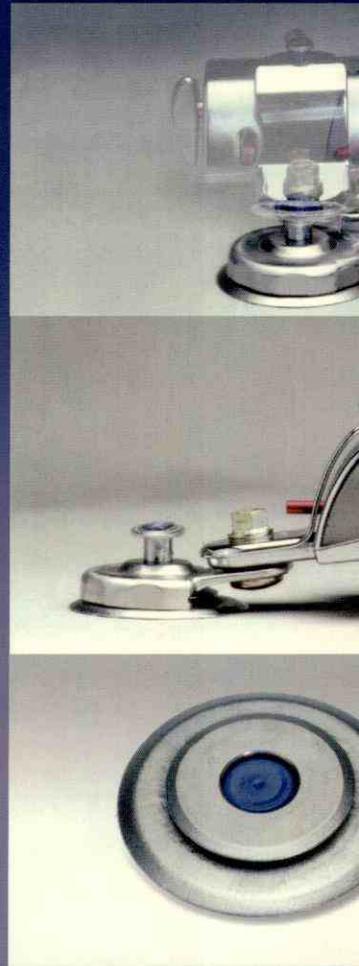
360 degree swivel for all directional usage

Low Profile

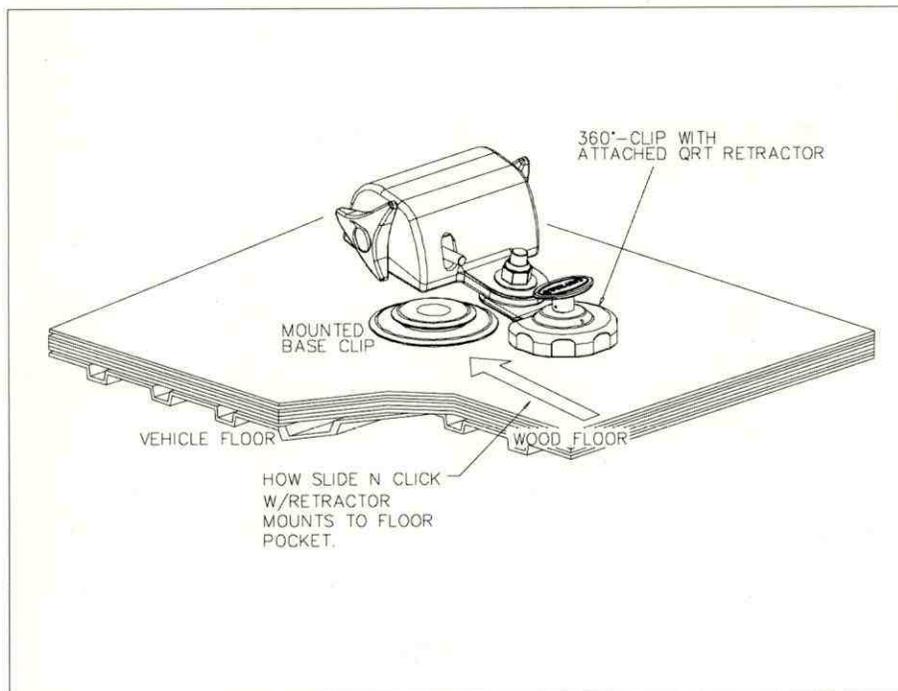
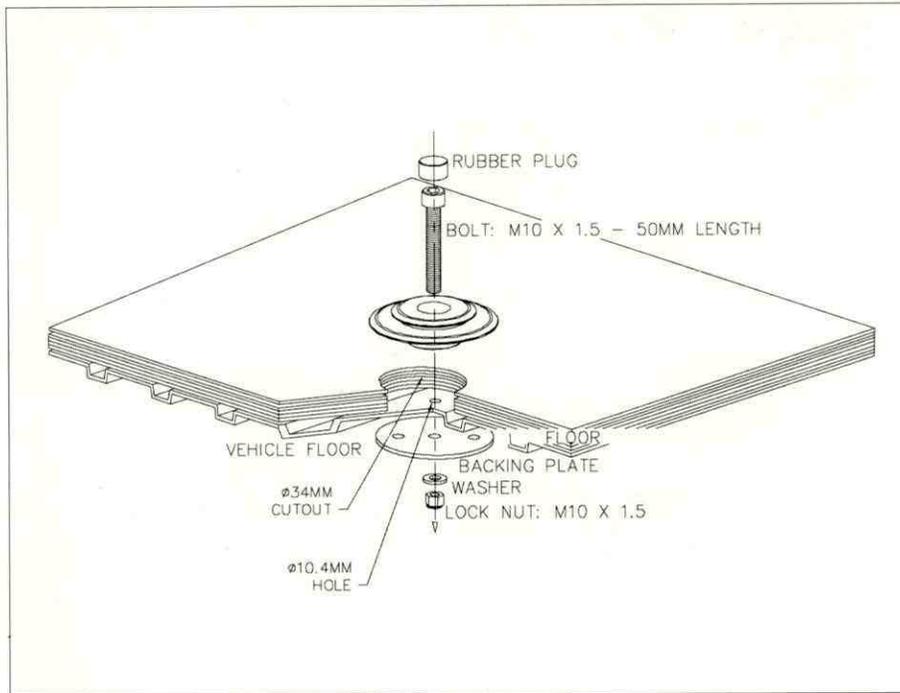
**Compact size
(great for small wheelchair spacing application)**

Positive lock

**Superior strength
Meets SAE J-2249,
ISO 10542**



patent pending



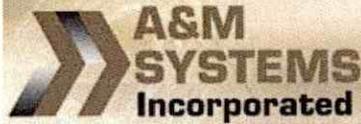
Visit us at www.qstraint.com for additional information.

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 Fax: 61-7-3892-6529



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Door Leaves



Product Features

- ┆ Distinctive door leaf design
- ┆ [Key-lock joint](#)
- ┆ Corrosion resistance through use of aluminum, stainless steel, and zinc plating
- ┆ [Torque arm](#) on upper hinge
- ┆ [Tempered glass](#)
- ┆ Tough, clear coat, anodized finish (204 R1 rated)
- ┆ [Radiused edge](#) for clean mating to seal
- ┆ Ambidextrous! (Use in either forward or aft position)

Harmony of Movement

- ┆ Our design produces completely [perpendicular door opening](#)--always.
- ┆ Forward door opens first and closes last--always.
- ┆ No need to rely on spring-loaded push-pull rods--ever.

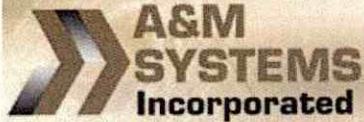
Secure Closing

- ┆ Our design ensure an unequalled, strong closing.
- ┆ The actuator will reliably hold the door shut, even at highway speeds.

Serviceability

- ┆ The reliability of the design,
- ┆ together with the ease-of-access,
- ┆ and the documentation tools we provide,

National Bus Sales & Service
6600 Reams Road
Charlotte, NC 28217



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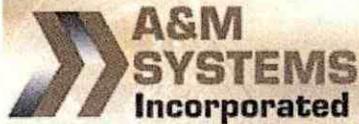
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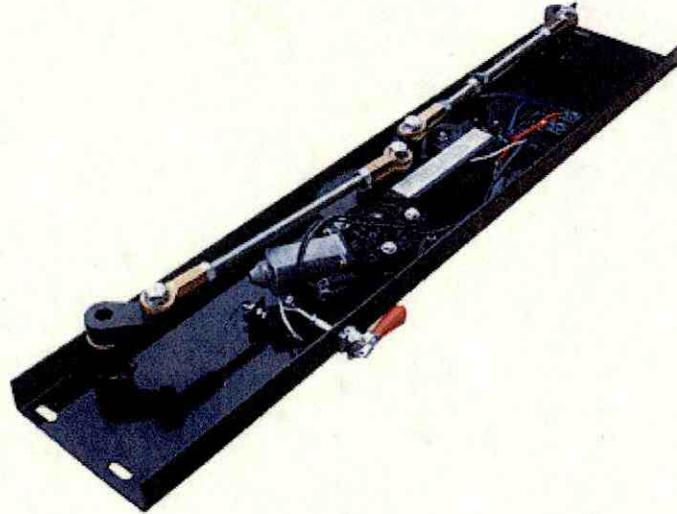
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Electric Door Actuators



Product Features

- ┆ Low-profile design
- ┆ Powder-coated base plate
- ┆ Plated push rods
- ┆ Permanently lubricated pivot points
- ┆ [Motor Control PC Board](#)
- ┆ [Proprietary, heavy-duty motor](#)
- ┆ [Available remote control](#)
- ┆ 1-year warranty
- ┆ New! Optional Auto Reopen Switch

Harmony of Movement

- ┆ Our design produces completely perpendicular door opening--always.
- ┆ Forward door opens first and closes last--always.
- ┆ No need to rely on spring-loaded push-pull rods--ever.

Secure Closing

- ┆ Our design ensure an unequalled, strong closing.
- ┆ The actuator will reliably hold the door shut, even at highway speeds.

Serviceability

- ┆ The reliability of the design,
- ┆ together with the ease-of-access,
- ┆ and the documentation tools we provide,
- ┆ work together to create unparalleled serviceability.

Maintenance

Minimal periodic maintenance of this product is recommended. The frequency varies, of course, by climate and use. Periodically **inspect** the entire mechanism.



25161 Leer Drive • Elkhart, IN 46514 • p: 574.970.6300 • f: 574.266.5866 • goshencoach.com

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

<u>STD.</u>	<u>Description</u>
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





Test Lab ACC Climate Control, Inc.

Client: Goshen Coach <i>Address: 25161 Leer Drive, Elkhart, IN 46514</i>	
Test(s) Name & Reference Standards: Federal Motor Vehicle Safety Standard (FMVSS) 220 July 16, 1991	
Vehicle Tests Conducted on: Goshen Coach - GCII, 2012 Chevy G4500 Express, 6.0L V8 OHV 32V Turbo Diesel Bus	
Model: GCII	Engine: 6.0L V8 OHV 32V Turbo Diesel
VIN: 1GB6G5BL7C1138552	

	Name, Title	Signature	Company
Test Conducted By:	Rodd Lehman, Test & Development Engineer	<i>Rodd Lehman</i>	ACC Climate Control, Inc.
Test Approved By:			ACC Climate Control, Inc.

Test number	ISO2012-009
Date	4/9/2012

Any additions, alterations, or unauthorized use of excerpts from this report are expressly forbidden.

This test report pertains only to the vehicle(s) tested. It remains the sole responsibility of the manufacturer to provide a product consistent to that which was tested

ISO/IEC 17025:2005 ACLASS Accredited
Certificate AT-1361



Automotive Climate Control • 22428 Elkhart East Blvd. • P.O. Box 1905 • Elkhart, IN 46515-1905
P(574) 264-2190 • F(574) 266-6744 • sales@accclimatecontrol.com • www.accclimatecontrol.com



Test Lab

ACC Climate Control, Inc.

1. Objective

To demonstrate that the static strength of the vehicle meets or exceeds the minimum requirements of structural integrity as required by FMVSS 220 (TP-220-02 July 16,1991).

2. Test Equipment - *Check all equipment for calibration compliance*

- 2.1 Kestrel Pocket weather tracker. Model 4000 (TL016)
- 2.2 "The Crusher" (TL058)
- 2.3 3pc - Noga Dial Indicators (TL001, TL002, TL003)
- 2.4 Tape Measure
- 2.5 4 - 20K lb Load Cells and Readouts (TL023-TL030)
- 2.6

3. Test Specimen

The bus is a Goshen Coach GCII model, 18 passenger bus, with a 187" wheelbase, built on a 2012 Chevy G4500 Express, 6.0L V8 turbo diesel chassis. The client provided an unloaded vehicle weight of **10,176 lbs.** The Vehicle as provided is structurally complete. See provided drawings for further details.

4. Test Set-Up

Reference following page(s) for instructions.

5. Procedure & Test Results

Reference following page(s) for instructions.

6. Conclusions

The Vehicle (as provided by the client):

Goshen Coach - GCII, 2012 Chevy G4500 Express, 6.0L V8 OHV 32V Turbo Diesel Bus

Passes Federal Motor Vehicle Safety Standard (FMVSS) 220 July 16,1991

7. Pictures

Take Pictures to document test procedure.



Test Lab

ACC Climate Control, Inc.

Initial: <u>RDL</u>	<u>FMVSS 220</u>	
Date: <u>4/9/12</u>	<u>School Bus Rollover Protection</u>	
Tested For: <u>Goshen Coach</u>	Temperature: <u>71.8°F</u>	
Date: <u>4/9/2012</u>	Humidity: <u>37.20%</u>	
Chassis: <u>GCI</u>		
Engine: <u>6.0L V8 OHV 32V Turbo Diesel</u>		
VIN: <u>1GB6G5BL7C1138552</u>		
<u>10,176 (lbs.)</u>	<i>Unloaded Vehicle weight determined by:</i>	
	<input checked="" type="checkbox"/>	Client provided high estimate based on vehicle
	<input type="checkbox"/>	Actual measured weight
Test Set-Up		
4.0	<input checked="" type="checkbox"/>	Determine Load application device to be used and set up fixture.
	<input checked="" type="checkbox"/>	<u>10K lbs. GVWR and over use 36" wide application plate</u>
		<u>Under 10K lbs. GVWR Use application plate that covers entire roof.</u>
4.1	<input checked="" type="checkbox"/>	Be sure the Force Application Plate is raised sufficiently to work under and blocked in place for added safety.
4.2	<input checked="" type="checkbox"/>	Allow pump motor to idle for a half hour before applying test load to allow the hydraulic fluid to warm up sufficiently.
4.3	<input checked="" type="checkbox"/>	Position the vehicle under the force application plate. Make sure to center the vehicle under the platform.
4.4	<input checked="" type="checkbox"/>	Block the chassis to keep the vehicles suspension from adding to the deflection.
4.5	<input checked="" type="checkbox"/>	If testing finished vehicle place a protective sheet (foam carpet pad or similar) between the force application plate and the vehicles roof surface to prevent scratches or any other preventable damage.
4.6	<input checked="" type="checkbox"/>	Set dial Indicators to measure vertical and horizontal displacement: One (1) at the center of each side and One (1) centered inside
4.7	<input checked="" type="checkbox"/>	Once ready for test. Clear the area and Un-block the force application plate.



Test Lab

ACC Climate Control, Inc.

Initial: RDL
Date: 4/9/12

FMVSS 220

School Bus Rollover Protection

Procedures & Test Results - Roof Load

- 5.1 While force application plate is suspended and level (parallel to the vehicle roof) in the air zero all load cell meters.
- 5.2 With all the vehicle doors and windows closed lower the force application plate until 500 lbs. registers on the meters and take initial deflection measurements.
- 5.3 Record elevation readings of all four corners of the roof, and on the three dial indicators.
- | | | | |
|---------------------------|--------------|-------------------------|--------------------|
| Curb Side Dial Indicator: | <u>0.494</u> | Curb Side Front Corner: | <u>120.563</u> in. |
| Road Side Dial Indicator: | <u>0.492</u> | Curb Side Rear Corner: | <u>123.500</u> in. |
| Center Dial Indicator: | <u>1.000</u> | Road Side Front Corner: | <u>119.938</u> in. |
| | | Road Side Rear Corner: | <u>123.250</u> in. |
- 7.1 Take pictures of test procedure for documentation.
- 5.4 Apply .75 x's the unloaded vehicle weight of the completed vehicle to the roof structure.
- 5.5 Record elevation readings of all four corners of the roof, and on the three dial indicators.
- | | | | |
|---------------------------|--------------|-------------------------|--------------------|
| Curb Side Dial Indicator: | <u>0.659</u> | Curb Side Front Corner: | <u>119.313</u> in. |
| Road Side Dial Indicator: | <u>0.754</u> | Curb Side Rear Corner: | <u>122.500</u> in. |
| Center Dial Indicator: | <u>1.688</u> | Road Side Front Corner: | <u>119.313</u> in. |
| | | Road Side Rear Corner: | <u>122.375</u> in. |
- 7.2 Take pictures of test procedure for documentation.
- 5.6 Apply 1.5 x's the unloaded vehicle weight of the completed vehicle to the roof structure.
- 5.7 Record elevation readings of all four corners of the roof, and on the three dial indicators.
- | | | | |
|---------------------------|--------------|-------------------------|--------------------|
| Curb Side Dial Indicator: | <u>0.958</u> | Curb Side Front Corner: | <u>118.000</u> in. |
| Road Side Dial Indicator: | <u>1.204</u> | Curb Side Rear Corner: | <u>121.250</u> in. |
| Center Dial Indicator: | <u>2.688</u> | Road Side Front Corner: | <u>118.063</u> in. |
| | | Road Side Rear Corner: | <u>121.438</u> in. |
- 7.3 Take pictures of test procedure for documentation.
- 5.8 With full load applied open and close all exit doors and Record Force and motion required to open Emergency exits and egress windows.
- | | | | |
|--------------------------------|--------------------|-----------------|------|
| Curb Side Front Egress Window: | <u>5</u> | Emergency Exit: | lbs. |
| Curb Side Rear Egress Window: | <u>6</u> | Emergency Exit: | lbs. |
| Road Side Front Egress Window: | <u>10</u> | Emergency Exit: | lbs. |
| Road Side Rear Egress Window: | <u>14</u> | Emergency Exit: | lbs. |
| Rear Egress Window: | <u>5 PS / 5 DS</u> | Emergency Exit: | lbs. |
- 7.4 Take pictures of test procedure for documentation.



Test Lab

ACC Climate Control, Inc.

Initial: RDL
 Date: 4/9/12

FMVSS 220

School Bus Rollover Protection

5.9 Check for any structural or component damage while load is applied.

7.5 Take pictures of and note any damage.

5.10 Release load until only 500 lbs. remains.

5.11 Record elevation readings of all four corners of the roof, and on the three dial indicators.

Curb Side Dial Indicator: <u>0.538</u>	Curb Side Front Corner: <u>120.000</u> in.
Road Side Dial Indicator: <u>0.628</u>	Curb Side Rear Corner: <u>122.875</u> in.
Center Dial Indicator: <u>1.313</u>	Road Side Front Corner: <u>119.563</u> in.
	Road Side Rear Corner: <u>123.000</u> in.

7.6 Take pictures of test procedure for documentation.

5.12 Raise the force application plate sufficiently to work under.
 Block in place for added safety.

5.13 With load removed open and close all exit doors and Record Force and motion required to open Emergency exits and egress windows.

Curb Side Front Egress Window: <u>4</u>	Emergency Exit: lbs.
Curb Side Rear Egress Window: <u>8</u>	Emergency Exit: lbs.
Road Side Front Egress Window: <u>9</u>	Emergency Exit: lbs.
Road Side Rear Egress Window: <u>7</u>	Emergency Exit: lbs.
Rear Egress Window: <u>6 PS / 4 DS</u>	Emergency Exit: lbs.

5.14 With load removed check for any structural or component damage.

7.7 Take pictures of test procedure for documentation and note any damage

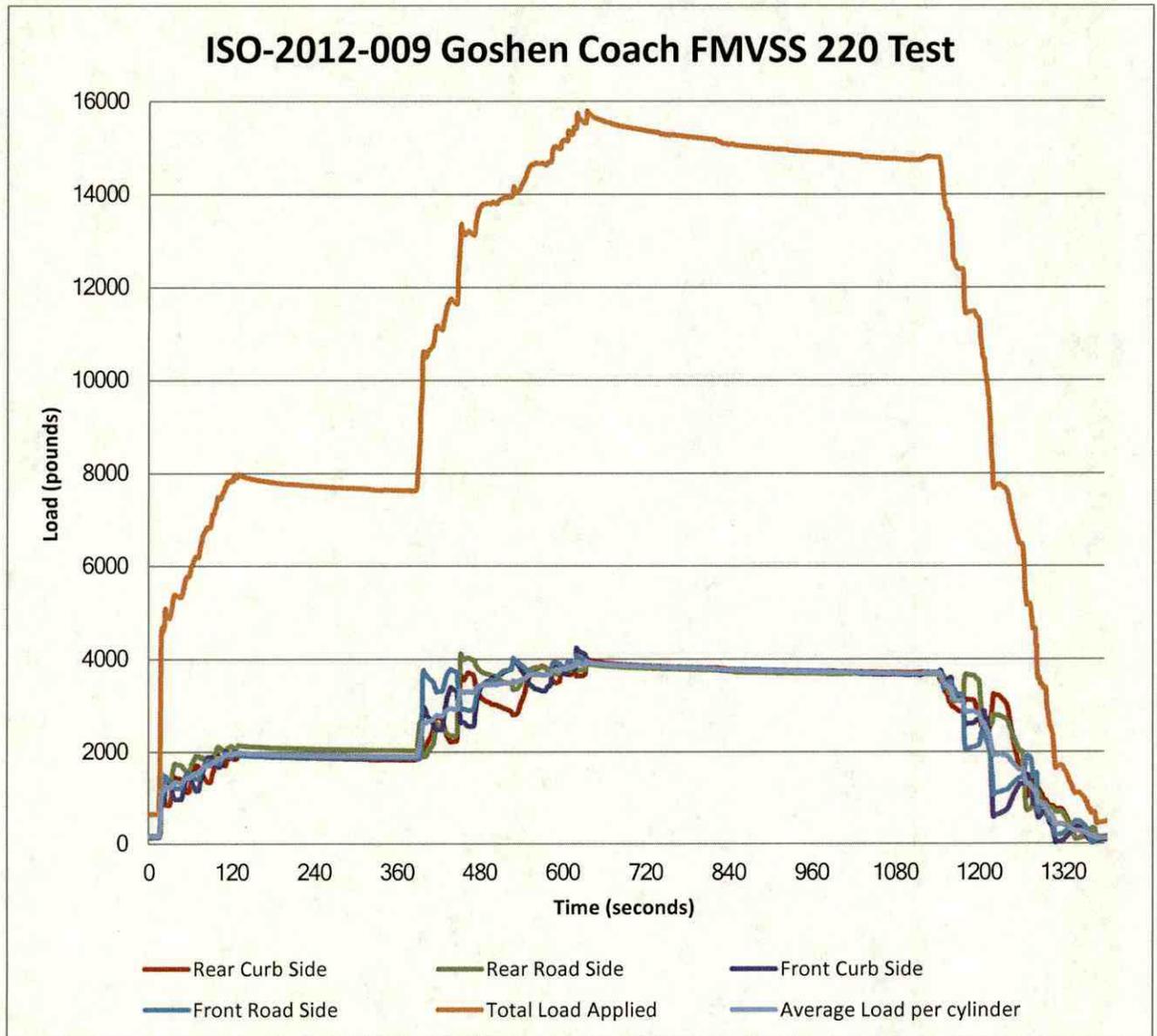
Load Applied per cylinder (lbs)	125 x 4	1,908 x 4		3,816 x 4		125 x 4	
5.15	Initial 500 lbs.	.75 x Unloaded Vehicle Weight= 7,632 lbs.		1.5 x Unloaded Vehicle Weight= 15,264 lbs.		Recovery 500 lbs.	
<i>Deflection is measured in inches</i>							
Road Side Front Corner	119.938	119.313	-0.625	118.063	-1.875	119.563	-0.375
Road Side Rear Corner	123.250	122.500	-0.750	121.438	-1.813	123.000	-0.250
Curb Side Front Corner	120.563	119.313	-1.250	118.000	-2.563	120.000	-0.563
Curb Side Rear Corner	123.500	122.500	-1.000	121.250	-2.250	122.875	-0.625
Road Side Middle	0.492	0.754	0.262	1.204	0.712	0.628	0.136
Curb Side Middle	0.494	0.659	0.165	0.958	0.464	0.538	0.044
Interior (Ceiling)	1.000	1.688	0.688	2.688	1.688	1.313	0.313
			0		0		0
			0		0		0



Test Lab ACC Climate Control, Inc.

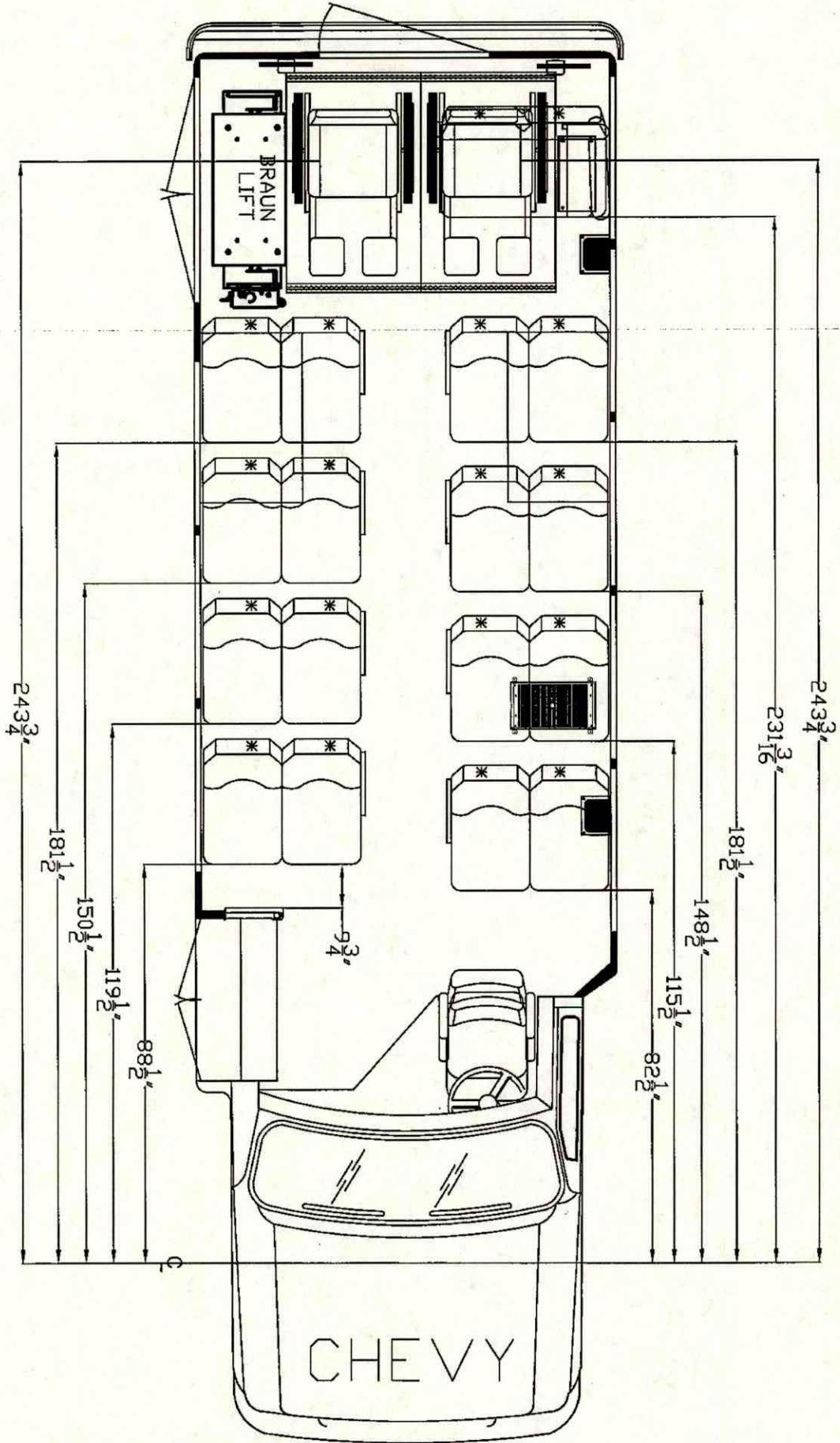
Initial: *RDL*
Date: 4/9/12

FMVSS 220 School Bus Rollover Protection



Maximum Load Applied: 15,743 lbs.

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



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Drawing Name / Description: FLOOR PLAN, GCII CHEVY 18P/2WC/187WB/314BDY

Unit Number: _____

Models: _____

Work Instruction Reference: _____

Scale: N/A

Units: INCHES

Drawn: RRP

Date: 01/19/09

Class Code: _____

File Location: G/2008/GCII/CHEVY/187/314

Reference: _____

GC Part Number: _____

Drawing Number: **0126928**

Revision: **A**

Sheet 1 of 1

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Drawing Name / Description: FRAME, CHEVY GCII CURB SIDE WALL 187WB/314BDY

Unit Number: 25161 Leer Date: 01/20/09

Model: 187WB/314BDY

Work Instruction Reference: N/A

Scale: N/A

Units: INCHES

Drawn: JH

Date: 01/20/09

Configuration: 01269935

Sheet 1 of 1

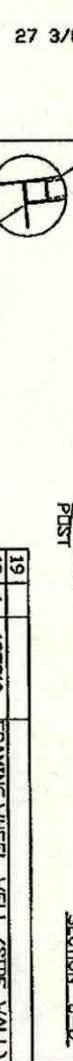
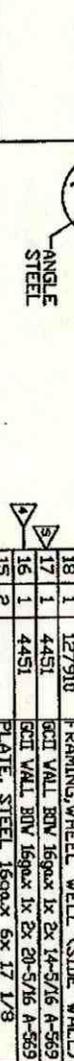
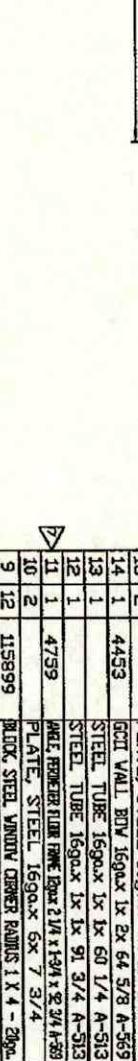
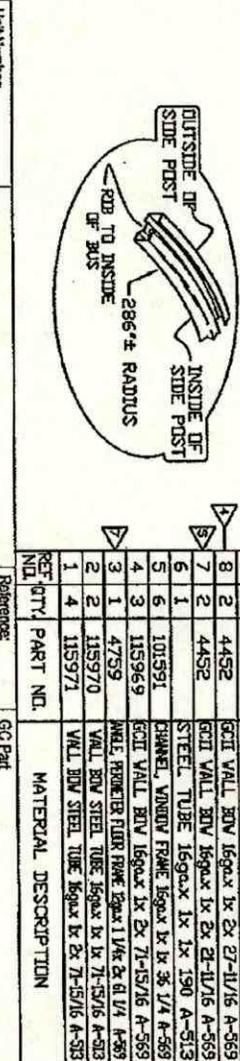
Revision: A

Material Description: MATERIAL DESCRIPTION

Reference: GC Part Number: 01269935

Part No. 187WB/314BDY

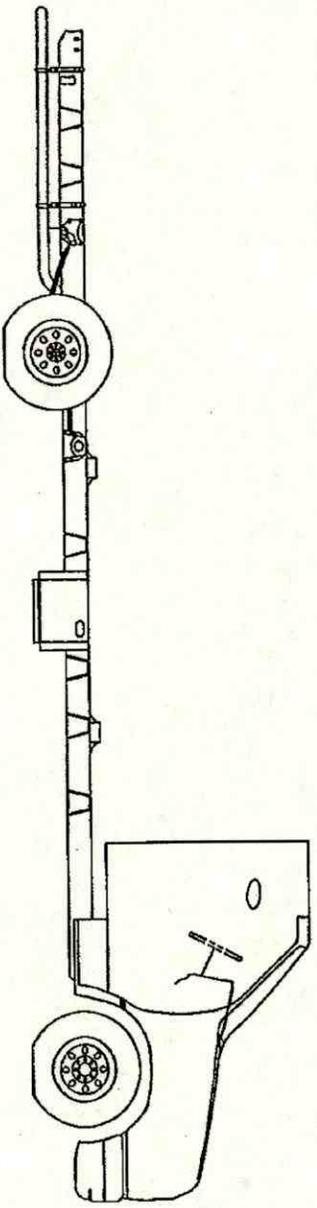
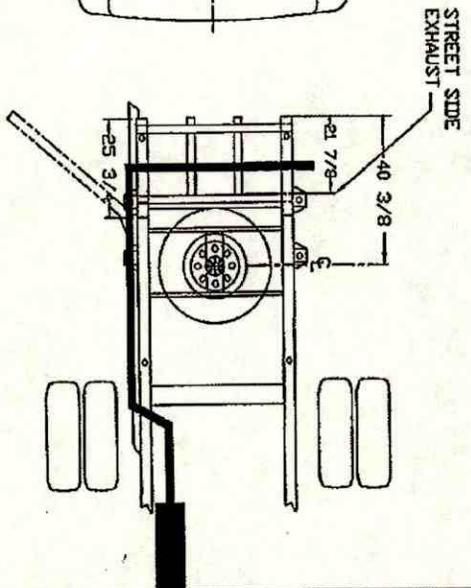
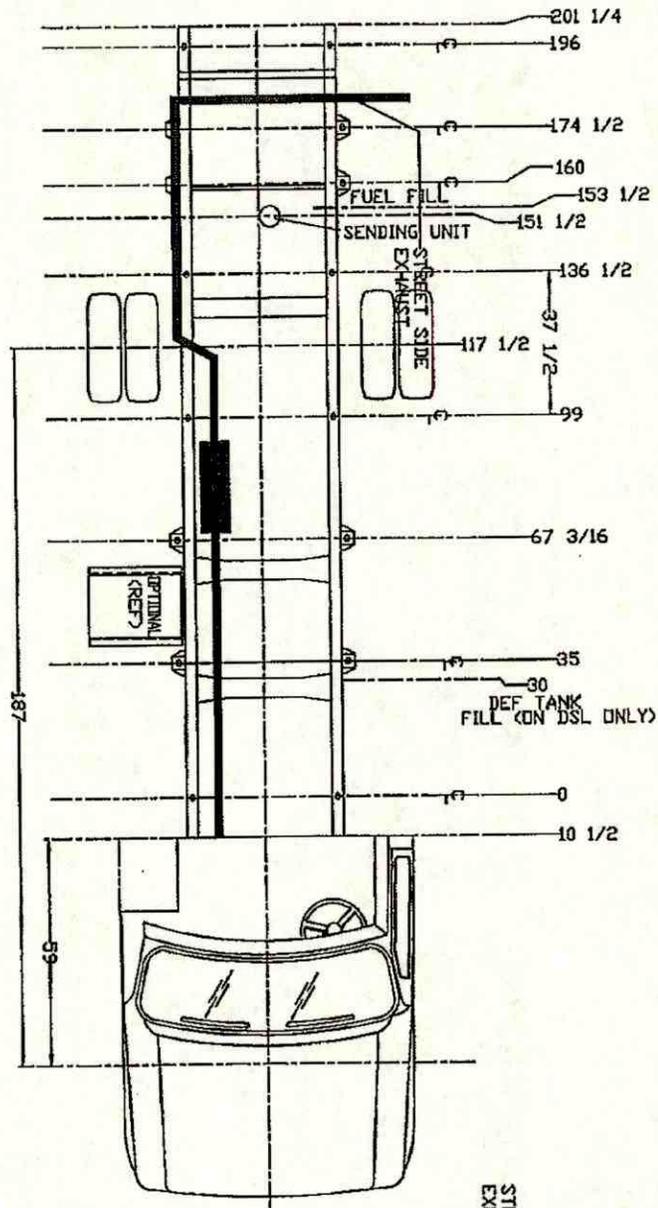
NOTE:
 1) VELVED FROM EXTERIOR SIDE.
 2) WINDOW SIZE (HEIGHT) IS VARIABLE, SEE SALES ORDER FOR PROPER SIZE DESIGNATION.
 3) 36" = 36 1/4" - 0+1/16" OPENING HEIGHT
 42" = 42 1/4" - 0+1/16" OPENING HEIGHT
 4) USE FOR 36" WINDOWS ONLY.
 5) USE FOR 42" WINDOWS ONLY.
 6) ANGLE TO BE WELDED FLUSH WITH SIDE WALL.
 7) WALL BOW REFERENCE CHART "SEE DRAWING 108737"
 8) REMOVE STL. TUBE IN DOOR AREA AFTER INSTALLATION OF SIDEWALL, BUT BEFORE INSTALLING DOOR JAM ASM.



Rev.	Revision Description	By	Date	ECN / PCN
1				N/A
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				

Part No.	Description	Quantity	Material
18	FRAMING, WHEEL WELL (SIDE WALL)	1	127910
17	GCII WALL BOW 16ga x 1x 2x 14-5/16 A-569	1	4451
16	GCII WALL BOW 16ga x 1x 2x 20-5/16 A-569	1	4451
15	PLATE, STEEL 16ga x 6x 17 1/8	2	4453
14	GCII WALL BOW 16ga x 1x 2x 64 5/8 A-569	1	1690x
13	STEEL TUBE 16ga x 1x 1x 60 1/4 A-513	1	1690x
12	STEEL TUBE 16ga x 1x 1x 91 3/4 A-513	1	1690x
11	WALL BOWER TUBE 16ga x 1x 1x 214 1/4 x 214 1/4	1	4759
10	PLATE, STEEL 16ga x 6x 7 3/4	2	115899
9	GCII WALL BOW 16ga x 1x 2x 27-11/16 A-569	2	4452
8	GCII WALL BOW 16ga x 1x 2x 21-11/16 A-569	2	4452
7	STEEL TUBE 16ga x 1x 1x 190 A-513	1	101591
6	CHANNEL, WINDOW FRAME 16ga x 1x 3x 1/4 A-569	1	115969
5	WALL BOWER TUBE 16ga x 1x 1x 1/4 A-569	1	4759
4	WALL BOW STEEL TUBE 16ga x 1x 1x 71-5/16 A-513	2	115970
3	WALL BOW STEEL TUBE 16ga x 1x 1x 71-5/16 A-513	2	115971
2			
1			

G4500



Rev.	Revision Description	By	Date	EN/PPCN

DO NOT SCALE

Drawing Name / Description: LAYOUT, CHASSIS CHEVY 187WB/314BDY "STANDARD FLOOR"

Unit Number: 25161 Last Date: 01/21/09

Model: GOSHEN COACH

Scale: N/A

Unit: INCHES

Drawn: JH

Date: 01/21/09

Configuration: GC Part Number: 0126931

File location: G:\CHASSIS\CHEVY\GCII\159-297

Sheet 1 of 1

Revision: A

Tolerances: ±.1/16" ±.1"

Work Instruction Reference: N/A

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Tolerances:
+/- 1/16"
+/- 1"

Work Instruction Reference: N/A
Scale: N/A
Units: INCHES
Drawn: JH
Date: 01/20/09
Revision: A

FRAMING, FLOOR FRAME, 187WB/314BDY "STANDARD"

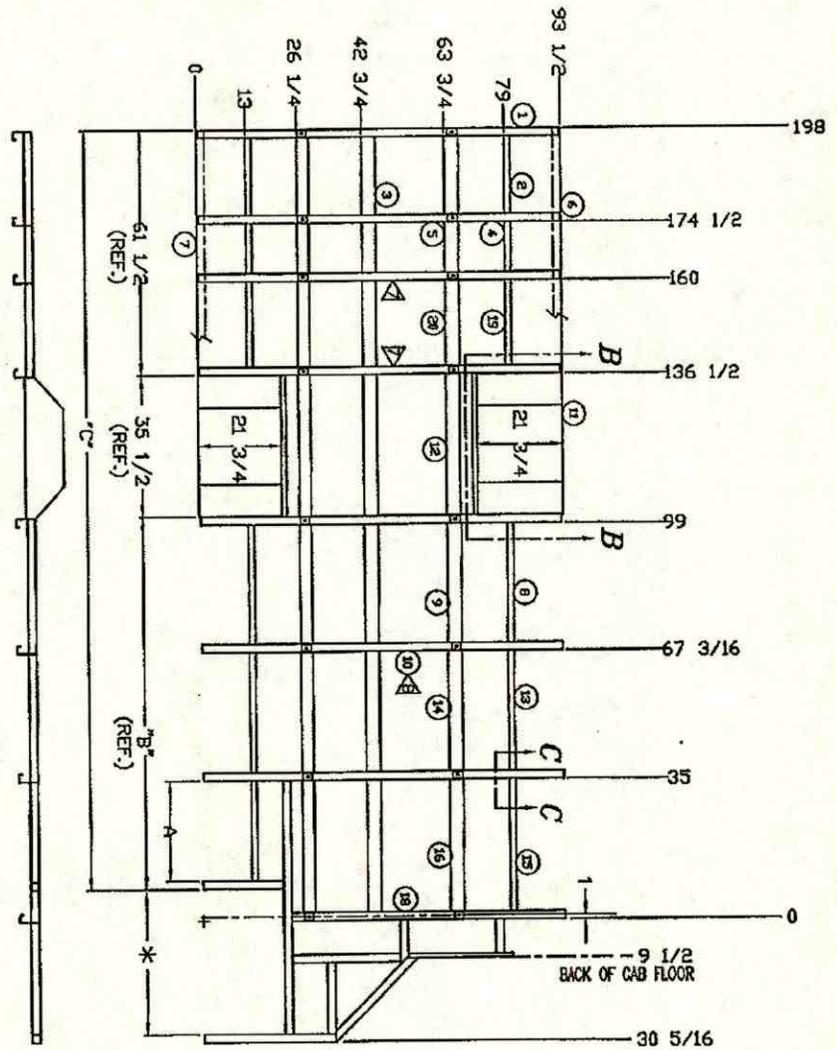
Unit Number: Models: Drawing Name / Description:

29161 Leer Dine
Ehank, IN 46574
(674) 970-0063

Drawing Number: **0126933**
Configuration: C.D./FLOORS/CHEVY/GCII/187-314
Sheet 1 of 1

- NOTES:**
- 1- VIEWED FROM INTERIOR SIDE OF UNIT.
 - 2- THIS FRAME TO BE USED ON FLAT REAR WALL 21 PASSENGER MODELS ONLY.
 - 3- SEE DETAIL-A FOR ANGLE CUT INFORMATION.
 - 4- SEE DETAIL-B FOR ANGLE CUT INFORMATION.
 - 5- LOCATION OF A/C BRACKETS: ONE MOUNT FLUSH WITH OUTSIDE EDGE OF CROSSMEMBER, THE OTHER MOUNTS 14 3/4" IN FROM OUTSIDE EDGE OF FLOOR FRAME ASSEMBLY.
 - 6- SEE SIDE WALL DRAWINGS FOR PERIMETER ANGEL PLACEMENT.
 - 7- FUEL TANK X-MEMBER W/REAR TANK LOCATION.
 - 8- FUEL TANK X-MEMBER W/FRONT TANK LOCATION.

CROSSMEMBER DIRECTION



Rev	Revision Description	By	Date	EQI/PPON

MATRIX DETAIL	DOOR SIZES		
DIMENSIONS R.O.	30"	36"	43"
A	31"	25"	18"
B	99"	93"	86"
C	196"	190"	183"

REF. NO.	PART NO.	MATERIAL DESCRIPTION
20	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 25-3/8 A-589
19	2	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 25-3/8 A-589
18	1	3437 CROSSMEMBER FLOOR FRAME 120x1x4813 x 69 13/16 A-589
17		
16	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 24 13/16 A-589
15	1	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 24 13/16 A-589
14	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 31-15/16 A-589
13	2	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 31-15/16 A-589
12	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 35 1/2" A-589
11	2	3005 WHEEL WELL GCHI
10	1	3438 CROSSMEMBER FLOOR FRAME 120x1x4813 x 69 A-589
9	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 33 7/16 A-589
8	2	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 33 7/16 A-589
7	1	SEE SIDE WALL DRAWINGS FOR PERIMETER ANGEL PLACEMENT
6	1	SEE SIDE WALL DRAWINGS FOR PERIMETER ANGEL PLACEMENT
5	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 14-5/16 A-589
4	2	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 14-5/16 A-589
3	3	6551 CHANNEL FLOOR FRAME 120x1x3 1/2x 23-3/16 A-589
2	2	4754 CHANNEL FLOOR FRAME 120x1x1 1/2x 23 3/16 A-589
1	6	3437 CROSSMEMBER FLOOR FRAME 120x1x4813 x 69 A-589

DO NOT SCALE

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UNIT NUMBER: 25161 Leer Drive
Elkhart, IN 46514
(574) 970-8300

DRAWING NUMBER: 0129739

REVISION: A

DATE: 03/30/11

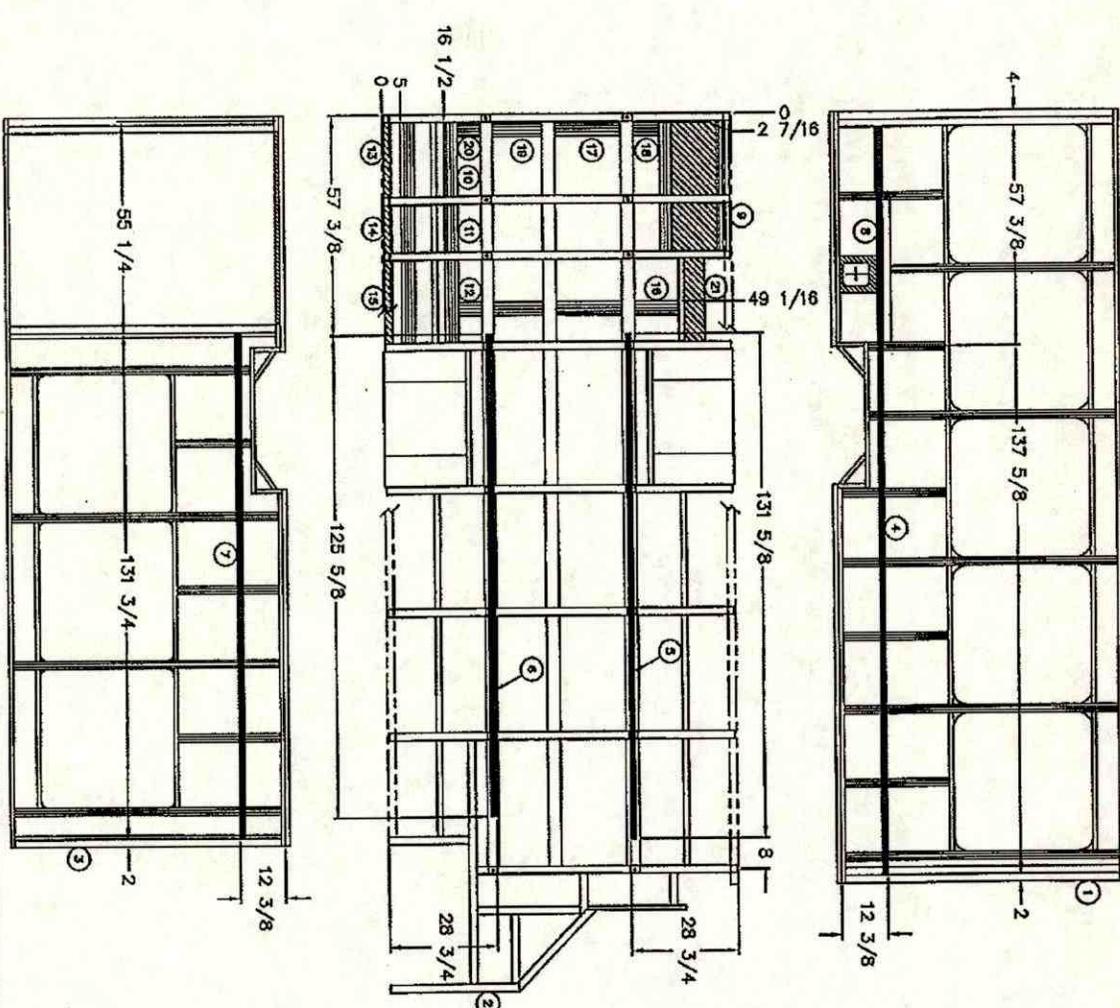
SCALE: N/A

UNITS: INCHES

DRAWN BY: JH

FILE LOCATION: SEATRACK/CHEVY/GCII/187-314

SHEET 1 OF 1



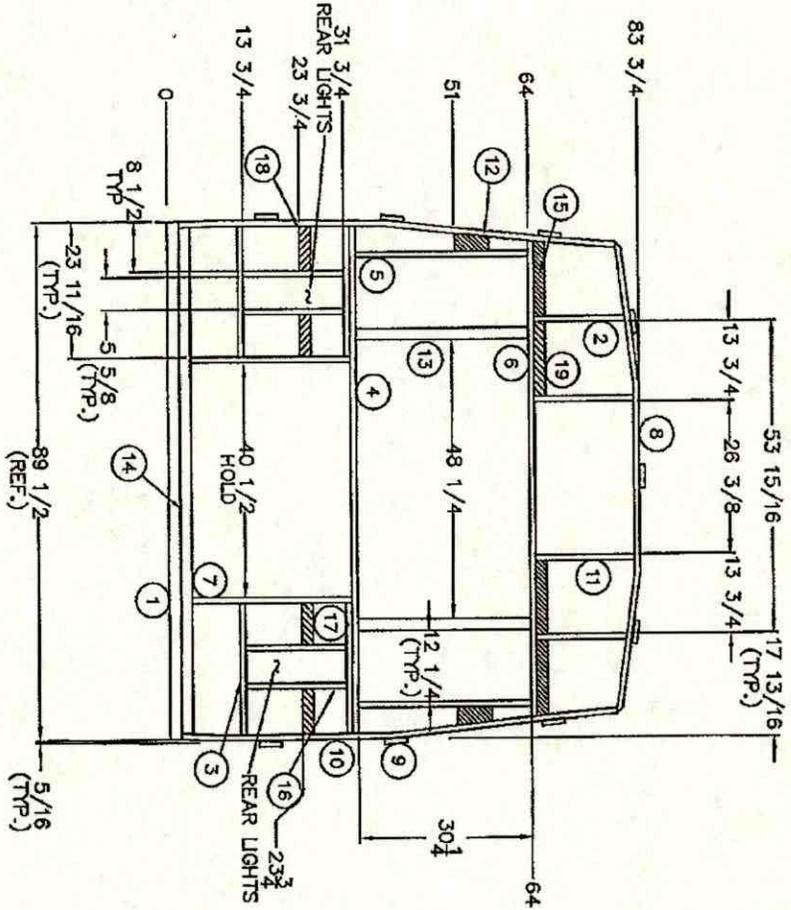
REF	QTY	PART NO.	MATERIAL DESCRIPTION
21	1	101618	STEEL PLATE, 11ga. X 5 1/2 X 21 1/2
20	2	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 6 1/4
19	3	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 13 1/4
18	1	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 6 13/16
17	3	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 17 1/2
16	1	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 11 3/4
15	1	101618	STEEL PLATE, 11ga. X 2 X 21 1/2
14	1	101618	STEEL PLATE, 11ga. X 2 X 12 1/2
13	1	101618	STEEL PLATE, 11ga. X 2 X 19 1/2
12	2	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 23 1/4
11	2	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 14 1/4
10	2	101618	CHANNEL, 12ga. X 1 X 3 1/2 X 23
9	2	119559	FLOOR RE-ENFORCEMENT FOR 3-STEP FLDWAY
8	1	101618	SEAT TRACK, 57 3/8
7	1	101618	SEAT TRACK, 131 3/4
6	1	101618	SEAT TRACK, 125 5/8
5	1	101618	SEAT TRACK, 131 5/8
4	1	101618	SEAT TRACK, 137 5/8
3	1	0126935	LAYOUT, RIGHT SIDEWALL
2	1	0120122	LAYOUT, FLOOR FRAME
1	1	0126523	LAYOUT, LEFT SIDEWALL

NOTES:

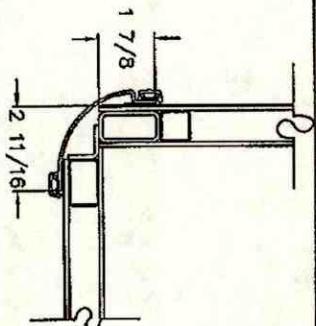
- VIEWED FROM INTERIOR OF UNIT.
- THIS FRAME USE WITH FLAT REAR WALL MODELS ONLY.

Rev.	Revision Description	By	Date	ECN/PECN
				N/A

Rev.	Revision Description	By	Date	ECN/PCN
A	TITLE BLOCK	ARS	09/01/05	N/A
B	ITEM #12 = 11 qc.	ARS	01/10/06	N/A



DETAIL, VERTICAL CORNER ASSY



REF	QTY	PART NO.	MATERIAL DESCRIPTION
27	1		SHEET, 11GA X 22 11/16 X 2 STL
26	2		SHEET, 11GA X 12 1/4 X 2 STL
25			
24			
23			
22			
21			
20			
19	2		SHEET, 11GA X 12 3/4 X 2 STL
18	2		SHEET, 11GA X 7 5/8 X 2 STL
17	2		SHEET, 11GA X 7 1/4 X 2 STL
16	4		TUBE, 16GA X 1 X 1 X 18 STL
15	2		SHEET, 16GAXX 12 2 1/2 X 2 STL
14	1		TUBE, 16GA X 1 X 2 X 87 1/2 STL
13	2		TUBE, 16GA X 1 X 2 X 30 1/4 STL
12	2		SHEET, 119q. X 6 X 6 5/8 STL
11	2		TUBE, 16GA X 1 X 1 X 17 5/8 STL
10	1		REAR WALL SIDEWALL BOW (GCIL)
9	9		ANGLE, 16GA X 1 X 1 X 4 STL
8	1		HEADER, PRE-BENT REAR WALL
7	2		TUBE, 16GA X 1 X 1 X 28 11/16 STL
6	1		TUBE, 16GA X 1 X 1 X 81 5/8 STL
5	2		TUBE, 16GA X 1 X 1 X 30 1/4 STL
4	1		TUBE, 16GA X 1 X 1 X 87 9/16 STL
3	4		TUBE, 16GA X 1 X 1 X 22 11/16 STL
2	2		TUBE, 16GA X 1 X 1 X 16 STL
1	1		TUBE, 16GA X 1 X 2 X 89 1/2 STL

NOTE:
 1- VIEWED FROM EXTERIOR.
 ▲ MOUNT TO INTERIOR SIDE OF WALL
 ▽ MOUNT TO EXTERIOR SIDE OF WALL

Drawing Name / Description:
 FRAMING, REAR WALL W/WINDOW

DO NOT SCALE

SIZE: **A**

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Tolerances:
 +/- 1/16"
 +/- 1"

Unless Noted Otherwise

Unit Number:
 Models:
 Work Instruction Reference:
 Scale: N/A
 Units: INCHES
 Drawn: ARS
 Date: 09/01/05



23161 Leer Drive
 Elkhart, IN 46514
 (574) 970-6300

Reference:
 GC Part Number:
 Drawing Number: **0107683B**
 Configuration: REAR WALLS/GCII
 Sheet 1 of 1



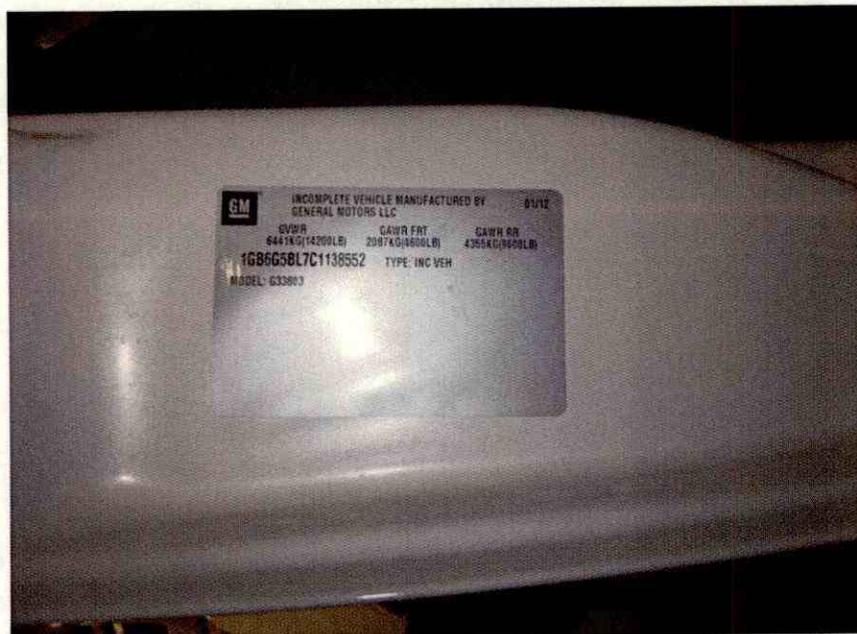
Test Lab ACC Climate Control, Inc.

Initial: *RDL*
Date: 4/9/12

FMVSS 220 School Bus Rollover Protection



Test Vehicle - setup



Test Vehicle Identification

Automotive Climate Control • 22428 Elkhart East Blvd. • P.O. Box 1905 • Elkhart, IN 46515-1905
P(574) 264-2190 • F(574) 266-6744 • sales@accclimatecontrol.com • www.accclimatecontrol.com



Test Lab
ACC Climate Control, Inc.

Initial: *RDL*

Date: 4/9/12

FMVSS 220

School Bus Rollover Protection



Test Vehicle - setup



Test Vehicle - setup

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Test Lab
ACC Climate Control, Inc.

Initial: *RDL*
Date: 4/9/12

FMVSS 220
School Bus Rollover Protection



Test Vehicle - setup



Test Vehicle - setup

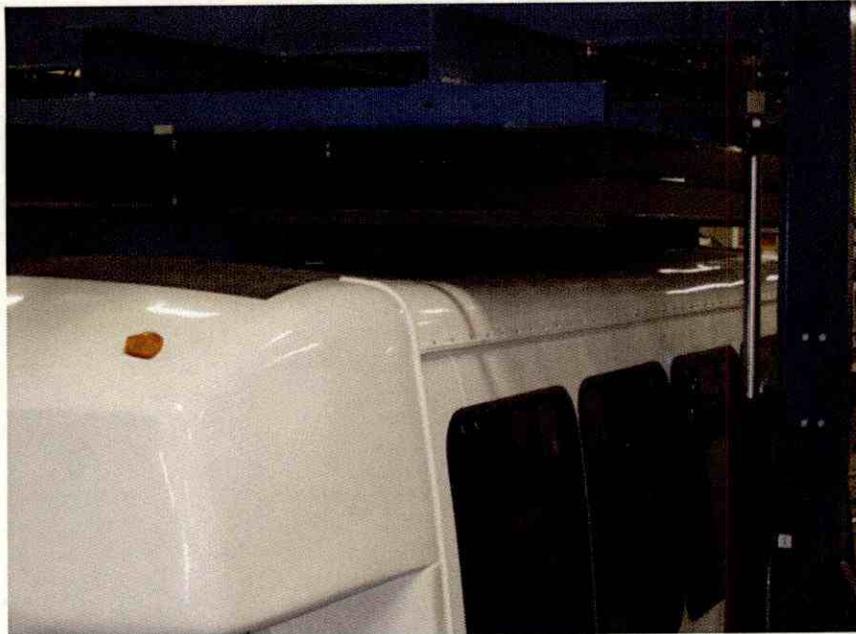
Automotive Climate Control • 22428 Elkhart East Blvd. • P.O. Box 1905 • Elkhart, IN 46515-1905
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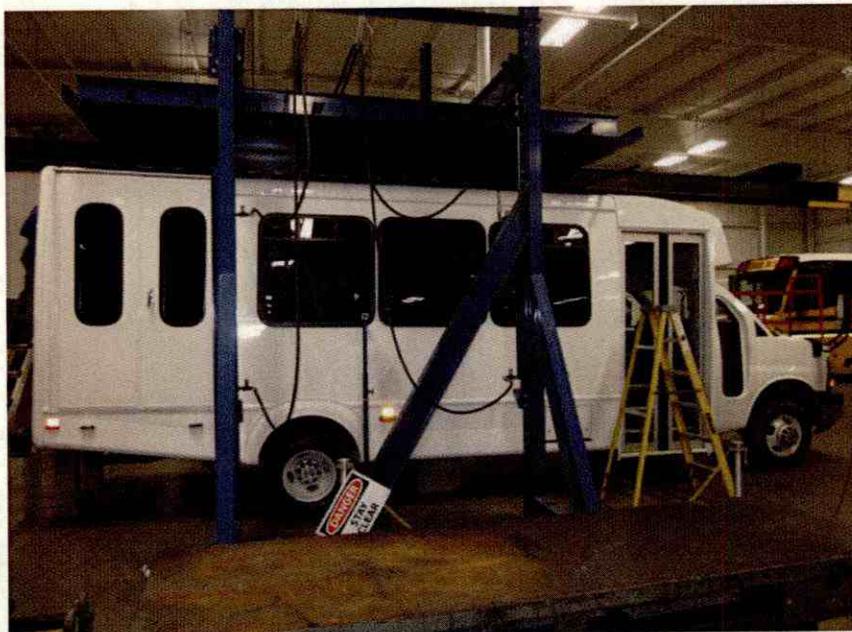
Test Lab
ACC Climate Control, Inc.

Initial: *RDL*
Date: 4/9/12

FMVSS 220
School Bus Rollover Protection



Test Vehicle - setup



Test Vehicle - setup

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**Test Lab
ACC Climate Control, Inc.**

Initial: *RDL*

Date: 4/9/12

FMVSS 220

School Bus Rollover Protection



Test Vehicle with .75 time the curb weight applied



Test Vehicle with .75 time the curb weight applied

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Test Lab ACC Climate Control, Inc.

Initial: *RDL*

Date: 4/9/12

FMVSS 220

School Bus Rollover Protection



Test Vehicle with 1.5 times the curb weight applied



Test Vehicle with 1.5 times the curb weight applied

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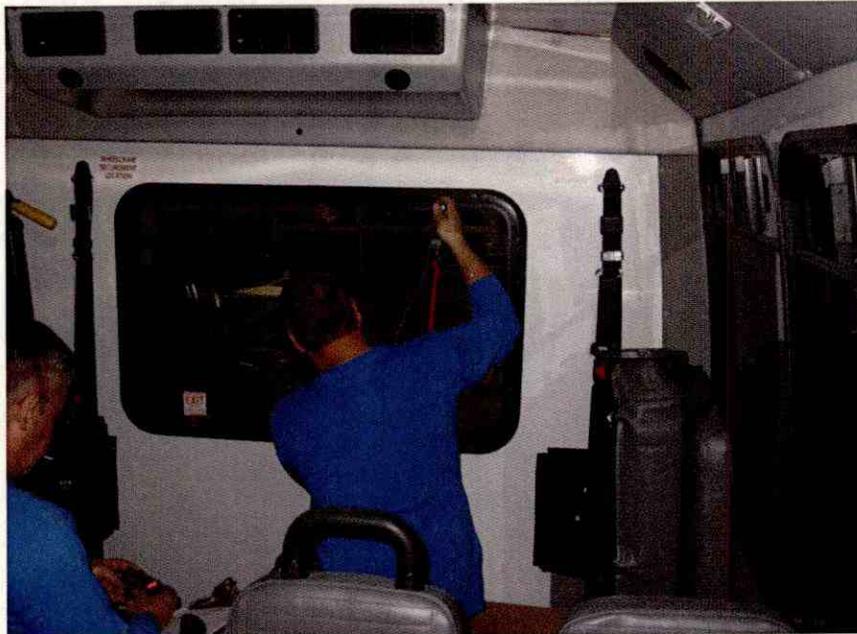
Test Lab ACC Climate Control, Inc.

Initial: *RDL*

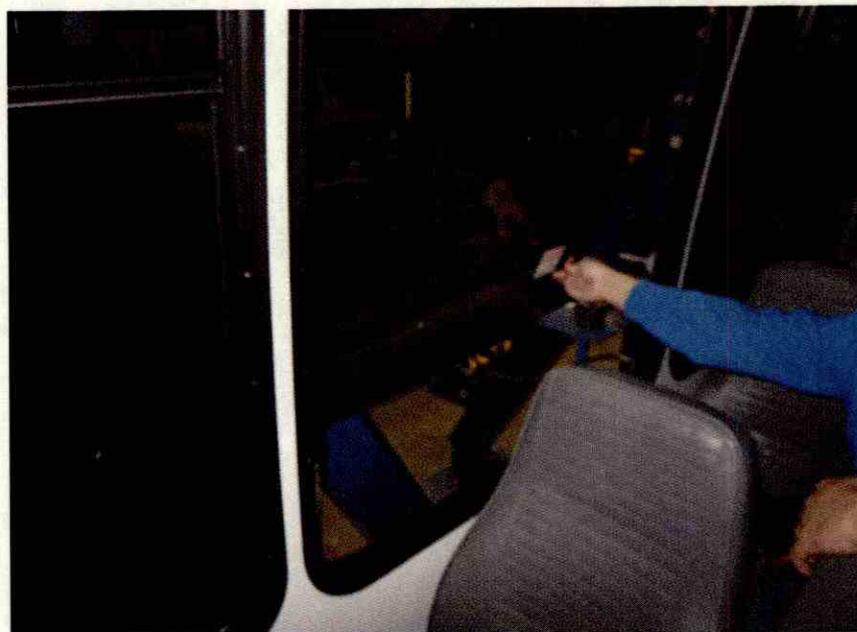
Date: 4/9/12

FMVSS 220

School Bus Rollover Protection



Test Vehicle with 1.5 times the curb weight applied - force measured to open the egress windows



Test Vehicle with 1.5 times the curb weight applied - all egress's were opened

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