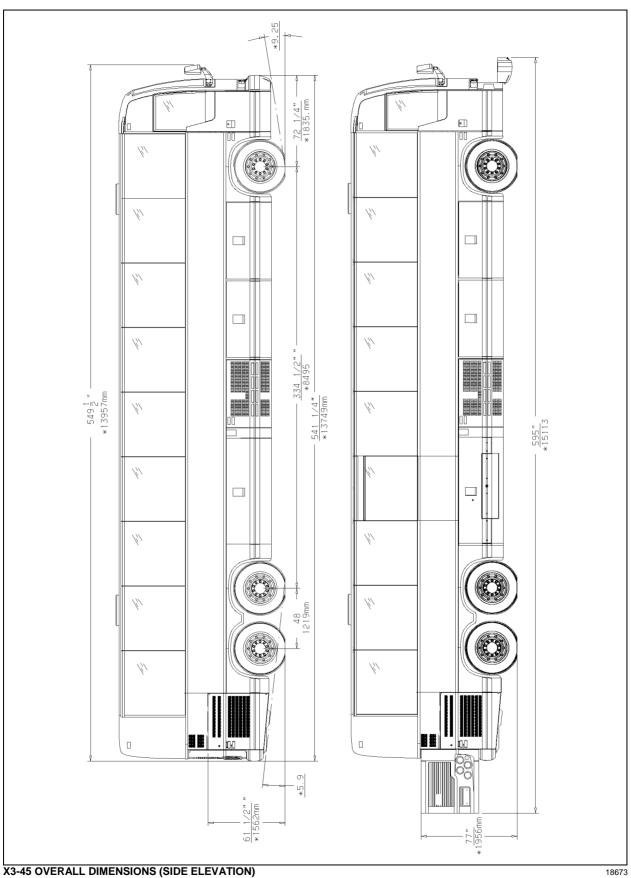
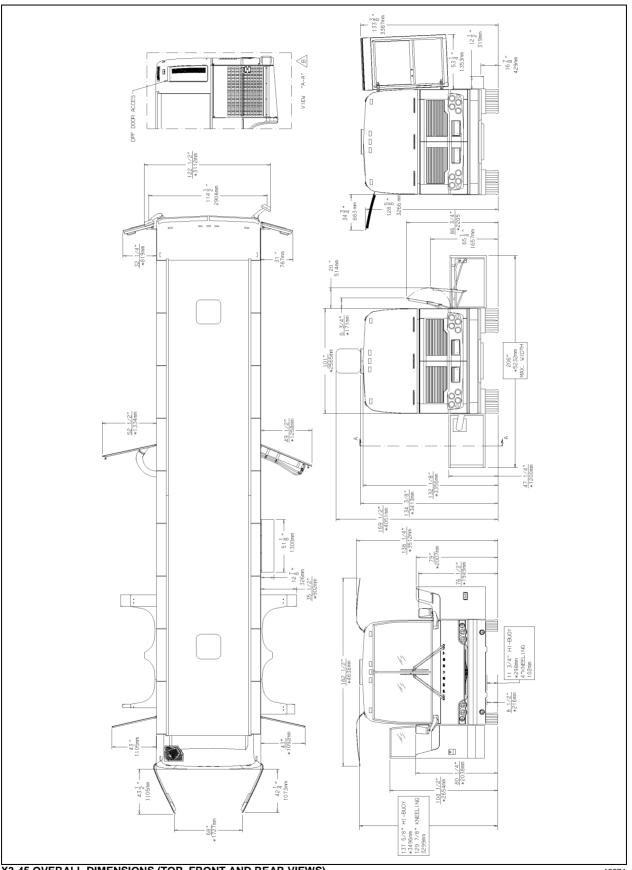
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X3-45 OVERALL DIMENSIONS (TOP, FRONT AND REAR VIEWS)

DIMENSIONS AND WEIGHTS	X3-45	
Overall length (including bumpers)	45' (13,7 m)	
Overall width	102" (2,59 m)	
Overall height	134 3/8" (3,413 m)	
Wheelbase (center of front axle to center of drive axle)	340" (8,64 m)	
Floor height from ground	48 1/2" (1,23 m)	
Ground clearance	11" (280 mm)	
Step height from ground	15" (380 mm)	
Step height (other steps)	7" (178 mm)	
Headroom	80" (2,03 m)	
Entrance door opening width	30" (762 mm)	
Front overhang	70 ¾" (1,80 m)	
Rear overhang	107 1/2" (2,73 m)	
Front track	85.9" (2,18 m)	
Drive track	76.7" (1,95 m)	
Rear track (Tag axle)	83.6" (2,12 m)	
Turning circle radius (I-Beam Axle)	47'-3" (14.4 m)	
Turning circle radius (independent suspension)	43'-9" (13.3 m)	
Curb weight	36,000 lb (16 327 kg)	
Gross Vehicle Weight Rating (G.V.W.R.)	49,600 lb (22 498 kg)	
Front axle Gross Axle Weight Rating (G.A.W.R.)	16,500 lb (7 500 kg)	
Drive axle (G.A.W.R.)	20,500 lb (9 299 kg)	
Tag axle (G.A.W.R.)	12,600 lb (5 727 kg)	

The Gross Vehicle Weight Rating (G.V.W.R.) and the Gross Axle Weight Rating (G.A.W.R.) for front, drive and tag axles are listed on a certification plate located on the L.H. control panel in driver's section.

CAPACITIES	X3-45
Volvo D13 Engine oil (Total with filters)	41 U.S. qrts (39 I)
Fuel tank (legal capacity equal to 95% of volume)	208 U.S. gal. (787 I)
Cooling system	18.7 U.S. gal. (71 l)

CAPACITIES	X3-45
Allison Automatic Transmission (does not include external circuit)	6 U.S. gallons (23 l) 6.9 U.S. gallons (26 l) with retarder
I-Shift Transmission	16 U.S. qts (15 I)
Differential oil	20 U.S. qts (18,7 l)
Power steering reservoir	4.0 U.S. qts (3,8 l)
A/C compressor oil	4.5 U.S. qts (4,3 l)
Windshield washer reservoir	5.3 U.S. gal. (20 l)
Refrigerant	24.1 lb (11 kg)
Toilet septic tank	23.8 US gal. (90 liters)

FUEL TYPE

Diesel engines for 2007 and later model year vehicles are designed to operate only with Ultra Low Sulfur Diesel (ULSD) fuel, which can contain no more than 15 ppm sulfur.



ULSD fuel is necessary to avoid fouling the engine's Exhaust Aftertreatment System. Use of fuel other than ULSD will reduce the efficiency and durability of the engine.

BIODIESEL FUELS

ULSD-B5 biodiesel may be used. B5 tells you the percentage of biodiesel mixed in with ULSD. B5 is 5% biodiesel and 95% ULSD.

Fuel used must meet engine manufacturer's specification for biodiesel fuel. Concerning the use of biodiesel with Volvo D13 engines, refer to Volvo's specifications.

Biodiesel fuels are alkyl esters of long chain fatty acids derived from renewable resources. Biodiesel fuels made from soybean or rapeseed oil through the proper transesterification reaction process are recommended. Other feedstock source of biodiesel fuels such as animal fat and used cooking oils are not recommended. Biodiesel fuels meeting ASTM D6751 specification and from BQ-9000 accredited producer, prior to blending can be mixed up to 5% maximum by volume in petroleum diesel fuel. The resulting mixture must meet the fuel properties of ASTM D975 specification. Failures attributed to the use of biodiesel fuel will not be covered by Volvo or Prevost product warranty.

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Also, any engine performance problem related to the use of biodiesel fuel would not be recognized nor considered as Volvo or Prevost's responsibility.

WHEELS AND TIRES

Accuride steel whe	els9" X 22½"
Alcoa aluminum for	rged wheels9" X 221/2"
Except inner drive	axle (steel)81/4" X 221/2"
Alcoa aluminum for (for super single tire	rged wheels e)14" X 22½"
Tires	. 315/80 R22.5 load range "L"
Tines	

Tires 365/70 R22.5 load range "L"

Tires (super single) 455/55 R22.5 load range "L"

RECOMMENDED TIRE INFLATION PRESSURE AT MAXIMUM COLD LOAD

The recommended tire inflation pressures are given in the applicable documents supplied with the vehicle. In addition, minimum cold tire inflation pressures are listed on the Department of Transport (DOT) certification plate, affixed on the left wall near the driver's seat.

Vehicle equipped with TPMS: The TPMS target pressures are factory set to equal the prevailing tire pressure at delivery time. When tire pressures are increased to account for higher vehicle weight, the TPMS set point need to be increased accordingly.

These tire pressures are established in accordance with the maximum allowable load on each axle. A lower pressure is recommended if the axle load is less than the above specifications. Weigh vehicle fully loaded and pressurize according to tire manufacturer's recommendations. For non standard tire and wheel specifications, see Prevost tire pressure tabulation in "Coach Final Record".

Special tire selection may lower maximum allowable speed limit, even below posted speed limit. For maximum safety, check with tire manufacturer.

BELTS

Use	Model	Qty
Cooling fan drive belt	Multi V-14 Rib 14PK2526	1
A/C system 05G compressor	V Belt BX-100 9212-0404	2
A/C small system ICE compressor	V-Belt A-41 9012-2041	2
Alternator (twin Bosch)	Multi-V-8 Rib 8PK1935	1
Alternator (emergency)	Multi-V-8 Rib 8PK1865	1

NOTE

Belts specifications may vary. For proper belt selection, always consult your vehicle Coach Final Record.

ENGINE

VOLVO D13

Volvo D13 engine displacing 12.8 liters. The engine is an inline six cylinder, four stroke, turbocharged, air to air charge cooled, diesel engine with SOHC with 4 valves per cylinder.

Power	435 HP
Torque	1,700 lbf•ft (2304 Nm)
Operating range	1400-1800rpm
Full dress, dry weight	

ALLISON TRANSMISSION

Allison B500 (B500R with the optional output retarder) electronically controlled six speed automatic transmission.

Gear Ratios

1 st	
2 nd	1.906
3 rd	1.429
4 th	1.000
5 th	0.737
6 th	0.639
Reverse	4.801
Converter	1.9
Differential ratio	3.91
Differential ratio (optional)	3.58

VOLVO I-SHIFT TRANSMISSION

Technologically advanced twelve speed automated mechanical transmission

Gear Ratios

1 st 14.94
2 nd 11.73
3 rd
4 th
5 th
6 th
7 th
8 th 2.70
9 th
10 th 1.63
11 th
12 th
121.00
Reverse 1 st 17.48
Reverse 2 nd
Differential ratio2.50
Maximum input torque 1850 Lb-Ft (2500 Nm)

PROPELLER SHAFT

Hayes-Dana SPL250 type tubular shafts. It is provided with heavy-duty universal joints.

BRAKES

The features of the braking system include a dual system where the front and rear circuits are completely independent from each other. The brakes are air operated disc type brakes with automatic slack adjusters on front, drive and tag axles. The emergency/parking brakes are located on the drive and tag axles only.

BRAKE CHAMBER EFFECTIVE AREA

Front axle		
	24/24 in ² (service)	
Tag axle	14/16 in ² (service)	/ emergency)

AIR SYSTEM

Compressed air is provided by a twin cylinder, 31.8 cfm Wabco, gear-driven, water-cooled and engine oil lubricated air compressor.

ANTILOCK BRAKING SYSTEM (ABS)

The antilock braking system has one Electronic Control Unit (ECU) controlling a four channel system. A wheel slip sensor is mounted at each front axle and drive axle wheel. The Tag axle wheels are slave to the drive axle wheels. The Electronic Control Module (ECM) is maintenance free. Its operating voltage is 24 ± 6 volts DC. The thermal operating range for the ECM is from -40 to 167° F (-40 to 75° C).

The solenoid control valves are maintenance free. Their operating voltage is 24 (+4.8, -2.4) volts DC. The rated current draw is 1.65 amps. The thermal operating range of the solenoid control valves is from -40 to 176°F (-40 to 80°C).

TROUBLESHOOTING AND TESTING

For troubleshooting and testing of the vehicle's anti-lock braking system, refer to Meritor WABCO Maintenance Manual: *"Anti-Lock Brake Systems For Trucks, Tractors and Buses"* or use dashboard Driver Information Display (DID).

AUTOMATIC TRACTION CONTROL (ATC) – ELECTRONIC STABILITY PROGRAM (ESP)

In addition to the ABS function, vehicle may be equipped with an advanced model of Bendix EC-60 controller to provide an **Automatic Traction Control (ATC)** feature. Bendix ATC can improve vehicle traction during acceleration, and lateral stability while accelerating through curves. ATC utilizes **Engine Torque Limiting (ETL)** where the ECU communicates with the engine's controller and/or **Differential Braking (DB)** where individual wheel brake applications are used to improve vehicle traction.

The EC-60 advanced model controller also provides ABS-based stability features referred to as **ESP**[®] **Electronic Stability Program**.

Refer to Maintenance Manual, Section 12: Brake and Air System for more information on this system.

Even with ESP-equipped vehicles, the driver remains responsible for ensuring vehicle stability during operation.

ESP may reduce the vehicle speed automatically.

ESP can make the vehicle **decelerate automatically.** ESP can slow the vehicle with or without the operator applying the brake, and even when the throttle is being applied.

STEERING

- ZF 8098 integral hydraulic assisted steering gear;
- Variable assistance in function of speed is optional.
- Volvo hydraulic pump gear driven from engine drive.
- Hydraulic reservoir and dipstick accessible from engine compartment.
- System pressure: 2175 psi (150 bars).
- Steering wheel diameter 20". Tilt steering wheel and telescopic steering column; pneumatically locked with foot operated switch for adjustment.
- Number of turns: 5³/₄.
- Outside turning radius: See Dimensions and Weight.

ELECTRICAL SYSTEM

- 24-volt, negative ground;
- 12-volt exterior lighting;
- Two 28 volts, 120 amp, self-regulated, beltdriven, air-cooled HD 10 Bosch alternators;
- Four 12 volt, group 31 format maintenancefree batteries connected in series/parallel. Cold cranking capacity is 1900 amps with a reserve capacity of 195 minutes;
- 100 amp battery equalizer.

SUSPENSION

Goodyear rolling lobe type air springs (bellows) are used throughout.

I-BEAM AXLE FRONT SUSPENSION (OPTION)

- 2 Bellows (12"); for a G.A.W.R. of 16,500 lb;
- 2 Shock absorbers;
- 4 Radius rods;
- 1 Transverse radius rod;
- 1 Height control valve.
- 1 sway bar (1³/₄" diameter).

INDEPENDENT FRONT SUSPENSION

2 Bellows (12") for a G.A.W.R. of 16,500 lb;

- 2 Shock absorbers;
- 2 Upper A-arms;
- 2 Lower A-arms;
- 2 Torque rods;
- 2 Steering Levers;
- 1 Height control valve;
- 1 sway bar (1³/₄" diameter).

DRIVE AXLE

- 4 Bellows (11");
- 4 Shock absorbers;
- 3 Radius rods;
- 1 Panhard rod;
- 2 Height control valves.

TAG AXLE

- 2 Bellows (11");
- 2 Shock absorbers;
- 3 Radius rods;
- 1 Panhard rod.

ALIGNMENT SPECIFICATIONS

Use wheel alignment systems which work with angle measurements only, such as Josam or Hunter systems. Alignment specifications are listed in the following tables:

I-BEAM AXLE FRONT SUSPENSION			
	Minimum value	Nominal value	Maximum value
Right camber (degrees)	-0.250	0.125	0.375
Left camber (degrees)	-0.250	0.125	0.375
Right caster (degrees)	2.0	2.75	3.5
Left caster (degrees)	2.0	2.75	3.5
Total toe-in (degrees)	0.08	0.13	0.17

FRONT AXLE (INDEPENDENT SUSPENSION)						
Minimum Nominal Maximu value value m value						
Right camber (degrees)	0.0	0.150	0.35			
Left camber (degrees)	0.0	0.150	0.35			

FRONT AXLE (INDEPENDENT SUSPENSION)						
Right caster (degrees)2.352.62.85						
Left caster (degrees)	2.35	2.6	2.85			
Total toe-in (degrees)	0.08	0.13	0.17			

DRIVE AXLE					
	Minimum value	Nominal value	Maximum value		
Thrust angle (degrees)	-0.04	0	0.04		

TAG AXLE					
	Minimum value	Nominal value	Maximum value		
Parallelism (degrees)	-0.02	0	0.02		
(*) Use the drive axle as reference					

COOLING SYSTEM

- Extra capacity, copper fin radiator and aluminum charge air cooler arranged one behind the other, Valeo made.
- 3 speed fan clutch engine ECU controlled.
- Rubber insulated from the body.
- Expansion tank above radiator and remote mounted.
- System pressure 14 psi.
- 185° F thermostat.
- System capacity 24 us gal.
- Coolant filter.
- Radiator fan: 38 inches fan belt and drive shaft driven.

FUEL SYSTEM

Polyethylene 208 US gallons/787 liters fuel tank centrally located.

Equipped with:

- Anti-spill device.
- Safety filler cap on right side of coach.
- Pressure relief valve.
- Electric fuel gauge.

- Low level signal at 26 US gallons/98.4 liters.
- Primary filter 25 microns (standard).
- Primary fuel filter with electrical water indicator (Volvo D13).
- Fuel pro 382 filter available as an option as a primary filter.
- Secondary filter 3 to 5 microns.
- Shut-off valve on fuel supply line.
- Provided with filling access on the right side of the coach.

EXHAUST SYSTEM

One all stainless steel exhaust aftertreatment system including:

- Catalylic converter to reduce NOx.
- FleetGuard assembly made of a DOC (Diesel Oxidation Catalyst and a DPF (Diesel Particulate Filter). Noise, vibration and heat insulated. This assembly is mounted to the bus structure and is accessible through an exterior access door.
- Tail pipe diffuser and rain deviation device.
- Exhaust pipe with Insulation and a flexible section.
- Exhaust to rear left hand top of rear cap.
- Diesel exhaust fluid (DEF) tank (60 liters) and injection system.

HEATING AND AIR CONDITIONING

Two air conditioning systems are available: the large capacity (central) A/C and an optional auxiliary A/C. The large capacity A/C provides adequate capacity of conditioned and filtered air for all climatic conditions. Fresh air is drawn into the system from the left (driver's) side of the vehicle. Return air is taken from the middle of the vehicle. The driver's heater and defogger are controlled separately from the central unit. An air mixture selector enables air to be drawn into the system from outside the vehicle or recirculated. The optional auxiliary A/C is used to cool air delivered from registers in the passenger overhead compartments.

AUXILIARY A/C	
Air conditioning capacity	2 tons

AUXILIARY A/C		
Refrigerant type	134A	
Air flow	450 cfm (12,7 m ³ /min)	

COMPRESSOR (for	auxiliary A/C)	
Number of cylinders	7	
Operating speed	700 to 6 000 rpm	
Oil capacity	6 U.S. oz. (0,18 l)	
Approved oil	SP-20 (PAG)	

CENTRAL A/C	
Air conditioning capacity	9 tons
Refrigerant type	134A
Heating capacity	152 000 Btu/h
Air flow	2 600 cfm (73,6 m ³ /min)

COMPRESSOR (for central A/C)				
Number of cylinders	6			
Operating speed	400 to 2 200 rpm (2,600 rpm, intermittent)			
Minimum speed for lubrication	400 rpm			
Oil capacity	4.5 U.S. qts (4,3 l)			
Approved oil	Castrol SW-68 (POE)			

NOTE

The above oils are suitable for use with reciprocating compressors using refrigerant R-134a and with evaporator temperatures above -40°F (-40°C).

OIL SPECIFICATIONS

ENGINE

For the Volvo D13H engine, we recommend using SAE 10W-30 oil meeting *EO-O Premium Plus* or *Volvo VDS-4*.

Volvo VDS-4 oils exceed API service category CJ-4 oils.

ALLISON TRANSMISSION

Allison Transmission recommends the following fluids:

- Castrol TranSynd[™] or TES-295 specification equivalent fluid;
- Dexron-III® automatic transmission fluid or TES-389 specification equivalent fluid.

I-SHIFT TRANSMISSION

The I-Shift transmission must be filled with Castrol Syntrans grade 75W-85 oil.

DIFFERENTIAL

Multigrade gear oil meeting MIL-PRF-2105E: 85W140 is recommended for use in drive axle. This lubricant performs well over a broad temperature range, providing good gear and bearing protection in a variety of climates. If temperature drops below 10°F (-12°C), 80W90 should be used, and below -15°F (-26°C), 75W90 should be used. In extreme conditions or for better performance, full synthetic gear oil should be used.

FAN RIGHT ANGLE GEARBOX

Use only synthetic gear lubricant SAE 75W-90.

POWER STEERING RESERVOIR

Use Automatic Transmission Fluid (ATF) Dexron-IIE or Dexron-III for this system.

PRE-HEATING SYSTEM

Depending on options chosen, a coolant heater may be installed on the coolant circuit. The heater can be used as a pre-heater or as an auxiliary heat source.

Only the Spheros 104,000 Btu preheater is available. The heater is controlled by a programmable timer. See Other Features chapter for information on how to use the timer.

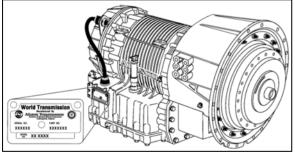
SPHEROS		
Model	Thermo 300	
Heating output	104,000 Btu/hr (30 kW)	
Fuel type	Same as engine	

Fuel consumption	4.8 US qts/hr (4.5 l/hr)			
Rated voltage	24 V DC			
Operating voltage		20-28 V DC		
Electric power consumption without water pump		110 watts		
Dimensions (L)		24.01 (610 mm)		
Inch (mm) (W)		9.69 (246 mm)		
(H)		8.66 (220 mm)		
Weight	lb (kg)	41.88 (19)		

PLATES AND CERTIFICATION

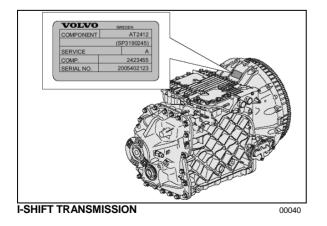
The main components of the vehicle such as engine, transmission, axles and chassis are identified by different serial numbers. It may be necessary to locate these numbers for warranty purposes.

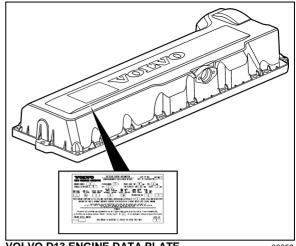
The engine data plate is located on the rocker cover. The engine serial and model number and a list of the optional engine equipment are written on this plate. Refer to this information when ordering replacement parts. Also the engine data plate certifies that the engine conforms to federal and any state exhaust emissions regulations.



ALLISON TRANSMISSION

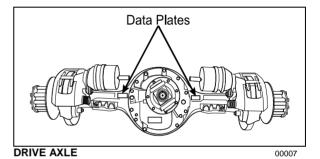
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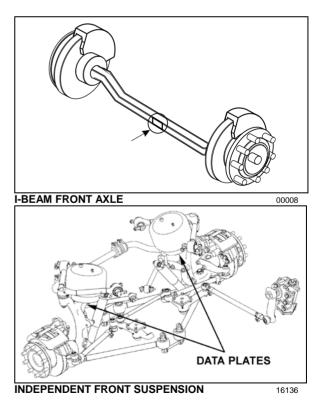












SAFETY CERTIFICATION

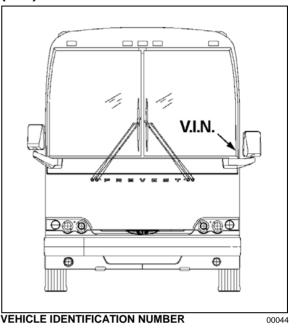
- Vehicle components meet specifications and standards as follows:
- Material and parts conform to ASTM and/or SAE standards in effect at the time of manufacture.
- All factory-installed interior materials meet FMVSS 302 for fire resistance.
- Certified according to Provincial, State and Federal Safety standards (Canadian and US) BMCSS, FMVSS and CMVSS.
- Other applicable certification labels are affixed to the component.

DOT CERTIFICATION PLATE

This certifies that vehicles manufactured by Prevost Car Inc. comply with all Federal Motor Vehicle Safety Standards at the time of manufacture. Information such as date of manufacture, model year, gross vehicle weight rating, tire types and inflation pressure is also etched on this plate. The DOT Certification plate is affixed to L.H. control panel.

 CANADA PREVOST ® CONTRACTOR DE Y : RREVOST S 9 4 4 2 SS FARRIOLE PAR : STE-CLAIRE, OLE. DATE DE FAB.							
AXLES/ G.A.W.R./ TIRES/ RIMS/ PRESS./ SIMPLE ESSIEUX P.N.B.E. PNEUS JANTES PRESS. A OU FROID DOUBLE							OR DUAL SIMPLE OU
FRONT: AVANT: DIFF.: REAR: TANDÉM:	KG 7484 10206 6350	(LBS) (16500) (22500) (14000)	315/80R22.5 (315/80R22.5 (315/80R22.5 (J) 22.5X9	827 621 689	(120) (90) (100)	S D S
SAFETY S	TANDAR	OS IN EFFE	O ALL APPLICAB ECT ON THE DAT				
		TICATION N TION VEHIC				#405	 5405 €
DOT CERTIFICATION PLATE 00016							

VEHICLE IDENTIFICATION NUMBER (VIN)



The Vehicle Identification Number is stamped on a plate located on the windshield frame pillar (driver's side). The VIN is visible from the outside of the vehicle. Make sure the correct vehicle identification number is given when ordering replacement parts. Using the VIN when ordering parts will facilitate processing.

NOTE

Record the VIN in the vehicle documentation and keep with company records. The VIN will normally be used for vehicle registration, service reference needs and for obtaining vehicle insurance coverage.

COACH FINAL RECORD

The Coach Final Record is a record of all data pertaining to the assembly of the vehicle. This record is shipped to the new customer via a courier company. Retain this record in the company records office for reference and safekeeping.