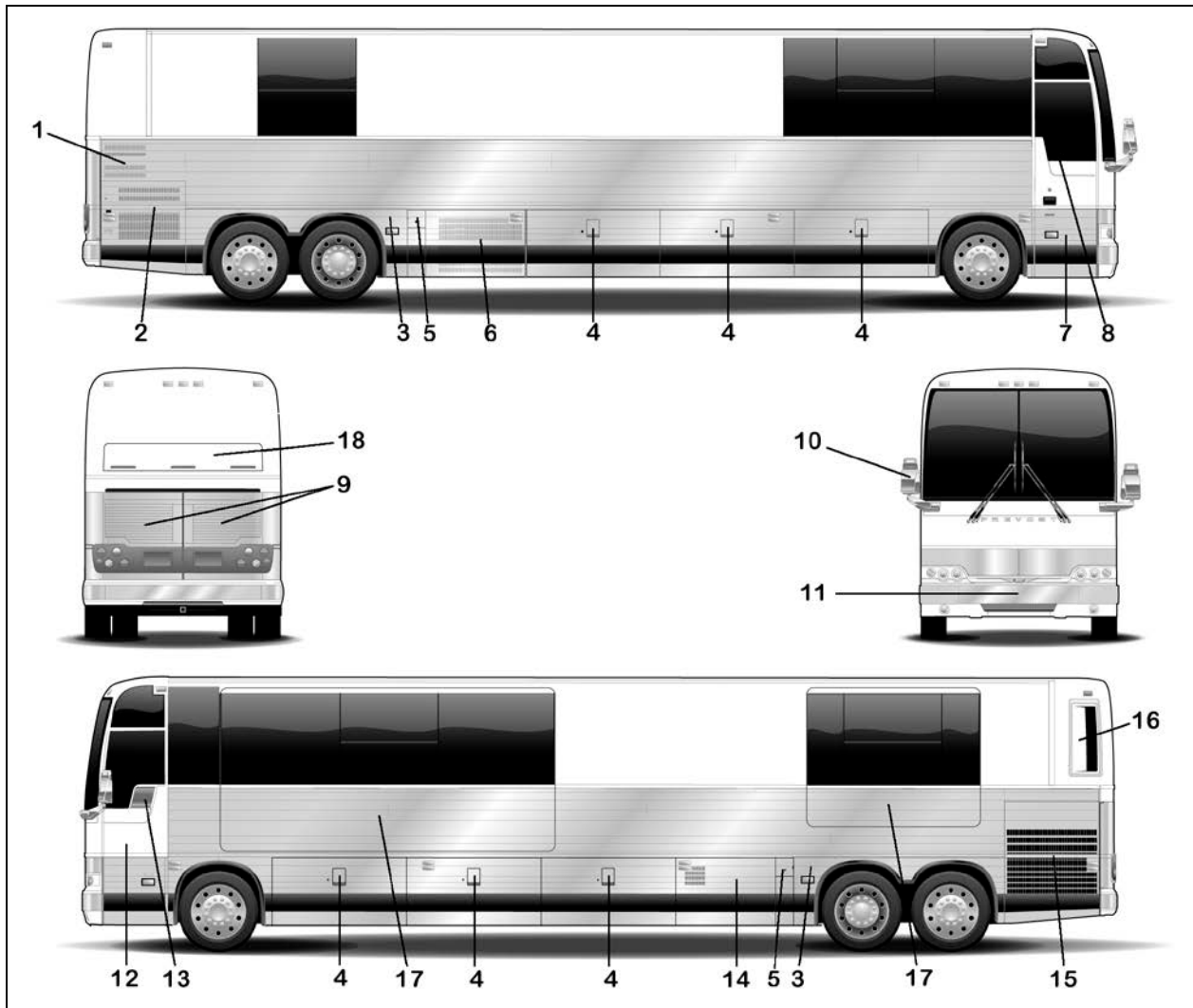


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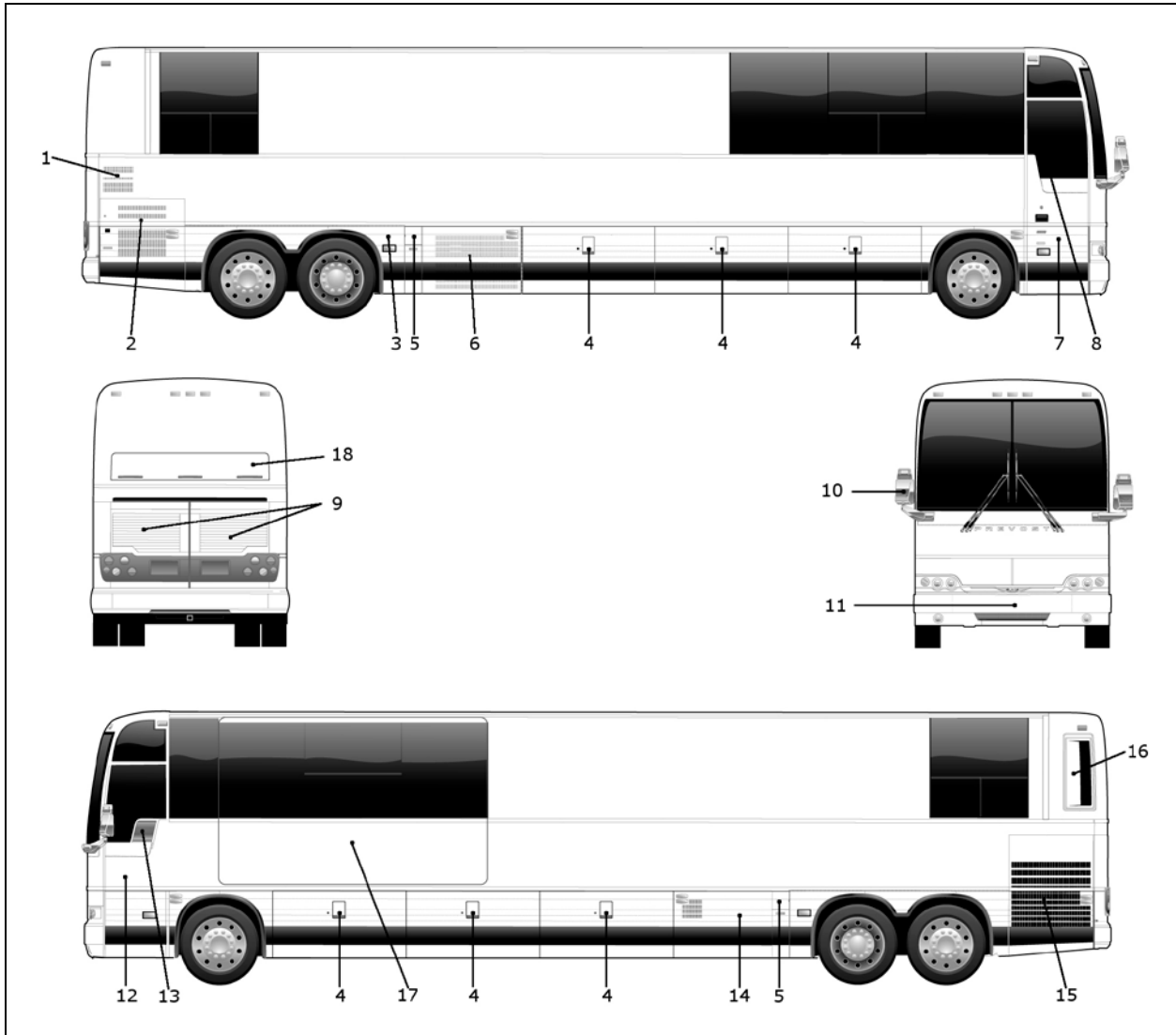
## 2-2 Vehicle Exterior



X3-45 VIP EXTERIOR VIEW (TYPICAL)

18576

- |                                      |   |
|--------------------------------------|---|
| 1. Engine air intake                 | 10. Rear-view mirror                          |
| 2. Engine compartment R.H. side door | 11. Reclining bumper                          |
| 3. Hinged rear fender                | 12. Front electrical and service compartment  |
| 4. Baggage compartment               | 13. Driver's power window                     |
| 5. Fuel filler door                  | 14. Evaporator or baggage compartment         |
| 6. Condenser or baggage compartment  | 15. Radiator door                             |
| 7. Entrance door                     | 16. Catalytic Converter access door           |
| 8. Entrance door power window        | 17. Slide-Out (Optional)                      |
| 9. Engine compartment rear doors     | 18. Exhaust Aftertreatment System access door |

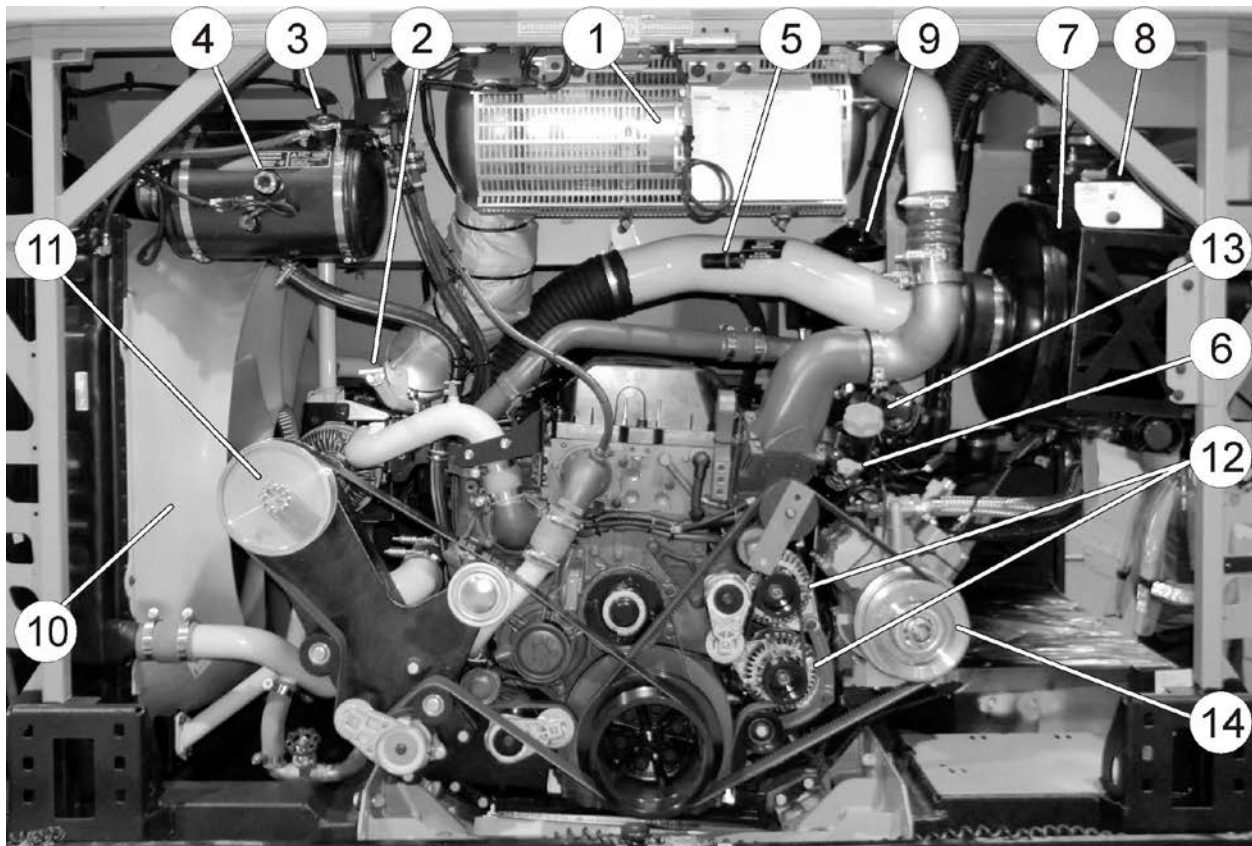


LE MIRAGE XLII BUS SHELL EXTERIOR VIEW (TYPICAL)

18622

- |                                      |   |
|--------------------------------------|---|
| 1. Engine air intake                 | 10. Rear-view mirror                          |
| 2. Engine compartment R.H. side door | 11. Front reclining bumper                    |
| 3. Hinged rear fender                | 12. Front electrical and service compartment  |
| 4. Baggage compartment               | 13. Driver's power window                     |
| 5. Fuel filler door                  | 14. Evaporator compartment                    |
| 6. Condenser compartment             | 15. Radiator door                             |
| 7. Entrance door                     | 16. Catalytic Converter access door           |
| 8. Entrance door power window        | 17. Front Slide-Out (Optional)                |
| 9. Engine compartment rear doors     | 18. Exhaust Aftertreatment System access door |

**ENGINE COMPARTMENT COMPONENTS**



**ENGINE COMPARTMENT FEATURING VOLVO D13 ENGINE**

01184

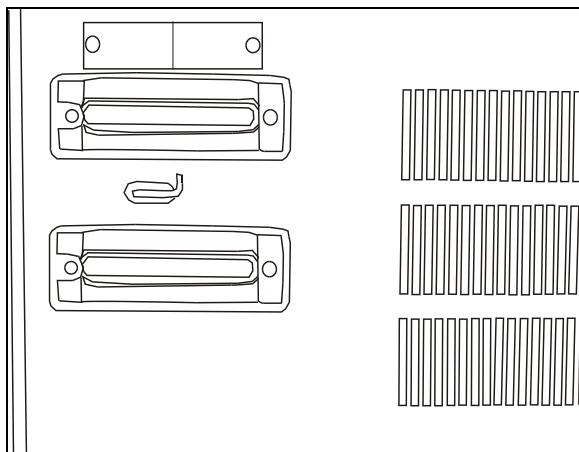
1. Diesel Oxidation Catalyst (DOC) & Diesel Particulate Filter (DPF) Assembly;
2. Transmission fluid dipstick;
3. Coolant fluid surge tank filler cap;
4. Coolant fluid surge tank sight glass;
5. Air filter restriction indicator;
6. Engine oil dipstick;
7. Air filter;
8. Starter selector switch and Engine rear start push-button switch, Engine compartment Lights Switch;
9. Power steering fluid reservoir;
10. Radiator fan;
11. Radiator fan drive mechanism
12. Alternators;
13. Engine oil filler tube;
14. Central A/C compressor;

Most serviceable parts may be accessed through exterior compartments. There may be slight differences in the location of parts and in the configuration of compartments between models, depending on options.

**ENGINE COMPARTMENT R.H. SIDE DOOR**

The engine compartment R.H. side door provides access to the following (if equipped):

- Engine compartment rear door release lever;
- Batteries;
- Battery equalizer;
- Rear Electrical Panel;
- Rear Junction Panel;
- Booster terminals;
- Primary air circuit fill valve and drain cock;
- Fuel filter/water separator;
- 110-120 volt connector.
- A/C Compressor.



ENGINE COMPARTMENT R.H. DOOR 18559

This door can be locked or unlocked using the exterior compartment key or, if so equipped, by the central door locking system. To open, push sideways the small lever located between the marker lights.



ENGINE COMPARTMENT R.H. SIDE 18513

**ENGINE COMPARTMENT REAR DOORS**

To open the engine compartment rear doors, open the engine compartment R.H. side door and pull the lever located on the rear door, close to the bottom door hinge. The engine compartment doors swing out to provide access to the following:

- Engine;
- Alternator(s);
- Compressor(s);



OPENING THE ENGINE COMPARTMENT REAR DOORS FROM R.H. SIDE DOOR 18547

- Belt tension valve (refer to Care and Maintenance chapter);
- Engine starting selector (refer to Starting and Stopping Procedures chapter);
- Certification plates;
- Engine coolant surge tank;
- Air cleaner restriction indicator;
- Engine oil dipstick;
- Power steering fluid reserve tank;

## 2-6 Vehicle Exterior

- Automatic transmission oil dipstick and filler tube;
- Engine coolant filler cap.

A catch holding each door open engages when the door is fully open. Release the catches before closing the doors. Close the L.H. door first, then firmly shut the R.H. door.

Turn the lights ON in the engine compartment using the switch on the rear start panel.



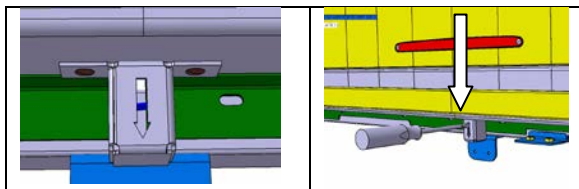
### WARNING

Unless otherwise specified, do not run engine when the engine compartment rear doors are open. Close the engine compartment rear doors before starting the engine.

### EXHAUST AFTERTREATMENT SYSTEM ACCESS DOOR

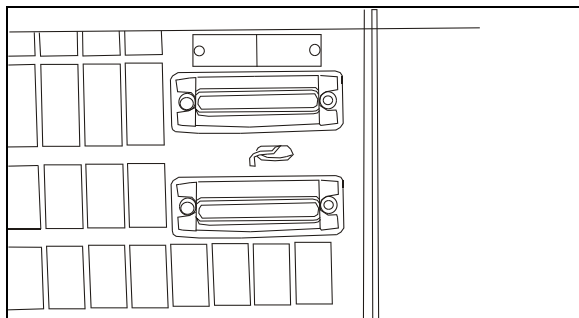


The engine door must be open before opening the exhaust aftertreatment system access door. To open the access door, lower the latch release lever, using a flat tip screwdriver.



To close the door, lower the door and push against the release lever spring to latch the door shut.

### RADIATOR DOOR



RADIATOR DOOR

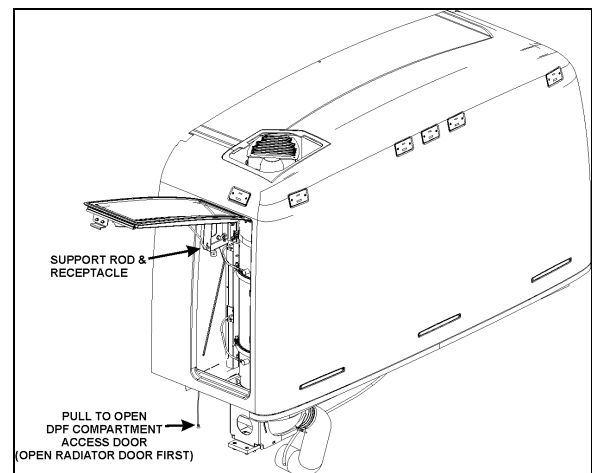
18560

Open the engine radiator door by pushing sideways the release lever.

### CATALYTIC CONVERTER ACCESS DOOR

To gain access to the catalytic converter, open the radiator door first. At the top of the radiator compartment, pull the catch connecting rod to unlock the catalytic access door and lift the door open.

Hold the door open by inserting the support rod free end into the receptacle located on the left side of the catalytic converter.



ACCESS TO THE CATALYTIC CONVERTER

04018



### WARNING

After inserting the support rod into the receptacle, make sure the rod supports the door securely from falling down on to your head or body.



### WARNING

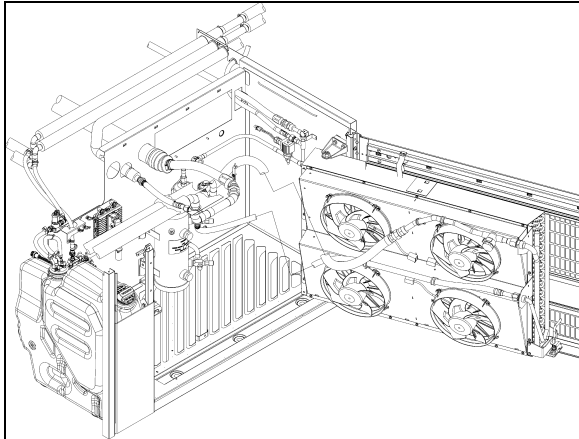
External and internal temperatures remain hot long after engine has been shutdown. Allow the Aftertreatment Device and DPF to cool before handling. Wear protective clothing and glove while servicing.

### CONDENSER COMPARTMENT (A/C)

Pull the release latch located inside the adjacent baggage compartment to open the condenser door.

The condenser compartment provides access to the following:

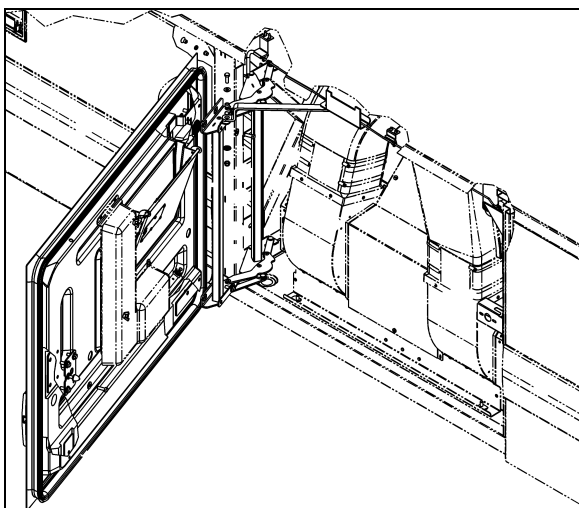
- Diesel Exhaust Fluid (DEF) tank;
- Condenser;
- Condenser fans and motors;
- Filter dryer and moisture indicator;
- Receiver tank.



CONDENSER COMPARTMENT (A/C)

### EVAPORATOR COMPARTMENT

The HVAC (Heating, Ventilating and Air-Conditioning) evaporator blower and water recirculating pump are located in this compartment. The compartment door release latch is located on the right side of the baggage compartment and to the left of the HVAC compartment door. Pull the release latch then press the secondary lock lever to swing the HVAC compartment door open.



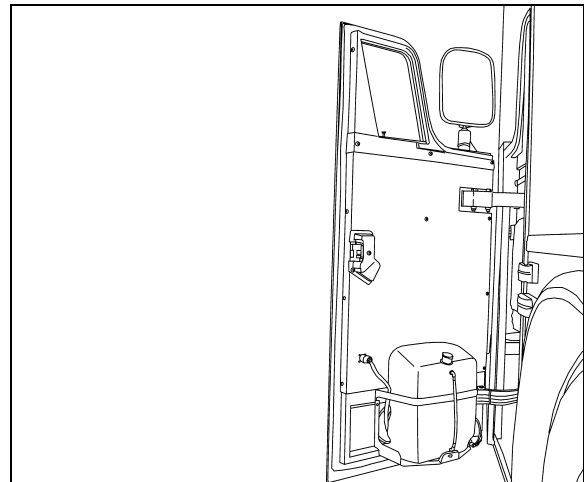
EVAPORATOR COMPARTMENT



SECONDARY LOCK LEVER

### FRONT ELECTRICAL AND SERVICE COMPARTMENT

To open the front electrical and service compartment door, pull the rod inside the vehicle, next to the driver's power window or use the key to open from outside the vehicle. The front electrical and service compartment provides access to the following:



FRONT SERVICE COMPARTMENT DOOR

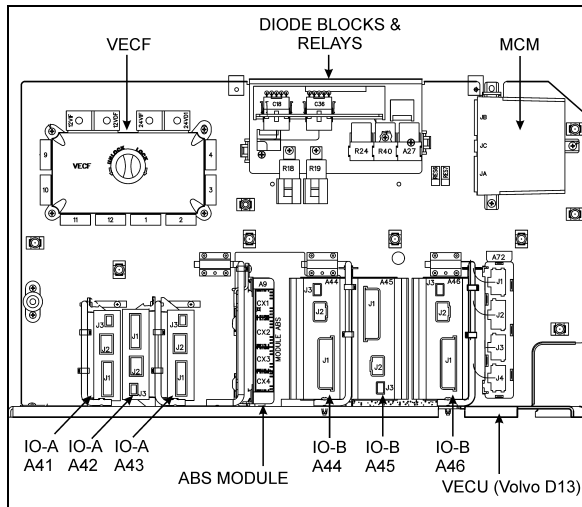
18381

- Front terminal block;
- VECU;
- Vehicle Electrical Center Front (VECF) and Multiplex Modules;
- Master Chassis Module (MCM);
- Keyless module;
- Relays and fuses;
- Windshield washer reservoir & headlights washer reservoir;
- Accessory air tank drain valve;
- Accessory system fill valve;

## 2-8 Vehicle Exterior

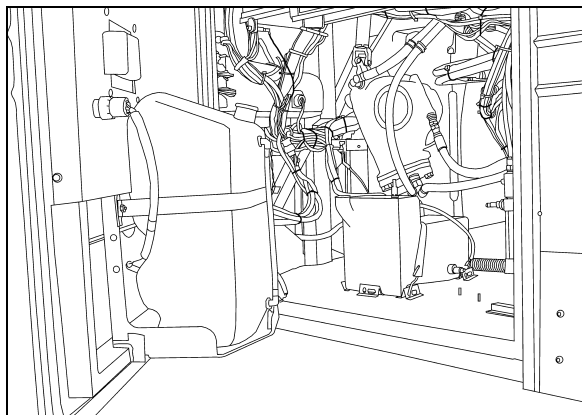
- ABS Electronic Control Unit (ECU).

The light in the front electric & service compartment turns *ON* automatically when the door is opened.



**FRONT ELECTRICAL COMPARTMENT**

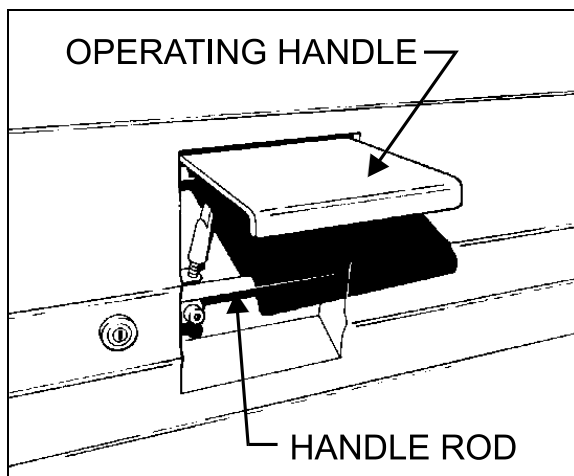
06665



**FRONT SERVICE COMPARTMENT**

06532

## BAGGAGE COMPARTMENTS



**BAGGAGE DOOR LOCK AND LEVER**

18043

The baggage compartment doors of the "X" Series models provide 407 ft<sup>3</sup> (11,53 m<sup>3</sup>) of storage capacity. The compartments can be locked or unlocked by using the exterior compartment key. Pull up operating handle to release the latch, and then pull the door open. Pressurized cylinders assist the opening and closing of the baggage compartment doors and hold the doors open.

To close, pull the door down by the handle rod. Complete the closing of the door by returning the operating handle to its initial position.



### CAUTION

Do not slam shut the baggage compartment doors. Damage to door weather-stripping or locking mechanism could result.

Lights in the baggage compartments turn *ON* automatically when the door is opened.



### WARNING

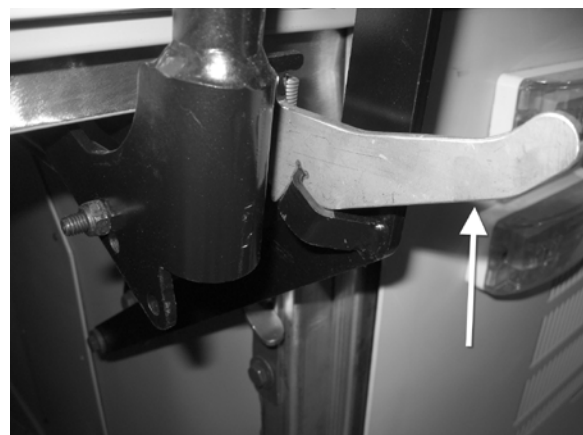
To avoid injury, keep hands clear of baggage compartment door edge and door frame when closing.

### NOTE

To prevent theft and vandalism, always lock the baggage compartment doors before leaving the vehicle unattended.

### NOTE

For safety, open the door until the catch holds the door open. Lift lever to release.



**BAGGAGE DOOR CATCH**

18612



**NOTE**

The baggage compartment doors can be locked/unlocked from the driver's position by the optional central locking system. The switch is on the L.H. control panel. Refer to "Controls & Instruments" chapter.

**RECLINING BUMPER COMPARTMENT**

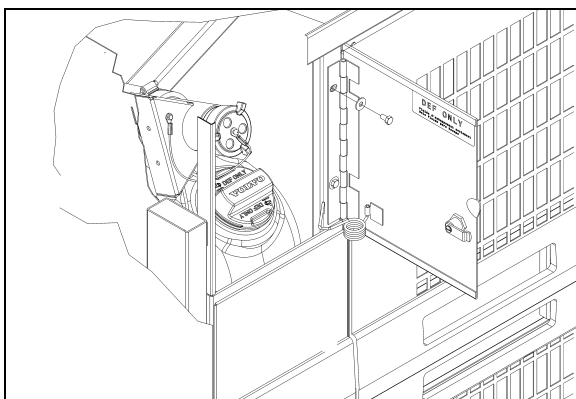
The front bumper can be tilted downward to give access to the bumper compartment. Pull the release handle located inside front service compartment to unlock. Tilt down the entire bumper assembly to access the compartment. Push the bumper back up firmly in place to lock in position.

**WARNING**

The compartment behind the bumper is not designed for storage. Never store loose objects in this compartment since they can interfere with the steering linkage mechanism. Use care when opening or closing the reclining bumper compartment to prevent personal injury.

**FUEL AND DIESEL EXHAUST FLUID (DEF) FILLER DOOR**

The fuel and Diesel Exhaust Fluid (DEF) filler door is located on the R.H. side of the coach providing easy filling. A spring keeps the door either open or shut. A key is provided for unlocking the door if the option was chosen.



FUEL & DEF FILLER DOOR 03046

**NOTE**

Provided the vehicle is parked on level ground, an automatic nozzle will automatically shut off when tank is approximately 95% full.

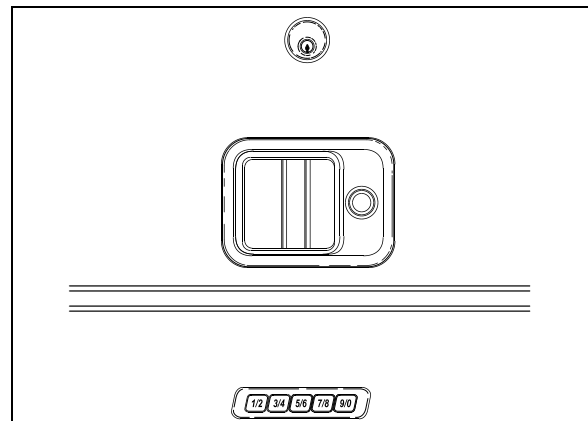
**CAUTION**

Do not fill to more than 95% of the tank capacity. Do not "top off" the tank, doing so may result in fuel spillage when the fuel expands.

**NOTE**

The fuel filler door locks must be in the unlocked position before closing.

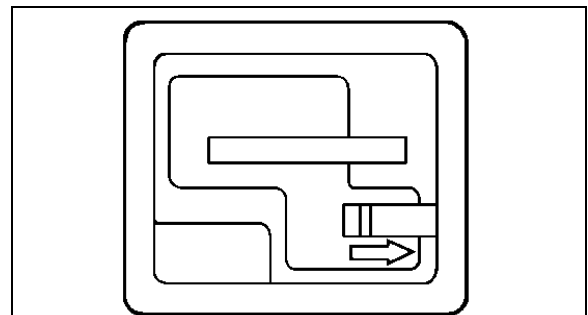
**ENTRANCE DOOR**



ENTRANCE DOOR 18380

Lock or unlock the entrance door from outside the vehicle by either turning the key in the door lock (counterclockwise to lock, clockwise to unlock), by using the outside key pad (see "Keyless Entry System" in this chapter), or by using the remote control (electronic key). Open the door by pulling on the lever. Close by pushing the door shut.

There are two ways of unlocking the entrance door from the inside. The first consists in actuating the rocker switch on the R.H. dashboard panel. This operation will also unlock the baggage compartments. Also, you can unlock the entrance door by sliding its lock lever to the left. If the orange tab on the door-lock lever is visible, the door is unlocked.



DOOR-LOCK PANEL 18187

## 2-10 Vehicle Exterior

### KEYLESS ENTRY SYSTEM

By using this system, you can lock or unlock the entrance door and the baggage and service compartment doors. The keyboard is located below the entrance door handle. The master code in the microprocessor/relay module is pre-programmed by the manufacturer and cannot be deleted. Moreover, you can program your own entry code (e.g. a birthday or part of a social security number).

The master code is:

- Printed on the owner's wallet card;
- Printed on three decals, joined to the owner's wallet card.
- Printed on decal affixed to the keyless system microprocessor/relay module in the front console;

When you use the keyless entry system, the keyboard and step lights illuminate.

Do not push the buttons with a key, pencil or any other hard or sharp object as the buttons could be damaged. Although each button is provided with two digits separated by a vertical line, there is only one contact per button. Press in the center of the button (between the two digits, on the vertical line).

You must unlock the entrance door before you unlock any other baggage or service compartment door. If you let more than five seconds pass between the numbers you press, the system shuts down, and you have to enter your code again. If the keyless entry system does not work properly, use the key to lock or unlock entrance or compartment doors.

### KEYLESS OPERATING INSTRUCTIONS

1. To unlock the entrance door, enter the five digits of the code. After pressing the fifth digit, the door will unlock. During the night, press any button to illuminate the keyboard, and then enter the code.
2. When pressing any button, the keyboard lights up for five seconds and the step lights illuminate for twenty-five seconds.
3. To unlock the baggage and service compartment doors, press button 3|4 within five seconds of entering the code.
4. To lock entrance door and compartments all at the same time, press buttons 7|8 and 9|0 at the same time.

### PROGRAMMING YOUR PERSONAL CODE

#### *NOTE*

*To avoid erasing your personal code from the system memory, you should connect the keyless entry system to house batteries, otherwise the code will be erased each time battery main disconnect switches are set to the OFF position.*

You can program a personal code to unlock the entrance door and compartments. This code does not replace the permanent code that is programmed into the system. Use your personal code in the same manner that you would use the original code.

Do not choose a code that presents the numbers in sequential order, such as 1|2, 3|4, 5|6, 7|8, 9|0. Studies show that people who idly press the buttons usually press a sequential pattern. Also, do not select a code that uses the same button five times. Thieves can easily figure out these types of codes.

1. Choose and memorize your personal code.
2. Enter the original code, and within five seconds, press button 1|2.
3. Within five seconds of pressing button 1|2, enter your personal code, pressing each button within five seconds of the previous digit. The keyboard light will immediately turn *OFF* if the code is correctly entered.

The keyless entry system registers your personal code. To unlock the entrance door, you can use either code.

To erase your personal code, enter the original code, press button 1|2, then wait six seconds.

Refer to "Controls and instruments" chapter, for instructions on remote unlock key fob. Refer to "Other Features" chapter, for full details on keyless entry system.

### REAR VIEW MIRRORS

The vehicle is equipped with flat-type and convex-type rear-view mirrors. Convex mirrors give a wide angle view. Objects viewed in convex-type rear-view mirrors appear smaller and are actually closer than they appear.

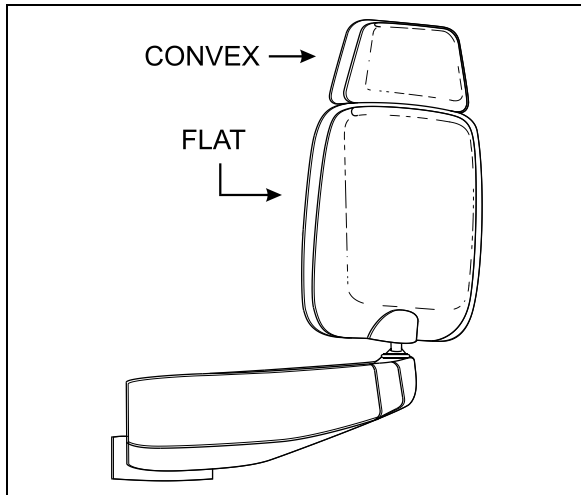
To provide good visibility in cold weather, the mirrors are equipped with heating elements. The elements are activated by a rocker switch located on the dashboard. Refer to "Controls & Instruments" chapter. Thermostats are used to

prevent continuous operation of the heating elements.



**CAUTION**

Do not attach stick-on type convex mirror accessories to the heated mirror glass. This could impede uniform heat distribution on the mirror surface and could break the mirror glass.



REAR VIEW MIRRORS

18376

The mirrors are adjusted using the controls located on the L.H. control panel. Refer to "Controls & Instruments" chapter. Manual adjustment is also possible.

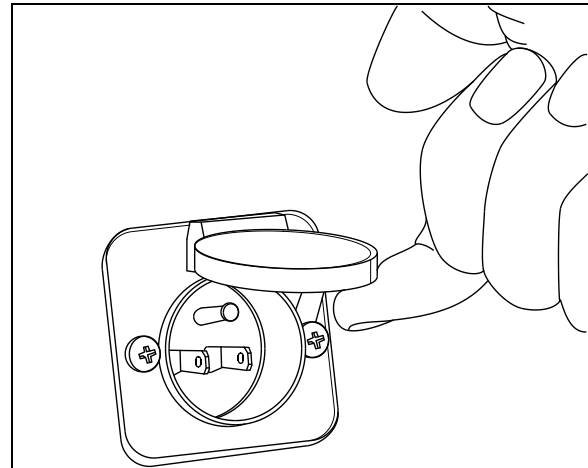
Adjust the side-view mirrors until the side of the vehicle is visible. Adjust the flat-type mirror until the road behind is in full view.

**BACK-UP CAMERA**

An optional back-up camera is available which provides the driver with visual assistance when backing-up. For additional information, refer to "Controls & Instruments" and 'Care and maintenance' chapters.

**110-120 VOLT CONNECTOR**

This connector is connected to the electric block heater and uses a 110-120 VAC power source. It is located near the engine compartment rear doors release handle. (Refer to chapter "Starting and Stopping Procedures").



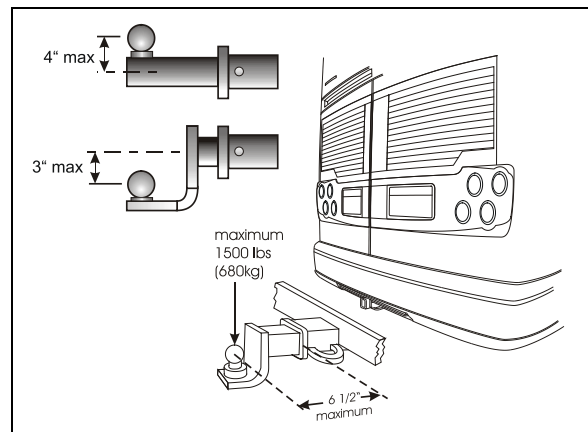
110-120 VOLT CONNECTOR

06390

**TRAILER HITCH**

20 000 lb max. Gross trailer weight capacity (optional)

Your vehicle may be equipped with a factory installed trailer hitch which has been designed to meet the following rating:



TRAILER HITCH

23337

- **Maximum gross trailer weight: 20,000 lb (9072 kg)**
- **Maximum tongue weight at 6 1/2 inches (165 mm) or less from coupling receiver: 1,500 lb (680 kg)**



**DANGER**

The draw bar and the ball used for towing the trailer should be rated for 20,000 lbs capacity or more.

## 2-12 Vehicle Exterior



### WARNING

Pulling a trailer weighing more than the recommended maximum gross weight may cause engine and transmission overheating, and also possible hitch failure.

### NOTE

*Pulling a trailer over long distances is considered as a "severe operating condition" for the vehicle and therefore, power plant requires more frequent servicing.*

### NOTE

*The minimum requirement for a trailer weighing up to 20,000 lbs when coupled to a 20,000 lb PrevoSt Trailer Hitch is as per the following:*

1. Trailer must comply with **Federal Motor Carrier Safety Regulations 393.52** regarding trailer braking capability.
2. The trailer coupling attachments meet the following minimum static test load requirements :
  - Longitudinal tension and compression: (1.5 x GVWR of trailer)
  - Transverse thrust: (0.5 x GVWR of trailer)
  - Vertical tension and compression: (0.5 x GVWR of trailer)

*Loads indicated must be applied without incurring loss of attachments or distortion or failure which could affect the safe towing of trailer.*

3. The ball and trailer coupling should meet the following minimum test load requirements without incurring failure:
  - Longitudinal tension and compression: (Gross Trailer Weight of trailer x 3)
  - Transverse thrust: (Gross Trailer Weight of trailer x 1)
  - Vertical tension and compression: (Gross Trailer Weight of trailer x 1.3)

*In this case, failure is identified as the point at which the coupling or ball will accept no additional test load without separation of the ball from the coupling ball socket, or the occurrence of a metal fracture of either coupling ball or coupling assembly, which results in separation of the ball from the coupling ball socket.*

4. *Two lengths of safety chain shall be used. The strength rating (minimum breaking force) of each individual chain and its connecting means shall be equal to, or exceed the trailer GVWR.*
5. *Towing vehicle must be equipped with engine or transmission retarder. The engine or the transmission retarder on the vehicle must be functional at all time (to be inspected frequently).*
6. *This hitch must be used for recreational use only.*