

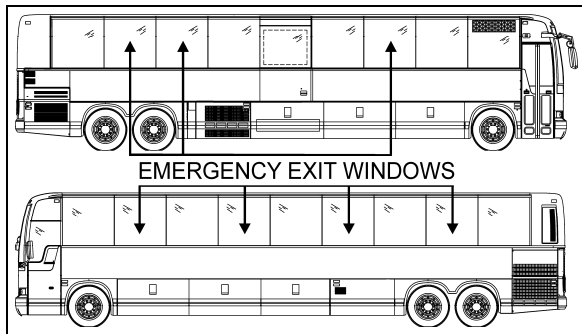
<b>EMERGENCY EXITS</b> .....	<b>90</b>
SIDE WINDOWS .....	90
ROOF HATCH.....	90
EMERGENCY ENTRANCE DOOR OPENING .....	91
<b>EMERGENCY EQUIPMENT</b> .....	<b>91</b>
SUPPRESSION SYSTEM (AFSS) .....	91
FIRE EXTINGUISHER AND FIRST AID KIT .....	92
WARNING REFLECTORS .....	92
JACK AND TOOLS.....	93
<b>JACKING POINTS</b> .....	<b>93</b>
HYDRAULIC JACK.....	94
<b>TOWING</b> .....	<b>94</b>
LIFTING FROM THE FRONT.....	94
MOVING A VEHICLE FROM THE REAR.....	96
<b>EMERGENCY AIR-FILL VALVES</b> .....	<b>97</b>
<b>EMERGENCY AND PARKING BRAKES</b> .....	<b>97</b>
<b>DAYTIME RUNNING LIGHTS</b> .....	<b>98</b>
<b>COMPARTMENT LIGHTING</b> .....	<b>98</b>
<b>MUD FLAPS AND SPLASH GUARDS</b> .....	<b>98</b>
<b>BACK-UP ALARM</b> .....	<b>98</b>
<b>ESSENTIAL FUNCTIONS TO OPERATE THE VEHICLE (BASIC LIMP-HOME FUNCTIONS)</b> .....	<b>98</b>
AVAILABLE FUNCTIONS .....	98

**EMERGENCY EXITS**

Locate and learn how to use all possible emergency exits. It is good practice to inform passengers of the location of exits and how to use them in case of an emergency.

**SIDE WINDOWS**

Some side windows can be opened from the inside for emergency exit. A decal located on the bottom of each passenger window indicates the location of the nearest emergency exit. Also, blue lights close to the wall in the overhead storage compartments illuminate the emergency exit decals. These lights illuminate when the general lighting switch is on.

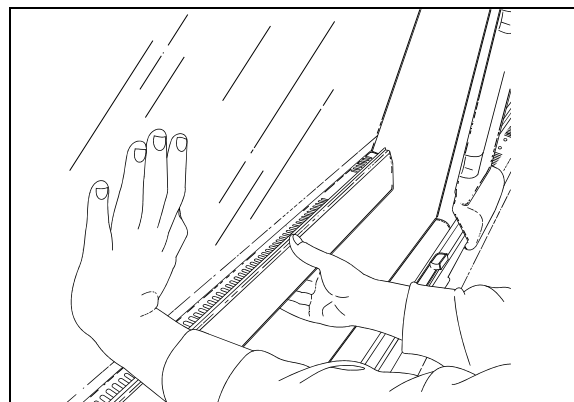


EMERGENCY EXIT WINDOWS (X3-45) 18617

To open a side window emergency exit, tilt up the release bar and push the bottom of the window outwards, as illustrated below. The window is hinged from the top and will not fall out.

A telltale light on the dashboard illuminates when a window is opened. Refer to Controls and Instruments chapter for more information.

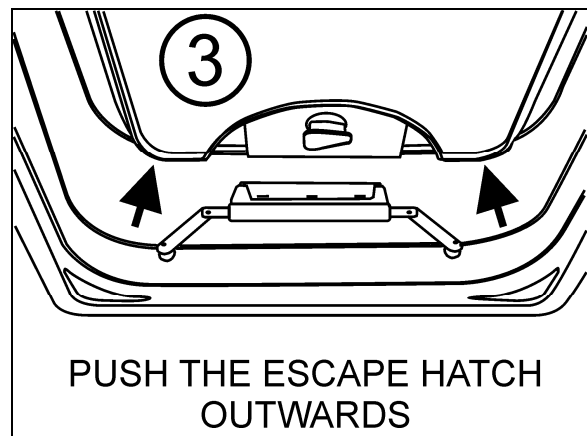
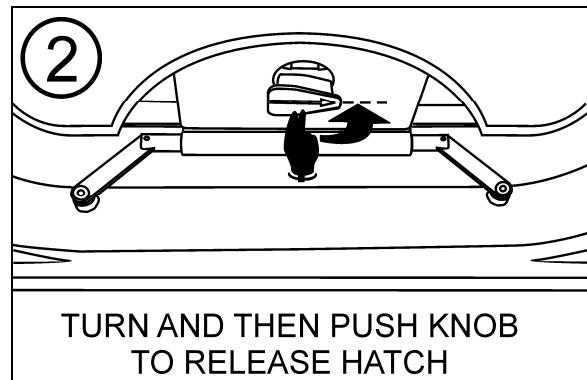
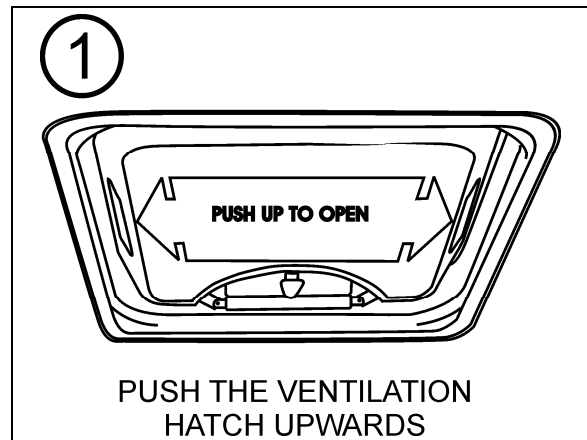
To close the window, tilt up the release bar and pull the window back. Push down the release bar to lock shut.



SIDE WINDOW EMERGENCY EXIT 18391

**ROOF HATCH**

A roof ventilation hatch, designed to be opened by occupants is installed in the roof at the rear of the vehicle. Another roof hatch is located in the front of the vehicle. The hatches can serve as emergency exits. In case of an emergency, push the ventilation hatch upwards (1). Turn knob 1/4 turn (arrow pointing "TO EXIT") and then push knob to release the hatch (2). Push the escape hatch outwards (3). A decal with operating instructions is located on the hatch.

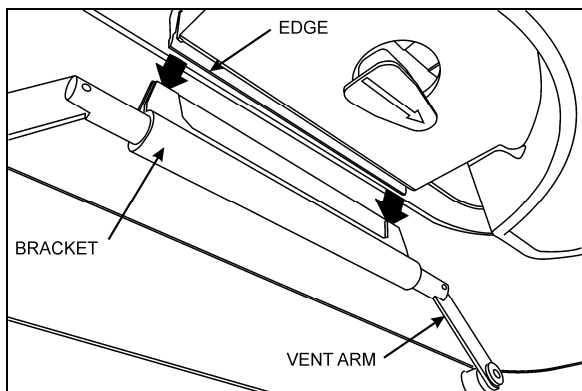


EMERGENCY ROOF ESCAPE OPENING

**NOTE**  
 In the event of ventilation blower motor failure, the roof hatch may be used to aid ventilation by pushing the hatch upwards.

**CAUTION**  
 Be aware of reduced vehicle overhead clearance when driving under overpasses with the roof hatch open.

To latch escape hatch after use, vent arms must be pushed upright in FULL OPEN VENT position. Insert edge firmly between the two sections of the bracket and then return knob to original position (arrow pointing "LATCHED") to lock the hatch. Finally, pull the hatch in to closed position, one side at a time.

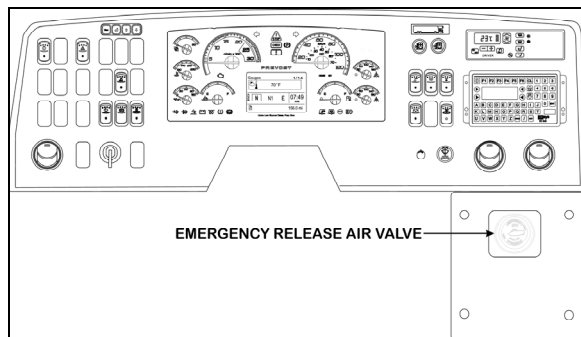


ROOF ESCAPE LATCHING

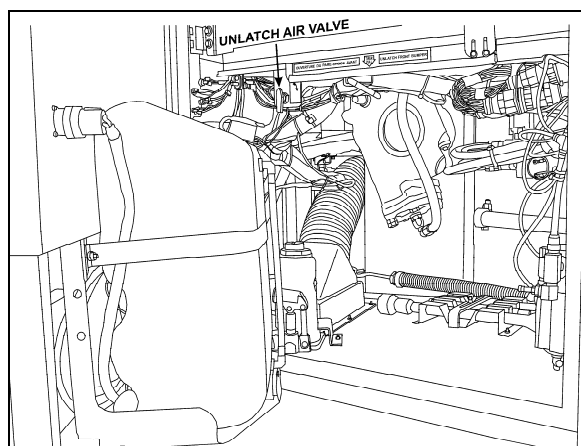
**EMERGENCY ENTRANCE DOOR OPENING**

An emergency release air valve located on the dashboard R.H. side allows emergency depletion of the door and latching cylinders. Another unlatch valve is located in the front service compartment and allows opening the door from the outside. To open the door in an emergency situation, first turn the unlatch valve in the direction of the arrows and push (or pull) the door open. To close the door after emergency opening, return the valve to its initial position, open the door using the door cylinder, then close the door normally.

**NOTE**  
 To be able to open the entrance door in an emergency situation, the entrance door must first be unlock using the key or lock lever before unlatching the door from the outside or the inside.



INTERIOR EMERGENCY RELEASE AIR VALVE 12164



UNLATCH AIR VALVE LOCATION 12209

**EMERGENCY EQUIPMENT**

**SUPPRESSION SYSTEM (AFSS)**

The coach is equipped with the Automatic Fire Detection and Suppression System (AFSS).

**System operation**

When a fire is detected inside the engine compartment, the system sends a fire alarm signal to the **Protection Panel** located in the Driver's area near the lateral control panel. The **Protection Panel** immediately turns on the fire "ALARM" lamp and sounds the audio alarm. After a 15-second time delay the engine is automatically shut down. The fire extinguisher is discharged simultaneously with engine shutdown.

**NOTE**  
 The **Manual Activation Switch** is used when immediate discharge of the fire extinguisher and engine shutdown is desired.

**NOTE**

The **Protection Panel** continuously monitors system integrity and displays the information via the “SYSTEM OK” and fire “TROUBLE” indicators.

**Operational sequence (fire)**

1. A fire detector or liner thermal detector detects a fire in the engine compartment and sends a signal to the **Protection Panel** in the driver’s area.
2. The fire “ALARM” lamp on the **Protection Panel** will illuminate solid red and an audible alarm will sound.
3. The operator shall bring the vehicle to a safe stop.
4. The system automatically shuts down the vehicle engine and discharges the extinguisher into the engine compartment 15 seconds after the fire alarm starts unless advanced or delayed by the operator.
  - If the operator presses the **Manual Activation Switch**, all delays will terminate and the engine shutdown and extinguisher discharge will occur immediately.
  - If the operator presses and releases the **Delay Engine Stop** switch once, the engine shutdown and extinguisher discharge will be delayed by an additional 15 seconds.



**WARNING**

The engine will stop 15 seconds after the fire alarm starts. The operator must be prepared to bring the vehicle to a safe stop as soon as the alarm sounds. Steering may become difficult after engine shutdown. If more time is required, the “DELAY ENGINE STOP” switch may be pressed and released for an additional 15 second delay.



**WARNING**

The extinguisher discharge may cause an obscuring cloud behind and near the vehicle.

5. The red fire “ALARM” lamp and audible alarm will stay on. The yellow fire “TROUBLE” lamp will also be on indicating a discharged extinguisher.
6. The system must be reset and the fire extinguisher removed and replaced in accordance with the System Reset portion of the Kidde Dual Spectrum Operation & Maintenance Manual.

**FIRE EXTINGUISHER AND FIRST AID KIT**

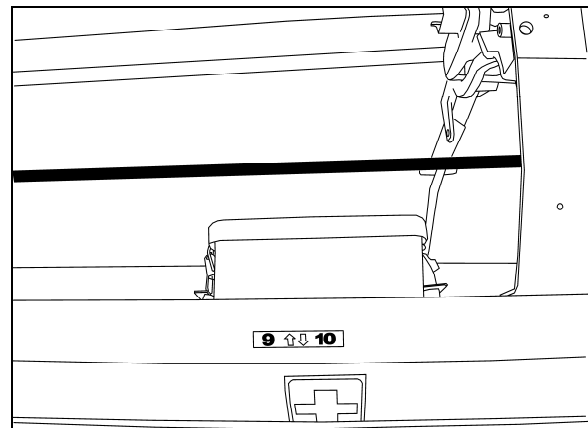
The fire extinguisher is located behind the driver’s seat. Instructions for use are found on the extinguishers.



**WARNING**

Make sure you know how to operate the fire extinguishers in case of an emergency.

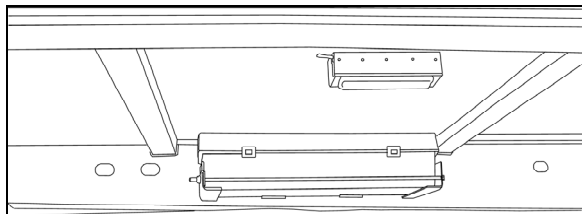
The first aid kit is located in the second curb-side overhead storage compartment, above seats 9-10. A white cross over red background decal identifies the first aid kit location.



FIRST AID KIT LOCATION

**WARNING REFLECTORS**

A kit containing three triangular reflectors is provided to warn other drivers on the road in case of a breakdown. The kit is located at the ceiling of the first baggage compartment, on the R.H. side. The reflectors provide visible warning of an emergency situation. The three reflectors should be placed as indicated on the box cover. These reflectors comply with FMVSS 125 (Federal Motor Vehicle Safety Standards).



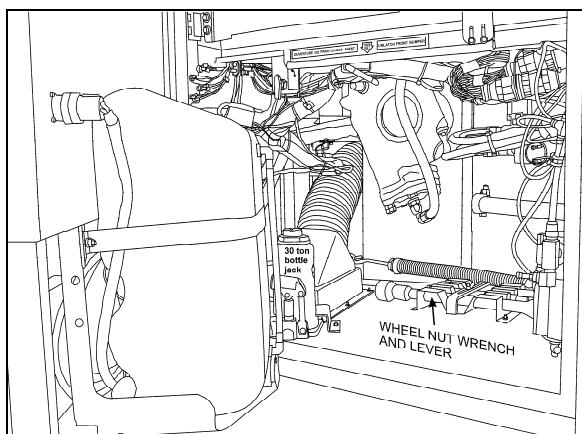
WARNING REFLECTORS LOCATION 23376

**JACK / TOOLS**

A kit for jacking up the vehicle and changing wheels is stored in the front service compartment. The kit includes a:

30 ton bottle jack;

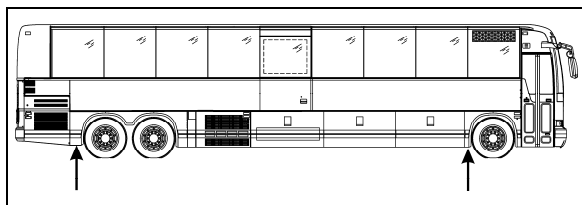
- Wheel nut wrench and lever.



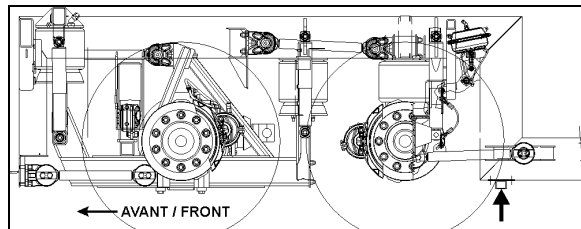
JACK/TOOLS LOCATION 23377

**JACKING POINTS**

Ten jacking points are located on the vehicle; two are located under each axle. The two jacking points that are located on each side of the frame are equipped with receptacles (pads). Refer to the following illustrations for the location of jacking points.



JACKING POINTS ON FRAME 18618

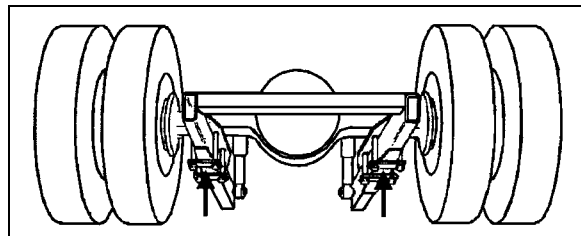


REAR END JACKING POINTS 18593

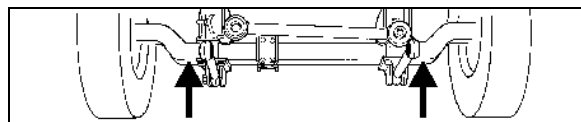


**WARNING**

The suspension of the vehicle must be in the normal ride position before jacking.



JACKING POINTS ON DRIVE AXLE 11005

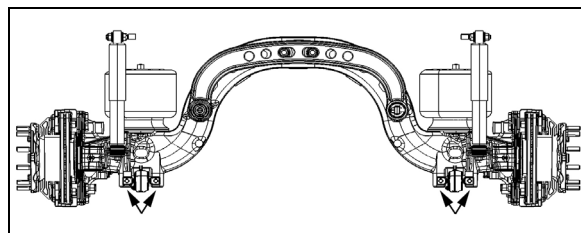


JACKING POINTS ON FRONT AXLE 10005



**WARNING**

Always unload or retract the tag axle before jacking the vehicle from the front and drive axle jacking points to prevent damage to suspension components.



JACKING POINTS ON TAG AXLE 11029



**WARNING**

The jacking points on the tag axle must be used for raising the tag axle only.

Several kinds of hydraulic jacks can be used. Only jack at the specified jacking points. Jack must support the following capacities:

Front axle: 20,000 lb (9 100 kg);

Drive axle: 40,000 lb (18 200 kg).

**HYDRAULIC JACK**

To raise: turn release valve clockwise. Insert handle in socket and raise by pumping.

To lower: remove handle and turn the release valve slowly counterclockwise.

Always keep ram and extension screw retracted when jack is not in use.

Service: Check oil level when jack fails to raise to full height. Lower ram completely with release valve open and jack in upright position, remove filler plug and refill to level of filler hole with hydraulic jack oil. **Never use brake fluid.**

**DANGER**

Jack is intended for lifting only. Do not get under the vehicle or load for any reason unless it is properly supported with safety stands and securely blocked.

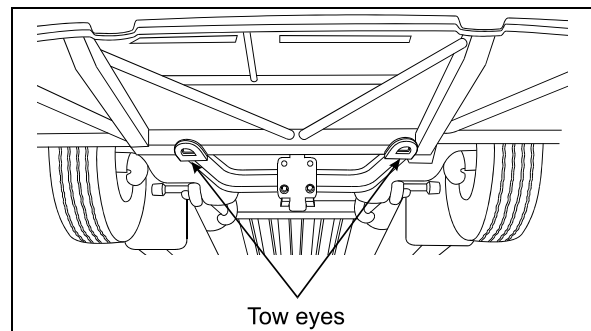
**DANGER**

Do not load jack above rated capacity. Prevent "side loading", make sure load is centered on ram. Do not push or tilt load off jack.

**TOWING**

**LIFTING FROM THE FRONT**

To prevent damage to the vehicle, use the two tow eyes fixed to the vehicle frame between the front axle and the front bumper. Use only a solid link tow bar and a safety chain to tow the vehicle.



**TOW EYES UNDER VEHICLE** 18401

- Disconnect driveshaft or remove both drive axle shafts to prevent damage to the transmission. Plug axle tube to prevent oil loss. Refer to Rockwell's "Maintenance

*manual no.5"* annexed at the end of Section 11: Rear Axle of the maintenance manual.

**CAUTION**

To prevent damage to the drive train components, disconnect axle shafts or driveshaft before towing. Do not attempt to push or pull-start a vehicle equipped with an automatic transmission.

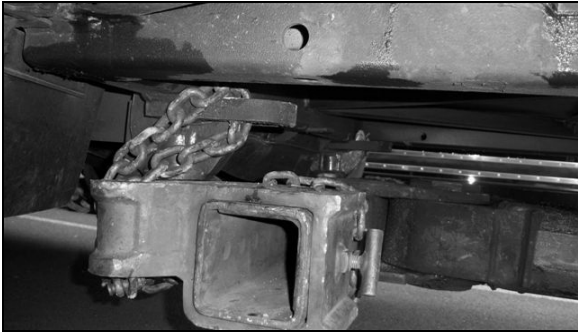
**Failure to disconnect the driveshaft, remove the drive axle shafts or lift the drive wheels off the ground before towing can cause serious transmission damage and void the warranty.**

- The towed vehicle must be lifted from under the front end only. The tow truck must be equipped with the proper lifting equipment to reach under the tow eyes or the front axle since no other lifting points are recommended. Lifting and towing from any other point are unauthorized as it may cause serious damage to the structure. Do not unload or raise the tag axle when lifting and towing to prevent overloading the drive axle.



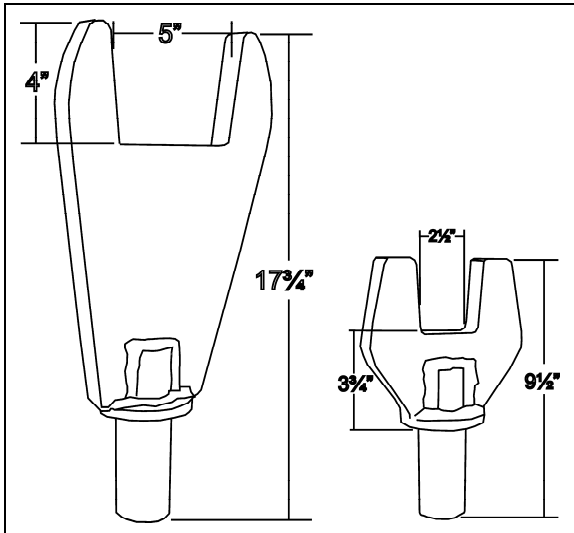
- Raise the front of the coach then install wooden blocks underneath front tires.

- Install axle forks and supports onto tow bar, position axle forks around beam and into tow eyes, insert chains into tow eyes to secure.



**⚠ DANGER**  
Do not carry passengers while the coach is being towed.

- The coach can also be towed by installing axle forks on the front axle.



AXLE FORKS

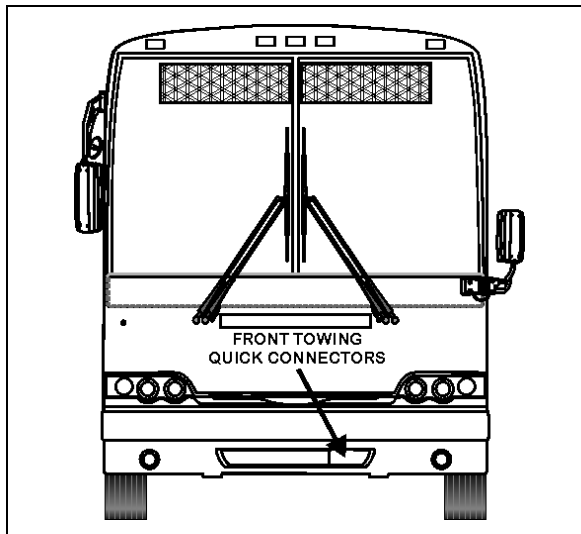


- Install chains around tow bar and front axle.

**⚠ CAUTION**  
Make sure a safe distance (27-28") is kept between the front of the coach and the tow truck. This space ensures that coach does not suffer damages when being towed.



- Flip down the access door located in the front bumper, connect an auxiliary air supply to the two quick connectors so the emergency/ parking brakes don't apply while towing.



FRONT TOWING AIR SUPPLY CONNECTORS

**Towing with a front flat tire**

- In case of a flat tire, drive coach over a wooden block to be able to slide the tow bar underneath.



- Repeat previous steps for attaching tow bar to tow eyes or front axle using axle forks and chains.



**MOVING A VEHICLE FROM THE REAR**

The vehicle should not be towed from the rear unless an emergency situation occurs. If the vehicle has to be moved over a short distance as in a parking lot:

- Chock front vehicle wheels.



- Lift the vehicle rear end. Slide axle forks and supports onto tow bar and install onto engine cradle.



**CAUTION**

To prevent damage to the vehicle structure, it is not recommended to tow the vehicle from the rear. In case of damage to the drive train components, use a low bed semi-trailer to support the rear end.



**DANGER**

Do not carry passengers while the coach is being towed.





**CAUTION**

Make sure axle shafts or driveshaft are installed correctly after towing. Tighten axle shaft and driveshaft nuts to the correct torque settings. Do not invert shafts.



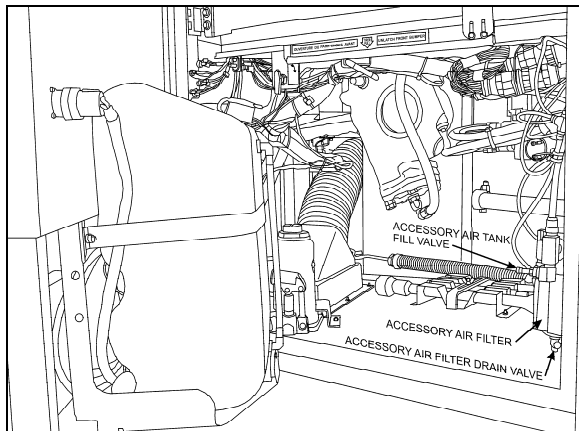
**CAUTION**

Air filled through the two emergency fill valves will pass through the standard air filtering-drying system. Do not fill air at any other location. Do not exceed 120 psi (827 kPa).

**EMERGENCY AIR-FILL VALVES**

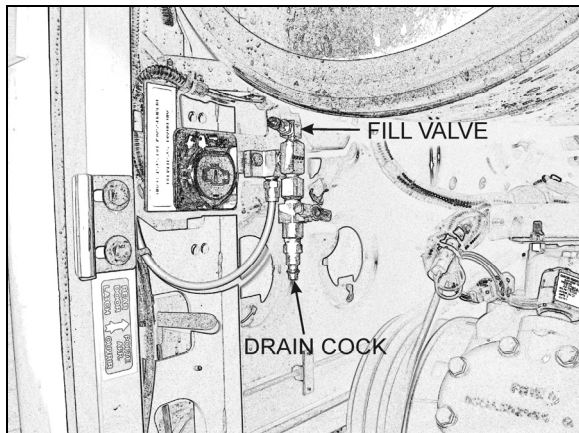
The vehicle is equipped with two air system emergency fill valves to supplement the air system when air pressure is low and the engine cannot be operated. One valve is located inside the front service compartment. The other valve is located inside the engine compartment.

Both air system emergency fill valves are fitted with standard tire valve stems. The air systems can be filled using any standard external air supply line. The fill valve located in the engine compartment supplies air for all systems (brakes, suspension and accessories). The fill valve located in the front service compartment supplies air for accessories only.



**FRONT SERVICE COMPARTMENT**

12210



**FILL VALVE IN ENGINE COMPARTMENT**

12211

**EMERGENCY AND PARKING BRAKES**

During normal operation, if air pressure in all brake circuits drops below 40 psi (276 kPa), spring-loaded emergency brake will be immediately applied at full capacity to the drive axle wheels to stop the vehicle.

Spring-loaded parking brake is applied by pulling up the control valve knob located on the L.H. lateral console.

Parking brake is not designed to be used as a service brake. For normal driving conditions, the control valve knob must remain in the down position.



**DANGER**

Always apply the parking brake before leaving the driver's seat.

**NOTE**

Only use the parking brake to supplement the service brake to stop the vehicle in emergency conditions. The stopping distance will be considerably longer than when using normal service brake.

**NOTE**

Before releasing the parking brake by pushing down the control valve knob, check the pressure gauges to make sure that the brake system air pressure is greater than or equal to 95 psi (655 kPa).

**NOTE**

A beep will sound if the ignition switch has been turned off without applying the parking brake. The same beep will sound if pressure is still applied to the service brake pedal.

**NOTE**

The stoplights will automatically turn on when the parking brake is applied and the ignition key is turned to the ON position.


### DAYTIME RUNNING LIGHTS

The inner lamps only also called high beams illuminate automatically when the engine is started and the parking brake is released to serve as daytime running lights. The daytime running lights provide added safety by making the traveling vehicle more visible to other drivers during the day.

The daytime running lights system turns the headlights on when:

- Engine is running;
- Parking brake is released;

The exterior lighting switch is set to the OFF position or pressed to the first position.

 <b>WARNING</b>
<p>Do not drive with only the daytime running lights at night because the tail and marker lights are not turned on in that situation and the high beams can blind other drivers. For night driving, turn ON the headlights by depressing the exterior lighting rocker switch to the second position.</p>

### COMPARTMENT LIGHTING

Baggage compartments and front service compartment lights are automatically turned ON when the corresponding compartment door is opened. A pictogram will appear on the status bar of the Driver Information Display (DID) when the baggage compartment door is open.

### MUD FLAPS AND SPLASH GUARDS

Mud flaps are installed behind each front and tag axle wheel in order to minimize dirt on the lower panels of the vehicle and prevent stones and debris from being thrown at vehicles traveling behind the vehicle. Mud flaps are also installed on front of each front axle wheel to reduce water splash on rear-view mirrors. Splash guards may be installed behind each dual wheel of the drive axle to prevent stone projectiles from being thrown at the tag axle wheels.

### BACK-UP ALARM

The back-up alarm alerts pedestrians and other drivers when the vehicle is being backed-up.


Take extra precautions whenever backing-up. If necessary, use a guide to provide directions when backing-up. The alarm is automatically activated when the transmission is put in the reverse (R) range.

### ESSENTIAL FUNCTIONS TO OPERATE THE VEHICLE (BASIC LIMP-HOME FUNCTIONS)

Even with a defective MCM (Master Chassis Module) or a CAN network problem, essential base functions are maintained to rear start the vehicle from the engine compartment and drive in a secure manner.

#### AVAILABLE FUNCTIONS

- Startup: Turn on the ignition in the driver's area and rear start the vehicle from the engine compartment,
- Opening the door: Functions normally,
- Closing the door: Manually pull on the door and it will lock automatically,
- Windshield wipers: Wipers functions at 1st speed only,
- Headlights: Low beams only,
- Directional signals: Rear and front only,
- Stoplights: 2 upper stoplights + high-mounted stoplight are functional,
- HVAC: Functional with set point fixed at 68°F (20°C), evaporator and condenser fixed at speed 1, defroster fixed at speed 4.

 <b>CAUTION</b>
<p>The following directives must be followed.</p> <ul style="list-style-type: none"> <li>• Never connect a battery charger when the ignition is at the ON position on a vehicle with a CAN defective or certain functions will start up by themselves,</li> <li>• Disconnect the charger before starting the vehicle, if not the default functions will not activate,</li> <li>• If the default mode does not activate, try to turn the ignition OFF while ensuring that no charger is connected and then restart the vehicle.</li> </ul>