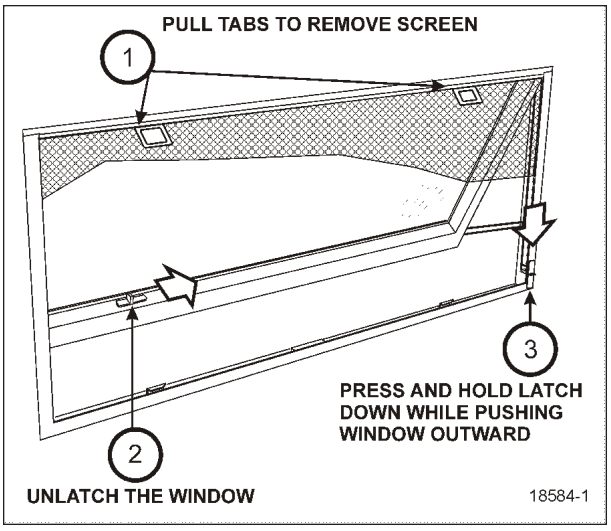
SECTION 7

EMERGENCY EXITS

Locate and learn how to use all possible emergency exits. It is good practice to inform all guests or passengers of the location of exits and how to use them in case of an emergency *"AIR REGISTERS" on page 23*.

ELECTRIC AWNING WINDOW

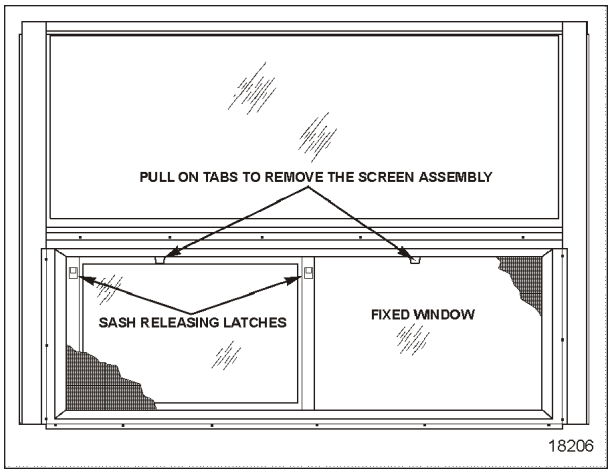


ELECTRIC AWNING WINDOW

ELECTRIC SLIDING WINDOW

Electric (power) sliding windows can be used as emergency exits.

- Remove the screen assembly,
- Pull down on both red release latches simultaneously and rotate the sash inwards approximately 10 degrees.
- Lift the sash up and out to disengage the bottom of the sash from the window frame.



ELECTRIC SLIDING WINDOW

FIXED WINDOW

Fixed windows are fastened or glued to the structure of the vehicle; they do not open and are very hard to break. In case of emergency, do not attempt to open them, instead find and use the entrance door or the nearest awning or sliding window.

EMERGENCY EQUIPMENT

FIRE EXTINGUISHERS

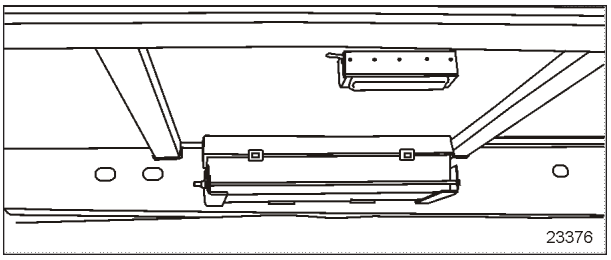
Two chemical fire extinguishers are provided with the vehicle. Placement may vary depending on options and models. Take a moment to locate them in your vehicle. Instructions for use are found on the extinguishers. Make sure you know how to operate fire extinguishers in case of an emergency.

FIRST-AID KIT

The optional first aid kit is usually stored near the driver's seat. A white cross over red background decal identifies the first aid kit.

WARNING REFLECTORS

A box containing three triangular reflectors is provided to warn other drivers on the road in case of a breakdown. The box is located at the ceiling of the first baggage compartment, on the R.H. side. The reflectors provide visible warning of an emergency. 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 (X3 SERIES)

JACK AND TOOLS

A kit for jacking up the vehicle is stored in the first R.H. side baggage compartment, attached to the forward bulkhead of the compartment. The kit includes a:

- 12-ton bottle jack;
- Wheel nut wrench and lever.
- Bumper Wrench

SPARE PARTS KIT

The vehicle may be equipped with a spare parts kit (optional). The kit contains parts such as bulbs, circuit breakers, belts, etc. The spare parts kit is stored in the first baggage compartment.

AUTOMATIC FIRE SUPPRESSION SYSTEM (AFSS)

The vehicle may be equipped with the optional 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 Protection Panel continuously monitors system integrity and displays the information via the "SYSTEM OK" and fire "TROUBLE" indicators.

NOTE

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

Operational Sequence (Fire)

1. A fire detector or linear 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.

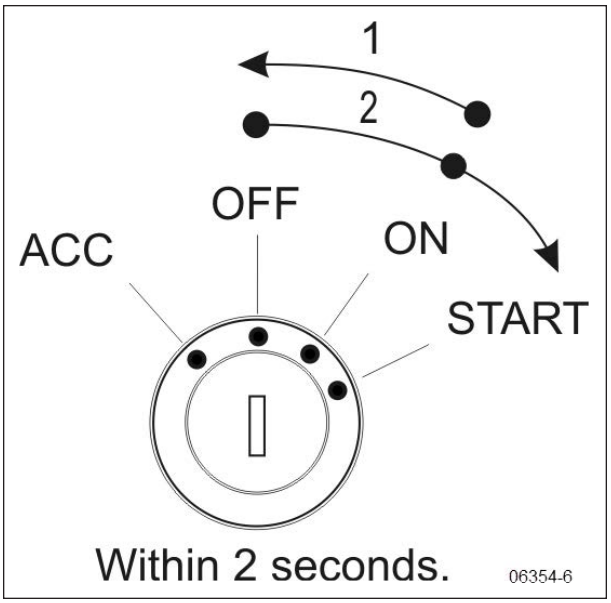
6. The system must be reset and the fire extinguisher removed and replaced in accordance with the System Reset portion of the Kidde Dual Spectrum Operation & Maintenance Manual.

Starting The Vehicle After A Fire Alarm

The vehicle may be started after a fire alarm without resetting the system. Refer to ignition switch sequence below. This will not reset the system; rather it will instruct the vehicle's multiplex system to ignore vehicle interface outputs from the Protection Panel. This feature is intended to be used only in emergencies that require the vehicle to be restarted and moved a short distance prior to system reset. It should not be performed if the cause of the fire has not been clearly identified and corrected.

To start the vehicle, perform this ignition switch (key) sequence.

- From the **ON** position,
- Turn to **OFF**, return to **ON** and **START** vehicle within 2 seconds.



TIRE PRESSURE MONITORING SYSTEM (TPMS)

The vehicle may be equipped with the optional Tire Pressure Monitoring System (TPMS).

Description

System includes the following elements:

- Special tire valves;
- RF sensor inside each tire, fixed to the valve;
- 3 antennas to receive the sensors RF signal (one in the front spare tire compartment, one above the L.H. side rear wheels and one above the R.H. side rear wheels);
- A TPMS receiver connected to the antennas and located in the front electrical compartment, above the CECM;
- A TPMS display built in the L.H. dashboard panel;
- A "FLAT TIRE" telltale panel indicator.

The section of the special tire valves located inside the tire is dome-shaped to allow fixing the sensor.

Sensors provide continuous tire pressure and temperature reading.

The normal sensor battery lifespan is 5 years. The remaining lifespan is displayed as a percentage in the TPMS display.

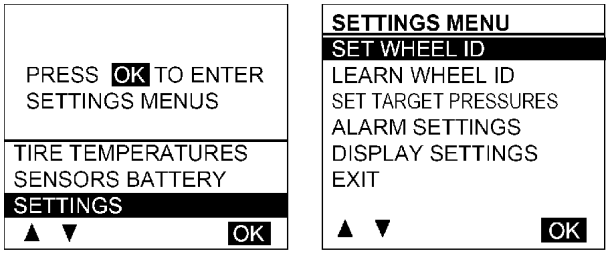
NOTE
It is recommended to check the remaining battery lifespan when changing the tires in order to replace the sensors at the same time if they are due for replacement before the next change.

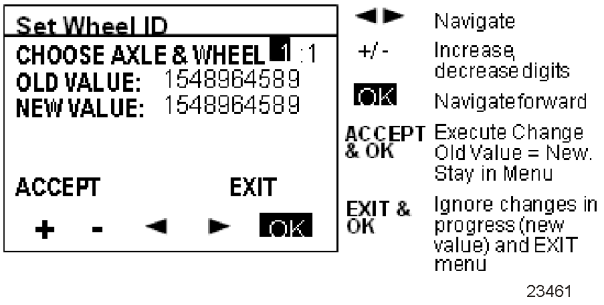
The screw fixing the sensor to the valve can only be used once because the threads are coated to lock the sensor in place and prevent unfastening.

The telltale panel indicator illuminates for 3 seconds when the ignition switch is turned ON to check the display operation and the communication between the display and the vehicle multiplex system. This confirms the communication between the TPMS display and CECM.

Settings Menu

- Set Wheel ID





- Learn Wheel ID

This menu allows learning new wheel sensors ID. The user can learn only one wheel, several wheels or all wheels of the vehicle. The sequence automatically jumps to the next wheel such that a user can initiate all wheels without having to come back to the display between each wheel.

The display uses a pressure change as the criteria to recognize which wheel sensor the operator wants to get assigned to a given location. The amount of pressure change required is established at 2 PSI.

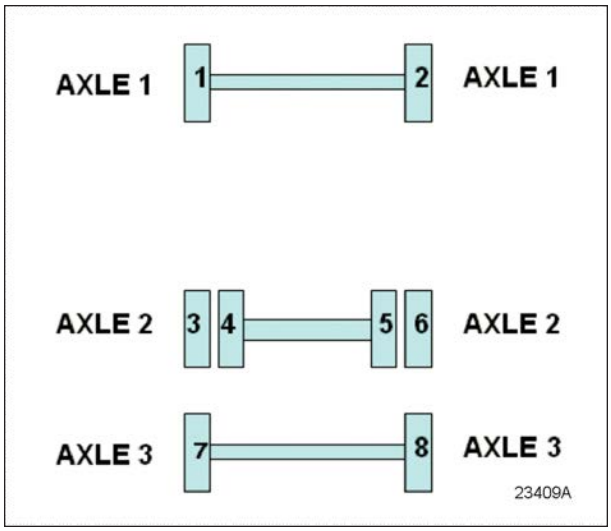
A pressure change of about 3 PSI is needed to wake up a sensor and then an extra amount of pressure change of 2 PSI is needed to trigger the display. The operator has to create a pressure change by at least 6 PSI and then wait for the display to recognize the pressure change. The wait time corresponds to the sensor sampling rate.

When entering the menu, the axle 1, wheel 1 is selected by default as a starting point for the learning. The user can select another axle with +/- , move the cursor to the wheel number with the right arrow and select another wheel with the +/- or move the cursor down to the start learning button.

After the start learning button is selected, the display stores the first transmission it gets from each sensor ID into the “initial pressure” for that sensor ID. Then it compares each subsequent pressure received for that sensor ID with the initial one and when the comparison shows a delta pressure exceeding the defined level required, this sensor ID is assigned to the selected tire location.

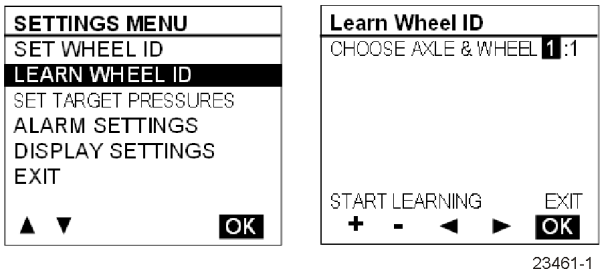
Once a wheel ID has been assigned, the display increments the number of wheels done and it moves to the next axle/wheel in the sequence, waiting for another sensor to come up with a pressure change. Within one learning session, the display remembers which sensor has been assigned and it will not assign it twice.

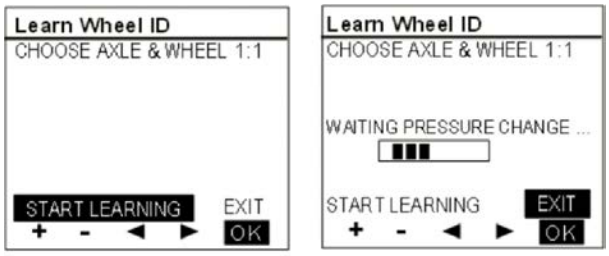
The sequence increments the display of the next wheel on the same axle, counting wheels from left to right, and then moves to the next axle, counting axles from front to rear.

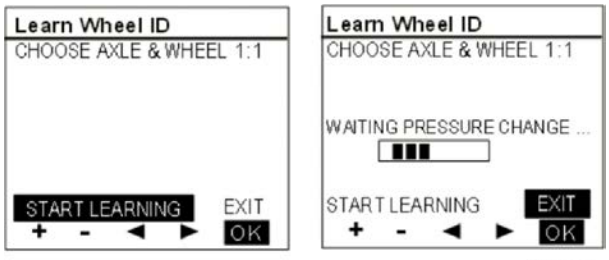


It activates the next wheel parameter each time a wheel is done. This setting is integrated with the vehicle electronic, activating an audible signal on the vehicle, thus providing feedback to the user that he can move on to the next wheel.

The spare tire can be done by selecting the axle/wheel “spare” which is internally encoded to 15:1.







- Set Target Pressures

This menu allows the end user to fine-tune the target pressure setting, taking account for the specific operating conditions (cold weather operation or unloaded operation). The end user can readjust the target pressure within +30% and -20% of the factory set target pressure but not outside this range.

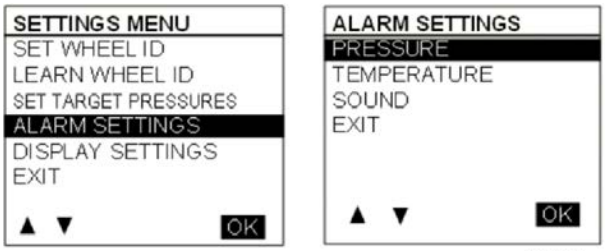
The factory set target pressure is always kept in permanent memory into the TPMS display and cannot be edited by the end user.

When the user sets a new target value, the selection can't be made outside the valid range.

23461-4

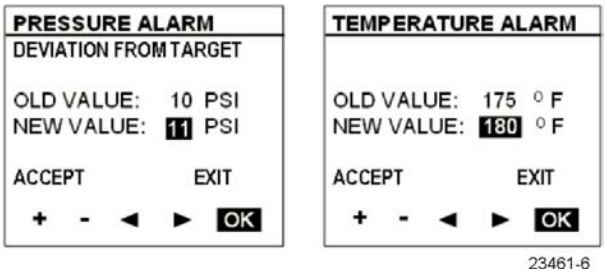
- Alarm Settings

When selecting the Alarm Settings Menu, a submenu containing Pressure Alarm and Temperature Alarm appears.

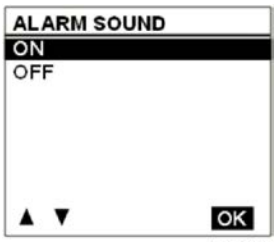


23461-5

When selecting Pressure, the following pressure alarm screen appears. A similar screen is displayed for temperature settings. The cursor can be moved to highlight the data beside "new value" and the "accept / exit" option. +/- allows increasing or decreasing the "new value" data. Pressure alarm changes are made by steps of 1 PSI, in the range from 5 to 20 PSI. Temperature alarm is done by steps of 5°F (2°C) in the range from 150 °F to 180 °F (64 °C to 82 °C). Pressing OK with "accept" highlighted applies changes and exits to the previous menu, while pressing OK while the "exit" option is highlighted exits without changes.

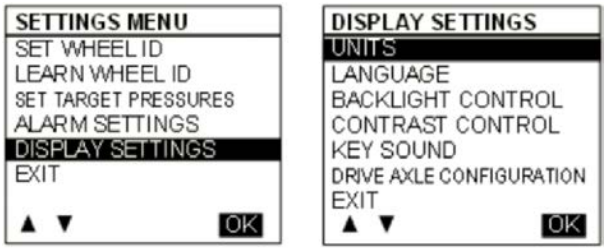


23461-6



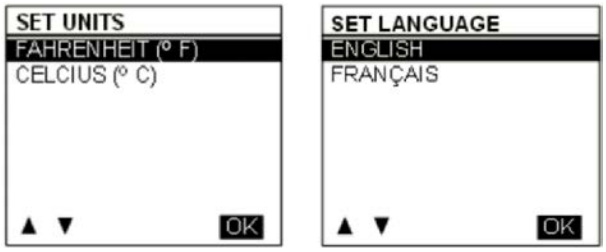
23461-7

- Display Settings



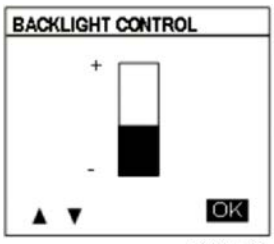
23461-8

- Units & Language



23461-9

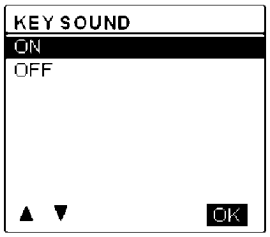
- Backlight Intensity



23461-10

- Key Sound

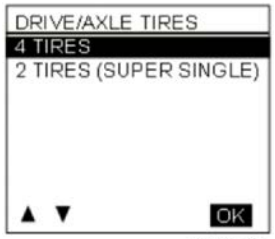
Turns ON/OFF the sound of keys each time they are pressed.



23461-11

- Tire / Axle Configuration

Pressing the up / down arrows allows to select the option of 2 or 4 tires, which are the choices for the drive axle on the vehicle.



23461-12

Refer to “Appendix G” for Troubleshooting Guide on Tire Pressure Monitoring System (TPMS).

CHANGING WHEEL

In case of a flat tire, turn ON the hazard flashers and bring the vehicle to a stop on the side of the road. Apply the parking brake. Make sure the vehicle is parked safely away from traffic. Set up the triangular reflectors in accordance with applicable highway regulations.

We suggest that you do not attempt to change a wheel. First, the wheel and tire are very heavy and usually there is no space available to put the removed flat. Second, the wheel nuts, especially those on inner dual, can become very tight after being on for only a short time. Often a heavy air wrench is required to get these nuts loose. We suggest you get help via CB radio or cellular phone. There are tire service trucks all over the country that can bring a wheel and make the change safely.

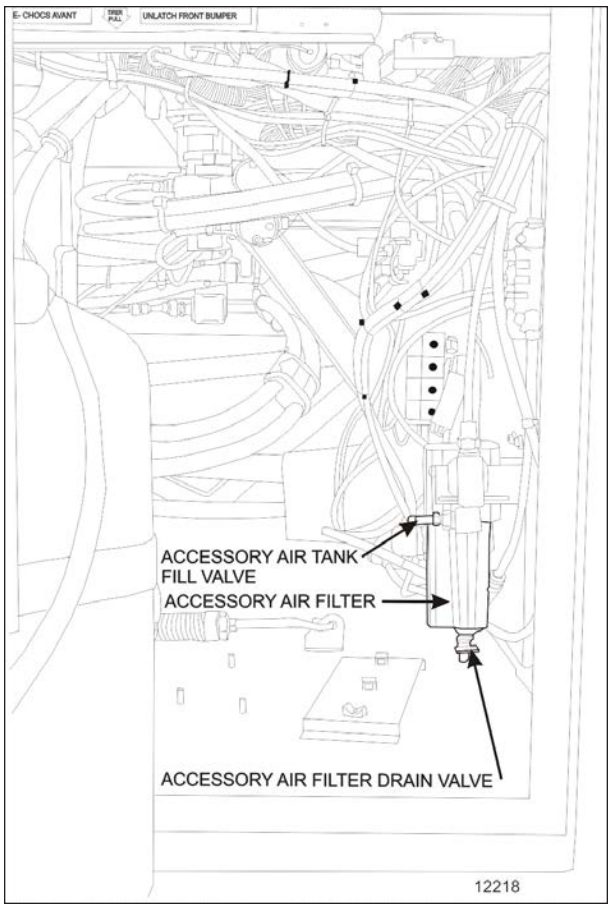
EMERGENCY AIR-FILL VALVES

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.

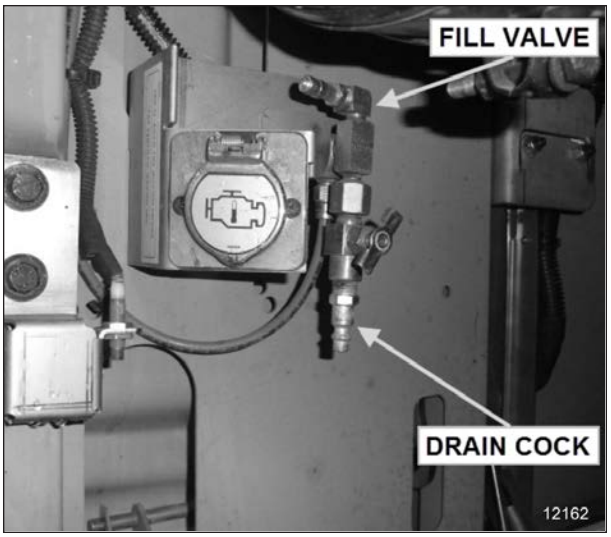
Both air system emergency fill valves are fitted with standard tire valve stems. The air systems can be filled using any standard external air supply line. The fill valve located in the engine compartment supplies air for all systems (brakes, suspension and accessories). The fill valve located in the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

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).



FRONT SERVICE COMPARTMENT



FILL FITTING IN ENGINE COMPARTMENT

EMERGENCY AND PARKING BRAKES

During normal operation, if air pressure in any brake circuit 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 depressed.

WARNING

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 gages to make sure that the brake system air pressure is greater than or equal to 95 psi (655 kPa).

NOTE

The telltale panel audible alarm will sound if the ignition switch has been turned to OFF without applying the parking brake. The same beep will sound if pressure is still applied to the service brake pedal.

NOTE

The stop lights automatically turn on when the parking brake is applied and the engine is running.

VEHICLE JACKING POINTS

For detailed instructions, refer to Maintenance information MI18-18, available on the technical publications USB key and website.

HYDRAULIC JACK

***To raise*:** turn release valve clockwise. Insert handle in socket and raise vehicle 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 overload jack above rated capacity. Prevent "side loading", make sure load is centered on ram. Do not push or tilt load off jack.

TOWING THE VEHICLE

For detailed instructions, refer to Maintenance information MI18-18, available on the technical

publications USB key and website.

DAYTIME RUNNING LIGHTS

The daytime running lights system provides added safety by making the front of the 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.

WARNING

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.

FOG LIGHTS

Optional halogen fog lights are available. They provide better visibility in fog and precipitation. They improve visibility immediately in front of the vehicle. They also provide added safety.

NOTE

Some states or provinces may restrict the use of fog lights. Verify local state or provincial regulations before using.

CORNERING AND DOCKING LIGHTS

The vehicle may be equipped with up to four halogen cornering lights. Two lights are installed at the front of the vehicle, on each side as standard equipment. Two optional lights may be installed on each side at the rear of the vehicle. When activated, the front lights illuminate at the same time as the turn signal flashers to increase lateral visibility while turning. The rear lights illuminate when the reverse (R) range is selected to increase visibility while backing-up the vehicle. All four lights will illuminate when the docking position is selected using the rocker switch. Refer to chapter: “Controls and Instruments”.

COMPARTMENT LIGHTING

Baggage compartments and the service compartments 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 wheel and the tag axles. Mud flaps minimize dirt on the lower panels of the vehicle and prevent stones and debris from being thrown at vehicles traveling behind the vehicle. 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 CAMERA

An optional back- up camera is available which provides the driver with visual assistance when backing-up. The monitor is mounted on the left side pillar. It switches on automatically when the transmission is in the reverse (R) range.

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. Both the alarm and optional camera are automatically activated when the transmission is put in the reverse (R) range.

BACK-UP ALARM CANCEL SWITCH

A rocker switch located on the lateral control panel allows the driver to cancel the back-up alarm system (as for example: at night on a camping site).

NOTE

After use, return to normal operation.

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

Even with a defective CECM (Chassis Electronic Control 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
- Windshiels washer fluid: Lower windshield washer
- 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 70°F (22°C), evaporator and condenser fixed at speed 1, defroster fixed at speed 4.

CAUTION

The following directives must be followed.

- 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,
- Disconnect the charger before starting the vehicle, if not the default functions will not activate,
- 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.