

SECTION 8 CARE AND MAINTENANCE

CLEANING.....	2
SEAT UPHOLSTERY.....	2
PLASTIC AND VINYL.....	3
WINDOWS.....	3
STAINLESS STEEL.....	3
FORMICA.....	3
CARPET.....	3
RUBBER COMPONENTS.....	3
FLOOR CLEANING.....	3
EXTERIOR SURFACES.....	3
TAR OR OIL.....	4
INSECTS.....	4
TREE SAP.....	4
WINDOWS.....	4
WIPER BLADES.....	4
FLUID LEVEL VERIFICATION.....	4
ENGINE OIL LEVEL.....	4
TRANSMISSION OIL LEVEL.....	5
POWER STEERING FLUID LEVEL.....	7
COOLING FAN RIGHT ANGLE GEARBOX OIL LEVEL.....	7
DRIVE AXLE WHEEL BEARING OIL LEVEL.....	7
FRONT AND AUXILIARY AXLE WHEEL HUBS.....	7
COOLANT FLUID LEVEL.....	7
WINDSHIELD WASHER & HEADLIGHTS WASHER RESERVOIRS.....	8
OTHER VERIFICATIONS.....	8
AIR TANK PURGE.....	8
FIRE EXTINGUISHERS.....	9
FUEL FILTER / WATER SEPARATOR.....	9
FAN AND ALTERNATOR DRIVE BELTS.....	10
A/C COMPRESSOR BELT TENSION ADJUSTMENT.....	10
BACK UP CAMERA.....	11
AIR FILTER RESTRICTION INDICATOR.....	11
MAIN POWER COMPARTMENT FAN AIR FILTER.....	11
A/C AND HEATING SYSTEM AIR FILTERS.....	12
HOSE INSPECTION.....	12
LUBRICATION.....	13
WHEELS AND TIRES.....	13
WHEEL BEARINGS.....	13
SERVICE BRAKE TEST.....	13
PARKING BRAKE TEST.....	13
EXTERIOR LIGHTING VERIFICATION.....	13
GENERAL RECOMMENDATIONS.....	16
FIRST SERVICE ON NEW VEHICLE.....	16
ENGINE OIL.....	16
ALLISON TRANSMISSION FLUID FILTER.....	16
WALK-AROUND INSPECTION (BEFORE EVERY TRIP).....	20

8-2 CARE AND MAINTENANCE

CLEANING

The cleaning information provided in this section is regarded as recommended cleaning practices. Cleaning results may vary depending on the condition of the stain. Always clean stains promptly for best results.

NOTE

Use only approved cleaning products such as Prevost A.P.C., all purpose cleaner (Prevost # 683664). Never use stain protection products on new fabrics. To prevent permanent staining of fabrics, clean stains soon after they occur. Incorrect treatment of stains can worsen them. Get help from a cleaning specialist to remove stubborn stains.



CAUTION

Custom fabrics and materials may require different cleaning and maintenance practices. Consult your converter.

SEAT UPHOLSTERY

Firmly beat the fabric with a blunt object, such as a wooden paddle, to release dust and dirt. Vacuum the seat fabric in the direction of the stitching using an upholstery nozzle.

NOTE

The abrasive nature of dirt and grit will reduce upholstery life expectancy. Vacuum regularly.

Removal of stains and marks

Depending on the nature of the stain, apply one of the two methods explained below to remove stains and marks on wool plush.

Method One:

1. Apply a nonflammable solvent to stained area with a clean, white absorbent rag;
2. Clean stain by starting at the outer edges of the stain and working in toward the center;
3. Blot affected area frequently with a clean, dry absorbent cloth to prevent stain rings caused by excess solvent.



WARNING

Use solvents in a well ventilated area. Open all windows and doors.

Method Two:

1. Wet the stain with a solution of household detergent and lukewarm water. Do not soak the stain;
2. Rub the stain with a damp cloth;
3. Rinse cloth after each application.



CAUTION

Do not use soap, soap powder, ammonia, soda, bleach or cleaning products containing any of these compounds.

Beverage stains

Remove beverage stains by following method one. If stain persists, repeat method one using methyl alcohol instead of solvent.

Alcoholic beverage stains

Remove alcoholic beverage stains by wetting the stain with water, then cleaning following method two.

Burns

Scrape burnt area using a knife or razor blade then clean following method two. Consult an upholstery specialist when dealing with extensive burns.

Cosmetic stains

Remove stains left by cosmetics by following method one then method two.

Ink stains

Remove ink stains following method two. If stain persists, apply a warm oxalic acid solution. Rinse with water.

Blood, urine or vomit stains

Remove such stains by following method two.

Copying ink - ball-point pen ink

Treat with methyl alcohol, blotting frequently to avoid spreading stain, followed by method two.

Marking ink (Felt-tip pens)

Treat with Methyl-Ethyl-Ketone (MEK) followed by method two.

Oil, grease and paint

Remove excess using a knife. Treat with method one followed by method two. If stain persists, repeat procedure.

Rust stains

Remove rust stains by following method two. Apply a warm oxalic acid solution to stained area. Rinse with water.

Tar

Soften tar with benzene, then treat using method one followed by method two.

Chewing gum

Soften gum with cyclohexane. Carefully scrape off stains using a sharp knife or razor blade.

PLASTIC AND VINYL

Clean plastic and vinyl trim using a clean damp cloth or sponge. For vinyl trim marks, use a lukewarm all purpose cleaner or a mild saddle soap. Remove water spots and soap traces using a clean damp cloth or sponge. Dry with a clean soft cloth.

Remove grease, tar or oil stains with a clean cloth or sponge and an all purpose or solvent-type vinyl cleaner.

Apply a colorless vinyl or leather protective product to maintain the luster and pliability of the plastic or vinyl surface.

WINDOWS

Clean the inside of the windows with a solution of one part vinegar to ten parts water.

STAINLESS STEEL

Use a stainless steel cleaner and follow the manufacturer's instructions. Stainless steel cleaning solution may be ordered from Prevost Car Inc. quoting part number 68-0356.

FORMICA

Remove stains on formica surfaces with a household detergent, methyl alcohol or mineral turps. Clean with a mild abrasive and water solution if stain persists.

CARPET

Vacuum carpets regularly to prolong carpet life.

RUBBER COMPONENTS

Use only pure water or glycerin to clean stains on rubber components.

 CAUTION
Never use solvents on rubber components.

FLOOR CLEANING

Clean vinyl floors with a quality nonionic detergent cleaner. Follow the manufacturer's recommendations for cleaning.

Remove any excess detergent solution using a wet/dry vacuum or mop. Rinse floor with a solution of one part Clorox to ten parts warm water.

Polish dry floor using a high-speed buffer and a smooth red 3-M polishing pad.

Mop floor periodically with a solution of 5 per cent Clorox in warm water.

NOTE
<i>For custom or special floor covering materials, consult the manufacturer or your converter for information on how to clean and maintain these types of floors.</i>

EXTERIOR SURFACES


Frequent washing and waxing of the vehicle exterior will help protect the finish and luster. The paint finish is attacked by the abrasive


8-4 CARE AND MAINTENANCE


effects of airborne particles and corrosive pollutants.


Before washing the exterior of the vehicle, close the fresh air dampers using the "REC" button located on HVAC control panel and on the air intake duct in the evaporator compartment. Install keyhole protectors to prevent water from penetrating. Rinse vehicle with water to remove all loose dirt. Wash vehicle using a quality brand car wash soap. Follow manufacturer's recommendations for cleaning. Rinse well with water.

The vehicle exterior should be cleaned, waxed and buffed when water droplets no longer form on the painted surfaces.

 CAUTION
Hot water can damage paint. Keep water cool or lukewarm.

 CAUTION
Make sure cleaning solutions are not harmful to painted surfaces. Read the manufacturer's instructions before using.

 CAUTION
Do not spray water jet directly into fresh air inlet dampers.

 CAUTION
Do not aim high pressure water jet at radiator or condenser doors. This could damage the fins.

To prevent corrosion, remove caked-on dirt and road salt from the vehicle underbody using a high pressure water jet. Clean wheel housings, bumpers, muffler, tailpipe and brackets.

Carry out corrosion prevention cleaning at least twice a year. Spray underneath of the vehicle and let soak before cleaning. Let engine and exhaust system cool down before cleaning.

TAR OR OIL

Remove tar or oil as soon as possible with an approved automotive tar and oil remover or

turpentine. Thoroughly clean area with car wash soap and water. Let dry, then wax.

INSECTS

Remove insect stains as soon as possible with lukewarm soap and water or insect remover.

TREE SAP

Remove tree sap or bird droppings with lukewarm soap and water. Do not allow to harden.

WINDOWS

To prevent windshield wiper streaking, keep silicone sprays away from windshield. Remove road film and wax build-up from windows with lukewarm soap and water or with an alcohol-based cleaning agent. If a chamois is used to dry and polish glass, use it exclusively for that purpose.

WIPER BLADES

To avoid tearing frozen wiper blades, loosen them before removing. Remove and clean wiper blades periodically with an alcohol-based cleaning solution. Clean wiper blades using a sponge or soft cloth.

FLUID LEVEL VERIFICATION

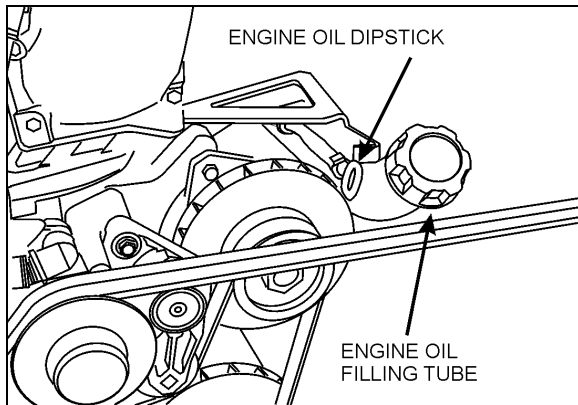
Periodic inspection of fluid level is the most economical and easiest way to help your vehicle perform at its best. Rigorous fluid level inspection and replacement will greatly help minimize expensive and unscheduled repairs.

ENGINE OIL LEVEL

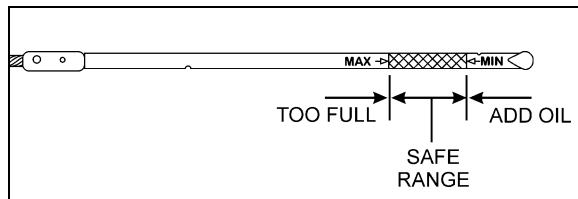
Check engine oil level when engine is still warm and with vehicle parked on a level surface. Shut off engine and wait at least 10 minutes for oil to drain into oil pan before checking. Check engine oil level daily or before each trip. Add oil as required. Do not overfill. Remove dipstick, wipe clean and fully reinsert to ensure an accurate reading. Remove dipstick and check engine oil level.

Do not let the oil level fall below the marking on the dipstick. **Do not** overfill so the level is above the upper marking on the dipstick. Add oil

through the oil filler pipe as required in order to maintain level within the safe range



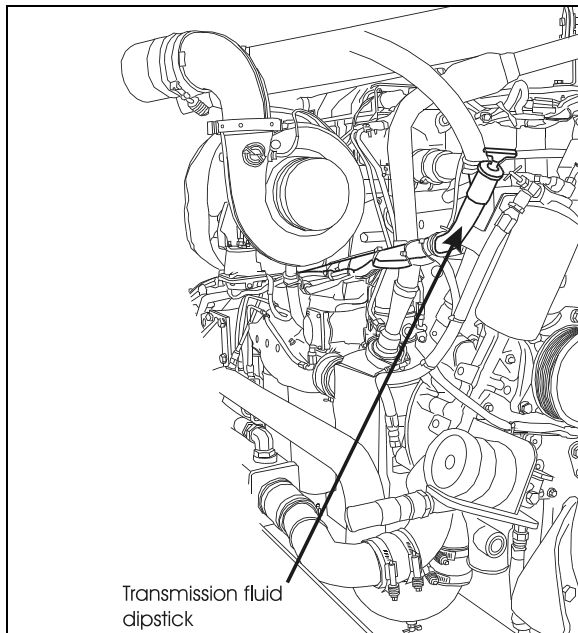
ENGINE OIL DIPSTICK 01192



VOLVO D13 ENGINE OIL LEVEL DIPSTICK 01195

TRANSMISSION OIL LEVEL

The transmission fluid level can be checked with the dipstick or with the use of the shift selector display. For more information on how to use the shift selector display to check the transmission oil level, refer to *Appendix C* under "Allison transmission oil level check using the pushbutton shift selector" in this manual.



LEFT SIDE OF ENGINE 01121

The automatic transmission oil level dipstick is accessible through the engine compartment rear door and is located on the left side of the engine.

Clean all dirt from around the end of the oil filler tube before removing the dipstick. Dirt or foreign matter must not be permitted to enter the oil system since it will cause valves to stick, undue wear of transmission parts, and clogged passages. To remove dipstick, unscrew filler cap approximately three turns and pull out dipstick. Check the oil level using the procedures in Cold Check and Hot Check. Record any abnormal level on your Maintenance Records.



WARNING

When checking the oil level, be sure that the parking brake and/or emergency brakes are set and properly engaged, and the wheels are chocked. Unexpected and possible sudden vehicle movement may occur if these precautions are not taken.

Special care must be taken not to touch the engine coolant tubing and/or exhaust pipe, since this could cause severe burns.

Do not wear loose clothing and, stay away from rotating parts during procedure; personal injury could occur.

NOTE

The Cold Check is more appropriate for verifying the oil level after the first fill-up. In case of conflict, the Hot Check has priority over the Cold Check; the fluid level check using the pushbutton shift selector has priority over the Hot Check.

Cold Check

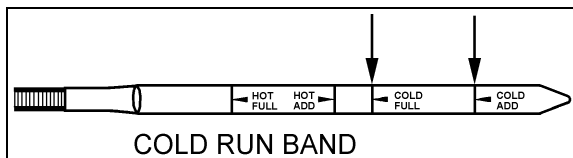
The purpose of the **Cold Check** is to determine if the transmission has enough fluid to be operated safely until a **Hot Check** can be made.

1. If the engine has been shut down for an extended period of time, park the vehicle on a level surface and apply the parking brake.
2. Run the engine at idle in «N» (Neutral) for about one minute.
3. Shift to «D» (Drive) and operate the engine for 30 seconds at 1000-1500 rpm; then shift to

8-6 CARE AND MAINTENANCE

«R» (Reverse) to clear the hydraulic system of air.

4. Move the vehicle to a level surface, put transmission in «N» (Neutral), and set the parking brake.
5. Finally shift to «N» (Neutral) and allow the engine to idle (500 - 800 rpm).
6. While the engine is running, remove the dipstick from the tube and wipe it clean. Insert the dipstick into the fill tube, pushing down until it stops.
7. Remove the dipstick and observe the fluid level. Repeat the check procedure to verify the reading. If the fluid on the dipstick is within the COLD CHECK band, the level is satisfactory for operating the transmission until the oil is hot enough to perform a **Hot Check**. If the fluid level is **not** within this band, add or drain fluid as necessary to bring the level within the COLD CHECK band.
8. Perform a **Hot Check** at the first opportunity after the normal operating temperature of 160°F to 200°F (71°C to 93°C) is attained.



AUTOMATIC TRANSMISSION OIL LEVEL DIPSTICK 07006



CAUTION

DO NOT operate the transmission for extended periods of time until a **Hot Check** has verified proper fluid level. Transmission damage can result from extended operation at improper fluid level conditions.



CAUTION

Obtain an accurate fluid level by imposing the following conditions:

- Engine is idling (500-800 rpm) in «N» (Neutral).
- Transmission fluid is at normal operating temperature.
- The vehicle is on a level surface.



CAUTION

The oil level rises as sump temperature increases. **DO NOT** fill above the Cold Run band if the transmission oil is below normal operating temperature. During operation, an overfull transmission can become overheated, leading to transmission damage.

Hot Check

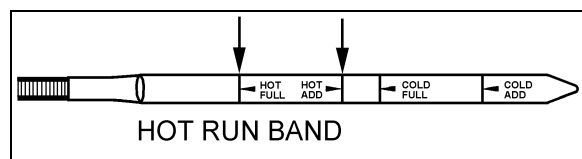
1. The **Hot Check** can be performed when the transmission oil reaches the normal operating temperature (160°F to 200°F / 71°C to 93°C). The transmission oil temperature can be checked with the dashboard message center display (MCD) when selecting the Gauge Mode.



CAUTION

The oil **must be hot** to obtain an accurate check because the fluid level rises as temperature increases.

2. Park the vehicle on a level surface and shift to «N» (Neutral). Apply the parking brake and allow the engine to idle (500 - 800 rpm).
3. Remove the dipstick from the tube and wipe it clean. Insert the dipstick into the fill tube, pushing down until it stops.
4. Remove the dipstick and observe the fluid level. The safe operating level is anywhere within the HOT RUN band on the dipstick. Repeat the check procedure to verify the reading.
5. If the level is **not** within this band, add or drain fluid as necessary to bring the level within the HOT RUN band.
6. Be sure fluid level checks are consistent. Check level more than once and if readings are not consistent, check to be sure the transmission breather is clean and not clogged. If readings are still not consistent, contact your nearest Allison dealer or distributor.



AUTOMATIC TRANSMISSION OIL LEVEL DIPSTICK 07006

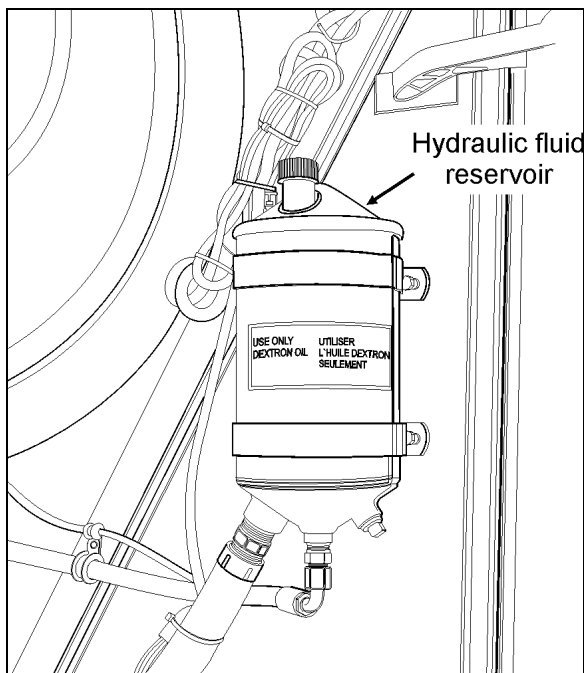
NOTE

Approximately 1 quart (0.95 liters) of oil will raise the oil level from the lower line of the HOT RUN band to the middle of the HOT RUN band.

Replace dipstick and tighten the filler tube cap until the rubber seal is correctly seated.

POWER STEERING FLUID LEVEL

The vehicle is equipped with a power steering system. The hydraulic fluid tank is accessible by the engine compartment R.H. side door.



POWER STEERING HYDRAULIC FLUID TANK 14043

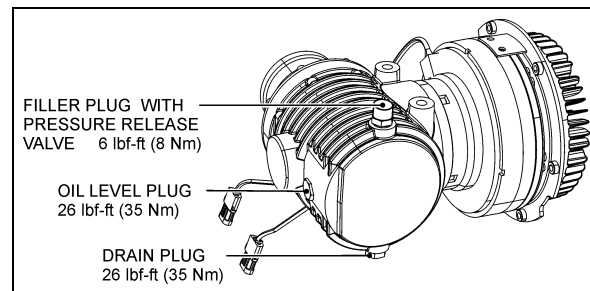
Check fluid level as follows:

1. Stop engine, open engine compartment R.H. side door and engine compartment door, place rear start switch to OFF position;
2. Unscrew and remove the dipstick located on top of the fluid tank and wipe with a clean rag;
3. Replace dipstick in tank, then remove to check fluid level;
4. Add hydraulic fluid until it reaches the FULL mark on the dipstick;
5. Place engine rear start switch to NORMAL position. Close engine compartment door;
6. Replace and tighten dipstick and close engine compartment R.H. side door.

COOLING FAN RIGHT ANGLE GEARBOX OIL LEVEL

Check cooling fan right angle gearbox oil level as follows:

1. Stop engine, open engine compartment door and place engine rear start switch to OFF position;
2. Remove side oil filler plug;
3. Add oil through the oil filling point if the oil level has fallen below the oil filling point;
4. The oil level is correct once the top of the oil has reached the bottom of the filling point or once oil has already started to escape from the filling point;
5. Replace the seal and screw the side filler plug back in;
6. Place engine rear start switch to NORMAL position. Close engine compartment door.



RIGHT ANGLE GEARBOX OIL LEVEL CHECK 05118

DRIVE AXLE WHEEL BEARING OIL LEVEL

Drive axle wheel bearings are lubricated by the differential oil. Maintain differential oil at correct level to ensure adequate lubrication of drive axle wheel bearings at all times.

FRONT AND AUXILIARY AXLE WHEEL HUBS

The unitized hub bearings used on the NDS range of axles, are non-serviceable items. Bearings are pre-adjusted, lubricated and have seals fitted as part of the manufacturing process. The bearings are greased for life and there is no need or facility for re-lubrication.

COOLANT FLUID LEVEL

Coolant level is correct when coolant reaches the middle of the surge tank sight glass when cold (ambient temperature). Fill the tank as necessary with the same 50/50 water-antifreeze mixture normally used. **Do not** mix two different types of coolant. Refer to the Maintenance

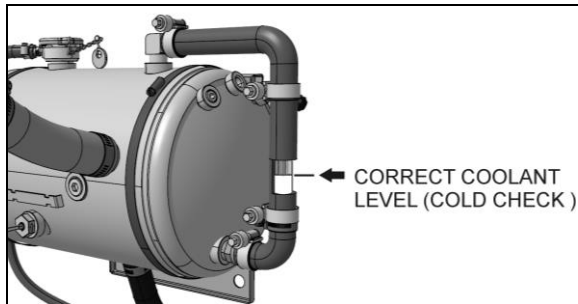
8-8 CARE AND MAINTENANCE

Manual for proper coolant type specifications or see the label affixed near the coolant surge tank on the vehicle.



CAUTION

On Volvo D13 engine, use **only** Extended Life Coolant (ELC). **Do not** add supplemental coolant additives (SCA) to extended life coolant. **Do not** use a coolant filter containing Supplemental Coolant Additives (SCA).



SURGE TANK IN ENGINE COMPARTMENT

05114_3

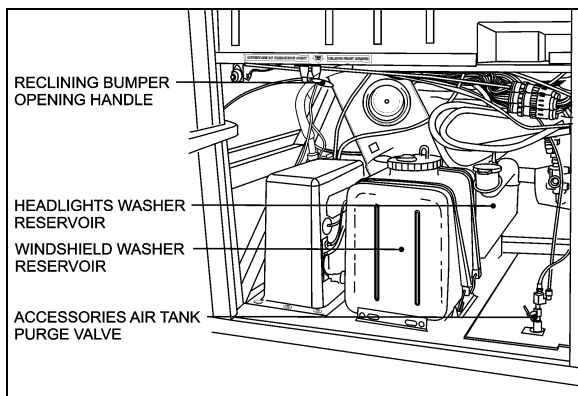


WARNING

Hot engine coolant is under high pressure. Allow engine to cool down before adding coolant.

WINDSHIELD WASHER & HEADLIGHTS WASHER RESERVOIRS

The windshield washer reservoir and headlights washer reservoir are located in the front service compartment door. The windshield washer reservoir has a capacity of 5.3 US gallons (20 liters) while the headlights washer reservoir has a capacity of 2.6 US gallons (10 liters). Check fluid level regularly.



WINDSHIELD WASHER FLUID RESERVOIR

14066

The spray jets are located on the windshield wipers and are angled to spray towards the center of the windshield.

Upper and lower windshield wipers have separate controls and separate washer pumps which are connected to the same reservoir.

Adjust the headlights washer nozzles according to the instructions found in section 23 of the maintenance manual. You may use water or windshield washer fluid as well.



CAUTION

During cold weather days, use windshield washer fluid suitable for freezing temperature only.

OTHER VERIFICATIONS

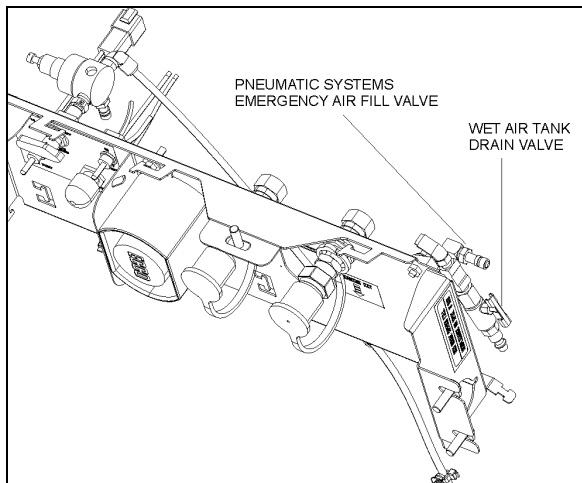
It is good practice to regularly inspect the vehicle for signs of component wear and to perform safety and maintenance routines.

AIR TANK PURGE

The vehicle may be equipped with up to twelve air tanks. Purge accessory and wet air tanks before each trip. The primary and secondary air tanks must be purged at least every 12,500 miles (20 000 km).

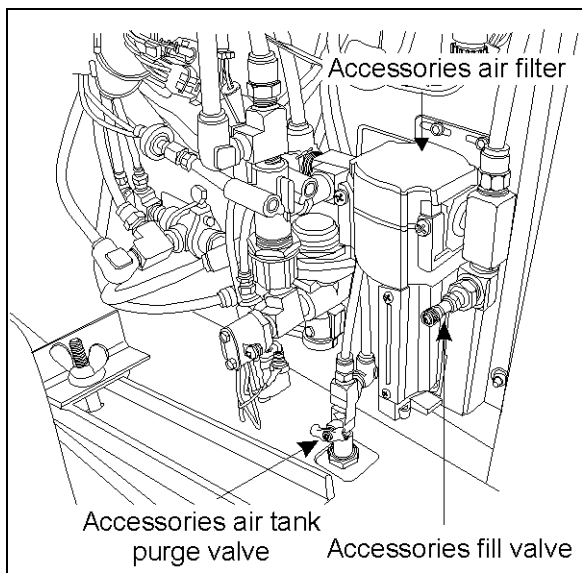
The accessory air tank drain cock is accessible from the front service and electrical compartment. The wet air tank drain cock is accessible from the engine compartment R.H. side door. All air tanks are equipped with a drain cock underneath the tank. Refer to "Components Identification" chart at the end of this chapter for tanks location.

Drain tanks by turning cocks counterclockwise.



ENGINE COMPARTMENT

12219_4



FRONT SERVICE COMPARTMENT

12130

FIRE EXTINGUISHERS

Inspect fire extinguishers monthly to insure operation in emergency situations.

In the case of extinguishers equipped with a pressure gauge, the needle should be in the green or NORMAL range. Refill or replace extinguisher if pressure is below normal;

Check that seal on handle is intact;

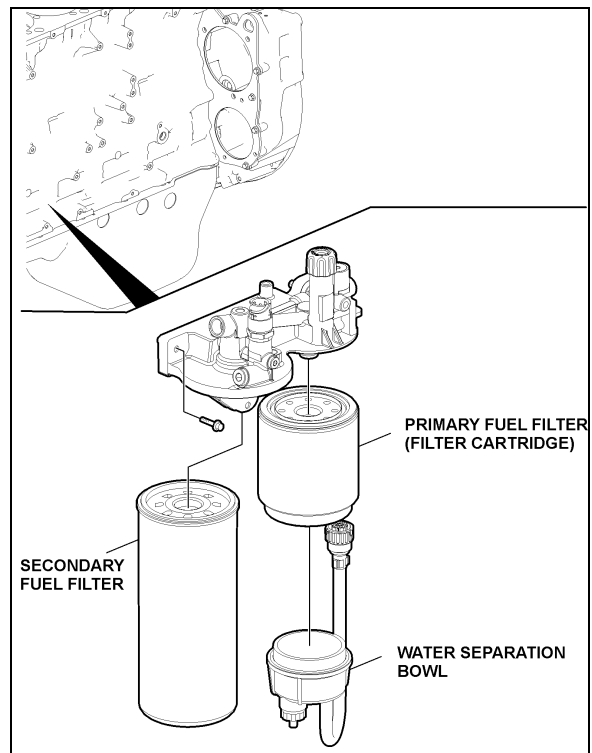
Check that nozzle hose is in good condition and that nozzle is free of obstruction;

Keep fire extinguishers clean.

FUEL FILTER / WATER SEPARATOR

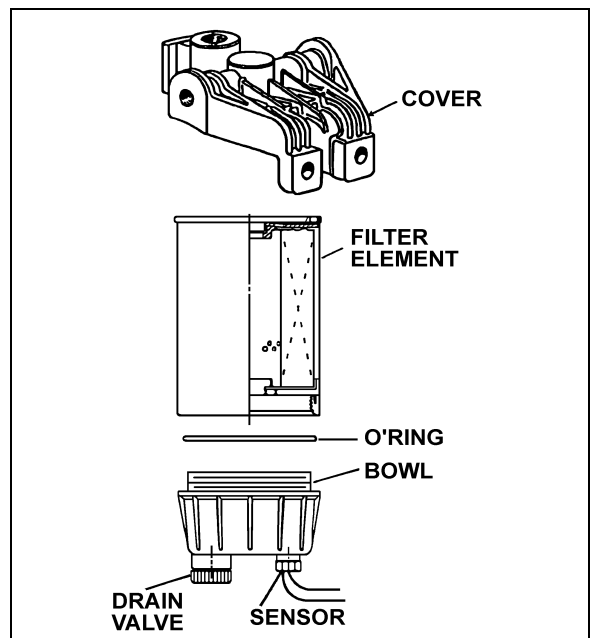
The fuel system is equipped with primary and secondary fuel filters for additional protection of

the injectors. A fuel filter/water-separator may be installed in primary fuel-filter location, to prevent water infiltration in engine fuel system. It should be drained periodically, or when the water separator telltale light on the dashboard illuminates. To drain, loosen positive seal drain valve below separator, and tighten after water has been flushed out.



FUEL FILTERS

03085

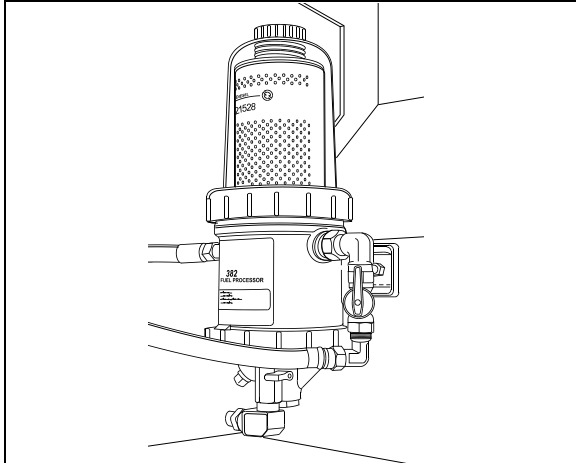


FUEL FILTER/WATER SEPARATOR

03025

8-10 CARE AND MAINTENANCE

The optional Fuel Pro 382 diesel fuel filter system consists of a permanently mounted fuel processor, a replaceable filter element, a filter element cover and collar and a fluid filter base assembly. This system is installed between the fuel tank and the fuel pump and replaces the primary fuel filter. The filter serves as a water separator as well as a fuel filter. To drain, turn ¼ turn the drain valve below filter, close when water has been flushed out.



DAVCO FUEL PRO 382

03032

FAN AND ALTERNATOR DRIVE BELTS

These belts have automatic belt tensioner to keep the correct tension without adjustment.

A/C COMPRESSOR BELT TENSION ADJUSTMENT

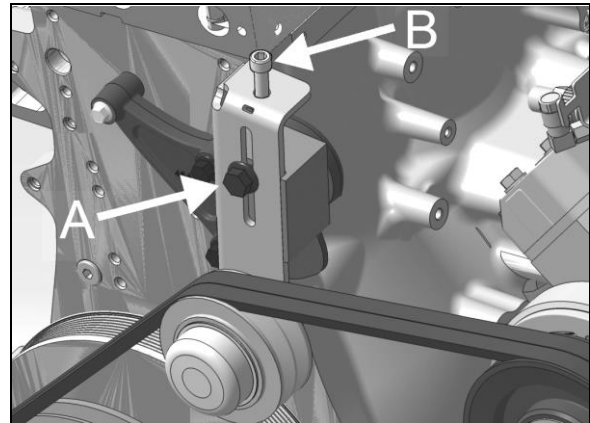
With Central HVAC system

The central HVAC Bitzer compressor is driven by either one or two V-belts depending if a 3rd alternator is installed.

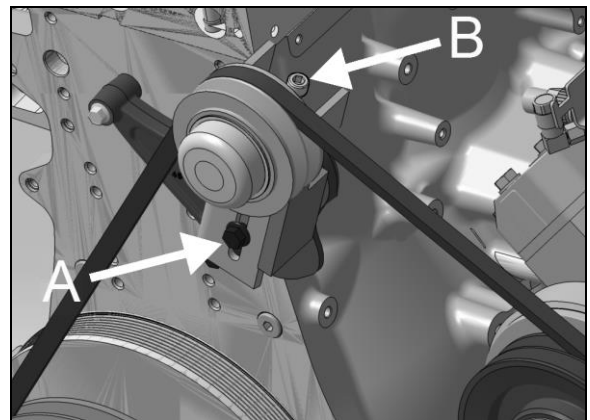
Belt tensioning is applied through the tensioner adjustment screw B. Loosen lock bolt A prior adjustment. Tighten lock bolt A to 43 lbf-ft once completed.

Belt tension should be within the following values:

Two v-belts arrangement	New belts: 90-100 lbs. Used belts: 75-85 lbs.
One v-belt arrangement	New belt: 150-160 lbs. Used belt: 120-130 lbs.



TWO V-BELTS ARRANGEMENT



ONE V-BELT ARRANGEMENT

Check belt tension using a belt strand tension gauge..

- Once adjustment completed, allow the engine to run for about ten minutes. Check belt tension and adjust if needed.
- Do not treat belts with any compounds. Keep belts dry.
- Periodically inspect belt and pulleys for wear or damage;

With Small HVAC System And Auxiliary Alternators

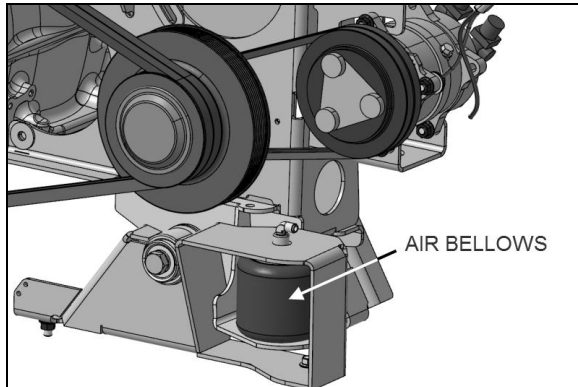
Intermediary belt tensioning is applied through an air bellows which is adjusted by an air pressure regulating valve mounted in the engine compartment, right behind the belt tensioning pressure control valve. The correct pressure of 45 psi (241 kPa) is set at the factory. Periodically verify the pressure at the regulating valve using a pressure gauge and correct if necessary.

To replace the intermediary belt, air pressure must be released from bellows by means of the

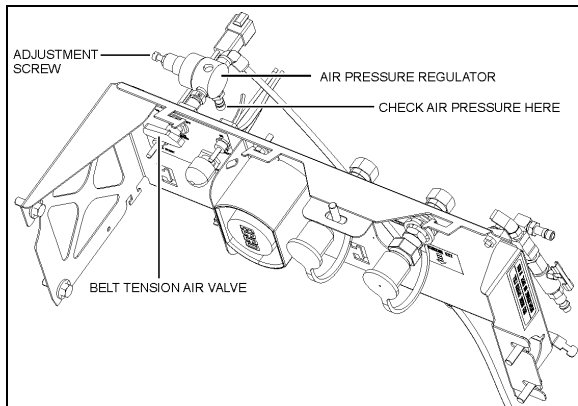
belt tensioning pressure control valve. This valve, mounted close to the pressure regulating valve, is manually operated. Before handling, be sure that all engine stopping safety precautions have been observed.

Turn control valve handle counterclockwise to its initial position to reapply pressure to the air bellows.

- Refer to the Parts Manual or the Coach Final Record for recommended belt sizes;
- Periodically inspect belt and pulleys for wear or damage;
- Do not treat belts with any compounds. Keep belts dry.



AIR BELLOWS



BELT TENSION AIR REGULATOR AND VALVE 12219_5

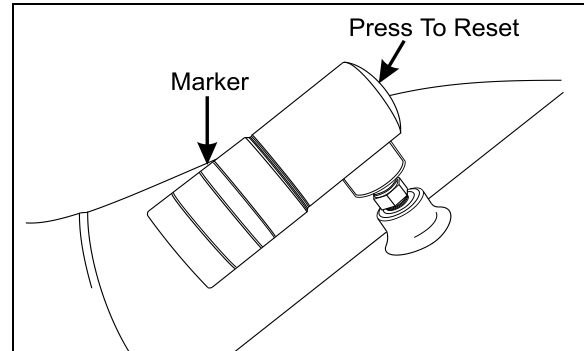
BACK UP CAMERA

The optional back up camera is located on the rear cap. The retractable back-up camera is visible only when turned on. To do so, put the transmission in reverse (R). The back up camera and monitor are then turned on automatically. To clean the camera's protective glass, spray with soapy water. Wipe with a clean damp rag or wiper blade.

AIR FILTER RESTRICTION INDICATOR

A filter restriction indicator is used to monitor the vacuum level between the air filter and engine. A red marker is displayed when the air filter is clogged. When a red marker is displayed, the air filter must be replaced. Reset by pressing on the indicator's extremity.

The filter restriction indicator is located on the engine air intake duct.

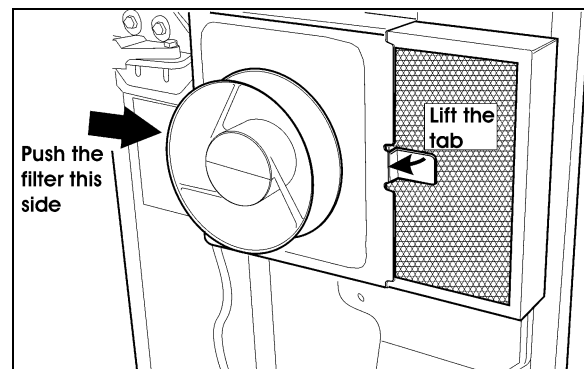


RESTRICTION INDICATOR 01052

MAIN POWER COMPARTMENT FAN AIR FILTER

For maximum service life of the electrical components, air filter should be inspected and cleaned as required in maintenance schedule to ensure proper ventilation and cooling of the main power compartment. Clean filter with an air jet in the opposite direction of normal air flow. Replace filter when necessary.

CAUTION
Be sure not to reverse filter upon installation.



MAIN POWER COMPARTMENT FAN AIR FILTER REMOVAL 06603

8-12 CARE AND MAINTENANCE

A/C AND HEATING SYSTEM AIR FILTERS

For maximum air conditioning and heating system efficiency, air filters should be inspected and cleaned as required in maintenance schedule to ensure proper ventilation of the evaporator and heating radiator cores. To clean filters, back flush with water, then dry with air.



CAUTION

Do not use high pressure water jet to avoid damaging filter.

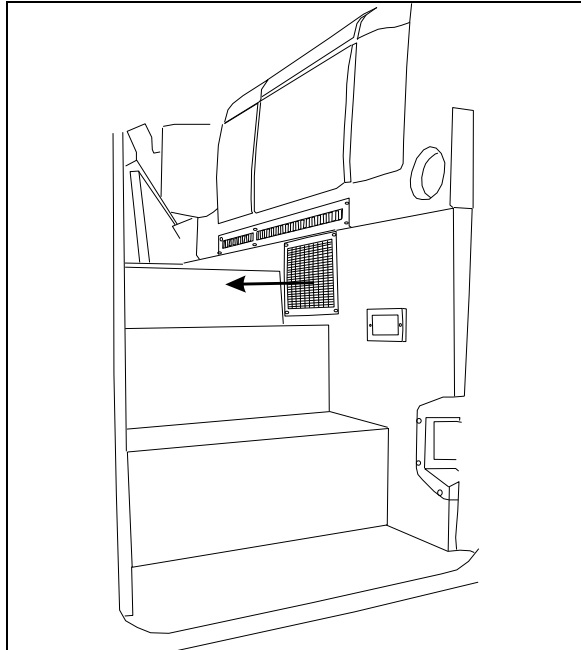


CAUTION

Be sure not to reverse filter upon installation.

Driver's Area Filters

The driver HVAC system's air filters are located behind the R.H. console. To gain access to the A/C filters, unscrew the grill located at the top step of the entrance door steps. Remove the filters for cleaning or replacement.



DRIVER'S AREA AIR FILTER REMOVAL

22231

Cabin System Air Filter

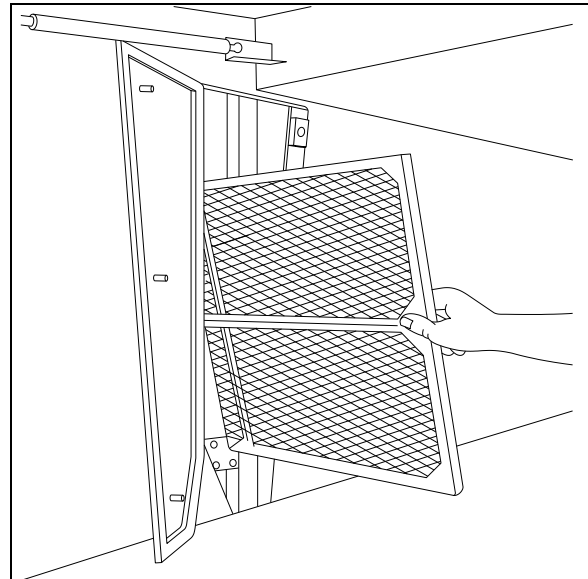
The Central HVAC System's air filter is located in the evaporator compartment on L.H. side of the vehicle. To gain access, locate access panel in one of the baggage compartment adjacent to the

evaporator compartment. Open panel by unscrewing ($\frac{1}{4}$ turn) the three screws of either panel, unsnap both fasteners on top of filter and slide out the filter for cleaning.



CAUTION

Be sure not to install filter in inverted position.



CABIN SYSTEM AIR FILTER REMOVAL

22178

HOSE INSPECTION

Inspect hoses regularly to ensure efficient, economical and safe operation of the engine and related equipment.

Inspect hoses for leaks. Carefully inspect all fittings, clamps and ties. To prevent chafing, make sure hoses are not touching shafts, couplings, heated surfaces, sharp edges or other parts. Since hose clamps and ties can vibrate loose or fail over time, inspect frequently and tighten or replace as necessary.

Correct leaking hoses immediately. Failure to correct leaks can cause severe damage to the equipment, as well as increase operating costs due to lost fluids. Treat fuel and oil leaks as an immediate fire hazard.



WARNING

Fire hazard - personal injury and property damage may result from fire caused by leaking flammable fluids.

Hose Service Life

Hoses have a limited service life. Thoroughly inspect hoses annually. Look for surface damage or indications of twisted, worn, crimped, cracked or leaking lines. Replace damaged hoses immediately.

Hoses should be replaced during major overhaul or after a maximum of five years service. Make sure replacement hoses match the original equipment manufacturer's specifications.

LUBRICATION


Grease all lubrication points during scheduled maintenance. For heavy loads or extended use, lubricate more often. Refer to the end of this chapter or to Maintenance Manual, section 24 for information on lubrication.

WHEELS AND TIRES

Check for loose wheel nuts. Both aluminum alloy and steel wheel nuts should be tightened to 450 to 500 foot-pounds (610 to 680 Nm.) torque.

Keep the tires inflated to the recommended inflation pressure to prolong tire life and for safety.

<p><i>NOTE</i></p> <p><i>The cold tire inflation pressures are found on the DOT certification plate located under the L.H. console or behind the driver's seat.</i></p>
--

 <p>WARNING</p> <p>Do not exceed maximum inflation pressure. Incorrect tire pressure increases tire wear and could lead to loss of driving control because of reduced road handling. Check tire pressure regularly.</p>

WHEEL BEARINGS

Check wheel bearing cover for overheating (especially after brake work) during fuel stops by touching the wheel bearing cover.

SERVICE BRAKE TEST

Check for correct pressure build-up. Stop engine and check pressure gauge. Pressure loss should not exceed 3 psi/min (21 kPa/min) with engine stopped and without brake pedal applied.

Air loss should not exceed 7 psi/min (48 kPa/min) with engine stopped and brake pedal fully applied.

A convenient way to proceed to the service brake test is with the use of the DID menu "Air Leakage Monitor". For more information, refer to "Driver Information Display (DID) Menu" in *Other Features* chapter.

PARKING BRAKE TEST

Release parking/emergency brake. Pump service brake pedal until air pressure drops to 65 psi (448 kPa). Make sure the warning buzzer operates and that the emergency brakes apply (the control valve knob lifts up). Allow air pressure to reach 95 psi (655 kPa) before releasing parking brake.

Moving the vehicle while the parking brake is applied should not be possible.

EXTERIOR LIGHTING VERIFICATION

Exterior Lighting Test Mode

This useful function allows quick verification of the vehicle exterior lights.

Activating the test mode:

When the vehicle is stationary (parking brake applied), pull up the multi-function lever 3 times within 3 seconds to activate the test mode. This test can be done when the engine is not running providing that the battery charge is sufficient (above 24.0 volts).

The telltale panel alarm emits a sound each second to remind that the test mode is in progress.

<p><i>NOTE</i></p> <p><i>You can also initiate and stop the exterior lighting test mode with the use of the DID menu "Exterior Lamp Inspection". For more information, refer to "Driver Information Display (DID) Menu" in <i>Other Features</i> chapter.</i></p>
--

Stopping the test mode:

To stop the test mode, pull up the multi-function lever once or turn the ignition OFF or remove the parking brake.

8-14 CARE AND MAINTENANCE

NOTE

The test mode is useful to check the functioning of the multiplex outputs and the exterior lights. It doesn't test the functionality of the commands related to the exterior lighting. For a complete testing, the directional signal commands, the headlights commands and the brake pedal have to be checked before. Once these commands tested, activate the test mode to check the exterior lighting.

Using the test mode:

First, test the functionality of the commands related to the exterior lighting:

- Activate the right directional signal and check that the corresponding cluster telltale light illuminates.
- Activate the left directional signal and check that the corresponding cluster telltale light illuminates.
- Activate the hazard warning flashers and check that the corresponding cluster telltale lights illuminate.
- Press the headlights rocker switch in first position and confirm that the instrument panel illuminates. Press the headlights rocker switch in second position and confirm that the headlights illuminate.
- Turn on the high beams and check that the corresponding cluster telltale light illuminates.

Once these commands tested, activate the test mode to check the exterior lighting by pulling up the multi-function lever 3 times within 3 seconds.

Go to the front of the vehicle and check the lights:

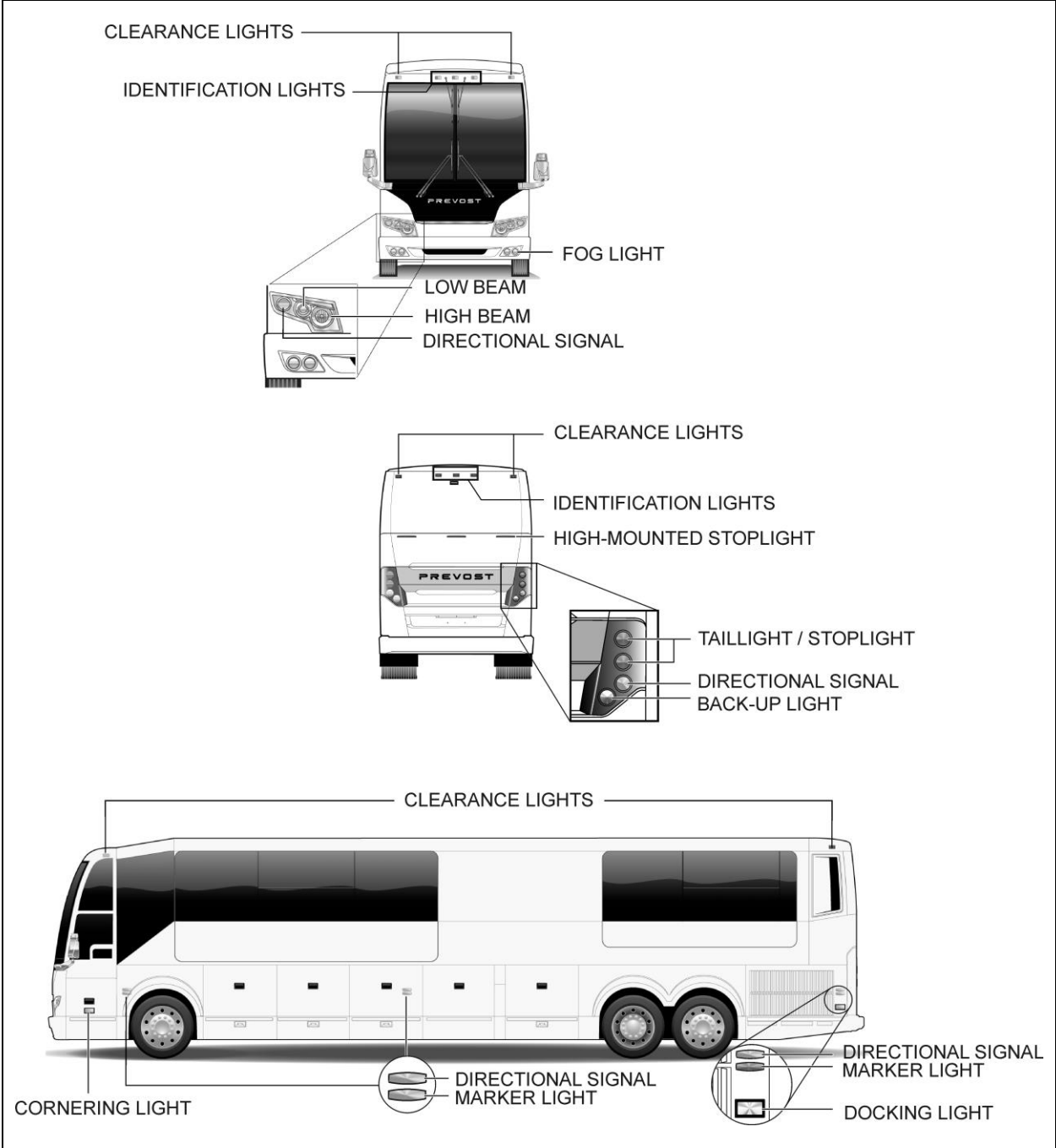
- Left and right directional signals.
- Identification lights and clearance lights.
- Low beams.
- High beams.

Left side and right side of the vehicle:

- Directional signals.
- Marker lights.

Go to the rear of the vehicle:

- Directional signals.
- Identification lights and clearance lights.
- Stoplights and taillights.
- Back-up lights.



EXTERIOR LIGHTING IDENTIFICATION

8-16 CARE AND MAINTENANCE

GENERAL RECOMMENDATIONS

- Understand basic principles of vehicle operation;
- Always maintain the vehicle in good running condition;
- Do not drive with low fuel. If the fuel tank runs dry, the engine will not start until the air is bled from the fuel system. Refer to "Maintenance Manual" for more information;
- Allow engine to run for at least two minutes at slow idle before shutting OFF;
- Engine should be at idle when shifting from neutral (N) to forward (D) or from neutral (N) to reverse (R);



CAUTION

Fast idle should always be turned off before releasing the parking brake and putting the coach in gear. Driveline damage can result if the fast idle switch is always left on.

- The automatic transmission does not have a park (P) position. Place transmission in neutral (N) position and apply parking brake when the vehicle is stopped. A warning buzzer will sound if the engine is stopped and the parking brake has not been applied when foot pressure is removed from the brake pedal;
- Always follow the procedures described in this manual;
- Unless stated otherwise, shut off the engine before performing all servicing, lubrication and maintenance tasks;
- Do not attempt to push or pull-start the coach;
- Damage may result if towed with the axle shafts or driveshaft connected;
- Two chemical fire extinguishers are under the first row of passenger seats. In case of fire, immediately evacuate all occupants. Occupant safety is the first priority. Do not attempt to extinguish the fire if there is immediate danger or risk for personal injury;
- When driving on ice and snow, accelerate and decelerate gradually;



WARNING

Report all problems affecting passenger or driver safety to a Prevost service center or an authorized service center. Have problems corrected immediately.

FIRST SERVICE ON NEW VEHICLE

NOTE

Refer to Maintenance Manual for precise service schedule.

NOTE

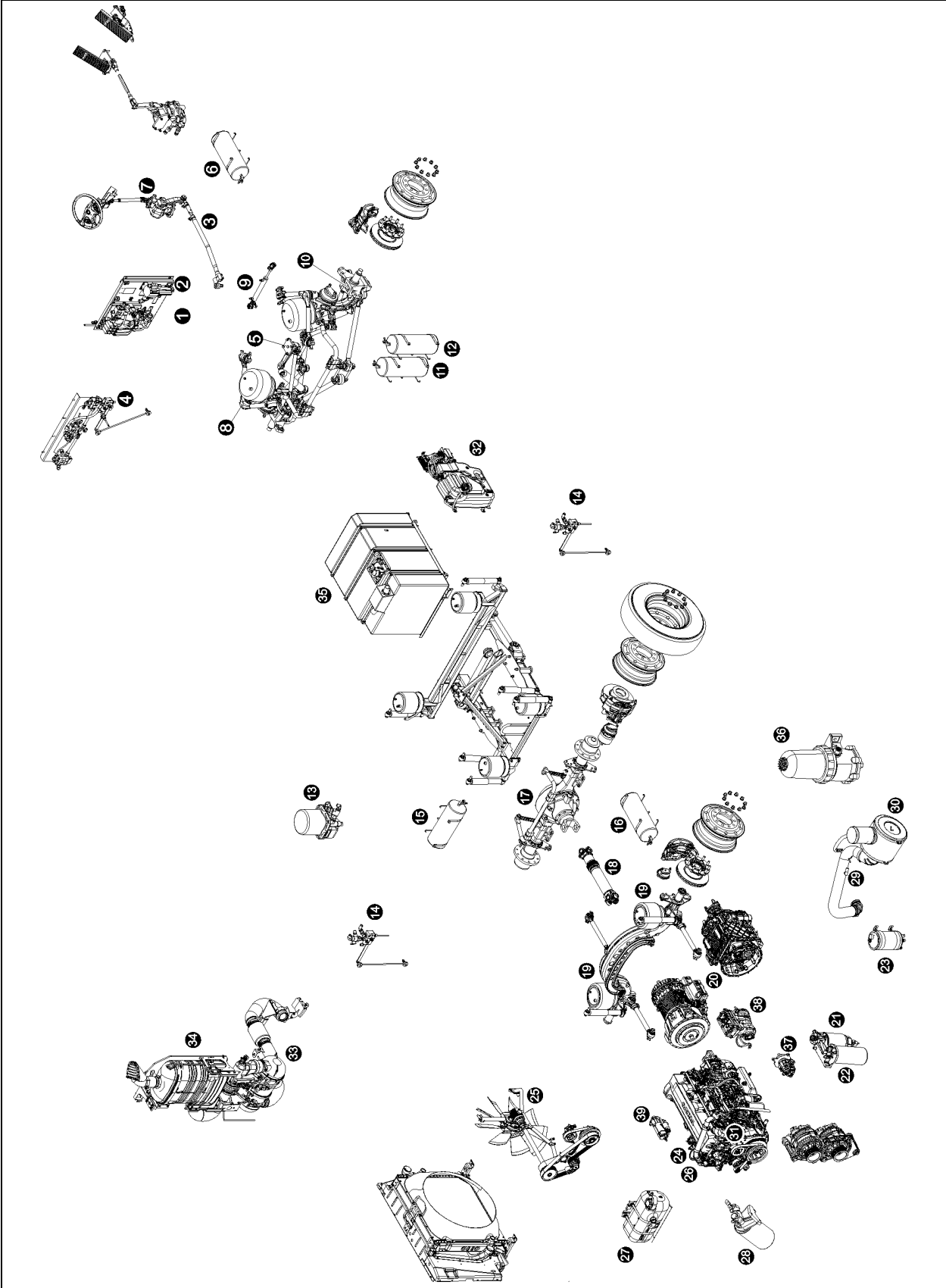
If soldering has been performed on cooling system, clean strainer after 3,000 miles (5 000 km).

ENGINE OIL

Preliminary oil change is not required since the engine has been test-run at the factory. Change oil and filter as specified in section 24 of the maintenance manual.

ALLISON TRANSMISSION FLUID FILTER

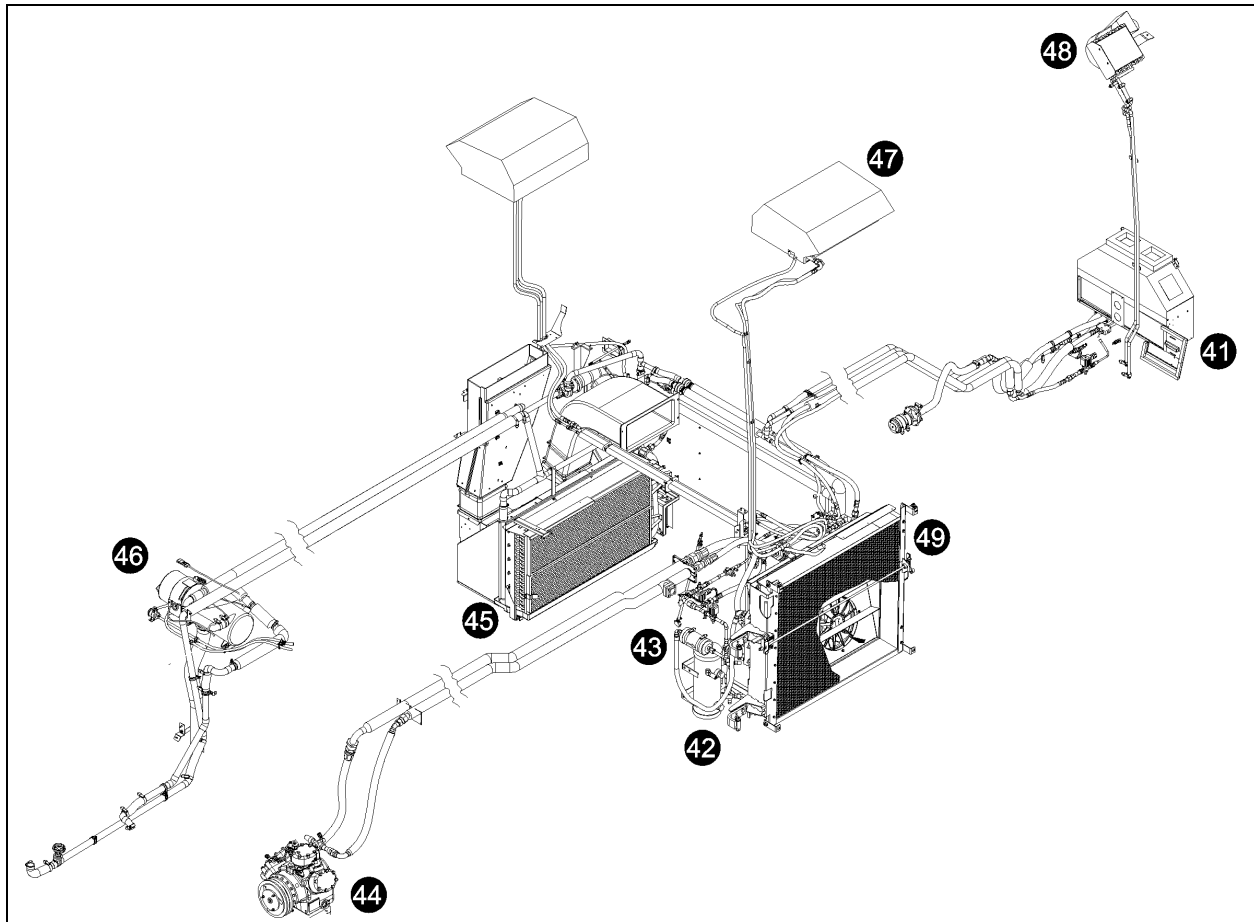
Your Allison transmission is equipped with High Capacity filters, eliminating the requirement of an initial fluid and filter change. Refer to regular lubrication and servicing schedule.



COMPONENTS IDENTIFICATION (components representation may differ slightly from the actual vehicle)

8-18 CARE AND MAINTENANCE

- | | | | |
|----|---|----|---|
| 1 | Accessories air tank drain cock | 21 | Primary fuel filter |
| 2 | Accessories air filter | 22 | Secondary fuel filter |
| 3 | Steering drag link | 23 | Power steering fluid tank |
| 4 | Height control valve (front) | 24 | Engine oil filter |
| 5 | Bell crank | 25 | Cooling fan gearbox |
| 6 | Accessories air tank | 26 | Allison transmission oil dipstick |
| 7 | Steering column U-joints | 27 | Engine coolant surge tank |
| 8 | Upper A-arm ball joint | 28 | Coolant filter & conditioner |
| 9 | Hydraulic power cylinder | 29 | Engine air filter restriction indicator |
| 10 | Steering king pin | 30 | Engine air filter |
| 11 | Emergency / parking brake overrule tank | 31 | Engine oil dipstick and filler tube |
| 12 | Secondary air tank | 32 | DEF tank |
| 13 | Air dryer | 33 | Diesel particulate filter |
| 14 | Height control valve (rear) | 34 | SCR catalytic converter |
| 15 | Wet air tank | 35 | Diesel fuel tank |
| 16 | Primary air tank | 36 | Davco Fuel Pro 382 fuel filter |
| 17 | Differential | 37 | Power steering pump |
| 18 | Propeller shaft | 38 | Air compressor |
| 19 | Auxiliary axle lever pivot | 39 | Starter |
| 20 | Transmission | | |



HVAC SYSTEM - MAIN COMPONENTS

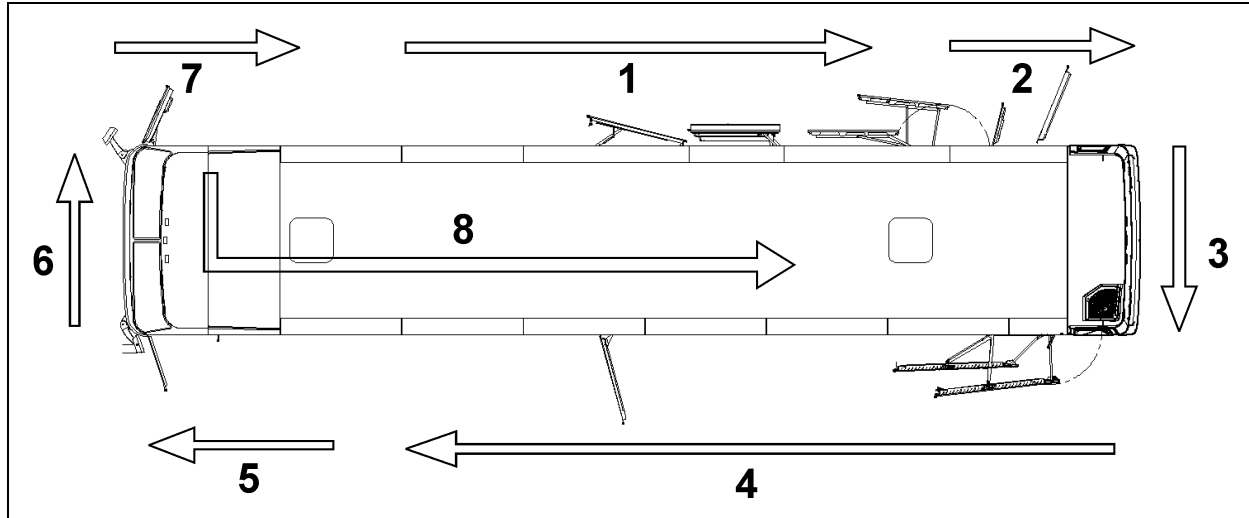
24039_3

- | | |
|---------------------------------------|--|
| 41 HVAC air filter – driver's unit | 46 Coolant preheater |
| 42 A/C receiver tank | 47 A/C system – passenger's overhead console |
| 43 Refrigerant moisture indicator | 48 Upper windshield defrost unit |
| 44 A/C compressor | 49 Condenser coil |
| 45 HVAC air filter – passenger's unit | |

8-20 CARE AND MAINTENANCE

WALK-AROUND INSPECTION (BEFORE EVERY TRIP)

It is a good practice to make a basic visual inspection of key areas on the vehicle before every trip and to report any problem areas to your PREVOST service center or a PREVOST-authorized authorized service center.



WALK-AROUND INSPECTION

18667

NOTE

Inspect the coach in a circular manner as shown in the illustration.

Approaching the Coach

- Check under the coach for oil, fuel or coolant leaks or other signs of damage.
- Check exterior body surfaces for signs of breaks or damage.
- Check condition of tires: properly inflated, no serious cuts, bulges, tread wear or any signs of misalignment; valve stems not touching wheels or rims; valve caps in place and no objects stuck between the wheels.

Preparation

- Start the engine and let the air pressure build up to normal. Stop engine.
- Switch on hazard warning flashers.
- Make sure parking brakes are applied.

Step 1: Right Side of the Coach

- Check that the vehicle is equipped with a wheel nut wrench, spare door keys, spare belts, reflectors and jack.
- Check that baggage doors and service compartment doors close properly. Check for good tightness and fit.
- Check condition of wheels and rims. Especially look for cracks, missing nuts, bent or broken studs.

Step 2: Engine Compartment Right Side Area

- Drain wet air tank by opening drain cock. Close drain cock when completed.
- Check engine and surrounding areas for coolant, oil and fuel leaks.
- Check primary fuel filter/water separator and drain if necessary. Close drain valve after draining.
- Check power steering reservoir fluid level, add if necessary.
- Check wiring harness for signs of damage.

Step 3: Engine Compartment

- Check engine and surrounding areas for coolant, oil and fuel leaks.

- Check wiring harness for signs of damage.
- Check for loose, worn or broken belts.
- Check belts tension adjustment.
- Check engine crankcase oil level, add if necessary.
- Check Allison transmission fluid level (can also be checked from push-button shift selector), add if necessary.
- Check coolant surge tank fluid level, add if necessary.
- Check air cleaner restriction indicator, replace air cleaner when red signal locks in full view.
- Check stop light, tail light, directional signal light and back-up light assembly, they should be clean.

Step 4: Rear Left Side of the Coach

- Check condition of wheels and rims. Especially look for cracks, missing nuts, bent or broken studs.
- Check that baggage doors and service compartment doors close properly. check for good tightness and fit.
- Check condition of tires: properly inflated, no serious cuts, bulges, tread wear or any signs of misalignment; valve stems not touching wheels or rims; valve caps in place and no objects stuck between the wheels.

Step 5: Front Left Side of the Coach

- Check condition of wheel rim. Especially look for cracks, missing nuts, bent or broken studs.
- Check condition of tire: properly inflated, no serious cuts, bulges, tread wear or any signs of misalignment; valve stem not touching wheel or rim; valve cap in place.
- Check windshield and headlights washer reservoir fluid level and add if necessary.
- Drain accessory air tank by opening drain cock. Close drain cock when completed.

Step 6: Front of the Coach

- Check for damage and clean if dirty.
- Check windshield wiper arms for proper spring tension.
- Check wiper blades for any damage, "dead" rubber and attachment to arm.
- Check clearance and identification lights, they should be clean.
- Check high and low beams, they should be clean. If equipped, check fog lights.
- Check left and right directional signals, they should be clean.
- Check to see that there is no mud, snow, ice build-up or other obstruction in front of the ACB radar sensor if applicable.

Step 7: Front Right Side of the Coach

- Check condition of wheel rim. Especially look for cracks, missing nuts, bent or broken studs.
- Check condition of tire: properly inflated, no serious cuts, bulges, tread wear or any signs of misalignment; valve stem not touching wheel or rim; valve cap in place.

Step 8: Inside the Coach

- Check for proper operation of the entrance door.
- Check steps; clean them if there is any substance that makes them slippery, which makes coach entry/exit hazardous.
- Adjust and clean mirrors for adequate rear view vision.
- Verify proper operation of windshield wiper/washer.
- Check for fire extinguishers to make sure they are ready for operation.
- Check that emergency exit windows and roof escape hatches can be opened then close all windows and hatches securely

With engine running

8-22 CARE AND MAINTENANCE

- Start engine and check for proper operation of all gauges. Perform a telltale light test (see “CONTROLS AND INSTRUMENTS” chapter). Indicator lights and buzzers should all be OFF before driving.
- Using the message center display, perform a system diagnostic to check if error codes and anomalies were recorded in the vehicle electronic modules.
- Check for proper operation of electric and air horns and back-up alarm.
- Check automatic transmission oil level, using the pushbutton shift selector (see APPENDIX C).
- Check that there is enough fuel in the tank.
- Perform a parking brake test. Check both primary and secondary pressure gauges. Refer to “OTHER VERIFICATIONS” in this chapter.
- Perform the exterior lighting verification using the test mode. Refer to “Other Verifications” in this chapter.
- Walk around the vehicle and listen for air leaks.
- Check for leaks and listen for unusual sounds coming from the turbocharger.