

SECTION 8 CARE AND MAINTENANCE

CLEANING..... 3

SEAT UPHOLSTERY 3

PLASTIC AND VINYL..... 4

WINDOWS 4

WINDSHIELD..... 4

STAINLESS STEEL 4

FORMICA 4

CARPET 4

RUBBER COMPONENTS 4

FLOOR CLEANING 4

EXTERIOR SURFACES 5

LAVATORY MAINTENANCE..... 5

FILLING THE LAVATORY WASTE WATER TANK 6

DRAINING THE LAVATORY WASTE WATER TANK 6

DRAINING THE AUXILIARY LAVATORY WASTE WATER TANK 6

FRESH WATER RESERVOIR 7

CLEANING CABINET..... 7

FLUID LEVEL VERIFICATION..... 8

ENGINE OIL LEVEL 8

TRANSMISSION FLUID LEVEL 8

ALLISON TRANSMISSION FLUID LEVEL 8

I-SHIFT TRANSMISSION FLUID LEVEL 9

POWER STEERING FLUID LEVEL 10

COOLING FAN RIGHT ANGLE GEARBOX OIL LEVEL 10

DRIVE AXLE WHEEL BEARING OIL LEVEL 10

FRONT AND TAG AXLE WHEEL HUBS 10

COOLANT FLUID LEVEL 11

WINDSHIELD WASHER & HEADLIGHTS WASHER RESERVOIRS 11

OTHER VERIFICATIONS..... 11

AIR TANK PURGE 11

FIRE EXTINGUISHERS..... 12

PRIMARY FUEL FILTER..... 12

FAN AND ALTERNATOR DRIVE BELTS 13

A/C COMPRESSOR BELT TENSION ADJUSTMENT 13

BACK UP CAMERA 14

AIR FILTER RESTRICTION INDICATOR 14

A/C AND HEATING SYSTEM AIR FILTERS 14

DRIVER’S AREA AIR FILTER 14

CABIN AIR FILTER..... 14

HOSE INSPECTION 15

LUBRICATION 15

WHEELS AND TIRES 15

WHEEL BEARINGS..... 16

SERVICE BRAKE TEST 16

PARKING BRAKE TEST 16

EXTERIOR LIGHTING VERIFICATION 16

8-2 STARTING AND STOPPING PROCEDURES


GENERAL RECOMMENDATIONS	18
FIRST SERVICE ON NEW VEHICLE	19
HOT WATER FILTER.....	19
ENGINE OIL	19
ALLISON TRANSMISSION FLUID FILTER.....	19
WALK-AROUND INSPECTION (BEFORE EVERY TRIP)	23

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 (Trichloroethylene) 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 methylated spirits 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.

8-4 CARE AND MAINTENANCE

Copying Ink - Ball-Point Pen Ink

Treat with methylated spirits, 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.

WINDSHIELD

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.

STAINLESS STEEL

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

FORMICA

Remove stains on Formica surfaces with a household detergent, methylated spirits 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

To keep its original appearance, wash the floor regularly. Clean vinyl floors with a quality nonionic detergent cleaner or a household all purpose cleaner. Follow the manufacturer's recommendations for cleaning. Remove incrustated rubber or oil stains with thinner.


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
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.


 **CAUTION**
 Using a water hose to clean the floor is prohibited since it could cause electrical shorts or damage the electrical system.


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 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. Install keyhole protectors to prevent water from penetrating. Rinse vehicle with water to remove all loose dirt. Wash vehicle using 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.

LAVATORY MAINTENANCE

Flush water in the lavatory is recirculated from the lavatory waste water tank (if two lavatory waste water tanks are installed, the top tank is the main tank and the bottom one becomes the auxiliary lavatory waste water tank). When the main lavatory waste water tank is too soiled to be recirculated, the driver can dump it into the optional auxiliary lavatory waste water tank until a suitable dump location can be reached. The main lavatory waste water tank is then filled with clean water and the process continues.

The optional top tank contains about 13 gallons (50 liters) and the lower tank contains about 26 gallons (100 liters).

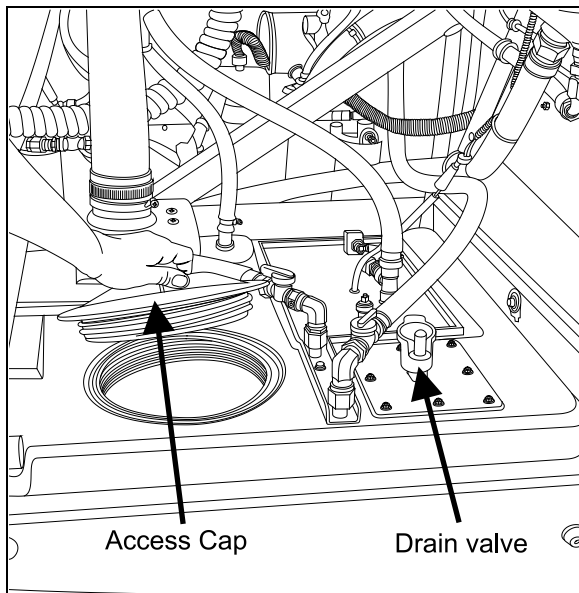
8-6 CARE AND MAINTENANCE

NOTE

The fresh water tank also drains into the lavatory waste water tank. One must take into account this fact to avoid an overflow.

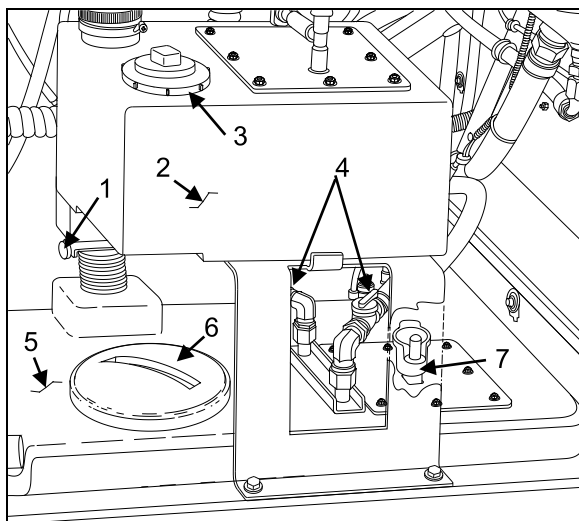
Routine draining and filling of lavatory tanks should be performed by maintenance personnel only, and should be done before parking the coach overnight in freezing temperatures.

The lavatory waste water tank may be equipped with a heating element which permits circulating coolant fluid through the tank in cold weather. When not needed, close the valves to bypass the system.



SINGLE LAVATORY WASTE WATER TANK OPTION

23294A



DUAL LAVATORY WASTE WATER TANK OPTION

23295

1. Main lavatory waste water tank drain valve;

2. Main lavatory waste water tank;
3. Main lavatory waste water tank access cap;
4. Auxiliary lavatory waste water tank heating element valves;
5. Auxiliary lavatory waste water tank;
6. Auxiliary lavatory waste water tank access cap;
7. Auxiliary lavatory waste water tank drain valve.

FILLING THE LAVATORY WASTE WATER TANK

Fill the lavatory waste water tank through the access hole and throw in a packet of commercial toilet deodorant (Prevost part #900329).

DRAINING THE LAVATORY WASTE WATER TANK

When recirculating water in the toilet is soiled, drain the lavatory waste water tank. If equipped with the optional auxiliary lavatory waste water tank, drain the main lavatory waste water tank contents into the auxiliary tank by opening the knife gate valve under the tank. Perform the filling procedure of the main tank.

DRAINING THE AUXILIARY LAVATORY WASTE WATER TANK

To drain the auxiliary lavatory waste water tank contents, remove the cap located underneath the tank then turn the drain valve lever counterclockwise about eight or nine turns and pull the lever up. Remove the access cap and flush tank with clean water. To close, push the valve down on its seat then turn the drain valve lever several turns clockwise until the rubber bladder seals the drain hole. Reinstall both caps.



CAUTION

Lavatory tanks should be serviced only at suitably equipped stations.

NOTE

It is unlawful to dump lavatory waste water tank contents in any location other than those designated as such.

When a complete tank draining is required, clean main tank by repeating the draining and

filling operations while leaving the auxiliary lavatory waste water tank drain valve opened. Close valves and drop in a packet of commercial toilet deodorant (Prevost part #900329) in toilet before starting final filling of the main tank.

WARNING

The toilet deodorant contains compounds which can be very irritating to skin. Use rubber gloves when handling and then clean toilet seat.

CAUTION

When cold weather is expected, both lavatory waste water tanks must be drained if the coach is parked overnight or for an extended period of time.

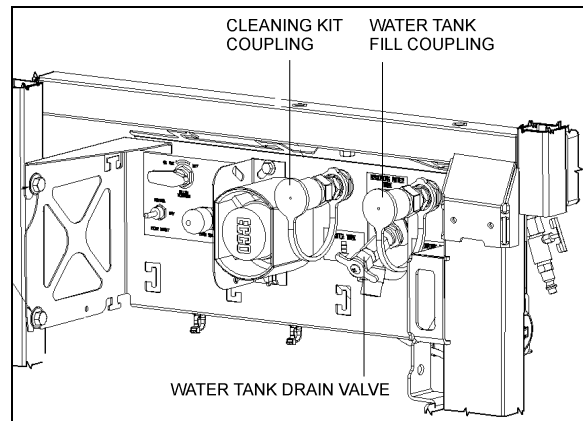
NOTE

Due to the heat it produces, there is less risk of freezing in the tanks when the engine is operating.

NOTE

New coaches are delivered with the sump and fresh water tanks empty. Fill with water before putting the coach in service.

FRESH WATER RESERVOIR



ENGINE COMPARTMENT 12219_3

Water from the fresh water reservoir supplies the washbasin in the lavatory.

WARNING

Do not drink water from the fresh water reservoir.

Filling The Fresh Water Reservoir

Connect the fresh water supply hose to the fresh water reservoir fill connection located in the curb-side engine compartment. The fresh water tank contains about 17 gallons (66 liters). Fill the reservoir until the overflow tube leaks, signaling that the reservoir is full.

WARNING

Never put antifreeze in fresh water reservoir; antifreeze is toxic.

WARNING

If reservoir has not been drained for an extended period of time, draining and filling operations must be repeated three (3) times in order to clean reservoir and eliminate contaminated water.

Draining The Fresh Water Reservoir

The fresh water reservoir can be drained by simply opening the drain cock. Don't forget to close the cock when draining is complete.

NOTE

The fresh water reservoir may be equipped with an optional thermal valve which is set to open at about 35°F, thereby automatically draining the reservoir in near-freezing temperatures.

CLEANING CABINET

A hose connection and valve is located behind a small door in the top curbside corner of the rear lavatory wall. It can be used to attach a garden hose for lavatory cleaning. To use, connect a fresh water supply to the connection in the engine compartment, identified as "Cleaning Kit", located next to the fresh water reservoir fill coupling.

To prevent freezing during cold weather, drain the hose after every use.

8-8 CARE AND MAINTENANCE

FLUID LEVEL VERIFICATION

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

ENGINE OIL LEVEL

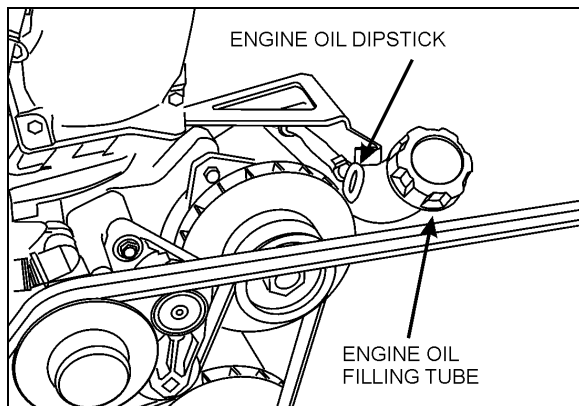
Check engine oil level when engine is still warm. Shut down engine and wait at least 10 minutes for oil to drain into oil pan before checking. Check engine oil level daily or before each trip. Add oil as required. Do not overfill. Remove dipstick, wipe clean and fully reinsert to ensure an accurate reading.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



WARNING

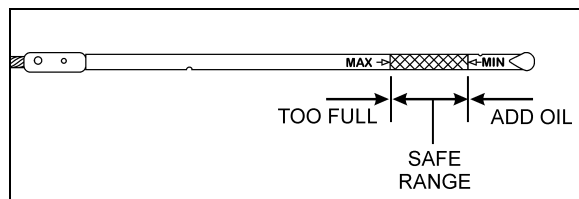
Check the engine oil level with vehicle parked on a level surface and with the parking brake engaged.

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 FLUID LEVEL



WARNING

To prevent personal injury, do not service transmission wearing loose clothing. Stand clear of the engine and rotating components while checking the oil level.



CAUTION

Do not mix fluid types or brands because of possible incompatibility.

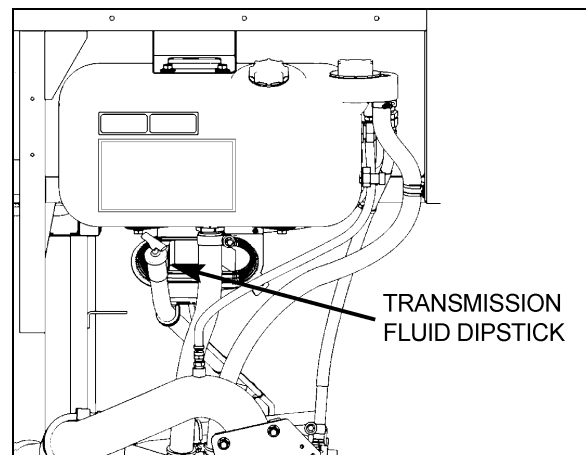


CAUTION

Use clean fluid and containers when filling transmission. Never use containers that have contained water or anti-freeze (Glycol).

ALLISON TRANSMISSION FLUID 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.



TRANSMISSION FLUID DIPSTICK

01195

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

To check the transmission fluid level, a "cold check" and a "hot check" must be performed. A cold check must be made when the transmission fluid is between 60°F and 120°F (16°C and 50°C).

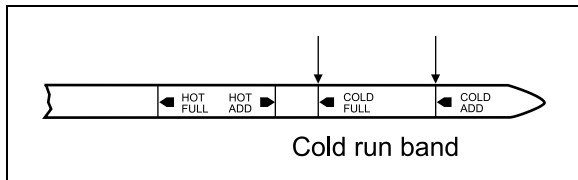
NOTE

Perform the cold check first to verify the transmission fluid level before performing the hot check.

To prevent dirt and foreign matter from entering the transmission, clean the end of the oil fill tube before removing dipstick. To remove dipstick, unscrew filler cap approximately three turns and pull out dipstick.

Cold Check

Run the engine until the transmission fluid temperature is between 60°F and 120°F (16°C and 50°C). With the engine idling, make sure the parking brake is applied and the transmission is in neutral (N). Remove and wipe the dipstick with a clean cloth. Check oil level. If the oil level is within the COLD RUN band, the oil level is correct and a hot check can be performed. If the oil level is on or below the lower line of the COLD RUN band, add oil until the level lies within the COLD RUN band. If the oil level is above the COLD RUN band, drain oil until the level is within the band.



TRANSMISSION FLUID LEVEL DIPSTICK 07006



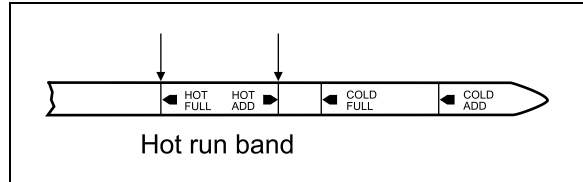
CAUTION

The oil level rises as oil temperature rises. Do not add oil above the "cold run" band before the transmission reaches 180°F to 220°F (82°C to 104°C).

Hot Check

Make sure the transmission fluid temperature is between 180°F and 220°F (82°C and 104°C) before performing the hot check. Run the engine between 1,000 and 1,200 RPM for approximately one minute to purge air from the system. With the engine idling and the parking brake applied, shift transmission from forward (D) to reverse (R) and back into neutral (N) to fill clutch cavities with oil. Remove and clean dipstick, then check oil level. If the oil level is on or under the lower HOT RUN line, add just

enough oil to bring up the level to the middle of the HOT RUN band.



TRANSMISSION FLUID LEVEL DIPSTICK 07006

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

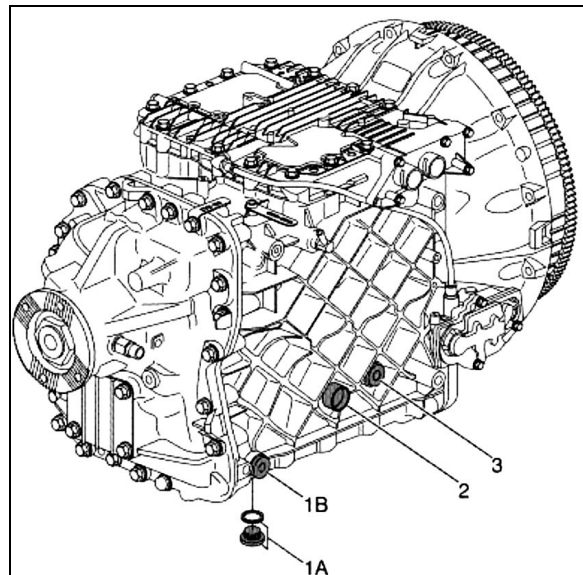


CAUTION

Do not overfill transmission fluid reservoir. Severe damage may result.

I-SHIFT TRANSMISSION FLUID LEVEL

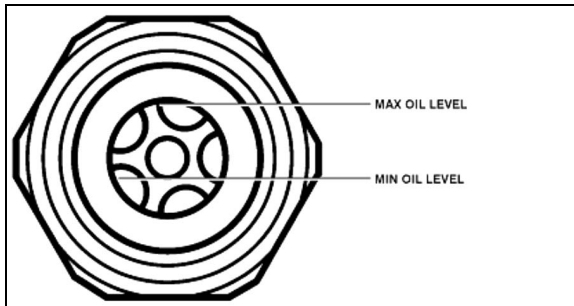
1. Vehicle should be on horizontal ground when oil is changed;
2. Do not check oil level straight after a journey (incorrect measurement). Undertake the check once the transmission oil has cooled down (lower than 104°F or 40°C);



I-SHIFT TRANSMISSION OIL LEVEL CHECK 07111

3. Check oil level using transmission sight glass (item 2) ;

8-10 CARE AND MAINTENANCE

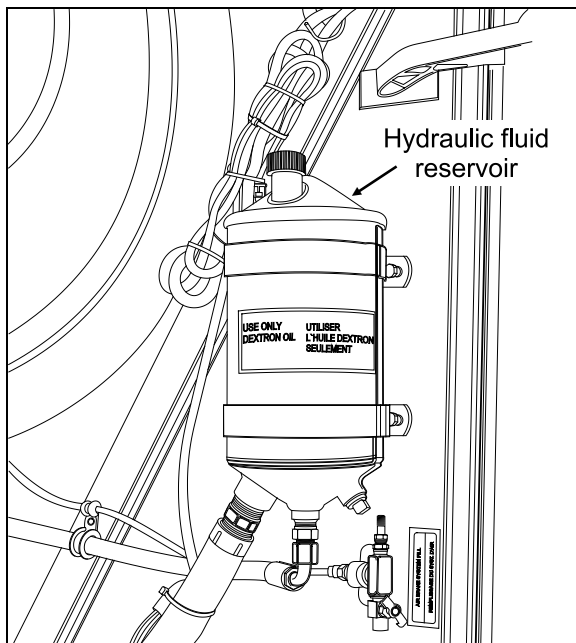


SIGHT GLASS FOR CHECKING OIL LEVEL

4. Add oil through the oil filling point if necessary (item 3) ;
5. Always use Volvo approved synthetic oil (Castrol Syntrans SAE 75W85) whenever changing the transmission oil.
6. Torque tighten fill plug to 26±4 Lb-Ft (35±5 N·m)

POWER STEERING FLUID LEVEL

The coach is equipped with a power steering system. The hydraulic fluid tank is located in the engine compartment.



ENGINE COMPARTMENT

14043

Check fluid level as follows:

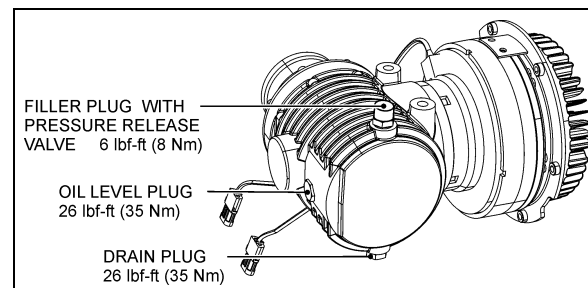
1. Stop engine, open engine compartment and place rear start switch to OFF position;
2. Unscrew and remove the dipstick located on top of the fluid tank and wipe with a clean rag;

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. Replace and tighten dipstick;
6. Place engine rear start switch to NORMAL position. Close engine compartment 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 TAG 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.

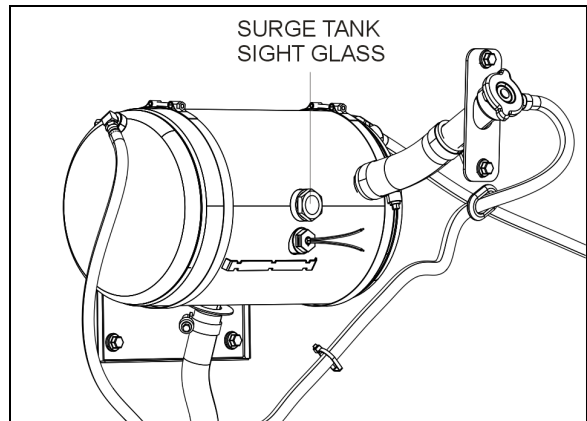
The bearings are greased for life and there is no need or facility for re-lubrication.

COOLANT FLUID LEVEL

Coolant level is correct when coolant is visible through the surge tank sight glass when cold. 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 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).



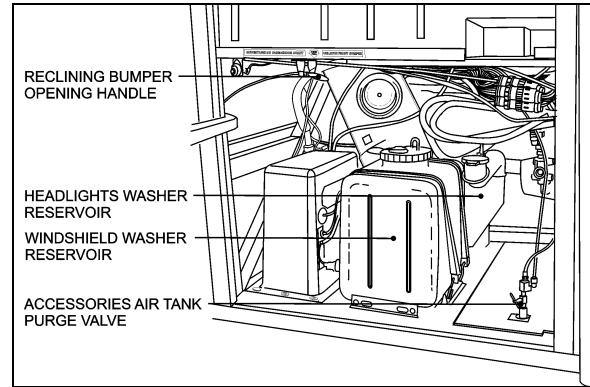
SURGE TANK IN ENGINE COMPARTMENT 05114_2

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 14072

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

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.

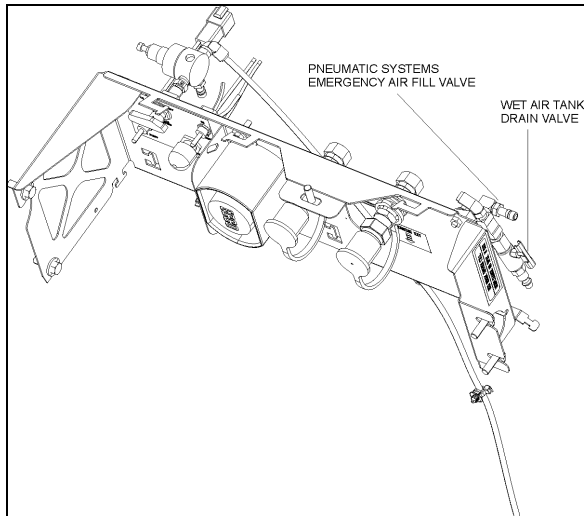
AIR TANK PURGE

The vehicle may be equipped with up to six 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 compartment. The wet air tank drain cock is accessible from the engine compartment door. All air tanks are equipped with a drain cock underneath the tank. Refer to "Components identification" chart in this section for tank locations.

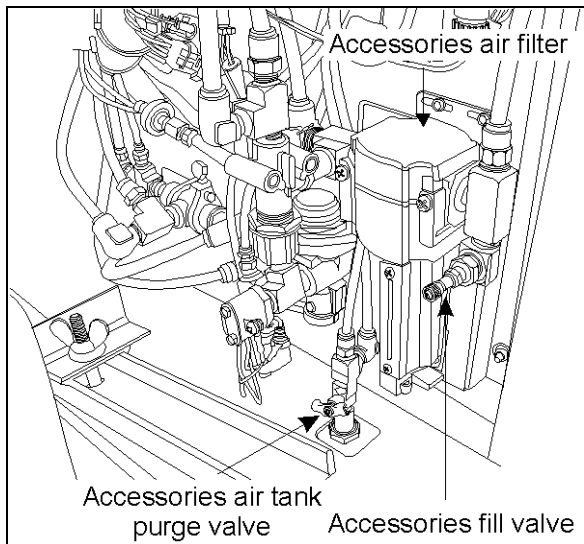
Drain tanks by turning cocks counterclockwise.

8-12 CARE AND MAINTENANCE



ENGINE COMPARTMENT

12219_4



FRONT SERVICE COMPARTMENT

12130

FIRE EXTINGUISHERS

Inspect fire extinguishers monthly to insure operation in emergency situations.

On extinguishers 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;

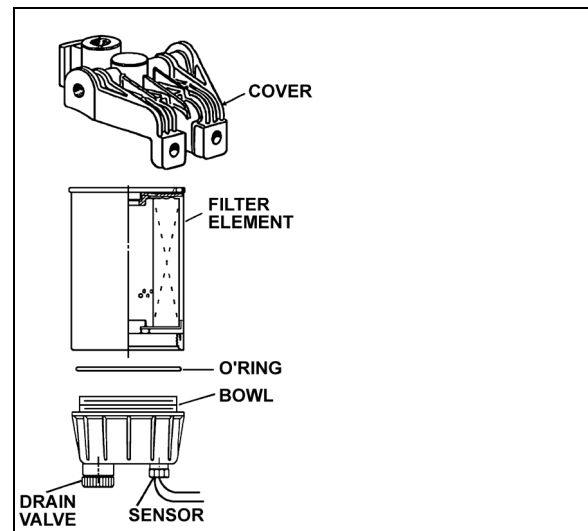
Check that hose nozzle is in good condition and the nozzle is free of obstructions;

Keep fire extinguishers clean.

PRIMARY FUEL FILTER

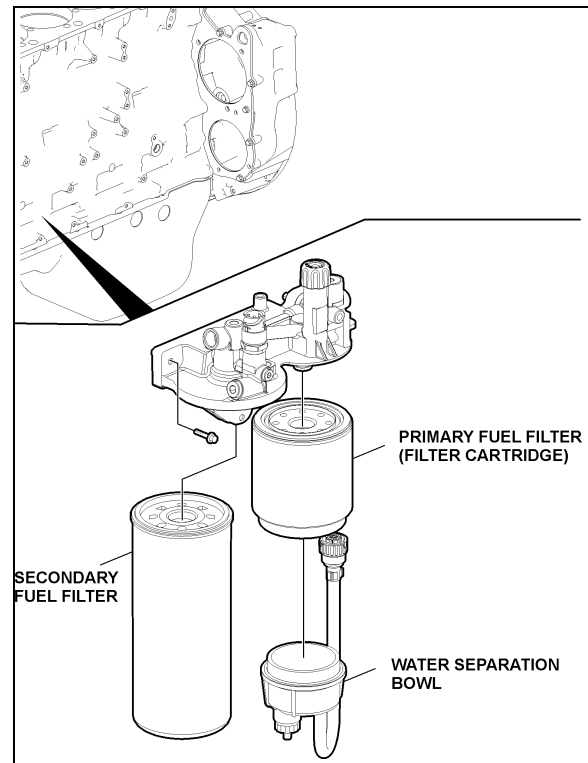
A primary fuel filter is installed on the engine. This filter may consist of a filter cartridge with a

drain valve at the bottom, or a filter cartridge, a water separation bowl and may have a fuel heater built in. It is used to prevent water from entering the fuel system. The primary fuel filter should be drained periodically or when the telltale light on the dashboard illuminates if equipped with this system. To drain water, loosen the drain valve below the separator. Close the drain valve when finished.



FUEL FILTER/WATER SEPARATOR

03025

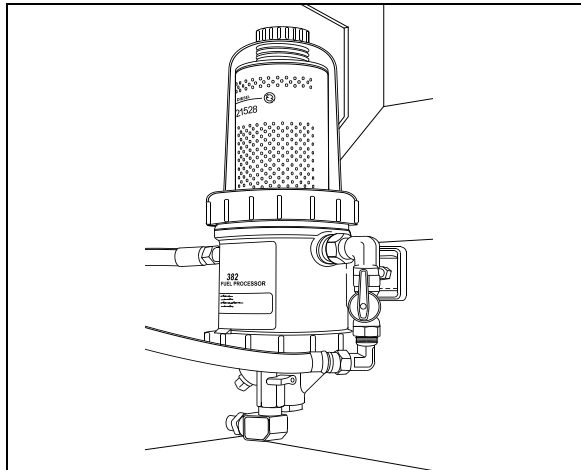


FUEL FILTERS

03085

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. The filter serves as a water separator as well as a fuel filter. To drain water, loosen the drain valve below the separator one quarter turn. Close the drain valve when finished.



DAVCO FUEL PRO 382 INSTALLATION 03032

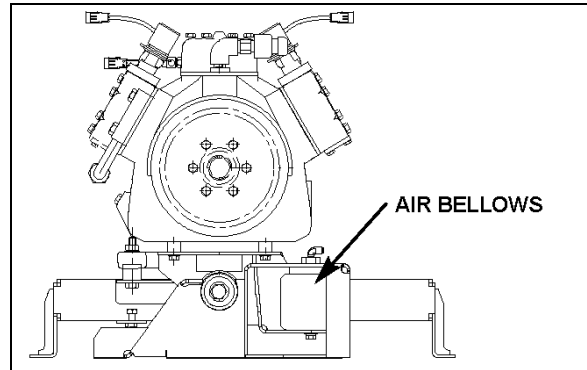
FAN AND ALTERNATOR DRIVE BELTS

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

A/C COMPRESSOR BELT TENSION ADJUSTMENT

The air conditioning compressor is driven by V-belts.

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.

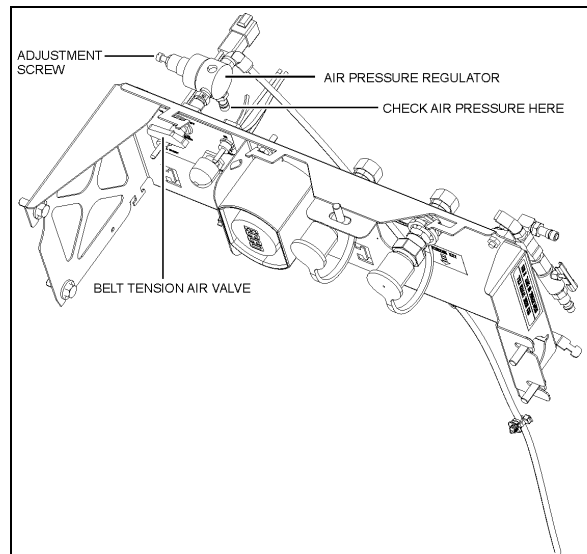


AIR BELLOWS 22351

For belt replacement, 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, Maintenance Manual or "Service Bulletins" for recommended belt sizes and tension settings;
- Periodically inspect belt and pulleys for wear or damage;
- Do not treat belts with any compounds. Keep belts dry.



BELT TENSION AIR REGULATOR AND VALVE 12219_5

8-14 CARE AND MAINTENANCE

BACK UP CAMERA

The optional back up camera is located on the rear cap. As soon as the transmission is put in reverse (R), back up camera and monitor are turned on automatically. To clean the camera's protective glass, spray with soapy water. Wipe with a clean damp rag or wiper blade.



WARNING

To avoid injury, do not clean camera with transmission in reverse (R). Shut off engine and apply parking brake before cleaning.



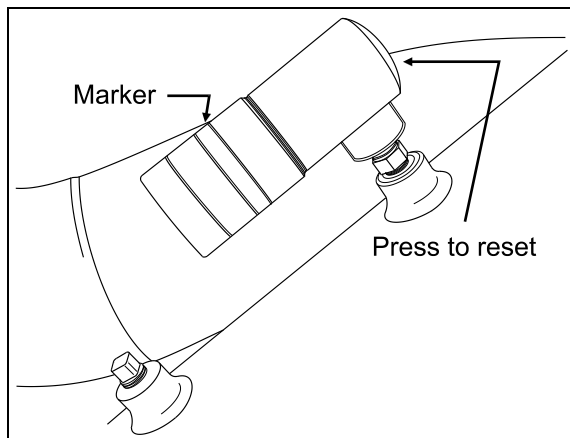
CAUTION

To prevent scratches to the camera protective glass, do not wipe with dry rag. Use a clean damp rag.

AIR FILTER RESTRICTION INDICATOR

An optional 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. Replace the air filter when a red marker is displayed or after a maximum of two years. Reset by pressing on the indicator's extremity.

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



AIR FILTER RESTRICTION INDICATOR

01052

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 the maintenance schedule to ensure proper ventilation of the

evaporator and heating radiator cores. To clean filters, remove lint using a nylon brush, back flush with water then dry with air.



CAUTION

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

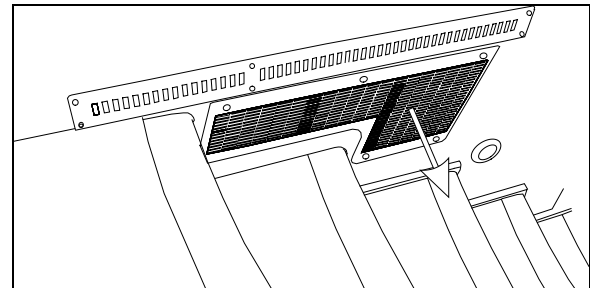


CAUTION

Be sure not to reverse the filters upon installation.

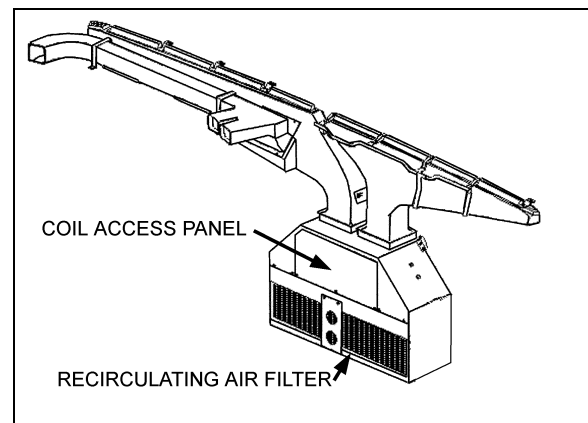
DRIVER'S AREA AIR FILTER

The driver HVAC system's air filter is located behind the front console. To gain access to the A/C filter, remove the grille located at the top step of the entrance door stairs. Remove the filter for cleaning or replacement.



DRIVER'S AREA AIR FILTER REMOVAL

18505

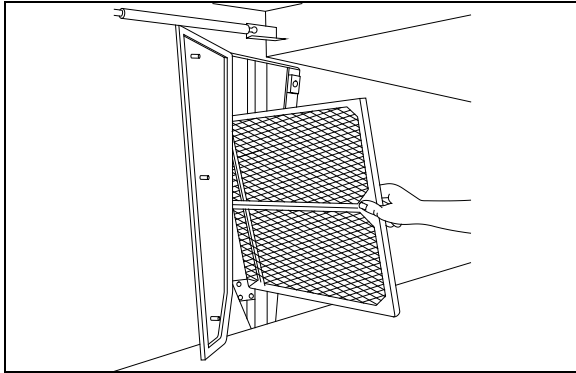


DRIVER'S AREA AIR FILTERS

22171

CABIN AIR FILTER

To access central HVAC system filter, open one of the two baggage compartment adjacent to the evaporator compartment. The filter is located behind an access door held shut by three retaining screws. Slide out the filter, clean or replace.

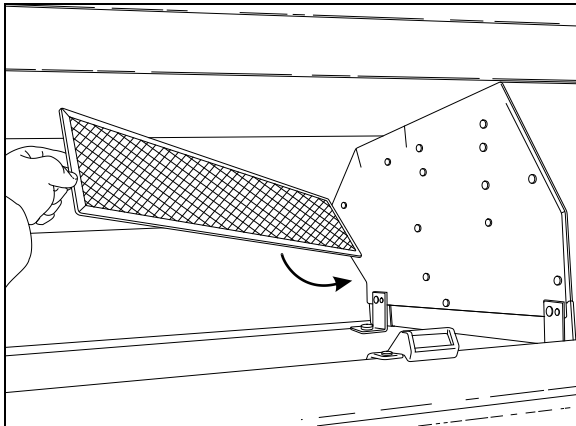


CABIN AIR FILTER

22100

Filters in the Overhead Compartments

Remove, clean or replace the air filter located behind each overhead baggage compartment fan.



OVERHEAD COMPARTMENT FAN AIR FILTER

22201

HOSE INSPECTION

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

	<p>WARNING</p>
<p>Personal injury and property damage may</p>	

<p>result from fire caused by leaking flammable fluids.</p>

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 seven years service. Be certain that 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 Maintenance Manual, section 24 for information on lubrication.

WHEELS AND TIRES

Check for loose wheel nuts. Inspect all types of rims for cracks. Cracks can appear in many places but typically radiate out from where a load is applied. Both aluminum alloy and steel wheel nuts should be tightened to 450 to 500 foot-pounds (610 to 680 N.m.) torque.

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

<p>NOTE</p> <p><i>Recommended tire inflation pressures are given in the "Coach Final Record", placed in the technical publications package supplied with the vehicle. The cold tire inflation pressures are on the Department of Transport certification plate located on the L.H. console besides the driver's seat. When special tires are installed by Prevost on a new vehicle, a special tire inflation chart is added next to the certification plate.</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</p>	

8-16 CARE AND MAINTENANCE

regularly.

WHEEL BEARINGS

Check wheel bearing cover for overheating (especially after using the service brakes) during fuel stops by touching the wheel bearing cover.



WARNING

If replacement tires are different from those described on the certification plate, pressure must be adjusted as requested in the Tire and Rim Association Manual.

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) Menus" in Section 5 *Other Features*.

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.

Driving 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.

NOTE

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) Menus" in Section 5 Other Features.

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.

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 telltale light illuminates.
- Activate the left directional signal and check that the corresponding telltale light illuminates.
- Press on the brake pedal and check that the STOP 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:

- First the left and right directional signals.
- Identification lights and clearance lights.
- Low beams.

- High beams.

Go to the left side of the vehicle:

- Directional signals.
- Marker lights.
- Directional signals.
- Marker lights.

Go to the rear of the vehicle:

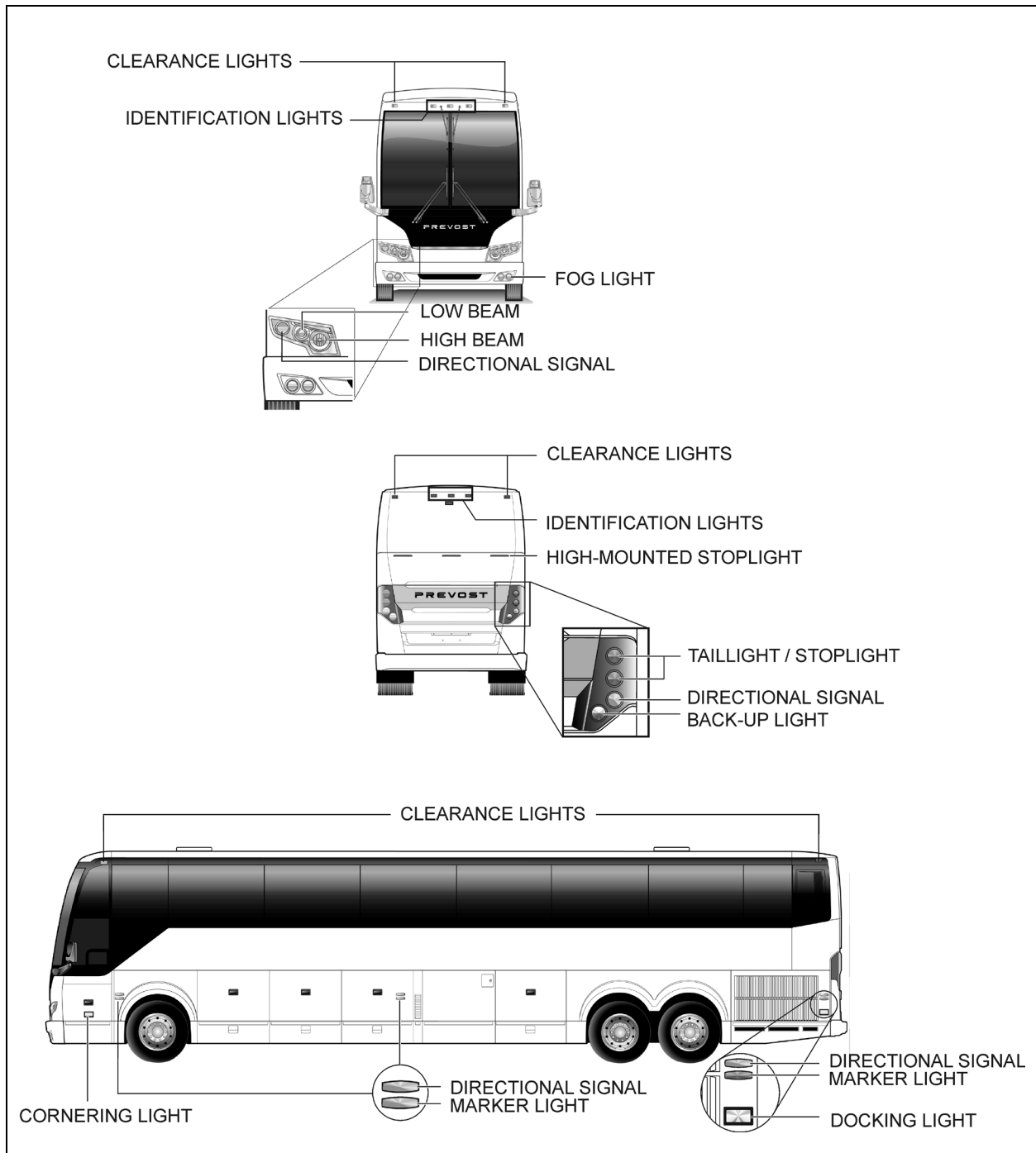
- Directional signals.
- Identification lights and clearance lights.
- Stoplights and taillights.
- Back-up lights and back-up alarm (option).

NOTE

To check the back-up lights and back-up alarm, you must flip the starter selector switch to REAR START position. (If the vehicle is running, do this quick enough so that the engine does not stop).

Go to the right side of the vehicle (same sequence as left side).

8-18 CARE AND MAINTENANCE



EXTERIOR LIGHTING

18588

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.

HOT WATER FILTER

The hot water filter is designed to recover the soldering residues trapped inside the coolant lines during their initial assembly. Clean strainer after first 3,000 miles (5 000 km) and then every 50,000 miles (80 000 km). Refer to the Maintenance Manual under section 05: Cooling System.

NOTE

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

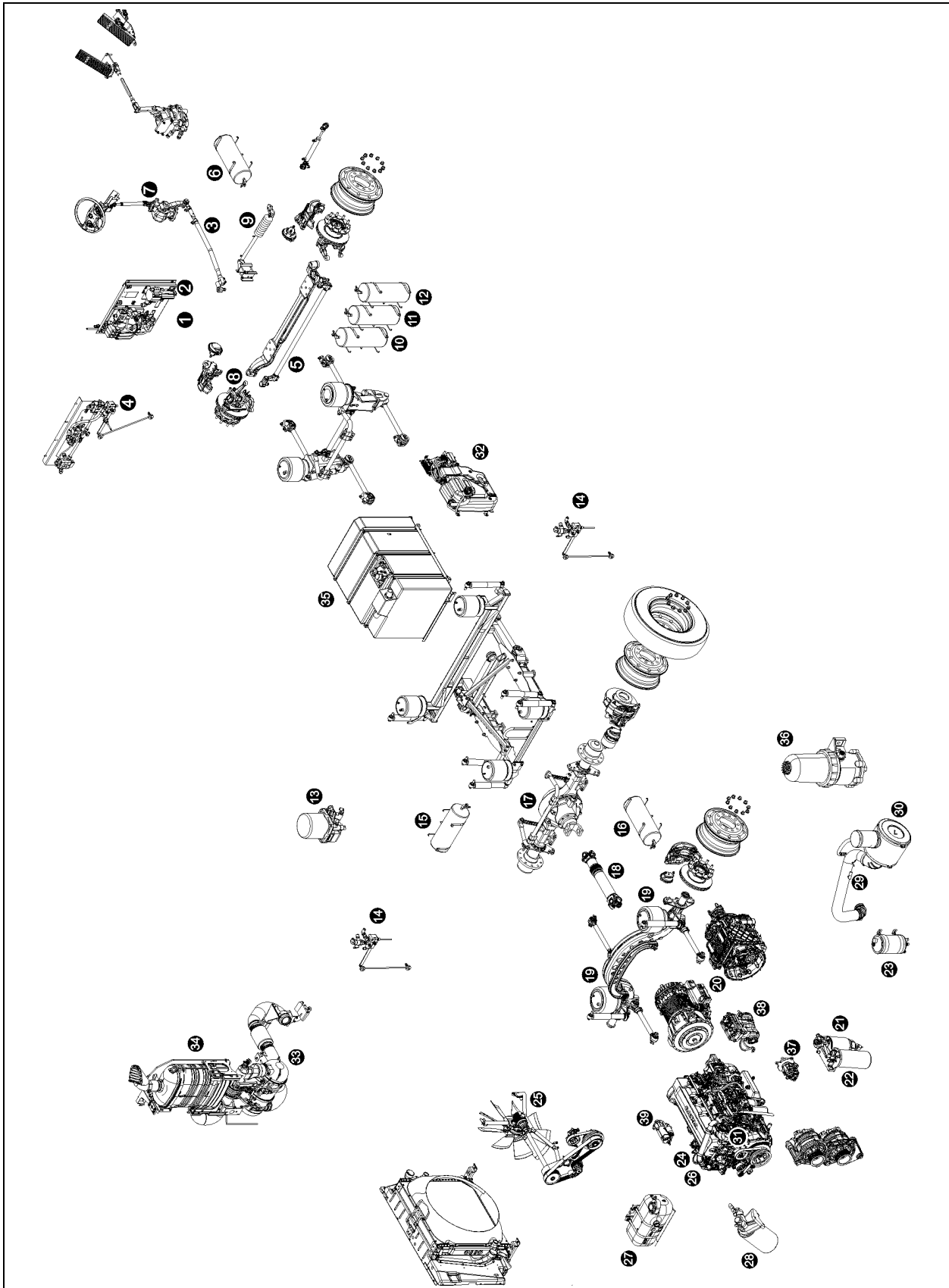
ENGINE OIL

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.

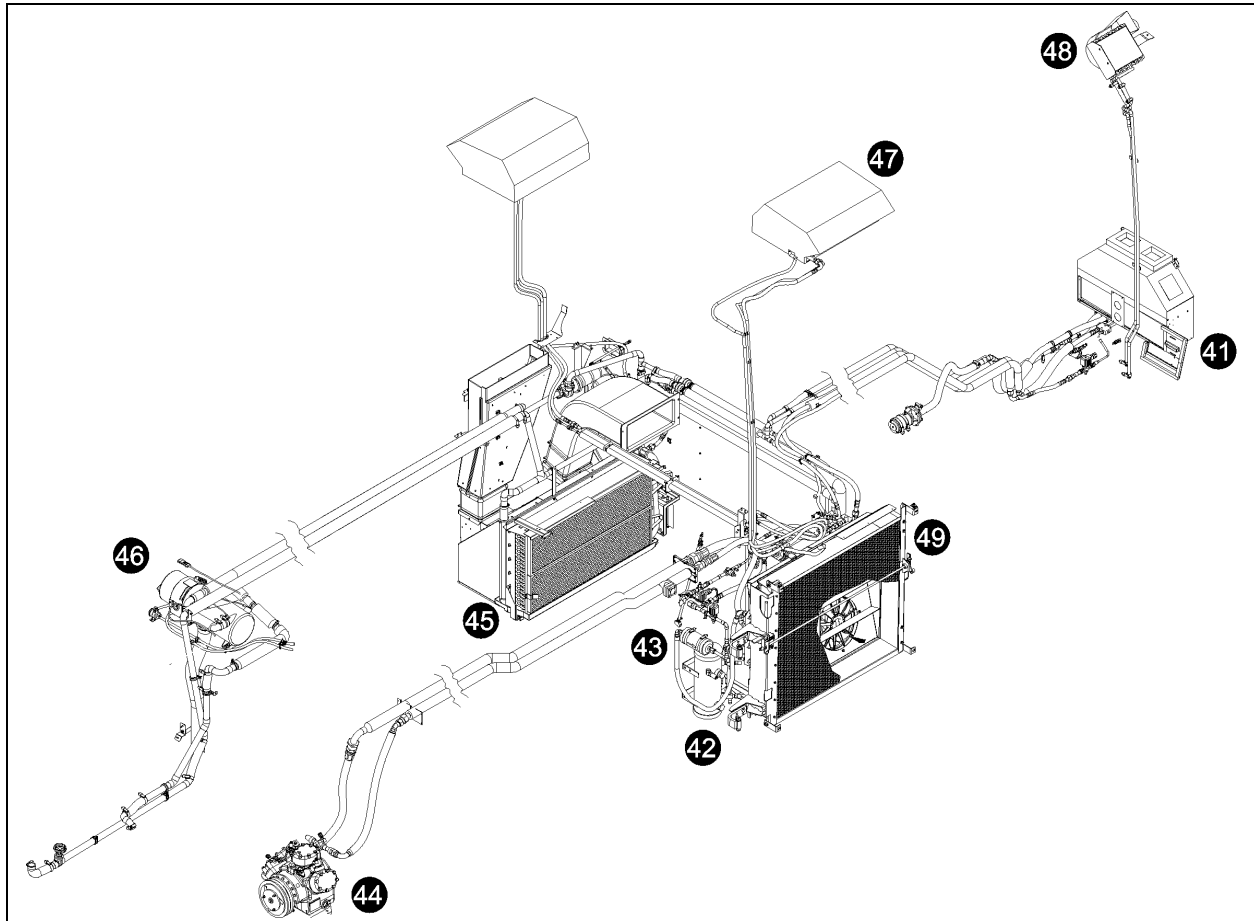
8-20 CARE AND MAINTENANCE



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

- | | | | |
|----|---|----|---|
| 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 | Steering tie rod | 25 | Cooling fan gearbox |
| 6 | Accessories air tank | 26 | Allison transmission oil dipstick |
| 7 | Steering column U-joints | 27 | Engine coolant surge tank |
| 8 | Steering knuckle pins | 28 | Coolant filter & conditioner |
| 9 | Steering damper cylinder | 29 | Engine air filter restriction indicator |
| 10 | Emergency / parking brake overrule tank | 30 | Engine air filter |
| 11 | Secondary air tank | 31 | Engine oil dipstick and filler tube |
| 12 | Kneeling 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 | Tag axle lever pivot | 39 | Starter |
| 20 | Transmission | | |

8-22 CARE AND MAINTENANCE



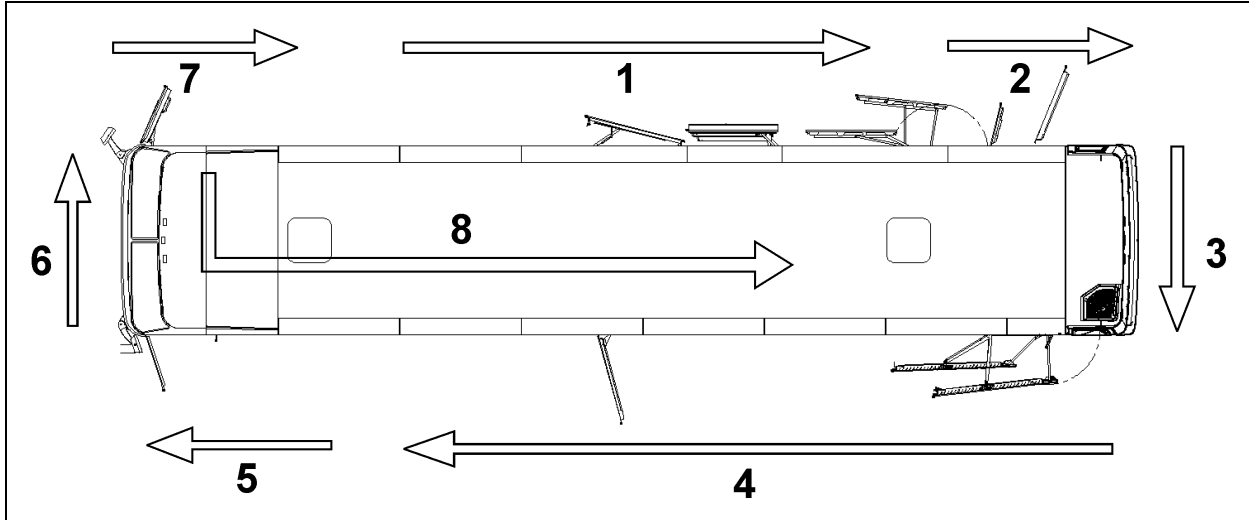
HVAC SYSTEM - MAIN COMPONENTS

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 | | |

WALK-AROUND INSPECTION (BEFORE EVERY TRIP)

It is good practice to make a visual inspection of key areas on the vehicle every day (or before every trip for private coaches) and to correct any problem found.



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.

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.

- 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 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.

8-24 CARE AND MAINTENANCE

- 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

- Start engine and check for proper operation of all gauges. Perform a telltale light test (see Section 4 *Controls And Instruments*). 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 section.
- Perform the exterior lighting verification using the test mode. Refer to “Other Verifications” in this section.
- Walk around the vehicle and listen for air leaks.
- Check for leaks and listen for unusual sounds coming from the turbocharger.