

SCHEDULED SERVICES

1994 Volvo 960

1992-96 MAINTENANCE
Volvo Maintenance & Service Intervals

960 Sedan
960 Wagon

* PLEASE READ THIS FIRST *

NOTE: All SERVICE SCHEDULES are listed for normal service vehicles. If vehicle is operated under severe service conditions, see SEVERE SERVICE REQUIREMENTS (PERFORM W/SERVICE SCHEDULES) for items requiring additional maintenance.

NOTE: This article contains scheduled maintenance service information. Fluid types and capacities listed with each service in this article are only those necessary to perform that scheduled service. For specifications pertaining to fluid capacities for the entire vehicle, fuse and circuit breaker identification, wheel and tire size, battery type, warranty information, or model identification refer to the MAINTENANCE INFORMATION article in this section.

CAUTIONS & WARNINGS

SUPPLEMENTAL RESTRAINT SYSTEM (AIR BAG)

NOTE: See the AIR BAGS article in the ACCESSORIES/SAFETY EQUIPMENT Section.

Modifications or improper maintenance, including incorrect removal and installation of the Supplemental Restraint System (SRS), can adversely affect system performance. DO NOT cover, obstruct or change the steering wheel horn pad in any way, as such action could cause improper function of the system. Use only plain water when cleaning the horn pad. Solvents or cleaners could adversely affect the air bag cover and cause improper deployment of the system.

WARNING: To avoid injury from accidental air bag deployment, read and carefully follow all warnings and service precautions. See appropriate AIR BAGS article in ACCESSORIES/SAFETY EQUIPMENT.

CAUTION: Disconnect negative battery cable before servicing any air bag system, steering column or passenger side dash component. After any repair, turn ignition key to the ON position from passenger's side of vehicle in case of accidental air bag inflation

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) AIR BAR WARNING

NOTE: For information on air bag DIAGNOSIS & TESTING or DISPOSAL PROCEDURES, see AIR BAGS article in the ACCESSORIES/SAFETY EQUIPMENT Section.

CAUTION: System circuit is grounded by 2 screws beneath the driver's seat. DO NOT use these screws to ground any other accessory. DO NOT ground any other components near this system.

SIDE IMPACT PROTECTION SYSTEM (SIPS) - 1996 MODELS

NOTE: For information on air bag DIAGNOSIS & TESTING or DISPOSAL PROCEDURES, see AIR BAGS article in the ACCESSORIES/SAFETY EQUIPMENT Section.

AIR CONDITIONING SERVICING

CAUTION: Avoid breathing R-134a refrigerant and PAG lubricant vapors, exposure may irritate eyes, nose and throat. To remove R-134a from system use R-134a recycling equipment that meets SAE J2210 specifications. If accidental system discharge occurs, ventilate work area before resuming service.

WARNING: R-134a service equipment or vehicle A/C systems SHOULD NOT be pressure tested or leak tested with compressed air. Some mixtures of air/R134a have shown to be combustible at elevated pressures. These mixtures are dangerous and may cause fire and/or explosions. See AIR CONDITIONING SERVICE article in GENERAL INFORMATION section.

ANTI-LOCK BRAKE SYSTEM

The anti-lock brake system contains electronic equipment that can be susceptible to interference caused by improperly installed or high output radio transmitting equipment. Since this interference could cause the possible loss of the anti-lock braking capability, such equipment should be installed by qualified professionals.

On models equipped with anti-lock brake systems, ALWAYS observe the following cautions:

- * DO NOT attempt to bleed hydraulic system without first referring to the appropriate ANTI-LOCK BRAKE SYSTEM article in the BRAKES Section.
- * DO NOT mix tire sizes. As long as tires remain close to the original diameter, increasing the width is acceptable. Rolling diameter must be identical for all 4 tires. Some manufacturers recommend tires of the same brand, style and type. Failure to follow this precaution may cause inaccurate wheel speed readings.
- * Use ONLY recommended brake fluids. DO NOT use silicone brake fluids in an ABS-equipped vehicle.

BATTERY WARNING

WARNING: When battery is disconnected, vehicles equipped with computers may lose memory data. When battery power is restored, driveability problems may exist on some vehicles. These vehicles may require a relearn procedure. See COMPUTER RELEARN PROCEDURES article in GENERAL INFORMATION section.

REPLACING BLOWN FUSES

Before replacing a blown fuse, remove ignition key, turn off all lights and accessories to avoid damaging the electrical system. Be sure to use fuse with the correct indicated amperage rating. The use of an incorrect amperage rating fuse may result in a dangerous electrical system overload.

BRAKE SYSTEM

CAUTION: If brake warning light comes on while driving it indicates a low fluid level or failure in one of the braking circuits. If the brake pedal can be depressed further than normal it is an indication that one of the brake circuits is not functioning. Stop vehicle and check brake reservoir fluid level. If level is below MIN mark, DO NOT drive vehicle. Have it towed to a repair shop. If level is between the MIN and MAX marks, proceed cautiously to a repair shop.

BRAKE PAD WEAR INDICATOR

Indicator will cause a squealing or scraping noise, warning that brake pads need replacement.

CATALYTIC CONVERTER

Continued operation of vehicle with a severe malfunction could cause converter to overheat, resulting in possible damage to converter and vehicle.

Any modification to the exhaust system on turbo models, which reduces exhaust backpressure, will lead to lean fuel mixtures and excessive spark advance. This could cause serious engine damage.

ELECTROSTATIC DISCHARGE SENSITIVE (ESD) PARTS

WARNING: Many solid state electrical components can be damaged by static electricity (ESD). Some will display a warning label, but many will not. Discharge personal static electricity by touching a metal ground point on the vehicle prior to servicing any ESD sensitive component.

ENGINE OIL

CAUTION: Never use non-detergent or straight mineral oil.

FUEL SYSTEM SERVICE

WARNING: Relieve fuel system pressure prior to servicing any fuel system component (fuel injection models).

HALOGEN BULBS

Halogen bulbs contain pressurized gas which may explode if overheated. DO NOT touch glass portion of bulb with bare hands. Eye protection should be worn when handling or working around halogen bulbs.

RADIATOR CAP

CAUTION: Always disconnect the fan motor when working near the radiator fan. The fan is temperature controlled and could start at any time even when the ignition key is in the OFF position. DO NOT loosen or remove radiator cap when cooling system is hot.

RADIATOR FAN

WARNING: Keep hands away from radiator fan. Fan is controlled by a thermostatic switch which may come on or run for up to 15 minutes even after engine is turned off.

WHEELS & TIRES

Only wheels tested and approved by the manufacturer should be used on models equipped with Air Dam aerodynamic components.

SERVICE POINT LOCATIONS

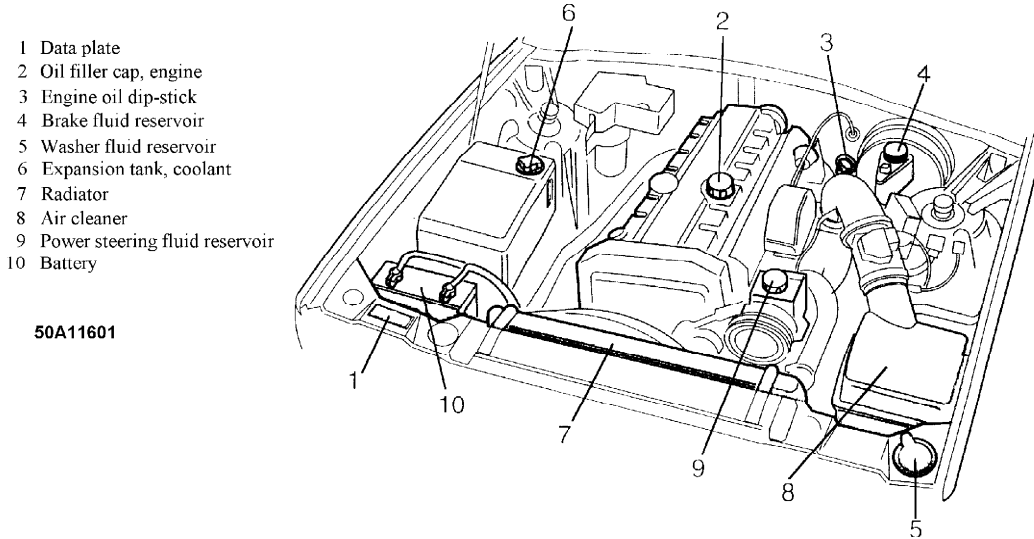


Fig. 1: Service Point Locations (1992-94)
 Courtesy of Volvo Cars of North America.

Engine compartment 960

- 1 Expansion tank, coolant
- 2 Oil filler cap, engine
- 3 Engine oil dip-stick
- 4 Brake fluid reservoir
- 5 Battery
- 6 Data plate
- 7 Radiator
- 8 Power steering fluid reservoir
- 9 Air cleaner
- 10 Washer fluid reservoir
- 11 Main fuse box
- 12 Relay/fuse box

WARNING!
 The cooling fan may start or continue to operate (for up to 6 minutes) after the engine has been switched off.

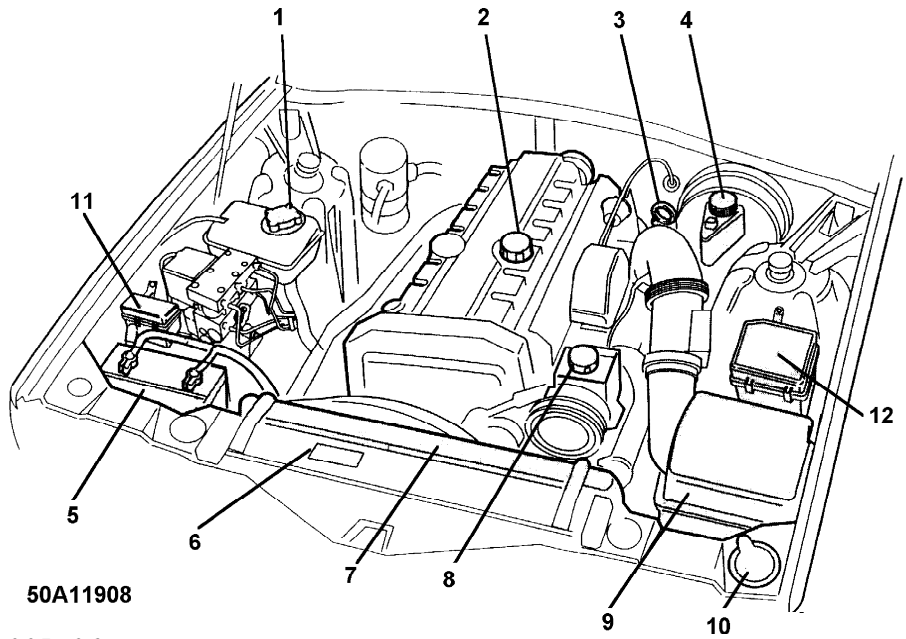
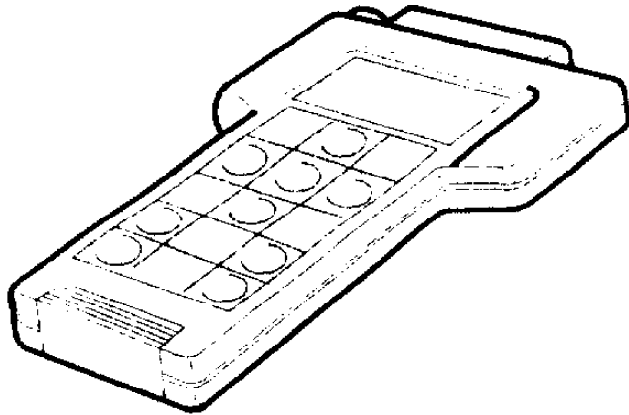


Fig. 2: Service Point Locations (1995-96)
 Courtesy of Volvo Cars of North America.



**Volvo System Tester
Scan Tool**

Data link connector (DLC)

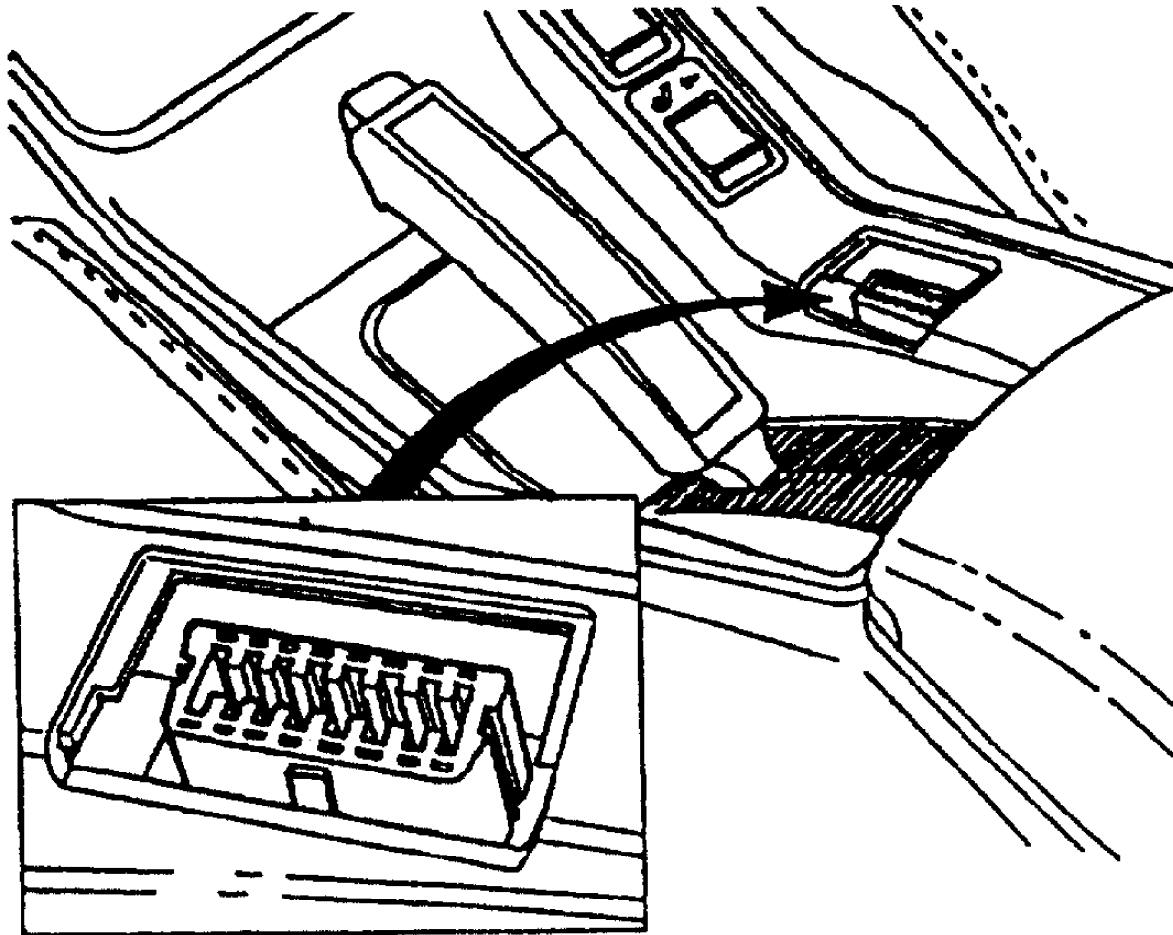


Fig. 3: OBD II Diagnostic Link Connector Location (1996)
Courtesy of Volvo Cars of North America.

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ADDITIONAL SERVICE INFORMATION

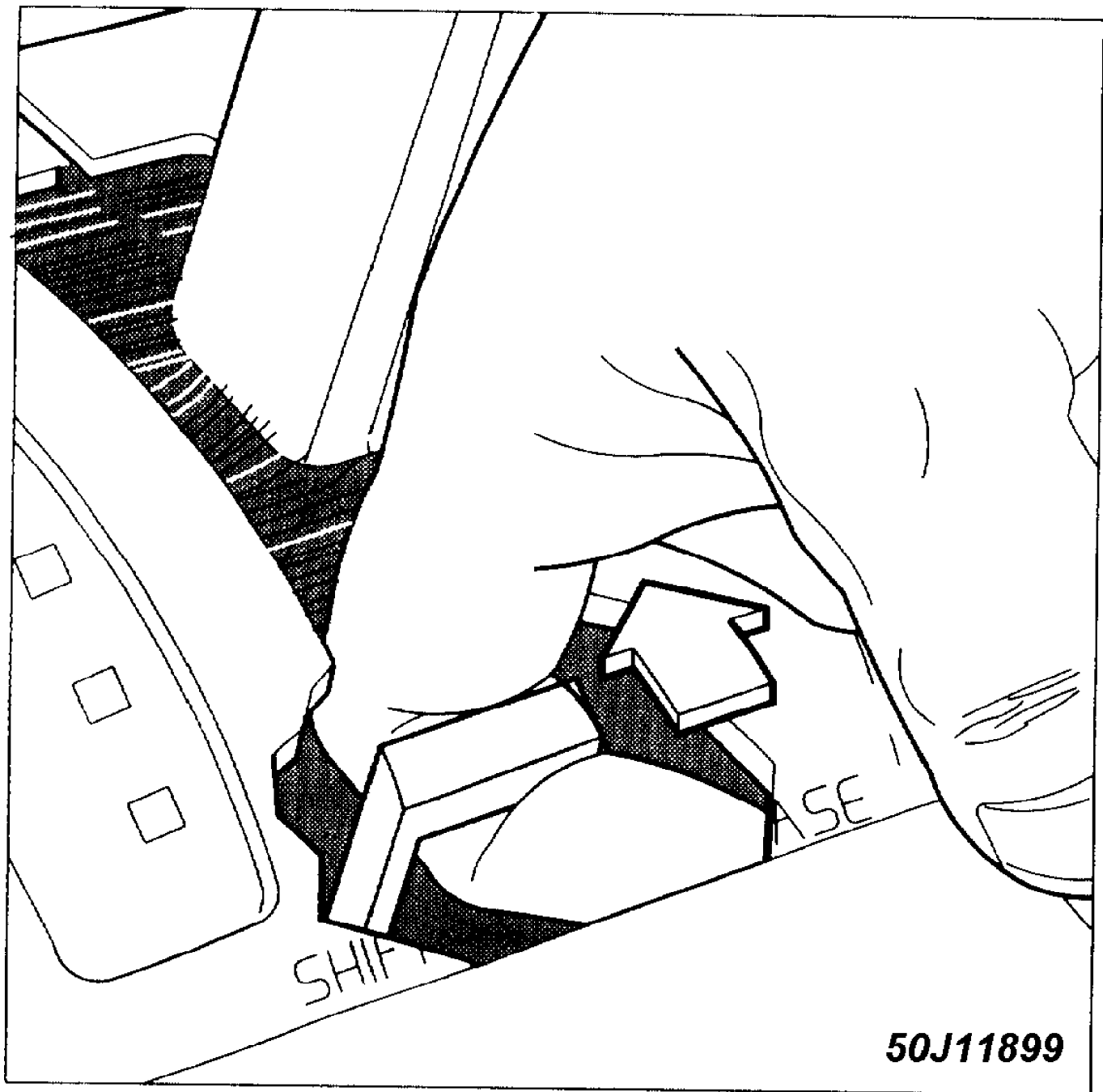
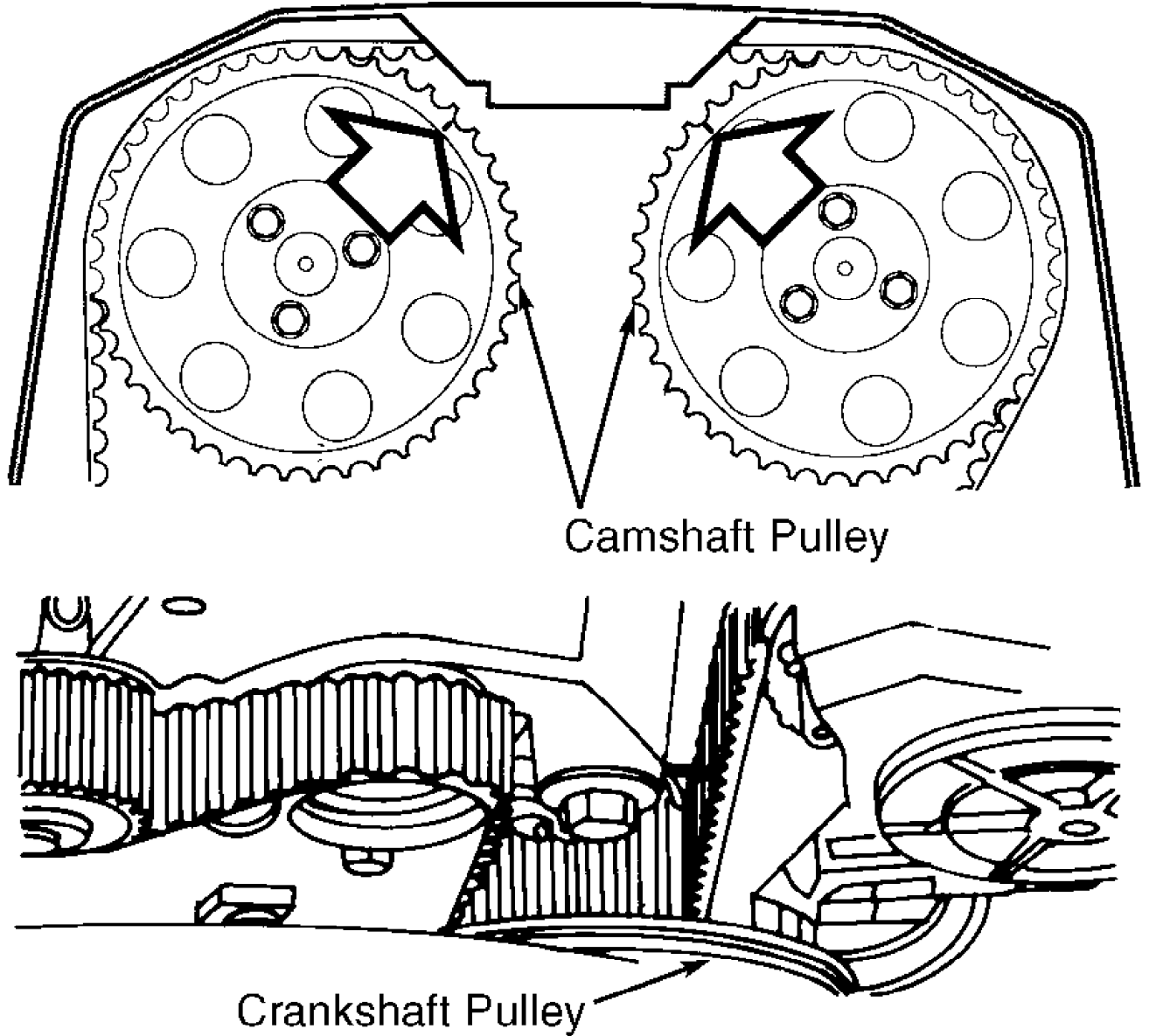


Fig. 4: Releasing Shift Interlock (1992 Models Only)
Courtesy of Volvo Cars of North America.

- 1) With gear selector in Park, depress brake pedal.
- 2) Move gear selector to desired position.
- 3) If gear selector DOES NOT MOVE, check fuse #12.
- 4) TO MANUALLY RELEASE gear selector, push finger between brushes at base of shifter and push catch forward. (See Fig. 3).
- 5) Select a gear.

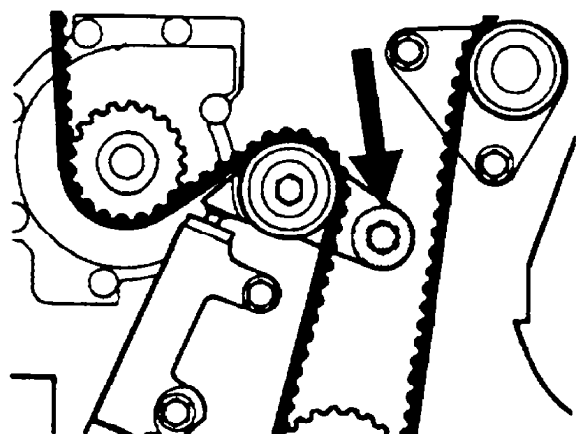
NOTE: 1993-96 models have a button located next to shifter.

ALIGNING CAMSHAFT TIMING MARKS



93E01228

Fig. 5: Aligning Camshaft & Crankshaft Timing Marks
Courtesy of Volvo Cars of North America.



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Lubricating bushing

Remove:

- lever mounting screw
- tensioner pulley
- sleeve behind screw.

Lubricate surfaces of bushing, screw and sleeve with grease P/N 1161246-2 (50 grams) or 1161247-0 (500 grams).

Reinstall:

- sleeve
- tensioner pulley
- lever mounting screw.

Torque screw to 29 ± 5 ft lb = 39 ± 5 Nm.

Torques:

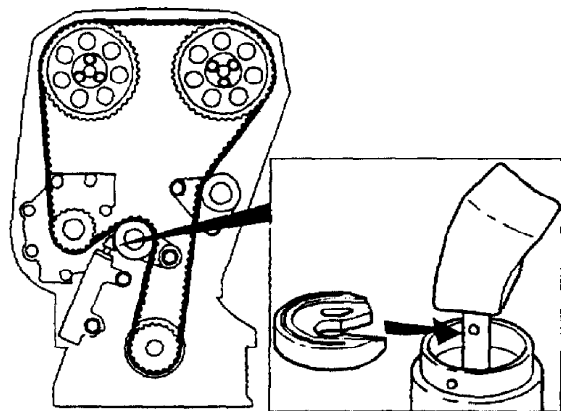
Pulley lever: **30 ft lb = 40 Nm**

Idler pulley: **18 ft lb = 25 Nm**

Fig. 6: Lubricating Tensioner Pulley Bushing (Pivot Bearing)
Courtesy of Volvo Cars of North America.

CAUTION: Lubrication of the Tensioner Pulley Bushing is REQUIRED on 1992-93 Models, it is recommended that the bushing be checked for free play and lubrication on 1994-96 models.

NOTE: For more information regarding camshaft timing belt service refer to the 2.9L 6-CYL article in the ENGINE MECHANICAL section.



Washer installation

Place **new** washer on piston stem of belt tensioner.

Check that washer centers on piston stem and tensioner case.

NOTE!

Make sure that correct side of washer is turned up. The countersunk side should face up. See illustration.

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Fig. 7: Installing Washer on Timing Belt Tensioner
Courtesy of Volvo Cars of North America.

MODEL 960 TIMING BELT REPLACEMENT TABLE

Model Year	Part Number	20K	30K	40K	50K	60K	70K	90K	100K
1992	271705-6	B		C			X		X
1993*	271705-6		D			X		X	

1994	271856-7				X				X
1995-	271876-5						E		

* = Late M/Y 93 960's (from engine no. 131035) should have M/Y 94 timing belt (P/N 271856-7). See Parts Bulletin 21-13 and Tech DCS 21-02.

B = See SMB 137A, timing belt replaced at no cost to customer
C = See SMB 137A, SB 21-118, install torsion damper, replace timing belt at no cost to customer
D = Recommended timing belt replacement at no cost to customer
E = Recommended timing belt replacement
X = Required timing belt replacement

CAUTION: On 1992 & 1993 960's, lubricate timing belt tensioner pivot bearing during timing belt replacement.

LUBRICATING AUXILIARY DRIVE BELT TENSIONER

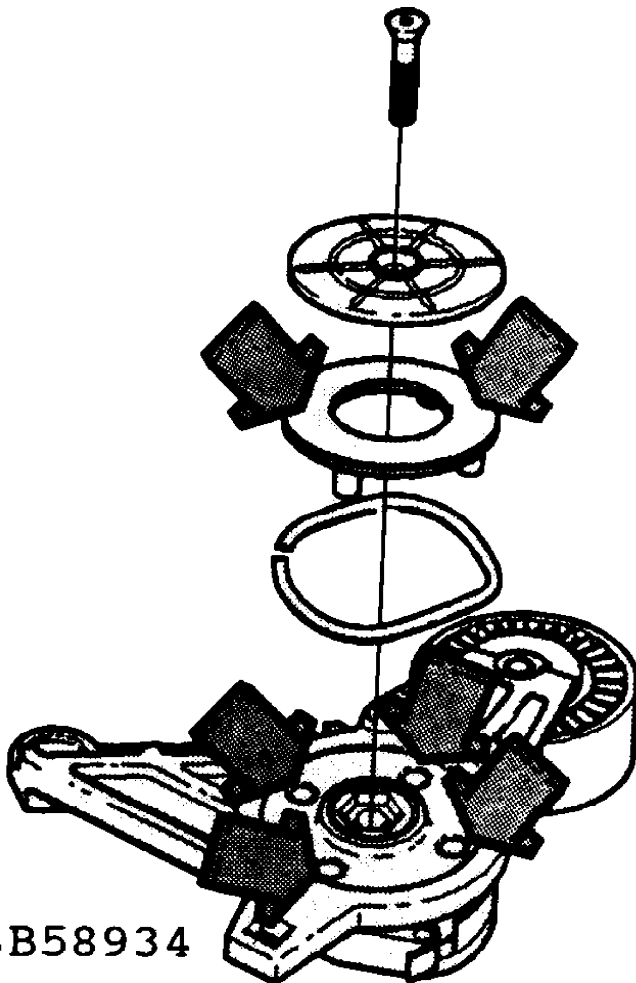


Fig. 8: Auxiliary Drive Belt Tensioner Lubrication Points
Courtesy of Volvo Cars of North America.

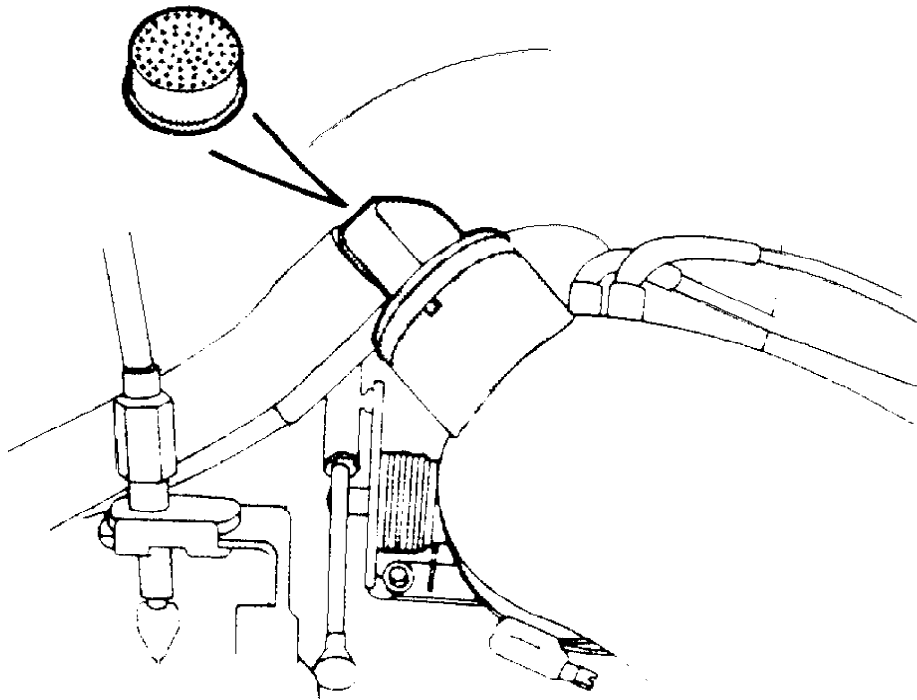
NOTE: For more information regarding auxiliary drive belt service refer to the

GROUP 26, NO. 700 GREASING OF AUXILIARY DRIVE BELT TENSIONER
article in the TSB section.

NOTE: The automatic tensioner for the auxiliary drive belt must be greased every 30,000 miles (45,000 km) or if an abnormal noise is heard from the tensioner.

NOTE: The auxiliary drive belt and automatic tensioner must be removed from engine in order to properly lubricate.

FLAME TRAP MAINTENANCE - PCV SYSTEM



- Rotate flame trap casing approx. $0.59^{\circ} = 15 \text{ mm}$ left (bayonet catch).
- Pull out flame trap and remove oil filler cap.
- Blow clean hoses down towards crankcase ventilation.
- Reinsert flame trap in inlet hose and rotate flame trap outer casing back to original position. **50A11916**

Fig. 9: Flame Trap Location
Courtesy of Volvo Cars of North America.

ELECTRONIC AIR PUMP SYSTEM (1995-96)

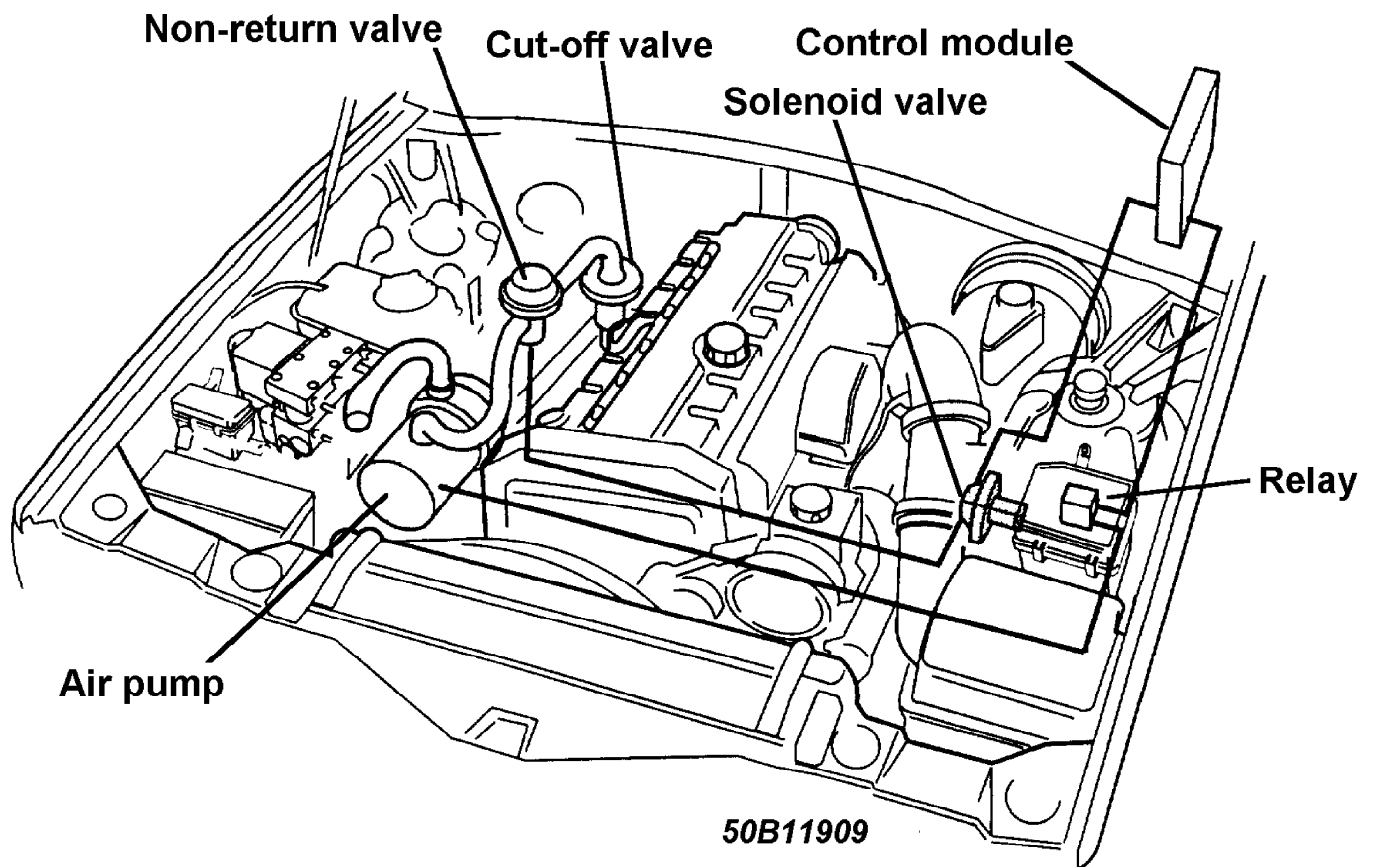
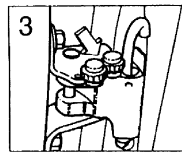
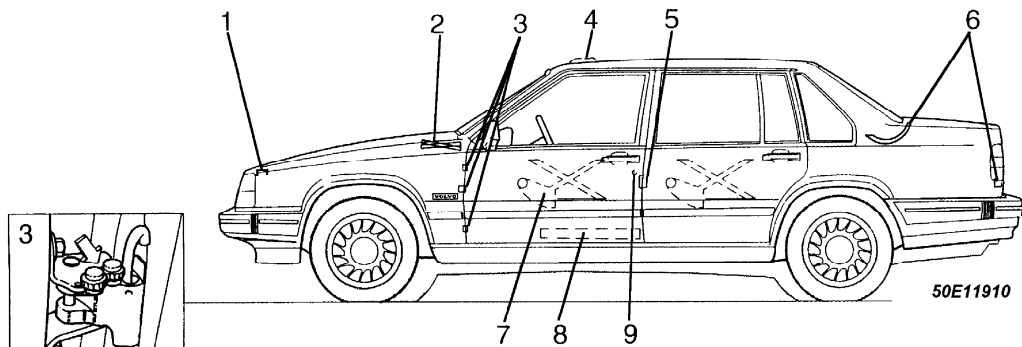


Fig. 10: Electronically Controlled Air Pump System (1995-96)
 Courtesy of Volvo Cars of North America.

BODY LUBRICATION POINTS



No. Lubricating hint	Lubricant	No. Lubricating hint	Lubricant
1 Hood lock and latch	Oil	7 Window regulator locking device (on inside of door)	Oil, grease low temperature grease
2 Hood hinges	Oil	8 Front seat slide rail and latch	Oil
3 Door stop and hinges	Oil	9 Door lock keyhole	Low temperature grease or Volvo Teflon lock oil
4 Sun roof wind deflector	Oil		
5 Door lock catch plate	Oil		
6 Trunk lid lock keyhole and hinges	Low temperature grease		

Fig. 11: Body Lubrication Points
 Courtesy of Volvo Cars of North America.

REAR AXLE SERVICE POINTS

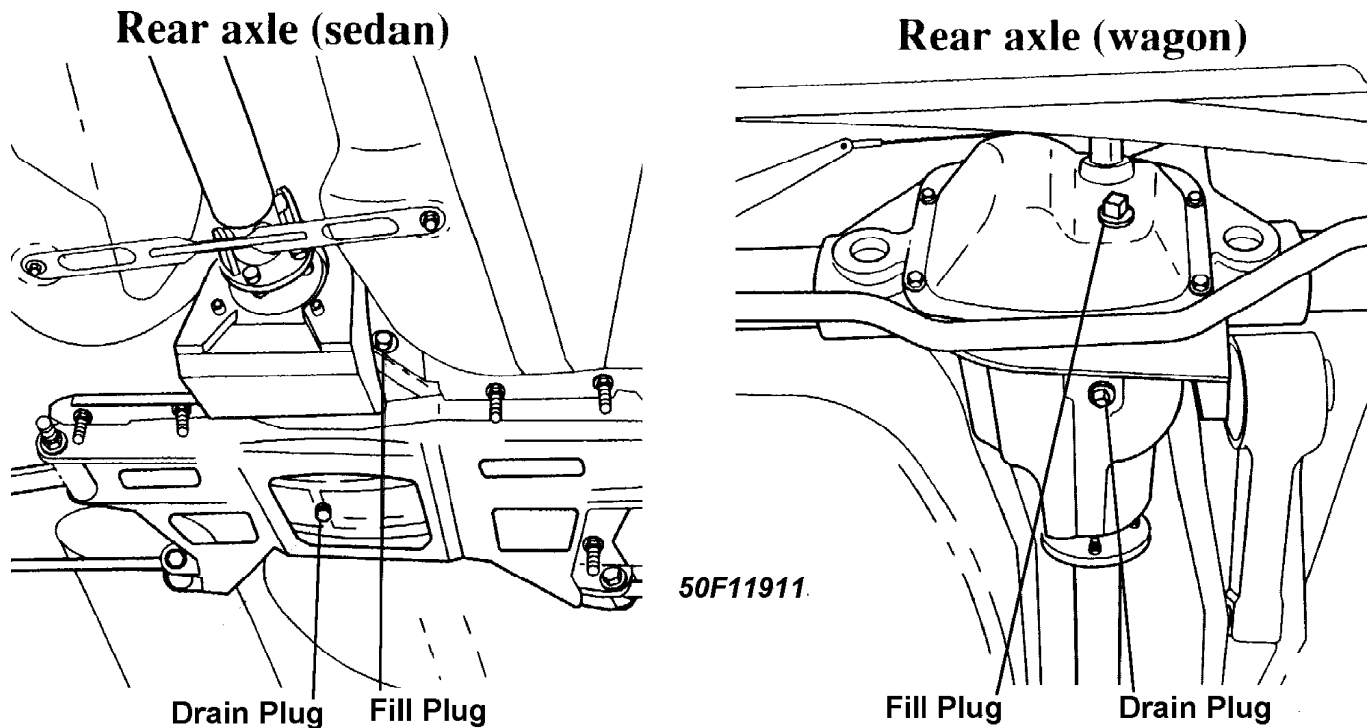


Fig. 12: Rear Axle Service Points (Sedan and Wagon)
 Courtesy of Volvo Cars of North America.

NOTE: All sedan and 1995-96 wagon models have an Independent Rear axle, the 1992-94 wagons have a solid axle.

SUSPENSION TORQUE SPECIFICATIONS

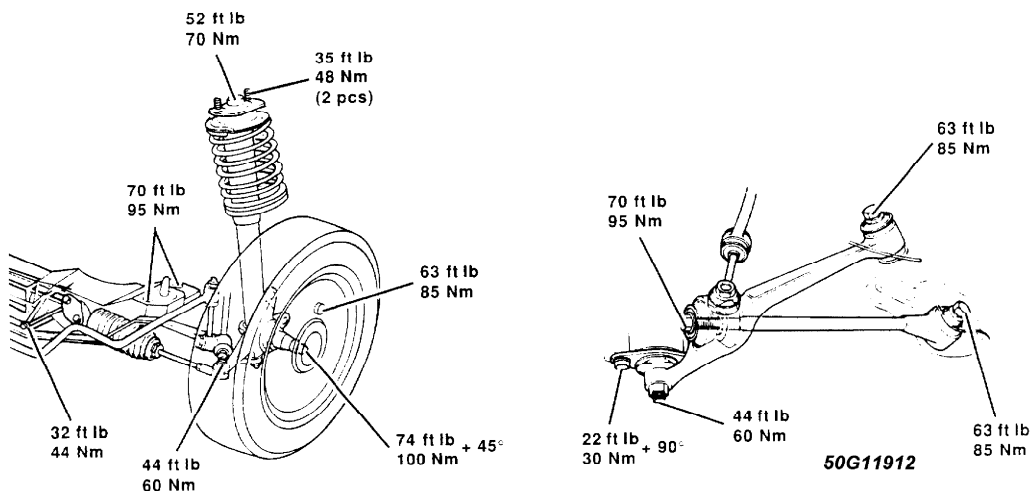


Fig. 13: Front Suspension Torque Specifications (1992-94 All)
 Courtesy of Volvo Cars of North America.

NOTE: For more information regarding front suspension service refer to the SUSPENSION - FRONT article in the STEERING & SUSPENSION section.

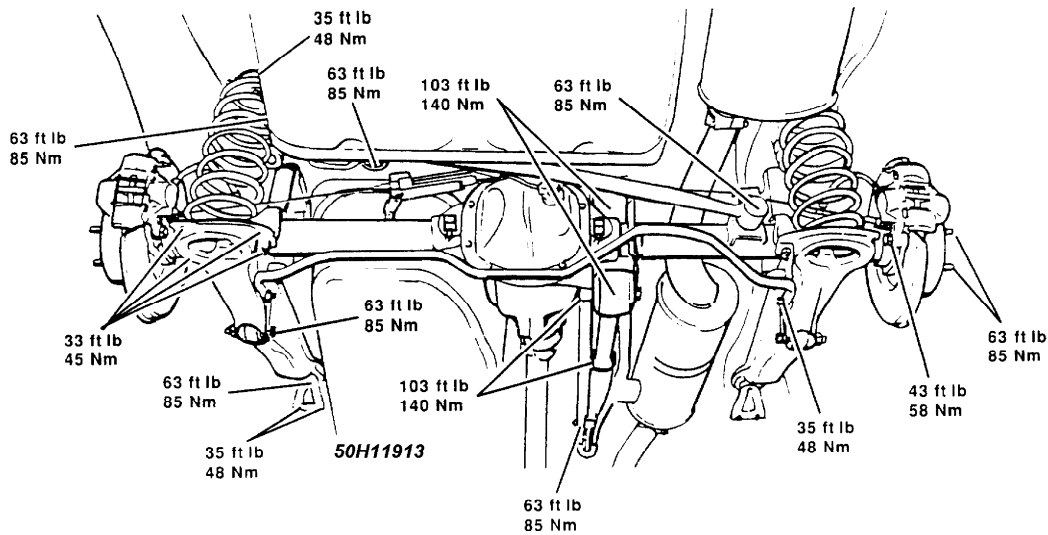


Fig. 14: Rear Suspension Torque Specifications (1992-94 Wagon)
 Courtesy of Volvo Cars of North America.

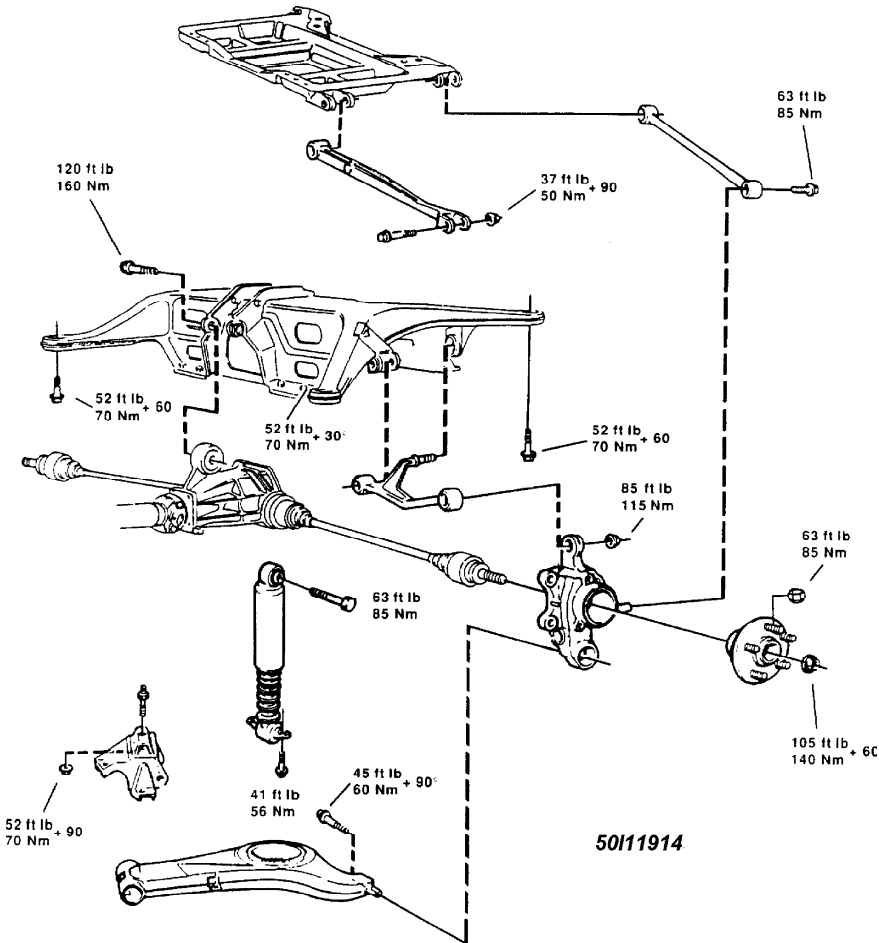


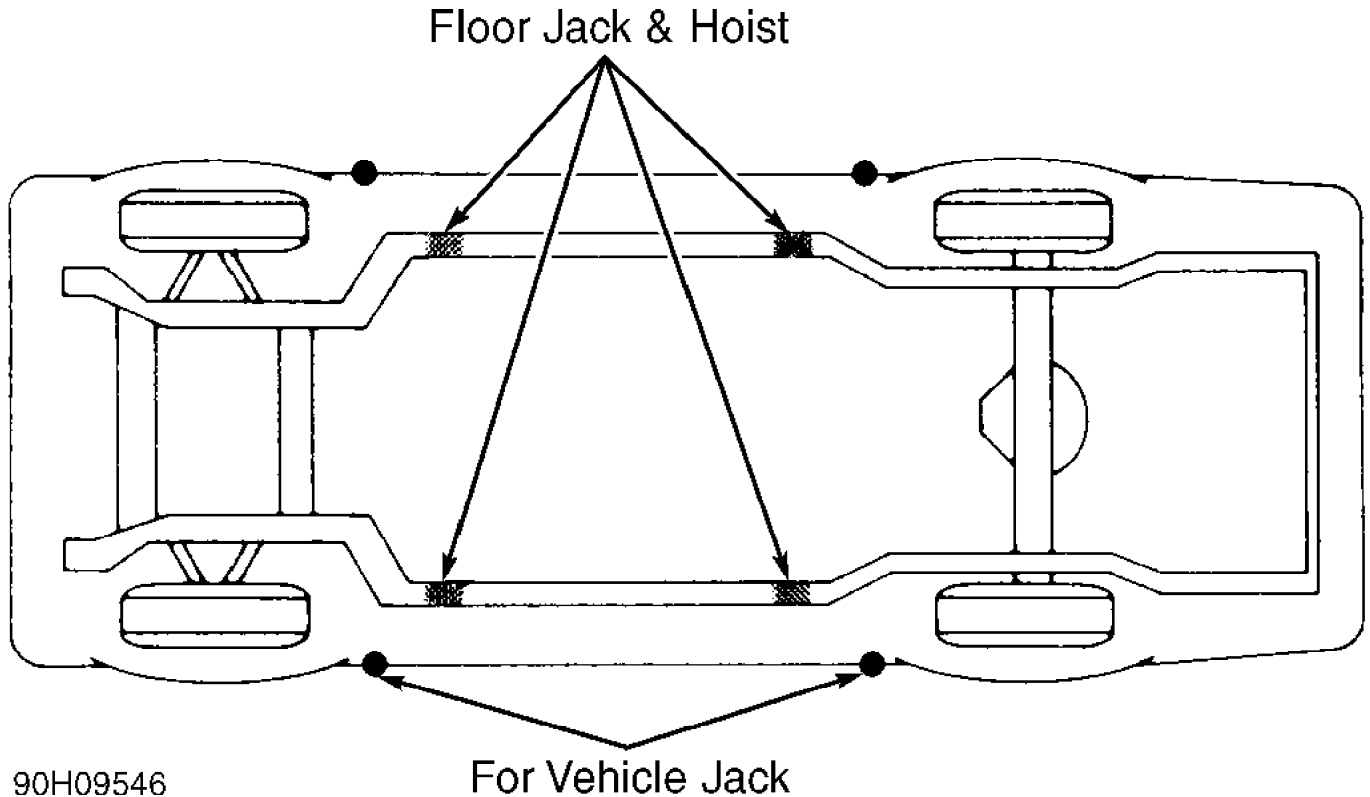
Fig. 15: Rear Suspension Torque Specifications (1992-94 Sedan)
 Courtesy of Volvo Cars of North America.

NOTE: For more information regarding rear suspension service refer to the SUSPENSION - REAR

article in the STEERING & SUSPENSION section.

NOTE: All 1995-96 models have a new Independent Rear Axle using a transverse composite leaf spring (instead of steel coils).

VEHICLE LIFT POINTS



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Fig. 16: Vehicle Lift Points (Typical)
Courtesy of Volvo Cars of North America.

NOTE: For more information regarding lifting and hoisting refer to the JACKING & HOISTING article in the WHEEL ALIGNMENT section.

INFORMATION LABEL LOCATIONS

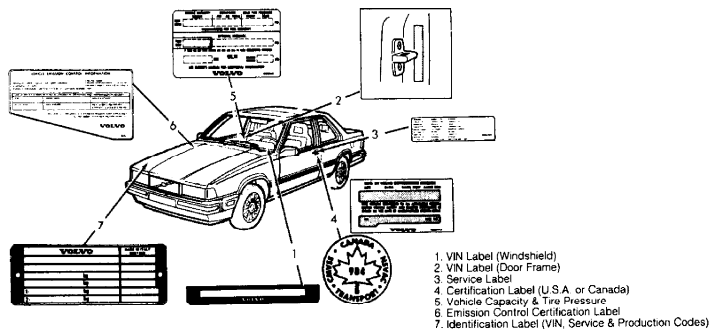


Fig. 17: Information Label Locations
Courtesy of Volvo Cars of North America.

WHEEL TIGHTENING

Tighten all wheel lug nuts to 63 ft. lbs. (85 N.m) using pattern shown in Fig. 18.

TIRE ROTATION PATTERNS

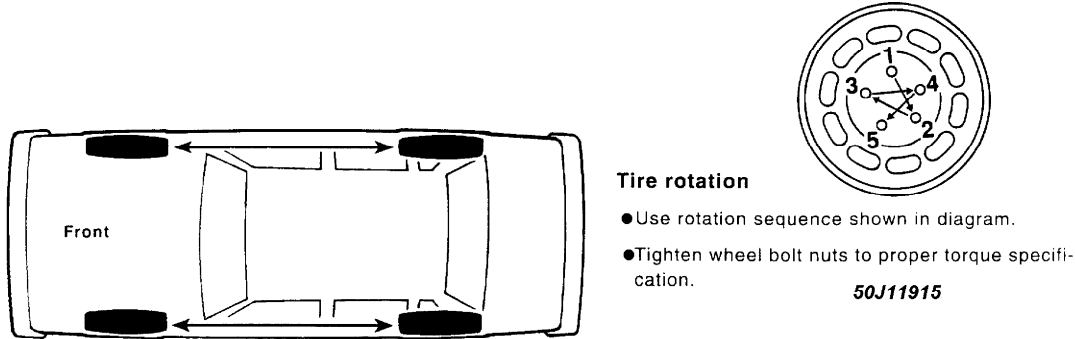


Fig. 18: Tire Rotation Pattern & Lug Nut Torque Pattern
 Courtesy of Volvo Cars of North America.

CAMSHAFT TIMING BELT REPLACEMENT INFORMATION

CAUTION: Failure to replace a faulty camshaft timing belt may result in serious engine damage.

The condition of camshaft drive belts should always be checked on vehicles which have more than 50,000 miles. Although some manufacturers do not recommend belt replacement at a specified mileage, others require it at 60,000-100,000 miles. A camshaft drive belt failure may cause extensive damage to internal engine components on most engines, although some designs do not allow piston-to-valve contact. These designs are often called "Free Wheeling".

Many manufacturers changed their maintenance and warranty schedules in the mid-1980's to reflect timing belt inspection and/or replacement at 50,000-60,000 miles. Most service interval schedules in this manual reflect these changes.

Belts or components should be inspected and replaced if any of the following conditions exist:

- * Cracks Or Tears In Belt Surface
- * Missing, Damaged, Cracked Or Rounded Teeth
- * Oil Contamination
- * Damaged Or Faulty Tensioners
- * Incorrect Tension Adjustment

Volvo recommends replacement of the camshaft timing belt at the following intervals:

CAMSHAFT TIMING BELT REPLACEMENT INTERVAL TABLE

Application	Interval (Miles)
1992-93 (1)	30,000
1994	50,000
1995-96	70,000

(1) - First (30,000 Mile) timing belt change to be done by Volvo dealer at no cost.

SEVERE & NORMAL SERVICE DEFINITIONS

NOTE: Use the Severe Service schedule if the vehicle to be serviced is operated under ANY (one or more) of these conditions:

Service is recommended at mileage intervals based on vehicle operation. Service schedules are based on the following primary operating conditions:

Normal Service

- * Driven More Than 10 Miles Daily
- * No Operating Conditions From Severe Service Schedule

Severe Service (Unique Driving Conditions)

- * Extended Idling Or Low Speed Operation
- * Frequent Short Trips Of Less Than 7 Miles
- * Extended Operation In Dusty Or Sandy Conditions
- * Trailer Towing Operations
- * Driving In Mountainous Conditions

SEVERE SERVICE REQUIREMENTS (PERFORM W/SERVICE SCHEDULES)

NOTE: The following services are to be performed on vehicles subjected to severe service. See SEVERE & NORMAL SERVICE DEFINITIONS. This service is to be performed in addition to the normal services listed in the NORMAL MAINTENANCE SERVICE SCHEDULES.

SEVERE SERVICE CONDITIONS/ACTIONS TABLE

Condition	Action	Item	Perform Every (1)
Extended Idling Or Low Speed Operation	Replace	Engine Oil & Filter	3,750 Miles or 3 Months
Frequent Short Trips Of Less Than 7 Miles	Replace	Engine Oil & Filter	3,750 Miles or 3 Months
Extended Operation In Dusty Or Sandy Conditions	Replace	Engine Oil & Filter	3,750 Miles or 3 Months
Trailer Towing Operations	Replace	Engine Oil & Filter	3,750 Miles or 3 Months
Driving In Mountainous Conditions	Replace	Engine Oil & Filter	3,750 Miles or 3 Months
(1) - Perform these services at the mileage or number of months (since the last time), whichever comes first.			

5000 MILE (8000 KM) SERVICE

5000 MILE (8000 KM) SERVICE

Service Or Inspect	
	Check Fluid Levels
	Inspect Coolant Hoses and Clamps
	Inspect Brake System
	Inspect Exhaust System
	Inspect Steering Linkage/Front Suspension
	Retorque Front & Rear Suspension Bolts (1992-94 Models Only)
	Lubricate Chassis
	Clean Power Antenna Mast
	Road Test
Replace	
	Engine Oil
	Oil Filter
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

10,000 MILE (16,000 KM) SERVICE

10,000 MILE (16,000 KM) SERVICE

Service Or Inspect	
	Verify Last Major Service Was Performed

Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast
Check Seat Belt Webbing and Release Mechanisms
Check Parking Brake Operation
Check Shift Interlock Operation
Inspect Steering Linkage/Front Suspension
Inspect Propeller Shaft, Support Bearings and U-Joints
Lubricate Chassis
Inspect Brake Pads, Rotors and Calipers
Inspect Brake System Hoses & Lines
Inspect Shocks/Struts for Leakage
Inspect Tire Wear Pattern
Rotate Tires and Adjust Air Pressure (Including Spare)
Road Test
Reset Service Reminder Indicator
Replace
Engine Oil
Oil Filter
Lubrication Specifications

Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

20,000 MILE (32,000 KM) SERVICE

20,000 MILE (32,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast

Check Seat Belt Webbing and Release Mechanisms	
Check Parking Brake Operation	
Check Shift Interlock Operation	
Inspect Steering Linkage/Front Suspension	
Inspect Propeller Shaft, Support Bearings and U-Joints	
Lubricate Chassis	
Inspect Brake Pads, Rotors and Calipers	
Inspect Brake System Hoses & Lines	
Inspect Shocks/Struts for Leakage	
Inspect Tire Wear Pattern	
Rotate Tires and Adjust Air Pressure (Including Spare)	
Road Test	
Reset Service Reminder Indicator	
Replace	
Engine Oil	
Oil Filter	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

30,000 MILE (48,000 KM) SERVICE

30,000 MILE (48,000 KM) SERVICE

	Service Or Inspect
	Verify Last Major Service Was Performed
	Check Fluid Levels
	Check Cooling System Hoses and Clamps
	Inspect Brake System
	Check Exhaust System & Heat Shielding
	Clean Battery and Battery Terminals
	Inspect/Adjust Accessory Drive Belts (Replace if Required)
	Lube Accessory Drive Belt Tensioner (1992-93 Models)
	Crankcase Ventilation System
	Inspect Fuel/Tank/Cap/Lines
	Check Operation of Horn, Wipers/Washers & All Exterior Lights
	Inspect Condition of Wiper Blades
	Check Headlight Alignment
	Lubricate Weatherstripping with Silicone
	Lubricate Door Hinges
	Lubricate Door Locks
	Check Body Drain Holes
	Clean Power Antenna Mast
	Check Seat Belt Webbing and Release Mechanisms
	Check Parking Brake Operation
	Check Shift Interlock Operation
	Inspect Steering Linkage/Front Suspension
	Inspect Propeller Shaft, Support Bearings and U-Joints
	Lubricate Chassis
	Inspect Brake Pads, Rotors and Calipers
	Inspect Brake System Hoses & Lines
	ABS System Operation
	Inspect Shocks/Struts for Leakage
	Suspension Bushings, Springs, Arms & Rear Jounce Bumpers
	Inspect Tire Wear Pattern

Rotate Tires and Adjust Air Pressure (Including Spare)
Road Test
Reset Service Reminder Indicator
Replace
Engine Oil
Oil Filter
Spark Plugs
Air Filter Element
Camshaft Timing Belt (1992-93 Models Only)
Drain, Flush and Refill Engine Coolant
Drain, Refill and Bleed Brake System Fluid

Lubrication Specifications

Application	Specification
Engine Coolant	50/50 Mix Ethylene Glycol and Distilled Water
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Automatic Transmission	Dexron-IIIE ATF
Power Steering Fluid	Dexron-IIIE Or Mercon ATF
Rear Axle	
Without Limited Slip	SAE 80W-90 API-GL-5 (2)
With Limited Slip	SAE 90 API-GL-5 (2) (3)
Limited Slip Additive	Volvo Additive (1161129-0)
Wheel Bearings	NLGI Grade 2 Category GC-LB
Drive Shaft U-Joints	NLGI Grade 2 Category GC-LB
Steering Linkage (4) (5)	NLGI Grade 2 Category GC-LB
Ball Joints (4) (6)	NLGI Grade 2 Category GC-LB
Aux. Drive Belt Tensioner	Volvo Grease (1161246-2)
Tensioner Pulley Bushing	Grease (P/N 116246-2 Or 116247-0)
Weatherstrip	Dielectric Silicone Grease
Power Antenna	WD-40 Or Equivalent Cleaner

- (1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.
- (2) - In Canada and cold climates use SAE 80W API GL-5.
- (3) - Supplement with Volvo Additive (1161129-0).
- (4) - Use low pressure grease gun to prevent seal damage.
- (5) - Fill until lubricant squeezes out from the base of seals.
- (6) - Fill ball joint until seal starts to swell.

Fluid Capacities

Application	(1) Quantity
Brake Master Cylinder	0.63 Qt. (0.6L)
Cooling System	10.5 Qts. (10.0L)

Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
Rear Axle (3)	
Sedan	1.4 Qts. (1.3L)
Wagon	1.7 Qts. (1.6L)
Power Steering	1.05 Qts. (1.0L)
Auxiliary Drive Belt Tensioner	50g. (4)
Tensioner Pulley Bushing	(P/N 116246-2) 50g. (5)
Tensioner Pulley Bushing	(P/N 116247-0) 500g. (5)

- (1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.
- (2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.
- (3) - If equipped with limited slip differential add lubricant additive (Volvo P/N 1161129-0) first, then add new fluid.
- (4) - Apply to surfaces between friction plate and cover as well as packing the (4) spring holes. See Fig. 7.
- (5) - Disassemble Tensioner Pulley, clean all surfaces and check for worn areas. Repack bushing assembly and reinstall.

Service Labor Times

Application	(1) (2) Hours
3.0L	6.3

- (1) - To replace camshaft timing belt, add 1.3 hours.
- (2) - Add 0.4 hours to service accessory drive belt tensioner.

40,000 MILE (64,000 KM) SERVICE

40,000 MILE (64,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks

Check Body Drain Holes	
Clean Power Antenna Mast	
Check Seat Belt Webbing and Release Mechanisms	
Check Parking Brake Operation	
Check Shift Interlock Operation	
Inspect Steering Linkage/Front Suspension	
Inspect Propeller Shaft, Support Bearings and U-Joints	
Lubricate Chassis	
Inspect Brake Pads, Rotors and Calipers	
Inspect Brake System Hoses & Lines	
Inspect Shocks/Struts for Leakage	
Inspect Tire Wear Pattern	
Rotate Tires and Adjust Air Pressure (Including Spare)	
Road Test	
Reset Service Reminder Indicator	
Replace	
Engine Oil	
Oil Filter	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

50,000 MILE (80,000 KM) SERVICE

50,000 MILE (80,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast
Check Seat Belt Webbing and Release Mechanisms
Check Parking Brake Operation
Check Shift Interlock Operation
Inspect Steering Linkage/Front Suspension
Inspect Propeller Shaft, Support Bearings and U-Joints
Lubricate Chassis
Inspect Brake Pads, Rotors and Calipers
Inspect Brake System Hoses & Lines
Inspect Shocks/Struts for Leakage
Inspect Tire Wear Pattern
Rotate Tires and Adjust Air Pressure (Including Spare)
Road Test

Reset Service Reminder Indicator	
Replace	
Engine Oil	
Oil Filter	
Drain, Flush and Refill Engine Coolant	
Accessory Drive Belts (1992-93 Models Only)	
Camshaft Timing Belt (1994 Models Only)	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	
Service Labor Times	
Application	(1) (2) Hours
3.0L	6.3
(1) - To replace camshaft timing belt, add 1.3 hours.	
(2) - Add 0.4 hours to service accessory drive belt tensioner.	

60,000 MILE (96,000 KM) SERVICE

60,000 MILE (96,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Inspect Brake System

	Check Exhaust System & Heat Shielding
	Clean Battery and Battery Terminals
	Inspect/Adjust Drive Belts (1992-93 Replace if Required)
	Lube Accessory Drive Belt Tensioner (1992-93 Models)
	Clean EGR System (1992-94 Models Only)
	Inspect PCV Valve, Flame Guard and Hoses
	Crankcase Ventilation System
	Inspect Fuel/Tank/Cap/Lines
	Check Operation of Horn, Wipers/Washers & All Exterior Lights
	Inspect Condition of Wiper Blades
	Check Headlight Alignment
	Lubricate Weatherstripping with Silicone
	Lubricate Door Hinges
	Lubricate Door Locks
	Check Body Drain Holes
	Clean Power Antenna Mast
	Check Seat Belt Webbing and Release Mechanisms
	Check Parking Brake Operation
	Check Shift Interlock Operation
	Inspect Steering Linkage/Front Suspension
	Steering System & Wheel Alignment
	Inspect Propeller Shaft, Support Bearings and U-Joints
	Lubricate Chassis
	Inspect Brake Pads, Rotors and Calipers
	Inspect Brake System Hoses & Lines
	ABS System Operation
	Inspect Shocks/Struts for Leakage
	Suspension Bushings, Springs, Arms & Rear Jounce Bumpers
	Inspect Tire Wear Pattern
	Rotate Tires and Adjust Air Pressure (Including Spare)
	Road Test

Reset Service Reminder Indicator
Replace
Engine Oil
Oil Filter
Spark Plugs
Air Filter Element
Fuel Filter (1992-94 Models)
PCV Valve Flame Guard
Accessory Drive Belts (1994-95 Models Only)
Camshaft Timing Belt (1992-93 Models Only)
Drain, Flush and Refill Engine Coolant
Drain, Refill and Bleed Brake System Fluid

Lubrication Specifications

Application	Specification
Coolant	50/50 Mix Ethylene Glycol and Distilled Water
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Automatic Transmission	Dexron-IIe ATF
Power Steering Fluid	Dexron-IIe Or Mercon ATF
Rear Axle	
Without Limited Slip	SAE 80W-90 API-GL-5 (2)
With Limited Slip	SAE 90 API-GL-5 (2)(3)
Limited Slip Additive	Volvo Additive (1161129-0)
Wheel Bearings	NLGI Grade 2 Category GC-LB
Drive Shaft U-Joints	NLGI Grade 2 Category GC-LB
Steering Linkage (4)(5)	NLGI Grade 2 Category GC-LB
Ball Joints (4)(6)	NLGI Grade 2 Category GC-LB
Aux. Drive Belt Tensioner	Volvo Grease (1161246-2)
Tensioner Pulley Bushing	Grease (P/N 116246-2 Or 116247-0)
Weatherstrip	Dielectric Silicone Grease
Power Antenna	WD-40 Or Equivalent Cleaner
<p>(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.</p> <p>(2) - In Canada and cold climates use SAE 80W API GL-5.</p> <p>(3) - Supplement with Volvo Additive (1161129-0).</p> <p>(4) - Use low pressure grease gun to prevent seal damage.</p> <p>(5) - Fill until lubricant squeezes out from the base of seals.</p> <p>(6) - Fill ball joint until seal starts to swell.</p>	

Fluid Capacities

Application	(1) Quantity
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Brake Master Cylinder	0.63 Qt. (0.6L)
Cooling System	10.5 Qts. (10.0L)
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
Rear Axle (3)	
Sedan	1.4 Qts. (1.3L)
Wagon	1.7 Qts. (1.6L)
Power Steering	1.05 Qts. (1.0L)
Auxiliary Drive Belt Tensioner	50g. (4)
Tensioner Pulley Bushing	(P/N 116246-2) 50g. (5)
Tensioner Pulley Bushing	(P/N 116247-0) 500g. (5)

- (1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.
- (2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.
- (3) - If equipped with limited slip differential add lubricant additive (Volvo P/N 1161129-0) first, then add new fluid.
- (4) - Apply to surfaces between friction plate and cover as well as packing the (4) spring holes. See Fig. 7.
- (5) - Disassemble Tensioner Pulley, clean all surfaces and check for worn areas. Repack bushing assembly and reinstall.

Service Labor Times

Application	(1) (2) Hours
3.0L	7.7

- (1) - To replace camshaft timing belt, add 1.3 hours.
- (2) - Add 0.4 hours to service accessory drive belt tensioner.

70,000 MILE (112,000 KM) SERVICE

70,000 MILE (112,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges

Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast
Check Seat Belt Webbing and Release Mechanisms
Check Parking Brake Operation
Check Shift Interlock Operation
Inspect Steering Linkage/Front Suspension
Inspect Propeller Shaft, Support Bearings and U-Joints
Lubricate Chassis
Inspect Brake Pads, Rotors and Calipers
Inspect Brake System Hoses & Lines
Inspect Shocks/Struts for Leakage
Inspect Tire Wear Pattern
Rotate Tires and Adjust Air Pressure (Including Spare)
Road Test
Reset Service Reminder Indicator
Replace
Engine Oil
Oil Filter
Camshaft Timing Belt (1995 960 Models Only)

Lubrication Specifications

Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner

(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.

Fluid Capacities

Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)

(1) - Capacities are recommended or calculated levels. Always use

dipstick (if available) to measure level.
 (2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.

80,000 MILE (128,000 KM) SERVICE

80,000 MILE (128,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean EGR System (1992-94 Models Only)
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast
Check Seat Belt Webbing and Release Mechanisms
Check Parking Brake Operation
Check Shift Interlock Operation
Inspect Steering Linkage/Front Suspension
Inspect Propeller Shaft, Support Bearings and U-Joints
Lubricate Chassis
Inspect Brake Pads, Rotors and Calipers
Inspect Brake System Hoses & Lines
Inspect Shocks/Struts for Leakage

Inspect Tire Wear Pattern	
Rotate Tires and Adjust Air Pressure (Including Spare)	
Road Test	
Reset Service Reminder Indicator	
Replace	
Engine Oil	
Oil Filter	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

90,000 MILE (144,000 KM) SERVICE

90,000 MILE (144,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect/Adjust Accessory Drive Belts (Replace if Required)
Lube Accessory Drive Belt Tensioner (1992-93 Models)

	Crankcase Ventilation System
	Inspect Fuel/Tank/Cap/Lines
	Check Operation of Horn, Wipers/Washers & All Exterior Lights
	Inspect Condition of Wiper Blades
	Check Headlight Alignment
	Lubricate Weatherstripping with Silicone
	Lubricate Door Hinges
	Lubricate Door Locks
	Check Body Drain Holes
	Clean Power Antenna Mast
	Check Seat Belt Webbing and Release Mechanisms
	Check Parking Brake Operation
	Check Shift Interlock Operation
	Inspect Steering Linkage/Front Suspension
	Steering System & Wheel Alignment
	Inspect Propeller Shaft, Support Bearings and U-Joints
	Lubricate Chassis
	Inspect Brake Pads, Rotors and Calipers
	Inspect Brake System Hoses & Lines
	ABS System Operation
	Inspect Shocks/Struts for Leakage
	Suspension Bushings, Springs, Arms & Rear Jounce Bumpers
	Inspect Tire Wear Pattern
	Rotate Tires and Adjust Air Pressure (Including Spare)
	Road Test
	Reset Service Reminder Indicator
	Replace
	Engine Oil
	Oil Filter
	Spark Plugs
	Air Filter Element
	Camshaft Timing Belt (1992-93 960 Models Only)

Drain, Flush and Refill Engine Coolant
Drain, Refill and Bleed Brake System

Lubrication Specifications

Application	Specification
Engine Coolant	50/50 Mix Ethylene Glycol and Distilled Water
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Automatic Transmission	Dexron-IIe ATF
Power Steering Fluid	Dexron-IIe Or Mercon ATF
Rear Axle	
Without Limited Slip	SAE 80W-90 API-GL-5 (2)
With Limited Slip	SAE 90 API-GL-5 (2) (3)
Limited Slip Additive	Volvo Additive (1161129-0)
Wheel Bearings	NLGI Grade 2 Category GC-LB
Drive Shaft U-Joints	NLGI Grade 2 Category GC-LB
Steering Linkage (4) (5)	NLGI Grade 2 Category GC-LB
Ball Joints (4) (6)	NLGI Grade 2 Category GC-LB
Aux. Drive Belt Tensioner	Volvo Grease (1161246-2)
Tensioner Pulley Bushing	Grease (P/N 116246-2 Or 116247-0)
Weatherstrip	Dielectric Silicone Grease
Power Antenna	WD-40 Or Equivalent Cleaner
<p>(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.</p> <p>(2) - In Canada and cold climates use SAE 80W API GL-5.</p> <p>(3) - Supplement with Volvo Additive (1161129-0).</p> <p>(4) - Use low pressure grease gun to prevent seal damage.</p> <p>(5) - Fill until lubricant squeezes out from the base of seals.</p> <p>(6) - Fill ball joint until seal starts to swell.</p>	

Fluid Capacities

Application	(1) Quantity
Brake Master Cylinder	0.63 Qt. (0.6L)
Cooling System	10.5 Qts. (10.0L)
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
Rear Axle (3)	
Sedan	1.4 Qts. (1.3L)
Wagon	1.7 Qts. (1.6L)
Power Steering	1.05 Qts. (1.0L)
Auxiliary Drive Belt Tensioner	50g. (4)
Tensioner Pulley Bushing	(P/N 116246-2) 50g. (5)
Tensioner Pulley Bushing	(P/N 116247-0) 500g. (5)
<p>(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.</p> <p>(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.</p> <p>(3) - If equipped with limited slip differential add lubricant additive (Volvo P/N 1161129-0) first, then add new fluid.</p> <p>(4) - Apply to surfaces between friction plate and cover as well as packing the (4) spring holes. See Fig. 7.</p> <p>(5) - Disassemble Tensioner Pulley, clean all surfaces and check</p>	

for worn areas. Repack bushing assembly and reinstall.

Service Labor Times

Application	(1) (2) Hours
3.0L	6.3
(1) - To replace camshaft timing belt, add 1.3 hours.	
(2) - Add 0.4 hours to service accessory drive belt tensioner.	

100,000 MILE (160,000 KM) SERVICE

100,000 MILE (160,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Check Coolant Strength
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean EGR System (All Models)
Inspect PCV Valve, Flame Guard and Hoses
Clean Battery and Battery Terminals
Inspect Fuel/Tank/Cap/Lines
Check Operation of Horn, Wipers/Washers & All Exterior Lights
Inspect Condition of Wiper Blades
Check Headlight Alignment
Lubricate Weatherstripping with Silicone
Lubricate Door Hinges
Lubricate Door Locks
Check Body Drain Holes
Clean Power Antenna Mast
Check Seat Belt Webbing and Release Mechanisms
Check Parking Brake Operation
Check Shift Interlock Operation
Inspect Steering Linkage/Front Suspension

Inspect Propeller Shaft, Support Bearings and U-Joints	
Lubricate Chassis	
Inspect Brake Pads, Rotors and Calipers	
Inspect Brake System Hoses & Lines	
Inspect Shocks/Struts for Leakage	
Inspect Tire Wear Pattern	
Rotate Tires and Adjust Air Pressure (Including Spare)	
Road Test	
Reset Service Reminder Indicator	
Replace	
Engine Oil	
Oil Filter	
Fuel Filter (1995 Models Only)	
Accessory Drive Belts (1992-93 Models Only)	
Camshaft Timing Belt (1994 Models Only)	
Drain, Refill and Bleed Brake System Fluid	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Brake Master Cylinder	0.63 Qt. (0.6L)
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

110,000 MILE (176,000 KM) SERVICE

110,000 MILE (176,000 KM) SERVICE

Service Or Inspect	
	Verify Last Major Service Was Performed
	Check Fluid Levels
	Check Cooling System Hoses and Clamps
	Check Coolant Strength
	Inspect Brake System
	Check Exhaust System & Heat Shielding
	Clean Battery and Battery Terminals
	Inspect Fuel/Tank/Cap/Lines
	Check Operation of Horn, Wipers/Washers & All Exterior Lights
	Inspect Condition of Wiper Blades
	Check Headlight Alignment
	Lubricate Weatherstripping with Silicone
	Lubricate Door Hinges
	Lubricate Door Locks
	Check Body Drain Holes
	Clean Power Antenna Mast
	Check Seat Belt Webbing and Release Mechanisms
	Check Parking Brake Operation
	Check Shift Interlock Operation
	Inspect Steering Linkage/Front Suspension
	Inspect Propeller Shaft, Support Bearings and U-Joints
	Lubricate Chassis
	Inspect Brake Pads, Rotors and Calipers
	Inspect Brake System Hoses & Lines
	Inspect Shocks/Struts for Leakage
	Inspect Tire Wear Pattern
	Rotate Tires and Adjust Air Pressure (Including Spare)
	Road Test
	Reset Service Reminder Indicator
Replace	

Engine Oil	
Oil Filter	
Lubrication Specifications	
Application	Specification
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Power Antenna	WD-40 Or Equivalent Cleaner
(1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.	
Fluid Capacities	
Application	(1) Quantity
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
(1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.	
(2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.	

120,000 MILE (192,000 KM) SERVICE

120,000 MILE (192,000 KM) SERVICE

Service Or Inspect
Verify Last Major Service Was Performed
Check Fluid Levels
Check Cooling System Hoses and Clamps
Inspect Brake System
Check Exhaust System & Heat Shielding
Clean Battery and Battery Terminals
Inspect/Adjust Drive Belts (1992-93 Replace if Required)
Lube Accessory Drive Belt Tensioner (1992-93 Models)
Inspect and Clean EGR System (All Models)
Check EGR Valve
Inspect PCV Valve, Flame Guard and Hoses
Crankcase Ventilation System
Inspect Fuel/Tank/Cap/Lines

	Check Operation of Horn, Wipers/Washers & All Exterior Lights
	Inspect Condition of Wiper Blades
	Check Headlight Alignment
	Lubricate Weatherstripping with Silicone
	Lubricate Door Hinges
	Lubricate Door Locks
	Check Body Drain Holes
	Clean Power Antenna Mast
	Check Seat Belt Webbing and Release Mechanisms
	Check Parking Brake Operation
	Check Shift Interlock Operation
	Inspect Steering Linkage/Front Suspension
	Steering System & Wheel Alignment
	Inspect Propeller Shaft, Support Bearings and U-Joints
	Lubricate Chassis
	Inspect Brake Pads, Rotors and Calipers
	Inspect Brake System Hoses & Lines
	ABS System Operation
	Inspect Shocks/Struts for Leakage
	Suspension Bushings, Springs, Arms & Rear Jounce Bumpers
	Inspect Tire Wear Pattern
	Rotate Tires and Adjust Air Pressure (Including Spare)
	Road Test
	Reset Service Reminder Indicator
	Replace
	Engine Oil
	Oil Filter
	Spark Plugs
	Air Filter Element
	Fuel Filter (1992-94 Models Only)
	PCV Valve Flame Guard
	Accessory Drive Belts (1994-95 Models Only)

Camshaft Timing Belt (1992-93 Models Only)
Drain, Flush and Refill Engine Coolant
Drain, Refill and Bleed Brake System Fluid

Lubrication Specifications

Application	Specification
Engine Coolant	50/50 Mix Ethylene Glycol and Distilled Water
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W40 API SH/CD
Automatic Transmission	Dexron-IIe ATF
Power Steering Fluid	Dexron-IIe Or Mercon ATF
Rear Axle	
Without Limited Slip	SAE 80W-90 API-GL-5 (2)
With Limited Slip	SAE 90 API-GL-5 (2)(3)
Limited Slip Additive	Volvo Additive (1161129-0)
Wheel Bearings	NLGI Grade 2 Category GC-LB
Drive Shaft U-Joints	NLGI Grade 2 Category GC-LB
Steering Linkage (4)(5)	NLGI Grade 2 Category GC-LB
Ball Joints (4)(6)	NLGI Grade 2 Category GC-LB
Aux. Drive Belt Tensioner	Volvo Grease (1161246-2)
Tensioner Pulley Bushing	Grease (P/N 116246-2 Or 116247-0)
Weatherstrip	Dielectric Silicone Grease
Power Antenna	WD-40 Or Equivalent Cleaner

- (1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.
- (2) - In Canada and cold climates use SAE 80W API GL-5.
- (3) - Supplement with Volvo Additive (1161129-0).
- (4) - Use low pressure grease gun to prevent seal damage.
- (5) - Fill until lubricant squeezes out from the base of seals.
- (6) - Fill ball joint until seal starts to swell.

Fluid Capacities

Application	(1) Quantity
Brake Master Cylinder	0.63 Qt. (0.6L)
Cooling System	10.5 Qts. (10.0L)
Engine Oil (Includes Oil Filter) (2)	5.9 Qts. (5.7L)
Rear Axle (3)	
Sedan	1.4 Qts. (1.3L)
Wagon	1.7 Qts. (1.6L)
Power Steering	1.05 Qts. (1.0L)
Auxiliary Drive Belt Tensioner	50g. (4)
Tensioner Pulley Bushing	(P/N 116246-2) 50g. (5)
Tensioner Pulley Bushing	(P/N 116247-0) 500g. (5)

- (1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.
- (2) - DO NOT use SAE 15W-40 oil in extremely low temperatures.
- (3) - If equipped with limited slip differential add lubricant additive (Volvo P/N 1161129-0) first, then add new fluid.
- (4) - Apply to surfaces between friction plate and cover as well

as packing the (4) spring holes. See Fig. 7.
 (5) - Disassemble Tensioner Pulley, clean all surfaces and check for worn areas. Repack bushing assembly and reinstall.

Service Labor Times

Application	(1) (2) Hours
3.0L	7.7

- (1) - To replace camshaft timing belt, add 1.3 hours.
- (2) - Add 0.4 hours to service accessory drive belt tensioner.

LUBRICATION SPECIFICATIONS

CAUTION: DO NOT use SAE 15W-40 oil in extremely low ambient temperatures.

LUBRICATION SPECIFICATIONS TABLE

Application	Fluid Specifications
Engine Coolant	50/50 Mix Ethylene Glycol and Distilled Water
Brake Fluid	DOT 4 Or DOT 4+ Brake Fluid
Engine Oil (1)	
Ambient Temperature	
Less Than 68°F (20°C)	SAE 5W-30 API SH/CD
-4°F To 100°F (-20° To 38°C)	SAE 10W-30 API SH/CD
Greater Than 14°F (-10°C)	SAE 15W-40 API SH/CD
Automatic Transmission	
AW30/40	Dexron-II E ATF
AW30/43	Dexron-II E ATF
Power Steering Fluid	Dexron-II E Or Mercon ATF
Rear Axle	
Without Limited Slip	SAE 80W-90 API-GL-5 (2)
With Limited Slip	SAE 90 API-GL-5 (2) (3)
Limited Slip Additive	Volvo Additive (1161129-0)
Wheel Bearings	NLGI Grade 2 Category GC-LB
Drive Shaft U-Joints	NLGI Grade 2 Category GC-LB
Steering Linkage (4) (5)	NLGI Grade 2 Category GC-LB
Ball Joints (4) (6)	NLGI Grade 2 Category GC-LB
Aux. Drive Belt Tensioner	Volvo Grease (1161246-2)
Tensioner Pulley Bushing ...	Grease (P/N 116246-2 Or 116247-0)
Weatherstrip	Dielectric Silicone Grease

- (1) - SAE 15W-40 or 20W-40 engine oil is recommended for extreme conditions or extended highway operation.
- (2) - In Canada and cold climates use SAE 80W API GL-5.
- (3) - Supplement with Volvo Additive (1161129-0)
- (4) - Use low pressure grease gun to prevent seal damage.
- (5) - Fill until lubricant squeezes out from the base of seals.
- (6) - Fill ball joint until seal starts to swell.

FLUID CAPACITIES

FLUID CAPACITIES TABLE

Application	Quantity (1)
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A/C R-12 Refrigerant		
1992	33.5 Ozs.	
A/C R-134a Refrigerant (2)		
1993-96	31.8 Ozs.	
Brake Master Cylinder	0.63 Qt. (0.6L)	
Cooling System	10.5 Qts. (10.0L)	
Engine Oil		
With Oil Filter Change	5.9 Qts. (5.7L)	
With Filter and Oil Cooler	6.4 Qts. (6.1L)	
Fuel Tank		
1992-94		
Sedan	21.1 Gals. (80.0L)	
Wagon	19.8 Gals. (75.0L)	
1995-96 (All)	20.8 Gals. (80.0L)	
Rear Axle (3)		
Sedan	1.4 Qts. (1.3L)	
Wagon	1.7 Qts. (1.6L)	
Automatic Transmission		
Fluid & Filter Change		
AW30/40	3.2 Qts. (3.0L)	
AW30/43	3.2 Qts. (3.0L)	
Overhaul		
AW30/40	7.9 Qts. (7.5L)	
AW30/43	7.9 Qts. (7.5L)	
Power Steering	1.05 Qts. (1.0L)	
Auxiliary Drive Belt Tensioner	50g. (4)	
Tensioner Pulley Bushing	(P/N 116246-2) 50g. (5)	
Tensioner Pulley Bushing	(P/N 116247-0) 500g. (5)	

- (1) - Capacities are recommended or calculated levels. Always use dipstick (if available) to measure level.
 - (2) - Use of R-12 in a R134a system will result in SEVERE DAMAGE.
 - (3) - If equipped with limited slip differential add lubricant additive (Volvo P/N 1161129-0) first, then add new fluid.
 - (4) - Apply to surfaces between friction plate and cover as well as packing the (4) spring holes. See Fig. 7.
 - (5) - Disassemble Tensioner Pulley, clean all surfaces and check for worn areas. Repack bushing assembly and reinstall.
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