XC90, 2005, B5254T2, AW50/51 AWD, L.H.D, YV1CM592751135488, 135488

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Oil air conditioning (A/C) system, filling

Special tools:
951 1204

Topping up the lubricating oil

Warning! Do not mix oil types. Always use the correct type of compressor oil.

Note! Too much lubrication oil will impair cooling. Too little lubrication oil will damage the compressor.

The oil must be topped up when repairing a leak or when replacing a component. The quantity required for the component in question will depend on whether leakage has taken place slowly or quickly.

Model	Engine	Model Year	Oil, AC compressor R134a
240	All	93	**1161 628-1**
400	All	94-97	**1161 627-3**
850	All	All	**1161 627-3**
940	All	93-95	**1161 628-1**
960	All (Sanden compressor)	93-95	**1161 629-9**
940/960/S90/V90	All	96-98	**1161 627-3**
S40 (-04)/V40	All petrol except B4184SM/SJ(GDI)	All	**1161 627-3**
S40 (-04)/V40	B4184SM/SJ(GDI)	All	**1161 628-1**
S40 (-04)/V40	All Diesel	All	**1161 629-9**
S60/S80(-06)/V70(00-	All	All	**1161 627-3**

)/V70XC(01-)/XC70/XC90			
S40(04-)/V50/C70(06-)/C30	All 5 cyl	All	**1161 627-3**
S40(04-)/V50/C30	All 4 cyl Petrol	All	**1161 627-3**
S40(04-)/V50/C30	All 4 cyl Diesel	All	**1161 629-9**

Slow leakage (longer than 24 hours)
With a slow leak, there is normally minimal risk of oil loss.

When installing new components the following procedures apply:

Rapid leakage (e.g. hose rupture)
Rapid leakage often means that lubricating oil escapes with the refrigerant.

When replacing components, the following oil volumes shall be found in the new components or shall be filled in the system through the service valve, except for the compressor (see the section "Compressor" below):

Receiver drier	30 cm³
Evaporator	50cm³
Condenser	30 cm³
Tube	10 cm³
Hose	10 cm³

Compressor

Oil return when

reusing compressor:

- measure the volume of the oil drained from the compressor
- replace the volume of drained oil according to the table below:

Drained oil	Filling with oil
≥ 70 cm³ oil	Replace the volume of drained oil with the corresponding quantity.
< 70 cm³ oil	Fill with 70 cm³ of oil.

Oil return when replacing compressor:

- Drain the old compressor of oil, and measure the amount.
- Drain the new compressor of oil (the amount may be below specified value since it is not possible to drain all oil from the compressor).
- Use the table below to fill the new compressor with the right amount of oil.

Drained oil	Filling with oil
≥ 70 cm³ oil	Replace the drained oil volume with the same amount that was drained from the old compressor.
< 70 cm³ oil	Fill with 70 cm³ of oil.

Caution! When installing completely new system: Check that there is oil in the compressor. The other components should contain no oil.

Replacing the

receiver drier

Replace the receiver drier in the following cases:

- when replacing the compressor (e.g., compressor breakdown)
- refrigerant leakage, where nearly 100% has leaked out of the system (the system has no pressure)
- when replacing any air conditioning (A/C) component outside the warranty period.

Filling the A/C system with oil

Note! On newer filling/draining/vacuum-pumping stations there is a reservoir for injecting oil. This can be used before filling with refrigerant and after vacuum-pumping without needing to remove the needle valve in the service valve.

Note! Fill with oil before vacuum-pumping.

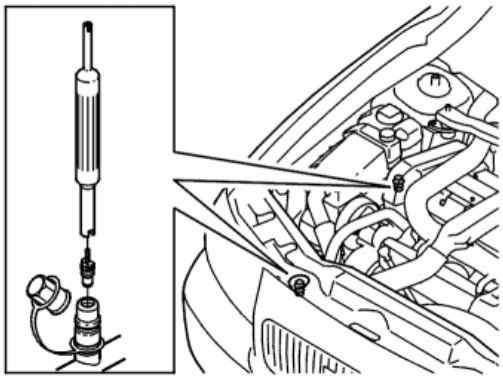
Filling with PAG oil

When replacing pipes/hoses, oil can be filled through the service valve.

When filling the vehicle with PAG oil (for P/N see spare parts catalog), carry out the

following:

- Remove the needle valve in the service valve using valve tool 951 1204 .



Use the filling syringe (without plastic hose) supplied with the unit to top up the oil. Clean the syringe to avoid the possibility of mixing different types of oil.

- Check according to the table above. Measure how much oil is to be added. After topping up the oil, reinstall the needle valve.

Note! Use only your thumb and index finger when tightening the service valve using valve needle tool 951 1204 **. This is to prevent damage to the seal on the service valve.**

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