

83-525 Checking oil level in A/C compressor

Operation number of operation texts and work units or standard texts and flat rates

When working on the air conditioner, correct compressor oil level according to items 1 through 3, depending on the type of damage.

Oil capacity

Type of oil - compressor oil (approved compressor oils, see Specifications for Service Products, sheet no. 362)

New oil capacity in A/C compressor	for R12 refrigerant	120 cm ³
	for R134a refrigerant	160 cm ³



Parts which have come into contact with compressor oil for R12 or R134a may only be installed in systems operating with the same refrigerant.

1. Following repair or slow refrigerant loss

Add refrigerant:

Up to 400 g (no leakage detectable)

Do not add compressor oil.

Completely recharge system due to leakage and replace fluid reservoir (drier)

20 cm³ fresh oil.

Replace A/C compressor and fluid reservoir (drier). Drain oil from A/C compressor which has been removed and measure quantity. Also drain oil from new A/C compressor.

Fill new A/C compressor with same quantity as drained from A/C compressor which has been removed plus 10 cm³ (for fluid reservoir) (oil drained from new compressor can be used).

Repair A/C compressor (e.g. front shaft seal) and fluid reservoir (drier). For this purpose drain refrigerant slowly (vacuum side)

Fill 20 cm³ of fresh oil in compressor.

Checking and correcting oil level in A/C compressor

A/C compressor

If the A/C compressor is replaced

Allow oil to drain

Remove and reinstall (83-530).

drain oil from removed A/C compressor while holding the A/C compressor with the pressure and vacuum opening pointing down and allow the oil to drain through the pressure and vacuum openings for approx.10 minutes. This process can be speeded up by turning the drive shaft (clutch) a number of times.

out of new A/C compressor.

Determine how much compressor oil has drained out of the original A/C compressor and pipeline.

Fill new A/C compressor with the same quantity of fresh oil through the vacuum opening, plus 10 cm³ for the new fluid reservoir.

When repairing the A/C compressor (e.g. front shaft seal) replace fluid reservoir, and add a further 20 cm³ of new compressor oil to the A/C compressor.



2. System suddenly empty (e.g. broken hose or accident)

Replace defective part and fluid reservoir as described in items 1 and 3, fill with specified quantity of oil

Add 40 cm³ of compressor oil in addition.

Note

After evacuating the system (approx. 30 minutes) charge air-conditioner with approx. 200 g of refrigerant R12 or R134a and check for leakage.

Then extract refrigerant again (recycling) and re-evacuate (approx. 15 minutes). Then fill the system with the specified quantity of refrigerant and check air conditioner for leaks.

3. Replacing parts

Replacing compressor	20 cm ³ of new compressor oil
Replacing evaporator	40 cm ³ of new compressor oil
Replacing fluid reservoir	10 cm ³ of new compressor oil
Vacuum line from evaporator to compressor and pressure line from compressor to condenser ..	10 cm ³ of new compressor oil each

