

## 64 52 ... Notes on changing the air conditioning compressor, determining the amount of refrigerant oil (amount of refrigerant oil of new air conditioning compressor not known)



*Note:*

This procedure only applies if the **new air conditioning compressor does not have a label with the amount of refrigerant oil.**

A [different procedure](#) applies for air conditioning compressors with a label indicating the amount of refrigerant oil.



**Attention!**

**Risk of damage!**

**Remove the air conditioning compressor without damaging and without the use of force!**

Air conditioning compressors with plastic belt pulleys:

- Avoid impacts/knocks to plastic belt pulley (caused by tools, contact with base).
- Return faulty air conditioning compressors in their original packaging only and with sealed connected branches.



**Attention!**

**In the event of a mechanical air conditioning compressor failure and the resulting ingress of chips into the refrigerant circuit, replace the following parts:**

- Air conditioning compressor
- Air conditioning condenser
- Desiccant insert
- Line to the air conditioning condenser
- Refrigerant oil



**i** The new air conditioning compressor is filled at the factory with refrigerant oil.

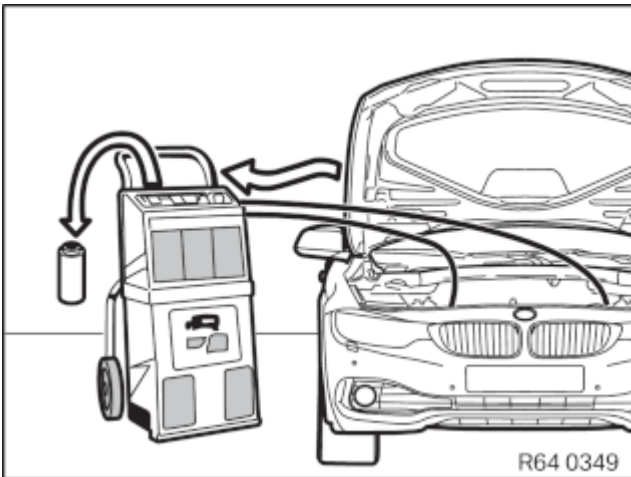
The amount of refrigerant oil in the new air conditioning compressor corresponds to the amount of refrigerant oil for the entire new and unfilled refrigerant circuit.



**When replacing the air conditioning compressor it is absolutely essential to adapt the amount of refrigerant oil in accordance with the instructions below!**

An adjustment of the amount of refrigerant oil is not required in the following case:

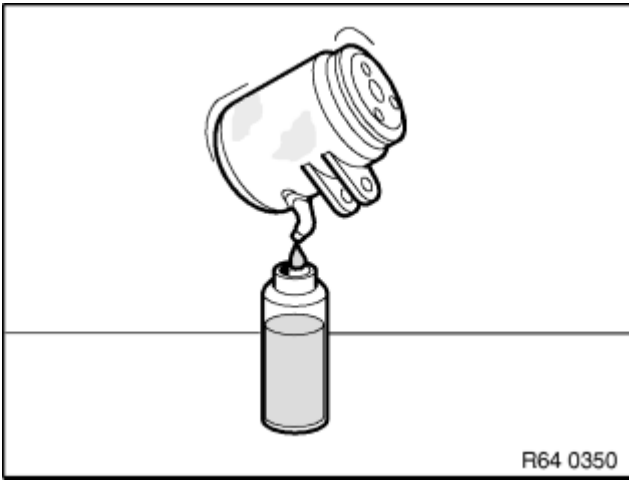
- Replacement of the complete refrigerant circuit.



- [Draw off A/C system.](#)
- Note down the amount of refrigerant oil shown on the A/C service station display.

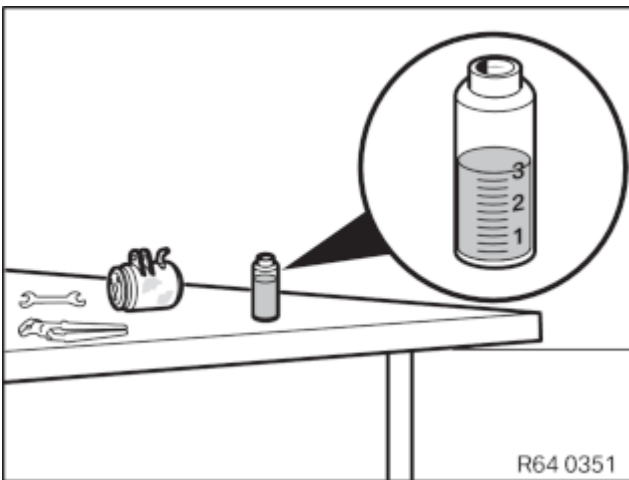


When evacuating the air conditioning system, refrigerant oil is also extracted and collected in the oil separator of the A/C service station. This amount of refrigerant oil is displayed after the extraction of the air conditioning on the display of the A/C service station.



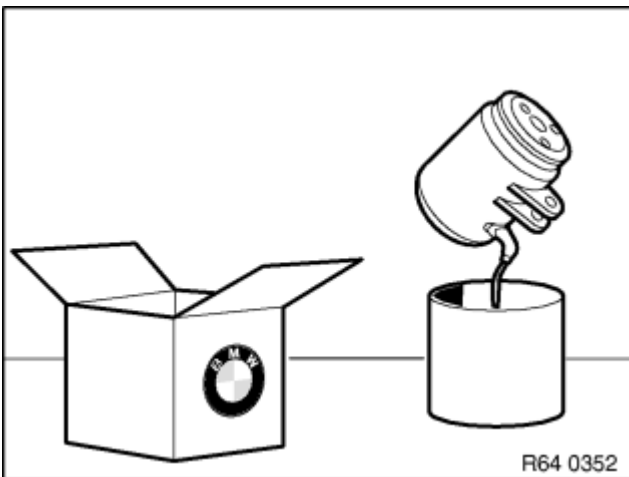
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- Transfer all of the refrigerant oil remaining in the previous air conditioning compressor into a measuring cup via the oil filler plug.
- Turn the belt pulley during the filling process. This allows more refrigerant oil to flow out of the previous air conditioning compressor.



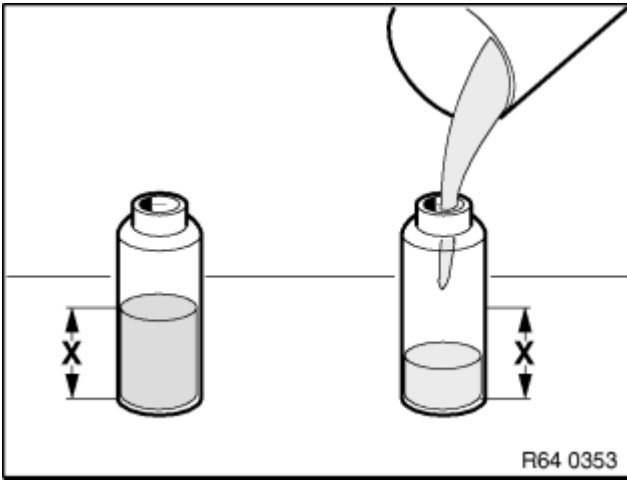
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- Read the amount of refrigerant oil at the measuring cup.



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- Open oil filler plug. Tightening torque [64 52 2AZ](#).
- Fill the entire contents of the new air conditioning compressor in a clean collecting vessel.



- Fill the same quantity of refrigerant oil (from the new air conditioning compressor), as was drained from the present air conditioning compressor, **+ 10 ml precautionary allowance** in a clean measuring cup and again fill it in the new air conditioning compressor . **At least but a total of 50 ml.**

Example:

20 ml read at measuring cup:

20 ml + 10 ml precautionary allowance =  
30 ml < 50 ml

determined amount of refrigerant oil for new air conditioning compressor = 50 ml



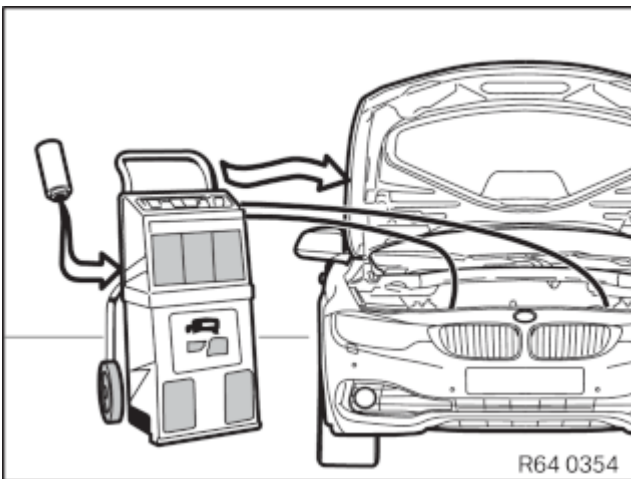
The drained new refrigerant oil can be filled into the expansion tank of the A/C service station after draining.



If the new, drained refrigerant oil is not filled straight away into the expansion tank of the A/C service station, it must be disposed of properly.



**On account of its hygroscopic properties, refrigerant oil must not be stored in open collecting vessels.**



- Reassemble the vehicle.
- [Evacuate Air conditioning.](#)
- Before filling the air conditioning with refrigerant, fill in the noted quantity of refrigerant oil previously drawn off, into the system.
- [Fill A/C system.](#)



### **Attention!**

#### **Risk of damage!**

**During initial operation of a new air conditioning compressor, it is absolutely essential to carry out the following breaking-in procedure.**

**Do not exceed idle speed.**

#### *Note:*

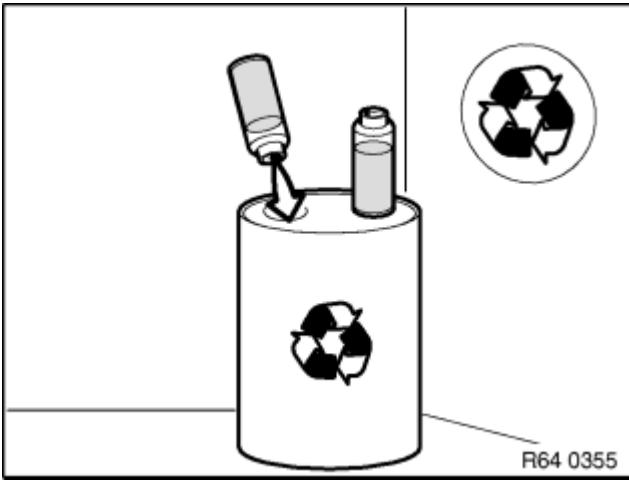
The breaking-in procedure for the new air conditioning compressor can be carried either manually or with the diagnosis system.

#### Manual:

- Switch off the air conditioning.
- Set all ventilation outlets in the instrument panel to "OPEN".
- Start engine and let it stabilise at idle speed.
- Set the blower output to a minimum of 75% of the maximum blower output.
- Switch on the air conditioning and allow the engine to run at idle speed for a minimum of 2 minutes.

#### Carry out the following service function with the diagnosis system:

- Body
- Heating and air conditioning functions
- Run-in protection for A/C compressor



- The refrigerant oil drawn off from the oil separator of the A/C service station and from the previous air conditioning compressor **must not be reused and must be correctly disposed of.**
- Observe country-specific waste disposal regulations.



*Installation note:*

If the refrigerant circuit is open for longer than 24 hours:

- [Replace desiccant insert](#)

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