

General Procedures

General Equipment

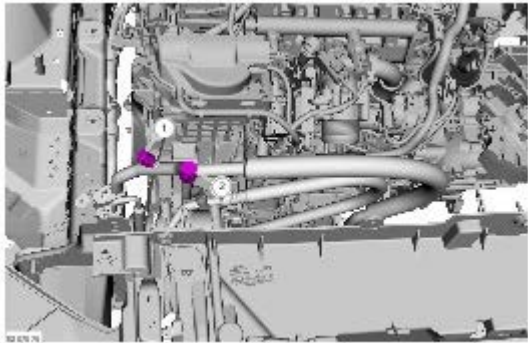
Air Conditioning Service Unit
Automatic Calibration Halogen Leak Detector
Electronic Leak Detector
Refrigerant Identification Equipment
UV Leak Detector

Activation

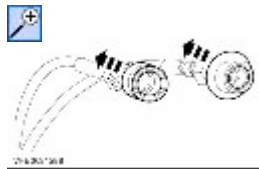
1. Refer to: [Climate Control System Health and Safety Precautions](#) (100-00 General Information, Description and Operation).
2. Unscrew and remove the protective caps from the A/C charging connections.

Use the General Equipments: [Air Conditioning Service Unit](#), [Refrigerant Identification Equipment](#)

3.
 1. Low-pressure connection
 2. High-pressure connection
4. Use the refrigerant analyzer before recovery, otherwise the refrigerant center may become contaminated. Dispose of contaminated refrigerant as hazardous waste. Always follow the manufacturer's instructions when using the refrigerant center and the refrigerant analyzer.



5. Connect the service unit lines to the filling connection of the air conditioning system.



6. Drain the air conditioning system via the low-pressure port in accordance with the service unit manufacturer instructions.

7.  **NOTICE:** Make sure that the specified amount of refrigerant oil is added.
NOTE: Make sure that a new component is installed.
NOTE: new component is installed.

Fill up with refrigerant oil.

Refer to: Specifications (412-00, Specifications).
Refer to: Refrigerant Oil Adding (412-00, General Procedures).

8. Evacuate the air conditioning system in accordance with the service unit manufacturer instructions.
9. **NOTE:** The system is leak-free, provided that the pressure increase does not exceed 20 mbar.
Perform the leak test, by closing the hand valves on the gauge set, switching off the service unit vacuum pump and observing the low pressure gauge.

10. **NOTE: This step is only necessary if the pressure increase exceeds 20 mbar.**

Locate and rectify any leaks in the A/C refrigerant circuit.

Use the General Equipments: [UV Leak Detector](#), [Electronic Leak Detector](#), [Automatic Calibration Halogen Leak Detector](#)

11. Add refrigerant oil to the air conditioning system.

Refer to: Specifications (412-00, Specifications).
Refer to: Refrigerant Oil Adding (412-00, General Procedures).

12. Fill the air conditioning system with liquid through the high-pressure connection.

Refer to: Specifications (412-00, Specifications).

13.
1. Open the shut-off valve on the high-pressure side.

2. Switch the service unit to "Fill" mode and fill the system with the specified quantity of liquid refrigerant (R134a).

14. Fill the air conditioning system with gas through the low-pressure connection.

Refer to: Specifications (412-00, Specifications).

15.
1. Open the shut-off valve on the low-pressure side.

2. Switch the service unit to "Fill" mode and fill the system with the specified quantity of gaseous refrigerant.

3. Add the remaining amount of refrigerant with the air conditioning switched on. To do so run the engine at about 1200-1500 rev/min. Set the air conditioning system to full cooling power and fresh air mode. Set the blower motor to the highest setting. Fill with the remainder of the specified fill capacity.

16. Disconnect the service unit.

17.
1. Close the shut-off valve.

2. Switch off the service unit.

3. Disconnect the service unit lines from the filling connections of the air conditioning system.

4. Screw the protective caps onto the charging connections.

18. Install all components in reverse order.