6. Refrigerant Leak Check

A: INSPECTION

PREPARATION TOOL:
Manifold gauge set
Electronic leak detector

1) Attach the manifold gauge set.
   (1) Confirm that all valves are fully closed.
   (2) Install the low/high pressure hoses to the service ports on the low/high pressure sides of the vehicle respectively.

CAUTION:
Confirm that the connections are secure.

   (3) Start the engine to operate the A/C system for approx. 10 minutes, and check that the high-pressure side shows at least 0.69 MPa (7.0 kgf/cm^2, 100 psi).
2) Stop the engine to start the leak test.

Inspection parts	Condition	Corrective action
Pipe	Check the connection between pipe and expansion valve.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
	Check the connection between pressure switch or pressure sensor and high-pressure pipe.	Replace the pressure switch or pressure sensor.
	Check the connection between pipe and condenser.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
Condenser	Check the welded spot of condenser and the core.	Replace the condenser.
Hose (high-pressure)	Check the connection between hose (high-pressure) and compressor.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
	Check the connection between hose (high-pressure) and condenser.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
	Check the rubber part of the flexible hose and the seam between hose and pipe. **CAUTION:** **Carefully check the external surface of flexible hose and pipe at approx. 25 mm (0.98 in) per second.**	Replace the hose (high-pressure).
	Check the valve and cap in the service port.	Check the rubber seal of the valve and cap. If necessary, replace valve or cap.
Compressor	Check the compressor pulley and the vicinity of shaft seal. **CAUTION:** **Some shaft seals will show a slight amount of leakage, about 3 g (0.1 oz) per year. This is not a problem.**	Replace the compressor.
Hose (low-pressure)	Check the connection between hose (low-pressure) and expansion valve.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
	Check the connection between hose (low-pressure) and compressor.	Check the O-ring and tightening torque on the connection. If necessary, replace each part.
	Check the rubber part of the flexible hose and the seam between hose and pipe. **CAUTION:** **Carefully check the external surface of flexible hose and pipe at approx. 25 mm (0.98 in) per second.**	Replace the hose (low-pressure).
	Check the valve and cap in the service port.	Check the rubber seal of the valve and cap. If necessary, replace valve or cap.
Evaporator	Remove the drain hose from the heater case, and check the end portion for 10 seconds or more.	Replace the evaporator.
	Check the air vent grille. NOTE: Turn the ignition switch to ON, and run the blower at high speed for approx. 1 minute. Stop the blower to check the air vent grille on the instrument panel. While moving the tester closer to the grille, run the blower for 1 or 2 seconds, then stop it. Check the grille at that position for at least 10 seconds.	Replace the evaporator.