COMPRESSOR AND MAGNETIC CLUTCH

AC1SS–01

ON–VEHICLE INSPECTION

1. INSPECT COMPRESSOR FOR METALLIC SOUND

Check if there is abnormal metallic sound from the compressor when the A/C switch is ON.

If abnormal metallic sound is heard, replace the compressor assembly.

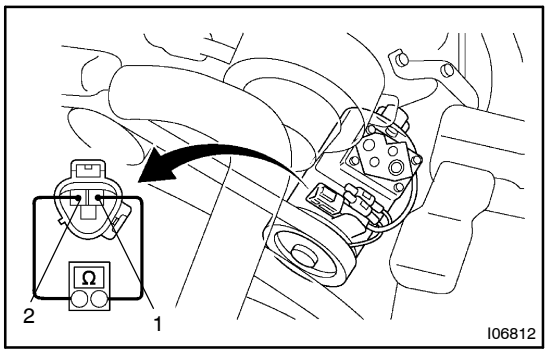
2. INSPECT REFRIGERANT PRESSURE

(See page AC–3)

3. INSPECT VISUALLY FOR LEAKAGE OF REFRIGERANT

Using a gas leak detector, check for leakage of refrigerant.

If there is any leakage, replace the compressor assembly.



4. 2UZ–FE Engine Models:
INSPECT COMPRESSOR LOCK SENSOR RESISTANCE

(a) Disconnect the connector.

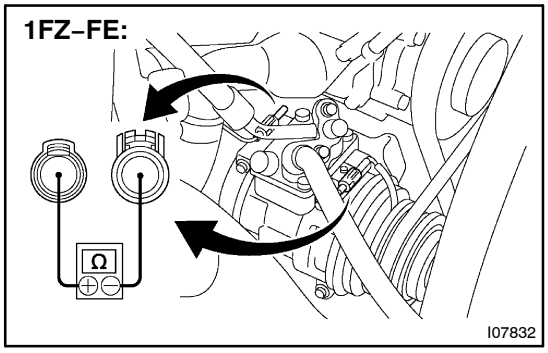
(b) Measure resistance between terminals 1 and 2.

Standard resistance:

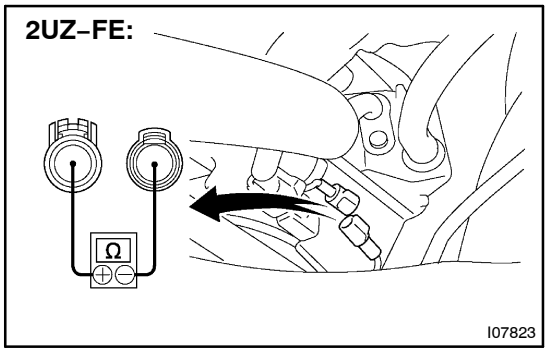
570 – 1,050 Ω at 20°C (68 °F)

If resistance is not as specified, replace the compressor.

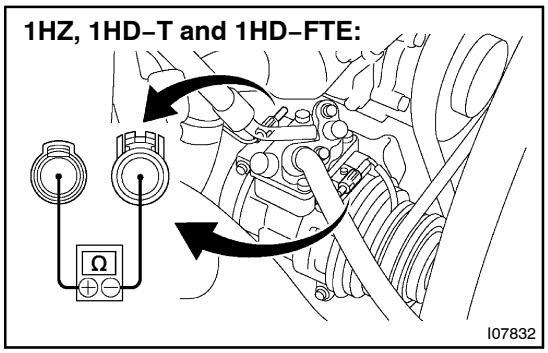
1FZ–FE:



2UZ–FE:



1HZ, 1HD–T and 1HD–FTE:



5. G.C.C. Countries:
INSPECT REFRIGERANT TEMPERATURE SENSOR

(a) Disconnect the connector.

(b) Measure resistance between terminals.
Standard resistance:
Below 70 mΩ at 20 – 30°C (68 – 86°F)

Except 2UZ–FE:

If resistance is not as specified, replace the discharge cover with the sensor.

2UZ–FE:

If resistance is not as specified, replace the rear housing with the sensor.

6. MAKE THESE VISUAL CHECKS:

(a) Leakage of grease from the clutch bearing.

(b) Signs of oil on the pressure plate or rotor.

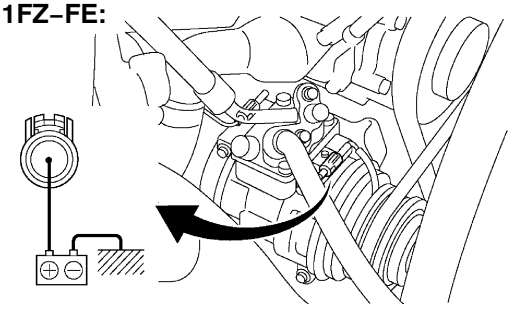
7. INSPECT MAGNETIC CLUTCH BEARING FOR NOISE

(a) Start engine.

(b) Check for abnormal noise from the compressor when the A/C switch is OFF.

If abnormal noise is being emitted, replace the rotor of magnetic clutch.

1FZ–FE:



8. INSPECT MAGNETIC CLUTCH OPERATION

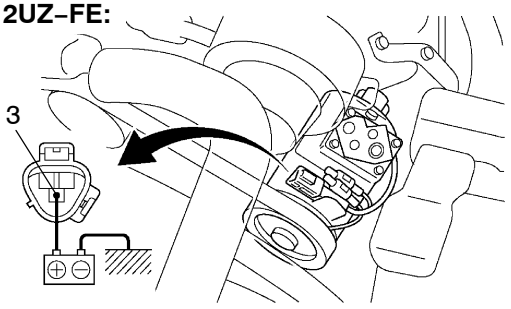
(a) Disconnect the connector.

(b) Connect the positive (+) lead from the battery to terminal on the magnetic clutch connector and the negative (–) lead to the body ground.

(c) Check that the magnetic clutch is energized.

If operation is not as specified, replace the magnetic clutch.

2UZ–FE:



1HZ, 1HD–T and 1HD–FTE: