

# COMPRESSOR AND MAGNETIC CLUTCH (1GR-FE)

## ON-VEHICLE INSPECTION

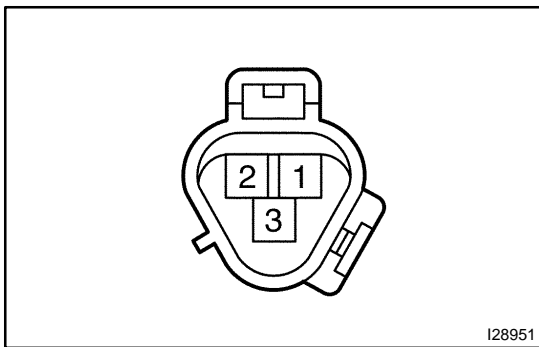
AC3SD-01

1. **SET MANIFOLD GAUGE SET** (See page AC-20)
2. **START ENGINE**
3. **INSPECT COMPRESSOR FOR METALLIC SOUND**  
Check if a metallic sound can be heard from the compressor when the A/C switch is on.  
If a metallic sound cannot be heard, replace the compressor assembly.
4. **INSPECT REFRIGERANT PRESSURE**  
(See page AC-3)
5. **STOP ENGINE**
6. **INSPECT VISUALLY FOR LEAKAGE OF REFRIGERANT FROM SAFETY SEAL**

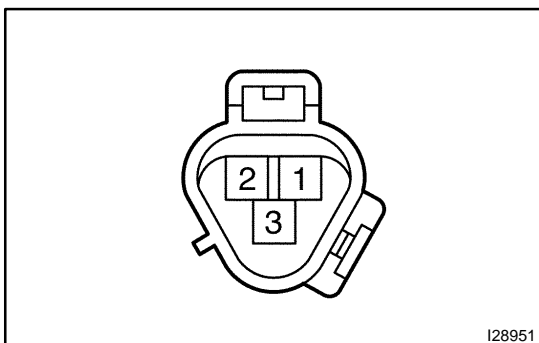
Using a gas leak detector, check for leakage of refrigerant. If there is any leakage, replace the compressor assembly.

7. **REMOVE MANIFOLD GAUGE SET**  
(See page AC-22)
8. **CHECK FOR LEAKAGE OF GREASE FROM CLUTCH BEARING**
9. **CHECK FOR SIGNS OF OIL ON PRESSURE PLATE**  
If necessary, repair or replace the pressure plate.
10. **INSPECT MAGNETIC CLUTCH BEARING FOR NOISE**
  - (a) Start the engine.
  - (b) Check if abnormal noise is heard from near the compressor when the A/C switch is OFF.

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



11. **INSPECT MAGNETIC CLUTCH OPERATION**
  - (a) Disconnect the connector.
  - (b) Connect the positive (+) lead from the battery to terminal 3 on the magnetic clutch connector and the negative (-) lead to body ground.
  - (c) Check that the magnetic clutch is energized.  
If operation is not as specified, replace the magnetic clutch.



12. **INSPECT COMPRESSOR LOCK SENSOR RESISTANCE**
  - (a) Disconnect the connector.
  - (b) Measure the resistance between terminals 1 and 2.  
**Standard resistance:**  
**165 to 205  $\Omega$  at 20°C (68°F)**  
If resistance is not as specified, replace the compressor.