HEATER AND MANUAL AIR CONDITIONER

CONTENTS

GENERAL

OUTLINE OF CHANGE

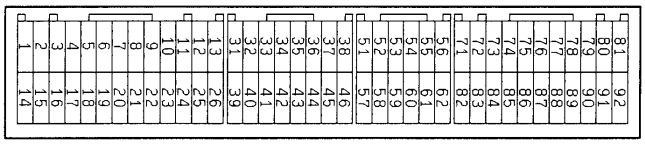
- The compressor oil capacity has been changed to correspond to the adoption of the F9Q1 engine.
- Service adjustment procedures for the condenser assembly have been added to correspond to the adoption of the F9Q1 engine.
- Service adjustment procedures for the refrigerant line have been added to correspond to the adoption of the F9Q1 engine.

LUBRICANTS

Item	Brand	Capacity
Compressor oil mL	SUN PAG 56	135
Pipe connections	SUN PAG 56	As required

TROUBLESHOOTING

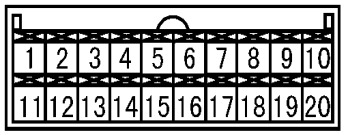
ENGINE-ECU TERMINAL CHECKS



9FU0393

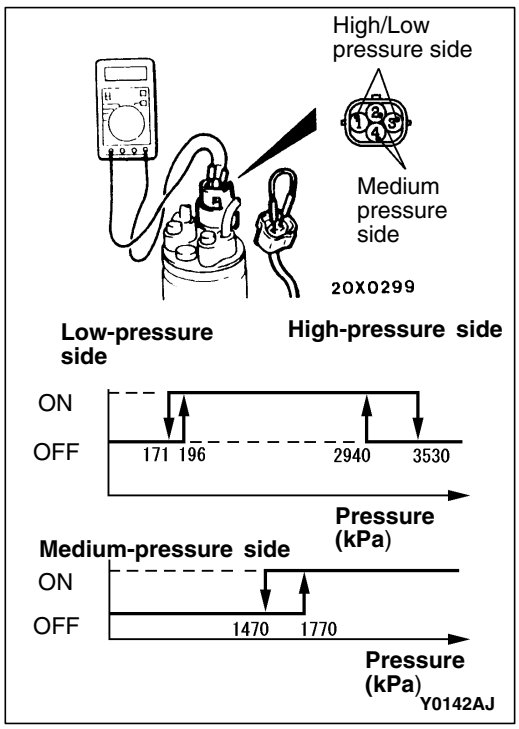
Terminal No.	Check item	Check condition	Normal condition
2	Fan controller output	A/C switch: OFF	5 V
		A/C switch: ON	0 V
3	A/C compressor relay input	A/C compressor relay: OFF	0 V
		A/C compressor relay: ON	System voltage
103	Condenser fan relay output (LO)	Condenser fan relay (LO): OFF	0 V
		Condenser fan relay (LO): ON	System voltage
128	Condenser fan relay output (HI)	Condenser fan relay (HI): OFF	0 V
		Condenser fan relay (HI): ON	System voltage

AUTO COMPRESSOR-ECU TERMINAL CHECKS



X0299AQ

Terminal No.	Check item	Check condition	Normal condition
1	A/C switch input	A/C switch: OFF	0 V
		A/C switch: ON	3 V or more
2	A/C compressor relay output	A/C switch: OFF	0 V
		A/C switch: ON	System voltage
4	Earth	At all times	0 V



ON-VEHICLE SERVICE

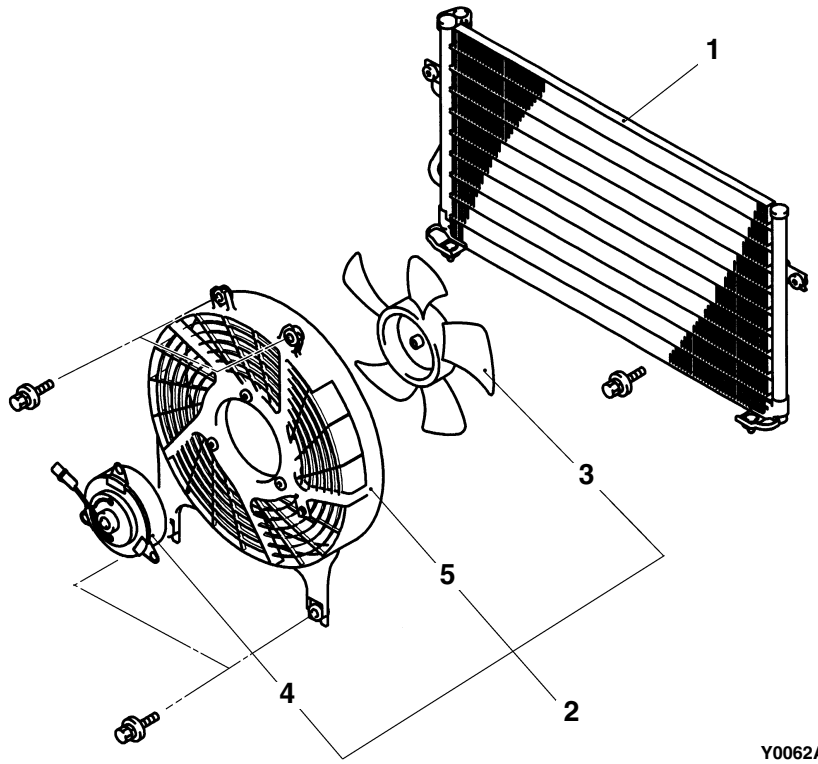
SIMPLE INSPECTION OF TRIPLE PRESSURE SWITCH

(1) Disconnect the triple pressure switch connector.
(2) Connect a gauge manifold to the refrigerant line high-pressure side service valve.
(3) There should be continuity between the terminals when the high and low pressure side and the medium side at the A/C pressure switch are under operating pressure (ON). If no continuity, replace the switch.

CONDENSER ASSEMBLY

REMOVAL AND INSTALLATION

Pre-removal and Post-installation Operations
- Refrigerant draining and filling
- Hood latch lever assembly and center air guide panel removal and installation (Refer to GROUP 42.)



Condenser removal steps
- Discharge flexible hose connection
- Liquid pipe A connection

1. Condenser assembly

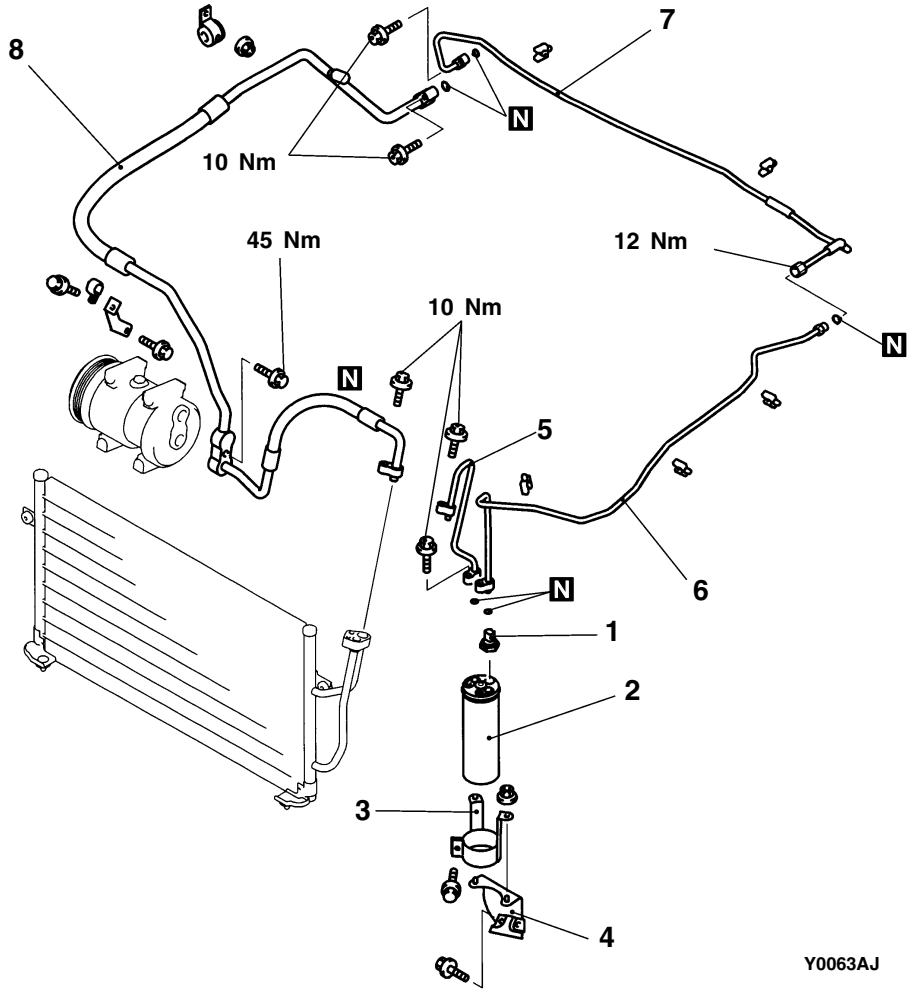
Condenser fan removal steps

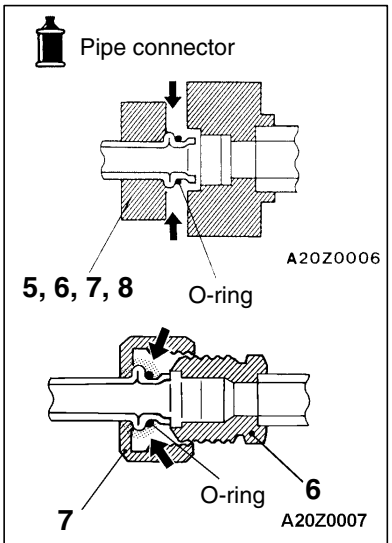
2. Shroud assembly
3. Condenser fan
4. Fan motor
5. Shroud

REFRIGERANT LINE

REMOVAL AND INSTALLATION <L.H. drive vehicles>

Pre-removal and Post-installation Operations
- Refrigerant draining and filling
- Radiator grille removal and installation
- Air cleaner removal and installation





A/C compressor oil: SUN PAG 56

Removal steps

1. A/C pressure sensor
2. Receiver
3. Receiver bracket A
4. Receiver bracket B
   - Radiator condense tank (Refer to GROUP 14.)

◀A▶ 5. Liquid pipe A
   - Battery, air cleaner engine cover, relay box (engine compartment)

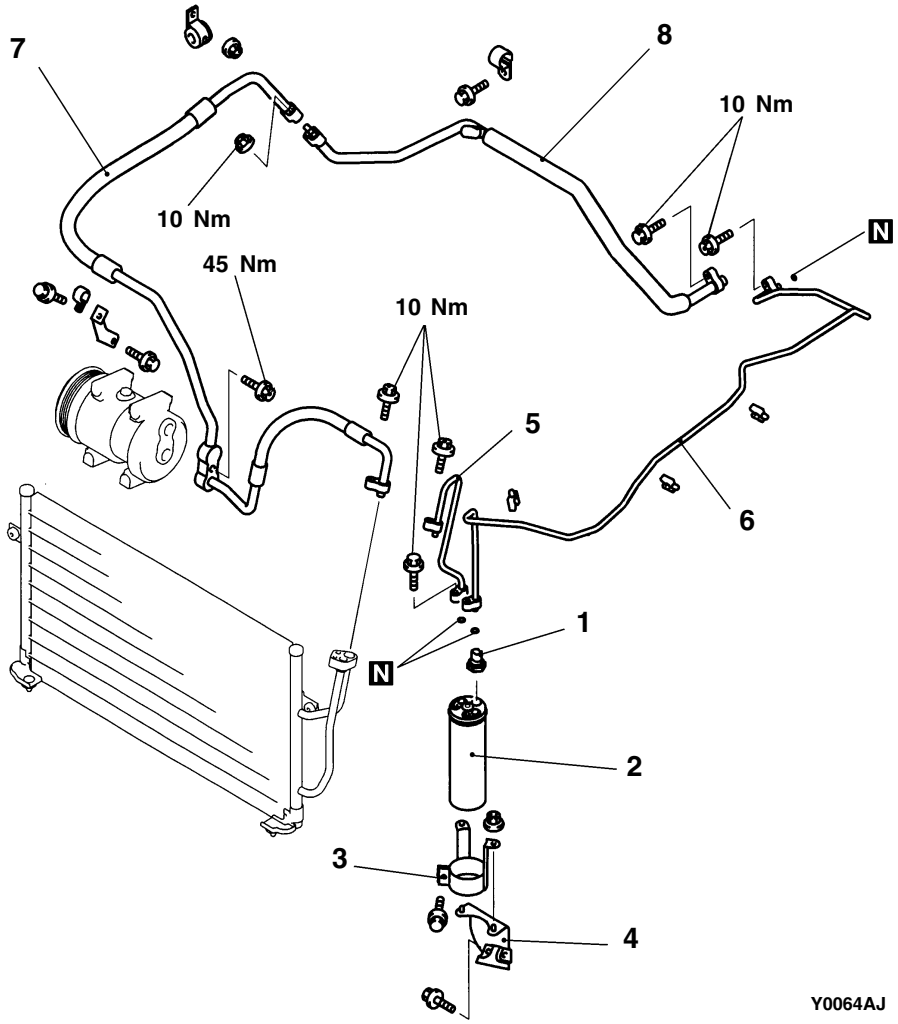
◀A▶ 6. Liquid pipe B
   - Intake manifold (Refer to GROUP 15.)
   - Engine mount (Refer to GROUP 32.)

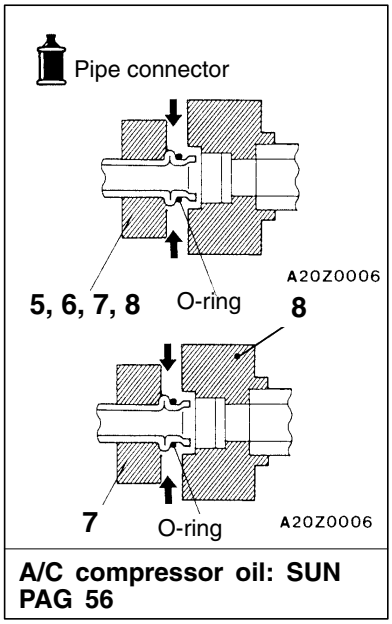
◀A▶ 7. Liquid pipe C

◀A▶ 8. Flexible hose

<R.H. drive vehicles>

Pre-removal and Post-installation Operations
- Refrigerant draining and filling
- Radiator grille removal and installation
- Air cleaner removal and installation





A/C compressor oil: SUN PAG 56

Removal steps

1. A/C pressure sensor
2. Receiver
3. Receiver bracket A
4. Receiver bracket B
- Radiator condense tank (Refer to GROUP 14.)

◀A▶ 5. Liquid pipe A
- Battery, air cleaner engine cover, relay box (engine compartment)

◀A▶ 6. Liquid pipe B
- Intake manifold (Refer to GROUP 15.)
- Engine mount (Refer to GROUP 32.)

◀A▶ 7. Flexible hose A

◀A▶ 8. Flexible hose B

REMOVAL SERVICE POINTS

◀A▶ HOSE AND PIPE REMOVAL

Plug the end of the disconnected hoses and the condenser assembly cooling unit nipple to prevent entry of dust or other foreign particles.

Caution
Because the compressor oil and receiver have strong hygroscopic properties, use a non-permeable plug.

NOTES