



INSTALLATION PROCEDURE

1 1. Remove the battery.
CAUTION: Remove the battery by disconnecting the battery negative (-) terminal first, then the positive (+) terminal.
 2. Remove and discard the radiator grill covers as shown.
CAUTION: Certainly remove the radiator grill covers by secure the cool air quantity.

2 • Remove the engine ground cable bolt.

3 • Slide the radiator reservoir, and position so that it does not cause a hindrance to work.

4 (Carbureted engine car only)
 1. Disconnect the connectors as shown.
 2. Slide the control box by removing the bolts.
NOTE: Do not remove the hoses.

10 1. Remove the front bulkhead with the six bolts.
 2. Disconnect the food opener cable clip and remove the food opener cable from the front bulkhead as shown.

11 (SOHC Engine car only)
 1. Loosen the power steering mount bolt.
 2. Turn the power steering adjust bolt and slacken off the tension on the power steering bolt.
 3. Remove the power steering belt.
 4. Remove the power steering mounting bolt and adjusting bolt.
 5. Move the power steering pump, and position so that it does not cause a hindrance to work.
NOTE: Be sure to protect the power steering pump with a cloth.

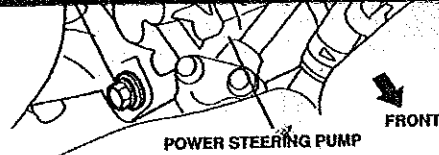
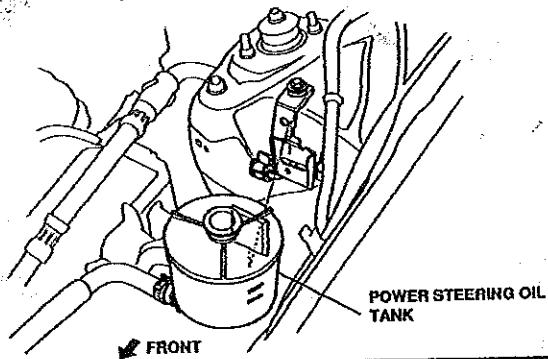
12 (DOHC Engine car only)
 1. Loosen the power steering mounting bolts.
 2. Turn the power steering adjust bolt and slacken off the tension on the power steering belt.
 3. Remove the power steering belt.
 4. Remove the power steering mounting bolts.
 5. Move the power steering pump, and position so that it does not cause a hindrance to work.
NOTE: Be sure to protect the power steering pump with a cloth.

Slide the power steering oil tank and position

5. Slide the power steering oil tank, and position so that it does not cause a hindrance to work.

NOTE:

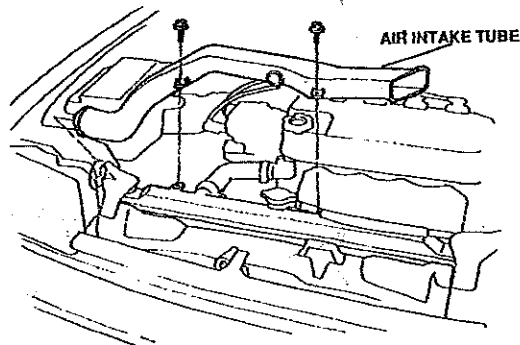
- Do not remove the hoses.
- Be sure that the power steering oil is not leaking from the cap.



6

(PGM-FI Engine car only)

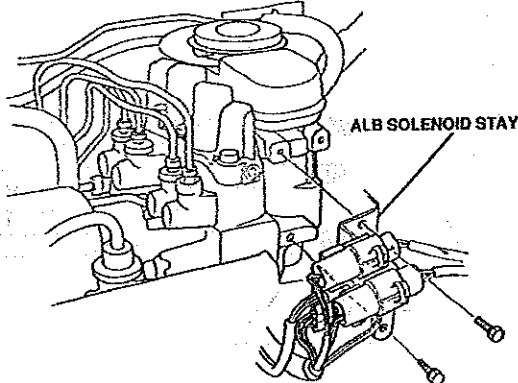
- Remove the air intake tube with two bolts/washers.



13

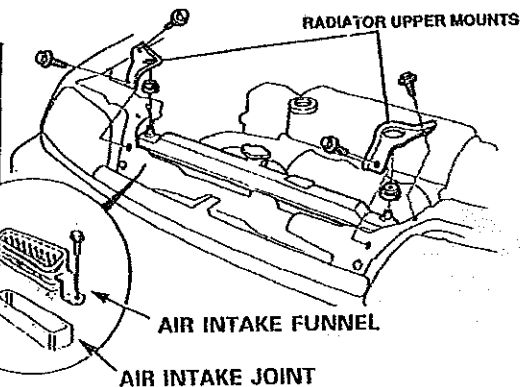
(Equipment ALB car only)

- Remove the ALB solenoid connector stay with two bolts.



7

- Remove the radiator upper mounts and rubber with the four bolts.

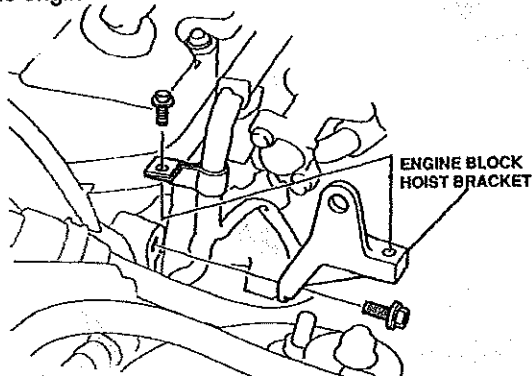


(VT Car)
Remove the air intake funnel and joint.

14

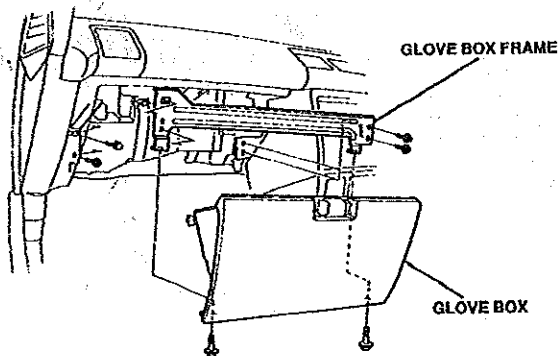
(Equipment ALB car only)

- Remove the engine block hoist bracket.



15

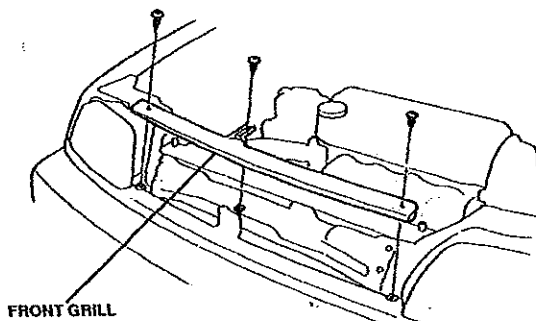
1. Remove the glove box with the two screws.
2. Remove the glove box frame with the four bolts.



8

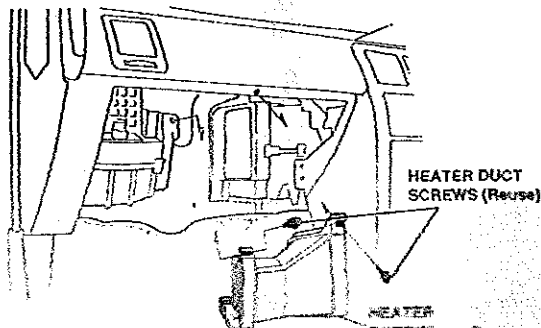
(Equipment front grill car only)

- Remove the front grill with three screws.



16

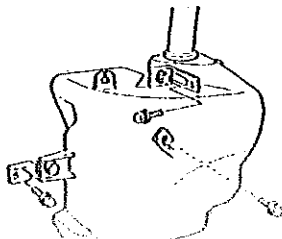
- Remove the heater duct screws (reuse) and remove the heater duct (discard).



9

(VT Car)

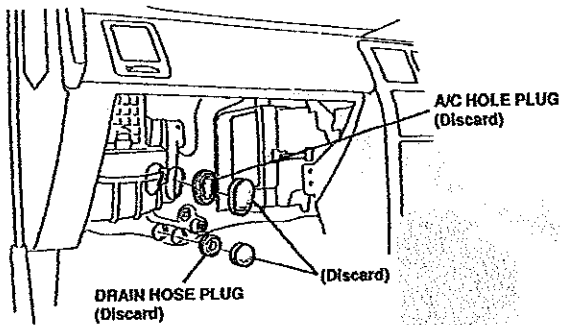
- Remove the washer tank.



Air Conditioner Installation

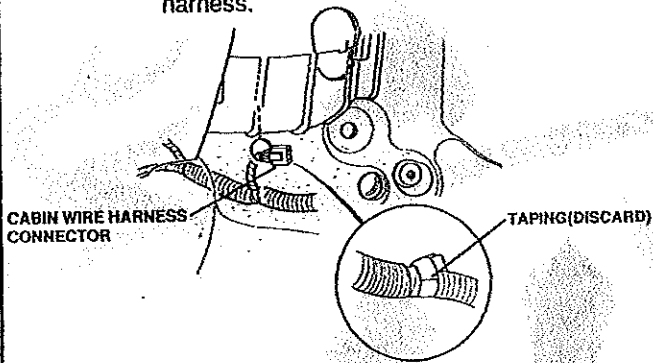
17

1. Cut off the parts of the dashboard lower insulator located above the grommets and discard them.
2. Remove and discard the A/C hole plug and drain hose plug.



18

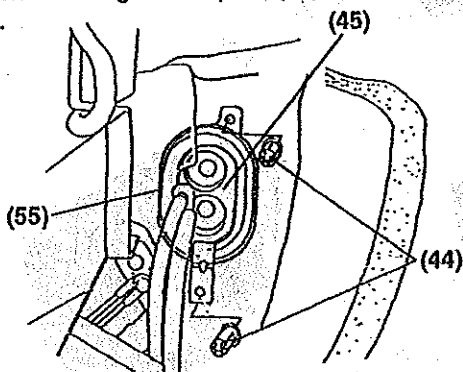
- Cut off the dashboard lower insulator and take out of the cabin wire harness connector disconnect taping (discard) from cabin wire harness.



19

(Equipment ALB car only)

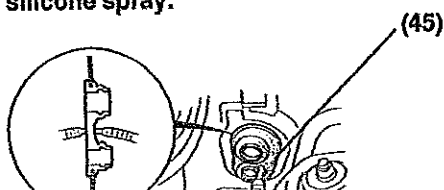
1. Install the grommet of A/C harness (45) into the A/C hole from cabin side.
2. Attach the A/C grommet plate (55) with grommet plate clips (44).



20

- Install the grommet of A/C harness (45) into the A/C hole from cabin side.

CAUTION: Use soapy water when installing the grommets, never use a silicone spray.



25

DRAIN HOSE INSTALLATION

COOLING UNIT

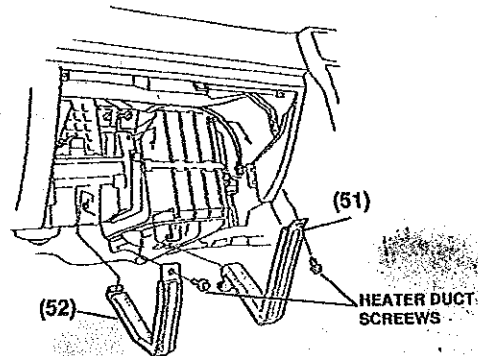
DRAIN HOSE

-
- There should be no clearance here. No bend or twist in the hose.
- Do not apply oil or lubricant to the joint section of the cooling unit and hose.
 - Water leaked into the cabin could cause trouble.

26

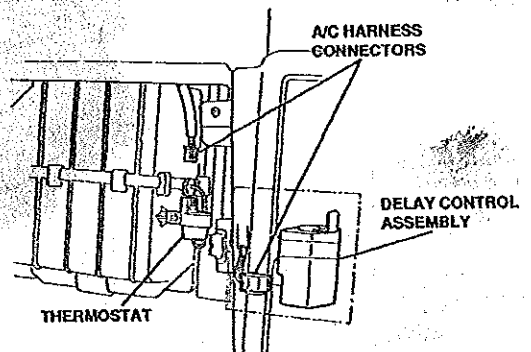
- Attach the A/C band A (51) and B (52) with the heater duct screws.

NOTE: Check that there are no gaps in the seal to the evaporator assembly.



27

1. Connect the A/C harness connectors to thermostat and delay control assembly.
2. Re-install the grove box and grove box frame.

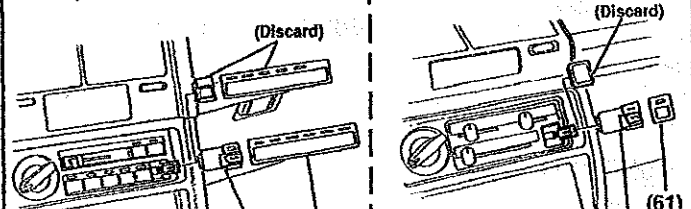


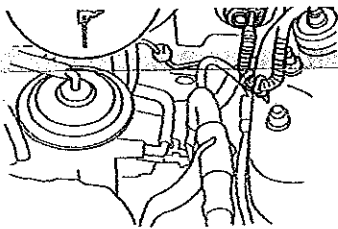
28

1. Remove and discard the A/C switch hole lid.
2. Put on the A/C switch plate (61) on the A/C switch (54).
3. Connect and install the A/C switch as shown.

(PUSH BUTTON TYPE)

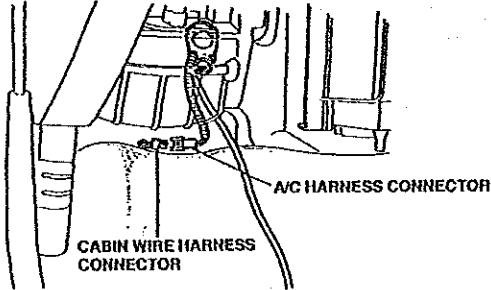
(LEVER TYPE)





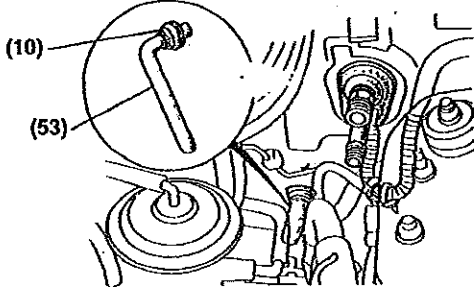
- 21** • Connect the A/C harness connector and cabin wire harness connector.

NOTE: After connecting, put in the connectors into the dashboard lower insulator.



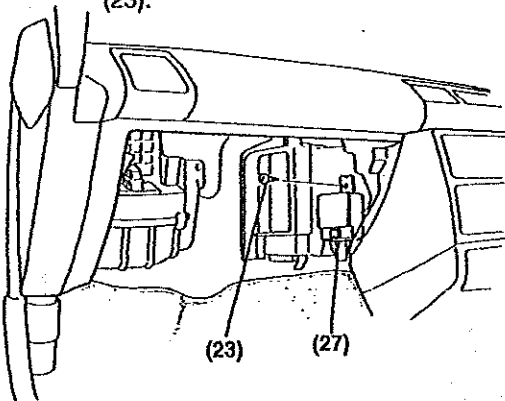
- 22** 1. Install the drain hose grommet (10) to the drain hose (53).

2. Install the drain hose to dashboard lower and set the drain hose grommet as shown.

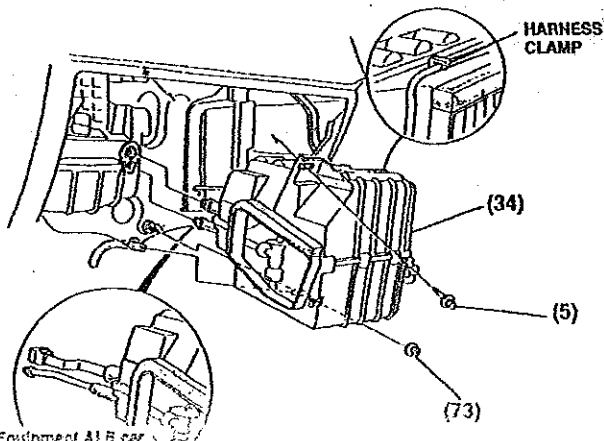


CAUTION: Use soapy water when installing the grommets, never use a silicone spray.

- 23** • Install the delay control assembly (27) to the heater unit assembly with tapping screw 4x16 (23).



- 24** • Connect the drain hose and evaporator assembly (34), and install to the car body with bolt/washer 6x24 (5) and nut/washer 6mm (73).



Equipment ALB car

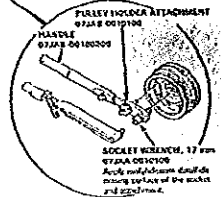
29

(Kit No. SH3-E04, E21, E60 only)

- Loosen the alternator bolt and through bolt, then remove the belt.
- Remove the original crankshaft pulley (discard) with original special bolt.
- Install the crankshaft pulley (67) with original special bolt.
TORQUE: 165N.m (16.5kg-m, 119lb-ft)
apply engine oil to the bolt threads.
- Reinstall the alternator belt removed earlier and adjust tension.
When pressing with a force of 9 - 11 mm/10 kg:
When using 30 - 40 kg/N.D belt tension gauge:
- Tighten the alternator adjusting bolt and nut.
TORQUE:
Adjusting bolt: 24N.m (2.4kg-m, 17lb-ft)
Nut: 45N.m (4.5kg-m, 33lb-ft)

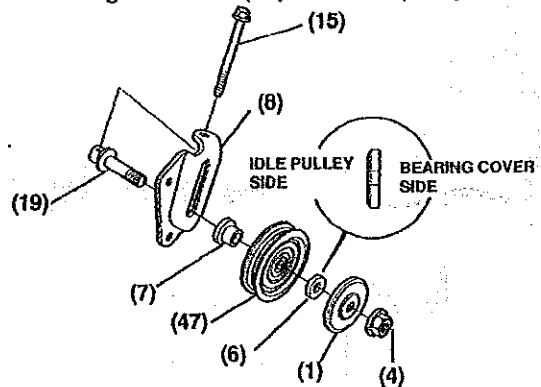
ORIGINAL SPECIAL BOLT

(67)



30

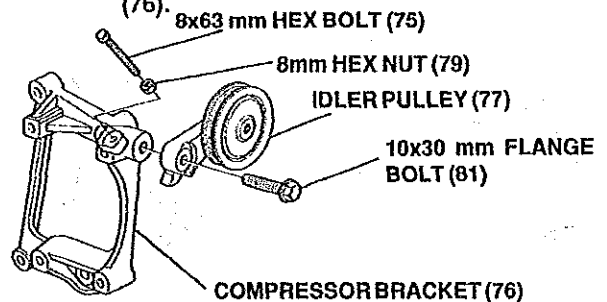
- Install the idle pulley bolt (19), idle pulley collar (7), idle pulley (47), washer 10mm (6), bearing cover (1) and nut/washer 10mm (4) to the idle pulley stay (8), and attach the flange bolt 8x85 (15) to the idle pulley bolt.



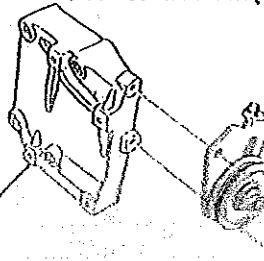
31

(VT Car)

- Loosely tighten the idler pulley (77), 8 x 63 mm HEX bolt (75), 8 mm HEX nut (79), and 10 x 30 mm flange bolt (81) against the compressor bracket (76).



- Attach the idle pulley stay to the compressor bracket (37) with two flange bolts 8x16 (3).
TORQUE: 25N.m (2.5kg-m, 18lb-ft)



Note the following marks/symbols before



★ indicates the points on installation

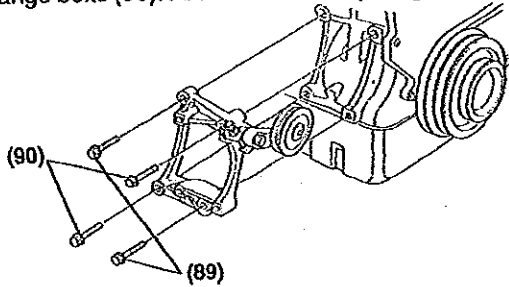
indicates the most important point

Indicates the parts that are revised

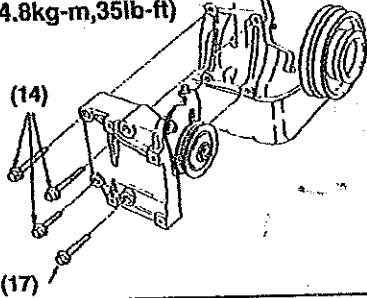
32

(VT Car)

• Install the compressor bracket on the engine block with the two 10 x 45 mm flange bolts (89) and the two 10 x 55 mm flange bolts (90). **TORQUE: 48N.m (4.8kg-m, 35lb-ft)**



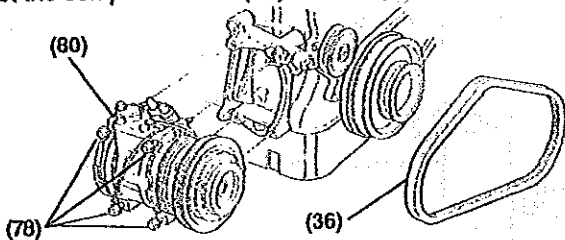
• Install the compressor bracket to the engine block with flange bolt 10x50 (17) and three flange bolts 10x60 (14). **TORQUE: 48N.m (4.8kg-m, 35lb-ft)**



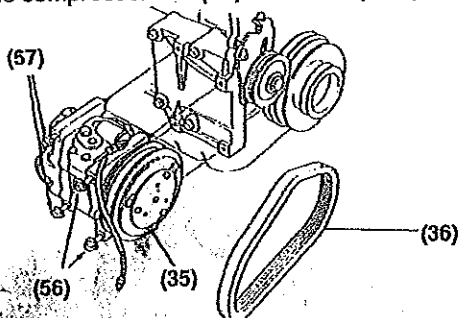
33

(VT Car)

1. Set the four 8 x 90 mm flange bolts (78) on the compressor assembly (80) and install it on the compressor bracket. **TORQUE: 25N.m (2.5kg-m, 18lb-ft)**
2. Set the compressor belt (36) on each pulley.



1. Set the two flange bolts 8x105 (57) and two flange bolts 8x120 (56) to the compressor assembly (35).
2. Install the compressor assembly to the compressor bracket. **TORQUE: 25N.m (2.5kg-m, 18lb-ft)**
3. Place the compressor belt (36) over each pulley.



34

(VT Car)

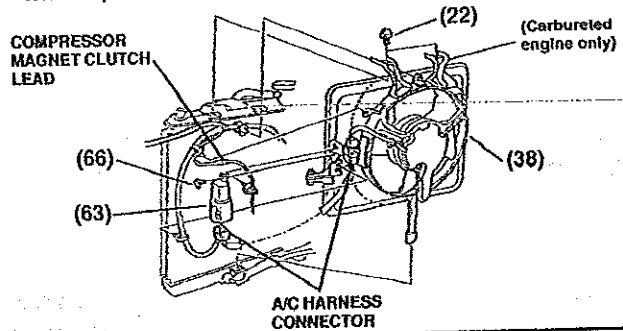
1. After adjusting the belt, retighten the nut 8mm to the torque of 5 N-m (0.5 kg-m).
2. Tighten the idler pulley mounting bolt securely. **TORQUE: 48N.m (4.8kg-m, 35lb-ft)**



38

1. Install the noise suppressor (63) to the shroud assembly stay with bolt/washer 6x12 (66).

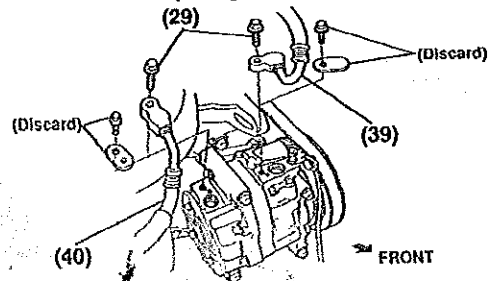
2. Connect the A/C harness connector to the noise suppressor and shroud assembly connector.
3. Set the A/C harness positioning clip to the shroud assembly (38).
4. Set the shroud assembly to the radiator lower mounting hole. (VT car: Insert the shroud stay to the radiator side rail)
5. Attach the shroud assembly with bolt/washer 6x16 (22).
6. Connect the compressor magnet clutch lead and A/C harness terminal, and set the shroud assembly stay.



39

1. Remove and discard the compressor fitting caps and fitting cap mount bolts.

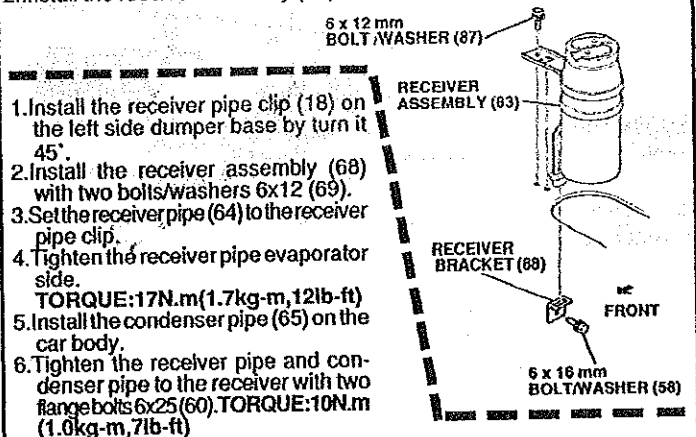
2. Install the suction hose (39) and discharge hose (40) to the compressor assembly with two bolts/washers 8x35 (29). **TORQUE: 30N.m (3.0kg-m, 22lb-ft)**



40

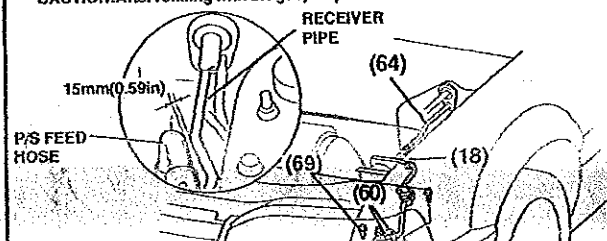
(VT Car)

1. Install the receiver bracket (88) on the frame with the 6 x 16 mm bolt/washer (58).
2. Install the receiver assembly (83) with the 6 x 12 mm bolt/washer (87).



1. Install the receiver pipe clip (18) on the left side dumper base by turn it 45°.
2. Install the receiver assembly (68) with two bolts/washers 6x12 (69).
3. Set the receiver pipe (64) to the receiver pipe clip.
4. Tighten the receiver pipe evaporator side. **TORQUE: 17N.m (1.7kg-m, 12lb-ft)**
5. Install the condenser pipe (65) on the car body.
6. Tighten the receiver pipe and condenser pipe to the receiver with two flange bolts 6x25 (60). **TORQUE: 10N.m (1.0kg-m, 7lb-ft)**

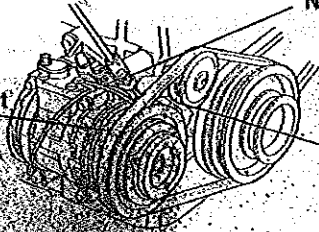
CAUTION: After refilling with the gas, keep the



TORQUE:48N·m(4.8kg·m,35lb·ft)

NUT 8mm

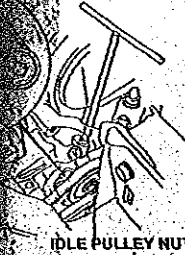
Adjust the belt



IDLER PULLEY MOUNTING BOLT

1. Adjust the compressor belt tension.
When pressing with a force : 7 - 9 mm/10 kg
When using N.D belt tension gauge:45 - 70 kg
2. Tighten the idler pulley nut.

TORQUE:48N·m(4.8kg·m,35lb·ft)



IDLER PULLEY NUT

35

1. Remove all the power steering belt (removed earlier) and adjust tension.

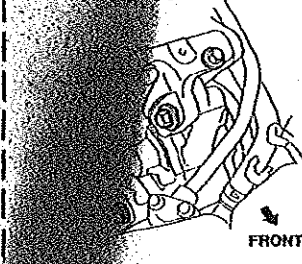
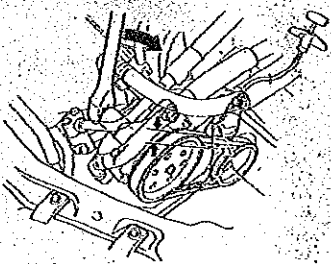
When pressing with a force : 9 - 12 mm/10 kg
When using N.D belt tension gauge:35 - 50 kg

2. Tighten the power steering mounting bolts.

TORQUE:48N·m(4.8kg·m,35lb·ft)

(SOHC Engine car)

(DOHC Engine car)

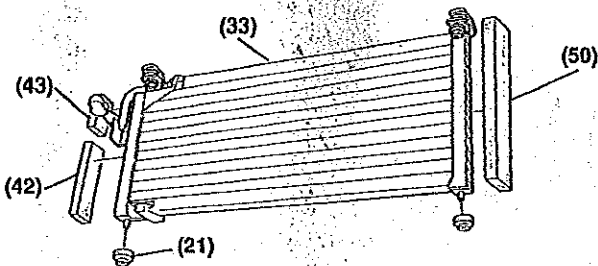


FRONT

36

1. Put on the condenser seal (50), seal A (42) and seal B (43) to the condenser assembly channel.

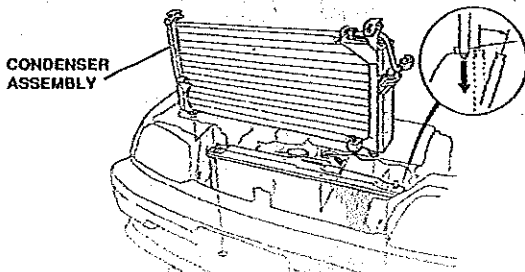
2. Install the two condenser mount rubbers (21) to the condenser assembly (33).



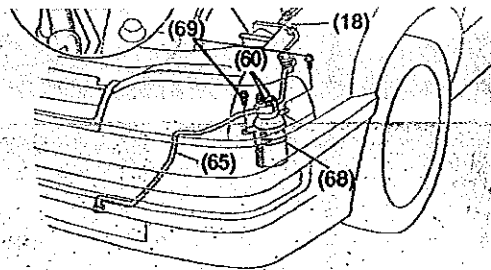
37

• Set the condenser assembly to the car body.
NOTE:Tilt the radiator towards the rear ,and set the

condenser to the vehicle body taking care not to damage the condenser assembly, radiator assembly and bulkhead.



HOSE



41

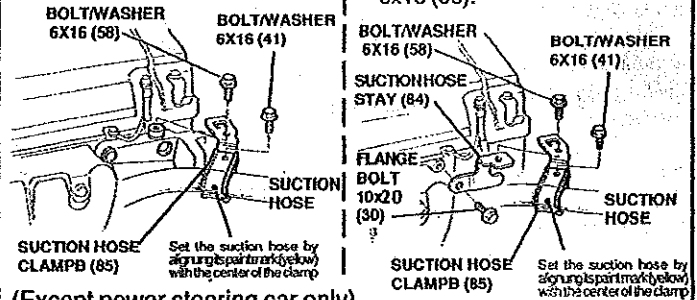
(VT Car)

(Equipment power steering car)

(Except power steering car)

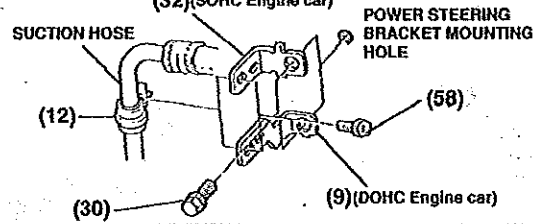
- Set the suction hose and suction hose clamp B (85) with bolt/washer 6x16 (41) (with large washer), and attach the power steering pump bracket with bolt/washer 6x16 (58).

1. Attach the suction hose stay (84) on the cylinder block with flange bolt 10 x 20 (30).
2. Set the suction hose and suction hose clamp B (85) with bolt/washer 6x16 (41), and attach the suction hose stay with bolt/washer 6x16 (58).



(Except power steering car only)

1. Install the suction hose stay (9 or 32) to the engine block with flange bolt 10x20 (30).
2. Set the suction hose clamp B (12) to the suction hose, and install to the suction hose stay with bolt/washer 6x16 (58).



42

(Equipment power steering car only)

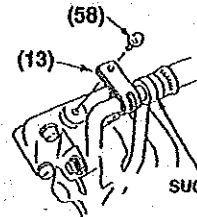
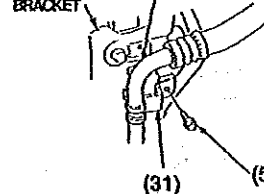
- Set the suction hose clamp B (13 or 31) to the suction hose, and install to the power steering bracket with bolt/washer 6x16 (58).

(SOHC Engine car)

(DOHC Engine car)

SUCTION HOSE

P/S BRACKET



SUCTION HOSE

43

1. Temporarily tighten the suction hose evaporator side (Except ALB car).

2. Attach the suction hose bracket (74) on the dumper base with bolt/washer 6x16 (58), and tighten the suction hose evaporator side with bolt/washer 8x35 (29) as shown (Equipment ALB car only).

TORQUE:30N·m(3.0kg·m,22lb·ft)

3. Install the suction hose clamp (62) with bolt/washer 6x16 (58).

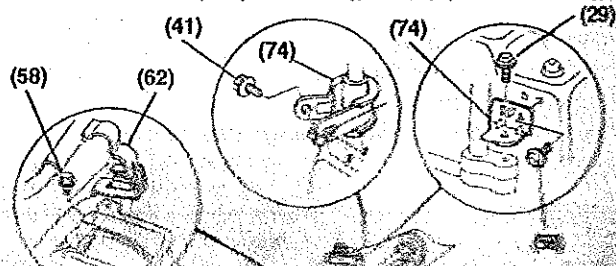
4. Set the suction hose bracket (74) to the suction hose, and install the car body with bolt/washer 6x16 (41) (Except ALB car).

5. Tighten the suction hose evaporator side (Except ALB car).

TORQUE:32kg·m(3.2kg·m,23lb·ft)

(Except ALB car only)

(Equipment ALB car only)



installation. They stand for:

KIT No. 80000-SH3-E04
80000-SH3-E13
80000-SH3-E21
80000-SH3-E54
80000-SH3-E60
80000-SH3-E42

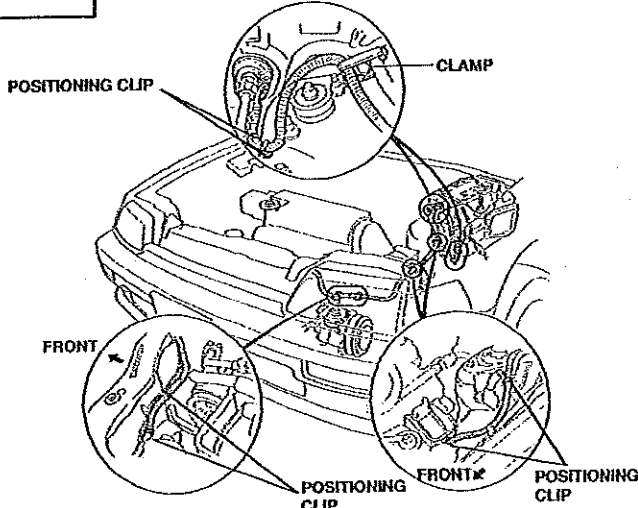
80000-SH3-E32
80000-SH3-E70
80000-SH3-Q52
80000-SH3-Q30
80000-SH3-T13
80000-SH3-T23
80000-SH3-E90

Revised Edition
Revised Edition
1.APR.'90 Revised Edition
10.NOV.'89 Revised Edition
15.SEP.'89 First Edition

Installation
Ident.

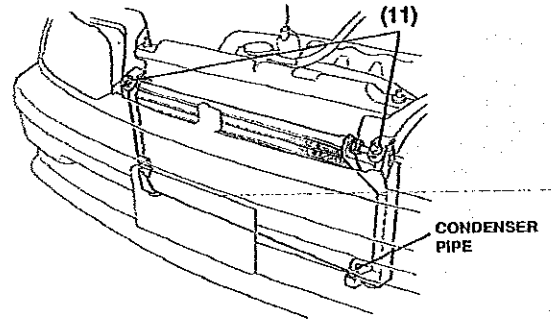
44

1. Insert the A/C harness positioning clips as shown.
2. Connect the A/C harness connector to the pressure switch.



51

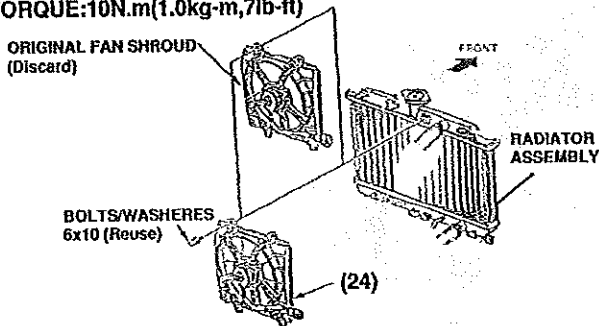
1. Tighten the condenser assembly with two bolts/washers 6x16 (11).
2. Tighten the condenser pipe to the condenser assembly.
TORQUE: 17N.m (1.7kg-m, 12lb-ft)



45

(Kit No. SH3-E13, E21 only)

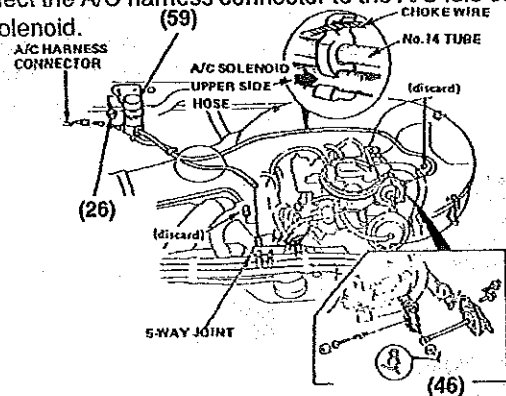
1. Disconnect the connectors of fan shroud and cabin wire harness.
2. Remove the original fan shroud assembly (Discard) with bolt/washer 6x10 (reuse) as shown.
3. Install the fan shroud assembly (24) with original bolt/washer 6x10.
TORQUE: 10N.m (1.0kg-m, 7lb-ft)



52

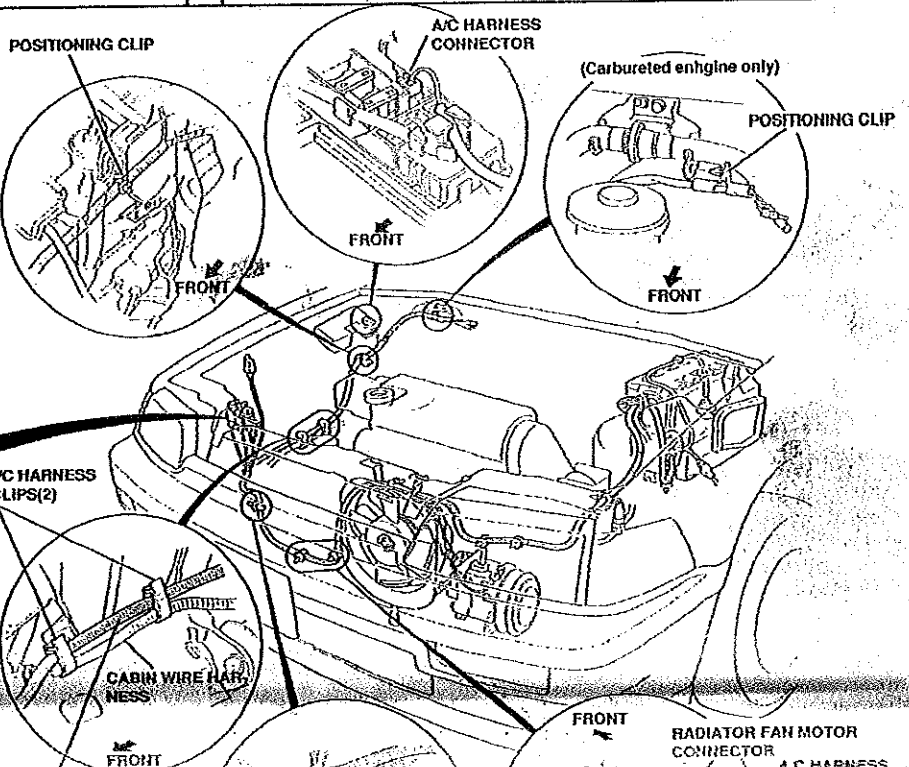
(Kit No. SH3-E04 only)

1. Install the A/C idle control set (59) on the car body with ground bolt 6x12 (26).
2. Install the carburetor idle control set (46) and set the hoses as shown.
3. Connect the A/C harness connector to the A/C idle control set solenoid.



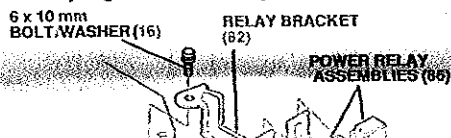
46

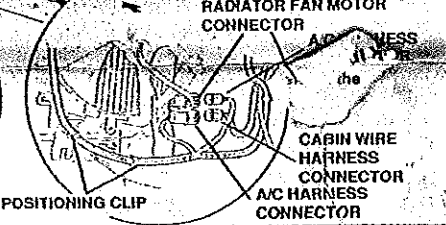
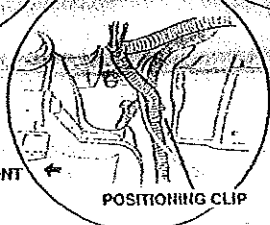
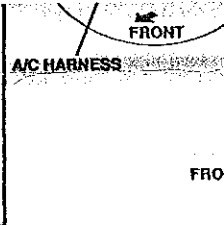
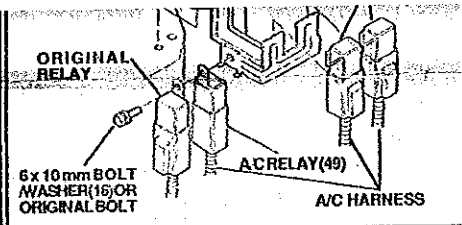
1. Insert the A/C harness positioning clips as shown.
2. Install the two A/C harness clips (2) to the A/C harness and cabin wire harness as shown.
3. Disconnect the radiator fan motor and cabin wire harness connectors.
4. Connect the radiator fan motor, cabin wire harness and A/C harness connectors as shown.
5. Connect the A/C harness connector to the main fuse box as shown.



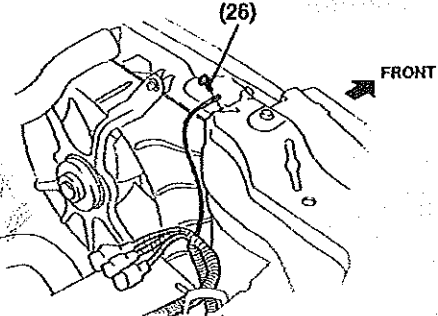
(VT Car)

1. Install the relay bracket (82) on the bulkhead upper frame with the 6 x 10 mm bolt/washer (16).
2. Connect the A/C harness coupler to the two power relay assemblies (86) and install on the relay bracket.
3. Connect the A/C harness coupler to the A/C relay (49) and install on the A/C relay bracket with the 6 x 10 mm bolt/washer (16).
4. If the car is the A.L.B. type, use the original relay mounting bolt, and tighten the A/C relay and original relay together with the relay bracket on the frame.

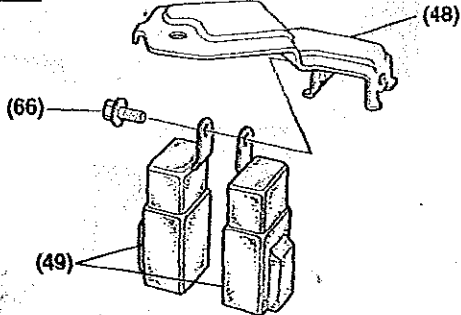




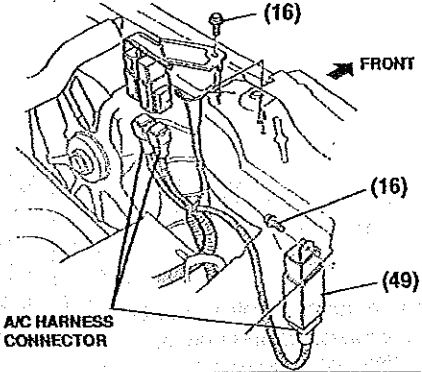
47 • Install the A/C harness ground terminal on the car body with ground bolt (26).



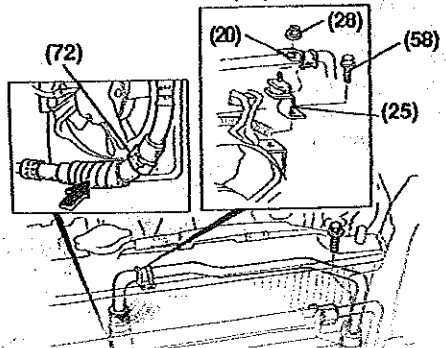
48 • Set the power relays (49) to the relay bracket (48) with bolt/washer 6x12 (66).



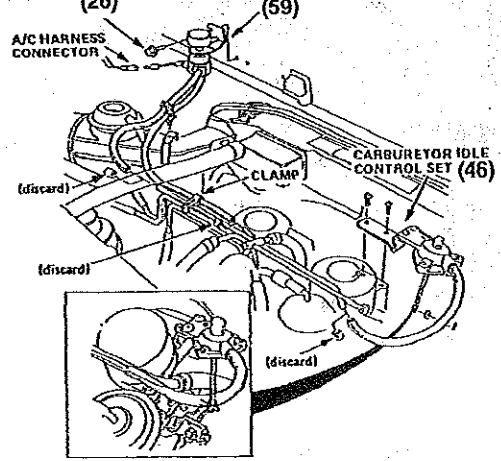
49 1. Connect the A/C harness connectors to the power relays.
2. Install the relay bracket on the car body with bolt/washer 6x10 (16).
3. Connect the A/C harness connector to the power relay (49) and install the car body with bolt/washer 6x10 (16).



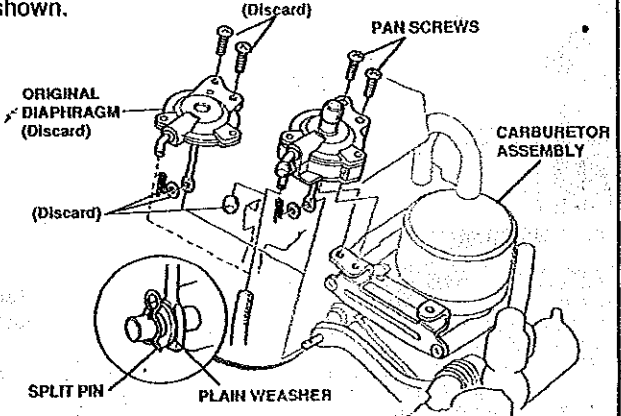
50 1. Set the discharge hose clamp B (72) to the shroud assembly and clamp the discharge hose.
2. Attach the mount rubber (25) to the shroud assembly with bolt/washer 6x16 (58).
3. Tighten the discharge hose condenser assembly side. TORQUE: 25N.m (2.5kg-m, 18lb-ft)
4. Install the discharge hose clamp (20) to the discharge hose and mount rubber with nut/washer 6mm (28).



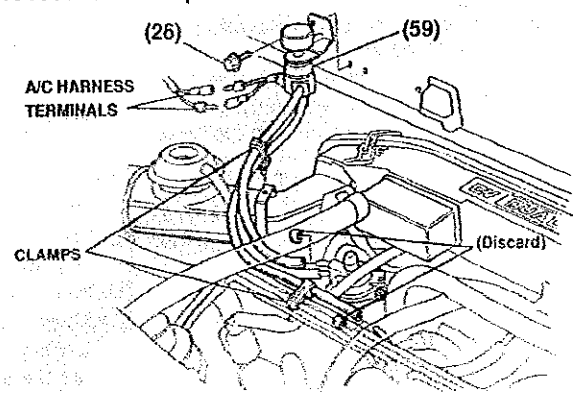
53 (Kit No. SH3-E13, E21, E54, E60 only)
1. Install the A/C idle control set (59) on the car body with ground bolt 6x12 (26).
2. Install the carburetor idle control set (46) and set the hoses as shown.
3. Connect the A/C harness connector to the A/C idle control set solenoid.



54 (Kit No. SH3-Q52 only)
1. Disconnect the original diaphragm connecting tube (reuse).
2. Remove the original diaphragm (discard) with two pan screws (discard), split pin (discard) and plain washer (discard).
3. Install the carburetor idle control set (46) diaphragm with two pan screws, split pin, and plain washer as shown.
4. Connect the tube to diaphragm under side attaching section as shown.



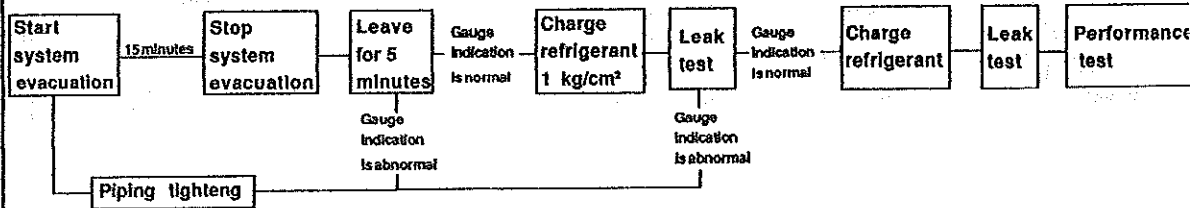
55 (Kit No. SH3-Q52 only)
1. Install the A/C idle control set (59) solenoid valve assembly to the car body with ground bolt 6x12 (26).
2. Connect the A/C harness terminals and solenoid valve terminals.
3. Set the two clamps and two tubes as shown.



57

SYSTEM CHARGING

The following are the procedures to be adhered to when servicing air conditioners to reduce the amount of Freon R-12 into the atmosphere.



58

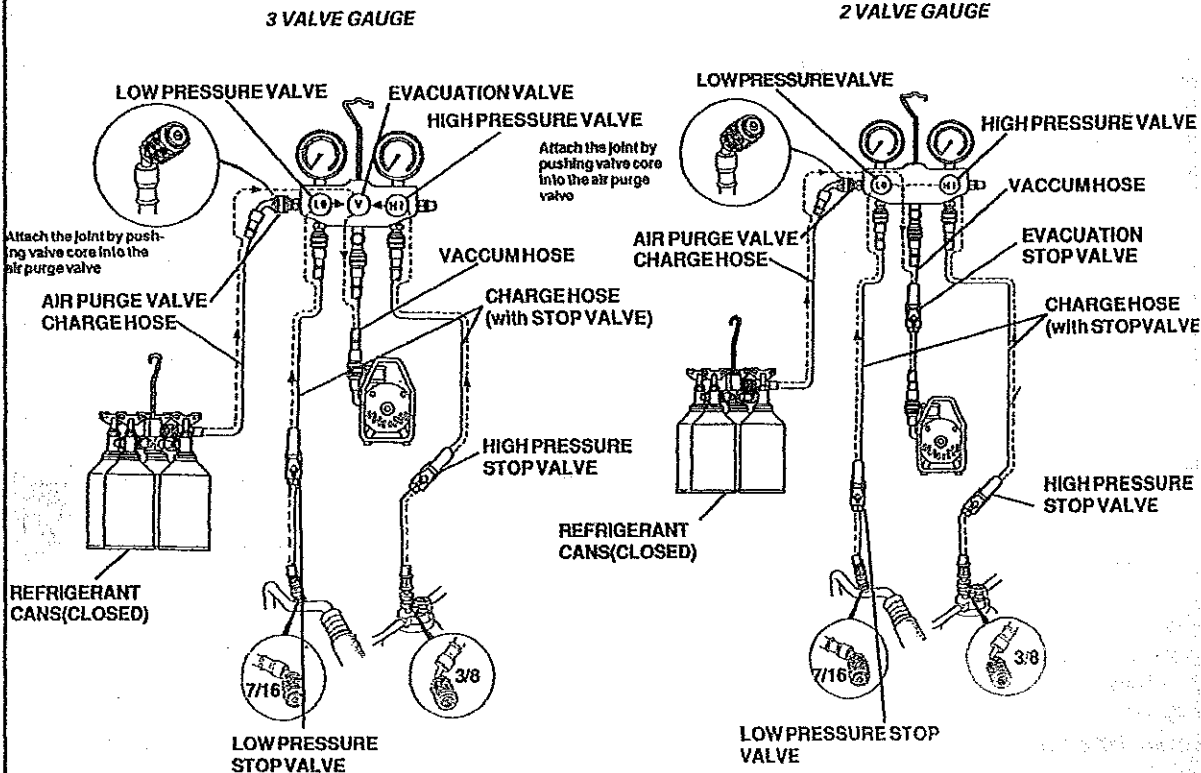
SYSTEM EVACUATION

1. When an A/C System has been opened to the atmosphere, such as during installation or repair, it must be evacuated using a vacuum pump. (If the system has been open for several days, the receiver/dryer should be replaced).
 2. Connect a gauge, pump and refrigerant containers (cans of R-12) as shown.
- NOTE: Do not open the cans.
3. Start the pump, then open the both pressure valves, both pressure stop valves and evacuation valve (2 valve gauge: evacuation stop valve). Run the pump for about 15 minutes. Close the both pressure valves and evacuation valve (2 valve gauge: evacuation stop valve) and stop the

pump. The low gauge should indicate above 700mmHg (27in-Hg) and remain steady with the valves closed.

NOTE: If low pressure does not reach more than 700mmHg (27in-Hg) in 15 minutes, there is probably a leak in the system. Check for leaks, and repair (see Leak Test below).

4. If there are no leaks, open the valves and continue pumping for at least another 15 minutes, then close both valves, stop the pump.



59

LEAK TEST

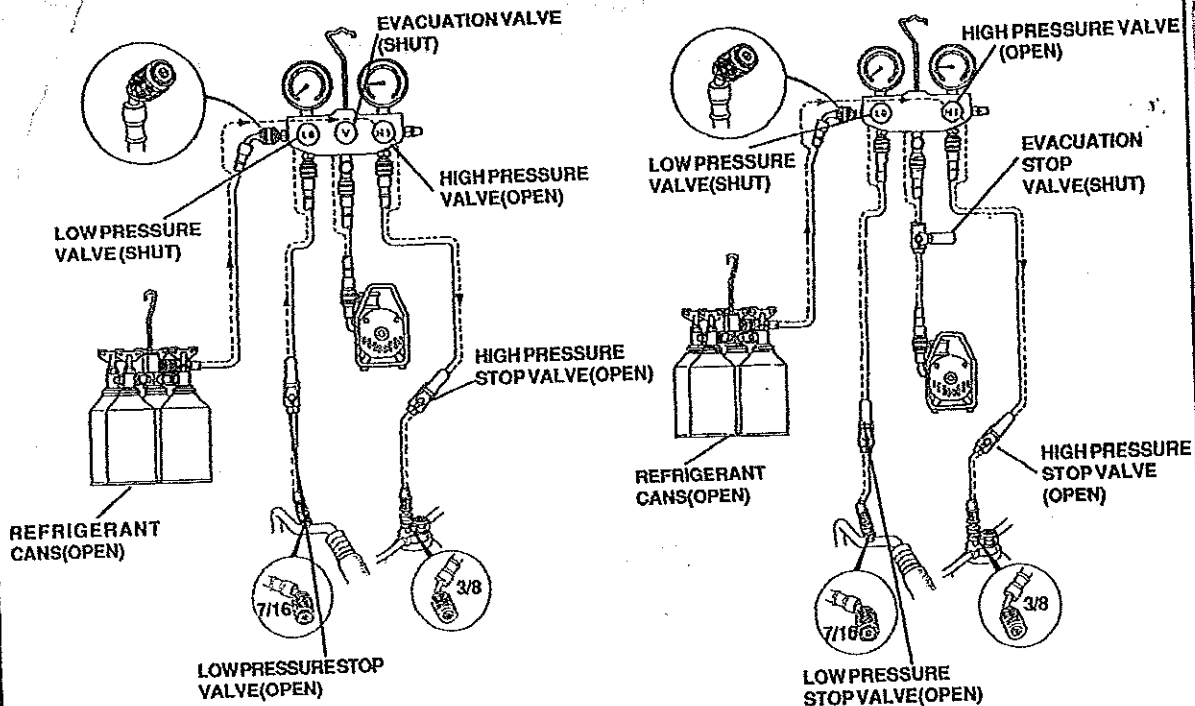
WARNING When handling refrigerant(R.12):

- Always wear eye protection.
 - Do not let refrigerant get on your skin or in your eyes. If it does:
 - Do not rub your eyes or skin.
 - Splash large quantities of cool water in your eyes or on your skin.
 - Rush to a physician or hospital for immediate treatment. Do not attempt to treat it yourself.
 - Keep refrigerant containers (Cans of R-12) stored below 40°C (100°F).
 - Keep away from open flame. Refrigerant, although non-flammable, will produce poisonous gas if burned.
 - Work in well-ventilated area. Refrigerant evaporates quickly and can force all the air out of a small, enclosed area.
- NOTE: Check for leaks after evacuation.

1. Close the evacuate valve(2 valve gauge; evacuation stop valve).
2. Open the cans.
3. Open high pressure valve to charge the system to about 100 kPa (14psi), then close the supply valve. NOTE: Close the low pressure valve.
4. Check the system for leaks using a leak detector. NOTE: Particularly check for leaks around the compressor, condenser and receiver-dryer.
5. If you find any leaks, tighten the joint nuts and bolts to the specified torque.
6. Recheck the system for leaks using a leak detector.
7. If you find leaks that require the system to be opened (to repair or replace hoses, fittings, etc.), release any charge in the system according to the Discharge Procedure.
8. After checking and repairing leaks, the system must be evacuated (see System Evacuation).

3 VALVE GAUGE

2 VALVE GAUGE



CHARGING PROCEDURE

- Turn the heater fan switch to maximum high speed position.
- 5. Run the engine at 1500-2000rpm, turn on the A/C switch, and check that the compressor clutch is engaged and the low pressure suddenly drops.

CHARGING PROCEDURE

- WARNING:** When handling refrigerant (R-12):
- Always wear eye protection.
 - Do not let refrigerant get on your skin or in your eyes. If it does:
 - Do not rub your eyes or skin.
 - Splash large quantities of cool water in your eyes or on your skin.
 - Rush to a physician or hospital for immediate treatment. Do not attempt to treat it yourself.
 - Keep refrigerant containers (Cans of R-12) stored below 40°C (100°F).
 - Keep away from open flame. Refrigerant, although non-flammable, will produce poisonous gas if burned.
 - Work in well-ventilated area. Refrigerant evaporates quickly, and can force all the air out of a small, enclosed area.
- CAUTION:** Do not overcharge the system; the compressor will be damaged.

1. Open the high pressure valve and charge with approximately 300g (10.5 oz) of refrigerant.

WARNING: Do not start the engine with high pressure valve open.

NOTE:

- Be sure to charge with 300g (10.5oz) refrigerant. If low, the vane in the compressor (if new compressor is installed) will not operate.
- Do not open the low pressure valve.

2. After charging with 300g (10.5 oz) refrigerant, close the high pressure valve.
3. Check that the high pressure valve is closed and start the engine.
4. Open the front door.
 - Turn the air mix dial (lever) to COOL.
 - Turn the function control switch (lever) on.

• Turn the heater fan switch to maximum high speed position.

5. Run the engine at 1500-2000rpm, turn on the A/C switch, and check that the compressor clutch is engaged and the low pressure suddenly drops.
 - (a) If the low pressure dose not drop: Raise the engine speed to 2500 rpm and turn the A/C switch on and off. If the low pressure dose not drop, turn the ignition switch off and wait for 1-2 minutes, then restart the engine and raise to 2500 rpm and turn the A/C switch ON and OFF.
 - (b) If the low pressure still does not drop, stop the engine and close the low gauge valve and re-charge with additional 100g (3.5oz) of refrigerant. Repeat step (a).
 - (c) If the low pressure does not drop after repeating the procedure in step (a) several times. Stop the engine and re-evacuate and repeat steps 1 thru 5.

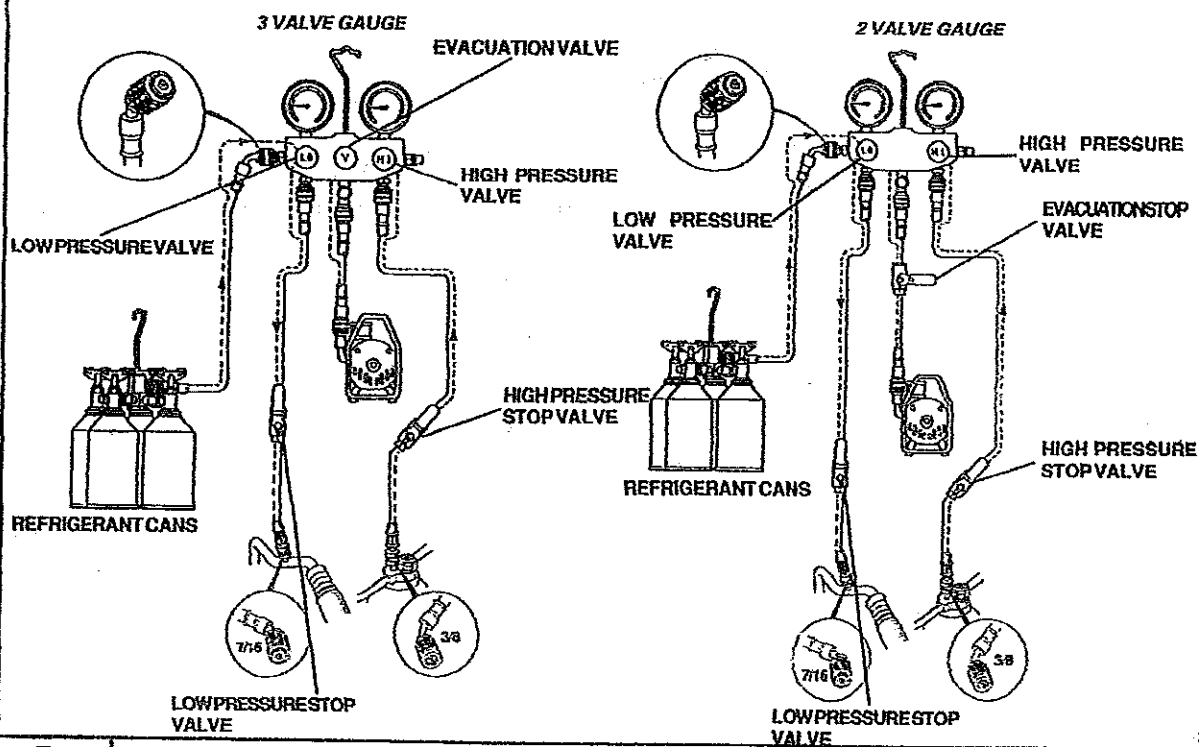
6. Open the low pressure valve and charge refrigerant with the engine running at 2500 rpm.

WARNING: Do not open the high pressure valve and keep the refrigerant can right side-up.

7. Charge the system with an additional 600-650 g (21-23 oz) of refrigerant to complete full charge.
8. When fully charged, close the low pressure valve and the refrigerant cans. Check the system.
9. Close the high pressure stop valve.
10. Open the low pressure valve and gradually open the high pressure valve. When both pressure gauge are the same, close the low pressure stop valve and stop the engine.

11. Disconnect the charge hose quickly.
 12. Check the system for leaks using a leak detector.
- NOTE:** Particularly check for leaks around the compressor, condenser and receiver-dryer.

DUCT (Discard)

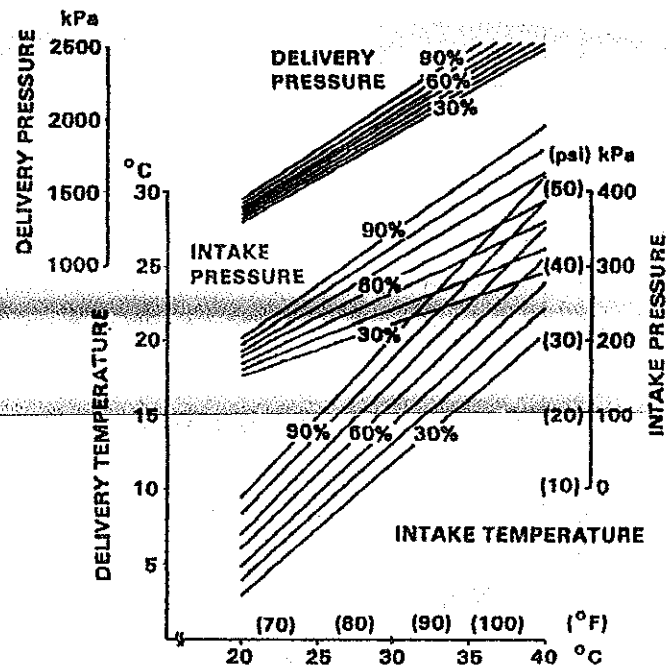
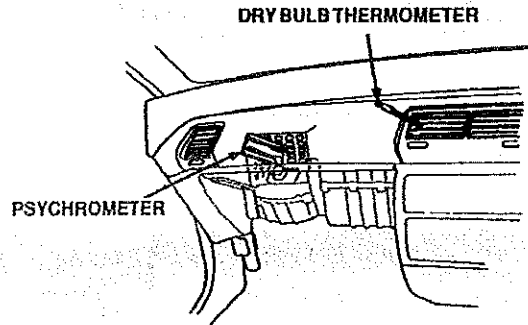
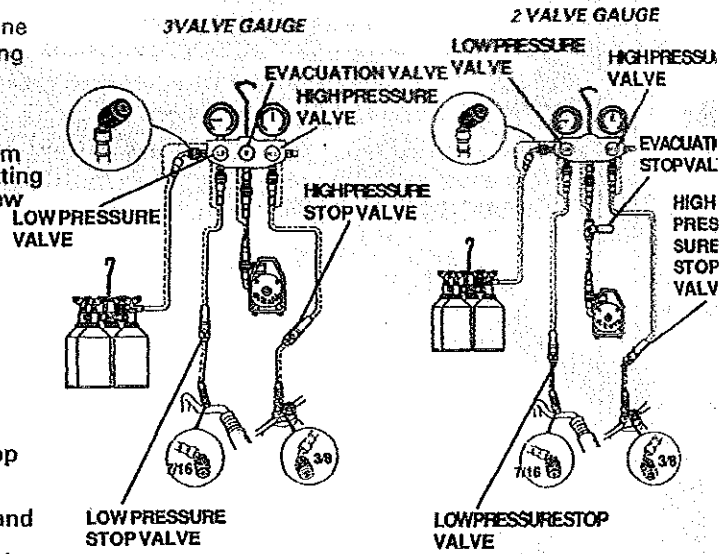


61

Performance Test

The performance test will help determine if the air conditioning system is operating within specifications.

1. Attach the gauge and pump as shown, connecting the center charging hose to the pump inlet. To purge air from the hose loosen both charging hoses fitting at the stop valves, until they hiss for a few seconds, then tighten them again.
 2. Start the pump, then open both gauge valves and the evacuate valve (2 valve gauge: evacuate stop valve). The low gauge should indicate above 700mmHg (27 in-Hg), then run the pump about 1 minute.
 3. Close both valves and the evacuate valve (2 valve gauge: evacuate stop valve) and stop the pump. Open both stop valves.
 4. Insert a thermostat in the vent outlet. Determine the relative humidity and ambient air temperature by a portable weather station or calling the local weather station.
 5. Test conditions:
 - Avoid direct sunlight.
 - Open engine hood.
 - Open front door.
 - (Button type)
 Set the temperature control dial to max and push the vent and fresh air buttons (Lever type)
 Slide the temperature control lever to cold and the function control lever to vent and push fresh air buttons.
 - Turn the fan switch to MAX.
 - Run the engine at 1,500rpm.
 - No driver or passengers in vehicle.
 6. After running the air conditioning for 10 minutes under the above test conditions, read the delivery temperature from the thermometer in the dash vent and the high and low system pressure from the A/C gauges.
 7. To complete the charts:
 - Mark the delivery temperature along the vertical line.
 - Mark the intake temperature (ambient air temperature) along the bottom line.
 - Draw a line straight up from the air temperature to the humidity.
 - Mark a point one line above and one line below the humidity level. (10% above and 10% below the humidity level)
 - From each point, draw a horizontal line across to the delivery temperature.
 - The delivery temperature should fall between the two lines.
- Complete the low side pressure test and high side pressure test in the same way.
 • Any measurements outside the line may indicate the need for further inspection.



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*Any measurements outside the line may indicate the need for further inspection.

62

IDLE SPEED ADJUSTMENT

CAUTION: Adjustment should be carried out after first warming up the engine (2 operations of the cooling fan)

• Turn the heater switch fully clockwise (high), turn on the air conditioner and check the idling speed with the condenser fan operating (compressor in operation).

• If the idling speed differs from the standard value, turn the adjust screw to adjust.

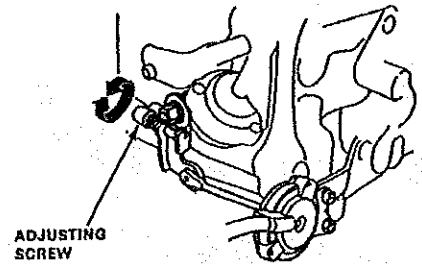
CAUTION: Make sure the compressor clutch is engaged.

• Idling speed

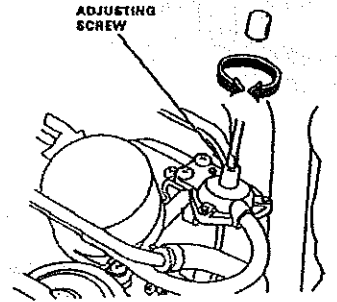
MT Cars: 750 ± 50 rpm

AT Cars: 750 ± 50 rpm (D₄ range)

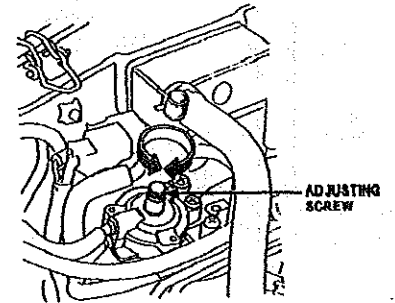
(Kit No. SH3-E04)



(Kit No. SH3-E13, E21, E54, E60)



(Kit No. SH3-Q52)



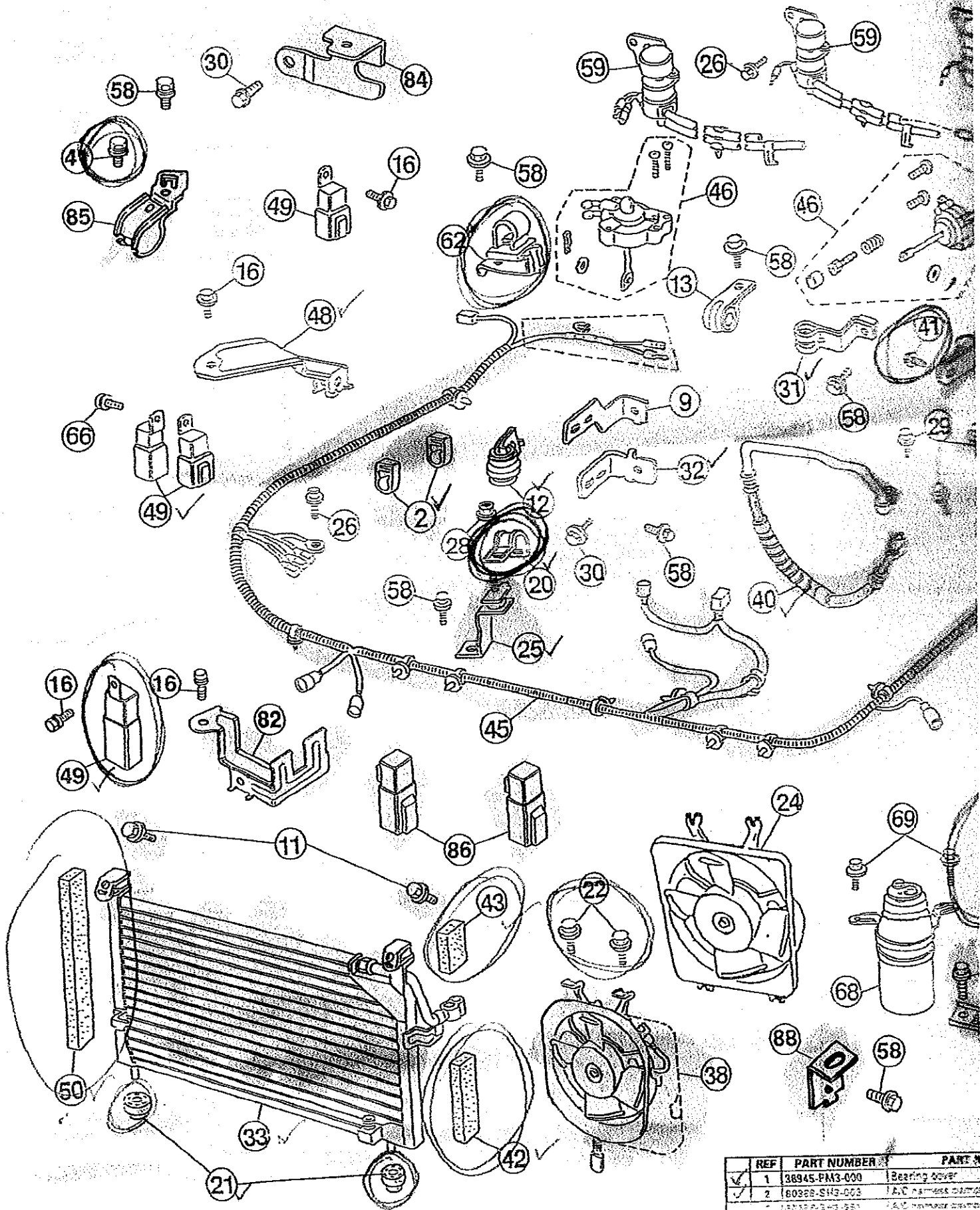
Service Tips

CAUTION:

1. Always disconnect the negative cable from the battery whenever servicing air conditioner parts.
2. Keep moisture and dust out of the system. When disconnecting any lines, plug or cap the fittings immediately; don't remove the caps or plugs until just before the lines are reconnected.
3. Before connecting any hose or line, apply a few drops of refrigerant oil to the seat of the O-ring or flange nut.
4. When tightening or loosening a fitting, use two wrenches to support nuts of the lines.
5. When discharging the system, don't let refrigerant escape too fast; it will draw the compressor oil out of the system.
6. Add refrigerant oil after replacing the following parts;
 - Condenser..... 10cc (1/3 fl oz)
 - Cooling unit..... 30cc (1 fl oz)
 - Line or hose..... 10cc (1/3 fl oz)
 - Receiver..... 10cc (1/3 fl oz)

WARNING When handling refrigerant (R-12)

- Always wear eye protection.
- Do not let refrigerant get on your skin or in your eyes; if it does:
 - Do not rub your eyes or skin.
 - Splash large quantities of cool water in your eyes or on your skin.
 - Rush to a physician or hospital for immediate treatment. Do not attempt to treat it yourself.
- Keep refrigerant containers (cans of R-12) stored below 40°C (100°F)
- Do not handle or discharge refrigerant in an enclosed area near an open flame; it may ignite and produce a poisonous gas.



REF	PART NUMBER	PART NAME	E90	E04	E13	E21	E54	E60	E42	E32	E70	Q52	Q30	T13	T23	For
✓ 1	38945-PM3-000	Bearing cover	-	1	1	1	1	1	1	1	1	1	1	1	1	For 47
✓ 2	80388-SH3-003	A/C harness clamps	-	2	2	2	2	2	2	2	-	2	2	2	2	For 45
2	80388-SH3-961	A/C harness clamps	2	-	-	-	-	-	-	-	2	-	-	-	-	For 8
3	95801-C8016-08	Flange bolts 8x16	-	2	2	2	2	2	2	2	2	2	2	2	2	For 19
4	99058-PG6-000	Nut/washer 10mm	-	1	1	1	1	1	1	1	1	1	1	1	1	For 34
5	80156-SH3-000	Bolt/washer 6x24	-	1	1	1	1	1	1	1	1	1	1	1	1	For 47
6	99017-PE0-000	Washer 10mm	-	1	1	1	1	1	1	1	1	1	1	1	1	For 47
✓ 7	38944-PM3-000	Idle pulley collar	-	1	1	1	1	1	1	1	1	1	1	1	1	For 37
8	38926-PM3-000	Idle pulley stay	-	1	1	1	1	1	1	1	1	1	1	1	1	For 39(Except P/S car)
✓ 9	80362-SH3-930	Suction hose stay	-	1	1	1	1	1	1	1	1	1	1	1	1	For 63
✓ 10	80272-SF4-000	Drain hose grommet	1	-	-	-	-	-	-	-	-	-	-	-	-	For 53
10	80272-SH3-960	Drain hose grommet	2	2	2	2	2	2	2	2	2	2	2	2	2	For 33
11	90146-SA7-000	Bolts/washers 6x16	-	1	1	1	1	1	1	1	1	1	1	1	1	For 39
✓ 12	80364-SH3-000	Suction hose clamp B	-	-	-	-	-	-	-	-	1	1	-	-	-	For 39(P/S car only)
13	80364-SH3-930	Suction hose clamp B	-	3	3	3	3	3	3	3	3	3	3	3	3	For 37
14	95801-10060-08	Flange bolts 10x60	-	1	1	1	1	1	1	1	1	1	1	1	1	For 8
15	90021-PM3-000	Flange bolt 8x85	1	2	2	2	2	2	2	2	2	2	2	2	2	For 48,49,82
16	90136-SH3-000	Bolts/washers 6x10	-	1	1	1	1	1	1	1	1	1	1	1	1	For 37
✓ 17	95801-10050-08	Flange bolt 10x50	-	1	1	1	1	1	1	1	1	1	1	1	1	For 64
✓ 18	80382-SH3-003	Receiver pipe clip	-	1	1	1	1	1	1	1	1	1	1	1	1	For 47
19	38946-PM3-000	Idle pulley bolt	-	1	1	1	1	1	1	1	1	1	1	1	1	For 40
✓ 20	80371-SH3-J00	Discharge hose clamp	1	1	1	1	1	1	1	1	1	1	1	1	1	For 33
✓ 21	80175-SE0-000	Condenser mounts	2	2	2	2	2	2	2	2	2	2	2	2	2	For 38
22	90003-PG7-660	Bolts/washers 6x16	-	1	1	1	1	1	1	1	1	1	1	1	1	For 27
23	90102-SA4-000	Topping screw 4x16	-	-	-	-	-	-	-	-	-	-	-	-	-	
24	19005-PM5-A01	Shroud assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	For 38
✓ 25	80375-SH3-J00	Mount rubber	1	-	-	-	-	-	-	-	-	-	-	-	-	For 38
25	80375-SH3-J31	Mount rubber	1	2	2	2	2	2	1	1	1	2	1	2	2	For 45,59
26	90153-SE0-003	Ground bolt 6x12	-	1	1	1	1	1	-	-	-	-	-	-	-	
27	39400-SB2-013	Delay control assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	For 20
28	94071-06080	Nut/washer 6mm	1	1	1	1	1	1	1	1	1	1	1	1	1	For 39,40
29	93403-08035-08	Bolts/washers 8x35	4	3	3	3	3	3	3	3	4	3	3	3	3	For 32 or 9,84
30	95701-10020-08	Flange bolt 10x20	1	1	1	1	1	1	1	1	1	1	1	1	1	For 39(P/S car only)
✓ 31	80364-SH3-900	Suction hose clamp B	-	1	1	1	1	1	1	1	-	1	-	1	1	For 39(Except P/S car)
✓ 32	80362-SH3-000	Suction hose stay	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 33	80100-SH3-023	Condenser assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	
✓ 33	80100-SH3-J31	Condenser assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 34	80200-SH3-000	Evaporator assembly	1	-	-	-	-	-	-	-	1	-	-	-	-	
✓ 34	80200-SH3-960	Evaporator assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 35	38800-PM3-036	Compressor assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 36	38920-PM3-003/014	Compressor belt	1	-	-	-	-	-	-	-	-	-	-	-	-	
✓ 36	38920-PW0-G02	Compressor belt	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 37	38930-PM3-000	Compressor bracket	-	1	1	1	1	1	1	1	1	1	1	1	1	
38	38605-PM3-040	Shroud assembly	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	38605-PW0-G00	Shroud assembly	1	-	-	-	-	-	-	-	1	1	1	1	1	
✓ 38	38605-PM3-A52	Shroud assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	
38	38605-PM3-A04	Shroud assembly	-	-	-	-	-	-	-	-	-	-	-	-	-	
38	38605-PM3-902	Shroud assembly	-	1	1	1	1	1	1	1	-	-	1	-	1	
✓ 39	80311-SH3-013	Suction hose	1	-	-	-	-	-	-	-	-	-	-	-	-	
39	80311-SH3-J31	Suction hose	-	-	-	-	-	-	-	-	1	-	-	-	-	
39	80311-SH3-932	Suction hose	-	-	-	-	-	-	-	-	1	-	-	-	-	
39	80311-SH3-J70	Suction hose	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 40	80315-SH3-010	Discharge hose	1	-	-	-	-	-	-	-	-	-	-	-	-	
40	80315-SH3-J31	Discharge hose	1	1	1	1	1	1	1	1	1	1	1	1	1	For 74,85
41	93405-06016-08	Bolt/washer 6x16	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 42	80110-SH3-000	Condenser seal A	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 43	80111-SH3-000	Condenser seal B	2	-	-	-	-	-	-	-	-	2	-	-	-	For 55
44	80467-SH3-961	Grommet plate clip	-	-	-	-	-	-	-	-	-	-	-	1	-	
45	38710-SH3-010	A/C wire harness	-	-	-	-	-	-	-	-	-	-	-	-	-	
45	38710-SH3-T02	A/C wire harness	-	1	1	1	1	1	1	1	-	-	-	-	-	
45	38710-SH3-E02	A/C wire harness	-	-	-	-	-	-	-	1	1	-	-	-	-	
✓ 45	38710-SH3-E32	A/C wire harness	-	-	-	-	-	-	-	-	1	-	-	-	-	
45	38710-SH3-E60	A/C wire harness	-	-	-	-	-	-	-	-	-	1	-	-	-	
45	38710-SH3-Q02	A/C wire harness	-	-	-	-	-	-	-	-	-	-	1	-	-	
45	38710-SH3-E90	A/C wire harness	-	1	-	-	-	-	-	-	-	-	-	-	1	
46	38780-PH1-601	Carb idle control set	-	-	1	1	1	1	-	-	-	-	-	-	-	
46	38780-PM2-B02	Carb idle control set	-	-	-	-	-	-	-	-	-	-	-	1	-	
46	38780-PM4-Q00	Carb idle control set	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 47	38942-PM3-000	Idle pulley	-	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 48	39792-SH7-000	A/C relay bracket	1	3	3	3	3	3	3	3	3	3	3	3	3	
✓ 49	39795-SB2-003	Power relay assemblies	1	1	1	1	1	1	1	1	1	1	1	1	1	For 34
✓ 50	80109-SH3-010	Condenser seal	1	1	1	1	1	1	1	1	1	1	1	1	1	For 34
✓ 51	80261-SH3-000	A/C band A	1	1	1	1	1	1	1	1	1	1	1	1	1	For 34
✓ 52	80265-SH3-000	A/C band B	1	1	1	1	1	1	1	1	1	1	1	1	1	For 34
53	80271-SH3-000	Drain hose	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 54	80410-SH3-013	A/C switch assembly	1	-	-	-	-	-	-	-	-	-	1	-	-	
✓ 55	80466-SH3-960	A/C grommet plate	-	2	2	2	2	2	2	2	2	2	2	2	2	For 35
✓ 56	90022-PM3-000	Flange bolts 8x120	-	2	2	2	2	2	2	2	2	2	2	2	2	For 35
✓ 57	90023-PM3-000	Flange bolts 8x105	-	2	2	2	2	2	2	2	2	2	2	2	2	
✓ 58	93403-06016-08	Bolts/washers 6x16	4	3	3	3	3	3	3	3	3	4	3	3	3	12,13,31,62,74,25,85,88
59	38770-PM1-E00	A/C idle control set	-	1	-	-	-	-	-	-	-	-	-	-	-	
59	38770-PM2-E04	A/C idle control set	-	-	1	1	1	1	-	-	-	-	-	-	-	
59	38770-PM4-Q00	A/C idle control set	-	-	-	-	-	-	-	-	-	-	-	1	-	
60	95701-06025-08	Flange bolts 6x25	2	2	2	2	2	2	2	2	2	2	2	2	2	For 64,65
✓ 61	80411-SH3-003	A/C switch plate	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 61	80411-SH2-003	A/C switch plate	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 62	80360-SJ4-000	Suction hose clamp	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓ 63	39139-SB3-003	Noise suppressor	-	1	1	1	1	1	1	1	1	-	-	1	1	
✓ 64	80341-SH3-013	Receiver pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	
64	80341-SH3-961	Receiver pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	
64	80341-SH3-331	Receiver pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	

SH3

59	39770-PM4-000	A/C RBE Unit/Bracket																		
60	95701-06025-08	Flange bolts 6x25	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	For 64,65
✓	61	80411-SH3-003	A/C switch plate	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	61	80411-SH2-003	A/C switch plate	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	62	80360-SJ4-000	Suction hose clamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	63	39139-SH3-003	Noise suppressor	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	64	80341-SH3-013	Receiver pipe	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	64	80341-SH3-951	Receiver pipe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	64	80341-SH3-J31	Receiver pipe	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	65	80331SH3003	Condenser pipe A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	65	80331SH3031	Condenser pipe A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	66	93403-06012-08	Bolts/washers 6x12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	For 49,63
✓	67	38921-PM3-Y01	Crankshaft pulley	-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	
✓	68	80350-SJ4-000	Receiver assembly	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	69	93403-06012-08	Bolts/washers 6x12	-	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	For 68
✓	72	80318-SH3-003	Discharge hose clamp B	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	73	90222-SB4-000	Nut washer 6mm	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	For 34
✓	74	80361-SH3-010	Suction hose bracket	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
✓	74	80361-SH3-960	Suction hose bracket	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	For 39
✓	75	90087-PJ7-000	Bolt hex 8x63	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	76	38930-PR3-000	Compressor bracket	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	77	38940-PR3-000	Idler assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	78	90023-PR3-000	Bolts/flange 8x90	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	79	90079-PR3-000	Nut hex 8mm	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	80	38900-PW0-003	Compressor assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	81	95801-10030-08	Flange bolt 10x30	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	82	39791-SH3-000	Relay bracket	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	83	80350-SH3-J30	Receiver assembly	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(Except A.L.B. car)
✓	84	80362-SH3-J31	Suction hose stay	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(Except P/S car)
✓	85	80364-SH3-J31	Suction hose clamp B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(Except P/S car)
✓	86	39795-SK7-003	Power relay assembly	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	87	93401-06012-08	Bolt/washer 6x12	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	88	80354-SH3-G90	Receiver bracket	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	89	95801-10045-08	Flange bolt 10x45	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
✓	90	95801-10055-08	Flange bolt 10x55	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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8000Z-SH3-06

If MIX dial (lever) to COOL.
junction control switch (lever) on.

NOTE: Particularly check for leaks around the
compressor, condenser and receiver-dryer.