

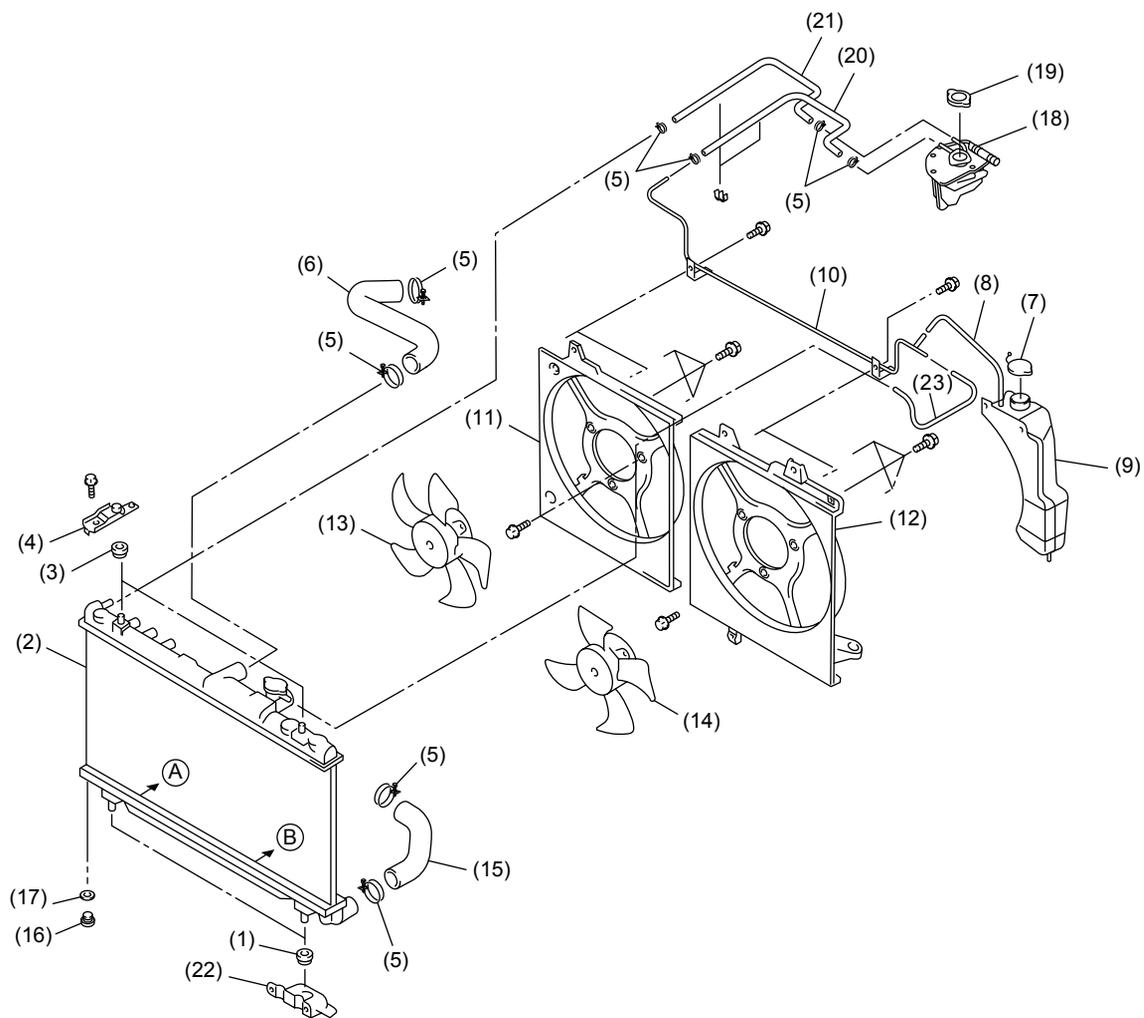
RADIATOR FAN

COOLING

6. Radiator Fan

A: DESCRIPTION

Each radiator fan is made of plastic. It is driven by an electric motor which is retained on a shroud.



CO-02118

CO(H4DOTC)-8

RADIATOR FAN

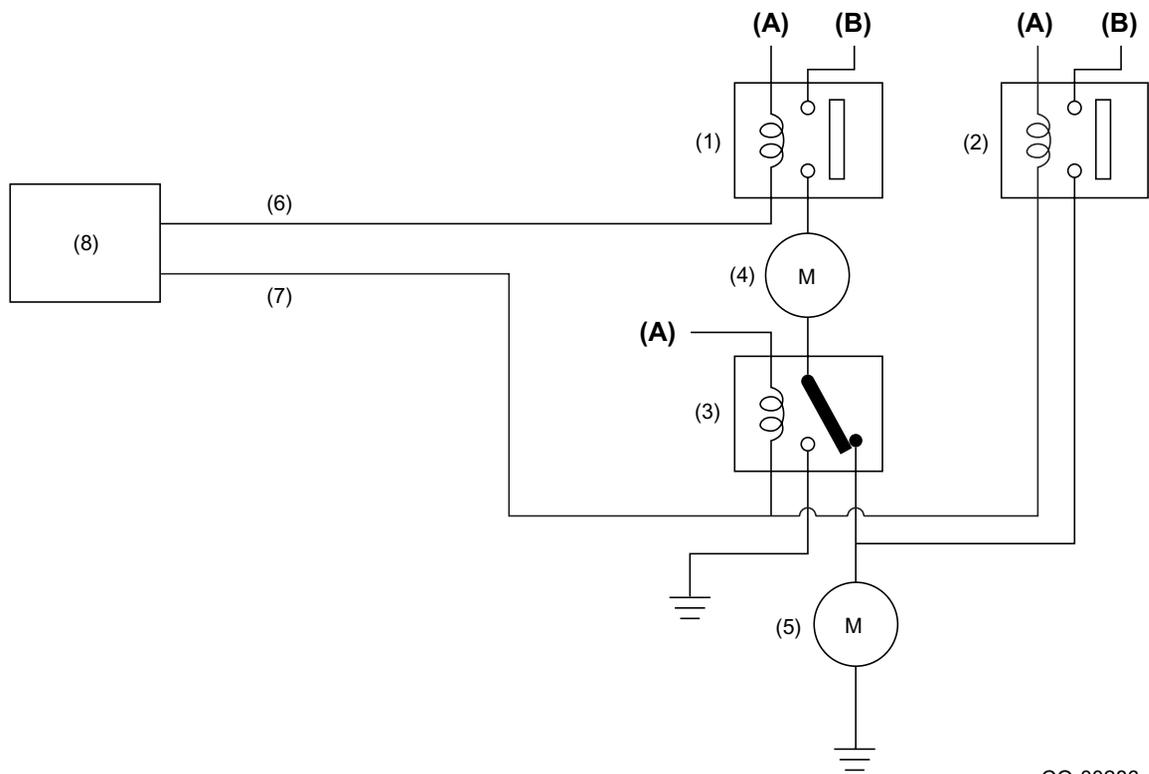
COOLING

- | | |
|---------------------------------------|--|
| (1) Radiator lower cushion | (13) Radiator main fan assembly |
| (2) Radiator | (14) Radiator sub fan assembly |
| (3) Radiator upper cushion | (15) Radiator hose B |
| (4) Radiator upper bracket | (16) Radiator drain plug |
| (5) Clamp | (17) O-ring |
| (6) Radiator hose A | (18) Engine coolant filler tank |
| (7) Engine coolant reservoir tank cap | (19) Radiator cap (engine coolant filler tank cap) |
| (8) Overflow hose A | (20) Engine overflow hose |
| (9) Engine coolant reservoir tank | (21) Engine air breather hose |
| (10) Overflow pipe | (22) Radiator lower bracket |
| (11) Radiator main fan shroud | (23) Overflow hose B |
| (12) Radiator sub fan shroud | |

RADIATOR FAN

COOLING

To reduce fan noise, the fan output is two-stepped and can be switched to Low or High according to the load on A/C, coolant temperature, and vehicle speed. This control is accomplished by a circuit as shown below; the output is changed by switching the connection of two motors between serial and parallel instead of using components such as resistors.



CO-00286

- | | |
|----------------------|--------------------------|
| (1) Sub fan relay | (6) Low speed signal |
| (2) Main fan relay 1 | (7) High speed signal |
| (3) Main fan relay 2 | (8) ECM |
| (4) Sub fan motor | (A) From ignition switch |
| (5) Main fan motor | (B) From battery |

RADIATOR FAN

COOLING

B: FUNCTION

The ECM receives signals from the engine coolant temperature sensor, vehicle speed sensor and A/C switch, and based on these signals, the ECM controls the radiator fan speed to high or low.

NOTE:

Refer to the Service Manual for operation of each model.

Operation example:

Vehicle speed	A/C compressor load	Engine coolant temperature		
		Rising: below 94°C (201°F) Lowering: below 91°C (196°F)	Rising: between 95 and 96°C (203 and 205°F) Lowering: between 92 and 94°C (198 and 201°F)	Rising: over 97°C (207°F) Lowering: over 95°C (203°F)
		Operation of radiator fans	Operation of radiator fans	Operation of radiator fans
When accelerating: below 19 km/h (12 MPH) When decelerating: below 10 km/h (6 MPH)	OFF	OFF	Low-speed	High-Speed
	Low	Low-Speed	Low-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
When accelerating: between 20 and 69 km/h (12 and 43 MPH) When decelerating: between 11 and 64 km/h (7 and 40 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	High-Speed	High-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
When accelerating: between 70 and 105 km/h (43 and 65 MPH) When decelerating: between 65 and 100 km/h (40 and 62 MPH)	OFF	OFF	Low-Speed	High-Speed
	Low	High-Speed	High-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed
When accelerating: over 106 km/h (66 MPH) When decelerating: over 101 km/h (63 MPH)	OFF	OFF	High-Speed	High-Speed
	Low	High-Speed	High-Speed	High-Speed
	High	High-Speed	High-Speed	High-Speed