

# ENGINE COOLING FAN

1991 Mitsubishi Montero

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Mitsubishi Engine Cooling Fans

Mitsubishi: Eclipse, Galant, Mirage,  
Montero, Pickup, Precis, 3000GT

## ELECTRIC COOLING FAN - COMPONENT TESTING

### MOTOR

Disconnect electric cooling fan motor at junction. Using 2 jumper wires, ground one lead and apply battery voltage to other. Fan should rotate. If fan does not rotate, replace motor.

### RADIATOR FAN SWITCH

Using an ohmmeter, check switch continuity in hot water. Switch should be open at less than 180°F (82°C) and continuity should exist at more than 185°F (85°C). Replace radiator fan switch if it does not test as specified.

### ELECTRIC COOLING FAN RELAY

1) Remove relay from relay box in front of right suspension tower. Using jumper wires, connect battery to indicated terminals.

2) On 3000GT, continuity should exist between terminals No. 1 and 3. With battery disconnected, continuity should exist between terminals No. 2 and 4 and should not exist between terminals No. 1 and 3.

3) On all other models, continuity should exist between terminals No. 3 and 4. With battery disconnected, continuity should exist between terminals No. 1 and 2 and should not exist between terminals No. 3 and 4. Replace relay if it does not test as specified.

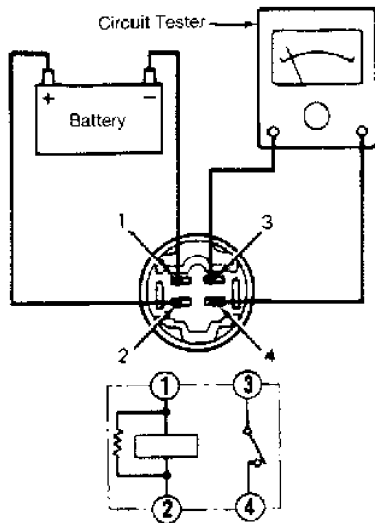
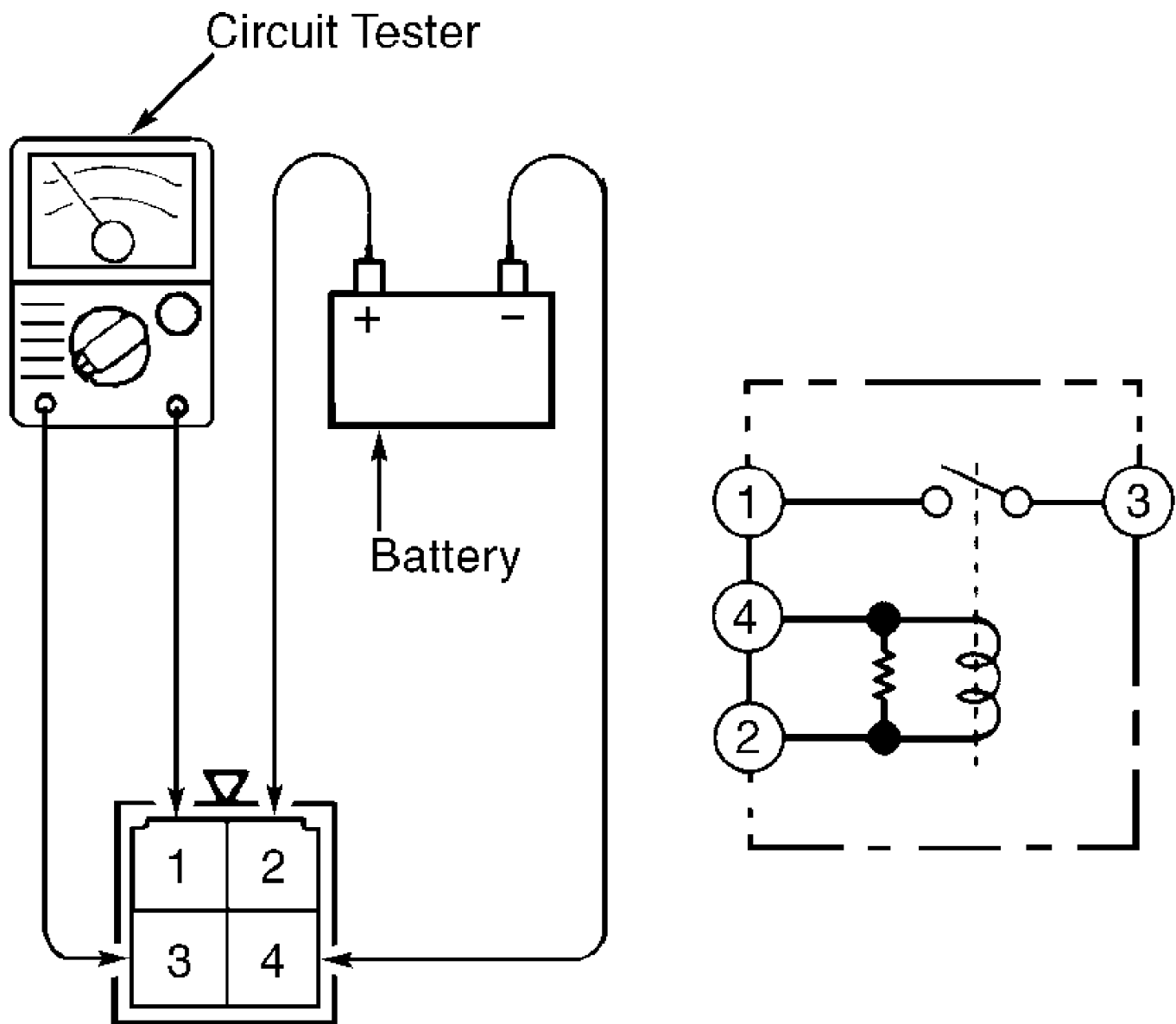


Fig. 1: Testing Electric Cooling Fan Relay (except 3000GT)  
Courtesy of Mitsubishi Motor Sales of America.



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Fig. 2: Testing Electric Cooling Fan Relay (3000GT)  
 Courtesy of Mitsubishi Motor Sales of America.

## ELECTRIC COOLING FAN - SYSTEM TESTING

### MIRAGE 1.5L

1) With A/C on LOW position, ignition on and engine coolant temperature greater than 185°F (85°C), thermosensor completes path to ground, closing radiator fan motor relay contacts and providing current to radiator fan motor. See Fig. 1.

2) With A/C on HIGH position and ignition on, power supply from automatic compressor control unit causes condenser fan motor relay and condenser fan motor cooling control relay to turn on, causing condenser fan and radiator cooling fan to operate.

## MIRAGE 1.6L

1) With A/C on LOW position, ignition on and engine coolant temperature greater than 185°F (85°C), thermosensor completes path to ground, closing radiator fan motor relay contacts and providing current to radiator fan motor. See Fig. 2.

2) With A/C on HIGH position and ignition on, power supply from auto compressor control unit causes condenser fan motor relay to turn on, causing condenser fan and radiator cooling fan to operate at a low speed by usage of a resistor.

3) If pressure switch is activated by excessive pressure or if thermosensor is on when engine coolant temperature exceeds 185°F (85°C), condenser fan motor control relay is activated, causing condenser fan and radiator cooling fan to operate at a high speed.

## ECLIPSE & 3000GT

With ignition on and engine coolant temperature greater than 185°F (85°C), thermosensor completes path to ground, closing radiator fan motor relay contacts and providing current to radiator fan. See Figs. 7-11.

## WIRING DIAGRAMS

For addition wiring diagrams, see appropriate chassis wiring diagrams in WIRING DIAGRAMS.

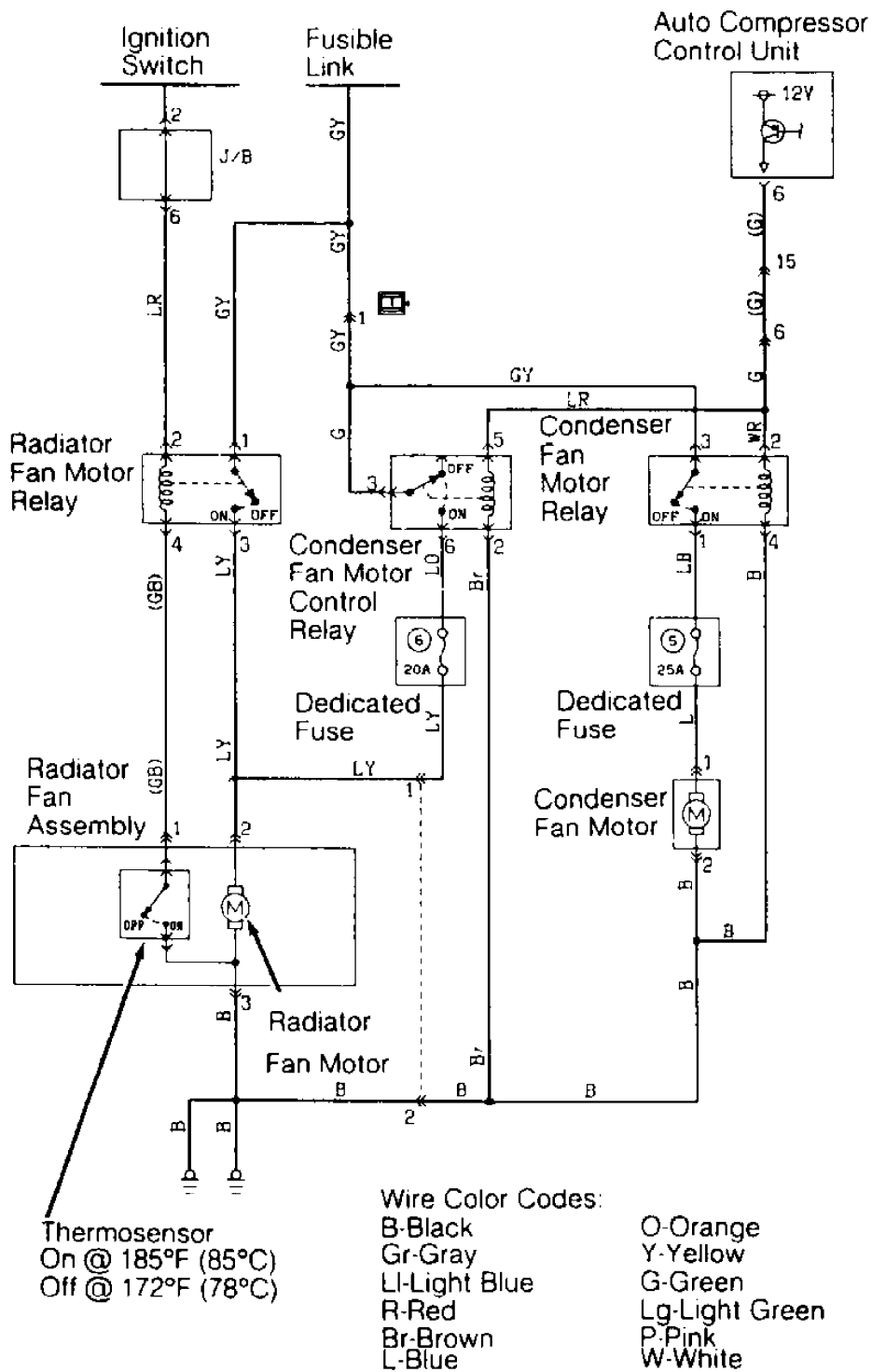


Fig. 3: Radiator Cooling Fan Wiring Diagram (Mirage 1.5L)  
 Courtesy of Mitsubishi Motor Sales of America.

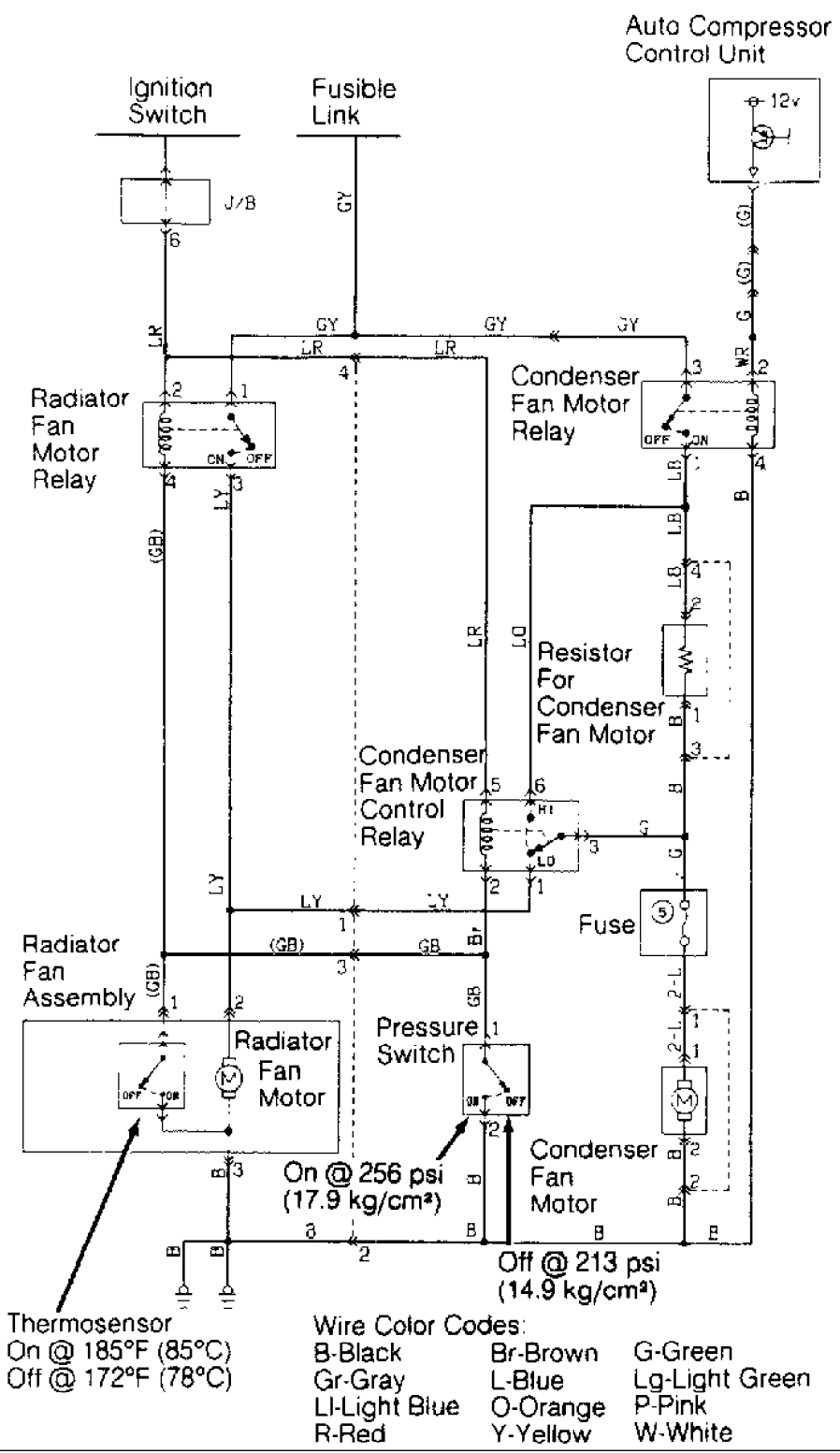


Fig. 4: Radiator Cooling Fan Wiring Diagram (Mirage 1.6L)  
 Courtesy of Mitsubishi Motor Sales of America.

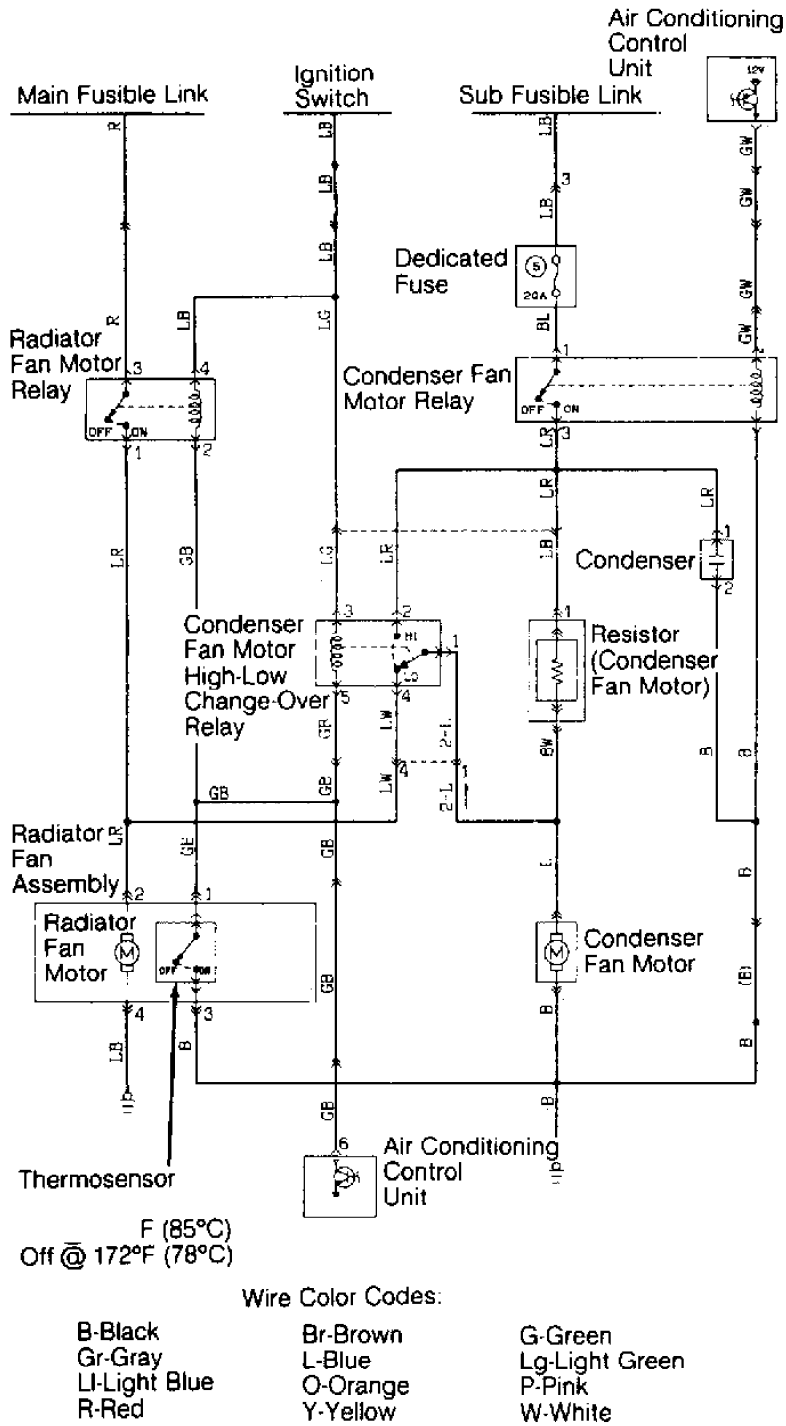


Fig. 5: Radiator Cooling Fan Wiring Diagram (Eclipse)  
 Courtesy of Mitsubishi Motor Sales of America.

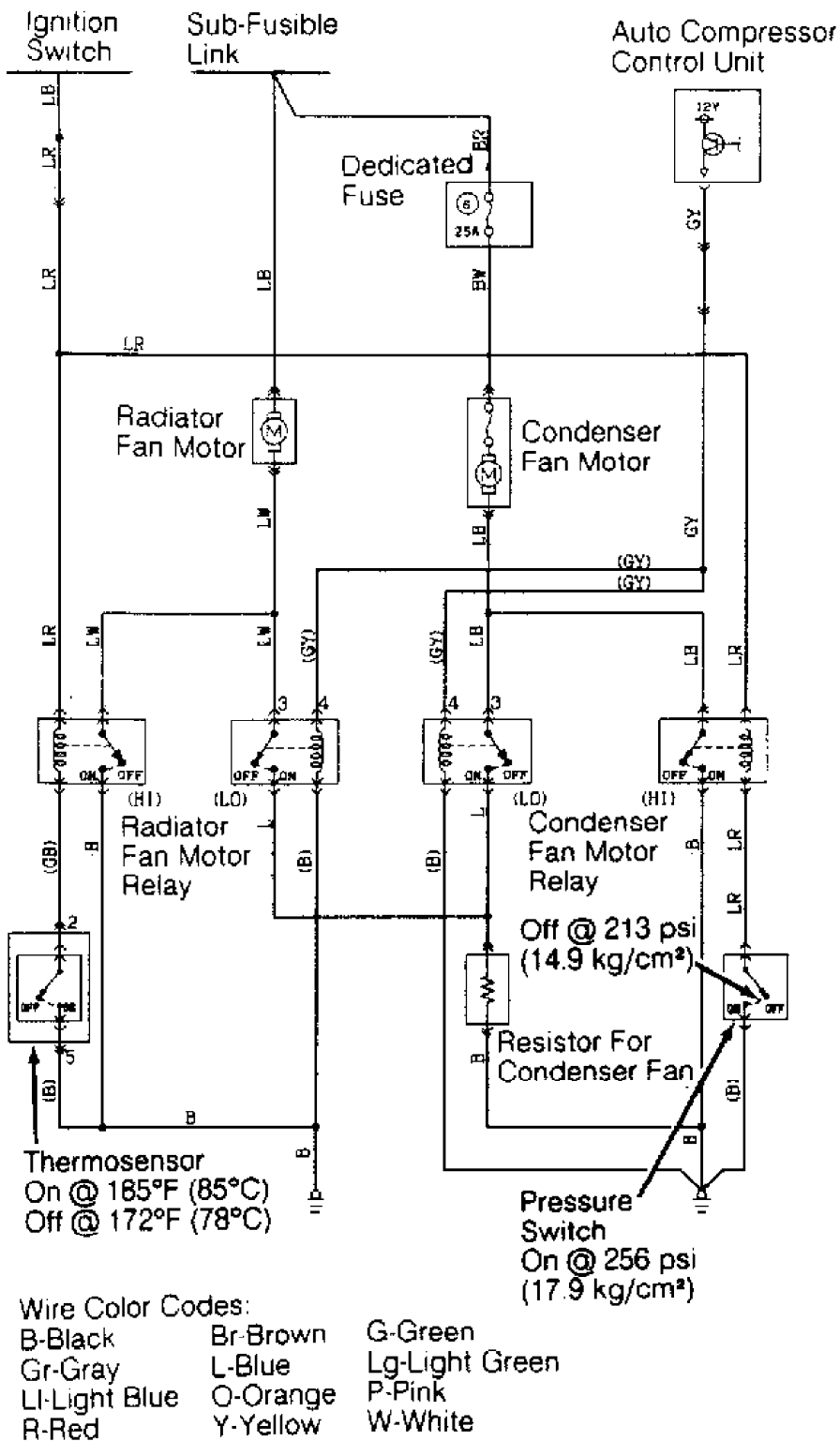


Fig. 6: Radiator Cooling Fan Wiring Diagram (Galant AWD A/T)  
 Courtesy of Mitsubishi Motor Sales of America.

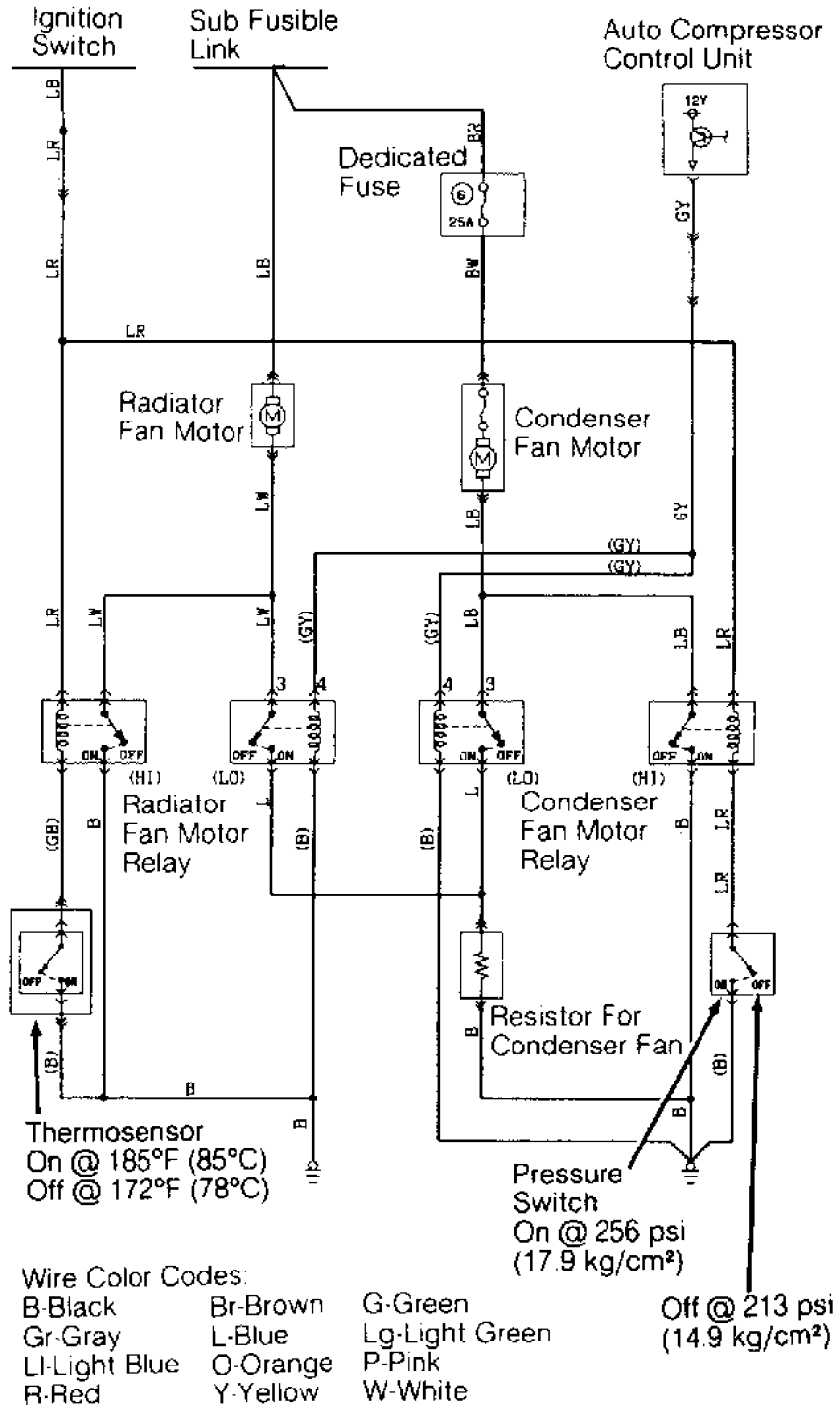


Fig. 7: Radiator Cooling Fan Wiring Diagram (Galant FWD & AWD M/T)  
 Courtesy of Mitsubishi Motor Sales of America.



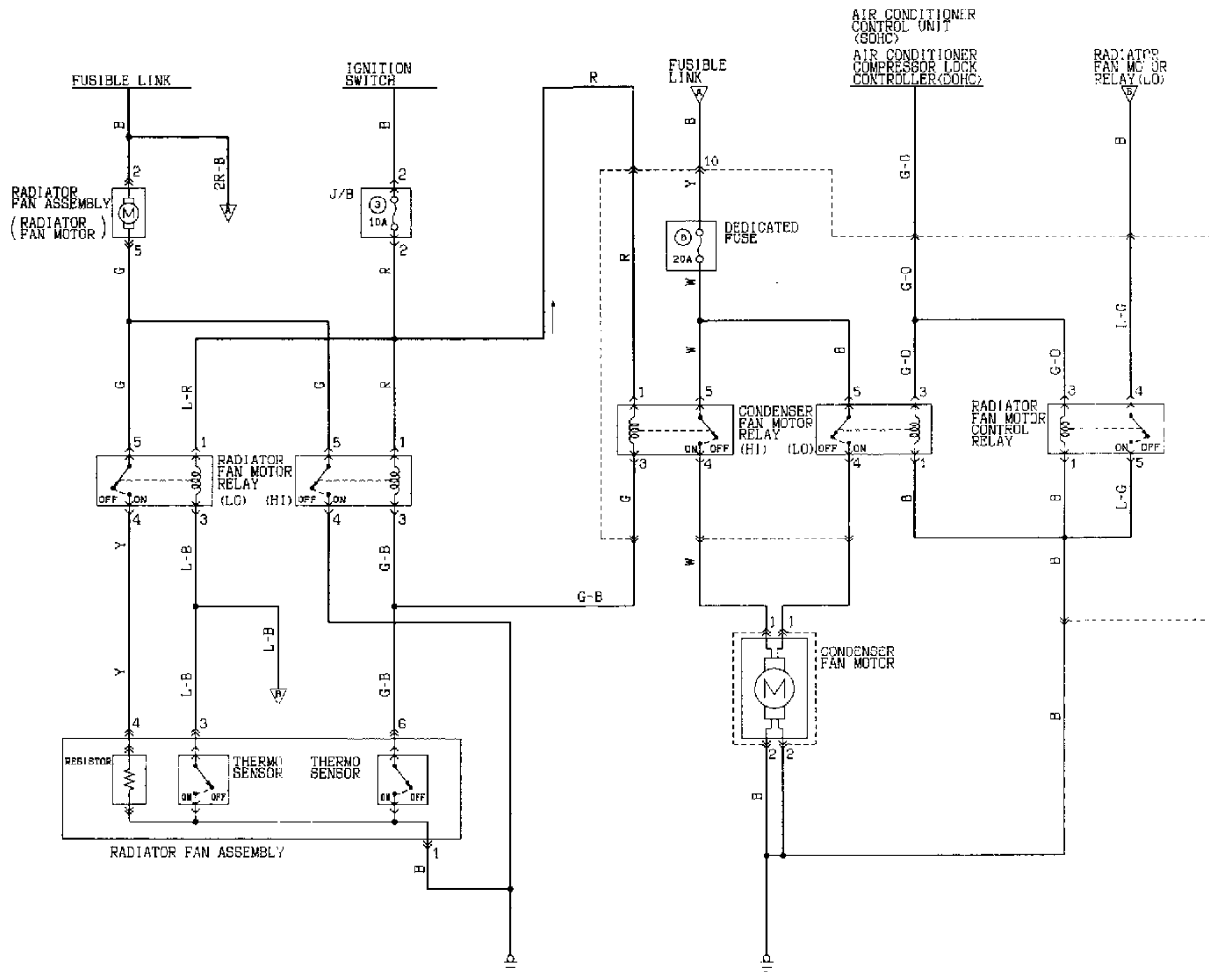


Fig. 8: Radiator Cooling Fan Wiring Diagram (3000GT)  
 Courtesy of Mitsubishi Motor Sales of America.