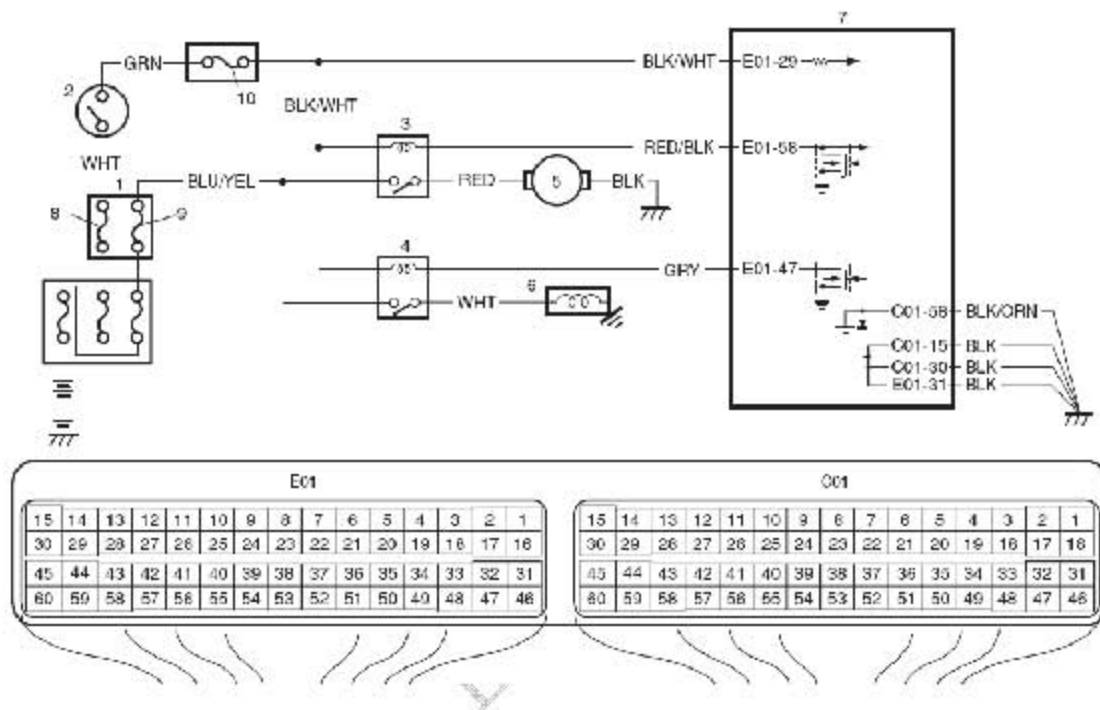


P0481: Cooling Fan 2 (A/C Condenser Fan) Control Circuit

Wiring Diagram



1.	Individual circuit fuse box No.1	5.	A/C condenser cooling fan motor	9.	"A/C" fuse
2.	Ignition switch	6.	A/C compressor	10.	"IG COIL" fuse
3.	A/C condenser cooling fan relay	7.	ECM		
4.	A/C compressor relay	8.	"FI" fuse		

Circuit Description

A/C condenser cooling fan motor is turned ON and OFF by its relay which ECM controls. A/C condenser cooling fan motor is turned ON when ECM outputs A/C ON signal or when engine coolant temp. is 110 ° C, 230 ° F or more.

DTC Detecting Condition and Trouble Area

DTC detecting condition	Trouble area
Monitor signal of A/C condenser cooling fan relay is different from command signal. (1 driving cycle detection logic but MIL does not light up)	<ul style="list-style-type: none"> • A/C condenser cooling fan relay circuit malfunction • A/C condenser cooling fan relay malfunction • ECM malfunction

DTC Confirmation Procedure

- 1) With ignition switch turned OFF, connect scan tool.
- 2) Turn ON ignition switch and clear DTC using scan tool.
- 3) Start engine and warm up engine to normal operating temperature.
- 4) Run engine at idle and turn both A/C switch and heater blower switch ON (turn ON air conditioning) for 3 min. or more.
- 5) Check DTC and pending DTC.

DTC Troubleshooting

Step	Action	Yes	No
3	Check wire circuit 1) Disconnect A/C compressor control relay (1) from individual circuit fuse box No.1 with ignition switch turned OFF. 2) Turn ON ignition switch, measure voltage between engine ground and "BLK/WHT" wire terminal of A/C condenser fan control relay connector. Is voltage 10 – 14 V?	Faulty A/C compressor control relay.	Go to Step 4.
4	Check wire circuit 1) Remove "A/C" fuse (10 A) from individual circuit fuse box No.1 with ignition switch turned OFF. 2) Measure resistance between "BLK/WHT" wire terminal of "A/C" fuse connector and vehicle body ground. Is resistance infinity?	Open wire in "BLK/WHT" circuit. If OK, go to Step 5.	"BLK/WHT" wire shorted to ground circuit.

Step	Action	Yes	No
5	<p>Check wire circuit</p> <p>1) Connect A/C condenser cooling fan control relay to individual circuit fuse box No.1 box with ignition switch turned OFF.</p> <p>2) Disconnect connectors from ECM.</p> <p>3) Turn ON ignition switch, measure voltage between vehicle body ground and "E01-58" wire terminal of ECM connector.</p> <p>Is voltage 10 – 14 V?</p>	Go to Step 9.	Go to Step 6.
6	<p>Check wire circuit</p> <p>1) Disconnect A/C condenser cooling fan control relay from individual circuit fuse box No.1 with ignition switch turned OFF.</p> <p>2) Measure resistance between "E01-58" wire terminal of ECM connector and vehicle body ground.</p> <p>Is resistance infinity?</p>	Go to Step 7.	"RED/BLK" wire shorted to ground circuit.
7	<p>Check wire circuit</p> <p>1) Turn ON ignition switch.</p> <p>2) Check voltage between "E01-58" wire terminal of ECM connector and vehicle body ground.</p> <p>Is voltage 0 V?</p>	Go to Step 8.	"RED/BLK" wire shorted to power supply circuit.
8	<p>Check A/C condenser cooling fan control relay</p> <p>1) Check A/C condenser cooling fan control relay referring to "A/C System Relay Inspection: Manual Type in Section 7B".</p> <p>Is result in good condition?</p>	Open wire in "RED/BLK" circuit.	Replace relay.