

P0617: Starter Relay Circuit High

Wiring Diagram

Refer to "DTC P0616: Starter Relay Circuit Low".

DTC Detecting Condition and Trouble Area

DTC detecting condition	Trouble area
Engine starter signal is high voltage for 180 seconds while engine is running. (2 driving cycle detection logic)	<ul style="list-style-type: none"> • Engine starter signal circuit •ECM

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 run it at idle for 3 min. or more.
- 4) Check DTC and pending DTC.

DTC Troubleshooting

Step	Action	Yes	No
1	Was "Engine and Emission Control System Check" performed?	Go to Step 2.	Go to "Engine and Emission Control System Check".
2	Starter signal check 1) Turn OFF ignition switch. 2) Remove ECM from its bracket with ECM connectors connected. 3) Start engine, measure voltage between "C01-48" terminal of ECM connector and vehicle body ground. Is voltage 0 – 1 V?	Intermittent trouble. Check for intermittent referring to "Intermittent and Poor Connection Inspection in Section 00". If OK, substitute a known-good ECM and recheck.	Go to Step 3.

Step	Action	Yes	No
3	<p>Wire circuit check</p> <ol style="list-style-type: none"> 1) Disconnect starting motor control relay in individual circuit fuse box No.1 with ignition switch turned OFF. 2) Check for proper connection to starting motor control relay at "RED/WHT", "RED", "WHT", and "YEL/GRN" wire terminals. 3) Disconnect connector from starting motor. 4) Measure voltage between "C01-48" terminal of ECM connector and vehicle body ground with ignition switch turned ON. <p>Is voltage 0 – 1 V?</p>	Go to Step 4.	"YEL/GRN" wire is shorted to power circuit. If wires are OK, substitute a known-good ECM and recheck.
4	<p>Wire circuit check</p> <ol style="list-style-type: none"> 1) Measure voltage between "RED/WHT" wire terminal of starting motor control relay connector and vehicle body ground with ignition switch turned ON. <p>Is voltage 0 – 1 V?</p>	Check starting motor control relay. If OK, substitute a known-good ECM and recheck.	Faulty ignition switch, check ignition switch referring to "Ignition Switch Inspection in Section 9C". If ignition switch is OK, check for short circuit between ignition switch and starting motor control relay to power circuit.