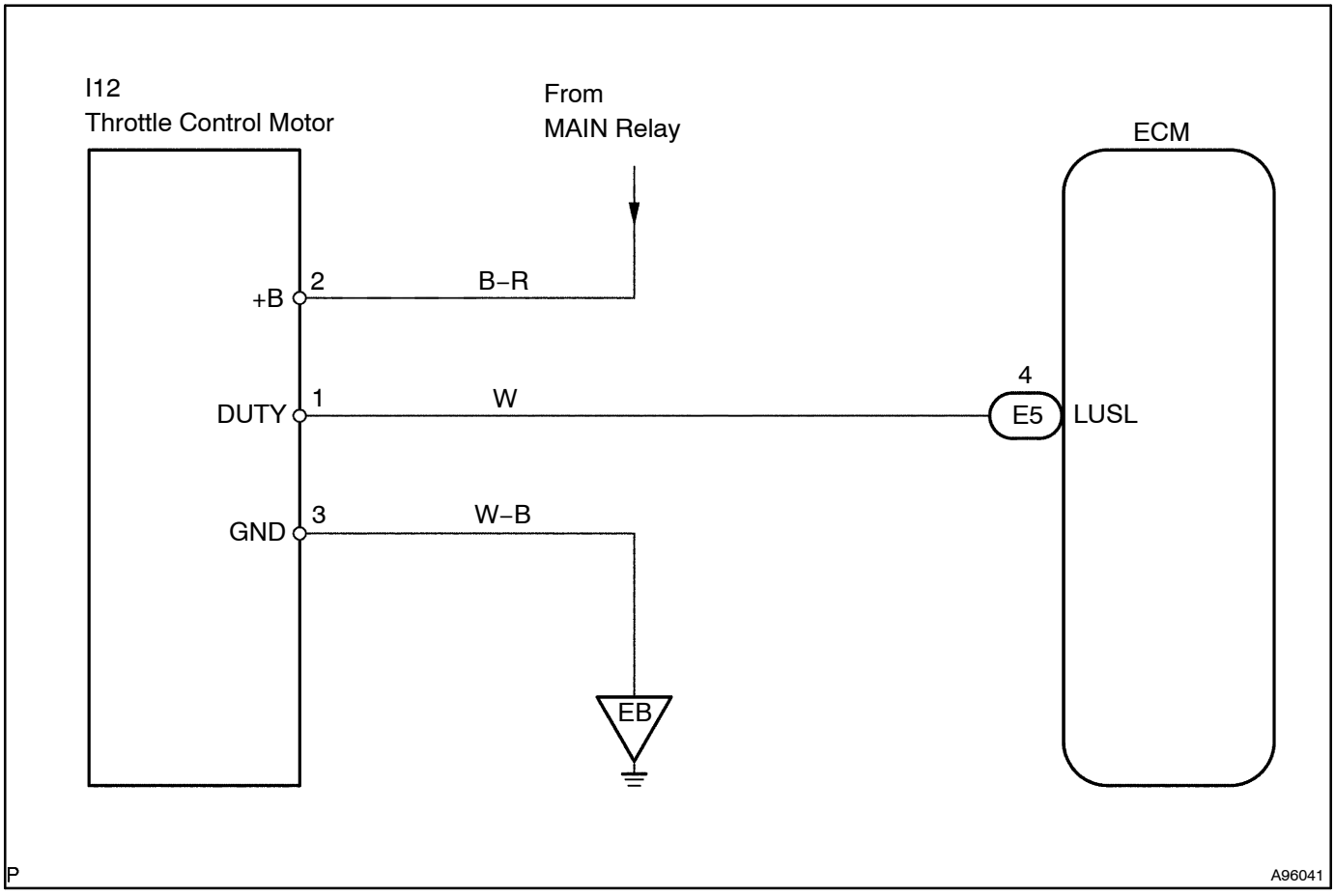
DTC	P0488/15	EXHAUST GAS RECIRCULATION THROTTLE POSITION CONTROL RANGE/PERFORMANCE

CIRCUIT DESCRIPTION

The throttle control motor opens and closes the throttle valve according to a duty–cycle (signal) from the ECM.

DTC No.	DTC Detection Condition	Trouble Area
P0488/15	Conditions (a) or (b) continue for more than 1 second (a) Battery voltage: 18.5 V or more Throttle motor's activation duty is out of the normal range (10 > activation duty ≧ 90) (b) Open, short or stuck in throttle sensor	• Open or short in throttle control motor circuit • Throttle control motor • ECM

WIRING DIAGRAM

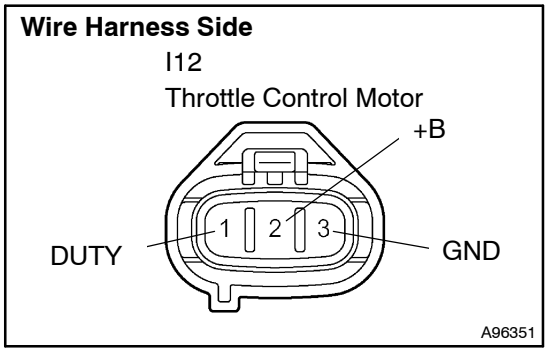


INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand–held tester. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1 CHECK THROTTLE CONTROL MOTOR (+B VOLTAGE)



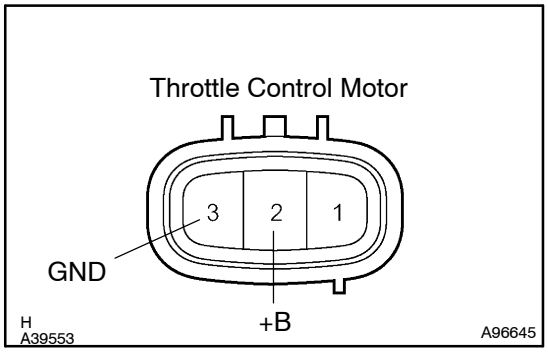
(a) Turn the ignition switch ON.
(b) Disconnect the I12 throttle control motor connector.
(c) Measure the voltage of the wire harness side connector.
Standard:

Tester Connection	Specified Condition
I12–2 (+B) – Body ground	18 to 27 V

NG → **Go to step 3**

OK

2 INSPECT THROTTLE CONTROL MOTOR



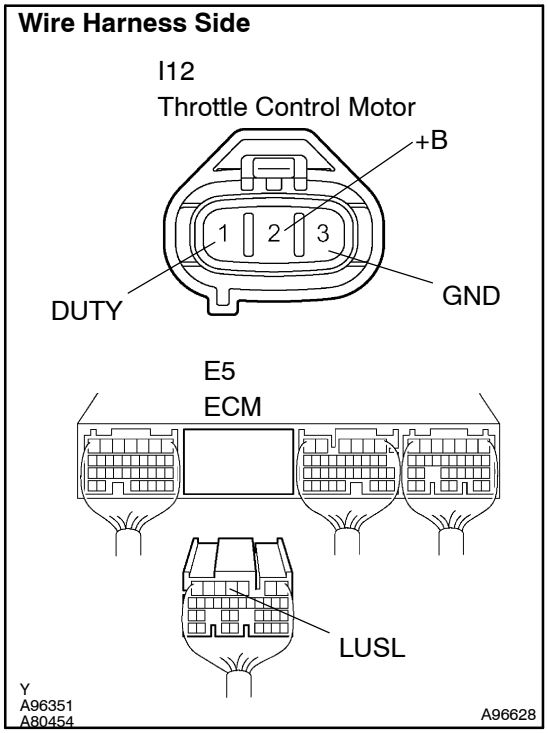
(a) Measure the resistance of the throttle control motor.
Standard:

Tester Connection	Specified Condition
I12–2 (+B) – I12–3 (GND)	2 to 10 kΩ

NG → **REPLACE THROTTLE CONTROL MOTOR**

OK

3 CHECK WIRE HARNESS (THROTTLE CONTROL MOTOR – ECM)



(a) Disconnect the I12 throttle control motor connector.
(b) Disconnect the E5 ECM connector.
(c) Measure the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
I12–1 (DUTY) – E5–4 (LUSL) I12–3 (GND) – Body ground	Below 1 Ω
I12–1 (DUTY) or E5–4 (LUSL) – Body ground	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ECM (See page 10–10)