DI8FH–01

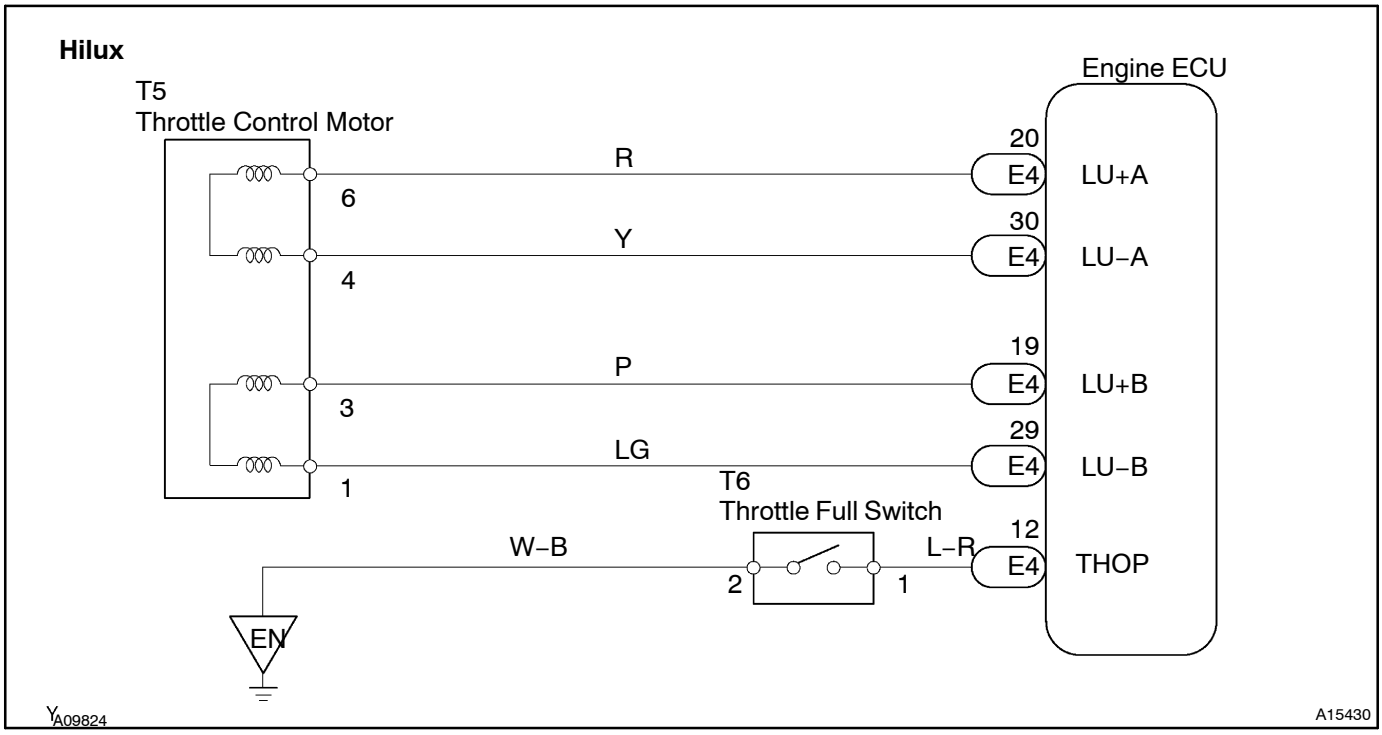
DTC	15	Throttle Control Motor Circuit Malfunction

CIRCUIT DESCRIPTION

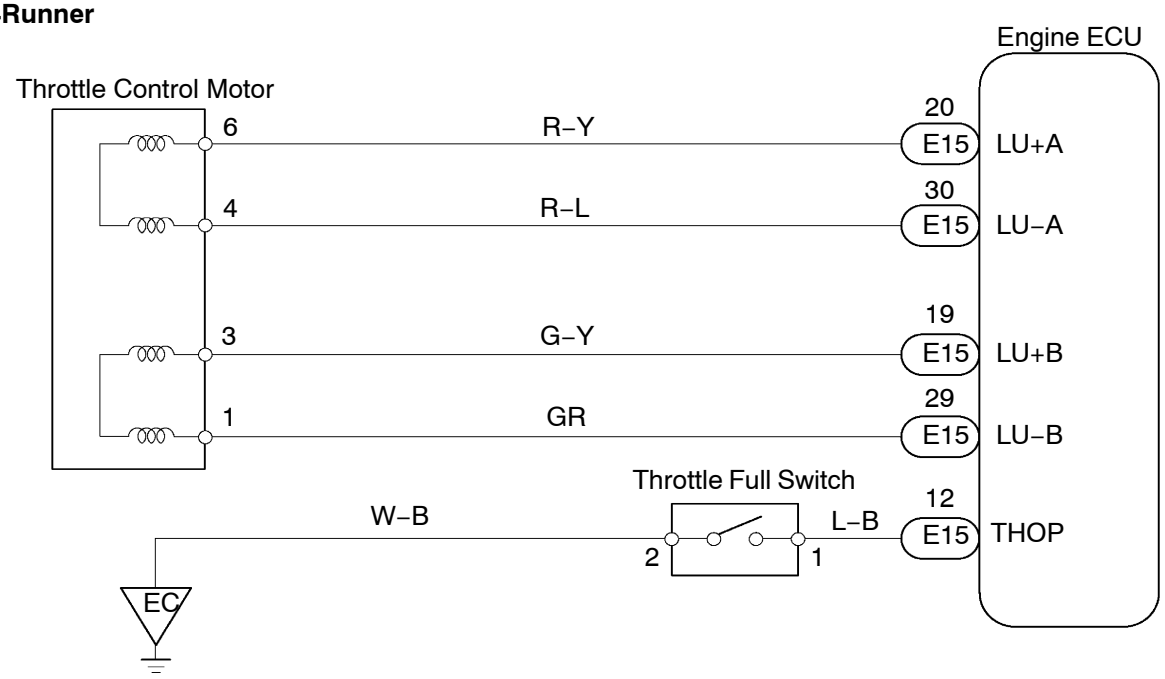
Throttle control motor is operated by the engine ECU and it opens and closes the throttle valve.
The fully opening of the throttle valve is detected by the throttle fully open position switch which is mounted on the throttle body.
If this DTC is stored, the engine ECU cuts the power for the throttle control motor.

DTC No.	DTC Detection Condition	Trouble Area
15	Open or short in throttle control motor circuit	• Open or short in throttle control motor circuit • Throttle control motor • Throttle valve • Throttle body • Engine ECU
	Open or short in throttle full switch circuit	

WIRING DIAGRAM

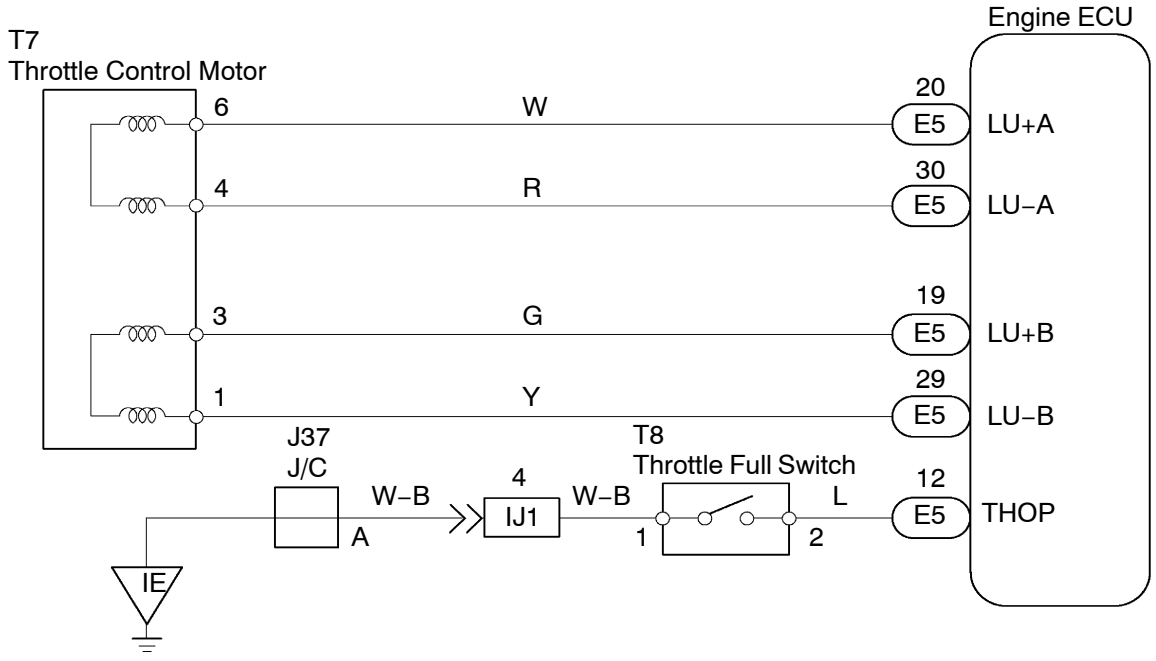


4Runner



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Land Cruiser/Land Cruiser Prado



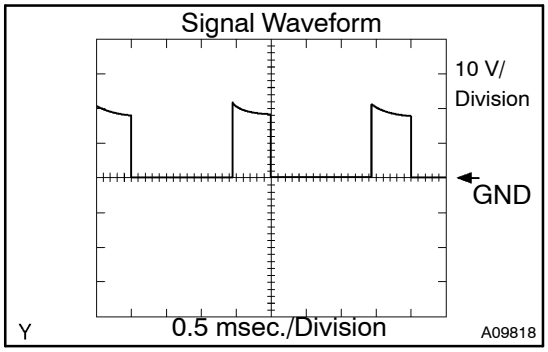
Y A09824

INSPECTION PROCEDURE

HINT:

Read freeze frame data using hand–held tester, as freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air–fuel ratio was lean or rich, etc. at the time of the malfunction.

1	**Check throttle control motor circuit.**



PREPARATION:

(a) Connect the oscilloscope between terminals LU+A/LU–A/LU+B/LU–B and E01 of the engine ECU connector.

(b) Start the engine.

CHECK:

Check the waveform between terminals LU+A/LU–A/LU+B/LU–B and E01 of the engine ECU connector when the engine is racing.

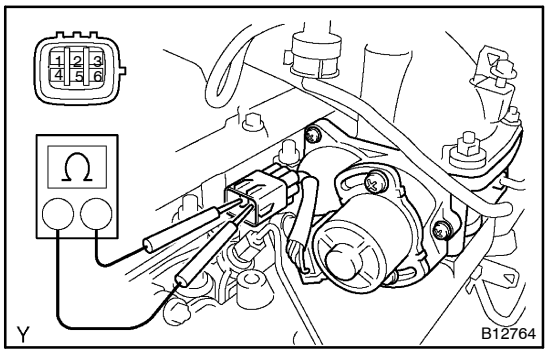
OK:

The correct waveform is as shown.

OK	**Check and replace engine ECU (See page IN–20).**

NG

2	**Check throttle control motor.**



PREPARATION:

Disconnect the throttle control motor connector.

CHECK:

- Measure the resistance between terminals 2 and 1/3 of the throttle control motor.
- Measure the resistance between terminals 5 and 4/6 of the throttle control motor.

OK:

Resistance: 18 – 22 Ω at 20°C (68°F)

NG	**Replace throttle body assembly (See page ED–1).**

OK

3	**Check for open and short in harness and connector between throttle control motor and engine ECU (See page IN–20).**

NG → **Repair or replace harness or connector.**

OK

Check and replace engine ECU.