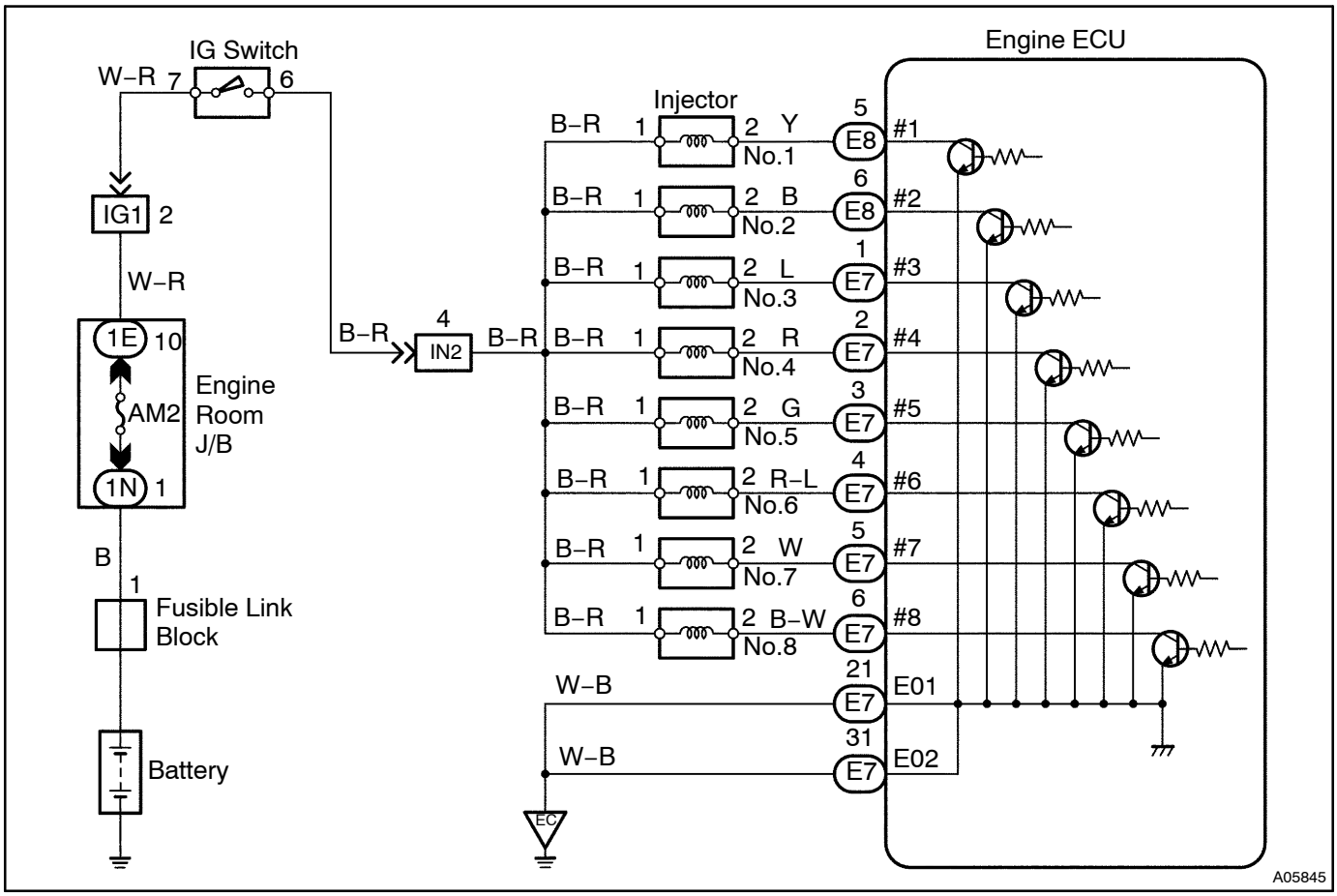
DI3PN–01

Injector Circuit

CIRCUIT DESCRIPTION

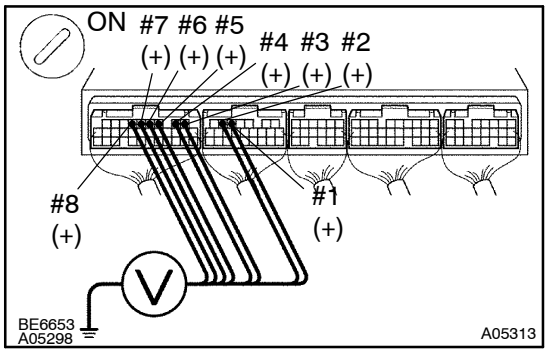
The injectors are provided to the intake manifold. They inject fuel into the cylinders based on the signals from engine ECU.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	**Check voltage of engine ECU terminal for injector of failed cylinder.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure voltage between applicable terminal of the engine ECU connector and body ground.

OK:

Voltage: 9 – 14 V

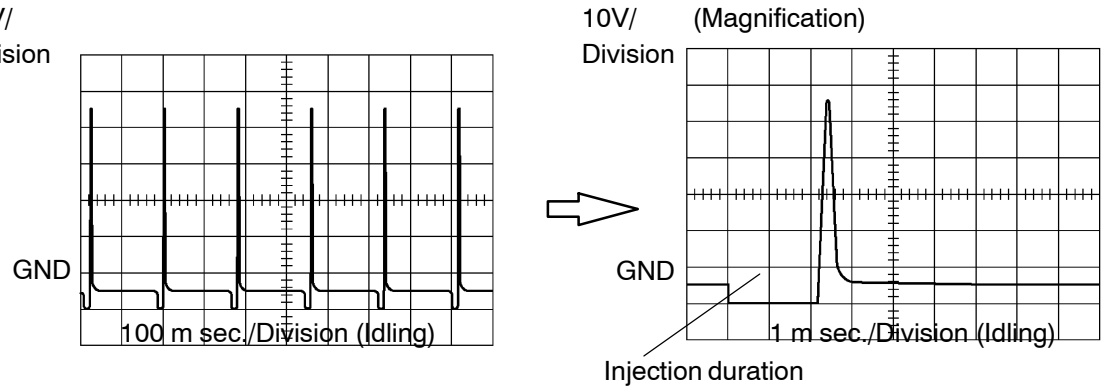
Reference INSPECTION USING OSCILLOSCOPE

With the engine idling, measure between terminals #1 ~ #8 and E01 of the engine ECU connector.

HINT:

The correct waveforms are as shown.

Injector Signal Waveform



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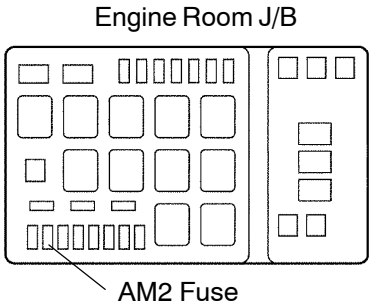
OK	**Go to step 4.**

NG

2	**Check AM2 fuse.**



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PREPARATION:

Remove the AM2 fuse from the engine room J/B.

CHECK:

Check continuity of the AM2 fuse.

OK:

Continuity

NG	**Check for short in harness and all components connected to AM2 fuse.**

OK

3	Check resistance of injectors (See page FI–24).

NG → Replace injector.

OK →

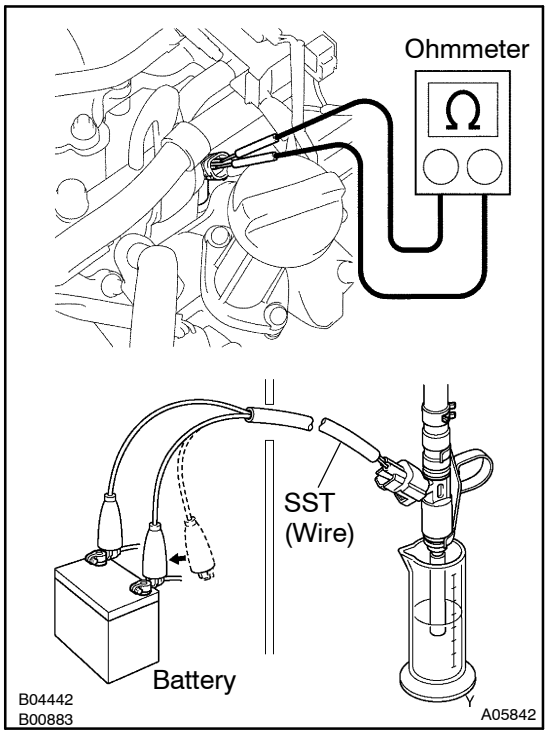
Check and repair harness and connector between engine ECU and battery.

4	Check for open in harness and connector between terminal E01 – E03 of engine ECU connector and body ground (See page IN–19).

NG → Repair or replace harness or connector.

OK →

5	Check injectors.



PREPARATION:
Disconnect the injector connectors.
CHECK:
Measure resistance of the injectors.
OK:

Resistance: 13.4 – 14.2 Ω at 20 °C (68 °F)

CHECK:
Check injection volume of the injectors.
OK:

Injection volume:
56 – 69 cm³ (3.4 – 4.2 cu in.)/ 15 sec.
Difference between each injector:
Less than 13 cm³ (0.8 cu in.)
Leakage
Fuel drop: One drop or less per 12 minutes

OK → **Proceed to next circuit inspection shown on problem symptoms table (See page DI–25).**

NG

Replace injector(s).