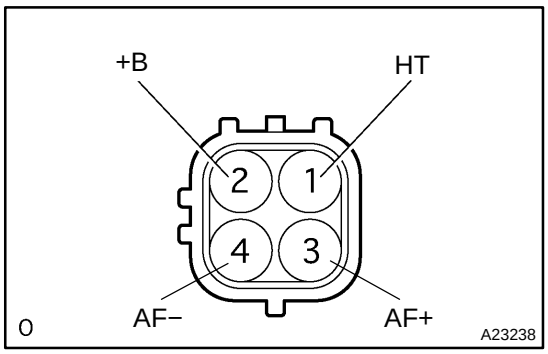


AIR−FUEL RATIO (A/F) SENSOR

SF1ZC−01

INSPECTION

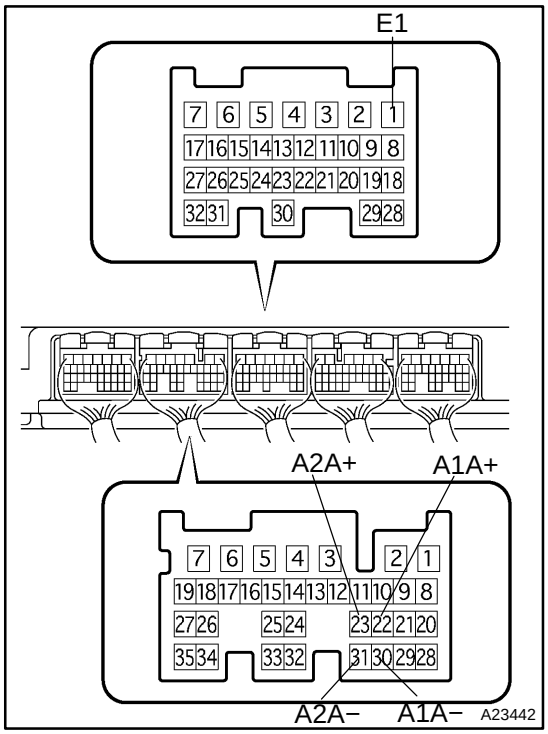
1. INSPECT AIR FUEL RATIO SENSOR (BANK1, BANK2 AIR FUEL RATIO SENSOR)

Using an ohmmeter, measure the resistance between the terminals.

Resistance:

Terminal No.	Resistance
1 (HT) ⇔ 2 (+B)	1.8 to 3.4 Ω at 20 °C (68 °F)
1 (HT) ⇔ 2 (+B)	5.0 to 7.5 Ω at 500 °C (932 °F)
1 (HT) ⇔ 4 (AF−)	No Continuity

If the resistance is not as specified, replace the sensor.



2. INSPECT AIR−FUEL RATIO COMPENSATION SYSTEM

(a) Measure the voltage between terminals of the ECM.

Standard voltage:

Terminal No.	Condition	Voltage
A1A+ ⇔ E1	IG switch ON	3.3V
A1A− ⇔ E1	IG switch ON	3.0V
A2A+ ⇔ E1	IG switch ON	3.3V
A2A− ⇔ E1	IG switch ON	3.0V

NOTICE:

Connect test leads from the back side of the ECM connector.

HINT:

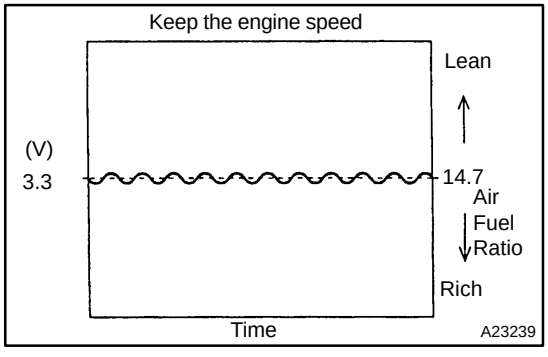
The voltage between terminals of the ECM is kept constant regardless of the voltage of the A/F sensor.

(b) Connect the hand−held tester to the DLC3.

(c) Select ”DATA MONITOR” − ”A/FS B1 S1”, ”A/FS B2 S1” and ”O2S B1 S2” to display the monitor.

(d) Warm up the A/F sensor by running the engine at 2,500 rpm for approx. 2 minutes.

(e) Keep the engine speed at 2,500 rpm and confirm that the displays of the ”A/FS B1 S1” and ”A/FS B2 S1” are similar to the illustration on the left.



NOTICE:

The illustration differs from the real display.

HINT:

The waveform of the A/F sensor is displayed only on the hand−held tester.

(f) Confirm that the display of the ”O2S B1 S2” changes between 0V to 1V with the engine speed at 2,500 rpm.