



## REFERENCE VALUE OF ECM DATA

HINT: ECM data can be monitored by TOYOTA hand-held tester.

1. Hook up the TOYOTA hand-held tester to DLC1.
2. Monitor ECM data by following the prompts on the tester screen.

Please refer to the TOYOTA hand-held tester operator's manual for further details.

## REFERENCE VALUE FOR ECM DATA (Engine at normal operating temperature)

Item	Inspection condition	Reference value
INJECTOR	Engine cold to hot Engine idling at normal operating temperature *1	Gradually decreases Approx. 2.2 – 2.7 m secs
IGNITION	Increase engine rpm	Gradually increases
ENGINE SPEED	RPM kept stable (Comparison with tachometer)	No great changes
VAF	Engine idling at normal operating temperature *1 Increase engine speed	Approx. 2.2 – 3.4 V Gradually increases
ECT	Engine at normal operating temperature	75 – 95° C (167 – 203° F) *2
THROTTLE	Closed throttle position Wide open throttle From closed throttle position to wide open throttle	Below 5° Above 70° Gradually increases
VEHICLE SPD	During driving (Comparison with "odometer)	No large differences
TARGET A / F No.1	Engine idling	2.50 ± 1.25 V *3
KNOCK FS	Depress throttle pedal suddenly during idling	ON
A/F FB No. 1	RPM stable at 2,500 rpm	ON
STA SIGNAL	During cranking	ON
CTP SIGNAL	Closed throttle position	ON
A/C SIGNAL	A/C switch ON	ON
PNP SIGNAL *4	–	GEAR
Ox No. 1	RPM stable at 2,500 rpm	RICH LEAN is repeated

\*1: All accessories and A/C are switched OFF.

\*2: If the engine coolant temperature sensor circuit is open or shorted, the ECM assumes an engine coolant temperature value of 80° C (176° F).

\*3: When feedback control is forbidden, 0 V is displayed.

\*4: A/T only.