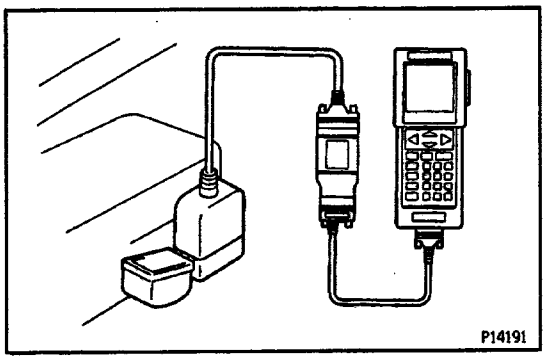

REFERENCE VALUE OF ECM DATA

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 temp.)

Item	Inspection condition	Reference value
INJECTOR	Engine cold to hot Engine idling at normal operating temp. *1	Gradually decreases Approx. 2 msecs
IGNITION	Increase engine rpm	Gradually increases
ENGINE SPEED	RPM kept stable (Comparison with tachometer)	No great changes
VAF	Engine idling . Increase engine speed	Approx.6 nf/h Gradually increases
ECT	Engine at normal operating temp.	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 increase
SPD	During driving (Comparison with speedometer)	No large differences
TARGET A / F No.1	Engine idling at normal operating temp.	2.50 ± 1.25 V *3
A/F FB No. 1	RPM stable at 2500 rpm with normal operating temp.	ON
A/F FB No.2	RPM stable at 2500 rpm with normal operating temp.	ON
STA SIGNAL	During cranking	ON
KNOCK F6	Depress throttle pedal suddenly during idling	ON
CTP SIGNAL	Closed throttle position	ON
PNP SIGNAL *4	When shifting from 'N' position into a position other than 'N'	GEAR
Ox No. 1	RPM stable at 2500 rpm with normal operating temp.	RICH LEAN is repeated

*1: All accessories and A/C are switched OFF.
*2: If the engine coolant temp. sensor circuit is open or shorted, the ECM assumes an engine coolant temp. value of 80˚C (176˚ F).
*3: When feedback control is forbidden, 0 V is displayed.
*4: A/T only.