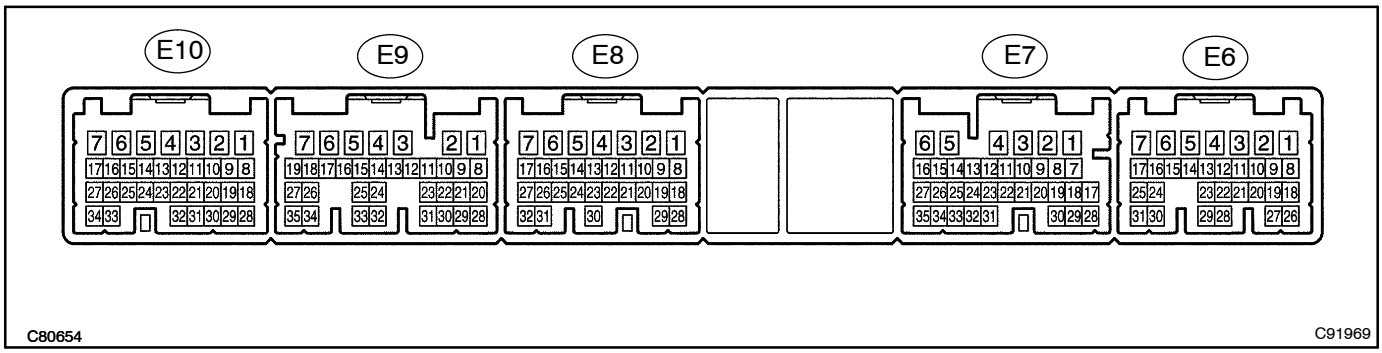
05FS0–01

TERMINALS OF ECM

1AZ–FE, 2AZ–FE:

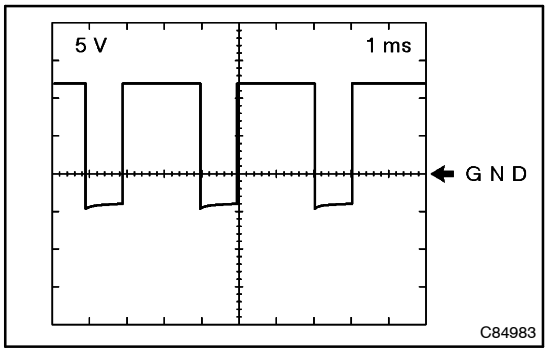


Each ECM terminals standard normal voltage is shown in the table below.
In the table, first follow the information under ”Condition”. Look under ”Symbols (Terminal No.)”for the terminals to be inspected. The standard normal voltage between the terminals is shown under ”Specific Condition”.
Use the illustration above as a reference for the ECM terminals.

Symbols (Terminal No.)	Wiring Color	Condition	STD Voltage
ODLP (E7–7) ⇔ E1 (E8–1)	O ⇔ BR	O/D main switch ON (O/D OFF)	Below 3 V
		O/D main switch OFF (O/D ON)	9 – 14 V
L (E7–8) ⇔ E1 (E8–1)	Y ⇔ BR	IG switch ON Shift lever L range	10 – 14 V
		IG switch ON Shift lever other than L range	Below 1 V
2 (E7–9) ⇔ E1 (E8–1)	L–W ⇔ BR	IG switch ON Shift lever 2 range	10 – 14 V
		IG switch ON Shift lever other than 2 range	Below 1 V
D (E7–10) ⇔ E1 (E8–1)	W–L ⇔ BR	IG switch ON Shift lever D range	10 – 14 V
		IG switch ON Shift lever other than D range	Below 1 V
R (E7–11) ⇔ E1 (E8–1)	R–B ⇔ BR	IG switch ON Shift lever R range	10 – 14 V
		IG switch ON Shift lever other than R range	Below 1 V
SPD (E7–17) ⇔ E1 (E8–1)	V–W ⇔ BR	IG switch ON	4.5 – 5.5 V
ODMS (E7–29) ⇔ E1 (E8–1)	G–O ⇔ BR	IG switch ON	10 – 14 V
		IG switch ON Press continuously O/D main switch	Below 1 V
KD*1 (E7–30) ⇔ E1 (E8–1)	R*1 ⇔ BR	IG switch ON and kick–down switch ON	Below 1 V
		IG switch ON and kick–down switch OFF	10 – 14 V
NSW (E9–8) ⇔ E1 (E8–1)	B–Y ⇔ BR	IG ON and shift lever P or N range	Below 1 V
		IG ON and shift lever other than P or N range	10 – 14 V
DSL (E9–11) ⇔ E1 (E8–1)	Y ⇔ BR	IG switch ON	Below 1 V
		Vehicle driving under lock–up range	10 – 14 V
S4 (E9–13) ⇔ E1 (E8–1)	L ⇔ BR	IG switch ON	Below 1 V
		O/D gear	10 – 14 V
		Except O/D gear	Below 1 V
SL2+ (E9–17) ⇔ SL2– (E9–16)	L–Y ⇔ L–R	IG switch ON	Below 1 V
		1st or 2nd gear	10 – 14 V
		3rd or O/D gear	Below 1 V
SL1+ (E9–19) ⇔ SL1– (E9–18)	R–B ⇔ P	IG switch ON	10 – 14 V
		1st gear	10 – 14 V
		Except 1st gear	Below 1 V
NC+ (E9–26) ⇔ NC– (E9–34)	R ⇔ G	Engine is running	Below 1 and 4 – 5 V

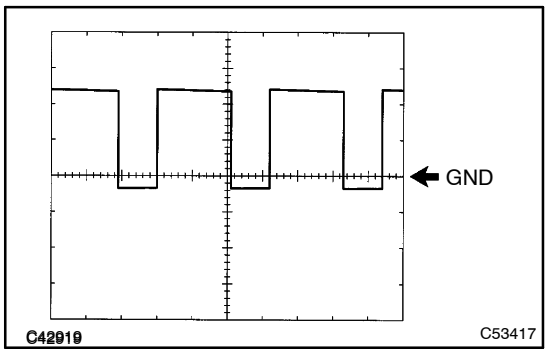
NT+ (E9–27) ⇔ NT– (E9–35)	L ⇔ LG	Engine is running	Below 1 and 4 – 5 V
SLT+ (E10–17) ⇔ SLT– (E10–16)	Y–R ⇔ Y–B	IG switch ON	10 – 14 V
THO (E10–30) ⇔ E2 (E10–28)	G ⇔ BR	ATF temperature: 115 °C (239 °F) or more	Below 1.5 V

*1: Europe LHD



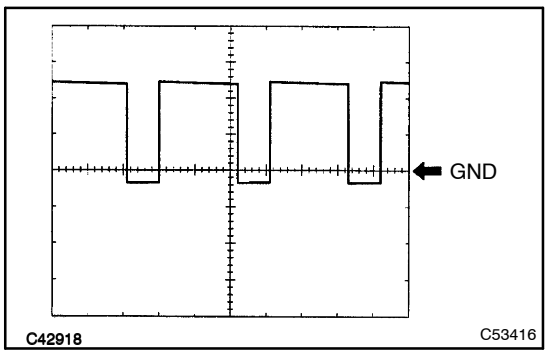
Reference:

Irem	Condition
Terminal	SLT+ – SLT–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



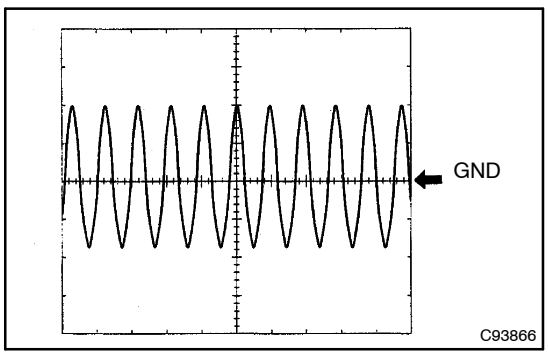
Reference:

Irem	Condition
Terminal	SL1+ – SL1–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



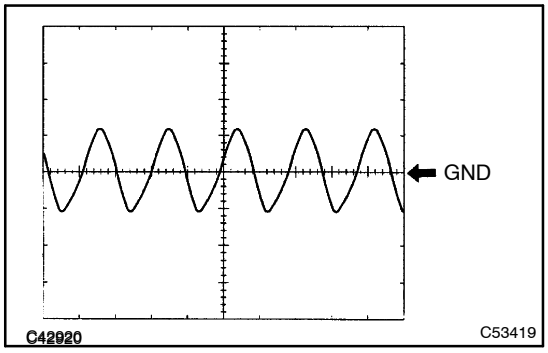
Reference:

Irem	Condition
Terminal	SL2+ – SL2–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



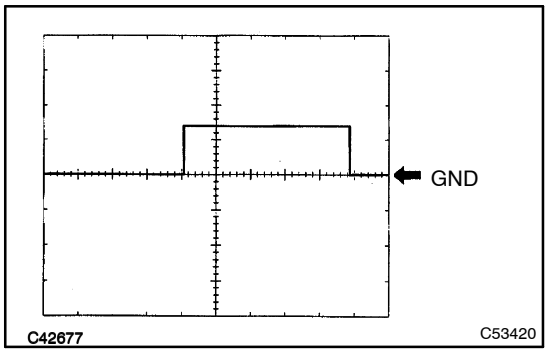
Reference:

Irem	Condition
Terminal	NC+ – NC–
Tool setting	1V/DIV, 1ms/DIV
Vehicle condition	Vehicle speed 30 km/h (19 mph): (3rd gear) Engine speed 1,400 rpm



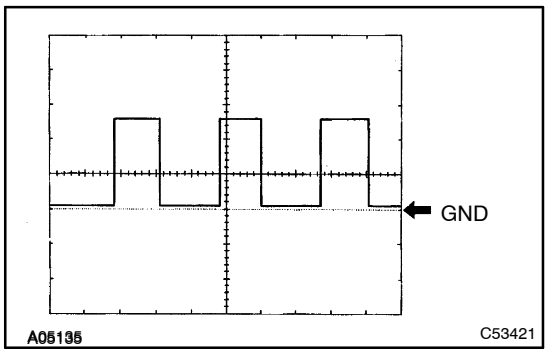
Reference:

Irem	Condition
Terminal	NT+ – NT–
Tool setting	5V/DIV, 0.5ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)



Reference:

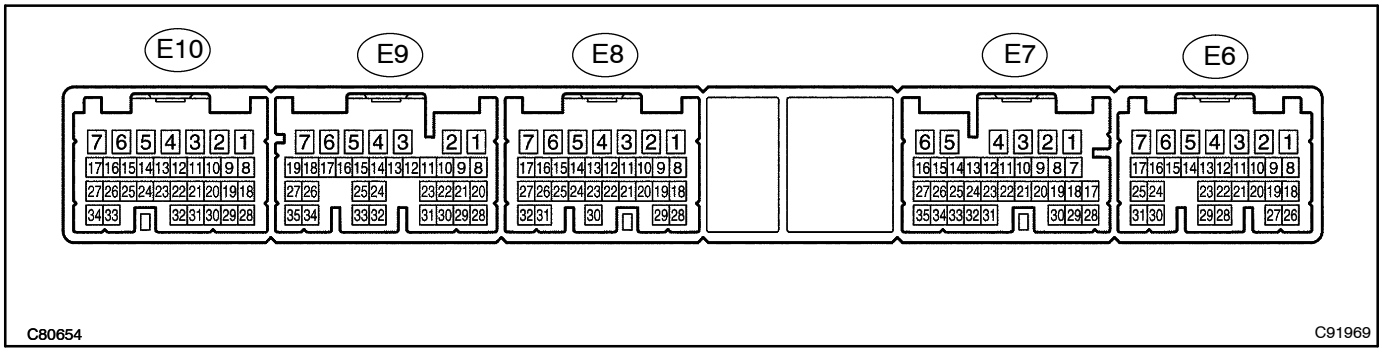
Irem	Condition
Terminal	DSL – E1
Tool setting	10V/DIV, 100ms/DIV
Vehicle condition	Vehicle speed 50 km/h (31 mph): (3rd ⇔ O/D)



Reference:

Irem	Condition
Terminal	SPD – E1
Tool setting	5V/DIV, 20ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)

1MZ–FE:

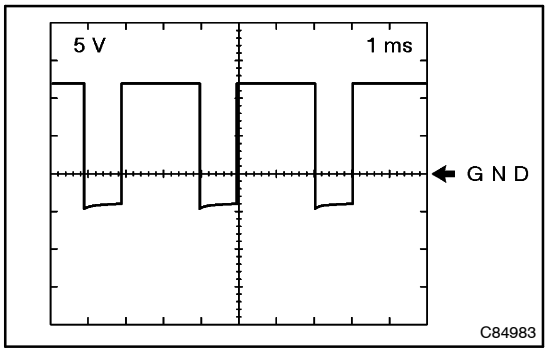


Each ECM terminals standard normal voltage is shown in the table below.
In the table, first follow the information under ”Condition”. Look under ”Symbols (Terminal No.)”for the terminals to be inspected. The standard normal voltage between the terminals is shown under ”Specific Condition”.
Use the illustration above as a reference for the ECM terminals.

Symbols (Terminal No.)	Wiring Color	Condition	STD Voltage
ODMS (E6–16) ⇔ E1 (E8–1)	G–O ⇔ BR	IG switch ON	10 – 14 V
		IG switch ON Press continuously O/D main switch	Below 1 V
ODLP (E7–7) ⇔ E1 (E8–1)	O ⇔ BR	O/D main switch ON (O/D OFF)	Below 3 V
		O/D main switch OFF (O/D ON)	9 – 14 V
L (E7–8) ⇔ E1 (E8–1)	Y ⇔ BR	IG switch ON Shift lever L range	10 – 14 V
		IG switch ON Shift lever other than L range	Below 1 V
2 (E7–9) ⇔ E1 (E8–1)	L–W ⇔ BR	IG switch ON Shift lever 2 range	10 – 14 V
		IG switch ON Shift lever other than 2 range	Below 1 V
D (E7–10) ⇔ E1 (E8–1)	W–L ⇔ BR	IG switch ON Shift lever D range	10 – 14 V
		IG switch ON Shift lever other than D range	Below 1 V
R (E7–11) ⇔ E1 (E8–1)	R–B ⇔ BR	IG switch ON Shift lever R range	10 – 14 V
		IG switch ON Shift lever other than R range	Below 1 V
SPD (E7–17) ⇔ E1 (E8–1)	V–W ⇔ BR	IG switch ON	4.5 – 5.5 V
KD*1 (E7–30) ⇔ E1 (E8–1)	R*1 ⇔ BR	IG switch ON and kick–down switch ON	Below 1 V
		IG switch ON and kick–down switch OFF	10 – 14 V
NSW (E9–8) ⇔ E1 (E8–1)	B–Y ⇔ BR	IG ON and shift lever P or N range	Below 1 V
		IG ON and shift lever other than P or N range	10 – 14 V
DSL (E9–11) ⇔ E1 (E8–1)	Y ⇔ BR	IG switch ON	Below 1 V
		Vehicle driving under lock–up range	10 – 14 V
S4 (E9–13) ⇔ E1 (E8–1)	L ⇔ BR	IG switch ON	Below 1 V
		O/D gear	10 – 14 V
		Except O/D gear	Below 1 V
SL2+ (E9–17) ⇔ SL2– (E9–16)	L–Y ⇔ L–R	IG switch ON	Below 1 V
		1st or 2nd gear	10 – 14 V
		3rd or O/D gear	Below 1 V
SL1+ (E9–19) ⇔ SL1– (E9–18)	R–B ⇔ P	IG switch ON	10 – 14 V
		1st gear	10 – 14V
		Except 1st gear	Below 1 V
NC+ (E9–26) ⇔ NC– (E9–34)	R ⇔ G	Engine is running	Below 1 and 4 – 5 V
NT+ (E9–27) ⇔ NT– (E9–35)	L ⇔ LG	Engine is running	Below 1 and 4 – 5 V

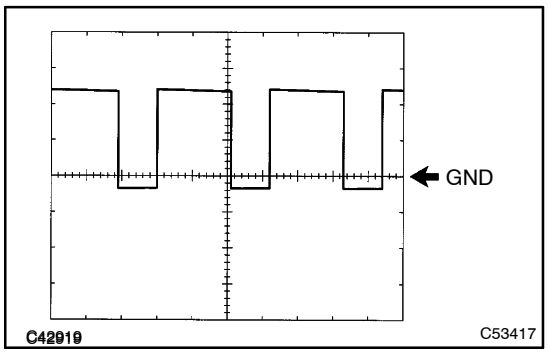
SLT+ (E10–17) ⇔ SLT– (E10–16)	Y–R ⇔ Y–B	IG switch ON	10 – 14 V
THO (E10–30) ⇔ E2 (E10–28)	G ⇔ BR	ATF temperature: 115 °C (239 °F) or more	Below 1.5V

*1: Europe LHD



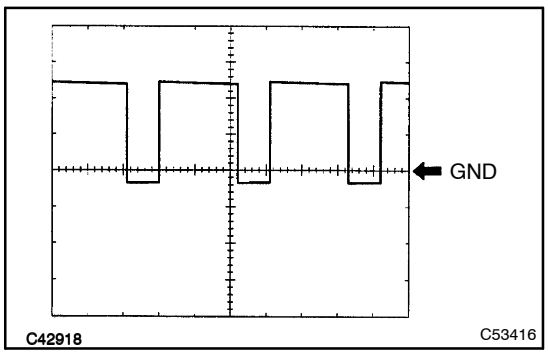
Reference:

Irem	Condition
Terminal	SLT+ – SLT–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



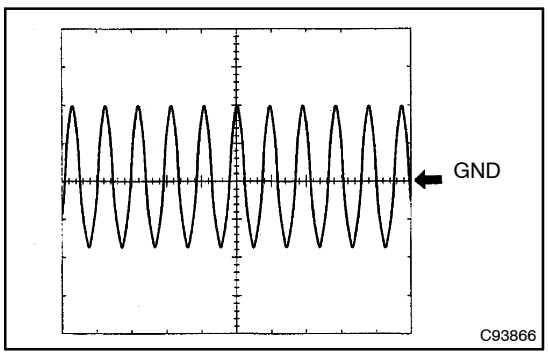
Reference:

Irem	Condition
Terminal	SL1+ – SL1–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



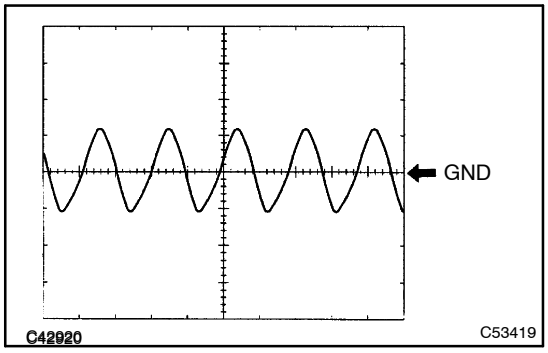
Reference:

Irem	Condition
Terminal	SL2+ – SL2–
Tool setting	5V/DIV, 1ms/DIV
Vehicle condition	Engine idle speed



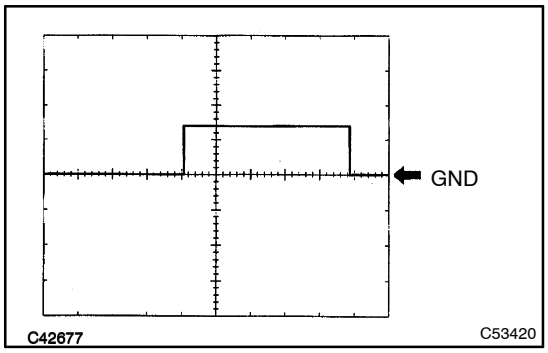
Reference:

Irem	Condition
Terminal	NC+ – NC–
Tool setting	1V/DIV, 1ms/DIV
Vehicle condition	Vehicle speed 30 km/h (19 mph): (3rd gear) Engine speed 1,400 rpm



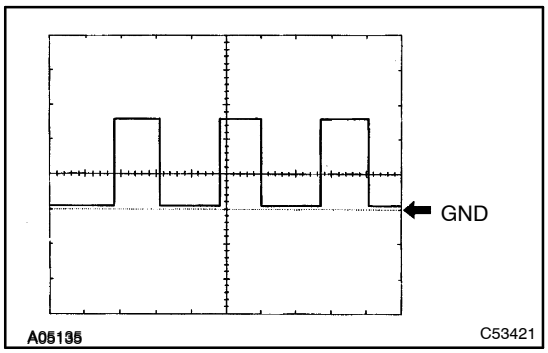
Reference:

Irem	Condition
Terminal	NT+ – NT–
Tool setting	5V/DIV, 0.5ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)



Reference:

Irem	Condition
Terminal	DSL – E1
Tool setting	10V/DIV, 100ms/DIV
Vehicle condition	Vehicle speed 50 km/h (31 mph): (3rd ⇔ O/D)



Reference:

Irem	Condition
Terminal	SPD – E1
Tool setting	5V/DIV, 20ms/DIV
Vehicle condition	Vehicle speed 20 km/h (12 mph)