

ECT AND A/T INDICATOR

SYSTEM OUTLINE

1. GEAR SHIFT OPERATION

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the EFI water temp. sensor and the vehicle speed signal from speed sensor (ECT) is input to TERMINAL NT+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINAL VTA of the engine and ECT ECU as throttle angle signal.

Based on these signals, the engine and ECT ECU selects the best shift position for the driving conditions and sends current to the ECT solenoid.

2. E-SHIFT SYSTEM (2ZZ-GE)

When the shift lever is set to the M position, the shift range can be switched with the UP or DOWN switch on the steering. (This limits to the maximum gear step and enables automatic shift-up and shift-down within the allowable range.)

SERVICE HINTS

E1 ECT SOLENOID

2-8 : **5.1-5.5 Ω**

3-9 : **3.5-3.9 Ω**

4-10 : **5.1-5.5 Ω**

5, 6, 11, 12-GROUND : **11-15 Ω**

S2 SPEED SENSOR (TURBINE SPEED SENSOR)

1-2 : **560-680 Ω**

O1 O/D DIRECT CLUTCH SPEED SENSOR

1-2 : **560-680 Ω**

E4 (B), E6 (D) ENGINE AND ECT ECU

BATT-E1 : Always approx. **12 volts**

+B-E1 : Approx. **12 volts** with ignition SW **ON** or **ST** position

MREL-E1 : Approx. **12 volts** with ignition SW **ON** or **ST** position

N1 A/T INDICATOR LIGHT SW [NEUTRAL START SW]

3-1 : Closed with shift lever in **P** position

3-2 : Closed with shift lever in **R** position

3-5 : Closed with shift lever in **N** position

3-7 : Closed with shift lever in **D** position

3-4 : Closed with shift lever in **2** position

3-8 : Closed with shift lever in **L** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A9	96 (RHD 2ZZ-GE)	E2	96 (RHD 2ZZ-GE)	J10	99 (RHD)
B6	A 98 (RHD)	E3	A 96 (RHD 2ZZ-GE)	N1	97 (RHD 2ZZ-GE)
B7	B 98 (RHD)	E4	B 96 (RHD 2ZZ-GE)	O1	97 (RHD 2ZZ-GE)
C11	A 98 (RHD)	E5	C 96 (RHD 2ZZ-GE)	O3	99 (RHD)
C12	B 98 (RHD)	E6	D 96 (RHD 2ZZ-GE)	S2	97 (RHD 2ZZ-GE)
C15	98 (RHD)	J1	97 (RHD 2ZZ-GE)	S9	99 (RHD)
C17	98 (RHD)	J2	97 (RHD 2ZZ-GE)	T1	97 (RHD 2ZZ-GE)
D1	98 (RHD)	J3	99 (RHD)		
E1	96 (RHD 2ZZ-GE)	J8	99 (RHD)		

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	81	Engine Room Main Wire and Instrument Panel J/B (Instrument Panel Brace RH)
IF	81	Instrument Panel Wire and Instrument Panel J/B (Instrument Panel Brace RH)
II		
IK		
IM		
IN	81	Floor Wire and Instrument Panel J/B (Instrument Panel Brace RH)
2C	79	Engine Wire and Engine Room J/B (Engine Compartment Left)
2F	79	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2G		
2H		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	112 (RHD 2ZZ-GE)	Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B No.1)
IE3	114 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Instrument Panel Brace LH)
IE4		
IE5		
IF2	116 (RHD)	Floor Wire and Instrument Panel Wire (Instrument Panel Brace LH)

 : GROUND POINTS

Code	See Page	Ground Points Location
EB	112 (RHD 2ZZ-GE)	Front Left Fender
EC	112 (RHD 2ZZ-GE)	Cylinder Head Cover LH
ED		
IE	114 (RHD)	Cowl Side Panel LH
IF	114 (RHD)	Instrument Panel Brace RH

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	112 (RHD 2ZZ-GE)	Engine Wire			