

## System Outline

This system has realized the following functions by adding motor-actuator, multi-mode manual transmission ECU, electronic throttle, various sensors and exclusive shift lever to conventional manual transmission.

- (1) Automation of the clutch operation (Without clutch pedal)
- (2) Selecting optimum gear for the driving conditions such as throttle opening and vehicle speed when automatic transmission mode is selected.
- (3) Driver's intentional driving by operating shift lever to + (Up-shift) or to - (Down-shift) when manual transmission mode is selected.

## Service Hints

### M2 (B), M3 (C) Multi-mode Manual Transmission ECU

- (B) 1-Ground : Always approx. 12 volts  
 (B) 3-Ground : Approx. 12 volts with the engine start/stop SW at IG ON position  
 (C) 8-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A18	44 (LHD)	J4	55 (RHD)	P3	46 (LHD)
	54 (RHD)		45 (LHD)		56 (RHD)
B1	40 (*1)	J10	B	P5	46 (LHD)
	50 (*3)		A		56 (RHD)
C5	40 (*1)	J11	B	S1	41 (*1)
	50 (*3)		A		51 (*3)
C6	40 (*1)	J12	B	S2	41 (*1)
	50 (*3)		A		51 (*3)
C7	40 (*1)	J16	45 (LHD)	S3	41 (*1)
	50 (*3)		55 (RHD)		51 (*3)
C14	44 (LHD)	J17	A	S4	41 (*1)
	54 (RHD)		55 (RHD)		51 (*3)
D5	45 (LHD)	J18	B	S5	41 (*1)
	55 (RHD)		A		51 (*3)
E4	45 (LHD)	J19	45 (LHD)	A	41 (*1)
	55 (RHD)		55 (RHD)		51 (*3)
E5	45 (LHD)	J21	A	B	41 (*1)
	55 (RHD)		45 (LHD)		51 (*3)
E6	45 (LHD)	J22	55 (RHD)	S12	47 (LHD)
	55 (RHD)		55 (RHD)		57 (RHD)
E7	45 (LHD)	J23	55 (RHD)	S17	47 (LHD)
	55 (RHD)		55 (RHD)		57 (RHD)
E8	45 (LHD)	J24	B	T2	41 (*1)
	55 (RHD)		46 (LHD)		51 (*3)
I8	45 (LHD)	K4	46 (LHD)	T5	41 (*1)
	55 (RHD)		56 (RHD)		51 (*3)
J3	45 (LHD)	M1	A	T15	47 (LHD)
J4	45 (LHD)		46 (LHD)		57 (RHD)
		M2	B		
			46 (LHD)		
		M3	C		
			46 (LHD)		
		N1	41 (*1)		
			51 (*3)		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24 (*5)	Engine Room R/B No.1 (Engine Compartment Left)
4	27	Engine Room R/B No.4 (Left Side of the Suspension Tower)
5	28	Fuse Block (Lower Finish Panel)

\* 1 : LHD 1ZZ-FE, 3ZZ-FE \* 2 : LHD 1CD-FTV \* 3 : RHD 1ZZ-FE, 3ZZ-FE \* 4 : RHD 1CD-FTV \* 5 : 1ZZ-FE, 3ZZ-FE \* 6 : 1CD-FTV

# Multi-mode Manual Transmission



## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
CA	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CC	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CD	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CF	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CH	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CJ	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
DA	32	Instrument Panel Wire and Instrument Panel J/B (Left Side of the Instrument Panel)
DB		
DC		



## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	60 (*1)	Engine Wire and Engine Room Main Wire (Left Side of the Suspension Tower)
	70 (*3)	
IA1	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
IA2	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IA3	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IA4	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
IA8	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IF1	66 (LHD)	Instrument Panel Wire and Switch Wire (Instrument Panel Brace LH)
IJ1	66 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	76 (RHD)	
IJ2	66 (LHD)	
	76 (RHD)	
IO1	76 (RHD)	Instrument Panel Wire and Switch Wire (Right Side of the Instrument Panel)



## : Ground Points

Code	See Page	Ground Points Location
ED	60 (*1)	Engine Compartment Left
	70 (*3)	
EF	60 (*1)	Left Side of the Cylinder Head
	70 (*3)	
EG	60 (*1)	On the Transmission
	70 (*3)	
II	64 (LHD)	Left Kick Panel
IJ	64 (LHD)	Behind the Combination Meter
	74 (RHD)	
IM	64 (LHD)	Right Kick Panel
	74 (RHD)	

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