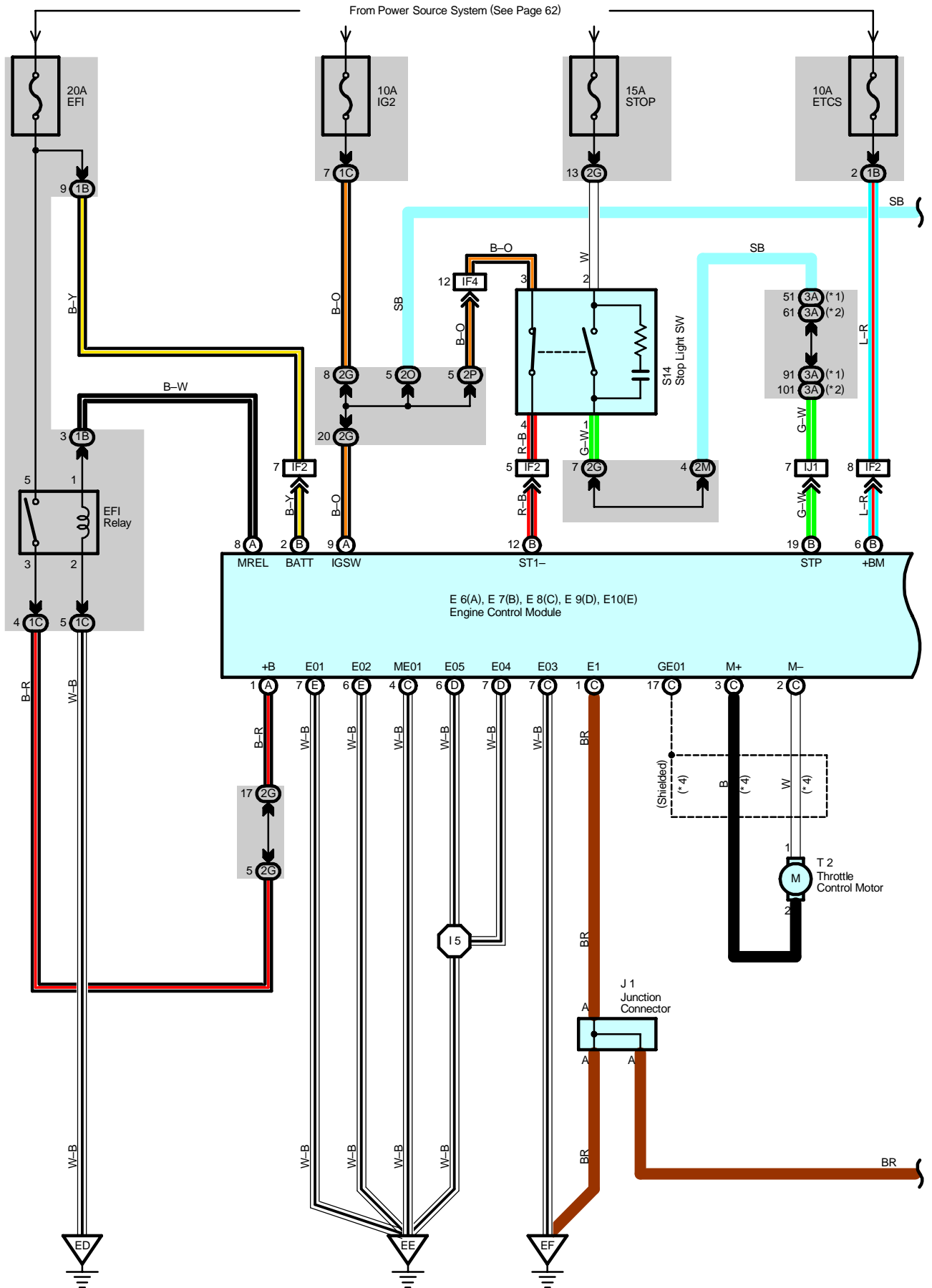
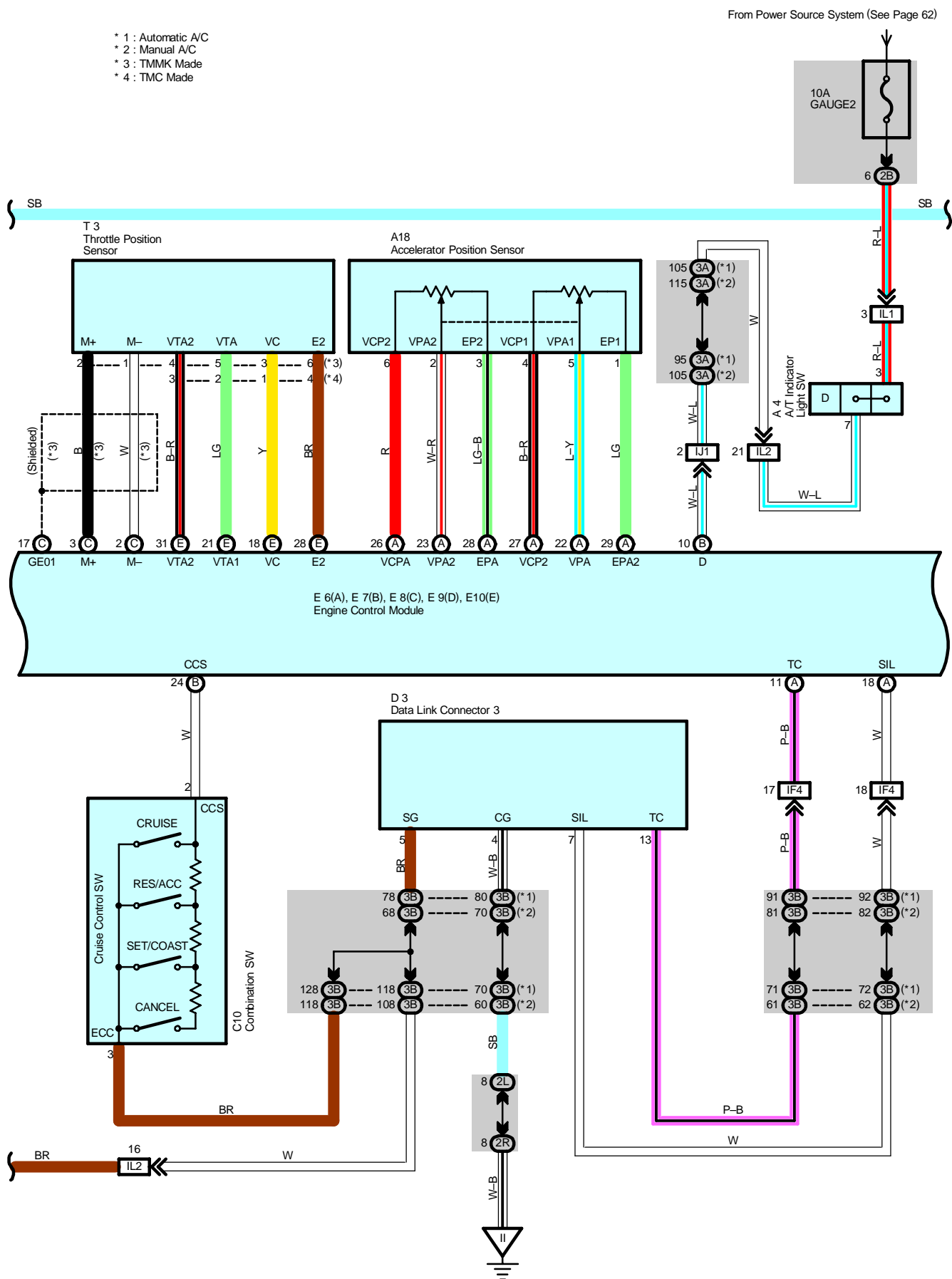
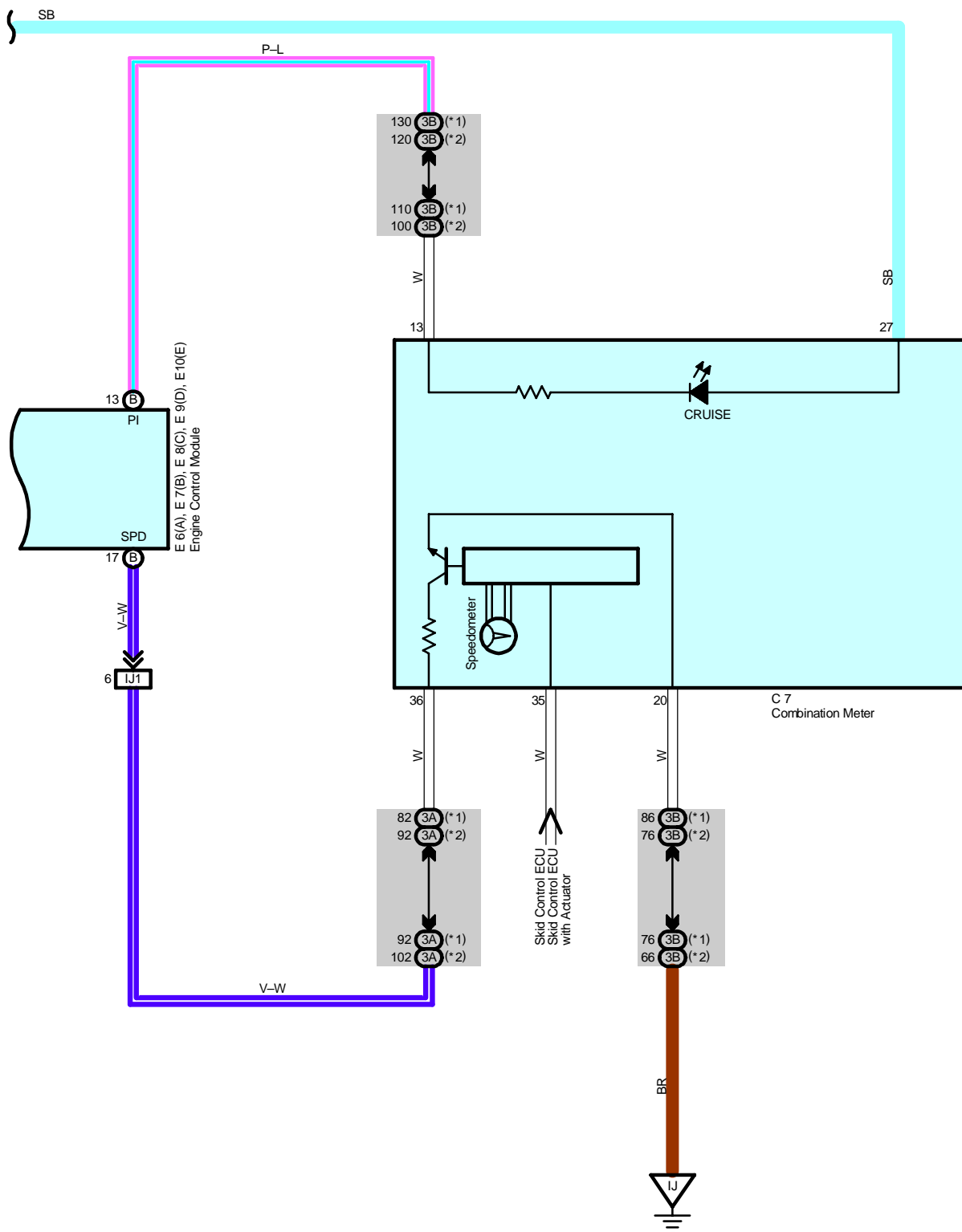


Cruise Control (1MZ-FE)





Cruise Control (1MZ-FE)



System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel. pedal.

1. Set Operation

When the cruise control main SW is turned on, the system starts preparations necessary for the cruise control and turns on the indicator light in the combination meter.

2. Set Speed Control

When the SET/COAST SW is operated with the cruise control SW turned on during travelling, the constant vehicle speed is controlled.

3. Coast Control

When the SET/COAST SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to decelerate the vehicle. Every time the SET/COAST SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.6 km/h.

4. Accel Control

When the RES/ACC SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to accelerate the vehicle. Every time the RES/ACC SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.6 km/h.

5. Resume Control

When the vehicle speed is within the low speed limit (Approximately 40 km/h, 25 mph) if the cruise control is cancelled, use of the RES/ACC SW accelerates the vehicle to the speed level used before canceling the cruise control.

6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.

- * The stop light SW is turned on.
- * The CANCEL SW is turned on.
- * The cruise control SW is turned off.

7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.

- * The stop light SW wiring is faulty or short-circuited.
- * The vehicle speed signal is faulty.
- * The electronically controlled throttle malfunctions.

8. Overdrive Control Function

The overdrive control may be cancelled if the vehicle travels on the slope during cruise control travelling. After the overdrive control has been cancelled, if the vehicle speed exceeds the overdrive return speed (The set speed is 2 km/h, 1.2 mph) and it is decided that the slope is finished, the vehicle returns to the overdrive control mode again.

Service Hints

E6 (A), E7 (B), E8 (C), E9 (D), E10 (E) Engine Control Module

- (A) 9–Ground : Approx. 12 volts with ignition SW at ON or ST position
- (B) 2–Ground : Always approx. 12 volts
- (C)1, (C) 4, (C) 7, (D) 6, (D) 7, (E) 6, (E) 7–Ground : Always continuity
- (B)19–Ground : Approx. 12 volts with stop light SW at on
- (B)24–Ground : Continuity with cruise control SW at on
 - Approx. 1540 Ω with CANCEL SW on in cruise control SW
 - Approx. 240 Ω with RES/ACC SW on in cruise control SW
 - Approx. 630 Ω with SET/COAST SW on in cruise control SW

C10 Combination SW

- 2–3 : Approx. 1540 Ω with CANCEL SW on
- Approx. 240 Ω with RES/ACC SW on
- Approx. 630 Ω with SET/COAST SW on

Cruise Control (1MZ-FE)

: Parts Location

Code	See Page	Code		See Page	Code	See Page
A4	38 (1MZ-FE)	E6	A	42	J1	43
A18	42	E7	B	42	S14	43
C7	42	E8	C	42	T2	39 (1MZ-FE)
C10	42	E9	D	42	T3	39 (1MZ-FE)
D3	42	E10	E	42		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	25	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2G	28	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2L	29	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2M		
2O		
2P		
2R		
3A	34 (*1)	Instrument Panel Wire and Passenger Side J/B (Instrument Panel Brace RH)
	35 (*3)	
	36 (*2)	
	37 (*4)	
3B	34 (*1)	
	35 (*3)	
	36 (*2)	
	37 (*4)	

* 1 : TMC Made Automatic A/C * 2 : TMC Made Manual A/C * 3 : TMMK Made Automatic A/C * 4 : TMMK Made Manual A/C

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF2	52	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IF4		
IJ1	54	Instrument Panel Wire and Instrument Panel Wire (Instrument Panel Reinforcement RH)
IL1	54	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
IL2		

: Ground Points

Code	See Page	Ground Points Location
ED	48 (1MZ-FE)	Left Fender
EE	48 (1MZ-FE)	Surge Tank RH
EF	48 (1MZ-FE)	Rear Side of Surge Tank
II	52	Cowl Side Panel LH
IJ	52	Instrument Panel Brace LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	54	Engine Wire			

