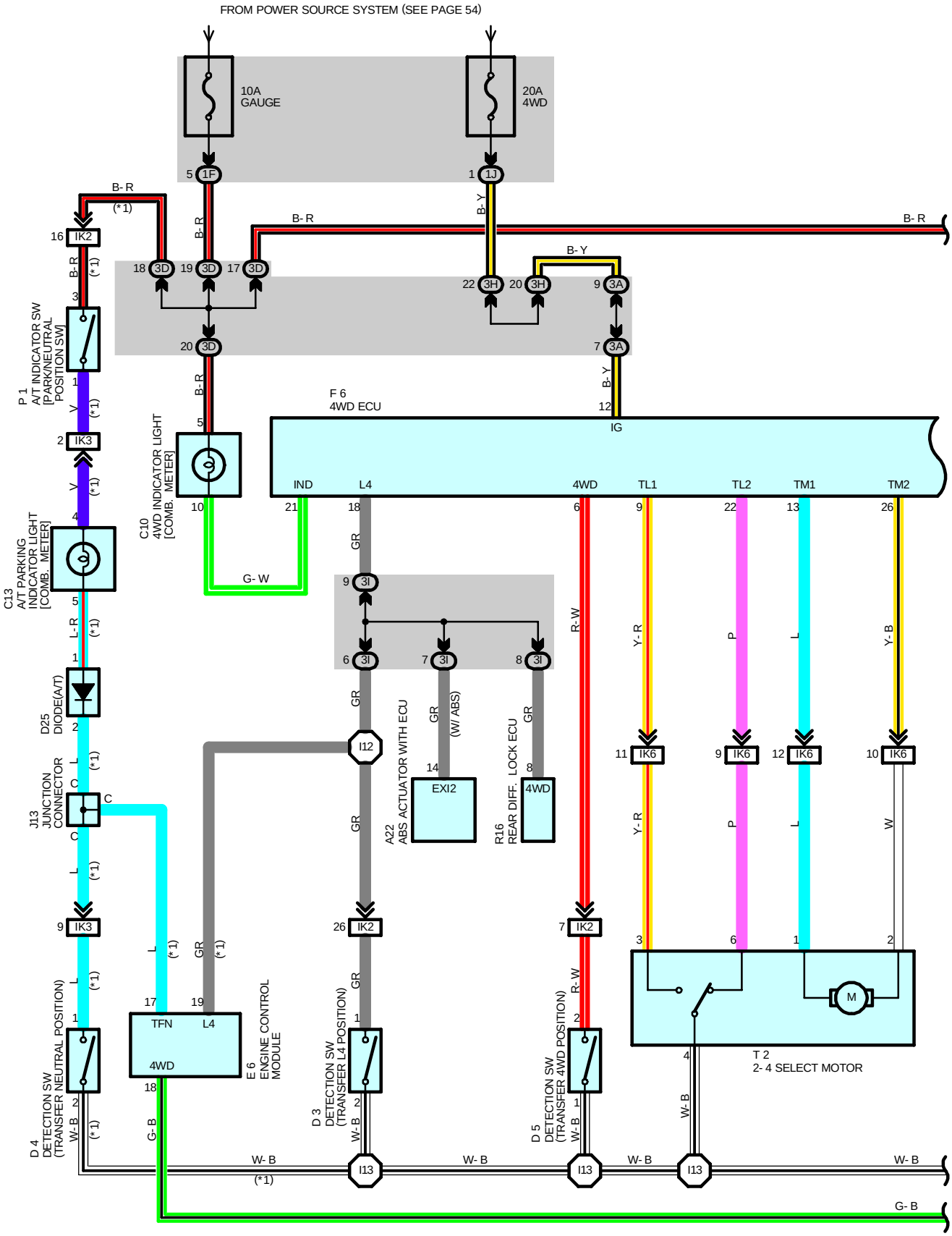
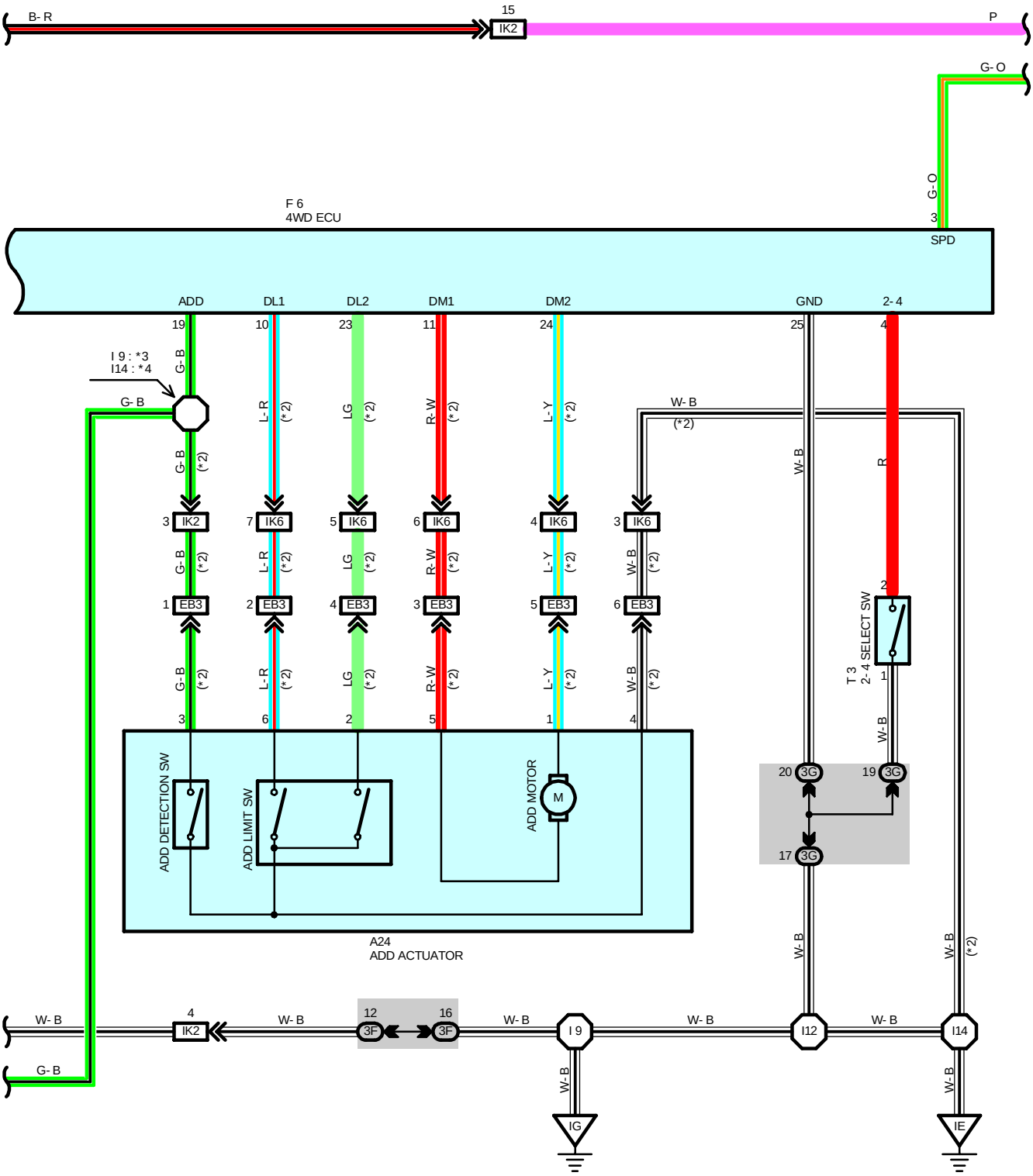
4WD (w/ 2-4 SELECT SW)

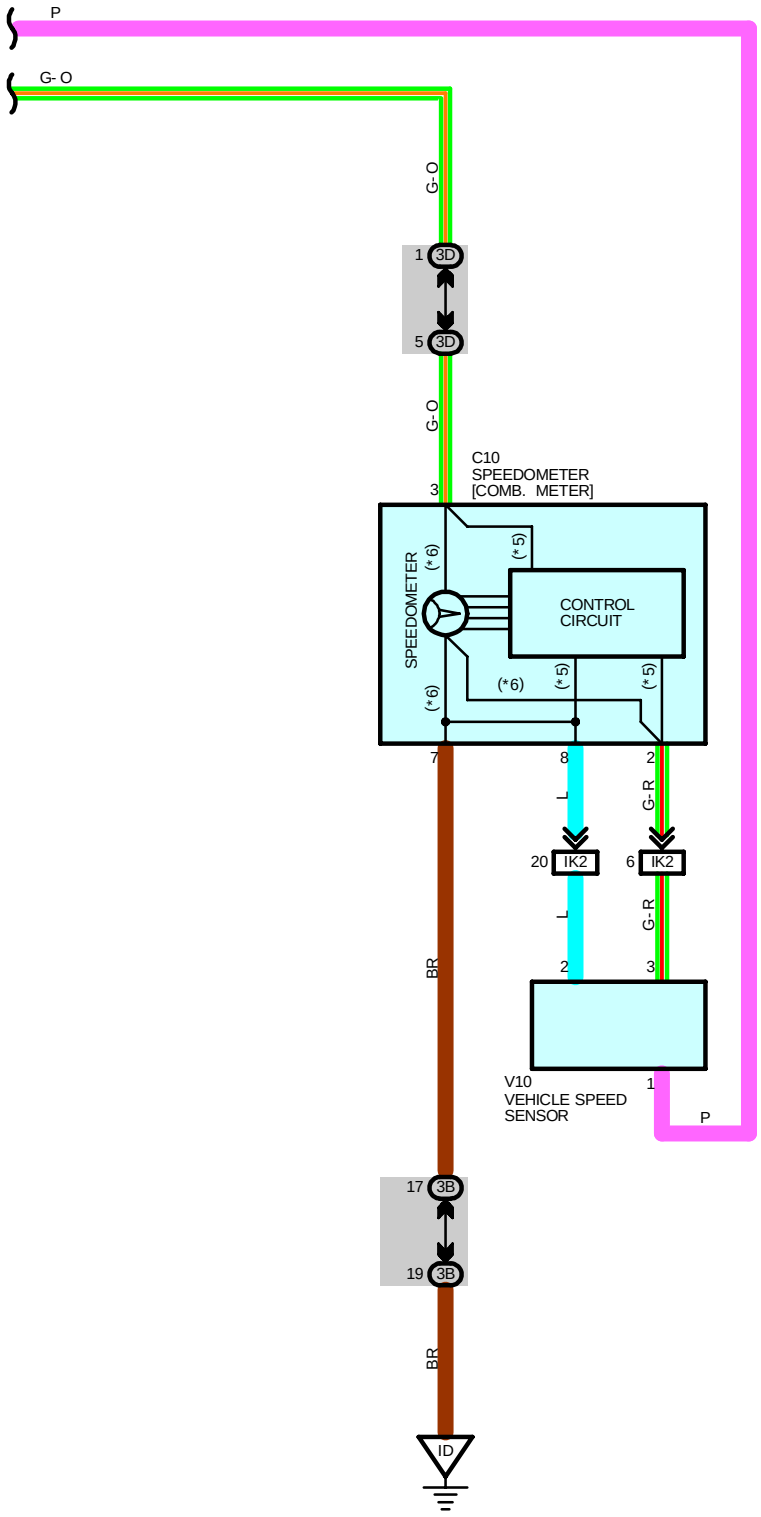


* 1 : A/T
* 2 : W/ ADD
* 3 : W/ DAYTIME RUNNING LIGHT
* 4 : W/O DAYTIME RUNNING LIGHT



4WD (w/ 2-4 SELECT SW)

* 5 : W/ TACHOMETER
* 6 : W/O TACHOMETER



SYSTEM OUTLINE

The 4WD ECU operates the 2-4 select motor in accordance with the conditions of the 2-4 select SW, the detection SW (Transfer 4WD position) and the detection SW (Transfer L4 position). It also controls the range over which shifting from H2 to H4 is possible based on the vehicle speed sensor. If the 2-4 select SW is pushed in while shifting is prohibited, it causes the 4WD indicator light to flash and sounds a warning buzzer to inform the driver. The warning buzzer is built into the ECU. The operation of the ECU is as follows.

2-4 SELECT SYSTEM

The 2-4 select system selects between 2WD and 4WD by means of a 2-4 select SW located in the transfer shift lever knob which provides good operability.

This system uses an ECU which drives the 2-4 select motor in accordance with signals from various sensors and accomplishes shifting between 2WD and 4WD. Shifting between H4 to L4 is accomplished by operating the transfer shift lever as before. This system also permits shifting between H2 and H4 without first shifting to H4. All models equipped with 2-4 select system are also equipped with the add, explained later.

(1) Shifting from H4 to H2

When the 2-4 select SW is turned off, a signal is input to the 2-4 select motor from the 4WD ECU, activating the 2-4 select motor so that the transfer changes to 2WD (H2 position).

At this time, the detection SW (Transfer 4WD position) and ADD indicator SW are off, so the 4WD indicator light goes off.

(2) Shifting from H2 to H4 (During normal driving)

When the 2-4 select SW is turned on, a signal is input to the 2-4 select motor from the 4WD ECU, activating the 2-4 select motor so that the transfer changes to 4WD (H4 position)

(3) Shifting from H2 to H4 (High speed driving)

The vehicle speed within below approx. 100 km/h, 62 mph, activating the 2-4 select motor so that the transfer changes to 4WD (H4 position)

The 4WD ECU stops the signal to the 2-4 select motor with the signal from the vehicle speed sensor. At the same time, it causes the 4WD indicator light to light up and the warning buzzer inside the 4WD ECU to sound.

(4) Shifting to L4

When the transfer shift lever is moved to L4 position, the transfer changes to LO position. This turns the detection SW (Transfer L4 position) on, so regardless of whether the 2-4 select SW is on or off, a signal is input to the 2-4 select motor from the 4WD ECU, activating the 2-4 select motor so that the transfer changes to 4WD (L4 position) in LO condition.

SERVICE HINTS

F6 4WD ECU

12-GROUND : Approx. **12** volts with ignition SW at **ON** position
25-GROUND : Always continuity
3-GROUND : **4** pulses with **1** rotation
4-GROUND : **2** volts or less with 2-4 select SW on
18-GROUND : **2** volts or less with detection SW (Transfer L4 position) on and transfer shift lever at **L4** position

T3 2-4 SELECT SW

1-2 : Closed with 2-4 select SW on

P1 A/T INDICATOR SW [PARK/NEUTRAL POSITION SW]

3-1 : Closed with A/T shift lever at **P** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A22	30 (5VZ-FE)	D5	30 (5VZ-FE)	R16	35
A24	30 (5VZ-FE)	D25	34	T2	31 (5VZ-FE)
C10	34	E6	35	T3	35
C13	34	F6	35	V10	31 (5VZ-FE)
D3	30 (5VZ-FE)	J13	35		
D4	30 (5VZ-FE)	P1	31 (5VZ-FE)		

4WD (w/ 2-4 SELECT SW)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	23	Cowl Wire and J/B No.1 (Lower Finish Panel)
1J		
3A	24	Cowl Wire and J/B No.3 (Behind the Instrument Panel Left)
3B		
3D		
3F		
3G	26	Cowl Wire and J/B No.3 (Behind the Instrument Panel Center)
3H		
3I		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB3	40 (5VZ-FE)	Engine Wire and Differential Wire (Front Differential Upper Side)
IK2	44	Engine Wire and Cowl Wire (Above the Glove Box)
IK3		
IK6		

: GROUND POINTS

Code	See Page	Ground Points Location
ID	44	Left Kick Panel
IE	44	Around the Right Edge of the Reinforcement
IG	44	Around the Left Edge of the Reinforcement

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I9	44	Cowl Wire	I13	44	Engine Wire
I12			I14	44	Cowl Wire