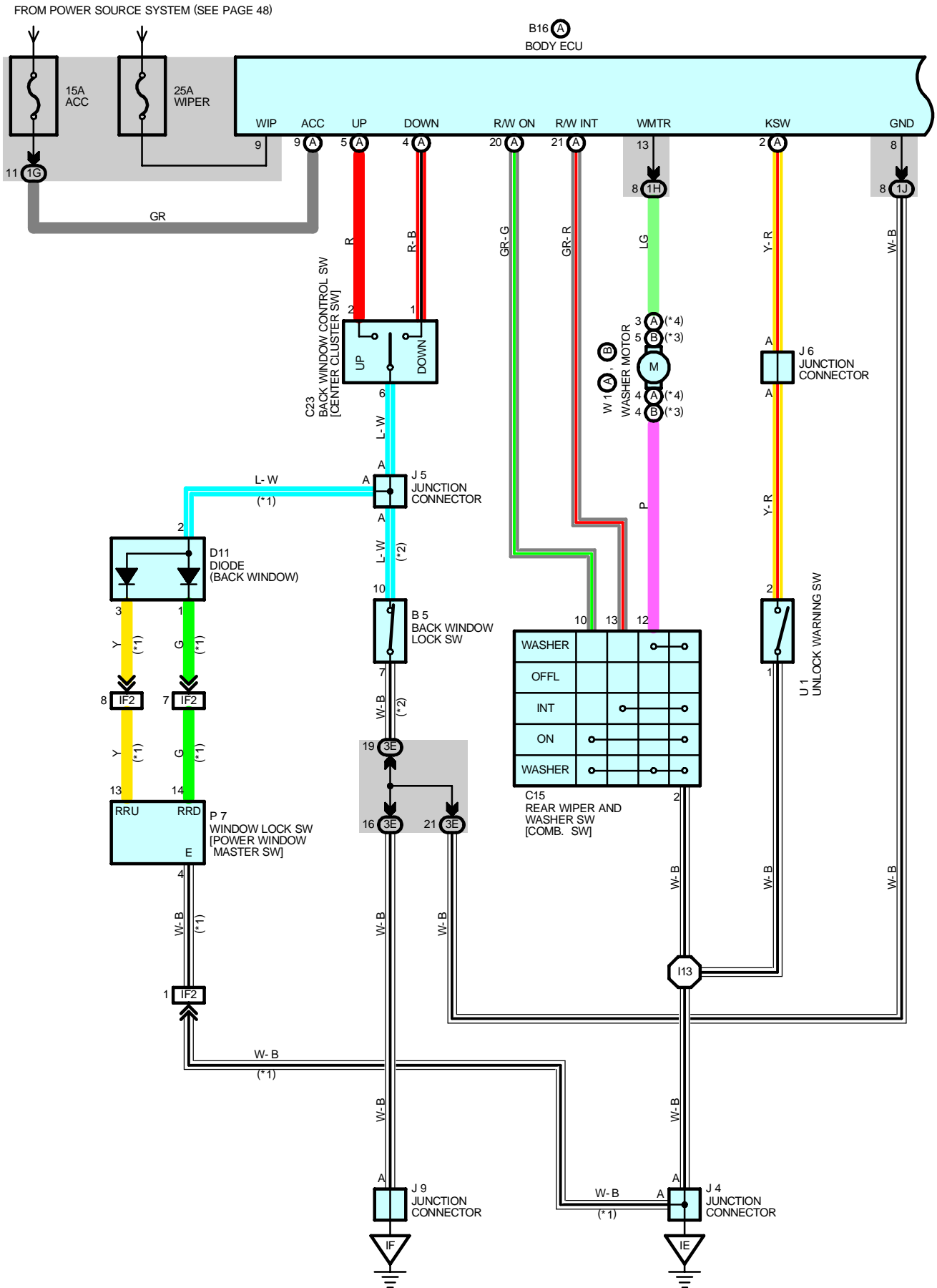
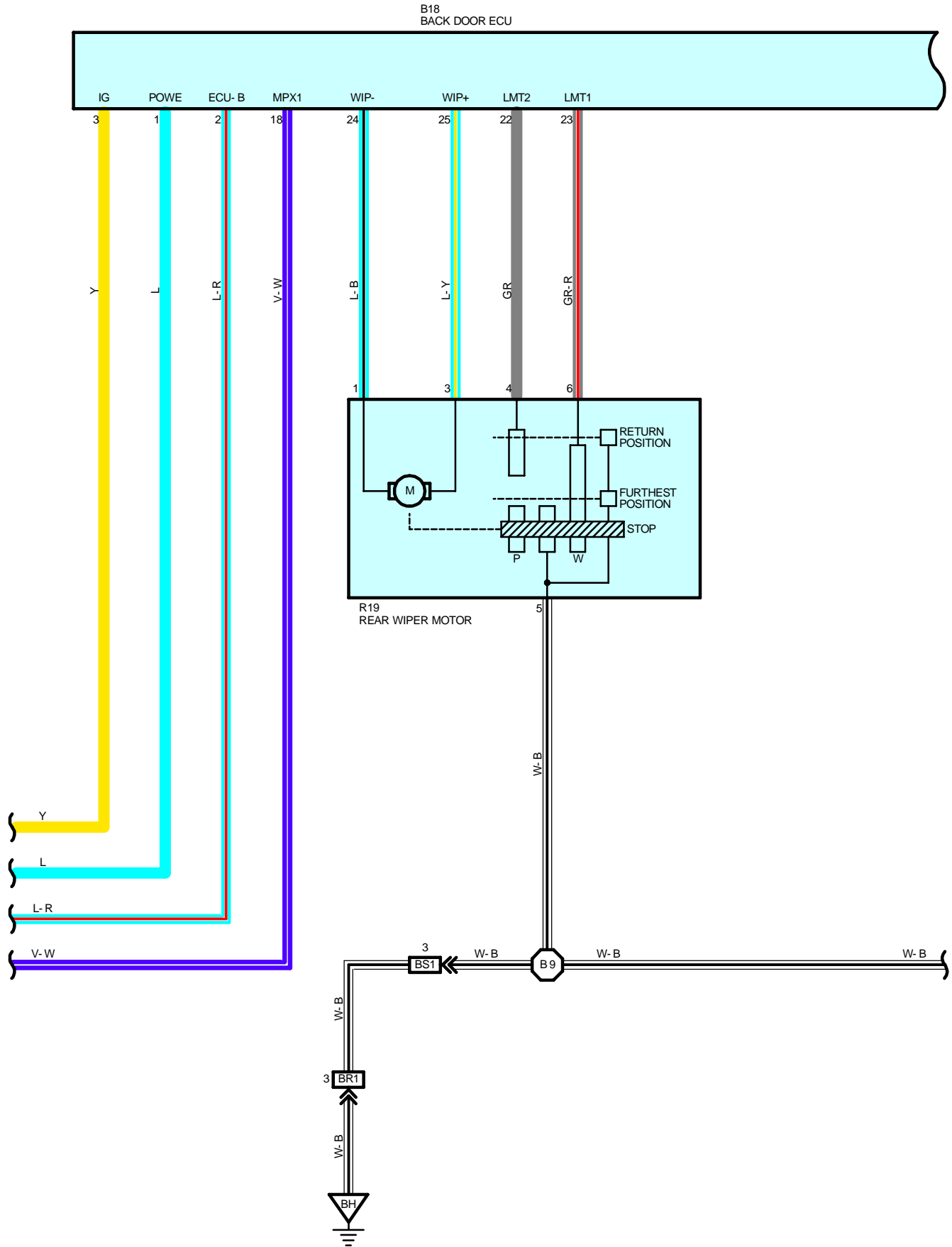


# POWER WINDOW (REAR), REAR WIPER AND WASHER

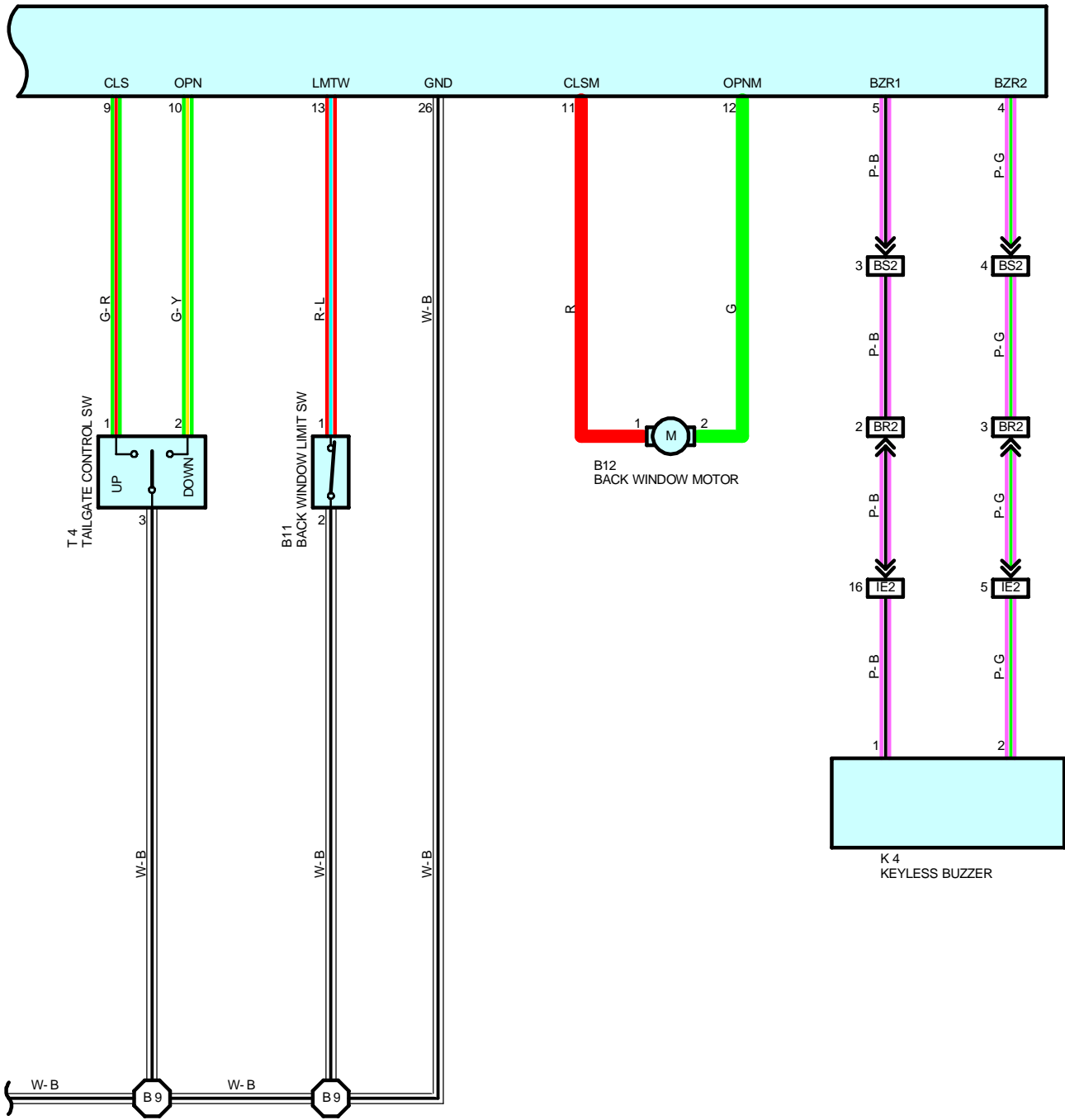




# POWER WINDOW (REAR), REAR WIPER AND WASHER



B18  
BACK DOOR ECU



# POWER WINDOW (REAR), REAR WIPER AND WASHER

## SYSTEM OUTLINE

Current always flows through the POWER fuse to TERMINAL 3 of the body ECU and TERMINAL 1 of the back door ECU. With the ignition SW turned on, the WIPER fuse to TERMINAL 9 of the body ECU, the ECU-IG fuse to TERMINAL 10 of the body ECU and TERMINAL 3 of the back door ECU.

### 1. REAR POWER WINDOW MANUAL OPERATION (BACK WINDOW CONTROL SW)

When the back window control SW is pushed to the up side (With the ignition SW on), an "ON" signal is input from TERMINAL 2 of the back window control SW to TERMINAL (A) 5 of the body ECU to TERMINAL (A) 7 to TERMINAL 18 of the back door ECU. Thus, the back door ECU is activated and the current to TERMINAL 1 of the back door ECU flows to TERMINAL 26 of the back door ECU to GROUND so that the current to back window motor flows from TERMINAL 1 of the back door ECU to TERMINAL 11 to TERMINAL 1 of the back window motor to TERMINAL 2 to TERMINAL 12 of the back door ECU to TERMINAL 26 to GROUND. This causes the back window motor to rotate toward the up side and the window ascends only while the back window control SW is being pushed.

To lower the window, the signal input from TERMINAL 1 of the back window control SW to TERMINAL (A) 4 of the body ECU to TERMINAL (A) 7 to TERMINAL 18 of the back door ECU. Causes current to the back window motor to flow from TERMINAL 1 of the back door ECU to TERMINAL 12 to TERMINAL 2 of the back window motor to TERMINAL 1 to TERMINAL 11 of the back door ECU to TERMINAL 26 to GROUND, so the current flows in the reverse direction to manual up operation and causes the motor to rotate in the opposite direction, thus lowering the window.

When the back window lock SW is pushed the lock side, the ground circuit of the back window control SW becomes open. Thus even if the driver operates the Open/Close function of the power window (Rear), the power window (Rear) will not operate because the back door ECU does not receive the on signal and the back door ECU does not operate.

### 2. REAR POWER WINDOW MANUAL OPERATION (TAILGATE CONTROL SW)

When the tailgate control SW to the up side a signal is input to TERMINAL 9 of the back door ECU from TERMINAL 1 of the tailgate control SW. This activates the back door ECU regardless of whether the ignition SW is on or off, and the current flows from TERMINAL 1 of the back door ECU to TERMINAL 26. So the current to the back window motor flows to TERMINAL 1 of the back door ECU to TERMINAL 11 to TERMINAL 1 of the back window motor to TERMINAL 2 to TERMINAL 12 of the back door ECU to TERMINAL 26 to GROUND and causes the back window motor to rotate in the up direction so the back window ascends only while the tailgate control SW is being pushed to lower the window. The on signal of the tailgate control SW (Rotate to down side) is input to TERMINAL 10, causing the current to the motor to flow to TERMINAL 1 of the back door ECU to TERMINAL 12 to TERMINAL 2 of the back window motor to TERMINAL 1 to TERMINAL 11 of the back door ECU to TERMINAL 26 to GROUND. This flow is the reverse of manual up, so the motor rotates in the reverse direction and the window is lowered.

### 3. WIRELESS BACK WINDOW CONTROL

When the ignition SW is off, the back window can be opened by pressing the back window open SW of the transmitter for approximately 0.8 seconds. At that time, the keyless buzzer beeps once.

### 4. REAR WIPER OPERATION

With ignition SW turned on and the back door window completely closed (Back window limit SW on), when the rear wiper and washer SW is turned on, the signal is input from TERMINAL 10 of the rear wiper and washer SW to TERMINAL (A) 20 of the body ECU to TERMINAL 7 to TERMINAL 18 of the back door ECU. Thus the back door ECU activates and the current flows from TERMINAL 1 of the back door ECU to TERMINAL 25 to TERMINAL 3 of the rear wiper motor to TERMINAL 1 to TERMINAL 24 of the back door ECU to TERMINAL 26 to GROUND and operates the rear wiper to the upper limit of the wiping area. When the upper limit of the wiping area is reached, the point (Cam plate P point) on the wiper motor is turned on (in the case, W point of cam plate is off), and the signal to reverse the rear wiper motor is input to TERMINAL 22 of the back door ECU. The back door ECU stops the rear wiper motor for about 0.1 seconds and the current flows from TERMINAL 24 of the back door ECU to TERMINAL 1 of the rear wiper motor to TERMINAL 3 to TERMINAL 25 of the back door ECU to TERMINAL 26 to GROUND. As a result, the rear wiper motor reverses and stops the rear wiper before the retraction position. At that time, the point (Cam plate W point) on the rear wiper motor is turned on (in this case, P point of cam plate is off), and the signal to rotate the motor is input to TERMINAL 25 of the back door ECU to TERMINAL 3 of the rear wiper motor to TERMINAL 1 to TERMINAL 24 of the back door ECU to TERMINAL 26 to GROUND and the rear wiper SW off, the signal to TERMINAL 23 of the back door ECU from W point of cam plate is cancelled and the wiping function is continued when P point is turned on. The rear wiper continues beyond the rear wiper area to the retraction position. At that time, P and W points are turned on, the power window relay stops operating, and the current to the rear wiper is cut off to cam plate rear wiper operation.

### 5. WASHER OPERATION

With the ignition SW turned on and back window closed completely (Back window limit SW on), when the rear wiper and washer SW is turned strongly (Rear washer SW on), current flows from TERMINAL 9 of the body ECU to TERMINAL 13 to TERMINAL 3 (w/o daytime running light), 5 (w/ daytime running light) of the washer motor to TERMINAL 4 to TERMINAL 12 of the rear wiper and washer SW to TERMINAL 2 to GROUND and causes the rear window washer emits a water spray only while the rear washer SW is turned. When the rear wiper SW is off, and the rear wiper SW is then turned in the off direction, washer liquid will also spray.

## SERVICE HINTS

### T4 TAILGATE CONTROL SW

- 2-3 : Continuity with tailgate control SW at down side
- 1-3 : Continuity with tailgate control SW at up side

### C15 REAR WIPER AND WASHER SW [COMB. SW]

- 12-2 : Continuity with rear wiper and washer SW at **WASHER** position
- 10-2 : Continuity with rear wiper and washer SW at **ON** position

### B18 BACK DOOR ECU

- 3-GROUND : Approx. **12** volts with ignition SW at **ON** position
- 1-GROUND : Always approx. **12** volts
- 26-GROUND : Always continuity
- 11-GROUND : Approx. **12** volts with back window at **UP** operation
- 12-GROUND : Approx. **12** volts with back window at **DOWN** operation
- 9-GROUND : Continuity with tailgate control SW at **UP** position
- 10-GROUND : Continuity with tailgate control SW at **DOWN** position

### B11 BACK WINDOW LIMIT SW

- 1-2 : Closed with back power window fully closed

### R19 REAR WIPER MOTOR

- 4, 6-5 : Continuity with rear wiper retracted
- 4-5 : Continuity with rear wiper at **RETURN** position

## ○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B5	30	D11	30	R19	33
B11	32	J4	31	T4	33
B12	32	J5	31	U1	31
B16	A 30	J6	31	W1	A 29
B18	32	J9	31		B 29
C15	30	K4	29		
C23	30	P7	33		

## ○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Cowl Wire and Driver Side J/B (Lower Finish Panel)
1G		
1H		
1J		
3C	26	Cowl Wire and Center J/B (Near the Steering Column Tube)
3E		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	38	Cowl Wire and Floor No.2 Wire (Left Kick Panel)
IE2		
IF2	38	Front Door LH Wire and Cowl Wire (Left Kick Panel)
IG1	38	Engine Room Main Wire and Cowl Wire (Left Kick Panel)
BR1	42	Back Door No.1 Wire and Floor No.2 Wire (Left Rear Side of Roof)
BR2		
BS1	42	Back Door No.1 Wire and Back Door No.2 Wire (Back Door Left)
BS2		

# POWER WINDOW (REAR), REAR WIPER AND WASHER



## : GROUND POINTS

Code	See Page	Ground Points Location
IE	<a href="#">38</a>	Cowl Side Panel LH
IF	<a href="#">38</a>	Cowl Side Panel RH
BH	<a href="#">42</a>	Left Quarter Panel Inner



## : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	<a href="#">40</a>	Cowl Wire	B9	<a href="#">42</a>	Back Door No.2 Wire
I13					

