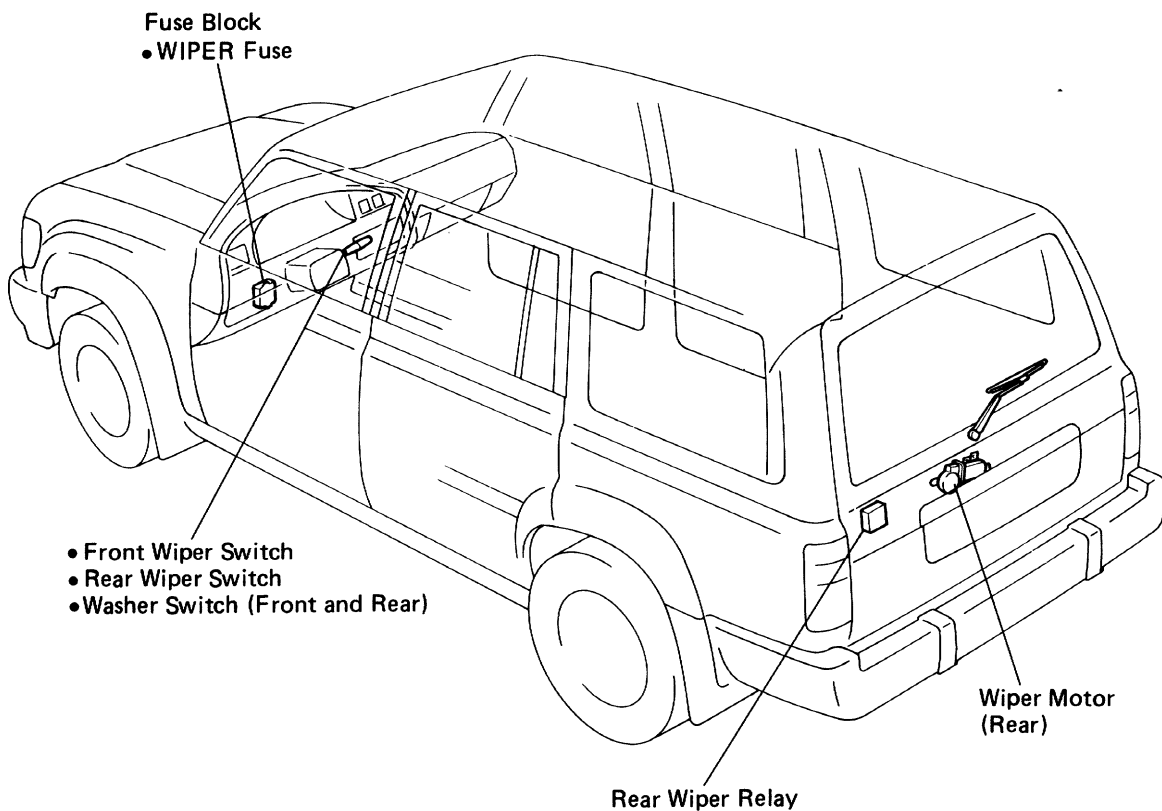
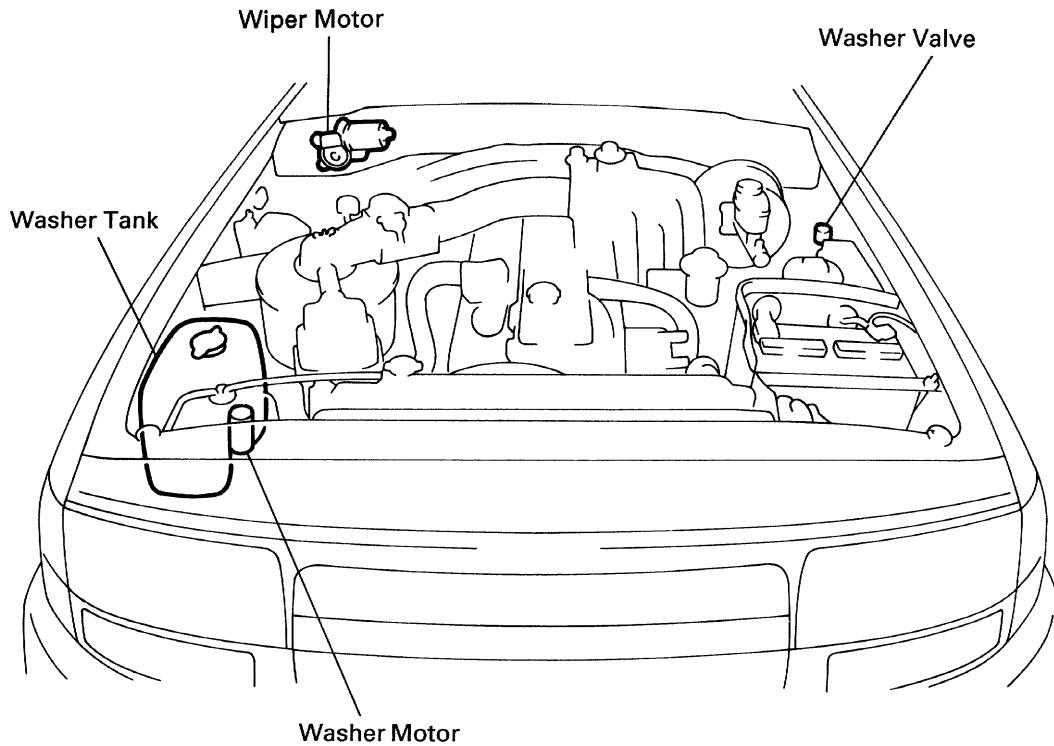


WIPER AND WASHER SYSTEM PARTS LOCATION



TROUBLESHOOTING

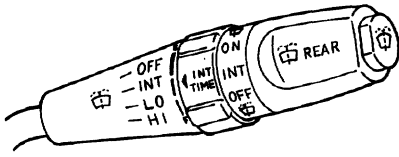
The table below will be useful for you in troubleshooting these electrical problems. The most likely causes of the malfunction are shown in the order of their probability. Inspect each part in the order shown, and replace the part when it is found to be faulty.

Trouble	Part name	See page	
		Front	Rear
Wiper do not operate or return to off position	1. WIPER Fuse 2. Wiper Motor 3. Wiper Switch 4. Wiper Relay 5. Wire Harness	BE-6, BE-10 BE-43 BE-41 BE-41 –	BE-6, BE-10 BE-44 BE-41 BE-42 –
Wiper do not operate in MIST position	1. Wiper Switch 2. Wiper Relay 3. Wiper Motor 4. Wire Harness	BE-41 BE-41 BE-43 –	BE-41 BE-42 BE-44 –
Wiper do not operate in INT position	1. Wiper Relay 2. Wiper Switch 3. Wiper Motor 4. Wire Harness	BE-41 BE-41 BE-43 –	BE-42 BE-41 BE-44 –
Washer do not operate	1. Washer Hose or Nozzle Clogged 2. Washer Motor 3. Washer Switch 4. Wire Harness	– BE-41 BE-44 –	– – BE-44 –

COMBINATION SWITCH

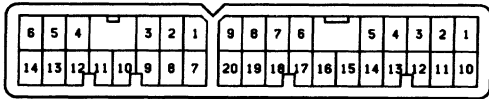
See page [BE-18](#).

(Wiper with Intermitten and time adjuster)



Connector "A"

Connector "B"



BE4178
N03146
V-34-2

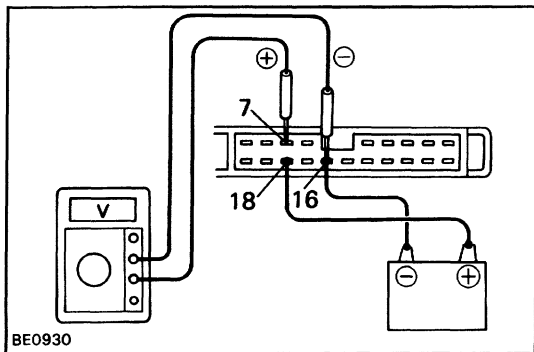
FRONT WIPER AND WASHER SWITCH INSPECTION CONTINUITY

Terminal (Color)		B4 (L-R)	B7 (L-B)	B8 (L)	B12 (Y-B)	B13 (L-O)	B16 (B)	B18 (L-W)
Switch position								
Wiper	OFF	○	○					
	INT	○	○					
	LO		○					○
	HI					○		○
Washer	OFF							
	ON			○			○	

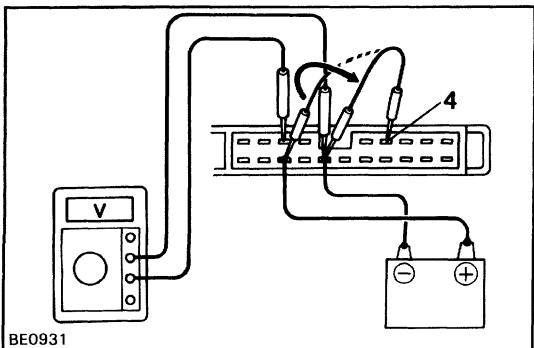
REAR WIPER AND WASHER SWITCH INSPECTION CONTINUITY

Terminal (Color)		B1 (G)	B2 (V)	B10 (O)	B16 (B)
Switch position					
Washer	ON		○		○
Wiper	OFF				
	INT			○	○
	ON	○			○
Washer	ON	○	○		○

If continuity is not as specified, replace the switch.



BE0930



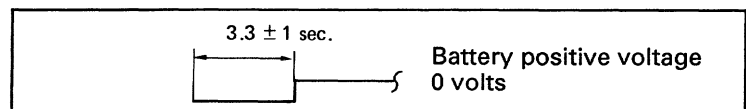
BE0931

FRONT WIPER RELAY

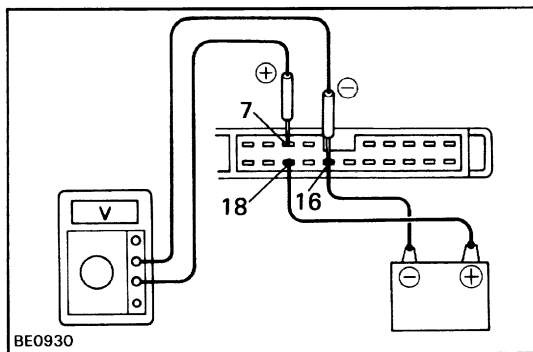
FRONT WIPER RELAY INSPECTION OPERATION AT INTERMITTENT

- Turn the wiper switch to INT position.
- Turn the intermittent time control switch to FAST position.
- Connect the positive (+) lead from the battery to terminal B18 and the negative (-) lead to terminal B16.
- Connect the positive (+) lead from the voltmeter to terminal B7 and the negative (-) lead to terminal B16, check that the meter needle indicates battery positive voltage.
- After connecting terminal B4 to terminal B18, connect to terminal B16.

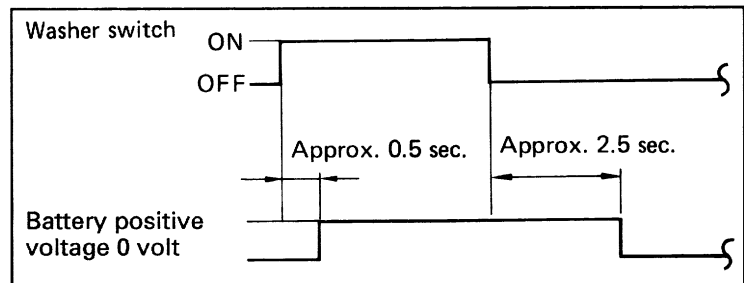
Then, check that the voltage rises from 0 volt to battery positive voltage within the times as shown in the table.



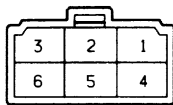
If operation is not as specified, replace the switch.

**OPERATION AS WASHER LINKED**

- Connect the positive (+) lead from the battery to terminal B18 and the negative (-) lead to terminal B16.
- Connect the positive (+) lead from the voltmeter to terminal B7 and the negative (-) lead to terminal B16.
- Push in the washer switch. Check that the voltage changes as shown in the table.



If operation is not as specified, replace the switch.

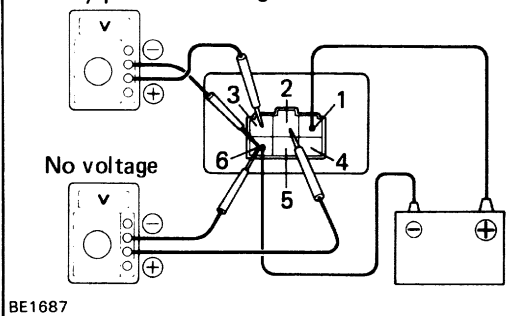
Relay Side

H-6-2

REAR WIPER RELAY**REAR WIPER RELAY INSPECTION
CONTINUITY**

- Check that there is no continuity between terminals 1 and 3.
- Check that there is continuity between terminals 2 and 3.

If continuity is not as specified, replace the relay.

Battery positive voltage

BE1687

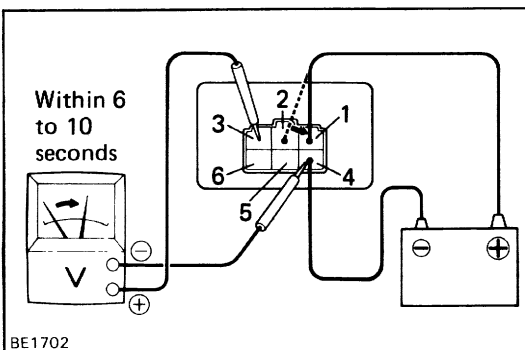
OPERATION

- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 6.
- Connect the positive (+) lead from the voltmeter to terminal 2 and the negative (-) lead to terminal 6, check that the meter needle indicates to 0 volts.
- Connect the positive (+) lead from the voltmeter to terminal 3 and the negative (-) lead to terminal 6, check that the meter needle indicates to battery positive voltage. If operation is not as specified, replace the relay.

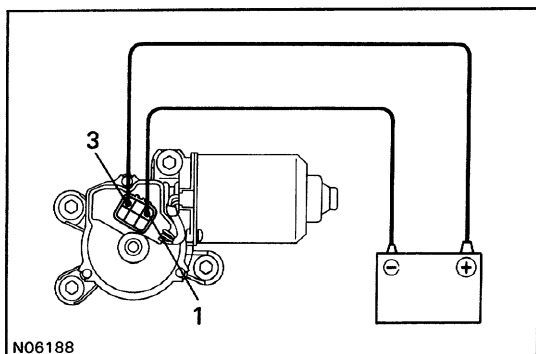
INTERMITTENT OPERATION

- Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 4.
- Connect the positive (+) lead from the voltmeter to terminal 3 and the negative (-) lead to terminal 4.
- After disconnecting the positive (+) lead from terminal 2, connect it to terminal 1, and then, check that the meter needle rises from 0 volts to battery positive voltage within 6 to 10 seconds.

If operation is not as specified, replace the relay.



BE1702



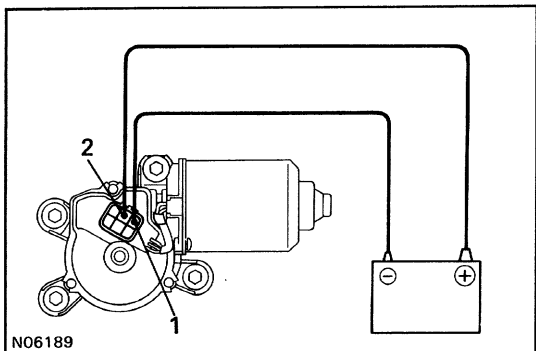
FRONT WIPER MOTOR

FRONT WIPER MOTOR INSPECTION

OPERATION AT LOW SPEED

Connect the positive (+) lead from the battery to terminal 3 and negative (-) lead to terminal 1 check that the motor operates at low speed.

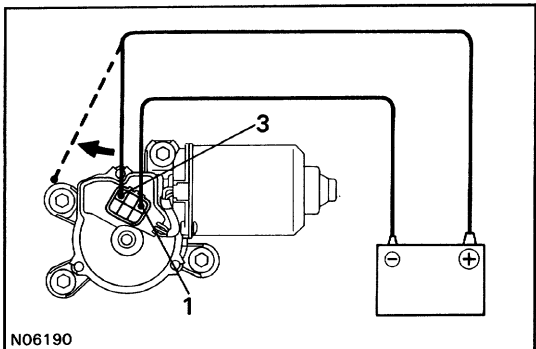
If operation is not as specified, replace the motor.



OPERATION AT HIGH SPEED

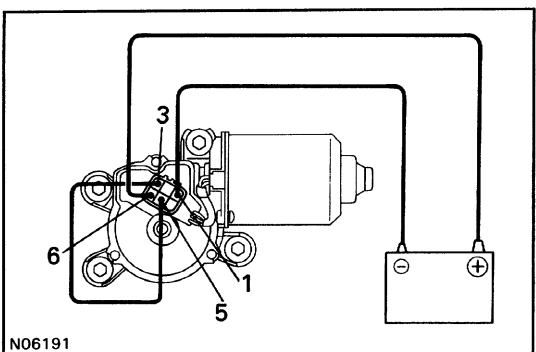
Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, check that the motor operates at high speed.

If operation is not as specified, replace the motor.



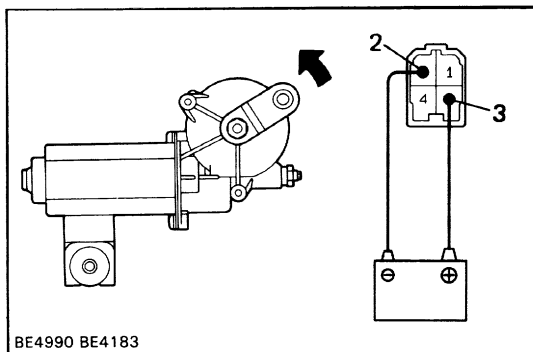
OPERATION, STOPPING AT STOP POSITION

- (a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.



- (b) Connect terminal 3 and 5.
- (c) Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to the terminal 1, check that the motor stops running at the stop position after the motor operates again.

If operation is not as specified, replace the motor.



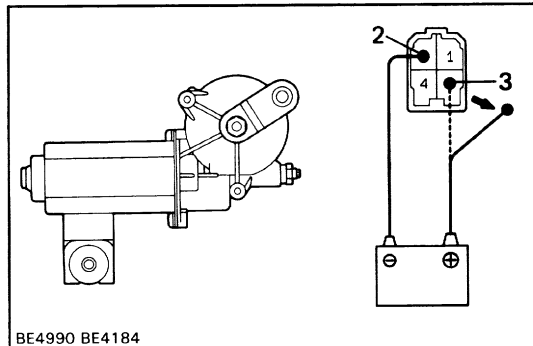
REAR WIPER MOTOR

REAR WIPER MOTOR INSPECTION

OPERATION AT LOW SPEED

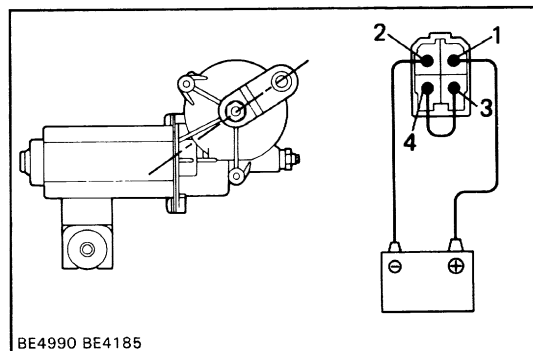
Connect the positive (+) lead from the battery to terminal 3 and the negative (-) lead to terminal 2, check that the motor operates as low speed.

If operation is not as specified, replace the motor.



OPERATION, STOPPING AT STOP POSITION

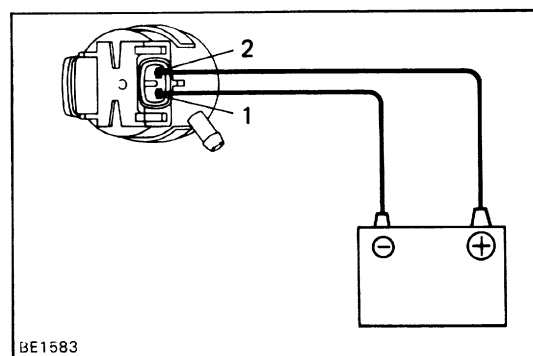
- (a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.



- (b) Connect terminals 3 and 4.

- (c) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, check that the motor stops running at the stop position after the motor operates again.

If operation is not as specified, replace the motor.



WASHER MOTOR

WASHER MOTOR INSPECTION

FRONT

Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, check that the motor operates.

NOTICE: These tests must be performed quickly (within 20 seconds) to prevent the coil from burning out.

If operation is not as specified, replace the motor.

REAR

Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, check that the motor operates.

NOTICE: These tests must be performed quickly (within 20 seconds) to prevent the coil from burning out.

If operation is not as specified, replace the motor.

