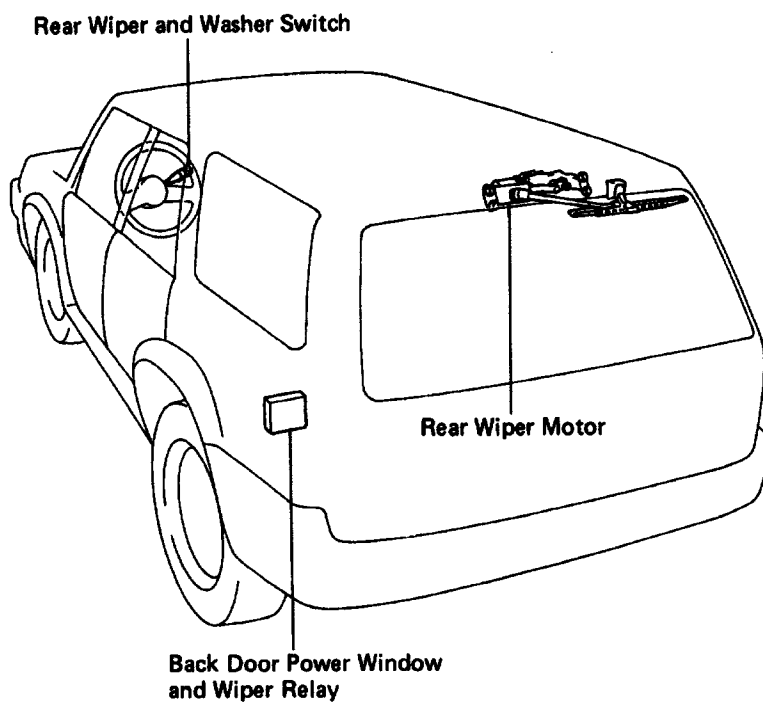
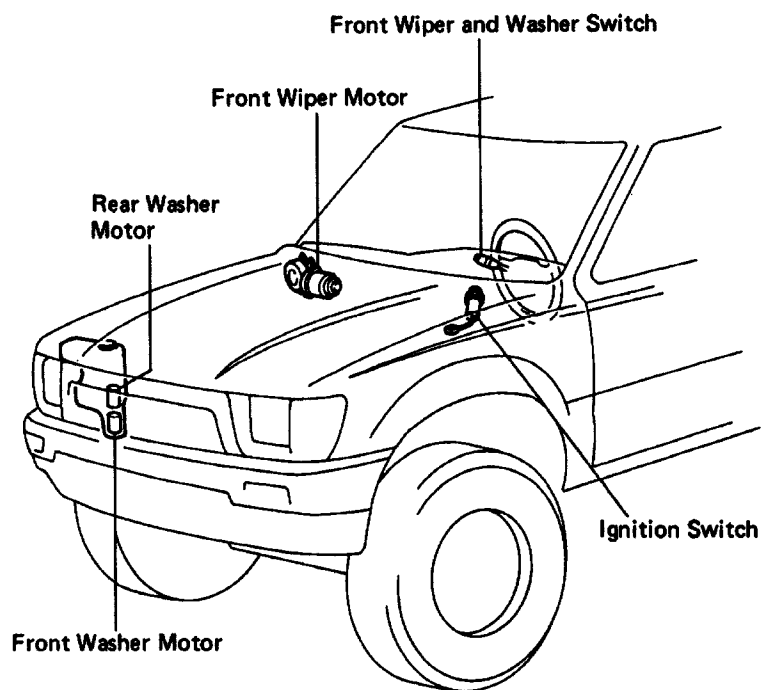


WIPER AND WASHER SYSTEM PARTS LOCATION



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.

FRONT WIPER

Trouble	Parts name	(See page)
Wipers does not operate or turn to off position	1. AM ₁ H –Fuse	(BE-11)
	2. WIPER Fuse	(BE-11)
	3. Ignition Switch	(BE-12)
	4. Wiper and Washer Switch	(BE-40)
	5. Wiper Motor	(BE-42)
	6. Wire Harness	
Wiper does not operate in MIST position	1. Wiper and Washer Switch	(BE-40)
	2. Wiper Motor	(BE-42)
	3. Wire Harness	
Wiper does not operate in INT position	1. Wiper and Washer Switch	(BE-40)
	2. Wiper Motor	(BE-42)
	3. Wire Harness	
Washer does not operate	1. Wiper and Washer Switch	(BE-40)
	2. Washer Hose and Nozzle	
	3. Washer Motor	(BE-43)
	4. Wire Harness	

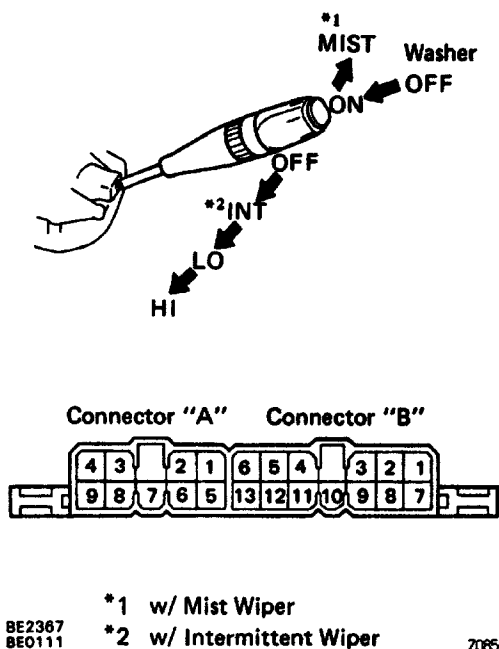
REAR WIPER AND WASHER

HINT: Before troubleshooting the rear wiper system, check that there is no problem in the Back Door Power Window Control System.

If there are some problems in that system, repair that system before repairing the rear wiper system.

Trouble	Parts name	(See page)
Wiper do not operate	1. Circuit Breaker OFF	
	2. WIPER Fuse	(BE-11)
	3. Wiper Motor	(BE-43)
	4. Wiper Switch	(BE-43)
	5. Limit Switch	(BE-73)
	6. Back Door Power Window and Relay	(BE-74)
	7. Wire Harness	
Wiper do not return to off position	1. Wiper Motor or Link	(BE-43)
	2. Back Door Power Window and Wiper Relay	(BE-74)
	3. Wire Harness	
Washers do not operate	1. Washer Hose or Nozzle Clogged	
	2. Washer Motor	(BE-44)
	3. Washer Switch	(BE-43)
	4. Back Door Power Window and Wiper Relay	(BE-74)
	5. Wire Harness	

Reference:



COMBINATION SWITCH INSPECTION

COMBINATION SWITCH DISASSEMBLY

See page [BE-19](#)

COMBINATION SWITCH ASSEMBLY

See page [BE-20](#)1. INSPECT FRONT WIPER CONTINUITY
w/Mist Wiper

Switch position	Tester connection to terminal number	Specified condition
MIST	A4 – A8	Continuity
OFF	A7 – A8	Continuity
LO	A4 – A8	Continuity
HI	A4 – A9	Continuity

If continuity is not as specified, replace the switch.
w/Intermittent Wiper

Switch position	Tester connection to terminal number	Specified condition
OFF	A7 – A8	Continuity
INT	A7 – A8	Continuity
LO	A4 – A8	Continuity
HI	A4 – A9	Continuity

If continuity is not as specified, replace the switch.

2. INSPECT FRONT WASHER CONTINUITY
w/Mist Wiper

Switch position	Tester connection to terminal number	Specified condition
OFF	—	No continuity
ON	A1 – A2	Continuity

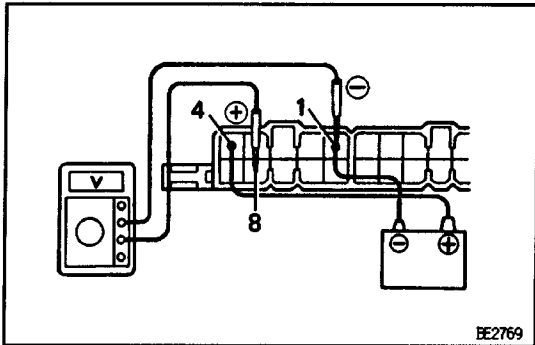
If continuity is not as specified, replace the switch.
w/Intermittent Wiper

Switch position	Tester connection to terminal number	Specified condition
OFF	—	No continuity
ON	A1 – A2	Continuity

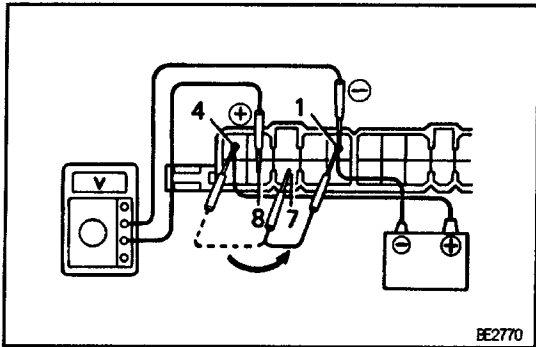
If continuity is not as specified, replace the switch.

3. INSPECT FRONT WIPER OPERATION**intermittent wiper**

- (a) Turn the wiper switch to INT position.
 (b) Variable Type:
 Turn the intermittent time control switch to FAST position.



- (c) Connect the positive (+) lead from the battery to terminal A4 and the negative (-) lead to terminal A1.
 (d) Connect the positive (+) lead from the voltmeter to terminal A8 and the negative (-) lead to terminal A1, check that the meter needle indicates battery positive voltage.



- (e) After connecting terminal A7 to terminal A4, connect to terminal A1.

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

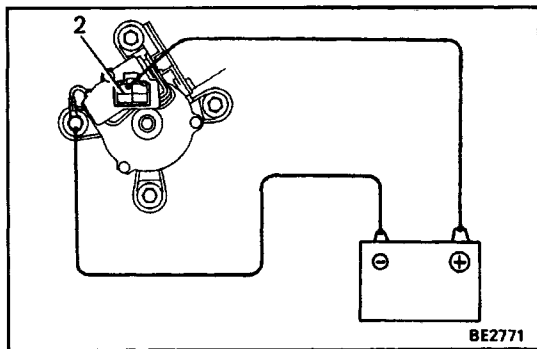
Non Variable Type

Switch position		Specified condition	
INT		3.3 ± 1 sec.	Battery positive voltage 0 volts

Variable Type

Switch position		Specified condition	
INT	FAST	1.6 ± 1 sec.	Battery positive voltage 0 volts
INT	LOW	10.7 ± 5 sec.	Battery positive voltage 0 volts

If operation is not as specified, replace the switch.

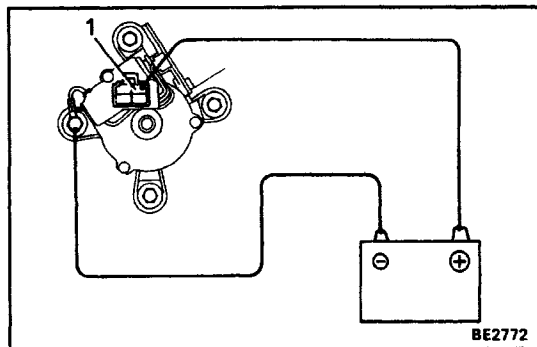


FRONT WIPER MOTOR INSPECTION

INSPECT FRONT WIPER MOTOR OPERATION

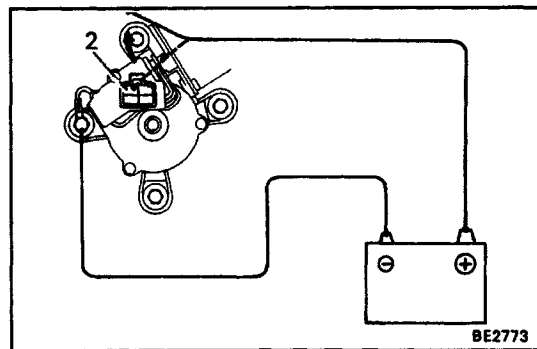
Low Speed

Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to the motor body, check that the motor operates at low speed. If operation is not as specified, replace the motor.



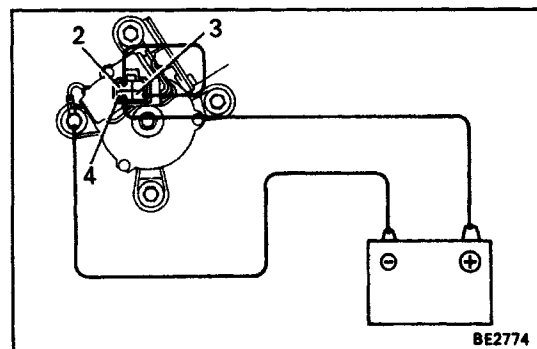
High Speed

Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to the motor body, check that the motor operates at high speed. If operation is not as specified, replace the motor.



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 2.



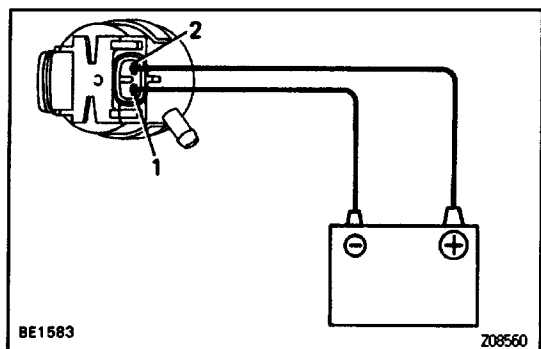
(b) Connect terminals 2 and 3.

(c) Connect the positive (+) lead from the battery to terminal 4 and the negative (–) lead to motor body, check that the motor stops running at the stop position after the motor operates again.

If operation is not as specified, replace the motor.

FRONT WASHER SWITCH INSPECTION

See Wiper and Washer Switch on page [BE-40](#)

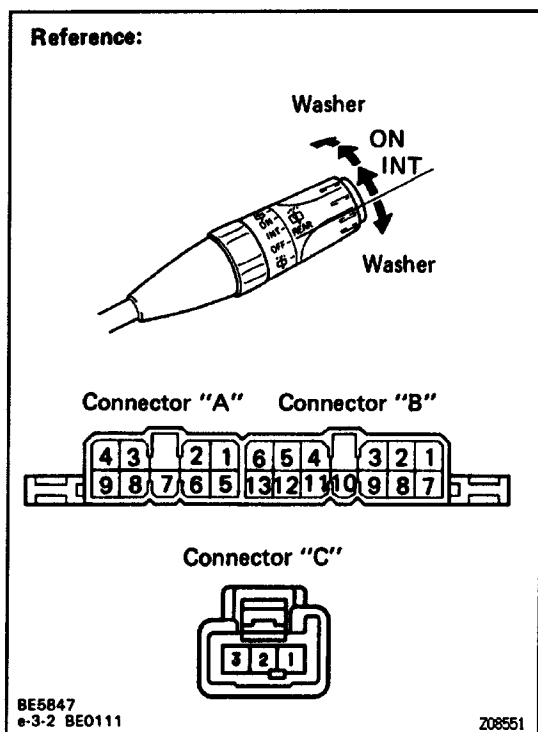


FRONT WASHER MOTOR INSPECTION

INSPECT FRONT WASHER MOTOR

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.

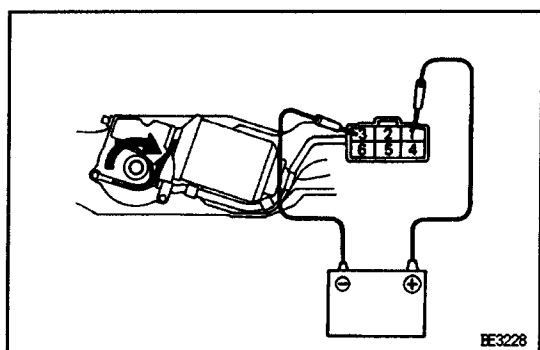


REAR WIPER AND WASHER SWITCH INSPECTION

INSPECT REAR WIPER AND WASHER SWITCH CONTINUITY

Switch position	Tester connection to terminal number	Specified condition
Washer	A1 – C3	Continuity
OFF	–	No continuity
INT	A1 – C2	Continuity
ON	A1 – C1	Continuity
Washer	A1 – C1 – C3	Continuity

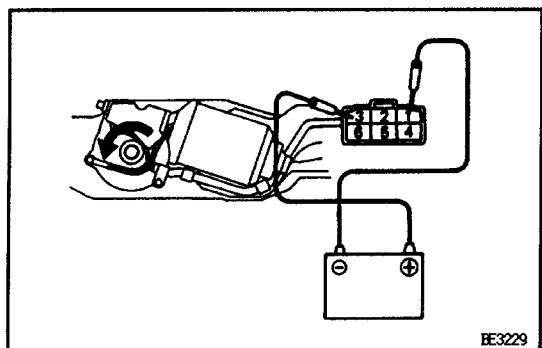
If continuity is not as specified, replace the switch.



REAR WIPER MOTOR INSPECTION

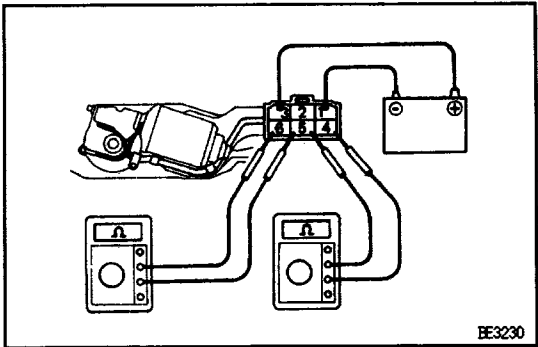
INSPECT REAR WIPER MOTOR OPERATION

- (a) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 3, check that the motor turns clockwise.



- (b) Reverse the polarity, check that the motor turns counter-clockwise.

If operation is not as specified, replace the motor.



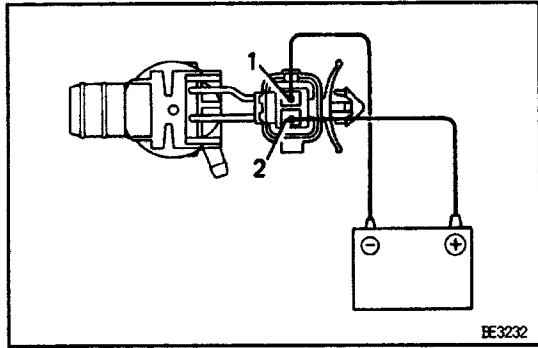
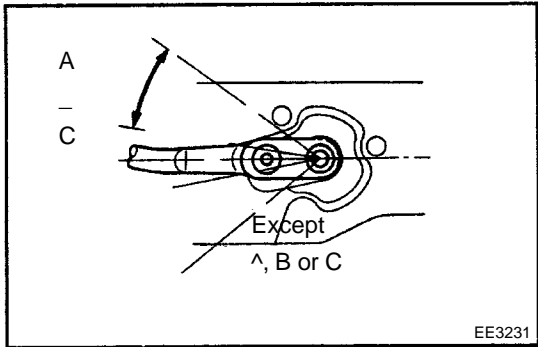
REAR WIPER MOTOR INSPECTION

INSPECT REAR WIPER MOTOR CONTINUITY

Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 1, inspect the continuity between terminals.

Motor link position	Tester connection to terminal number	Specified condition
A	5 – 6	Continuity
B	4 – 5 – 6	Continuity
C	5 – 6	Continuity
Except A, B or C	–	No continuity

If continuity is not as specified, replace the motor.



REAR WASHER MOTOR INSPECTION

INSPECT REAR WASHER MOTOR OPERATION

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.

LIMIT SWITCH INSPECTION

See Window Limit Switch on page [BE-73](#)

BACK DOOR POWER WINDOW AND WIPER RELAY INSPECTION

See Power Window end Wiper Relay on page [BE-74](#)