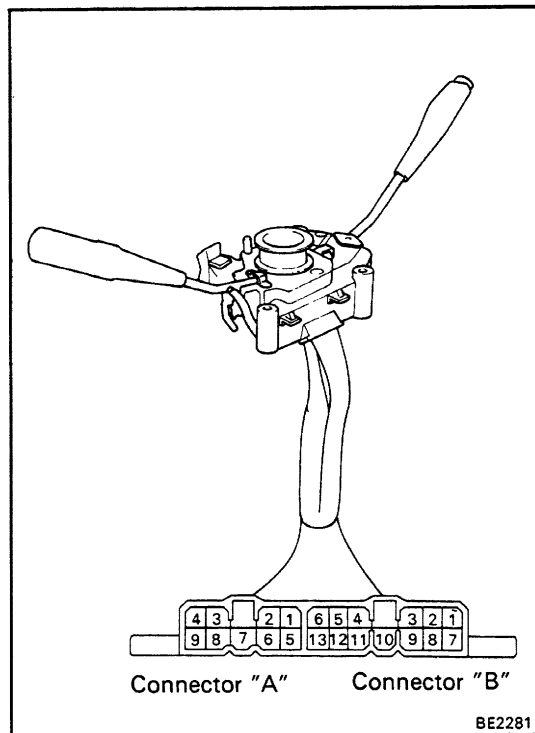


WIPERS AND WASHERS

Troubleshooting

Problem	Possible cause	Remedy	Front	Rear
			Page	Page
Wipers do operate or return to off position	WIPER fuse blown Wiper motor faulty Wiper switch faulty Wiper relay faulty Wiring or ground faulty	Replace fuse and check for short Check motor Check switch Check relay Repair as necessary	BE-3 BE-20 BE-18 BE-19	BE-3 BE-21 BE-18 BE-19
Wipers do not operate in INT position	Wiper switch faulty Wiper relay faulty Wiper motor faulty Wiring or ground faulty	Check switch Check relay Check motor Repair as necessary	BE-18 BE-19 BE-20	BE-18 BE-19 BE-21
Washer does not operate	Washer hose or nozzle clogged Washer motor faulty Wiper switch faulty Wiring or ground faulty	Repair as necessary Replace motor Check switch Repair as necessary	BE-18	BE-18



Part Replacement

See Replacement of Combination Switch on page [BE-12](#).

Part Inspection

Wiper System

1. INSPECT SWITCH

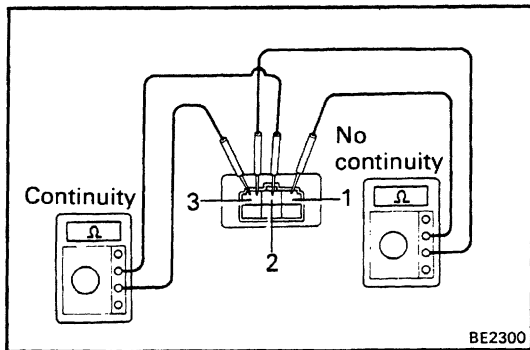
(Front Wiper and Washer Switch/ Continuity)

Terminals (Color)		A-1 (B)	A-2 (L)	A-4 (L-W)	A-6 (Lg-R)	A-7 (L-R)	A-8 (L-B)	A-9 (L-O)
Switch position								
Wiper	OFF					○	○	
	INT	○			○	○	○	
	LO			○			○	
	HI			○				○
Washer	OFF							
	ON	○	○					

(Rear Wiper and Washer Switch/ Continuity)

Terminals		1	2	3	4
Switch position					
Washer II		○	○		○
I NT			○		○
OFF					
ON				○	○
Washer I		○		○	○

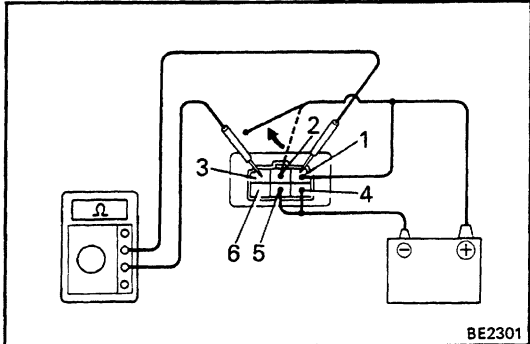
If continuity is not as specified, replace the switch.



2. INSPECT WIPER RELAY

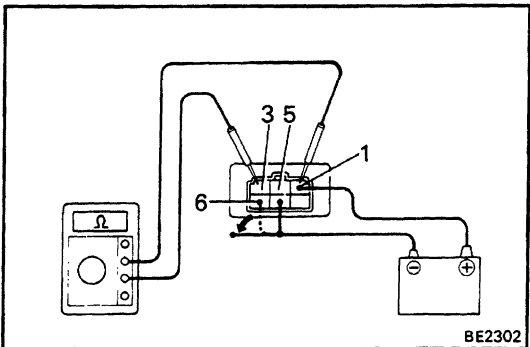
(Front Wiper Relay/ Continuity)

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



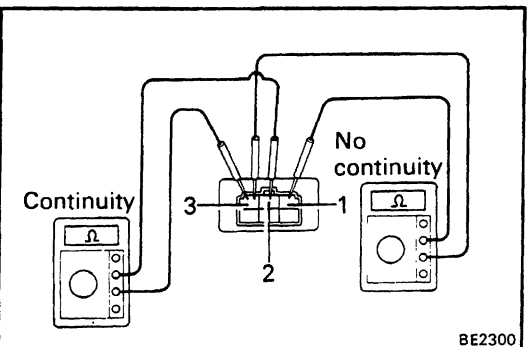
(Front Wiper Relay/ Operation)

- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) leads to terminals 4 and 5.
- Connect the positive (+) lead from the battery to terminal 2 for approx. 1 second.
- Check that there is no continuity between terminals 1 and 3 for 3 to 5 seconds, then there is continuity.



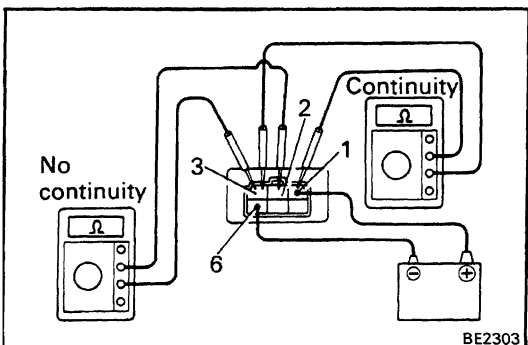
- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) leads to terminals 5 and 6.
- Check that there is continuity between terminals 1 and 3 after approx. 0.5 seconds.
- Disconnect the negative (-) lead from terminal 6, check that there is no continuity between terminals 1 and 3 after approx. 2 seconds.

If operation is not as specified, replace the relay.



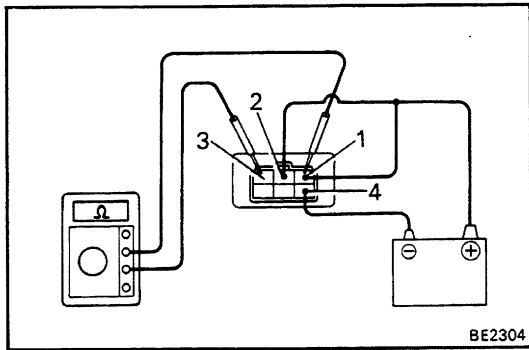
(Rear Wiper Relay/ Continuity)

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

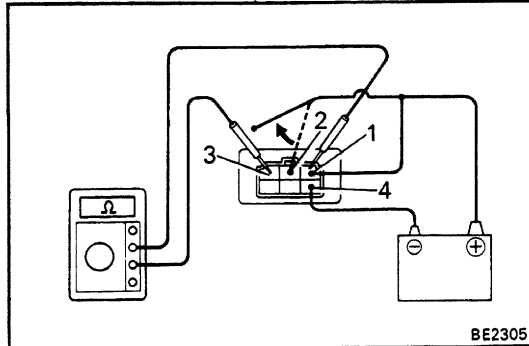


(Rear Wiper Relay/ Continuity)

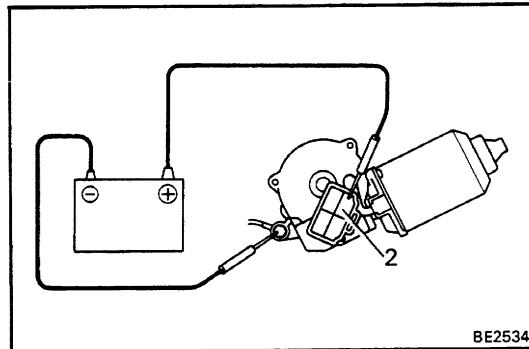
- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 6.
- Check that there is continuity between terminals 1 and 3.
- Check that there is no continuity between terminals 2 and 3.



- (d) Connect the positive (+) leads from the battery to terminals 1 and 2 and the negative (-) lead to terminal 4, check that there is continuity between terminals 1 and 3 for 5 seconds, then there is no continuity.



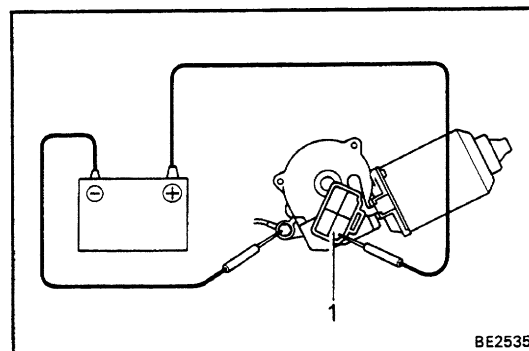
- (e) Disconnect the positive (+) lead from terminal 2, check that there is no continuity between terminals 1 and 3 for 9 – 15 seconds, then there is continuity. If continuity is not as specified, replace the relay.



3. INSPECT WIPER MOTOR

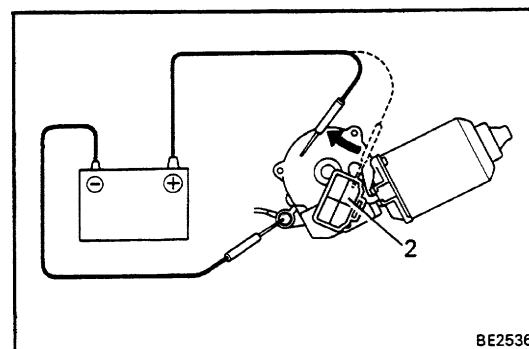
(Front Wiper Motor/Operation at Low Speed)

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



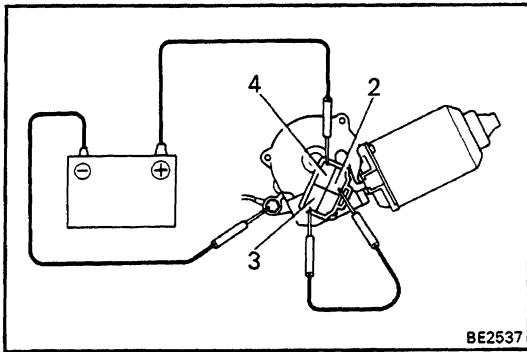
(Front Wiper Motor/Operation at High Speed)

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

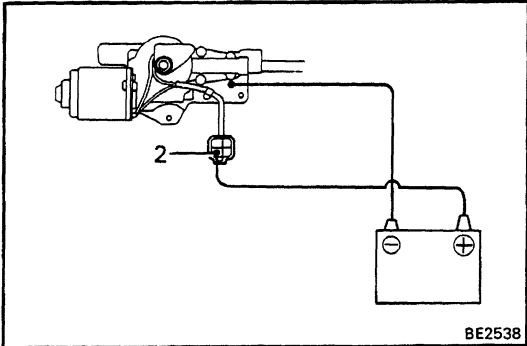


(Front Wiper Motor/Operation at Stop Position)

- (a) Operate the motor at low speed.
 (b) Stop the motor operation anywhere except the stop position by disconnecting the battery positive (+) terminal.

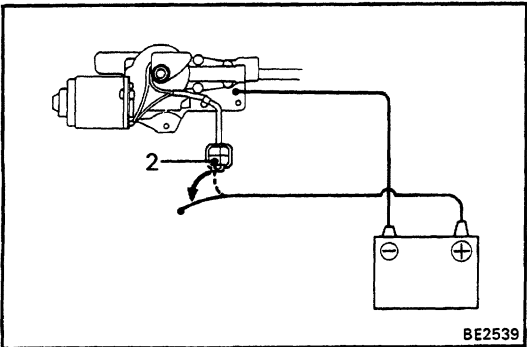


- (c) Connect the positive (+) lead from the battery to terminal 4 and the negative (–) lead to the motor body. Connect terminals 2 and 3.
- (d) Check that the motor stops running at the stopped position after the motor operates again.
If operation is not as specified, replace the motor.



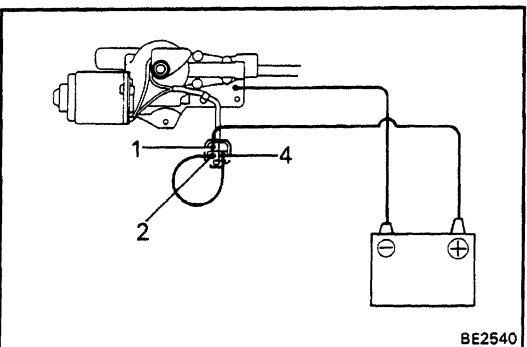
(Rear Wiper Motor/ Operation)

- (a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to the motor body.
- (b) Check that the motor operates.
If operation is not as specified, replace the motor.



(Rear Wiper Motor/Operation Stopping at Stop Position)

- (a) Operate the motor and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 2.

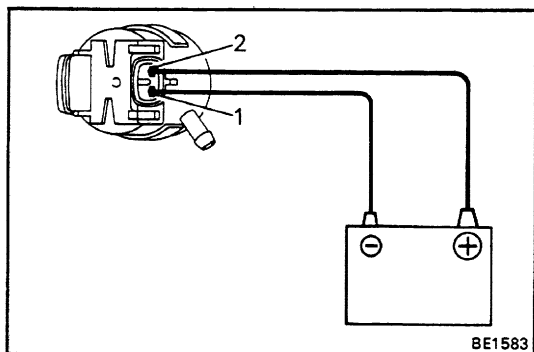


- (b) Connect terminals 2 and 4.
- (c) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to the motor body, check that the motor stops running at the stop position after the motor operates again.
If operation is not as specified, replace the motor.

Washer System

1. INSPECT SWITCHES

See front and rear wiper and washer switch on page [BE-18](#).

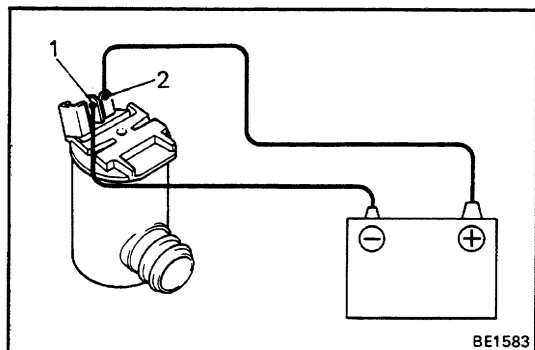


2. INSPECT WASHER MOTOR

(Front Washer Motor/ Operation)

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

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 Washer Motor/ Operation)

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

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.