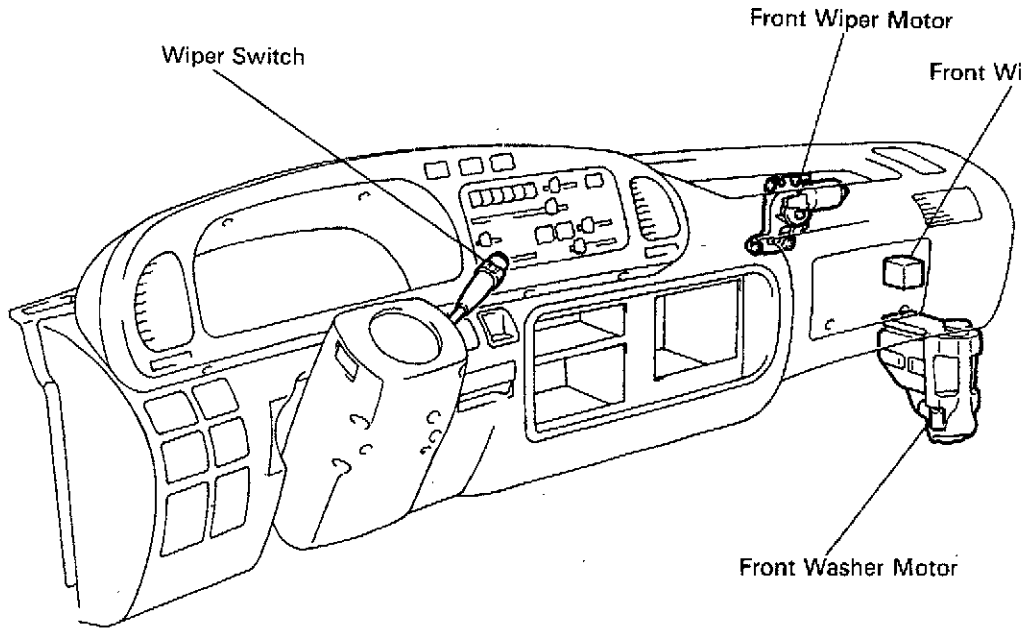
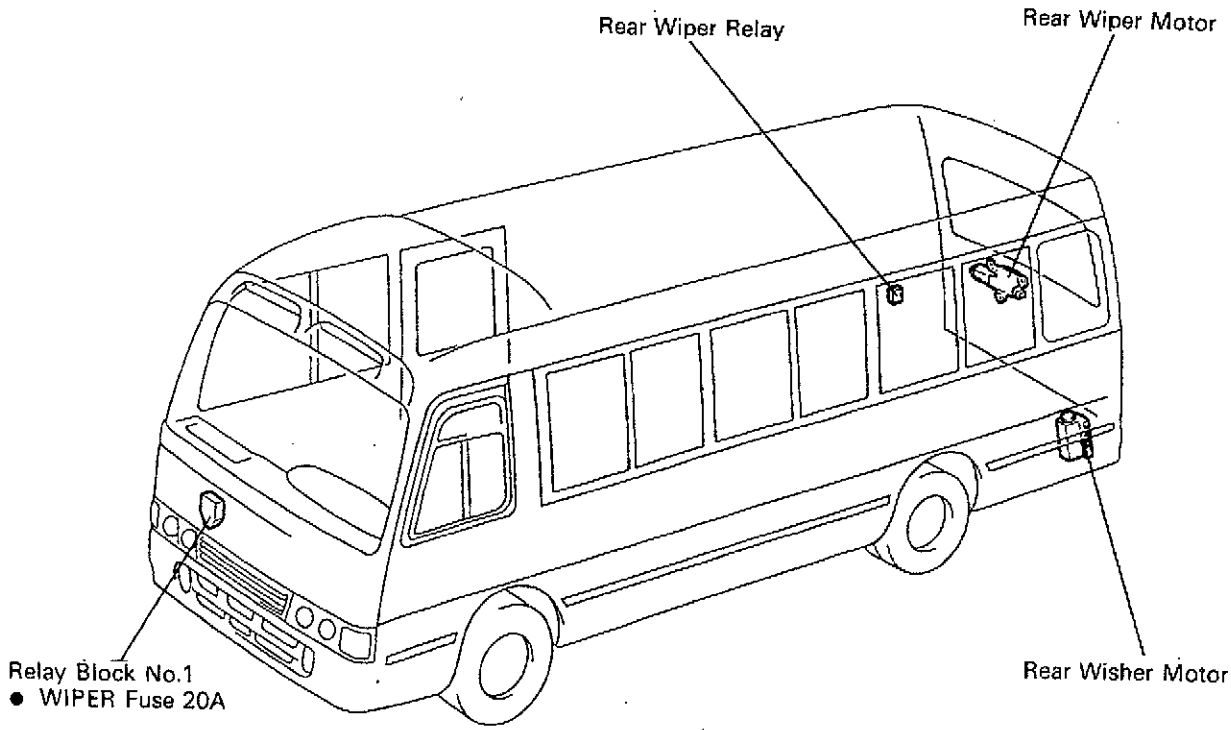
WIPER AND WASHER SYSTEM

PARTS LOCATION

BE016-02





N08122
N08123

BE019-01

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.

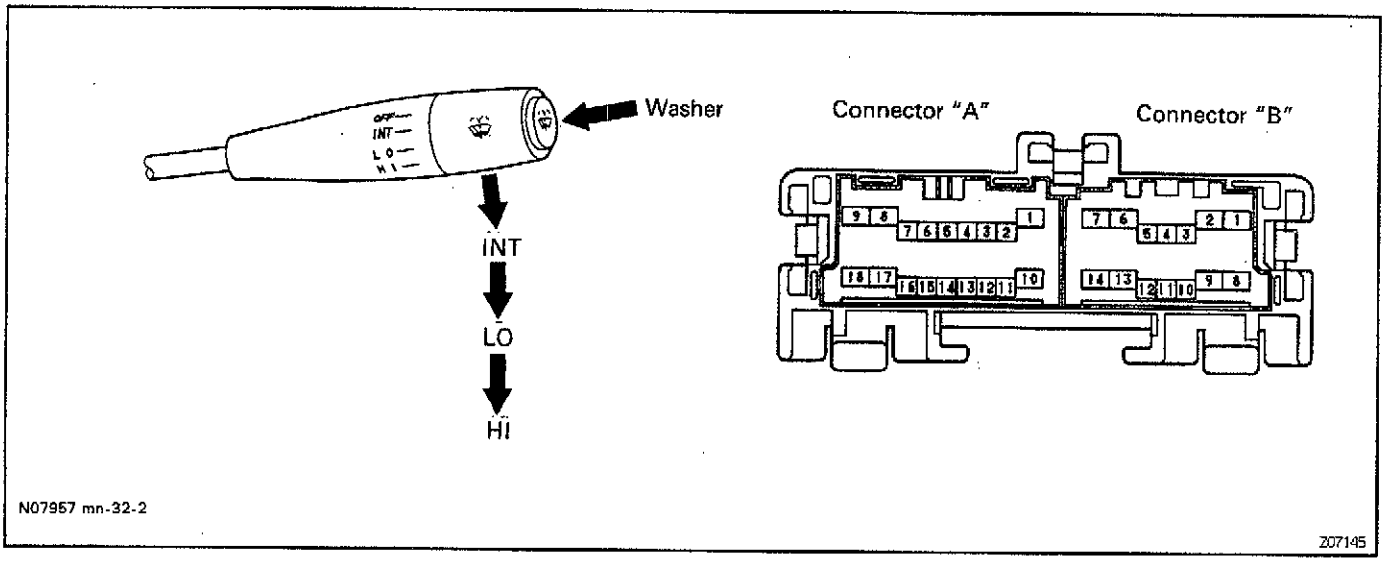
Trouble	Parts' name	See page
Wiper does not operate or turn to off position	1. AM1	BE—9 and 12
	2. Wiper Fuse	BE—9 and 12
	3. Ignition Switch	BE—13
	4. Wiper and Washer Switch	BE—34
	5. Wiper Motor	BE—39
	6. Wire harness	
Wiper does not operate in INT position	1. Wiper and Washer Switch	BE—34
	2. Wiper Motor	BE—39
	3. Wire Harness	
Washer does not operate	1. Wiper and Washer Switch	BE—34
	2. Washer Hose and Nozzle	
	3. Washer Motor	BE—39
	4. Wire Harness	

WIPER SWITCH

BE02P–01

1. INSPECT FRONT WIPER SWITCH

Inspect switch continuity between terminals.



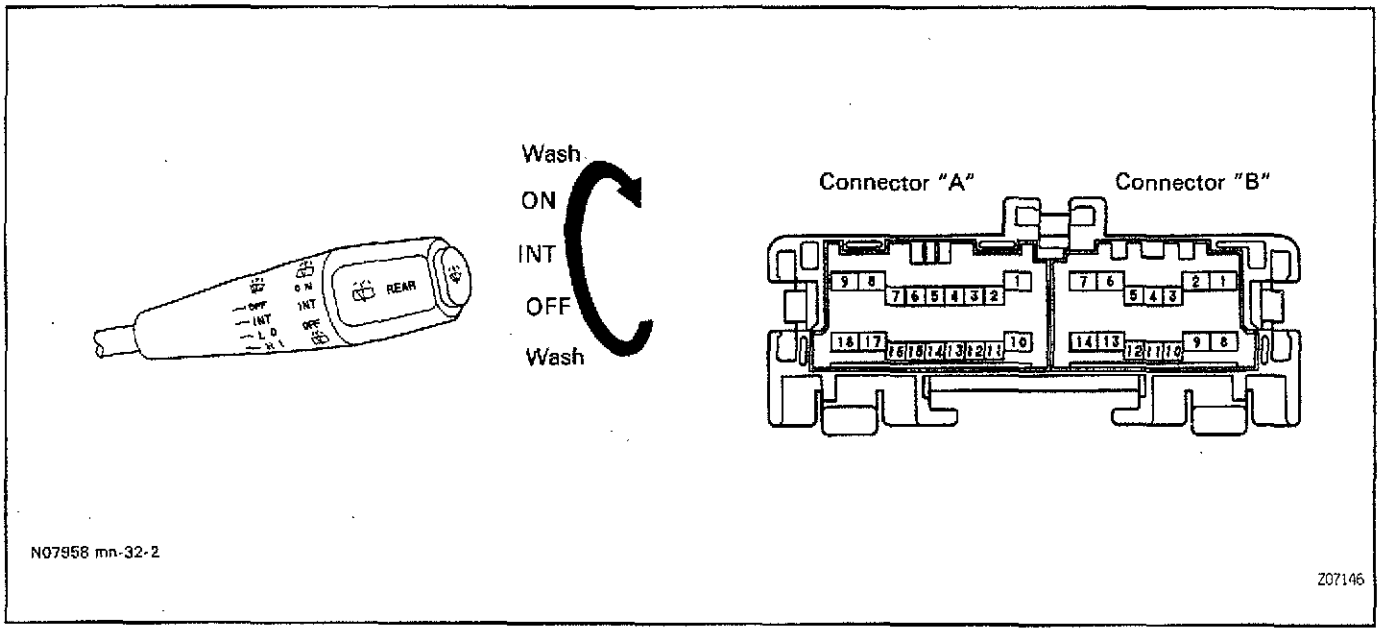
BE

Switch position	Tester connection	Specified value
OFF	A1 – A10	Continuity
INT	A1 – A10 B5 – B6	Continuity
LO	A1 – B14	Continuity
HI	B7 – B14	Continuity
WASH	B6 – B13	Continuity

If continuity is not as specified, replace the switch.

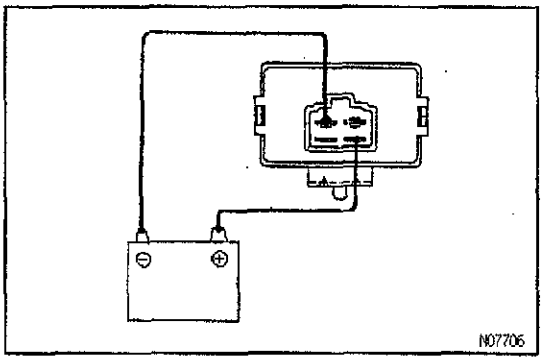
2. INSPECT REAR WIPER SWITCH

Inspect switch continuity between terminals.



Switch position	Tester connection	Specified value
WASH	B6 — B9	*Continuity*
OFF	—	No continuity
INT	A12 — B6	Continuity
ON	A3 — B6	Continuity
WASH	A3 — B6 — B9	Continuity

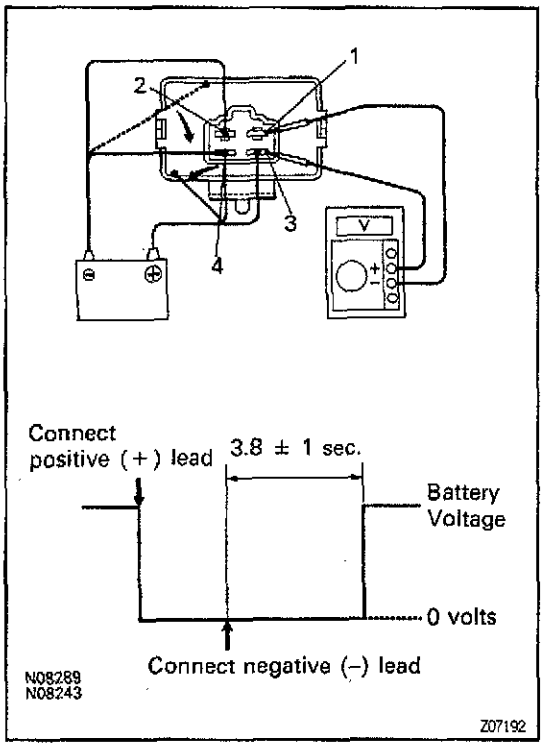
If continuity is not as specified, replace the switch.



WIPER RELAY

1. INSPECT FRONT WIPER RELAY

(a) Connect the positive (+) lead from the battery to terminal 3 and the negative (−) lead to terminal 2.

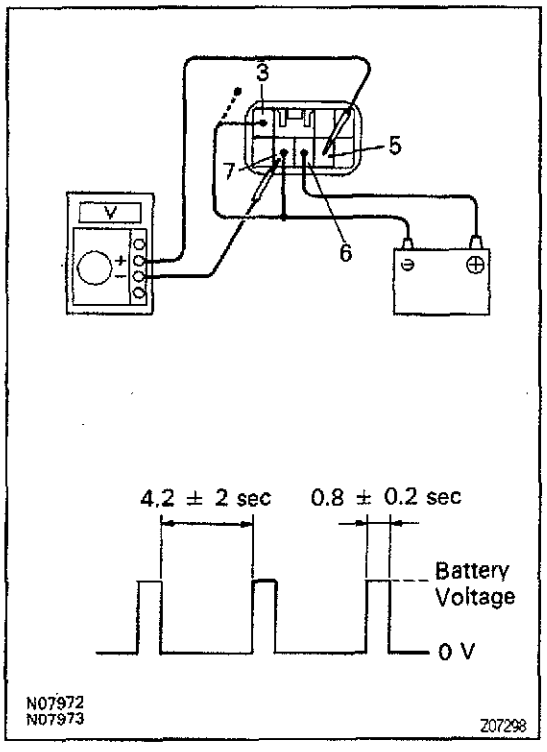


(b) Connect the positive (+) lead from the voltmeter to terminal 3 and negative (−) lead to terminal 1.

(c) Connect the positive (+) lead from the battery to terminal 4 for several seconds, then disconnect the battery positive (+) lead from the terminal 4.

(d) Check that the voltage changes as shown in the illustration when the negative (−) lead from the battery to terminal 4.

If operation is not as specified, replace the relay.



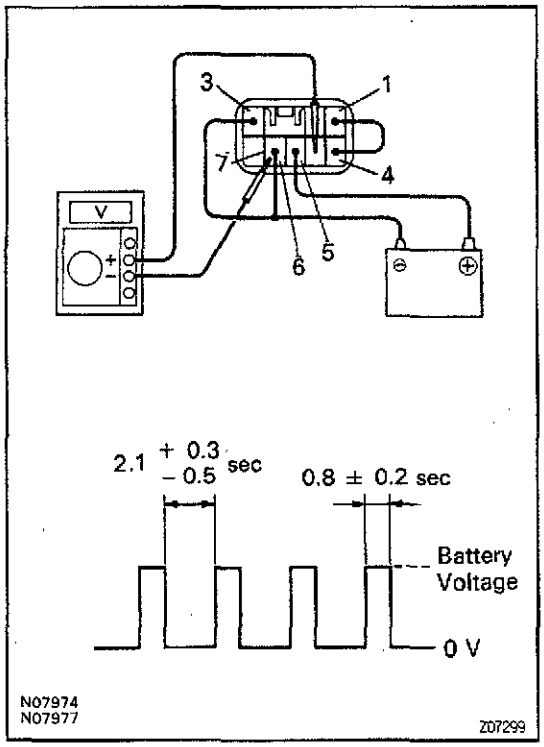
2. INSPECT FRONT WIPER RELAY W/ VARIABLE INT, LINKED WASH

(Operation at intermittent)

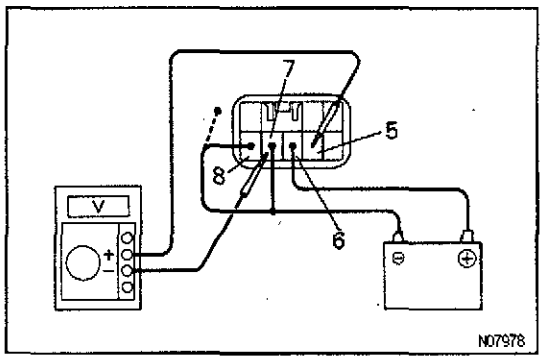
(a) Connect the positive (+) lead from the battery to terminal 6 and the negative (−) lead to terminal 7.

(b) Connect the positive (+) lead from the voltmeter to terminal 5 and the negative (−) lead to terminal 7, check that there is no voltage.

(c) Connect the negative (−) lead from the battery to terminal 3, check that the voltage changes as shown in the illustration.



(d) Connect terminals 1 and 4, check that the voltage changes shown in the table.
If operation is not as specified, replace the relay.



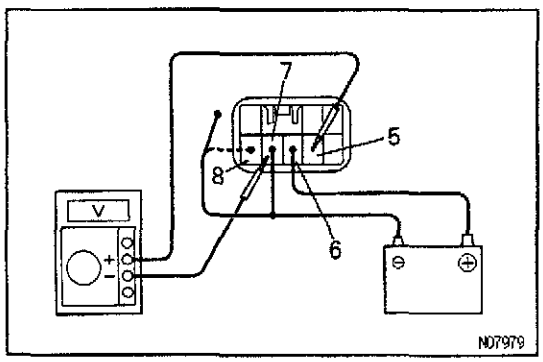
(Operation at Washer Linked)

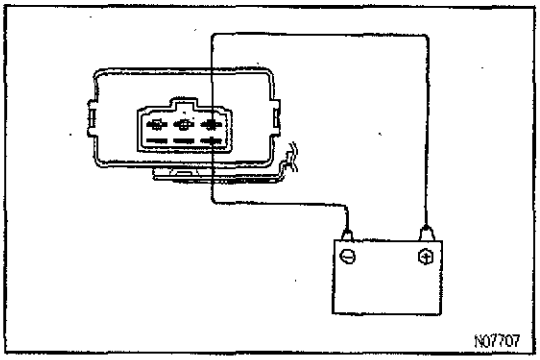
(a) Connect the positive (+) lead from the battery to terminal 6 and the negative (–) lead to terminal 7.

(b) Connect the positive (+) lead from the voltmeter to terminal 5 and the negative (–) lead to terminal 7.

(c) Connect the negative (–) lead from the battery to terminal 8, check that the voltage changes soon to battery positive voltage from no voltage.

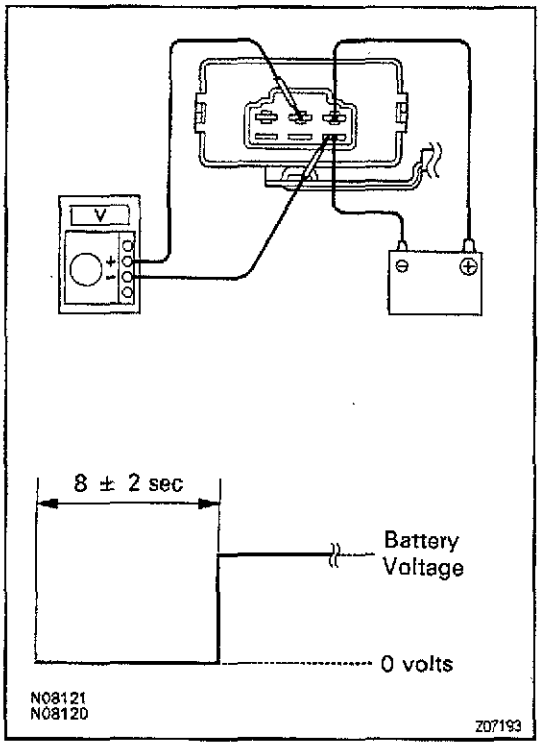
(d) Disconnect the negative (–) lead from terminal 8, check that the voltage changes to no voltage from battery positive voltage approximately 2.5 seconds later.
If operation is not as specified, replace the relay.





3. INSPECT REAR INTERMITTENT WIPER RELAY

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (−) lead to terminal 4.

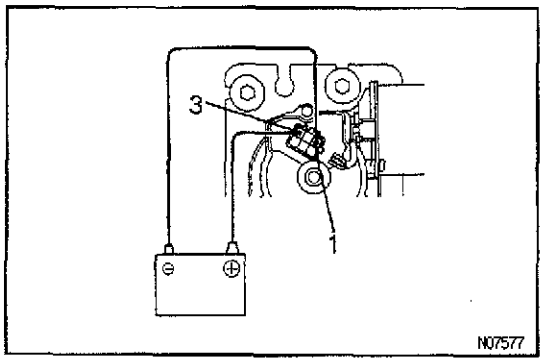


(b) Connect the positive (+) lead from the voltmeter to terminal 1 and negative (−) lead to terminal 3.

(c) Connect the positive (+) lead from the battery to terminal 2 for several seconds, then the battery positive (+) lead from the battery.

(d) Check that the voltage changes as shown in the illustration when the negative (−) lead from the battery to terminal 2.

If operation is not as specified, replace the relay.

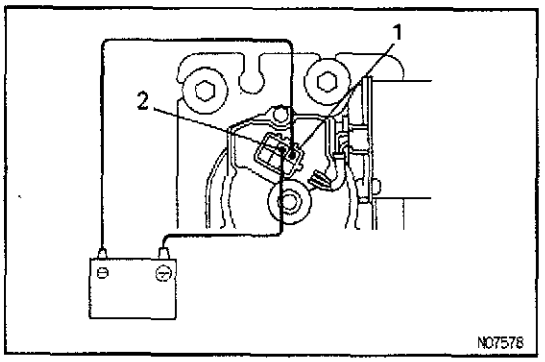


FRONT WIPER MOTOR

1. INSPECT OPERATION AT LOW SPEED

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

If operation is not as specified, replace the motor.

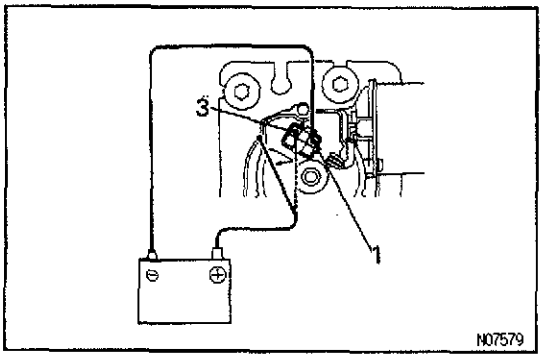


2. INSPECT OPERATION AT HIGH SPEED

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

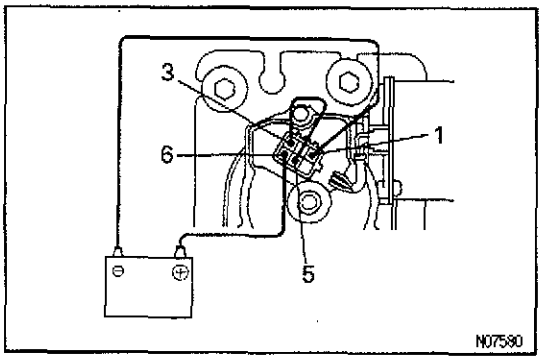
If operation is not as specified, replace the motor.

BE



3. INSPECT STOPPING OPERATION AT STOP POSITION

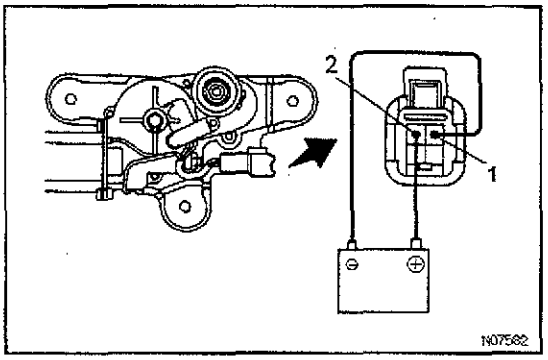
(a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.



(b) Connect terminals 3 and 5.

(c) Connect the positive (+) lead from the battery to terminal 6 and the negative (−) lead from the battery to 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.

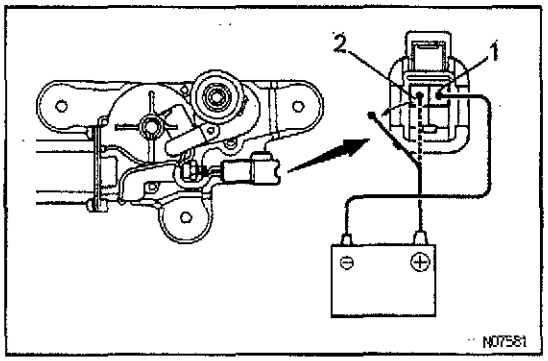


REAR WIPER MOTOR

BE02R-01

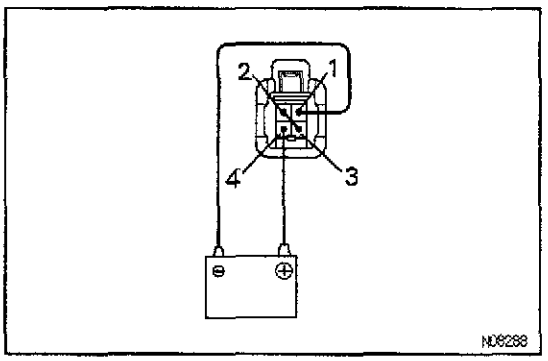
1. INSPECT OPERATION AT LOW SPEED

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



2. INSPECT STOPPING OPERATION AT STOP POSITION

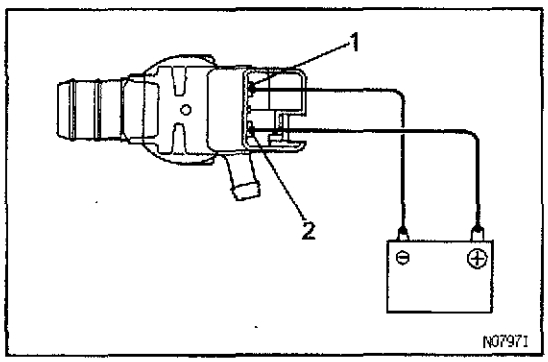
(a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.



(b) Connect terminals 2 and 4.

(c) Connect the positive (+) lead from the battery to terminal 4 and negative (−) lead from the battery to 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.



WASHER MOTOR

BE01C-02

WASHER MOTOR INSPECTION

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.