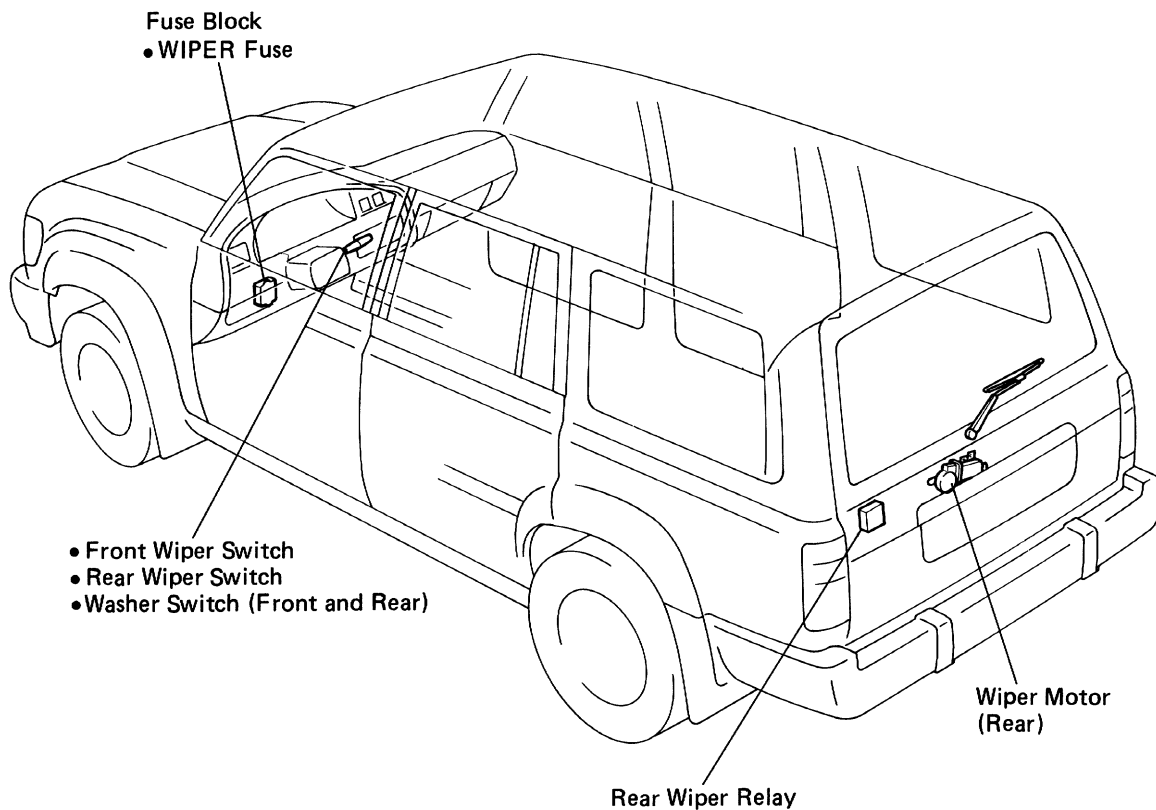
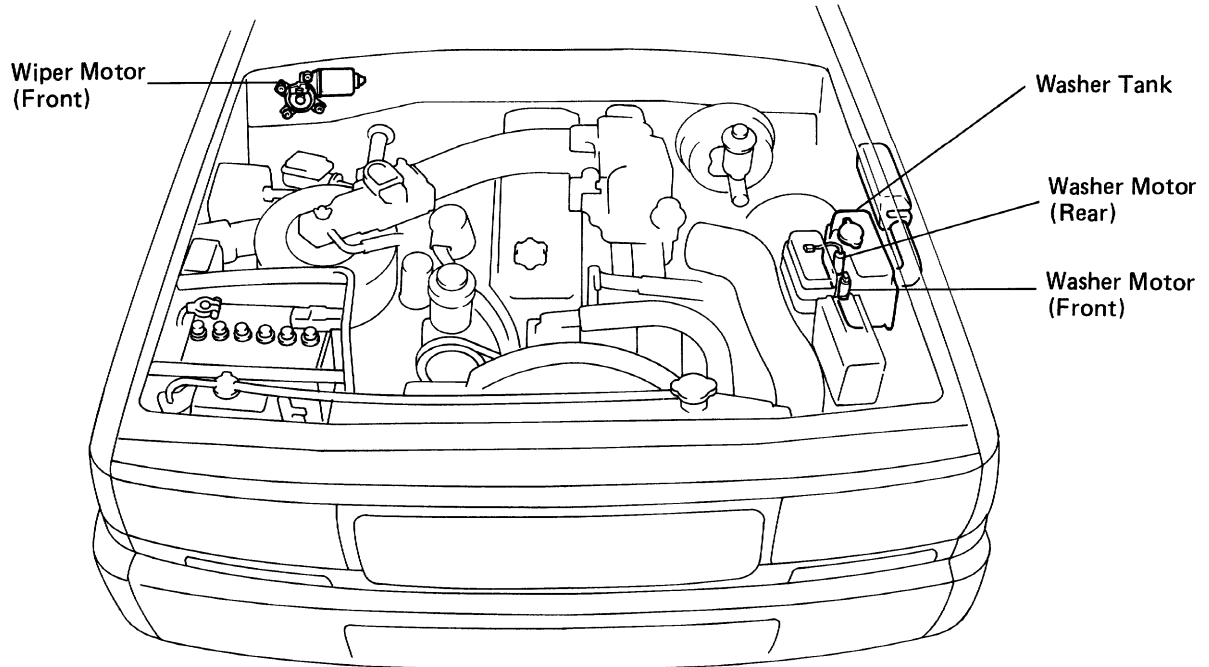
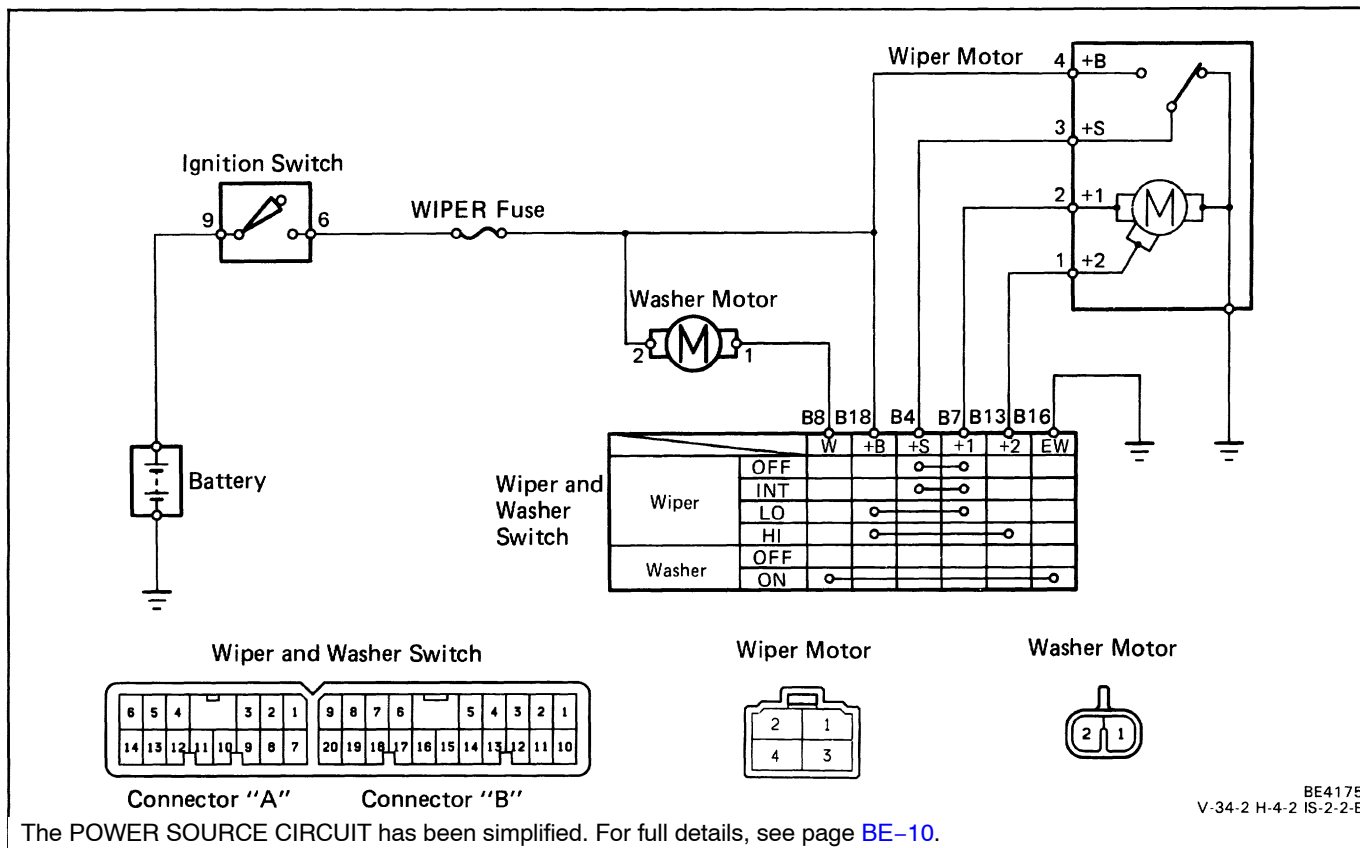


WIPER AND WASHER SYSTEM

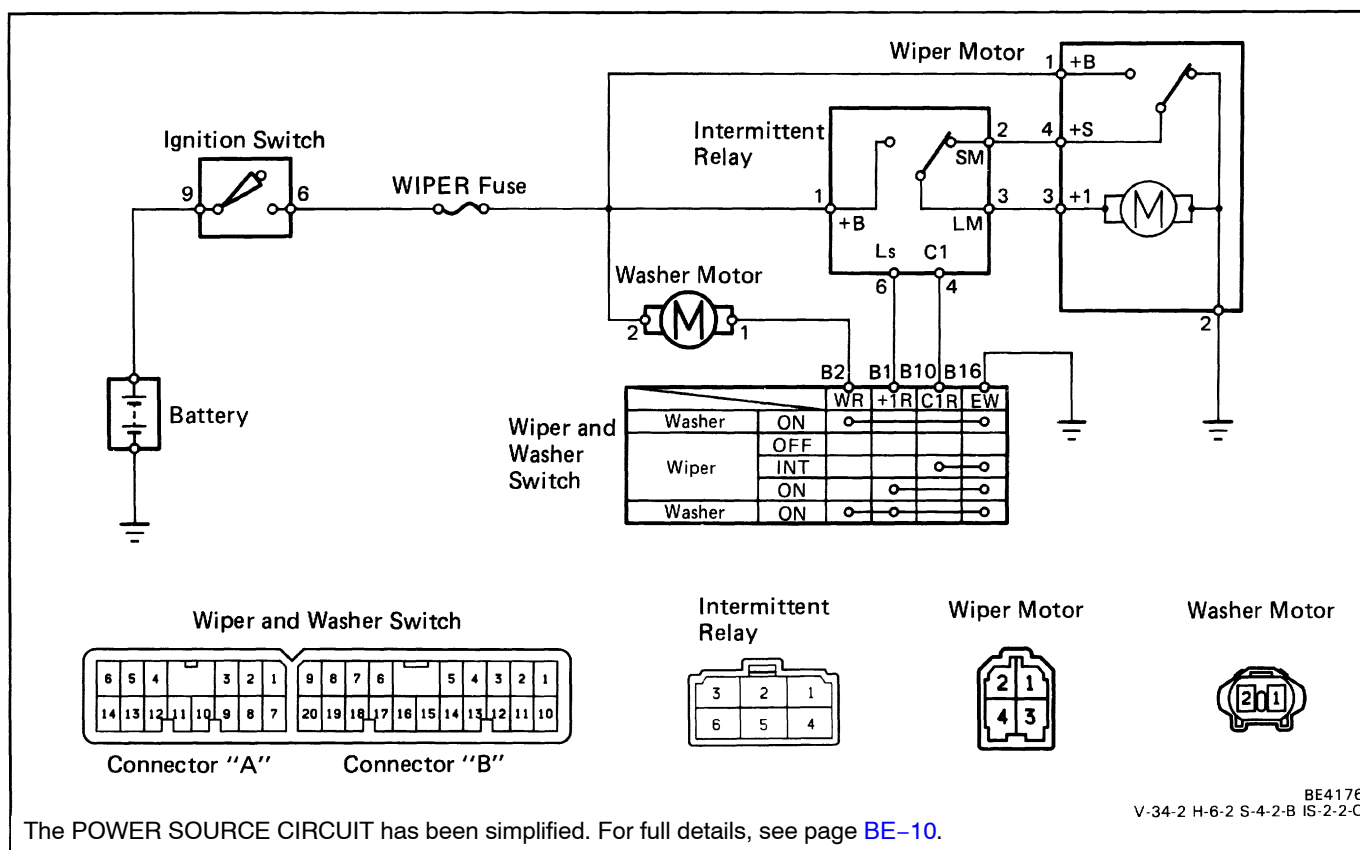
Parts Location



Wiring and Connector Diagrams (Front)



(Rear)



Troubleshooting

Problem	Possible cause	Remedy	Page	
			Front	Rear
Wiper do not operate or return to off position	WIPER fuse blown Wiper motor faulty Wiper switch faulty Wiring or ground faulty	Replace fuse and check for short Check motor Check switch Repair as necessary	BE-4, BE-6 BE-31 BE-29	BE-4, BE-6 BE-31 BE-29
Wiper do not operate in Mist position	Wiper switch faulty Wiper motor faulty Wiring or ground faulty	Check switch Check motor Repair as necessary	BE-29 BE-31	— — —
Wiper do not operate in Inter-mittent (INT) position	Wiper relay faulty Wiper switch faulty Wiper motor faulty Wiring or ground faulty	Check relay Check switch Check motor Repair as necessary	BE-30 BE-29 BE-31	BE-30 BE-29 BE-31
Washer do not operate	Washer hose or nozzle clogged Washer motor faulty Washer switch faulty Wiring or ground faulty	Repair as necessary Check motor Check switch Repair as necessary	BE-33 BE-29	BE-33 BE-29

Parts Replacement

See Parts Replacement of Combination Switch on page [BE-21](#).

Parts Inspection

Wiper System

1. INSPECTION SWITCHES

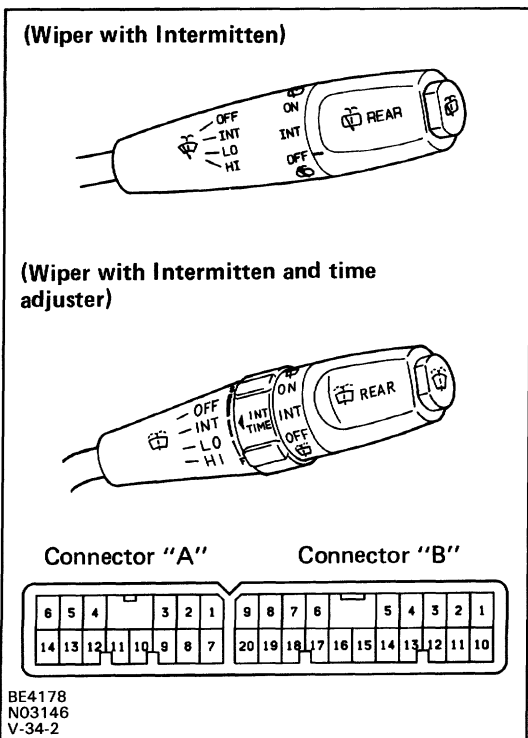
(Front Wiper and Washer Switch/Continuity)

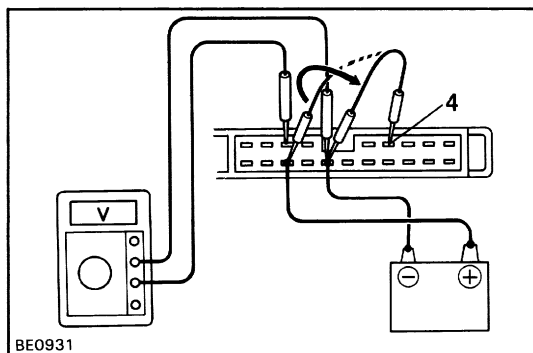
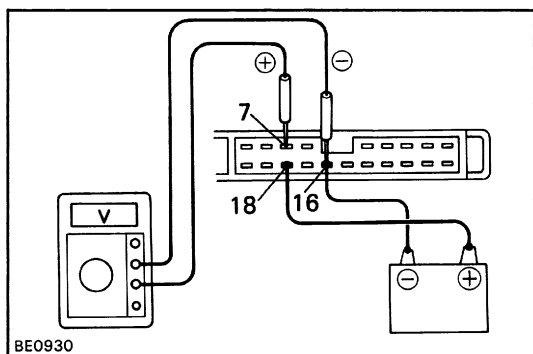
Terminal (Color)		B4 (L-R)	B7 (L-B)	B8 (L)	B12 (Y-B)	B13 (L-O)	B16 (B)	B18 (L-W)
Switch position								
Wiper	OFF	○	○					
	INT	○	○					
	LO		○	—	—	—	—	○
	HI					○	—	○
Washer	OFF							
	ON			○	—	—	○	

(Rear Wiper and Washer Switch/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.



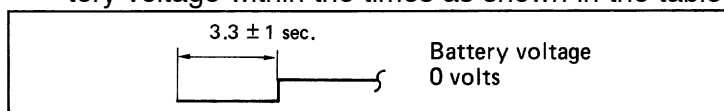


2. INSPECT FRONT WIPER RELAY

(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 voltage.
- After connecting terminal B4 to terminal B18, connect to terminal B16.

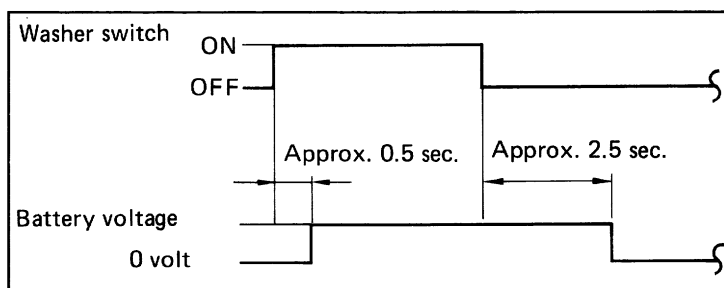
Then, check that the voltage rises from 0 volt to battery voltage within the times as shown in the table.



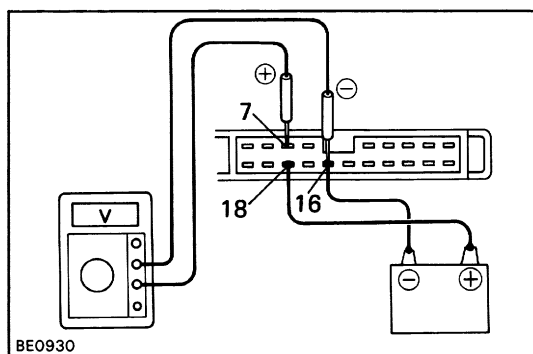
If operation is not as specified, replace the switch.

(Operation as Washer Linked)

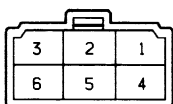
- Connect the positive (+) lead from the battery to terminal B18 and the negative (-) lead to terminal B16.
- Connect the positive (+) lead from the voltmeter to terminal B7 and the negative (-) lead to terminal B16.
- Push in the washer switch. Check that the voltage changes as shown in the table.



If operation is not as specified, replace the switch.



Relay Side

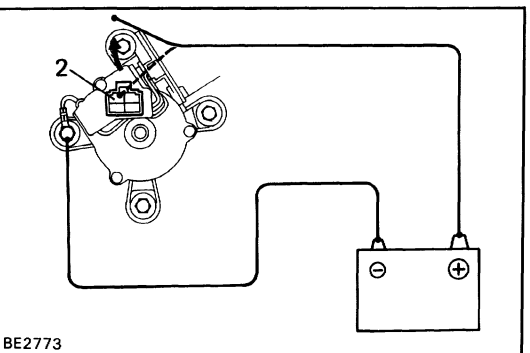
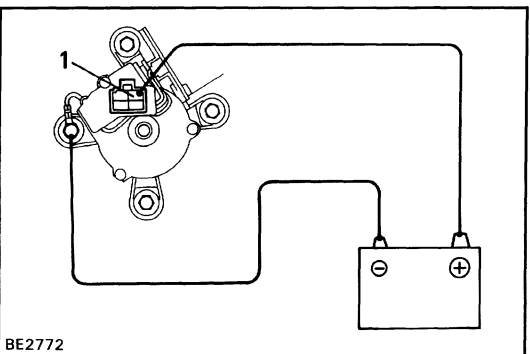
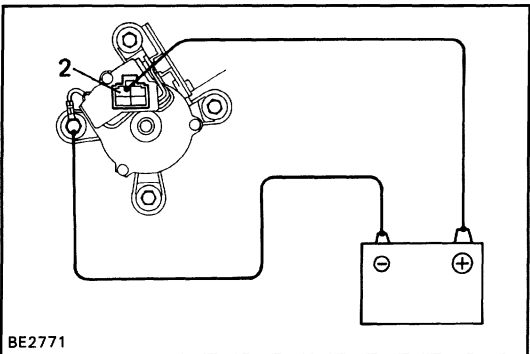
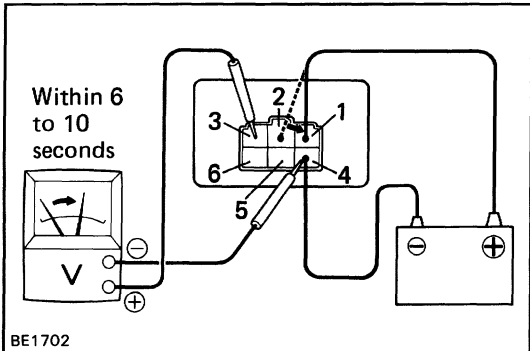
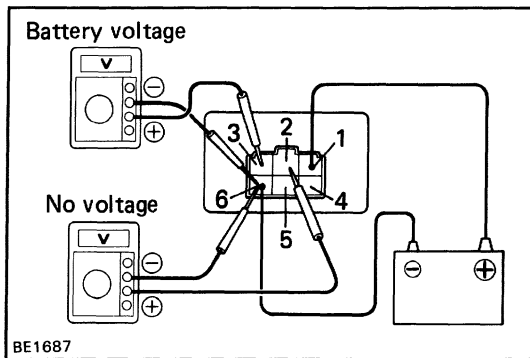


3. INSPECT REAR WIPER RELAY

(Continuity)

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

If continuity is not as specified, replace the relay.



(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 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 voltage within 6 to 10 seconds.

If operation is not as specified, replace the relay.

3. INSPECT MOTOR

(Front Motor/Operation at 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 as low speed.

If operation is not as specified, replace the motor.

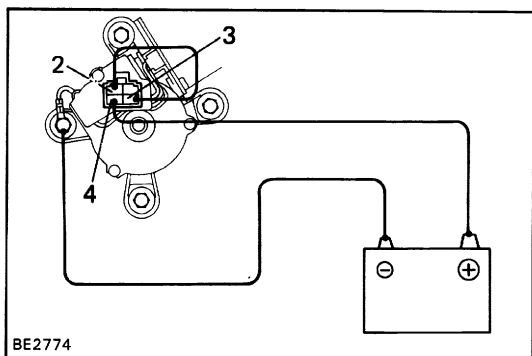
(Front Motor/Operation at High Speed)

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

If operation is not as specified, replace the motor.

(Front Motor/Operation, Stopping at Stop Position)

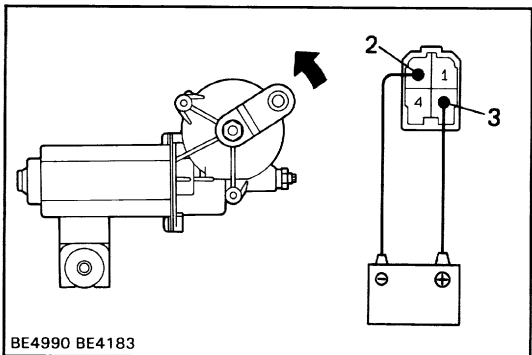
- Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 2.



(b) Connect terminals 2 and 3.

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

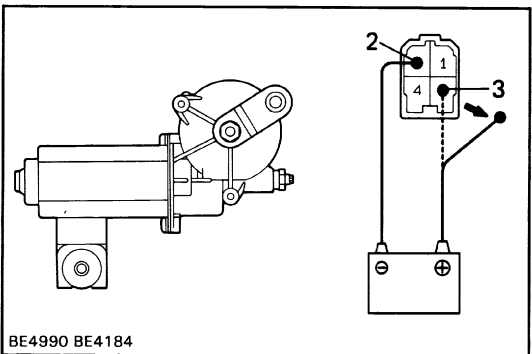
If operation is not as specified, replace the motor.



(Rear Motor/Operation at Low Speed)

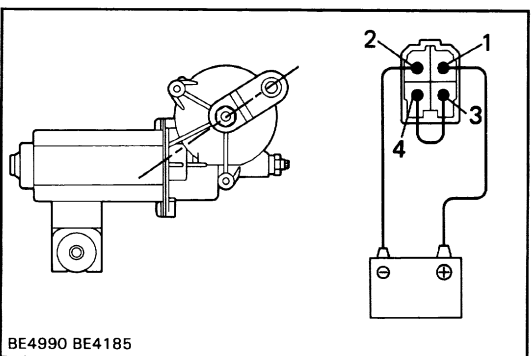
Connect the positive (+) lead from the battery to terminal 3 and the negative (-) lead to terminal 2, check that the motor operates as low speed.

If operation is not as specified, replace the motor.



(Rear Motor/Operation, Stopping at Stop Position)

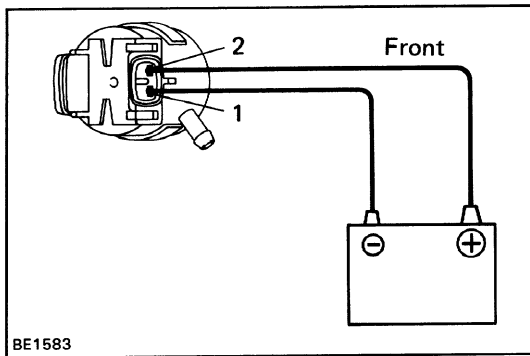
(a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.



(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 System

1. INSPECT WASHER SWITCH

(Washer Switch)

See Wiper and Washer Switch on page [BE-29](#).

2. INSPECT 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.

