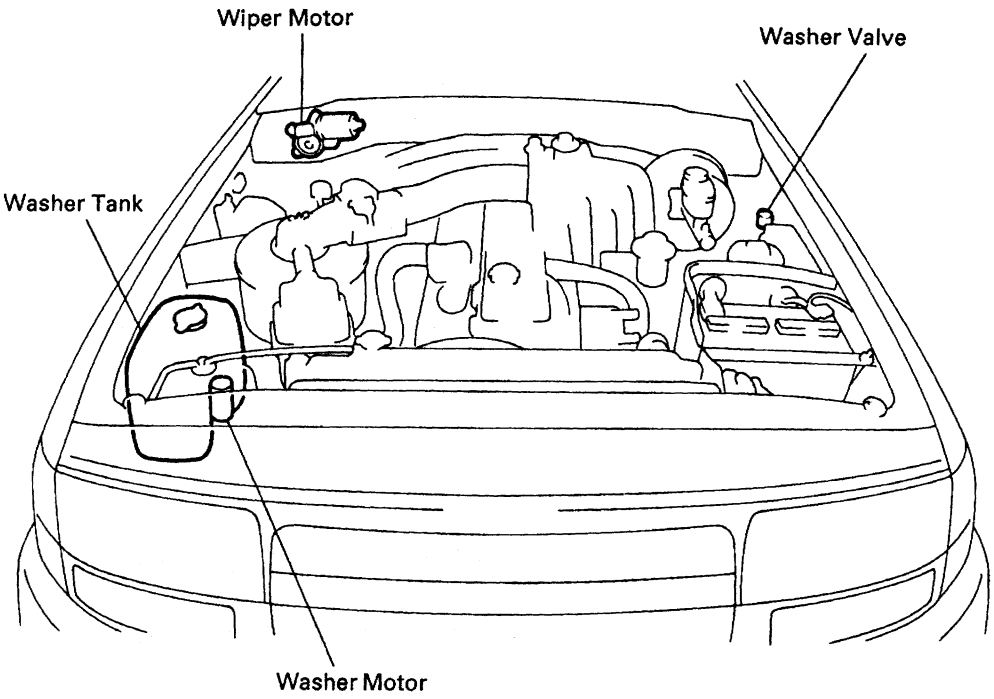
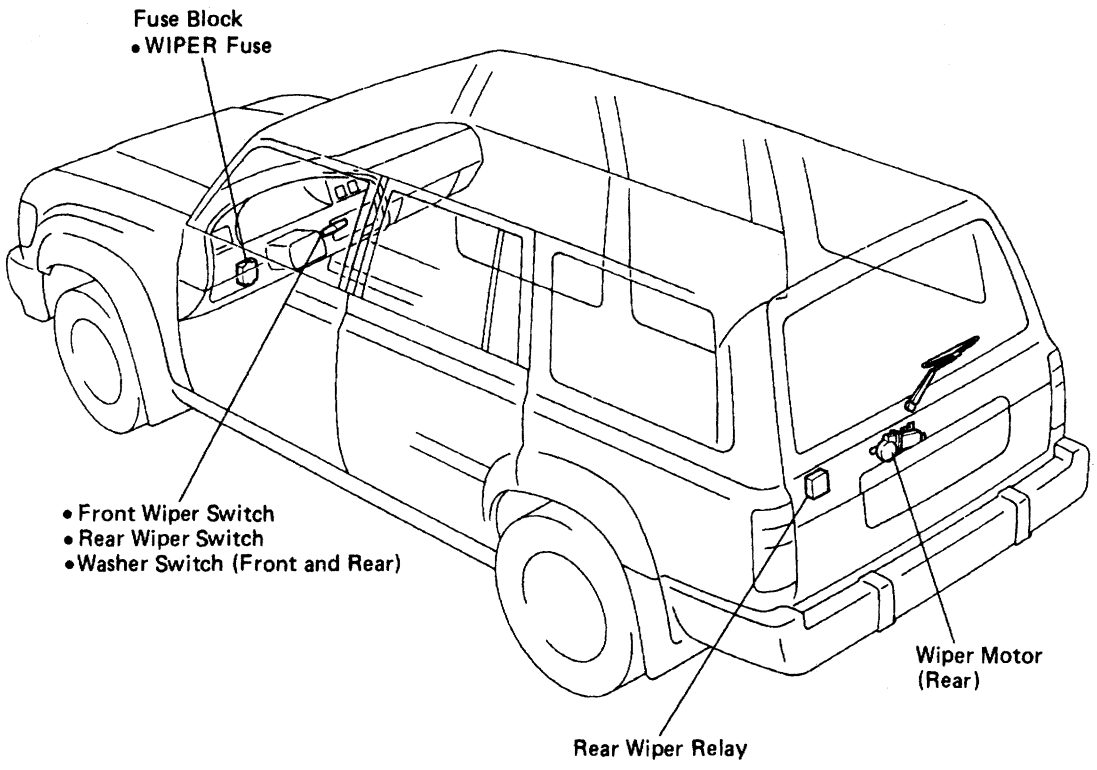
WIPER AND WASHER SYSTEM

BE0KN–01

PARTS LOCATION





N06187
BE5080

Z06286

BE0KQ–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) (Front) (Rear)
Wiper do not operate or return to off position.	1. WIPER Fuse 2. Wiper Switch 3. Wiper Motor 4. Wiper Relay 5. Wire Harness	(BE–4) (BE–4) (BE–36) (BE–36) (BE–38) (BE–39) (BE–37) (BE–38)
Wiper do not operate in MIST.	1. Wiper Switch 2. Wiper Motor 3. Wiper Relay 4. Wire Harness	(BE–36) (BE–36) (BE–38) (BE–39) (BE–37) (BE–38)
Wiper do not operate in INT.	1. Wiper Switch 2. Wiper Motor 3. Wiper Relay 4. Wire Harness	(BE–36) (BE–36) (BE–38) (BE–39) (BE–37) (BE–38)
Washer does not operate.	1. Washer Hose or Nozzle Clogged 2. Washer Switch 3. Washer Motor 4. Wire Harness	(BE–36) (BE–40) (BE–40)

COMBINATION SWITCH REMOVAL

BE0KS–02

REMOVE FRONT WIPER AND WASHER SWITCH

See page BO–61.

COMBINATION SWITCH INSTALLATION

INSTALL FRONT WIPER AND WASHER SWITCH

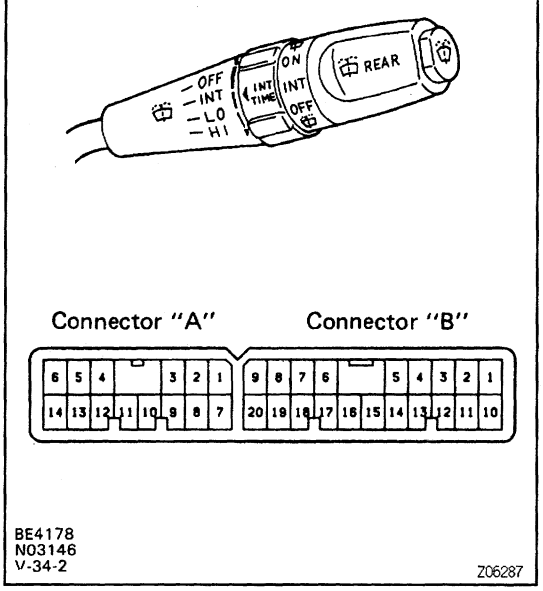
See page BO–61.

COMBINATION SWITCH INSPECTION

INSPECT FRONT WIPER AND WASHER SWITCH

Continuity

(Wiper with Intermitten and time adjuster)



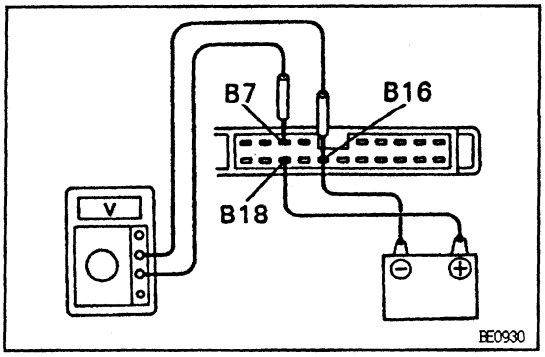
Switch position	Tester connection to terminal number	Specified value
Wiper OFF	B4–B7 (L–R) – (L–B)	Continuity
Wiper INT	B4 – B7 (L – R) – (L – B)	Continuity
Wiper LO	B7–B18 (L–B) – (L–W)	Continuity
Wiper HI	B13 – B18 (L–0) – (L–W)	Continuity
Washer OFF	–	No continuity
Washer ON	B8–B16 (L) – (B)	Continuity

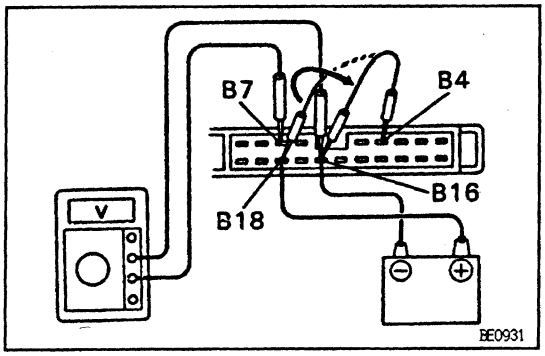
INSPECT REAR WIPER AND WASHER SWITCH

Continuity

Switch position	Tester connection to terminal number	Specified value
Washer ON	B2 B16 (v) – (6)	Continuity
Wiper OFF	–	No continuity
Wiper INT	B10 – 816 (0) – (B)	Continuity
Wiper ON	B1 – B16 (G) .– (B)	Continuity
Washer ON	B1 B2 B16 (G) – (V) – (B)	Continuity

If continuity is not as specified, replace the switch.





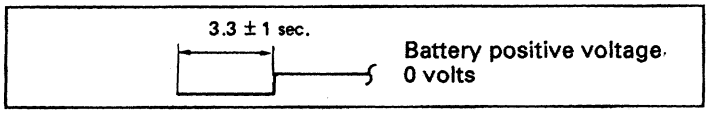
FRONT WIPER RELAY INSPECTION

BE0KU–01

INSPECT FRONT WIPER RELAY

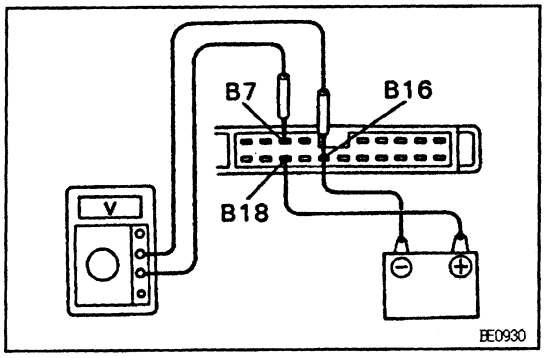
Operation at Intermittent

(a) Turn the wiper switch to INT position.
(b) Turn the intermittent time control switch to FAST position.
(c) Connect the positive (+) lead from the battery to terminal 1318 and the negative (–) lead to terminal B 16.
(d) Connect the positive (+) lead from the voltmeter to terminal B7 and the negative (–) lead to terminal B1 6, check that the meter needle indicates battery positive voltage.
(e) After connecting terminal B4 to terminal B18, connect to terminal B 16.
Then, check that the voltage rises from O volt to battery positive voltage within the times, as shown in the table.



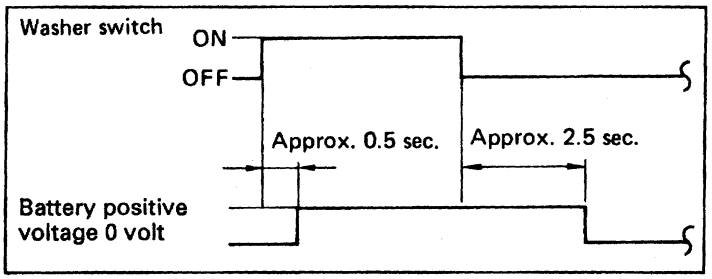
V02744

If operation is not as specified, replace the switch.



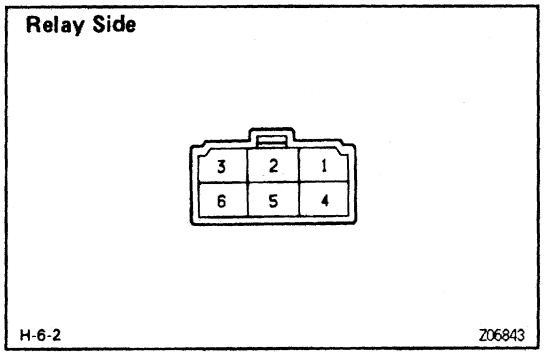
Operation as Washer Linked

(a) Connect the positive (+) lead from the battery to terminal B18 and the negative (–) lead to terminal B 16.
(b) Connect the positive (+) lead from the voltmeter to terminal B7 and the negative (–) lead to terminal B16.
(c) Push in the washer switch. Check that the voltage changes, as shown in the table.



V02745

If operation is not as specified, replace the switch.



BE0KW–02

REAR WIPER RELAY INSPECTION

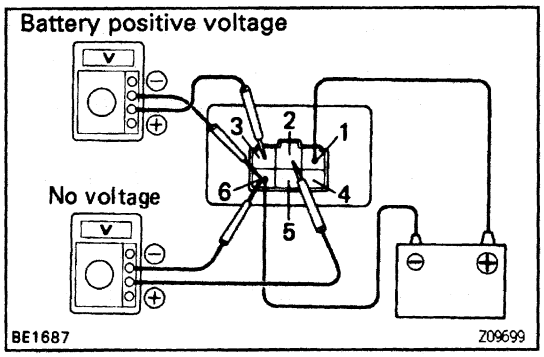
INSPECT REAR WIPER RELAY

Continuity

(a) Check that there is no continuity between terminals 1 and 3.

(b) Check that there is continuity between terminals 2 and 3.

If continuity is not as specified, replace the relay.



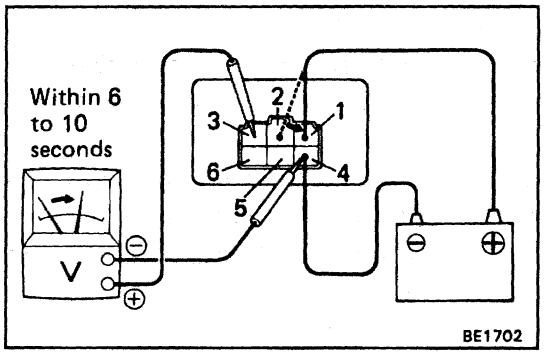
Operation

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 6.

(b) Conneppct the positive (+) lead from the voltmeter to terminal 2 and the negative (–) lead to terminal 6, check that the meter needle indicates to O volts.

(c) 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.



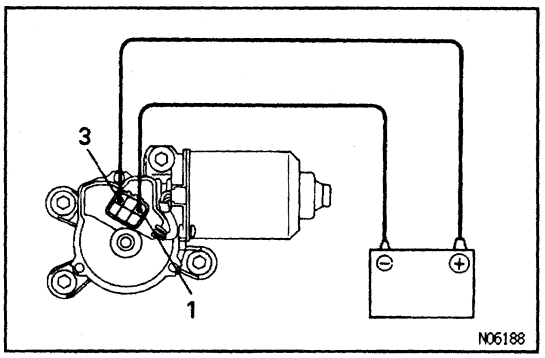
Intermittent Operation

(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (–) lead to terminal 4.

(b) Connect the positive (+) lead from the voltmeter to terminal 3 and the negative (–) lead to terminal 4.

(c) After disconnecting the positive (+) lead from terminal 2, connect it to terminal 1, and then, check that the meter needle rises from O volts to battery positive voltage within 6 to 10 seconds.

If operation is not as specified, replace the relay.



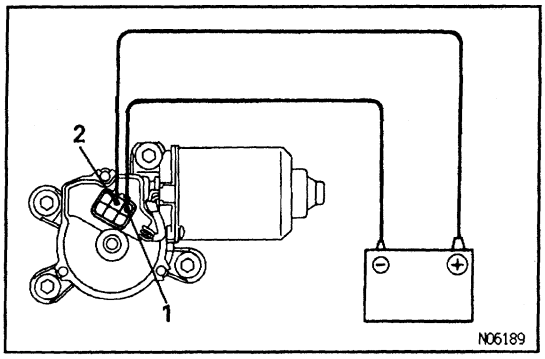
FRONT WIPER MOTOR INSPECTION

INSPECT FRONT WIPER MOTOR

Operation at Low Speed

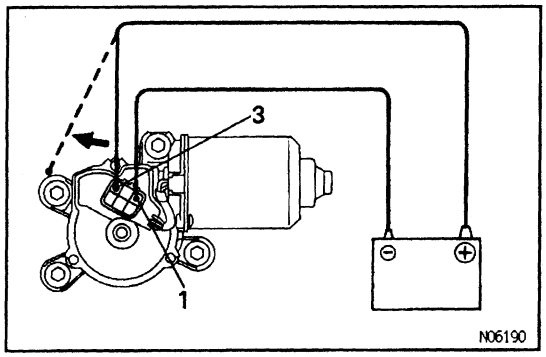
Connect the positive (+) lead from the battery to terminal 3 and negative (–) lead to terminal 1 check that the motor operates at low speed.

If operation is not as specified, replace the motor.



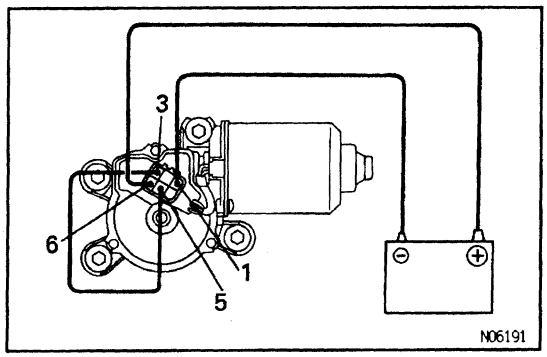
Operation at High Speed

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 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.

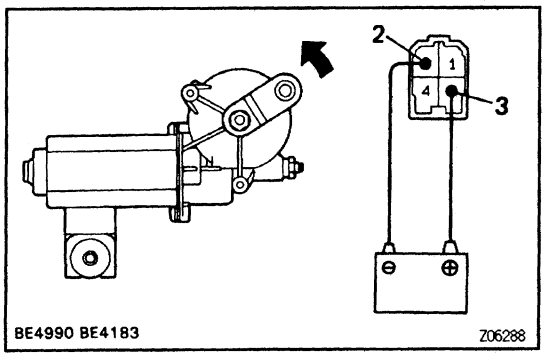
REAR WIPER MOTOR INSPECTION

BE0L0-01

INSPECT REAR WIPER MOTOR

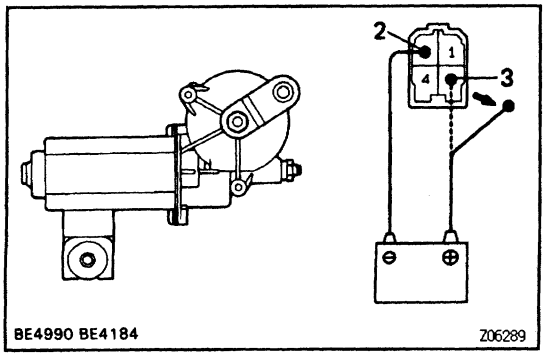
Operation at Low Speed

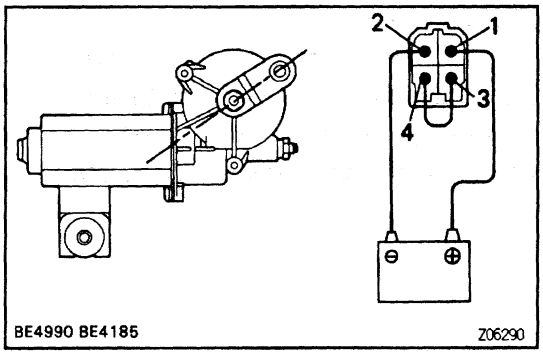
Connect the positive (+) lead from the battery to terminal 3 and negative (–) lead to terminal 2, check that the motor operates at low speed.
If operation is not at specified, replace the motor.



Operation. Stopping at Stop Position

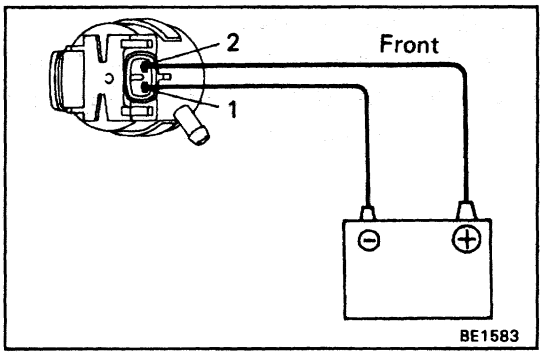
(a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 3.

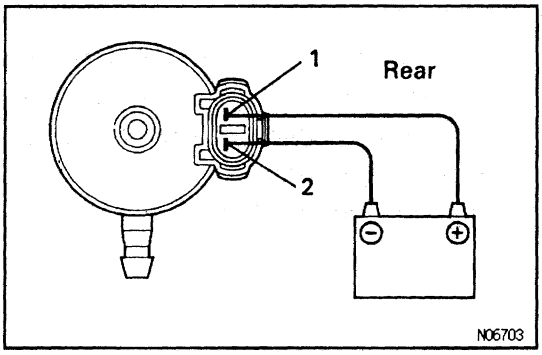




(b) Connect terminal 3 and 4.

(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.





BE0L2–02

WASHER MOTOR INSPECTION

INSPECT WASHER MOTOR

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.