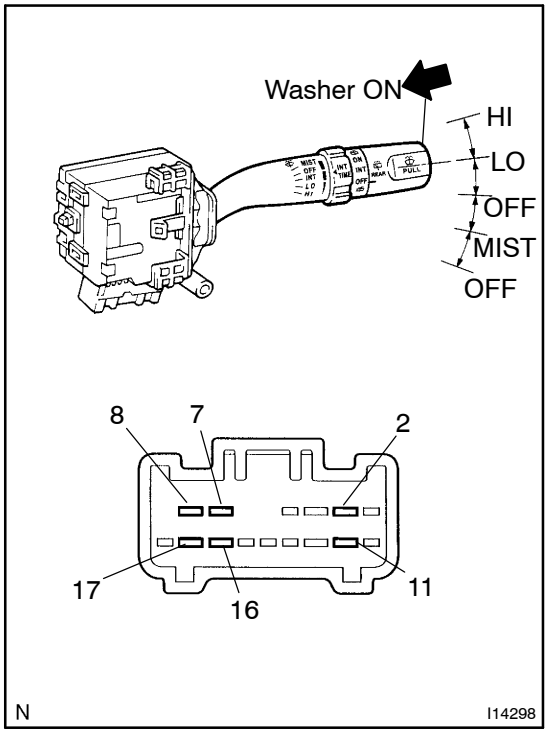
BE1ER–01

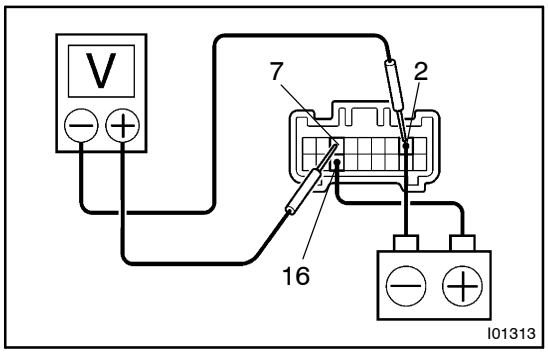
INSPECTION

1. LHD models:
INSPECT FRONT WIPER AND WASHER SWITCH CONTINUITY



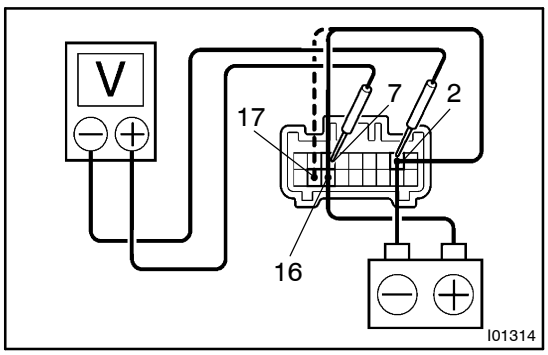
Switch position	Tester connection	Specified condition
OFF	7 – 16	Continuity
MIST (w/ Mist wiper)	7 – 17	Continuity
INT (w/ Intermittent wiper)	7 – 16	Continuity
LO	7 – 17	Continuity
HI	8 – 17	Continuity
Washer ON	2 – 11	Continuity

If continuity is not as specified, replace the switch.



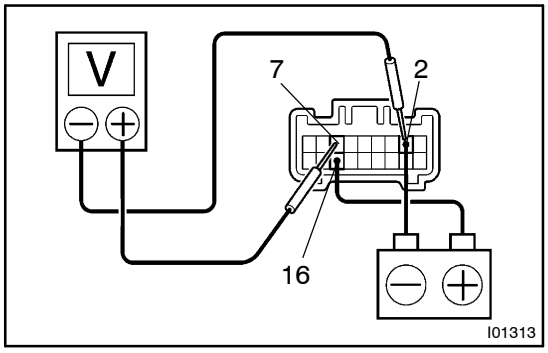
2. LHD models:
INSPECT FRONT WIPER INTERMITTENT OPERATION

(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 16 and the negative (–) lead to terminal 2.
(d) Connect the positive (+) lead from the voltmeter to terminal 7 and the negative (–) lead to terminal 2, check that the meter needle indicates battery voltage.
(e) After connecting terminal 16 to terminal 17, connect to terminal 2 to terminal 17, check the voltage rises from 0 volts to battery voltage with in the times, as shown in the table.



INT time control switch position	Voltage
FAST	Approx. 1 ~ 3 sec. Battery voltage 0 Volt
SLOW	Approx. 10 ~ 15 secs. Battery voltage 0 Volt

If operation is not as specified, replace the wiper and washer switch.

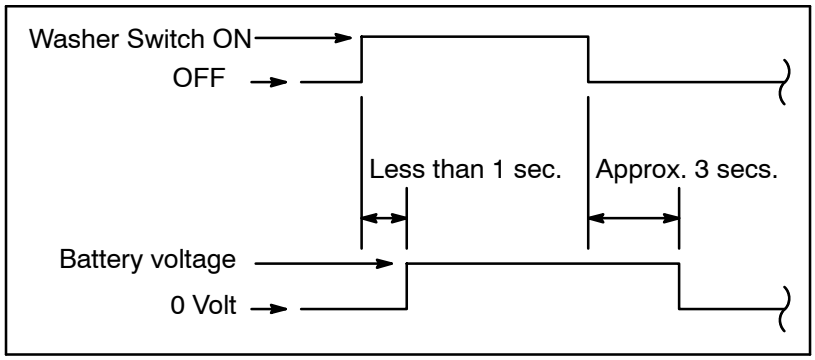


3. LHD models:
INSPECT FRONT WASHER LINKED OPERATION

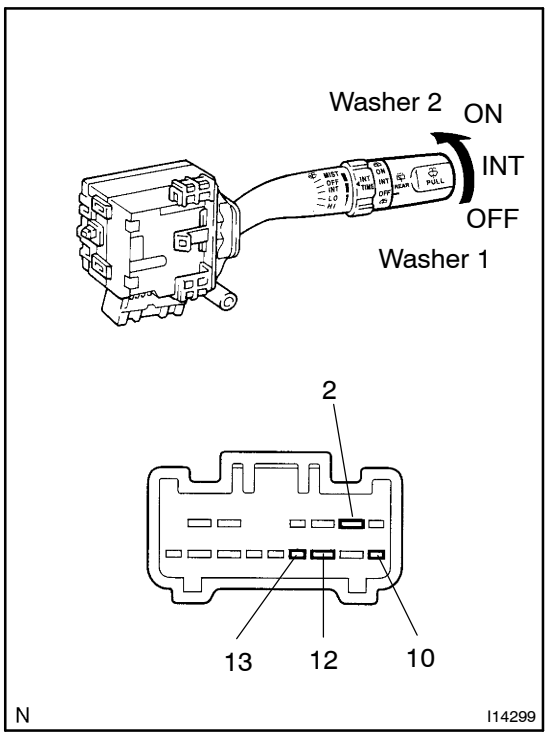
(a) Connect the positive (+) lead from the battery to terminal 16 and the negative (–) lead to terminal 2.

(b) Connect the positive (+) lead from the voltmeter to terminal 7 and the negative (–) lead to terminal 2.

(c) Push in the washer switch, and check that the voltage changes, as shown in the table.



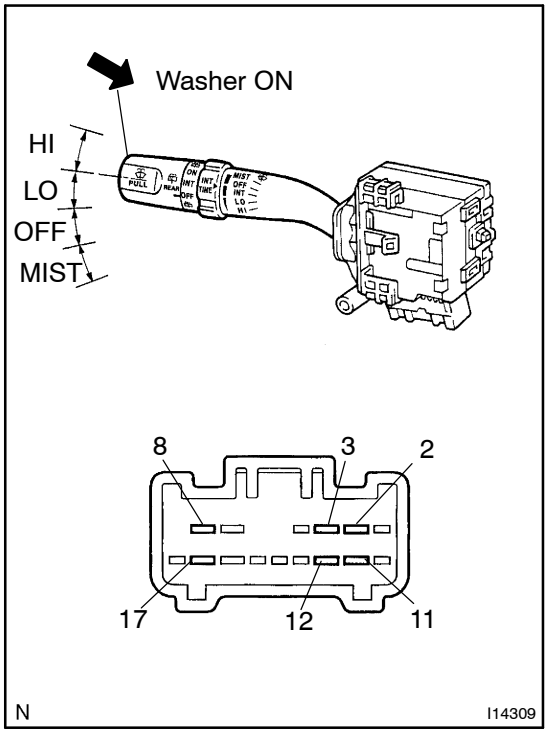
If operation is not as specified, replace the wiper and washer switch.



4. LHD models:
INSPECT REAR WIPER AND WASHER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Washer 1	2 – 12	Continuity
OFF	–	No continuity
INT	2 – 13	Continuity
ON	2 – 10	Continuity
Washer 2	2 – 10 – 12	Continuity

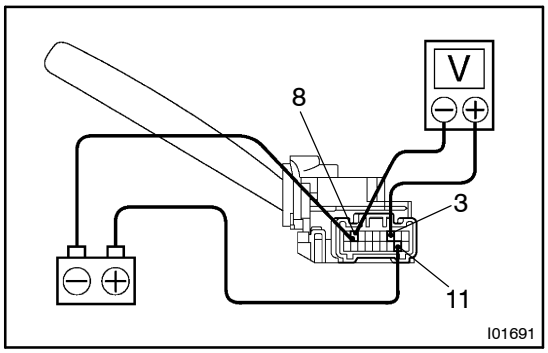
If continuity is not as specified, replace the switch.

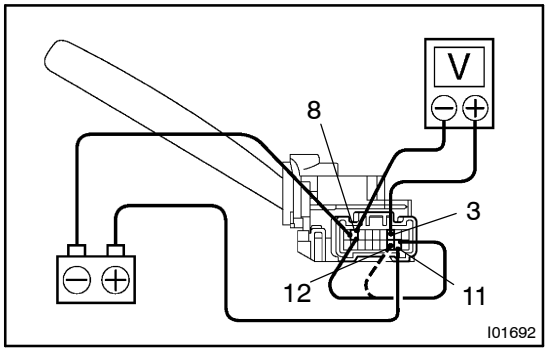


5. RHD models:
INSPECT FRONT WIPER AND WASHER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
OFF	3 – 12	Continuity
MIST (w/ Mist wiper)	3 – 11	Continuity
INT (w/ Intermittent wiper)	3 – 12	Continuity
LO	3 – 11	Continuity
HI	2 – 11	Continuity
Washer ON	8 – 17	Continuity

If continuity is not as specified, replace the switch.



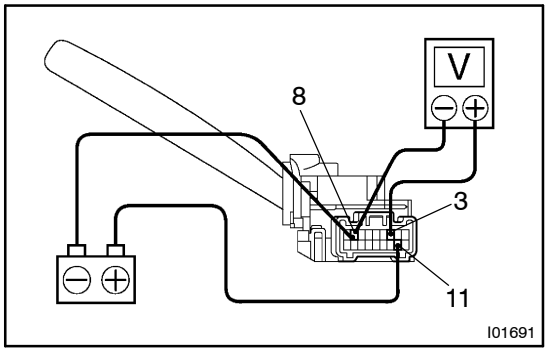


6. RHD models:
INSPECT FRONT WIPER INTERMITTENT OPERATION

(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 11 and the negative (–) lead to terminal 8.
(d) Connect the positive (+) lead from the voltmeter to terminal 3 and the negative (–) lead to terminal 8, check that the meter needle indicates battery voltage.
(e) After connecting terminal 12 to terminal 11, connect to terminal 11 to terminal 8, check the voltage rises from 0 volts to battery voltage with in the times, as shown in the table.

INT time control switch position	**Voltage**
FAST	Approx. 1 ~ 3 sec. Battery voltage 0 Volt
SLOW	Approx. 10 ~ 15 secs. Battery voltage 0 Volt

If operation is not as specified, replace the wiper and washer switch.

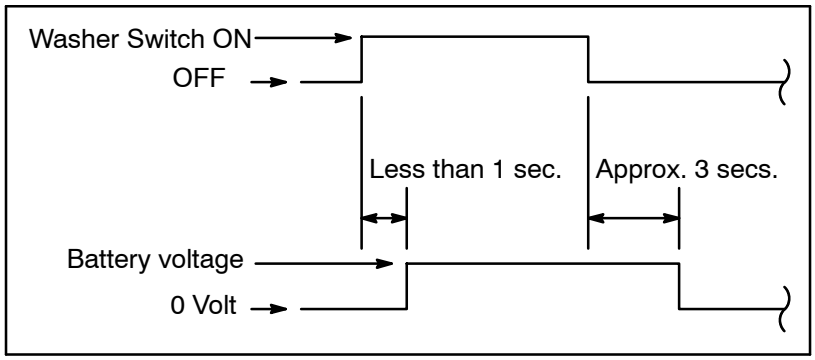


7. RHD models:
INSPECT FRONT WASHER LINKED OPERATION

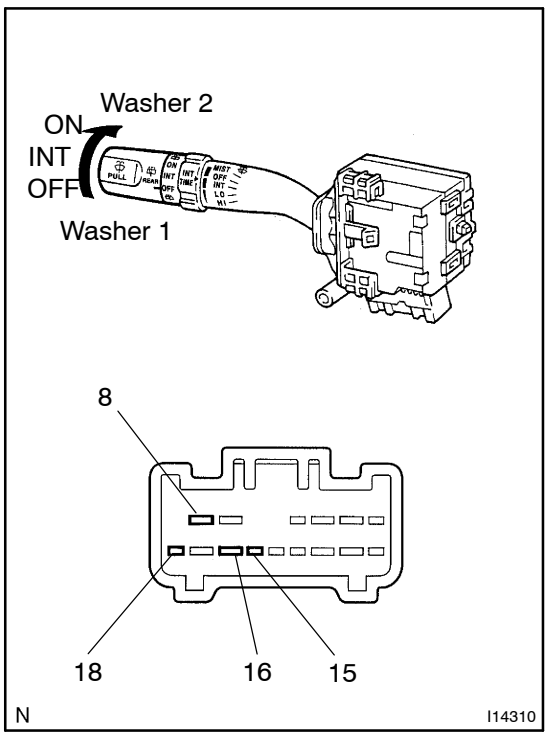
(a) Connect the positive (+) lead from the battery to terminal 11 and the negative (–) lead to terminal 8.

(b) Connect the positive (+) lead from the voltmeter to terminal 3 and the negative (–) lead to terminal 8.

(c) Push in the washer switch, and check that the voltage changes, as shown in the table.



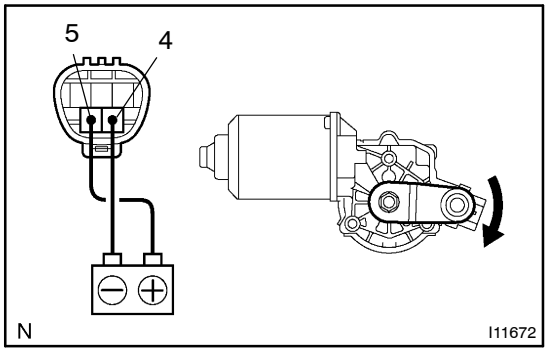
If operation is not as specified, replace the wiper and washer switch.



8. RHD models:
INSPECT REAR WIPER AND WASHER SWITCH CONTINUITY

Switch position	Tester connection	Specified condition
Washer 1	8 – 16	Continuity
OFF	–	No continuity
INT	8 – 15	Continuity
ON	8 – 18	Continuity
Washer 2	8 – 16 – 18	Continuity

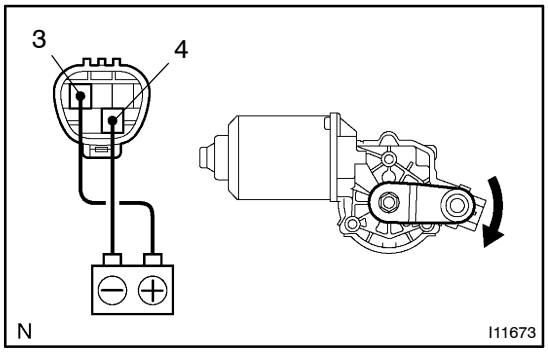
If continuity is not as specified, replace the switch.



9. Low Speed (LHD models):
INSPECT FRONT WIPER MOTOR OPERATION

Connect the positive (+) lead from the battery to terminal 5 and the negative (–) lead to terminal 4, check that the motor operates at low speed.

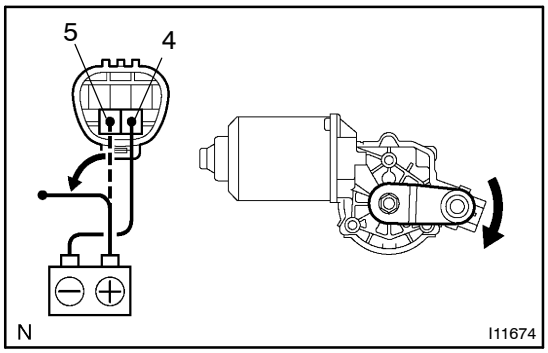
If operation is not as specified, replace the motor.



10. High Speed (LHD models):
INSPECT FRONT WIPER MOTOR OPERATION

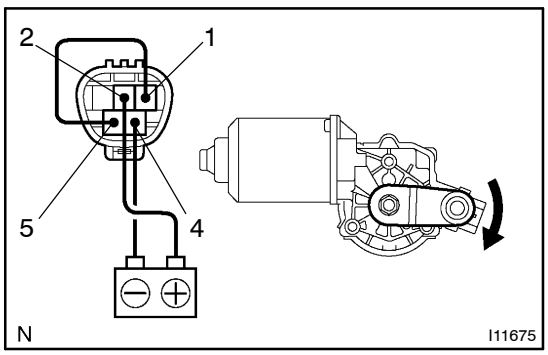
Connect the positive (+) lead from the battery to terminal 3 and the negative (–) lead to terminal 4, check that the motor operates at high speed.

If operation is not as specified, replace the motor.



11. Stopping at Stop Position (LHD models):
INSPECT FRONT WIPER MOTOR OPERATION

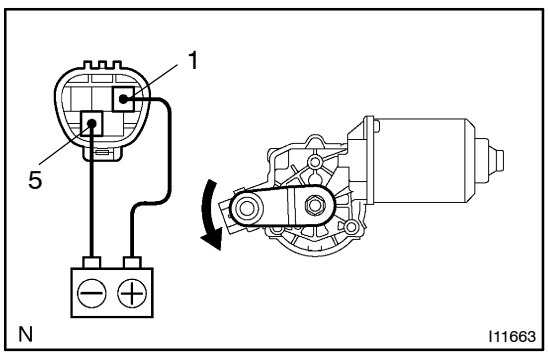
(a) Operate the motor at low speed and stop the motor operation anywhere except at the stop position by disconnecting positive (+) lead from terminal 5.



(b) Connect terminals 1 and 5.

(c) Connect the positive (+) lead from the battery to terminal 2 and negative (–) lead to terminal 4, check that the motor stops running at the stop position after the motor operates again.

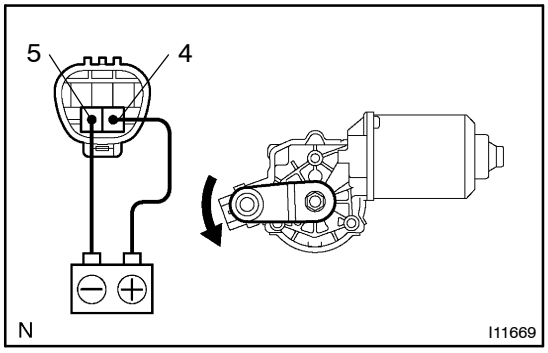
If operation is not as specified, replace the motor.



12. Low speed (RHD models)
INSPECT FRONT WIPER MOTOR OPERATION

Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 5, check that the motor operates at low speed.

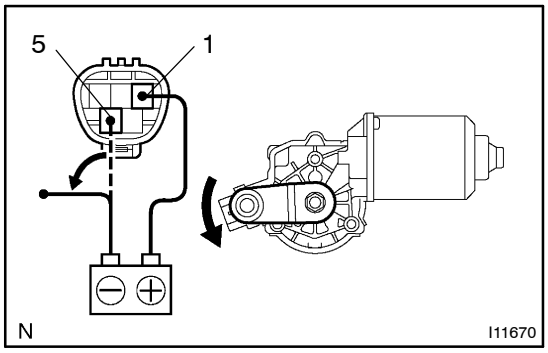
If operation is not as specified, replace the motor.



13. High speed (RHD models)
INSPECT FRONT WIPER MOTOR OPERATION

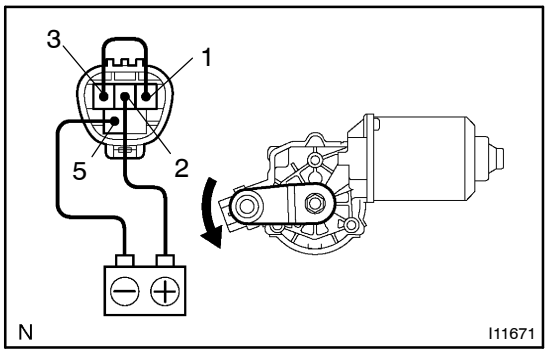
Connect the positive (+) lead from the battery to terminal 4 and the negative (–) lead to terminal 5, check that the motor operates at high speed.

If operation is not as specified, replace the motor.



14. Stopping in stop position (RHD models)
INSPECT FRONT WIPER MOTOR OPERATION

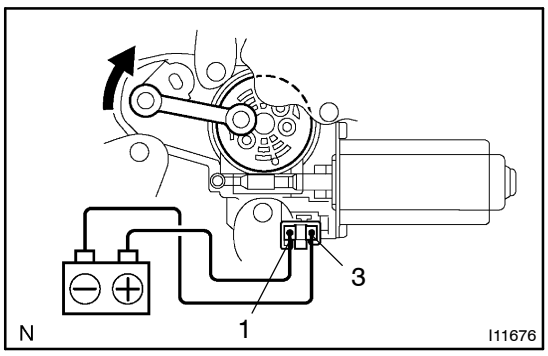
(a) Operate the motor at low speed and stop the motor operation anywhere except in the stop position by disconnecting positive (+) lead from terminal 1.



(b) Connect terminals 1 and 3.

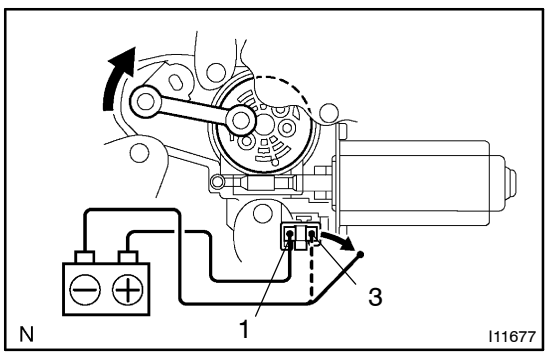
(c) Connect the positive (+) lead from the battery to terminal 2 and negative (–) lead to terminal 5, check that the motor stops running in the stop position after the motor operates again.

If operation is not as specified, replace the motor.



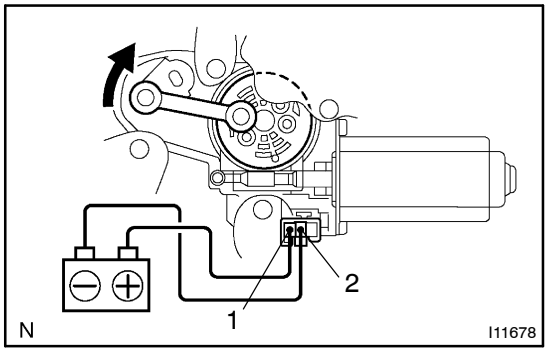
15. INSPECT REAR WIPER MOTOR AND RELAY OPERATION

(a) Connect the positive (+) lead from the battery to terminal 1, and the negative (–) lead to terminal 3 and the motor body, check that the motor operates.



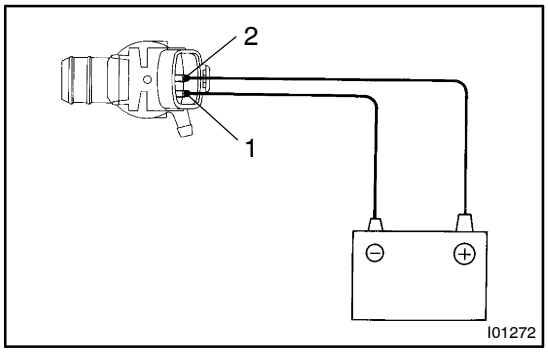
(b) Disconnect the negative (–) lead from terminal 3, check that the motor stops running at the stop position.

If operation is not as specified, replace the motor and relay.



16. Intermittent:
INSPECT REAR WIPER MOTOR AND RELAY OPERATION

Connect the positive (+) lead from the battery to terminal 1, and the negative (–) lead to terminal 2 and the motor body, check that the motor operates intermittently for 9 – 15 seconds.
If operation is not as specified, replace the motor and relay.



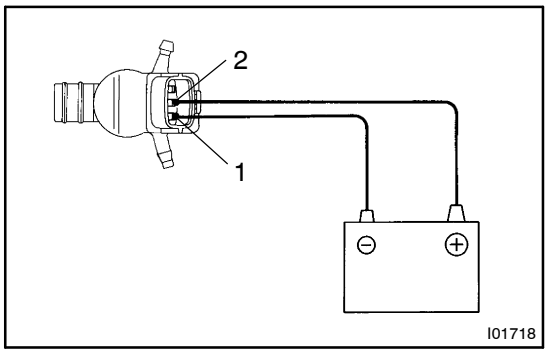
17. w/o Rear wiper:
INSPECT WASHER MOTOR OPERATION

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.

If operation is not as specified, replace the motor.



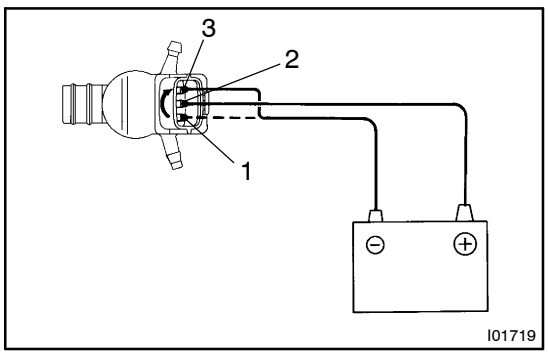
18. w/ Rear wiper:
INSPECT FRONT WASHER MOTOR OPERATION

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



19. w/ Rear wiper:
INSPECT REAR WASHER MOTOR OPERATION

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