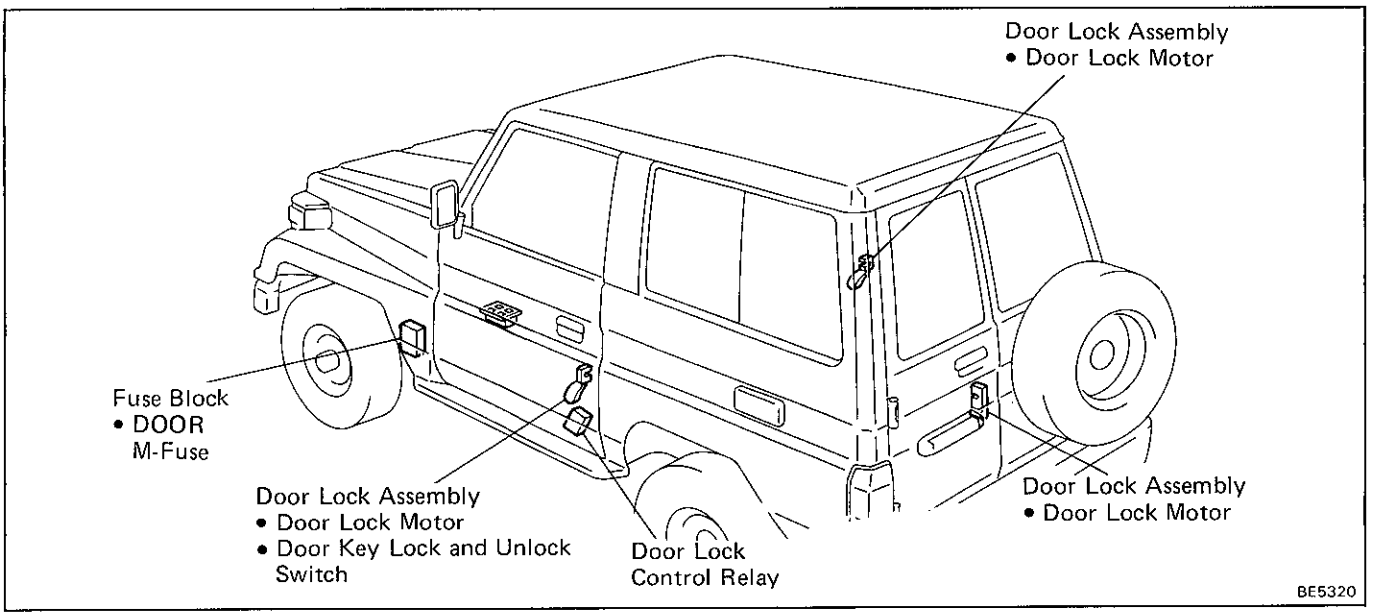
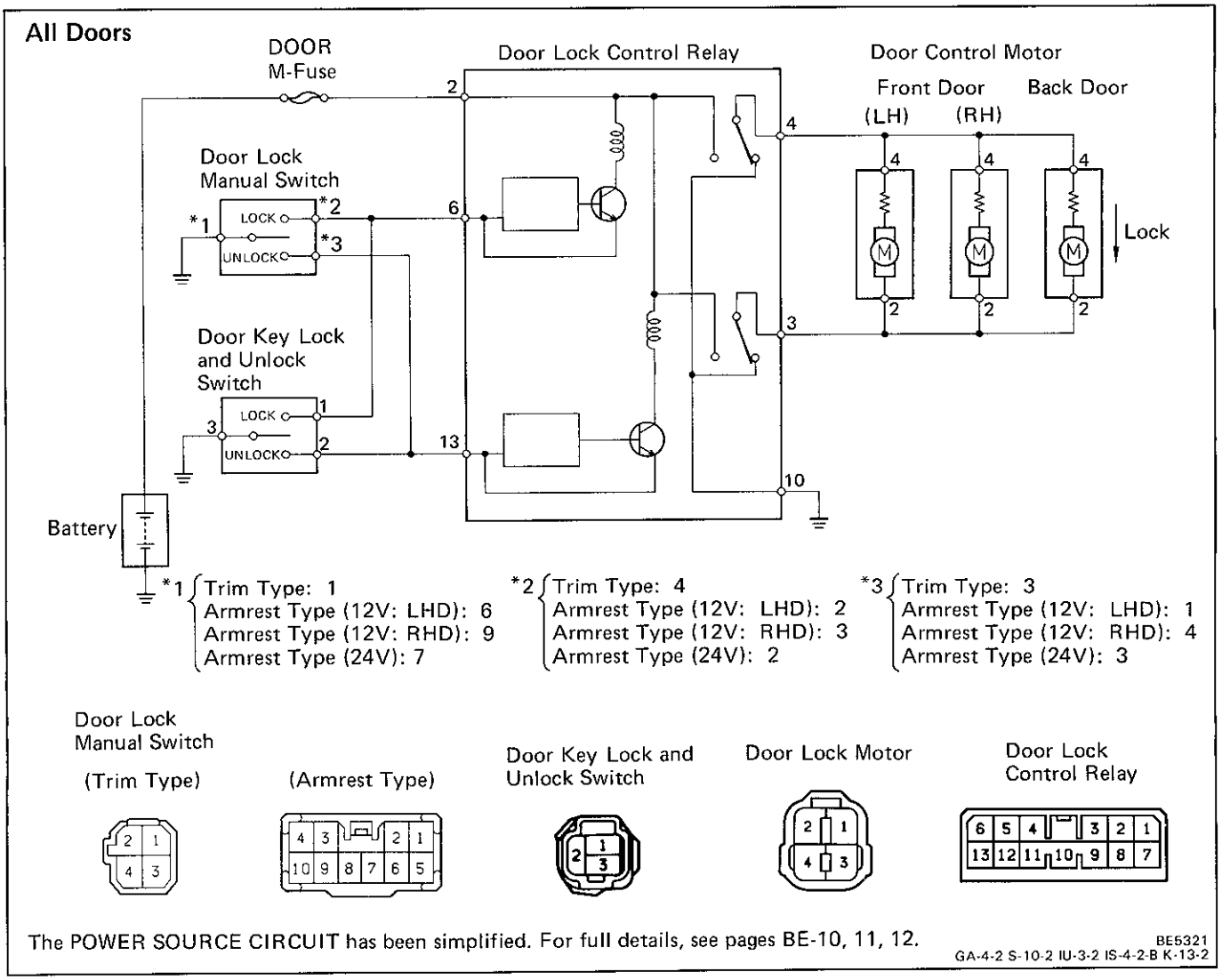
POWER DOOR LOCK CONTROL SYSTEM

Parts Location



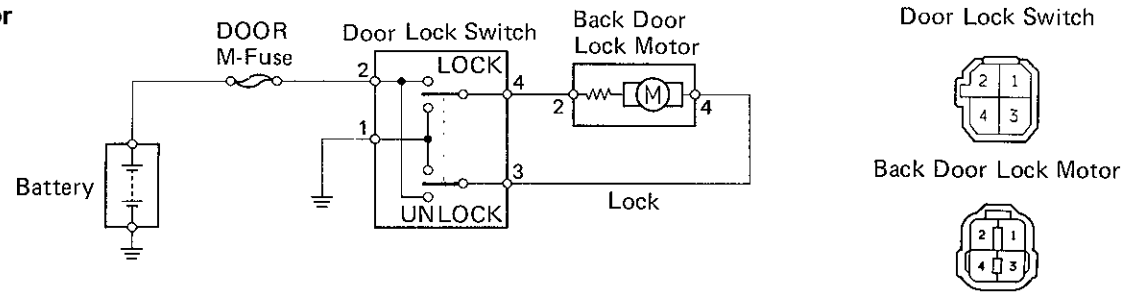
Wiring and Connector Diagrams



The POWER SOURCE CIRCUIT has been simplified. For full details, see pages BE-10, 11, 12.

BE5321
GA-4-2 S-10-2 IU-3-2 IS-4-2-B K-13-2

Back Door



The POWER SOURCE CIRCUIT has been simplified. For full details, see pages BE-10, 11, 12.

GA-4-2
BE5322 IS-4-2-B

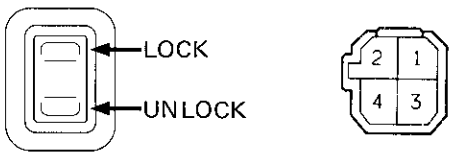
Troubleshooting

Problem	Possible cause	Remedy	Page
Door lock system does not operate at all	DOOR fuse blown Door lock motor faulty Door lock control relay faulty Wiring or ground faulty	Replace fuse and check for short Check motor Check relay Repair as necessary	BE-4 BE-84 BE-86
Door lock system does not operate by manual switch	Door lock manual switch faulty Wiring faulty	Check switch Repair as necessary	BE-83
Door lock system does not operate by door key	Door key lock and unlock switch faulty Wiring faulty Door lock link disconnected	Check switch Repair as necessary Connect link	BE-84

Parts Inspection

1. INSPECT SWITCHES (Door Lock Manual Switch/Continuity)

Trim Type

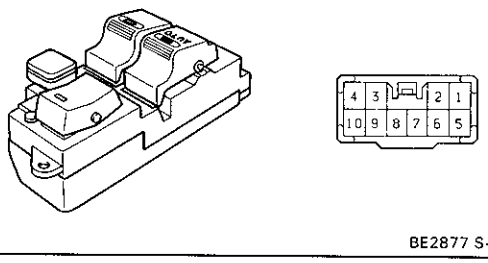


BE5323 GA-4-2

Terminal / Switch position	1	2	3	4
LOCK	○		○	
		○		○
OFF				
UNLOCK	○			○
		○	○	

If continuity is not as specified, replace the switch.

Armrest Type (12 V)

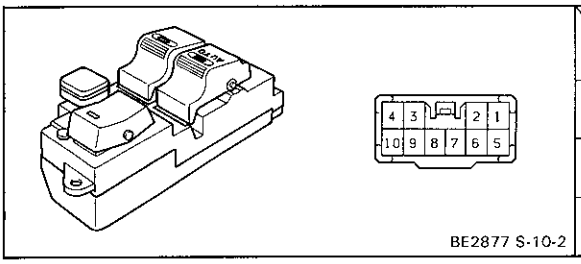


BE2877 S-10-2

Terminal	LHD	1	2	5	6
Switch position	RHD	4	3	10	9
LOCK		○		○	
			○		○
OFF					
UNLOCK		○			○
			○	○	

If continuity is not as specified, replace the switch.

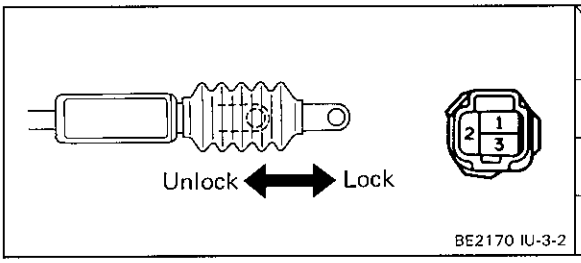
Armrest Type (24 V)



Terminal / Switch position	2	3	7
LOCK	○		○
OFF			
UNLOCK		○	○

If continuity is not as specified, replace the switch.

(Door Key Lock and Unlock Switch/Continuity)

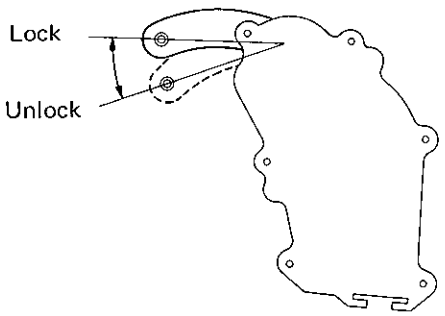


Terminal / Switch position	1	2	3
LOCK	○		○
OFF			
UNLOCK		○	○

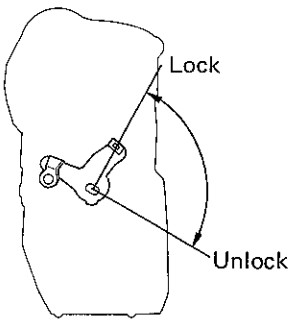
If continuity is not as specified, replace the switch.

2. INSPECT DOOR LOCK MOTOR
(Motor Operation)

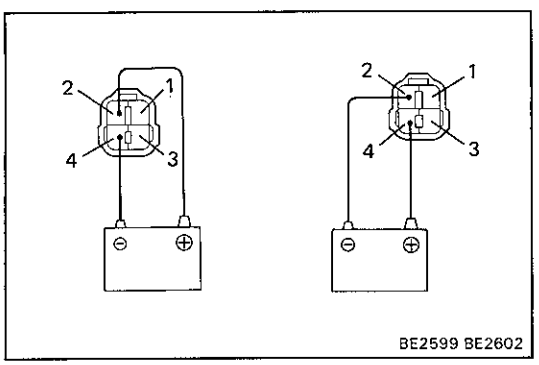
Front Door



Back Door



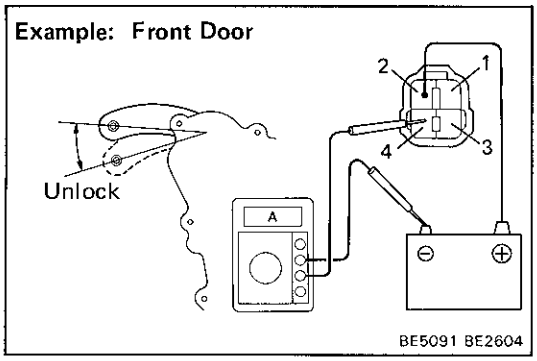
BE5091 BE5408

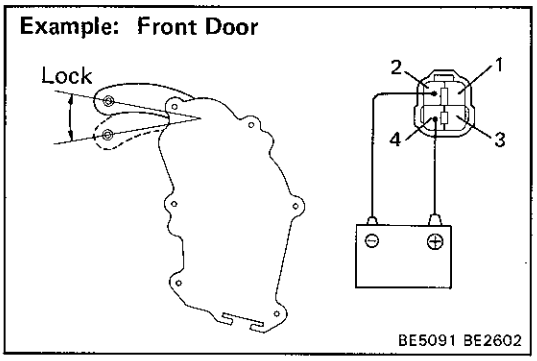


(a) Connect the positive (+) lead from the battery to terminal 2 and the negative (−) lead to terminal 4, check that the door lock link moves to UNLOCK position.

(b) Remove the polarity, check that the door lock link move to LOCK position.

If operation is not as specified, replace the door lock assembly.





(PTC Thermistor Operation)

Inspection using an ammeter.

HINT: The number in brackets ( ) applies to 24 V vehicles.

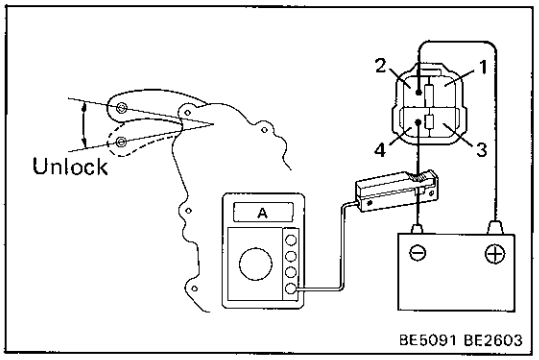
(a) Connect the positive (+) lead from the battery to terminal 2.

(b) Connect the positive (+) lead from the ammeter to terminal 4 and the negative (—) lead to battery negative (—) terminal, check that the current changes from approx. 3.2 (2) A to less than 0.5 A with 20 to 70 seconds.

(c) Disconnect the leads from terminals.

(d) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 4 and the negative (—) lead to terminal 2 check that the door lock moves to LOCK position.

If operation is not as specified, replace the door lock assembly.

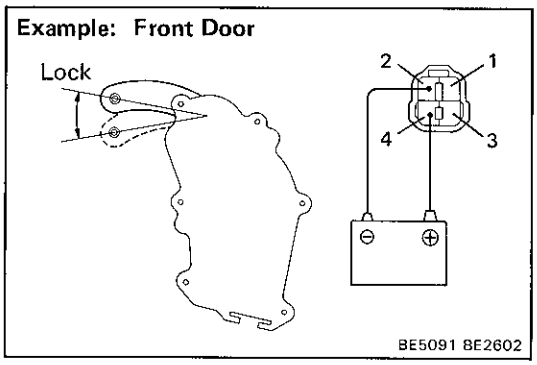


Inspection using an ammeter with a current-measuring probe.

HINT: The number in brackets ( ) applies to 24V vehicles.

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

(b) Attach a current-measuring probe to either the positive (+) lead or the negative (—) lead, check that the current changes from approx. 3.2 (2) A to less than 0.5 A within 20 to 70 seconds.

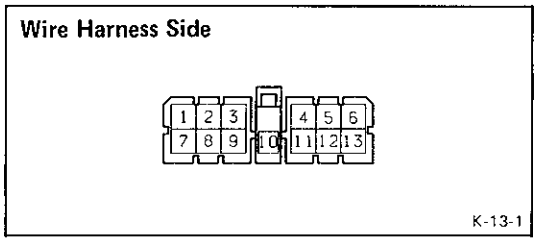


(c) Disconnect the leads from terminals.

(d) Approximately 60 seconds later, reverse the polarity, check that the door lock moves to LOCK position.

If operation is not as specified, replace the door lock assembly.

HINT: Perform inspection of PTC thermistor operation of other door lock motors the same way as for the front door.

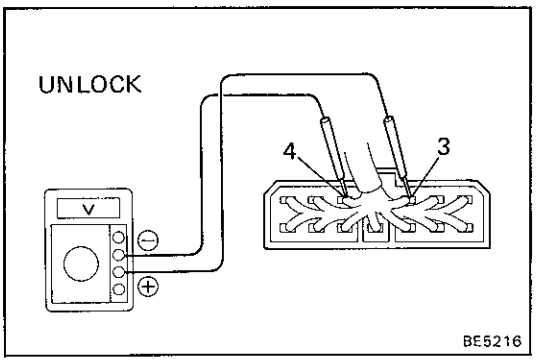


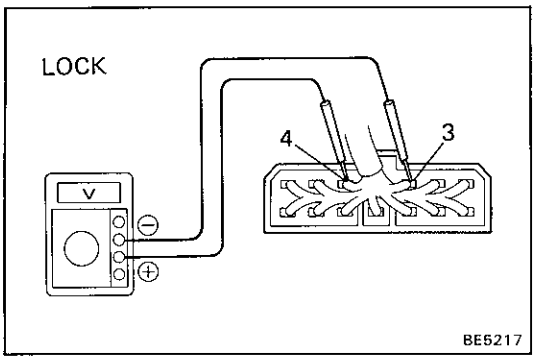
3. INSPECT DOOR LOCK CONTROL RELAY (Relay Circuit)

Disconnect the connector from the relay and inspect the connector on the wire harness side as shown in the chart.

Check for	Tester connection	Condition		Specified value
Continuity	6—Ground	Door key lock and unlock switch position	OFF or Unlock (Door key free or turned to Unlock)	No continuity
			Lock (Door key turned to LOCK)	Continuity
		Door lock manual switch position	OFF or Unlock	No continuity
			Lock	Continuity
	10 — Ground	Constant		Continuity
	13 — Ground	Door key lock and unlock switch position	OFF or Lock (Door key free or turned to Lock)	No continuity
			Unlock (Door key turned to Unlock)	Continuity
		Door lock manual switch position	OFF or Lock	No continuity
			Unlock	Continuity
Voltage	2 — Ground	Constant		Battery voltage

If continuity is as specified, inspect the door lock signal.





(Door Lock Signal)

HINT: When the relay circuit is as specified, inspect the door lock signal.

(a) Connect the connector to the relay.

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

(c) Set the door lock control switch to UNLOCK, check that the voltage rises from 0 V to battery voltage for approximately 0.2 seconds.

(d) Reverse the polarity of the voltmeter leads.

(e) Set the door lock control switch to LOCK, check that the voltage rises from 0 V to battery voltage for approximately 0.2 seconds.

If operation is not as specified, replace the relay.