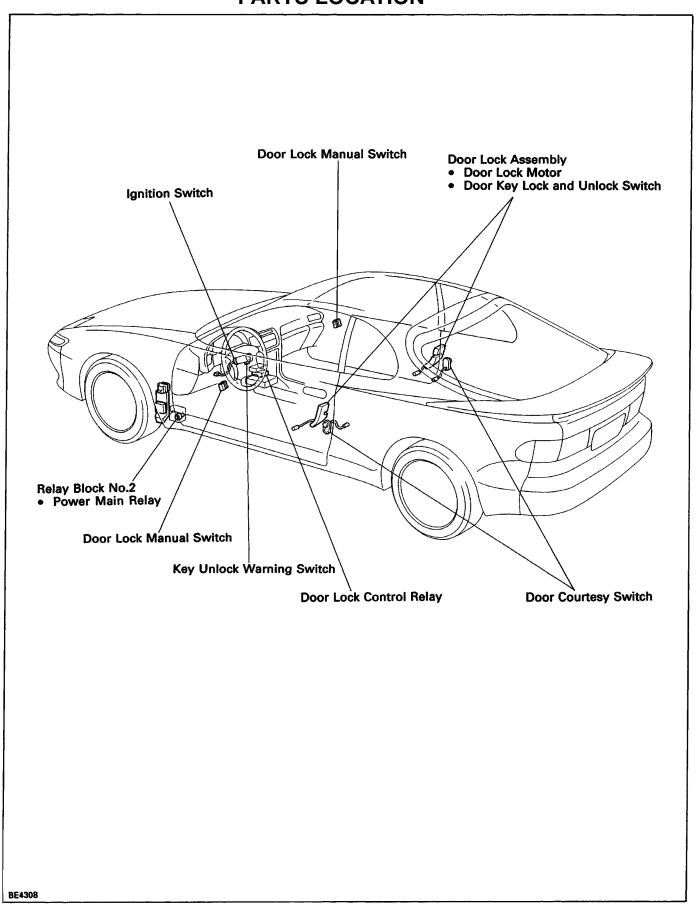
## POWER DOOR LOCK CONTROL SYSTEM PARTS LOCATION



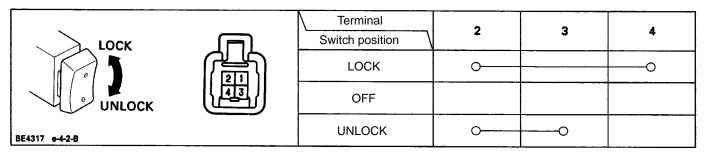
### **TROUBLESHOOTING**

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	Part name	See page	
Door lock system does not operate at all	1. POWER Fuse 2. Door Lock Motor 3. Door Lock Control Relay 4. Wire Harness	BE-3 BE-73 BE-75	
Door lock system does not operate by manual switch	Door Lock Manual Switch     Door Lock Control Relay     Wire Harness	BE-72 BE-75 -	
Door lock system does not operate by door key	Door Key Lock and Unlock Switch     Door Lock Control Relay     Wire Harness     Door Lock Link Disconnected	BE-72 BE-75 -	

#### DOOR LOCK MANUAL SWITCH

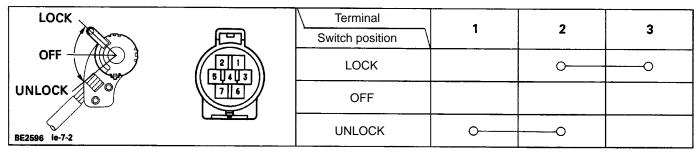
## DOOR LOCK MANUAL SWITCH INSPECTION CONTINUITY



If continuity is not as specified, replace the switch.

## DOOR KEY LOCK AND UNLOCK SWITCH

## DOOR KEY LOCK AND UNLOCK SWITCH INSPECTION CONTINUITY



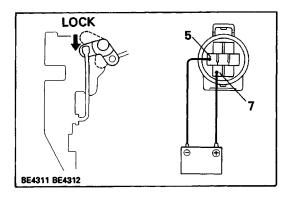
If continuity is not as specified, replace the switch.

## **KEY UNLOCK WARNING SWITCH**

See page BE-11.

#### DOOR COURTESY SWITCH

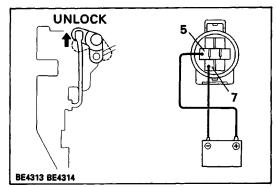
See page BE-33.



### **DOOR LOCK MOTOR**

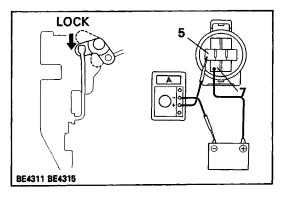
## DOOR LOCK MOTOR INSPECTION MOTOR OPERATION

(a) Connect the positive (+) lead from the battery to terminal 7 and the negative (-) lead to terminal 5, check that the door lock link moves to "LOCK" position.



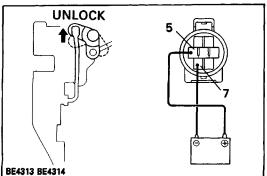
(b) Reverse the polarity, check that the door lock link moves to "UNLOCK" position.

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



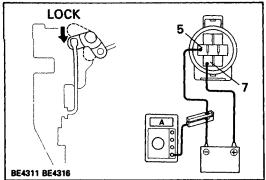
## PTC THERMISTOR OPERATION INSPECTION USING AN AMMETER

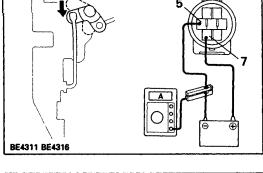
- (a) Connect the positive (+) lead from the battery to terminal 7.
- (b) Connect the positive (+) lead from the ammeter to terminal 5 and the negative (-) lead to battery negative terminal, check that the current changes from approximately 3.2 A to less than 0.5 A within 20 to 70 seconds.



- (c) Disconnect the leads from terminals.
- (d) Approximately 60 seconds later, connect the positive lead from the battery to terminal 5 and the negative 1–j lead to terminal 7, check that the door lock moves to "UNLOCK" position.

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



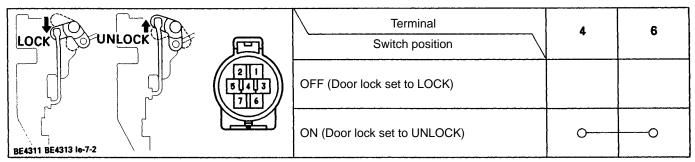


# UNLOCK BE4313 BE4314

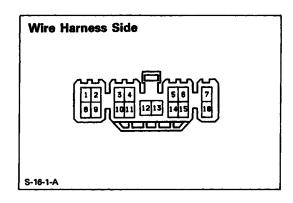
#### INSPECTION USING AN AMMETER WITH A CURRENT-**MEASURING PROBE.**

- (a) Connect the positive W lead from the battery to terminal 7 and the negative (-) lead to terminal 5.
- (b) Attach a current-measuring probe to either the positive (-) lead or the negative H lead, check that the current changes from approximately 3.2 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 "UNLOCK" position. If operation is not as specified, replace the door lock assembly.

## DOOR LOCK SWITCH DOOR LOCK SWITCH INSPECTION CONTINUITY



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



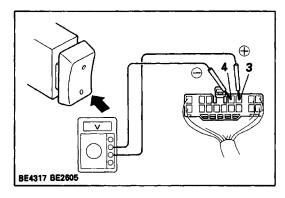
## DOOR LOCK CONTROL RELAY

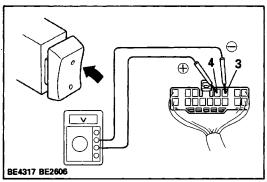
## DOOR LOCK CONTROL RELAY INSPECTION RELAY CIRCUIT

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	2 – Ground	Driver's door courtesy switch position	OFF (Door closed)	No continuity
			ON (Door opened)	Continuity
	5 – Ground	Passenger's door lock switch position	OFF (Door locked)	No continuity
			ON (Door unlocked)	Continuity
	6 – Ground	Driver's door lock switch position	OFF 1Door locked)	No continuity
			ON (Door unlocked)	Continuity
	7 – Ground	Key unlock warning switch position	OFF (ignition key removed)	No continuity
			ON (ignition key set)	Continuity
	9 – Ground	Driver's 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
	10 – Ground	Door lock manual switch position	OFF or UNLOCK	No continuity
			LOCK	Continuity
	11– Ground	Door lock manual switch OFF or turned to LOCK		No continuity
		Passenger's door key lock and unlock switch OFF or turned to LOCK (Door key free or turned to LOCK)		
		Door lock manual switch turned to UNLOCK		Continuity
		Passenger's door key lock and unlock switch turned to UNLOCK (Door key turned to UNLOCK)		
	12 – Ground	Door key lock and unlock switch position	OFF or UNLOCK	No continuity
			LOCK	Continuity
	14 – Ground	Passenger's door courtesy switch position	OFF (Door closed)	No continuity
			ON (Door opened)	Continuity
	15 – Ground	Constant		approx. 70Ω
	16 – Ground	Constant		Continuity

If circuit 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 manual switch to "UNLOCK", check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.
- (d) Reverse the polarity of the voltmeter leads.
- (e) Set the door lock manual switch to "LOCK", check that the voltage rises from 0 V to battery positive voltage for approximately 0.2 seconds.If operation is not as specified, replace the relay.