

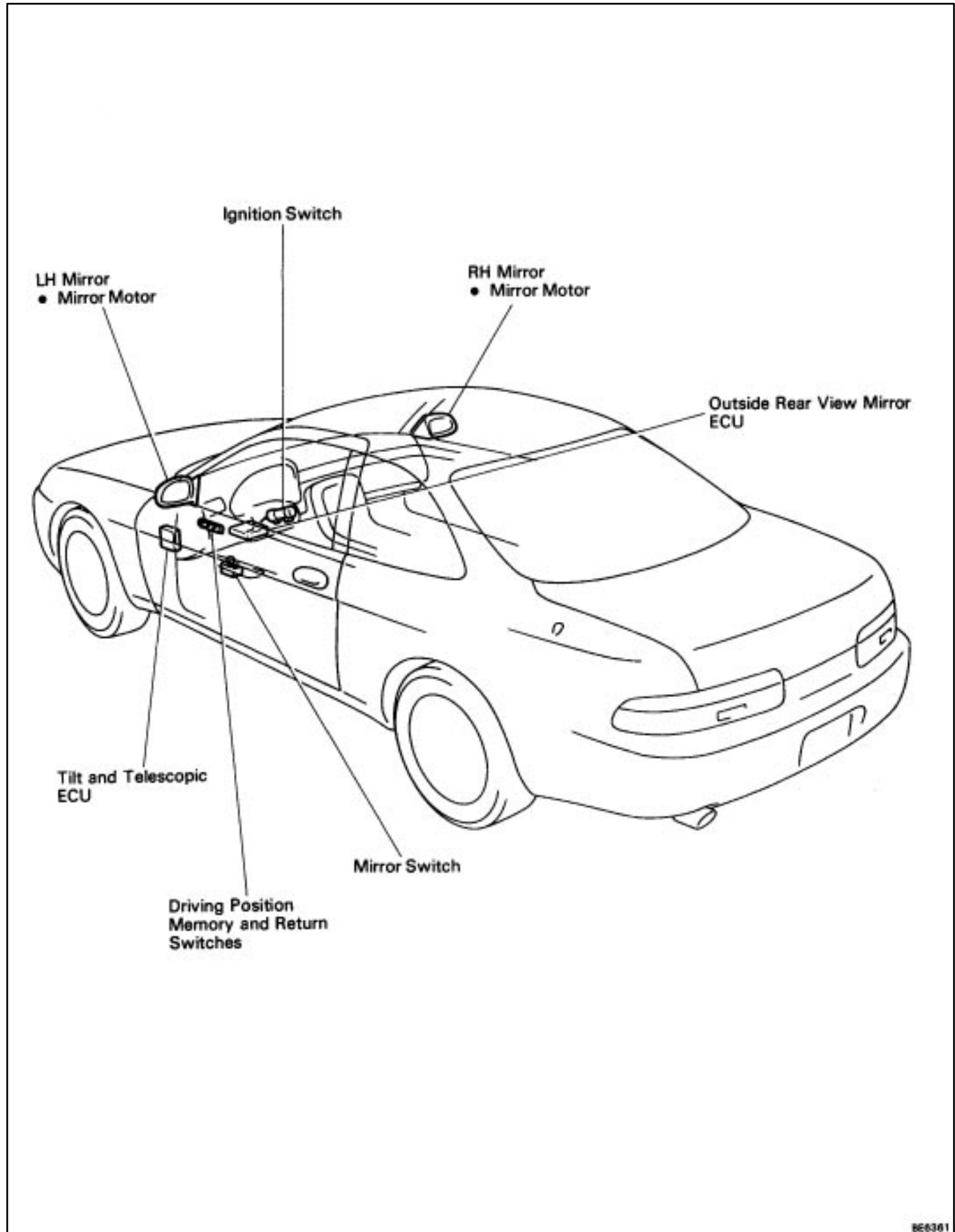
POWER MIRROR CONTROL SYSTEM

Description

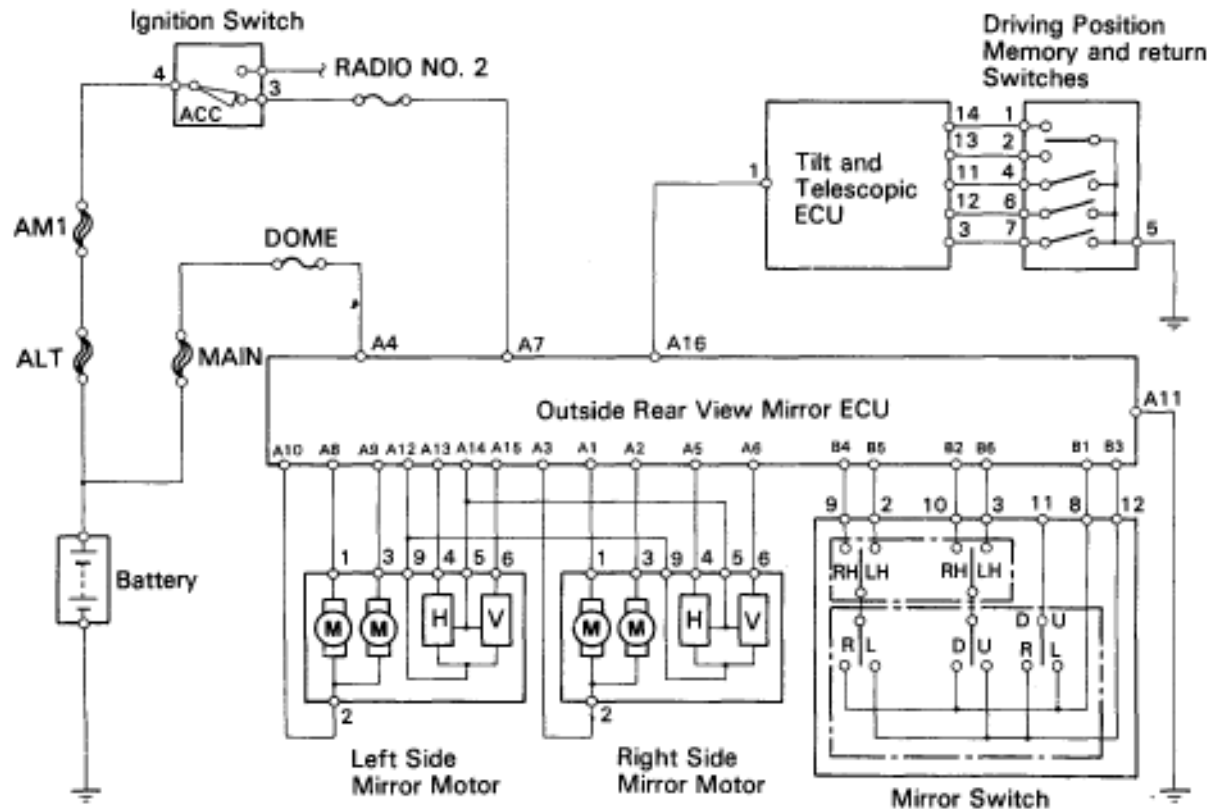
The Power Mirror Control System carries out mirror left/right and up/down adjustments electrically when the Mirror Switch is operated. In addition, operation of the Driving Position Memory and Return Switches makes it possible to store the adjusted position in memory and reproduce each adjustment when desired. The component parts of this system and their functions are described in the following table.

Parts Name	Function
Outside Rear View Mirror ECU	The Outside Rear View Mirror ECU is supplied with power from the DOME and RADIO NO. 2 fuses and is connected to the Tilt and Telescopic ECU, Mirror Switch, each mirror motor and ground.
Rear View Adjustment Switch	Operation of this switch sends left/right, up/down signals to Outside Rear View Mirror ECU.
Driving Position Memory and Return Switches	Memory and return signals are sent to the ECU via the Tilt and Telescopic ECU.
Mirror Motor	These motors operate on current from the Outside Rear View Mirror ECU, moving the various parts of the mirror directly. These sensors send signals about the motor positions to the ECU for storing in memory and during return operation.
Left/Right Select Switch	This switch is used to select operation of the Rear View Adjustment Switch for the Left or right hand side mirror.

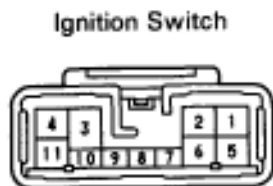
Parts Location



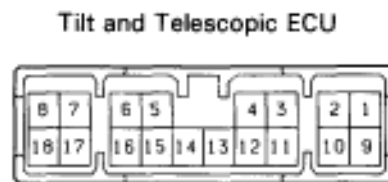
Wiring and Connector Diagrams (Cont'd)



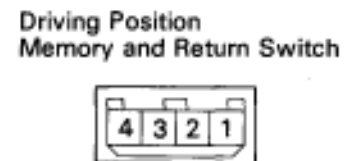
BE3882



eq-11-2



S-18-2



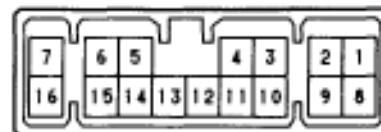
BE6362

Outside Rear View Mirror ECU



Connector "B"

BE3883



Connector "A"

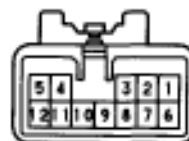
S-16-2-A

Mirror Motor

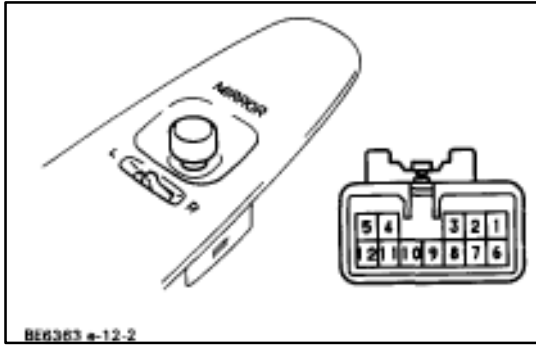


BE6352

Mirror Switch



e-12-2



Parts Inspection (Mirror Switch)

REMOVAL AND INSTALLATION OF MIRROR SWITCH

(See Instrument Panel on page [BO-33](#))

INSPECTION OF MIRROR SWITCH

INSPECT SWITCH CONTINUITY

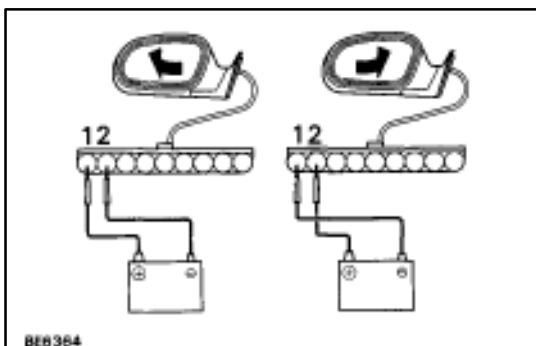
- Rear View adjustment switch

Left/Right Select Switch Position	LEFT SIDE					RIGHT SIDE				
Terminal Switch Position	2	3	8	11	12	8	9	10	11	12
OFF										
UP		○	○	○	○	○		○	○	○
DOWN		○	○	○	○	○		○	○	○
LEFT	○		○	○	○	○	○		○	○
RIGHT	○		○	○	○	○	○		○	○

- Left/Right select switch

Terminal Switch Position	2	3	9	10
LEFT	○	○	○	○
OFF				
RIGHT	○	○	○	○

If continuity is not as specified, replace the switch.



(Mirror Motor)

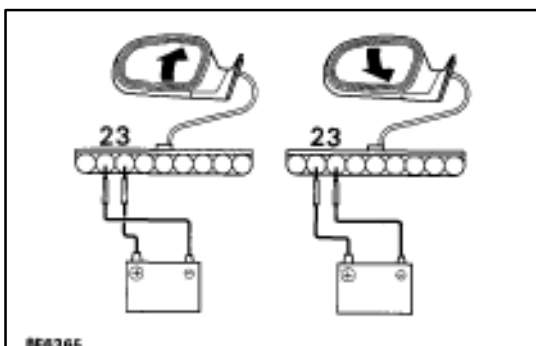
REMOVAL AND INSTALLATION OF OUTSIDE MIRROR ASSEMBLY

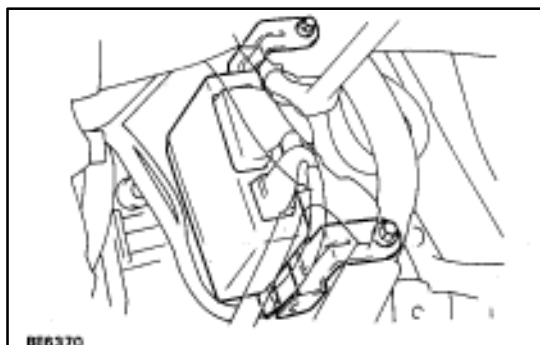
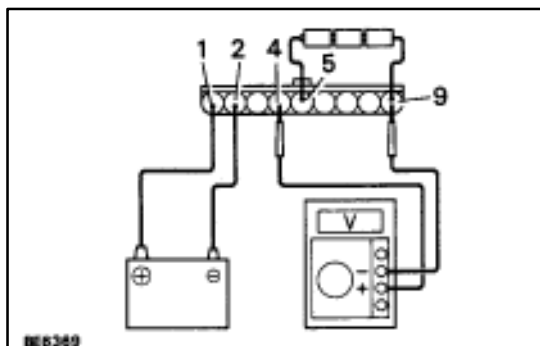
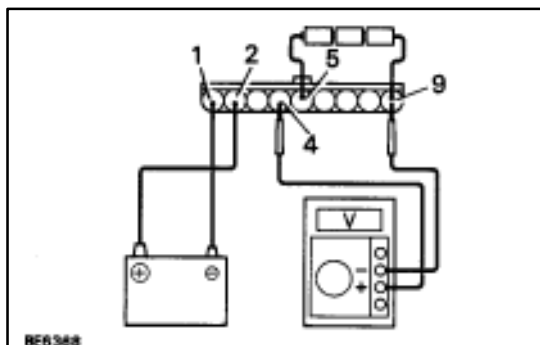
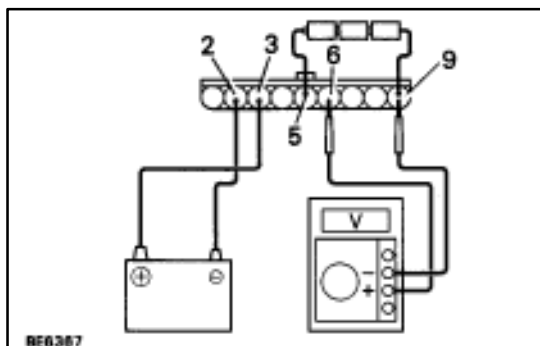
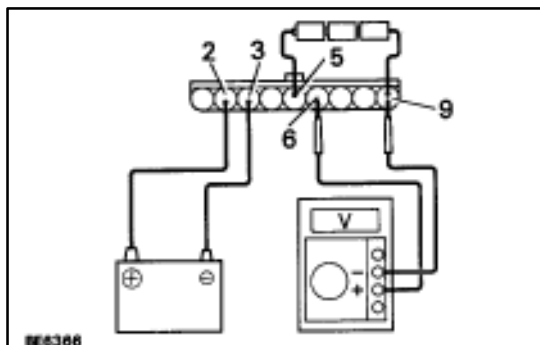
(See Outside Rear View Mirror on page [BO-42](#))

INSPECTION OF MIRROR MOTOR

1. INSPECT MIRROR MOTOR OPERATION

- Connect the positive (+) lead from the battery to terminal 1 and negative (–) lead to terminal 2 check that the mirror turns to left side.
- Reverse the polarity, check that the mirror turns to right side.
- Connect the positive (+) lead from the battery to terminal 3 and negative (–) lead to terminal 2 check that the mirror turns
- Reverse the polarity, check that the mirror turns downward.





2. INSPECT MIRROR POSITION SENSORS

HINT: Strip off the vinyl tape of the connector and remove terminals 1, 2, 3, 5 and 9 from the connector housing.

- Connect a series of three 1.5 volt dry cell batteries.
- Connect the positive (+) lead from the dry cell batteries to terminal 5 and the negative (–) lead to terminal 9.
- Connect the positive (+) lead from the voltmeter to terminal 6 and the negative (–) lead to terminal 9.
- Apply battery voltage to terminals 2 and 3, check that the voltage gradually changes according to the table below while the mirror moves between the uppermost position and lowermost position.

Mirror position	Lowermost		Uppermost
Voltage	2.8–5.0	Changes gradually	0–0.9

If voltage value is not as specified, replace the motor assembly.

- Disconnect the four leads of the battery and voltmeter.
- Connect the positive (+) lead from the voltmeter to terminal 4 and the negative (–) lead to terminal 9.
- Apply battery voltage to terminals 1 and 2, inspect that the voltage gradually changes according to the table below while the mirror moves between the leftmost position and rightmost position.

Mirror position		Leftmost		Rightmost
Voltage	Left mirror	2.8–5.0	Changes gradually	0–0.9
	Right mirror	0–0.9	Changes gradually	2.8–5.0

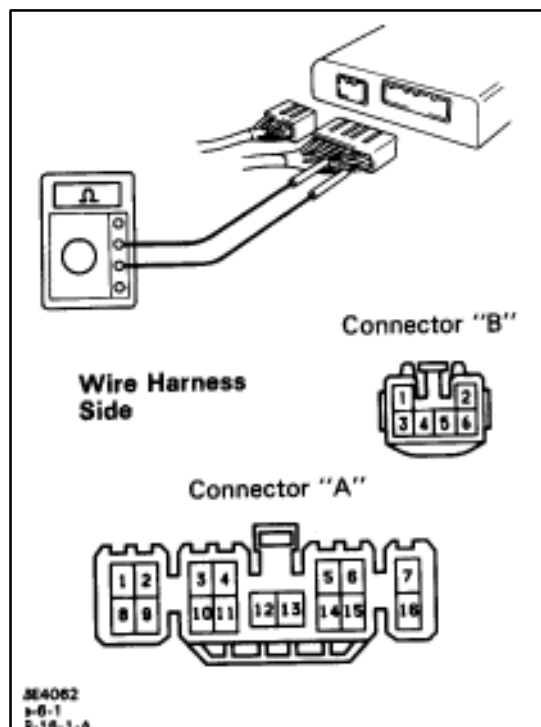
If voltage value is not as specified, replace the motor assembly.

(Mirror ECU)

REMOVAL AND INSTALLATION OF MIRROR ECU

REMOVAL AND INSTALL MIRROR ECU

- Remove the No. 1 under cover.
(See page [BO-112](#))
- Remove the two screws and disconnect the two connectors and then pull out the ECU.
- For installation, follow the removal procedure in reverse.



INSPECTION OF MIRROR ECU

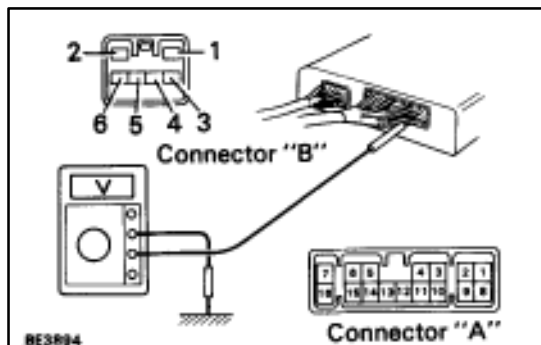
1. INSPECT MIRROR ECU CIRCUIT

Disconnect the connectors from the ECU and inspect the connector on the wire harness side as shown in the chart below.

Check for	Tester connection	Condition	Specified value
Continuity	A1–A2	Constant	Continuity
	A1–A3	Constant	Continuity
	A8–A10	Constant	Continuity
	A9–A10	Constant	Continuity
	A11–Ground	Constant	Continuity
	A12–A13	Constant	Continuity
	A16–*	Constant	Continuity
	B1–B2	right mirror switch on DOWN	Continuity
	B1–B4	Right mirror switch to RIGHT	Continuity
	B1–B5	Left mirror switch to RIGHT	Continuity
	B1–B6	Left mirror switch to DOWN	Continuity
	B2–B3	Right mirror switch to UP	Continuity
	B3–B4	Right mirror switch to LEFT	Continuity
	B3–B5	Left mirror switch to LEFT	Continuity
	B3–B6	Left mirror switch to UP	Continuity
Voltage	A4–Ground	Constant	Battery voltage
	A7–Ground	Ignition switch to ACC	Battery voltage
		Ignition switch to OFF	No voltage

*: Terminal 1/18 of the Tilt and Telescopic ECU

If circuit is not as specified, inspect the wire harness and mirror switch or motor assembly.



2. INSPECT MIRROR ECU OPERATION

Connect the connectors and using a voltmeter with high impedance (10 k Ω /V minimum), measure the voltage at each terminal and body ground.

Check for	Tester connection	Condition	Specified value
Voltage	A1–Ground	Right mirror switch to LEFT	Battery voltage
	A2–Ground	Right mirror switch to UP	Battery voltage
	A3–Ground	Right mirror switch to RIGHT or DOWN	Battery voltage
	*A5–Ground	Right mirror to leftmost position	0–0.9 V
		Right mirror to rightmost position	2.8–5.0 V
	*A6–Ground	Right mirror to lowermost position	2.8–5.0 V
		Right mirror to uppermost position	0–0.9 V
	A8–Ground	Left mirror switch to RIGHT	Battery voltage
	A9–Ground	Left mirror switch to UP	Battery voltage
	A10–Ground	Left mirror switch to LEFT or DOWN	Battery voltage
	A13–Ground	Right or left mirror switch to any position except OFF	Approx. 5 V
	*A14–Ground	Left mirror to leftmost position	2.8–5.0 V
		Left mirror to rightmost position	0–0.9 V
	*A15–Ground	Left mirror to lowermost position	2.8–5.0 V
		Left mirror to uppermost position	0–0.9 V
	B2–Ground	Constant	Approx. 5 V
	B4–Ground	Constant	Approx. 5 V
	B5–Ground	Constant	Approx. 5 V
	B6–Ground	Constant	Approx. 5 V

*: Confirm that the voltage changes gradually while the mirror moves

If operation is not as specified, inspect the wire harness and mirror switch or motor assembly. Then if these are correct, replace the ECU.

Troubleshooting

You will find the cause of trouble more easily by properly using the table shown below. In this table, the numbers indicate the order of priority of the causes of trouble. Check each part in the order shown. If necessary, replace the part.

See page	Part name	Trouble	BE-4, 20	BE-4, 21	BE-186	BE-186	-	BE-188	SR-60	-	IN-32	BE-187
			RADIO NO. 2 Fuse	DOME Fuse	Mirror Switch	Mirror Motor	Wire Harness	Mirror ECU	Driving Position Switch	Driving Position Switch (Position is not set)	Tilt and Telescopic ECU	Mirror Sensors
Mirror does not operate.			1	1	2	3	5	4				
Mirror operates abnormally.					1	2	4	3				
Mirror does not return to the memorized position. (w/ Memory System)							6	4	2	1	3	5
Mirror returns to a position which is not memorized. (w/ Memory System)							3	1				2