

1999-2000 ACCESSORIES & EQUIPMENT**Power Mirrors****DESCRIPTION & OPERATION**

NOTE: For additional information on heated mirrors, see **REAR WINDOW & MIRROR DEFOGGERS** article.

Power mirrors are controlled by a dual control switch assembly, located on driver's door panel, instrument panel or instrument panel center console. Left/right control switch directs current to desired mirror. Horizontal/vertical control switch directs current to one of 2 motors located in mirror/motor assembly. Mirror and motors must be removed and serviced as an assembly.

TROUBLE SHOOTING**BOTH POWER MIRRORS INOPERATIVE**

Check fuse for power mirror switch. Check power mirror switch. See **POWER MIRROR SWITCH** under COMPONENT TESTS. Check power mirror motor(s). See **POWER MIRROR MOTOR** under COMPONENT TESTS. Check ground circuit and wiring harness. See **WIRING DIAGRAMS** .

LEFT OR RIGHT POWER MIRROR INOPERATIVE

Check power mirror switch. See **POWER MIRROR SWITCH** under COMPONENT TESTS. Check power mirror motor(s). See **POWER MIRROR MOTOR** under COMPONENT TESTS. Check ground circuit and wiring harness. See **WIRING DIAGRAMS** .

UP/DOWN OR LEFT/RIGHT FUNCTION INOPERATIVE

Check power mirror motor(s). See **POWER MIRROR MOTOR** under COMPONENT TESTS. Check power mirror switch. See **POWER MIRROR SWITCH** under COMPONENT TESTS. Check ground circuit and wiring harness. See **WIRING DIAGRAMS** .

COMPONENT TESTS**POWER MIRROR SWITCH**

NOTE: Mirror motor connectors may vary in configuration from vehicle to vehicle of the same model.

Remove power mirror switch. Using ohmmeter, check continuity between appropriate mirror switch terminals. Continuity should exist between specified terminals. See appropriate POWER MIRROR SWITCH CONTINUITY TEST table. See **Fig. 1 -Fig. 21** . If switch fails any test, replace switch.

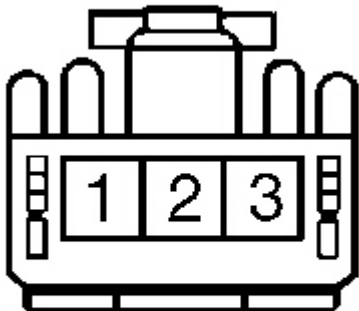
POWER MIRROR SWITCH CONTINUITY TEST (AVALON)

Application	(1) Terminals No.
Switch In Left Position	
Up	2 & 6; 1, 3 & 8
Down	3 & 6; 1, 2 & 8
Left	1, 3 & 6; 2 & 8
Right	1, 2 & 6; 3 & 8
Switch In Right Position	
Up	2 & 5; 1, 3 & 7
Down	3 & 5; 1, 2 & 7
Left	1, 3 & 5; 2 & 7
Right	3 & 7; 1, 2 & 5
(1) Continuity should exist between specified terminals. See Fig. 1 -Fig. 2 .	



G96F06844

Fig. 1: Identifying Power Mirror Switch Connector Terminals (Avalon)



G96D06843

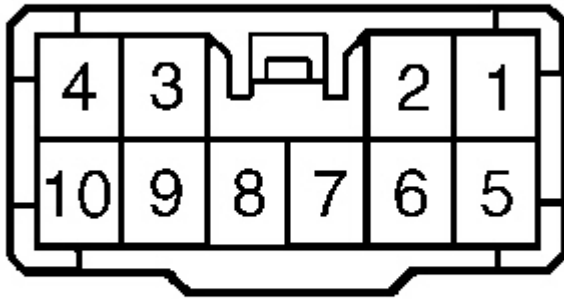
Fig. 2: Identifying Power Mirror Motor Connector Terminals (Avalon)

POWER MIRROR SWITCH CONTINUITY TEST (CAMRY & CAMRY SOLARA)

Application	(1) Terminals No.
Switch In Left Position	
Up	1 & 9; 6 & 10
Down	1 & 10; 6 & 9
Left	5 & 9; 6 & 10
Right	5 & 10; 6 & 9
Switch In Right Position	
Up	6 & 10; 7 & 9
Down	6 & 9; 7 & 10
Left	6 & 10; 8 & 9
Right	6 & 9; 8 & 10
(1) Continuity should exist between specified terminals. See Fig. 3 -Fig. 7 .	

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors



G96B06842

Fig. 3: Identifying Power Mirror Switch Connector Terminals (Camry & Camry Solara)
Courtesy of TOYOTA MOTOR MFG. U.S.A.

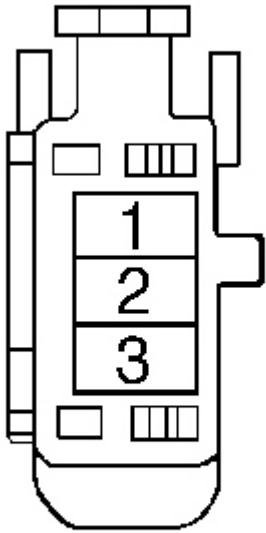


G96G06849

Fig. 4: Identifying Power Mirror Motor Connector Terminals (Camry - Mirror Motor W/O Heater - Japan Made Connector)
Courtesy of TOYOTA MOTOR MFG. U.S.A.

1999 Toyota RAV4

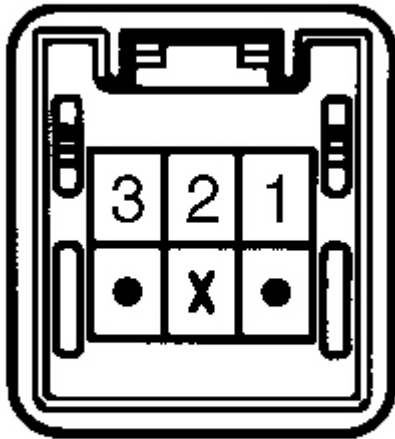
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors



G96E06853

Fig. 5: Identifying Power Mirror Motor Connector Terminals (Camry - Mirror Motor W/O Heater - USA Made Connector)

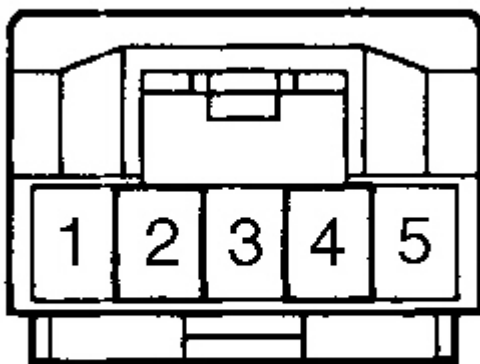
Courtesy of TOYOTA MOTOR MFG. U.S.A.



G97G11235

Fig. 6: Identifying Power Mirror Motor Connector Terminals (Camry - Mirror Motor W/Heater - USA Made Connector)

Courtesy of TOYOTA MOTOR MFG. U.S.A.



G99J50236

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 7: Identifying Power Mirror Motor Connector Terminals (Camry Solara)

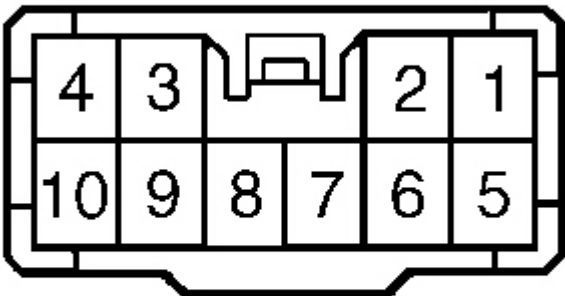
Courtesy of TOYOTA MOTOR MFG. U.S.A.

POWER MIRROR SWITCH CONTINUITY TEST (CELICA W/POWER WINDOWS)

Application	(1) Terminals No.
Switch In Left Position	
Up	1 & 10; 3 & 4
Down	1 & 3; 4 & 10
Left	1 & 6; 3 & 4
Right	1 & 3; 4 & 6
Switch In Right Position	
Up	1 & 6; 3 & 4
Down	1 & 3; 4 & 6
Left	1 & 2; 3 & 4
Right	1 & 3; 2 & 4
(1) Continuity should exist between specified terminals. See <u>Fig. 8 -Fig. 9</u> .	

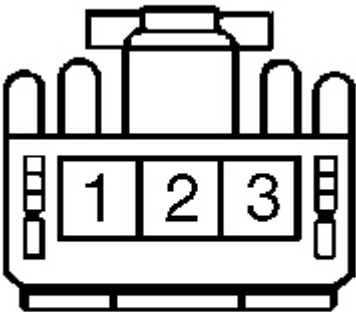
POWER MIRROR SWITCH CONTINUITY TEST (CELICA W/O POWER WINDOWS)

Application	(1) Terminals No.
Switch In Left Position	
Up	2 & 3; 7 & 8
Down	2 & 7; 3 & 8
Left	1 & 3; 7 & 8
Right	1 & 7; 3 & 8
Switch In Right Position	
Up	3 & 10; 7 & 8
Down	3 & 8; 7 & 10
Left	3 & 5; 7 & 8
Right	3 & 8; 5 & 7
(1) Continuity should exist between specified terminals. See <u>Fig. 8 -Fig. 9</u> .	



G96B06842

Fig. 8: Power Mirror Switch Connector Terminals (Celica & Corolla)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



G96D06843

Fig. 9: Power Mirror Motor Connector Terminals (Celica & Corolla)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

POWER MIRROR SWITCH CONTINUITY TEST (COROLLA)

Application	(1) Terminals No.

1999 Toyota RAV4**1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors****Switch In Left Position**

Up	1 & 9; 6 & 10
Down	1 & 10; 6 & 9
Left	5 & 9; 6 & 10
Right	5 & 10; 6 & 9

Switch In Right Position

Up	6 & 10; 7 & 9
Down	6 & 9; 7 & 10
Left	6 & 10; 8 & 9
Right	6 & 9; 8 & 10

(1) Continuity should exist between specified terminals. See **Fig. 8 -Fig. 9** .

POWER MIRROR SWITCH CONTINUITY TEST (LAND CRUISER)

Application	(1) Terminals No.
Switch In Left Position	
Up	3 & 4; 7 & 8
Down	3 & 8; 4 & 7
Left	4 & 9; 7 & 8
Right	4 & 7; 8 & 9
Switch In Right Position	
Up	2 & 4; 1, 7 & 8
Down	4 & 7; 1, 2 & 8
Left	4 & 10; 1, 7 & 8
Right	4 & 7; 1, 8 & 10

(1) Continuity should exist between specified terminals. See **Fig. 10 -Fig. 11** .

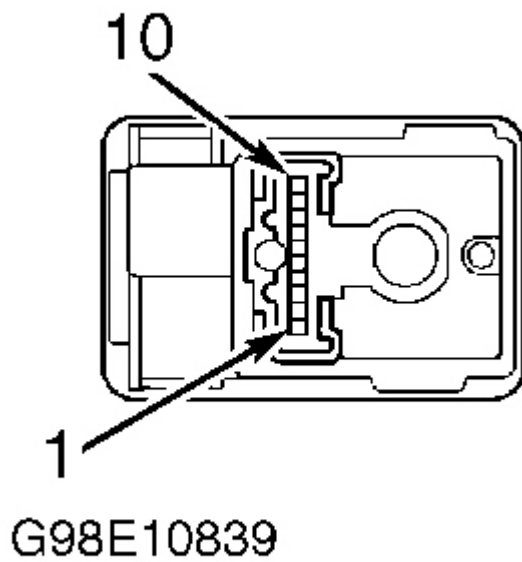


Fig. 10: Power Mirror Switch Connector Terminals (Land Cruiser)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

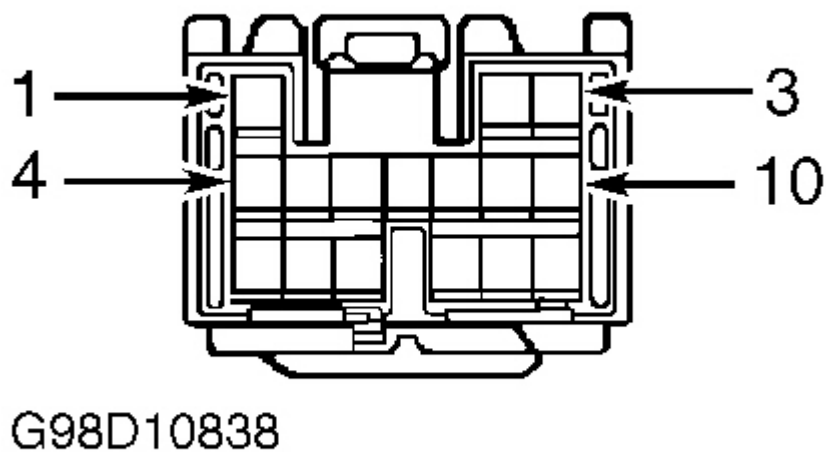


Fig. 11: Power Mirror Motor Connector Terminals (Land Cruiser)
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

POWER MIRROR SWITCH CONTINUITY TEST (RAV4)

Application	(1) Terminals No.
Switch In Left Position	
Up	1 & 9; 6 & 10
Down	1 & 10; 6 & 9
Left	5 & 9; 6 & 10
Right	5 & 10; 6 & 9
Switch In Right Position	
Up	6 & 10; 7 & 9
Down	6 & 9; 7 & 10
Left	6 & 10; 8 & 9
Right	6 & 9; 8 & 10

(1) Continuity should exist between specified terminals. See **Fig. 12 -Fig. 13** .

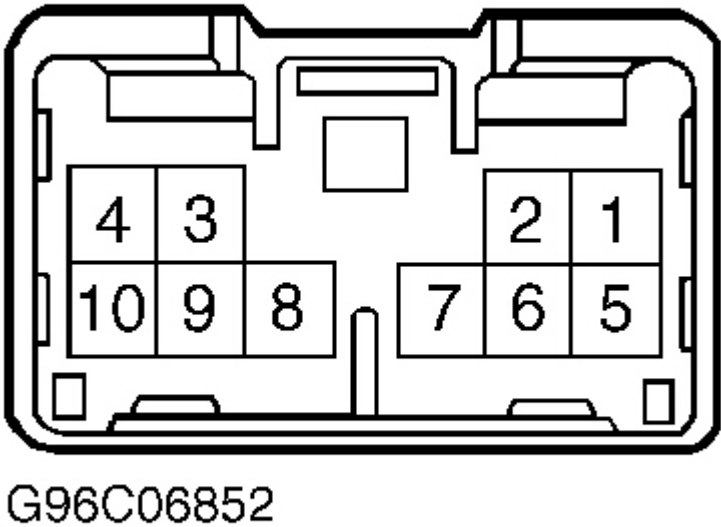
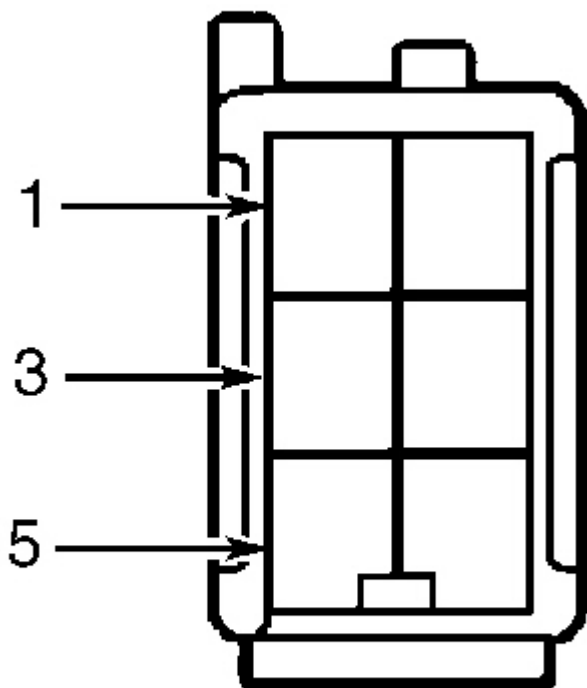


Fig. 12: Identifying Power Mirror Switch Connector Terminals (RAV4)
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



G98C10837

Fig. 13: Identifying Power Mirror Motor Connector Terminals (RAV4)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

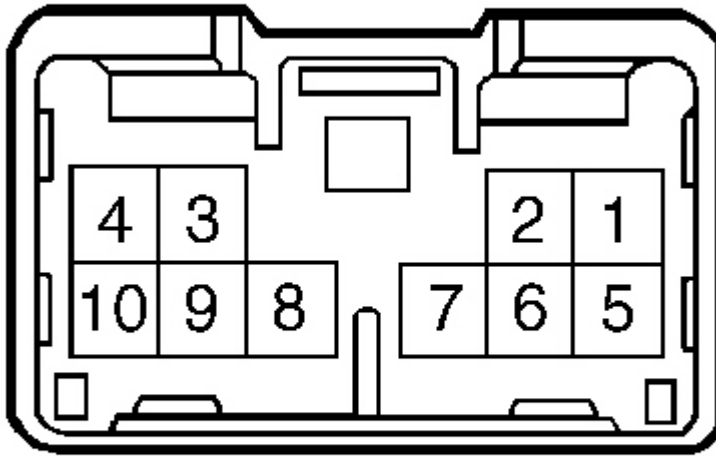
POWER MIRROR SWITCH CONTINUITY TEST (SIENNA)

Application	(1) Terminals No.
Switch In Left Position	
Up	1 & 9; 6 & 10
Down	1 & 10; 6 & 9
Left	5 & 9; 6 & 10
Right	5 & 10; 6 & 9
Switch In Right Position	
Up	6 & 10; 7 & 9
Down	6 & 9; 7 & 10
Left	6 & 10; 8 & 9
Right	6 & 9; 8 & 10

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

(1) Continuity should exist between specified terminals. See **Fig. 14 -Fig. 16** .

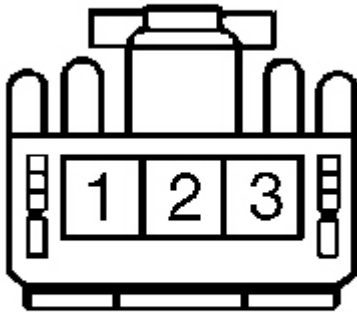


G96C06852

Fig. 14: Identifying Power Mirror Switch Connector Terminals (Sienna)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

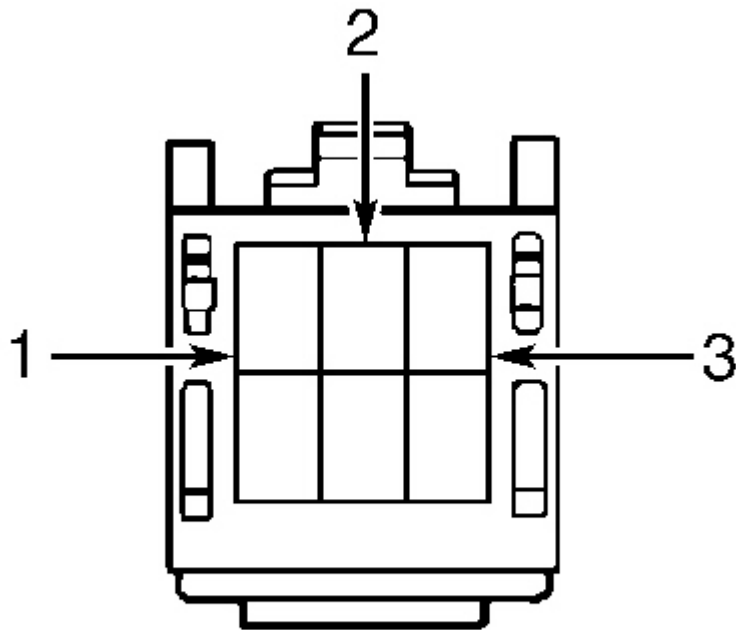


G96D06843

Fig. 15: Identifying Power Mirror Motor Connector Terminals (Sienna - Mirror Motor W/O Heater)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

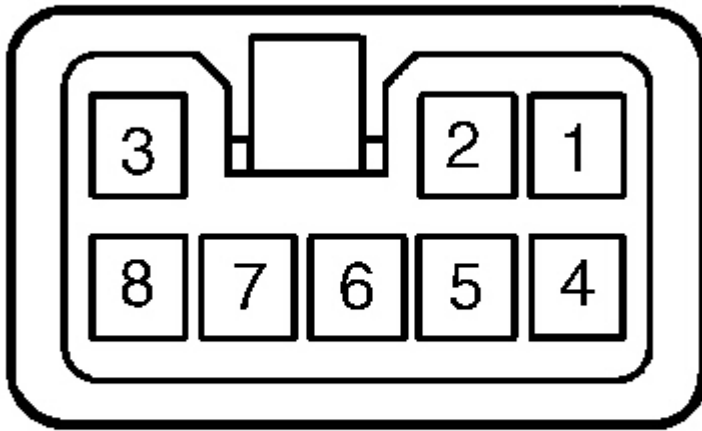


G98B10836

Fig. 16: Identifying Power Mirror Motor Connector Terminals (Sienna - Mirror Motor W/Heater)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

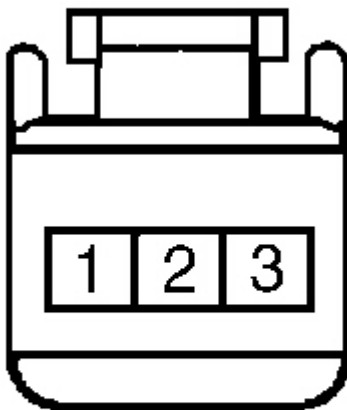
POWER MIRROR SWITCH CONTINUITY TEST (TACOMA)

Application	(1) Terminals No.
Switch In Left Position	
Up	2 & 3; 1 & 7
Down	1 & 2; 3 & 7
Left	2 & 3; 1 & 8
Right	1 & 2; 3 & 8
Switch In Right Position	
Up	2 & 3; 1 & 5
Down	1 & 2; 3 & 5
Left	2 & 3; 1 & 6
Right	1 & 2; 3 & 6
(1) Continuity should exist between specified terminals. See Fig. 17 -Fig. 18 .	



G96I06845

Fig. 17: Identifying Power Mirror Switch Connector Terminals (Tacoma)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



G96A06851

Fig. 18: Identifying Power Mirror Motor Connector Terminals (Tacoma)
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

POWER MIRROR SWITCH CONTINUITY TEST (TUNDRA)

Application	(1) Terminals No.
Switch In Left Position	
Up	4 & 8; 6 & 7
Down	4 & 7; 6 & 8
Left	5 & 8; 6 & 7
Right	5 & 7; 6 & 8
Switch In Right Position	
Up	3 & 8; 6 & 7
Down	3 & 7; 6 & 8
Left	5 & 8; 6 & 7
Right	5 & 7; 6 & 8
(1) Continuity should exist between specified terminals. See Fig. 19 -Fig. 20 .	

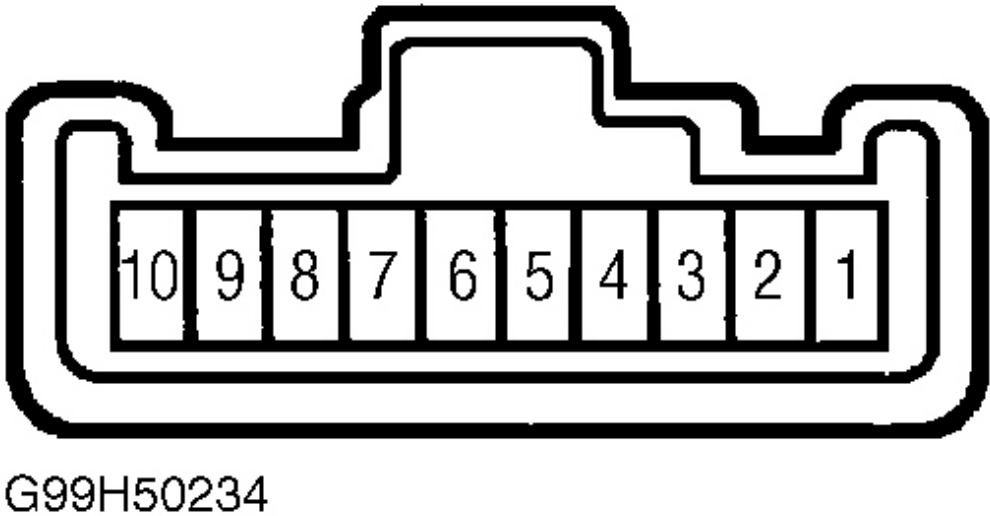
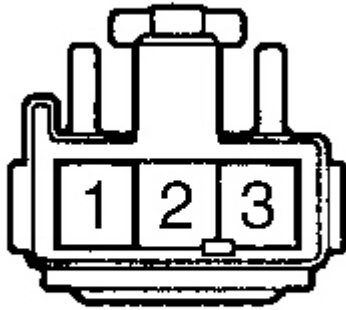


Fig. 19: Identifying Power Mirror Switch Connector Terminals (Tundra)
 Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors



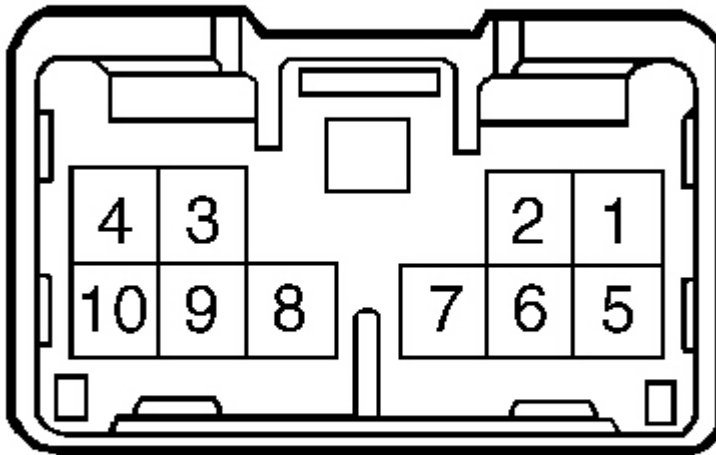
G99I50235

Fig. 20: Identifying Power Mirror Motor Connector Terminals (Tundra)

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

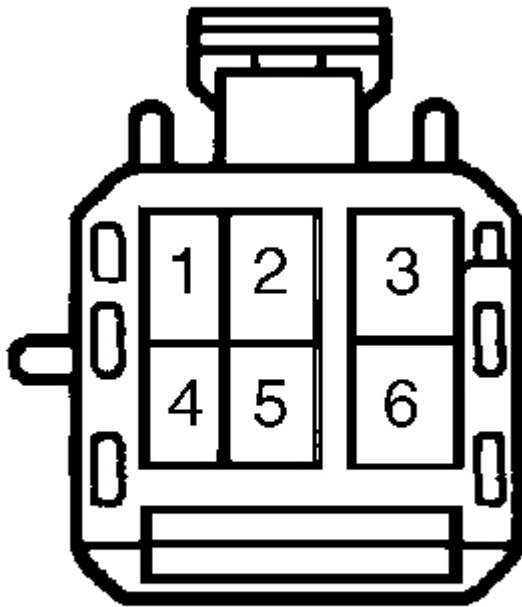
POWER MIRROR SWITCH CONTINUITY TEST (4RUNNER)

Application	(1) Terminals No.
Switch In Left Position	
Up	1 & 9; 6 & 10
Down	1 & 10; 6 & 9
Left	5 & 9; 6 & 10
Right	5 & 10; 6 & 9
Switch In Right Position	
Up	6 & 10; 7 & 9
Down	6 & 9; 7 & 10
Left	6 & 10; 8 & 9
Right	6 & 9; 8 & 10
(1) Continuity should exist between specified terminals. See Fig. 21 -Fig. 22 .	



G96C06852

Fig. 21: Power Mirror Switch Connector Terminals (4Runner)
Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.



G99A50237

Fig. 22: Power Mirror Motor Connector Terminals (4Runner)

Courtesy of TOYOTA MOTOR SALES, U.S.A., INC.

POWER MIRROR MOTOR

NOTE: Mirror motor connectors may vary in configuration from vehicle to vehicle of the same model.

Disconnect power mirror motor harness connector. Using a 12-volt power source, connect positive and negative leads to specified pins or terminals. See appropriate POWER MIRROR MOTOR TEST table. See **Fig. 1 -Fig. 22** . If power mirror motor fails any test, replace power mirror assembly.

POWER MIRROR MOTOR TEST (AVALON, CELICA & COROLLA)

Apply 12 Volts To Pin No.	⁽¹⁾ Ground Pin No.	Mirror Operation
3	2	Up
2	3	Down
1	2	Left
2	1	Right

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

(1) See **Fig. 2** or **Fig. 9** .

POWER MIRROR MOTOR TEST (CAMRY - WITH HEATER)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
1	2	Up
2	1	Down
3	2	Left
2	3	Right
(1) See Fig. 4 .		

POWER MIRROR MOTOR TEST (CAMRY - WITHOUT HEATER)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
3	2	Up
2	3	Down
1	2	Left
2	1	Right
(1) See Fig. 5 .		

POWER MIRROR MOTOR TEST (CAMRY - WITH HEATER)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
1	2	Up
2	1	Down
3	2	Left
2	3	Right
(1) See Fig. 6 .		

POWER MIRROR MOTOR TEST (CAMRY SOLARA)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
3	4	Up
4	3	Down
3	4	Left
4	2	Right
(1) See Fig. 7 .		

POWER MIRROR MOTOR TEST (LAND CRUISER)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
8	7	Left
7	8	Right

1999 Toyota RAV4

1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

6	7	Up
7	6	Down

(1) See **Fig. 11** .

POWER MIRROR MOTOR TEST (RAV4)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
3	1	Right
1	3	Left
3	5	Down
5	3	Up

(1) See **Fig. 29** .

POWER MIRROR MOTOR TEST (SIENNA)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
2	3	Left
3	2	Right
2	1	Up
1	2	Down

(1) See **Fig. 15** or **Fig. 16** .

POWER MIRROR MOTOR TEST (TACOMA)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
2	1	Up
1	2	Down
3	1	Left
1	3	Right

(1) See **Fig. 18** .

POWER MIRROR MOTOR TEST (TUNDRA)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
2	1	Up
1	2	Down
3	1	Left
1	3	Right

(1) See **Fig. 20** .

POWER MIRROR MOTOR TEST (4RUNNER)

Apply 12 Volts To Pin No.	(1) Ground Pin No.	Mirror Operation
---------------------------	--------------------	------------------

5	4	Up
4	5	Down
1	4	Left
4	1	Right
(1) See Fig. 20 .		

REMOVAL & INSTALLATION

POWER MIRROR ASSEMBLY

Removal & Installation

Remove mirror inner trim panel on inside of door. Mirror inner trim panel may include speaker. If necessary, disconnect speaker harness connector. Disconnect power mirror motor harness connector. Support outside mirror assembly while removing mirror retaining bolts/nuts on inside of door. To install, reverse removal procedure.

POWER MIRROR SWITCH

NOTE: Power mirror switch removal and installation procedures are not available from manufacturer.

WIRING DIAGRAMS

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 23: Power Mirror System Wiring Diagram (Avalon)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 24: Power Mirror System Wiring Diagram (Camry)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 25: Power Mirror System Wiring Diagram (Camry Solara)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 26: Power Mirror System Wiring Diagram (Celica)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 27: Power Mirror System Wiring Diagram (Corolla)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 28: Power Mirror System Wiring Diagram (Land Cruiser)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 29: Power Mirror System Wiring Diagram (RAV4)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 30: Power Mirror System Wiring Diagram (Sienna)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 31: Power Mirror System Wiring Diagram (Tacoma)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 32: Power Mirror System Wiring Diagram (2000 Tundra)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 33: Power Mirror System Wiring Diagram (4Runner - With Power Windows)

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

1999 Toyota RAV4
1999-2000 ACCESSORIES & EQUIPMENT Power Mirrors

Fig. 34: Power Mirror System Wiring Diagram (4Runner - Without Power Windows)