

POWER WINDOWS

1998 Mitsubishi Montero

1998 ACCESSORIES & EQUIPMENT
Mitsubishi - Power Windows

Mirage, Montero, Montero Sport & 3000GT

DESCRIPTION & OPERATION

With ignition switch in RUN position, battery voltage is applied to master power window switch located on driver's door. Master power window switch provides power and ground for all power window switches and motors. Master power window switch offers one-touch operation of driver's window. A solid state control unit, incorporated in master switch, fully lowers driver's window when switch is completely depressed. Master switch also includes lock-out feature to prevent passengers from operating any of the other power window door switches.

COMPONENT LOCATIONS

COMPONENT LOCATIONS TABLE

Component	Location
Power Window Relay (1)	In Passenger Compartment Fuse/Relay Block

(1) - See Fig. 1.

TROUBLE SHOOTING

POWER WINDOWS INOPERATIVE

Check for faulty fusible link, faulty power window relay or faulty power window switches. See WIRING DIAGRAMS.

ONE WINDOW FAILS TO OPERATE

If one window does not operate, even if both master and passenger side power window switches are pressed, check for faulty master power window switch or power window motor that is inoperative. If one window does not operate only when either master or passenger side power window switch is pressed, but does operate when both switches are pressed, check power window switch that is inoperative.

ONE-TOUCH SWITCH FUNCTION INOPERATIVE

Replace master power window switch.

COMPONENT TESTS

CIRCUIT BREAKER TEST

Press UP switch to fully close window. Continue to press switch for 10 seconds. Release UP switch and immediately press DOWN switch. If window begins to open within 60 seconds, circuit breaker is

okay. Circuit breaker is part of window motor.

POWER WINDOW RELAY TEST

Mirage & 3000GT

1) Remove power window relay from fuse/relay block. See Fig. 1. Check for continuity between power window relay terminals No. 1 and 3. See Fig. 5. Continuity should be present.

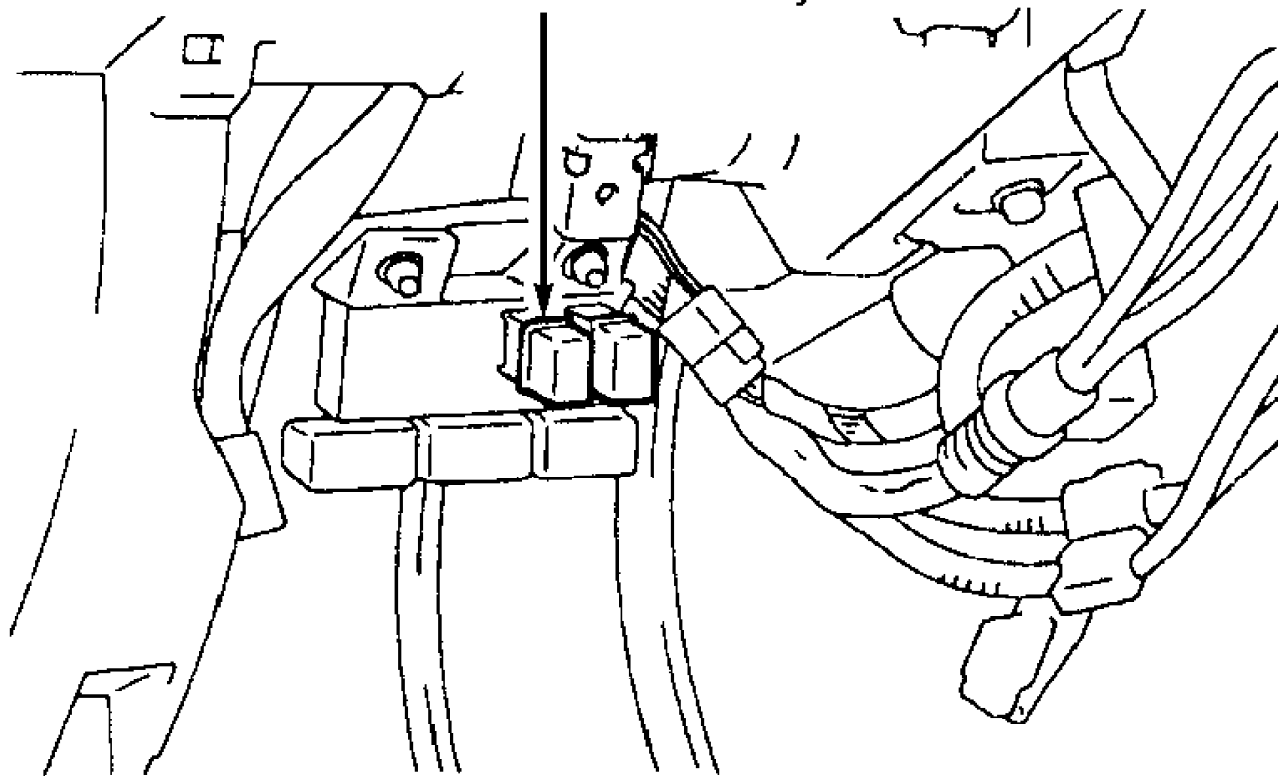
2) Connect positive lead of a 12-volt battery to power window relay terminal No. 1, and negative lead of battery to terminal No. 3. Continuity should be present between terminals No. 4 and 5 with voltage applied. Replace power window relay if continuity is not as specified.

Montero & Montero Sport

1) Remove power window relay from fuse/relay block. See Fig. 2 or 3. Check for continuity between power window relay terminals No. 2 and 4. See Fig. 6. Continuity should be present.

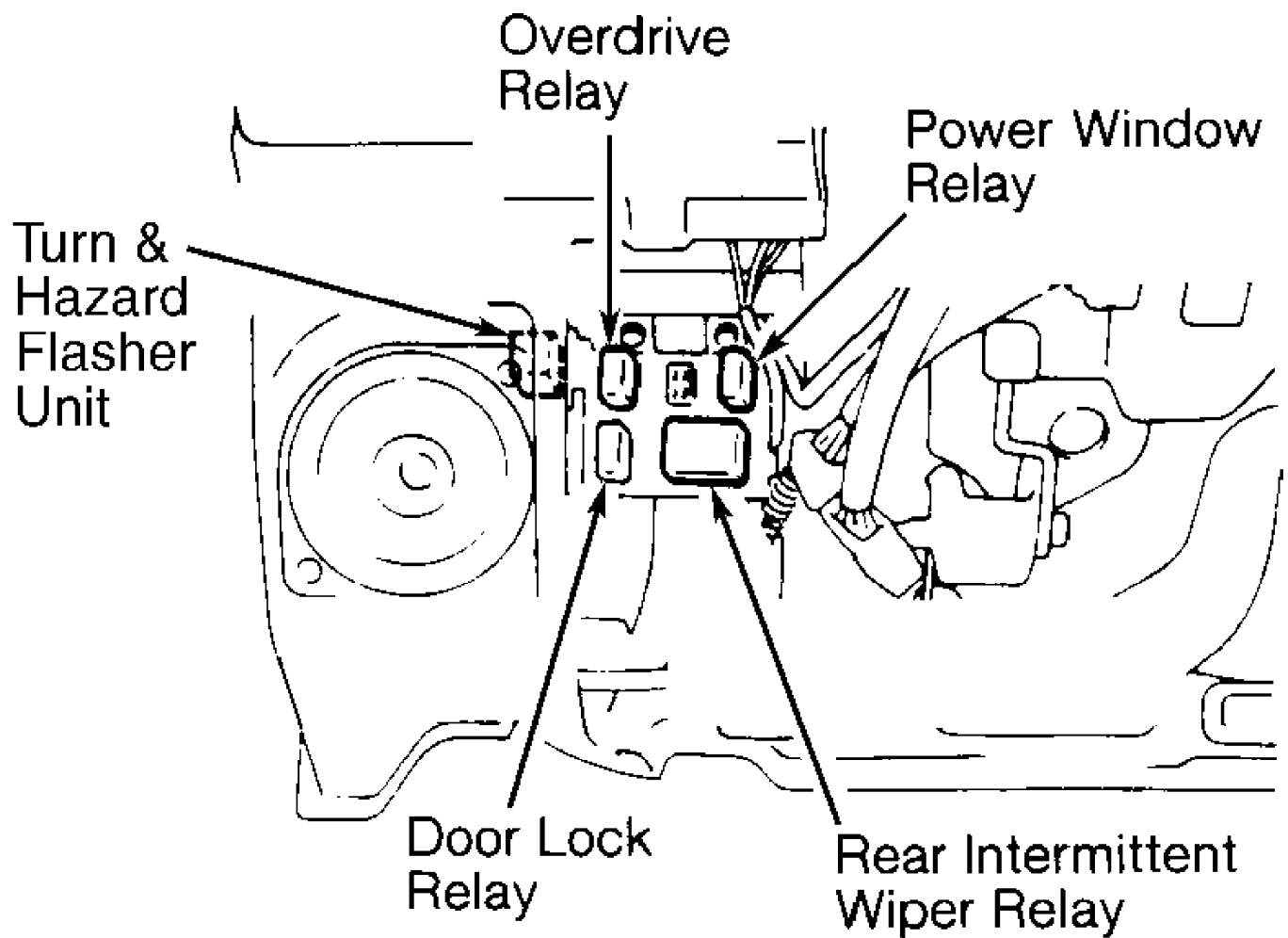
2) Connect positive lead of a 12-volt battery to power window relay terminal No. 2, and negative lead of battery to terminal No. 4. Continuity should be present between terminals No. 1 and 3 with voltage applied. Replace power window relay if continuity is not as specified.

Power Window Relay



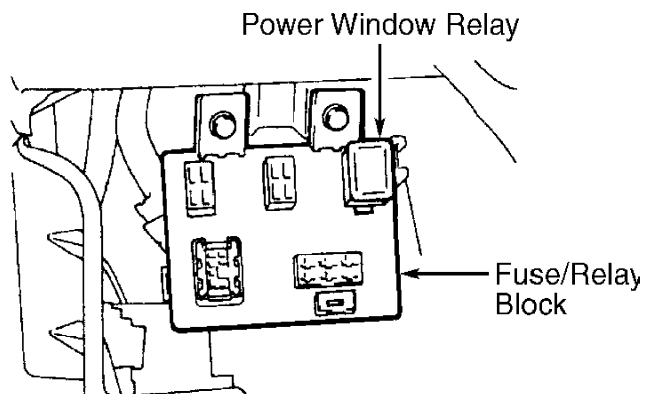
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Fig. 1: Locating Power Window Relay (Mirage)
Courtesy of Mitsubishi Motor Sales of America



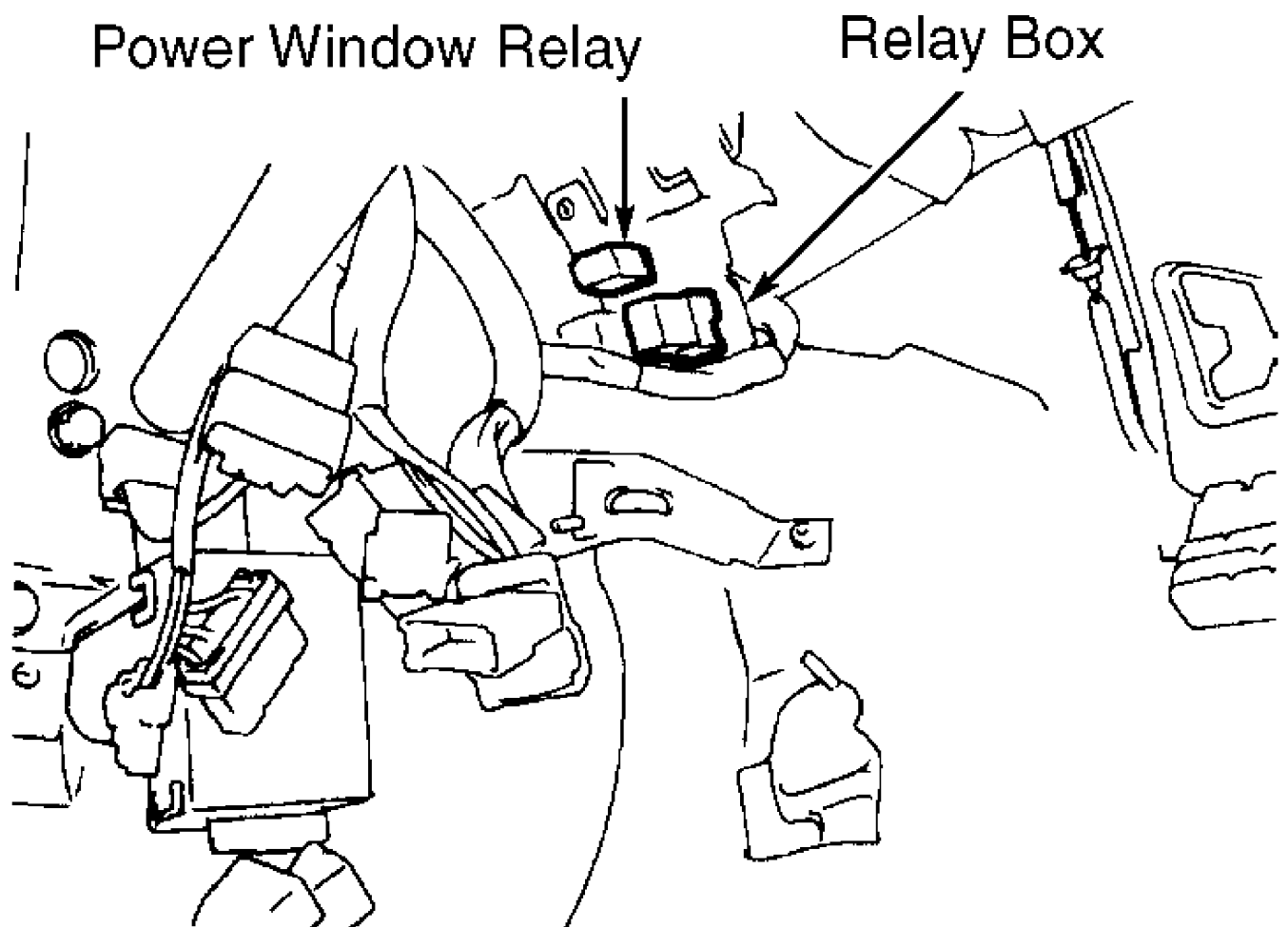
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Fig. 2: Locating Power Window Relay (Montero)
Courtesy of Mitsubishi Motor Sales of America



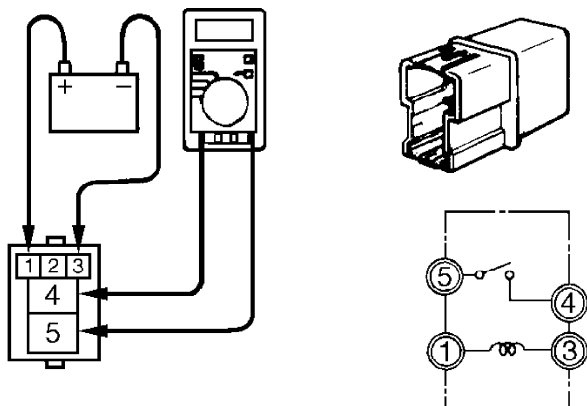
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Fig. 3: Locating Power Window Relay (Montero Sport)
Courtesy of Mitsubishi Motor Sales of America



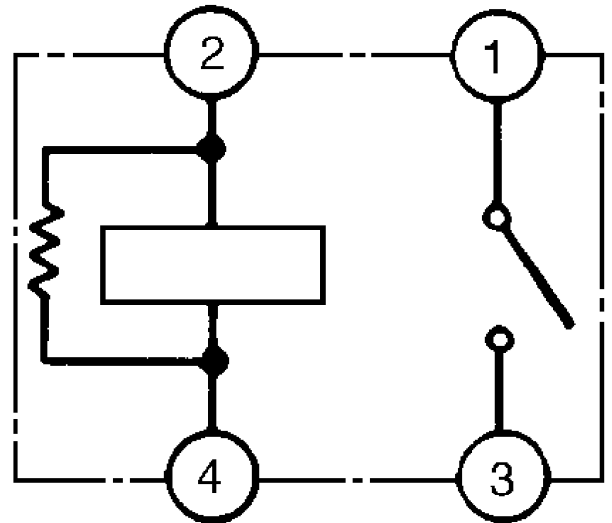
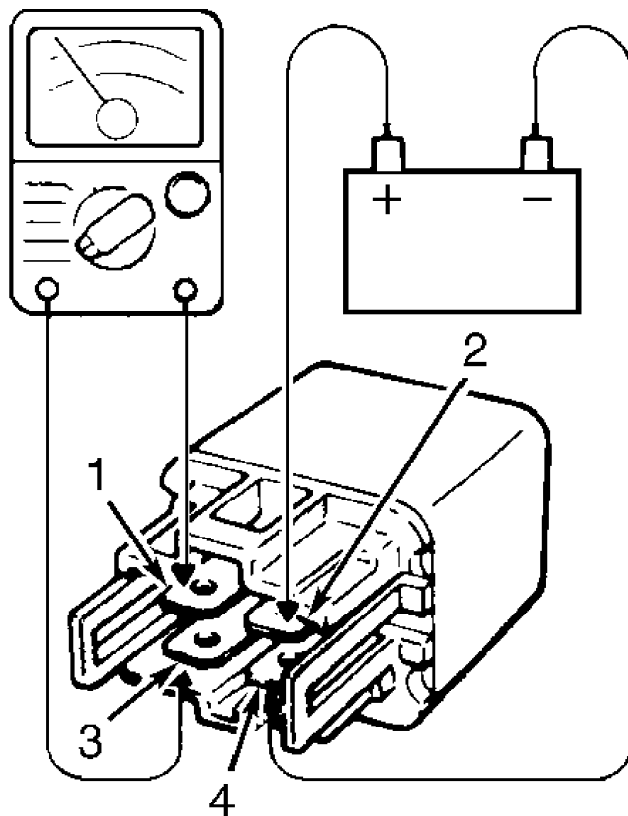
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Fig. 4: Locating Power Window Relay (3000GT)
Courtesy of Mitsubishi Motor Sales of America



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Fig. 5: Identifying Power Window Relay Terminals (Mirage & 3000GT)
Courtesy of Mitsubishi Motor Sales of America



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Fig. 6: Identifying Power Window Relay Terminals (Montero & Montero Sport)

Courtesy of Mitsubishi Motor Sales of America

POWER WINDOW MOTOR TEST

1) Remove appropriate door trim panel. Connect positive lead of a 12-volt test battery to either motor terminal. Connect negative lead of test battery to other motor terminal. Motor should operate, unless motor is at maximum travel.

2) Reverse test battery leads. Motor should operate in opposite direction. If motor does not operate as specified, inspect wiring. If wiring is okay, replace motor. Reverse test battery leads again to complete full function test of motor.

POWER WINDOW SWITCH TEST

Remove control switch from trim panel. Using ohmmeter, check continuity of switch. See appropriate MASTER WINDOW SWITCH CONTINUITY or SUB-SWITCH CONTINUITY table. See Fig. 7. Replace appropriate switch as necessary if switch continuity is not as specified.

MASTER WINDOW SWITCH CONTINUITY TABLE (MIRAGE - 2-DOOR)

Switch Position (1)	Check Continuity Between Pins No.
Normal Position	
Left Front OFF	1, 5 & 9
Left Front UP	1 & 6; 5 & 9
Left Front DOWN	5 & 6; 1 & 9

Right Front OFF		7, 8 & 9
Right Front UP		6 & 7; 8 & 9
Right Front DOWN		6 & 8; 7 & 9
Lock Position		
Left Front OFF		1, 5 & 9
Left Front UP		1 & 6; 5 & 9
Left Front DOWN		5 & 6; 1 & 9
Right Front OFF		7 & 8
Right Front UP		6 & 7
Right Front DOWN		6 & 8

(1) - Left side of vehicle refers to driver's side.

MASTER WINDOW SWITCH CONTINUITY TABLE (MIRAGE - 4-DOOR)

Switch Position (1)	Check Continuity Between Pins No.
Normal Position	
Left Front OFF	8, 9 & 12
Left Front UP	8 & 13; 9 & 12
Left Front DOWN	8 & 12; 9 & 13
Left Rear OFF	1, 2 & 12
Left Rear UP	1 & 13; 2 & 12
Left Rear DOWN	2 & 13; 1 & 12
Right Front OFF	3, 11 & 12
Right Front UP	3 & 13; 11 & 12
Right Front DOWN	3 & 12; 11 & 13
Right Rear OFF	6, 12 & 14
Right Rear UP	6 & 12; 13 & 14
Right Rear DOWN	6 & 13; 12 & 14
Lock Position	
Left Front OFF	8, 9 & 12
Left Front UP	8 & 13; 9 & 12
Left Front DOWN	8 & 12; 9 & 13
Left Rear OFF	1 & 2
Left Rear UP	1 & 13
Left Rear DOWN	2 & 13
Right Front OFF	3 & 11
Right Front UP	3 & 13
Right Front DOWN	11 & 13
Right Rear OFF	6 & 14
Right Rear UP	13 & 14
Right Rear DOWN	6 & 13

(1) - Left side of vehicle refers to driver's side.

SUB-SWITCH CONTINUITY TABLE (MIRAGE - ALL MODELS)

Switch Position	Check Continuity Between Pins No.	
OFF		4 & 7; 6 & 8
UP		5 & 7; 6 & 8
DOWN		4 & 7; 5 & 6

MASTER WINDOW SWITCH CONTINUITY TABLE (MONTERO & MONTERO SPORT)

Switch Position (1)	Check Continuity Between Pins No.	
Normal Position		
Left Front OFF		8, 9 & 12

Left Front UP	8 & 13; 9 & 12
Left Front DOWN	8 & 12; 9 & 13
Left Rear OFF	1, 2 & 12
Left Rear UP	1 & 13; 2 & 12
Left Rear DOWN	1 & 12; 2 & 13
Right Front OFF	3, 11 & 12
Right Front UP	3 & 13; 11 & 12
Right Front DOWN	3 & 12; 11 & 13
Right Rear OFF	6, 12 & 14
Right Rear UP	6 & 12; 13 & 14
Right Rear DOWN	6 & 13; 12 & 14
Lock Position	
Left Front OFF	8, 9 & 12
Left Front UP	8 & 13; 9 & 12
Left Front DOWN	8 & 12; 9 & 13
Left Rear OFF	1 & 2
Left Rear UP	1 & 13
Left Rear DOWN	2 & 13
Right Front OFF	3 & 11
Right Front UP	3 & 13
Right Front DOWN	11 & 13
Right Rear OFF	6 & 14
Right Rear UP	13 & 14
Right Rear DOWN	6 & 13

(1) - Left side of vehicle refers to driver's side.

SUB-SWITCH CONTINUITY TABLE (MONTERO & MONTERO SPORT)

Switch Position	Check Continuity Between Pins No.
OFF	4 & 7; 6 & 8
UP	5 & 7; 6 & 8
DOWN	4 & 7; 5 & 6

MASTER WINDOW SWITCH CONTINUITY TABLE (3000GT)

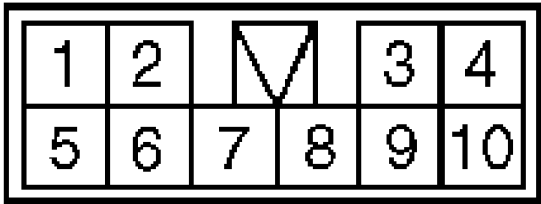
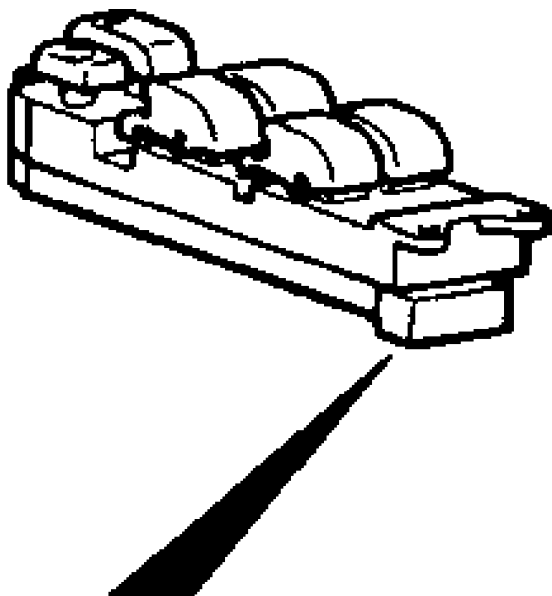
Switch Position (1)	Check Continuity Between Pins No.
Normal Position	
Left Front OFF	2, 6 & 9
Left Front UP	1 & 2; 6 & 9
Left Front DOWN	1 & 9; 2 & 6
Right Front OFF	3, 4 & 6
Right Front UP	1 & 4; 3 & 6
Right Front DOWN	1 & 3; 4 & 6
Lock Position	
Left Front OFF	2, 6 & 9
Left Front UP	1 & 2; 6 & 9
Left Front DOWN	1 & 9; 2 & 6
Right Front OFF	3 & 4
Right Front UP	1 & 4
Right Front DOWN	1 & 3

(1) - Left side of vehicle refers to driver's side.

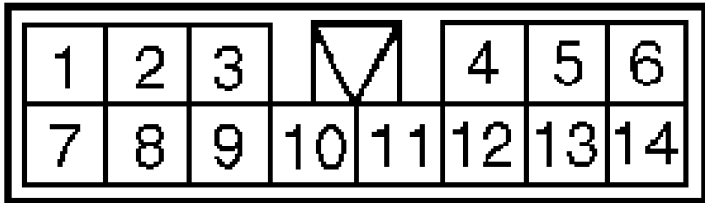
PASSENGER-SIDE WINDOW SWITCH CONTINUITY TABLE (3000GT)

Switch Position	Check Continuity Between Pins No.
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OFF		3 & 8; 5 & 7
UP		3 & 8; 5 & 9
DOWN		3 & 9; 5 & 7



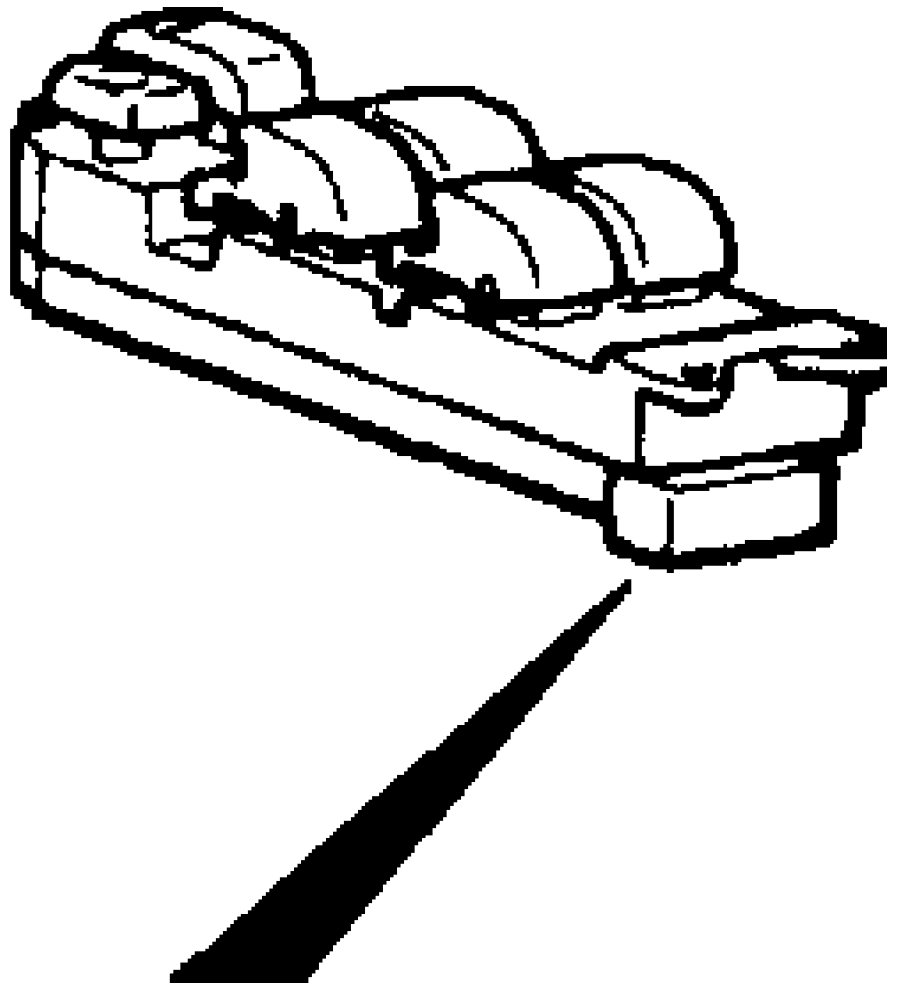
2-DOOR MODELS



4-DOOR MODELS

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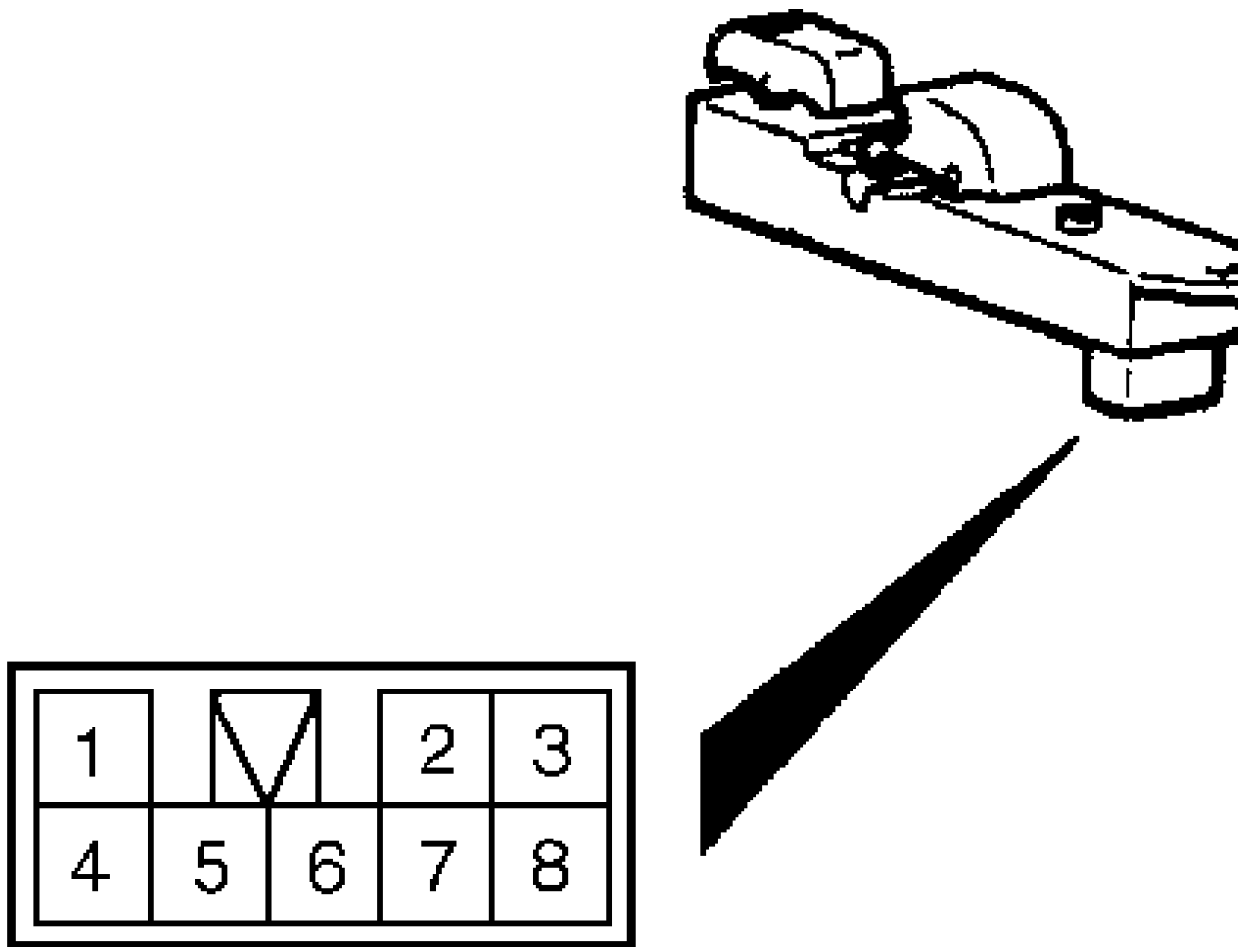
Fig. 7: Identifying Power Window Connector Terminals (Mirage - Main Switch)
 Courtesy of Mitsubishi Motor Sales of America



1	2	3	▽		4	5	6
7	8	9	10	11	12	13	14

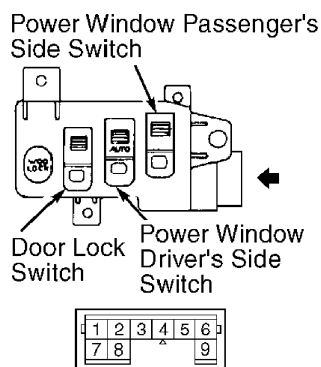
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Fig. 8: Identifying Power Window Connector Terminals (Montero & Montero Sport - Main Switch)
 Courtesy of Mitsubishi Motor Sales of America



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Fig. 9: Identifying Power Window Connector Terminals (Mirage, Montero & Montero Sport - Sub-Switch)
 Courtesy of Mitsubishi Motor Sales of America



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Fig. 10: Identifying Power Window Connector Terminals (3000GT - Main Switch)
 Courtesy of Mitsubishi Motor Sales of America

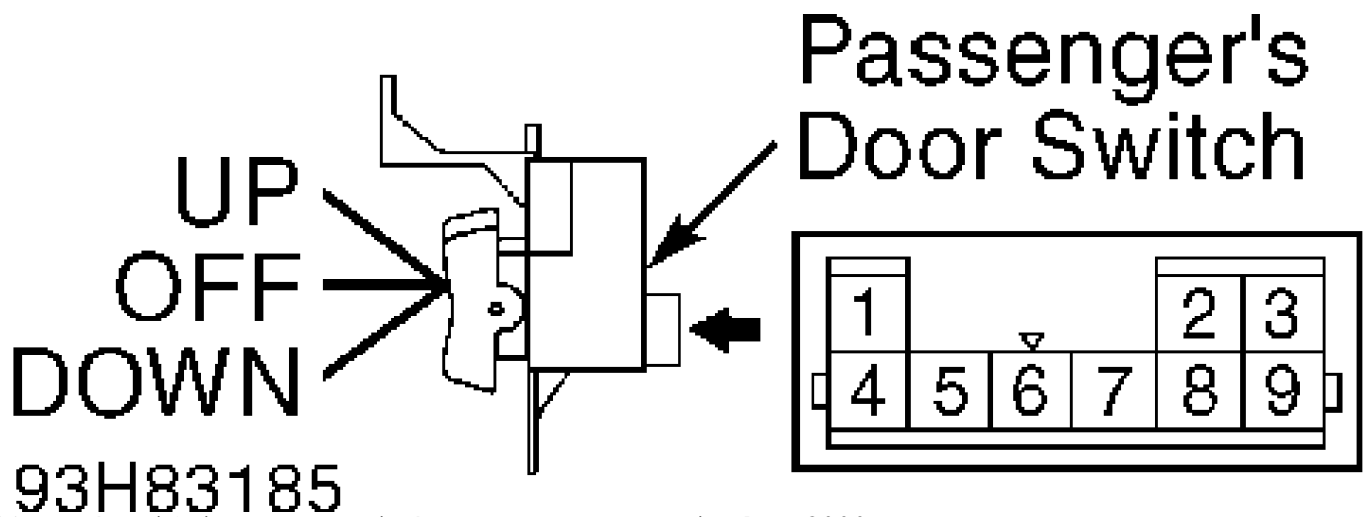


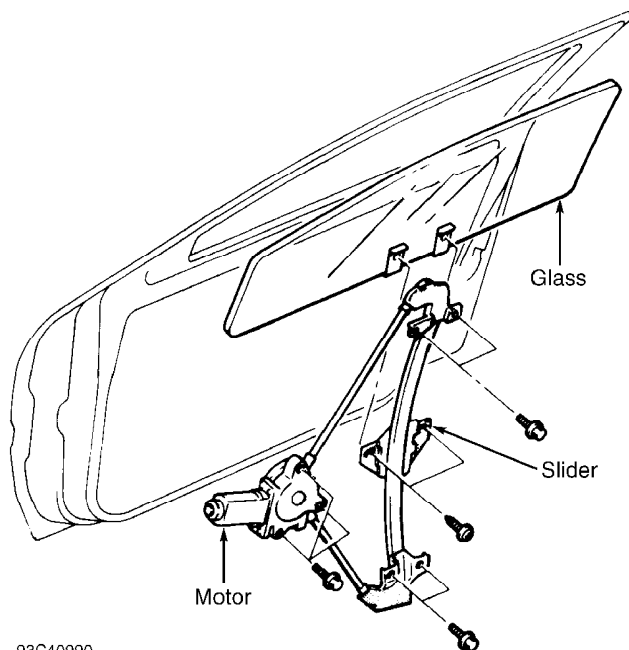
Fig. 11: Identifying Power Window Connector Terminals (3000GT - Sub-Switch)
 Courtesy of Mitsubishi Motor Sales of America

REMOVAL & INSTALLATION

POWER WINDOW MOTOR

Removal & Installation

Remove door trim panel and waterproof shield. Remove glass retaining screws and glass. See Fig. 12. Remove motor and slider assembly retaining bolts. Remove motor and slider assembly from door. To install, reverse removal procedure.



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 Fig. 12: Removing Power Window Motor & Slider Assembly (Typical)
 Courtesy of Mitsubishi Motor Sales of America

WIRING DIAGRAMS

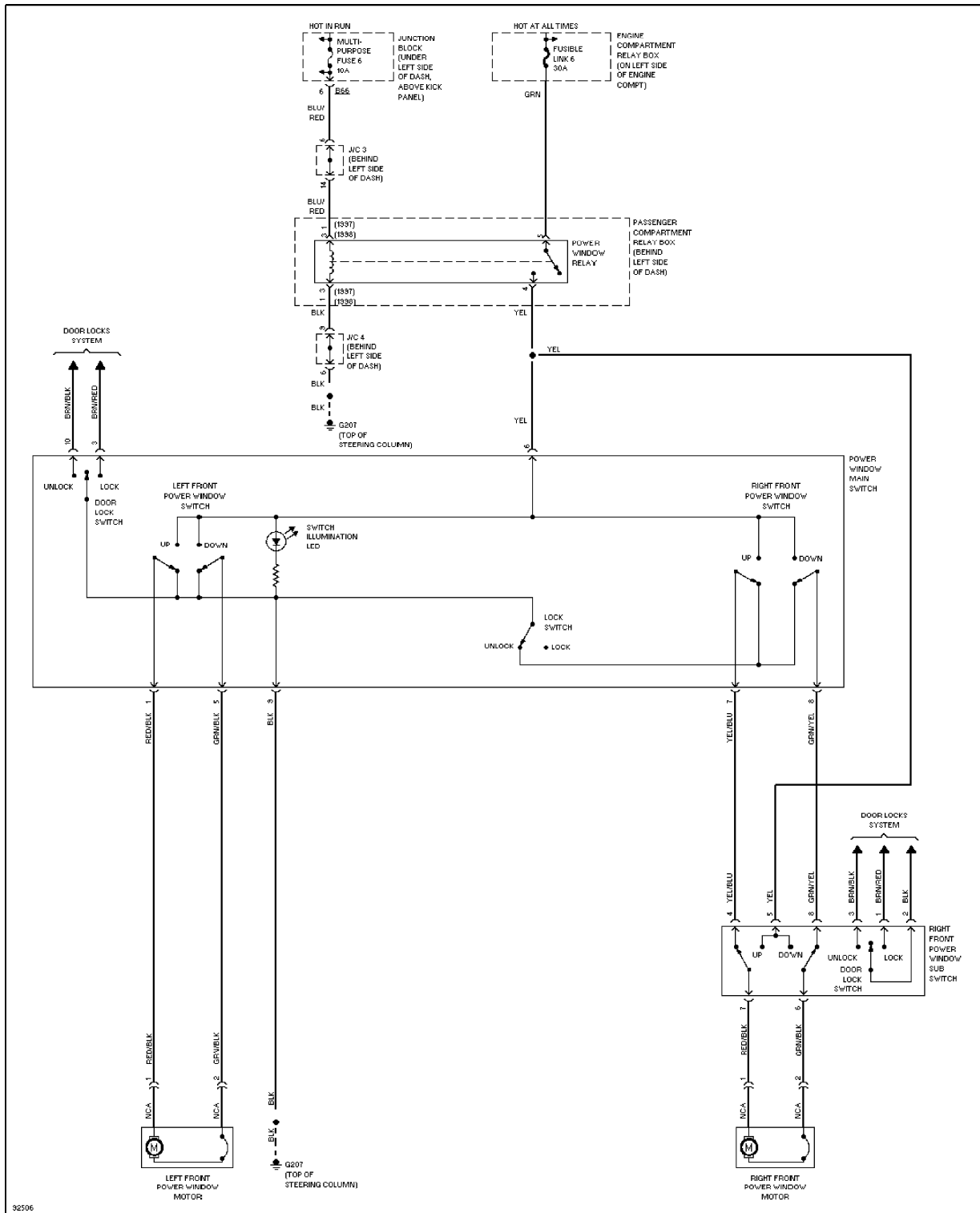


Fig. 13: Power Window System Wiring Diagram (Mirage - 2-Door)

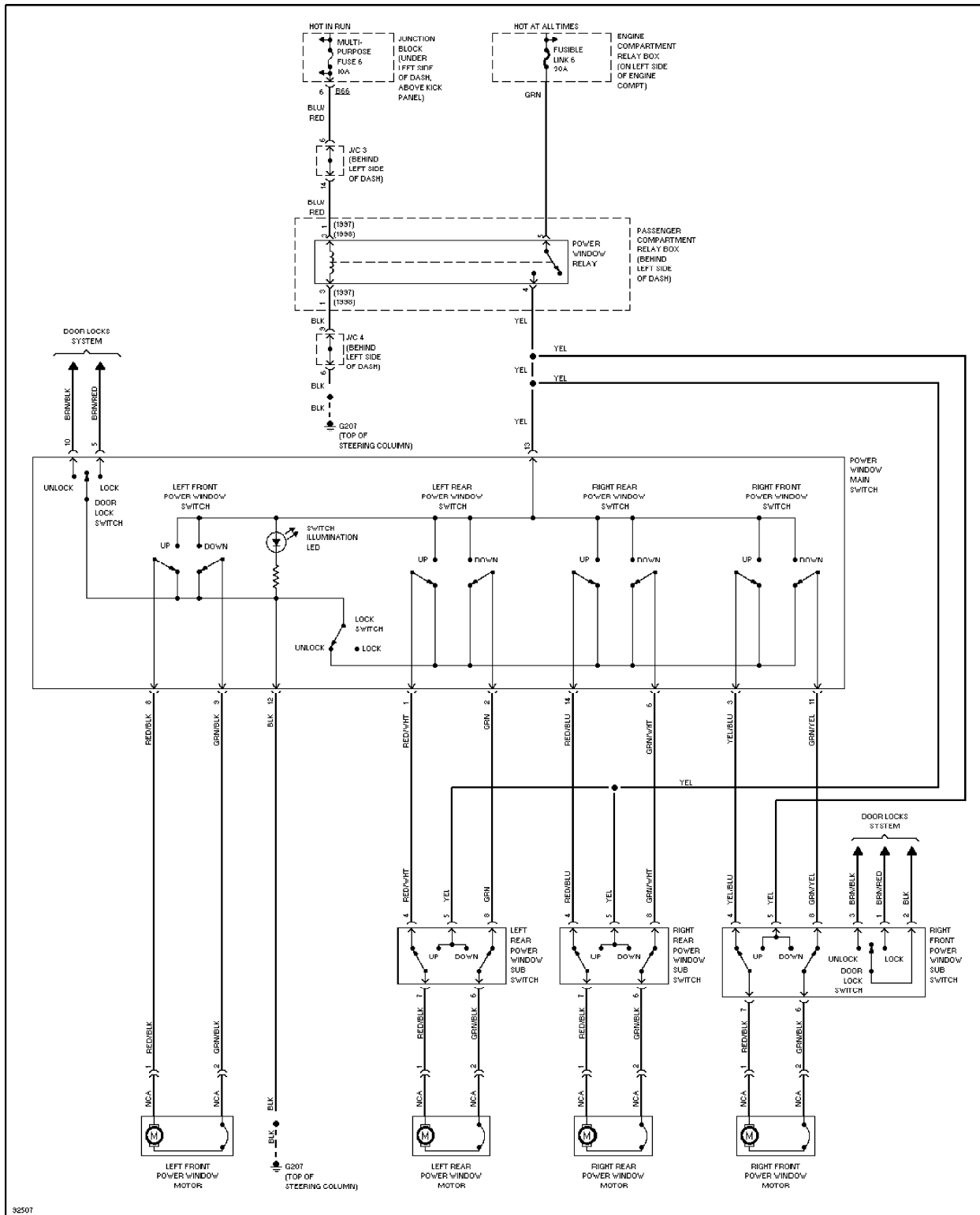
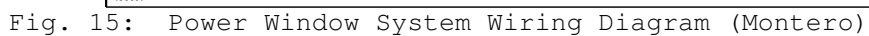


Fig. 14: Power Window System Wiring Diagram (Mirage - 4-Door)



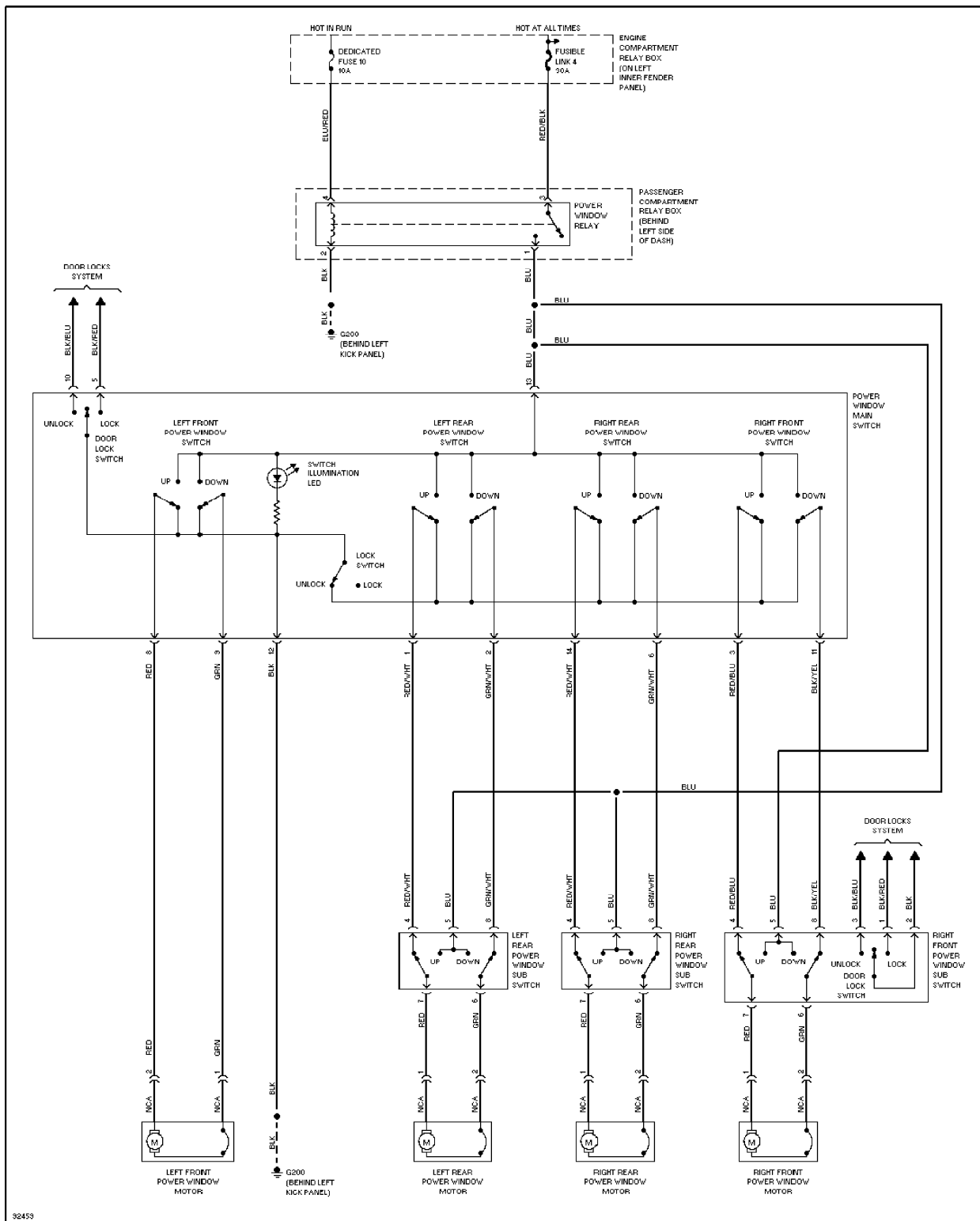


Fig. 16: Power Window System Wiring Diagram (Montero Sport)

