### **POWER WINDOWS**

### 1993 Nissan Sentra

1993 ACCESSORIES/SAFETY EQUIPMENT Nissan Power Windows

Sentra

### DESCRIPTION

Power windows use a motor mounted on window regulator to raise and lower the side glass. Each motor includes an internal circuit breaker. An in-line circuit breaker protects all power window circuits. Each door switch includes an amplifier.

### **OPERATION**

Pushing door switch will raise or lower side glass. When other side of switch is pushed, current to motor is reversed and motor changes direction. Driver's door switch can operate any window.

### TROUBLE SHOOTING

## **POWER & GROUND**

- 1) Turn ignition on. Check for 12 volts at 6-pin connector between White/Red and Black wire terminals of driver's door switch (located inside driver's door). If 12 volts is present, go to next step. If 12 volts is not present, check power source, fuses, ground and related circuits.
- 2) Check for continuity between Black wire at driver's door switch and ground. If there is no continuity, repair circuit. If there is continuity, check for 12 volts between Red wire at 12-pin connector of driver's door switch and ground.
- 3) If 12 volts is present, power circuits are okay. If 12 volts is not present, check power source, fuses, ground and related circuits.
- 4) Disconnect door switch connector at passenger doors. On passenger door switches (6-pin connector on 2-door), check for 12 volts between White/Red and Black wires. If 12 volts is present, power circuits are okay. If 12 volts is not present, check power source, fuses, ground and related circuits.

## DRIVER'S WINDOW NOT WORKING; OTHERS WORK OKAY

- 1) Remove 6-pin connector from driver's door window switch. Apply battery voltage between Blue/Red and Blue/Black wires. Window should move up or down.
- 2) Reverse battery leads and check for window moving in other direction. If window moves up and down, replace driver's switch. If window does not move, check circuits between driver's side window switch and window motor.
- 3) Repair circuits as necessary. If circuits are okay, apply battery voltage between window motor terminals. If motor works, recheck circuits. If motor does not work, replace window motor.

# PASSENGER WINDOW(S) NOT WORKING; POWER DOOR LOCKS OKAY

1) Measure voltage at 10-pin (6-pin on 2-door) connector at door window switch. Turn ignition on. Press UP on window switch. Check

for battery voltage between Blue/Purple or Blue/Black and Blue/Red wires.

- 2) Battery voltage should be present. Reverse voltmeter leads. Press DOWN on window switch. Battery voltage should be present. If switch tests as described, go to step 3). If switch does not test as described, replace door switch.
- 3) Disconnect 10-pin (6-pin on 2-door) connector from door switch. Measure continuity between Blue/Red and Blue/Black wires of door switch connector and window motor connector.
- 4) If continuity is not present or circuit is grounded, repair circuits as necessary. If circuits are okay, apply battery voltage between window motor terminals. If motor works, recheck circuits. If motor does not work, replace window motor.

## PASSENGER WINDOW(S) NOT WORKING FROM ANY DOOR SWITCH

- 1) Remove 10-pin (6-pin on 2-door) connector from door window switch. Turn ignition on. Turn main window lock switch on. Check for battery voltage between White/Red wire and ground.
- 2) Battery voltage should be present. Turn main window lock switch off. Battery voltage should not be present. If voltage is as specified, replace door switch. If voltage is not as specified, disconnect 12-pin connector from driver's door main switch.
- 3) Measure continuity between White/Red wire of driver's door main switch connector and door window switch connector. If continuity is present and circuit is not grounded, replace driver's door main switch. If continuity is not present or circuit is grounded, repair circuits.

### PASS WINDOW(S) WRKNG FROM DOOR SW ONLY, NOT FROM DRVR'S SW

- 1) Remove 10-pin connector from passenger window switches. Turn main lock switch to OFF. Check voltage between Green/Blue wire and ground.
- 2) With main switch in UP position, 12 volts should be present. With main switch in DOWN position, about 4 volts should be present. With main switch in NEUTRAL position, about zero volts should be present. If voltage is as specified, replace window switch.
- 3) If voltage is not as specified, disconnect 12-pin connector from driver's door switch. Check for continuity between Green/Blue wire at passenger door switch connector and Green/Red, Green/Blue and Green wires at driver's door switch connector.
- 4) If any circuits are open or shorted to ground, repair circuits. If no problems with shorts or open circuits are found, replace driver's door main switch.

NOTE: Trouble shooting information for other models is not available from the manufacturer.

### **TESTING**

## AMPLIFIER (DRIVER'S WINDOW SWITCH)

Driver's window switch includes power amplifier. To test amplifier, see appropriate test under TROUBLE SHOOTING.

### MOTOR TEST

Apply battery voltage between wire terminals of motor connector. Window should move up or down. Reverse battery leads and check for window moving in other direction. If window moves up and down, motor is okay. If window does not move as described, replace

window motor.

# SWITCH TEST

Switches include power amplifier. To test switch, see appropriate test under TROUBLE SHOOTING.

# **WIRING DIAGRAMS**

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