### **DOOR LOCKS - POWER**

#### 1993 Nissan Sentra

1993 ACCESSORIES/SAFETY EQUIPMENT Nissan Power Door Locks

Sentra

### **DESCRIPTION & OPERATION**

Electric actuators are used to lock or unlock doors. Actuator assembly include switches to limit actuator travel. A timer limits current "on time" required to operate electric door actuator.

# **TROUBLE SHOOTING**

Power & Ground

- 1) Turn ignition on. Check for 12 volts at 6-pin connector between White/Red and Black wires 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 of driver's door switch and ground. If there is no continuity, repair circuit. If there is continuity, check for 12 volts between Red wire terminal and ground on 12-pin connector of driver's door switch.
- 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 connectors 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.

Power Locks Not Working (2-Door)

- 1) Disconnect 12-pin connector from driver's door switch. Using a jumper wire, ground Green/Blue wire. Door lock actuator should lock passenger door. If actuator locks door, go to step 3).
- 2) If actuator does not lock door, check for 12 volts at Green/Blue wire. If 12 volts is present, go to step 5). If 12 volts is not present, check continuity between Green/Blue wire of driver's door switch and Gray/Red wire of passenger's door 12-pin connector. If continuity is not present, repair circuits. If continuity is present, replace passenger door switch.
- 3) Using a jumper wire, ground Green/Red wire at driver's door switch. If actuator unlocks passenger door, go to step 8). If actuator does not unlock door, check for 12 volts at Green/Red wire. If 12 volts is present, go to step 5).
- If 12 volts is present, go to step 5).

  4) If 12 volts is not present, check continuity between Green/Red wire of driver's door switch and Gray/Blue wire of passenger's door 12-pin connector. If continuity is not present, repair circuits. If continuity is present, replace passenger door switch.
- 5) Check for voltage at Gray/Red wire at passenger door switch. Operate main switch at driver's door to unlock passenger door. Voltmeter should indicate 12 volts for a short time, then return to zero volts.
- 6) Check for voltage at Gray/Blue wire at passenger door switch. Operate main switch at driver's door to lock passenger door. Voltmeter should indicate 12 volts for a short time, then return to zero volts.

- 7) If voltmeter indicated voltage as described, but actuator is not working, replace passenger door switch. If voltage was not as described, go to next step.
- 8) Check continuity of Gray/Red and Gray/Blue wires between 6-pin passenger door switch connector and door lock actuator. Repair any shorts or open in circuit(s). If circuits are okay, disconnect door lock actuator connector. Apply battery voltage to door lock actuator.
- 9) If door lock actuator does not operate, reverse battery leads. Door lock actuator should now work. Reverse battery leads and door lock actuator should reverse direction.
- 10) If door lock actuator does not work as described, replace door lock actuator. If door lock actuator works as described, recheck related circuits.

Power Locks Not Working (4-Door)

- 1) Check for voltage at Gray/Blue wire at 6-pin driver's door switch. Operate driver's door switch to unlock doors. Voltmeter should indicate 12 volts for a short time, then return to zero volts.
- 2) Check for voltage at Gray/Red wire at 6-pin driver's door switch. Operate driver's door switch to lock doors. Voltmeter should indicate 12 volts for a short time, then return to zero volts.
- 3) If voltage was not as described, replace driver's switch. If voltmeter indicated as described, disconnect 6-pin driver's door switch connector.
- 4) Check continuity of Gray/Red and Gray/Blue wires between 6-pin driver's door switch connector and door lock actuator(s). Repair any shorts or open in circuit(s). If circuits are okay, disconnect door lock actuator connector. Apply battery voltage to door lock actuator.
- 5) If door lock actuator does not operate, reverse battery leads. Door lock actuator should now work. Reverse battery leads and door lock actuator should reverse direction.
- $\,$  6) If door lock actuator does not work as described, replace door lock actuator. If door lock actuator works as described, recheck system.

Driver's Lock Knob Does Not Work Door Locks (Main Switch On 4-Door Models Will Work Door Locks)

- 1) Disconnect 12-pin connector from driver's door switch. Check continuity between Light Green/Black wire and ground. Continuity should be present with door lock knob in lock position. Continuity should not be present with door lock knob in unlock position.
- 2) If circuits test as described, replace driver's door switch. If circuits do not test as described, disconnect connector from lock knob switch. Check continuity of Light Green/Black wire between 12-pin driver's door switch connector and door lock knob switch connector.
- 3) Check continuity of Black wire between door lock knob switch connector and ground. Repair any shorts or open in circuit(s). If circuits are okay, disconnect door lock knob connector.
- 4) Check for continuity between terminals with door lock knob in unlock position and no continuity between terminals with door lock knob in lock position. If door lock knob does not test as described, replace door lock knob. If door lock knob tests as described, recheck system.

One Or More Door Locks Do Not Work (4-Door)

1) Disconnect 6-pin driver's door switch connector. Check continuity of Gray/Red and Gray/Blue wires between 6-pin driver's door switch connector and door lock actuator(s). Repair any shorts or open in circuit(s). If circuits are okay, disconnect door lock actuator connector. Apply battery voltage to door lock actuator.

- 2) If door lock actuator does not operate, reverse battery leads. Door lock actuator should now work. Reverse battery leads and door lock actuator should reverse direction.
- 3) If door lock actuator does not work as described, replace door lock actuator. If door lock actuator works as described, recheck system.

#### **TESTING**

# DOOR LOCK KNOB TEST

Check for continuity between switch terminals with door lock knob switch in unlock position and no continuity between switch terminals with door lock knob in lock position. If door lock knob does not test as described, replace door lock knob.

# DOOR LOCK ACTUATOR TEST

- 1) Disconnect door lock actuator connector. Apply battery voltage to door lock actuator. If door lock actuator does not operate, reverse battery leads. Door lock actuator should now work.
- reverse battery leads. Door lock actuator should now work.

  2) Reverse battery leads and door lock actuator should reverse direction. If door lock actuator does not work as described, replace door lock actuator.

#### WIRING DIAGRAMS

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