### **DEFOGGER - REAR WINDOW**

1990 Nissan 240SX

1990-92 ACCESSORIES & EQUIPMENT Rear Window Defogger

Axxess, Maxima, Pathfinder, Pickup, Pulsar NX, Sentra, Stanza, 240SX, 300ZX

# **REAR DEFOGGER RELAY DESCRIPTION & OPERATION**

(EXCEPT AXXESS & PICKUP)

All models except Axxess and Pickup use a relay to supply voltage to grid filament. See SYSTEM COMPONENT LOCATIONS table in this article for relay location.

#### TIME CONTROL UNIT DESCRIPTION & OPERATION

(MAXIMA, PATHFINDER, SENTRA, STANZA, 240SX & 300ZX)

Time control unit controls defogger's on time. Unless control switch is turned off first, system will automatically turn off after approximately 15 minutes. On Maxima, Stanza, 240SX and 300ZX, time control unit controls other functions of system in addition to rear defogger (wiper delay, warning chimes, etc.). On Pathfinder and Sentra, time control unit is a separate unit, controlling only the defogger's on time function. For location of time control unit, see SYSTEM COMPONENT LOCATIONS table in this article.

CONTROL SWITCH LOCATIONS

Application	Location
Axxess, Pulsar NX & 300ZX	Mounted To Upper Left Corner Of Dash Panel
Pathfinder & Pickup	Mounted To Dash Panel,
Maxima, Sentra, Stanza & 240SX	Left Of Steering Column Mounted To Dash Panel, ight Of Steering Column

NOTE: All models except Axxess and Pickup use a relay to supply voltage to grid filament.

# SYSTEM COMPONENT LOCATIONS TABLE

SYSTEM COMPONENT LOCATIONS

Application	Location
Rear Defogger Relay Maxima & Stanza F	
Pathfinder Behind Opening In Left Rea	Under Left End Of Dash ar Interior Ouarter Panel
Pulsar NX & Sentra Under Left Sic	de Of Dash, Near Firewall
240SX To Right Of Junction Block 300ZX In Fuse Block,	•

Time Control Unit

Maxima Near Brake Pedal Bracket Pathfinder Behind Opening In Left Rear Interior Quarter Panel
Sentra Combined Unit With Control Switch Stanza, 240SX & 300ZX Behind Left Kick Panel
DEAD DEFOCED DELAY LOCATION (1000)

#### REAR DEFOGGER RELAY LOCATION (1992)

Application	Location
Maxima, NX, Sentra & Stanza .	Behind Left End Of Dash,
Pathfinder	On Right Side Of Fuse Block Behind Opening In Left Rear
240SX	Interior Quarter Panel Under Left End Of Dash
300ZX	To Right Of Junction Block Under Left Of Dash, In Fuse Block

#### **DEFOGGER DOES NOT WORK TROUBLESHOOTING**

Check fuse, control switch, wiring circuit and grid wire filaments. Also, check rear defogger relay and time control unit for models equipped with these components.

# **SYSTEM OPERATION TESTING**

Start engine. Turn rear defogger control switch on. Glass should feel warm after a few minutes. If glass is not warm, use a test light or voltmeter to check for battery voltage at grid feed wire. If battery voltage is NOT present, check wiring harness, control switch, rear defogger relay (if equipped) and time control unit (if equipped).

### **FILAMENT TESTING**

To locate breaks in grid wire filaments, ensure battery voltage is present on feed side of grid. Connect voltmeter between middle portion of filament and vertical section of grid (at either end of window). See Fig. 1. Probe entire length of filament. If voltmeter needle moves abruptly, check for break in filament at that point.

# **DEFOGGER SWITCH TEST**

Remove defogger switch. Using an ohmmeter, check continuity of defogger switch terminals. See DEFOGGER SWITCH TERMINALS CONTINUITY table.

# DEFOGGER SWITCH TERMINALS CONTINUITY

Application	Terminal	Continuity
Maxima, NX, Sentra, Stanza & 240SX Switch On Switch Off Pathfinder		
Switch On		
Switch On		,

# **ON-VEHICLE SERVICE**

# **GRID FILAMENT REPAIR**

1) Clean broken grid and its surrounding area with a cloth dampened in alcohol. Apply masking tape to both sides of grid line. See Fig. 1.

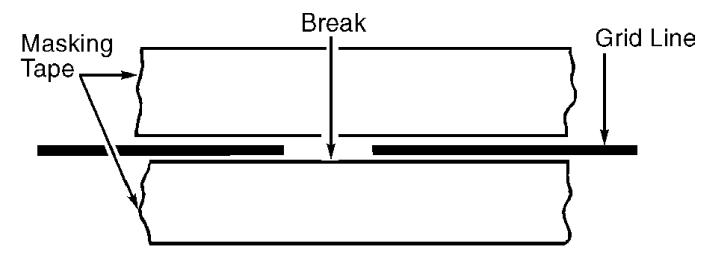
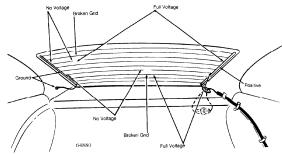


Fig. 1: G92A01033 Repairing Rear Defogger Grid Element

- 2) Apply a small amount of silver conductive paint to the tip of a drawing pen. Apply silver conductive paint on grid, overlapping existing grid approximately .20" (5 mm).
- 3) After 10 minutes, check repaired grid for continuity. Do not touch repaired area while test is being performed. If repaired area is okay, use a heat gun and apply hot air to repaired area for approximately 20 minutes. If a heat gun is not available, allow repaired area to dry for 24 hours.

#### **WIRING DIAGRAMS**

See appropriate chassis wiring diagram in WIRING DIAGRAMS. NOTE:



Typical Voltage Test for Broken Grid Filaments