Service Instructions

Heater/Defroster Installation Instructions

Models: All 2005 - Current Part Number: 0106-01669

WARNING! TO PREVENT PERSONAL INJURY OR PROPERTY DAMAGE BE SURE TO TURN THE MASTER DISCONNECT SWITCH (MDS) TO THE 'OFF' POSITION BEFORE ATTEMPTING ANY SERVICE TO THE VEHICLE.

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Procedure:

1. Turn the MDS to the **'OFF'** position. Locate the access panel in the center of the white lower dash. If needed, unlock using the ignition key, open the panel and switch the Breaker Off. (See Photo 1)

2. Remove the upper and lower dash units from the inside of the vehicle. (See Service Manual Part # 1010-00174, Section 7 – BODY.)

3. Clear a work area and lay out components of the kit. Prepare to install the Heater/Defroster unit to the vehicle.

4. The heater/defroster unit will attach to the front aluminum cross member tube of the vehicle. Center it across the width of the vehicle. The unit has an **'L'** shaped bracket attached to it that will cradle over the top of the cross member. Using the provided self-drilling screws in the kit, secure the unit to the cross member tube. (See Photo 2)

Photo 1

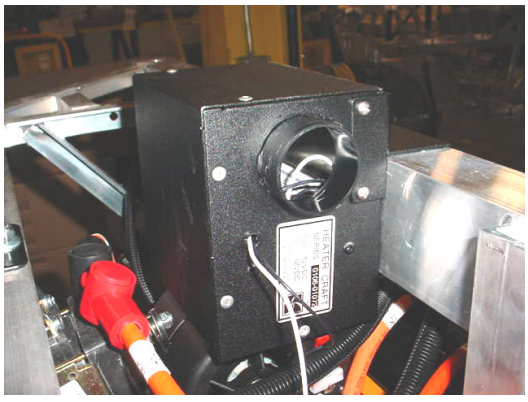


Photo 2

The mounting holes are located on the front of the bracket. To secure properly, using the predrilled mount holes, open the front hood of the vehicle. Locate the aluminum cross member tube. Be sure the heater/defroster is centered, and then secure the unit. (See Photo 3)

- **<u>NOTE</u>: The two above-mentioned photos were taken during build-up of a vehicle and will look different than an assembled vehicle in the field.**

At this point the heater/defroster unit should be mounted and secured to the vehicle.

5. Next, mount the accessory contactor unit to the vehicle. The contactor will mount to the lower right Power Signal Distribution Module (PSDM) bracket. (See Photo 4) Secure the unit using the provided hardware.

- **<u>NOTE</u>: In earlier model 2005 vehicles this bracket was not predrilled so you will need to position the unit to the bracket, mark out the hole locations, drill, and then secure to the bracket. More recent models are predrilled and will only require you to secure the unit.**

The Heater/Defroster unit operates on 72 volt DC and 12 volt DC power. The heater coil element internally operates utilizing the 72 volt power of the vehicle, while the blower fan operates utilizing 12 volt accessory power from the fuse block.

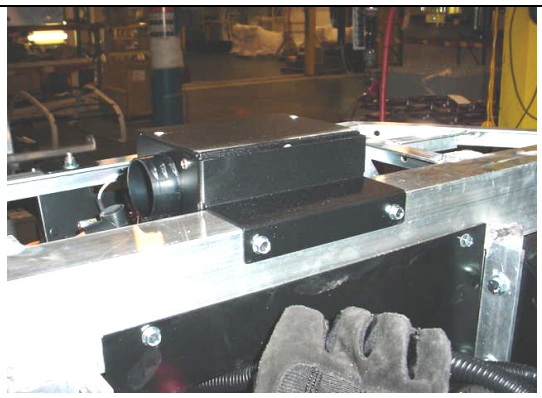


Photo 3

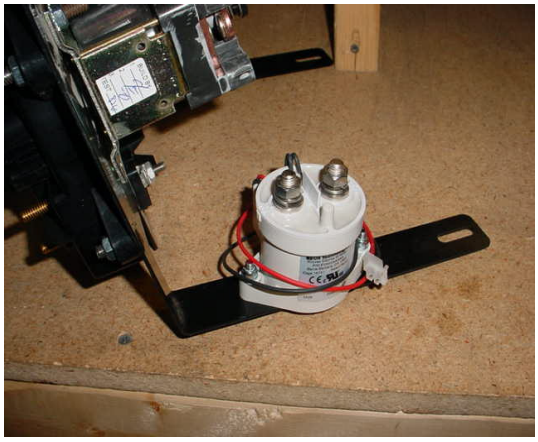
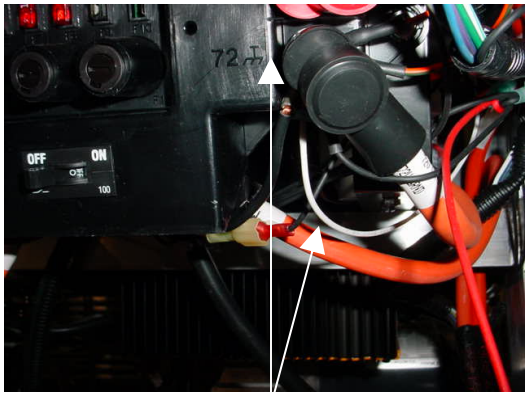


Photo 4



White wire to 72 GROUND

Photo 5

<u>Begin Electrical Connections</u>:

6. Connect the white wire of the heater/defroster unit to the ¼" brass stud of the lower right corner on the PSDM labeled **'72 GROUND'**. (See Photo 5)

7. Connect the black wire of the heater/defroster unit to the 5/16" stud labeled **'A2'** of the contactor. Connect the orange wire provided in the kit to the stud labeled **'A1'** of the contactor. (See Photo 6)

8. Now, connect the red/black 2-wire harness provided in the kit to the short mating harness of the contactor. In this installation we require the harness be split and a T-tap connector or spade terminal be added to connect power to orange wire of blower fan and red wire to 'ON/OFF' rocker switch. (See Photo 7)

   - **<u>NOTE</u>: This will need to be done for both the red and black wire of this harness.**
   - **See also Service Manual Part # 1010-00174, Section 5 – ELECTRICAL, for wiring diagram and/or 2005 Interactive Animated Schematic Part # 1010-00175 – Heater Wiring Diagram.**

9. Secure the black wires to the frame of the vehicle (chassis ground) using a provided self-drilling screw. No more than 3 wires per ground connection. Secure to the front cross member tube. (See Photo 8)

Photo 6

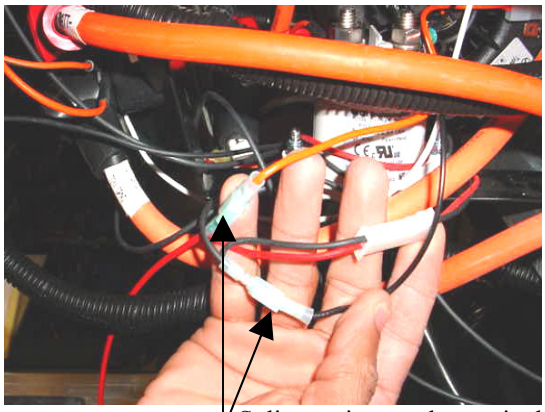


Photo 7

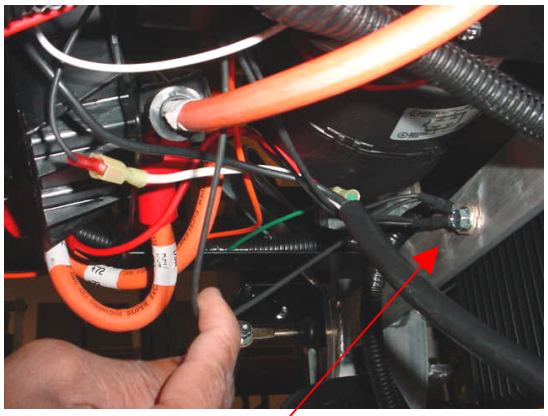


Photo 8

10. Stop any further wire termination at this point. Now prepare the lower dash unit. Locate an area to mount the switch. Mark the hole. Drill a 1/8" pilot hole. Drill to 13/16". (See Photo 9)

11. Insert the switch. Tighten the retaining nut. Clean the surface with isopropyl alcohol. Place the switch decal.

12. Prepare to install the lower air duct. (Use the template provided on page 6 of this document.) Mark the hole location. Drill a 1/8" pilot hole. Using a hole saw drill a 2 1/16" hole. Insert the duct in to the hole.

13. Install the lower dash unit to the vehicle. Secure using the existing hardware. Connect the red wire from the contactor harness to one side of the switch (polarity doesn't matter). Using the red wire provided in the kit, connect it to the other side of the switch. (See Photo 10)

14. Make power connections to the fuse panel. Connect the red wire from the switch to the male spade terminal of the fuse panel labeled **'2'**. Connect the provided orange wire from the contactor to male spade terminal of the fuse panel labeled **'A'**.

15. Insert a standard automotive-type 10-amp fuse in to fuse slot labeled **'F2'** of the fuse block, and a 30-amp SLO-BLO ceramic fuse in to fuse slot labeled **'F12'**. (See Photo 11)

16. Wire termination complete.

Photo 9

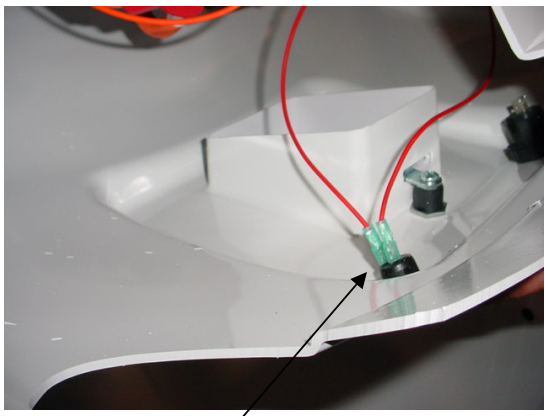
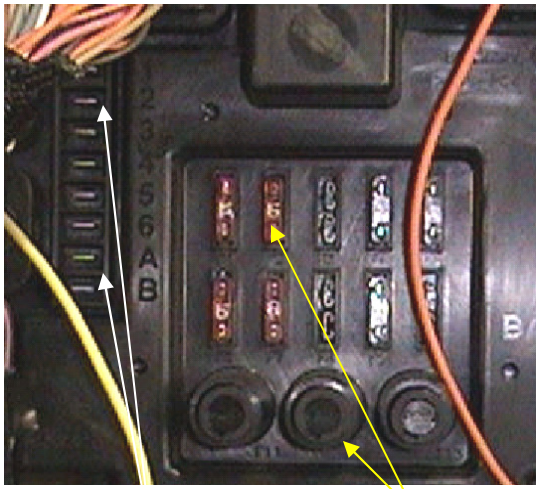


Photo 10 Red wires to switch



Male spade terminals

Photo 11 Fuse slots

17. Prepare the upper dash. Using the template provided on page 7, mark out hole locations. Drill a 1/8" pilot hole. Drill out with a 2 1/16" hole saw. (See Photo 12)

18. Install the provided air duct hoses to the floor heater and window defroster ducts of the upper and lower dashes. At this point route the lower dash hose up to the heater unit and attach and secure it using a provided black plastic tie wrap.

19. Install the upper dash. Connect the hoses from the upper dash to the heater unit. (See Photo 13)

20. Verify operation of the heater/defroster unit. Turn the MDS to the **'ON'** position. Turn the ignition key to ON and switch the heater/defroster rocker switch on the access panel. The unit should blow hot air from all three ducts.

21. Installation complete.

Photo 12

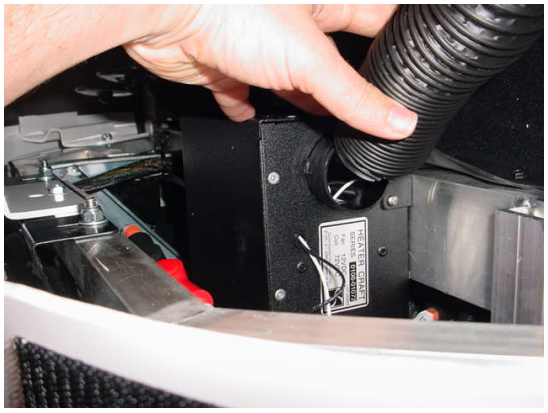


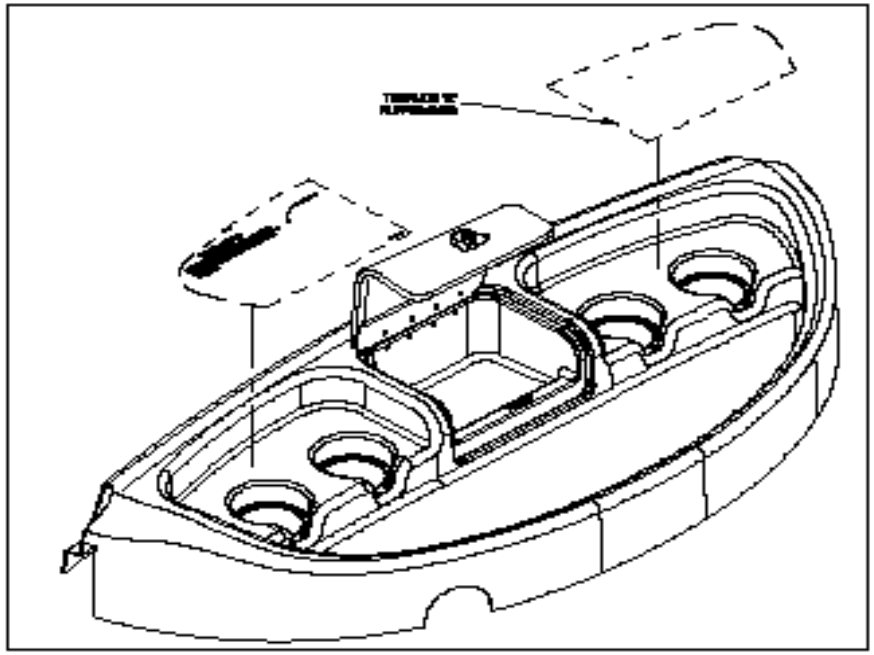
Photo 13

*** <u>NOTE</u>: USE THIS TEMPLATE FOR MARKING OUT THE HOLE LOCATION OF THE LOWER DASH HEAT DUCT. PRINT THIS PAGE. SEE THE PICTURE INSIDE THE TEMPLATE FOR PLACEMENT. ALIGN THE BOTTOM LINE WITH THE LOWER EDGE OF THE DASH. CUT ALONG THE RIGHT LINE AND PLACE THAT IN LINE WITH THE RIGHT LOWER DASH EAR.**

TEMPLATE "A"

DRILL THRU. Ø1/16"

NOTE: THIS TEMPLATE IS TO BE USED FOR BOTH THE LEFT AND RIGHT SIDE OF THE UPPER DASH, SIMPLY FLIP THIS TEMPLATE OVER FOR THE RIGHT SIDE OF THE UPPER DASH. (SEE FIG. BELOW)



P/N 0310

Tools List:

- Drill
- 13/16” drill bit
- 1/8” drill bit
- 2 1/16” hole saw
- Side cutters
- Pliers
- 3/8” driver or wrench
- T27 Torx bit driver
- 10mm wrench
- 10mm socket
- Ratchet
- Isopropyl Alcohol

Parts List:

PART NO.	QTY	DESCRIPTION
0106-03641	1	ASSY, CONTACTOR - SEALED, 100 A
0106-03659	1	ASSY, WIRE HARNESS - HEATER SWITCH
0106-03660	1	ASSY, WIRE HARNESS - HEATER
0106-03809	1	ASSY, HEATER-PTC ELEMENT W/BLOWER,3 PORT
0310-00848	2	HOSE, 2" HEATER DUCT, 16" LENGTH
0310-01932	1	HOSE, 2" HEATER DUCT, 24" LENGTH
0350-01839	1	DECAL, HEATER SWITCH
0510-00137	8	TIE, CABLE 11" BLACK
0521-00283	2	NUT, 8-32 NYLOCK ZN PL
0522-00641	2	BLT,M5X0.8X10,HEX,FT,C8.8,CZ
0523-00032	2	SCR,.25-14X.75,HFL,SD,,CZ
0523-00282	2	SCREW, MACH 8-32x3/4" PHILLIPS PAN HD ZN
0524-00271	2	WASHER, FLAT - M5
0524-00533	2	WASHER, LOCK - M5
0606-00293	1	FUSE, ATC-10
0606-00515	1	FUSE, CERAMIC TUBE - 30A SLOW BLOW
0606-00537	1	SWITCH, HEATER - THREADED ROUND ROCKER
0607-00412	3	VENT, ROUND - 2" BARBED FLAT
0610-00099	2	3/4 SQUARECRADLEMOUNTNYL"