

RangerWare



Instructions
WPS-104
2009 Model Year

ORDER OF INSTALLATION FOR A COMPLETE ENCLOSURE OF A RANGERWARE WPS (Weather Protection System) IS AS FOLLOWS:

1. Heater
2. Steel Door Thresholds - Passenger & Driver
3. Windshield - Fixed or Tip-out
4. Soft Side Door Hinge Bracket
5. WPS Enclosure System
6. Doors – Passenger & Driver

Tools Required

- X Drill**
- X Jigsaw or other type of saw to cut defrost vent**
- X 2 1/16" – 2 1/8" Hole Saw**
- X 1 3/8" – 1 1/2" Hole Saw**
- X 7/8" Hole Saw or Spade Bit**
- X 3/16" Drill Bit**
- X Ratchet, 5/16" Socket & 6" extension**
- X Phillips Screw Driver**
- X Utility Knife**
- X # 25 Torx**

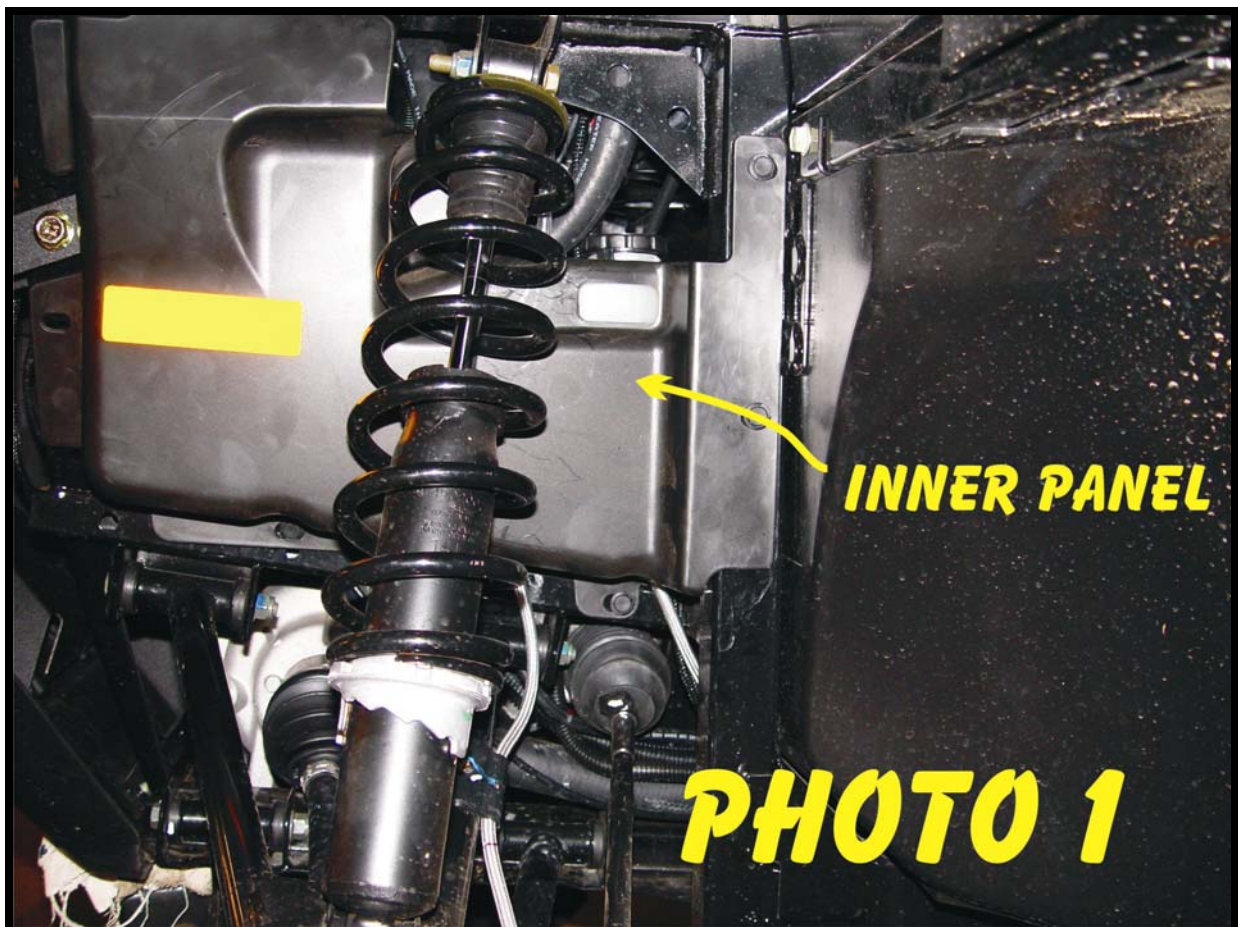
Note: If you are installing this with an enclosure other than RangerWare check to see if the defrost vent will be blocked by a wiper or any other component. If so there is an optional kit available

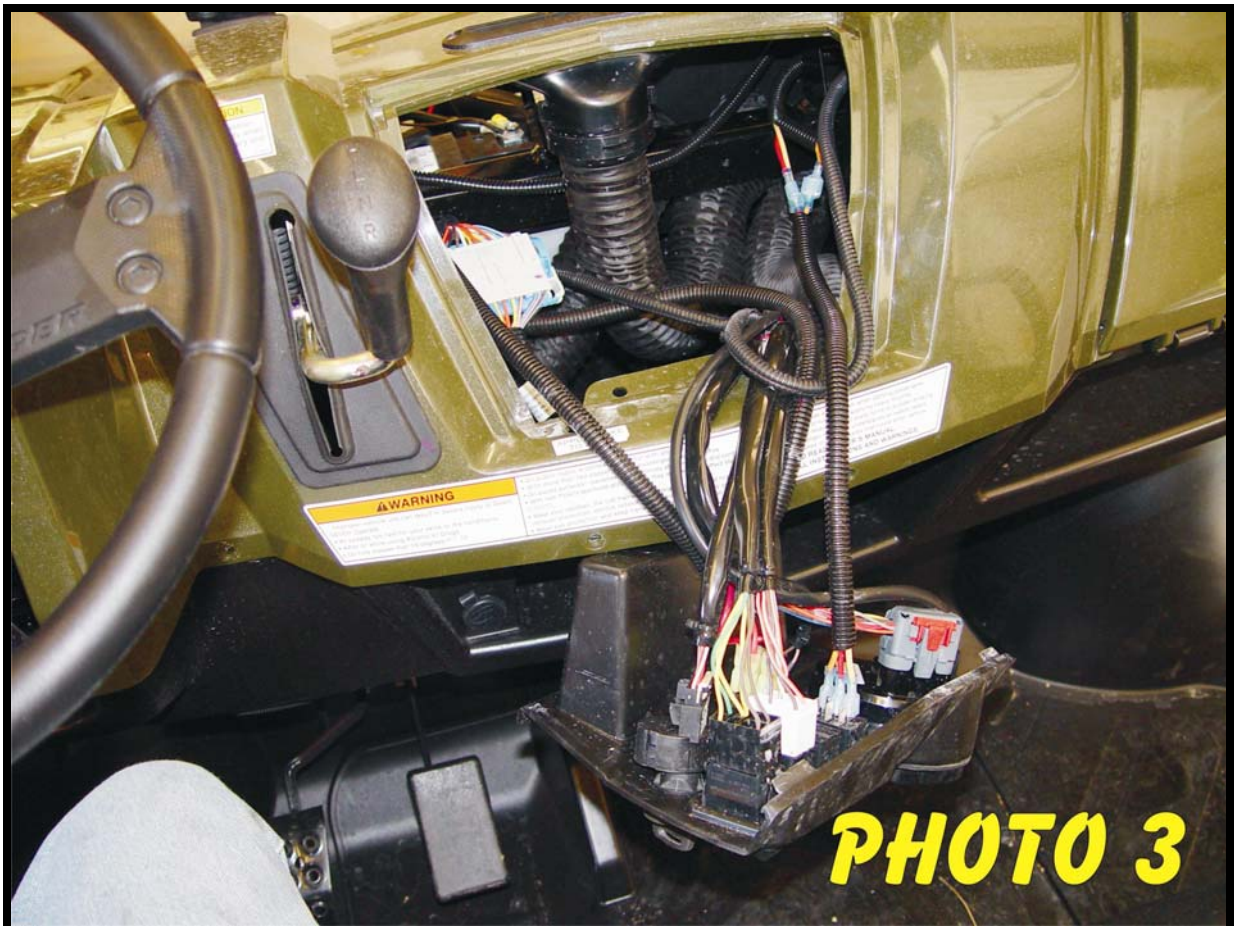
Installation Instructions

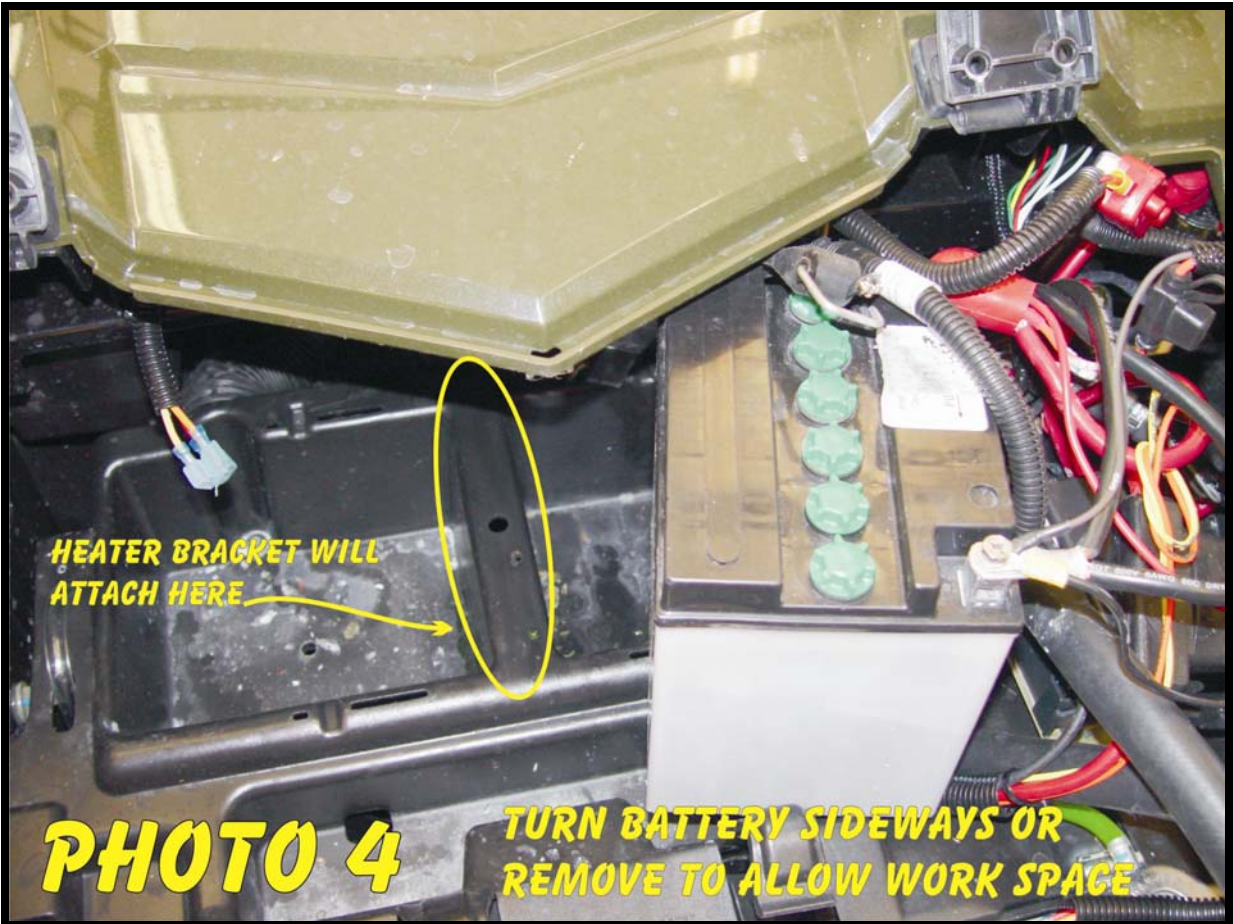
1. Lift front of vehicle and remove driver side front tire and wheel.
2. Remove the inner panel shown in Photo 1
3. Remove the plastic rivets from the instrument panel and let panel hang, shown in Photo 2 & 3.
4. Loosen Battery and turn sideways (or completely remove) to give yourself some extra workspace, Photo 4.
5. Use the Template provided to install the defrost vent, example shown in Photos 5 & 6. For best results once you have the defrost hole marked off tape around it to protect the finish on the dash from the vibrations of the jig saw.
6. Using the 2 1/16" – 2 1/8" hole saw install the 360 degree vents where desired. Photos 7 & 8 will give you a sample of a possible placement. Wherever you determine to install them make sure there is adequate room for the vents and duct hose. Be careful not to damage any wiring under the dash.
7. Install Brackets as shown in Photos 9 & 10. Discard the screw shown in Photo 10.
8. Wire heater as shown in Photo 11
9. Set heater as close as possible to mounting position photo 12.
10. Hook up duct hoses to vents and to the Heater Plenum. Keep duct hose as short as possible Photo 12.
11. Install switch in instrument panel and hook up wires (note Photo 15 for switch wiring diagram). Positive and negative can be hooked up --- on the terminal strip to the right of the Battery. Red wire should be fused and hooked to the lug (w/orange wires) this lug is key on/off power.
12. Finish mounting heater using screws provided. A #10 Self tap hex head will be used on the Passenger side bracket. The black screws provided will be used on the Driver side Bracket.
13. Use the 1 3/8" – 1 1/2" hole saw to drill hole for the grommet shown in Photo 13. See photos 13 & 14 for hose hook up. **NOTE: Use the provided springs wherever needed to prevent kinks in the hoses.**
14. Install the flush tee in the upper hose to Heater Core shown in photo 12.

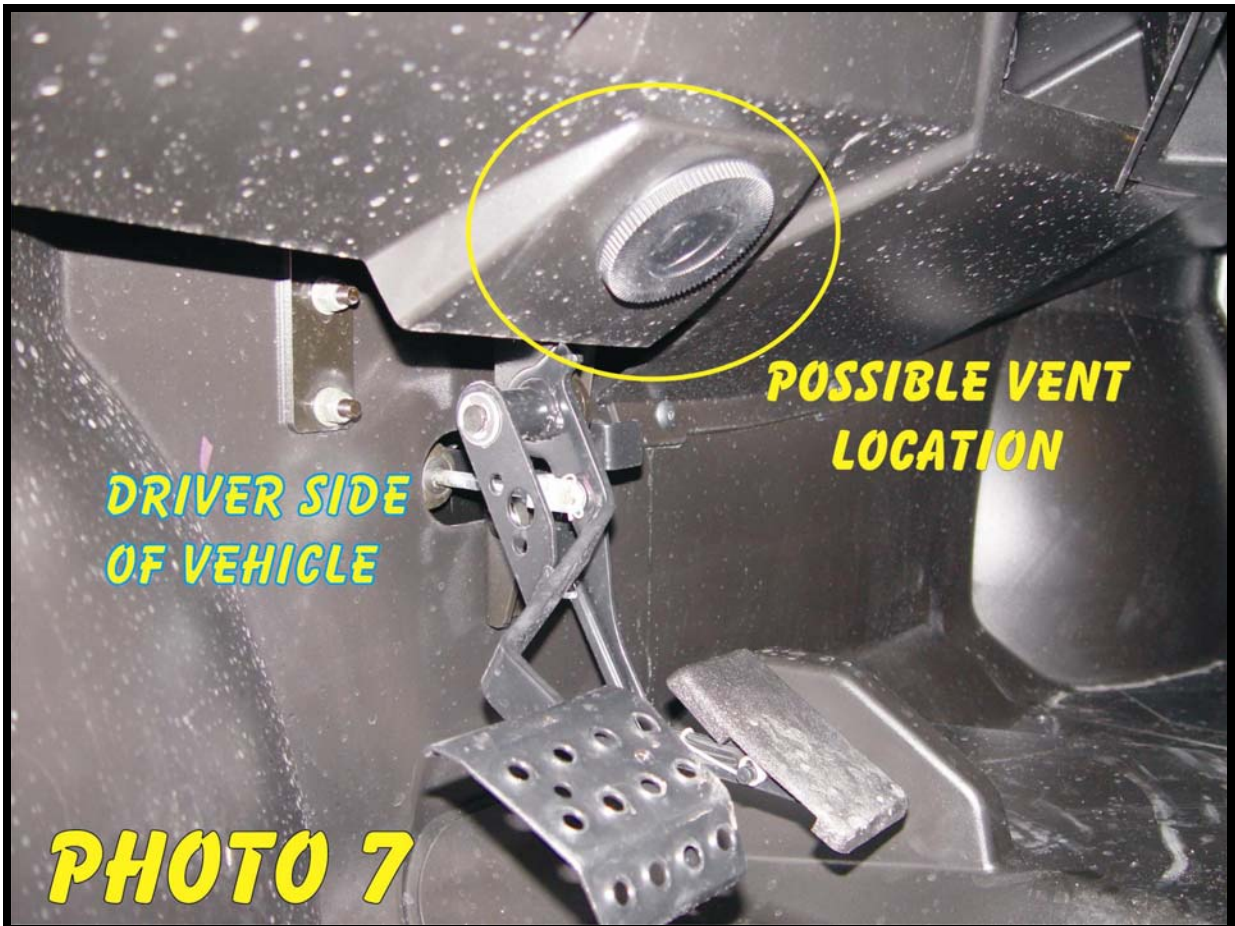
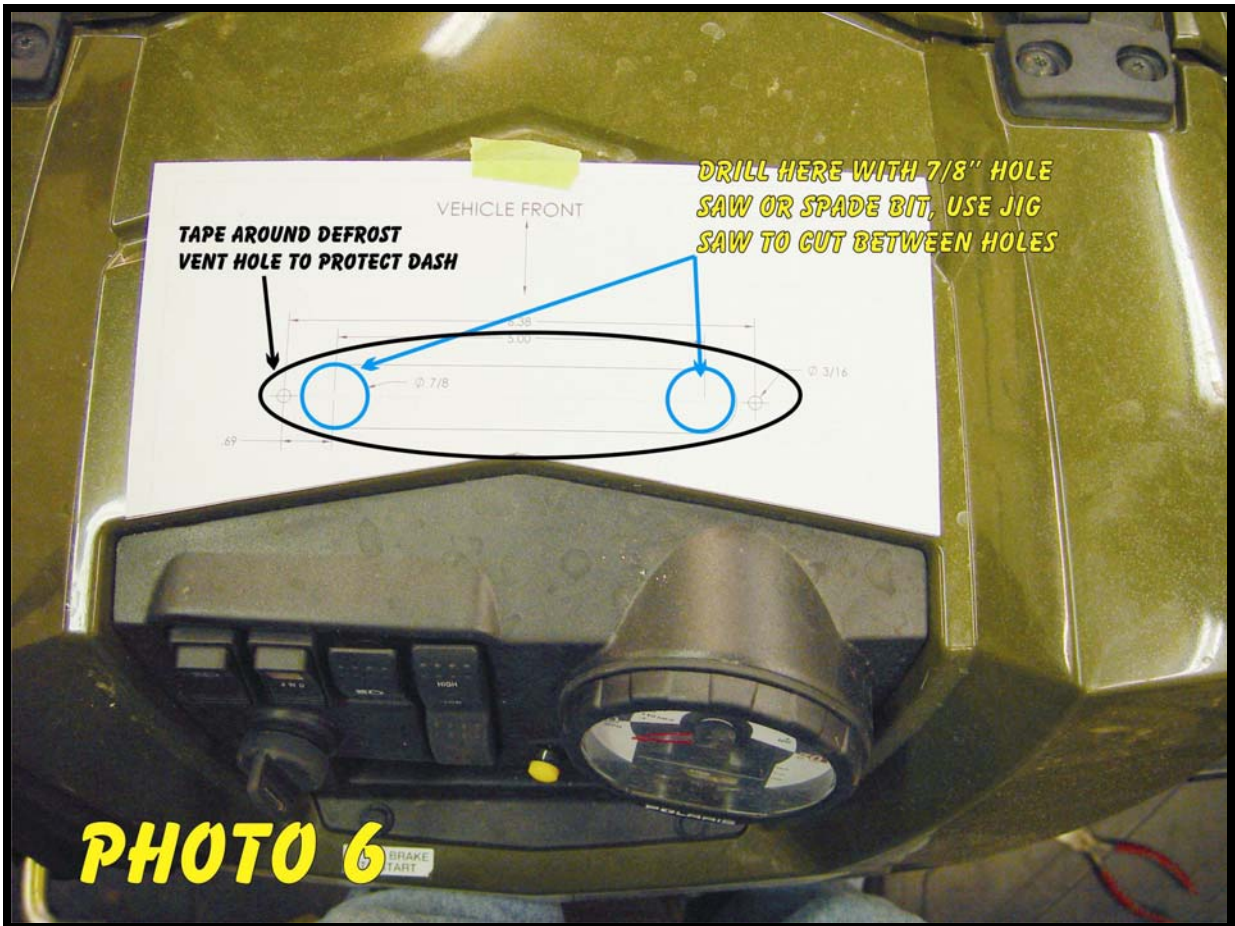
System Filling and Bleeding

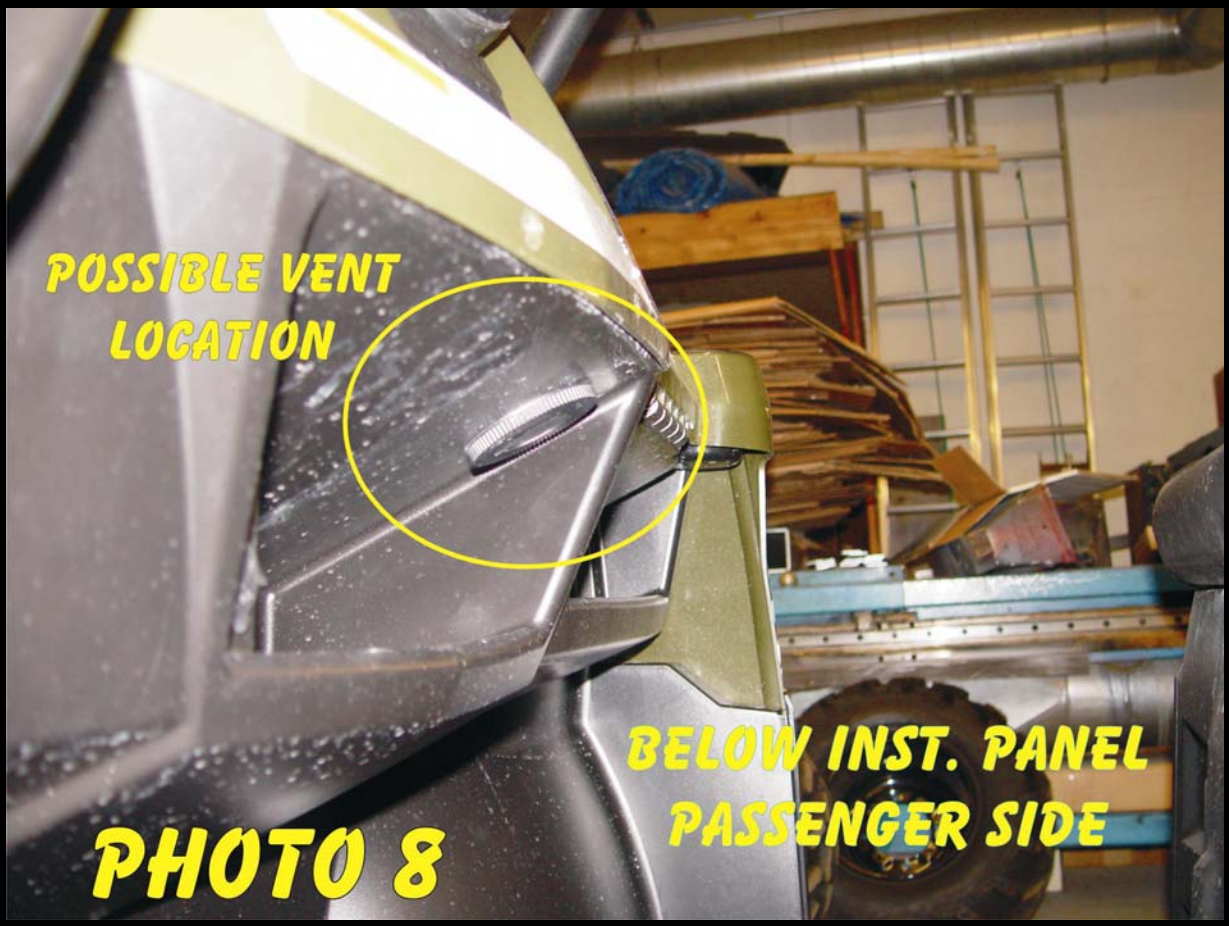
15. With all hose clamps tight and drain valves closed, remove the radiator cap and the filler/bleeder cap. Slowly fill the system with coolant through the filler/bleeder until the radiator is full. Quickly replace the radiator cap. Hold up slightly on the filler/bleeder and continue filling until the heater core and hoses are full. Pause often to allow air to exit thru the filler. Replace the filler cap.
 - a. **Caution: Coolant level is now above the radiator cap. NEVER OPEN THE RADIATOR CAP. Fill the system only through the filler/bleeder and overflow reservoir. This information must be passed on to the customer!!!**
16. Start and run the vehicle for 2 minutes. With engine off, open the filler/bleeder and add coolant as necessary. Wait several minutes and repeat as needed until coolant level remains full. Check the system for leaks.
17. Start and run the vehicle until the thermostat on the engine opens. A warm upper radiator hose will indicate the thermostat is open and the coolant is circulating. Operate the fan and check for warm air at the vents. If you do not have heat at the vents or in the upper radiator hose, allow the vehicle to cool and repeat steps 2 and 3.
18. Replace the wheel well access cover.

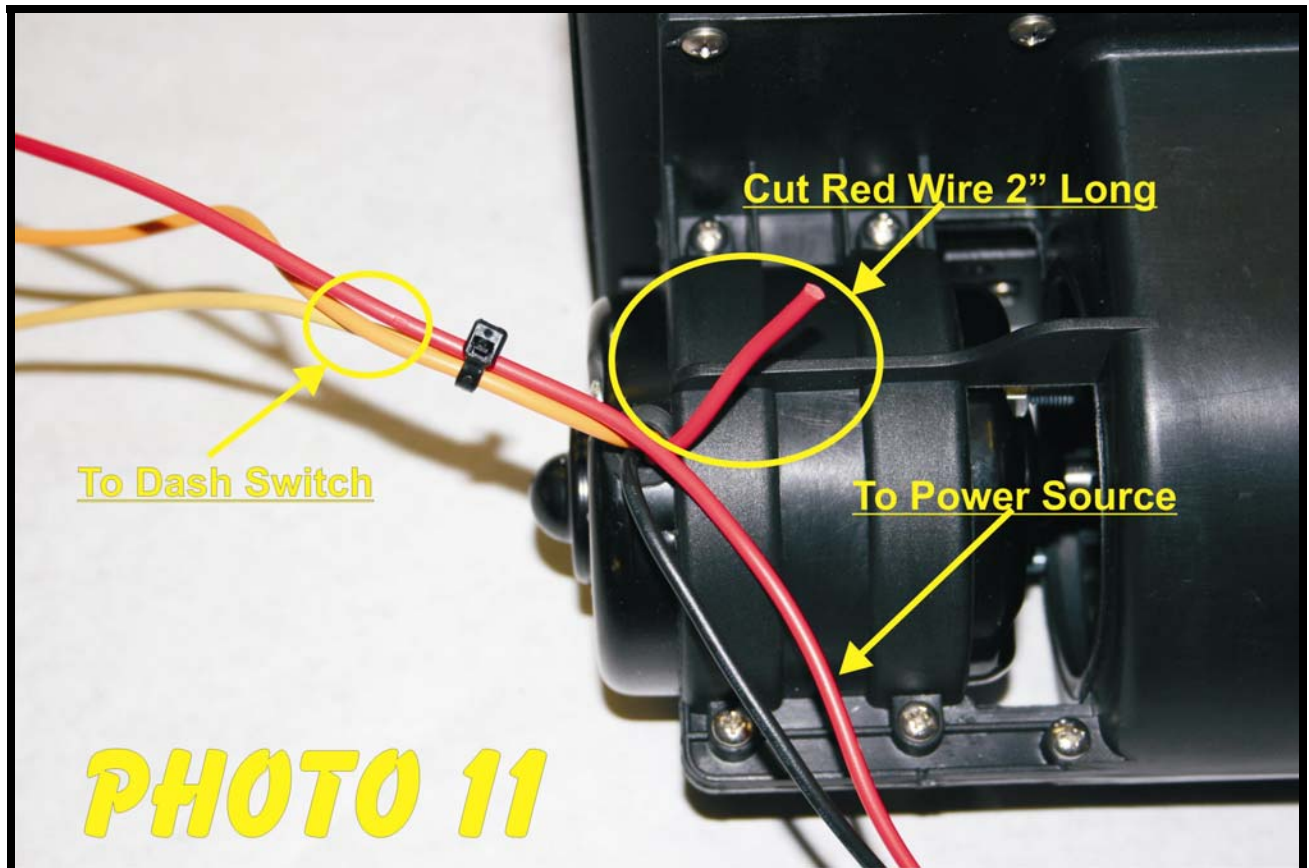
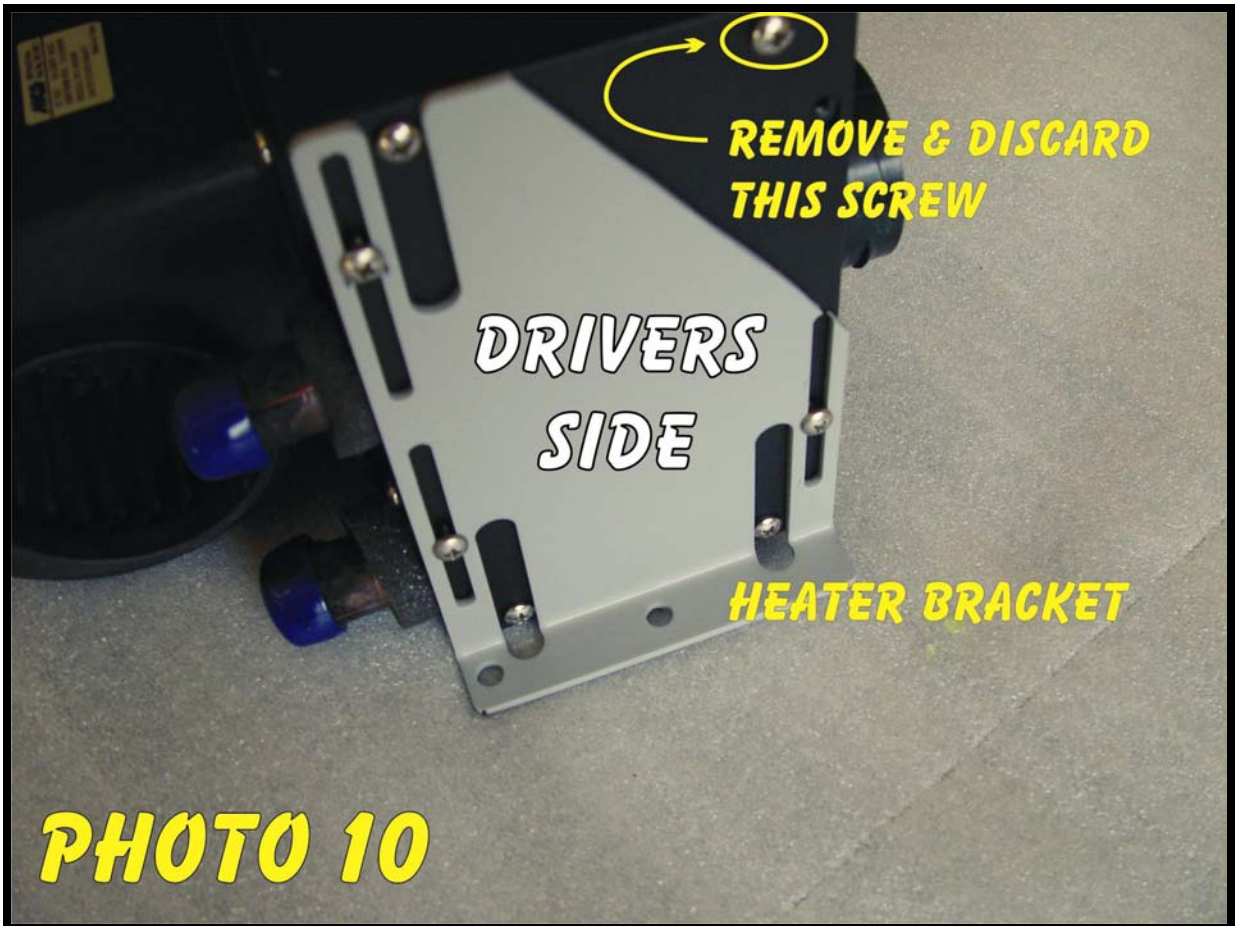


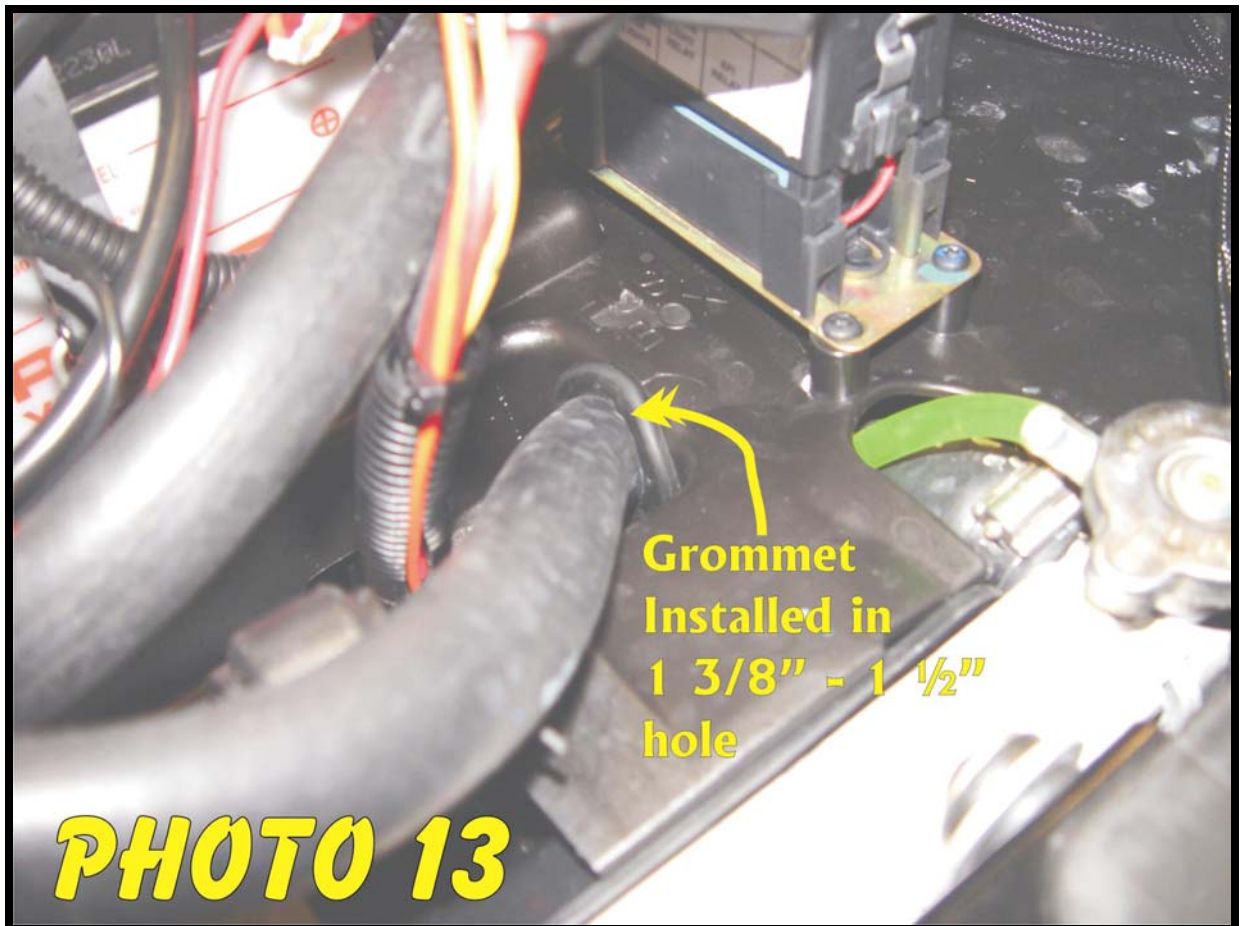
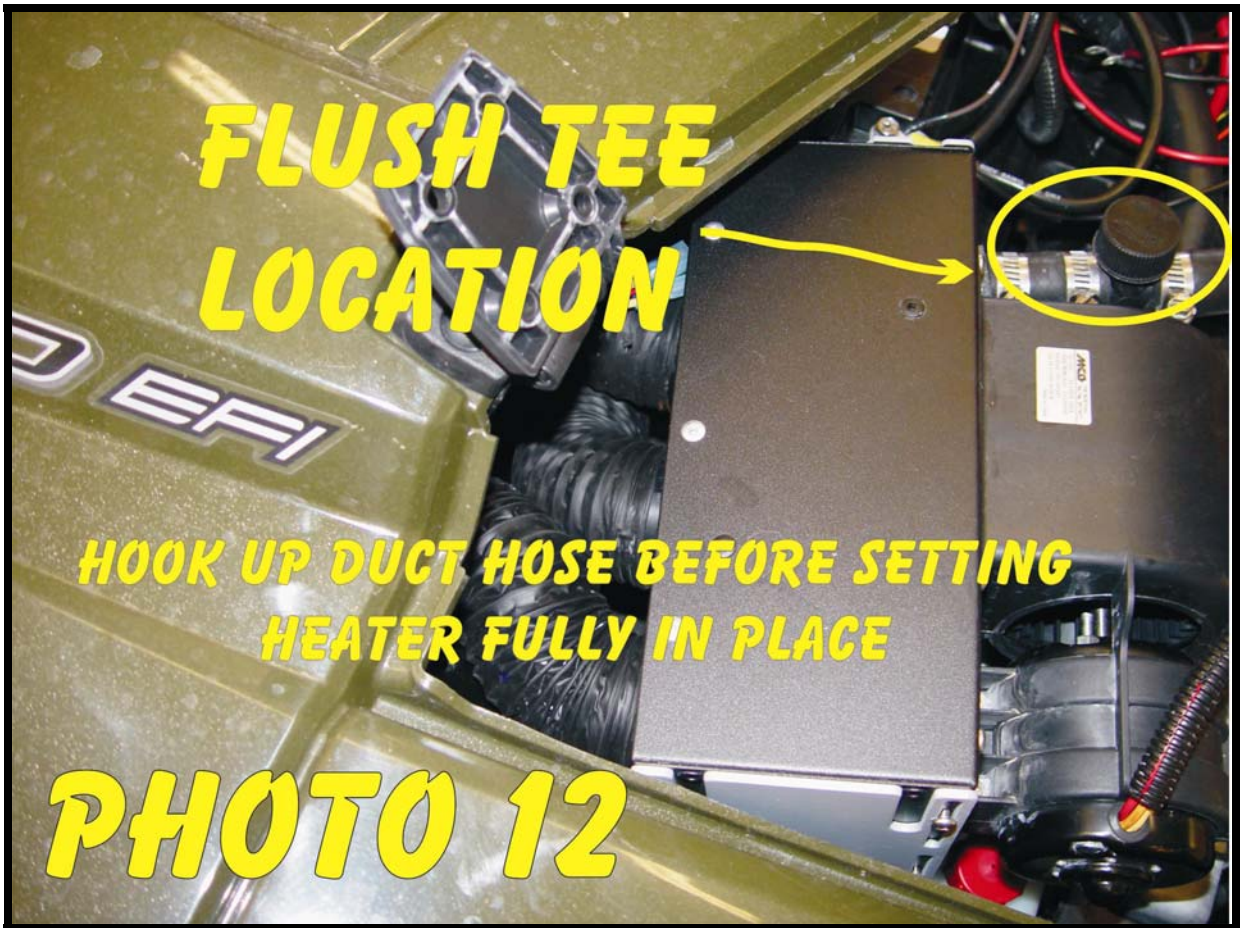












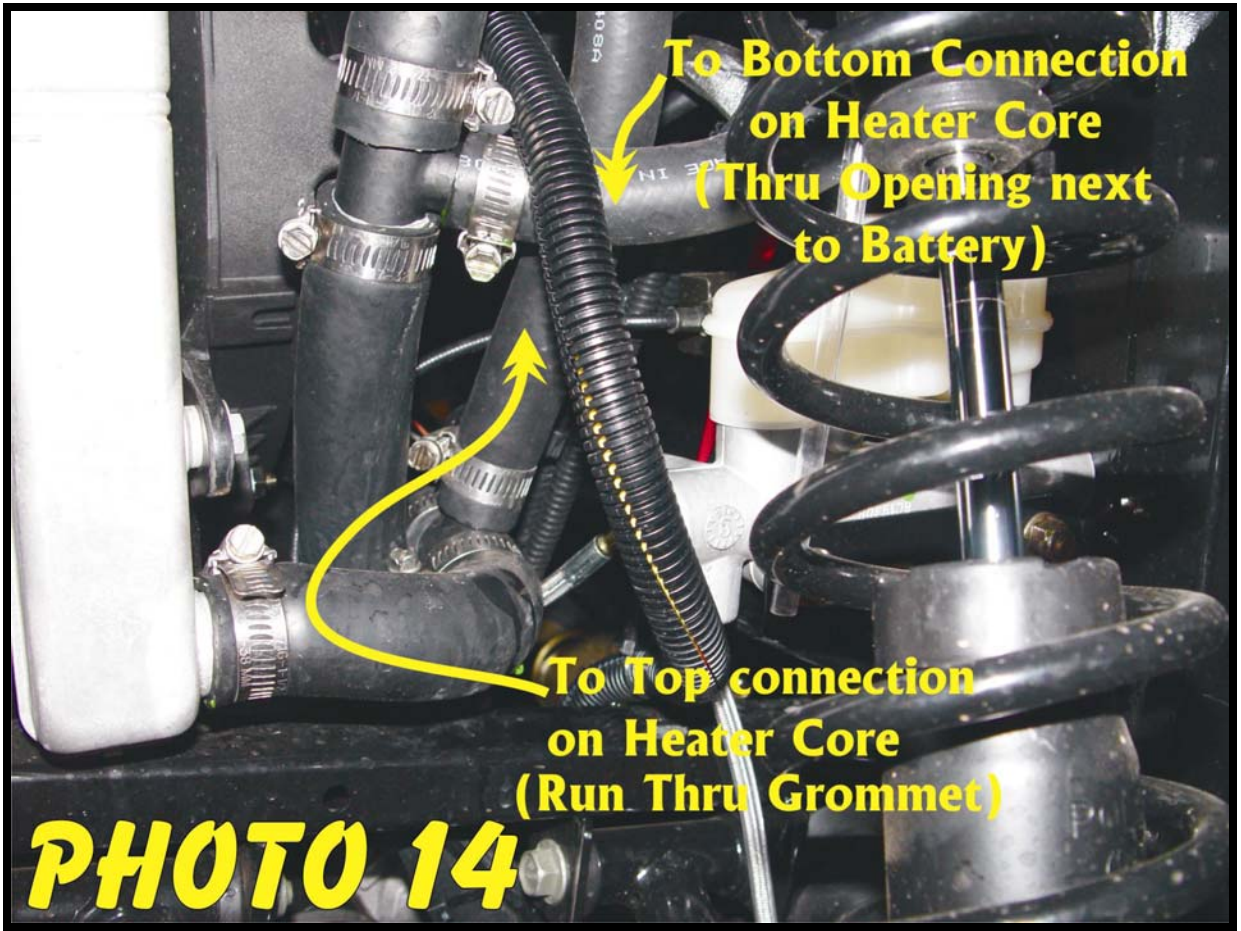


PHOTO 14

Back of Switch

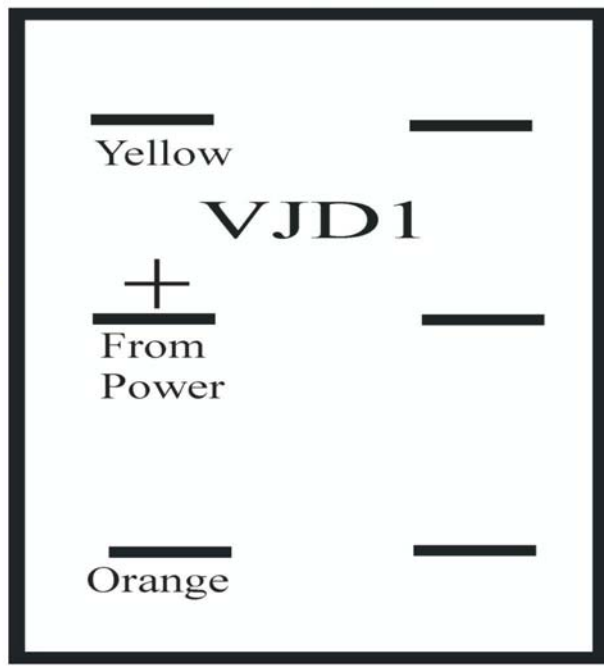


PHOTO 15

Red from heater is Medium and won't be used.
 Black from heater is Ground

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