



**CAN-AM DEFENDER
HEATER INSTALLATION
p/n: 9PH20S69**

The contents of this envelope are the property of the owner.
Be sure to leave with the owner when installation is complete.



California Proposition 65

⚠ WARNING ⚠

Engine exhaust, some of its constituents, certain vehicle components and fluids, contain or emit chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

revised: 1-30-2017

p/n: IM-9PH20S69

1. HEATER PREP.

1.1 It is absolutely necessary to remove the rubber plugs from the heater tubes.

2. HEATER INSTALLATION

2.1 Remove the front floor cover from the vehicle. Cut out a 4-3/4" square section as shown, then re-install the cover to the vehicle.

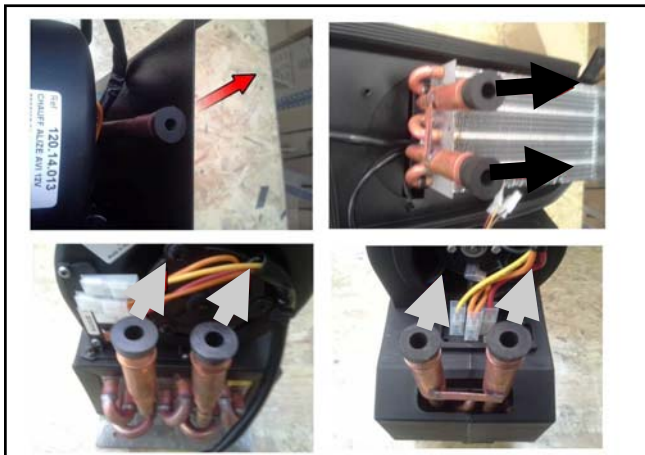


Fig. 1.1

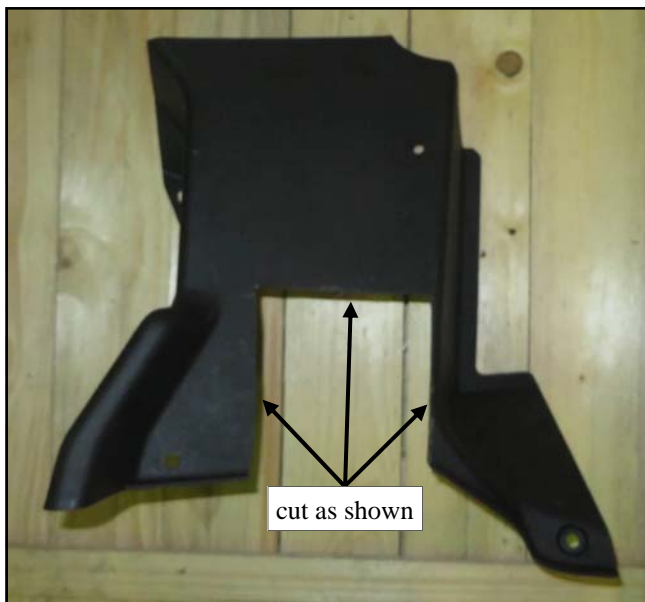


Fig. 2.1

2.2 Before drilling holes, check the space under the dashboard, and if necessary take the harness out of the way to prevent damage. Cut two holes (2-5/32" diameter) into the dashboard for the air vents.

2.3 Route the hot air hoses through.

2.4 Route the hot water hose with the electric valve to the front radiator (see the white arrow in the photo).

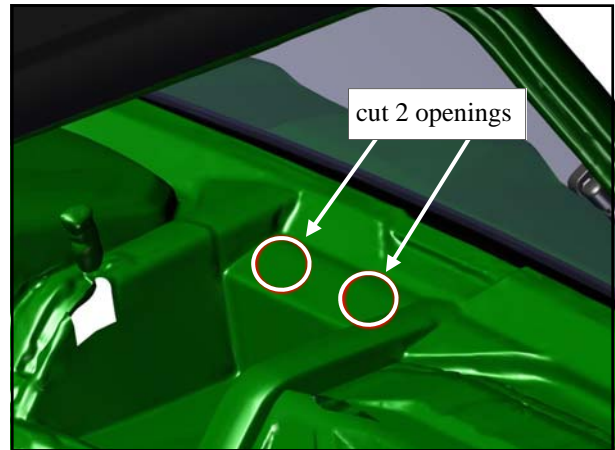


Fig. 2.2

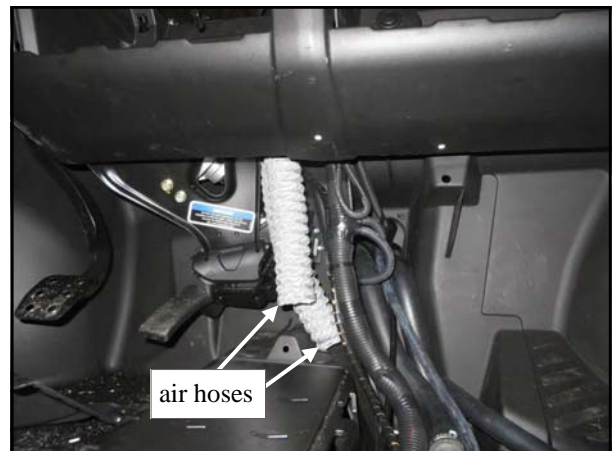


Fig. 2.3



Fig. 2.4

2.5 See the white circle in the photo. Cut the hot water hose and install the hot water pump. Secure the hot water pump by tightening the hose clamps. Connect the hot water pump to the pump harness and route the harness back to the heater.



Fig. 2.5

2.6 See the white circle in the photo. Clamp/restrict the flow of the original cooling system hot water hose with clamps (not included), cut the hose and install the supplied "Y" coupling into the hose. Connect the heater hose to the coupling and secure all ends using the supplied hose clamps.



Fig. 2.6

2.7 Cut the hose with the air vent to an appropriate length.

2.8 See the white circle in the photo. Clamp/restrict the flow of the original cooling system cold water hose with clamps (not included), cut the hose and install the supplied "Y" coupling into the hose. Connect the heater hose to the coupling and secure all ends using the supplied hose clamps.

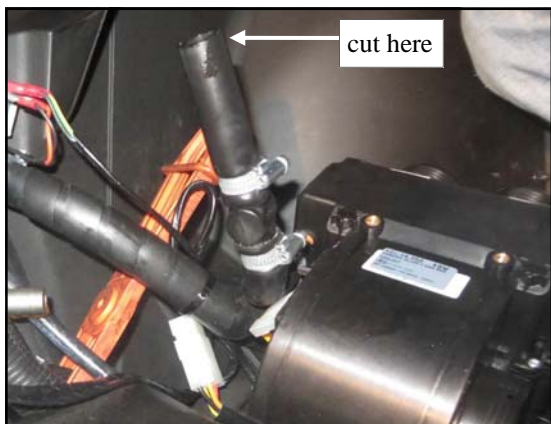


Fig. 2.7



Fig. 2.8

2.9 Connect the electric valve to the electric valve harness wire.

2.10 Connect the heater to the heater harness wire.

2.11 Install the heater bracket onto the heater and assemble with the supplied screws and washers.



Fig. 2.9



Fig. 2.10



Fig. 2.11

2.12 Place the heater assembly onto the UTV floor and assemble accordingly. Note: holes will need to be drilled for the rubber nuts. Match the bolt pattern on the heater bracket.

2.13 Connect the prepared hot air hoses to the heater vents and secure with the supplied self-adhesive aluminum tape.

2.14 Prepare two shorter pieces of the hot air hose to the rest of heater vents and secure with the supplied self-adhesive aluminum tape.



Fig. 2.12



Fig. 2.13



Fig. 2.14

2.15 Connect the valve harness and the pump to the pre-installed valve switch.

2.16 Connect the heater harness to the heater switch base.

2.17 Cut the hot air hoses to appropriate lengths, connect the hoses to the air vent and secure with the supplied hose clamps.

2.18 Repeat previous step with the dashboard air vents and press the vents into the dashboard.

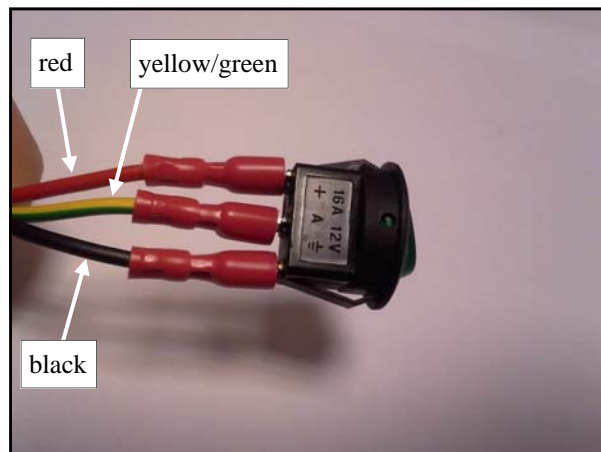


Fig. 2.15

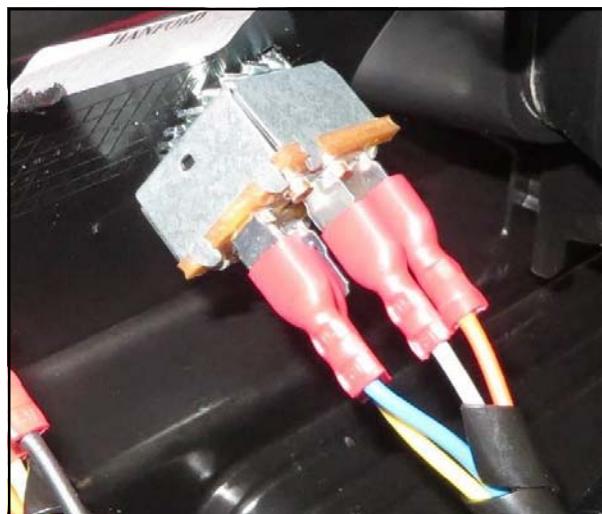


Fig. 2.16



Fig. 2.17



Fig. 2.18

2.19 Route the harness under the dashboard and connect the heater harness to the vehicle power source.

2.20 Place the heater cover, with all tubes and harnesses connected, into the best position and attach it using the supplied rubber rivets. Drill 5/16" diameter holes for the rubber rivets.



Fig. 2.19

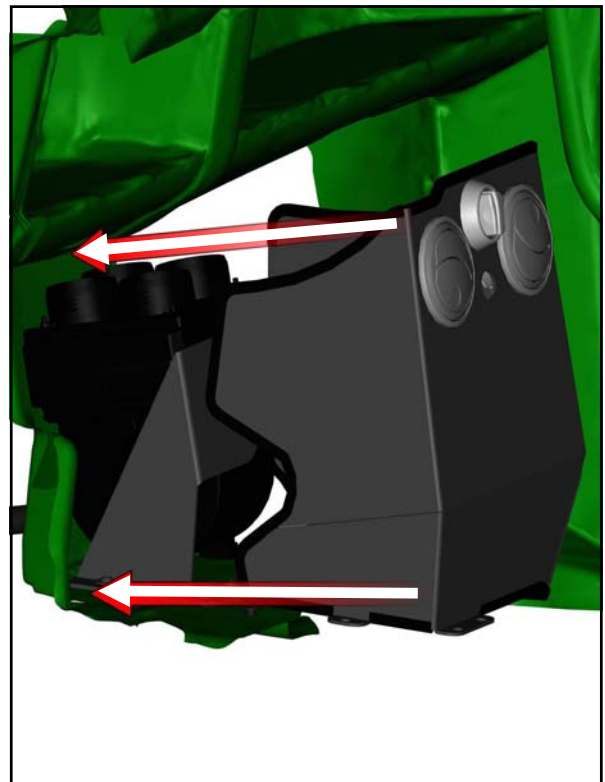


Fig. 2.20

It is very important to bleed the air out of the UTV's engine cooling system. Incomplete bleeding of the cooling system can result in engine damage. If you do not have sufficient experience with this process, we strongly recommend professional assistance. We are not responsible for damage when the cooling system is bled incompletely. Please note that the additional heater system will absorb more than 2 liters of coolant fluid.

1. Important: After the heating system is installed, check the system for leaks. Turn on the electric vent switch and confirm that the engine is cold. Start the engine, open the bleeding valve and wait until the engine warms up. Always check engine temperature –if it overheats turn off engine.
2. To achieve engine operating temperature, depress the accelerator to increase the engine RPM. This will increase the pressure and flow of the water pump forcing more coolant through the heater. After operating temperature is reached, turn off engine and open the bleeding valve. Trapped air should come out from heater system through the bleeding valve. Repeat this procedure until heater/cooling system is completely bled out.

It is important to check the coolant level regularly at least 4-5 times during the first several days of operation and fill as necessary until the coolant level has stabilized. The heater will draw and retain coolant, sometimes at the expense of coolant to the engine. This can cause engine overheating if not managed properly.

SERVICE PARTS



Electric Valve
p/n: 9SV-00033



Air Vent Valve
p/n: 9SV-00034