

Gravely Atlas JSV 3000 (2016 - Current)

Gravely Atlas JSV 6000 (2016 - Current)

Direct-Fit Cab Heater with Defrost

302 303

### STEP 1: PRE-INSTALLATION

- 1) Remove the hood.
- 2) Remove the glove box by:
  - Removing the (4) small screws at each corner of the glove box, and
  - Removing the (1) large bolt located at back of the glove box.
- 3) Remove the top portion of the dash (**PIC01**).
  - NOTE: there are top, middle and bottom portions to the full dash panel. The middle portion stays in place during the install.
- 4) Remove the bottom portion of the dash (**PIC01**).
  - You will install floor vents on this panel later in the installation.
- 5) Remove the middle floor cover (**PIC01**).
  - You will use this floor access to run heater hose later in the installation.

### STEP 2: INSTALLING THE HEATER BOX

- 6) On the heater box, remove the (4) side bolts on the mounting bracket so one piece is loose and one is still attached to the heater box.
- 7) Using the (3) self-tapping screws provided, mount the loose mounting bracket piece under the 2x2 steel square framing that runs under the dash (**PIC02**).
  - The bracket holes are cut so it can be adjusted after screws are drilled.
- 8) Fit the heater box up into the previously installed top bracket and re-install the two brackets together using the (4) side bolts (**PIC03**).

### STEP 3: INSTALL THE HEATER HOSE

- 9) Drain the coolant from the machine.
- 10) Using a 1-3/8" hole-saw, install the rubber grommets into the firewall (**PIC03**).
- 11) For the JSV3000 Cut the heater hose into 87" (inlet) and 81" (return) pieces.
- 12) For the JSV6000 Cut the heater hose into 135" (inlet) and 129" (return) pieces.
- 13) Under the seats, locate the factory plastic T and replace this with the Y-Fitting included in the kit (**PIC04**), reuse the factory hose clamps.
  - Make sure the 5/8" splice off this Y-fitting is pointing towards the radiator, you want this coolant to flow back in-line with the natural flow of the coolant.
  - There is 1/2" hose that connects the factory 'T' and goes to an engine port. Remove this hose.
- 14) With the bed raised, locate the barbed port fitting by the thermostat and replace this with the barbed fitting included in the kit, use thread tape to install (**PIC05**).
- 15) With the seat and the center floor plate removed you will have access to feed the hose through (**PIC06**). The inlet hose goes to the barbed port coming off the engine (inlet line), this connects to the lower heater core fitting (relative to gravity).
- 16) The return hose goes to the Y-Fitting (return line), this connects to the highest heater core fitting (relative to gravity).
  - Zip tie the heater hoses to the steel radiator lines to keep out of the way of the drive shaft. Re-use the existing factory hose clamps.

#### **STEP 4: INSTALL VENTS AND LOUVERS AND RUN DUCT**

- 17) Stretch your duct out and cut into the following lengths: (2) 20" pieces for the defrost vents and (2) 16" pieces for the floor vents.
- 18) With the top dash panel off, set your defrost vent trim pieces in place. Trace the air opening and screw holes with a marker (**PIC07**).
- 19) Using a utility knife cut the opening out. Make sure to plunge the blade straight down and pull the blade straight out. Use a flame on the blade to make cutting easier.
  - Make a ½" bit hole on each edge, then connect the holes with the razor blade.
- 20) Using a 1/8" drill bit, make holes for the screws to go through.
- 21) Install the two defrost vents (**PIC07**) by setting the trim piece and grill on top of the dash and setting your adapter on the backside. Now use the screws to connect them together.
- 22) On the lower dash panel, cut and remove the existing cubby hole (**PIC08**).
- 23) Use the floor vent cut-out template and tape in on the lower dash panel (**PIC09**).
- 24) Using a 2.5" circle saw, cut the louver openings and install the floor louvers (**PIC10**).
  - The face and adapter portions screw apart. Set the face in the hole and screw the adapter on from the backside. Install the duct barbs on the adapters for max hold.
- 25) Included in the kit is a cubby-hole plate cover, install this plate as shown (**PIC10**).
- 26) Connect the four runs of duct to the heater box adapters and secure with the zip ties.

#### **STEP 5: WIRING**

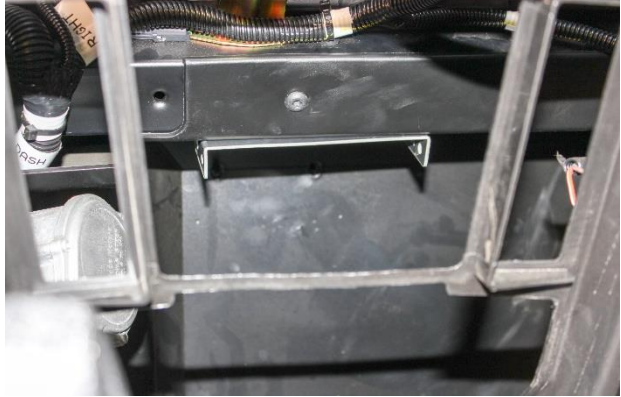
- 27) Remove one of the factory switch plates and install the rocker switch (**PIC11**).
- 28) Using the wiring harness, plug the switch connector into the back of the rocker switch.
- 29) Using the wiring harness, plug the blower fan connector to the heater box blower.
- 30) Under the hood there is a circular embossment, drill a ½" bit hole in the middle of this embossment and run the accessory 12v and ground (red and black) wires through this.
- 31) Using the wiring harness, run the accessory 12v and ground eyelets through the fire-wall hole and onto the accessory bar (**PIC12**).
- 32) Once the wiring is complete test the heater blower.

#### **STEP 6: REFILL COOLANT**

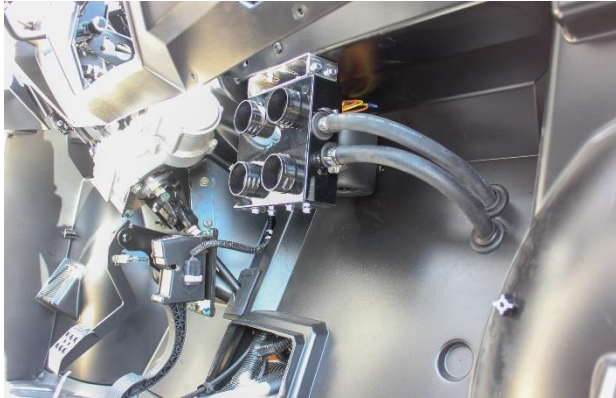
- 33) Refill the radiator and check for leaks.
- 34) Start the machine and allow the engine to warm up and circulate the coolant.
- 35) Test drive the vehicle and put it under a load, this will help expel air from the system.
- 36) When done let the machine cool down, recheck the coolant level and refill coolant.
- 37) Coolant will be consumed as the air is expelled from the system. You may need to run the machine and recheck fluid levels multiple times before working out all the air.



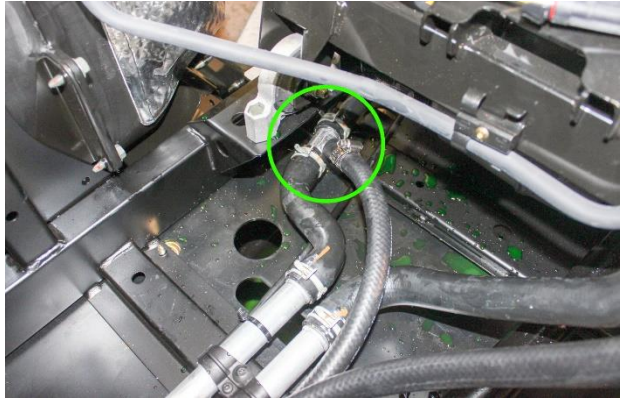
PIC01



PIC02



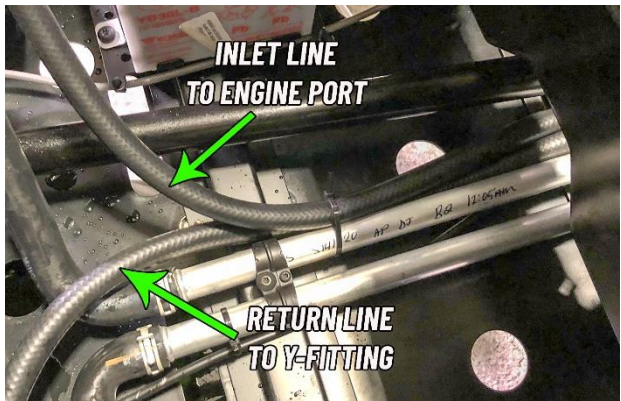
PIC03



PIC04



PIC05



PIC06



PIC07



PIC08



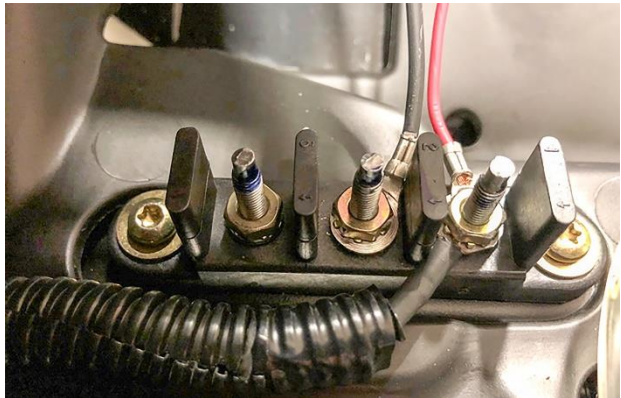
PIC09



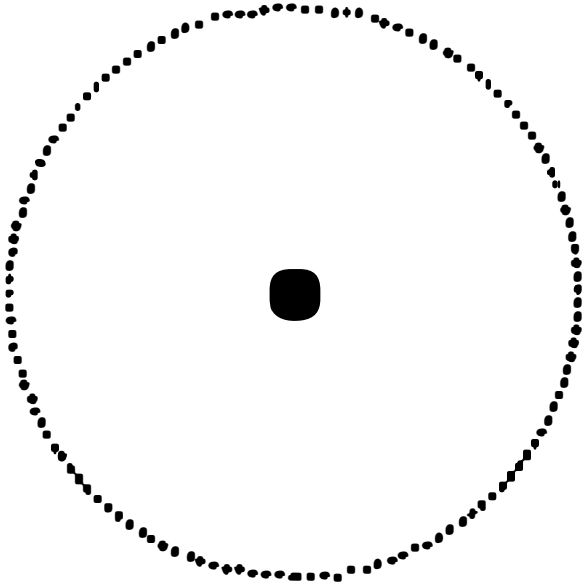
PIC10



PIC11



PIC12



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