

Can Am Commander 1000 Radiator Relocation Installation Instructions

What comes with the kit

2 CNC Machined Aluminum mounting brackets

2 pcs M6 x 1.0 x 60mm long SHCS

2 pcs M6 x 1.0 x 75mm long SHCS

4 pc M8 x 30mm long SHCS

1 Powder coated Steel face plate

4 aluminum bushings (1.240" long)

Face Plate & Screen Hardware

- 4 pcs 1/4" x 1" Carriage bolts

- 8 pcs 1/4" nuts

- 8 pcs 1/4" lock washer

- 8 pcs 1/4" flat washers

1 powder coated perforated steel screen ([\\$20 Option/upgrade](#))

20 feet of 1" heater hose

12 feet 1/4" clear overflow bottle hose

10 pcs - 1" Hose Clamps

2 pcs - 3/4" Hose Clamps

2 pcs - 1" Hose Barbs

6 Feet of Heat Tape

6 Black Zip Ties

2 pcs Of fan wire - 12 feet long each.

4 Heat Shrink butt connectors

Installation Instructions

- Remove the front splash guards under the front fender, they have 3 push pin rubber grommets, you just pull the cover off the posts at the 3 hole locations.



-Remove both sides to the center console, these are secured with the standard plastic push pins



-Remove the bolts holding the fan to the radiator and unplug the fan and lean it

back towards the cab of the machine.

-Disconnect the lower rad hose from the bottom of the radiator and allow the coolant to drain. Removing the fill cap may speed up the process

-Disconnect the upper rad hose on the opposite side of the rad

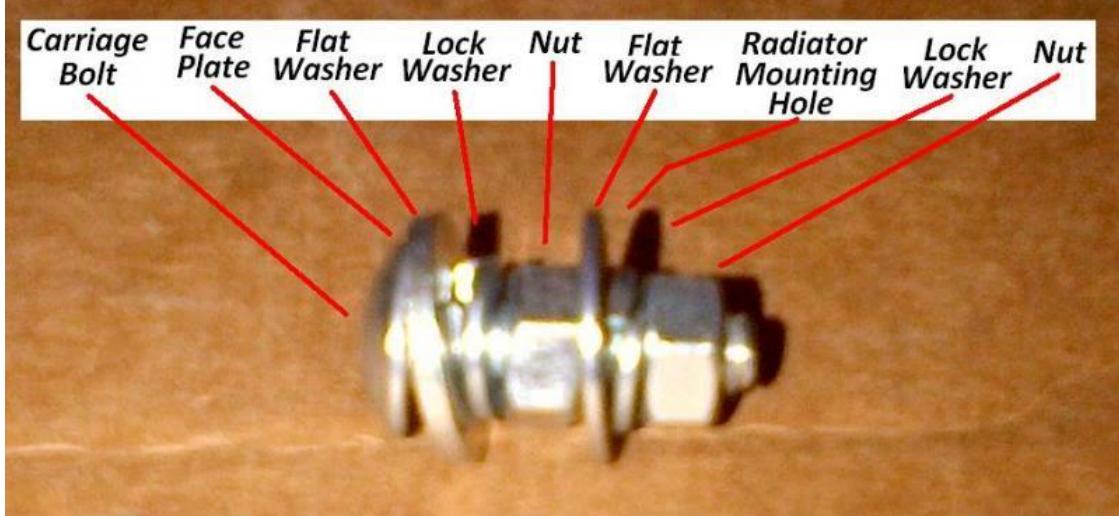
-Remove the top 2 bolts that hold the radiator in place, the bottom is only secured by 2 posts on the bottom of the radiator. With the 2 bolts removed, you can lean back and lift the radiator out of the 2 post holes at the bottom. You can now slide the radiator out the side towards the passenger side front tire, turn the tire all the way to the right for extra room.

-With the radiator out and completely drained, now is a good time to fully clean it. A good aluminum spray cleaner and a garden hose work very well, make sure you get ALL of the mud out of the entire radiator.

-There is a T Fitting between the thermostat and the top hole of the radiator, this is where the fill neck and cap are located, you need to remove the T fitting along with the fill neck/cap assembly and the piece of hose that went to the top of the radiator. The overflow tube also needs to be removed from the fill neck



- You will need to re-use parts of the factory hoses so set them aside for now
- You can now bolt the Steel face plate and optional screen to the front of the radiator by bolting it into the 4 oval holes on the radiator, see the picture below for the sequence of hardware while bolting the face plate to the radiator.



Can Am Commander Face Plate Mounting Hardware

- Install the 2 larger mounting brackets to the radiator using the supplied hardware and aluminum spacers. The bolts will thread right into the factory threaded clips on the radiator.
- With the help of a second set of hands, you can now hold the radiator up to the roll cage cross bar and have someone install the bracket clamps. Be sure to tighten them evenly so you have an even gap on both sides of each clamp.



-You will now need to drill a hole or an oval large enough to run 2 pcs of 1" heater hose, 1 pcs of overflow hose and wire through the center console as pictured, however, this machine here has snorkels installed and we cut the hole between his snorkel tubes



-Run the supplied heater hose from the back, through the hole you cut for the hoses, down and along the right side of the motor, connecting the end to the bottom of the thermostat housing, this hose will then be cut at the rear end of the machine, cut it off just long enough to connect to the bottom of the radiator on the right hand side. Use the supplied 1" hose clamps to secure the hose to the thermostat housing but do not attach it to the radiator



-Take one of the factory hoses that we removed and cut off a section as pictured below, then use this section on the bottom of the radiator, this will give us a nice smooth transition.



-Now you can join this lower factory section of hose with the 1" hose running to the thermostat using supplied hose barb and hose clamps.

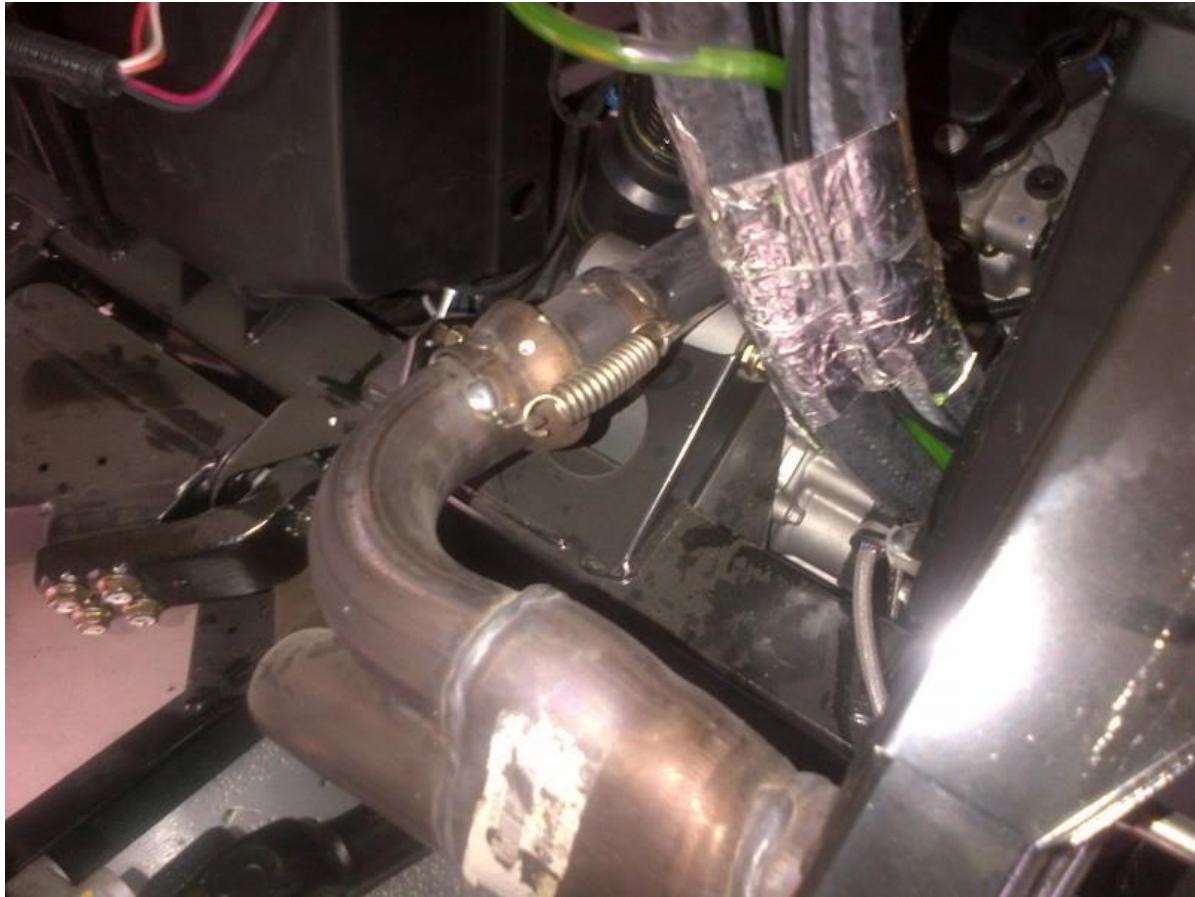
-Run the remaining length of 1" heat hose along side the hose you already ran to the front of the machine and it will attach to the left side under the front end where the T fitting was removed using a supplied barb and hose clamps.

-Using the factory hose with the T fitting, attach this to the top of the radiator by feeding the factory bend through the large hole in the mounting bracket. Then take the other factory piece of hose that we cut apart earlier and connect it to the right side of the Tfitting and through the right side mounting bracket. And finally, cut the 1" supplied heater hose to the correct length and connect it to this factory hose with supplied hose barb and hose clamps.



-With the dump box tilted back, use SOME of the supplied heat tape to protect the heater hose from the exhaust, I would recommend maybe using some zip ties to pull the hose all the way over to the side if possible for added protection. Save some of the heat tape for the new Fan Wire and Overflow line

to be used later in these instructions



- You now need to remove the short factory overflow tube from the bottom of the overflow bottle, it will be much easier if you remove the overflow bottle from the machine as the hose seems to be siliconed onto the nipple.
- Run the supplied clear tube along side the 2 new heater hoses so it can be connected to the overflow bottle and the fin neck and then re-attached your overflow bottle
- Cut the plastic sleeve back on the fan plug wires at the fan and then cut the plug wires leaving enough room to strip and re-connect the wires. Using the shrinkable butt connectors, connect the end of each supplied wire to the wires on the fan assembly by crimping them and then use a lighter to shrink them for a sealed connection.
- At the front of the machine, do the same thing to connect the plug to the wires and then plug the fan plug back together.

Filling and BURPING the System

There is a bleeder screw on the top of each cylinder, use an 8mm wrench to back this screw out a few turns and then fill the radiator with coolant. These bleeder screws will let the air escape from the system.

- Once the system is full and coolant comes out of both bleeder screws, close them up and run the machine. As the coolant level lowers, top it up. After a few minutes put the fill cap back on. With the cap on, pressure will buildup in the system, loosen these 2 bleeder screws again to allow any air/stem to escape the system. Once you get coolant coming from the bleeder screws, close them back up, turn off the machine and let the machine cool down.
- Once the machine is cool enough to open the fill cap, check the level and top it up as needed. Put the cap back on, run the machine for a few more minutes and bleed the system again.
- Once both heater hoses are getting warm, you know the coolant is circulating and there are no air blockages in the system.

ADDED BURBING TIPS

1 person sits in the drivers seat and press the gas pedal all the way to the floor and hold it there, then with the pedal all the way down turn the key to start the motor. The motor will NOT start as long as you have the pedal all the way down but it will circulate the water pump and turn over the engine. While person #1 is doing this, person # 2 needs to back out the bleeder screw until coolant comes out, do this on both cylinders with both bleeder screws. This will help but no promise it will be enough.



Next step, see the pictures below. I used a large funnel and a rubber stopper plug for this, it worked like a charm. A funnel with a shot off valve would also work just as good. Remove the actual fill cap fitting at the rad hose at the very top and put the funnel in place. Put coolant in the funnel and run the engine. Rev it up and down and work the hoses down below with your hands. As the air pukes out it pukes into the funnel and the air is instantly replaced with coolant. Do this for several minutes until it seems that it is no longer pushing air out of the system. Drop a plug of some sort into the funnel so you can remove it without spilling all of the excess coolant all over the place. Put the fill cap fitting back on and you should be finished.







