

CFMOTO CFORCE 600(2020-2021)

Radiator Relocation Kit Installation Instructions

Removing the Radiator

1. Remove front plastic racks and center access covers (both the top center black one and the lower one)
2. Remove both front inner fenders
3. Unplug the fan plug (cutting some of the factory zip ties will be required)
4. Disconnect the small overflow hose from the radiator fill neck
5. Remove the front left shock.
6. Remove the 2 bolts holding the brake fluid pressure valve assembly in place



7. Remove the 2 bolts holding the overflow jug in place and remove it from the machine (having the shock removed and the brake fluid pressure valve assembly unbolted makes this possible)
8. Remove the front plastic cover by the winch.



9. Let the winch cable out about 3 feet and then disconnect the yellow and blue winch cables on the winch terminals.



10. Remove the 4 bolts holding the winch in place and pull it out the left hand side and set it on the floor out of the way. The roller fairlead does NOT need to be removed!

11. Remove the 4 bolts that secure the fan assembly to the radiator and carefully slide the fan assembly out from the left hand side.

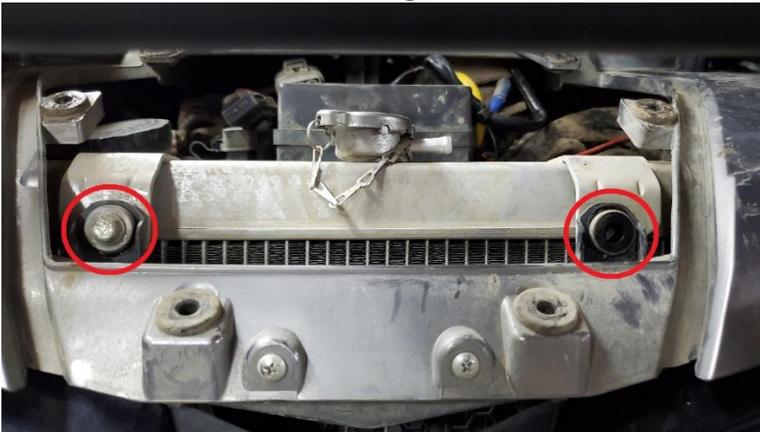
12. Place large waste oil pan under the Radiator

13. Remove the radiator fill cap

14. Disconnect the lower radiator hose and collect all draining coolant for proper disposal

15. Disconnect the upper radiator hose and catch any coolant from this hose for proper disposal.

16. Remove the 2 top rad mounting bolts and carefully pull UPWARDS so the 2 bottom posts come out of their mounting holes



17. Carefully slide radiator out the left hand side

18. Re-install the winch, winch connections and front cover for the winch

19. Re-install the front left shock

20. Re-Install the 2 bolts for the brake fluid pressure valve assembly

21. Thoroughly wash out and rinse the Radiator until you can see light through the entire rad, I personally just use a garden nozzle and a hose and rinse from both sides for about 10 minutes until all water flowing through all of the fins is clear and has no blockages from mud or debris.

Installation of Radiator and Rad Kit

1. Bolt fan assembly back onto radiator, BUT ROTATE IT 180° SO THAT THE FAN WIRE IS ORIENTATED AT THE BOTTOM OF THE RAD INSTEAD OF AT THE TOP OF THE RAD.

2. Lay the face plate, face down on a non scratch surface like a towel or cardboard and bolt the 2 side plates on using 4 of the ¾" long carriage bolts, 4 washers and 4 locknuts. If you ordered the OPTIONAL perforated steel screen, you will want to place it between the side plates and the face plate to sandwich it in place. Using some silicone to sort of "glue" the screen to the face plate in areas away from the design cutouts will help requece vibration noises.



3. Place the 2 FACTORY radiator 6mm flange head bolts (with 2 of the supplied ¼" lock washers) through the 2 round holes at the top of the face plate, put the 2 supplied 5/16" nuts over the bolts on the inside surface of the face plate to be used as spacers.



4. Take the 2 rubber bushing off of the 2 bottom posts of the radiator and put them into the 2 suitable holes in the bottom bend on the face plate.



5. Place Radiator into the bracket by first putting the 2 bottom posts into the 2 rubber bushings, then align the 2 top mounting holes to go onto the 2 factory 6mm bolts.



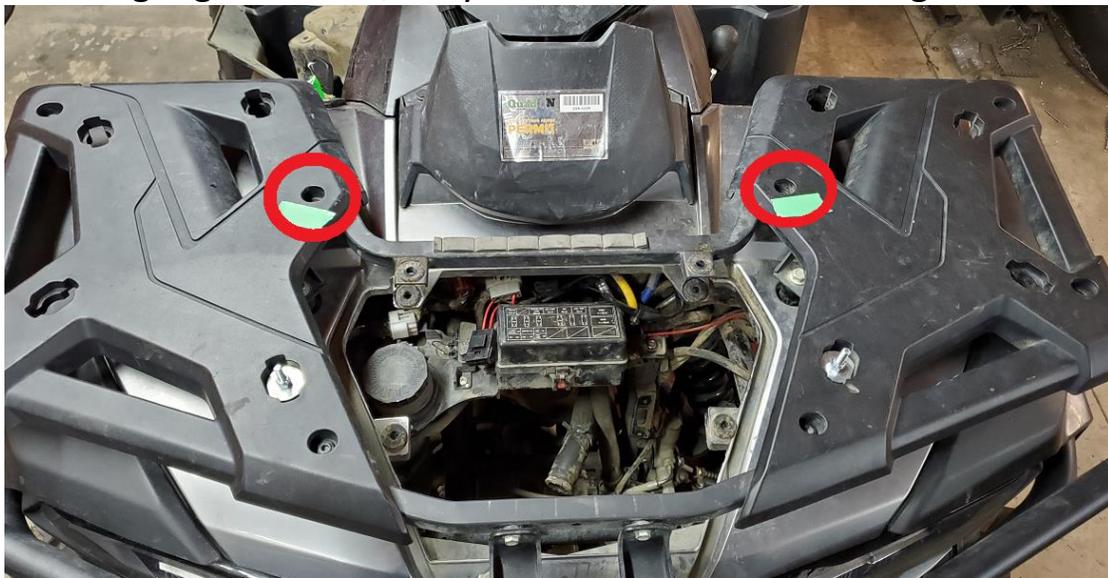
6. Now flip the assembled kit over and set it upright and it should look like this.



7. Using the 2 small mounting brackets for the underside of the left and right front racks, install the brackets, the 1-1/4" long carriage bolts, the modified 1/4" fender washers and a lylock nut as pictured below in the most forward, most inner hole locations on each of the 2 front racks.



8. Put the left & right front racks back onto the machine but don't install the bolts highlighted here, they will be used for mounting the rad kit.



9. Cut a short section from the end of the FACTORY UPPER RAD HOSE as pictured and use it on the bottom radiator orifice along with a supplied straight hose barb.



10. Cut a short (2-3/4" to 3") section from the end of the FACTORY LOWER RAD HOSE as pictured and use it on the top radiator orifice along with a supplied 90° elbow hose barb.



10. Take the supplied heater hose and install a 90° elbow hose barb into one end of it. Take a straight hose barb and install it into the other end of the supplied hose. Using a lube like soapy water or WD-40 makes this much easier. You should now have an elbow in one end of the supplied hose and a straight barb in the other end of the hose.

11. Take the exposed end of the 90° hose barb and insert it into the LOWER factory rad hose and make sure hose clamps are tight. Pull the rest of this supplied heater hose up through the center to where the rad kit will be placed.



12. Place the complete rad kit and radiator onto the front rack so that the 2 forward mounting bolts are going through the forward mounting holes on the side plates.
13. Route the hose to the lower radiator connection, and with a little bit of slack to prevent any kinks in the hose, mark it and cut it so you can make the connection with the previously installed straight hose barb on the bottom of your radiator, BUT do not connect it yet!
14. Take the rad kit back off the front rack
15. Insert the exposed straight hose barb on the remaining supplied coolant hose into the upper factory hose and make sure all hose barbs are tight.
16. Place the rad kit back onto the machine again and route the upper hose to be connected on the upper connection, cut the hose accordingly.
17. Tuck both of these hoses down below and remove the rad bracket from the front rack again.
18. Put the top black factory center access cover back in place with the lower rad hoses pushed back down below out of the way.
19. Set the rad bracket back onto the front rack and mark a line on the access cover just inside of both rad kit side plates, this is where you will need to cut the top access cover to fit between the inside of the side plate. Your cover should be marked somewhat like this.



20. The bottom left side of this cover also needs to be trimmed in order for it to slide in between the steel ATV rack and the lower radiator hose connection. You will need to place the rad kit back onto the front rack for this step to be sure you have trimmed the access cover enough. See picture below.



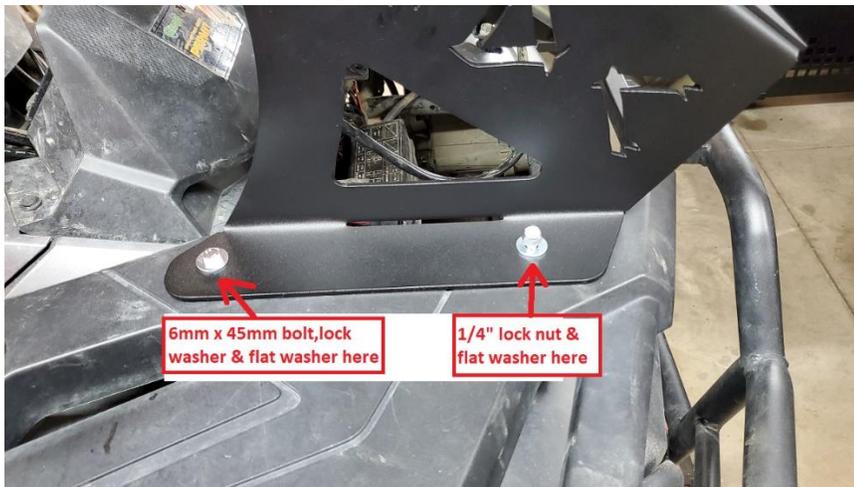
21. Once you have the access cover trimmed properly, you can connect the hoses for the rad kit, remember, a little lube makes this step go much easier. Once they are all connected, secure all connections with the supplied hose clamps. I like to use the factory hose clamps on the short factory lengths of hose at the radiator orifices only, all other connections should be made with the gear type hose clamps supplied.
22. Try to mark out where the black access cover needs to be trimmed to slide in and not interfere with the newly routed hoses. This is what I did for this machine.



23. Once the top access cover is fitted properly, remove it from the machine and do the same for the lower access cover, this is how it looked like on this ATV. With a little flexing, this cover will slide right in place through the space on the front bumper and click into position perfectly.



24. You can now completely bolt the rad kit to the front rack. Use 2 flat washers and 2 of the 1/4" lock nuts to bolt down the 2 front mounting points and use the 2 supplied 45mm long 6mm bolts, 2 flat washers and 2 lock washers to bolt down the rear mounting points into the factory threaded holes on the machines steel rack.



25. Using 2 of the 3/4" long carriage bolts, 2 washers and 2 lock nuts, bolt the overflow jug to the left side panel and connect the overflow hose to the fill neck, take the other drain hose and route it under the rad kit face plate.



26. Feed the fan plug and plug wire through the same path as the rad hoses and plug the fan back together.
27. Leave the inner fenders off until after burping the machine so you can check for any leaks in the system.

BURPING THE SYSTEM

1. Fill radiator with coolant and put coolant in the overflow jug so its between min and max levels in the jug.
2. Leave radiator cap off and start the machine, let it idle for a few minutes, if coolant level drops or air blows out the fill neck, add more coolant.
3. If coolant level doesn't drop at all, rev up the RPM's a bit for a few seconds at a time up and down for a few minutes, this should warm up the engine and allow the temp to rise and the t-stat to open, therefore expelling more air and allowing you to add more coolant. Do this until the fan has cycled, this means the system is cycling and the air should all be coming out and being replaced by coolant.
4. Once you think its fully burped, put the cap on and let it cool down, once its cooled down, remove cap and repeat burping steps to be sure all of the air has been removed and the coolant level is full.
5. Re-install the inner fenders
6. For your first few rides, bring some extra coolant along just in case there is any air left in the system and your level needs to be topped up.