

Thank you for making the investment with MFC Offroad as well as yourself. The MFC Offroad Performance Ram Air Snorkel is the perfect compliment to aid power, increased throttle response and the ability to ford deeper water. Due to the increased airflow with the closed loop K&N performance air filter, you will notice increased engine intake sounds. When at WOT, this sound is incredible and you will enjoy hearing your engine breathe easier.

The design of our snorkel implements a 100% closed loop system. This is due to reinforced silicone couplers, and a special design of the upper snorkel intake with a water egress opening on the back in case you encounter foul weather while driving.

Tools needed to complete the installation:

1. 4" hole saw
2. Drill bits ranging from 1/8" - 3/8"
3. Open ended wrenches ranging from 10mm - 14mm
4. Phillips head screw driver or rivet tool
5. Flat head screw driver
6. Socket sizes ranging from 7mm to 12mm
7. Tape measurer
8. Silicone
9. Cutoff wheel or dremel

\*\*\*Please note\*\*\* 99% of the MFC Offroad snorkel kit will come assembled. The above tools are references for what is needed to fully assemble the kit that comes to you already assembled. Some disassembly is needed to fit the kit into your Jeep.

### Step 1: Preparing for installation

Open your front passenger side door and locate where the interior a-pillar trim starts and the headliner trim begins. This is where you will reference starting your measurement to install the upper snorkel tube mount. From this point, measure down 3.5" and place the upper mount as shown to the right here. While holding the mount with your hand, mark both holes. Depending on your installation method, you can use personally supplied screws, or the supplied rivets.

The second hole will line up with the 6" marking on the ruler as well. Be sure to apply a generous amount of silicone not only in the holes drilled, but also around the entire plate area to ensure there will be a watertight seal all around.



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## Step 2: Drilling the 4" hole

Now that you have the upper mount secured to the body pillar, you can secure the snorkel. By doing this, you can line up the hole for where the snorkel needs to pass through the fender. You will also be able to marry up the template from there to mark where the holes will go to secure the snorkel to the fender.

If you are having issues with lining everything up with either the snorkel fitted or the included template, see the pictures with measurement references for all the holes needed for fitment.

Picture one center point is 3.5" from fender lip

Picture two drill hole is 10.5" from center point

Picture three drill hole is 4.125" from center point

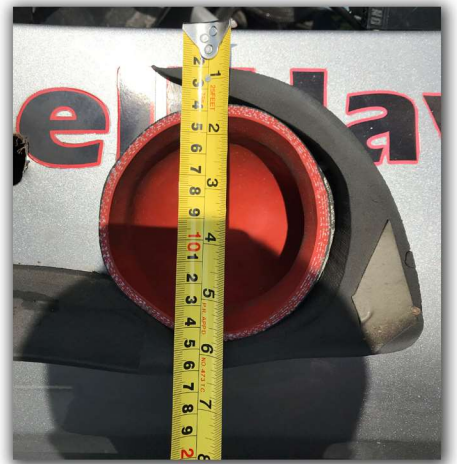
Note: As you can see the foam buffer filler is married to the fender already. We recommend marrying it to the snorkel. This way it will line up perfectly when on the fender.

You can now take your 4" hole saw and drill the necessary opening for your snorkel. Located right behind the 4" hole you make is a bracket that needs to be removed. All of the bracket needs to be removed.

## Step 3: Removing the factory intake

Assuming you have everything drilled, you can now move on to the inside of the engine bay. You will remove all of the intake from the factory. This includes the upper flexible rubber boot, factory intake box and lower "U" shaped pipe.

The intake boot is removed with either a flat head screw driver, or hex bit. You can choose either. The factory intake box is removed with phillips head screws all around the lower lip. These attach the upper part to the lower part. Once the upper part is removed, you can remove the lower part by simply pulling up. The lower "U" shaped pipe is removed with a nut on the bottom. It attaches to the lower rad support/frame rail.



### Step 3: Installing the MFC Offroad closed loop intake

Now that everything is removed from inside the engine bay, you can start the assembly process of the snorkel. The vent adaptor is mounted to the lower portion of the K&N intake, and will marry with your factory oil vent tube. Fitment of the preassembled snorkel should be 90% spot on, so take note when you disassemble everything to install in the engine bay.

A helpful hint is to jack the passenger side up, remove the wheel and forward section of the fender liner. This will give you the added accesibility for routing all the piping for the lower portion of the snorkel.

2 adjustments need to be done on site when putting everything back together. The 90 degree elbow that goes through the fender has an aluminum inner coupler that needs to be flattened a tiny bit to fit between the fender and the frame rail. Depending on how much silicone elbow you have protruding out of the 4" hole that you drilled, you will have to adjust for this.

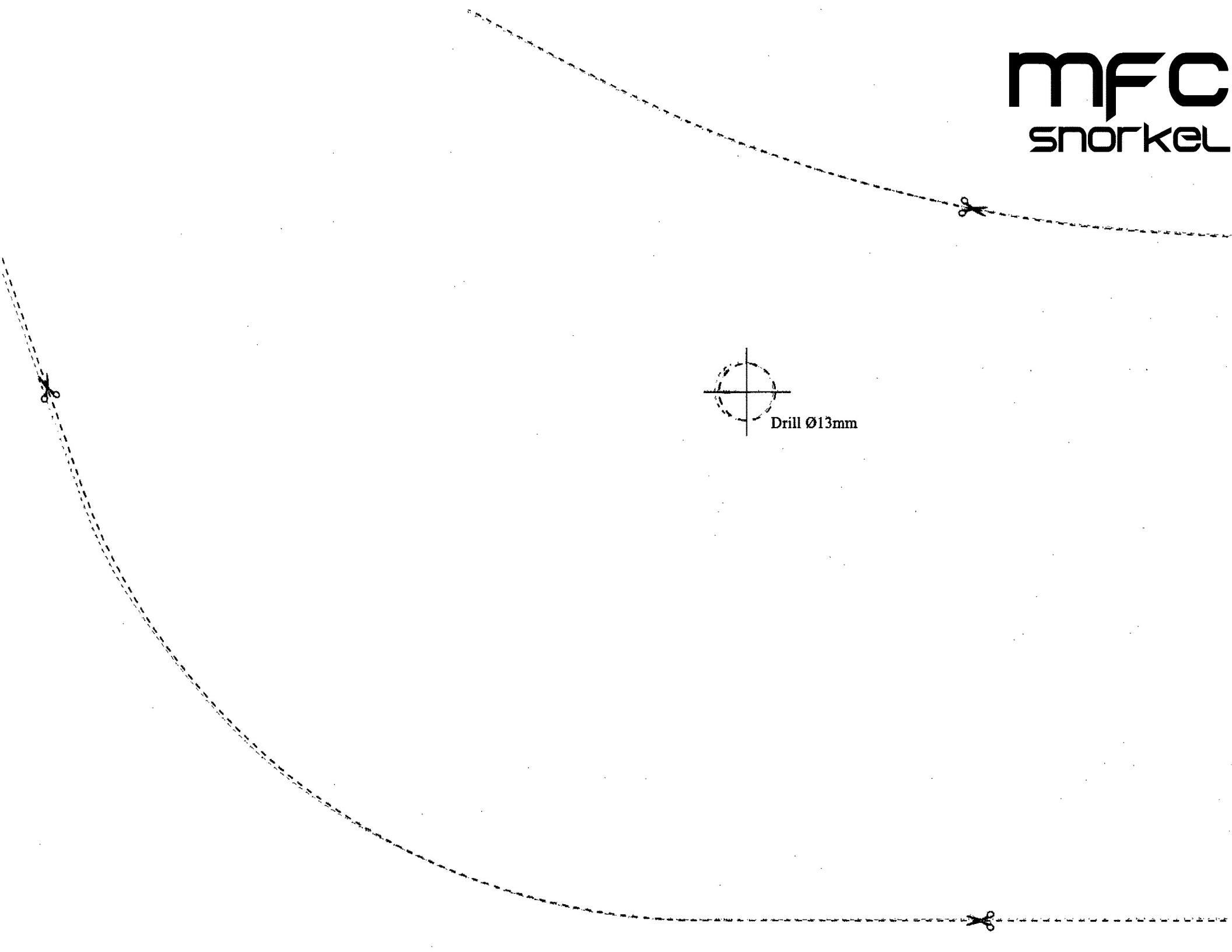
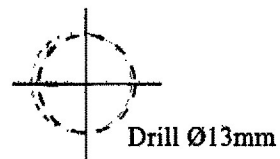
The second adjustment is the amount of silicone coupler sticking out of the fender. You only need 1/2" sticking out for the hose clamp to attach to. The remaining needs to be removed so your snorkel can sit flush with the top of the fender. All that is necessary to mount the forward portion of the snorkel to the fender are the two upper bolts as marked on the template. They will be threaded into the inner side of the snorkel first, then passed through the holes that you drilled in the fender. On the inside of the fender, you will use the washer and nuts to secure them to the body. Use a hex bit to hold the bolt in place as you use an open ended wrnech to tighten them.

Be sure that everything is tight and put back together cleanly. You can now put the remaining head of the snorkel tub on using the black hose clamp. Take note to the opening on the back, as this is where water will evacuate from during rainfalls. You may now enjoy your new ram air snorkel, and at WOT, be sure to listen to the engine roar.



# MFC

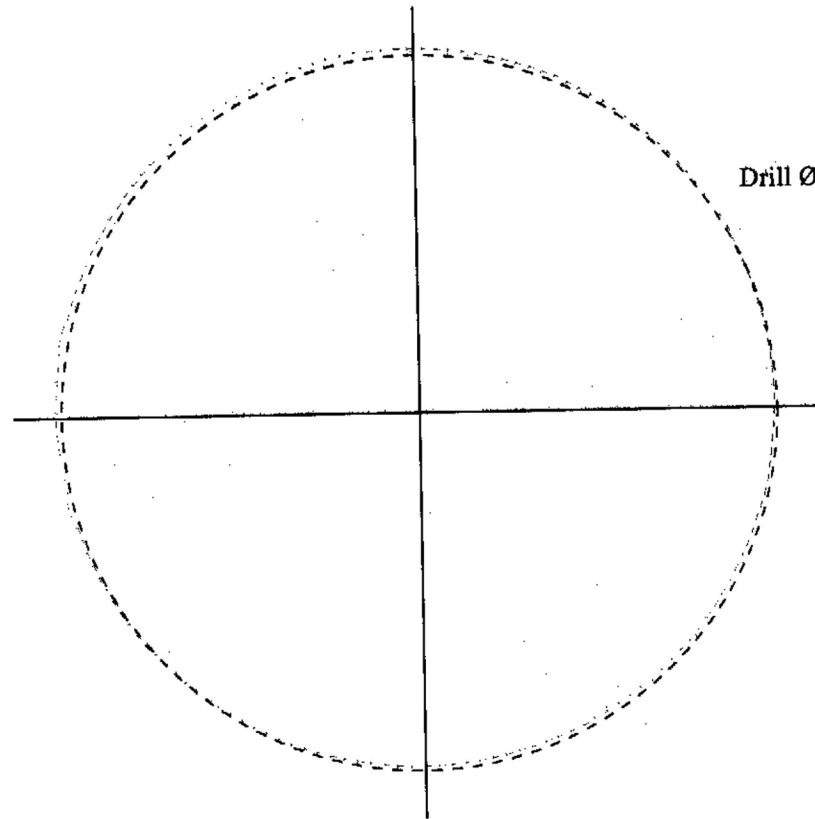
## SNORKEL



# OFFROAD Template



Drill Ø13mm



Drill Ø95mm

