## **Detroit Tuned JCW Intake Filter Installation Instructions**

Thank you for purchasing the Detroit Tuned JCW Filter. This filter is made by AMSOIL, and the cleaning directions are on the side of the box. Cut them off and put them some place you will know where to find them when the filter needs to be cleaned. A place like the owner's manual is a smart place.



READ ALL DIRECTIONS THROUGHLY BEFORE YOU START!!!

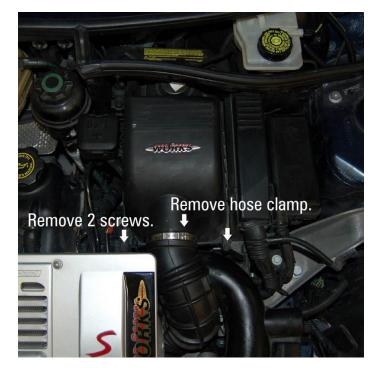
NOTE: WHENEVER WORKING IN THE ENGINE BAY, YOU SHOULD WEAR SAFETY GLASSES AND THE ENGINE SHOULD BE COOL. IF AFTER READING THESE DIRECTIONS, YOU FEEL THIS IS WORK YOU CANNOT COMPLETE, YOU SHOULD CONSULT A TRAINED MECHANIC.

## **Tools Needed:**

- Torx 30 Screw Driver OR Torx 30 socket w/ 3/8" ratchet & 8" extension
- Small Phillips Head Screw Driver
- Small Straight Blade Screw Driver
- Sharp Knife or Razor Blade
- Vacuum Cleaner

## **Directions:**

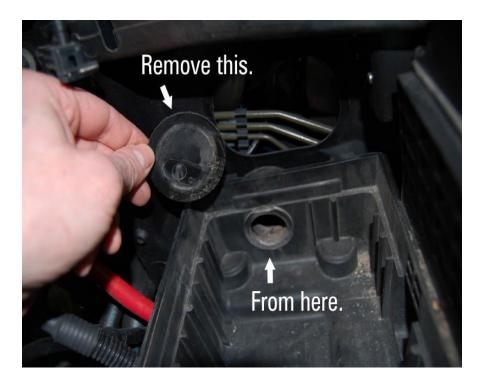
- 1. Open the bonnet and locate your JCW intake system in the engine bay located on the driver side of the car near the firewall.
- 2. Remove the clamp around the intake hose with a small screwdriver. Then remove the two Torx screws with the small screwdriver or the Torx bit. Also, remove the battery positive connection from the side. It will simply pull up a bit and bend over to the side out of the way.



3. Pull up the rubber seal from the back of the intake, and unplug the connection to the vacuum solenoid. Lay the connector off to the back, to be reconnected at the end. Grab the entire box and slide it back until it stops, then pull the back of the intake up a bit. There are two tabs on the back of the intake that clip over two short posts to seal the back of the intake once it's bolted down. With a bit of movement, they will come off very easily. **Do not** try to force them as they can break. If they do not unclip, try it again. Once the intake is lose, pull forward a bit then tilt the front of the intake up and out of the intake lower box. Remove and set it on the bench for now.



**4.** For whatever reason, MINI decided to install a plastic disc in the lower hole in all JCW intakes. You can remove the disc for better air flow. This can be very important if you decide to leave the vacuum door in at the end of the directions. Or it can be less important if you remove the door. Keep in mind that it could add more intake sound if noise is a concern for you.



5. Your intake will now look like this. To remove the filter, you need to remove the screw from the plastic arm that holds the filter down. The filter will then just pull out.



**6.** The next few steps are **optional**. If you do not plan to remove the vacuum operated door you can skip to step 12, otherwise read on and do as much or as little as you would like in the next few steps.

Many of the items in the intake will not be needed anymore and can improve airflow, and reduce weight in your car. You can remove the flap door and all the airlines and vacuum canister from the inside the intake. We recommend saving these items just in case you ever need them again.



7. If you remove all the items, before we add the new intake filter you need to fix a vacuum line from the bypass valve. There are two ways you can do this. One way, and the best way, would be to remove the vacuum lines (shown below), remove the long section from the Y connector and use it to reconnect the two ports on the BPV. Trim this as needed. Or you can put something into the end to seal it. A vacuum leak can cause a lot of problems down the road, so make sure this is done right the first time.



8. Now is the time to remove the butterfly door, so that the port is fully open all of the time.



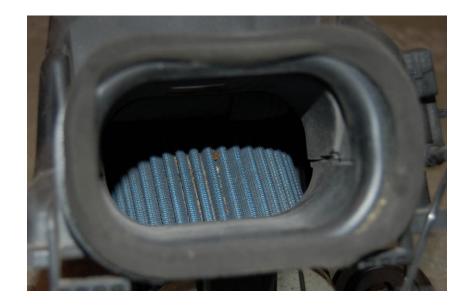
**9.** Remove the 4 screws that hold the butterfly in place. You can also remove the 1 screw that holds the vacuum canister in place if you would like to remove it. Also, remove all vacuum lines.



**10.** Slide the door out of the hook and twist the canister off. Put all of these parts into the box of parts that you are saving.



11. Cover the hole with a suitable tape of some sort. We use a heat reflective tape. Clean the area first so that the tape will stick. Cut a section big enough to cover the hole and seal it up. The only reason we are covering the hole is to keep any warm air from the engine bay from entering into the intake path. Once the intake is sealed to the hole in the firewall, it will draw air from the cowl.



**12.** We are now ready to add the new filter. Put the filter in and gently snug the hose clamp just to keep it in place. With the filter kit, we supplied a short section of sticky back foam. Cut two sections to go under the plastic arm to keep things tight and in place (as shown in the photos). Once the plastic arm is tight, go back to the hose clamp and re-tighten it





13. This completes the filter installation and modification. All that is left is putting the air box back in place and to tighten the two screws. Put the air hose on and clip the clamp, then re install the batter post. Make sure to not over tighten the bolts, and make sure the two tab are locked into the back before starting the bolts.

Any questions? Give us a call.

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