

Tapout ATS-V Intercooler Fill/Bleed Kit

SAC – 9/9/2019

Our kit is easily installed and provides everything needed to properly fill and bleed your ATS-V intercooler. The factory intercooler is a sealed system with total capacity of 3.3 quarts. There is no reservoir, and any air pocket will stop the intercooler pump from running after five seconds, rendering your intercooler worthless. This can create an unsafe scenario for a turbocharged car, especially when boost is turned up via an aftermarket tune.

For installation, one of your factory intercooler hoses will need to be shortened and partially replaced with a special automotive grade clear hose. This allows you to see when the intercooler pump is running, whether fluid is flowing and if air bubbles are present in the lines. An illuminated switch will be added to your underhood fusebox so you can easily cycle the power to the intercooler pump. A large translucent funnel and stopper are also provided. These will be used to fill and bleed the system while the intercooler pump power is being cycled.

Kit Contents

- large translucent funnel
- funnel stopper
- short piece of heater hose
- dowel rod
- special automotive grade clear hose
- barb coupler
- two hose clamps with extended tail
- wiring harness with illuminated switch
- fuse tap
- fuse
- detailed installation instructions

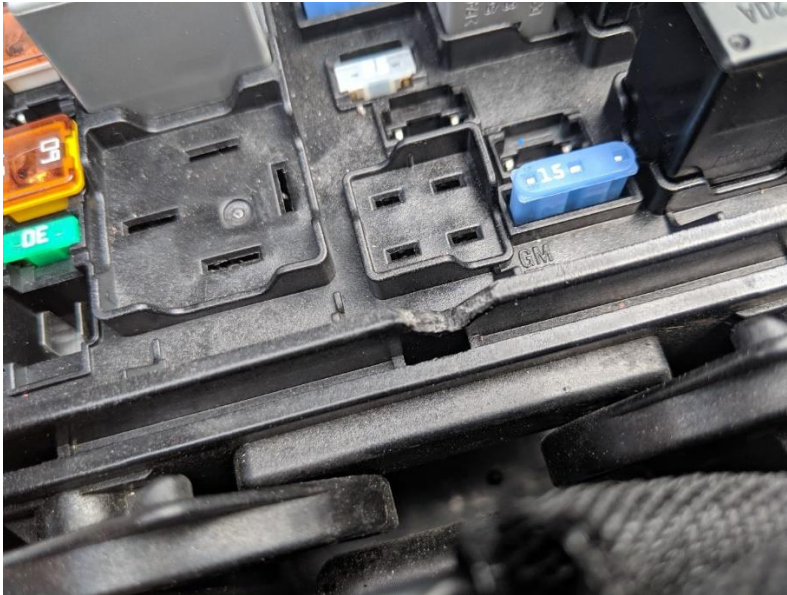
Tools Required

- regular pliers
- needle-nosed pliers
- diagonal wire cutters
- 5/16" or 8 mm. nut driver
- 13 mm. socket or wrench
- hair dryer
- cordless drill
- Unibit (step drill bit) to drill (.795" or 20.2 mm.) mounting hole



Electrical Wiring Instructions

1. Remove lid from underhood fusebox by carefully unsnapping it.
2. Use diagonal wire cutters to make a small notch in the bottom of the fuse box for the wires to exit as shown.

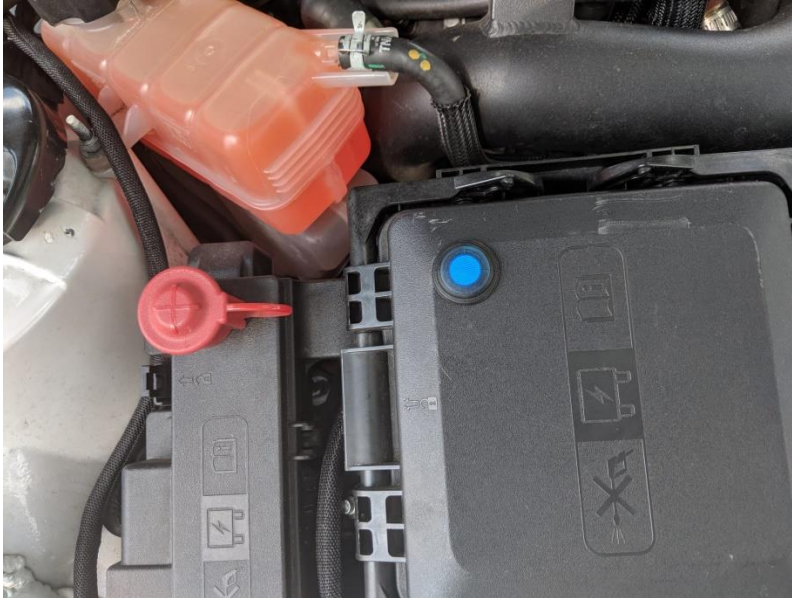


3. Use Unibit (step drill bit) to drill (.795" or 20.2 mm.) mounting hole in corner of fusebox lid closest to coolant overflow bottle and positive battery terminal.



4. Install illuminated switch in fusebox lid, routing wiring harness through first.

5. Reinstall lid on fusebox by carefully snapping it back in place.



6. Remove mini fuse #53 using needle-nosed pliers.
7. Replace the mini fuse you just removed with the supplied ATS style fuse, with the brass fuse tap placed over the left side fuse leg as shown. You can use needle-nosed pliers to hold the brass piece in place as you slide the fuse into the slot.

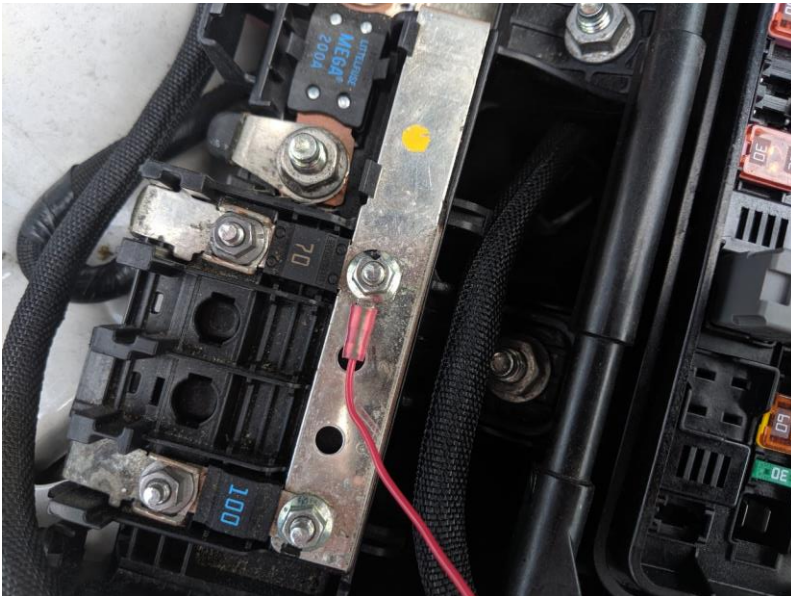


8. Slide the female quick-connect onto the brass fuse tapper terminal.
9. Remove positive battery power safety cover just left of the underhood compartment fuse box.

10. Use 13 mm. socket or wrench to install large ring terminal under battery grounding post.



11. Use 5/16" or 8 mm. nut driver to connect small ring terminal to positive battery power.



12. Reinstall positive battery power safety cover.

Hose Installation Instructions

1. Use regular pliers to remove and retain clamp from forward/lower intercooler hose.
2. Disconnect forward/lower intercooler hose.
3. Cut off 8 to 12" from factory forward/lower intercooler hose.
4. Cut special clear hose to fit where factory forward/lower intercooler hose was shortened.
5. Install barb coupler to connector factory forward/lower intercooler hose to special clear hose. It may be necessary to heat up the special clear hose with a hair dryer, allowing it to expand easier.
6. Use 5/16" or 8 mm. nut driver to install two hose clamps with extended tail to secure hoses to barb coupler.
7. Use hair dryer again as necessary to connect special clear hose to factory intercooler fitting.
8. Use regular pliers to reinstall factory hose clamp in original location as shown.



9. Use garden hose to rinse excess intercooler fluid from engine compartment.
10. Fill and bleed intercooler system.

Intercooler Fill and Bleed Instructions

1. Park the car on a slight incline, with the front end higher than the rear. Or elevate the front end a few inches using a trolley jack and jack stands for safety.
2. To fill and bleed the intercooler system, you do not want to leave the pump running. Most of the air bubbles come to the surface when the pump starts and stops. For this reason, starting and stopping the pump every few seconds will yield much better results than leaving it running continuously.
3. With the engine off, rotate your intercooler fill port to the vertical position.
4. Remove the rubber cap.
5. Use the short piece of heater hose to support the large funnel.
6. Add several ounces of 50/50 coolant mix to the funnel.



7. Depress the intercooler fill port Schrader valve, by pushing the dowel rod down through the funnel and short piece of heater hose.
8. Use the new pushbutton switch mounted on the fusebox cover to cycle the intercooler pump power every few seconds until there are no more air bubbles. Be patient, since this step may take ten or twenty minutes.
9. Sometimes it helps to fiddle with the 7 mm. bleeder screws, but this does not seem to be necessary.
10. Through experience we have found it's best to fill and bleed the system cold. Then drive around until it's up to normal operating temperature, let it cool down and bleed it one more time.