

Installation Instructions
Cadillac ATS Intercooler Kit
ZZ-ATSFMIC



Estimated Installation Time: 8 Hours

Installation Difficulty: 4/5

Some procedures will not be described in full detail. If you run into any installation issues or have trouble comprehending any of the procedures, please contact customerservice@zzperformance.com

Kit Contents:

- 1 ATS Front Mount Intercooler
- 1 ZZP10 Silicone Coupler
- 1 ATS Intercooler Pipe
- 1 L90/63 Silicone Coupler
- 1 L90/63-70 Silicone Coupler
- **1 –** 94100-250 Clamp
- **1 –** 94100-325 Clamp
- 3 94100-288 Clamps
- **1 –** 94100-300 Clamp
- 4 M8x30mm Serrated Flange Head Bolts
- 8 M8 Serrated Flange Nuts
- 1 M6x14mm Socket Head Screw
- **1 –** ATS Intercooler Bracket (Driver)
- **1 –** ATS Intercooler Brackets (Passenger)
- 1 1/8 NPT Set Screw Plug

Tools Needed:

- Impact Gun
- 3/8" Ratchet
- 4" Extension
- T15 Torx Socket
- 7mm Socket
- 10mm Socket
- 13mm Socket
- 7/16" Wrench
- 7/16" Deep Well Socket
- Flat Head Screw Driver
- Trim Removal Tool
- Lug Nut Socket
- 1/4" Drill Bit
- 7/32" Drill Bit
- Side Cutters



STEP ONE:

Once you have all of your tools and parts laid out, you will want to start by removing the plastic front engine bay cover using a trim clip removal tool.

STEP TWO:

Remove the (8) bolts under the plastic trim piece that are holding the top of the front bumper cover on, using your 10mm socket.





STEP THREE:

Remove the intake tube, followed by the entire air box (pull up slightly; there are 3 press in fittings. No bolts)

STEP FOUR:

Remove the front wheels.



STEP FIVE:

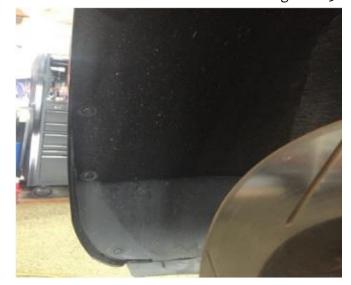
Remove the plastic belly pan under the front bumper cover using your 7mm & 10mm sockets as well as your T15 torx bit.





STEP SIX:

Remove the front half of the fender liner using the T15 Torx bit, 7mm socket, and a trim clip removal tool.





STEP SEVEN:

READ THIS STEP ALL THE WAY THROUGH BEFORE YOU BEGIN!!! With the help of another person, gently and slowly pull forward on the front bumper cover near the side marker on the driver side, to pull the bumper out of the clips. Repeat this process on the passenger side. You will need to PARTIALLY remove the front bumper cover. **BEFORE YOU FULLY REMOVE THE BUMPER, THERE IS A WIRE HARNESS YOU WILL NEED TO DISCONNECT ON TO THE BACK OF THE FRONT BUMPER SUPPORT!** Once you have disconnected the wire harness, carefully remove the front bumper cover.







STEP EIGHT:

Remove the plastic trim clips from around the sides, top, and bottom of the air diffuser below the radiator, intercooler, and condenser.









STEP NINE:

Remove the outside air temperature sensor from the front bumper support and let it hang for now. Make sure you don't damage the trim clip holding it in as you will need to reinstall it later.

STEP TEN:

Between the hood latch supports on top of the front bumper support you will need to drill 2 holes. BEFORE DRILLING THE HOLES MAKE SURE TO MOVE THE WIRE HARNESS OUT OF THE WAY!! Place your outside temperature sensor centered in between the hood latch support bars and mark a spot for the mounting hole and a spot for the non-rotation tab. Drill a ¼" hole on the left spot you marked and a 7/32" hole on the right spot you marked. After drilling the holes remove the two 7mm bolts in the hood latch supports. We will come back to this later in the install process.







STEP ELEVEN:

Remove the 3 star clips on either side of the intercooler holding the rubber air diffuser on.

STEP TWELVE:

Remove the 2 bolts on the driver side and the 2 bolts on the passenger side that connect the condenser to the intercooler and unclip the stock charge pipes from the intercooler.





STEP THIRTEEN:

Using your 13mm socket, Remove the (8) bolts in the front bumper support and remove the front bumper support.

STEP FOURTEEN:

Carefully remove the air diffuser. You'll have to bend the harder plastic pieces towards the top below the front frame of the car and wiggle them out and it will all come out in 1 piece. This can be slightly difficult so have patience.





STEP FIFTEEN:

Unbolt the AC lines from the side of the lower radiator with your 10mm socket.

STEP SIXTEEN:

Unclip the intercooler from the radiator and drop out through the bottom.



STEP SEVENTEEN:

Push the condenser back and mount it to the radiator where the factory intercooler was in the clips and bolt it back in.

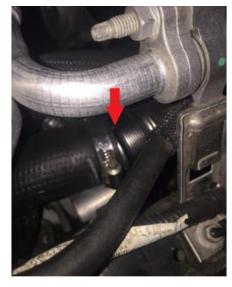






STEP EIGHTEEN:

Remove the factory charge pipes. Loosen the worm clamp on the hot side charge tube and remove from the turbo outlet. Be sure to unplug the MAP sensor. To remove the cold side charge pipe from the throttle body, you can use your fingers or a flat head screw driver to rotate the grey locking ring releasing it from the throttle body.





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STEP NINETEEN:

Replace the front bumper support, attach the hood latch supports, and clip in the wire harness on top of the front bumper support.









STEP TWENTY:

Attach the intercooler brackets to the back of the front bumper support (utilizing the attatched existing factory bolts) with the supplied M8 flanged nuts. The brackets are labled but are side specific so make sure you have the driver and passenger brackets on the correct side with the center point of the triangle pointing towards the center of the bumper support. (The pictures show washers being used, this is not longer needed.)

STEP TWENTY ONE:

Attach the intercooler to the intercooler brackets using the supplied M8 x 1.25 serrated bolts, and M8 Flanged Nuts. The brackets should be infront of the mounting tabs on the intercooler. You should have a washer between the M8 bolt and the bracket and another washer on the back side of the intercooler mounting tab before you put the M8 nuts on.



STEP TWENTY TWO:

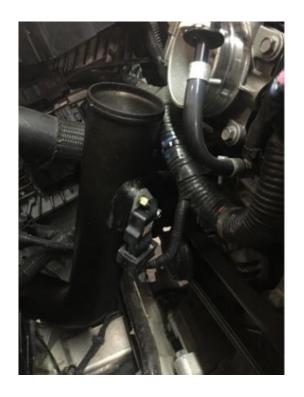
You will now need to cut the tab on the outside air temp sensor off. Remove the tab closest to the mounting hole using your side cutters.

STEP TWENTY THREE:

You will now relocate the outside air temp sensor to the spot where you drilled the 2 holes earlier in the top of your front bumper support. With the sensor facing the front of the car, slide the sensor under the wire harness, position the mounting hole on the sensor over the ½" hole you drilled on the left and insert the non-rotation tab into the 7/32" hole on the right. Secure the sensor using the factory trim clip that was holding it in before.







STEP TWENTY FOUR:

Remove your MAP sensor from your facory charge pipe and mount it to the long ZZP cold side charge pipe using the supplied M6x14mm bolt. Insert the pipe into the engine bay with the MAF sensor closest to the throttle body, then plug in your MAF sensor.

STEP TWENTY FIVE:

Connect the cold side charge pipe to the throttle body using the supplied 2 $\frac{1}{2}$ " -2 $\frac{3}{4}$ " 90° (L90/63-70) silicone coupler and secure it using the 94100-300 T Bolt clamp on the throttle body side and a 94100-288 T bolt clamp. Leave the 94100-288 loose for now. Adjustments may need to me made. Also make sure the AC line is not rubbing on the charge pipe now that it is in place.



STEP TWENTY SIX:

Attach the lower part of the cold side charge pipe to the intercooler using the supplied 2 ½" 90° (L90/63) silicone coupler and secure it using 2 of the 94100-288 T bolt clamps. ONCE YOU HAVE IT FITTING CORRECTLY AND SECURED REMEMBER TO GO BACK AND SECURE THE CLAMP THAT WAS LEFT LOOSE IN THE PREVIOUS STEP.

STEP TWENTY SEVEN:

At this point you can slide the new one pc silicone hot side charge pipe into place. It is easiest to install the pip from the bottom of the car starting next to the intercooler inlet up toward the turbocharger outlet.



NOT CORRECT

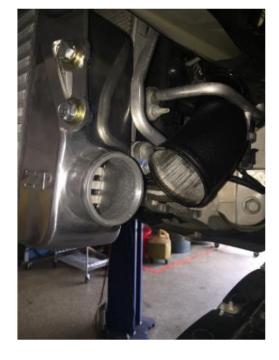


STEP TWENTY EIGHT:

You may need to make room for the hot side charge pipe to go under the AC line now that you've moved the condenser back a couple inches. If the AC line is not touching the frame you will be fine. If the AC line is touching the frame you will need to gently apply upwards pressure to move it away from the frame.

STEP TWENTY NINE:

Insert the hot side charge pipe under the AC line and connect it to the turbocharger outlet. You will secure this using a 94100-250 T bolt clamp but leave it loose for now in case any adjustments need to me made. Also make sure the AC line is not rubbing on the charge pipe now that it is in place.



STEP THIRTY:

Connect the 2.5" hot side charge pipe to the intercooler using the supplied 94100-288 T bolt clamp. REMEMBER TO SECURE THE T BOLT CLAMP ON THE TURBO OUTLET. REATTACH THE AC LINE YOU UNBOLTED BACK ONTO THE RADIATOR!!!



STEP THIRTY ONE:

Congratulations, you have completed installing your ZZP Front Mount Intercooler Package for your Cadillac ATS. You are now ready to start reassembling your ATS. Start by replacing your front bumper cover, followed by the lower front belly pan, fender well liners, plastic front engine bay cover, air box, and lastly your wheels. Make sure your lug nuts are torqued to 100ft/lbs.