

ZZPERFORMANCE

Installation Instructions

ZZP 1.4T Aluminum Thermostat Assembly
1.4T Chevrolet Sonic & Cruze



Estimated Installation Time: 45 minutes

Installation Difficulty: 1/5

Kit Contents:

- ZZP Aluminum Thermostat Housing
- Mechanical Thermostat (installed)
- Thermostat housing gasket
- Heater element resistor pack

Tools Needed:

- Socket set
- Ratchet
- Flat head screw driver
- Pick tool
- Drain pan
- Pliers

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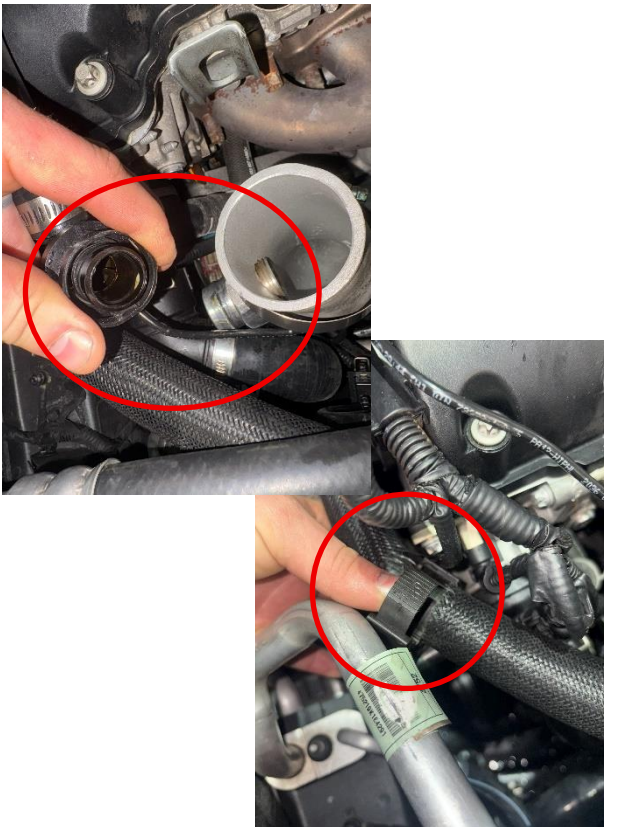


STEP ONE: Prepare vehicle

- Disconnect the negative battery terminal. Be certain you do so before removing thermostat housing as you risk setting a permanent code.

STEP TWO: Prepare for thermostat removal

- Disconnect MAF plug from MAF sensor
- Remove airbox. If you need reference, refer back to our intake installation instructions.
- Loosen and disconnect coupler from turbo inlet.
- Unbolt or pull airbox out of grommets.
- Set airbox aside.



STEP THREE: Prepare for thermostat removal cont.

- Release coolant tank hose from holding bracket on passenger side of engine bay. Let the hose rest on top of clip to gain better access to the thermostat.
- Remove PCV check valve from turbo by squeezing clipers and pulling away from turbo inlet.

STEP FOUR: Begin to remove thermostat

- Using a pick or your finger remove connector/plug from thermostat heater.
- Place a drain pan underneath the vehicle. You will lose quite a bit of coolant unless you drain the system fully using the petcock on the radiator.

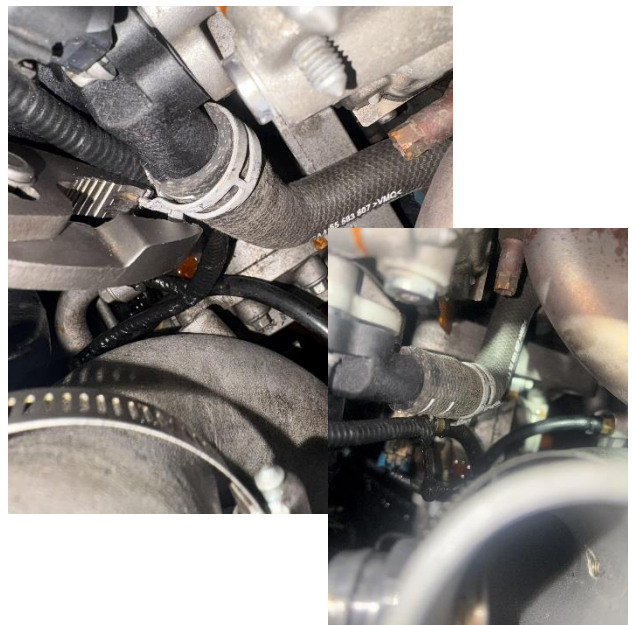


STEP FIVE: Remove OEM thermostat

- Using a pick unlock the retaining clip that holds the radiator hose to the thermostat. Be careful not to pull the clip too far out or it will fall. The clip and receiver has a second locking groove for the clip so it will stay released without fully removing the clip.
- Wiggle and pull out on radiator hose to disconnect from the thermostat. Beware of coolant loss.

STEP SIX: Remove OEM thermostat

- Using pliers, squeeze the constant tension clamp and push it further down the hose on the small coolant hose that goes to the oil cooler.





STEP SEVEN: Remove OEM thermostat

- Using a deep 8mm 6-point socket or an E10 torx socket remove all 3 bolts that hold thermostat to head. Be careful not to drop the bolts on the ground.
- Using 1 hand push down on the small oil cooler hose while using the other to twist and pull on the thermostat to fully remove.
- If the oil cooler hose is difficult to remove you may find that slipping a flat head or pick tool in between the housing and hose and working it around can help free it up.
- The factory thermostat should now be fully removed.

STEP EIGHT: Prepare ZZP thermostat for installation

- Install the new gasket provided onto your aluminum thermostat housing

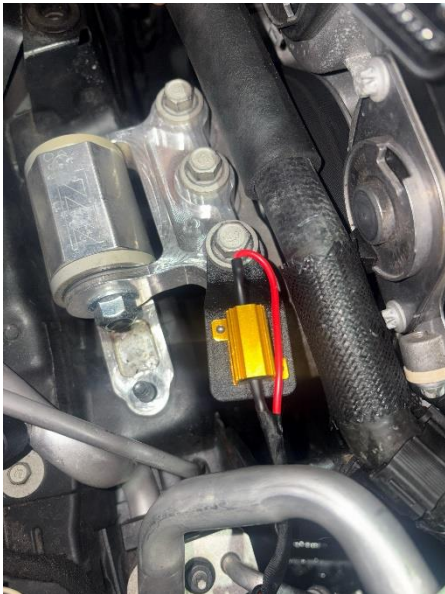


STEP NINE: Install ZZP thermostat

- Install the new thermostat housing onto the head and tighten bolts to **71 in/lbs**. Be sure to use a torque wrench as these bolts can easily strip the head.
- Reinstall the small oil cooler hose onto the thermostat.
- Slide constant tension clamp back up into factory position.

STEP TEN: Continue installation

- Wiggle and push radiator hose onto thermostat. It will be a tight fit. Push locking clip back into locked position.
- Pull on radiator hose to be certain it has locked into place.

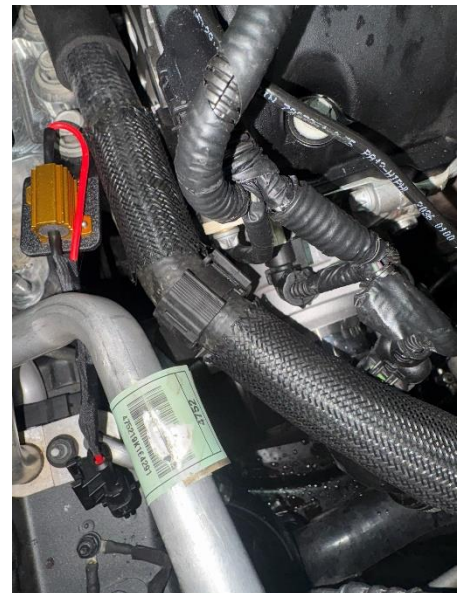


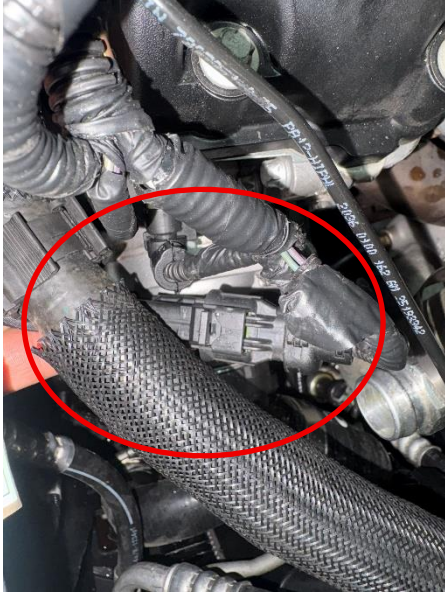
STEP ELEVEN: Install heater resistor pack

- Using a 15mm socket remove the front most upper engine mount bolt.
- Install the new thermostat resistor pack under the engine mount bolt on a slight angle to avoid rubbing on coolant hose. Tighten bolt.

STEP TWELVE: Finalize installation

- Reinstall the coolant hose back into the original clip/mounting bracket and lock into place. Double check that the resistor pack does not hit the hose. If it does after being fully clipped in, angle the resistor pack further away.





STEP THIRTEEN: Finalize installation cont.

- Plug the connector end of the resistor pack into the stock thermostat heater plug and route it underneath the coolant hose.

STEP FOURTEEN: Finalize installation cont.

- Reinstall the PCV hose back onto turbo inlet.
- Be careful not to break the o-ring on the connector when pushing it into the turbo connection. Twist and push in until you hear a click.
- Lightly pull on hose to be certain it is fully seated.



STEP FIFTEEN: Finalize installation cont.

- Reinstall your airbox. Tighten clamp to turbo inlet.
- Reconnect the MAF sensor.
- Reconnect your negative battery terminal.
- Double check all connections
- Add coolant to your reservoir and check for leaks. Start the car and let it get up to temp. Verify that the thermostat is working and the car is not overheating due to air in the system.
- The 1.4 cooling system can be tricky to bleed sometimes. You may need to unbolt your coolant reservoir and hold it higher above the engine to properly bleed and get all air out of the system.
- Once system is fully bled and coolant in reservoir levels out, fill reservoir to factory level.
- Enjoy!

