



Installation Instructions

Pontiac

Find additional information online at:

CoolViewThermostat.com

Getting Started

Installing the Cool-View thermostat unit is not a difficult project; it requires only a few tools. In most cases it can be done in less than an hour. The first thing to note is to work safely. When working on any engine's cooling system it is always recommended to allow the engine to cool down before starting any work. This is because hot engine coolants are often at or above the boiling point and can be under 15-20 pounds of pressure making it easy to be seriously burned. This does not mean you cannot safely do this work. If you do not feel this is something you can or wish to do, any competent auto shop should be able to install it for you. Also wear protective gloves to protect your hands and safety goggles for your eyes. Depending on whether you are installing this on a new engine or a running vehicle some of the steps involved in the installation may not be required. Please read all instructions below before starting the installation.

What's included?

Now is a good time to check the Cool-View parts list to see that you have all the Cool-View parts.

- » 1 each, sight glass assembly with end plates, and index pointer thermostat.
- » 2 each, stand off.
- » 2 each, Bolt and washer.

Tools

The type of tools required will vary depending on your engine. You may need a screw driver or nut driver for any hose clamps, a wrench for the bolts on the thermostat housing, a scraper and flat file to clean the mating surfaces of your manifold and the thermostat housing. You may also need a bottom tap or thread chaser $\frac{3}{8}$ NC. You will need a pan large enough to catch any coolant you drain from the engine and a funnel to add coolant back into the cooling system. If you plan to reuse your coolant, you may want to use a paint strainer to pour the coolant through when putting it back into the cooling system.

Supplies

- » New coolant, unless you plan to reuse your old coolant.
- » Gasket and gasket sealer.
- » Anti-seize compound.
- » Shop towels.
- » Safety glasses.
- » Protective gloves.

Disassembly

Note: before starting check to make sure you have room above your engine for the added height of the Cool-View unit. Make sure there are no other brackets, hoses, lines, wires, carburetor bowls, or other obstacles that will interfere with the installation of the unit.

1. Make sure the engine is cool.
2. Drain the engine coolant from engine into an appropriate pan. Inspect the drained coolant, and determine whether or not to replace it. If needed, flush the rest of the coolant system.
3. Remove the upper radiator hose clamp and hose at the thermostat housing. You will want to secure the

hose out of the way or remove it completely.

4. Remove the two bolts that mount the thermostat housing to the manifold.
5. Remove the thermostat housing.
6. Remove the thermostat.
7. Clean the manifold mounting surface with a flat scraper and finish with a flat file or flat sanding block using 220 grit or finer. This surface needs to be completely flat and smooth so the new gasket will seal correctly.
8. Check the condition of the threads in the two mounting holes of the manifold. Often over time water will get into the threads and corrode them and the bolts will not tighten correctly. Make sure that the mounting bolts can be screwed in all the way by hand. If they cannot be screwed in all the way by hand, a tap or thread chaser should be used to clean up the threaded holes. After cleaning the threads blow out or vacuum the threaded holes. Make sure to wear eye protection. Wipe the mounting surface clean.
9. If using a used thermostat housing, clean the mounting surface of it in the same way that you cleaned up the manifold mounting surface. If the thermostat housing is the type with an o-ring you may not have to do much, if any cleaning, filing or sanding if any. But you may want to replace the o-ring. Also check the hose end where the hose slides on and clean any corrosion which could cause the hose to leak.

Reassembly

You should now be ready to install your new Cool-View unit.

Note: Cool-View units use Chevy thermostat housings. A Pontiac thermostat housing will not fit. Before starting make sure you have 2 correct length bolts to go all the way through the thermostat housing and into the Cool-View unit lower plate. The bolts should go all the way through the plate but not stick out the bottom. If the bolts go through to far they could push the plate off the manifold. Also Depending on the thermostat housing you are using, the bolts may not be the same length. If you purchased a Cool-View unit with a thermostat, it is locked in place with silicon rubber to prevent movement, and keep the thermostat index pointer correctly aligned.

1. The Cool-View unit has 2 different ends. One mounts to the manifold and the other receives the thermostat and thermostat housing. Install a new gasket (not Provided in kit) on the manifold and use sealer if gasket requires it. Set the Cool-View unit on the

manifold with the manifold end plate down. Make sure the index lines on the side of the glass tube are facing the correct direction (the basic unit has no index lines on the glass tube). Install the two 3/8" bolts with washers provided and tighten to your engines factory specs. Note: If you have the basic unit you can install a restrictor plate now.

2. Now take the thermostat housing and set it onto the thermostat end plate. The type of thermostat housing you have chosen will determine the way it seals to the top of the thermostat end plate. Refer to the installation instruction for your thermostat housing for proper mounting and sealing. Note: The top of the Cool-View thermostat end plate is machined to be the same as a standard Chevy manifold so that any factory or after-market Chevy thermostat housing will work.
3. Carefully slide the 2 standoff spacers supplied in the kit between the 2 end plates and install the two 3/8" bolts (not included in kit). Tighten these 2 bolts to 20ft. LBS. Check to make sure the spacers do not turn.
4. Reinstall the upper radiator hose.
5. Make sure the place where you drained the coolant from the engine is closed back up.
6. Be sure to wipe up any coolant that may be on the engine. If you do not do this it will be very hard to tell if you have a leak after filling the cooling system back up and starting the engine.
7. Add coolant back into the system. Check to see if you have any leaks as you add the coolant. When you are done filling the cooling system, wipe up any coolant that may have spilled.
8. Start up the engine and check for leaks.
9. Let the engine run and warm up. Normally it takes 5-15 minutes before the thermostat starts to open. The efficiency of your cooling system will determine how far open your thermostat will run under normal operating conditions. Some thermostats will just open and others will run more than half way open after the engine has reached normal operating temperature.