

Magnum Thermostat Install

Applies To 3.9/5.2/5.9 Magnum V8

Here are my instructions. I am using the FSM as a reference so you can follow along and see how I do/explain things differently.

Removal:

1. I dont bother disconnecting the battery because I am lazy and dont feel like having to rest my clock. :) Just be careful.
2. The book says to drain the cooling system. I just wedge an empty coolant jug between the battery tray and washer fluid reservoir with a funnel on top and then disconnect the upper hose at the radiator and let the coolant drain into the funnel. I also tilt the hose down to get most of the coolant out lessening the amount that spills out at the intake. The reason I do it this way is if you use the drain cock of the radiator there is still quite a bit of coolant in the upper hose and you need to put a jug there anyway to catch it or you make a mess. So why not do that in the first place? If you do use the drain cock be careful with it they aren't hard to break.
3. Remove the accessory belt. I just take my 18" breaker bar and a 15mm socket, pivot the tensioner pulley and take the belt off the tensioner and the alternator pulleys. I just leave the belt in that position because it makes it easier to get it back on after. Now look at the A/C lines that run over the top of the alternator and you will see a small bracket holding them in place which bolts to the intake. First unbolt the bolt on the intake holding the bracket in place and then undo the small little bolt in between the a/c lines. This will allow you to open up the bracket and slid it off the a/c lines. The bolt you removed from the intake should of gone thru a ground wire and another support bracket. Just push the ground wire out of the way. At the back of the support bracket there will be another bolt. Just loosen this up enough so you can rotate the support bracket out of the way. Now its time to move the alternator. There should be two bolts holding it in place, one on the lower left and one on the upper right. Totally remove the one on the upper right and then just loosen the one on the lower left. This will allow you to rotate the alternator up out of the way and fully expose the thermostat gooseneck.
4. Unclip the throttle cables from the upper radiator hose and push them out of the way. Now remove the upper hose.
5. I dont know what the FSM is talking about here. But I guess if there are wires in the way, move them... DUH.
6. Remove the two mounting bolts from the gooseneck and remove the gasket and thermostat.

Installation:

1. Clean the intake manifold and the gooseneck.
2. Install the thermostat in the intake manifold.
3. If you buy a NAPA gasket take off the sticky backing and stick the gasket to the gooseneck. If you choose to use RTV then apply it to the manifold

now. I have used both with good results but the paper gasket is the easiest to use.

4. Install the gooseneck on the manifold with the word FRONT facing the front of the truck.

5. Tighten the bolts on the gooseneck. I generally hand tighten with a socket and extension first and then torque them to spec. My book says 200in/lbs.

6. Reinstall the upper radiator hose and replace the throttle cable bracket on the hose.

7. Tilt the alternator back into position and tighten the two mounting bolts to spec. 30ft/lbs in my book. Now rotate the support bracket back into position and reinstall the a/c line bracket. Install the bolt that goes thru the a/c line bracket, ground wire and support bracket. Retighten the bolt at the rear of the support bracket now. 40ft/lbs for both of these bolts.

8. Reinstall the accessory belt on the pulleys using the breaker bar and socket again. Refer to the sticker on the radiator support for the correct routing.

9. Reclamp the upper radiator hose to the radiator and refill the system.

Courtesy of Jay Eberhard via the [DiRT](#) list