

## UNOFFICIAL M1 INSTALLATION GUIDE – Courtesy write up by David Salazar (adakotartguy)

This is informational and to be used at your discretion. It worked for me 4 times so far so it should in theory work for you.

Feel free to PM me what I might have missed, I want to try and keep it all in one post. If you think its good maybe it can become a sticky. Who knows, did this for Nasty99RT really.

Things you need on hand  
Torque Wrench Inch an lbs  
Spray gasket sealer  
RTV  
Install kit or spacers at a min  
New Thermostat (180 if it was me)  
Oil and Filter  
Coolant  
New injector o-rings  
Intake Manifold Gasket Set(I hope you have this or else that would be pretty dumb)

First

### DISCONNECT THE BATTERY

Drain your coolant or at least a good amount  
Remove Airhat or Airbox  
Disconnect all connections from the A/C, Alt, Fuel injectors, TB  
Remove TB (4 Screws)  
Remove 5 bolts(14mm) holding on the accessory Bracket, pull assembly forward to expose entire manifold  
Remove heater hose  
Remove Radiator Hose  
Remove Temp Sensor connection  
Relieve fuel pressure by removing schrader valve cap and putting a rag around it and pressing the small pin in the middle, a small amount of fuel will come out.  
Remove 4 bolts holding on the fuel rails  
Pull fuel rails slowly from each side straight up until they come all the way out  
pull them to the driver side holding it with some sort of strap or something  
Remove bypass hose or simply the clamp as it may be easier to pull it when you take the manifold out  
Remove the 12 bolts from the manifold  
Pry up the manifold and pull that POS out

Plug ports on the heads with paper towels or rags as to not let anything in there.  
Put a clean towel in the lifter valley so that nothing gets in.  
Clean the manifold sides of the heads with a razor, careful not to gouge anything.

Should be ready for the reinstall

Transfer over all your sensors and feeds. This is a good time to get a new Thermostat and water neck.  
Put some plumbers tape on the coolant bypass hose in the direction that it screws in so that it won't strip out.



Shop vac any residue that might be left over

Now get this or similar Gasket Sealent



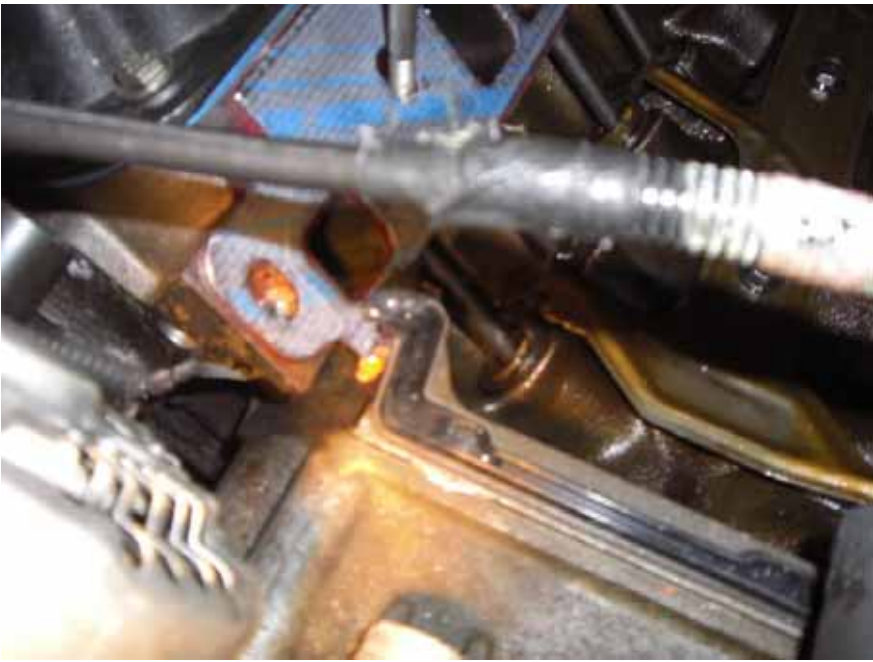
Now spray some gasket sealant on the heads and on the backside of the gaskets, let it sit for about 5 min.

Put the gaskets on the heads and put about 2 bolts on each side to make sure they are on there correctly. Press down on the gasket lightly so that the sealant is taken to the head and the gasket. This prevents them from moving when you put the manifold in.



Put some gasket maker or Copper RTV on all four corners







You can put the front and rear gaskets either before or after. I before because the RTV fills in the spaces when the manifold goes in.

Now you are ready to put the manifold in.

At this point you should put the bypass hose on the manifold before it goes on to make it easier to mate up with the water pump.

Now put the manifold in, rear first because I has to fit under the distributor.

Connect the other end of the bypass hose.



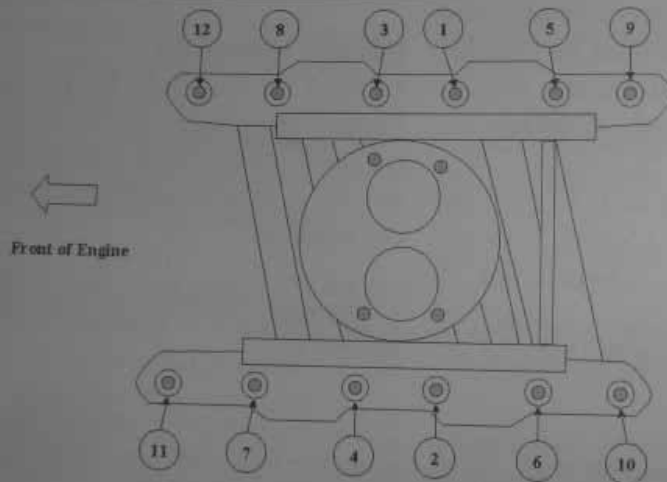
Put in all 12 bolts but only until they are hand tight.

**THIS IS IMPORTANT**

Follow this sequence to tighten the bolts down.

## INTAKE MANIFOLD TORQUE SEQUENCE

- Step #1, bolts #1-#4: Torque to 72 in-lbs. in increments of 12 in-lbs.  
 Step #2, bolts #5-#12: Torque to 72 in-lbs.  
 Step #3, check all bolts: Torqued to 72 in-lbs.  
 Step #4, all bolts in sequence: Torque to 12 ft-lbs.  
 Step #5, check all bolts: Torqued to 12 ft-lbs.



Magnum Intake Manifold Bolt Tightening Sequence

Next you want to install the fuel rails

Coat the O-rings with a light oil, put on new ones now.

Put in one side at a time but do not force them, you will know when they are in as they will pop lightly. Now bolt them in, ensure you have the spacers

Now plug in your Temp sensors, injector harness, IAT sensor

Connect the Heater hose

Install TB and connect your sensors and cables

Move accessory bracket back to position and install 5 bolts

Install Radiator Hose and idler wheel





Rerun your belt

Change your oil

Add coolant





Install Air Hat or intake or whatever

Connect battery

Crank it up and check for leaks

You will have to burp the cooling system as well or your vehicle will overheat