

MAGNUSON

SUPERCHARGERS

MAGNUM DI TVS2650 Torque Specifications



WARNING!



Read the following statements before proceeding with any installation.

- All units have been 100% inspected and performance tested as-shipped. To maximize performance, this supercharger unit has extremely tight tolerances from the factory. Any modifications to these units, including disassembly, or mounting on non-standard engines can adversely impact these clearances and result in part failure. Magnuson Products, LLC. cannot be held responsible for part failure due to improper installation.
- **The supercharger bypass must be connected at all times.** Operating the unit without a bypass can result in supercharger failure.

1. **An LT4 drive system is required for this supercharger installation on an LT1 engine.**



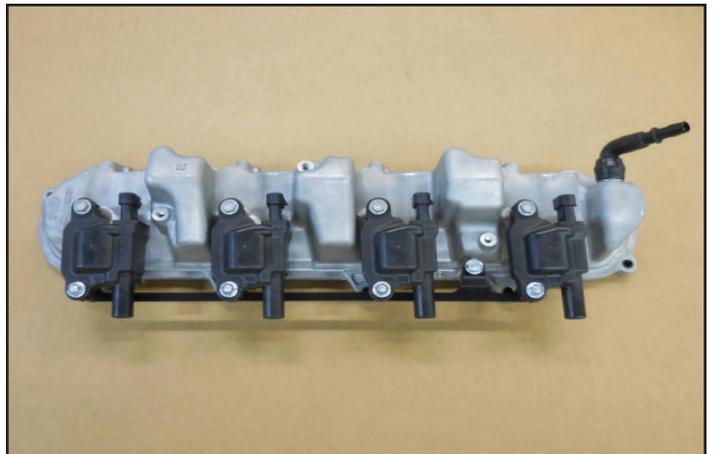
2. **For Hot Rod kit only.** You will have to provide a fuel supply hose that is longer than stock to supply the high pressure pump with fuel. This hose has a 3/8" female SAE quick connect fuel fitting.



3. You will need to modify your valve covers for supercharger clearance or purchase valve covers that have enough clearance.



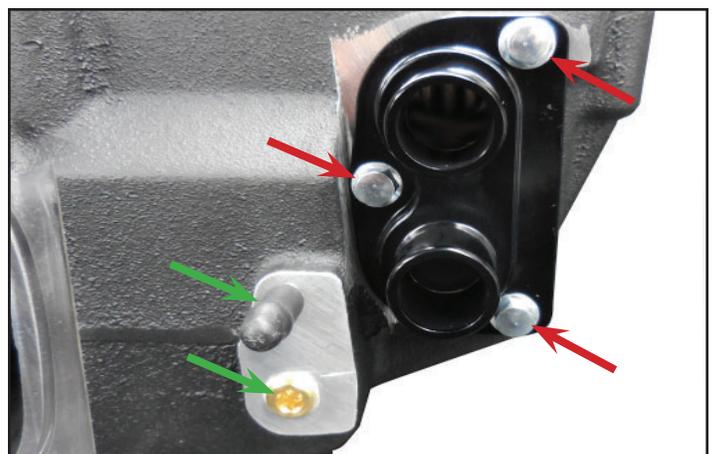
4. You will need to relocate your coils. **For the Hot Rod kit the part number of our coil relocation kit is 31-26-62-100.**



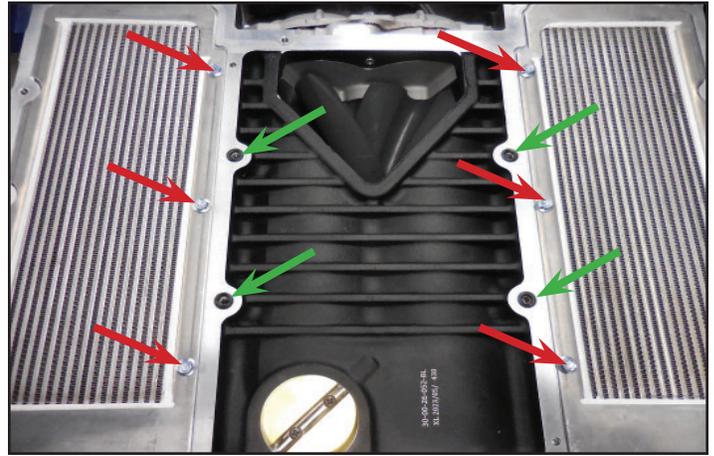
5. Remove the 19 M6x20mm bolts around the perimeter of the lid and remove the lid. **Also remove the four screws holding the Magnuson Supercharger emblems to gain access to the 4 bolt locations (red arrows) that will be fitted with M6x30mm bolts later.**



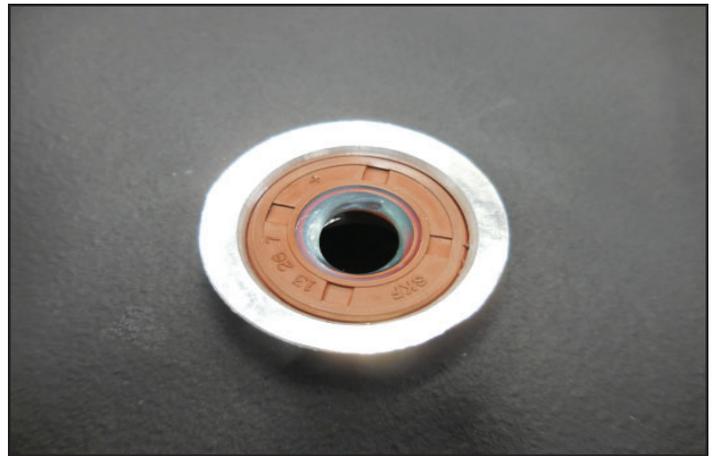
6. Remove the three M6x20mm flange head bolts (red arrows) holding the coolant manifold assembly at the front of the supercharger and pull the manifold out. Repeat this process on the other coolant manifold assembly. Note: Two boost reference locations are given at the green arrow locations.



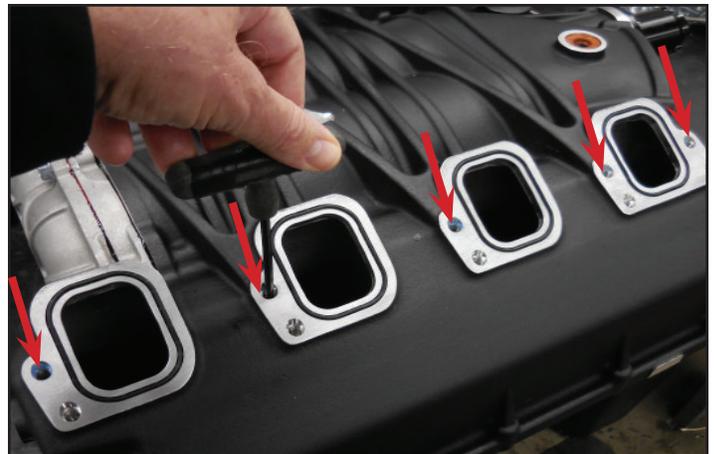
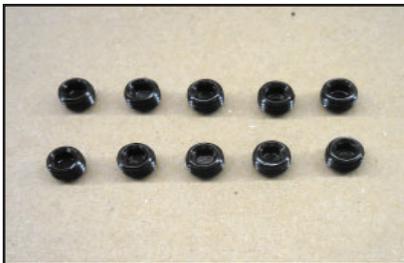
7. Remove the six M5x35mm flange head bolts (red arrows) holding the charge air coolers inside the supercharger housing and pull the charge air coolers out. Ensure that the four O-rings are located at the green arrow locations.



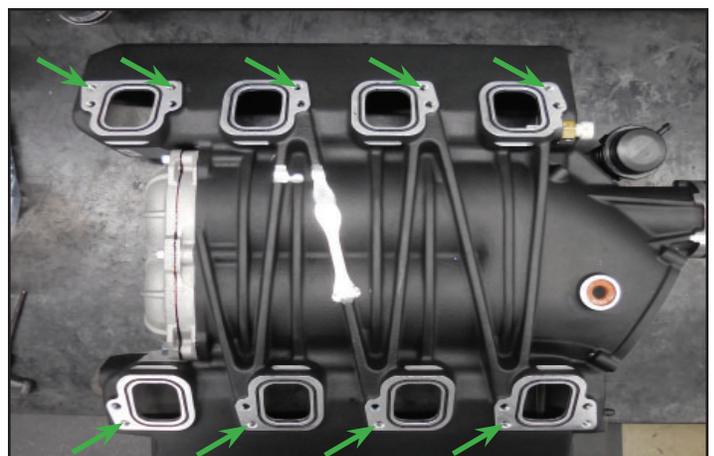
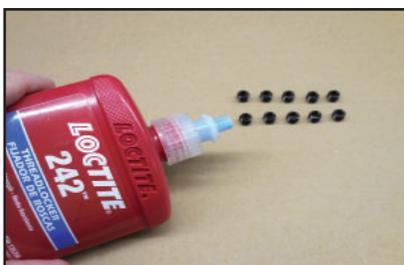
8. **For LT4 Only:** Apply some supplied Super Lube to the PCV seal at the bottom of the supercharger.



9. **For LT1 Only:** Remove the 10 set screws shown below from near the outlet ports. Five of these locations are shown with arrows in the photo to the right. These will be installed in new locations in the next step.



10. **For LT1 Only:** Apply **Loctite 242** to the 10 set screws from the last step as shown below and install them in the outer hole locations shown with arrows in the photo to the right.



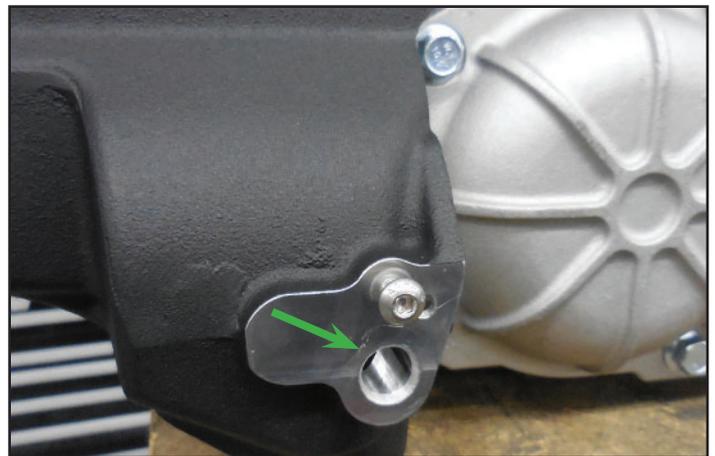
11. **For LT1 Only:** Remove the rubber PCV seal from the bottom of the housing. This seal will not be reused and this location will be plugged in the next step.



12. **For LT1 Only:** Apply a light coat of the provided Super Lube to the O-ring on the supplied threaded plug as shown below. Screw the plug into the area where the PCV seal was removed.



13. If you have an LT1, install the provided MAP sensor at the arrow location and secure with the supplied button head bolt shown here. **Lube the O-ring with the supplied Super Lube.** If you have an LT4 you can install your OEM TMAP in this location.



14. Clean the mating surfaces on the heads and supercharger housing prior to installation. Get some assistance when installing the supercharger on the engine. **Ensure that gaskets are installed at all 8 ports of the supercharger as shown below.**



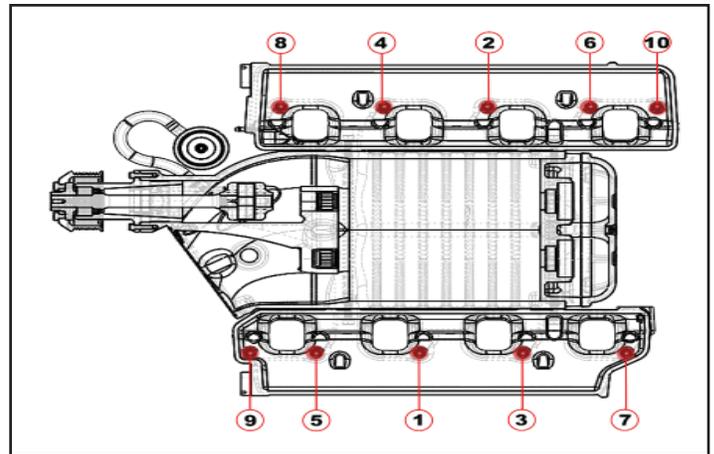
15. The IAT sensor is shown at the arrow location.
(GM #12614717).



16. Install the provided seal washers on 10 supplied M6x35mm flange bolts and **apply Loctite 242** to these bolts.



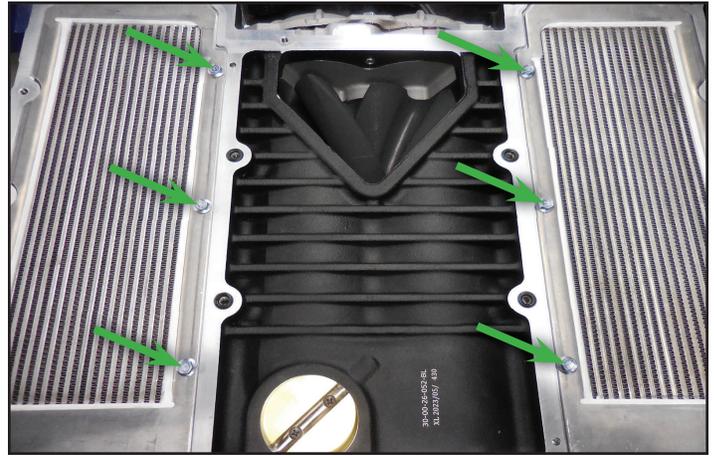
17. Install the supercharger to the heads using the 10 bolts from the last step and **torque them to 108 in-lbs. following the order given here and in a larger image at the back of this manual.** Gradually work your way up to 108 in-lbs. and **ensure that supercharger pulley still spins freely after full torque is applied.**



18. **Apply Loctite 242** to the six M5x35mm flange head bolts that were removed from the charge air coolers and six M6x20mm flange head bolts that were removed from the coolant manifolds.



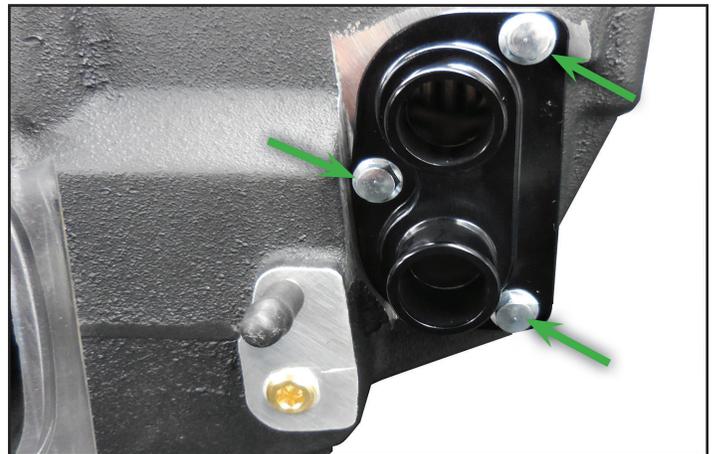
19. Reinstall the charge air coolers with the 6 M5x35mm bolts that have **Loctite 242** applied and **torque them to 70 in-lbs.**



20. Gather the coolant manifolds shown that were removed earlier. **Relube all the O-rings with the provided Super Lube prior to reinstalling the coolant manifolds. Carefully rock the tubes in place to prevent the O-rings from being damaged.**

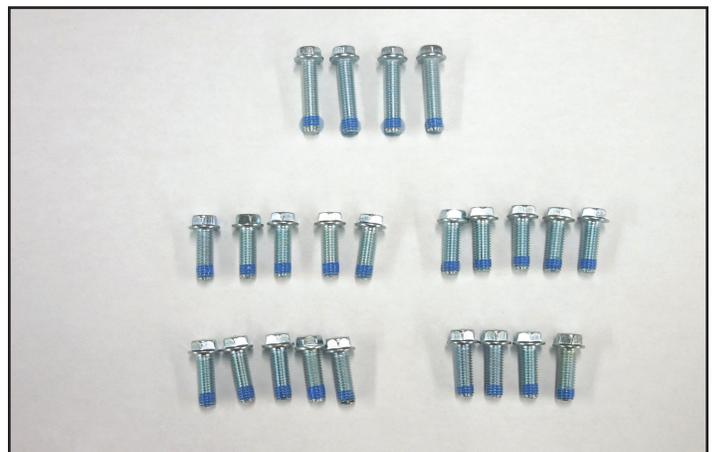


21. Reinstall the coolant manifolds with the 6 M6x20mm flange bolts that have **Loctite 242** applied and **torque them to 108 in-lbs.**

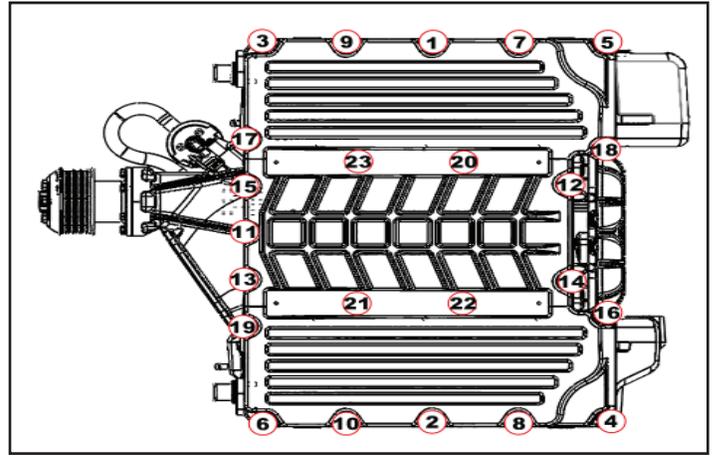


*****WARNING: You must perform a vacuum leak down test on your intercooler system prior to adding any coolant. This can be accomplished with the same equipment that is used for engine cooling systems.*****

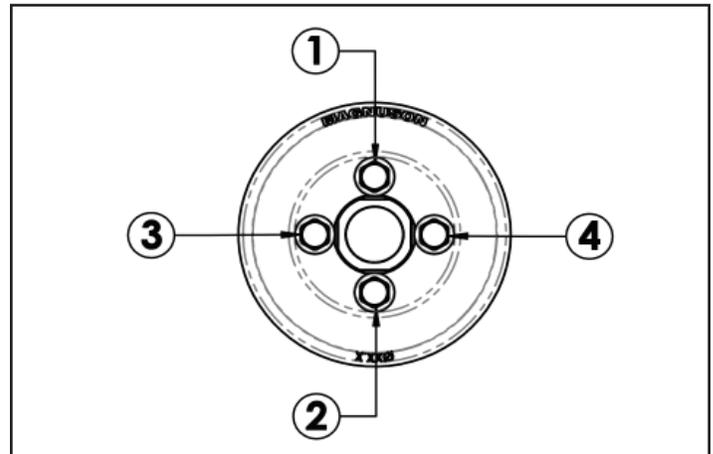
22. **Apply Loctite 242** to the 19 M6x20mm bolts that were removed from the lid and 4 more M6x30mm bolts that are provided and re-install the lid.



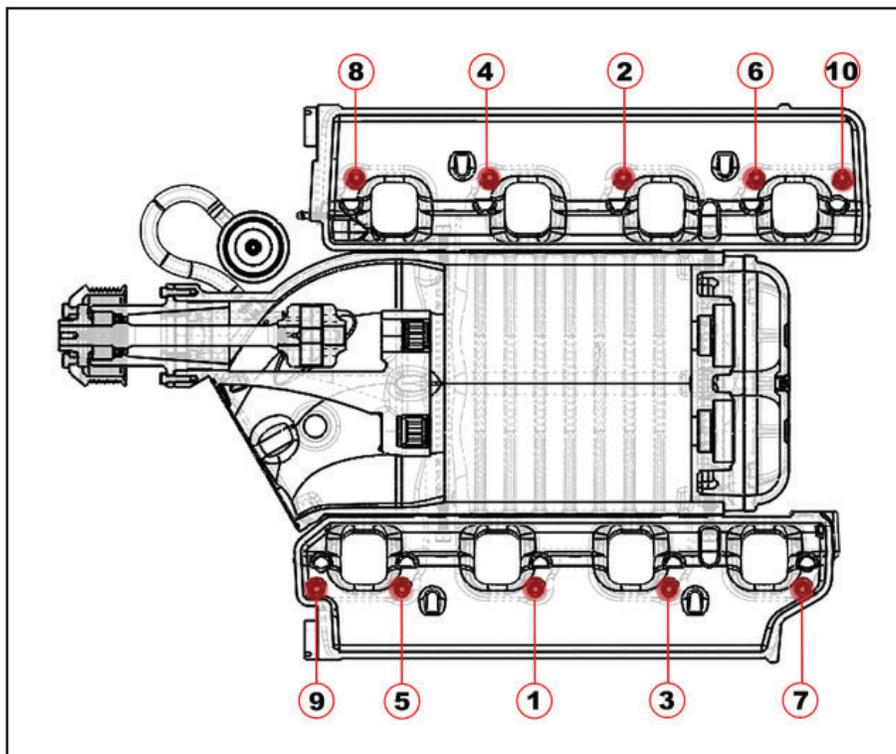
23. Torque the 23 bolts from the last step to **108 in-lbs.** following the order for the lid shown here and in a larger image at the back of this manual. The longer M6x30mm bolts go in the 20-23 numbered locations in the center of the lid.



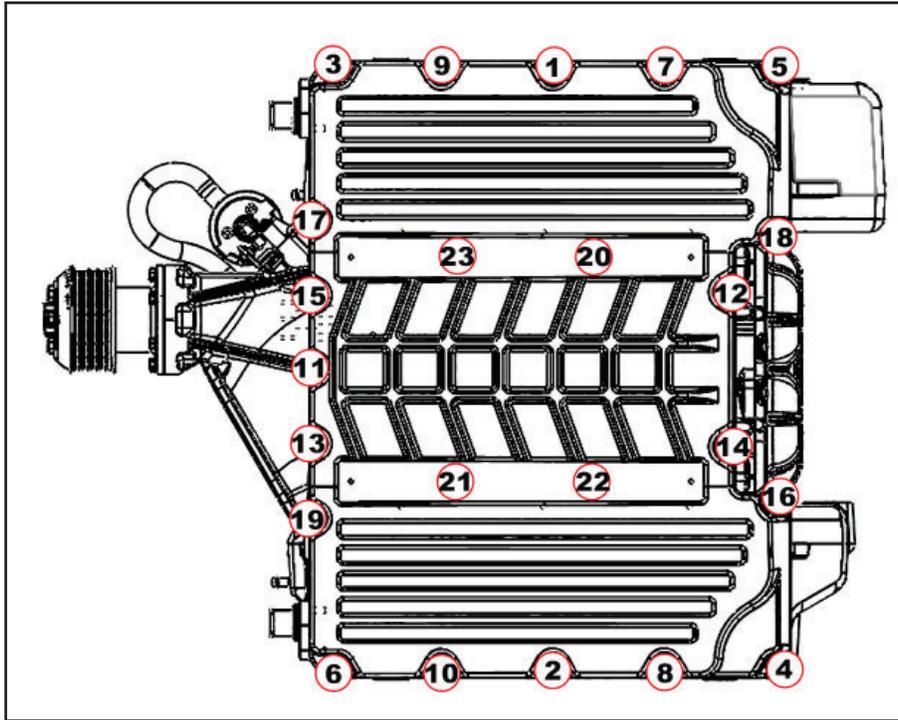
24. Install the pulley with the 4 provided M6x16mm flange bolts following the torque sequence shown to **108 in-lbs.**



Torque Specifications



1. Supercharger to Cylinder Heads: 108 in-lbs.



2. Lid to Supercharger Housing: 108 in-lbs



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