

## 2011-2016 LML Upper Crossover Intercooler Pipe

Covers installation of PN: WCF100328

(Before any installation of parts please verify you have received all parts on your packing list)



- 1. Disconnect Batteries (Negative terminals on both).
- 2. Remove the airbox lid and tube using a Philips and flat head screwdriver.





3. Remove the resonator from the turbo inlet by removing two 10mm bolts on resonator.



4. Remove the MAP sensor connector, intake air valve connector, grid heater connectors and battery cable from grid heater using a 10 mm socket.





5. Remove the passenger side intercooler pipe connection at the intake air valve by rotating the locking ring at the intake air valve counterclockwise slightly while pulling the pipe towards the front of the truck with a flat head screwdriver for assistance. Note: The intercooler pipe will rotate out of the way. No need to remove lower connection for the installation of this part.



6. Loosen the four 10mm bolts on the intake air valve and remove from the truck.

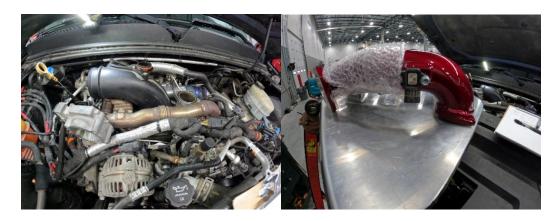


7. Remove two 13mm bolts from bracket on passenger side near engine oil dipstick. Be sure to save one of these as it will be reused on the installation process. Next, remove the two 13mm bolts from the flange at the engine side of the crossover pipe.





8. Remove factory crossover pipe and install MAP sensor in new WCFab cross over pipe.



9. Install high temperature o-ring into the groove on your new crossover pipe at the grid heater flange. The o-ring should stay into the crossover pipe during install. If you are unable to install it without the o-ring moving, use some Dr. Tranny's Assembly Goo or similar product to help the o-ring stay in the groove during the installation process.



10. Set crossover pipe into place and start one bolt into the engine side (DO NOT TIGHTEN

THIS WILL ONLY BE USED TO AID IN THE ALIGNMENT OF THE PIPE TO GRID HEATER).





**11.** Replace the intake air valve gasket and start all four bolts (BY HAND ONLY).

## Do not fully tighten at this time.



- 12. Start the other bolt on the engine side flange (BY HAND ONLY).
- 13. Tighten the two engine side flange bolts to <u>18 LB FT</u>.
- 14. Tighten the four intake air valve bolts to <u>89 LB IN</u>.
- 15. Reinstall intercooler pipe back onto intake air valve. You should hear an audible "click"

when it is locked into place and pipe will no longer be able to slide off the flange.



- 16. Reinstall resonator plate onto turbo inlet tube with two supplied socket head cap bolts.

17. Secure wire harness to fuel line near vacuum port. Locate zip tie near existing one and

clip extra length to tidy up the area. Note: Zip tie does not need to be pulled tight, it is

only needed to secure the engine harness away from EGR components.



18. Install one bolt previously removed from the dipstick tube bracket and supplied locking

nut to attach the engine oil dipstick tube to the bracket. Tighten to 18 LB FT.



19. Attach connectors for intake air valve, grid heater and battery cable for grid heater.



20. Install air box lid and MAF connectors as well as intercooler temp sensor connector.



21. Reinstall intake tube and air box lid.



- 22. Reconnect batteries.
- 23. Start engine and allow to reach operating temperature, check for leaks, and verify all fluids are full.

(Boost testing is always recommended when servicing to verify a leak free system)



Any Questions, Comments, or Feedback? Reach us by Email- <u>Sales@wcfab.com</u> Or the shop phone- 630-277-8239 Thank you for purchasing from Wehrli Custom Fabrication!