

## 2017-2019 L5P Duramax Stage 1 High Flow Intake Bundle Kit

Covers installation of PN: WCF100718



## Part 1: Driver Side Intercooler Pipe

- 1. First, locate the packing list included with the kit and double check you have all items on the list.
- 2. Leave bubble wrap on piping until install is complete to help protect finish from nicks and scratches.
- 3. Disconnect the negative battery cables from both batteries.



4. Remove the driver side wheel/tire and inner fender liner.



5. Remove clamp at turbo outlet.



6. Remove clamp at intercooler on driver side bottom.



7. Remove pipe from truck using whatever means is easiest for you. We typically recommend taking the pipe out and down through the wheel well area.



8. Clean off turbo and intercooler connection points with brake cleaner if needed.



9. Install straight boot at lower intercooler pipe connection



10. Install pipe from top side of engine compartment paying attention to match orientation of original pipe design.



11. Install reducer boot at turbo



12. Seat into bottom boot first to ensure a solid connection at that location then into turbo side.



- 13. Check for proper engagement of pipe at both boots and tighten all clamps making sure that the clamps are placed just behind the pipe bead roll and square to prevent boost leaks.
- 14. Remove bubble wrap from piping and clean any finger prints with damp micro fiber cloth.
- 15. Reinstall Fender Liner, and driver's side wheel/tire.
- 16. Reconnect battery cables.
- 17. Start truck and check for any leaks after some idle time. Boost testing is recommended after installation and service of this part.

## Part 2: Passenger Side Intercooler Pipe

- 18. First, locate the packing list included with the kit and double check you have all items on the list.
- 19. Leave bubble wrap on piping until install is complete to help protect finish from nicks and scratches.
- 20. Disconnect the negative battery cables from both batteries.



21. Remove the passenger side wheel/tire and inner fender liner.



22. Unplug MAF Sensor and disconnect intake pipe



23. Unbolt Airbox



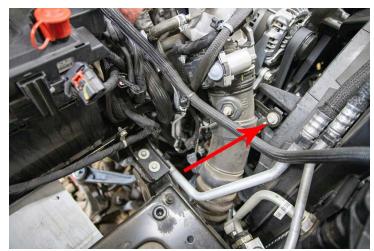
24. Remove Wire Harness Clip and tuck safely out of the way.



25. Separate Lid from Airbox. Grab Lower Airbox and pull up firmly to unseat the lower airbox from the inner fender.



26. Unplug Charge Air Temp Sensor on Intercooler Pipe.



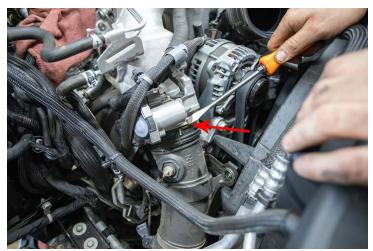
27. Remove Bracket Bolts from the intercooler pipe.



28. Access and locate clip ring at lower intercooler pipe connection through wheel well.



29. Using a pick or flat blade screwdriver, remove clip at lower intercooler pipe connection and pop pipe off of intercooler.



30. Turn lock ring clockwise to remove top connection to engine and slide pipe off of intake flange.



31. Remove pipe by passing it out carefully through passenger wheel well.



32. Remove clip ring from lower OEM Intercooler pipe connection using a pick or flat blade screwdriver.



**33.** Install new clip ring to the new intercooler pipe assembly. **NOTE: Pay close attention to** orientation of clip ring on the new pipe as it will only properly engage the pipe and intercooler assembly one way. One groove in the pipe is smaller than the other two. Reference image above to make sure your ring position matches the mounting shown.



34. Swap charge air temp sensor from OEM intercooler pipe to your new 3.5" intercooler pipe using a pry tool to remove wire harness clip and a 14 mm wrench. Liquid Teflon thread sealant is recommended on the sensor during re-installation for a leak free seal.



35. Install 2 o-rings, dry, in lower grooves as shown. Once o-rings are fully seated, apply transmission assembly lube (such as Trans-Jel or Dr. Tranny's Assemblee Goo) to inside of pipe connection, o-rings, and intercooler outlet to help prevent damage during install. **Avoid using petroleum or other synthetic lubricants which may damage o-ring seals.** 



36. Remove OEM Intercooler support bracket from engine as it is no longer required.



37. Install top boot and clamps onto the engine intake side and leave loose.



38. Install new intercooler pipe upwards carefully through passenger side wheel opening paying attention not to damage charge air temp sensor.



39. Slide pipe into upper boot and slowly put lower end on the intercooler. Make sure to stay square with the intercooler as much as possible.



40. Move to lower assembly and fully seat the clip ring so that it is engaged / down all the way. Adjust pipe at upper connection as necessary once lower clip is seated. Lower airbox brackets have been removed for illustration purposes. It is not necessary for installation but can provide additional workspace if needed for accessing the clip assembly. Applying a thin layer of assembly lube on the pipe and intercooler connection will help the pipe and O-ring fully seat.



41. Tighten upper clamps.



- 42. Remove bubble wrap from piping and clean any fingerprints with damp microfiber cloth.
- 43. Reconnect charge air temp sensor and reinstall air box assembly by reversing removal steps outlined above.
- 44. Reinstall Fender Liner and passenger wheel/tire.
- 45. Reconnect battery cables.



46. Start truck and check for any leaks after some idle time. Boost testing is recommended after installation and service of this part. Boost testing (Boost Tester Kit Sold Separatley) is always recommended whenever intercooler pipes have been serviced or boots and clamps have been moved. While the factory turbo intake horn is removed, this is the time to test for boost leaks. This can be done by spraying a mild soap/water solution at all connection points with pressure in the system.

Any Questions, Comments, or Feedback?

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