



### **2006-2007 LBZ Duramax Y-Bridge Kit**

Covers installation of PN: WCF100163

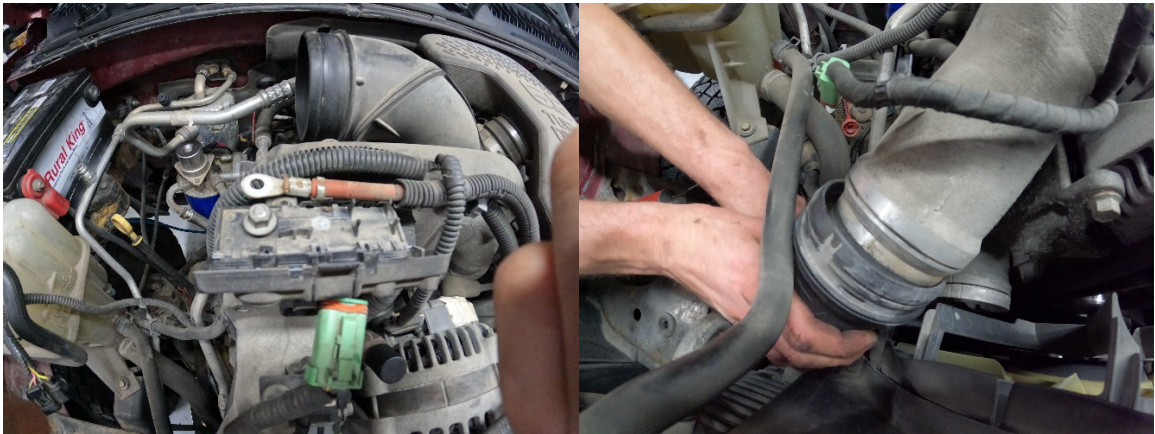


1. Disconnect both negative battery connections. Remove RF fender liner and drain coolant.

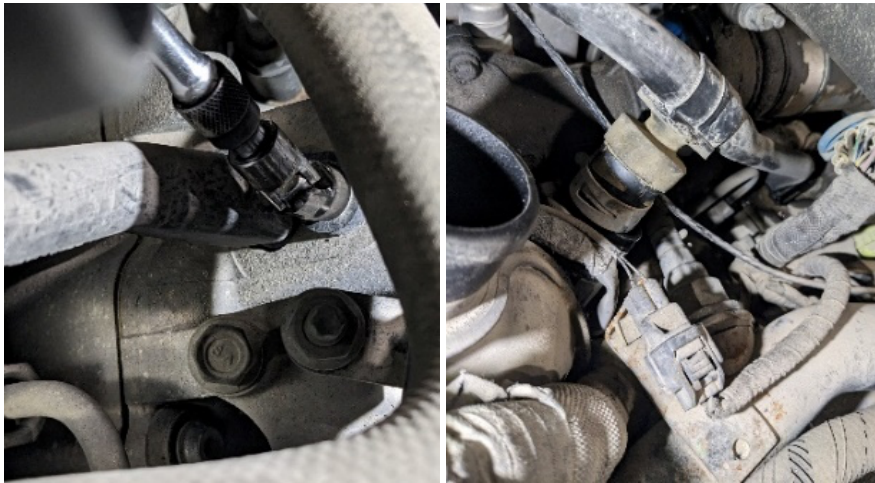


2. Remove air box and intake tube.

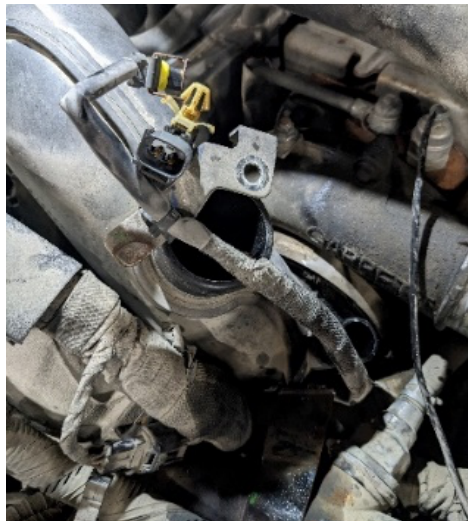
3. Disconnect crossover pipe wire harness at grid heater and passenger side intercooler pipe.



4. Remove intake resonator, driver side intercooler pipe and PCV hose.



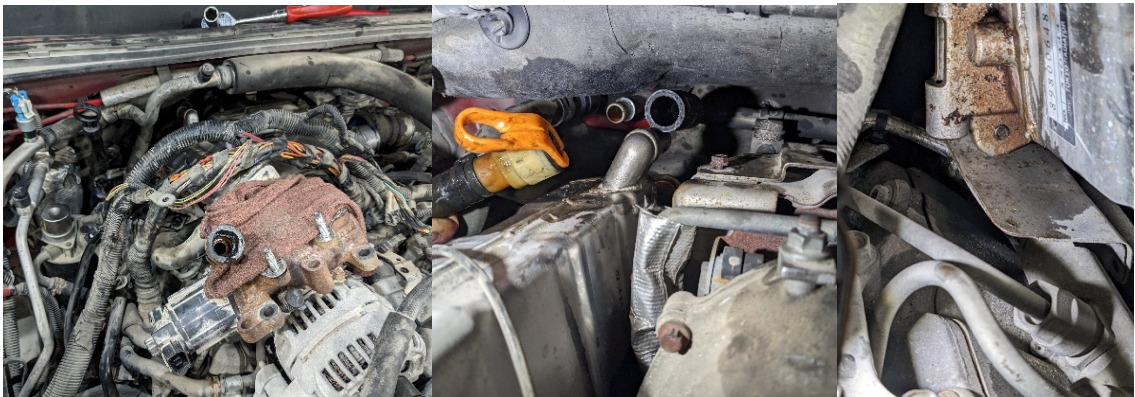
5. Remove turbo intake horn. Disconnect turbo solenoid wire harness & y-bridge temp sensor. Position out of the way.



6. Remove crossover pipe as a full assembly and disconnect alternator wiring. Position behind crossover pipe before removal. There are two 12mm fasteners on front bracket and six 12mm fasteners holding crossover pipe.



7. Remove EGR valve electrical connector, heater core hose to EGR, rear hose to EGR and 12mm fasteners at up pipe connection to EGR cooler assembly. Remove four 14mm bolts holding EGR cooler to engine. Lightly push EGR back while lifting front near EGR valve to get it over passenger side fuel rail heat shield. Lastly, remove plastic wire guide originally attached to crossover pipe (this will not be reused).



8. Remove front section of factory y-bridge and disconnect fuel pressure regulator connector. Remove fuel line brackets and E8 stud on passenger side intake runner.



9. Remove factory y-bridge using following steps.

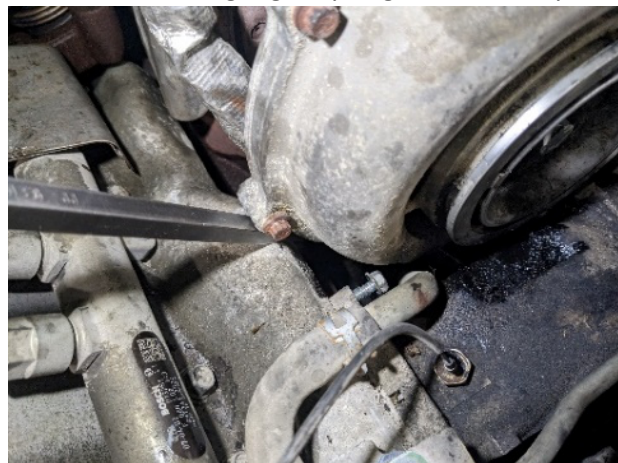
- Remove glow plug module and glow plug module heat shield.
- Remove turbo heat shield bolts (Qty 3 10mm), then slide back toward firewall to gain access to turbo mounting bolts.
- Remove lower down pipe bracket bolt and v-band clamp from down pipe to exhaust pipe connection.



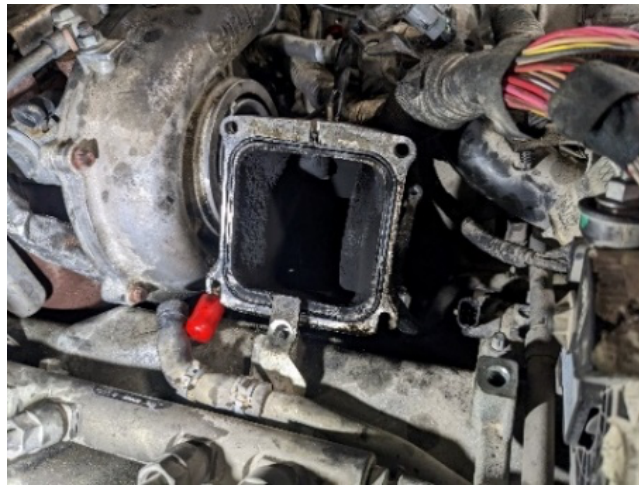
- Remove three 17mm mounting bolts at base of turbocharger.



- Use a pry bar to move turbocharger gently to gain access to y-bridge bolts.



- Disconnect turbo coolant feed hose and return fuel lines. Cover/plug all openings.
- Remove Y-bridge bolts (Qty. 8 10mm).
- Remove factory y-bridge from passenger side of truck.



10. Clean up surfaces on intake runners, grid heater, throttle valve and EGR connections.
11. Install supplied O-rings in y-bridge and make sure seal is uniformly seated. **NOTE: If you are having difficulty getting O-ring fully seated, a trim tool can be helpful with this step.** Install stud into bridge once seal is seated. After O-rings are installed, use a thin layer of assembly lube or similar to aid in installation.



12. Install y-bridge starting with bottom four fasteners. Torque all to 89 inch-pounds (IN LB) using a cross pattern tightening evenly using 2-3 steps. After lower four bolts are properly tightened, install and tighten top four bolts to 89 IN LB.
13. Re-torque turbo mounting bolts to 80 foot-pounds (FT LB).
14. Re-install down pipe bracket bolt and v-band clamp previously removed.
15. Install turbo heat shield and glow plug module.
16. Install front section of new y-bridge.
  - Inspect coolant and fuel hoses/lines and clamps for damage or wear before install and replace as needed.
  - Slide front section of new y-bridge into place and verify bottom tab is fully seated in slot and tighten nut to 18 FT LB. Be sure not to damage O-ring during installation.
  - Install fuel return lines.
  - Adjust metal fuel lines as needed to avoid contact with new y-bridge.

- Reconnect fuel pressure regulator electrical connector.



17. Install EGR valve and cooler, up pipe fasteners and coolant hoses.

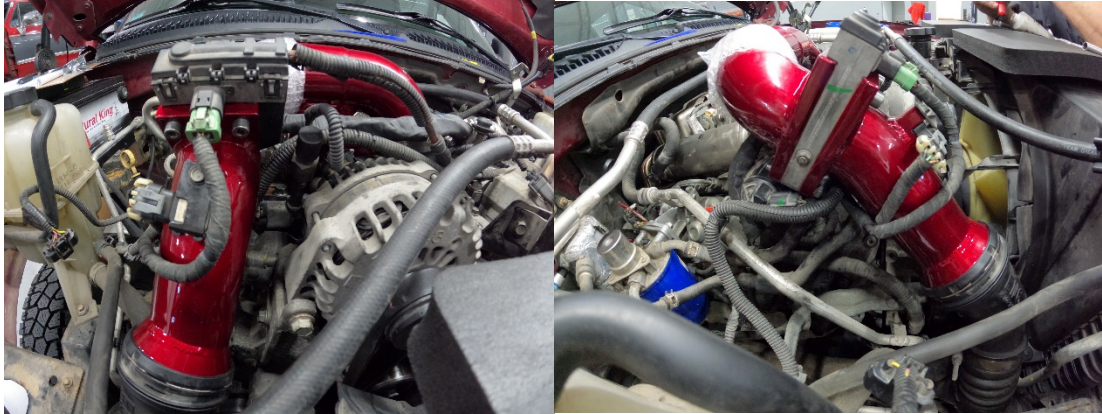
18. Retape or loom electrical harness where plastic guide was removed.



19. Install new crossover pipe with grid heater and throttle valve using supplied O-rings (original gasket will not be used in locations with new O-rings). If extra length is needed for grid heater wiring pull back loom and separate that section. Re-loom or tape electrical harness as needed.



20. Install crossover assembly using factory hardware and torque to 18 FT LB.



21. Connect passenger and driver side intercooler pipes. Boost test to check for leaks after install or during service on any of installed parts.
22. Install turbo intake horn, PCV and reconnect turbo and y-bridge connectors.
23. Refill coolant.
24. Install air box and elbow. Make sure to leave room for wire harness and connect MAF sensor.
25. Start truck and check for leaks.



Any Questions, Comments, or Feedback?

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