

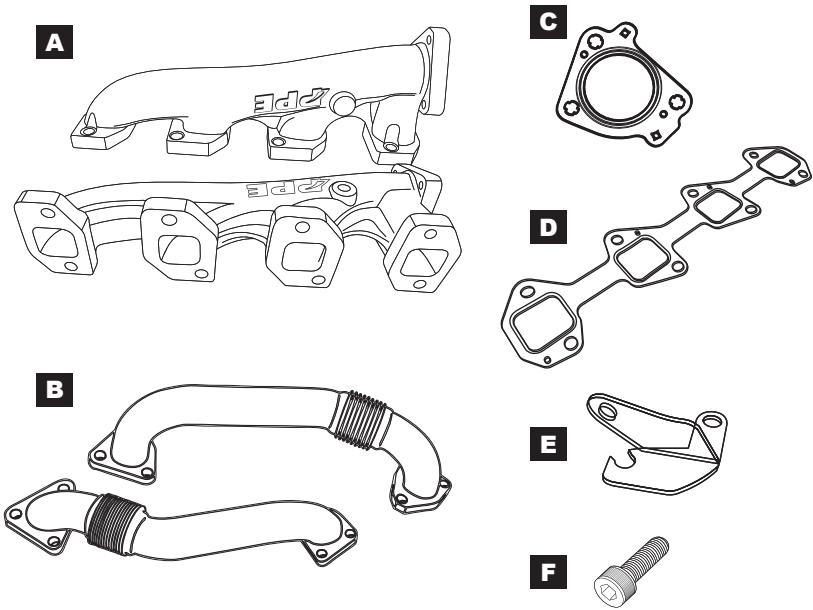
# **High-Flow Exhaust Manifolds and Up-Pipes Kit**

**2001-2016 6.6L GM Duramax**

(116111000, 116112000, 116111400,  
116111600, 116111800)

## **Installation Guide**





## **CONTENTS:**

*Because of variations in fitment, your Kit contents may appear different than depicted.*

- A. (2) Left and Right Manifolds
- B. (2) Left and Right Up-Pipes
- C. (4) PPE Up-Pipe Gaskets
- D. (2) High-Performance Manifold Gaskets
- E. (1) Down-Pipe Support Bracket
- F. (16) M10 - 1.5 x 35 Socket-Head Bolts

## INSTALLATION

1. Disconnect the negative leads from the batteries.
2. Remove the right side wheel (passenger side) tire. **(Fig. 1)**
3. Using either a flat-headed screwdriver or a specialty fastener tool, gently-pry up the heads of the push clips and remove the fender liner. **(Fig. 2)**
4. Loosen the transmission dipstick tube.
5. Remove the clamp from right side outlet exhaust pipe and remove outlet exhaust pipe. Some maneuvering of the outlet exhaust pipe will be required to remove it. **(Fig. 3, Fig. 4)**



6. Remove the heat shield from the exhaust manifold.  
(Fig. 5, Fig. 6)

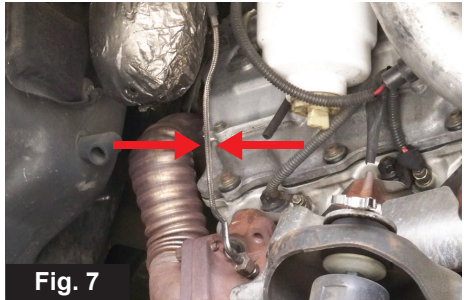


**Fig. 5**



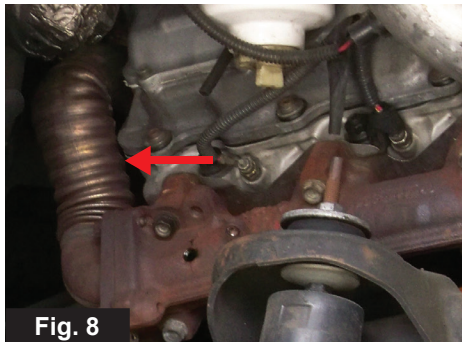
**Fig. 6**

7. If vehicle is equipped with aftermarket EGT gauge, remove probe and put electrical lead safely out of the way. Note that stock vehicles will not have this lead cable or probe. (Fig. 7)



**Fig. 7**

8. Remove the right side up-pipe.  
(Fig. 8)



**Fig. 8**

9. Remove exhaust manifold.  
Replace with new manifold and gasket. **(Fig. 9)**

10. Remove the left side wheel.



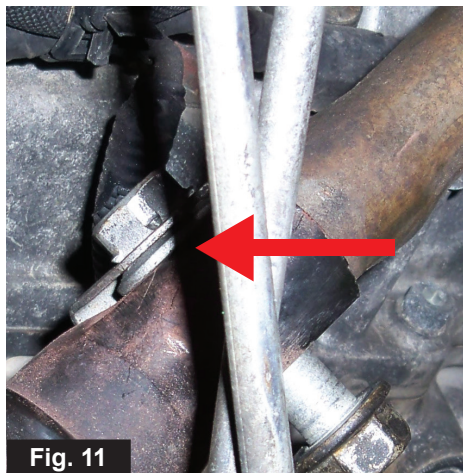
11. Remove the fender liner.  
**(Fig. 10)**

12. Unbolt and remove the left  
up-pipe.



13. Orient steering shaft so that  
the bolt is in the up/down  
position, then remove steering  
shaft bolt and separate the  
steering shaft. Failure to  
properly orient the steering  
shaft will prevent this bolt from  
being removed. **(Fig. 11)**

14. Remove heat shield from left-  
side manifold.

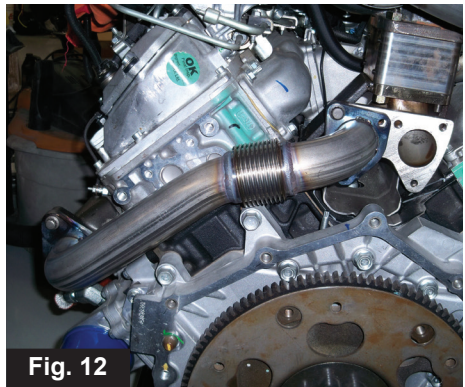




15. Remove the left-side manifold.

**Special Note:** Before installing the left-side manifold, install the left up-pipe so you have more room to work. Installation of the manifold and up pipes in some pictures will show an engine that is on a stand and not in the truck. This is done for image purposes only. You do not need to lower or remove the engine from the truck to complete this install.

16. Connect left up-pipe to the turbo, leaving the mounting hardware loose at this time. (Fig. 12)



17. Install the left side manifold with new PPE gasket and torque mounting hardware to 42 lb-ft. Connect up-pipe to exhaust manifold and tighten hardware to 39 lb-ft.
18. Connect steering shaft and steering shaft bolt.

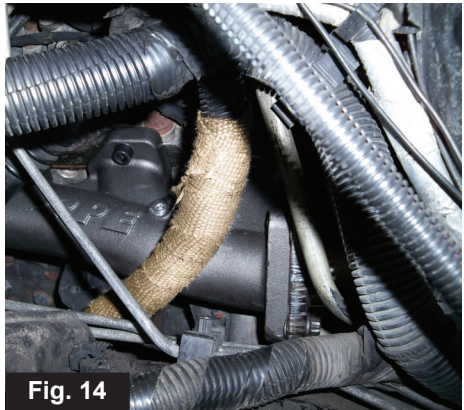
19. Wrap the power steering pressure hose with "heat wrap" tape (not included) overlapping at a 50% rate. Secure ends of wrap with safety wire, not zip-ties or tape. (**Fig. 13, Fig. 14**)

20. Install the left-side fender liner.

21. Install the left side wheel.



**Fig. 13**



**Fig. 14**

22. Install the right up-pipe, keeping the mounting hardware loose at this time. (**Fig. 15**)



**Fig. 15**

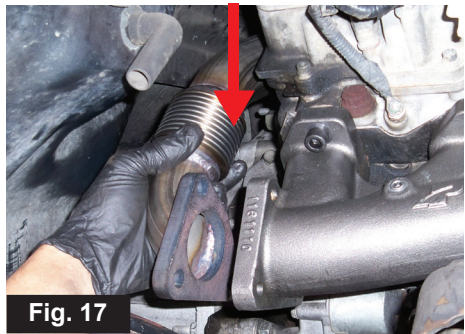


23. The engine oil dipstick tube is routed between the first and second exhaust flanges/runners. Place the gasket as normal, but with the tube running over it and then install the manifold. Bolt the manifold in place and torque mounting hardware to 42 lb-ft. (**Fig. 16**)



24. Install the EGT gauge probe/lead on manifold if applicable.

25. Insert new gasket and install hardware connecting the up-pipe to the manifold. With up-pipe connected to manifold, tighten all upper and lower up-pipe bolts to 39 lb-ft. (**Fig. 17**)



26. Refasten the transmission dipstick tube. (**Fig. 18**)

**Helpful tip:** Applying a coating of Nickel Anti-Seize Lubricant to the exhaust sections makes for an easier install.





27. Install the clamp that connects the lower downpipe flange to the exhaust pipe.  
(Fig. 19, Fig. 20)

28. Install the right side fender liner.

29. Install the right side wheel.

30. Reconnect connective battery leads.



**Fig. 19**



**Fig. 20**

31. Place the supplied CARB E.O. label on a clean, visible location under the hood. PPE recommends using the top side of the fan shroud.  
(Fig. 21)



**Fig. 21**

***Installation Complete***

## **DISCLAIMER OF LIABILITY**

Performance products can increase horsepower above and beyond factory specifications. Additional horsepower creates more stress on the drive-train components, which could result in drive-train failure.

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