

Items Supplied >

- 1 - FRONT HEADPIPE W/ HEATSHIELD
- 1 - REAR HEADPIPE W/ HEATSHIELD
- 1 - COLLECTOR W/ HEATSHIELD
- 1 - MUFFLER ASSEMBLY
- 1 - CLAMP, 27-69MSC
- 1 - BRACKET, EXHAUST MOUNT
- 1 - SPACER, RIGHT FOOT PEG
- 2 - BOLT, 5/16" X 1/2" FLANGE W/ LOCK PATCH
- 2 - BOLT, 3/8" X 3/4" FLANGE W/ LOCK PATCH
- 5 - CLAMP, HS-24
- 1 - CLAMP, HS-32
- 2 - CLAMP, 27-61MSC

Application(s) >

HARLEY SOFTAIL:

FXBB STREET BOB	18-20
FXLR LOW RIDER	18-20
FLSL SLIM	18-20
FLDE DELUXE	18-20

NOTE: DOES NOT FIT FXFB/FXFB5 FAT BOB, FLHC/FLHCS HERITAGE CLASSIC, FLSB SPORTGLIDE, FXBR/FXBR5 BREAKOUT, OR FLFB/FLFB5 FAT BOY.

Instruction Manual >

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PRIOR TO INSTALLATION, MAKE SURE YOUR STOCK HEADPIPE GASKETS ARE IN GOOD CONDITION. IF YOU HAVE ANY DOUBTS AS TO THEIR CONDITION, REPLACE THEM.

Read all instructions carefully and completely before installing your new exhaust system!

1. Apply masking tape to any surrounding parts on the motorcycle to protect them from getting scratched.
2. Remove the right side battery cover to gain access to the rear O₂ sensor plug. Unplug O₂ sensors on front and rear headpipes from motorcycle wire harnesses.
3. If the motorcycle has mid controls then the right side foot peg/brake lever assembly will need to be removed to gain clearance for removing and installing the exhaust system. Remove the two lower mounting bolts connecting it to the frame and allow it to swing down out of the way. It is not necessary to remove the brake rod. See **FIGURE 1**.
4. If the motorcycle has forward floorboards/controls then the right side floor board/foot peg will need to be removed to gain clearance for removing and installing the exhaust system. Remove the two lower mounting bolts connecting it to the frame and set it aside. It is not necessary to remove the brake lever. See **FIGURE 1**.

MID CONTROLS



REMOVE THESE LOWER BOLTS

FORWARD FLOORBOARDS



REMOVE THESE LOWER BOLTS

FIGURE 1

5. Remove the stock exhaust system being careful not to damage the headpipe gaskets. If the headpipe gaskets are in good condition they do not need to be removed from the cylinders. Also be careful not to damage the oil cooler near the front cylinder. Remove and save the flanges, nuts, retaining rings, and O₂ sensors from the stock exhaust as they will be reused.

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6. Remove the right side passenger foot peg from the stock exhaust mount bracket and set it aside to be installed at the end of the installation. Then remove the stock exhaust mount bracket from the frame.
7. Install the new exhaust mount bracket using the supplied 3/8" x 3/4" hex flange bolts. Tighten the bolts to factory specifications. See **FIGURE 2**.

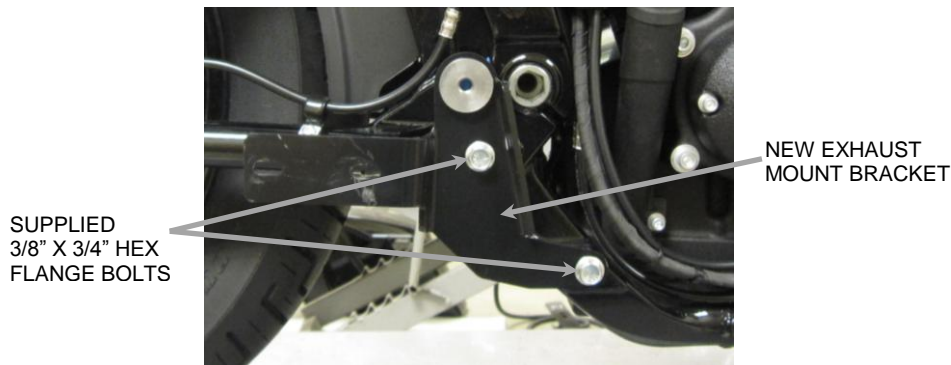


FIGURE 2

8. Unwrap the heatshields, headpipes, collector, and muffler assembly from packaging.
9. Install the stock flanges, retaining rings and O₂ sensors onto the supplied front and rear headpipes.
10. Install the front headpipe (with stock headpipe gasket in place) onto the front cylinder using the stock nuts but **DO NOT TIGHTEN** at this time. Be careful not to damage the oil cooler while installing the nuts.
11. Install the rear headpipe (with stock headpipe gasket in place) onto the rear cylinder using the stock nuts but **DO NOT TIGHTEN** at this time.
12. Position the supplied #27-61 MSC clamps with hex head facing the direction shown in **FIGURE 3** and slide them onto the collector inlets.
13. Install the collector onto the front and rear headpipe. Make sure the front and rear headpipes are pushed in as far as possible into the collector inlet slips. Rotate the collector around the axis of the collector outlet so that the collector inlets are straight vertically when looking from the rear of the motorcycle (perpendicular with the ground).
14. Position the supplied #27-69 MSC muffler clamp with hex head facing inward and down as shown in **FIGURE 4** and slide it onto the muffler inlet tube.
15. Slide the muffler onto the outlet of the collector until the holes in the muffler mount align with the exhaust bracket. Position the holes so they are in the center of the slots.

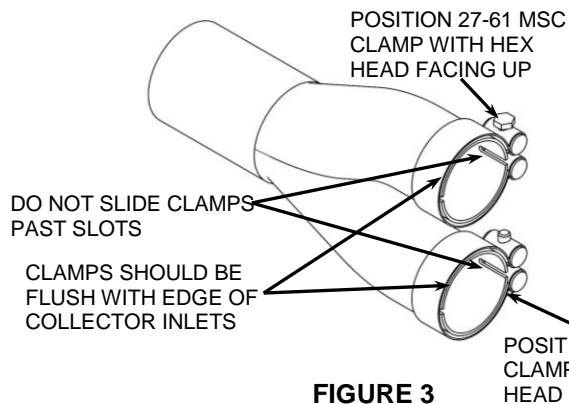


FIGURE 3

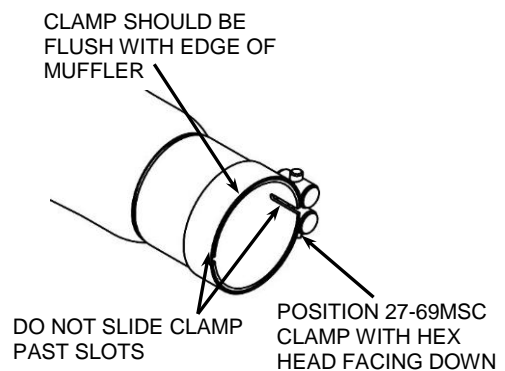


FIGURE 4

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16. Secure the muffler assembly to the exhaust mount bracket using the (2) supplied 5/16"-18 bolts but **DO NOT TIGHTEN**.
17. Make sure the muffler assembly, collector, front headpipe, and rear headpipe are aligned properly and tighten in the following order; headpipe flanges to the cylinders (slowly tightening opposing nuts), front headpipe/collector clamp, rear headpipe/collector clamp, muffler clamp, and finally the muffler to the exhaust mount. (NOTE: The muffler clamp and headpipe clamps should be flush with the end of the inlets when tightened. See **FIGURE 3 & 4**. If the clamps are slid past the slots on the inlets the clamps will not tighten properly).
18. Plug the O₂ sensors back into the motorcycle wire harnesses.
19. Unscrew the small **HS-24** clamps and feed the tail end of the clamp through the clips on the inside of the heatshields. See **FIGURE 5** for proper positioning of the clamps on the heatshields. (NOTE: The arrows point to the positioning of the hex head of the clamps. The hex head of the clamps should be accessible for tightening but not visible when the heatshields are mounted to the pipes.)
20. Install the rear heatshield over the rear headpipe. (Hint: Spread the hose clamps apart slightly to make it easier to slide them over the headpipes.) Snug the clamps but **DO NOT TIGHTEN** at this time. See **FIGURE 5**.
21. Install the front heatshield over the front headpipe. (Hint: Spread the hose clamps apart slightly to make it easier to slide them over the headpipes. When the heatshield is aligned properly snug the clamps but **DO NOT TIGHTEN** at this time. See **FIGURE 5**.
22. Lightly apply masking tape to the front of the muffler body to prevent it from getting scratched when installing the collector heatshield. See **FIGURE 6**.
23. Unscrew the larger **HS-32** clamp and insert the tail end through the clip on the inside of the collector heatshield. See **FIGURE 5** for proper positioning of the clamps on the heatshields. (NOTE: The arrows point to the positioning of the hex head of the clamps.)

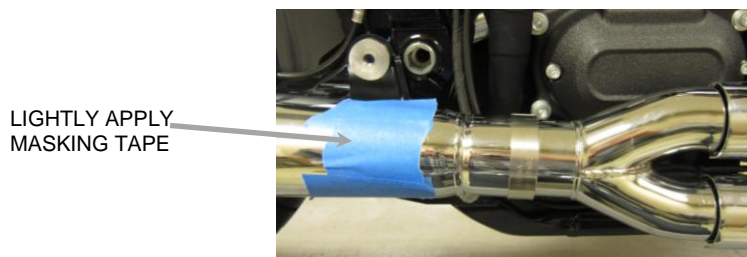
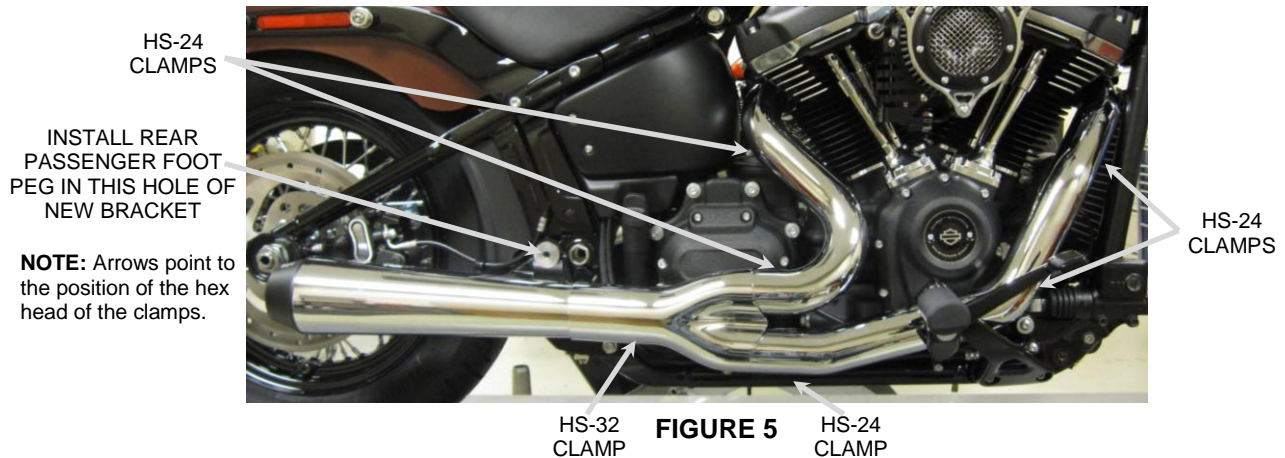
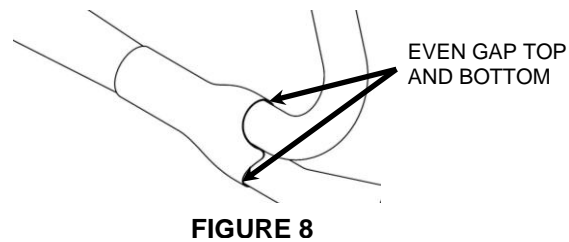
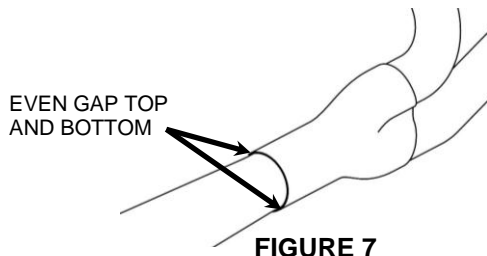


FIGURE 6
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24. Install the collector heatshield over the collector area by first inserting the rear portion over the front of the muffler inlet and then carefully sliding it backward over the muffler body. See **FIGURE 5**. The front of the collector heatshield will go over the rear portion of the headpipe heatshields.
25. Once the collector heatshield is installed over the collector area carefully remove the tape from the muffler body. Make sure to get all the tape removed so it does not discolor the muffler when it gets hot.
26. Adjust the heatshield fore and aft on the collector so there is a small and even gap between the rear of the collector heatshield and the front of the muffler body. See **FIGURE 7**. The muffler may need to be slid forward or backward on the mounting bracket to increase or decrease the size of the gap. Also be sure to rotate the front of the collector heatshield on the collector so that it sits on both the front and rear headpipe heatshields evenly. See **FIGURE 8**. NOTE: The headpipe heatshields may need to be adjusted fore and aft and or rotated on the headpipes to allow the collector heatshield to align properly.



27. Once the collector heatshield is aligned properly snug the clamp but **DO NOT TIGHTEN** at this time.
28. Make sure the front and rear heatshields are still aligned properly and then tighten all the heatshield clamps. Tighten the front and rear heatshield clamps first then the collector heatshield clamp last.
29. Install the right side passenger foot peg in the threaded hole on the new exhaust mount bracket. See **FIGURE 4**.
30. For motorcycles with mid controls, insert the supplied foot peg spacer between the frame and the foot peg mount and then install the foot peg. Motorcycles with floor boards do not need the spacer so install the floor board as it was before. Also install the right side battery cover. Make sure the rear O2 sensor wire does not get pinched by the cover.
31. Make sure all the hardware (brackets, headpipes, and heatshields) have been tightened appropriately.
32. **IMPORTANT: Before starting your engine remove all fingerprints from chrome with a quality wax or chrome polish. Failure to do so can cause chrome discoloration. Due to fluctuations in fuel delivery settings, timing, etc., Cobra Engineering does not warrant against chrome discoloration.**
33. Check the tightness of the two button head bolts securing the billet tip to the muffler after the first ride, 100 miles, and every 500 miles after that.

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