

Items Supplied >

- 1 FRONT HEADPIPE W/ HEATSHIELD
- 1 REAR HEADPIPE/MUFFLER ASSEMBLY W/ HEATSHIELD
- 2 CORE WITH CHROME TIP
- 2 BOLT, 1/4" X 1/2" HEX HEAD
- 2 1/4" INTERNAL TOOTH LOCK WASHERS
- 2 1/4" FLAT WASHERS
- 1 BRACKET, EXHAUST MOUNT
- 2 BOLT. 5/16" X 5/8" FLANGE W/ LOCK PATCH
- 2 BOLT, 3/8" X 3/4" FLANGE W/ LOCK PATCH
- 5 CLAMP, HS-24
- 1 CLAMP, 27-61MSC
- 2 3/8" ID X 1/8" THICK FLAT WASHERS (FOR FXDR 114 ONLY)

Application(s) >

HARLEY SOFTAIL:

FLFB/FLFBS FAT BOY 18-19 **FXBR/FXBRS BREAKOUT** 18-19 **FXDR 114** 2019

NOTE: DOES NOT FIT FXBB STREETBOB, FXLR LOWRIDER, FLSL SLIM, FXFB/FXFBS FAT BOB, FLDE DELUXE, FLSB SPORTGLIDE, OR FLHC/FLHCS HERITAGE CLASSIC.

Instruction Manual >

6715

Page 1 of 4

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 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.

FORWARD FLOORBOARDS



REMOVE THESE / LOWER BOLTS

FIGURE 1

4. 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.

Continued on Page 2

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DOCUMENT NO. 0017



Instruction Manual >

6715

Page 2 of 4

- 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.
- 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. NOTE: For FXDR 114 motorcycles, the exhaust mount needs to be spaced outward 1/8" so that the bracket clears the swing arm. Insert the supplied 3/8" x 3/4" hex flange bolts through the bracket, through the supplied 3/8" X 1/8" thick washers, and then into the frame so that the spacer is between the frame and the exhaust mount. Tighten the bolts to factory specifications.

For FXDR 114 motorcycles, place the supplied 3/8" X 1/8" thick washers between the frame and the exhaust mount to space the bracket 1/8" outward.

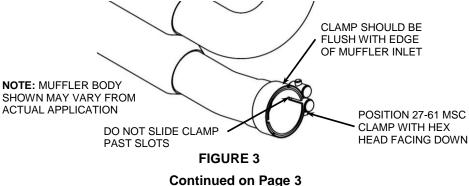
> SUPPLIED 3/8" X 3/4" HEX FLANGE BOLTS



NEW EXHAUST MOUNT BRACKET

FIGURE 2

- 8. Unwrap the heatshields and headpipes from packaging. Remove the rear heatshield from the rear headpipe and muffler assembly.
- 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. Position the supplied #27-61 MSC muffler clamp with hex head facing inward and down as shown in FIGURE 3 and slide it onto the rear muffler inlet tube.
- 12. Install the rear headpipe and muffler assembly (with stock headpipe gasket in place) onto the rear cylinder and slide the lower muffler inlet on to the front headpipe. Use the stock nuts to fasten the rear headpipe to the cylinder but DO NOT TIGHTEN at this time. Make sure the front headpipe is pushed in as far as possible into the rear muffler slip.
- 13. Secure the muffler assembly to the exhaust mount bracket using the (2) supplied 5/16"-18 bolts but **DO** NOT TIGHTEN as these bolts will have to be removed later in STEP 20.
- 14. Make sure the rear muffler assembly and front headpipe are straight and parallel and tighten the muffler inlet clamp. (NOTE: The muffler inlet clamp should be flush with the end of the muffler inlet when tightened. See FIGURE 3. If the muffler inlet clamp is slid past the slots on the muffler inlet, the clamp will not tighten properly).



OCUMENT NO. 0018

REV. A



Instruction Manual >

6715

Page 3 of 4

- 15. Plug the O₂ sensors back into the motorcycle wire harnesses.
- 16. Unscrew the HS-24 clamps and feed the tail end of the clamp through the clips on the inside of the heatshields. See FIGURE 4 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 heatshields are mounted to the pipes.)
- 17. Install the front heatshield first. Slide the rear portion of the heatshield forward over the muffler while gently pushing the front of the heatshield into place between the frame and motor (NOTE: Spread the hose clamps apart slightly to make it easier to slide them over the muffler assembly and headpipes.) Make sure the muffler clamp does not interfere with the heatshield and is aligned as shown in FIGURE 3. Snug the heatshield clamps but do not tighten.

HS-24 **CLAMPS**

INSTALL REAR PASSENGER FOOT PEG IN THIS HOLE OF **NEW BRACKET**

NOTE: Arrows point to the position of the hex head of the clamps.



HS-24 **CLAMPS**

FIGURE 4

HS-24 CLAMP

- 18. If the motorcycle is equipped with the knob for the rear mono shock adjustment the knob will need to be adjusted to the #5 setting to gain clearance to install the rear heatshield. Make sure to write down the current setting before adjusting the knob. See FIGURE 5.
- 19. Install the rear heatshield the same way as the front heatshield. See FIGURE 4.



ADJUST KNOB® TO #5 SETTING

REV. A

FIGURE 5

Continued on Page 4

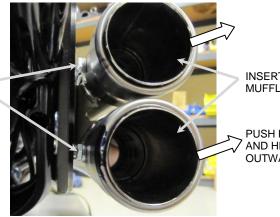
Instruction Manual >

6715

Page 4 of 4

- 20. Remove the two 5/16" bolts that secure the rear headpipe muffler assembly to the bracket from STEP 13. This will allow the headpipes to be pushed outward far enough away from the mount bracket to insert the 1/4-20 hex bolts in the following steps.
- 21. Align the threaded hole in the core tip with the hole in the heatshield and muffler body and then insert the core into the muffler body until the threaded hole aligns with the heatshield and muffler body. See FIGURE 6. (NOTE: If it is difficult to align the heatshield, muffler body and core, then loosen the clamps on the heatshields so the heatshields can move forward or backward.) Install the other core in the same way.
- 22. Push the headpipe and heatshield assembly outward away from the mount bracket and insert the supplied 1/4-20 hex head screws with a 1/4" internal tooth lock washer and a 1/4" flat washer through the heatshields and muffler body into the threaded holes in the core tips and snug the bolts. DO NOT TIGHTEN at this time. See FIGURE 6.

FASTEN CORES WITH SUPPLIED 1/4-20 HEX HEAD SCREWS. INTERNAL TOOTH LOCK WASHERS, AND FLAT WASHERS



INSERT CORES INTO MUFFLER BODIES

PUSH HEATSHIELDS AND HEADPIPES **OUTWARD**

FIGURE 6

- 23. Once the cores have been installed into the muffler bodies and heatshields secure the muffler assembly to the exhaust mount bracket as in STEP 13 using the (2) supplied 5/16"-18 bolts and tighten securely.
- 24. Make sure the heatshields are straight and parallel and that the ends of both core tips and heatshields are flush vertically with each other. Once they are all aligned then tighten the clamps on the heatshields first then tighten the bolts for the core tips.
- 25. Finally, tighten the front and rear headpipe flange nuts (slowly tightening opposing nuts). Be careful not to scratch the heatshields or damage the oil cooler.
- 26. Install the right side passenger foot peg in the threaded hole on the new exhaust mount bracket. See FIGURE 4.
- 27. Reinstall the foot peg/floorboard and the right side battery cover. Make sure the rear O2 sensor wire does not get pinched by the cover.
- 28. Make sure all the hardware (brackets, headpipes, clamps, heatshields, and tips) have been tightened appropriately.
- 29. If equipped, readjust the rear mono shock adjustment knob to the appropriate setting.
- 30. 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.
- 31. Check the tightness of the two hex head bolts securing the cores to the heatshields and muffler after the first ride, 100 miles, and every 500 miles after that.

IMPORTANT: It is recommended that a Cobra Fi2000® Closed Loop Digital Fuel Processor (Part#: 692-1632CL or 692-1632B) be installed with the Cobra exhaust system.

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