

## Items Supplied >

- 1 - FRONT HEADPIPE W/ HEATSHIELD
- 1 - REAR HEADPIPE/MUFFLER ASSEMBLY W/ HEATSHIELD
- 2 - BILLET MUFFLER TIPS
- 2 - 1/4" X 3/8" BUTTON HEAD BOLTS
- 1 - BRACKET, EXHAUST MOUNT
- 4 - CLAMP, HS-24 (SMALL)
- 2 - CLAMP, HS-28 (LARGE)
- 1 - CLAMP, 27-61MSC
- 2 - BOLT, 5/16" X 1/2" FLANGE W/ LOCK PATCH
- 1 - SPACER, .750"O.D. X .343" I.D. X .550" L BLACK
- 2 - SPACER, ALUMINUM .550"O.D. X .344" I.D. X .170" L

## Application(s) >

- HARLEY:
- |            |       |
|------------|-------|
| DYNA       | 12-17 |
| SWITCHBACK | 12-16 |

## Instruction Manual >

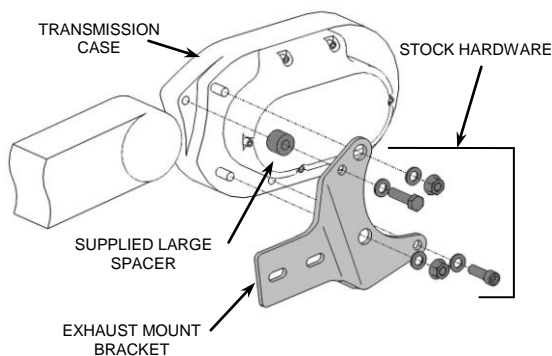
6788

Page 1 of 3

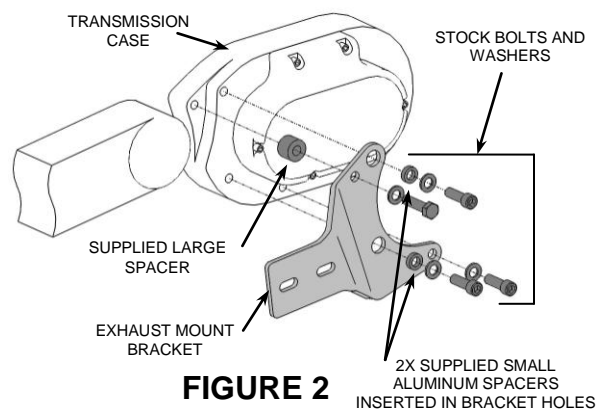
**PRIOR TO INSTALLATION, MAKE SURE YOUR STOCK HEAD PIPE GASKETS ARE IN GOOD CONDITION. IF YOU HAVE ANY DOUBTS AS TO THEIR CONDITION, REPLACE THEM.**

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

1. Apply masking tape to any surrounding parts to protect them from getting scratched.
2. For Switchback models, the right side floorboard will need to be removed from the mounts. Also remove the forward mount bolt and loosen the rearward mount bolt so the mount will swing out of the way for clearance.
3. Unplug O<sub>2</sub> sensors on front and rear headpipes from motorcycle wire harnesses.
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. Remove and save the flanges, nuts, retaining rings and O<sub>2</sub> sensors from the stock exhaust.
5. Remove the stock exhaust mount bracket.
6. Install the supplied exhaust mount bracket using the stock bolts. See **FIGURE 1**. Tighten the bolts to factory specifications. If applicable, be sure to insert the large spacer between the exhaust mount and the transmission case as shown in **FIGURE 1**. For Switchback models, also insert 2 of the supplied small aluminum spacers into the large holes in the exhaust mount bracket as shown in **FIGURE 2**.



**FIGURE 1**  
**DYNA**

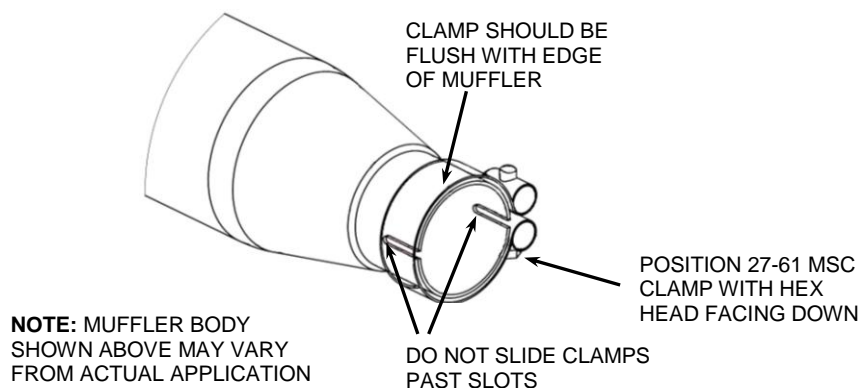


**FIGURE 2**  
**SWITCHBACK**

Continued on Page 2

**DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES.**

7. Install the stock flanges, retaining rings and O<sub>2</sub> sensors onto the supplied front and rear headpipes.
8. Install the front headpipe (with stock gasket in place) onto the front cylinder using the stock nuts but **DO NOT TIGHTEN** at this time.
9. Position the supplied #27-61 MSC muffler clamp with hex head facing the direction shown in **FIGURE 3** and slide onto the rear muffler inlet tube.
10. Install the rear headpipe and muffler assembly (with stock 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 head pipe is pushed in as far as possible into the rear muffler slip.
11. Secure the muffler assembly to the exhaust mount bracket using the (2) supplied 5/16"-18 bolts but **DO NOT TIGHTEN**.
12. Make sure the rear muffler assembly and front head pipe are straight and parallel and tighten in the following order; head pipe flanges to the cylinders (slowly tightening opposing nuts), muffler assembly to the exhaust mount and finally the muffler clamp. (NOTE: The muffler clamps should be flush with the end of the muffler when tightened. See **FIGURE 3**. If the muffler clamps are slid past the slots on the muffler inlets the clamps will not tighten properly).



**FIGURE 3**

13. Plug the O<sub>2</sub> sensors back into motorcycle wire harnesses.
14. Unscrew the **HS-28** and **HS-24** clamps and feed the tail end of the clamp through the clips on the inside of the heat shields. The larger clamps (**HS-28**) go to the rear of the heat shields where they will rest on the muffler bodies. The smaller clamps (**HS-24**) go to the front for the head pipes. See **FIGURE 4** for proper positioning of the clamps on the heat shields. (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 heat shields are mounted to the pipes.)
15. Install the front heat shield first. Slide the rear portion of the heat shield forward over the muffler while gently pushing the front of the heat shield 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 head pipes.) Make sure the muffler clamp does not interfere with the heat shield and is aligned as shown in **FIGURE 3**. Snug the heatshield clamps but do not tighten.
16. Install the rear heatshield the same way as the front heat shield. See **FIGURE 4**.

Continued on Page 3

HS-24  
CLAMP

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



HS-24  
CLAMP

HS-24  
CLAMP

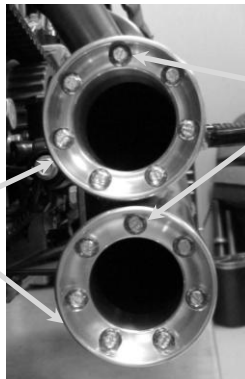
HS-28  
CLAMP

**FIGURE 4**

HS-24  
CLAMP

16. Align the tapped hole in the side of the billet tip with the hole in the heat shield and slide it into the heat shield. Be sure one of the 12 point bolts is in the 12 o'clock position. See **FIGURE 5**. (NOTE: If it is difficult to slide the tips into the heat shields loosen the clamps on the heat shields. Failure to do this may cause damage to the tips.) Fasten the tips with the supplied 1/4-20 button head screws making sure there is no gap between the tip and heat shield when tightened.

FASTEN WITH  
1/4-20 BUTTON HEAD  
SCREWS



POSITION TIPS WITH  
12 POINT BOLT IN  
12 O'CLOCK POSITION  
AS SHOWN

**FIGURE 5**

17. Make sure the ends of both tips are flush vertically with each other and tighten the clamps on the heat shields.
18. Make sure all the hardware (brackets, head pipes, heat shields, and tips) has been tightened appropriately.
19. **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.

**IMPORTANT:** It is recommended that a Cobra Fi2000® Closed Loop Digital Fuel Processor (Cobra Part #692-1616AT, 692-1616CL, or 692-1616CL-50 for California models) be installed with the Cobra exhaust system.

**DISCLAIMER:** NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLES.