

Harley CVO Exhaust Tip Removal and Installation Instructions

Tools Needed:

T30 Torx Socket or Wrench	5/32 Allen Socket or Wrench
Stepped Drill Bit	Small Flat Head Screwdriver
Center Punch	Metal Pick / Scribe
Dead Blow / Rubber Mallet	Hammer
Qty 4 – ¼-20 x 5/8 Button Head Screws (Chrome, Black or Stainless)	



1. Remove CVO Tips from muffler.

- a. Using the T30 Torx Socket, remove the three (3) flat head screws attaching the tip to the muffler. These screws will not be re-used.
- b. Wrap the tip with multiple layers of painter's tape to help protect the finish of the tip. Remove the tip with a dead blow or rubber mallet as to not damage the finish on the tip. The longer the mufflers had been run, the longer and harder it will be to remove the tip. Using some creeping oil or WD-40 on the seams will help ease the removal.
- c. Once the tip is removed, using a small flat head screwdriver, remove the three (3) speed nuts that are attached to the inner mounting ring. Two (2) of the speed nuts will be re-used.



- d. Remove the inner mounting ring from the tip. This is a very tight fit, so you may need to use a hammer and punch to remove it.

2. Fit CVO Tips to New Muffler.

- a. Align the tip on the new muffler. This is much easier with the muffler removed from the motorcycle but could be done when mufflers are installed. Using the horizontal bar in the Bar & Shield Logo, line the tip up with the single mounting hole on the bike side of the muffler. This will help to make sure the tip is straight, and the correct side is up.



- b. Using a Metal Pick or Scribe, mark the two mounting holes for the tip in the coating. Be sure to mark the entire size of the hole.



- c. With the holes marked, insert the inner mounting ring onto the tip. Be sure to align one of the previous holes with one of the new marks on your tip. The flat side of the mounting ring should be facing the exit of the muffler.

3. Drill the Mounting Holes in the Tip.

- a. Using your center punch, mark the center of the two new mounting holes. This doesn't have to be precise as the hole can be enlarged to ensure fitment.
- b. Using a stepped drill bit, drill the two new mounting holes. If you lined up one of the previous holes in the inner mounting ring, you would only need to drill all the way through the tip and the inner mounting ring once.



- c. Fit the tips to the new mufflers to check mounting holes. You should not be able to see any tip material in the mounting hole. If you do, adjust the holes so that you don't.

4. **Mount Tip to New Muffler.**

- a. Remove the newly modified inner ring from the tip.
- b. Insert one (1) of the speed nuts onto the hole that was chosen to be re-used.
- c. Install the inner mounting ring on the tip.
- d. Install tip on new muffler. Once holes are aligned, using two (2) $\frac{1}{4}$ -20x5/8 button head screws and two (2) washers, mount the tip to the new muffler. Start by tightening the bolt of the re-used hole. On the second hole, use one (1) speed nut as a regular nut and tighten the second button head screw.



- e. Be sure to make sure everything is tight.