## HARLEY DAVIDSON 2004 – 2013 "Rubber-Mount" EVO SPORTSTER 2-1 EXHAUST Installation Instructions MC-CN-HDS0413



In the picture above, you see the full system assembled on the motorcycle. The exhaust mounting bracket is hidden behind the collector and attaches to the bracket that mounts to the engine case, under the primary drive side cover. The "ball flange" on the inlet of the header will attach to the cylinder head using your existing 2-bolt flanges and spring clips (or you can purchase replacements). We recommend inspecting and replacing, if necessary, the gasket inside the cylinder head to minimize exhaust leaks. Also, if your existing flange springs clips are weak and/or rusted, you might want to replace these as well.

## **Recommended Installation Steps**

1. Remove the existing exhaust. The exact process can vary depending on whether you are removing an OEM or aftermarket exhaust. Save the 2-bolt flange and spring clip to use on the new exhaust.



## Step 1.A. FOR EFI MODELS:

• O2 sensor - remove electrical connector at ECU before removing headers.



2. Remove rear brake rod mount at master cylinder. Can be left attached at brake pedal



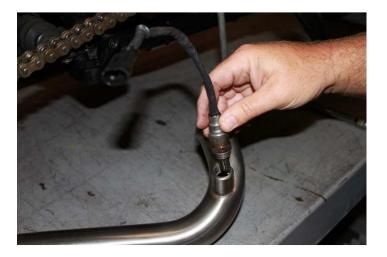
3. Remove primary drive side cover. Note locations of bolts and retain the hardware for reinstallation.



4. Remove muffler support bracket, either OEM/aftermarket as applies, from behind the side cover. Note location of the hardware removed and save, some bolts will be reused.



5. For EFI models, insert and tighten O2 sensor probes.



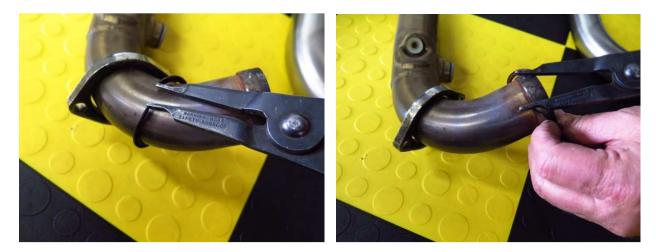
For non-EFI models, insert and tighten the included O2 bung plugs.



6. **INSTALLATION:** You should have already inspected the cylinder head gaskets, spring clips, and 2-bolt flanges. Time to replace if needed, or reinstall/retain your existing parts if you feel they are in good condition. These are a common over-the-counter part, available from many aftermarket companies as well as OEM. You can find them at almost any shop that deals with Harley Davidson parts.



7. Transfer your existing cylinder head spring clips and flanges (or install new ones) onto the new exhaust. Make sure the indentation in the flange (for the spring clip to sit in) is facing in the proper direction.





8. Begin by loosely installing the headers in the cylinder head and start the flange bolts, *don't tighten them yet*.



9. Locate the new muffler support bracket and mounting hardware that is included in the new kit.



10. Attach the frame support bracket to the tab mounted on the exhaust with the provided hardware. Leave it loose so you have plenty of adjustment range.



11. Test fit the collector to header BEFORE applying the high-temp sealant. Reattach brake rod first. Note the alignment of the bolt holes to engine case and make sure brake rod is inside the bracket. Once you've confirm fit, apply sealant and slide collector onto header tubes. *Don't install collector springs yet*.



12. The frame bracket will attach to case using an original allen head bolt in the upper right corner of bracket. The lower, middle hole will use the hex head bolt provided in the kit (can't tighten allen head style bolt due to bracket clearance). The upper left side bolt hole will be filled when you install the side cover bolt (now is a good opportunity to make sure it has clearance for that bolt).



13. Tighten the bracket to the engine, and the bracket to the muffler. Checking frequently for proper alignment. *This is where you are going to make most of your adjustments to properly align the muffler relative to frame and swingarm.* 



14. Once everything is aligned properly, then tighten the muffler support bracket in all locations. Tighten the cylinder head flanges to proper specification.

NOTE: At this point, the distance between the spring tab on the collector, and the spring tabs on the headers, should be about 4" from tip-to-tip.

15. Install collector retainer springs. If you don't have a spring puller there are several ways to pull and attach them. *If you find you are having to stretch the springs excessively, you probably don't have the collector far enough on the header. You should only have to the springs a little over an inch.* 



16. Re-install the side cover over the primary drive sprocket.



17. **VERY IMPORTANT! BEFORE STARTING**: Always clean a new stainless steel exhaust by wiping down carefully with a clean cloth and acetone or rubbing alcohol. Any oil, grease, even oil skin fingerprints will permanently etch into your new exhaust. If you don't clean it, you will permanently stain your new exhaust!

