

American Custom

Have your stock headers and mufflers reworked for more power and rumble!

**Thunder
Alley**
HIGH
PERFORMANCE
HARLEYS

WANT MORE POWER AND SOUND, BUT don't have a lot of cash? No worries! The folks at American Custom have you covered! They'll rework your stock header pipes and mufflers or swap them out for an exchange. You'll be back on the road with more power and rumble for only \$350!

American Custom offers its PowerFLEX header pipe for 2010-11 H-D Touring models, which is a stock header pipe that has the area containing the catalytic converter refitted with its Power Chamber. If you have your stock header reworked, or swap it out for one of American Custom's in exchange for yours, the cost is \$169.

As for the mufflers, American Custom (AC) removes the stock baffling system and replaces it with its new baffling, as well as its attachment system. The AC attachment system allows you to change the look and sound of your pipes whenever you want. American Custom's Bomber mufflers, which is its loudest version, produce what AC calls its Deep Growl sound thanks to nonremovable inner-wall baffles. This is also the configuration that puts out the most power when combined with American Custom's PowerFLEX header. Bomber mufflers, which fit all H-D Touring models, sell for \$179 with the exchange or reworking of your 2007 or later mufflers (\$268 for a set outright).

Our opening shot shows the 2010 Ultra Classic Unlimited with the saddlebags, right-side cover, right floorboard, stock mufflers, heat shields, and header pipe removed.



If you want to quiet the bike down, you can add a set of Mid-Rumble baffles (\$44 for a set of two). Want to jazz up the look of your mufflers? Add on one of AC's optional chrome or black-anodized endcaps kits, which come in six different styles (\$98-\$149 per set of two). Whatever setup you choose, 2007 and later bikes won't need to be retuned after this exhaust swap-over. The stock ECM EFI system will automatically adjust to these minor changes. You also reuse all the stock heat shields, mounting brackets, and hardware, which keeps the cost of this system down.

These mufflers and headers are sold directly to the customer, so there's no middle man. You deal directly with the factory. American Custom offers this 100 percent satisfaction guarantee: if you don't like the header pipes or

TOOLS NEEDED

- Blue Permatex
- Large snap ring pliers
- Wire cutters
- Wire-ties
- Flat-bladed screwdriver
- 5/16" Allen
- 14mm wrench
- 9/16" wrench
- 8mm socket
- 1/2" swivel socket
- 1/2" socket
- 9/16" socket
- 5/8" socket ■



2 John swaps the stock flanges and retaining clips over to the new American Custom header pipes.



3 Using a 14mm flange nut wrench, John installs the stock O₂ sensors into the AC headers. The holes on the pipe are marked B (black/rear) and G (gray/front) to ensure the correct sensor goes in each hole.



4 After removing the stock exhaust gaskets from both exhaust ports, John installs new ones (not included) into both heads.



5 Using the stock exhaust flange nuts, John loosely attaches the AC header pipes to the engine using a 1/2" socket. He does this by tightening both nuts down evenly, front to back.

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6 With the header pipes in place, the O₂ sensors can be reattached to their stock connectors, behind the ABS module, under the right-side cover. Their wires are then wire-tied to the frame.



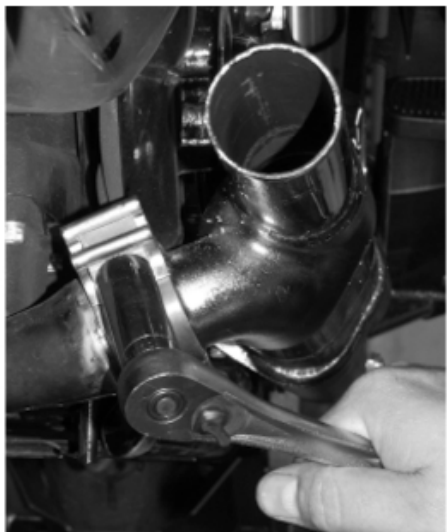
7 The AC header pipe is loosely secured to the transmission mounting bracket using the stock hardware, some blue Permatex threadlock, and a 9/16" socket.

mufflers for any reason, even after you've installed them and ridden your bike, AC will give you a full refund. No questions asked.

For our test, we bolted a PowerFLEX header pipe and a set of Bomber mufflers,



8 The stock crossover pipe (with clamp) is then loosely resecured to the stock mounting bracket using the stock hardware, some blue Permatex threadlock, and a 1/2" short socket.



9 The stock crossover exhaust clamp can now be correctly positioned on the pipe and loosely secured using a 5/8" deep socket.

TIPS & TRICKS

BE SURE TO RETAIN ALL STOCK MOUNTING HARDWARE AND HEAT shields when removing the stock header pipes and mufflers. They are all reused with the reworked American Custom headers and mufflers.

When installing the American Custom mufflers, there are notches in the muffler that distinguish them as left and right. Make note of this as you remove the stock ones so you don't mix them up.

When installing the heat shields, install them all with their clamps loose, so they can be aligned once they are all in place on the exhaust system. Then go back and tighten all the clamps. ■

as well as a set of Mid-Rumble baffles to a 2010 103" Ultra Classic Limited. We got 67.15 hp and 85.75 ft.-lbs. of torque with the stock configuration. With the new header pipe and Bomber mufflers fitted with the Mid-Rumble baffles, we



10 The stock muffler exhaust clamps slip onto the American Custom mufflers. Be sure they are positioned so their bolt is facing in and the nut is facing down.



11 Slide the AC mufflers onto the AC header pipe and lightly attach them to the stock rear mounting brackets using the stock hardware, some blue Permatex, and a 1/2" socket.

SOURCES

AMERICAN CUSTOM

264 Fairchild Ave., Dept. AIM
Fairfield, CT 06825
203/873 0241
www.AmericanCustom.com

WESTCHESTER POWERSPORTS

57 Plainfield Ave., Dept. AIM
Bedford Hills, NY 10507
914/864 0656
www.WestchesterPowersports.com

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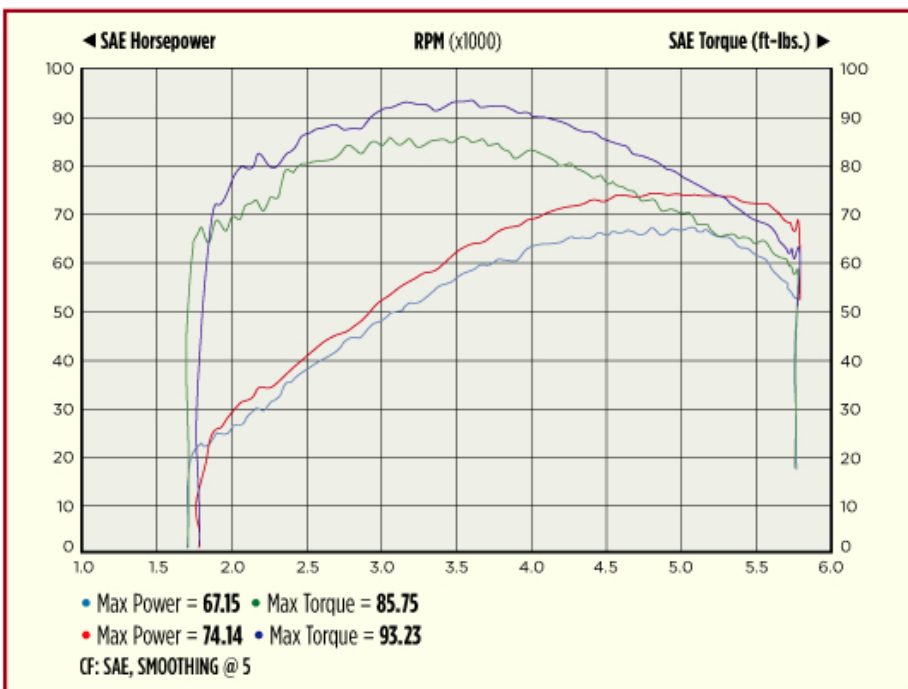


12 Now that the entire system is installed on the bike, tighten all the hardware, starting at the heads, and working your way back. Use a 9/16" socket on the muffler exhaust clamps.

got 70.09 hp and 87.81 ft.-lbs. of torque, a gain of 3 hp and 2 ft.-lbs. of torque, as well as slightly more rumble from the exhaust. The power curve on the dyno chart closely followed the curve of the stock run. We then removed the Mid-Rumble baffles and left the Bomber mufflers just as we got them. The sound



13 After wiping down the whole exhaust system with glass cleaner, the stock heat shield for the front header pipe is loosely installed using a flat-bladed screwdriver and the stock clamps.



increased quite a bit and so did the power output. We got 74.14 hp and 93.23 ft.-lbs. of torque, for a gain of 7 hp and almost 8 ft.-lbs. of torque over the stock pipes. And we didn't touch the EFI fuel or ignition settings. This is the run you see on the accompanying dyno chart.

As for who did this installation for us,

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we went to see our buddy John Narciso at Westchester Powersports. We've known and worked with John for years, since he was the service manager at a local Harley-Davidson dealership. John also did our dyno runs and test rode the bike to make sure all was correct. The accompanying photos and captions show the steps to make this simple swap, which is really just removing the stock exhaust system and bolting another stock, but reworked, system back on.



14 The stock rear header pipe heat shield is lightly attached next using a flat-bladed screwdriver and the stock clamps.



15 Once the stock crossover heat shield is installed, correctly position all the shields and secure them to their respective pipes using a flat-bladed screwdriver on the stock clamps.



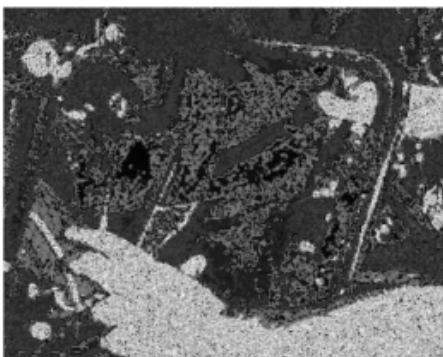
16 The stock right floorboard is reinstalled using the stock mounting bolts and some blue Permatex. Use a 5/16" Allen and 9/16" wrench to torque the hardware to spec.



17 These mufflers can be used with or without baffles. To install them, slip the provided gasket over the baffle, then slide the baffle into the open end of the muffler.



18 To secure the baffles to the mufflers, tighten the AC-supplied bolts and lock washers to the interior of the muffler using the optional AC 1/8" T-handle Allen.



19 To finish the job, reinstall the stock right-side cover and saddlebags. **AIM**