TECH by Tyler Greenblatt

WEGNER/SUPERTRAPP HI-PO EXHAUST We gained 3 hp and 4 ft-lbs. of torque!

IGH-PERFORMANCE BAGGERS ARE NOTHING NEW. Looks-wise, however, those cruise missiles still resemble the loaded barges that leave the factory. That's one of the reasons that we love them - and one of the reasons that we hate them.

Wegner Motorsports has moved in the right direction with its multistepped header exhaust system for highperformance Touring bikes (#WEGTOURX-CH/\$1,650). The name Wegner should be immediately recognized by NASCAR enthusiasts as one of the top engine builders in the business. With that high-performance pedigree, it was only a matter of time before the company set its sights onto another type of American muscle.

Wisconsin-based since 1974, Wegner only produces exhaust systems for Harley-Davidson Dynas, Tri Glides, V-Rods, Softail Rockers, and Touring models. The multistepped header exhaust system that we're installing on our 2013 Electra Glide Ultra Limited was created using race-bred principles. The headers feature a four-step primary tube design and an X-pipe merge collector. The 2-1/4" pipes leaving the X-pipe include a crossover for that classic bagger dual-exhaust look and sound. These pipes are really designed for a much larger engine, but they also work well with stock displacement motors.

Here's our 2013 Ultra Limited with the stock exhaust system, right side cover, and right floorboard and mounting bracket removed.

As far as this system fitting your year bike, Wegner has got you covered with its three-way O2 sensor setup. You can run this system with the O2 sensor bungs blocked off if you have a bike with no sensors, or use the upper or lower set of bungs, depending on whether you're equipped with the older 18mm sensors or the new 12mm ones

Wegner Motorsports takes no shortcuts on quality when it comes to the 304 stainless steel pipes and flanges, and semiautomated purged brewers welds. Nor are these pipes thin-walled cheapos! These pipes are built stout. But the pipes themselves are only half the equation,

TOOLS NEEDED

- Anti-seize
- Blue Loctite
- Glass cleaner
- Hook tool
- Pick tool
- Flat-bladed screwdriver

- 3/16" Allen 5/16" Allen 7/16" wrench
- 9/16" wrench
- 15mm wrench 15mm socket
- 7/16" socket
- 1/2" socket
- Torque wrench (in-lbs.)
- Torque wrench (ft-lbs.)



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After pulling them from the old system, install the stock exhaust flanges onto the new Wegner header pipe using large external snap ring pliers and the stock snap rings.

Rivco

Pickard

since Wegner teamed up with Supertrapp for the custom-made, stainless steel mufflers to complete the system.

Several versions of the kit are available, including a natural or brushed finish. The header system is also available without mufflers if you'd like to change things up. We got our system chrome-plated, and even though it comes with stainless heat shields, the bike's owner opted to leave the pipes



After putting some anti-seize on the threads (don't get any on the sensor bulb), install the stock O₂ sensors into the Wegner header pipe using a 9/16" wrench. Torque them to 25 ft-lbs.



After removing the old ones from the heads using a pick tool, install new H-D exhaust gaskets into the exhaust ports using just your fingers. Be gentle.



The front header pipe can now be loosely installed onto the engine using the stock flange nuts and a 1/2" socket. These nuts will get torqued to 100-120 in-lbs. later.

open for a high-performance look.

As for who did the installation for us, we went to see our buddy and dyno master Rob at Rob's Dyno in Gardner, Massachusetts. That said, follow along with the step-by-step photos and captions to see what you need to do to bolt this system onto your bagger and check out the dyno chart to see how the system performed.



The rear header pipe is then loosely installed in the same way. These nuts will also get torqued to 100-120 in-lbs. later.



After sliding the provided P-clamp over the end of the lower (front) header pipe, route the O₂ sensor wires to the ECM and plug them in as per their color code.



Install both Wegner retaining springs using a hook tool. Make sure the mounting bracket you slipped on earlier goes between them. Note: our springs were too short, so we got longer ones at a hardware store.



Loosely attach the Wegner P-clamp to the stock tranny exhaust mounting bracket. This bolt will get torqued to 25-35 ft-lbs. using a 9/16" socket and 9/16" wrench later on. Note: the Wegner supplied bolt was too short for our bike; we needed a 1/4"-20 x 7/8" bolt.



Then slip the Wegner crossover pipe onto the two header pipes. If it doesn't slide on smoothly you may have to slightly grind the inside of the crossover pipe to make it fit.



The stock rear exhaust hanger bracket is removed and replaced with the Wegner-supplied one using the two stock mounting bolts, some blue Loctite, and a 3/16" Allen. These bolts will get torqued to 100-120 in-lbs. later.

Hog Tunes

Belt Drive



P The next step is to slip the Wegner-supplied P-clamp and exhaust clamp onto the Wegner crossover pipe, noting their orientation. The crossover pipe is then slipped onto the Wegner X-pipe.



The crossover pipe's exhaust clamp is then lightly tightened using a 15mm socket. This clamp will get torqued to 40 ft-lbs. later.



After slipping both mufflers onto their pipes, loosely secure them to the stock mounting brackets using the stock hardware and a 1/2" socket.



The P-clamp is then loosely attached to the Wegner rear exhaust hanger bracket using the 1/4" longer bolt than the one provided, blue Loctite, and a 7/16" socket.



Now slip a Wegner-supplied muffler clamp over each of the SuperTrapp mufflers. Note that there is a left and right muffler, so have the open side of the clamp on the inner side of the muffler.





You can now torque all the hardware you left loose to spec starting at the flange nuts on the heads and working your way back to the mufflers. But don't tighten the muffler hardware just yet.



Before tightening the muffler hardware and clamps, ensure the mufflers are protruding the same amount past their brackets using a ruler. Then torque the muffler clamps to 38-43 ft-lbs. using a 15mm wrench. Ride Wright



The Wegner-supplied clamps are then slipped into the back of each of the Wegner heat shields. Position the clamp heads so they will be hidden when you install the heat shields onto the pipes.



After wiping the entire exhaust system down with glass cleaner to remove all fingerprints and other oils, slip each heat shield over its pipe and secure it using a flat-bladed screwdriver. Do all the shields at this time.





SOURCES

ROB'S DYNO SERVICE 978/895-0441 RobsDyno.com

WEGNER MOTORSPORTS INC. 920/394-3557 WegnerAutomotive.com



After putting some blue Loctite on the bolt threads, use a 5/16" Allen to loosely secure the right rear floorboard mounting bracket to the frame.



Slip a Wegner-supplied 3" bolt (with a stock lock washer) into the front floorboard's stock front mounting bracket, followed by a Wegner-supplied single spacer.



After putting some blue Loctite on the bolt threads, use a 5/16" Allen and a 9/16" wrench to loosely secure the right front floorboard mounting bracket to the frame.



The right floorboard is then bolted to its mounts using the stock hardware, blue Loctite, a 3/16" Allen, and 7/16" wrench. Then torque the mounting bracket bolts to 120 inlbs. Do the same for the left floorboard.



26 Here's how the finished system looks on our 2013 Ultra Limited. MB