

S&S POWER TUNE DUALS & SLIP-ONS

We gained about 5 horses and 3 ft.-lbs. of torque with this bolt-on exhaust

S&S CYCLE IS WELL KNOWN FOR ITS MASSIVE CATALOG OF engine hop-up components, including, of course, carbs and air cleaners. But S&S also makes exhaust systems for Harleys that can get you great performance and sound from your engine.

We decided to check out a couple of S&S' products to see what kind of power gains we could get on a 2010 Electra Glide Limited 103". We started with a set of Power Tune Duals header pipes and crossover for 2009 and later Touring models (#550-0004/\$524.95). This kit also fits Tri Glides with the use of a separately purchased adapter.

The S&S headers and crossover pipe are a great blend of form and function. They give your Touring bike a hot true-dual look while maintaining an equalizing crossover pipe. No one has to tell this audience that the stock headers on pre-2009 Touring bikes can get pretty hot for the passenger. Harley fixed this problem in 2009 by altering the path of the rear header pipe, which is the stock setup for our 2010 bike. For pre-2009 models, however, S&S shaped its pipes to match the newer design, moving the hot pipe farther away from the passenger. The Power Tune Duals header system features full chrome heat shielding with 220-degree coverage to ensure everything stays a little cooler in general. Your bike

will end up looking much better than stock, too. The header system is set up by S&S to fit easily on your bike without any other modifications. The inlets feature a spherical design to improve sealing to the heads and exhaust gasket durability. All the hardware is included to mount the crossover pipe.

TOOLS NEEDED

- Blue Loctite
- Anti-seize
- Glass cleaner
- Muffler cement
- 18mm-1.5 tap
- Ruler
- Pick tool
- 10mm Allen
- 3/16" Allen
- 5/16" Allen
- Flat-bladed screwdriver
- 9/16" wrench
- 1/2" socket
- 9/16" socket
- 5/8" socket
- Torque wrench (in.-lbs.)
- Torque wrench (ft.-lbs.) ■

Our 2010 Electra Glide Limited 103" is up on Rob's dyno with its stock exhaust and right side cover removed. The right floorboard's rear mount is disconnected, the front one is loosened. We're using the air cleaner runs we did in the last issue as our baseline run for this build.



PHOTOS BY CHRIS MALDA



2 After removing the old exhaust gaskets from the exhaust ports using a pick tool, Rob slips in the new S&S-supplied gaskets with his finger.

pro guard

mystry design



3 Rob always sends an 18mm-1.5 tap through a new exhaust header's O₂ sensor ports to ensure the threads are clear. These were fine.



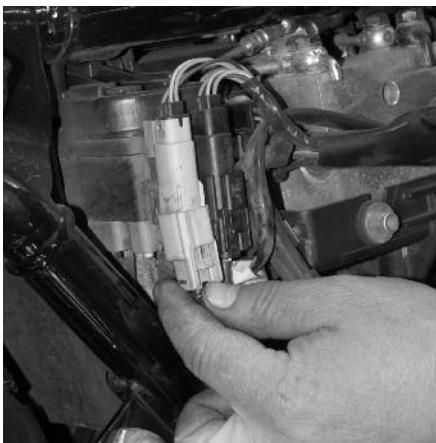
4 After putting a little anti-seize on the threads (don't get any on the sensor bulbs), Rob installs the stock O₂ sensors in the new S&S header using a 9/16" wrench. He torques them to 30-44 ft-lbs.



5 Rob swaps the stock exhaust flanges, with new H-D retaining rings, over to the new S&S header. He then closes off the unused O₂ sensor bungs near them using the S&S-supplied plugs and a 10mm Allen.



6 He installs the S&S header onto the engine using new H-D nuts and a 1/2" socket. He leaves the nuts loose for now, but will torque them to 100-120 in-lbs. once the entire exhaust system is on.



7 Rob attaches the O₂ sensor connectors to their harnesses, which are located under the right side cover. Don't mix them up: gray goes to gray, and black goes to black.



8 He then uses a 3/16" Allen to remove these four bolts from the oil pan, so he can mount the new S&S exhaust mounting bracket.



9 Ron installs the new black S&S-supplied exhaust mounting bracket to the oil pan using the new S&S-supplied bolts, blue Loctite, and a 3/16" Allen. He torques the bolts to 100-120 in-lbs.



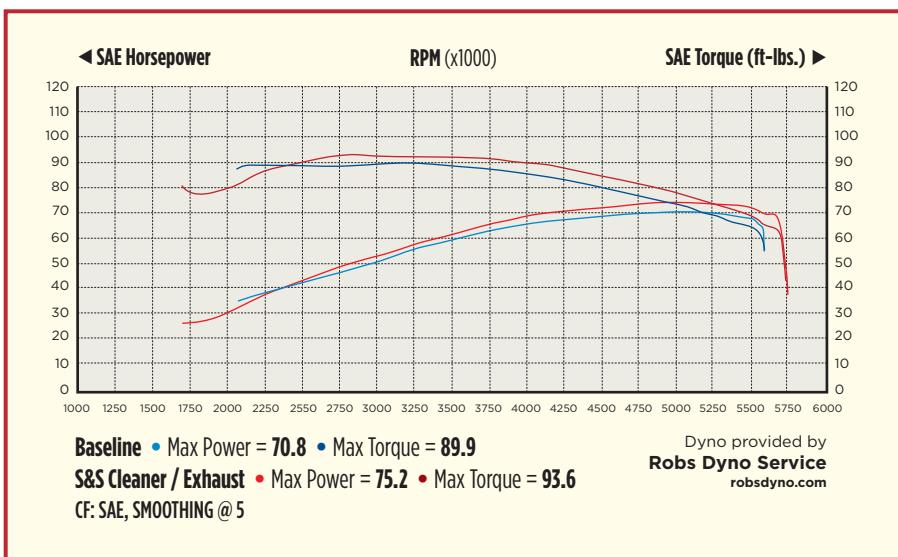
10 Rob then slips the S&S-supplied red rubber grommets into the S&S-supplied front cylinder crossover pipe mounting bracket using just his fingers.



11 He can now slip the S&S-supplied pipe clamp over the forward end of the crossover pipe. He then puts some muffler cement inside the same end of the crossover pipe.



12 Rob slips a S&S-supplied large washer and spacer over each of the two S&S-supplied bracket mounting bolts. He then puts some muffler cement on the outside of the front cylinder header.



avon



13 Rob slips the crossover pipe over the S&S header's front cylinder pipe and secures it to the bracket using the S&S-supplied hardware, blue Loctite, and a 1/2" socket.



16 After he puts muffer cement inside the forward end of the muffer, Rob slips the muffer over the pipe and secures the muffer to the stock mount using the stock hardware, blue Loctite, and a 9/16" socket.



14 Once he has the clamp hardware inboard of the pipe, Rob uses a 5/8" socket to torque the hardware to 25-30 ft-lbs. He then puts some muffer cement outside the rear end of the rear header.



17 Once he has the clamp hardware inboard of the muffer, Rob uses a 9/16" socket to torque the hardware to 25 ft-lbs. He then torques the exhaust flange nuts to 100-120 in-lbs. using a 1/2" socket.



15 Rob now slips a new H-D muffer clamp over the forward end of the S&S right muffer (no, they're not the same), so the hardware will be facing in toward the bike.



18 After installing the left muffer in the same way, Rob uses a ruler to ensure both mufflers are protruding the same distance from their mounting bracket.



19 Rob now slips the S&S-supplied clamps inside the S&S chrome header heat shields, so he'll have easy access to their heads once the shields are on the bike.



20 After wiping down the entire system with glass cleaner, Rob installs the front heat shield using a 1/4" socket or flat-bladed screwdriver. He torques the clamp to 20-40 in-lbs.



21 Yup, Rob installs the rear heat shield in the same way using a 1/4" socket or flat-bladed screwdriver. He then wipes down both heat shields with glass cleaner.

One of the nice things about S&S Cycle's line of exhaust systems is that the customer has a variety of choices in terms of mufflers. Its mufflers will work with your stock header system, but as previously stated, we're doing the full upgrade. We went with the SPO Touring Muffler for 1995 and later Touring models (#550-0002/\$779.95). Pay attention, though. If you have a 2010 Road Glide Custom or Street Glide, this part number will not fit.

The SPO's oval shape and contrasting bodies and end caps make for a sweet look for your ride. We got ours with chrome bodies and Xylan black end caps, and it simply looks killer. Double-walled construction and show chrome match up perfectly with the Power Tune Duals and virtually eliminate bluing. All the factory mounting locations are utilized, making these slip-on mufflers an



22 Rob reconnects the right floorboard using some blue Loctite, the stock hardware, and a 5/16" Allen. He also pops the right side cover back onto the bike.



23 Here's how the finished system looks on the bike. It performs as good as it looks. Check out the dyno chart. MB

easy addition to your ride.

Now, let's talk numbers and performance. We gained a total of 5 hp and 3 ft-lbs. of torque from the full S&S system. This is pretty good considering we already made good gains by swapping out the bike's air cleaner. S&S Cycle recommends swapping out the air cleaner and cams along with the exhaust to realize the most power from your Big Twin bagger. We downloaded S&S' map for the Power Vision tuner, but no additional power gains were made. The same thing happened with the air cleaner. The stock ECM was able to calibrate itself to work with the new high-po equipment. I suppose I should also warn you that this is not a street-legal system.

We did this project at Rob's Dyno with Rob himself turning the wrenches for us. Rob describes the Ultra Limited's new voice as "a nice, deep, and throaty sound but more than quiet enough to hear the stereo." Don't worry, I thought that was going in a different direction, too. Either way, here's Rob with the install of the S&S Cycle exhaust system on our 2010 Ultra Limited. We'll do the cams next month. MB

SOURCES

ROB'S DYNO SERVICE
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