

BOYESEN POWER X-INTAKE

Bolting on this air cleaner got us 7 more ponies!

IT'S PROBABLY NO NEWS FLASH TO MOST OF YOU THAT THE quickest way to pick up a few extra horsepower is to swap out the stock air cleaner for a performance one. The reason is simple: a performance version lets a lot more air get into the engine than the stocker, which means you can add more fuel to that air. More fuel in the engine means more power is produced. As complicated as headwork, cams, and such can get, the whole process still breaks down to this simple truth. The boys at Boyesen know this, too, of course, and they've been hard at the performance game since 1972 in the quest to do just that. The latest result of all their testing and experience is the Power X Intake for 2008-12 Harley-Davidson Touring models.

The heart of the Power X Intake is its patented X-Wing venturi, which gets the incoming air funneled down into the intake system in an orderly fashion. Contrary to what some may think, you don't want turbulence in the intake tract. You definitely want it in the combustion chamber, but not anywhere along the intake, from air cleaner to intake valve, since turbulence slows air down. The X-Wing venturi is one with the kit's backing plate, which also has integral breather ports.

In fact, once the one-piece backing plate/venturi/breather port component is secured to the engine, all that's left to do is attach the 40-micron, oil-free, washable, polycotton-blend filter element and bolt on the cover. As for that cover, you've got some options. If you want to fly under the radar, just reinstall the stock air filter cover. We didn't want that, so we mounted one of Boyesen's matte black covers. If that's not your speed, you could opt for a gloss black or shiny chrome one — your call. Of course, the all-important backing plate comes either polished or black, depending on what cover you've selected. You'll also get a waterproof filter sock no matter what cover option you pick.

To see just what the Power X intake (#PX-HBPK-01BB/\$269.95) could do,

Our 2010 Street Glide is up on Rob's dyno with the stock air cleaner and breather bolt bracket removed. The baseline dyno runs have already been recorded.



TOOLS NEEDED

- Light grease
- Blue Loctite
- 5/32" Allen
- #3 Phillips screwdriver
- 9/16" socket
- Torque wrench (ft-lbs.) ■



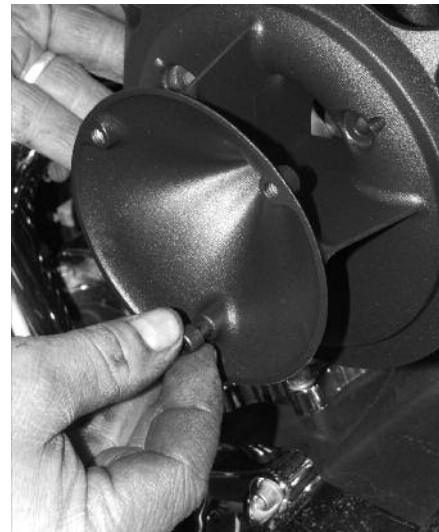
2 After putting a little grease on the four Boyesen-supplied O-rings, Rob positions the two round O-rings in their grooves on the engine side of the Boyesen backing plate.

harbor freight

mdm prod



3 Rob then installs the two square O-rings into their grooves on the filter element side of the backing plate.



4 With a Boyesen gasket between the throttle body and backing plate, Rob loosely attaches the backing plate to the throttle body using the 2-3/4"-long Boyesen bottom bolt.



5 After putting blue Loctite on both Boyesen breather bolts, Rob loosely threads in the breather bolts using just his fingers. He then checks the gap between the backing plate and throttle body.

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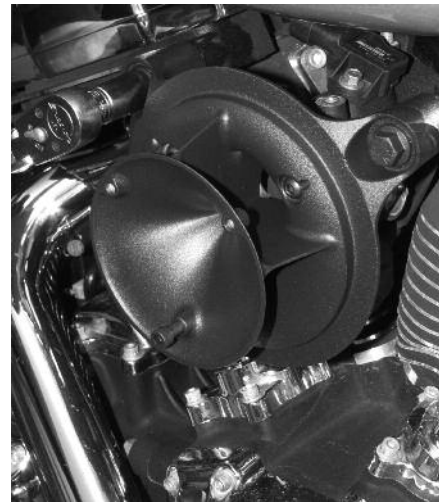
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6 Since the gap is filled, Rob loosely threads in the two Boyesen 1"-long bolts using a 5/32" Allen. He then torques both bolts to 10 ft-lbs.

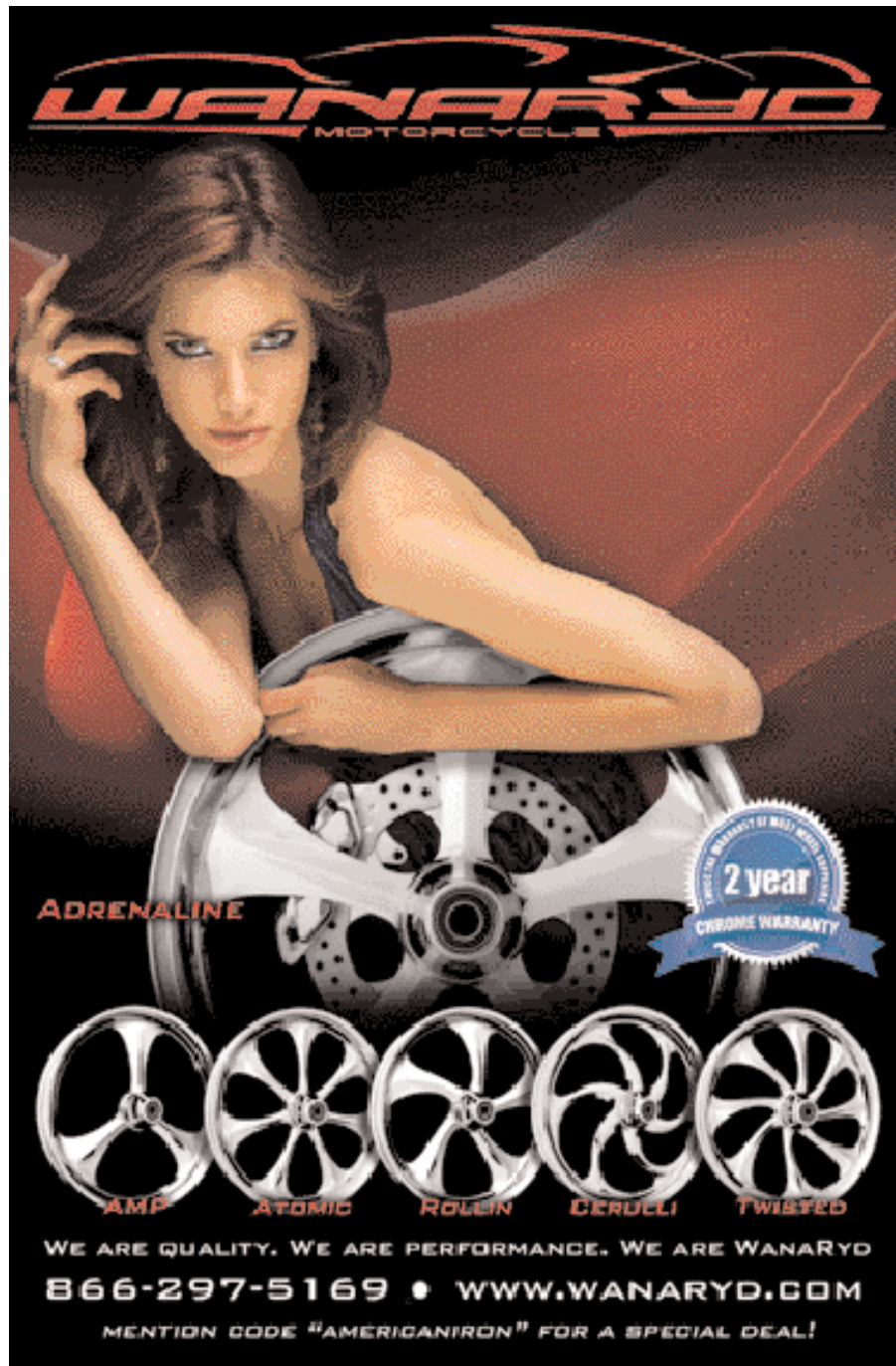


7 Rob can now torque both breather bolts to 14 ft-lbs. using a 9/16" socket. He then removes the 2-3/4"-long bolt he installed loosely in the bottom hole of the backing plate in step 4.



8 Rob positions the Boyesen element onto the backing plate and secures it using the 2-3/4"-long bolt and the 3/8"-long bolts using a 5/32" Allen. He torques the bolts to 10 ft-lbs.

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9 Last on is the Boyesen flat black outer cover. Rob secures it using some blue Loctite, the Boyesen-supplied bolt, and a #3 Phillips screwdriver.

we asked Rob of Rob's Dyno Service to bolt one onto a 2010 Street Glide for us, and perform before and after dyno runs. Since this install is so simple, after Rob did the baseline runs, he left the bike strapped to his dyno and did the installation. He then followed up with another series of runs to see how much power we gained. And though the Boyesen web site recommends installing the Harley's SE Stage I ECM recalibration with this kit, we didn't. During the power runs, Rob sampled the engine's air/fuel mixtures. He also later checked the mixtures at various partial throttle settings. The mixtures were fine, so we didn't install a fuel tuner. Our bike's stock ECM was able to recalibrate the air/fuel mixture settings to compensate for this air cleaner upgrade. **MB**



10 Here's how the finished installation looks! Rob then does some power runs and also checks the air/fuel mixtures. The mixtures are fine as is, and the dyno chart below speaks for itself.

SOURCES

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