

# BOYESEN POWER X-INTAKE

*We gained seven ponies on our 2013 Ultra Limited!*

**Thunder Alley**  
HIGH PERFORMANCE HARLEYS

Here's our 2013 Ultra Limited up on Rob's lift with its stock air cleaner and breather bolt bracket removed, ready to receive its new Boyesen X-Intake assembly.

EVERYONE REMEMBERS THE X-WING FIGHTER that Luke Skywalker piloted in his successful attack on the Death Star. In fact, the X-Wing was the high-performance fighter used by the Rebel Alliance throughout the *Star Wars* trilogy. Its performance was partially due to the X-shaped wings that flanked its fuselage. Of course, this ignores the fact that there's no atmosphere in space. The first *Star Wars* movie was released in 1977 and became a science fiction blockbuster.

What does any of this have to do with motorcycles? Well, over 35 years later, that tested and proven X-Wing technology is used by power provider Boyesen to add performance to Harley-Davidsons. While we will likely never be able to man the controls of a X-Wing fighter, we opted for the next best thing and installed Boyesen's Power X-Intake (#PX-HBPK-01SC/\$289.95) on a 2013 Ultra Limited.

Those familiar with the Boyesen name may be aware that it makes an insert for carbs and throttle bodies called the Power X-Wing. It's a device that improves airflow through a carb or throttle body's throat by speeding it up and straight-

## TOOLS NEEDED

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

ening it out. That simple product can be installed with any air cleaner setup. It also comes built into the Power X-Intake we installed on our Limited.

The Power X-Intake comes as a complete bolt-on kit, which includes backing plate, filter, mounting hardware, and a chrome cover. If you want,



**2** A Boyesen Thermal Guard (\$79.95) was already installed on the bike, so we begin by reattaching the Thermal Guard to its mount points using the quick disconnect pins.



**3** After putting a little light grease on the Boyesen-supplied round O-rings, they are inserted into their grooves on the backside of the Boyesen X-Intake.



**4** The Boyesen-supplied gasket is then placed onto the X-Intake.



**5** With a little light grease on the Boyesen-supplied square O-rings, position them into their grooves on the opposite side of the X-Intake.

action station



**6** Insert the Boyesen-supplied 2-3/4" screw into the bottom hole of the X-Intake and loosely secure the X-Intake to the throttle body.



**7** After putting some blue Loctite onto the Boyesen-supplied breather bolts, loosely secure the X-Intake assembly to the heads.



**8** Bolt the X-Intake to the throttle body using the two Boyesen-supplied 1"-long screws and a 5/32" Allen. Torque the screws to 10 ft.-lbs.



**9** The two breather bolts are now torqued to 14 ft.-lbs. using a 9/16" socket. Then remove the 2-3/4"-long bolt installed earlier in the bottom hole.



**10** Secure the Boyesen element onto the X-Intake using the two Boyesen 3/8"-long bolts in the two upper holes and the 2-3/4" bolt in the lower hole. Torque the bolts to 10 ft.-lbs. using a 3/16" Allen.



**11** The Boyesen chrome outer cover is installed using a #3 Phillips screwdriver and the Boyesen-supplied bolt. You can also use the stock air cleaner cover if you want.

you can also use your stock air cleaner cover, but we went with Boyesen's chrome cover. We did this install with



**12** Here's how the finished Boyesen Power X-Intake looks on our 2013 Ultra Limited.

Rob of Rob's Dyno in Gardner, Massachusetts. We also used this bike for a few other projects, one of which was a set of Wegner exhaust pipes. That article, with dyno chart, is featured in the January/February issue of *Motorcycle Bagger*. This Boyesen kit was installed before the Wegner exhaust system, so our baseline runs for this article are with the stock pipes and mufflers. That said, our real wheel horsepower increase for just the Power X-Intake was 7 hp and 2 ft.-lbs. of torque. And those increases are without installing a fuel tuner. The stock ECM was able to adapt to the new Boyesen X-Intake.

While the Boyesen X-Wing actually needs air to perform, unlike its distant (in a galaxy far, far away) relative, the basic principles are there: velocity and laminar airflow. Perhaps the biggest (or littlest) similarity between the *American Iron Magazine* team and *Star Wars* is our very own Yoda in the form of Chris Maida, our wise and powerful editor. **AIM**

**SOURCES**

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