

ONE-HOUR TECH *by Chris Maida*

# NESS BIG SUCKER

*We got a 4 hp and 4 ft-lbs. of torque gain!*

**G**IVING A PRODUCT A NAME LIKE BIG SUCKER HAS THE potential for disaster. Who would want to put something on his bike that says it sucks big time right on the box? Save for some kind of *Miracle on 34th Street* marketing attempt, somebody's probably going to lose his job. Unless, of course, that product happens to be a high-performance air cleaner designed to get more air into your Milwaukee motor, therefore giving you more power.

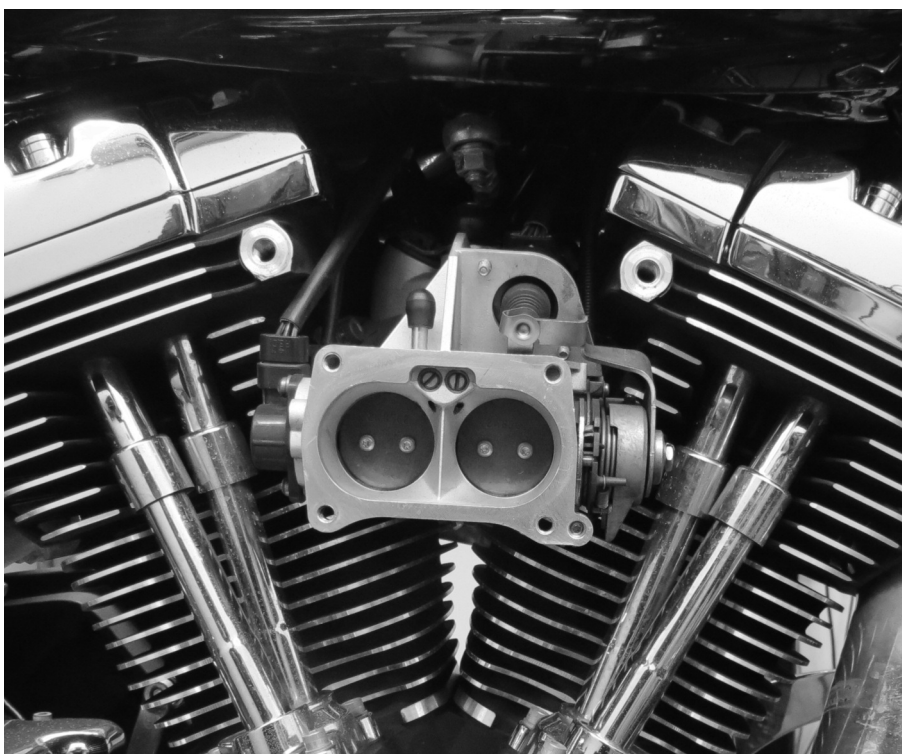
The Stage 1 Big Sucker (\$129.95) from Arlen Ness is just that product. Believe me when I tell you, this kit sucks! Just by looking at it, it's easy to tell the difference between the stock air cleaner and Ness' high-performance one. Depending on how you want to mount it though, no one else will be able to see the additional performance. Designed to fit neatly underneath the stock cover, the Big Sucker lets you keep a clean, factory look if you so desire. You can also leave the filter exposed with one of Arlen Ness' Stage 1 billet covers if you're going for a custom look. We opted for the stealthy stock route.

You can get a Big Sucker for just about any Big Twin or Sportster, so sure enough, Ness had one specifically for 1999 - 2001 FLs. Just right for our 1999 Road King. Ness also offers a

variety of options with the kit. You can go with a plain, chrome, or black backing plate. You also have a choice of standard or stainless filter if you're planning on leaving it exposed.

Because everyone's bike is different, every install is going to be different. Our 1999 Road King already sports a set of freer flowing exhaust pipes with no O2 sensors. The lack of O2 sensors means the ECM can't adjust itself to the extra air coming into the motor, and we must therefore use a fuel tuner. However, we're doing the dyno runs without the tuner because there's a cam install planned for this bike next. We're going to tune the whole thing then. Since the Road King was running a bit lean when we did our dyno pulls, the tuner should be able to pull an additional 2 hp onto the chart.

**I** Here's our 1999 Road King up on Rob's dyno. The baseline runs are already done and the old air cleaner has been removed, which means Dan is ready to install the new Ness Big Sucker.



## TOOLS NEEDED

- Blue Loctite
- Silicone
- 1/2" socket
- 1/8" Allen
- 5/32" Allen
- 3/16" Allen
- 5/16" Allen
- Torque wrench (in-lbs.) ■



**2** With a little blue Loctite on its threads, Dan inserts a Ness setscrew into a Ness standoff and then torques it to 36-60 in-lbs. using a 1/8" Allen. He does the same to all four setscrews and standoffs.



freedom perf.



j&amp;p

bike barn

boyesen



**3** Dan inserts a new Ness O-ring into each of their grooves in the Ness backing plate. The O-rings go in dry, but you can put a small dab of silicone on them to hold them in place if needed.



**4** After positioning the Ness-supplied gasket between the Ness backing plate and throttle body, Dan threads in the four Ness standoffs.



**5** Dan will use the Ness breather bolt on the left since this is a Twin Cam motor. The one on the right is for Evos.



supertrapp



bad land



**6** Dan can now slip one of the Ness-supplied chrome washers over each of the Twin Cam-style breather bolts.

We did this install at Rob's Dyno, which is well-known for its tuning abilities. Recently, Rob hired Dan, a certified H-D mechanic who has been working at dealerships for over 18 years. Now Rob's Dyno can do installs and tuning right on premises. We're going to use him for the cams next and then push the bike right onto the dyno for a top-notch tune job.

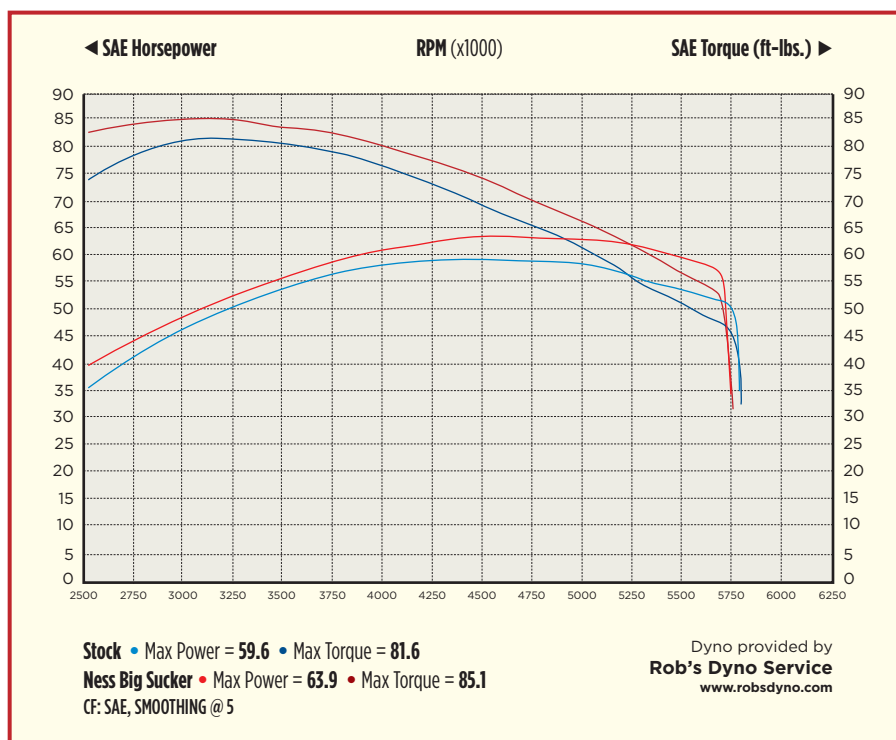


**7** After making sure the O-rings are still in place, Dan threads in both Ness-supplied breather bolts, with a little blue Loctite on their threads. He torques them to 10-12 ft.-lbs. using a 5/16" Allen.

#### SOURCES

**ARLEN NESS INC.**  
6050 Dublin Blvd., Dept. AIM  
Dublin, CA 94568  
925/479-6300  
ArlenNess.com

**ROB'S DYNO SERVICE**  
Dept. AIM  
Gardener, MA 01440  
978/895-0441  
RobsDyno.com





**8** Dan can now torque the four Ness standoffs to 36-60 in-lbs. using a 1/2" socket.



**9** With a little blue Loctite on the four Ness-supplied screws, Dan attaches the Ness filter element to the backing plate using a 5/32" Allen. He then torques all four bolts to 36-60 in-lbs.



**10** The owner wanted to reinstall the stock air cleaner cover, which goes on with a little blue Loctite on the stock bolt's threads. Dan uses a 5/16" Allen to torque the bolt to 36-60 in-lbs.  
**MB**

stop n go

mystry design