

**NESS BIG SUCKER, BILLET SUCKER, DERBY SUCKER & TWIN SUCKER
AIR CLEANER KITS FOR 2008-14 FLT ARB E.O. D-639-4**



Thank you for purchasing this Arlen Ness product. We believe that our products are the they very best available and are engineered to provide a lifetime of use. The Team Ness Big Sucker air cleaner for 2008-10 FLT models provides the cleanest installation available. Basic hand tools and a service manual applicable to your model of motorcycle are all that is necessary to complete the installation. If you ride a custom-built bike, please call our technical assistance department and they will be able to recommend the best service manual to use with your motorcycle.

PARTS:

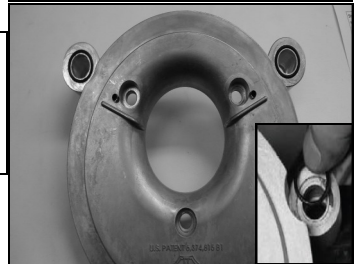
Quantity	Description	Quantity	Description
1	Air Cleaner Element (Varies per kit)	2	Banjo Bolt
1	Big Sucker Backing Plate (Varies per kit)	2	Banjo bolt Washer
1	Air cleaner cover (Varies per kit, except 18-510 thru 18-513 and Derby Sucker kits)	4	Banjo Bolt O'Ring
1	Derby air filter ring (Derby Sucker kits only)	3	1/4-20 x 1-1/4 Set Screw, Black
1	Twin Sucker body (Twin Sucker kits only)	3	Stand off
1	Gasket, back plate to throttle body	3	1/4-20 x 1/2 Buttonhead, Stainless
2	Twin Sucker Filters, stainless (Twin Sucker kits only)	1	Nylon Spacer (Steel cover kits Only)
1	Gasket, Twin Sucker body to backing plate (Twin Sucker kits only)	4	1/4-20 x 1/2 Sockethead, Zinc (Twin Sucker kits only)
1	Loctite Removable Threadlocker	3	1/4-20 x 3/4 Sockethead, black (Twin Sucker kits only)
5	1/4-20 x 1/2 Buttonhead, chrome (Derby Sucker kits only)	1	5/16-18 x 1-1/4 allen head, chrome (Retro kit only)
1	5/16-18 x 1-1/4 Flathead, chrome (exc. 18-510 thru 18-513, Derby Sucker & Retro kits)	1	5/16 Washer Stainless
1	5/16-18 X 1-1/4 Button Head Stainless		

Step 1: Begin by removing the existing air cleaner and backing plate as illustrated in the appropriate service manual for your year and model of motorcycle. **Do not remove the OEM throttle body support bracket. This must be left in place for proper fitment and support.**

Note: if your motorcycle does not have this bracket you must purchase it from an H.D. dealer. Part # 27712-08 Clean the flange on the throttle body as well as the bosses on the cylinder heads. Using the rubber covered gasket supplied, put a thin coat of grease on the face of the throttle body to hold it in place during assembly. **Note:** If your motorcycle is equipped with an electronic baffle in the OEM air box, unplug the solenoid and wire tie it to a secure location on the motorcycle where it will not interfere with anything.



Step 2: The new backing plate features differs from earlier backing plates, featuring two small ribs that are designed to direct oil into the throttle bore. Four o-rings are included to seal the backing plate (inset). To keep them in place during installation, apply a small amount of grease in the o-ring grooves. Keep an eye on them while you position the backing plate to ensure all four o-rings are positioned correctly.

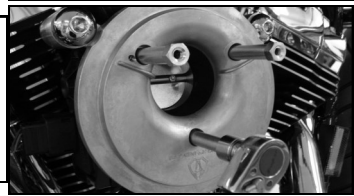


Step 3: Install the supplied washers onto the breather bolts, then install the appropriate breather bolts as seen in picture at right. (The bolts in this kit may vary, you may get button heads, as shown in the inset picture). Apply thread sealing paste such as Loctite, ARP, etc. to the threads of the breather bolts leave loose for now, as this will allow the backing plate studs to align easily.



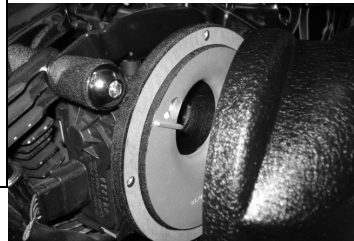
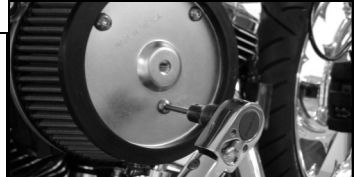
Step 4: Using thread locker on the threads, **install the black set screws into backing plate stand offs** opposite of the hex and torque them to 3-5 ft/lbs (36-60 in/lbs). Next, using thread locker on the threads of the stand off assembly attach the back plate to the throttle body torque stand offs to 3-5 ft/lbs (36-60 in/lbs). Torque the banjo bolts to 10-12 ft/lbs. The backing plate is now secure.

* Twin Sucker kits only—Use (3) 1/4-20 x 3/4 black Sockethead allens in place of set screws and stand off bolts and require the same



Step 5: Install the air cleaner element on the backing plate and secure it using thread locker on the three Buttonhead screws supplied and torque them to 3-5 ft/lbs (36-60 in/lbs).

* Install Twin Sucker body with gasket supplied between the backing plate and the body using (4) 1/4-20 x 1/2 Socketheads allens. Use a stubby 3/16" allen key for the top allen bolt.



2008-11 FLT BIG SUCKER, BILLET SUCKER, DERBY SUCKER & TWIN SUCKER INSTRUCTIONS

Step 6: Cover installation

OEM air cleaner cover on kits 18-510 and 18-512

Fully clean and install your existing air cleaner cover using OEM hardware as per the specifications in the appropriate service manual for your year and model of motorcycle.



2014 Air Cleaner Covers 18-440, 18-441, 18-442

Load the included 5/16" flat washer onto the included 5/16-18 x 1 1/8" button head bolt. Insert the bolt into the center hole of the air cleaner cover. While holding the button head bolt in place, rotate the air cleaner cover on its back. Place plastic spacer over the threads of the 5/16 button head bolt as shown in picture. With the spacer in place on the threads, carefully offer the cover up to the filter and thread the 5/16 button head into the center hole on the filter, making sure the spacer does not drop off the threads. Tighten bolt to OEM specs



Important note: Before installing the Derby Sucker filter element make sure that the holes in the outer plate are aligned with and fully seated over the nipples in the outer edge of the filter element. 15 holes with 15 nipples.



Twin Sucker kits only—Install both filters & tighten both hose clamps securely.



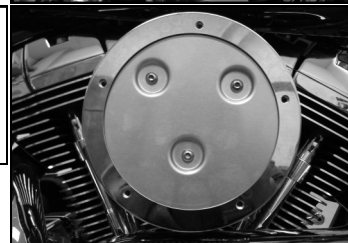
Big Sucker kits w/steel covers and Billet Sucker kits

Using the 5/16x18x11/4 countersunk allen w/threadlocker attach outer cover to air filter element. Torque to 5 ft.lbs. **Note: Steel cover kits use a nylon spacer between the cover and air filter w/ the countersunk facing the outer cover. Retro covers uses a standard 5/16x18x11/4 allen to attach it.**



Derby Sucker kits

Install the chrome air filter ring over the air filter lining up the holes in the ring with the threaded holes in air filter.



Derby Sucker kits

Install your choice of derby covers using thread locker on five 1/4 x 20 x 1/2 chrome button head allens (supplied). Torque to 3-5 ft/lbs (36-60 in/lbs).



To ensure maximum performance adopt cleaning and re-oiling of the air filter element as part of the regular maintenance schedule. Arlen Ness recommends using the Big Sucker Filter Recharge Kit part # 18-096 (red) for standard filters or SS Sucker Filter Recharge Kit part # 18-075 (clear) for Stainless Steel filters.

IMPORTANT NOTE: Due to the increased air flow it may be necessary to install some kind of adjustable fuel tuner. Arlen Ness recommends a Big Shot adjustable fuel tuner part# 18-620