

# FEULING

## TWIN CAM AIR CLEANER KIT INSTALLATION INSTRUCTIONS

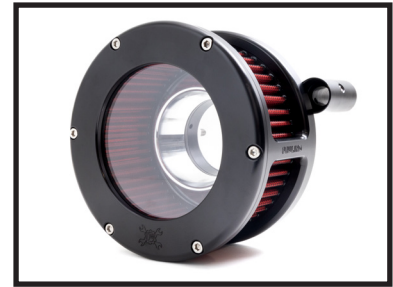


DYNA '99-'05  
SOFTAIL '00-'17  
TOURING '99-'16  
Excluding '99-'00 TOURING MODELS

**PART #S:** 5443, 5444, 5447, 5448, 5453, 5454, 5457, 5458, 5483, 5484, 5487, 5488, 5493, 5494, 5497, 5498, 5543, 5544, 5547, 5548, 5553, 5554, 5557, 5558, 5583, 5584, 5587, 5588, 5593, 5594, 5597, 5598

With years of experience designing improved cylinder heads, combustion chambers and intake manifolds, FEULING brings light to a new bolt-on air cleaner design for H-D® motorcycles. The FEULING BA air cleaner lengthens the intake runners and increases air velocity, delivering added volume for balanced dynamic flow.

The BA air cleaner features a highflow billet aluminum velocity stack with optimal opening diameter, outer lip and internal (ID) taper. The BA Air Cleaner includes a highflow reusable air filter and one piece billet cage. The one piece design, creates a clean look and eases installation when compared to the industry standard multi stack up construction.



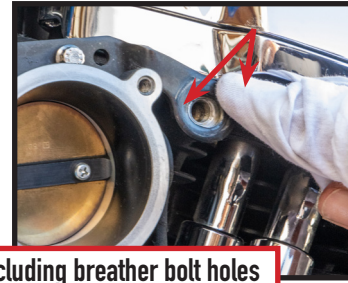
### INSTRUCTIONS

**1.** Use the proper tools for installation. Clean the intake/carburetor surface with a clean rag to ensure it is free of debris. Clean breather hole surfaces.



#### TOOLS:

- 1.) Ratchet
- 2.) 3/16" Allen Socket
- 3.) 5/32" Allen Socket
- 4.) Extension
- 5.) 7/16" Socket



Clean all surfaces including breather bolt holes

**2.** Lube and install inner and outer breather O-rings, use with O-ring lube.



Inner breather O-rings

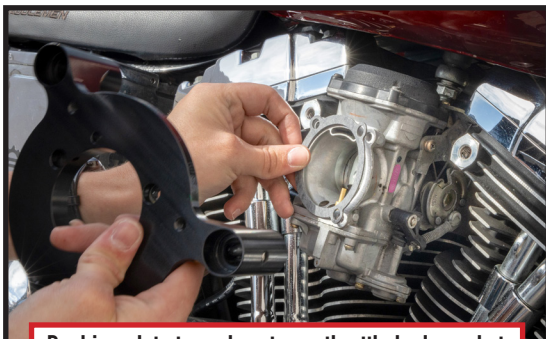


Lube and install inner and outer breather O-rings, use with O-ring lube.

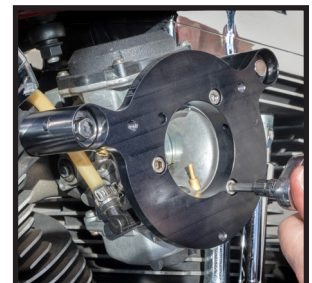
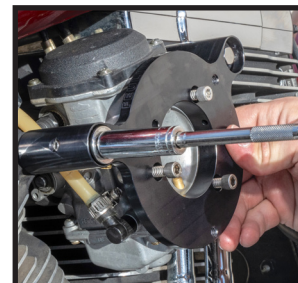
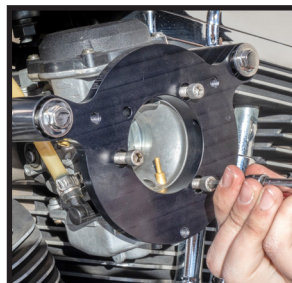


Install breather bolts with outer breather O-rings

**3.** Install breather bolts with red 263 loctite on threads and O-ring lube on underhead flanges. Use 545 thread sealant on backing plate to carburetor/throttle body bolts ('08-present TBW models use backing plate spacers when OEM crossover bracket is removed). Loosely install the three (3) backing plate bolts to help center backing plate, gasket and breather bolt holes. (Note: For Mikuni HSR series carburetors use included short 1/4-20 x 0.500 backing plate bolts in place of longer 1/4-20 x 1.000). Alternately tighten and torque breather bolts and backing plate bolts. Final torque Breather bolts to 22-24 ft/lbs. Final torque backing plate bolts to carburetor 36-60 in/lbs or 72 in/lbs for EFI models.



Backing plate to carburetor or throttle body gasket



Insert backing plate bolts to help center backing plate & breather bolt holes. Final torque breather bolts to 22-24 ft/lbs. Final torque backing plate bolts to 36-60 in/lbs (Carburetor) 72 in/lbs (EFI)



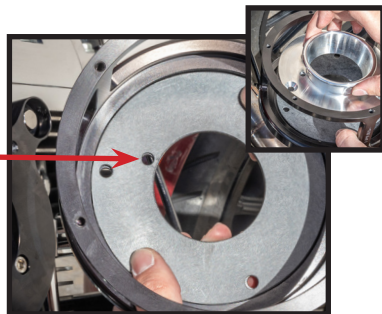
4. On the inside of the filter cage, see "TC" for throttle cable models & "TBW" for throttle by wire models. Align "TC" with bottom hole or "TBW" with top hole on backing plate, this will clock the cage and logo properly. Install velocity stack, gaskets and bolts.

**HARDWARE:**  
Velocity stack counter sinks:  
Qty. 3, 1/4"-20 x 0.875"

**Cover bolts (Long):**  
Socket head cap screw  
Qty. 3 10/32 x .750"

**Cover bolts (Short):**  
Socket head cap screw  
Qty. 3, 10/32 x .250"

**NOTE:** Make sure to line up velocity stack, cage & gaskets properly to not block vent hole on carburetor models



**TC = THROTTLE CABLE**

**TBW = THROTTLE BY WIRE**



**CLOCK AIR FILTER CAGE**

5. Apply red loctite to the velocity stack bolt threads. Alternately tighten and torque the 1/4"-20 velocity stack bolts to a final torque of 72 in/lbs. Lube both bases of the air filter to seal filter to the cage & cover. Install filter gasket into cage, and Insert air filter.



**Install velocity stack, gaskets and bolts.**



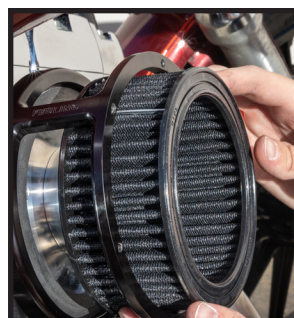
**Red Loctite on bolt threads.**



**Alternately tighten velocity stack bolts. Final torque to 72 in/lbs.**



5. Lube both bases of the air filter to seal filter to cage & cover. Install filter gasket ring into cage, and Insert air filter.



**Line up metal rib with pillar on cage**

**Install filter gasket ring into cage, Lube both filter bases with O-ring lube and install into**

6. Apply 545 thread sealant to cover bolt threads. Start with the 3 longer .750" bolts, alternately tighten all 6 cover bolts, final torque to 30 in/lbs.

**NOTE:** If air filter protrudes excessively out of cage, filter may distort during cover final torque. Remove filter gasket ring if necessary, then reinstall filter and final torque cover



**Install cover with logo at the six o'clock position**



**Final torque cover bolts to 30 in/lbs.**



**GO RIDE!**

**\* STANDARD 1 YEAR WARRANTY:**

- WARRANTY COVERS MANUFACTURE DEFECTS.
- DOES NOT COVER PARTS THAT HAVE FAILED DUE TO IMPROPER INSTALLATION, MAINTENANCE, EXCESSIVE CRANKSHAFT RUNOUT, OR MISUSE.
- DOES NOT COVER ANY CONSEQUENTIAL DAMAGE RESULTING FROM A FAILURE OF A FEULING PRODUCT.

**\* OPTIONAL 2 YEAR WARRANTY:**

- ADDITIONAL YEAR WARRANTY IS ONLY AVAILABLE IF PARTS ARE INSTALLED BY A PROFESSIONAL INSTALLER.
- THE ONLINE WARRANTY FORM MUST BE COMPLETED BY THE DEALER PRIOR TO BIKE DELIVERY.
- OIL TANK MUST BE DROPPED & CLEANED.
- CRANKSHAFT RUNOUT MUST BE BELOW 0.005"

**NOTE: FOR FULL WARRANTY INFORMATION VISIT [WWW.FEULINGPARTS.COM/WARRANTY](http://WWW.FEULINGPARTS.COM/WARRANTY)**



**DISCLAIMER: NOT LEGAL FOR SALE OR USE IN CALIFORNIA ON ANY POLLUTION CONTROLLED MOTOR VEHICLE.**

**3740 Oceanic Way - #304 - Oceanside, CA. 92056 // [www.FeulingParts.com](http://www.FeulingParts.com) // 1(866)966-9767**