



INSTRUCTIONS

-J00049

REV. 01-8-2002

Kit Number 29041-88B

HIGH FLOW AIR CLEANER KIT

General

This High Flow Air Cleaner Kit is designed for installation on 1988 and later XLH Sportster models.

CAUTION

Harley-Davidson* motorcycles equipped with some Screamin' Eagle* high-performance engine parts may not be used on public roads, and in some cases, must be restricted to closed course competition. This engine-related performance part is intended for racing applications, and is not legal for sale or use in California on pollution-controlled motor vehicles.

Installation

CAUTION

Loosen backing plate-to-carburetor screws a few turns at a time, at the same time pulling backing plate away from carburetor, to prevent screws from engaging threads in backing plate inserts. If screws engage insert threads, the inserts may accidentally be pulled out of backing plate.

1. Remove original air cleaner and backing plate according to instructions in the appropriate Service Manual. Save original components; some will be reused with new air cleaner in this kit.
2. See Service Parts illustration. Position two spacers (5) over two countersunk holes on "filter element side" of new air cleaner backing plate; each spacer should be positioned with concave end away from backing plate. Secure each spacer to backing plate by installing a flathead screw (9) through countersunk hole (on "carburetor side" of backing plate) and into spacer. Tighten screws to 12 ft-lbs.
3. Peel backing paper off air cleaner-to-carburetor gaskets (10) and apply gaskets to spacer (11) and "carburetor side" of backplate as shown in Service Parts illustration.
4. For 1988 - 1990 models only, proceed to Step 5.
For 1991 and later models only, proceed to Step 8.
5. On 1988 - 1990 models only, remove 3/8 in. diameter "knockout" from backing plate using a hammer and punch (so as not to distort backing plate, support the backing plate surface near the "knockout" during removal). Install O-ring (17) over crankcase breather hose fitting (16). O-ring should contact sealing flange on end of fitting. Insert fitting (with O-ring) into knockout hole on "filter element side" of backing plate.
6. Install end of original crankcase breather hose (on motorcycle) onto end of installed fitting which protrudes on "carburetor side" of backing plate. When properly installed, end of the hose should contact "carburetor side" of backing plate, while the O-ring should be lightly

compressed between the sealing flange of the fitting and the "filter element side" of backing plate. Secure hose to fitting using hose clamp (18).

7. Insert two hexhead screws (12) through two lockwashers (13), two flat washers (14), two 9/16 in. holes in "filter element side" of backing plate, and two spacers (15), and into mounting holes in front and rear cylinder heads of engine. Do not tighten screws at this time. Proceed to Step 9.
8. On 1991 and later models only, insert two original breather screws through two lockwashers (1), two flat washers (3), two 9/16 in. holes in "filter element side" of backing plate, and two spacers (19), and into mounting holes in front and rear cylinder heads of engine. Do not tighten screws at this time.

CAUTION

On 1991 and later models, do not install a different style of fastener in place of the original hollow breather screws (Part No. 3534) which secure the air cleaner backing plate to the engine cylinder heads. These special screws are hollow to allow for ventilation of the crankcase through passages in the cylinder heads, and perform the same function as the crankcase breather hose used on earlier Sportsters.

SPECIAL NOTE FOR HDI MODELS

In place of stock breather screws, HDI models require (2) breather screws, Part No. 3534B.

9. On all models, insert gasket with spacer (11) between carburetor and air cleaner backing plate. Align all mounting and float bowl vent holes, and hold all components in place.
10. Position flat side of venturi ring (6) against "filter element side" of backing plate, aligning all mounting and float bowl vent holes. Insert three buttonhead screws (7) through venturi ring, backing plate, and gaskets/spacer assembly, and into carburetor mounting holes. Tighten screws to 3-5 ft-lbs.
11. Final tighten two breather screws to the applicable torque below:
 - On 1988 - 1990 models only, tighten to 10-12 ft-lbs.
 - On 1991 and later models only, tighten to 10-20 ft-lbs.
12. On all models, position filter element onto backing plate; filter element should be positioned with open side away from backing plate, and with small holes (in solid plastic side of element) installed over two air cleaner cover-to-backing plate spacers (5).
13. Position original air cleaner cover and new air cleaner cover trim plate (2) over filter element. Insert two original air cleaner cover screws through trim plate and cover, and into two spacers (air cleaner cover-to-backing plate). Tighten screws evenly until secure.

Air Filter Maintenance

INSPECTING FILTER ELEMENT

- Remove air cleaner cover and inspect filter element every 5000 miles, or more often when operating vehicle in adverse, dusty conditions.

Cleaning and Re-Oiling Filter Element

- Remove filter element from air cleaner assembly. Immerse element in an upright position (on its end) in a pan containing a shallow amount (3/4 the depth of filter pleats) of air filter cleaner/degreaser. Carefully "roll" the element within the solution along its perimeter until the entire outer surface of the filter pleats has been soaked. Do not let dirty solution run to inside of filter.

- Remove element from cleaner, and allow five minutes for cleaner to dissolve dirt. From the inside out, rinse the filter element with cold water. Shake off excess water, and allow filter element to air dry. Do not dry with compressed air.
- Re-oil element using Air Filter Oil. Apply along the full length of each pleat, and allow to set until the element is a uniform color. Allow excess oil to drain off. Install element, cover, and trim plate using two original mounting screws.



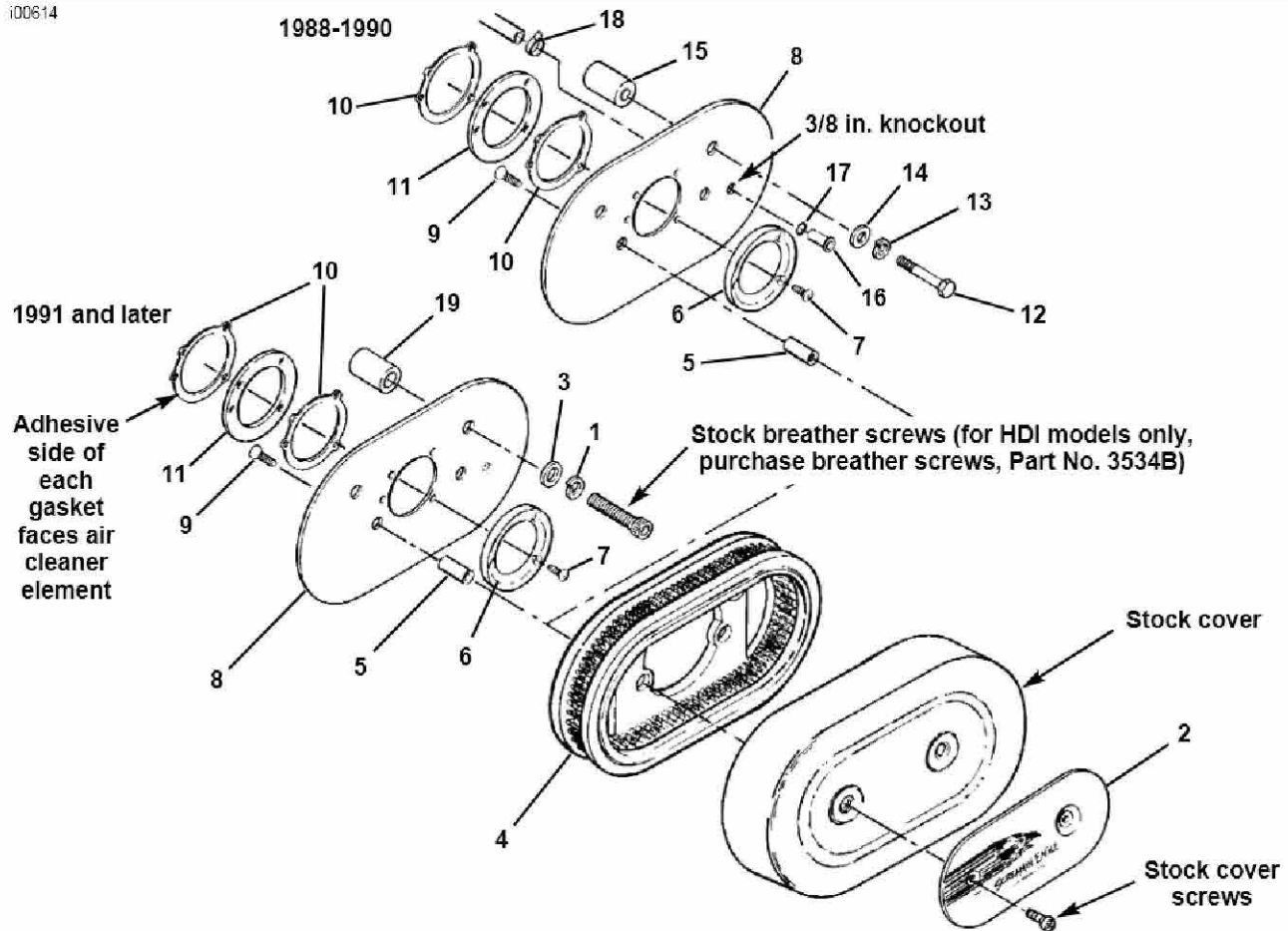
Service Parts

Part No. 29041-88B

Date 1/02

High Flow Air Cleaner Kit

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| Item | Description | Part No. |
|------|----------------------------|-----------|
| 1 | Lockwashers (2) | 7068 |
| 2 | Screamin' Eagle trim plate | 29382-97A |
| 3 | Flat washers (2) | 6738 |
| 4 | Filter element | 29025-88B |
| 5 | Spacers (2) | 31523-88 |
| 6 | Venturi ring | 29179-88 |
| 7 | Buttonhead screws (3) | 927A |
| 8 | Backing plate | 29027-91 |
| 9 | Flathead screws (2) | 3795 |
| 10 | Gaskets (2) | 29059-88A |

| Item | Description | Part No. |
|------|-----------------|----------|
| 11 | Spacer | 29265-88 |
| 12 | Screws (2) | 3419 |
| 13 | Lockwashers (2) | 7041 |
| 14 | Washers (2) | 6333 |
| 15 | Spacers (2) | 6784 |
| 16 | Fitting | 29034-85 |
| 17 | O-ring | 11110 |
| 18 | Hose clamp | 9946 |
| 19 | Spacer | 6783 |