

INSTRUCTIONS

29221-88

REV. 6-89

SUPPORT BRACKET/ADAPTER KIT

General

This kit is designed for use with the high flow carburetor and air cleaner kit, part no. 91731-88, on 1988 and later XL models equipped with the Evolution engine

NOTE

On 1988 or later model, you must replace the intake manifold. Use a stock replacement 1987 style XL manifold for proper installation of the carburetor and air cleaner kit.

The kit contains the following:

QTY	Description
2	Bolt, 5/16-18 x 2 in.
1	Bolt, 1/4-20 x 3/4 in.
2	Lockwasher, 5/16 in.
2	washer, 1/4 in. rubber
2	washer, 5/16 x 5/8 in. O.D.
2	Washer, 5/16 x 11/16 O.D.
2	Washer, 1/4 in. flat
2	Lockwasher, 5/16 in.
1	Locknut
1	Gasket, carb
1	Bracket, support
1	Carb spacer
1	Cable, throttle control
1	Cable, idle control
1	Fitting, tube

NOTE

Refer to applicable Service Manual for detailed instructions to remove necessary components.

1. Remove air cleaner assembly.

WARNING

Gasoline is extremely flammable and highly explosive. Do not smoke or allow open flame or sparks anywhere in the area when servicing any part of the fuel system.

2. Turn fuel valve to off position. Disconnect fuel line at carb and drain any remaining gas into proper container.

WARNING

Use red fuel storage container only. Storing gas in unapproved container could create a dangerous situation ie: leakage, leading to explosion or fire hazard.

3. Disconnect Vacuum Operated Electrical Switch (VOES), if so equipped, throttle cables and choke cable at carb. Remove carb. On 1988 and later vehicles remove intake manifold.

Carb Installation

1. Install replacement intake manifold on 1988 and later models.

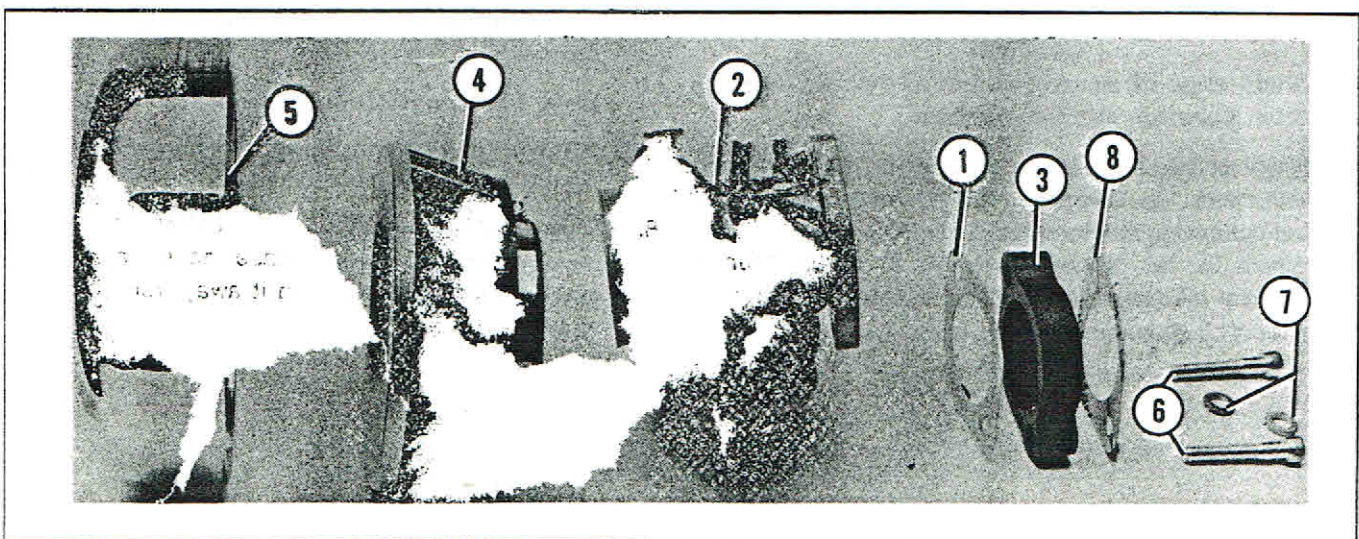


Figure 1. Carb installation

2. Make VOES connection by drilling and tapping a hole for a 1/4-28 thread in spacer at position indicated by boss, visible through slot on the carb side of the spacer. Apply Loctite Pipe Sealant with Teflon to threads on VOES fitting, supplied with kit, and install fitting in spacer.

NOTE

When installing the high flow carburetor, there may be a slight interference between the throttle cable bracket and the cylinder head. Grind just enough material off the cylinder head, at the point of interference, to provide necessary clearance.

3. See Figure 1. Attach manifold spacer (3) and carburetor assembly (2) to manifold using bolts (6) and washers (7). Place gasket (1) (from carb kit) between the spacer and the carb. Place gasket (8) between the spacer and the manifold. Tighten bolts (6) to 10-14 ft-lbs torque.
4. Connect the fuel line, and the VOES hose (if used). Replace original throttle cables with new cables from mounting bracket kit. Refer to applicable Service Manual (1988 and later vehicles refer to 1987 Manual) for detailed information on cable installation and routing.

NOTE

If vehicle is VOES equipped and the VOES is not being used on the high flow carburetion kit expect deteriorated mid-range performance and reduced fuel economy.

CAUTION

Be sure throttle butterfly valve returns to full idle position (idle adjusting screw against stop) when handle grip is released.

5. The air cleaner element is pre-oiled and requires no service upon installation. For service interval and procedure see Instruction Sheet included with carb kit, part no. 91731-88, under SERVICING AIR CLEANER.

CAUTION

File sharp edge off of carb mouth to prevent damage to rubber piece on air filter element.

6. Install air cleaner element (4) on carb (2) and secure with clamp. Be sure the worm drive clamp is secure but not cutting into the rubber sleeve.
7. Attach the air cleaner cover (5) to air cleaner element (4) with screw. Be sure support bracket hole in cover is at bottom. Tighten screw securely.

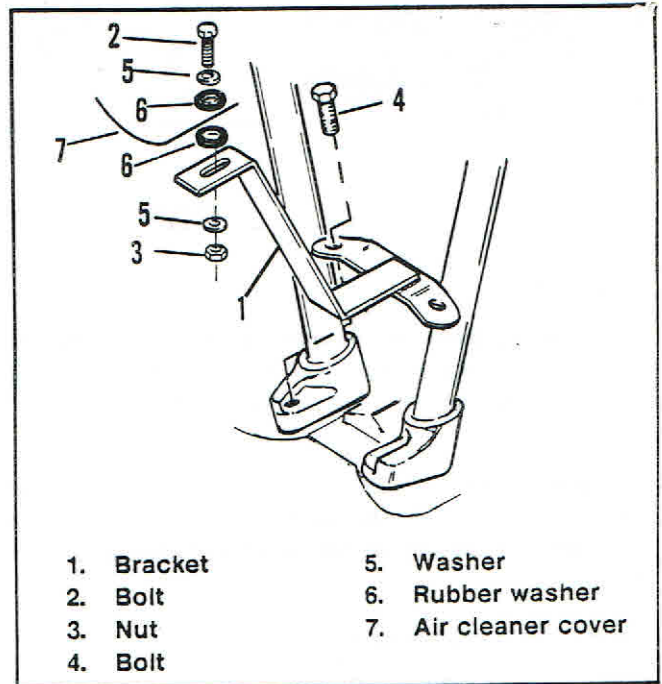


Figure 2. Bracket mounting

CAUTION

The air cleaner must have the factory authorized support bracket, properly installed, to prevent movement and subsequent leaks at the manifold/head joint. See an authorized Harley-Davidson dealer. Bracket installation instructions are as follows:

Support Bracket Installation

1. See Figure 2. Remove socket head screws from intake tappet guide blocks. Leave washers in place.
2. Place bracket (1) over holes in intake tappet guide blocks.
3. Install 5/16x5/8 washers from kit onto the tappet block bolts and reinstall.
5. Inset bolt (2) through washer (7), rubber washer (8), air cleaner cover (9), rubber washer (8) and through bracket (1).
6. Place washer on bolt (2) and thread on nut (3).
7. Tighten bolts (4) to a torque of 8-10 ft-lbs. Tighten nut (3) to 6 ft-lbs.
9. Remove choke cable so it doesn't interfere with other components. Route crankcase hose safely down toward road surface keeping it away from moving or heated surfaces.