



INSTRUCTIONS

-J01696

REV. 09-26-03

Kit Number 27934-99

SCREAMIN' EAGLE® BIG BORE 44 mm CV CARBURETOR KIT

General

This kit is designed for use on 1984 through 1999 1340 Evolution engines and 1999 and later Twin Cam 88™ engines. It is recommended that SCREAMIN' EAGLE air cleaner kits be used with these carburetors. For use on pre-1990 Evolution engine vehicles, the throttle cables will need to be changed to 1990 and later cables from the same model vehicle.

The correct Intake Manifold Kit **must** be used with this carburetor. These kits are:

Part Number 29635-99, Intake Manifold Kit - Twin Cam 88 Engines

Part Number 29636-99, Intake Manifold Kit - 1340 Evolution Engines

The additional kits available for use with this kit are:

Part Number 27554-99 - Carburetor rebuild kit for SCREAMIN' EAGLE Big Bore 44 mm CV carburetor.

Part Number 27419-99 - Carburetor tuner kit for SCREAMIN' EAGLE Big Bore 44 mm CV carburetor.

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. Use of this Screamin' Eagle carburetor may reduce or void the Limited Warranty Coverage.

Engine related performance parts are intended FOR THE EXPERIENCED RIDER ONLY.

WARNING

The rider's safety depends on the correct installation of this kit. Follow the procedures listed in this Instruction Sheet and applicable Service Manual. If any procedures are not within your capabilities, or you do not have the correct tools, have your Harley-Davidson Dealer perform the installation. Improper installation could result in death or serious injury.

Kit Contents

The kit contains only the Big Bore 44mm CV carburetor. For detailed internal parts listing, see Service Parts Illustration and list at the end of these instructions.

Additional Kits Required

WARNING

Using this kit with air cleaner covers other than recommended below could result in failure of element faceplate. The element in this kit is specifically designed for use with the original equipment cover used on the models specified. This kit may be used in conjunction with other Harley-Davidson accessory covers provided that the appropriate adapter recommended in those kits is used. If the element faceplate fails, the air cleaner cover could detach, possibly distracting the rider and could result in death or serious injury.

SCREAMIN' EAGLE air cleaner Part No.'s are as follows:

1990-1992 1340 Evolution engines-29008-90A

1993 and later 1340 Evolution engines-29543-99

1999 and later Twin Cam 88 engines-29440-99

Installation

NOTE

Refer to applicable Service Manual for detailed instructions on how to remove necessary components. Service Manuals are available from your Harley-Davidson Dealer.

WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

1. Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the battery cables, negative cable first.
2. Remove stock air cleaner, carburetor and manifold according to the applicable Service Manual instructions.

NOTE

In order for the Big Bore Carburetor to function properly, the stock manifold assembly must be replaced by either of the performance intake manifolds, Part Number 29635-99 for the Twin Cam 88 engine or Part Number 29636-99 for the 1340 Evolution engine.

3. Refer to Instruction Sheet -J01695 for Kit Numbers 29635-00 and 26636-00 and install the applicable Performance Screamin' Eagle Intake Manifold assembly.

NOTE

The fit between the carburetor and the intake manifold seal ring is tight. For ease of installation it is recommended that the mating surfaces, carburetor body and seal ring be lubricated prior to assembly to reduce surface friction. Use liquid dish soap or tire mounting lube for this purpose.

4. Refer to the applicable Service Manual. Insert the carburetor into the manifold. As the carburetor is being inserted, check that the choke cable is not being kinked.
5. On 1340 Evolution engines, slip the V.O.E.S. vacuum hose on the carburetor fitting below idle cable bracket. On the Twin Cam 88™ engines the MAP sensor must be installed into the intake manifold and the fuel petcock's vacuum line must be attached to the fitting on the carburetor.
6. Slip the fuel hose onto the carburetor fuel nipple and secure with hose clamp.
7. On 1340 Evolution engines, route float bowl overflow hose behind rear cylinder push rod tubes and down between crankcase and transmission.
8. On Twin Cam 88™ engines, the overflow line should be routed behind the rear cylinder push rod tubes, behind the rear cylinder and on top of engine/transmission surface. It should then be routed down between the engine/transmission and inner primary.

NOTE

The overflow line can be cut for improved fitment. It should not hang below the lowest engine/transmission surface. Doing so will expose the end of the hose to excessive air flow which can affect the operation of the carburetor.

WARNING

Refer to the applicable Service Manual and ensure that the throttle cables are of the correct length and are routed correctly. If the cables are not of the correct length or routed correctly, they could interfere with the operation of the motorcycle. This could cause loss of control and could cause death or serious injury.

9. Install the applicable air cleaner assembly.
10. Connect the negative (-) battery cable and install the seat.

WARNING

After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)

11. Start the motorcycle and check engine performance. If performance is unsatisfactory, tune the carburetor as described below.
12. Tuning the carburetor.
 - If the engine exhibits a rich or lean condition at idle and up to 1/4 throttle opening, adjusting the idle mixture screw (IMS) may correct the condition without having to change jets.
 - The IMS is a fuel flow adjuster, so that turning it in (clockwise) leans the carburetor and turning it out (counterclockwise) enriches the carburetor.

NOTE

The IMS is not to be adjusted "out" further than 3-1/2 turns.

- The IMS can be adjusted from 1/2 to 3-1/2 turns.
- If the engine runs well at either the 1/2 or 3-1/2 turn extreme, change to a leaner (smaller) or richer (larger) slow jet. Then reset the IMS away from the extreme positions.
- Additional jets and needles for tuning are included in the Tuner Kit, Part Number 27419-99.



Service Parts

Part No. 27934-99

Date 9/03

44 mm BIG BORE CV CARB. KIT

ITEM	DESCRIPTION	PART NO.	ITEM	DESCRIPTION	PART NO.
1	Main Jet	See Tuner Kit	26*	Screw, Top (3)	27262-96
2	Needle Jet	27725-99	27	Collar, Carburetor Top	27263-96
3	Needle Jet Holder	27101-88	28*	Boot, Accelerator Pump	27311-76
4	Rod	27122-89	29	Spring	27315-88A
5	Spring	27123-89A	30*	Screw	27317-88
6	E-Clip	27124-89	31	Bracket, Throttle Cables	27339-90
7	Washer	27125-89	32*	O-Ring (2)	27360-76
8	Lever	27126-89	33*	Diaphragm, Accelerator Pump	27361-76
9	Washer	27127-89	34*	Spring, Diaphragm	27362-76
10	Pin (2)	27128-89	35*	Clip, Overflow Hose	27368-76
11	Idle Screw	27130-90	36	Hose, Overflow w/Clip	27553-99
12	Spring	27136-90	37	Fitting (L-Joint)	27371-76
13	Washer	27137-81	38	Pin	27575-88A
14*	Screw w/Washer (3)	27146-89	39	Float	27576-92
15	Collar	27147-89	40*	O-Ring, Float Chamber	27577-92
16	Washer	27148-89	41*	Screw (4)	27579-88A
17	Rod	27156-89	42	Cable Guide	27580-88
18	O-Ring	27127-89	43	Starter Cap	27581-88
19	Drain Screw	27158-89	44	Cable sealing Cap	27582-88
20	Float Chamber Assembly	27287-98	45	Starter Valve	27583-88
21	Pump Housing	27260-00	46*	Vacuum Piston	27552-99
22	Spring	27162-89	47	Spring Seat	27586-88
23	Slow Jet	See Tuner Kit	48	Screw	27587-88
24	Jet Needle	See Tuner Kit	49	Valve w/Clip	27886-78A
25	Top, Carburetor	27261-96	50	Clamp, hose (not shown)	9946

Note: Items marked with a (*) and in "bold" are included in the Carburetor Rebuild Kit Part No. 27554-99