



# INSTRUCTIONS

-J01496

REV 2-16-99

Kit Numbers 16459-96B, 16460-96B

## SCREAMIN' EAGLE SPORTSTER 1200 CYLINDER HEADS

### General

These kits are designed for installation on 1991 and later XL 1200 models.

This instruction sheet covers the following Cylinder Head Kits:

Qty	Description	Kit No.
2	Silver heads	16459-96B
2	Black heads	16460-96B

### Additional Required Parts

On all models, a Top End Overhaul Gasket Kit, Part No.17032-91 must be purchased from your Harley-Davidson Dealership. In addition, on 1991 models the four (two per head) stock short head screws must be replaced with Part No. 16480-92 heads screws.

#### NOTE

Service Parts for these kits are listed on page 3. A Service Manual for your motorcycle is available at your Harley-Davidson Dealership.

### Installation

#### CAUTION

These head assemblies are intended for high-performance applications only. This engine-related performance part is legal for sale or use in California on pollution-controlled motor vehicles. Use of these head assemblies may reduce or void the Limited Warranty coverage.

#### NOTE

The product information label contained in this kit is required in the state of California only. This label is required to aid in passing the California Smog Check Program. Place the information label on the right side of the frame directly beneath the VIN sticker. Do not place the label over other product information labels. Do not place the label on motorcycles other than those specified in this instruction sheet.

1. Refer to appropriate Service Manual for all removal, assembly and disassembly procedures.
2. Remove existing cylinder head assemblies.

#### CAUTION

For 1991 models, it is very important that head screws, Part No. 16480-92 are used. The stock 1991 screws length is 1-11/16 in. The Part No. 16480-92 screws length is 1-7/8 in. Damage to engine could occur if shorter screws are used.

#### NOTE

This kit contains secondary hole plugs for use if cylinder heads are used with only one spark plug. If the ignition system used does not support dual spark plug cylinder heads, install a secondary hole plug and gasket (item 16 on Service Parts illustration) into the middle spark plug hole in each cylinder head (the hole located under the center of the rocker boxes). See Service Parts illustration for location. Tighten hole plug to 11-18 ft-lbs (15-24 Nm).

3. Install new cylinder heads using appropriate Service Manual procedures and new gaskets from Top Overhaul Gasket Kit, Part No.17032-91. On 1991 models, make certain Part No. 16480-92 heads screws are used.

#### NOTE

Due to increased compression ratio, use at least 91 octane gasoline. Octane rating is usually found on the pump.

4. Check assembly for proper installation and operation.

### Notes on Valve Springs

The valve springs on these cylinder heads have an installed spring height of 1.800 in., which equals 155 lbs. of seat pressure. Seat pressure can be changed by placing shims (P.N. 18224-98 [.015 in.] or 18225-98 [.030 in.]) under lower spring collars.

Every .015 in. reduction in spring height equals 5 lbs. more of seat pressure. For example:

- 1.785 in. installed spring height = 160 lbs. seat pressure
- 1.770 in. installed spring height = 165 lbs. seat pressure

#### NOTE

Shim to desired seat pressure by placing shims under lower collar, but do not use more than .075 in. of shims.

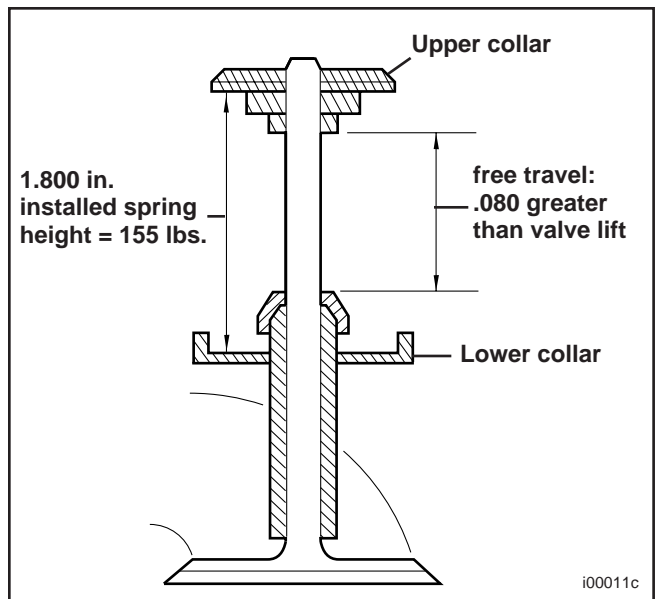


Figure 1.

**To Change Installed Valve Spring Height (Seat Pressure)**

1. Compress valve springs and remove upper collar keys, upper collar, and lower collar on all four valves.

**NOTE**

Do not remove valves. If valves are removed, new seals must be installed kkkkk2kk

**CAUTION**

Because of the large diameter of the springs in this kit, there may be slight interference between the spring and the rocker box. If interference is detected, it will be necessary to remove a small amount of material from the rocker box.

2. See Figure 1. Using shims required for desired seat pressure (see notes above), install lower valve spring collars, upper collars, and collar keys. Check installed spring height. Add shims or remove material from spring seat to reach installed spring height. Remove upper collar keys and upper collars and assemble cylinder heads following applicable Service Manual procedures.



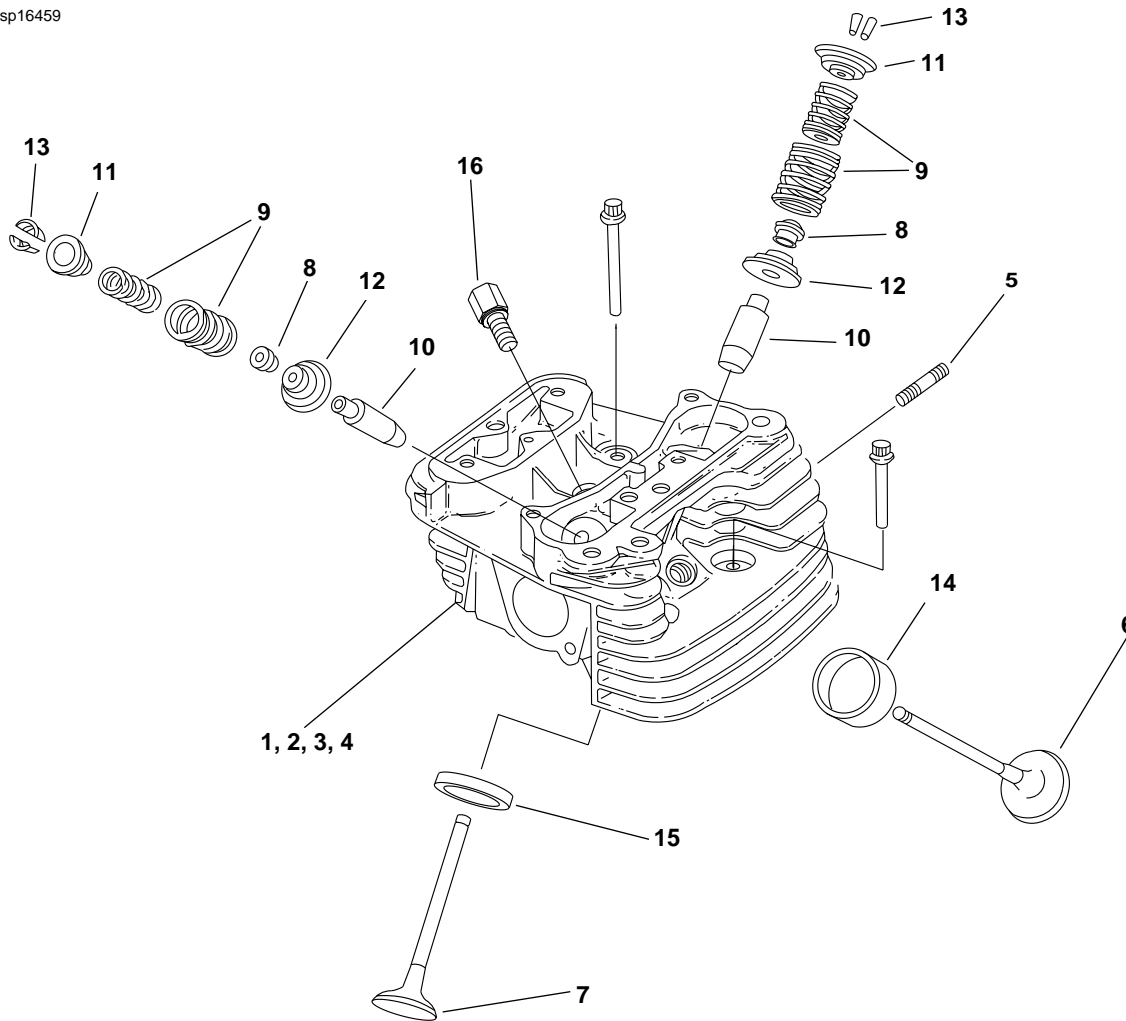
# Service Parts

16459-96B/16460-96B

Date 2/99

Screamin' Eagle 1200 Cylinder Heads

sp16459



**Kit Numbers 16459-96B, 16460-96B**

Item	Description	Part No.	Item	Description	Part No.
1	Front cylinder head, silver*	16454-96A	11	Collar, valve spring-upper (4)	18216-98
2	Rear cylinder head silver*	16456-96A	12	Collar, valve spring-lower (4)	18217-98
3	Front cylinder head, black*	16453-96A	13	Retainer, valve collar (8)	18211-86
4	Rear cylinder head, black*	16455-96A	14	Intake valve seat (2)	18020-87
5	Stud, exhaust port (4)	16715-83	15	Exhaust valve seat (2)	18022-96Y
6	Intake valve (2)	18023-87	16	Secondary hole plug and spark plug gasket (2)	16604-98
7	Exhaust valve (2)	18024-87	17	E.O. Label	not sold
8	Seal, valve (4)	18001-83B			
9	Valve spring, outer and inner (4)	18218-98			
10	Valve guide, intake and exhaust (4)	18113-96Y			

**\* With valve guides and seats installed**

Note: Quantities shown are for kit, only one cylinder assembly shown