



INSTRUCTIONS

-J00943

REV. 12-21-98

Kit Number 18223-98

SCREAMIN' EAGLE PERFORMANCE VALVE SPRING KIT

General

This kit is designed for use on all Harley-Davidson Evolution motors.

CAUTION

Read this entire Instruction Sheet before beginning. If any procedures are not within your capabilities, or you do not have the correct tools, have your Harley-Davidson Dealer perform the installation.

CAUTION

This kit is intended for use with high lift, high rpm applications. This kit will work with lifts up to .575 inches and up to 6500 rpm. For kits with cams that have more than .575 inch lift or rpms over 6500, use Screamin Eagle Race Spring Kit P/N 18236-98. This kit may be purchased separately from your Harley-Davidson Dealer. Failure to use the correct kit may cause damage to the valve train.

The kit contains the following parts:

Qty	Description	Part No.
4	Valve spring unit	18218-98
8	Key, valve spring collar	18211-86
4	Collar, valve spring lower	18217-98
4	Collar, valve spring upper	18216-98
8	Shim, .015 in.	18224-98
8	Shim, .030 in.	18225-98

NOTE

To properly install this kit you must have a Service Manual that covers your model. Service Manuals are available at your nearest authorized Harley-Davidson dealer.

Installation

1. Refer to the Service Manual and follow the procedure under Stripping the Motorcycle for Engine Repair.
2. Remove cylinder heads.
3. 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.

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.

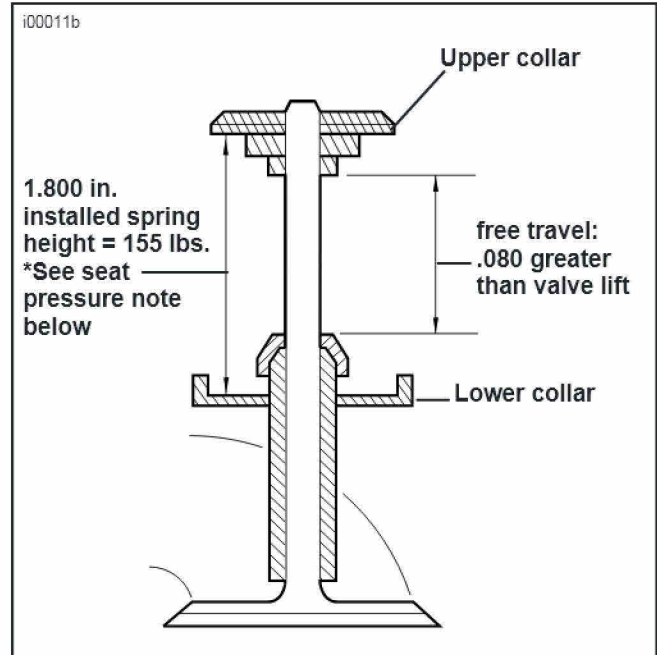


Figure 1. Check installed spring height

4. See Figure 1. Install lower valve spring collars, upper collars, and collar keys. Check installed spring height. Add shims (see note below) or remove material from spring seat to reach installed spring height. Remove upper collar keys and upper collars.

NOTE

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

5. Assemble cylinder heads following Service Manual procedures, using springs, collars and keys from this kit.
6. Follow procedures in Service Manual and install heads and remaining components disassembled in Step 1.

*SEAT PRESSURE NOTE

Every .015 in. reduction in spring height = 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