



# INSTRUCTIONS

-J03492

REV. 9-15-2004

Kit Number 18344-05

## SCREAMIN' EAGLE RACE VALVE SPRING KIT

### General

This kit fits 2004 and later XL models, 2005 and later Big Twin models, and Buell XB models built after July, 2003.

#### NOTE

*This engine related performance part is intended for Racing applications and is not legal for sale or use on pollution controlled motor vehicles. This kit may reduce or void the limited vehicle warranty. Engine related performance parts are intended for the experienced rider only.*

#### WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate Service Manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

#### CAUTION

This kit is intended for use with high lift, high rpm applications. This kit will work with lifts up to .650 inches and up to 7000 rpm. Failure to follow these instructions may result in engine damage.

The kit contains the following parts:

Qty	Description	Part No.
4	Collar, valve spring upper	18343-05
4	Collar, valve spring lower	18345-05
8	Key, valve spring collar	18260-02
4	Valve spring unit (1 inner & 1 Outer)	18279-02
4	Valve seat	18342-05

#### 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.
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.

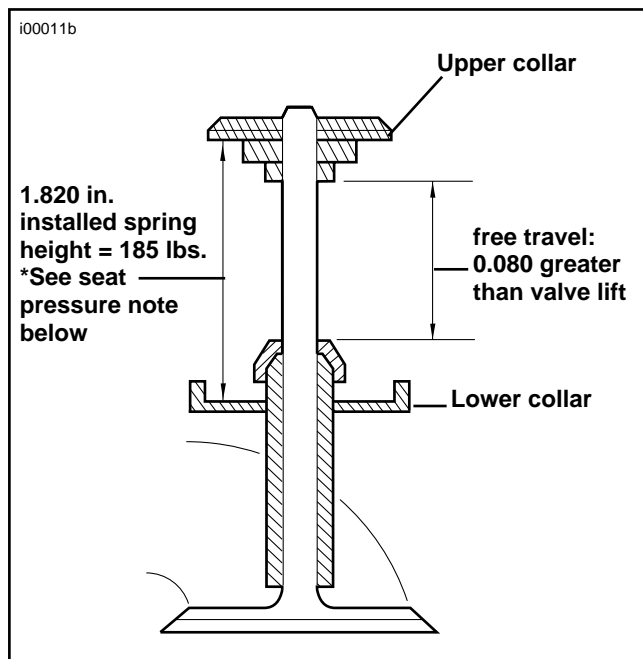


Figure 1. Check installed spring height

#### NOTE

*Shim to desired seat pressure by placing shims under lower collar, but maintain a minimum of 0.070" before coil bind.*

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 0.015 in. reduction in spring height = 7.5 lbs. more of seat pressure. For example:*

*1.820 in. installed spring height = 185 lbs. seat pressure  
1.805 in. installed spring height = 192.5 lbs. seat pressure*