

# **SCREAMIN' EAGLE MILWAUKEE-EIGHT STAGE 2 KIT**

## **GENERAL INFORMATION**

94100523

**Table 1. General Information** 

Kits	Suggested Tools	Skill Level <sup>(1)</sup>				
92500132, 92500133	Safety Glasses, Torque Wrench					
(1) Tightening to torque value or other moderate tools and techniques required						

## **KIT CONTENTS**

See Figure 1 and Figure 2.

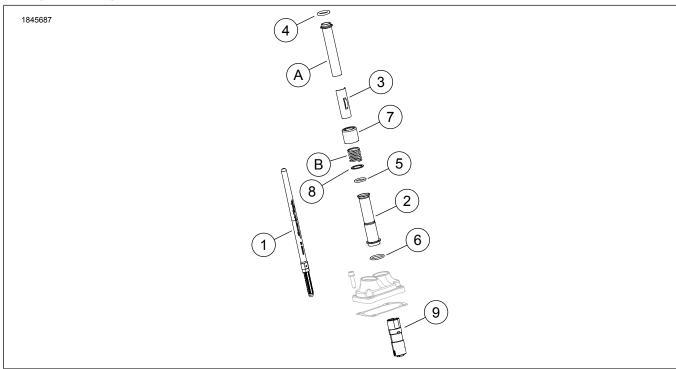


Figure 1. Kit Contents: Screamin' Eagle Milwaukee-Eight Stage 2 Kit

Table 2. Kit Contents: Screamin' Eagle Milwaukee-Eight Stage 2 Kit

	Verify that all contents are present in the kit before installing or removing items from vehicle.						
	Item	Qty	Description	Part No.	Notes		
	- 1	2	Push rod, adjustable, exhaust	17900060			
		2	Push rod, adjustable, intake	17900059			
	2	4	Push rod cover, lower, black	25700408			
	2	4	Push rod cover, lower, chrome	17938-83			
	3	4	Keeper, pushrod spring cover, black	25700645			
	3	4	Keeper, pushrod spring cover, chrome	25700642			
	4	4	O-ring, pushrod cover, upper	11293			
	5	4	O-ring, pushrod cover, lower	11145A			
	6	4	O-ring, pushrod cover, middle	11132A			
	7	4	Pushrod tube collar, black	17900076			
	,	4	Pushrod tube collar, chrome	17945-36B			
	8	4	Washer	6762D			
	9	1	Tappet Kit	18572-13			
Items mentioned in text, but not included in kit							
	Α	4	Upper pushrod cover				
	В	4	Cover spring (2)				

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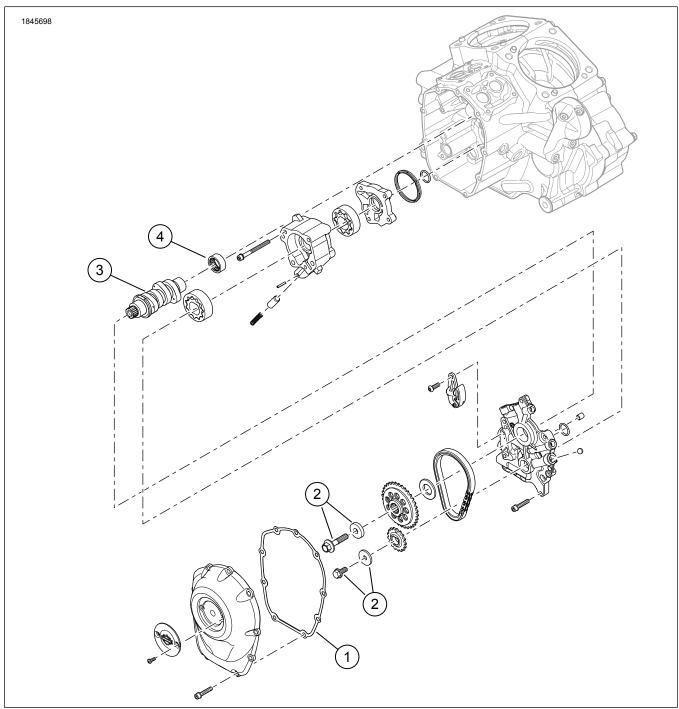


Figure 2. Kit Contents: Screamin' Eagle Milwaukee-Eight Stage 2 Kit

Table 3. Kit Contents: Screamin' Eagle Milwaukee-Eight Stage 2 Kit

Verify that all contents are present in the kit before installing or removing items from vehicle.				
Item	Qty	Description	Part No.	Notes
1	1	Gasket, cam cover	25700370	
2	1	Camshaft drive sprocket retention kit	25566-06	
3	1	Camshaft, SE8-511	25400476	
4	1	Bearing, needle (1) (must be purchased separately, if needed)	9298B	

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## **GENERAL**

### Models

For model fitment information, see the Parts and Accessories (P&A) Retail Catalog or the Parts and Accessories section of www.harley-davidson.com.

Verify that the most current version of the instruction sheet is used. It is available at: h-d.com/isheets

Contact Harley-Davidson Customer Support Center at 1-800-258-2464 (U.S. only) or 1-414-343-4056.

## **Installation Requirements**

#### **A WARNING**

Rider and passenger safety depend 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. (00333b)

#### NOTE

This instruction sheet references service manual information. A service manual for the year and model motorcycle is required for this installation and is available from:

- · A Harley-Davidson dealer.
- H-D Service Information Portal, a subscription-based access available for most 2001 and newer models. For more information see Frequently ask questions about subscriptions.

These items are available at a Harley-Davidson dealership.

- Separate purchase of Screamin Eagle High Flow Air Cleaner kit.
- Separate purchase of Cam Spacer Kit (Part No. 25928-06) is recommended. This kit contains five different spacers to achieve proper sprocket alignment.

See Harley-Davidson Genuine Motor Parts and Accessories catalog or Screamin Eagle Pro catalog for available kits.

See appropriate sections in service manual for the special tools required to install this kit.

Proper installation of this kit also requires ECM recalibration, contact a Harley-Davidson dealer.

## **PREPARE**

## NOTE

See owner's manual and disarm security system.

- 1. Raise the vehicle. See service manual.
- 2. Remove main fuse. See service manual.
- 3. Remove air cleaner assembly. See service manual.
- Remove exhaust system. See service manual.

### REMOVE

- 1. Remove stock pushrods using a bolt cutter.
- 2. Remove camshaft cover.
- Remove front and rear cylinder spark plugs from left side of vehicle.
- 4. With vehicle on a lift, raise rear wheel off ground.
- 5. With the vehicle in 5th gear, rotate rear wheel to rotate engine and align camshaft/crankshaft timing marks.
- Using special tool, lock camshaft and crankshaft. See service manual.
  - Special Tool: CRANKSHAFT/CAMSHAFT SPROCKET LOCKING TOOL (HD-47941)
- Remove camshaft components, tappets and camshaft. See service manual.
- 8. Remove and inspect the oil pump. See service manual.

### INSTALL

- 1. See Figure 2. Install oil pump. See service manual.
- Inspect camshaft components and replace if necessary. See service manual.
- Install camshaft, tappets and cam components. See service manual.
- Verify camshaft to crankshaft timing marks are properly aligned.
- With transmission in gear use rear wheel to turn engine over until both front cylinder tappets are at their lowest point.
- 6. See Figure 3. Loosen locknut on all of the pushrods and adjust them to their shortest length.
- See Figure 4. Install the intake pushrods into the pushrod covers. Replace O-rings, lower pushrod cover and spring cover keeper with new components supplied in kit. Be sure adjuster end of pushrod is down.
- Insert the pushrod (within the pushrod tube) into the front cylinder head intake pushrod hole (hole closest to the cylinder) then slip the adjuster end of the pushrod into the tappet block.
- 9. Adjust pushrods.
  - a. Adjust pushrod length to zero clearance by hand.
  - With the pushrod adjusting screw kept from rotating with a 5/16 in. wrench, slowly turn the pushrod tube with a 1/2 in. wrench, 2-1/2 complete turns clockwise (lengthening the pushrod) as viewed from the bottom. (There is a dot on the flats of the pushrod tube that can be used as a reference.)

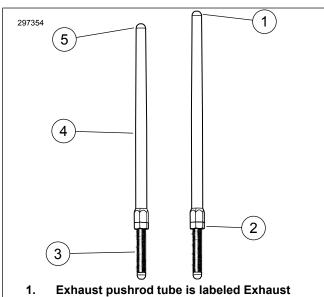
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- Hold adjusting screw and tighten locknut with 1/2 in. C. open end wrench against the pushrod tube. If pushrod turns with locknut use three open end wrenches, one to hold the pushrod tube, one to hold adjusting screw and one to turn locknut.
- Repeat steps 5 through step 9c for the exhaust pushrod.

#### NOTE

Wait ten minutes before turning engine over after adjusting front or rear cylinder pushrods. This wait allows tappets to bleed down and prevents bending pushrods or valves. Pushrods should turn freely and valves must be on their seats (closed) before turning over engine.

- Wait ten minutes. With transmission in gear, use rear e. wheel to turn engine over until both rear cylinder tappets are at their lowest position.
- f. Repeat steps 5 through step 9d for the rear cylinder.
- g. Install pushrod spring cap retainers on pushrod covers.
- h. Install spark plugs and return transmission to neutral.
- 10. Install camshaft cover. See service manual.
- 11. Install exhaust system. See service manual.
- 12. Install air cleaner assembly. Refer to instruction sheet included with separately purchased Screamin' Eagle high flow air cleaner kit.



- Locknut 2.
- **Adjusting screw** 3.
- 4. **Pushrod tube**
- Intake pushrod tube is labeled Intake

Figure 3. Adjustable Pushrod

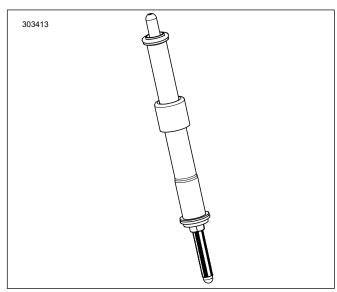


Figure 4. Pushrod Installed into Pushrod Cover

## COMPLETE

### **NOTICE**

You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)

- Verify that the vehicle is in neutral.
- Run engine. Repeat several times to verify proper operation.
- Recalibrate Electronic Control Module (ECM) with proper calibration for configuration. See Dealer for details.
- Run engine. Repeat several times to verify proper operation.
- Refer to BREAK-IN RIDING RULES in the owner's manual for instructions to break in the vehicle.

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