INSTRUCTIONS

94100562A 2025-04-23

SCREAMIN EAGLE OHLINS INVERTED FORK LEGS

GENERAL INFORMATION

Table 1. General Information

Kits	Suggested Tools	Skill Level(1)
45400392, 45400393	Safety Glasses, Torque Wrench, DIGITAL TECHNICIAN II (PART NUMBER: HD-48650)	
(1) Special tools or techniques required for installation		

KIT CONTENTS

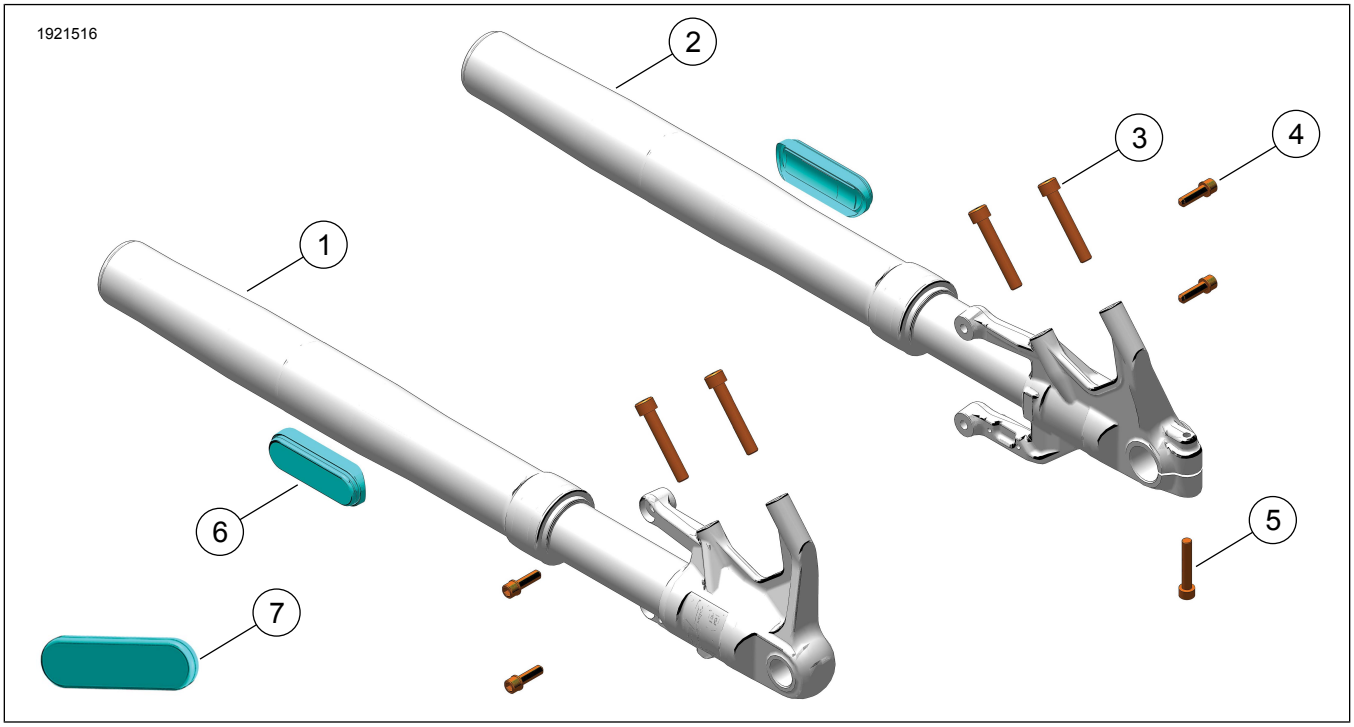


Figure 1. Kit Contents: Screamin Eagle Ohlins® Inverted Fork Legs

Table 2. Kit Contents: Screamin Eagle Ohlins® Inverted Fork Legs

✓	Verify that all contents are present in the kit before installing or removing items from vehicle.				
	Item	Qty	Description	Part No.	Notes
☐	1	1	47mm fork assembly, left, telescoping, black	45400410	
☐			47mm fork assembly, left, telescoping, gold	45400412	
☐	2	1	47mm fork assembly, right, telescoping, black	45400409	
☐			47mm fork assembly, right, telescoping, gold	45400411	
☐	3	4	Screw, socket head	10200802	
☐	4	4	Screw, hex socket, lock	2479	
☐	5	1	Screw, cap screw, M8	45500132	
☐	6	2	Reflector, amber	67900659	
☐	7	2	Reflector, amber, flat	67900212A	

GENERAL

Instruction sheet is also available electronically. To verify you are using the most current version available, do one of the following:

- Go to h-d.com/isheets
- Scan QR code in upper left corner of the instruction sheet

NOTE

*This instruction sheet **may have a Supplemental Video** to assist installer in clarifying a certain part of the assembly. A linked video would be located at the end of this instruction sheet.*

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.

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

Installation Requirements

⚠ 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 and **CVO supplement service manual** for the year and model motorcycle is required for this installation. They are 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 your local Harley-Davidson dealership.

- **2024-later Street Glide (FLHX):** Separate purchase of Screamin' Eagle Ohlins® Inverted Fork Installation Kit (Part No. 45400391) is required.
- **2024-later Road Glide (FLTRX):** Separate purchase of Screamin' Eagle Ohlins® Inverted Fork Installation Kit (Part No. 45400390) is required.
- Axial Mount calipers to radial mount caliper requires Anti-lock Braking System (ABS) re-flash using Digital Technician II (DT II).

PREPARE

1. Secure motorcycle for service. See service manual.
   a. Set motorcycle upright.
   b. Raise front wheel for service.
   c. Secure with tie-downs.
2. Remove left saddlebag. See service manual.
3. Remove left side cover. See service manual.
4. Remove main fuse. See service manual.

REMOVE FAIRING

Fork Mounted

1. Remove outer fairing. See service manual.
2. Remove air deflector assembly. See service manual.

3. Remove dash panel. See service manual.

4. **Detach** fairing for service:

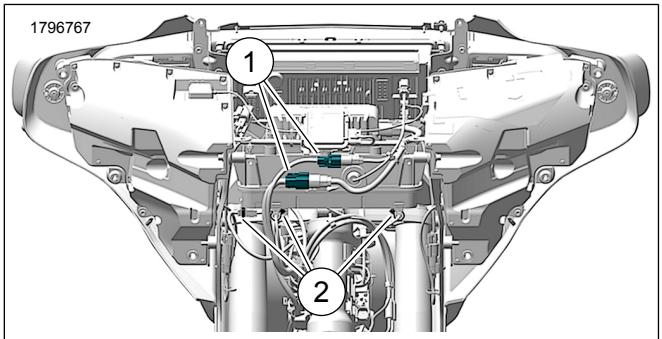
   a. See Figure 2. Disconnect harness connectors (1).

   b. Remove wire ties (2).

   c. See Figure 3. Remove screws (1).

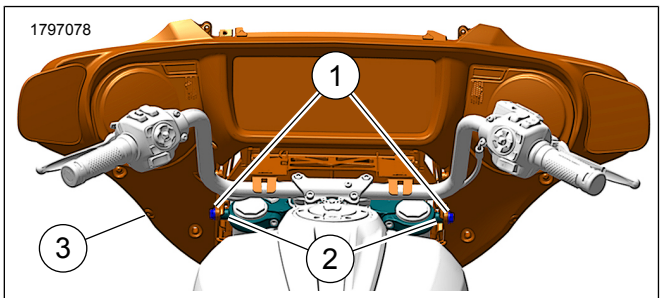
   d. Remove fairing (3).

   e. Place fairing on non scratch surface.



1. **Connectors (2)**
2. **Wire ties (3)**

Figure 2. Inner Fairing Fasteners



1. **Screws (2)**
2. **Guide pins (2)**
3. **Fairing**

Figure 3. Fairing Fasteners

Frame Mounted

1. Remove windshield. See service manual.

2. Remove air duct cover and air duct bezel. See service manual.

3. Remove air duct vane assembly. See service manual.

4. Remove left and right speaker grilles. See service manual.

5. Remove outer fairing. See service manual.

6. Remove headlamp. See service manual.

7. See Figure 4. Release wire locator (1) and route headlamp wire (8) out of inner fairing assembly (3).

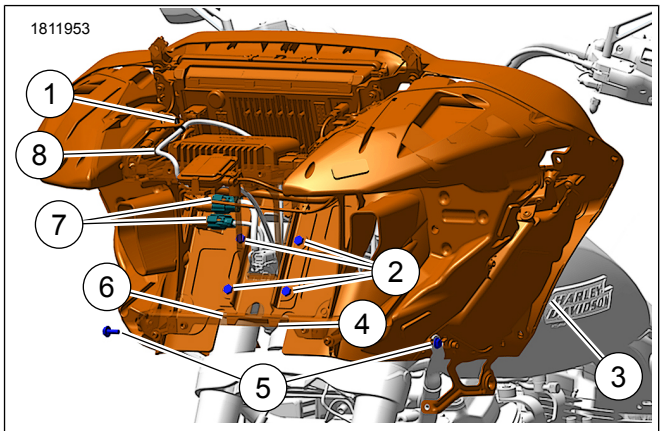
8. Disconnect two main harness connectors (7).

9. Draw branches of main harness out of inner fairing through openings in fairing bracket.

10. Remove inner fairing support screws (5).

11. Remove inner fairing mount screws (2).

12. Raise the inner fairing assembly (3) off the inner fairing mounting bracket (4) and remove.



1. **Wire locator**
2. **Screws (4)**
3. **Inner fairing assembly**
4. **Inner fairing mounting bracket**
5. **Screws (2)**
6. **Fairing main support bracket**
7. **Main harness connectors (2)**
8. **Headlamp harness**

Figure 4. Inner Fairing Assembly

REMOVE

1. Remove front fender. See service manual.

2. Detach front brake calipers. See service manual.

   a. If working on a CVO model, see **CVO supplement** service manual.

3. Remove front wheel. See service manual.

4. Remove Original Equipment (OE) front forks. See service manual.

   a. If working on a CVO model, see **CVO supplement** service manual.

INSTALL

NOTE

*DO NOT Install Screamin Eagle Ohlins® Inverted Fork Legs on a **Non CVO Original Equipment (OE)** fork stem assembly.*

*Screamin' Eagle Ohlins® Inverted Fork Installation Kit (Part No. 45400390 or 45400391) is required for a **Non CVO Original Equipment (OE)** vehicle. Refer to Installation Requirements.*

This will require the removal of OE:

- *Front brake calipers*

- *Steering Head/Fork Stem and bracket assembly*
- *Front wheel speed sensor*
- *Steering head bearing cups*

1. Install Screamin Eagle Ohlins® Inverted Fork Installation kit. Refer to Installation Requirements.

2. Install front fork tube assembly.

   a. Insert each fork tube assembly (4) through lower fork bracket (6) and upper fork bracket (2).

   b. Refer to Table 3. Measure distance (3) from top of fork tube to top of lower fork bracket (6) to set fork height.

   c. Tighten lower fork bracket pinch screws (5) alternately (top fastener, bottom fastener, repeat) until specification is maintained.

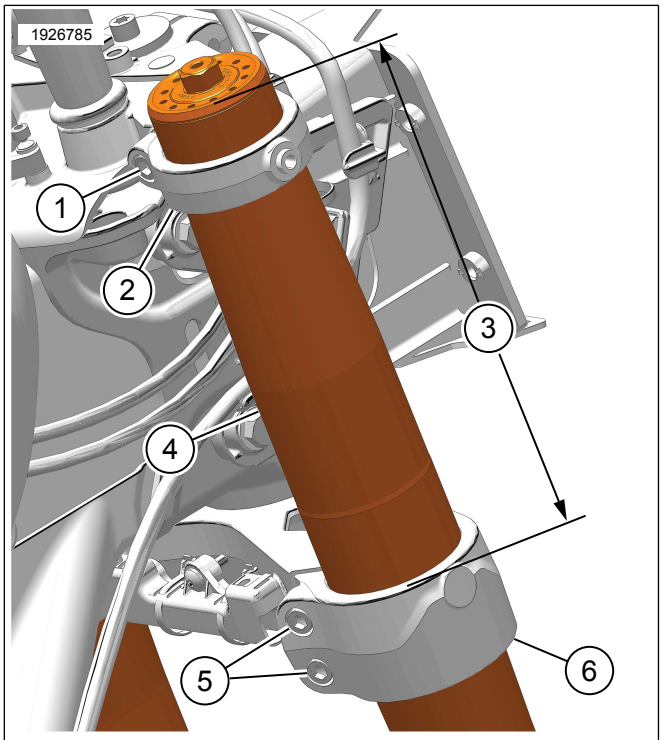
      Torque: 20–24.5 N·m (15–18 ft-lbs) *Lower pinch screw*

   d. Tighten upper fork bracket pinch screws (1).

      Torque: 20–24.5 N·m (15–18 ft-lbs) *Upper pinch screw*

Table 3. Fork Installation Distance

FORK INSTALLATION DISTANCE	IN	MM
Distance	8.83-8.95	224.3-227.3



1. **Upper fork bracket pinch screw**
2. **Upper fork bracket**
3. **Distance**
4. **Fork tube assembly**
5. **Lower fork bracket pinch screw (2)**
6. **Lower fork bracket**

Figure 5. Front Fork Length

INSTALL FAIRING

Fork Mounted

1. **Attach:**

   a. See Figure 3. Install fairing (3).

   b. Install screws (1).

   c. See Figure 2. Install wire ties (2).

   d. Connect harness connectors (1).

2. Attach fairing for service.

3. Install dash panel. See service manual.

4. Install air deflector assembly. See service manual.

5. Install outer fairing. See service manual.

Frame Mounted

1. Lower inner fairing assembly (3) onto the inner fairing mounting bracket (4) and install.

2. Install inner fairing mount screws (2).

3. Install inner fairing support screws (5).

4. Route branches of main harness into inner fairing through openings in fairing bracket.

5. Connect two main harness connectors (7).

6. See Figure 4. Route headlamp wire (8) into inner fairing assembly (3) and secure wire locator (1).

7. Install headlamp. See service manual.

8. Install outer fairing. See service manual.

9. Install left and right speaker grilles. See service manual.

10. Install air duct vane assembly. See service manual.

11. Install air duct cover and air duct bezel. See service manual.

12. Install windshield. See service manual.

REFLECTOR

1. **Models without fairing lowers installed and fork mounted reflectors:**

   a. Ambient temperature should be at least 16 °C (60 °F) for proper adhesion of the reflectors to the fork sliders.

b. Allow at least 24 hours after applying the reflectors before exposing the area to vigorous washing, strong water spray or extreme weather.

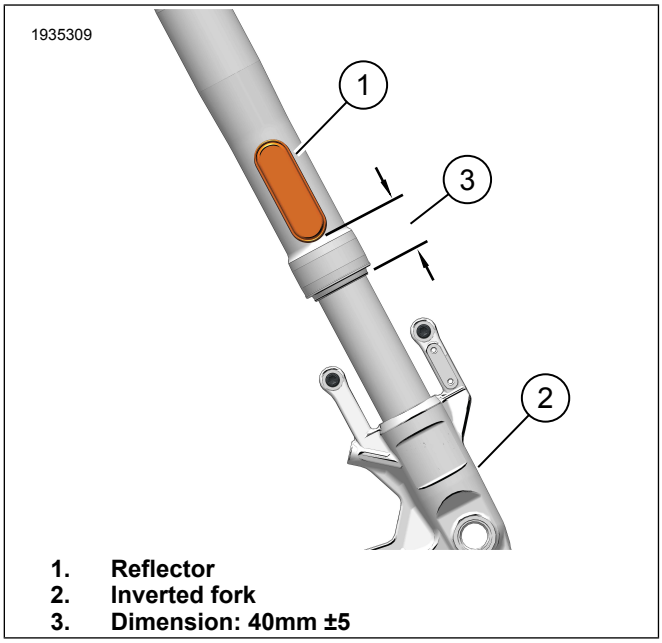
c. The adhesive bond will increase to maximum strength after about 72 hours at normal room temperature.

2. Clean reflector mounting area of fork slider with a 50:50 mixture of isopropyl alcohol and distilled water. Allow to dry completely.

3. See Figure 6. Peel liner from tape. Install reflector (1) in position (3) on fork as shown. Press firmly into place.

   a. Hold reflector in position with steady pressure for approximately one minute.

4. Repeat procedure on opposite side.



1. Reflector
2. Inverted fork
3. Dimension: 40mm ±5

Figure 6. Reflector Replacement, Front Fork

Models with fairing lowers installed and fender mounted reflectors:

1. See Figure 7. Install reflectors on left and right sides of front fender.

   a. Ambient temperature should be at least 16 °C (60 °F) for proper adhesion of the reflectors to the front fender.

   b. Allow at least 24 hours after applying the reflectors before exposing the area to vigorous washing, strong water spray or extreme weather.

   c. The adhesive bond will increase to maximum strength after about 72 hours at normal room temperature.

2. Clean and prep surfaces on both sides of front fender.

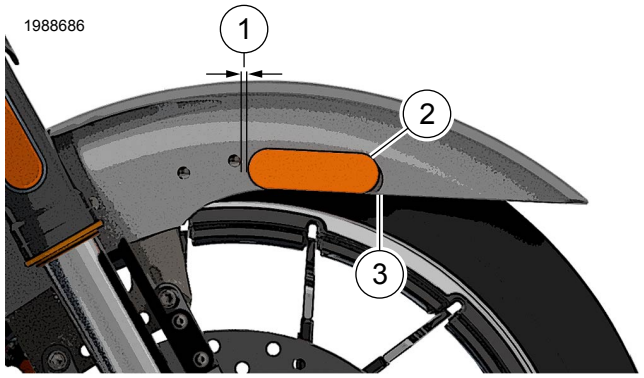
NOTE

See Figure 7. Reflector should be located approximately ¼ inch (6.35 mm) (1) from rivet and align to the lower fender edge (3).

   a. Peel liner from tape. Install reflector (2) in position (3) on fork as shown. Press firmly into place.

   b. Hold reflector in position with steady pressure for approximately one minute.

3. Repeat on opposite side.



1. Dimension: ¼ inch (6.35 mm)
2. Reflector
3. Fender edge

Figure 7. Reflector Placement, Front Fender

COMPLETE

1. Install front wheel. See service manual.

2. Attach front brake calipers. See **CVO supplement** service manual.

3. Install front fender. See service manual.

NOTE

When performing Calibration Reflash to ABS / Electro Hydraulic Control Unit (EHCU) per kit instructions for the inverted forks > You must click through on EHCU in the reflash section on DT II to see the option to select for the style of forks installed, even if the EHCU calibration shows up-to-date.

4. **Non-CVO models only:** Re-flash ABS system using special tool.

   Special Tool: DIGITAL TECHNICIAN II (HD-48650)

FORK SETUP

Ohlins® forks are pre-set at Harley-Davidson recommended preload and damper settings. See recommended adjustments based on vehicle loading conditions.

Compression vs Rebound Overview

Compression and rebound are terms used to describe how a fork absorber responds to bumps and impacts.

- Compression Damping is how quickly or slowly the spring is allowed to compress.

- Rebound Damping is how quickly or slowly the spring extends back to its original position.

Compression:

- When a fork is compressed, the piston rod is pushed into the damper tube.
- Compression resistance controls how much a vehicle's suspension moves when it hits a bump.
- More compression resistance results in a firmer suspension and more control.
- Compression adjustment can help with handling and cornering.

Rebound:

- When a fork rebounds, the piston rod is pulled out of the damper tube.
- Rebound controls how quickly a fork returns to its neutral position after being compressed.
- Rebound adjustment can help with comfort and stability.
- Too much rebound can cause the forks to pack, which can lead to an uncomfortable ride.

Pre-Load

Pre-load is set equal on both forks. To set the desired pre-load, loosen the adjuster by turning them counter-clockwise until it stops turning. This is the minimum pre-load setting. Tighten the adjuster by turning it clockwise to the desired setting. One full rotation of the adjuster is equal to 1mm of pre-load change.

- Fork preload is the amount of compression applied to a spring when the fork is fully extended. It's used to adjust the suspension's range of motion and the amount of force the spring pushes back.
- More preload raises the vehicle's suspension, making it harder and helping prevent bottoming out.
- Less preload lowers the vehicle's suspension, making it softer and helping prevent nose-diving when braking

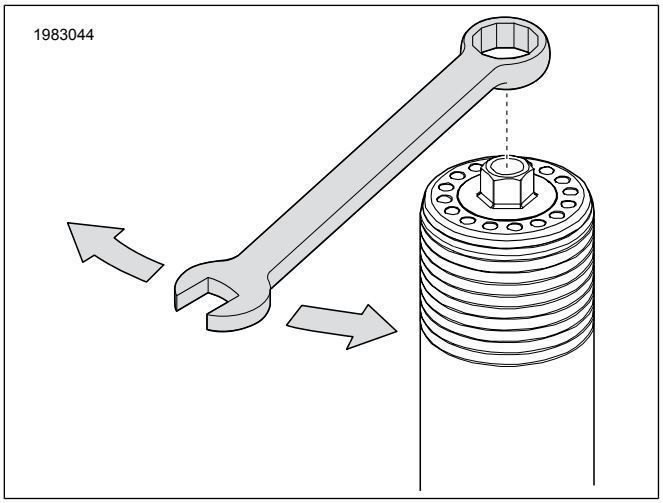


Figure 8. Pre-Load Adjustment

Table 4. Pre-Load Table

Rider Weight		Front Forks
LBS	KG	Turns from Minimum[1]
<150	<68	5

Table 4. Pre-Load Table

Rider Weight		Front Forks
170	77	6
190	86	7
210	95	8
230	104	9
250	113	10
270	122	11
290	132	12
300 to GVWR	131 to GVWR	13
NOTE *DO NOT exceed Gross Vehicle Weight Rating (GVWR) for any loading condition.*		
(1) Make fork preload changes to both forks as specified.		

Damping

NOTE

A hex wrench is provided in kit for damping adjustment.

- The right fork is rebound damping only.
- The left fork is compression damping only.

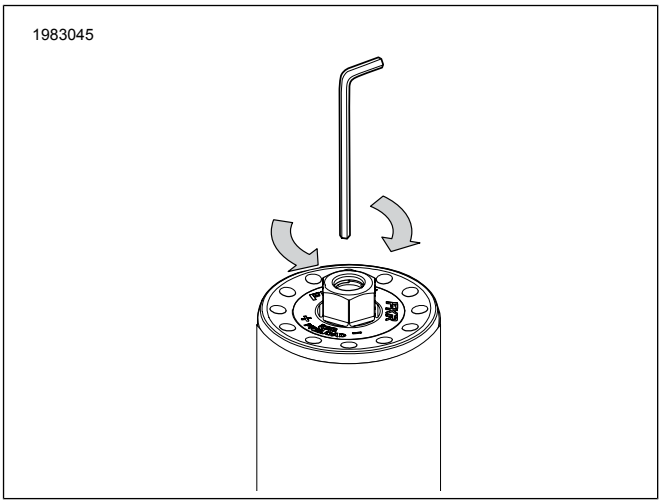


Figure 9. Damping Adjustment

Table 5. Front Forks

Compression[1]	Rebound[1]
16	10
Note: (1) Damping adjuster settings are done by tightening adjuster clockwise until it stops and then turning the adjuster counter-clockwise to the first click (this is position 1), then count clicks while turning adjuster counter-clockwise to the desired setting	

MAINTENANCE

⚠ WARNING

Shock absorbers contain compressed nitrogen. Attempting to service shock absorbers can cause an explosion, which could result in death or serious injury. Servicing requires special tools and training from Öhlins. (17604a)

1. Service for the forks is recommended every 18,600 miles (30,000 km) or 3 years.

2. Maintain product packaging to be used to send the forks to an Öhlins certified dealer for service, as needed.