



# INSTALLATION GUIDE

PARTS: 0414-0530, 0414-0531, 0414-0532, 0414-0541, 0414-0542, 0414-0543

## PRELOAD SETTING CHART

RUNNING WEIGHT IS TOTAL OF: RIDER + RUNNING GEAR	NUMBER OF TURNS
100-249 LBS	0
250-349 LBS	1
350-450 LBS	2
450+ LBS	3

## RIDER PREFERENCE - Read Prior to Installation

This chart is not a one size fits all. What constitutes as a firm or a soft ride will vary from one rider to another based on rider preference. This chart is designed as a starting point when determining the preload adjustment of the AXEO cartridge. No matter the preload adjustment setting chosen, the AXEO cartridge will provide a luxury ride, while also improving handling and performance of the front suspension, regardless of rider weight. **It's up to the installer or rider to determine exactly the type of ride quality desired when adjusting preload to ensure customer satisfaction.**

### Points to consider:

- **DO NOT include passenger weight when determining preload adjustment** as their weight is mainly over the rear shocks and it is only a factor under hard braking when the center of gravity of the motorcycle is shifted forward.
- **The AXEO will ride slightly firmer than stock with the nature of the design.** With an increase in performance you will feel more feedback from the front suspension over small road expansion joints, cracks, etc. Softer stock suspensions will result in the absorption of these small road imperfections; however, this will result in an undesirable reaction when encountering the larger potholes, uneven bridge joints, cracks, etc. The AXEO will adsorb these larger road imperfections, without the jarring effect experienced with stock suspension.
- **The change in firmness of the AXEO is significant when increasing or decreasing preload adjustment.**

### Rider Preference Scenario 1:

Rider weighs 250 lbs. with gear. Rider states they would prefer a comfortable ride with an increase in performance = stay with 0 turns of preload

### Rider Preference Scenario 2:

Rider weighs 250 lbs. with gear. Rider states they prefer a firmer feel in the front end and exercise the limits of their motorcycle when cornering, braking, etc. They understand the front suspension already will be slightly firmer than stock and are aware of the noticeable change in firmness between setting 0 and 1 turn of preload = adjust with 1 turn of preload.

This preference interpretation can be applied to all weight ranges.

**NOTE:** These settings DO NOT change the gross vehicle weight of your motorcycle, see your owner's manual for this specification and understand these limits. These performance descriptions will help you choose a setting that will give you the ride quality, enhance steering, braking and traction at a level you desire. Legend Suspensions is not liable for damages or injuries as the result of exceeding the gross vehicle weight of the motorcycle.



### AXEO23 FITMENT:

- 0414-0530:**  
97-13 H-D FLH  
TOURING MODELS (41 MM)
- 0414-0531:**  
14-16 H-D FLH  
TOURING MODELS (49 MM)
- 0414-0532:**  
17-22 H-D FLH  
TOURING MODELS (49 MM)

### AXEO21 FITMENT:

- 0414-0541:**  
97-13 H-D FLH  
TOURING MODELS (41 MM)
- 0414-0542:**  
14-16 H-D FLH  
TOURING MODELS (49 MM)
- 0414-0543:**  
17-22 H-D FLH  
TOURING MODELS (49 MM)

**NOTE:** LEGEND SUSPENSIONS RECOMMENDS THE USE OF THE FOLLOWING FORK OILS: SCREAMIN' EAGLE HEAVY, MAXIMA 20W V-TWIN, OR AN EQUIVALENT 20W FORK OIL



## OIL VOLUME & STANCHION TUBE CHART FOR AXEO23/AXEO21

**NOTE:** LEGEND SUSPENSIONS RECOMMENDS THE USE OF THE FOLLOWING FORK OILS: SCREAMIN' EAGLE HEAVY, MAXIMA 20W V-TWIN, OR AN EQUIVALENT 20W FORK OIL

AXEO 23/21" PART #	TUBE SIZE	FITMENT	LENGTH	OZ OF OIL TO ADD	STANCHION TUBE #
0414-0530	41 MM	1997-2013 FLH	STD	4.5 OZ	45972-09
0414-0531	49 MM	2014-2016 FLH	STD	13.5 OZ	45500113
0414-0532	49 MM	2017+ FLH	STD	14 OZ	45500341
0414-0541	41 MM	1997-2013 FLH	STD	4.5 OZ	45972-09
0414-0542	49 MM	2014-2016 FLH	STD	13.5 OZ	45500113
0414-0543	49 MM	2017+ FLH	STD	13.5 OZ	45500341

## WARRANTY

### English

Please visit [www.legendsuspensions.com](http://www.legendsuspensions.com) for the translated version of this install guide in the following languages: French, German, Italian, and Spanish. Please choose your preferred language at the top of the page and then choose the product you purchased. The install guides are located on the bottom of the product page under Product Downloads.

### Spanish

Visite [www.legendsuspensions.com](http://www.legendsuspensions.com) para obtener la versión traducida de esta guía de instalación en los siguientes idiomas: francés, alemán, italiano y español. Elija su idioma de preferencia en la parte superior de la página y luego elija el producto que compró. Las guías de instalación se encuentran en la parte inferior de la página del producto, en la sección Descargas de productos.

### German

Besuchen Sie bitte [www.legendsuspensions.com](http://www.legendsuspensions.com) für die übersetzte Version dieser Installationsanleitung in den folgenden Sprachen: Französisch, Deutsch, Italienisch und Spanisch. Wählen Sie bitte oben auf der Seite Ihre bevorzugte Sprache und anschließend das von Ihnen gekaufte Produkt aus. Die Installationsanleitungen finden Sie am unteren Rand der Produktseite unter Produkt-Downloads.

### French

Veillez visiter le site : [www.legendsuspensions.com](http://www.legendsuspensions.com) pour la version traduite de ce guide d'installation dans les langues suivantes : français, allemand, italien et espagnol. Veuillez choisir votre langue préférée en haut de la page, puis choisissez le produit que vous avez acheté. Les guides d'installation sont disponibles au bas de la fiche produit sous Téléchargements de produits.

### Italian

Prego consultare [www.legendsuspensions.com](http://www.legendsuspensions.com) per la versione tradotta della presente guida di installazione nelle seguenti lingue: francese, tedesco, italiano, e spagnolo. Prego scegliere la lingua preferita in cima alla pagina e in seguito scegliere il prodotto acquistato. Le guide di installazione si trovano in fondo alla pagina di prodotto sotto Scaricamenti di Prodotti.



**DO NOT TAMPER WITH THE SCHRADER VALVE ON TOP OF CAP!**

**WARNING**



IT'S EXTREMELY IMPORTANT THAT YOU MEASURE AND VERIFY THE DISTANCE BETWEEN THE TOP OF FRONT FENDER AND THE LOWEST PART OF THE TRIPLE CAMP/BRAKET ASSEMBLY TO KNOW WHAT TRAVEL LIMIT YOU NEED. FOLLOW THESE PRE-ASSEMBLY STEPS:

1. INSTALL TLC COLLARS INTO THE LOWER FORK LEGS AND REASSEMBLE UPPER AND LOWER TUBES
  2. DO NOT INSTALL CARTRIDGES AT THIS TIME
  3. INSERT FORK LEGS INTO TRIPLE CLAMPS, SET TUBE HEIGHTS AND TIGHTEN PINCH BOLTS
  4. INSTALL FRONT FENDER
  5. COMPRESS FORKS BY HAND SLOWLY UNTIL THE FORKS BOTTOM OUT AGAINST THE TRAVEL LIMITERS
  6. VERIFY FENDER TO CLEAR ALL FRONT END COMPONENTS (MAY NEED TO SLIGHTLY ADJUST TUBE HEIGHTS IN TRIPLE CLAMPS - 49 MM ONLY)
  7. ONCE ADEQUATE CLEARANCE IS CONFIRMED THEN THE CARTRIDGES CAN BE INSTALLED IN THE FORK LEGS
- \* AXEO 21/2.3" KITS MUST BE USED IN HD-OEM STANCHION TUBE LENGTHS. SEE CHART ON BACK COVER  
 \* AXEO 21/2.3" KITS CAN BE USED WITH ARLEN NESS "HOT LEGS" OR HD-OEM LOWER SLIDERS

**ATTENTION AXEO2.3 ONLY :** INSTALLING THE AXEO2.3 REQUIRES THE SEPARATE PURCHASE OF ARLEN NESS 7&7 RAKED TREES FOR FLT MODELS:  
 ARLEN NESS #: 20-389/DRA6 #: 0408-0317 FOR 2014+ MODELS  
 ARLEN NESS #: 20-378/DRA6 #: 0408-0316 FOR 97-2013 MODELS



**FIGURE F**

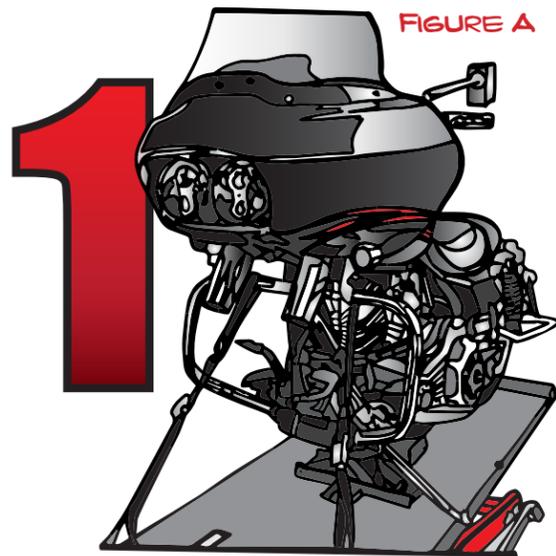
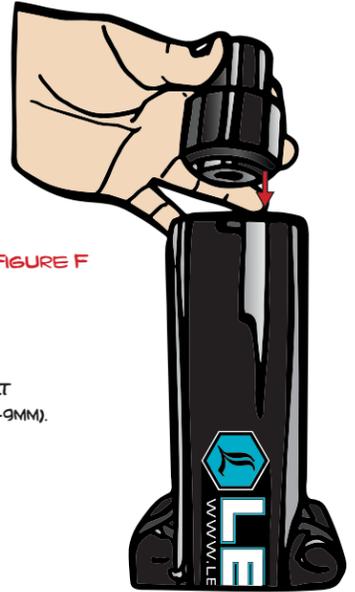


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**STEP FIVE: REASSEMBLE AND INSTALL**

- A. SECURE LOWER SLIDER IN TUBE VISE AND DROP THE TLC COLLAR IN WITH CUP FACING UP. **FIGURE E**
- B. PRE-LUBE AND INSTALL THE NEW BUSHING ON STANCHION TUBE AND PRE-LUBE BUSHING AND TUBE WITH FORK OIL.
- C. PRE-LUBE THE LOWER SLIDER AND INSERT THE STANCHION TUBE INTO THE LOWER SLIDER...CAREFULLY, LOWER IT ALL THE WAY DOWN.
- D. PRE-LUBE AND INSTALL THE LOWER SLIDER BUSHING (REQUIRES INSTALLING TOOL).
- E. INSTALL THE STEEL SPACER AND RUBBER SEAL (REQUIRES INSTALLING TOOL).
- F. INSTALL RETAINING RING.
- G. DROP PROVIDED REBOUND SPRING INTO TOP OF THE UPPER TUBE. **FIGURE F**
- H. LOWER THE LEGEND AXEO CARTRIDGE INTO THE TUBE, MAKING SURE THE LOWER ROD SEATS INTO THE TLC COLLAR CUP.
- I. RE-INSTALL THE LOWER ALLEN BOLT AND COPPER SEALING WASHER WITH A SMALL AMOUNT OF BLUE LOCTITE ON THE THREADS.
- J. HOLD CARTRIDGE BY HAND WHILE TIGHTENING THE LOWER ALLEN BOLT TO 15 FT. LBS. FOR A 8MM BOLT (41 MM) AND 28 FT. LBS. FOR A 14MM BOLT (49MM).

**FIGURE E (TLC - TRAVEL LIMIT COLLAR)**



**FIGURE A**

**STEP ONE: FORK REMOVAL**

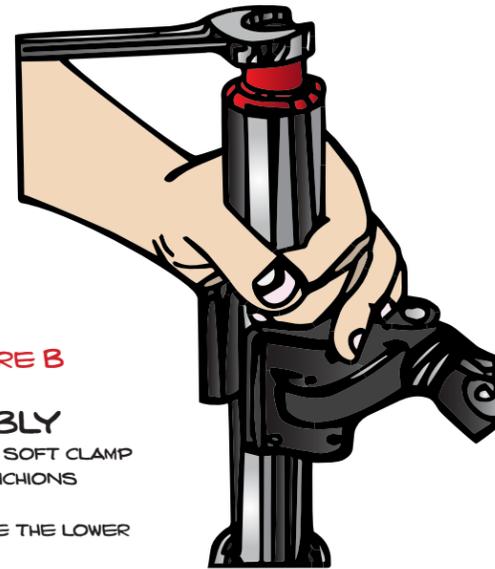
- A. PROPERLY SUPPORT YOUR MOTORCYCLE THEN REMOVE STOCK FORKS FROM MOTORCYCLE, CONSULT WITH AN EXPERIENCED TECHNICIAN BEFORE REMOVAL IF NEEDED. **FIGURE A.**



**FIGURE B**

**STEP TWO: DISASSEMBLY**

- A. SECURE FORKS IN A FORK VICE OR SOFT CLAMP TO ELIMINATE SCRATCHING ON STANCHIONS (UPPER TUBES).
- B. USE AN IMPACT WRENCH TO REMOVE THE LOWER ALLEN BOLT. **FIGURE B.**
- C. LET THE OIL DRAIN OUT AND PUMP FORK SEVERAL TIMES TO REMOVE ALL ORIGINAL OIL.
- D. WITH FORK STILL IN VICE, REMOVE TOP FORK CAP. **WARNING: BE EXTREMELY CAREFUL WHEN REMOVING THE CAP, IT IS UNDER HIGH SPRING PRESSURE AND MAY CAUSE INJURY. FIGURE C.**
- E. DUMP ALL STOCK COMPONENTS OUT OF FORKS.
- F. RETURN THE ASSEMBLY TO THE VISE, CLAMPING ON THE LOWER SLIDER AND REMOVE RETAINING RING FROM TOP OF LOWER SLIDER, THEN REMOVE THE STANCHION TUBE WITH BUSHING/SPACER/SEAL.
- G. REMOVE OLD BUSHINGS AND SEALS FROM TUBE BEFORE CLEANING.
- H. IT'S HIGHLY RECOMMENDED TO REPLACE TUBE BUSHINGS AND LOWER SLIDER BUSHINGS AND SEALS AND NOT RE-USE THE OLD ONES.

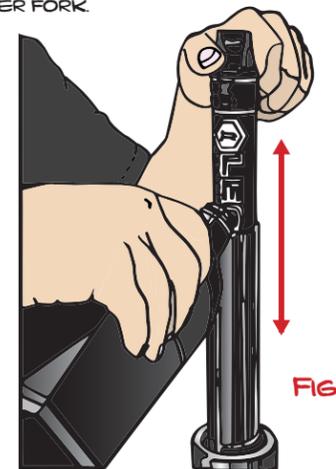


**FIGURE C**

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**STEP SIX: ADDING OIL AND BLEEDING**

- A. REFER TO THE OIL VOLUME CHART ON THE BACK COVER OF THIS INSTALL GUIDE FOR THE TYPE AND AMOUNT OF OIL TO ADD PER FORK. **IMPORTANT: THE AMOUNT OF OIL ADDED INSURES THE HYDRAULIC BUMP STOP WILL FUNCTION.**
- B. POUR OIL IN TOP OF TUBE, YOU WILL NEED TO PUMP THE STANCHION A FEW TIMES WHILE DOING THIS TO LET OIL DRAIN DOWN INTO TUBE. **FIGURE G.**
- C. ONCE RECOMMENDED AMOUNT OF OIL HAS BEEN ADDED, PUMP THE STANCHION UP AND DOWN SEVERAL TIMES TO MAKE SURE YOU HAVE THE OIL INTO THE LOWER PART OF THE SLIDER.
- D. AFTER BLEEDING THE FORKS, SLIDE THE STANCHION UP AND THREAD ONTO THE FORK CAP.
- E. TIGHTEN THE FORK CAP TO 25 FT. LBS.



**FIGURE G**

**PARTS INCLUDED:**

- (2) - AXEO CARTRIDGES
- (2) - TRAVEL LIMIT COLLARS
- (2) - REBOUND SPRINGS

**STEP THREE: CLEAN FORKS**

- A. CLEAN ALL USED FOR OIL FROM STANCHION TUBES AND LOWER SLIDERS.
- B. USE SOLVENT AND A LONG SOFT BORE BRUSH TO REMOVE METALLIC OIL FILM.
- C. USE SUSPENSIONS CLEANER TO REMOVE ANY OILY RESIDUE.
- D. DRY ALL PARTS WITH COMPRESSED AIR.

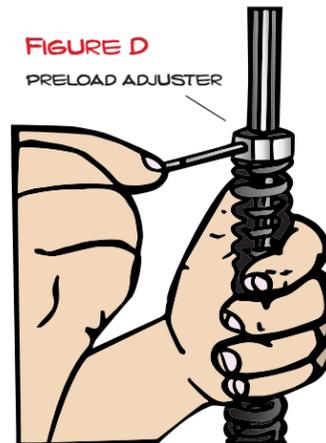
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**STEP FOUR: SET PRELOAD FOR LEGEND CARTRIDGE**

- A. REFER TO THE PRELOAD SETTING CHART (BASED ON RIDER AND GEAR WEIGHT) ON THE BACK COVER OF THIS INSTALL GUIDE.
- B. USE AN ALLEN WRENCH TO LOOSEN THE SET SCREW ON THE PRELOAD ADJUSTER. **FIGURE D.**
- C. USE THE RECOMMENDED NUMBER OF TURNS FROM THE CHART AND THREAD YOUR PRELOAD ADJUSTER TOWARDS THE SPRING. **PRELOAD ADJUSTER IS SET AT ZERO, ONE FULL TURN IS INDICATED BY SET SCREW ALIGNING WITH "FLAT."**
- D. **IMPORTANT: LINE THE SET SCREW UP WITH THE "FLAT" THAT IS MACHINED IN THE SHAFT, AND RE-TIGHTEN THE SET SCREW WHEN COMPLETE.**

**FIGURE D**  
PRELOAD ADJUSTER



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**STEP SEVEN: INSTALL FORKS**

- A. ONCE FORKS ARE COMPLETELY ASSEMBLED RE-INSTALL THEM ONTO YOUR MOTORCYCLE FOLLOW THE MANUFACTURERS' TORQUE SPECS FOR SAFETY.