



# INSTALLATION GUIDE

PARTS: 0414-0516, 0414-0517, 0414-0494, 0414-0495, 0414-0496, 0414-0497

## 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.

## OIL VOLUME CHART FOR AXEO

**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 PART	TUBE SIZE	FITMENT	FORK TUBE LENGTH	OZ OF OIL TO ADD
0414-0496	41 MM	1997-13 FLH	STD	3.5 OZ
0414-0497	41 MM	1997-13 FLH	LWD	3.5 OZ
0414-0494	49 MM	2014-16 FLH	STD	11.5 OZ
0414-0495	49 MM	2014-16 FLH	LWR	12 OZ
0414-0516	49 MM	2017+ FLH	STD	11 OZ
0414-0517	49 MM	2017+ FLH	LWR	11.5 OZ

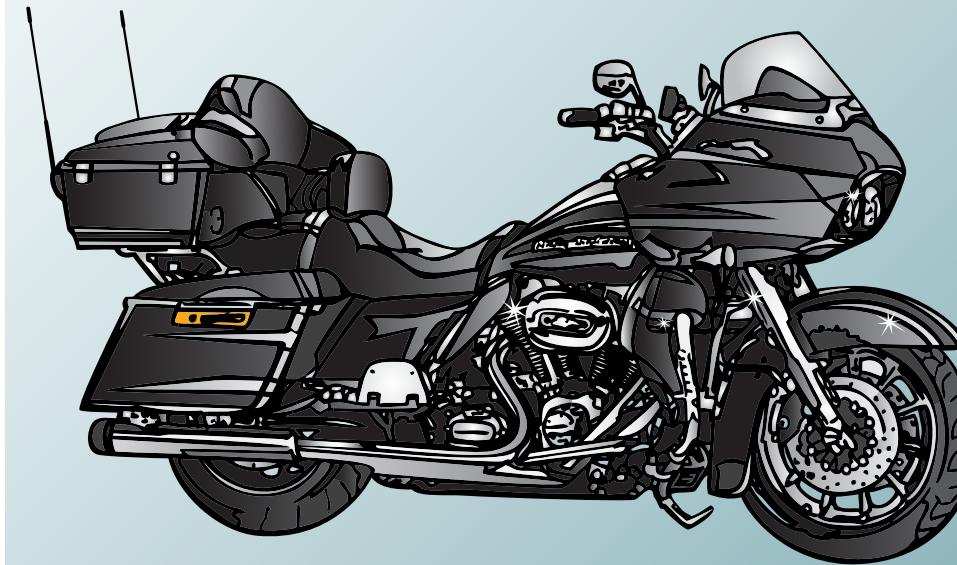


### FITMENT:

- 0414-0516 (STANDARD):** 2017-22 HARLEY-DAVIDSON FLH TOURING MODELS (49 MM)
- 0414-0517 (1" LOWERED):** 2017-22 HARLEY-DAVIDSON FLH TOURING MODELS (49 MM)
- 0414-0494 (STANDARD):** 2014-16 HARLEY-DAVIDSON FLH TOURING MODELS (49 MM)
- 0414-0495 (1" LOWERED):** 2014-16 HARLEY-DAVIDSON FLH TOURING MODELS (49 MM)

- 0414-0496 (STANDARD):** 1997-13 HARLEY-DAVIDSON FLH TOURING MODELS (41 MM)
- 0414-0497 (1" LOWERED):** 1997-13 HARLEY-DAVIDSON FLH TOURING MODELS (41 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



### English

Please visit [www.legend suspensions.com](http://www.legend suspensions.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.legend suspensions.com](http://www.legend suspensions.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.legend suspensions.com](http://www.legend suspensions.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.legend suspensions.com](http://www.legend suspensions.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.

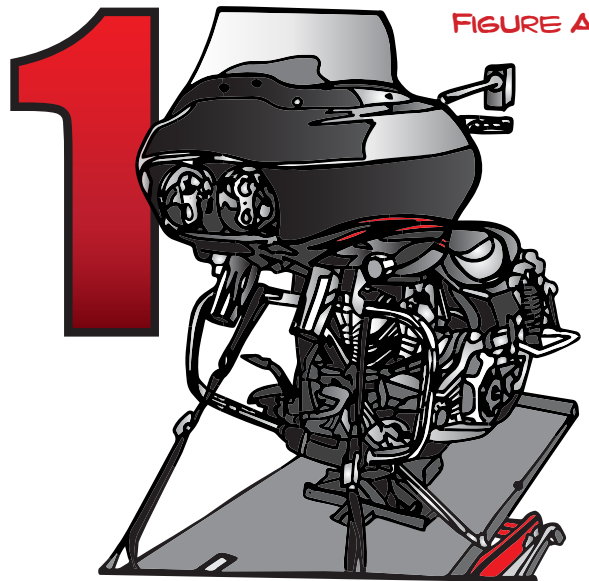
### Italian

Prego consultare [www.legend suspensions.com](http://www.legend suspensions.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.

For more information visit [www.legend suspensions.com](http://www.legend suspensions.com)

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

**WARNING** PROPERLY SUPPORT YOUR MOTORCYCLE PRIOR TO SUSPENSION INSTALLATION!



# 1

FIGURE A



# 2

FIGURE B

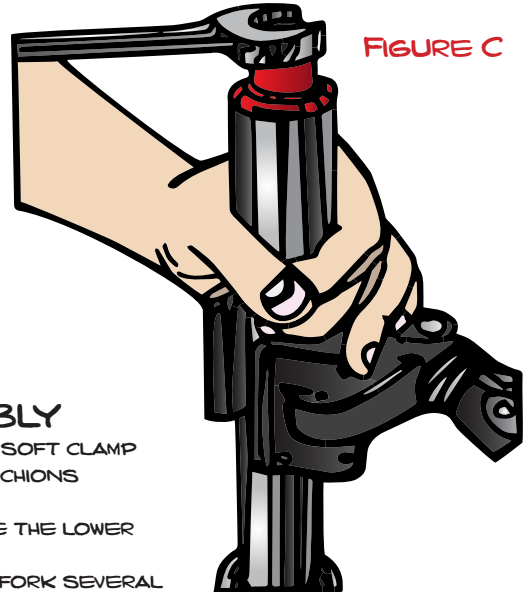


FIGURE C

# 3

### STEP THREE: CLEAN FORKS

- A. IF YOU DIDN'T SPLIT YOUR FORKS CLEAN ALL OF THE USED OIL AND CONTAMINANTS FROM FORKS.
- B. USE A SOLVENT TANK AND LONG BRUSH TO SCRUB THE INSIDE OF YOUR FORKS. ONCE ALL OF THE OIL IS WASHED OUT, USE SUSPENSION CLEANER THAT DOESN'T LEAVE AN OILY FILM, AND WASH THE SOLVENT OUT.
- C. BLOW ALL PARTS DRY WITH COMPRESSED AIR.



### STEP ONE: FORK REMOVAL

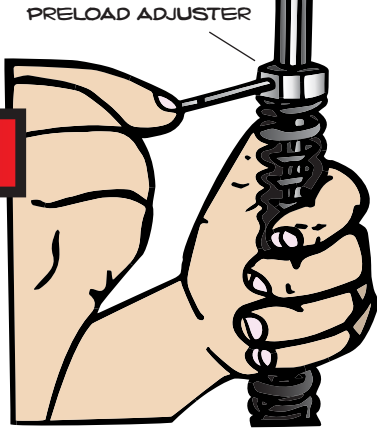
- A. REMOVE STOCK FORKS FROM MOTORCYCLE, CONSULT WITH AN EXPERIENCED TECHNICIAN BEFORE REMOVAL IF NEEDED. FIGURE A.

### 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. FIGURE D. **NOTE: SPLITTING OF THE LOWER SLIDER AND STANCHION TUBE IS UNNECESSARY UNLESS:**  
 1. YOUR CURRENT FORK SET HAS AN OEM DAMPER CARTRIDGE IN "ONE" LEG AND YOU MUST REPLACE THE OIL LOCK PIECE WITH THE ONE PROVIDED FROM LEGEND  
 2. YOU WISH TO REPLACE YOUR FORK SEALS AND BUSHINGS AT THIS TIME (HIGHLY RECOMMENDED)
- F. IF SO, REMOVE THE SNAP RING. USE THE STANCHION AS A SLIDE HAMMER AND PULL FORK PART. CLEAN YOUR FORKS AND REPLACING YOUR SEALS AND BUSHINGS IS HIGHLY RECOMMENDED.

# 4

FIGURE E



### 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 E.
- 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.**

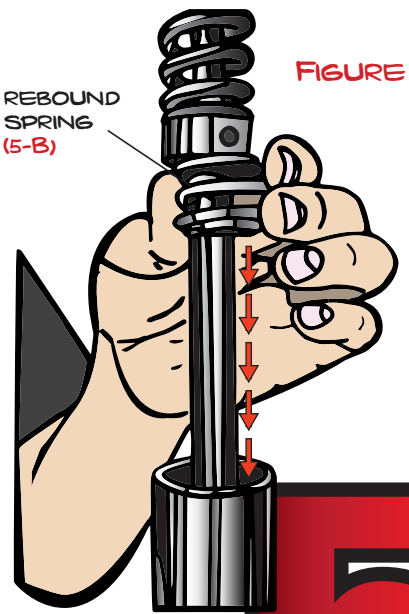


FIGURE F

REBOUND SPRING (5-B)

**SEE STEP 2: E NOTE**

	O414-0494: LEGEND PROVIDES ONE OIL LOCK PIECE	
	O414-0495: LEGEND PROVIDES ONE OIL LOCK PIECE	
	O414-0496: LEGEND PROVIDES ONE OIL LOCK PIECE	
	O414-0497: LEGEND PROVIDES ONE OIL LOCK PIECE	
	O414-0516: CUSTOMER RE-USES OEM OIL LOCK PIECES	
	O414-0517: CUSTOMER RE-USES OEM OIL LOCK PIECES	

### STEP FIVE: INSTALL LEGEND CARTRIDGES

- A. MAKE SURE THE OIL LOCK PIECE IS ALIGNED WITH UPPER TUBE (USE A FLASHLIGHT AND MAKE SURE YOU CAN SEE ALL THE WAY THROUGH THE FORK TO THE LOWER BOLT HOLE).
- B. MAKE SURE STOCK REBOUND SPRINGS ARE REMOVED. THEN DROP THE PROVIDED REBOUND SPRINGS INTO THE TOP OF TUBE AND MAKE SURE THEY ARE ALIGNED IN THE BOTTOM OF THE STANCHION. FIGURE F.
- C. WITH THE FORK FULLY COMPRESSED, LOWER THE CARTRIDGE INTO THE TUBE, MAKING SURE IT IS SEATED IN THE OIL LOCK PIECE
- D. INSPECT THE COPPER WASHER FROM THE LOWER BOLT YOU REMOVED EARLIER. CLEAN WASHER AND MAKE SURE THERE ARE NO BLEMISHES.
- E. APPLY SMALL AMOUNT OF BLUE LOC-TITE TO THREADS OF LOWER BOLT AND INSTALL IT WITH COPPER WASHER
- F. HOLD CARTRIDGE AND TIGHTEN BOLT TO 15 FT. LBS FOR A 41 MM FORK AND 30 FT. LBS FOR A 49 MM FORK.

**PARTS INCLUDED:**  
 (2) - AXEO CARTRIDGES  
 (1) - OIL LOCK PIECE  
 (2) - REBOUND SPRINGS

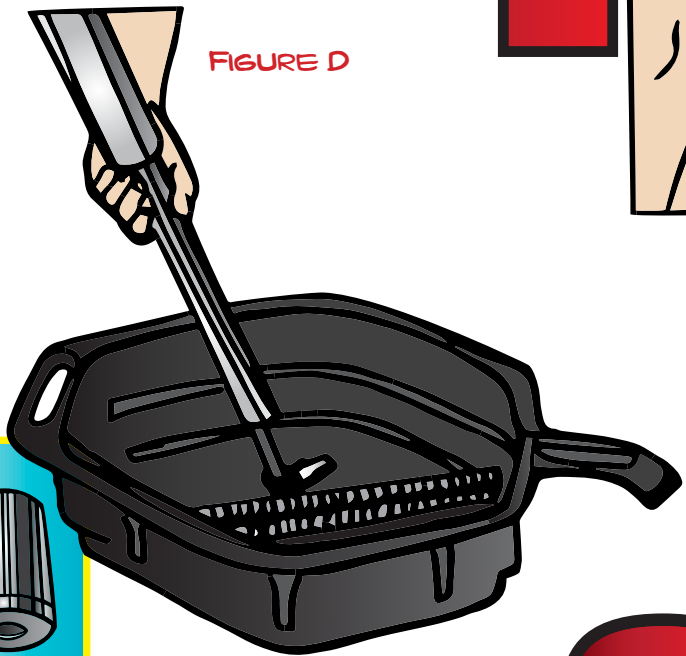


FIGURE D

# 7

### STEP SEVEN: INSTALL FORKS

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

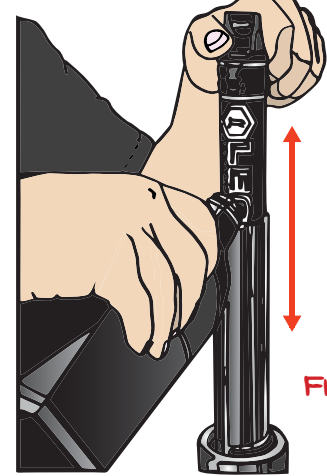


FIGURE G

# 6

### 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.