

PREMIUM HARDWARE INSTALLATION GUIDE FITMENT

2006+ Harley-Davidson & M8 Softail (Rear Drive Pulley / Sprocket Bolts)

MATERIAL: Aerospace Grade 5 Titanium
(Ti-6Al-4V) 12-Point Flange

*Thank you for choosing our Premium
Titanium Rear Pulley Hardware Kit.*

Grade 5 Titanium delivers the high-tensile strength of structural steel at a 45% weight reduction, massively reducing rotational mass on your rear wheel while completely eliminating thread corrosion.

Because rear pulley bolts are subjected to intense shearing force from V-Twin torque, you must strictly adhere to this factory installation process to prevent catastrophic hardware failure or wheel damage.



THE #1 CRITICAL RULE: TWO-STAGE TORQUE SEQUENCE

Harley-Davidson uses a precision multistage sequence to stretch pulley fasteners evenly.

Failure to use a criss-cross pattern or skipping the back-off stage will warp the pulley or snap the bolts. Always tighten the 5 bolts in a Star/Criss-Cross Pattern (1-3-5-2-4).

A manual, calibrated torque wrench is mandatory. NEVER use an impact gun.

STEP 1: WHEEL HUB PREPARATION

Old factory thread-locking compound left inside the wheel hub's blind holes creates massive friction. This tricks torque wrenches into clicking early, leaving the pulley loose. Use a 7/16-14 thread chaser or a stiff brass/nylon thread brush with brake cleaner to scrub out the hub's internal threads. Ensure the hub holes and the back of the drive pulley are completely clean, flat, and dry.

STEP 2: ANTI-GALLING & VIBRATION LOCKING

Titanium threading into aluminum hubs is highly prone to destructive thread galling (cold-welding). However, standard anti-seize is dangerous here because it will cause the pulley bolts to back out from tire vibrations. **DO NOT use standard anti-seize.**

DO USE 2-3 drops of liquid medium-strength blue threadlocker (such as Loctite 243) directly onto the titanium threads. The liquid acts as a necessary lubricant to prevent galling during the complex torque sequence, then cures to permanently lock the bolts.

STEP 3: THE FACTORY INSTALLATION SEQUENCE

Follow this sequence precisely using a sharp-edged 12-point socket pushed completely flush onto the bolt flanges: Stage 1 (Initial Set): Following a Star Pattern, torque all 5 bolts to 60 ft-lbs (81.3 Nm). Stage 2 (The Back-Off): In a Star Pattern, back off each bolt exactly 180 degrees (half a turn). (Do not skip this-it resets the friction threshold for the titanium). Stage 3 (Final Torque): Following a Star Pattern, tighten all 5 bolts smoothly to a final spec of 80 ft-lbs (108.4 Nm).

STEP 4: MANDATORY INSPECTION INTERVALS

Due to the extreme alternating loads on a rear drive system, checking your hardware is a critical safety step. The 100-Mile Check: After your first 100 miles (160 km) of riding, use a manual torque wrench to verify that all 5 fasteners remain locked at 80 ft-lbs.

Visual Anchor: We highly recommend marking a small line across the bolt head and pulley using a paint pen after final torque. This allows for a split-second visual check to ensure no bolts are turning.

Disclaimer: Professional installation is highly recommended. Incorrectly torqued drive hardware can lead to total loss of vehicle control, wheel destruction, or serious injury.



www.kpr-ind.com.au | sales@kpr-ind.com.au | 07 3162 0077