



## 30/34 Tooth Power-Drive Motor Sprocket Kit

Evolution Industries strongly recommends installation be performed by a certified Harley-Davidson technician or an independent V-twin service shop.

Please follow the factory service manual to ensure proper installation and safety while installing this product.

Before beginning installation of your kit, make sure you have received the correct parts necessary for the installation on your bike. Installing a 30 tooth motor sprocket will require a different length primary chain than original equipment. 34T kits can re-use the O.E. primary chain. Replacements are also available. Custom charging systems may require custom sprocket shims to achieve proper chain alignment. Please contact us if you have any questions regarding installation of this kit.

Be aware changing the gearing ratio of your primary will affect how your bike calculates vehicle speed, cruise control operation, and gear indicator functions. Most tuning devices that allow access to inside the ECM functions can correct for gearing changes. Harley-Davidson's Screaming Eagle tuner and "piggy-back" tuners will not allow you to correct these functions.



1. Remove the outer primary as per the factory service manual.

2. Remove the primary chain tensioner as per the factory service manual.



3. Remove the Clutch Basket, Compensator Assembly, and primary chain per factory service manual.





4. At this point it is easiest to check the clearance of the motor sprocket if your bike has a charging rotor with a cup attached. Some bikes may require clearancing of the edge of the cup to avoid contact with the motor sprocket. You may also remove the springs from the rotor cup entirely as they no longer serve a purpose. On vehicles that have a newer charging system, you will have a bare stator rotor at this point. Milwaukee Eights do not require a sprocket spacer. 2007-2010 Twin Cams (Also '06 Dyna) upgraded with screamin' eagle charging systems or '11-'17 Twin Cams will require a sprocket spacer (#1004-3012).



5. As noted above install the sprocket spacer if needed behind the motor sprocket. Install your Power-Drive Motor Sprocket, Primary Chain and Clutch Basket as one unit. It is recommended to install the sprocket using a new bolt kit (#1004-3011) available as a separate purchase.



6. Torque the motor sprocket to factory specifications using the new bolt kit and some medium strength loctite. At this point, check the alignment of the primary chain using a straight-edge. Alignment of the motor sprocket and clutch sprocket should be within 0.030". If sprockets are in alignment, proceed to the final step.

7. Re-Install the clutch basket, chain tensioner and remaining items as per factory recommendations.









Description:	Sprocket Size:	Primary Chain:
O.E. Softail/Dyna '07 to Present (Also '06 Dyna)	34T	92L
O.E. Touring/Trike '07 to Present	34T	86L
Softail/Dyna '07 to Present (Also '06 Dyna)	30T	90L
Touring/Trike '07 to Present	30T	84L