



**Product number: DH-MMS-A34**

Complete M8/TwinCam 34 tooth Motorsprocket

**Product number: DH-MMS-A32**

Complete Twin Cam - 32 tooth Motorsprocket

**Product number: DH-TCMS**

\*Motorsprocket Adaptor for 07' - 16' TwinCam models

**Model Fitment**

2007-2013\* & 2014-2016 Twin Cam Engines

2017-2020 Milwaukee 8 Touring models

**Additional Parts required:**

-Primary cover gasket

-Recommend Primary Grade Oil

\*H-D Charging Rotor #30041-08A

\*H-D Oil deflector installed on outer primary cover

\*H-D Tapered Torx bolt #10500031

*\*Required Upgraded parts if not OEM equipped*

**Special Tools Required:**

-Primary Locking Tool

-Darkhorse Products sprocket shaft run out tool available at [Darkhorsecrankworks.com](http://Darkhorsecrankworks.com) (optional)

-Darkhorse Products Cushion Install Tool (#DH-CCT) available at [Darkhorsecrankworks.com](http://Darkhorsecrankworks.com)(optional)

**\*\*\*\*\*Warning!\*\*\*\*\***

**The rider's safety depends 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 trained motorcycle technician perform the installation. Improper installation of this kit could result in death or serious injury.**

**Removal**

1. To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect the battery, removing the negative cable first.
2. Remove drive components as outlined in the factory service manual.

## Motorsprocket Installation

### Instructions version 20.5

**Before beginning, install, read and understand all processes.**

1. We recommend first and foremost to inspect sprocketshaft run out. Our recommended runout allowed is .010 in. maximum. If there is more than allowed runout we recommend contacting Darkhorse Crankworks for service options.

\*\*This can be achieved by using (Spk runout tool part #DH-SRTK). If there are questions on runout measuring see [www.darkhorsecrankworks.com](http://www.darkhorsecrankworks.com) for a video of proper procedure on inspecting runout.

**If sprocketshaft runout is within specifications, proceed as follows:**

2. We recommend installing the clutch basket and the sprocket assembly using tapered torx compensator bolt H-D part #10500031 & the oil slinger washer supplied in the kit, there should be NO endplay on the motor sprocket.
  - A) Torque to 20 ft/lbs **\*for alignment test only**
  - B) **ALL TwinCam Models require spacer #DH-TCMS installed between rotor and sprocket**
3. Place a straight edge against the sprocket on the motorsprocket and the clutch basket sprocket and make sure there is no more than .025 in. difference in alignment. (.025" Shims are available through Darkhorse)
4. Once alignment of sprockets are verified, remove sprocket and clutch assembly and install chain and both drive components simultaneously with the chain adjuster still removed.
5. Verify that the threads are clean on sprocket bolt and clutch nut and prime, install using Loctite Thread Locker 262 Red. Torque the motorsprocket bolt (with supplied oil distribution washer) to 175 ft/lbs. Torque clutchhub nut to OEM specs per manual.
6. Follow the service manual to install the remaining primary components. \*32 tooth sprockets will need primary chain adjuster revision to take up additional chain slack. See website for options.
7. Our recommended setting of autochain tensioner should be set with 1/2" (cold) chain deflection. \*We recommend setting proper chain deflection during install.
8. Proceed with the service manual for completing installation.