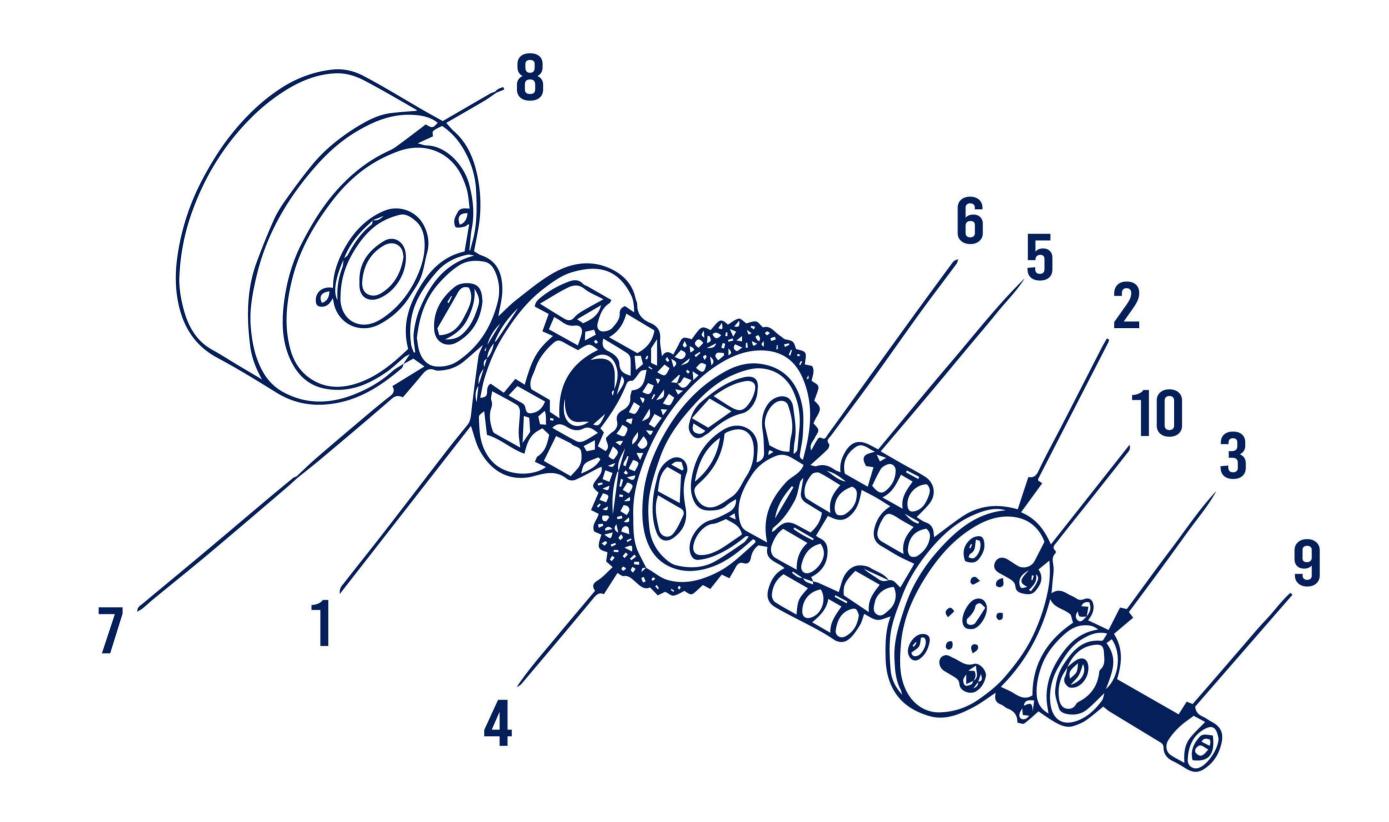


PATENTED MANO-WAR MOTORSPROCKET PARTS DIAGRAM



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DH-MDH-M8	DRIVE HUB	1
2	DH-MFP	FACE PLATE	1
3	DH-MMS-OSS	OIL SLINGER	1
4	DH-MMS34T REV A	SPROCKET 34T	1
5	DH-MDVC-75/85	CUSHIONS	8
6	DH-MMS-SB	SPROCKET BUSHING	1
7	DH-TCMS	TWIN CAM SPACER	1
8	30041-08A	ROTOR	1
9	10500031	BOLT FOR FLYWHEEL	1
10	1124224	SCREW	4
11A	62700063	OIL DEFLECTOR TOURING NOT PICTURED	
11B	62700064	DYNA, SOFTAIL NOT PICTURED	
11C	12200065	CLIPS - RETAINING	

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 Tapered Torx bolt #10500031
- •H-D Oil deflector installed on outer primary cover
- •Required Upgraded parts if not OEM equipped

Special Tools Required:

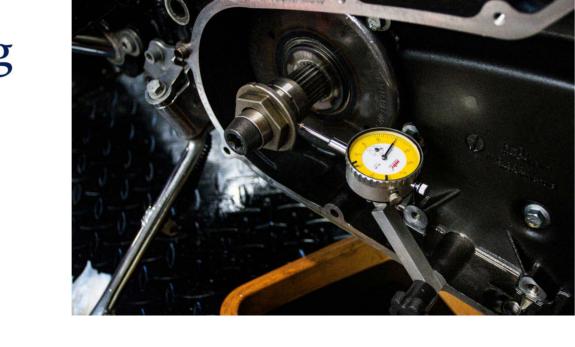
- Primary Locking Tool
- Darkhorse Products sprocket shaft run out tool available at darkhorsecrankworks.com (optional)
- Darkhorse Products
 Cushion Install Tool (#DH-CCT) available at darkhorsecrankworks.com (optional)

*****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 motorcycletechnician perform the installation. Improper installation of this kit could result in death or serious injury.

Model Install v. 20.5

Before beginning install, read and understand all processes.

- 1. We recommend first and foremost to inspect sprocket shaft run out. Our recommended runout allowed is .010" maximum. If there is more than allowed runout we recommend contacting Darkhorse Crankworks for service options.
- **This can be achieved by using sprocket runout tool part #DH-SRTK. If there are questions on runout measuring see darkhorsecrankworks.com

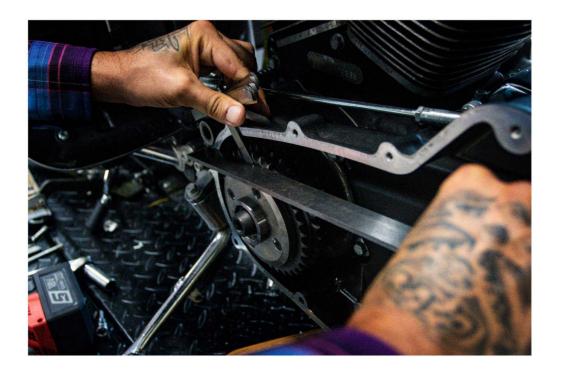


for a video of proper procedure on inspecting runout.

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 and the oil slinger washer supplied in the kit, there should be NO endplay on the motorsprocket.



- 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 motor sprocket and the clutch basket sprocket and make sure there is no more than .025 in. difference in alignment. (Qty 2 0.015 Alignment shims included in kit)

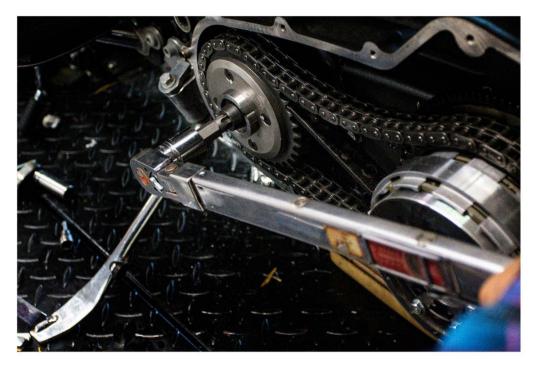
4. Once alignment of the sprocket is verified, remove sprocket and clutch assembly and install #10500031 tapered T70 bolt and oil slinger.



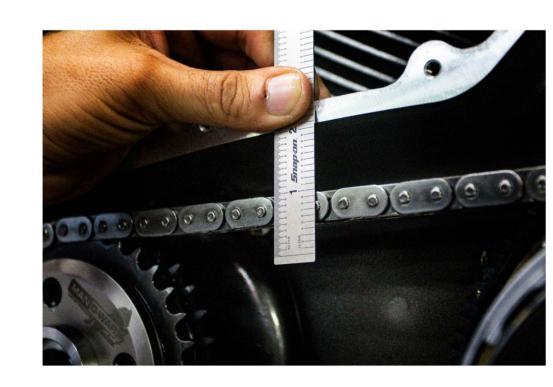


5. Verify that the threads are clean on sprocket bolt and clutch nut and prime, install using Loctite Thread Locker 262 Red. Torque the motorsprocket bolt (with supplied oil slinger) to 175 ft/lbs. Torque clutchhub nut to OEM specs per manual.





- 6. Follow the service manual to install the remaining primary components.
- 7. Our recommended setting of autochain tensioner should be set with 1/2" (cold) chain deflection. *We recommend setting proper chain deflection during install. Run OEM Tensioner set to 1/2".





- 8. Proceed with the service manual for completing installation.
- 9. If you have a 2007 to 2011 you will need to install the oil deflector onto your inner primary cover. If you have a 2012 to present the oil deflector is built into the primary cover as shown in this image.



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.