



*BIG TWIN SERVICES, LLC
CUSTOMIZATION, PERFORMANCE, REPAIR, SERVICE, TUNING, AND WELDING
FOR ALL HARLEY-DAVIDSON® MOTORCYCLES*

706-220-4239 / service@bigtwinservices.com

January 24, 2021

Subject: Eliminating the Primary Drive Failures in both the Twin-Cam and Mil-Et [M-8]

If you have been “keeping up” with our Testing and Solutions for the 2017 and later Model Motorcycles, you’ll be glad to know, we also have solved the Primary Drive Problems which have plagued the Motorcycles since about 1985.

THE “EVOLUTION” OF THE MIL-8 / TWIN-CAM PRIMARY DRIVE DEALER-PROOFING

As promised, we’ve eliminated the Mil-Eht [M-8] failures and next was to address the Primary Drive System that Harley-Davidson has had in one form or another since 1985.

In our neverendingly pursuit to resolve the issues, as with the Mil-8 Engine, we have found the solution to DEALER-PROOF the Primary Drive System. We’ve completed **50,000-mile tests** and can now tell you how to DEALER-PROOF the PRIMARY DRIVE for **WORRY FREE RIDING** with a onetime cost. We tried a multitude of parts in differing configurations for customer’s in GA, MD, and VA consisting of five Motorcycles, two of which were BIG BUILDS! 140 hp and 145 tq. !

ISSUES AND SOLUTIONS

CHAIN TENSIONER: Everyone knows, and it’s no secret, Automatic Chain Tensioners and H-D Compensators are, to say the least, ineffective and damaging to your Motorcycle’s Transmissions Main Shaft, Seals, Bearing, and just plain worthless.

The Automatic Chain Tensioner since 2007, have been, and will continue to be an issue for Harley-Davidson Owners. Causing damage to almost every part of the Primary Drive System.

CHAIN TENSIONER SOLUTION: The Hayden Enterprises #M6BT17-M8 Primary Chain Tensioner for Harley-Davidson Milwaukee-Eight M-8 Models is your answer! Automatically adjust the tension of the primary chain Provide constant and even tension, which improves gear shifting Reduce shifting noise; make for a smoother ride Extend primary chain life and it’s “Made in the U.S.A.” Cost about \$120 + Shipping.

COMPENSATOR NIGHTMARE: Compensators on Harley-Davidson began having issues with the 96ci 2007 Model Year and, with FOUR REVISION'S to date, still continue to break costing the Customers upwards of \$500 - \$1000 on average. Sometimes destroying the Crank Sprocket and Flywheel Assy's as well costing may thousands to repair. This problem will NEVER go away by the Motor Company. They've just "given-up" on any more R&D. We have tested MANY so-called solutions to the Compensator Issues including the Screamin' Eagle and to no avail. They just keep breaking and destroying parts!

COMPENSATOR NIGHTMARE SOLUTION: Man O-War Motorsprocket system by DarkHorse This motor sprocket is the 1st performance engineered primary motor sprocket on the market that provides "instant torque response" combined with an "engine pulse absorbing cushion drive" primary system for Harley-Davidson Twin-Cam® and Milwaukee 8® models. All these benefits combined with being a billet machined, balanced motor sprocket that weighs nearly 2 pounds less than the OEM compensator and ½ the number of parts, you do not have to look any further to increasing your "trouble free" miles on your Harley-Davidson Twin-Cam® or Milwaukee 8® motorcycle. AND Replacing cushions costs considerably less, estimated at under 1 hour labor with proper tooling and our certified 8-piece cushion kit is currently priced at \$39.95 + tax & shipping and should not have to be dome for 30,000 miles!!

CLUTCH NIGHTMARE: As the above, nothing has been done to prevent failures and catastrophic damage caused by higher horsepower engines from the 96ci to the 131ci Harley-Davidson builds. In fact, moving more than 100 hp will cost you, bigtime if you are the type to "full power the Throttle". It's a fact. Clutch fade, walk, slip, and heat destroys not only the clutch but, the basket and bearings as well. The Stock Clutch just plain SUCKS at getting the horsepower to the rear wheel without excessive wear and damage. People pay hefty prices for stage builds to find out they just do not perform because of Clutch issues. And, they're loud as crap!

CLUTCH NIGHTMARE SOLUTION: REKLUSE "TorqDrive Plus 6". TorqDrive provides more disks in less space, allowing us to add up to 6 additional frictions disks to the clutch pack over stock. More frictions = more torque capacity thus unlocking the full power of your engine without the need to add stiffer or pressure plate springs or a lock up.. Proven in racing at the highest levels, it's not just good, it's "Revolutionary".

The Plus 6 friction disks offer up to 50% stronger clutch engagement with no increase in lever effort, Smoother shifting, Improved lever feel, engineered to eliminate slip and tunable to handle high horsepower engines, Steel core friction disks for improved heat dissipation and longer clutch life. Rekluse sleeves eliminate basket wear and notching.

INNER PRIMARY BEARING: The Inner Primary Bearing does a lot. Specifically, maintaining a friction-free surface for the Transmissions Main Shaft which the Clutch is also connected to. These often cause the Primary race to “walk” the Main Shaft and fail under aggressive operation in the Stock Setup. inner bearing race has been used on Big Twins since 1985. The inner primary bearing rides on this race. By design, this race presses onto the transmission mainshaft. This system works fine for stock engines. 100 HP+ engines will make this race walk on the mainshaft. If it walks inboard, it will damage the maindrive gear seal and cause a transmission oil leak. If it walks outboard, it will cause a primary oil leak.

INNER PRIMARY BEARING SOLUTION: BAKER The 34091-85 high torque bearing kit eliminates this condition. Kit includes a precision honed bearing and seal. #189-56. Five Year Fifty Thousand Mile [50,000 mi.] Warranty!

Not only did we NOT see one fail using these parts, wear was SURPRISINGLY unfound! Some had minimalistic initial signs of use, but none had wear! AMAZING!

In total disclosure, I did break a Bearing when removing it from the inner-primary – **MY BAD!**

If you have any questions or comments, please don't hesitate to contact me.

You can find the costs on the following page to never repair another primary drive problem – Guaranteed!

Sincerely,



Thomas White Owner

Ph. 706.220.4239

Web: service@bigtwinservices.com

e-Mail: www.bigtwinservices.com

MANUFACTURER RETAIL COST

Hayden Enterprises #M6BT17	\$118.00
Man O War Motorsprocket 34 TOOTH TWIN CAM 2007-16	\$514.90
Man O War Motorsprocket 34 TOOTH MILWAUKEE 8	\$499.95
REKLUSE "TorqDrive Plus 6".....	\$459.00
High Torque Bearing Kit - BAKER Drivetrain	<u>\$50.00</u>
TOTAL to DEALER PROOF	\$1,642.80

- Does not include Labor or GA Sales Tax

One failure in your Primary could easily cost as much or more in parts to just put Stock parts back in that will fail again.