TB Update 06-2020

Technical Bulletin 01-2019 SRF3 Tilton Cover / Kevlar Clutch Disc

During the past 10 or 11 months we have learned a lot about the condition of clutch components in relation to the intended operation of the Dampened Kevlar clutch disc.

One of the most critical things is the assembly tolerance of the friction rings on the clutch disc. The clutch company now understands and can hold the assembly to a tighter tolerance window.

When the Tilton clutch parts and flywheel are in like new condition, we have almost no problems with the Kevlar disc. As the metal parts start to wear, .002” / .005” / .008”, it has a very insignificant impact. Considering the clamping force working window is only about .030”, you can see how you start to reduce clamping force quickly.

In an attempt to make the condition of all the parts less critical, plus make the clutch more forgiving to abuse, we started suggesting to some customers to use the next stronger diaphragm spring for the Tilton clutch cover. (BF)

Tilton developed the “W” spring for our original clutch package, the next stronger spring is called “BF”. The “BF” spring has roughly 55/70lbs more clamping force than our “W” spring. While this is not a large increase in clamping force, in nearly all cases it will clamp the clutch disc when parts of the clutch package are worn.

The initial concern with using the “BF” spring was it also increases the load on the crankshaft thrust bearing a similar amount. The load of the “W” spring is similar to the OEM clutch.

We have roughly 100 “BF” springs in service as of now. Going forward we are delivering the GEN3 kit with “BF” spring clutch cover and Kevlar clutch disc combination.

We have made these changes to help the reliability of the gear box. The Kevlar Clutch disc seems to be the best update as of now.

We suggest when you need to rebuild/replace clutch components, you update with the “BF” spring cover and Kevlar disc.

Mike Davies