



CARBON DRIVE™

Tension Requirements

Proper belt tension is critical to maintain optimum drive operation.

Too low of tension will allow your drive to jump teeth. This is known as “ratcheting”. Ratcheting your drive will result in a popping sound. This event may lead to damage of the carbon tensile cords inside your belt. Damage to these cords will reduce the life of your drive, and may lead to belt failure. Proper tensioning of your drive will usually eliminate ratcheting.

Too high of tension can cause damage to your bearings. It can also increase wear on your belt and sprockets. You may notice too high of tension through a perceived drag feeling in your drive. Again, proper tensioning of your drive will eliminate these problems.

Tension can easily be set properly using the tension tester tool. This tool has two red zones with a green zone in the middle. Proper tensioning is achieved when the measurement arm registers in the green zone. Tension within the green zone can vary somewhat. Depending on the size and strength of the rider, tension can be varied while staying within the green zone, until proper tension is found. For more explanation on how to use a tension tester tool, please see [Tension Tester Instructions](#).

If proper tension is needed, but the tension tester tool is unavailable, the force deflection method can be applied. The force deflection method is simply deflecting the belt a prescribed amount with a given amount of force. Proper tensioning is achieved by deflecting the belt 1/2” with approximately 5-10lbs of force. With any tensioning procedure, it is recommended to rotate the drive and recheck tension several times. This is because tension will vary within the drive due to part tolerances.

Please Review Related Documents:

[Tension Tester instructions](#)

[Belt Alignment and Tensioning Instructions](#)