

Adjusting Belt Tension

STINGRAY & MART 50Hz Belt Drive Systems Using Tension Checker # 85000

1. Measure the belt span in inches as shown in **fig.1**.

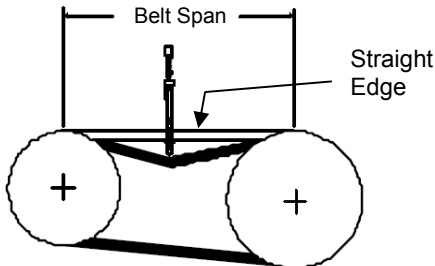


Fig. 1



Photo: Belt Tension Checker Use

2. Position bottom of the large "O" ring on the span scale at the measured belt span as shown in **fig.2**.

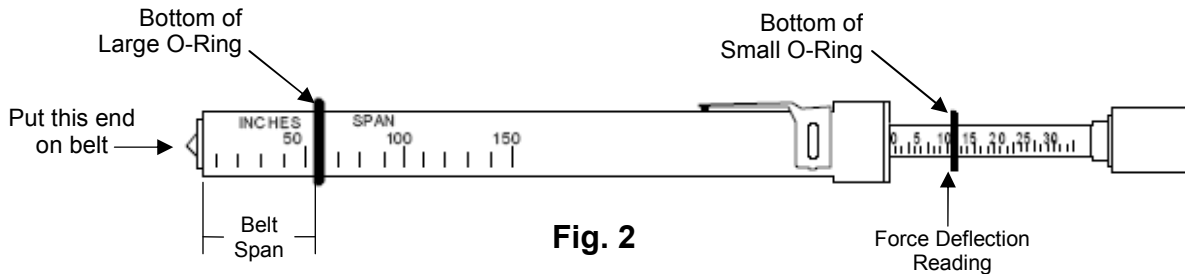


Fig. 2

3. Set the small O-ring to Zero on the force deflection scale.
4. Place the tension checker squarely on the belt at the center of the belt span (See Photograph above). Push on the plunger perpendicular to the belt span until the bottom of the large "O" ring is even with the top of the adjacent (next) belt or with the bottom of a straight edge laid across the outside diameters of the V-belt sheaves as shown in fig.1.
5. Remove the tension checker and read the deflection force applied from the bottom of the small "O" ring on the deflection force scale.
6. Compare the deflection force measurement with the values given in the table below. The deflection force should be between the minimum (used belts) and maximum (new belts) as shown. Set "New" belts to the tensions shown at initial installation. Operate for 3 minutes of operation and adjust to the "New" tension again if necessary.
7. After 8 hours of operation check tension again and adjust belts to "Used" tension in the table. Adjust the belt tension to "Used Belt" tensions for all subsequent checks

Belt Tension Settings Table			
	Smallest Sheave Diameter (Inches)	RPM	
			Used Belt Deflection Force
			New Belt Deflection Force
Main Pump	4.4 - 6.7	3000	8.8
Booster Pump	7.1 - 10.9	1500	14.8
			22.1