



Supplement

Belt Tensioning on 1HP, 3HP, & 5HP MTOII and 7.5HP VTR and 10HP & 15HP WTR Oil-less Recips

PURPOSE

The Purpose of this supplement is to provide you with maintenance information regarding belt tensioning on the listed Models. Keep this supplement in a safe place along with the manual provided with your unit.

SETTING BELT TENSION

Follow the procedures outlined below to correctly set and measure tension. Refer to Figure 1 for a visual representation.

1. Measure the span length (t) of the drive.
2. Determine the amount of deflection (in inches) required to measure deflection force (in pounds) by multiplying the span length (t) by 1/64. For example, a 32" span length multiplied by 1/64 equals ½" of deflection required to measure deflection force.
3. Lay a straight edge across the top outer surface of the belt drive from pulley to sheave.
4. At the center of the span, perpendicular to the belt, apply pressure to the outer surface of the belt with a tension gauge. Force the belt to the predetermined deflection calculated in step 2. Compare the reading on the tension gauge to the table below.

Model	HP	PSI	RPM	Motor Pulley OD	Belt Section	Belt Number	Qty. of Belts	Min Belt Deflection Force (lbs. min)	Max Belt Deflection Force (lbs. min)
CCE10	1	100	532	4.95	A	61	1	1.9	2.7
CCE30	3	100	678	3.75	4L	510	2	3.2	4.5
CCE50	5	100	651	3.75	B	49	2	4.9	7.1
VTR20	7.5	175	1358	8.95	B	78	3	2.6	3.7
WTR45	10	175	1105	7.35	B	76	3	3.5	5.0
WTR45	15	175	1484	9.75	B	80	3	4.0	5.7

Ensure the pulley and sheave are properly aligned and the motor anchor screws are adequately retightened prior to restarting the compressor.

CAUTION

Improper pulley/sheave alignment and belt tension can result in motor overload, excessive vibration, and premature belt and/or bearing failure. To prevent these problems from occurring, ensure the pulley and sheave are aligned and belt tension is satisfactory after installing new belts or tensioning existing belts.

Figure 1. Belt Tensioning

