

6.0 Inspection/Replacement Procedures

6.1 V-Belts

Narrow type V-belts are used for this unit. Refer to Table 6-1a & 6-1b for the correct size.

6.1.1 Tension Check

Table 6-1A Belt Size and Tension (for new belts) on systems operating at 60 Hz

Hp	Belt Part Number	No. of Belts	Tensioning		
			Defl. (in)	Force New (lbs)	Force Norm (lbs)
2	4107 6524 39	1	1/4"	6	5
3	4107 6562 18	1	1/4"	6	5
5	4107 6524 41	2	7/32"	6	5
7.5	4107 6540 93	2	1/4"	6	5
10	4107 6544 20	4	9/32"	6	5
15	4107 6544 20	4	9/32"	6	5

Table 6-1B Belt Size and Tension (for new belts) on systems operating at 50 Hz

Hp	Belt Part Number	No. of Belts	Tensioning		
			Defl. (in)	Force New (lbs)	Force Norm (lbs)
2	4107 6524 41	1	1/4"	6	5
3	4107 6524 41	1	1/4"	6	5
5	4107 6524 42	2	7/32"	6	5
7.5	4107 6562 19	2	1/4"	6	5
10	4107 6544 20	4	9/32"	6	5
15	4107 6505 47	4	9/32"	6	5

WARNING:

Before starting any maintenance procedures, disconnect all power to the package.

Never perform any maintenance functions while the unit is in operation.

Release all pressure from the package before removing, loosening, or servicing any covers, guards, fittings, connections, or other devices.

Check the belt tension monthly. Disconnect the main power and remove the beltguard. As shown in the illustration below, Figure 6.1, deflect each V-belt at the center of the drive span with a spring balance or tension meter at the tension force of Table 6-1. Then check that the average deflections at the proper tension force are approximately the same values as shown in Table 6-1.

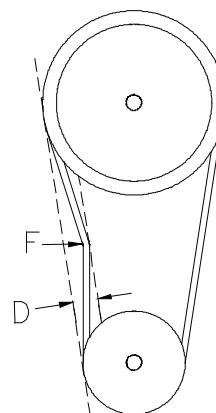


Figure 6.1 Belt Tension

6.1.2 V-Belt Tension Adjustment

If necessary, adjust the V-belts until the average deflections are within the values shown in Table 6-1.

6.0 Inspection/Replacement Procedures

To tighten the V-belts:

1. Remove the beltguard.
2. Loosen 4 bolts holding motor.
3. Adjust the two belt tensioning adjustment rods on the sliding motor base until the proper tension and alignment is obtained. To check for correct alignment, place a straight edge on the faces of the two sheaves. Proper alignment is obtained when all the gaps between the straight edge and the sheaves are minimized and less than 1/8".
4. Check the belt tension again and make sure the tension is similar to the values listed in Table 6-1.
5. Replace the beltguard **before** operating the machine.

CAUTION: IF THE COMPRESSOR IS OPERATED WITH LOOSE V-BELTS OR IMPROPER SHEAVE ALIGNMENT, THE LIFE OF THE V-BELTS IS SHORTENED. EXCESSIVE TENSION CAN BREAK THE SHAFT OR REDUCE BEARING LIFE. BE SURE TO MAINTAIN PROPER V-BELT TENSION AND ALIGNMENT.

6.1.3 Changing the V-Belts

V-belts should be changed yearly under normal operating conditions. If any damage is found, V-belts should be replaced at once. To change the V-belts call the nearest **Lifeline®** distributor or follow the procedures described below:

To change the belts:

Remove the old belts:

1. Remove the beltguard.
2. Loosen the locking bolts securing the motor base.
3. Adjust the belt tensioning adjustment rods on the motor base to loosen tension on belts.
4. Remove the old belt(s).

Check and clean:

1. Check and clean all of the grooves of both the motor and compressor sheaves.
2. Check the tightness of bolts on the sheave bushings.

Installation of new belts:

1. Confirm the belt type and length.
2. Place the belt(s) into the grooves of both sheaves.
3. Adjust the belt tensioning adjusting rods on the motor base until the proper tension and alignment is obtained. To check for correct alignment, place a straight edge on the faces of the two sheaves. Proper alignment is obtained when all the gaps between the straight edge and the sheaves are minimized and less than 1/8".
4. Check the belt tension again and make sure the tension is similar to the values listed in Table 6-1.
5. Replace the beltguards **before** operating the machine.



Figure 6.2 Belt Alignment - Straight Edge