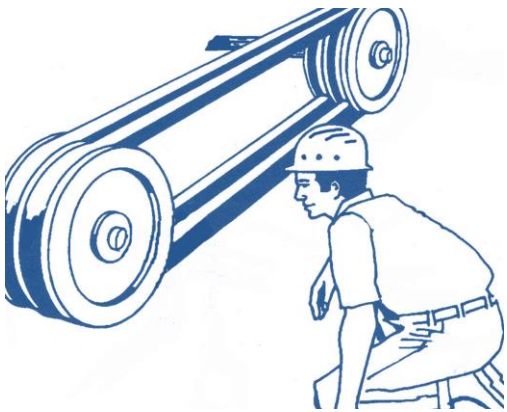


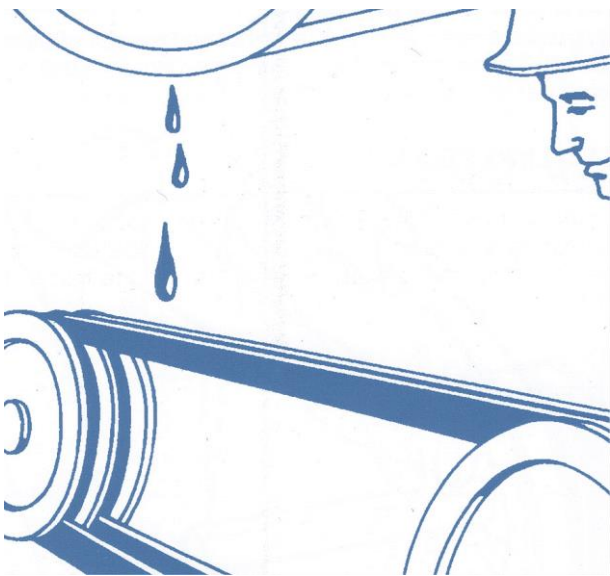
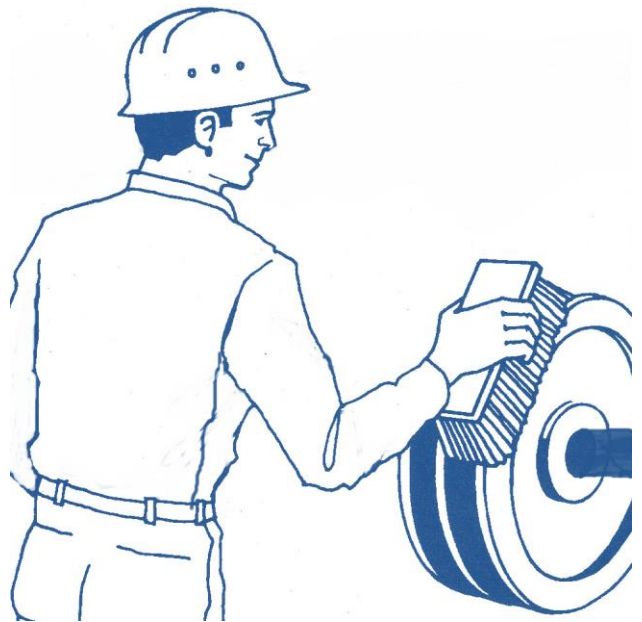
## Maintenance



Properly installed belts generally do not require much maintenance. V-Belt drives are recognized as extremely reliable, trouble free and efficient. The main ingredient of good maintenance of a belt drive is to look and listen. Any of the following can be detrimental to belt life but if corrections are made and the belts have not been damaged, the drive will continue to perform well.

- **Dirt and Dust**

Dirt and dust accelerate belt wear. If too much dirt accumulates in the bottom of the groove it can cause the belt to bottom out and slip. Dusty conditions can reduce the belts grip on the sheave, leading to slip.

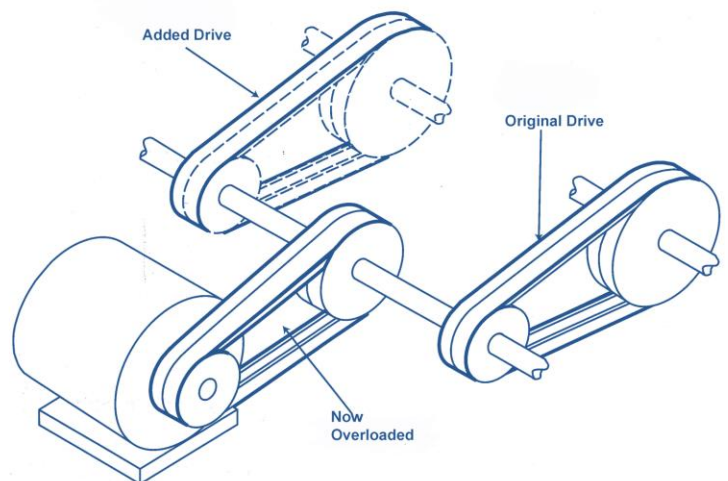


- **Oil & Grease**

Belts exposed to oil in a spray, liquid, or past form fail prematurely. Even belts labeled "Oil Resistant" are not designed to run in oily conditions. Oil breaks down the rubber either chemically or by causing slip, which rapidly destroys belts.

- **Added Loads**

Added loads will decrease belt life. Belt load versus belt life is not linear, so even small increases in belt loads can cause a severe reduction in belt life. Doubling the load on a belt could reduce the belts life to 5%-10% of the original. Always be sure to check that an added drive does not exceed the capabilities of another drive.

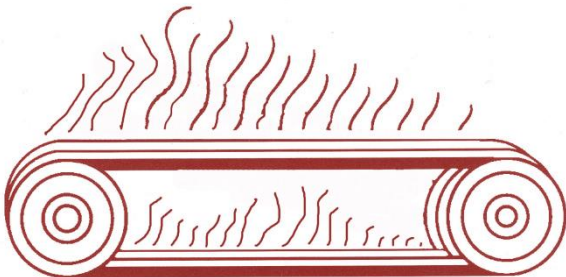
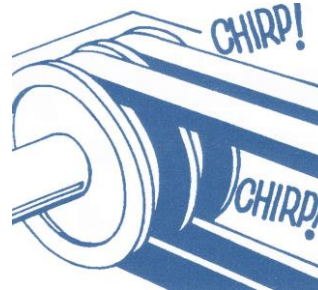
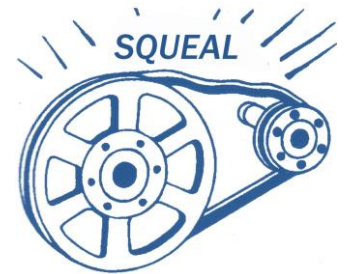


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- Squeal & Chirp

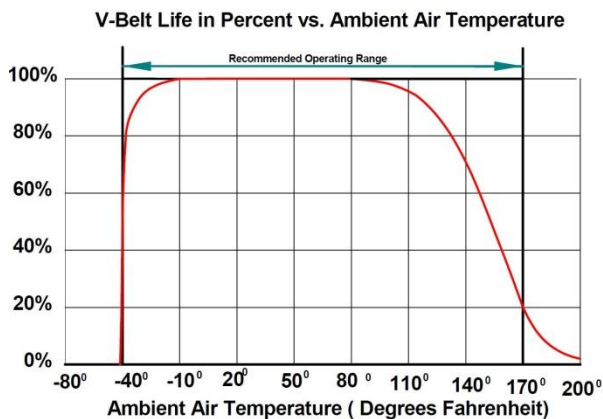
A squealing noise is an indication of belt slip and is most often due to insufficient belt tension. If the drive is properly tensioned (according to the table), the squealing could be due to dirt, oil, grease, misalignment or belt overload. If the cause of belt squeal is not found and eliminated, belt life will be dramatically reduced. A belt “chirp” sounds somewhat like a chirping bird, hence the name, and is often caused by misalignment. Dust can also be a contributing factor. Extremely wet or dry conditions can also cause chirp.

**Adding belt dressing will not fix the problem;** it will only degrade the surface of the belt and shorten belt life. Chirps are often annoying but do not significantly shorten belt life.



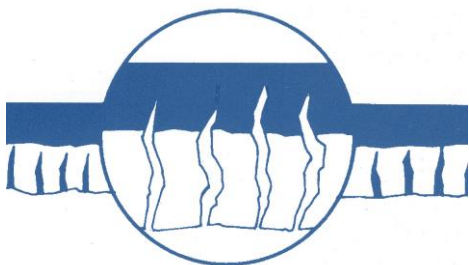
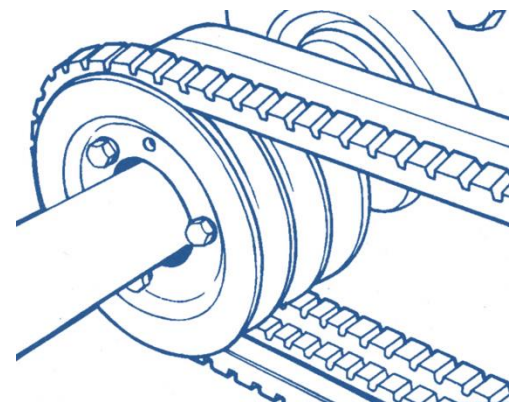
- Heat

Belts are cured in a scientifically controlled process. The rubber and other compounds in belts are adversely affected by exposure to heat. Glazed sidewalls and cracks in belts are evidence that a belt has been damaged by heat. Heat may be from high ambient air temperature, belt slip or overload. The graph shows the approximate effects of ambient air temperature on belt life.



- Belt Turn Over

Belts which have rolled over may indicate: severe drive misalignment, badly worn pulleys, lateral vibration, foreign material or severe pulsating loads.



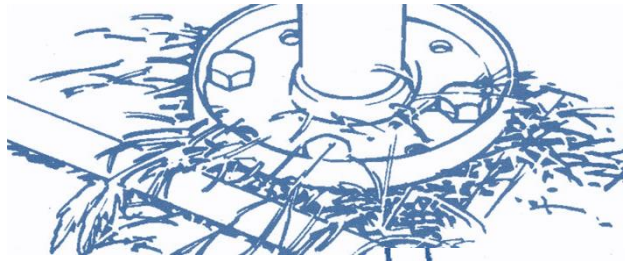
- Cracking

Bottom Cracking will not reduce the tensile strength of the belt nor will it affect the operation of the belt. Cracking will continue fairly rapidly and indicates a belt should be changed soon. High temperatures, dust, small diameters pulleys and backside idlers accelerate cracking.

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- Foreign Matter

The presence of foreign material in the drive can cause broken belts, rollover or excessive wear on both pulleys and belts.



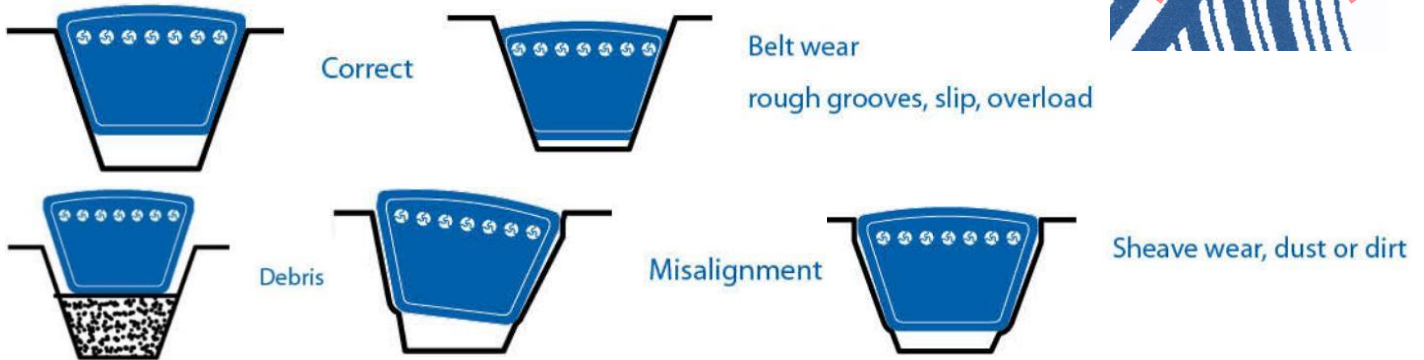
- Belt Dressing

As stated in the installation notes, **NEVER use any kind of belt dressing.** Belt dressing chemically attacks the surface of the belt to make it tacky and dramatically reduces belt life.



- Belt and/or Pulley Wear

If the belts are riding significantly different than the correct position, there is a drive problem to correct. Sheave wear, dust, dirt, misalignment, rough sheaves, slip, overloading and debris are common problems.



## Proper Storage

Proper care of a belt is not limited to the time during which the belt is operating on equipment; it also includes proper storage techniques. In order to prevent reduced belt life, proper storage techniques must be followed for all types of belts.

### Do's

- Belts should be stored in a cool and dry environment out of direct sunlight. Ideally, belts should be stored in conditions less than 85°F and 75% relative humidity. Adding 15°F to the storage temperature decreases belt life by approximately 50%. Do not store belts at a temperature above 115°F
- Store on shelves in boxes or containers.
- If V-Belts are stored on a wall rack, use a saddle with a diameter at least as large as the minimum recommended sheave diameter for that cross section.
- Belts can be coiled as long as the diameter of the loops is not less than the minimum recommended sheave diameter for that cross section. Zero coils means one belt loop. One coil has three belt loops, etc. If belts are to be stored coiled, refer to the table for the maximum recommended number of coils for a given cross section.
- If stored in containers, ensure that the belt is not forced in and distorted. Limit the contents of each container so that the belts at the bottom are not damaged by the rest of the belts.
- If a machine will be idle for long periods of time (6+ months), the belt tension should be relaxed and the equipment or belt stored in an environment which meets the above guidelines.

### Don'ts

- Belts should not be stored near windows as this can expose the belts to moisture and sunlight. UV light causes the belt material to degrade and shorten belt life.
- Do not store belts near any type of heater, or in the direct airflow of a heating device.
- Belts should not be stored near any ozone generating device or where they are exposed to solvents or chemicals in the atmosphere.
- Do not store belts on the floor unless they are in a protective container. Floor locations are more likely to be exposed to traffic and chemicals that may damage the belts.
- Do not cause sharp bends or crimp belts. Crimping is when the belts are bent to a diameter smaller than that of the smallest recommended sheave diameter for that cross section. Hanging a belt on a small diameter pin or using a tie or tape near the "end" of the belts can cause irreversible damage to the tensile cord.
- Belts should not be exposed to excessive pressures or holding forces that cause permanent deformation.

Coiling Recommendations				
Belt Cross Section	Belt Length (in)	Belt Length (mm)	Number of Times Coiled	Number of Loops
3L, 4L, 5L, A, AX, AA, B, BX, 3V, 3VX	-60	-1500	0	1
	60 - 120	1500 - 3000	1	3
	120 - 180	3000 - 4600	2	5
	180+	4600+	3	7
BB, C, CX, 5V, 5VX	-75	-1900	0	1
	75 - 144	1900 - 3700	1	3
	144 - 240	3700 - 6000	2	5
	240+	6000+	3	7
CC, D	-120	-3000	0	1
	120 - 240	3000 - 6100	1	3
	240 - 330	6100 - 8400	2	5
	330 - 420	8400 - 10600	3	7
8V	420+	10600+	4	9
	-180	-4600	0	1
	180 - 270	4600 - 6900	1	3
	270 - 390	6900 - 9900	2	5



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	390 - 480	9900 - 12200	3	7
	480+	12200+	4	9