HOW TO IDENTIFY A TIMING BELT

Timing Belt Identification

There are several ways that a timing belt can be identified.

Many times the timing belt part number and the name of the timing belt manufacturer will be printed on the timing belt and will still be legible. While this is the ideal situation, there are many times when the timing belt part number is either incomplete, vague, or from a belt manufacturing company that is either out of business or has a timing belt numbering system that isn't easily cross referenced.

If the timing belt isn't marked adequately, there are times when the timing pulleys are marked adequately to determine the pitch and profile of the timing belt. The pitch of the timing belt is the distance from the center of one tooth to the center of the next tooth. The problem is that there are several different tooth profiles or shapes for 3mm, 5mm, 8mm and 14mm pitches not easily discernible without proper tooling. These include the AT5/T5, PowerGrip® HTD®/ PowerGrip® GT®2, Powerhouse®, Powerhouse® MX, and Poly Chain® profiles.

If you can determine the exact pitch and tooth profile of the timing belt, you can narrow down your choices rather quickly by measuring the width of the timing belt and the overall length of the timing belt. Alternatively, you could count the teeth or cogs on the timing belt and multiply by the pitch to get the length of the timing belt.

The unknown that remains is the material of the timing belts. Common timing belt materials include neoprene and polyurethane. Neoprene is a rubbery material that can flake after extended use and is typically black and fairly flexible. Polyurethane is typically slick and is a little more rigid, especially in larger sizes. Often times, polyurethane will be clear or white, but it can also be black.

Part Number

Once you have all of this information, the part number for the belt will look something like:

640-8MX-12

The first set of numbers in most cases will indicate the pitch length of the belt. In this case, the pitch length is 640 mm. In MXL pitches, some companies use the first number as the pitch length but most companies indicate the number of teeth on the timing belt. At B&B Manufacturing, we decided to adopt the standard of the time, tooth count.

The next set of characters, 8MX in this case, indicate the pitch and tooth profile of the timing belt. Common pitches and profiles include XL (.200"), L (.375"), MXL (.080"), H (.500") HTD (3mm, 5mm, and 8mm), Powerhouse™ (2mm, 3mm, 5mm, 8mm, and 14mm), T2.5, T5, T10, AT5, AT10, and Powerhouse MX™ (8mm and 14mm).

The last set of numbers, 12 in this case, refer to the width of the belt. On metric sizes the number is how wide the timing belt is in millimeters. On standard sizes the number breaks down in inches with a leading zero for sizes under an inch such as: 012=0.125", 025=0.25", 037=0.375", 050=0.500", 075=0.75", 100=1.00", 150=1.50", 200=2.00", and 300=3.00"

Often times at the end of the part number, there will be a letter to indicate from which material the belt is made. Common codes are: G for neoprene with fiberGlass reinforcements, UP for Urethane with Polyester reinforcements, US for Urethane with Steel reinforcements, and UK for Urethane with Kevlar reinforcements. In our example, the material code was not added because this timing belt is only offered in Urethane with Kevlar reinforcements.

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