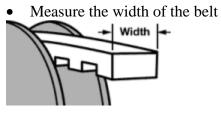


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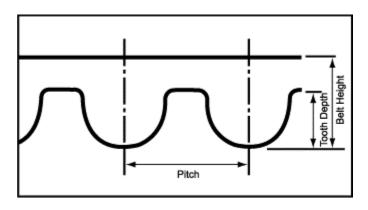
#### **Belt Identification and Replacement**

Firstly, look for identifying numbers and letters marked on the belt. These numbers indicate a standard trade size and will help in indentifying the specifics of the belt.

Secondly, if there is no trade size indicated on the belt do the following:



- Note the construction of the belt. Rubber construction is extremely flexible while a polyurethane construction is plastic like and has little flexibility
- Measure the pitch (see diagram). This is the distance in millimeters (mm) between the center of the crown of one tooth and the center of the crown of the tooth next to it.





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		Pitch		
Timing Belt Tooth Profile / Pitch			Inches	Metric
CTD	C8M / CTD	8mm	0.315"	8mm
	C14M / CTD	14mm	0.551"	14mm
HTD	3M / HTD	3mm	0.118"	3mm
	5M / HTD	5mm	0.197"	5mm
	8M / HTD	8mm	0.315"	8mm
	14M / HTD	14mm	0.551"	14mm
	20M / HTD	20mm	0.787"	20mm
			[ [	
PolyChain GT	5M / PCGT	5mm	0.197"	5mm
	8M / PCGT	8mm	0.315"	8mm
	14M / PCGT	14mm	0.551"	14mm
	14M / PCGT			
PolyChain GT HTD	HTD	14mm	0.551"	14mm
		8mm	0.215"	2mm
PolyChain GT2	8M / PCGT2		0.315"	8mm
	14M / PCGT2	14mm	0.551"	14mm
PowerGrip GT2	2MR / PGGT2	2mm	0.079"	2mm
	3MR / PGGT2	3mm	0.118"	3mm
	5MR / PGGT2	5mm	0.197"	5mm
	8M / PGGT2	8mm	0.315"	8mm
	14M / PGGT2	14mm	0.551"	14mm
	20M / PGGT2	14mm	0.787"	20mm



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		Pitch		
Timing Belt Tooth Profile / Pitch			Inches	Metric
RPP	5M / RPP	5mm	0.197"	5mm
	8M / RPP	8mm	0.315"	8mm
	14M / RPP	14mm	0.551"	14mm
	20M / RPP	20mm	0.787"	20mm
			1	
STD	S8M / STD	8mm	0.315"	8mm
Trapezoidal (Inch Pitch)	2/25" MXL	0.080"	0.080"	2.032mm
	40 D.P.	0.0816"	0.0816"	2.07mm
	1/5" XL	0.200"	0.200"	5.08mm
	3/8" L	0.375"	0.375"	9.525mm
	1/2" H	0.500"	0.500"	12.7mm
	7/8" XH	0.875"	0.875"	22.23mm
	1-1/4" XXH	1.250"	1.250"	31.75mm
			1	]
Trapezoidal (Metric Pitch)	T2.5	2.5mm	0.098"	2.5mm
	Т5	5mm	0.197"	5mm
	T10	10mm	0.394"	10mm
	T20	20mm	0.787"	20mm
			1	]
Trapezoidal (Metric Pitch)	AT5	5mm	0.197"	5mm
	AT10	10mm	0.394"	10mm
	AT20	20mm	0.787"	20mm

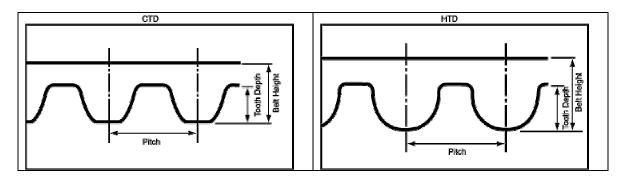


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#### Note: Belt Tooth Profile Abbreviations

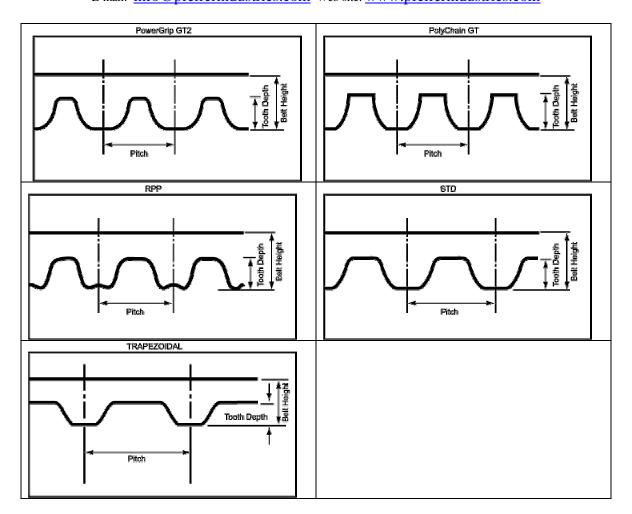
CTD	ContiTech - Conti Torque Drive
HTD	High Torque Drive
PGGT	Gates - PowerGrip GT
PGGT2	Gates - PowerGrip GT2
PCGT	Gates - PolyChain GT
PCGT HTD	Gates - PolyChain GT HTD
PCGT2	Gates - PolyChain GT2
RPP	Carlisle - Reinforced Parabolic Profile
STD	Super Torque Drive
Trapezoidal	Trapezoidal

• Note the shape of the pulley teeth (tooth profile); if the valley between the teeth is curved than it is an HTD style belt. If the valley between the teeth is flat than it is and PolyChain GT style belt. You should also look for identifying numbers and/or letters on the pulleys themselves to help in the belt tooth profile identification.





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• Count the number of teeth on the belt. I suggest marking on tooth on the belt with some sort of identification so that you have a starting point for the tooth count. You can also measure the length of the belt from end to end if the belt is broken. If the belt is in place measure the circumference of the belt (distance around the outside edge of the belt)

From these pieces of information a replacement belt can be identified.



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Lastly, if you are changing any of the pulleys in the power transmission drive than the belt length is more than likely to change also. The following information will be needed to determine the correct belt length

- Center to center distance between the shaft the driver pulley is fixed to and the shaft the driven pulley is fixed to. This measurement is taken from the center of the shafts. There should be two (2) measurements for this since the majority of timing belt drives has a means in place for tensioning the belts. The two distances required will have one of the shafts in the all the way forward position and the other in the all the way backward position.
  - Center to center distance all the way **FORWARD**
  - Center to center distance all the way **<u>BACKWARD</u>**
- Count the number of teeth on both pulleys. I suggest marking one tooth on the pulleys with some sort of identification so that you have a starting point for the tooth count

From these pieces of information a replacement belt can be identified.