

# TENSION-FINDER<sup>®</sup>

V-Belt Tensioning Device

## USER INSTRUCTIONS

The Tension-Finder tool is designed for use on Carlisle<sup>®</sup> V-Belts and Banded Belts.

- Use only with the Carlisle belts by Timken listed in Table 1
- Do NOT use on belts with aramid, glass or carbon cord

**⚠ WARNING: REMOVE THE TENSION-FINDER TOOL FROM THE BELT BEFORE STARTING THE DRIVE.**

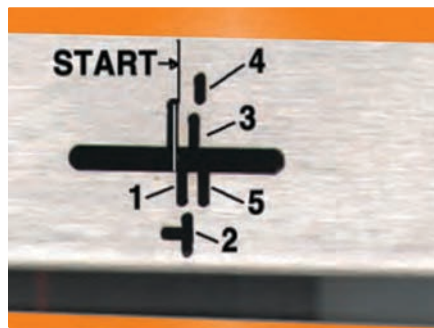
### PROCEDURE:

**Step 1:** Install belts loosely on the drive.

**Step 2:** Apply enough tension to take the slack out of the belts.



**Step 3:**  
Scribe a line on the belt using the Tension-Finder tool as a square. For cog belts, see the special instructions on page 2.



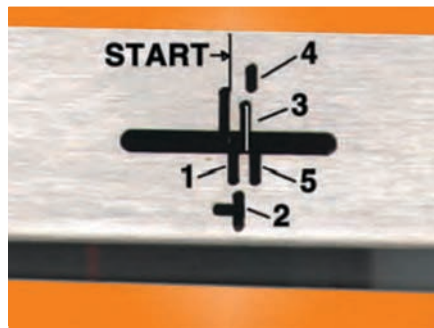
**Step 4:**  
Place the Start Slot over the line.



**Step 5:**  
With the line in the Start Slot attach the spring to the belt. Note: For cog belts, the best place for the spring may be in between the cogs.



**Step 6:**  
Scribe a line at the spring end of the Tension-Finder tool. Use this line as a reference point in case the spring slips off the belt.



**Step 7:**  
Determine the required slot for your drive from Table 1. Tighten the belt until the line has moved to the designated slot. (In this photo, the line is in Slot 3.)

**Step 8:**  
Remove the Tension-Finder tool from the belt, tighten mounting bolts, and replace belt guards. You're ready to start the drive!

**TABLE 1: RECOMMENDED TENSIONING SLOTS**

CARLISLE® BELT TYPE	SLOT NUMBER	
	NEW BELT	USED BELT
AP, BP, CP, DP, RBP, RCP, RDP A, B, C	2	1
AX, BX, CX, DX, RBX, RCX, RDX, RBL, RCL, RDL AA, BB, CC		
5V, 8V, R3V, R5V, R8V 5VX, 8VX, R3VX, R5VX R5VL SPAX, SPBX, SPCX		

The recommended slot numbers in Table 1 will provide an adequate level of belt tension on average drives. If more tension is required, go to a higher slot number. For less tension, go to a lower slot number.

Note: Slots 4 and 5 on the Tension-Finder tool are provided for drives where the values in Table 1 do not provide adequate tension. Please consult Timken Belts Application Engineering before tensioning a drive to these slots.

**SPECIAL INSTRUCTIONS FOR COG-BELTS**

If the spring clip will not sit securely on the flat area between cogs, take the following steps to scribe the line on the belt.



**1.** Place the spring in a cog groove.



**2.** Put a dot at the Start Slot. Be careful not to catch the pen in the slot – you may pull the tip out of the pen.



**3.** Scribe a line through the dot. The line should extend across the width of the Tension-Finder tool. Then go back to step 4 on page 1.

**⚠ WARNING**

**Failure to observe the following warnings could create a risk of death or serious injury.**

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Remove the Tension-Finder tool from the belt before starting the drive

**TIMKEN**

The Timken team applies their know-how to improve the reliability and performance of machinery in diverse markets worldwide. The company designs, makes and markets high-performance mechanical components, including bearings, gears, chain and related mechanical power transmission products and services.

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