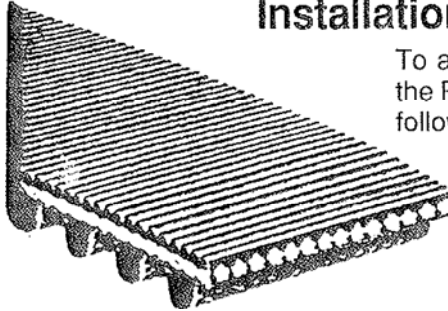


# INSTRUCTION MANUAL FOR Gates Poly Chain® Belt & Sprocket

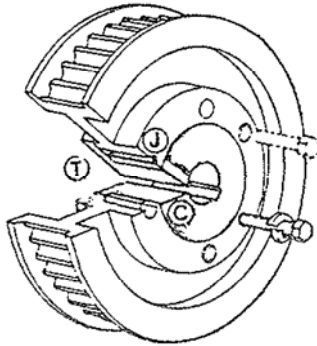
**WARNING:** To ensure that drive is not unexpectedly started, turn off and lock out or tag power source before proceeding. Failure to observe these precautions could result in bodily injury.

## Installation & Removal

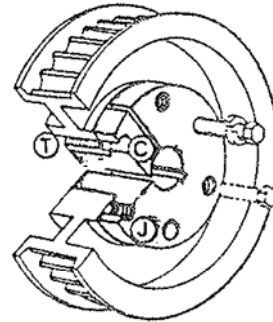


To assure **maximum service** from both the Poly Chain Belt and the Sprocket, the following precautions must be taken:

1. Do not crimp or sharply bend the belt.
2. Do not pry the belt onto the sprocket.
3. Properly tension the belt. (See Gates Design Manual.)



POSITION ONE



POSITION TWO

1. Make sure the tapered-cone surface of the bushing and the mating bore of the sprocket are free of all foreign substances such as dirt, excess paint accumulations, metal chips, lubricants, etc.

**CAUTION:** The use of lubricants can cause sprocket breakage. USE NO LUBRICANTS IN THIS INSTALLATION.

2. For POSITION ONE or POSITION TWO (whichever applies), line up the unthreaded holes (C) with the threaded holes (T) and insert cap screws with lock washers engaging only 2 or 3 threads. Screw heads should be mounted outside to enable disassembly. When mounting sprocket on an 'M' through 'W' size bushing, position the threaded jack-apart hole (J) as far from the bushing saw slot as possible to reduce the possibility of bushing breakage.
3. With key in shaft keyway, slide the loosely assembled unit onto shaft and position for good belt alignment. When installing large or heavy parts in POSITION ONE, it may be easier to mount the key and bushing on the shaft first then place the sprocket on the bushing and align the holes. Use no lubricants or anti-seize compounds on threads or tapered surfaces.

**CAUTION:** When mounting on a vertical shaft, provisions must be made which will positively prevent the sprocket and/or bushing from dropping during installation.

4. Carefully tighten the cap screws alternately and progressively until tapers are seated (at approximately half the recommended torque).
5. Check alignment and sprocket runout (wobble) and correct as necessary.

over ►

- Continue careful alternate and progressive tightening of the cap screws to the recommended torque values shown in the table on back of this sheet.

**CAUTION:** Excessive cap screw torque can cause sprocket and/or bushing breakage.

**NOTE:** When properly mounted, there must be a gap between bushing flange and sprocket after screws are tightened.

- Tighten the set screw, when available, to hold the key securely during operation.

| Bushings | Recommended Torque                           |       |                   |       |
|----------|--|-------|-------------------|-------|
|          | Cap Screws                                   |       | K.S. Set Screw    |       |
|          | Size   | Lb-In | Size              | Lb-In |
| H        | $\frac{1}{4}$ -20 $\times$ $\frac{7}{8}$     | 90    | —                 | —     |
| JA       | #10-24 $\times$ 1                            | 54    | —                 | —     |
| SH       | $\frac{1}{4}$ -20 $\times$ 1 $\frac{3}{8}$   | 108   | $\frac{1}{4}$ -20 | 87    |
| SDS      | $\frac{1}{4}$ -20 $\times$ 1 $\frac{3}{8}$   | 108   | $\frac{1}{4}$ -20 | 87    |
| SD       | $\frac{1}{4}$ -20 $\times$ 1 $\frac{7}{8}$   | 108   | $\frac{1}{4}$ -20 | 87    |
| SK       | $\frac{5}{16}$ -18 $\times$ 2                | 180   | $\frac{1}{4}$ -20 | 87    |
| SF       | $\frac{3}{8}$ -16 $\times$ 2                 | 360   | $\frac{3}{8}$ -16 | 290   |
| E        | $\frac{1}{2}$ -13 $\times$ 2 $\frac{3}{4}$   | 720   | $\frac{3}{8}$ -16 | 290   |
| F        | $\frac{9}{16}$ -12 $\times$ 3 $\frac{5}{8}$  | 900   | $\frac{3}{8}$ -16 | 290   |
| J        | $\frac{5}{8}$ -11 $\times$ 4 $\frac{1}{2}$   | 1620  | $\frac{1}{2}$ -13 | 620   |
| M        | $\frac{3}{4}$ -10 $\times$ 6 $\frac{3}{4}$   | 2700  | $\frac{1}{2}$ -13 | 620   |
| N        | $\frac{7}{8}$ -9 $\times$ 8                  | 3600  | $\frac{5}{8}$ -11 | 1325  |
| P        | 1-8 $\times$ 9 $\frac{1}{2}$                 | 5400  | $\frac{5}{8}$ -11 | 1325  |
| W        | 1 $\frac{1}{8}$ -7 $\times$ 11 $\frac{1}{2}$ | 7200  | $\frac{3}{4}$ -10 | 2400  |
| S        | 1 $\frac{1}{4}$ -7 $\times$ 15               | 9000  | 1-8               | 7200  |

#### REMOVAL

- Loosen and remove all mounting screws.
- Insert cap screws in all threaded jack-screw holes (J).
- Start with the screw furthest from the bushing saw slot and tighten all cap screws alternately and progressively. Keep turning the screws in small equal amounts until the tapered surfaces disengage.

**CAUTION:** Excessive or unequal pressure on the cap screws can break the bushing flange, making removal nearly impossible without destroying the sprocket.

**WARNING:** Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed: Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by The Gates Rubber Company nor are the responsibility of The Gates Rubber Company. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

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Printed in U.S.A.

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