

## INSTALLATION INSTRUCTIONS FOR VAN GORP TAPER-LOCK<sup>®</sup> PULLEYS



INSTALLATION:

- 1. Clean shaft, bore and outside of bushings, and bore of hubs (taking bushings from hubs if already assembled). Remove any oil, lacquer or dirt. Do not grease bushing or hub before installation.
- 2. Being careful not to damage bore or hubs, slip shaft into pulley.

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- 3. Slip bushings onto shaft and into hubs. Oil thread and point of set screws or thread and under head of cap screws. Place screws loosely in holes that are threaded on hub side (shown thus ) in diagram).
- 4. Locate shaft in position desired and tighten screws in each bushing slightly, so that bushings are snug in hubs.
- 5. Tighten screws alternately and evenly in one bushing only until all are pulled up very tightly. Use a piece of pipe on wrench to increase leverage—see table for wrench torque. Avoid excessive wrench torque to prevent damage to the threads. Now, using hammer recommended in table, hammer against large end of bushing using a heavy steel or bronze bar held against bushings. Hammer first beside the screw farthest from the bushing split and then hammer on the bushing on the opposite side of the screw. Avoid hammering close to the O.D. of the bushing to prevent damage. Working toward the split, hammer on bushing on each side of each screw. Then hammer on each side of the bushing split. Make sure that surfaces on both sides of the split are even. Screws can now be tightened a little more using the specified torque. Repeat this alternate hammering and screw re-tightening until the specified wrench torque no longer turns the screws after hammering. Check to make sure that the surfaces on both side of the split are evened up. Fill the other holes with grease to exclude dirt.
- 6. Now tighten the second bushing per step 5.

## REMOVAL

- 1. Remove all screws. Oil thread and point of set screws or thread and under head of cap screws.
- 2. Insert screws in holes that are threaded on bushing side (Shown thus ) in diagram). In sizes where washers are found under screw heads, be sure to use these washers. Note that one screw in each hub is left over and is not used in this loosening operation.
- 3. Tighten screws alternately until bushings are loosened in hubs. If bushing does not loosen immediately, tap on hub.

RECOMMENDEDWRENCHTORQUE				RECOMMENDEDWRENCHTORQUE			
Bushing No.	Screws	Wrench Torque * (Pound-Inches)	Hammer Size	Bushing No.	Screws	Wrench Torque * (Pound-Inches)	Hammer Size
1008 & 1108	1/4" Set Screws	55	3 Lb	3535	1/2" Cap Screws	1,000	8 Lb
1210, 1215 & 1310	3/8" Set Screws	175	3 Lb	4040	5/8" Cap Screws	1,700	8 Lb
1610 & 1615	3/8" Set Screws	175	3 Lb	4545	3/4" Cap Screws	2,450	8 Lb
2012	7/16" Set Screws	280	3 Lb	5050	7/8" Cap Screws	3,100	8 Lb
2517 & 2525	1/2" Set Screws	430	3 Lb	6050, 7060 & 8065	1 1/4" Cap Screws	7,820	16 Lb
3020 & 3030	5/8" Set Screws	800	3 Lb	10085 & 120100	1 1/2" Cap Screws	13,700	20 Lb

\* When torque wrench is not available it is possible to approximate these values by using an ordinary wrench and a piece of pipe on wrench. Example: For 800 pound-inches torque, pull 80 pounds at 10" distance from center of pull to center of screw, or 50 pounds at 16" distance, etc.

**Maintenance.** For the first month of operation inspect bushings and cap screws for proper seating at least once a week and thereafter during periodic shut downs.

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Disconnect all power while adjusting units

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## OPERATING INSTRUCTIONS FOR CONVEYOR PULLEY ASSEMBLIES

1. All pulleys should be checked for tightness on their shafts.

**NOTE:** For the first month of operation, inspect the bushings for proper seating and capscrews for correct bolt torque at least once a week and thereafter during periodic shutdowns.

- 2. The pulley lagging should be checked for wear, cracks, and tightness. Changes in coefficient of friction between the drive pulleys and belt could result in belt slippage.
- 3. The ends of pulleys should be inspected for cracks or other signs of stress or fatigue. The pulley should not be operated if a crack develops.
- 4. Take-up pulleys and belt tensioning devices should function normally. Excessive belt tension could fail pulleys, bearings and shafts.
- 5. Pulleys should be checked for vertical and lateral alignment. Misalignment can result in belt tracking problems and pulley wear.
- 6. Bearings should be visually checked for excessive shaft movement in the bearing during operation.
- 7. All bearings should be checked for alignment, lubrication, and tightness of locking devices.
- 8. Conveyor pulleys should not be cleaned during operation. It is extremely dangerous to be near the nip point when the pulley is in operation.
- 9. The conveyor should not be operated without the necessary protective guards.