

# INSTALLATION AND MAINTENANCE

# REEVES®

## COMPOUND PULLEY X-V Design

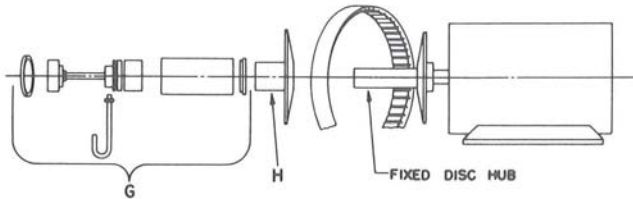


**NOTE: PHOTOGRAPH IS SHOWN WITHOUT GUARD FOR CLARITY. DO NOT INSTALL WITHOUT PROPER GUARDING.**

### OPERATION AND CARE

1. Keep the faces of discs and V-belt clean.
2. The V-belt should run level between the faces of the disc. If one rides high, investigate immediately. Check V-belt alignment (per Section 4, Installation Instructions).
3. Make speed adjustments only when unit is running.
4. It is recommended that the unit be disassembled annually for inspection.

### BELT REPLACEMENT INSTRUCTIONS

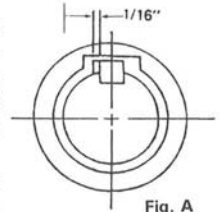


1. Start compound pulley and shift to high speed. Stop unit.
2. Disconnect power.
3. Remove guard.
4. Remove control assembly (G). (Refer Section 1, Installation Instructions).
5. Remove sliding disc (H).
6. Belt can now be easily removed over fixed disc hub.
7. Pull replacement belt down in variable disc assembly and over fixed disc hub of constant disc assembly. **NOTE: DO NOT PRY BELT OVER DISCS.**
8. Replace sliding disc assembly (H) and control assembly (G). (Refer Section 3, Installation Instructions.)
9. Check belt alignment. (Refer Section 4, Installation Instructions.)
10. Replace guard before re-energizing.

### INSPECTION AND BUSHING REPLACEMENT INSTRUCTIONS

#### Disassembly

1. Shift the unit to the high speed position.
2. Disconnect power.
3. Remove guard.
4. Remove the control assembly as described in Step 1 in the Installation Instructions.
5. Check the disc bushing and key for signs of excessive wear or abuse. If the rotational clearance between the bushing keyway and key exceeds 1/16 in. (See Figure A), the bushings and key should be replaced.



**NOTE:** Rotational clearance must be checked with sliding disc located on shaft in its normal operating location.

If the bushings are in good condition, relubricate with General Electric silicone grease 330M. If this grease is not available, lubricate with a good grade of ball bearing grease. If the bushings need replacing, proceed to Step 4.

Should your X-V Compound Pulley require bushing replacement, repair kits can be ordered by the following part numbers:

PULLEY SIZE	BUSHING KIT NO.
CP5675	415112-65-SB
CP7202	415112-65-SC
CP9205	415112-65-SD

6. Remove sliding disc from the shaft of the fixed disc.
7. With a pair of needle nose pliers, collapse the bushing and remove from the bore of the sliding disc. Turn the disc around and remove the second bushing.
8. Remove the key from the keyway.
9. Install the new bushings and key according to the detailed instructions supplied in the bushing kit.



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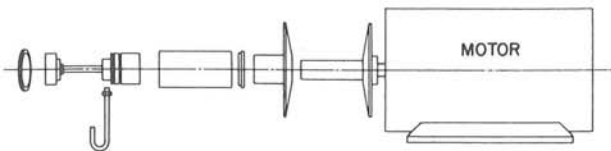
G3037-2 PG. 1 OF 3  
Compound Pulley  
8/2010

**WARNING:** Because of the possible danger to person(s) or property which may result from 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, operation and maintenance 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 Master Power Transmission nor are the responsibility of Master Power Transmission. 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 the equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a failsafe device must be an integral part of the driven equipment beyond the speed reducer output shaft.

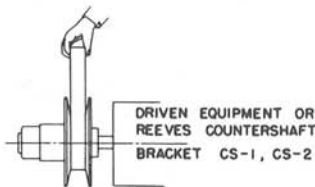
# INSTALLATION INSTRUCTIONS

**WARNING: TURN OFF POWER AND LOCK OUT POWER BEFORE INSTALLATION OR PERFORMING MAINTENANCE ON THIS EQUIPMENT.**

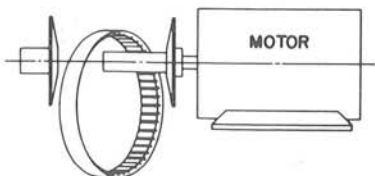
**1** **SLIDE THE CONSTANT DISC ASSEMBLY** on the motor shaft as far as possible and tighten clamp collar on fixed disc. No motor shaft key is required with this design. Do not use on undersize, corroded or damaged motor shafts. Torque the clamp collar screw to 200 inch pounds for the CP-5675 and CP-7202. The proper torque for the CP-9205 is 350 inch pounds. Remove shifting mechanism and sliding disc from fixed disc by disassembling spirolox ring and shifting slide. Then loosen the three set screws in support block and remove shifting mechanism and sliding disc.



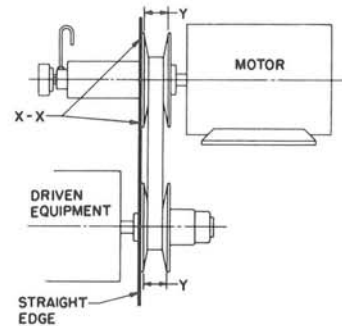
**2** **MOUNT VARIABLE SPEED DISC ASSEMBLY** on shaft of driven equipment. Be sure movable disc of variable speed disc assembly is on the opposite side of the belt from the movable disc of the constant speed disc assembly. Tighten clamp collar to the same torque used in Step 1. Pull belt down in variable disc assembly. When using Reeves countershaft bracket refer to instructions section 6 regarding bracket installation.



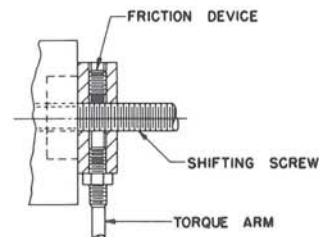
**3** **PLACE BELT OVER CONSTANT DISC HUB** and reassemble constant sliding disc and shifting mechanism. Before assembling shifting slide tighten the three set screws located in the support block to approximately 30 inch pounds torque. Assemble shifting slide and install spirolox ring in groove of bearing support. Install torque arm into threaded hole in shifting nut and lock in position with jam nut provided. Customer must use torque tie down rod provided or substitute his own means of preventing torque arm rotation as well as allowing axial torque arm movement.



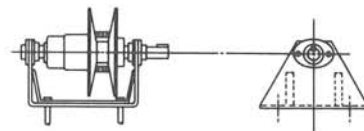
**4** **TO ALIGN UNIT** rotate discs by hand and shift unit until disc faces are separated the same distance apart (y). Then place straight edge along outside rim of variable disc assembly and move motor until the straight edge touches points "X"- "X" of constant speed disc assemblies. Bolt motor in place. **TO INCREASE SPEED** — turn handwheel clockwise. **TO DECREASE SPEED** — turn handwheel counterclockwise. **CAUTION:** At no time should the belt operate beyond the rims of either disc assembly or ride on the hub keyway of either disc assembly.



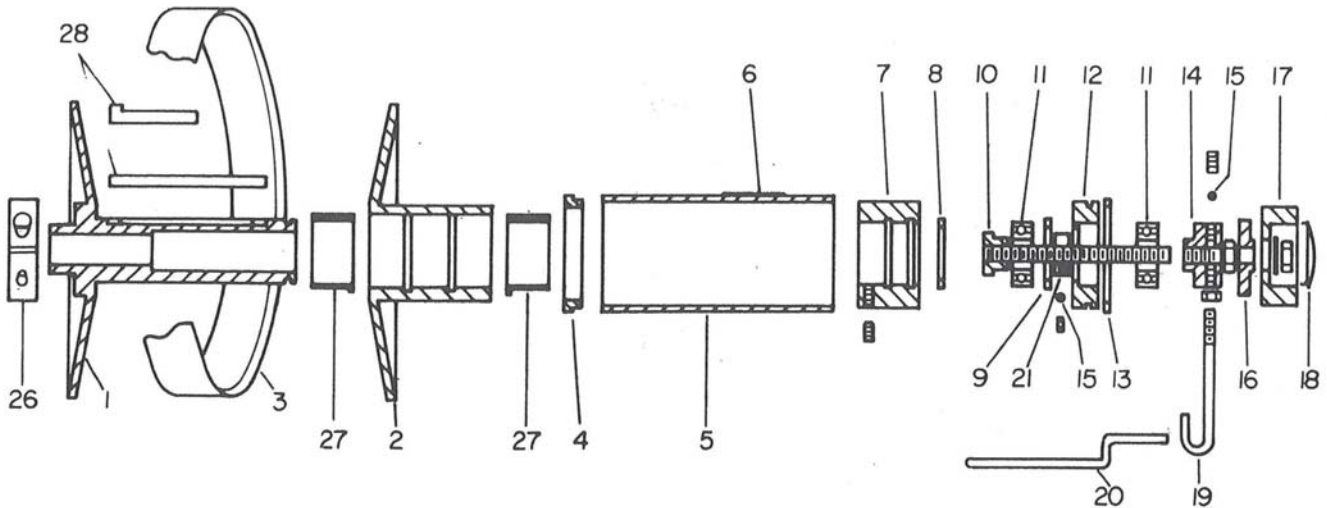
**5** **ADJUSTMENTS:** Adjust the friction screw until significant drag is produced on the shifting screw, preventing the shifting screw from creeping and changing speed.



**6** **INSTALLATION OF COUNTERSHAFT BRACKET** CS1 or CS2. Bracket must be mounted on a flat surface with alignment instructions (section 4) maintained. To mount variable disc assembly on countershaft, first disassemble bearings and shaft from bracket, then remove one bearing from shaft and install disc assembly on shaft. Install belt around countershaft before reassembling disc assembly, shaft and bearings to bracket. When alignment (section 4) has been accomplished, tighten clamp collar to the same torque as used in Step 1. **NOTE:** Shaft extension can be adjusted to either side of bracket according to application requirements.



# REEVES COMPOUND PULLEY PARTS LIST



- |   |  |
|---|--|
| 1- DISC, FIXED                                  | 17- HANDWHEEL                          |
| 2- DISC, SLIDING                                | 18- PLUG, BUTTON                       |
| 3- BELT   | 19- TORQUE ARM                         |
| 4- RING, SUPPORT                                | 20- ROD, TORQUE ARM TIE DOWN           |
| 5- SLIDE, SHIFTING                              | 21- COLLAR, STOP                       |
| 6- NAMEPLATE                                    | 22- WASHER                             |
| 7- BLOCK, SUPPORT                               | 23- RING, SPRING CARTRIDGE RETAINING   |
| 8- RING, THRUST BEARING RETAINING (5675 & 7202) | 24- SPRING CARTRIDGE                   |
| 9- RING, THRUST BEARING RETAINING               | 25- NAMEPLATE                          |
| 10- SHIFTING SCREW ASSEMBLY                     | 26- COLLAR, CLAMP                      |
| 11- BEARING, THRUST                             | 27- BUSHING                            |
| 12- SUPPORT, BEARING                            | 28- KEY                                |
| 13- RING, SHIFTING SLIDE RETAINING              | 29- BRACKET, COUNTERSHAFT              |
| 14- NUT, SHIFTING                               | 30- BEARING & FLANGETTES, COUNTERSHAFT |
| 15- PELLET, DRAG                                | 31- KEY, OUTPUT                        |
| 16- HUB, HANDWHEEL                              | 32- COUNTERSHAFT                       |