

**KNOWLEDGE BASE**

Article Type: Instructions

Installing Stripper and Compression beam bushings on CPM machines, models, 30, 40 50 and 60 machines

Description:

Instructions on “How to” properly install CPM Stripper and Compression beam bushings, and product comparison on fiber, plastic and steel bushings.

WARNING

Never work on, clean or service this unit, control panel or any machine or open or remove any protective cover, guard, grate, door, or maintenance panel until the power or energy sources has been turned off, locked out / tagged out, and all moving parts have come to a complete stop and or blocked to prevent movement. Machinery is dangerous - avoid personal injury and or death by following manufacture, Local, and OSHA safety procedures. Contact Columbia Machine for safety decals, guards, horns and beacons.

Installing CPM Stripper and Compression beam bushings, plastic (run dry) or steel (greased)

- All CPM series machines from 30, 40, 50, 60
- See part details below for part #s and other details.

When installing the new beam bushings here are some guide lines:

- Make sure columns are smooth.
- Make sure the bushings are kept as matched pairs.
- Before installing, fill a clean bucket or bowl with about 5 inches of clean hydraulic oil.
- Drop the pairs in oil, and then install.
- This oil SHOULD NOT be used continuously, or on a regular bases.
- Do not sand bushing before installing, install bushings as received.

Plastic bushings:

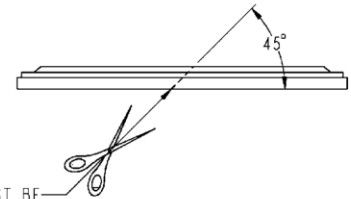
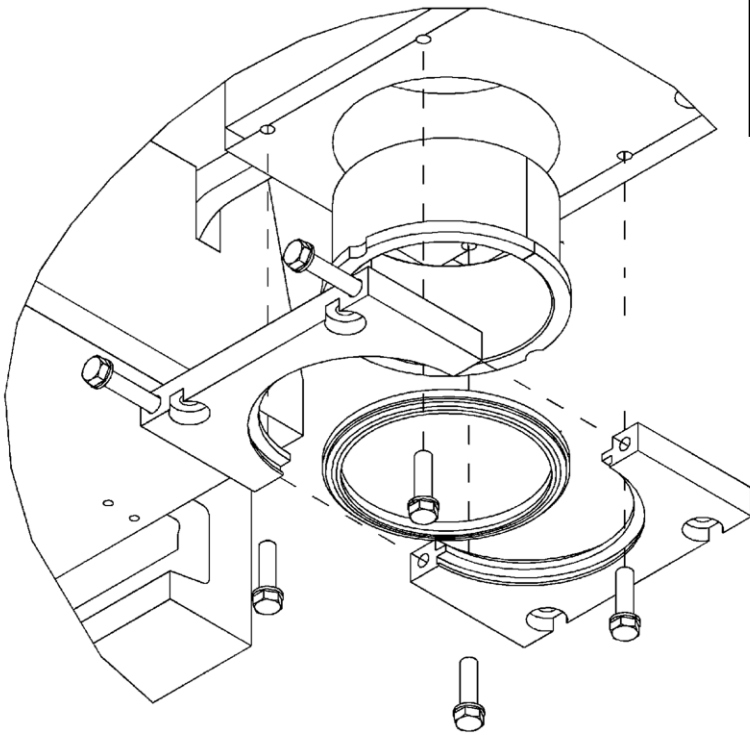
- Regular heating of columns and the need for oiling means you have other problems going on.
 1. First, the oil will help when removing the old bushings and help on installation of the new replacements.
 2. The oil film on the face (against the column) will help stop heating during start up and brake in.
 3. If columns ever heat up, a lightweight oil like WD-40 can be applied to columns.

Steel bushings:

- The steel bushing are greased once a shift or as needed based on the grease film left on the column surface.

Typical CPM Bushing Layout

When replacing bushings, it is advisable to replace the seals



IF SEAL/WIPER MUST BE CUT TO INSTALL, CUT AT 45° WITH UTILITY KNIFE



WARNING

NEVER WORK ON, CLEAN, OR SERVICE THIS MACHINE OR OPEN OR REMOVE ANY PROTECTIVE COVER, GUARD, GRATE, DOOR, OR MAINTENANCE PANEL UNTIL THE POWER HAS BEEN TURNED OFF AND LOCKED OUT, STORED HYDRAULIC ENERGY HAS BEEN BLED OFF OR ISOLATED, AND MASSES IN A RAISED POSITION HAVE BEEN PROPERLY SUPPORTED.

Product Comparison

CPM Column Bushings for Stripper and Compression Beams

Part Number: 675.200.19.000 (used from 1994 to 2005)

Simple Description: Fiber bushing

Material Description: Fabric reinforced resin with incorporated solid lubricant.

Expected Life:

Heavy production (multiple shifts, 5+ days/week): 3 mos.

Moderate production (single shift, 5 days/week): 6 mos.+

Number needed for machine: 8 (4 on each beam)

Advantages: no greasing, only initial oil lubrication, lower cost

Disadvantages: replaced more often/wear out quicker compared to cast iron, flange occasionally breaks off requiring raising of column to remove bushing



Part Number: 675.200.19V (used 2005 to present)

Simple Description: Plastic bushing

Material Description: Low friction polymer bearing material.

Expected Life:

Heavy production (multiple shifts, 5+ days/week): 3 mos.

Moderate production (single shift, 5 days/week): 6 mos.+

Number needed for machine: 8 (4 on each beam)

Advantages: no greasing, only initial oil lubrication, lower cost, flange does not break off, possible longer life over fabric bushing

Disadvantages: replaced more often/wear out quicker compared to cast iron



Part Number: 485.2.16S (used 1980 to present)

Simple Description: Metal bushing

Material Description: Cast iron.

Expected Life:

Heavy production (multiple shifts, 5+ days/week): 3 years

Moderate production (single shift, 5 days/week): 5 years

Number needed for machine: 8 (4 on each beam)

Advantages: long life

Disadvantages: requires periodic greasing, grease build-up on machine, more expensive than plastic or fiber

