



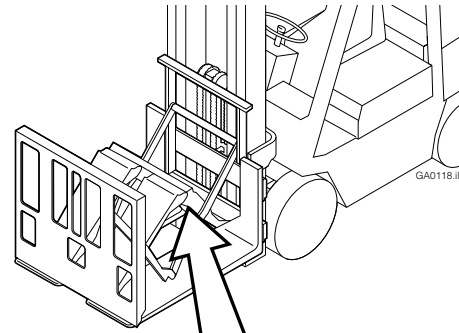
# Technical Bulletin

## E-Series Push-Pull Mechanism Primary-to-Secondary Arm Middle Pivot Joint Inspection, Service

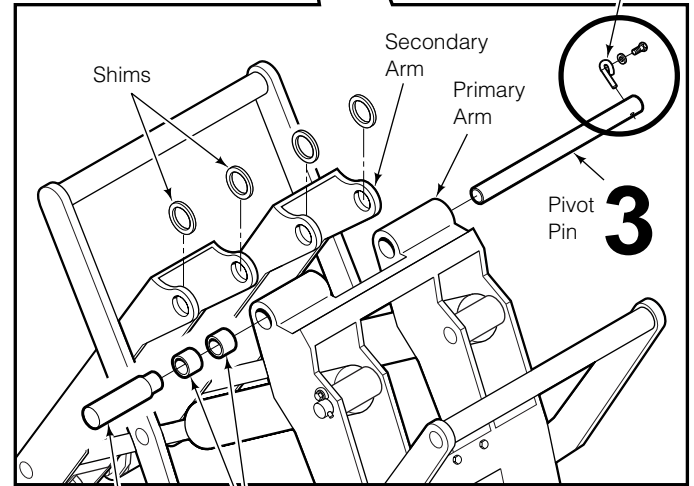
This sheet describes the inspection, replacement and lubrication of the primary-to-secondary arm middle pivot bushings on Cascade Push-Pull Attachment mechanisms.

**Description** – The upper middle pivot joint of the pantograph mechanism on Cascade Push-Pull Attachments uses a pin and composite bearings that may be too tight on some models. This can result in the securing eyepin being damaged or sheared off. To correct the problem, accomplish the following:

- 1 Inspect the eyepin/keeper that secures the upper pivot pin (see illustration). If a distorted or sheared eyepin is found, the bushings and eyepin/keeper must be replaced as follows:
- 2 Lower the Push-Pull Attachment to the ground so the faceplate is supporting the weight of the mechanism.
- 3 Remove the capscrew and securing eyepin and drive the upper pivot pin out of the mechanism. **NOTE:** Use a hoist or floor jack as necessary to keep the arm mechanism supported. Keep track of shims for reassembly.
- 4 Replace the bushings in the primary arm casting. **CAUTION:** Use a properly-sized bushing driver (Cascade Part No. 6028300) as shown below to remove and replace the bushings:
- 5 Lubricate the bushing ID with general-purpose lithium-based chassis grease (NLGI grade 2). Align the arms and drive a new pivot pin into the joint. Assure that the shims are in place and located properly.
- 6 Install a new eyepin and capscrew and tighten to 10 ft.-lbs. (15 Nm).

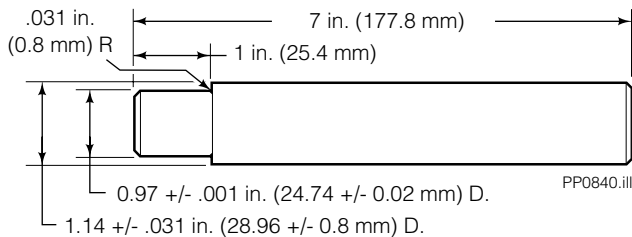


Eyepin / Keeper  
6020429 **1**



Bushing Driver  
6028300 **4** Bushings  
(4 total)  
683155

### BUSHING DRIVER DIMENSIONS



**NOTE:** Refer to Cascade *Service Manual* 686455 for complete service & maintenance procedures for the Push-Pull Attachment.

**NOTE:** This information should not be interpreted as the basis for warranty claims unless so designated.



### For Technical Support . . .

Call: 1-800-227-2233 Fax: 1-888-329-8207  
Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, PO Box 20187, Portland, OR 97294

### To Order Parts . . .

Call: 1-888-227-2233 Fax: 1-888-329-0234  
Internet: [www.cascorp.com](http://www.cascorp.com)  
Write: Cascade Corporation, 2501 Sheridan Ave., Springfield, OH 45505