

# INSTALLATION MANUAL

REF NO.	BA03001A
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*This Parts & Service News supersedes the previous issuance, BA03001, dated January 06, 2003. BA03001 should be discarded.*

**SUBJECT:** INTRODUCTION OF BRASS BUSHING KITS FOR WORK EQUIPMENT

**PURPOSE:** To introduce high strength brass bushing service kits for the work equipment pinned joints.

**APPLICATION:** Komatsu Wheel Loaders:  
 WA800-2: 10001 & Up  
 WA800-2L: A20001 - A20020;  
 WA800-2LC: A20021 & Up;  
 WA800-3: 50001 & Up;  
 WA800-3LC: A50001 & Up;  
 WA900-1: 10001 & Up;  
 WA900-1L: A20001 - A20007;  
 WA900-1LC: A20008 & Up;  
 WA900-3: 50001 & Up;  
 WA900-3LC: A50001 & Up

**FAILURE CODE:** 771BFC

**DESCRIPTION:** Bushing Kit (XK0291), Bushing Kit (XK0293), Bushing Kit (XK0295)

Three kits have been developed that contain brass bushings for work equipment pinned joints on the specified wheel loaders. The new bushings are more resistant against scuffing and seizure occurring from an unanticipated shortage of grease due to the omission of manual greasing, or malfunctions of the automatic lubrication system. However, the degree of wear during normal use (and lubrication) will be higher than those of the steel bushings. If there is no problem at present with regular lubrication of the joints as specified in the Operation and Maintenance Manual, it is not advantageous to use the new brass bushings. Refer to Figure 1 for a look at the wear trend during normal lubrication. Tables 1 - 3 contain listings of the contents of each kit. Refer to Installation of Bushings And Seals, in this bulletin, for important guidelines to observe when installing the kits.

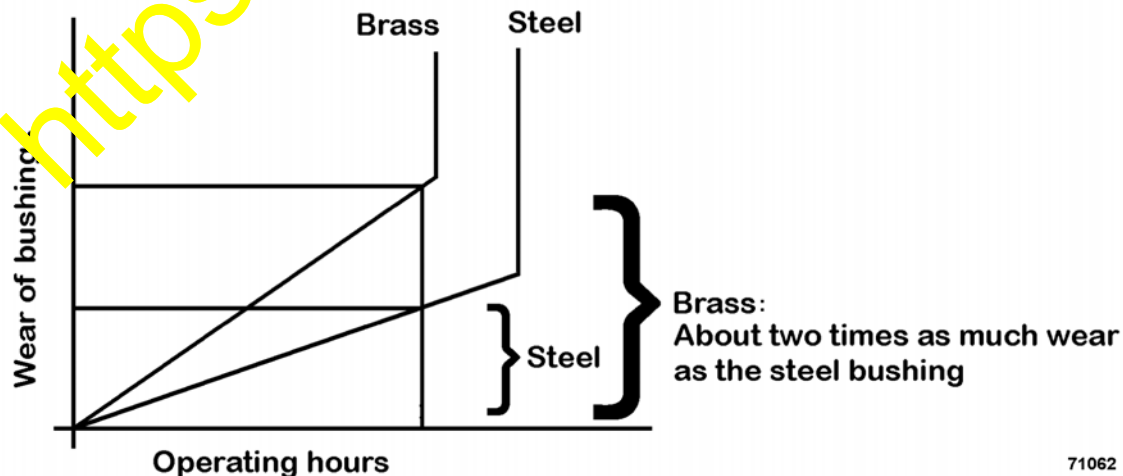
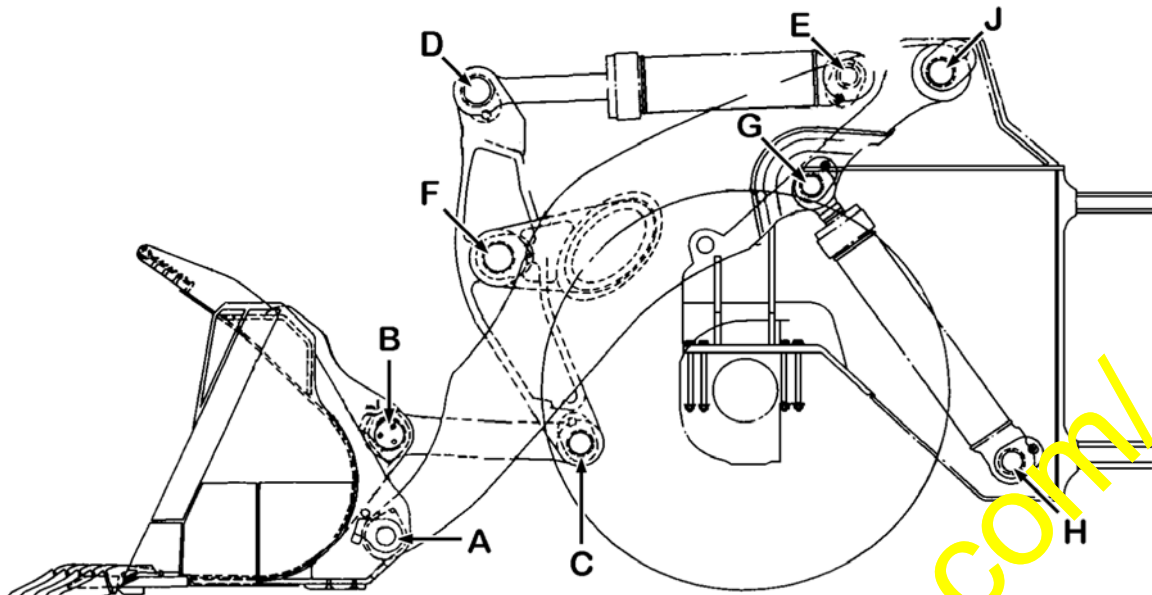


FIGURE 1. WEAR TREND WITH JOINTS PROPERLY LUBRICATED



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FIGURE 2. WORK EQUIPMENT BUSHING LOCATIONS

TABLE 1. BUSHING KIT (XK0291): WA800-2 WA800-2L WA800-2LC WA900-1 (10001 - 10007)				
Part Number	Description	Quantity	Location	Bushing Inner Diameter
426-09-11110	Dust Seal	8	A, B, C	Ø160 mm
427-70-14360	Brass Bushing	3	A, B	Ø160 mm
427-70-14370	Brass Bushing	1	C	Ø160 mm

TABLE 2. BUSHING KIT (XK0293): WA800-2 WA800-2L WA800-2LC WA900-3LC WA900-1 (10008 & Up) WA900-1L WA900-1LC WA900-3 WA900-3LC Hi-Lift Boom Applications				
Part Number	Description	Quantity	Location	Bushing Inner Diameter
427-09-11120	Dust Seal	8	A, B, C	Ø180 mm
427-70-14350	Brass Bushing	4	A, B, C	Ø180 mm

TABLE 3. BUSHING KIT (XK0295): All Models				
Part Number	Description	Quantity	Location	Bushing Inner Diameter
427-09-11110	Dust Seal	6	F, J	Ø200 mm
427-09-11120	Dust Seal	12	D, E, G, H	Ø180 mm
427-70-14310	Brass Bushing	1	F	Ø200 mm
427-70-14320	Brass Bushing	2	J	Ø200 mm
427-70-14330	Brass Bushing	4	G, H	Ø180 mm
427-70-14340	Brass Bushing	2	D, E	Ø180 mm

## Installation Of Bushings And Seals

- Always refer to the appropriate service manual for proper removal/installation procedures when performing maintenance on the work equipment.
- Always use LM-P: molybdenum disulfide paste (moly-disulfide content of 50% or more) when installing bushings and pins to the work equipment. Refer to Parts & Service News, AT96202, Precaution Attachment Assembly At Site on WA700, WA800, WA900, for more information.
- Always replace the corresponding dust seals when replacing bushings.
- Use care when installing bucket link bushings. The lube holes in the bushings and the link must be aligned. Refer to Figure 3. Failure to align the holes may result in seizure of the joint.
- Position the sealing lip outward when installing dust seals. Refer to Figures 3 and 4 for dust seal orientation and installation dimensions.

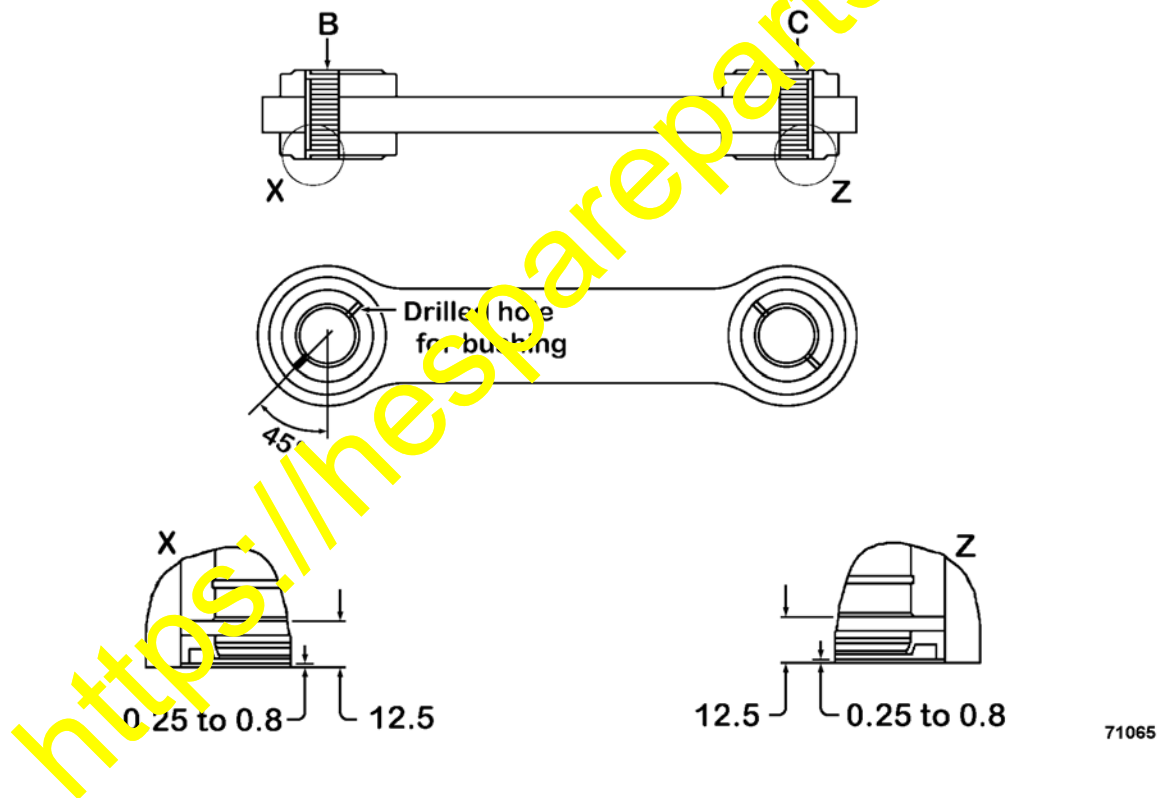


FIGURE 3. BUCKET LINK BUSHING AND DUST SEAL INSTALLATION

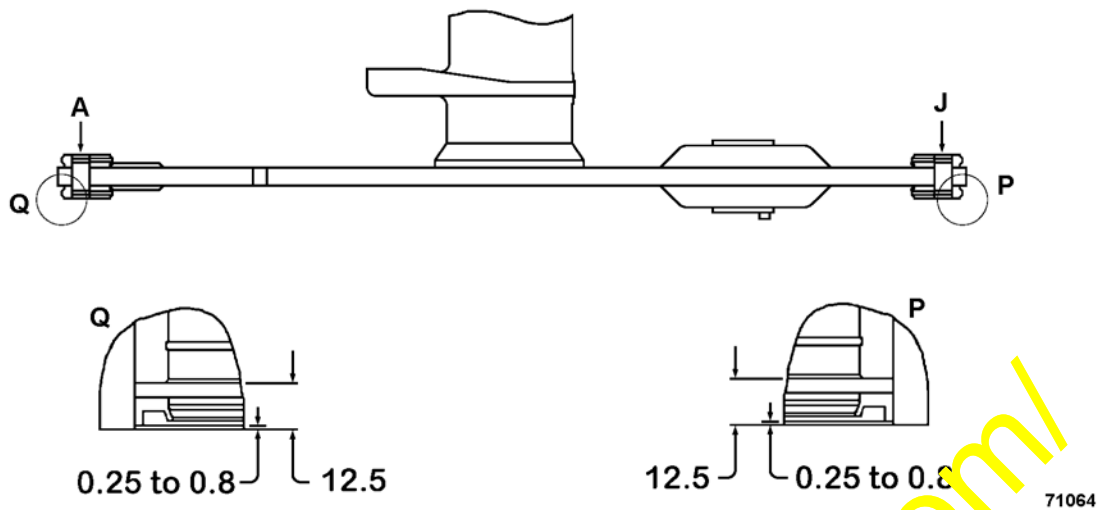


FIGURE 4. BOOM DUST SEAL INSTALLATION

### Recommended Greasing Intervals

No changes in greasing intervals and/or grease quantities are necessary with the installation of the brass bushings. Manual greasing intervals remain at every 100 hours for normal operating conditions and every 10 hours for severe operating conditions.

Automatic lubrication systems may vary depending on model. For wheel loaders equipped with an automatic lubrication system, refer to the Operation and Maintenance Manual or the appropriate shop manual for specific instructions for the particular arrangement.

Table 4 lists grease delivery rates and is included as a guide to aid in adjusting non-factory installed systems.

TABLE 4. GREASE DELIVERY RATES				
Steps		1st Step	2nd Step	3rd Step
Operational Hour		30 Hours	150 Hours	After 150 Hours
Timer Interval		10 - 12 minutes	10 - 12 minutes	10 - 12 minutes
		Grease = cc/Hr	Grease = cc/Hr	Grease = cc/Hr
A	Bucket hinge	49.2	49.2	49.2
B	Bucket link, front	31.2	15.6	3.9
C	Bucket link, rear	31.2	23.4	15.6
D	Bucket cylinder, rod	7.8	3.9	1.95
E	Bucket cylinder, barrel	7.8	3.9	1.95
F	Bellcrank, center	15.6	7.8	3.9
G	Boom cylinder, rod	7.8	3.9	3.9
H	Boom cylinder, barrel	7.8	3.9	3.9
J	Boom pivot	23.4	23.4	23.4