

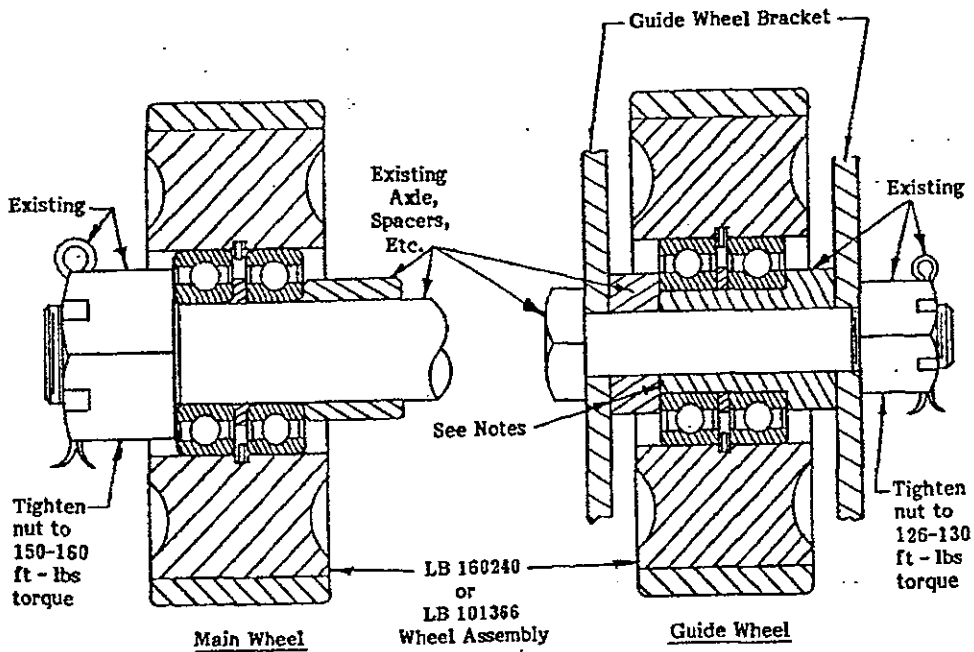


May 24, 1989

SERVICE BULLETIN 89-1

SUPER LOOPS

Starting immediately, replacement wheels for Super Loops will be either aluminum wheels with molded urethane tires, Part No. LB160240, or nylon wheels, Part No. LB101366. These wheels will come assembled with sealed ball bearings and internal spacers. This is a direct replacement for wheels with tapered roller bearings (Timken). These wheels are sold only as assemblies to insure proper installation of the bearings, retainer rings and spacer. Installation of the bearing is shown below and uses the existing spacer(s), axle and nut. Since these bearings are prelubricated and sealed, no further lubrication is required resulting in less maintenance and a cleaner ride.



- Notes:
1. Two piece spacer must make up solid to prevent bolt from turning in brackets.
  2. Check holes in brackets for wear if bolts have been allowed to spin. Repair if necessary.

Manufacturers of  
The Hi-Roller • Super Loops • Whirlwind • Paratower

**THE HI-ROLLER CO.**

(806) 293-5214  
FAX (806) 293-5215

P.O. Box 1968  
Plainview, TX 79073-1968

Note: Most rides, Serial No. 44 and up do not use an eccentric hinge pin and have the large shoulder radii. These pins must be inspected at the five (5) year intervals, but do not require further machining.

If a new hinge pin(s) is ordered, place the old pin next to its replacement so that both are oriented the same. Mark the new one the same as the old. The three (3) set screws holes are not predrilled. This is to be done at assembly to insure proper position of the holes. Install the pin into the hinge housing. The pin should protrude equally out each end of the hinge housing. Align marks as previously set during disassembly. With the three setscrews removed, mark the positions of the setscrew holes on the hinge pin with a center or prick punch. Remove the pin and drill each center with a 21/32 inch diameter drill with the full diameter going 1/2 inch deep as shown in Sketch 2.

Note: If the parts were not marked during disassembly, hinge pin is placed in the hinge housing as stated above. Set the eccentric at the bottom or 180 degrees from the uppermost of the pin as viewed when looking down on the pin. See Sketch 3. Mark the position of the setscrew holes, remove the pin and drill as stated above. During assembly, it will be required to realign the tracks.

To reassemble, put the hinge pin into the housing, aligning the setscrew holes. When setscrew holes are aligned, replace the setscrews. Install the bearing cups in the main hinge eccentric and assemble the main hinge eccentrics to the front (or rear) section housing, being sure to align markings. If markings were omitted, place both top and bottom main hinge eccentrics in the same orientation.

Pack the bearing cone with a multipurpose grease and install the bearing cone on the eccentric sleeve and install this assembly onto the hinge pin, aligning the keyway and the previous markings. Drive in the key. If markings were not made previous to disassembly, align the sleeve with the pin so that the total effect of the eccentric is zero (0). (In other words, the thick part of the sleeve should match the high side of the pin shoulder.)

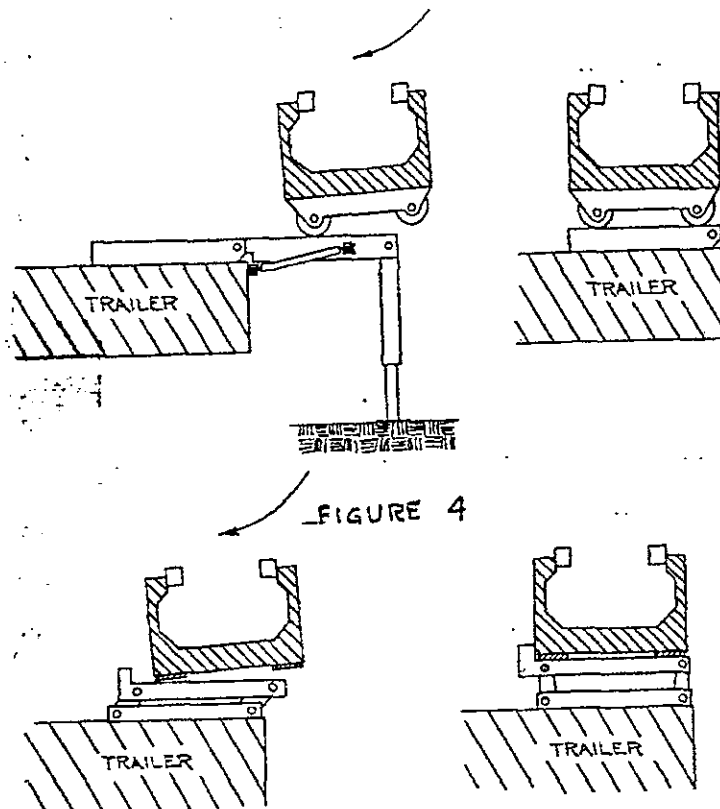
Replace the bearing nuts and washers, locking the nuts in place. Replace the covers and the felt packing. Grease the bearings.

After replacing the pins, carefully erect the ride, paying particular attention to the track on the folding section as it needs to be centered on the trailer track section. There should be no mis-alignment or binding as it may damage the dovel pins.

If the marking was omitted or ride is out of alignment, the ride must be erected and aligned. To accomplish this, normal erection

procedures are followed, being sure that the trailer is properly leveled in all directions before starting. After erection, if one track is high, the other low, bring the ride down. DO NOT ATTEMPT TO ADJUST IN THE RAISED POSITION. Adjust the bearing sleeves to raise or lower the proper track. These sleeves may be rotated 180 degrees. Erect the ride again and recheck position. If the sleeves will not give enough adjustment, it will be necessary to remove one or both hinge pins, turning the pin(s) 180 degrees, redrilling the setscrew holes, and repeating the alignment procedure.

To help prevent fatigue cracks, all Super Loops were provided with transport carriers, Figure 4. When the track is lowered to the trailer for transport, a set of wheels mounted on the track engage a ramp, lifting the free end of the track onto the transport carrier. When the track is completely down, this carrier, through a parallelogram linkage, further lifts and supports the free end of the track. At this point, the ramp wheels should have some clearance (1/16 to 1/4 inch) with the ramp. If the ramp, ramp wheels, and/or the transport carriers are damaged or missing, they must be repaired or replaced. If the transport carrier does not lift the ramp wheels off the ramp, shim or modify as necessary.



This bulletin should be complied with as soon as possible but no later than December 31, 1989.