

# INSTALLATION and MAINTENANCE Procedure, SK-2724A, For SCT-LPCCSB (P/N 6343)

Standard Car Truck Company • 865 Busse Highway • Park Ridge, I L 60068 • 847-692-6050

### Preparation

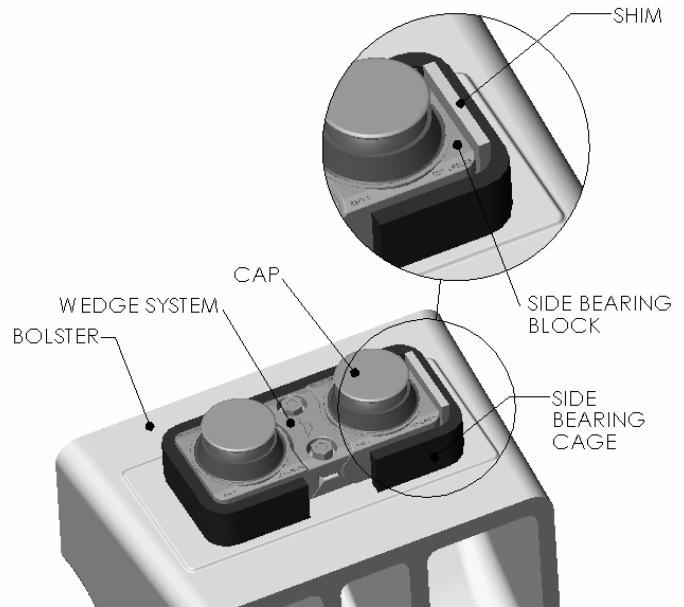
1. Remove friction blocks and all debris from side bearing cage.
2. Repair pocket of any cracks, heavy rust or visible high metal spots. SCT-LPCCSB must sit flat on bolster pad. If side bearing cage is bent, warped or damaged, replace or repair.
3. Inspect car body bolster side bearing wear plate to ensure surface uniformity. Wear plates must be free of pitting or surface protrusions.
4. Body bolster wear plate surface should be parallel to side bearing pad on bolster, no more than 1/8" over the length of the side bearing and 1/16" over the width of the side bearing. Must meet AAR standard S-235. Wear plate length shall provide proper side bearing engagement through minimum curve negotiation requirement of car. Table 1 lists recommended minimum wear plate lengths for cars with 150' minimum curve negotiation requirements.

**Table 1**

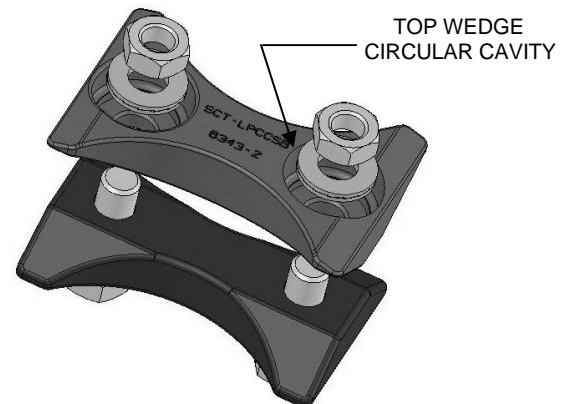
Truck Centers	Minimum Wear Plate Length (in)
28' or Less	10
28'-1" to 40'	12
40'-1" to 55'	14
55'-1" to 64'	16
64'-1" to 76'	18
Cars having truck centers greater than 42' must have a 5" wide wear plate	

### Installation

5. The side bearing may be used with minimum cage pocket dimensions of 4 1/8" width X 9 3/32 length. Verify that side bearings fit listed pocket dimension.
6. **DO NOT WELD ANY COMPONENTS**
7. Position parts into cage as shown in Figure 1.
8. Ensure that patent pending wedge lock system is oriented properly for installation as seen in see Figure 2. The wedge marked 6343-2 must be positioned so that it is visible from above.
9. Ensure that SCT-LPCCSB sits flat on bolster pad with no rocking.
10. The side bearing block provides a solid stop at 1 15/16". Ensure that top of block is between 1/16" to 3/8" above the existing cage (Figure 3) at all sides. If not, add shims. Shims should cover at least 80% of side bearing cage footprint.
11. Apply shims, part no. 6346 (as shown in Figure 1), between the cage and block to ensure the wedge bolt's ends do not extend above the top of the side bearing block. Based on the length of the cage, use Table 2 as a guideline for the appropriate number of shims (shims are included).
12. Tighten one nut then the other of patent pending wedge lock system and ensure that nut and bolt are fully engaged with upper and lower wedge system. Torque nuts to 70 ft-lbs if using a torque wrench. Using a straight edge, ensure that the top of nut or bolt does not protrude above the side bearing block, preventing vertical travel.



**Figure 1**



**Figure 2**

**Table 2**

Inside Cage Length (in)	Number of 10 Ga. 3" x 1 5/8" Shims
9 3/32 to 9 3/8	0
9 3/8 to 9 1/2	1
9 1/2 to 9 5/8	2

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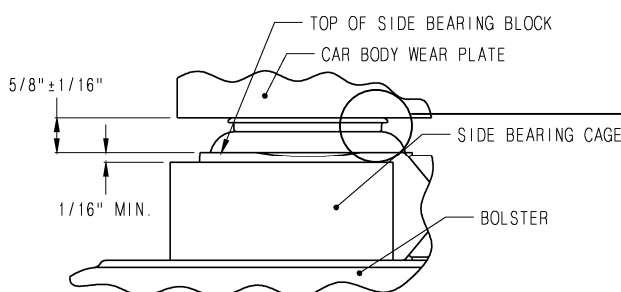
13. Re-tighten the first nut then re-tighten the second nut. If using a torque wrench, re-torque the first nut to 70 ft-lbs and then re-torque the second nut to 70 ft-lbs.

## **Set-Up**

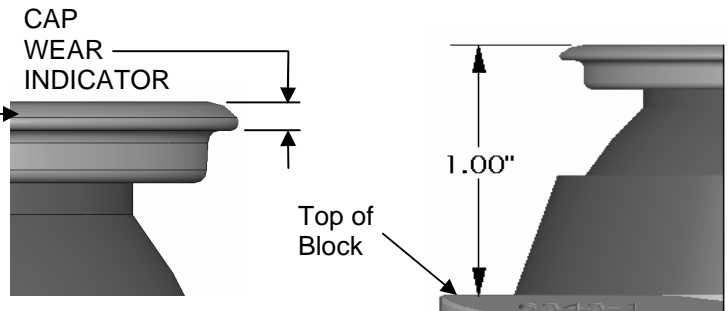
14. Ensure car is on flat track.
15. Add (reduce distance) or remove (increase distance) the necessary amount of shims on the car body wear plate to achieve a  $5/8" \pm 1/16"$  distance between the bottom of the car body wear plate and the top of the side bearing block (Figure 3) using calipers, telescoping gages or go-no-go gages.
  - a. During measurements, make sure the center plate is in contact with the bolster center bowl. Do not apply lube disc in center bowl when measuring the set-up height.
  - b. If new non-metallic bowl liners or graphite lube discs are used, add  $1/16"$  to set-up height.
  - c. It will take approximately 15 minutes for the side bearing to reach nominal set-up height at temperatures  $20^{\circ}$  F or below.
  - d. Do not expose side bearings to temperatures higher than  $225^{\circ}$  F.

## **Maintenance**

1. All elements must be replaced in pairs within one cage.
2. Check to ensure there is no damage to the side bearing components, such as cracks in the side bearing block, cap, and wedge system. Any broken or bent components should be replaced.
3. Ensure that the side bearings are tight within the bolster side bearing cage. If the side bearings are loose, re-tighten the nuts following steps 12 and 13 outlined in the installation procedure.
4. Replace the elements if the top surface of the cap wear indicator is flush with bottom diameter of cap. See Figure 3.
5. Replace the elements if the rubber has two or more cracks greater than 0.5" in length or horizontal separation between the block and rubber exceeding 50% of the perimeter.
6. Body bolster wear plate surface should be parallel to side bearing pad on bolster, no more than  $1/8"$  over the length of the side bearing and  $1/16"$  over the width of the side bearing. Must meet AAR standard S-235. Wear plate length shall provide proper side bearing engagement through minimum curve negotiation requirement of car. Table 1 lists recommended minimum wear plate lengths for cars with 150' minimum curve negotiation requirements.
7. For proper operation and preload, determine the free height of the side bearing by measuring the distance between the top of the side bearing block to the top of the cap with the car body off the side bearings. Replace the elements if the distance is equal to or less than 1.00" (see Figure 4).



**Figure 3**



**Figure 4**