



# Installation Instructions

## “S” & “L” Series Sideshifters

### 1-26. Sideshift Carriage Installation

1-27. There are two Cascade sideshift carriages each with a different location for the sideshift cylinder. The “S” series cylinder mounts on the upper fork bar. The “L” series mounts on the lower fork bar. Both carriages require the same initial mounting steps.

1-28. Inspect the faceplate of the truck carriage. The plate should be straight and free of metal projections. Make sure the notches along the top of the truck carriage are in good condition.

**NOTE:** The front face of the lower fork bar on the “L” series must be flat within .030 inch for smooth sideshift action.

1-29. Remove the anchor bracket from the shell end of the cylinder.

1-30. The cylinder anchor bracket must be properly located and welded to the front side of the truck carriage or the cylinder may be damaged.

### 1-31. Anchor Bracket Installation – “S” Series (See Figure 1-5)

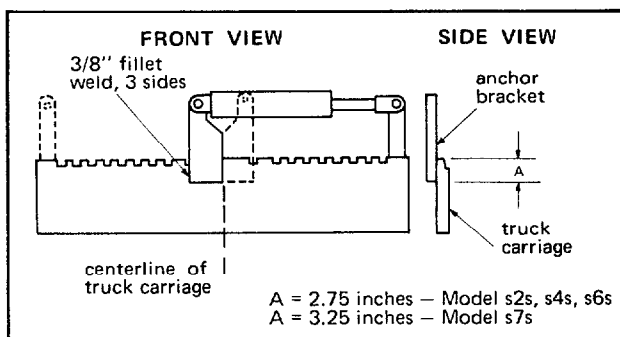


FIGURE 1-5 “S” SERIES BRACKET INSTALLATION

- a. Mark the horizontal centerline of the upper fork bar. Mark dimension “A” on the front of the fork bar. Position the bracket so the side is on the carriage centerline and the bottom of dimension “A”. The bracket must be at a true 90° to the carriage fork bars.
- b. The anchor can be mounted right or left hand on the “S” series. On an alloy truck carriage, use E7018 rod with a 300° preheat and a 600° post heat. The anchor should be welded on three sides with a 3/8 inch fillet.

### 1-32. Anchor Bracket Installation – “L” Series (See Figure 1-6)

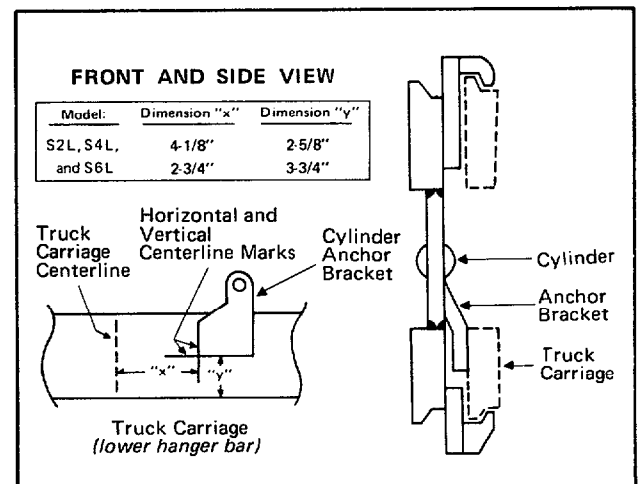


FIGURE 1-6 “L” SERIES BRACKET INSTALLATION

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- a. Mark the horizontal centerline of the lower fork bar and measure dimension "X" as shown in illustration 1-6.
- b. Measure up from the bottom of the lower fork bar dimension "Y" and mark intersecting dimension "X".
- c. Position the anchor so the bottom lines up with dimension "Y" and side with dimension "X". Welding instructions are the same for the "S" series described in paragraph 1-31b.

1-33. With the anchor installed, the bronze segments can be placed on the truck carriage. Apply a liberal coating of graphite base grease to the segments before installation. See Figure 1-7.

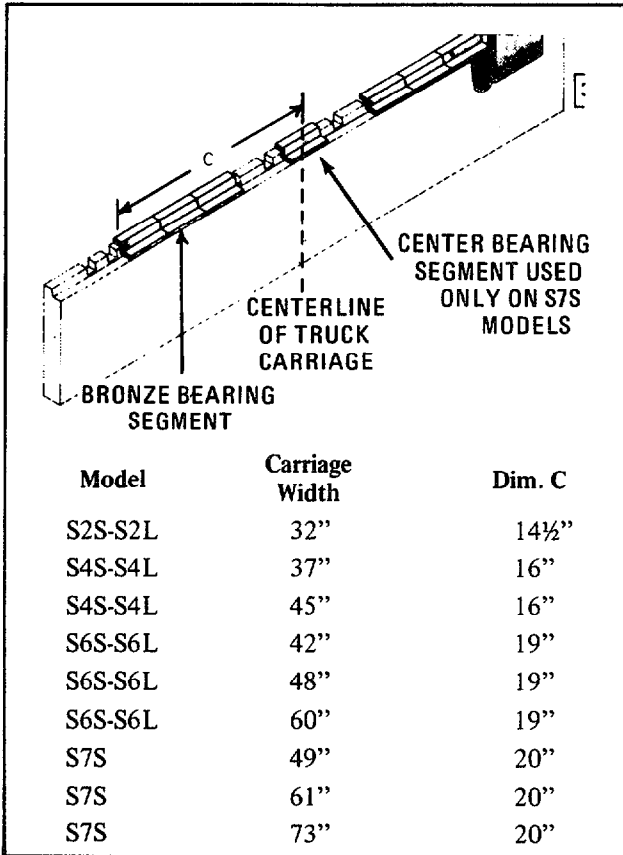


FIGURE 1-7 BEARING MOUNTING DIMENSIONS

1-34. On the S7 sideshift place the segments starting at the center notch of the fork bar and work out. The bearing segments should be completely covered by the upper hanger. See Figure 1-7. On the "L" series and the S2-S4-S6 place three segments on each side of the center notch. Leave out the center segment. With the sideshift centered all the segments should be completely covered by the upper hanger.

1-35. A further check on the segments is made with the carriage installed. The outer segment should not extend more than one-half its length beyond the edge of the upper sideshift hanger with the unit sideshifted fully either direction.

1-36. Install the sideshifter on the truck carriage. Be sure the cylinder on the "L" series does not interfere with the truck carriage.

1-37. Install the lower mounting hooks. They should be positioned so there is 1/16 inch clearance between the bottom of the fork bar. Torque the hooks according to Figure 1-1.

1-38. Install the cylinder. Recheck that the cylinder is parallel with the carriage bar.

1-39. Lubricate the heel rollers on S6S and S7S carriages before sideshift is installed. On "L" series carriages lubricate the bearing strip. Use NLGI consistency No. 0 high pressure grease.

1-40. Attach two jumper hoses from the truck junction block to the cylinder ports.

1-41. Start the truck and run at high idle to assure normal oil volume to the attachment. Loosen the locknut on the restrictor located at the base of the cylinder. Turn the shaft in to reduce sideshift speed and out to increase speed. The restrictor is fully open when 1/2 inch of shaft is exposed above the tightened locknut. Operate the sideshift. It must move freely in both directions. Be sure the hoses don't rub, pinch or twist during operation.



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you need answered  
right now?**

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