

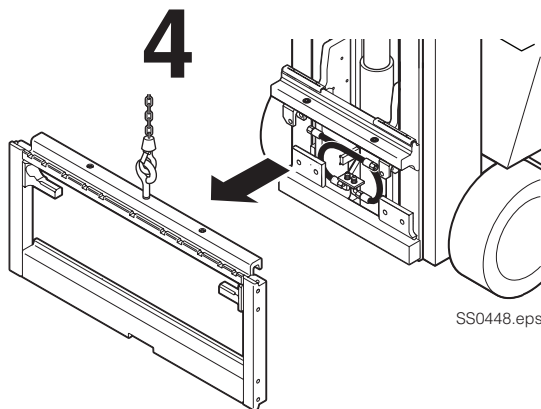


Technical Bulletin

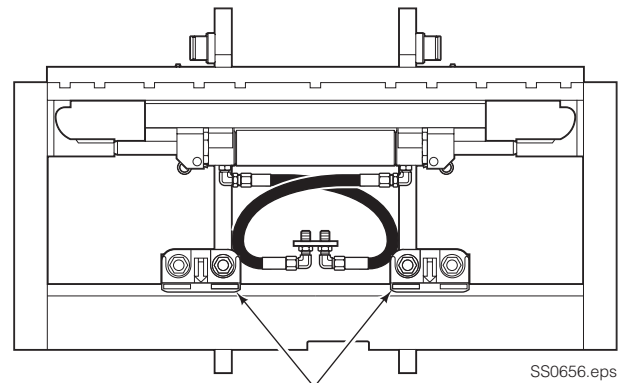
C-Series Integral Sideshifter Inner Frame Replacement

This Bulletin describes the replacement of the inner frame for a C-Series Integral Sideshifter.

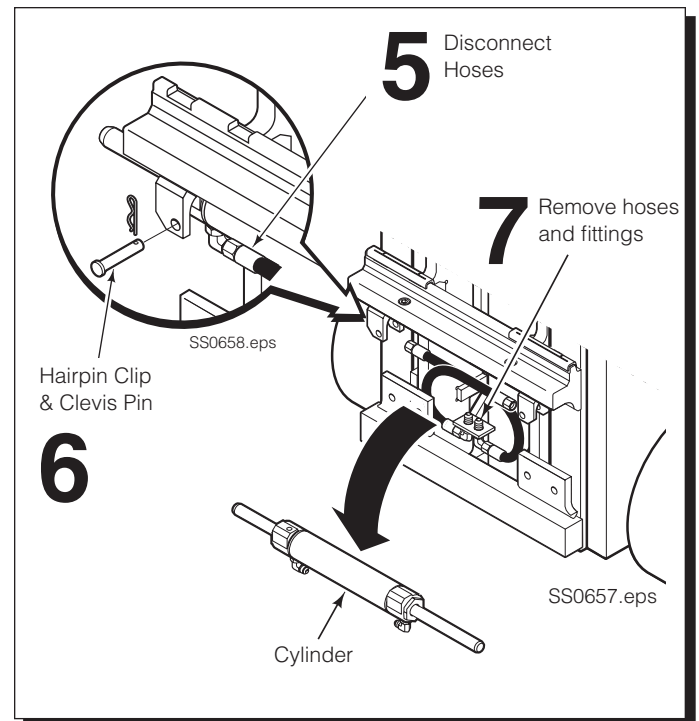
- 1 Remove the forks and backrest from the sideshifter.
- 2 Remove the lower mounting hooks.
- 3 If the outer frame has a fork positioner in it, disconnect the fork positioner hoses at the carriage.
- 4 Install an M12 lifting eye in the center threaded hole in the outer frame top bar. Use a 1000 lb. (450 kg) capacity overhead hoist and lift the outer frame away. Place the outer frame on a pallet. **NOTE:** Bearings and cylinder will remain on the integral carriage bars.



- 5 Disconnect the hoses from the cylinder and tag for reassembly. Cap the cylinder fittings.
- 6 Remove the hairpin clips and clevis pins from the carriage mounting yokes and remove the cylinder.
- 7 Remove hoses and bulkhead fittings from carriage.
- 8 If a fork positioner is installed, remove the fittings and brackets from the carriage.



2 Remove Lower Mounting Hooks



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

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- 9 Remove inner carriage from mast. See Toyota Service Instructions for carriage removal. Remove rollers and side thrust rollers from existing carriage and install on new carriage.
- 10 Install new carriage into mast per Toyota Service Instructions. Shim carriage as required.
- 11 Install the sideshift bulkhead fittings and hoses. If a fork positioner is installed, install the fittings and brackets to the carriage.
- 12 For reassembly, reverse the above procedures with the following exceptions:
 - Make sure cylinder anti-rotation pin is in place before installing cylinder.
 - Install shims on seal carrier opposite the cylinder anti-rotation pin. Shim this side only for a maximum of 0.02 in. (0.5 mm) clearance with cylinder in place.
 - Clean all bearing areas of built-up dirt and grease.
 - Adjust hooks as shown below and tighten to 120 ft.-lbs. (165 Nm).

