Towing or being towed with LCAC is similar to towing in a displacement mode. Major differences are the use of a towing bridle and the inability to veer or take in tow line. The tow bridle is required because of the ramps forward and aft. Several different tow lengths are possible by combining the 90-foot and 300-foot tow lines of the towing and disabled craft.

3-12.3. Towing Considerations The LCAC tow rig includes a weak link/shear pin adapter (Figures 3-15 and 3-16) that has a breaking strength of 40,000 lbs ± 2,000 lbs. The weak link is installed in the tow rig (at disabled craft tow bridle) as a protection to the craft tow points, which are limited to a horizontal pull of 50,000 lbs. This is less than the breaking strength of the nylon line now in use in the tow rig (4½ inch double braided nylon line with a breaking strength of 64,200 lbs, IAW NSTM 613). The weak link is designed to break before tow line pull causes structural damage to the hull and hull fittings.

NOTE

It is the nature of nylon line that wet line will have a lower breaking strength than dry line. The less time tow line spends in the water, the stronger it will be.

3-12.4. Towing Bridle Assembly The towing bridle assembly for LCAC shown in Figures 3-15 and 3-16 is comprised of (2) 90-foot tow legs (4½ inch double-braided nylon); (1) Shear Pin Adapter (designed to fail at 40,000 lbs ± 2,000 lbs); (8) No. 6 Nylite Spool Shield and Shackles; (2) Pelican Hooks with (2) 7/8 inch end links; (2) 1-3/8 inch chain safety shackles; (1) 300-foot tow line (4½ inch double-braided nylon); and (1) 90-foot tow line (4½ inch double-braided nylon).

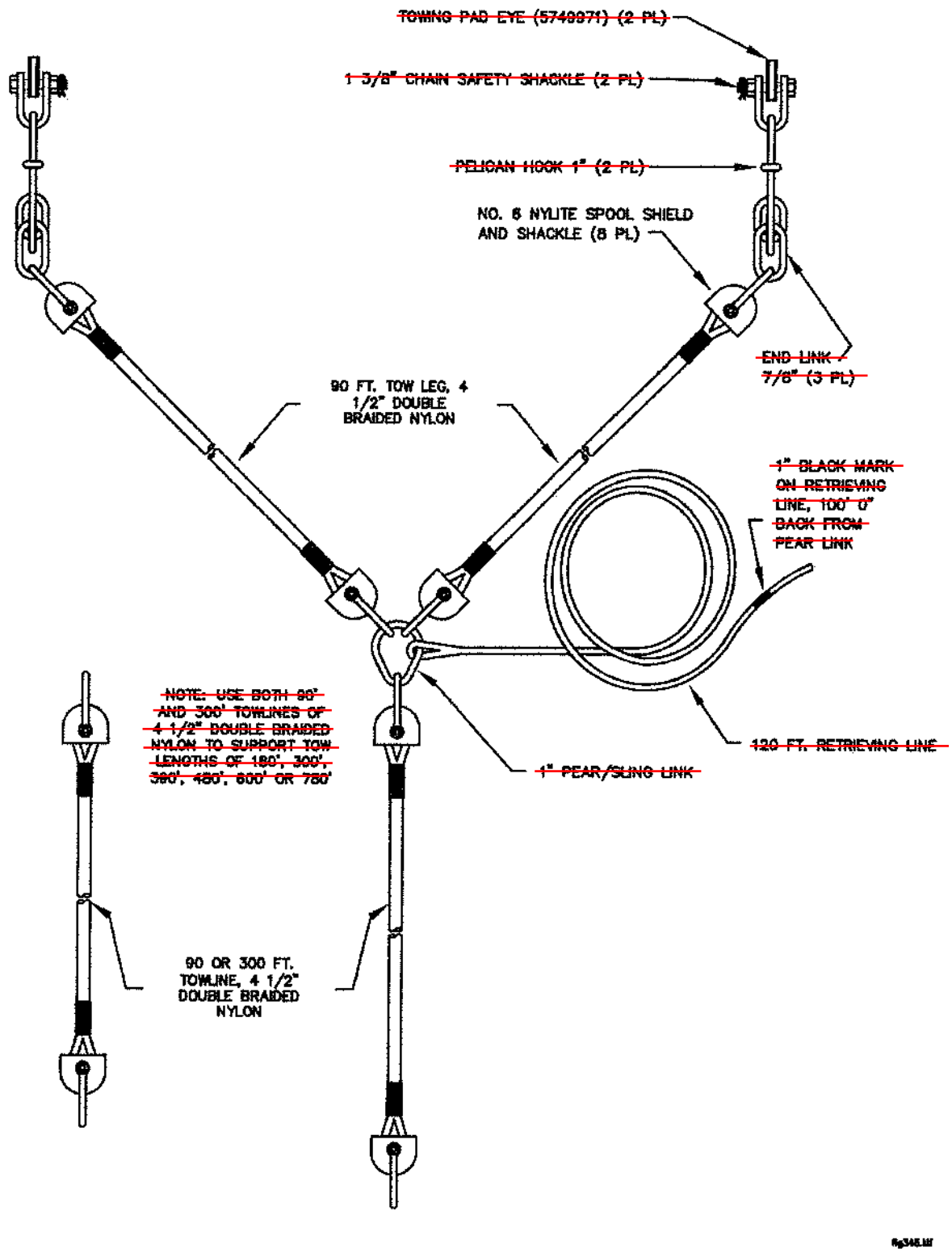

Figure 3-15 Towing Bridle Assembly (Towing Craft)