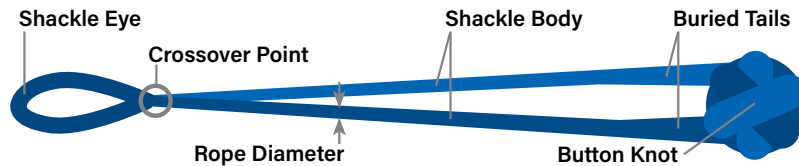


Overview Inspection before and after each use is a critical safety principle for all load-bearing products to maintain predictable daily operations. Usage details like load history (maximum force, median force applied), number of uses (i.e., cycles or jobs), and rope contact points will aid in estimating the ropes' current condition. Understanding these factors, in addition to manufacturer-provided inspection and retirement criteria, will provide a better understanding when making retirement decisions.

SOFT SHACKLE ANATOMY:



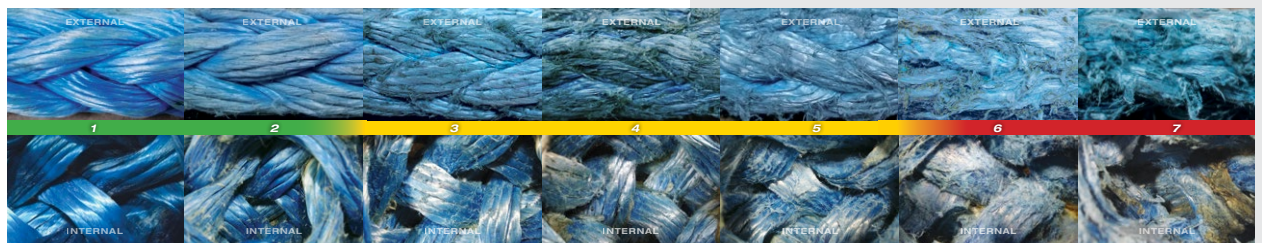
Abrasion & Construction

Link-It and *Link-It Plus* products are fabricated from *AmSteel®Blue*, the most studied, tested, and understood high-performance rope. These performance references allow *Link-It* users to refer to Samson's *Class II 12-Strand Abrasion Guide* when evaluating wear and tear on the rope structure as a first step. The comparator is an easy reference that can be used in the field to help assess the state of the rope.

LINK-IT™



LINK-IT™ PLUS



The Inspection and Retirement Pocket Guide includes information on proper rope inspection techniques and corrective action steps.

Beyond rope condition, inspecting the knot and loop structures of *Link-It* and *Link-It Plus* soft shackles are also essential, as knot adjustments can occur under extreme loading.



The comparator is an easy reference that can be used in the field to help assess the state of a rope. Small and easily held in the hand while performing an inspection, it helps establish a guideline and a common language when discussing the state of a rope.

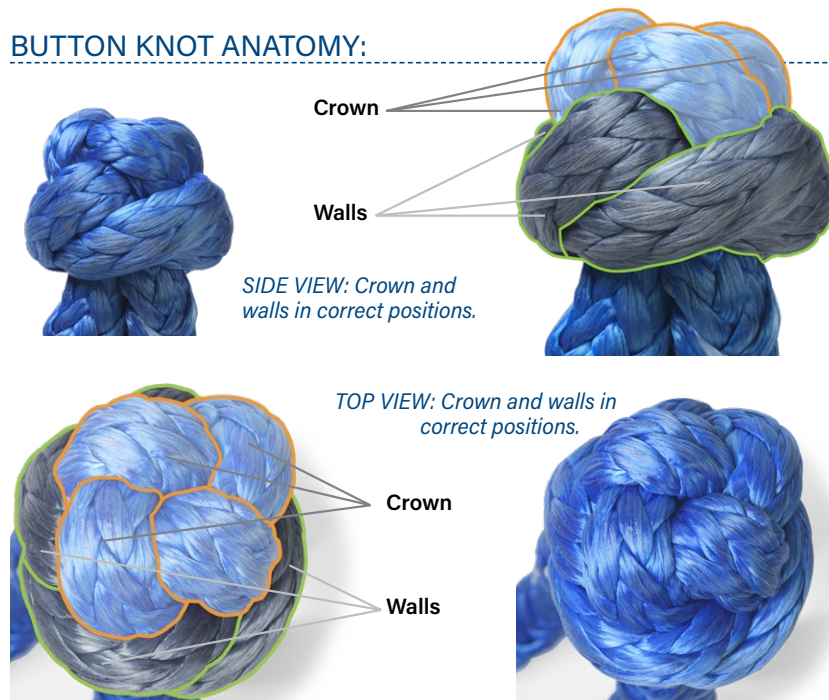
The following sections explain how to examine your soft shackle to help to decide whether it is still suitable for safe operations.

LINK-IT & LINK-IT PLUS INSPECTION & RETIREMENT CHECKLIST

Lock Stitching

Lock stitching on the *Link-it* and *Link-it Plus* helps prevent splice tails from backing out from the bury point just below the knot. These tails are the excess material beyond the end of the knot and are not critical to the strength of *Link-It* products. However, tails backing out or protruding below the knot could pose a risk of snagging and should be corrected. If tails begin to back out, carefully inspect the knot to ensure it remains in operable condition. After confirming knot integrity, the tails can be buried back into the rope by milking or using a fid.

BUTTON KNOT ANATOMY:



Knot Adjustment under Extreme Tension

When a *Link-It* or *Link-It Plus* experiences a high level of tension, the knot adjusts as the rope sections within the knot compress and reduce in diameter. This initial knot adjustment helps to stabilize and secure the knot for long-term use. However, excessive knot adjustment can occur under extreme loading (>40% of Minimum Breaking Strength) during initial use. Excessive knot adjustment can be identified by the sinking of any of the four crowns at the top of the knot, or rising of any of the four walls that make up the knot's base. The peak of a sinking crown will be 1-2 rope diameters lower than other crowns. A rising wall moves above the halfway point and threatens to slide over a crown. If either a sinking crown or rising wall is identified, the *Link-It* must be retired. Refer to the provided photos to identify the knot anatomy and learn the signs of excessive knot adjustment.

LOCK STITCHING



Lock stitching prevents tails from backing out.

SAFE FOR CONTINUED USE



WHAT: Tail backed out and pulled away from the rest of the rope. Typically caused by snagging on equipment or surface.

CORRECTIVE ACTION: Work back into the rope by milking or using fid. Lock stitch the rope to finish the repair.

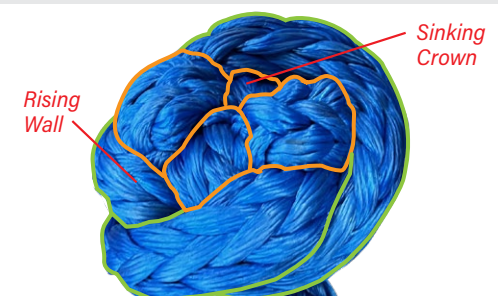
RETIRE



RISING WALLS/SINKING CROWN = RETIRE

WHAT: Walls rising around crown top view.

CORRECTIVE ACTION: Damage permanent, retire.



RISING WALLS/SINKING CROWN = RETIRE

WHAT: Crown sinking into walls side view.

CORRECTIVE ACTION: Damage permanent, retire.

LINK-IT & LINK-IT PLUS INSPECTION & RETIREMENT CHECKLIST *CONTINUED*

Link-It Plus Chafe Sleeve Inspection

Link-it Plus includes added chafe protection which acts as a sacrificial barrier and extends the lifetime of the product. Damage or wear to the chafe protection does not affect the strength of *Link-it Plus* but is a good indicator for “hot spots” where the rope is likely to see abrasion and wear over time. For any guidance, reach out to your Samson representative.

Holistic Approach to Damage Assessment

Samson takes safety seriously and cares about supporting safe operations. Samson thrives on providing products and innovations that make daily operations safer and more predictable. Please use this safety and damage assessment guide to localize your rope’s damage. Contact your Samson representative for further damage assessment assistance.

CHAFE SLEEVE INSPECTION



CHAFE DAMAGE = REPAIR

WHAT: Chafe section that has been worn through over time during normal use.

CORRECTIVE ACTION: Check rope underneath the damaged chafe. Inspect and repair.



ROPE DAMAGE = INSPECT

WHAT: Rope wear that occurred after the chafe was worn through.

CORRECTIVE ACTION: Inspect rope. Shift the chafe to cover rope’s typical bearing surface.

