Tritech Fall Protection Systems Inc.

TRAINING SESSION

Chapter 3: System Design

3.1 OVERVIEW

The Self-Retracting Lanyard is an integral part of your fall protection system. The length of the lanyard will vary depending upon the model that was supplied with your system. Normally it will be 8 to 21 feet in length.

Visually inspect your SRL prior to every use.

Your SRL is likely to be located overhead on the fall protection line.

Visually inspect that the housing of the device is free of cracks, damage, distortion or corrosion. Visually ensure that the Self-retracting lanyard is securely connected to the traveling device (slider or trolley) via the carabiner and that there are no signs of damage.

3.2 CABLE RETRACTION TEST

Pull out the lanyard portion (using the tag-line provided). Ensure that the lanyard is retracting correctly by pulling the line out slowly. Pull out the full length of the webbing from the device and allow it to retract slowly. This will ensure its movement is unrestricted.

At the same time, check the lanyard webbing for cuts, frays or abrasions.

3.3 General Inspection

Your Self Retracting Lanyard is equipped with an impact indicator or indicator fold. This is a stitched loop, which will pull apart at approximately 900 lbs.

Ensure that the

- Red warning indicator on the hook is not deployed
- Hook-retaining bolt on the indicator is not worn or deformed.
- Hook is free to swivel on the linkage without revealing the red warning sleeve.

If the red stitching is torn or ripped apart, the SRL has been impact loaded. It has seen the force of a fall and should be removed from service. Contact Tritech for service instructions.

Ensure that the snap hook opens and closes freely. Depress the locking mechanism on the snap hook with your index finger and pull the gate back with your thumb. The gate must remain locked when closed. If the devise is fitted with a screw gate hook, ensure that the thumbscrew locks down on the gate.

3.4 Lock Test

Check the locking action of the SRL by pulling down sharply on the line. Pull down vigorously on the line to activate the inertia brake. It should lock without slipping. The brake must engage and lock, so preventing further payout of the retractable webbing. When the load is released the webbing must retract back into the housing unit automatically and without assistance.

Do not use if your inspection reveals any problems with the self-retracting lifeline.

3.5 Trouble Shooting Guide

Problem	Possible Cause	Solutions
When fully retracted the web cannot be pulled from the device.	Fall stopping brake has engaged with lifeline at full retraction.	Push web back into the unit against the rubber bush.
Web pulls out to a point then locks; when released the device retracts normally.	Uncontrolled retraction of the lifeline can cause cable to nest on the drum, which wedges between the drum and housing.	Inspect device for dents, corrosion or cracks. Pull on lifeline to try and un-jam web.
Web tension seems too weak, device does not retract lifeline.	There is only a small amount of tension required to retract the line, the device may be working as intended.	Pull web sharply to engage brakes, then release. The device should retract the full web length.
Web tension too weak and device does not retract lifeline fully.	The main (rewind) spring inside the unit is corroded, lifeline is nested on drum or there is excessive dirt or grease on the lifeline.	Check web length is clean. Pull entire length of web from the device and allow it retract slowly. Remove from service if problem persist.
Web tension too weak and device does not retract lifeline at all.	The main (rewind) spring inside the unit is damaged or corroded.	Remove from service immediately and Tritech Service Department.
Device locks too quickly.	You may be moving too quickly and the device is sensing a fall. You may be moving too quickly.	If device restricts free movement at walking speed, send for repair.
Device does not lock when tested.	Try using more effort; 100feet devices require more effort due to the weight.	Remove from service immediately and contact Tritech Service Department.
Scraping and grating noise can be heard within unit.	Housing is damaged or there is a buildup of dirt within the device.	Inspect housing and lifeline for dents, cracks and dirt.

3.6 Caution

Always stay vertically below the housing devise, to avoid swing fall hazard. This will be further elaborated under the section "Connecting to the System"

NEVER

- climb or move away from a place of safety before attaching to the Lanyard
- run, jump or make any jerky movements. This could cause the cause the device to lock. This may pull you off balance and cause a fall.
- allow the lanyard to get slacked or obstructed
- be in a position that puts you above the level of the device

A competent person other than the user must annually inspect the Self Retracting Lanyard. Please contact Tritech for Annual inspection and servicing