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Technical Bulletin

April 2024

Fall Protection Pre-Use Inspection Guidance

Introduction

Fall protection components are required to be inspected on a regular basis. There are individual requirements defined by the Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI) Z359, Canadian Standards Association (CSA) Z259, as well as requirements established by the fall protection equipment manufacturers. These inspections are generally classified under two categories.

1. Pre-Use inspections
2. Formal Inspections

For the remainder of this bulletin, we will only focus on Pre-Use inspections.

As required by 29 CFR OSHA 1910.140 for General Industry and 29 CFR OHSA 1926.502 for Construction Industry, each of these regulations state:

OSHA 1910.140

- Remove impacted systems and components. (remove equipment from service if impacted by a fall event)
- Inspect systems prior to use.

OSHA 1926.502

- Remove impacted systems and components. (remove equipment from service if impacted by a fall event).
- Inspect systems prior to use.

What is typically not provided by OSHA, ANSI/ASSP and CSA are specific instructions on what and how to inspect your personal fall arrest systems and components. These inspection criteria are applicable to all components of a personal fall arrest system. Inspection details must be provided by your equipment manufacturer within their product user instruction documents. It is important to always follow the manufacturers user instructions for inspection criteria and to comply with regional, local, state and federal requirements where and when defined.

3M Fall Protection provides employee pre-use inspection requirements within our product user instruction manuals. This example in Fig. 1 represents a general employee pre-use inspection checklist guidance. Always refer to your equipment manufacturers user instructions for direction.

Figure 1. Inspection and Maintenance Log

Model Number (Serial Number):					
Date Purchased:			**Date of First Use:**		
..					
☑ *This product must be inspected by the user before each use. Additionally, a Competent Person other than the user must inspect this equipment at least once each year.*					
..					
Component	**Inspection Procedure**			**Inspection Result**	
				Pass	**Fail**
SRD - General (Figure 12.1)	Inspect for loose bolts and bent or damaged parts.			☐	☐
	Inspect Housing (A) for distortion, cracks, or other damage.			☐	☐
	Inspect the Swivel Eye (B) for distortion, cracks, or other damage. The Swivel Eye should be attached securely to the SRD, but should pivot freely.			☐	☐
	The Lifeline (C) should pull out and retract fully without hesitation or creating a slack line condition.			☐	☐
	Ensure device locks up when lifeline is jerked sharply. Lockup should be positive with no slipping.			☐	☐
	Look for signs of corrosion on the entire unit.			☐	☐
Connectors (Figure 12.2)	Inspect all SRD connectors for signs of damage and corrosion. Verify that all connectors are working properly. Where present: Gates (A) should open, close, lock, and unlock properly; Swivel Eyes (B) should rotate without interference; and locking buttons and pins should function correctly.			☐	☐
Modular Connector	If your SRD model includes a modular connector, verify that the connecting component secures properly to the modular D-ring of the SRD. The connecting component should open and close smoothly and should lock when secured to the modular D-ring.			☐	☐
Swivel Snap Hook and Impact Indicator (Figure 12.3)	Inspect the Impact Indicator. If a red band is shown and the swivel does not turn freely, then impact loading has occurred and the SRD must be removed from service. Do not attempt to reset the Impact Indicator. Return the SRD to an authorized service center for resetting.			☐	☐
Reserve Lifeline (Figure 12.4)	Inspect the reserve lifeline payout. Pull the lifeline out of the SRD until it stops. If a Warning Label or Red Band (X) is visible, the reserve lifeline is spent and the unit must be serviced by an authorized service center before reuse.			☐	☐
Wire Rope Lifeline (Figure 13)	Inspect wire rope for cuts, Kinks (A), Broken Wires (B), Bird-Caging (C), welding splatter, corrosion, chemical contact areas, or Severely-Abraded Areas (D). Slide the Lifeline Bumper (E) up and inspect the Ferrules (F) for damage. Replace the wire rope assembly if there are six or more broken wires in one revolution, or three or more broken wires in one strand in one revolution. Replace the assembly if there are any broken wires within 25 mm (1 in.) of the ferrules.			☐	☐
Synthetic Rope Lifeline (Figure 14)	Inspect rope for Abrasion (A), Cut Strands (B), Pulled Strands (C), Melting (D), Compression (E), Inconsistent Diameter (F), and Discoloration (G). Slide the Lifeline Bumper (H) up and inspect the area below for damage.			☐	☐
Energy Absorber (Figure 15)	Verify that the integral energy absorber has not been activated. Verify that the Lifeline Cover (A) has not pulled out from the Energy Absorber Cover (B) on either end. None of the Energy Absorbe ebbing (C) should be exposed. The Energy Absorber Cover should also be secure and free of Tears (D) or other damage.			☐	☐
Labels (Figure 11)	All labels are present and fully legible.			☐	☐
Fall Protection Equipment	Additional Fall Protection equipment that is used with the product is installed and inspected per the manufacturer instructions.			☐	☐
..					
☑ *If the product fails an inspection procedure, then the product fails overall inspection. If the product fails inspection, remove it from service immediately. Clearly tag the product "DO NOT USE". See Section 5 for more information.*					
..					
Inspection Type:	☐ User	☐ Competent Person	**Overall Inspection Result:**	☐ Pass	☐ Fail
Inspected By:			**Date of Inspection:**		
Signature:			**Next Inspection Due:**		
..					
Additional Notes:					

When Facing Challenging Inspections

Unlike Formal Inspections, Pre-Use inspections can occasionally present some challenges. In certain situations, as with Self-Retracting Devices (SRD), Fixed Ladder Climbing Systems, Horizontal Lifeline systems and Roof Top anchorages, these products are often installed in locations that may prevent the end-user from physically being able to make direct hands on contact with the device or system. In these situations, it is recommended to consult with your employer or equipment manufacturer as to how to best perform these inspections. As an example, if your SRD is permanently mounted or installed in a location overhead, where you might utilize a tagline to extend the SRD lifeline down to your elevation for connection to your harness, it is likely that it will be difficult to gain access to the main housing of the SRD, or even the entire length of the lifeline material to perform inspection requirements.

In these situations, you may need to conduct Formal Inspections more frequently. You may also consider options to utilize equipment such as a drone equipped with video, or binoculars to aid in a closer visual inspection.

The key to any successful product inspection program is to develop a site specific program best suited for your application, jobsite, equipment and environment.

Contact 3M Fall Protection Technical Service if you have any questions or concerns.

IMPORTANT NOTE

Refer to the 3M User Instructions provided with your product for additional information.

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3M PSD products are occupational use only.

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