

ReLoad™ SRL

User instructions

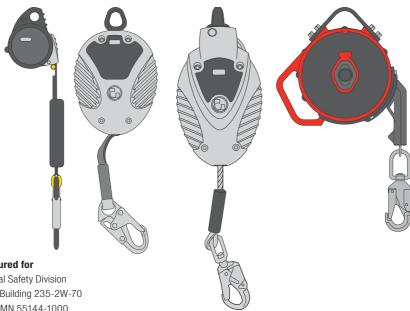
Mini webbing SRL Webbing SRL Standard cable SRL Sealed SRL





The user must read, understand and follow this instruction manual before using this equipment. This manual must be kept in a safe place for any future reference and inspection/recertification records. This manual is written to comply with ANSI Z359.14-2012, CSA Z259.2.2-98 and EN 365, and should be used as part of an employee training program as required by OSHA.

Fall arrest Personal Fall Protective Equipment (PFPE) is used to arrest a worker in the event of a fall and limit forces applied to the worker and the point of anchorage. A PFPE fall arrest system comprises a body support element (fall arrest full body harness), a connecting element (fall arrest lanyard with built in energy absorber), a connector carabiner/hook) and an anchorage (lifeline/anchor). The 3M™ Self-Retracting Lanyards/Devices (SRLs) are intended to be used as connecting elements within a personal fall arrest system. SRLs include a self-locking function and automatically extend and retract providing the user with freedom of movement over a large working area. SRLs are to be used where user mobility is required and fall protection is needed (inspection work, general construction and maintenance work etc.).



Manufactured for

3M Personal Safety Division 3M Center Building 235-2W-70 Saint Paul, MN 55144-1000 USA

Technical Service: 800-243-4630 in U.S. 800-267-4414 in Canada www.3M.com/FallProtection www.3M.com/PPESafety

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IMPORTANT

You must read the entire document carefully before using this product. Please pay particular attention to all sections which carry warning symbols and notices below.



WARNING!

This is a Warning symbol. This symbol is used throughout this document whenever there is a risk of personal injury or death. Ensure that these warnings are read and understood at all times.



CAUTION!

This is a Caution symbol. This symbol is used throughout this document whenever there is a risk of damaging the 3M product. Ensure that these cautions are read and understood at all times.



MANDATORY

This is a Mandatory symbol. This symbol is used throughout this document whenever there is a specific instruction for the 3M product. Ensure that these mandatory instructions are read, understood and followed at all times

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WARNING!

This device is part of a personal fall arrest system. The user must be provided with, read, understand and follow this instruction manual before using this equipment. This equipment must be used and maintained as instructed. Before and during use an emergency rescue plan must be in place, to be implemented in the event of a fall. Failure to follow these instructions, alterations to or misuse of this equipment may result in serious injury or death.

IMPORTANT

Contact 3M Technical Service if you have any concerns regarding the use, maintenance, applications or operation of this device

IMPORTANT

It is important before using this device that the product serial number on the device matches the number in the certificate of conformity (see Section 7) and the first date of usage is recorded in the Recertification log (see Section 6).



WARNING!

It is essential for the safety of the user that if the SRL is resold outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the device is to be used.

DESCRIPTIONS:

Webbing self retracting lanyard:

Includes eyelet, integral energy absorber, self locking snap hook, and polyester webbing lanyards in lengths of 7 feet and 12 feet x 25/32 inch, and 23 feet x 1 inch.

Cable self retracting lanyard:

Includes eyelet, integral coil energy absorber, self locking swivel snap hook, and 3/16 inch (7x19) cable (wire rope) lanyard in a choice of galvanized or stainless steel in lengths of 23, 30, 40 and 50 feet.

Sealed cable self retracting lanyard:

Ingress protected to IP69k. Includes attachment point, integral coil energy absorber, self locking swivel snap hook and 3/16 inch (7x19) stainless steel cable (wire rope) lanyard in lengths of 30, 50, 85 and 130 feet.

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1.0 Instructions for use

1.1 Applications

1.1.1 Intended purpose:

The Self Retracting Lanyard (SRL) is intended to be used as a connecting element within a personal fall arrest system. The SRL must be used vertically in situations where user mobility is required and fall protection is needed (inspection work, general construction and maintenance work etc.). A PFPE fall arrest system comprises of a body support element or fall arrest full body harness), a connecting element (SRL or energy absorbing lanyard), a connector (carabiner/hook) and an anchorage (lifeline/anchor).

WARNING!

This product is intended for overhead applications only. For applications below shoulder height, please contact 3M Technical Service.



WARNING!

Ensure there is a rescue plan in place and you are aware of the procedure before attempting any work at height.

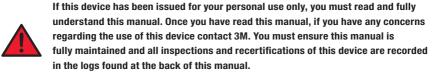


WARNING!

Do not modify or alter the SRL. All maintenance work is to be conducted by a 3M authorized person.



WARNING!



1.1.2 Product limitations:

SRL performance may be affected by the following:

1.1.2.1 Corrosion:

- Sewage and fertilizers. Do not leave the SRL in environments with exposure to sewage or fertilizers.
- Corrosive environments (e.g. near seawater). More frequent inspections and recertification will be required to
 ensure continued safe working use of the SRL.

1.1.2.2 Chemicals:

- Chlorine environment (i.e. near swimming pool or swimming pool ventilation systems). It is recommended that
 the lanyard is replaced regularly.
- Acidic or caustic solutions. Do not leave the SRL in environments with exposure to acidic or caustic solutions.
 If you have any concerns about using this equipment near chemical hazards, contact 3M Technical Service.



WARNING!

In the above environments it is difficult to identify defects because they may not show on the external surface of the lanyard. It is strongly recommended that the lanyard be replaced more frequently by an authorized person.

1.1.2.3 Direct sunlight:

- The lanyard within webbing models when subjected to prolonged periods outside may deteriorate and require replacement.
- UV rays can cause the color of the lanyard to fade and may reduce its strength.
- If severe discoloration is visible the lanyard must be replaced by an authorized person.

NOTE: Authorized person means a person who is trained and approved by 3M to identify hazards or dangerous conditions of the self retracting lanyard.

1.1.2.4 High temperature environments:

- 3M SRLs are not designed for use in high temperatures above 130°F. Use in such environments may result in product failure.
- Use caution when using this equipment near metal cutting or similar activities.
- If you have concerns regarding the use of this equipment in high temperature environments, contact 3M Technical Service.

1.1.2.5 Environmental exposures:

• 3M Sealed SRL products are rated to IP69K and are able to withstand high-pressure and steam cleaning.





1.1.2.6 Electrical dangers:



WARNING!

This product must not be used if there is any risk of the SRL contacting high voltage power lines. This warning also includes webbing type devices because moisture can be absorbed by the lanyard providing a path for electrical current.

1.1.2.7 Capacity:

- SRLs are only to be used by those of a combined mass (person, clothing, tools, etc.) of 310 pounds (140 kg) maximum (webbing SRLs) or 400 pounds (181 kg) maximum (cable and Sealed SRLs).
- An SRL is for the use of a single user only. No more than one person can connect to an SRL.

1.1.2.8 Locking speed:

- To ensure positive locking of the SRL, a clear, unobstructed fall path is necessary.
- Do not use an SRL if the fall path is obstructed.
- Do not use the SRL when working on materials such as sand or grain because this may not allow sufficient speed to cause the SRL to lock in the event of a fall.

1.1.2.9 Health:



WARNING!

Fitness and age significantly affect a person's ability to safely withstand fall arrest loads.

The following are among the medical conditions that could affect the safety of the user:

Heart disease/chest pain.

High blood pressure.

Epilepsy, fits, blackouts.

Fear of heights/vertigo.

Impaired limb function.

Alcohol or drug dependence.

Psychiatric illness.

Diabetes.



If you are uncertain about your ability, consult your doctor.

3M SRLs must not be used by pregnant women or minors.

1.1.2.10 Training:

Both the user and purchaser of this equipment are responsible for ensuring they read and understand these
instructions in full. They should be trained in the correct care and use of this equipment, and should be aware of
the operation, the limitations, and the consequences of incorrect use of this equipment.

IMPORTANT

Never expose a trainee to a fall hazard. Training must be repeated on a periodic basis.



WARNING!

Only persons who have undergone the necessary work at height training and have read and understood this manual may use the 3M SRL.

1.2 System requirements

1.2.1 Suitability of components:

The 3M SRLs are designed for use with compatible components and subsystems or approved components and subsystems. The integration of unapproved components can lessen the safety of the complete system.

1.2.2 Suitability of connectors:

All connectors (such as hooks, carabiners and D-rings) must be compatible with the anchorage point and other system components. To ensure connectors are suitable to be used with other system components they must be able to connect in such a way that their size and shape do not affect the performance and safety of the connectors. Contact 3M Technical Service if you have any concerns about connector compatibility.



WARNING!

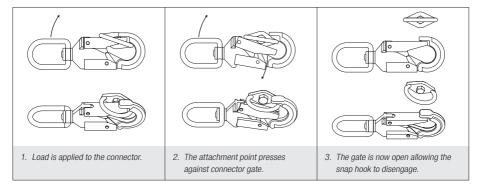
Do not use equipment that is not suitable (See Figure 1). All connectors must be capable of supporting loads of at least 5,000 lbs (22 kN). All snap hooks and carabiners must be self locking (refer to relevant national standards).





Attachment points with an unusual shape or attachment points that are undersized, when used in conjunction with connectors, can be orientated in such a way that allows forces to be applied to the gate of a snap hook or carabiner. This force may cause the connector to open allowing the connector to unlock from the attachment point. Figure 1 shows unintentional 'rollout'.

Figure 1—Unintentional disengagement (rollout).



1.2.3 Making connections:

It is the user's responsibility to ensure that the correct connector is used for the intended application, by making sure that all of the connectors are compatible with each other in size, shape and strength.

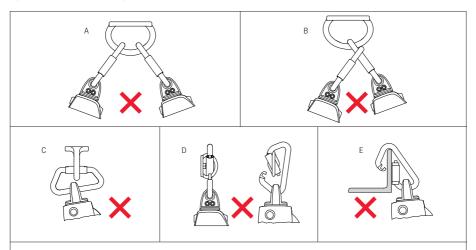


WARNING!

Always ensure all connectors are correctly engaged and locked. Do not use combinations of components or subsystems that may affect or interfere with the safe function of each other.

3M approved connectors (snap hooks and carabiners) are designed to be used only as they are specified in the relevant product's user instructions.

Figure 2—Inappropriate anchorage connections





WARNING!

- A. Never connect to a D-ring where another connector has already been attached.
- B. Never link connectors together.
- C. Never connect in a way that would load the gate of the carabiner or hook.
- D. Ensure the anchor point does not obstruct or prevent the connector gate from closing.
- E. Never connect in such a way that may result in unintentional disengagement (See Section 1.2.2).





1.2.4 Anchorage structure:

When connecting the SRL to an anchorage structure, the anchorage used must comply with applicable requirements.

Within the US

The anchorage structure must be capable of supporting static loads applied in all direction permitted by the fall arrest system of at least 3,600 pounds (16 kN) with certification of a qualified person. Alternatively, if a qualified person cannot provide certification, the minimum strength of the anchorage must be 5,000 pounds (22 kN). Refer to local, state, governmental or jurisdictional agencies for further information.

Within Canada

The anchorage structure must be able to sustain a minimum force of 5,000 pounds (22.5 kN). It is the responsibility of the user to ensure that anchors conform to applicable government regulations.

Within Europe

The anchorage structure must be able to sustain a minimum force of 2,700 pounds (12 kN). 3M recommends using a certified anchor point. Refer to EN 795.



CAUTION!

If more than one personal fall arrest system is attached to the same supporting structure then the former strength requirements have to be multiplied by the number of personal fall arrest systems attached to the supporting structure.

1.3 Operation and use

1.3.1 Preparation before use:



WARNING!

Do not attempt to modify or repair the equipment. Modifying the equipment could result in serious injury or death. Always consult 3M Technical Service if you need to use this equipment in any way other than described in this manual.

Carefully inspect this equipment as instructed in Section 2.0 before each use.

Before connecting to your fall protection system, ensure you fully understand how to use it, an inspection has been carried out and a rescue plan is in place. Always be aware of any other factors that could affect your safety while using the equipment.



MANDATORY

Rescue: There must be a rescue plan in place and an ability to implement the plan in the event of a fall.

Always ensure the anchorage is capable of sustaining fall arrest loads. Please refer to Section 1.2.4



WARNING!

Always ensure the SRL is anchored above the head height of the user. See Figure 3. For applications below shoulder height, please contact 3M Technical Service at 800-243-4630.

Figure 3—Always locate anchorage above user.

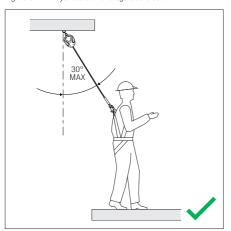
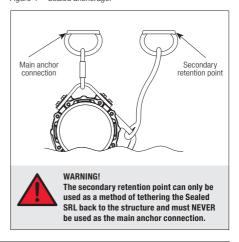


Figure 4—Sealed anchorage.





WARNING

The addition of the 2 foot (0.6 m) 3M 3012 Personal Energy Absorber will increase the clearance requirements by $5\frac{1}{2}$ feet (1.6 m). The additional distance must be taken into consideration during the clearance calculation process.

1.3.1.1 Leading edge applications:

The use of the 3M 3012 Personal Energy Absorber is required in leading edge applications. The 3012 Personal Energy Absorber must be placed inline with the Self Retracting Lanyard to add energy absorption properties at the user end of the system. The additional energy absorption properties will keep forces below the cable sheer strength in the event of a fall over leading edge.

1.3.1.2 Calculate fall clearance:

This is an example of how to calculate the fall clearance requirements using a Self Retracting Lanyard connected to the dorsal D-ring of a full body harness. Add the deceleration distance identified on the label of the Self Retracting Lanyard (3 feet per OSHA 1910 and 1926) to the slide of the D-ring (1 foot) and the additional safety clearance (2 feet), to allow for the possibility of an improperly fit harness and/or a miscalculation of distances. A total fall clearance of 6 feet is required for this example.

Before commencing work, always be aware of any moving machinery.







WARNING

Always ensure that you work a safe distance from moving machinery, and that all components in a system cannot be damaged by any moving machinery.

1.3.2 Using the SRL:

Attach the SRL overhead to a suitable anchorage or anchorage connector. Ensure that rollout cannot occur when using a hook or carabiner to make a connection as specified in Section 1.2.2 and 1.2.3.

Perform an operational check of the device before connecting the self locking snap hook to the harness. To check operation pull smoothly on the lanyard and listen for the audible signal (clicking), then pull sharply on the lanyard to engage the locking mechanism.

A full body harness must be worn when using the SRL. Always ensure that you attach to a designated fall arrest attachment point on the harness. Situations where fall paths are obstructed must be avoided.



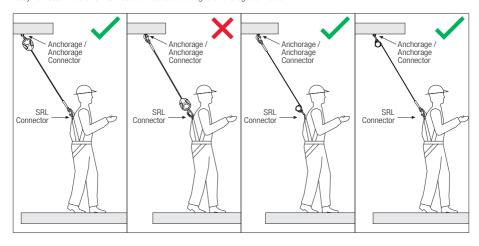
WARNING!

Never use a body belt for any fall arrest applications. Always use a full body harness.

REW - 23, REC - 23, 30, 40, 50 and SREC 30, 50, 85, 130—connect the self locking snap hook on the end of the lanyard to the designated fall arrest attachment point of a full body harness.

REW – 7, 12—the self locking snap hook can be attached to either the designated fall arrest attachment point of a full body harness or the anchorage/anchorage connector.

Figure 5—Only REW -7, 12 have the option to attach to the designated fall arrest attachment point or attachment point on the full body harness. All other SRLs must connect to anchorage / anchorage connector



Ensure all connections are compatible in size, shape, and strength. Make sure the snap hook or carabiner gate is securely closed and locked. Always ensure that you follow the manufacturer's supplied instructions with each component of a system.

Once connected to the SRL the user is free to move about the working area. The lanyard will extract and retract without hesitation. If the lanyard is prevented from retracting during normal use, extract the lanyard fully and allow it to retract under tension. Then check the locking function of the device. If the lanyard continues not to retract fully, then return the SRL to an authorized person for inspection and recertification.

An increase in fall distance can occur if the lanyard is prevented from retracting. This must be avoided. Therefore, always ensure that the lanyard can extract and retract without hesitation, and never prevent the lanyard from retracting (see Figure 6).

During use, sudden or quick movements can cause the SRL to lock up, and should, therefore, be avoided.

Never attach an additional lanyard or similar component to lengthen the lanyard.

Do not allow the lanyard to pass through legs or under arms.

In the event of a fall, the SRL will lock, arrest the fall, and deploy the energy absorber when used properly. After rescue the SRL should be removed from use and recertified by an authorized person.



MANDATORY

In the event of a fall: If a fall has occurred on an SRL, it must be removed from service and recertified by an authorized person.



WARNING! Do not allow the lanyard to be in contact with or rub against sharp edges or abrasive surfaces.



WARNING!

It is essential to safety that the anchor device and anchor point should always be positioned, and work carried out in such a way, as to minimize the potential for a fall. See examples of free fall situations to be avoided in Figures 6 and 7.



WARNING

An increase in fall distance can occur if the lanyard is prevented from retracting. This must be avoided.





Free fall

Maximum allowable free fall for a self retracting lanyard is 2 feet.

Figure 6-Free falls

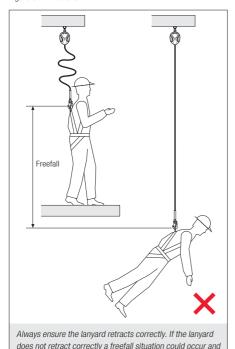
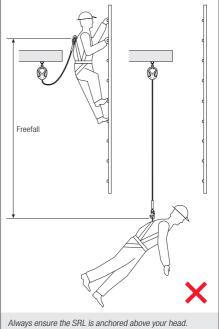


Figure 7—Free falls



Always ensure the SRL is anchored above your head.

If anchored below shoulder height, a freefall greater than
2 feet could occur and must be avoided.

Always ensure that free fall situations greater than 2 feet are avoided (see Figures 6 and 7) in order to help avoid potential product failure.

Always ensure swing falls are avoided (see Figure 8).



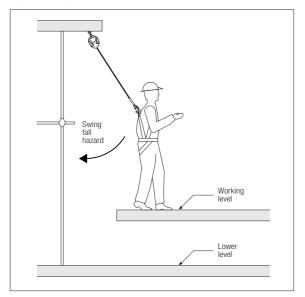
must be avoided.

WARNING!

Striking objects horizontally due to the pendulum affect of a swing fall may cause serious injury or death.

Swing falls must be prevented by ensuring that work is conducted as directly below the anchorage point as possible. Swing falls can cause serious injury. A swing fall can result in an increased freefall distance requiring more distance to safely arrest the fall. See Figure 8.

Figure 8-Swing falls



When the SRL is not in use, do not allow the lanyard to be fully extracted for long periods of time because this may cause weakening of the retraction spring. Do not let go of the lanyard because it will retract at high speed potentially damaging internal parts. Instead, allow the device to retract back into the SRL slowly and under controlled tension.

If the SRL is positioned high above the users head, the use of a tag line/second line is acceptable to allow the SRL to fully retract.



WARNING!

Tag lines/second lines must be removed from the device before use. Never use a tag line other than as described in this manual.





2.0 Instructions for inspection/recertification



WARNING!

Regular and periodic examinations of the SRL are required to ensure the safety of the user, which is dependent on the continued efficiency and durability of the SRL. If inspection reveals any defect, inadequate maintenance, or unsafe condition, immediately remove SRL from service for authorized repairs or disposal.

2.1 Frequency:

2.1.1 Before each use:

The user must carry out a pre-use inspection of the equipment to ensure that it operates correctly before use. See Sections 2.2, 2.3 and 2.4 for inspection guidelines.

2.1.2 Periodically:

An inspection should be completed by an authorized person other than the user. See Sections 2.2, 2.3 and 2.4. It is the responsibility of the site safety officer or the user to maintain a record of each periodic inspection in the inspection log, which can be found at the back of this manual. See Section 6.

2.1.3 Annually:

- A. An inspection of the SRL must be completed by a competent person other than the user. Contact 3M Technical Service for additional information.
- B. Every recertification must be recorded in the recertification log. It is mandatory that a factory authorized recertification of this product be completed within 2 years of manufacture and annually thereafter. However, local legislation may indicate more frequent recertification intervals. It is the responsibility of the site safety officer or the user to comply with all local or jurisdictional safety requirements, including to maintain a record of each annual recertification in the recertification log, which can be found in the back of this manual. See Section 7.

NOTE: Authorized person means a person who is trained and approved by 3M to identify hazards or dangerous conditions of the self retracting lanyard.



WARNING!

Only 3M, or parties authorized by 3M in writing, may make repairs or undertake recertification of this equipment.



WARNING!

If the SRL has been subjected to fall arrest or impact forces, or you are in any doubt concerning the safety or condition of the device, it must be removed from service immediately and recertified by an authorized person.

2.2 Visual load indicator:

3M manufactures both webbing and cable SRLs. These SRLs contain different load indicators to indicate when a fall has occurred. Different load indicators will require different inspection methods.

2.2.1 Cable SRL:

Cable SRLs incorporate a constant force energy absorbing coil and/or an impact indicating snap hook designed to deploy in the event of a fall. This will result in the coil protruding from the top of the SRL or the impact indicator on the hook showing deployment. To inspect the visual load indicator, visually examine the SRL for any exposed red color on the absorber coil or snap hook indicator. (See Figure 9). If any red color is visible on the absorber coil or impact indicator snap hook, then loading has occurred. SRLs that have been subjected to loading must be removed from service and recertified by an authorized person.

Figure 9a—Deployment of cable energy absorber

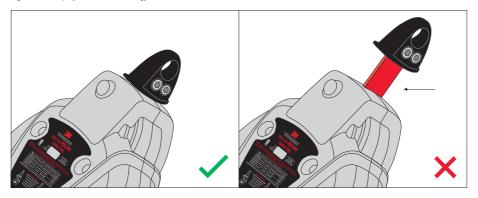
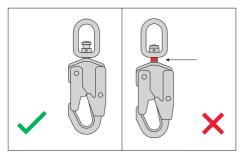


Figure 9b—Impact indicating snap hooks showing exposed red warning color once deployed



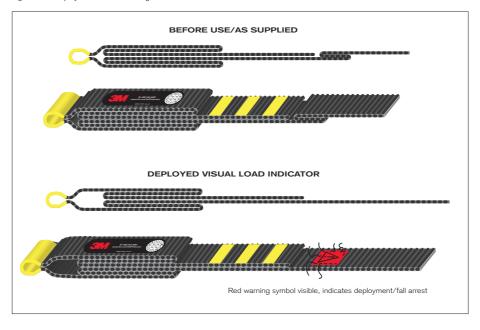




2.2.2 Webbing SRL:

Webbing SRLs incorporate an energy absorbing component within the webbing lanyard. Inspect the energy absorber to determine if it has been deployed. Deployment is clearly indicated by a red warning symbol displayed on the lanyard (See Figure 10). Ensure the clear plastic energy absorber cover is secure and not damaged or torn. If inspection reveals the SRL has received an impact load it should be removed from service immediately and recertified by an authorized person.

Figure 10—Deployment of tear webbing absorber



2.3 Visual inspection:

Perform the following checks in sequence. If you have any doubts about any of the inspection checks to be performed below, consult 3M Technical Service or an authorized person who is qualified to perform inspections.

It is the responsibility of the site safety officer or the user to maintain a record of each periodic inspection in the inspection log, which can be found at the back of this manual. See Section 6.

Check 1.

Inspect the SRL to see if the visual load indicator has deployed. This indicates if a fall has occurred and if the SRL has been subjected to fall arrest loads. See Section 2.2 for load indicator inspection.

Check 2.

Inspect to ensure all labels are present and fully legible. See Section 4.0.

Check 3.

Inspect connecting hooks or carabiners for signs of damage, corrosion, and working condition.

Check 4.

Inspect the casing for signs of damage or distortion.

Check 5.

Inspect the eyelet on all cable models for signs of damage or distortion. The swivel eye on webbing models must turn freely, the spiral pin must be present and securely fixed, and the fastening bolt must be flush with eyelet surface. If fastening bolt is sub-flush, please contact an authorized person.

Check 6.

Ensure all fastenings are present and secure.

Check 7.

Ensure that it is possible to completely extract the lanyard. As the lanyard retracts it must do so without hesitation (no slack line should occur). During extraction and retraction ensure that a clicking sound can be heard which indicates that the locking mechanism is functioning correctly.

Check 8.

Pull the lanyard sharply making sure that this causes the device to lock up.

Check 9

Visually inspect the entire unit for signs of corrosion.





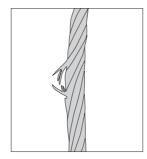
Check 10.

Inspect lanyard. On cable models, inspect lanyard for the following:

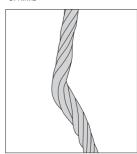
1. Cuts



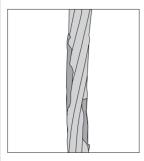
2. Broken wires



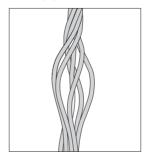
3. Kinks



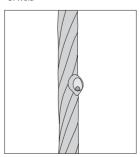
4. Corrosion



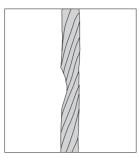
5. Bird-caging



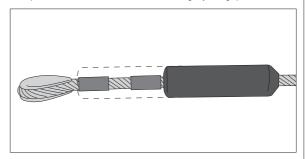
6. Weld



7. Abraded areas



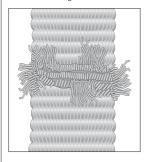
8. Inspect the ferrules for corrosion, cracks or damage by sliding up cable.



Check 11.

Inspect lanyard. On web models, inspect lanyard for the following:

1. Broken stitching



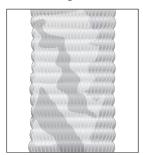
2. Frayed strands



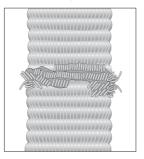
3. Cut/sliced



4. Excessive soiling



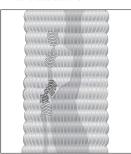
5. Localized wearing



6. Burnt web



7. Deteriorated sections



Also inspect for discoloration of the lanyard, possibly caused by chemical attack, heat, or ultraviolet light. Regularly check lanyard for the presence of metal or wood splinters on its surface, metal splinters will reduce the wear resistance of the lanyard.





2.4 Action:

If a defect is revealed during inspection or operation, the SRL must be removed from service and an authorized person should be contacted for recertification.

NOTE: Authorized person means a person who is trained and approved by 3M to identify hazards or dangerous conditions of the self retracting lanyard.

2.5 Working life:

The lanyard within webbing models when subjected to prolonged periods outside may deteriorate. UV rays can cause the color of the lanyard to fade and may reduce its strength. If significant discoloration is visible, the lanyard must be replaced by an authorized person.

The life of the product can be affected by environmental conditions. If, during periodic inspection by a competent person, the product is deemed unsafe it should be removed from service. Under the proper conditions and with proper use, the service life of SRL webbing has been evaluated to be up to 10 years.



WARNING!

The following factors such as (but not limited to): environmental conditions (e.g. contact with chemicals, exposure to temperatures >60°C (>140°F)), incorrect storage, frequency of use, may reduce service life. If the lanyard fails inspection, it must be replaced by an authorized person.

3.0 Maintenance, servicing and storage

3.1 Cleaning:

If required, clean the SRL's exterior with warm water (<100°F) and non biological detergent. Position the SRL such that any excess water can drain out. Clean labels as required in order to maintain legibility.

Clean the lanyard with water and non biological detergent. Rinse and towell dry lanyard leaving fully retracted device to dry naturally in a sheltered and ventilated place. Do not place near sources of heat. An excessive buildup of dust, dirt and paint etc, may compromise the retraction of the lanyard. If there is an excessive dirt build up ensure that the lanyard is replaced by an authorized person.



WARNING!

If the lanyard comes into contact with acids, remove the unit from service and return the SRL to an authorized person for lanyard replacement.

Lanyard replacement and any further maintenance must be completed by an authorized person. **D0 NOT disassemble the SRL**. For inspection intervals please refer to Section 2.1.

3.2 System components:

The full body harness and any other system components should be cleaned and stored according to manufacturer's instructions.

NOTE: Authorized person means a person who is trained and approved by 3M to identify hazards or dangerous conditions of the self retracting lanyard.

3.3 Storage:

Store the SRL in a cool, dry, clean environment. Ensure SRL is away from dust and oil and direct sunlight. Inspect the SRL after long periods of storage.

3.4 Transportation:

During transportation of this device, protection must be provided in order to prevent damage or contamination.





4.0 Product marking

The following labels should be attached and fully legible on each SRL.

4.1 Webbing SRL (7 ft)







4.2 Webbing SRL (12 ft and 23 ft)

Case labels:





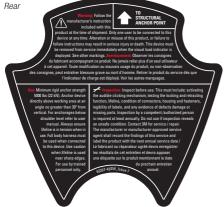
Webbing Shock Absorber Label:



The date of manufacture will be indicated.

4.3 Cable SRL (23 ft, 30 ft, 40 ft and 50 ft)





Next Service Date Label:



4.4 Sealed cable SRL (30 ft, 50 ft, 85 ft and 130 ft)







5.0 Specifications

5.1 SRL materials and performance for REW-7 only

Case	Aluminium
Pawl/ratchet module	Hard lubricated stainless steel
Motor spring	Stainless spring steel
Fasteners	Stainless steel
Hub/drum module	Nylon
Web	25/32 (20 mm) x 1/16 Inch (1.6 mm) Polyester with Vectran™ core
Pawl type	Full Contact™ anti-ratchet (patented)

Meets	Max	Free	Max	Avg.	Max
	arrest distance	fall limit	arresting force	arresting force	capacity
ANSI - CLASS B	54 in.	24 in.	1800 lbs	900 lbs	130 - 310 lbs
Z359.14-2012	(1372 mm)	(610 mm)	(8 kN)	(4 kN)	(59 - 141 kg)
OSHA 29 CFR	42 in.	24in.	1800 lbs	N/A	310 lbs
1910.66/1926.502	(1067 mm)	(610mm)	(8 kN)		(141 kg)
CSA - TYPE 1	55 in.	24 in.	1800 lbs	N/A	310 lbs
Z259.2.2-98	(1.4 m)	(0.6 m)	(8 kN)		(141 kg)

5.2 SRL materials and performance for REW-12, 23, REC-23, 30, 40, 50 and SREC 30, 50, 85, 130

Case	Impact modified nylon or aluminium (sealed)		
Pawl/ratchet module	Hard lubricated stainless steel		
Chassis	Stainless steel		
Motor spring	Stainless spring steel		
Fasteners	Stainless steel		
Hub/drum module	Aluminium		
Cable	3/16 inch (5 mm) (7x19) Galvanized or stainless steel		
Web	1 inch (25 mm) x 5/64 (2 mm) Polyester		
CF® absorber module	Stainless steel/nylon (patented)		
Energy absorber type	Constant Force® in-line (patented)		
Pawl type	Full Contact™ anti-ratchet (patented)		

			Max	Avg.	Max capacity	
Meets	Max arrest distance	Free fall limit			Web SRL	Cable SRL
ANSI - CLASS B	54 in.	24 in.	1800 lbs	900 lbs	130 - 310 lbs	130 - 310 lbs
Z359.14-2012	(1372 mm)	(610 mm)	(8 kN)	(4 kN)	(59 - 141 kg)	(59 - 141 kg)
OSHA 29 CFR	42 in.	24in.	1800 lbs	N/A	310 lbs	400 lbs
1910.66/1926.502	(1067 mm)	(610mm)	(8 kN)		(141 kg)	(181 kg)
CSA - TYPE 2	55 in.	24 in.	1800 lbs	N/A	310 lbs	310 lbs
Z259.2.2-98	(1.4 m)	(0.6 m)	(8 kN)		(141 kg)	(141 kg)





5.3 Webbing SRL variants and specifications (See Figure 11)

Model number	Working range (ft)	Lanyard type	Hook type	Size (L x W x D) (in)	Weight (lbs)
REW-7	7	Vectran [™] web	Forged steel, double locking	4 ³ /8 x 3 ¹¹ /16 x 2 ³ /8	3.4
REW-12	12	Polyester web	Forged steel, double locking	8 ¹¹ /16 x 5 ⁹ /16 x 3 ⁷ /8	5.3
REW-23	23	Polyester web	Forged steel, double locking	10 ¹³ /16 x 7 ⁵ /16 x 5	9.6

5.4 Cable SRL variants and specifications (See Figure 11)

Model number	Working range (ft)	Lanyard type	Hook type	Size (L x W x D) (in)	Weight (lbs)
REC-23 REC-23-SS	23	Galvanized cable Stainless steel cable	Forged steel, double locking	13 x 6 ¹¹ /16 x 4 ¹³ /16	11.5 11.4
REC-30 REC-30-SS	30	Galvanized cable Stainless steel cable	Forged steel, double locking	14 ¹ /16 x 7 ⁵ /16 x 5	13.3 13.2
REC-40 REC-40-SS	40	Galvanized cable Stainless steel cable	Forged steel, double locking	15 ⁹ /16 x 8 ⁷ /16 x 5 ¹ /8	16 15.8
REC-50 REC-50-SS	50	Galvanized cable Stainless steel cable	Forged steel, double locking	15 ⁹ /16 x 8 ⁷ /16 x 5 ¹ /8	16.6 16.4
SREC-30-SS	30	Stainless steel cable	Stainless steel, double locking	9 ¹ / ₂ x 9 ¹ / ₂ x 7	21.4
SREC-50-SS	50	Stainless steel cable	Stainless steel, double locking	11 x 11 x 8	27.7
SREC-85-SS	85	Stainless steel cable	Stainless steel, double locking	13 ¹ /4 x 13 ¹ /4 x 8	48.3
SREC-130-SS	130	Stainless steel cable	Stainless steel, double locking	15 x 15 x 8 ¹ / ₂	62

Figure 11 – webbing and cable SRLs.



Note: Hook shown is for illustration purposes only. Exact hook specification may be subject to change.





6.0 Recertification log

To be completed by an authorized person and maintained by the site safety officer or the user.

First date of usage: mm / dd / yy

Date of recertification (mm/dd/yy)	Organization	Name	Signature	Results/ comments	Date of next recertification (mm/dd/yy)

To be completed by an authorized person and maintained by the site safety officer or the user.

Date of recertification (mm/dd/yy)	Organization	Name	Signature	Results/ comments	Date of next recertification (mm/dd/yy)





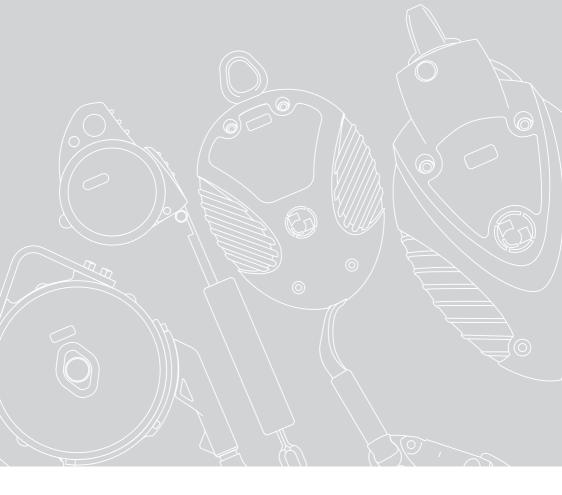
7.0 Certificate of conformity

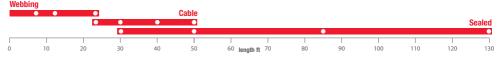
	Product					
Webbing	Cable Sealed	S/S Galv				
7 ft 12 ft	23 ft 30 ft	40 ft 50 ft				
23 ft	85 ft 130 ft					
	PLACE LOCK T STICKER HEF					
Serial number:		Date of manufacture: mm / dd / yy				
We certify that this item has been inspected and conforms to the full requirements and specifications of the relevant Standards: (tick applicable box)						
ANSI Z359.14-2012	CSA Z259.2.2-98	EN 360:2002				
The quality control arrangements	The quality control arrangements adopted in respect of this item conforms to the conditions of EN ISO 9001:2000.					
Issue date: mm / dd / yy	Place: Devizes, UK					
Signed:						

Position in company: __

Notes







For more information on the full ReLoad range, visit www.3M.com/FallProtection

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