



INSTRUCTIONS FOR USE AND
PRODUCT GUIDE

799953 / 799955 Tool and Equipment
Safety Tether System
(T.E.S.T.S.)



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Product Labeling

**RELIANCE**
www.relsafe.com

**Tool / Equipment
Lanyard**

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2802 East X Street
Deer Park, TX 77536
281-930-8000

MODEL #: ☐ 799953 (0-15 lbs Max) ☐ 799955 (15-50 Lbs Max)
(500 Lbs Anchor Min)  **WARNING** (1000 Lbs Anchor Min)
THIS PRODUCT IS NOT DESIGNED FOR PERSONAL FALL ARREST!
You must read and understand all instructions and labels supplied with
this product at the time of shipment. Failure to do so may result in injury
or even death. Contact Reliance if more information is needed.

Product Specifications:
Lanyard Construction - Polyester
Hardware - Zinc Plated Alloy Steel

Date of Manufacture

Month	1	2	3	4	5	6	7	8	9	10	11	12
Year	0	9	1	0	1	1	1	2	1	3	1	4

**WARNING**

Banding material is extremely sharp. When handling banding material use minimum class 3 cut resistant gloves.

 **WARNING**

Never exceed the max capacity of the lanyard. Care must be observed that adequate clearance exists below the worker in the event of a dropped tool or equipment. Lanyards may elongate as much as 78" while arresting a fall. Never connect tools or equipment greater than 5 lbs to yourself. Tools tethered to yourself may cause you to lose balance. Always use with all appropriate PPE required to perform your task. Connection to tool or equipment must be adequate to prevent the tool from releasing from the lanyard in the event of a drop. Remove from service if lanyard is damaged or has been used to arrest a dropped tool or equipment. Ensure spring hooks are closed and locked.

Inspection: Some lanyards may include a load indicating flag. Inspect lanyard for "Remove From Service" flag deployment. If visible remove from service. Additionally, inspect and measure from end of spring hooks the extended length of lanyard. Any lanyard longer than 70" must be removed from service. Inspect lanyard and hardware for any damage or deformation prior to each use. See instruction manual for full inspection procedures.

Made in USAT3011011 Rev 1

Anchor Ring and Banding:

- Inspect that the Anchor Ring is not deformed. Remove from service any rings that appear to be deformed or elongated from its original round shape.
- Ensure set screw in the Screw Loc buckle is tight. Retighten as needed.
- Inspect banding for damage and proper installation. Banding should be tight around item and anchor ring should not be able to be moved.

WARNING

You must read and understand all instructions and labeling supplied with this product at the time of shipment. Failure to do so may result in serious injury or even death.

These products are designed to reduce the chance of dropped tools and equipment from heights to a lower level. Use of these products does not assure dropped tool worksite safety. As always when working over people, care must be observed to prevent workers below from being struck by dropped items.

Method and location of anchor installation on tools or equipment is critical for proper system function. Connection must be adequate to support 1000 lbs (454kg). Selection of the anchor for your tool lanyard is critical for proper function. Do not tie tool lanyard to yourself. Connecting to yourself may cause you to lose your balance and fall. Although the 799953, and 799955 have an internal energy absorber, forces may be as high as 450 lbs on the anchor point and tool attachment point. Ensure adequate clearance is available below your work area. Even with tool lanyard properly installed, the lanyard may elongate greater than its initial length to absorb energy. Consult lanyard label for lanyard elongation data.

WARNING

This product is not designed for personal fall arrest.

WARNING

Use all appropriate PPE to perform your job safely.

Product Specifications

799953 / 799955 Tool Lanyard

Lanyard Material: Polyester

Hardware: Zinc Plated Alloy Steel

799970 Anchor Ring

Material: .070" Stainless Steel

799972 Anchor Ring

Material: .090" Stainless Steel

799960 Banding

Material: .020" x 3/8" Stainless Steel

799962 Banding

Material: .025" x 1/2" Stainless Steel

799961 & 799963 Screw Loc™ Buckle

Material: Stainless Steel

799980 Anchor Loop

Material: Vinyl Coated 1/16" Wire Rope with
Aluminum Stop Sleeve

Inspection

Both the lanyard and method of connection to the tool or equipment must be inspected prior to each use by the user. A competent person should provide an additional inspection at regularly scheduled intervals.

Lanyard:

Inspect the spring hooks for damage. Remove from service if there is evidence of deformation, corrosion or not closing properly and not locking properly with screw lock barrel

- Inspect webbing for damage. Remove from service if there are any cuts, tears, burn hole's, chemical damage or any other damage that may effect the lanyard performance.
- Some lanyards may include a load indicating flag. Inspect lanyard for "Remove From Service" flag deployment. If visible remove from service. Additionally, inspect and measure from end of spring hooks the extended length of lanyard. Any lanyard longer than 70" must be removed from service.



- Inspect for illegible or missing labeling. Labeling is referenced on page 18 of this manual. If labeling is missing or illegible, remove from service.

Anchor Loop:

- Inspect wire rope for damage. If wires are broken, cut or otherwise damaged remove from service.
- Inspect that aluminum button is in place and secure. Remove from service if not.

Selecting Anchor Point for Lanyard



WARNING

Method, selection and location of your lanyard attachment is critical for safe use and operation of this product. Anchor points may need to be equal to what is used for personal fall arrest. Never use same anchor for tool lanyard anchor and your personal fall arrest system anchor.

Now that you have determined a method of attaching the lanyard to your tool or equipment, you must now determine an adequate anchor point for the opposite end of the lanyard.

Method and location of anchor installation on tools or equipment is critical for proper system function. Connection must be adequate to support 1000 lbs (454kg) for the 799955 and 500 lbs (228kg) for the 799953 to allow for an adequate factor of safety. Selection of the anchor for your tool lanyard is critical for proper function. Do not tie any tool greater than 5 lbs to yourself. Connecting to yourself may cause you to lose your balance and fall. Although lanyards have an internal energy absorber, forces may be as high as 450 lbs (204kg) on the anchor point and tool attachment point. Ensure adequate clearance is available below your work area. Lanyards may elongate as much as 78" when loaded when arresting a dropped object. Connection to the tool and anchor is accomplished with the supplied locking spring hooks. Ensure spring hooks are closed and locked with the screw lock barrel.

Product Overview

Falling object hazards from elevated locations is a serious jobsite safety concern. Reliance has recognized this hazard and has developed a series of products to assist in jobsite dropped object protection. A 15 lbs tool dropped a distance of 6 feet can generate forces greater than 1000 lbs when arrested with no energy absorption. Reliance has developed a patent pending technology that can limit the tool arresting forces to 450 lbs or less. Tools and equipment up to 50 lbs can be accommodated with this technology. Additionally, not all tools or equipment have adequate connection points for tool lanyard connection. Reliance has designed several options to allow field installable tool /equipment connectors that can withstand the potential forces that heavier dropped tools can generate.

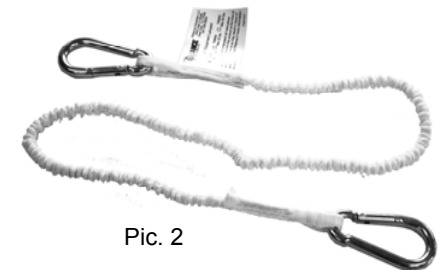
799955 Tool Lanyard: (Pic.1) Lanyard is designed to arrest dropped tools up to 50 lbs (23kg). Lanyard is elasticized and contains an energy absorber that limits forces to 450 Lbs (2 kN). Includes spring hook's on each end.

799953 Tool Lanyard: (Pic. 2) Lanyard is designed to arrest dropped tools up to 15 lbs (7kg). Lanyard is elasticized and contains an energy absorber that limits forces to 225 Lbs (1 kN). Includes spring hook's on each end.

Pic. 1



Pic. 2



799970 Light Duty Anchor Ring: (Pic. 3) Designed to be installed on tools and equipment that do not include a method of connecting the tool lanyard or of adequate strength or size. Can be used on tools up to 20 lbs (9kg) in weight. Ring can be installed using the 799960 3/8" banding. Can be ordered in bags of 10, part # 799971.



Pic. 3

799972 Heavy Duty Anchor Ring: (Pic. 4) Designed to be installed on tools and equipment that do not include a method of connecting the tool lanyard or of adequate strength or size. Can be used on tools up to 50 lbs (23kg) in weight. Ring can be installed using the 799962 1/2" banding. Can be ordered in bags of 10, part # 799973



Pic. 4

799980 Anchor Loop: (Pic. 5) Is for use on tools or equipment that has an anchor hole or slot, but is too small or positioned in such a place that the standard spring hook cannot be inserted.

799960 3/8" Banding: Used to secure the 799970 Anchor Ring to tools or equipment. Can be used on tools up to 20 lbs (9kg). Banding is tensioned using the 799990 Tension Tool (Fig. 6) and locked in place with the 799961 3/8" Screw Loc Buckle. Comes in 100' (30m) rolls.

799962 1/2" Banding: Used to secure the 799972 Anchor Ring to tools or equipment. Can be used on tools up to 30 lbs (13kg) with a single wrap and up to 50 lbs (23kg) with a double wrap of banding. Banding is tensioned using the 799990 Tension Tool (Fig. 6) and locked in place with the 799963 1/2" Screw Loc Buckle. Comes in 100' (30m) rolls



Pic. 5

Step 14: (Pic.25) Bend tail back 180 degrees on to itself.

Step 15: (Pic.26) Flatten banding back against the item by striking the tail with the hammer surface of the winding knob.

Inspect your Anchor Ring installation. Banding should be tight around item and the Anchor Ring should not move.



Pic.25



Pic.26

Step 10: (Pic.21) While gripping the main handle firmly, push down on the cutter handle. This will cut the band while tensioned through nose of the tool.

Step 11: (Pic.22) With item setting on a work bench, strike the Screw Loc buckle with the winding knob hammer surface of the tool. This should seat the banding against the item surface.

Step 12: (Pic. 23) Tighten set screw with supplied Allen wrench for a second time. Continue to tighten as tight as possible without stripping the hex socket.



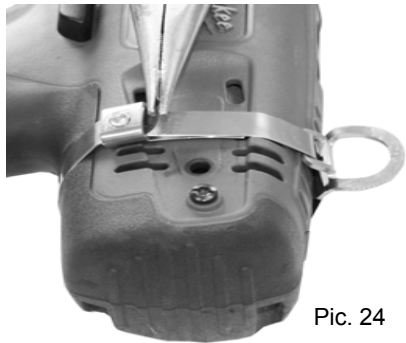
Pic.21



Pic.22



Pic.23



Pic. 24

Step 13: (Pic.24) Using a pair of needle nose pliers, bend banding tail up 90 degrees. This will allow you to protect the sharp edge left on the banding from the cutting process.

799990 Tool Banding Tension
Tool Type 1: (Pic. 6) Must be used to properly secure and tension the 799960 and 799962 banding to tools or equipment. Can be configured to pistol grip position, straight or angle position by removing and repositioning the rear handle. Unit includes a cutter blade to cut banding material.



Pic. 6

Quick Selection Guide

Tool/ Equipment Weight:		0-5 lbs	0-15 lbs	15-20 lbs	20-30 lbs	30-50 lbs
Part Number	799950		Do Not Use	Do Not Use	Do Not Use	Do Not Use
	799952		Do Not Use	Do Not Use	Do Not Use	Do Not Use
	799953			Do Not Use	Do Not Use	Do Not Use
	799955					
	799960				Do Not Use	Do Not Use
	799962 Single Wrap					Do Not Use
	799962 Double Wrap					
	799970				Do Not Use	Do Not Use
	799972					
	799980					Do Not Use

Shaded Cell Indicates Acceptable Use

Table 1

Selecting the Proper Tool Connection

The method of lanyard connection to your tool or equipment is essential for safe use and operation. Reliance has tested and developed several methods for connection. When planning your connection method, care must be observed that the connection has adequate strength to retain the tool or equipment when dropped. Connections may see forces as high as 450 lbs (2kN) when using the 799955 and 250 lbs (1kN) when using the 799953. Reliance recommends that connections be capable of withstanding forces of 1000 lbs (4.4kN) for the 799955 and 450 lbs for the 799953 to allow for a factor of safety.

Direct Connect Method: (Pic. 7) Tools and equipment with connection points of adequate size and of adequate strength can be connected directly to the lanyard with the supplied locking spring hook.

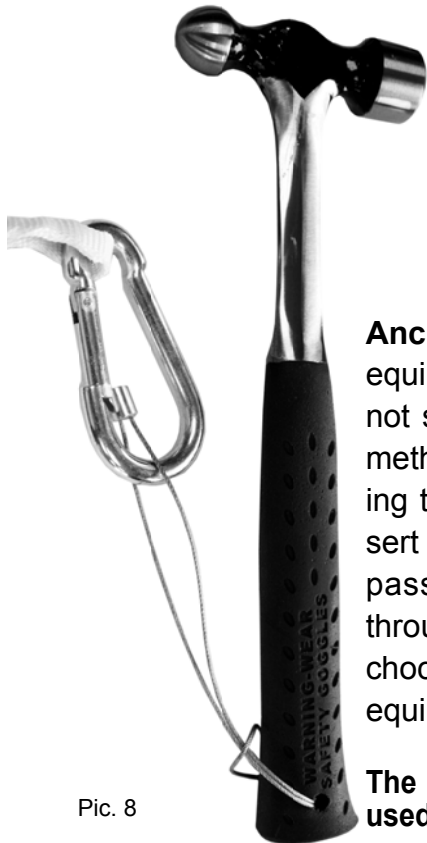


Pic. 7

Anchor Loop Method: (Pic. 8) Tools or equipment with holes or slots that are not sized to allow for the direct connect method may be accommodated by using the 799980 anchor loop. To use, insert loop through hole or slot and then pass the aluminum swage button through the loop. Pull button tight to chock wire rope around the tool or equipment.

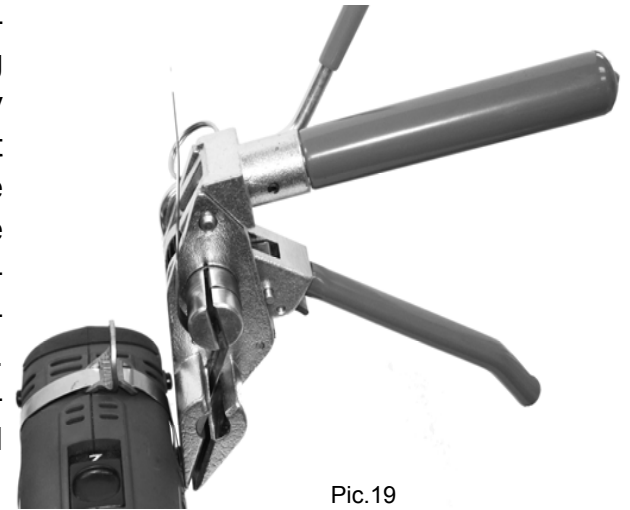
⚠ WARNING

The 799980 Anchor Loop may only be used on tool's weighing 30 lbs or less.



Pic. 8

Step 8: (Pic.19) Tension the banding around the item by squeezing the ratchet handle against the pistol grip. Continue tensioning until banding is as tight as possible around the item. The tail of the banding will wind around the winding mandrel.



Pic.19

Note: For items that are irregular shape, it may be necessary to reposition the pistol grip handle. The tool can be converted to the straight position or angled position by removing the handle locking pin and reinstalling in the new configuration.

⚠ WARNING

Not properly tensioned banding may result in Anchor Ring connection failure. If installed on tapered handles, Anchor Ring should be installed on the narrow portion with the wider section aft of the Anchor Ring band location.

Step 9: (Pic.20) Using the Allen wrench supplied with the buckles, tighten set screw as tight as possible with out stripping the hex socket.



Pic.20

Step 5: (Pic.16)

Slide the appropriate size Anchor Ring onto the banding by passing the banding through the slots formed in the anchor ring. The Band should pass beneath the Reliance name stamped onto the Anchor Ring.



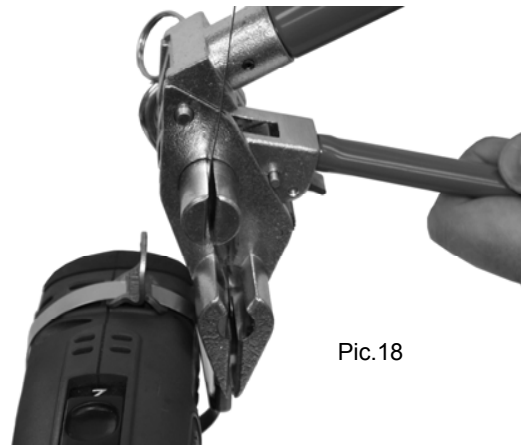
Pic.16

Step 6: (Pic.17) Wrap banding around item and pass through the Screw Loc Buckle. The set screw may need to be backed out to allow the band to pass through. If double wrapping, pass band through the Anchor Ring for a second time and pass through the Screw Loc Buckle again. Pull banding around tool as tight as possible to remove all slack from the banding. Move Anchor Ring to the location you have selected for the connection point.



Pic.17

Step 7: (Pic.18) Pass the tail of the banding through the nose of the tool and through the slot in the winding mandrel.



Pic.18

The mandrel can be turned by the winding knob to allow for proper alignment of the banding and the slot. Push the nose of the tool tight up against the Screw Loc Buckle. At this time, make sure the anchor ring and banding is located where you have determined you want your connection.

Anchor Ring Connect Method:

(Pic. 9 & 10) Tools or equipment that do not have a built in method of connection can be retrofitted with an Anchor Ring. The 799970 Anchor ring utilizes the 799960 3/8" banding and can accommodate tools up to 20 lbs (9 kg). The 799972 Anchor Ring utilizes the 799962 1/2" banding and can accommodate tools up to 30 lbs (14kg) with single wrap and up to 50 lbs (23kg) with double wrap.



Pic. 9

Note- Multiple Anchor Rings: (Pic. 11) In some cases more than one anchor ring may be needed and installed on the same tool. For example, cordless tools with removable battery packs need Anchor Rings on both the tool and battery pack. Items of 5 lbs (2.3kg) or less may be secured with the 799952 tool lanyard as shown in Pic. 11.



Pic. 11

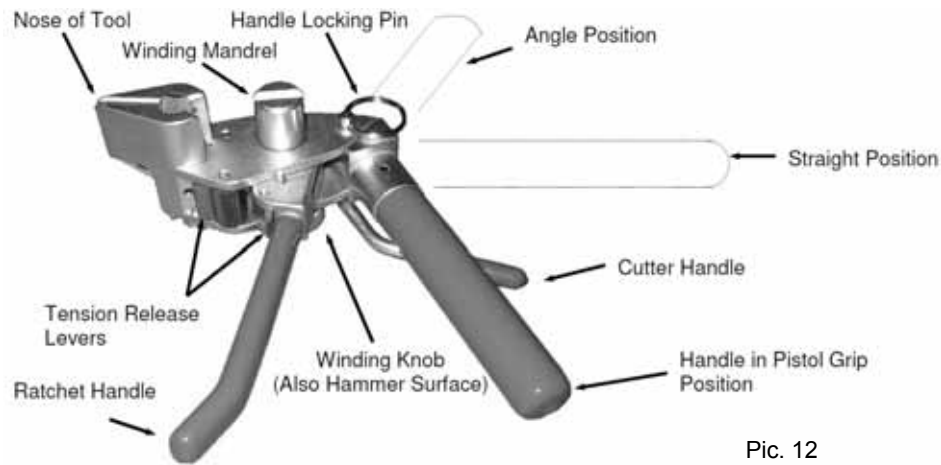
⚠ WARNING

Location of Anchor Ring installation is critical for safe use and operation. For example, when installing on a drill motor, the band and ring should be installed around the main body and not the handle. The handle may not be strong enough to properly arrest a dropped tool. Anchor Rings should not be installed in a location that may interfere with the safe operation of the tool or equipment.



Pic. 10

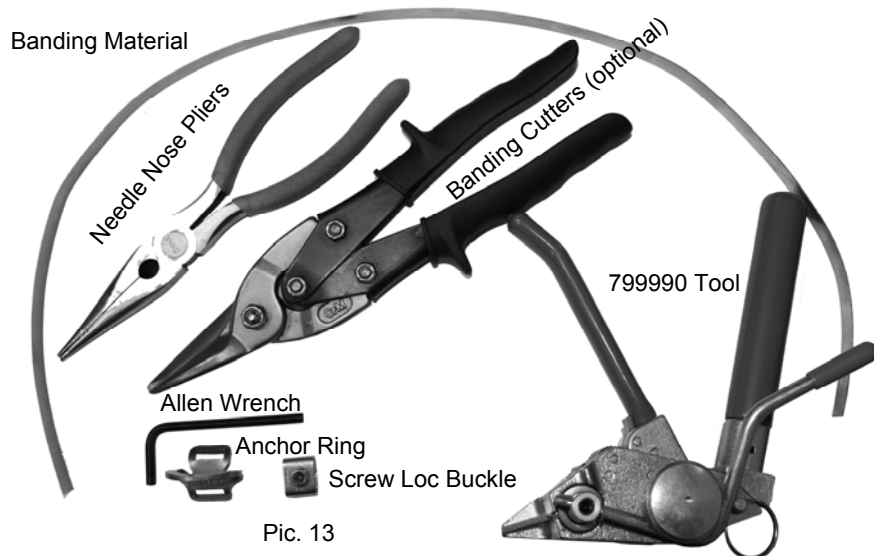
The 799990 Tool Banding Tension Tool



Pic. 12

Anchor Ring Installation

Recommended Tools and Materials for Anchor Ring Installation



Pic. 13

Refer to Table 1 on page 7 for the proper Anchor Ring and Banding that should be used based on your tool or equipment weight.

⚠ WARNING

Banding material must be handled with care. Edges are sharp. Use minimum Class 3 cut resistant gloves while handling.

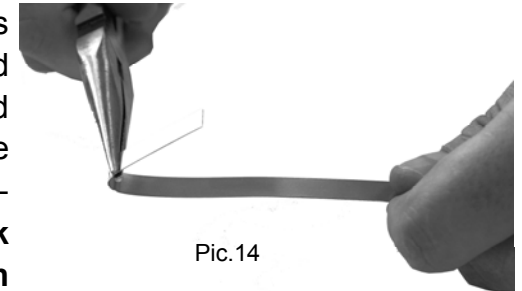
Step 1: Determine the best location for Anchor Ring installation. Anchor Rings can be bent slightly in the field to best fit irregular shape items that will best allow a tight band fitting around item.

Note: When doing a banding double wrap with the 799972 Anchor Ring, The slotted wings may need to be bent down farther to allow the passage of 2 layers of the 799962 1/2" banding.

Step 2: Determine the approximate circumference or perimeter of the item you want to secure the Anchor Ring to. Cut banding material 6" longer than the determined circumference or perimeter. If double wrapping, double the length.

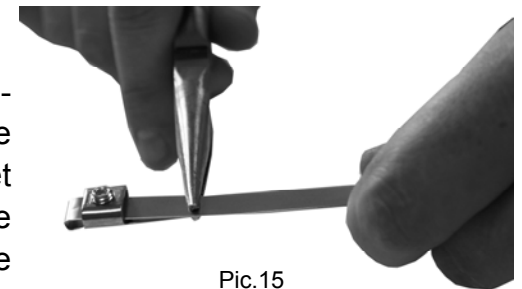
Note: Banding can be cut with banding cutters or with the 799990 Tool by inserting the banding through the nose of the tool. With the banding passing through the nose of the tool, push down on the cutter handle as indicated in Pic. 12.

Step 3: (Pic.14) Using Needle Nose Pliers, bend the end of the band 180 degrees back on its self. The length of the bend back may need to be adjusted depending on the size of the item being retrofitted with Anchor Rings. **The bend back must be at least the length of the Screw Loc Buckle.**



Pic. 14

Step 4: (Pic.15) Slide the appropriate Screw Loc Buckle onto the banding with the set screw on the side opposite the bend back. With the buckle fully inserted into the bend back, pinch the bend back tight against the upper band to secure the buckle to the end of the band.



Pic. 15