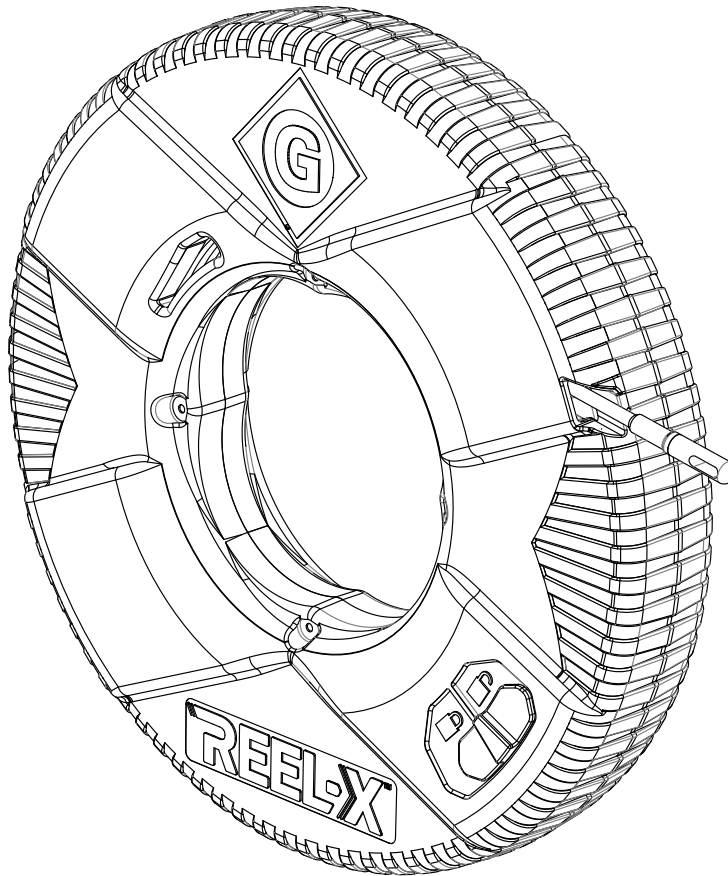


INSTRUCTION MANUAL



Reel-X™ Fish Tape



Read and understand all of the instructions and safety information in this manual before operating or servicing this tool.

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KEEP THIS MANUAL

Safety Symbols

In this operator's manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

indicates a hazardous situation which, if not avoided, Will result in death or serious injury.

⚠ WARNING

indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

indicates Hazards or unsafe practices which, if not avoided, MAY result in injury or property damage.



These symbols mean read the operator's manual carefully before using the equipment. The operator's manual contains important information on the safe and proper operation of the equipment.



These symbols mean always wear safety glasses with side shields or goggles when handling or using this equipment to reduce the risk of eye injury.



This symbol means always wear gloves when handling or using this equipment to reduce risk of hand injury.



These symbols indicates the risk of electrical shock.



This symbol indicates the risk of striking injuries.



This symbol indicates the risk of falling.



This symbol indicates the risk of injury from a chemical substance.



This symbol indicates the risk of burns from a hot surface.



General Safety Warnings

Safety is essential in the use and maintenance of Greenlee tools and equipment. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all the safety information provided.

WORK AREA SAFETY

Keep your work area clean and well lit. Cluttered or dark areas invite accidents.

Keep children and bystanders away while operating tool. Distractions can cause you to lose control potentially injuring yourself or others.

PERSONAL SAFETY

Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, gloves, or hearing protection used for appropriate conditions will reduce personal injuries.

Do not overreach, always keep proper footing and balance. This enables better control of the tool in unexpected situations.

Do not use tools while tired or under the influence of drugs, alcohol, or medication. Stay alert, watch what you are doing and use common sense when operating a tool. A moment of inattention while operating tools may result in serious personal injury.

Do not let familiarity gained from frequent use of this tool allow you to become complacent and ignore tool safety principles. A careless action can cause severe injury within a fraction of a second.



Tool Specific Safety Warnings

Use the correct tool and accessories for your application. The correct tool will do the job better and safer at the rate for which it was designed. Use of the tool for operations different from those intended can result in a hazardous situation.

Before operating this tool, read and understand:

- The instructions for any other equipment or material used with this tool
- Markings on the tool
- Required worksite safety procedures

Do not use fish tape near live circuits. Contact with live circuits could result in severe injury or death.

Always wear safety glasses and gloves when using this tool. Injury could result from sharp edges or from the pulling eye whipping around if the fish tape leaves conduit suddenly.

Do not use fish tape above rated load or use powered pulling equipment. Overloading fish tape could result in the tape breaking and may cause striking or falling injuries.

Do not pull using the housing, only pull on fish tape material. The tape may break or pull from the housing.

Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools and equipment.

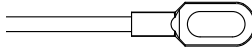
Tool Description & Features

Steel Fish Tapes



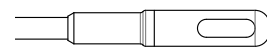
- For general fishing in conduit
- Durable tapes made from oil-tempered spring steel
- Improved low profile tip for easy fishing through all sizes of conduit
- Maximum design strength: 400 lbs (1.7kN)
- 1/8" and 1/4" flat steel profiles to accommodate different fishing situations
- Tapes are laser etched with feet and meter markings every 1' (.3m)

Stainless Steel Fish Tapes



- For general fishing in conduit and wet/corrosive environments
- Corrosion free stainless steel tape for maximum life
- Maximum design strength: 400 lbs (1.7kN)
- 1/8" flat steel profiles to accommodate different fishing situations
- Tapes are laser etched with feet and meter markings every 1' (.3m)
- Fish further and faster with the Speed Flex® Leader

Fiberglass Fish Tapes



- For fishing through conduit with existing cable
- Non-conductive fiberglass tape with low-friction coating for faster and easier fishing
- Perfect for fishing in conduit with wire or cable present
- Maximum design strength: 300 lbs (1.3kN)

Free-Spinning Quick-Change Reel Cartridges

- Reduced tape friction to speed up pull up to 2x faster (when compared with a traditional fish tape)
- Easily swap out cartridges to replace or change fish tape

Ergonomic Design

- Reduce fatigue with lower forces needed to feed & pull tape
- Decrease discomfort during use with a housing that promotes neutral arm & wrist positions
- Minimize strain with a housing designed to encourage holding it closer to your body

Measurement Markings (Steel and Stainless Only)

- Laser etched feet/meter distance markings every 1' (0.3 m) and special stop indicator markings

Secondary Exit

Free up hands by allowing fish tape to lay flat on the ground (Fiberglass only)

Primary Exit

Symmetric design allows for right and left hand use

Textured Grip

Ribbing along the housing allows for a secure hold

Storage Lock

Keeps the reel cartridge locked in place within the housing

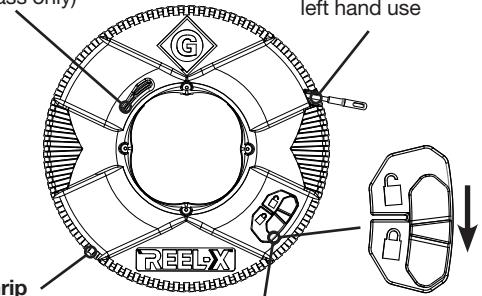


figure 1

Specifications

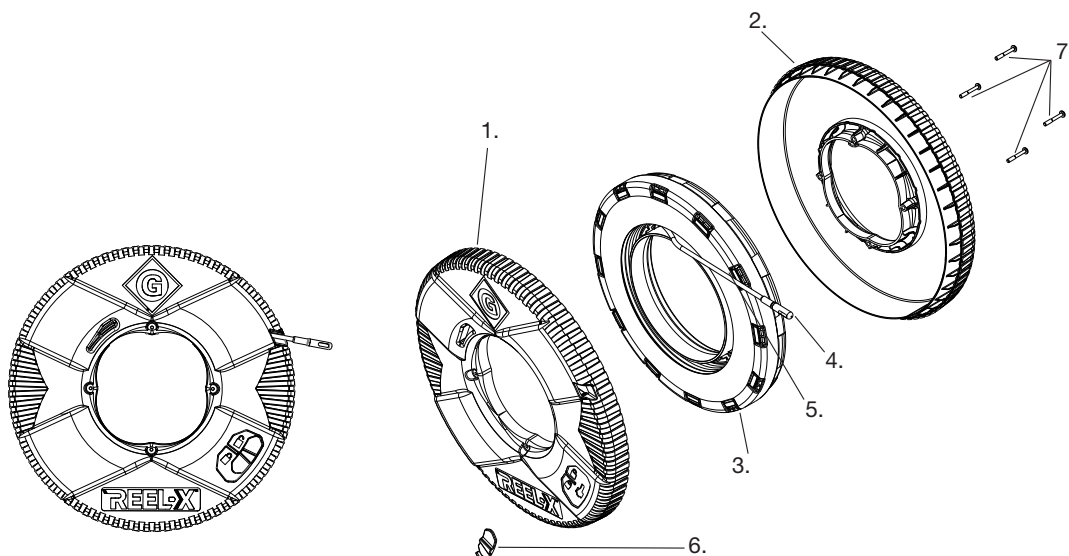
Unit Specifications			
Housing Diameter	Housing Thickness	Cartridge Diameter	Cartridge Thickness
12.8" (325 mm)	2.5" (64 mm)	11.3" (287 mm)	1.5" (38 mm)

Fish Tape Material Specifications							
Catalog Number	Material Type	Diameter	Length	Tensile Strength	Pulling End Type	Weight	Replacement Cartridge
FTXF-50	Fiberglass	11/64" (4.4 mm) Dia.	50' (15.2 m)	300 lbs (1.3 kN)	Eyelet	3.5 lbs (1.6 kg)	RFTXF-50
FTXF-100	Fiberglass	11/64" (4.4 mm) Dia.	100' (30.5 m)	300 lbs (1.3 kN)	Eyelet	4.2 lbs (1.9 kg)	RFTXF-100
FTXS-65	Spring Steel	1/8" (3.2 mm) Wide	65' (19.8 m)	400 lbs (1.8 kN)	Formed Hook	4.4 lbs (2.0 kg)	RFTXS-65
FTXS-125	Spring Steel	1/8" (3.2 mm) Wide	125' (38.1 m)	400 lbs (1.8 kN)	Formed Hook	5.9 lbs (2.7 kg)	RFTXS-125
FTXS-240	Spring Steel	1/8" (3.2 mm) Wide	240' (73.2 m)	400 lbs (1.8 kN)	Formed Hook	8.7 lbs (3.9 kg)	RFTXS-240
FTXS-100W	Spring Steel	1/4" (6.4 mm) Wide	100' (30.5 m)	400 lbs (1.8 kN)	Formed Hook	8.1 lbs (3.7 kg)	RFTXS-100W
FTXSS-65	Stainless Steel	1/8" (3.2 mm) Wide	65' (19.8 m)	400 lbs (1.8 kN)	Speed Flex® Leader	4.4 lbs (2.0 kg)	RFTXSS-65
FTXSS-125	Stainless Steel	1/8" (3.2 mm) Wide	125' (38.1 m)	400 lbs (1.8 kN)	Speed Flex® Leader	5.9 lbs (2.7 kg)	RFTXSS-125
FTXSS-240	Stainless Steel	1/8" (3.2 mm) Wide	240' (73.2 m)	400 lbs (1.8 kN)	Speed Flex® Leader	8.7 lbs (3.9 kg)	RFTXSS-240

Tool Identification

Components

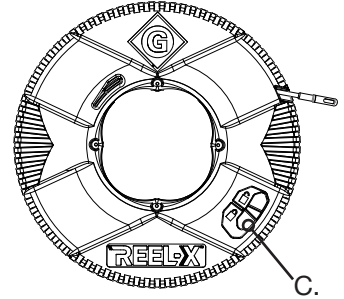
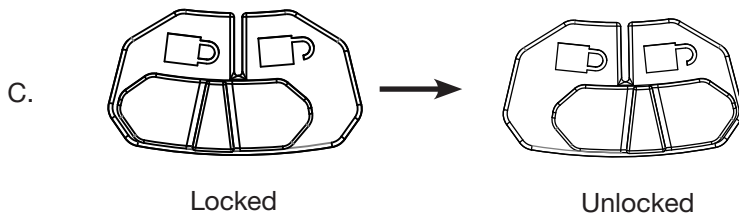
1. Front Housing
2. Rear Housing
3. Reel Cartridge
4. Pulling Eye
5. Fish Tape
6. Storage Lock
7. Screws



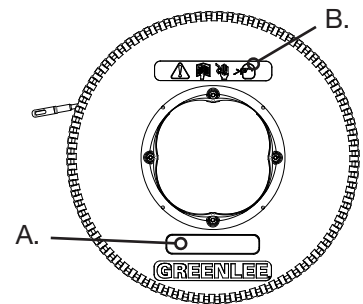
Decals & Locations

Components

- A. Identification & Storage Note
- B. Warning Icons
- C. Lock & Unlock



Front Housing

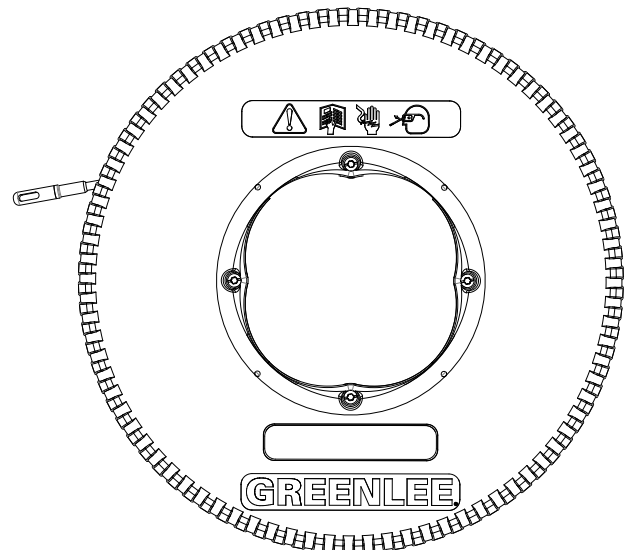


Back Housing

Pre-Operation Inspection

Before daily use, inspect your fish tape and correct any problems before using the tool. If any problems are found, do not use the fish tape until the problems have been fixed.

1. Clean any oil, grease or dirt from the tool. This aids inspection and helps prevent the tool or control from slipping in your grip. Dirty fish tapes can bind and become hard to control.
2. Inspect the tool for:
 - Proper assembly, maintenance and completeness.
 - Any broken, worn, missing, misaligned or binding parts.
 - Any breaks, gouges, nicks, rust or sharp bends (will weaken all fish tape).
 - Presence and readability of the tool warnings.
 - Any other condition which may prevent safe and normal operation.



Tool Operation & Set-Up



⚠ WARNING

Do not use fish tape near live circuits. Contact with live circuits could result in severe injury or death.

Always wear safety glasses and gloves when using this tool. Injury could result from sharp edges or from the pulling eye whipping around if the fish tape leaves conduit suddenly.

Do not use fish tape above rated load or use powered pulling equipment. Overloading fish tape could result in the tape breaking and may cause striking or falling injuries.

Do not pull using the housing, only pull on fish tape material. The tape may break or pull from the housing.

1. Prepare an appropriate work area free of obstructions or hazards.
2. Check the storage lock is unlocked before fishing. (Figure 1)
3. Manually feed the fish tape through the conduit. Hold the housing securely with one hand while feeding with the other, if using the Primary Exit.
If using the Secondary Exit (Fiberglass Only) lay the case flat on the ground with one foot keeping it in place while pulling straight up using both hands to feed tape.
Do not force tape that is jammed or not moving. Remove fish tape and check for kinks and obstructions before trying again.
4. Fasten the pull line or wire securely (Figure 2). For additional security, wrap the pulling end with electrical tape (Figure 3).
5. Pull fish tape back through conduit. Keep a stable stance to prevent falling from the tape exiting conduit suddenly. Do not pull using the housing or when the lock is engaged. Do not pull fish tape over sharp edges or corners.
6. Pull out desired amount of wire or line from the conduit. Remove tape around the connection and separate wire/line from pulling eye.

7. Feed the remainder of the tape onto the reel, stopping so just the pulling eye is out of the case for use on the next job.
8. Engage the lock on the reel to secure the tape for transport to the next site or storage. Secure pulling eye if fish tape is going into storage.

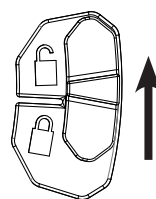


Figure 1

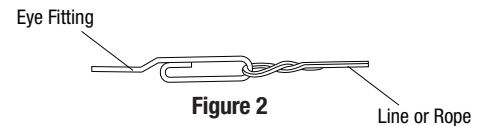
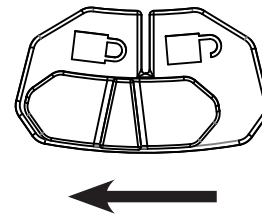


Figure 2

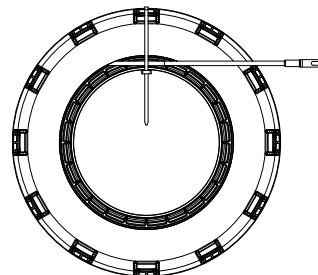


Figure 3

Transportation & Storage



Keep storage lock in the locked position and the pulling eye secure with a zip tie or equivalent when not in use. This keeps the fish tape from unwinding from excessive vibration and shock when transporting or from the stored tension in the fish tape when left alone in storage.



Maintenance & Repair




⚠ WARNING

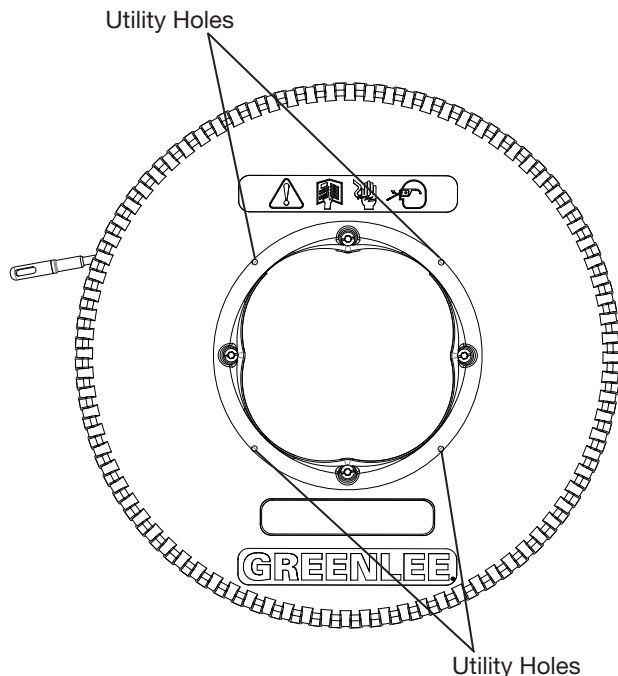
Do not perform any maintenance other than as described in this manual.

Follow instructions from this manual when repairing this tool and use only identical replacement parts. Use of unauthorized parts or failure to follow instructions increases the risk of injury or damage to the tool.

Do not modify fish tape. Modifying the fish tape in any manner may result in personal injury and damage to the tool.

Do not disassemble reel cartridge. Fish tape is coiled under tension and may cause striking injuries if released.

If reel is not moving smoothly, spray silicone lubricant through the utility holes on the back of the reel to lubricate.



If reel is jammed, take apart housing and clean interior and reel cartridge (See Replace Reel Cartridge).

Note: Excessive fish tape disassembly and reassembly may weaken unit.

Replacement/Repair Parts

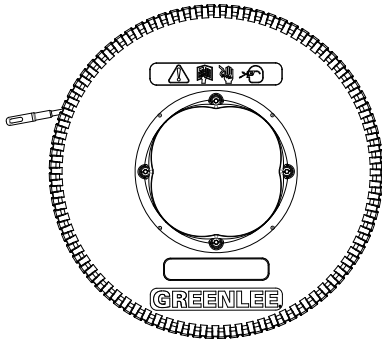
Repair Parts

Cat.	Description	Compatible Tapes
RFTXH	Housing Kit (<i>includes front housing, rear housing, storage lock and screws x 4</i>)	All
RFTXSL	Storage Lock Kit	All
35930	Pulling Eye	Fiberglass
10565	Repair Kit (<i>includes threaded ferrule, splice ferrule and pulling eye</i>)	Fiberglass
439-2	Flexible Fish Tape Leader (solder), 12" L x 1/8" Dia.	Stainless Steel, 1/8" Spring Steel

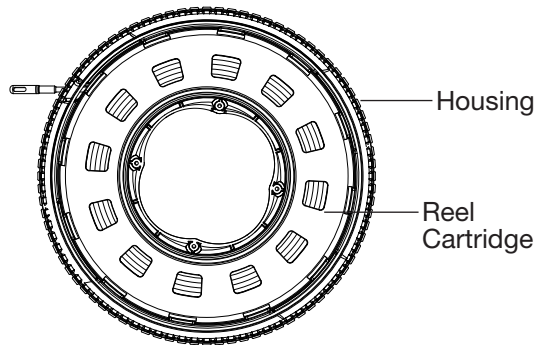
Catalog Number	Material Type	Replacement Cartridge
FTXF-50	Fiberglass	RFTXF-50
FTXF-100	Fiberglass	RFTXF-100
FTXS-65	Spring Steel	RFTXS-65
FTXS-125	Spring Steel	RFTXS-125
FTXS-240	Spring Steel	RFTXS-240
FTXS-100W	Spring Steel	RFTXS-100W
FTXSS-65	Stainless Steel	RFTXSS-65
FTXSS-125	Stainless Steel	RFTXSS-125
FTXSS-240	Stainless Steel	RFTXSS-240

Replace Reel Cartridge

1. Place front housing facing down on a flat, stable surface.



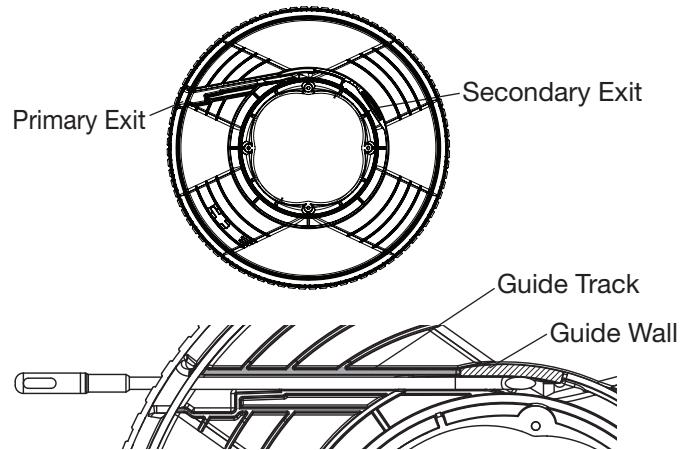
2. Remove the 4 screws and lift up rear housing. Use caution when opening housing. Fish tape is coiled under tension and may shift reel suddenly.



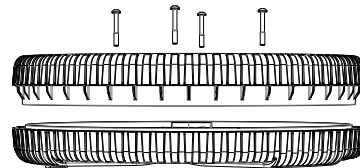
3. Remove reel cartridge from housing.
4. Secure the pulling eye to the reel cartridge for storage or disposal to prevent the tape from unwinding.
5. Cut and remove tie from new reel.
6. Place new reel cartridge into front housing.
7. Place pulling eye through desired exit in front housing.

For the Primary Exit, the fish tape will lay inside the guide track in the outer housing wall with the pulling eye outside the housing

For the Secondary Exit (Fiberglass only), the fish tape will lay in the groove in the inner housing wall with the pulling eye outside the housing. Do not put steel fish tape through this exit. Damage to the tool will result.



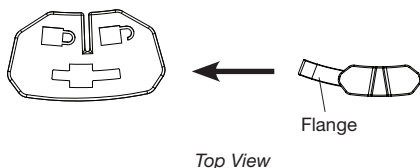
8. Replace the rear housing onto assembly, tabs on the housing inner diameters help make sure the two halves line up.
9. Replace the 4 screws. Screw until tight, over or under tightening the screws will weaken unit. If threads are stripped, replace housing.



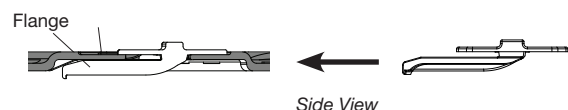
10. Test that the reel spins freely by moving the fish tape pulling eye out and in a few times. If reel does not spin freely, check that everything is aligned properly and pulling eye is inside of guide wall and guide track.

Replace Storage Lock

1. Slide the flange of the replacement lock underneath the housing wall in the direction of the locked marking.



2. Make sure the storage lock is flush with the front housing and slides back to the unlocked position.



Repairing Steel Tape & Replacing Speed Flex® Leader

 
⚠ WARNING
Do not touch the tape, the end of the torch, or any other heated surfaces. Failure to observe this warning could result in burns. A repaired pulling eye will be weaker and can break during use if heated and quenched in liquid. Air cool only.

STEEL TAPE PULLING EYE

1. Clean and dry the fish tape. Be sure to remove all grease and oil.
2. Cut off damaged or kinked portion of the tape.
3. Grip the tape with a pair of insulated pliers. Use a torch to heat the tape until it is a dull red color.
4. Use a pair of pliers to bend tape into a closed loop.
5. Allow the tape to air cool completely.
6. Reheat the tape again to a dull red color and allow it to air cool completely. Do not quench in liquid. Air cool only.

SPEED FLEX® LEADER

1. Clean and dry the fish tape. Be sure to remove all grease and oil.
2. Cut the fish tape below the damaged leader, to provide a straight end.
3. Slide the silver solder ring from the Speed Flex kit on to the fish tape.
4. Apply brazing flux appropriate for silver solder to the end of the fish tape (approximately .50"/mm).
5. Insert the fish tape into the Speed Flex Leader. Position fish tape so the leader is pointing down and solder ring is resting against the leader.
6. Use a propane torch to braze the joint between 1205°F and 1400°F (651°C and 760°C). Let air cool, do not quench in water.

Repair Fiberglass Tape & Pulling Eye

  
⚠ WARNING
A properly bonded pulling eye will have 1/2 the original strength of a new tape. (Maximum strength: 150 lb) Failure to observe reduced strength may result in injury during use. Wear gloves and follow all safety and curing instructions provided by the adhesive manufacturer.

1. Cut the end of the fish tape with a fine-tooth hacksaw or sharp knife. Do not pinch, crack, or crush the fiberglass core.
2. Carefully strip approximately 1/2" (12.7 mm) length of the outer plastic jacket with a wire stripper or sharp knife. Do not cut into the fiberglass core.
3. Use emery cloth to rough up the surface of the stripped fiberglass core.
Note: Do not touch the fiberglass surface after sanding without gloves, shards can get lodged under the skin and cause irritation.
Do not reuse the old end fitting. A new end fitting is required for a good bond.
4. Test assemble the new fitting to the stripped tape to check for a good fit. If splicing, test fit against the splicing piece.
5. Use the adhesive provided in the repair kit (10565) and follow the adhesive manufacturer's safety information and instructions. Apply and spread adhesive on the fiberglass core and immediately insert the end of the tape into the fitting with a twisting motion.
6. Hold new end fitting and fish tape together until adhesive has set.
Note: If splicing, repeat Steps 2-5 for the other end of the tape, using the splicing fitting provided in the repair kit.

Disposal

Parts of these tools contain valuable materials and can be recycled. There are companies that specialize in recycling that may be found locally.

Dispose of the components in compliance with all applicable regulations. Contact your local waste management authority for more information.