KLEIN TOOLS®
For Professionals…Since 1857™

Instructions for the Proper Use and Care of Klein Flat Steel Fish Tapes and Winder Reels

These instructions apply to Klein flat steel fish tapes in 50', 100' and 200' lengths encased in winder reels.

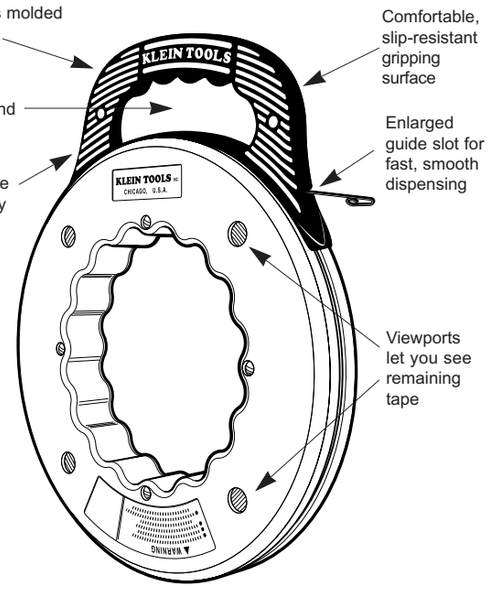
⚠WARNING: Save these instructions. Fish tapes and winder reels must not be used without first reading, understanding and following instructions for the proper use, inspection and maintenance procedures. Failure to read, understand and follow all instructions may result in injury or death.

⚠WARNING: Use approved eye protection when feeding, pulling or rewinding fish tape.

⚠WARNING: Do NOT use any fish tape on or near live circuits. Use extreme caution when working near any electrical equipment.

⚠WARNING: Use a safe work position to avoid loss of balance when using fish tape.

⚠WARNING: Never remove screws while fish tape is coiled inside reel.



Klein Flat-Steel Fish Tapes with Reel

Cat. No.	Tape Length	Reel Diameter
50206	50' (15.2 m)	12" (305 mm)
50211	100' (30.5 m)	12" (305 mm)
50221	200' (61 m)	12" (305 mm)

Replacement Flat-Steel Fish Tapes (without reel)

Cat. No.	Tape Length
50305	50' (15.2 m)
50310	100' (30.5 m)
50320	200' (61 m)

How to Use a Klein Flat Steel Fish Tape

1. Read all warning labels and instructional materials provided with Klein flat steel fish tapes. They provide important information on care and use. Keep all labels and instructional material for future reference.

2. When pulling through conduit which contains any other wires, be certain that power to those wires has been turned off or disconnected.

3. To feed a conduit run, hold the winder handle with one hand, pulling tape from the reel with the other hand. We recommend using a wire-pulling lubricant to reduce friction on the wire, especially in long or multiple bend runs. We suggest Klein Wire-Pulling Lubricant.

4. Be sure the fish tape being fed into the conduit is free of kinks or bends.

5. When your fish tape has been pushed out to the pulling point, your wire or pull line should be securely fastened to the fish tape as shown in Fig. 1 or Fig. 2. The connection can then be wrapped with plastic tape, if you wish, to help prevent it from kinking or pulling open.

Fig. 1 — Fastened to flat steel tape end

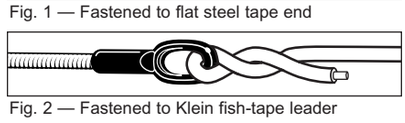


Fig. 2 — Fastened to Klein fish-tape leader

6. Before pulling wire through, protect yourself and others by clearing away hazardous obstructions in case something lets loose and upsets your balance while you are pulling. Stand in a safe area while pulling. Do not force a pull that has become hung up. It is best to remove the wire, clear any kinks or obstructions and, if necessary, use additional lubricant.

7. To pull cable or wire through the conduit, either use your hands (with proper protection), Klein Pliers with Fish Tape Pulling Grip (Cat. No. D213-9NETP), or the Klein Grip-It™ Fish Tape Puller (Cat. No. 50355). **Do not pull fish tape with powered pulling equipment, which could damage or break the tape or cause injury to yourself or others.**

8. Rewind the tape by holding the handle firmly with one hand while rotating the reel. Always store your fish tape in its reel when not in use. This not only protects the tape, but decreases the chances of it being tripped over or accidentally coming in contact with live electrical circuits.

Inspection and Maintenance Procedures

1. Before each use, examine reel: (a) to be sure the four assembly screws are securely in place, (b) that handle is not cracked or broken, and (c) that the reel rotates smoothly under the handle and functions properly.

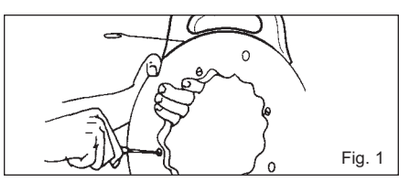


Fig. 1

2. Check the fish-tape leader (if used) for excessive wear, distortion, cracks or nicks that could result in breakage under pulling forces. Check attachment point of leader to fish tape to ensure connection is completely firm and strong.

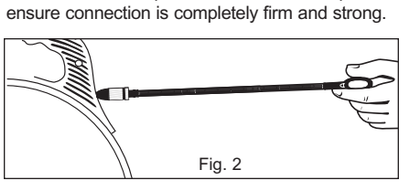


Fig. 2

3. Periodically check the fish tape for nicks, corrosion or other damage that could cause breakage under pulling forces. If the tape and/or the reel becomes dirty or accumulates wire-pulling lubricant, clean with mild detergent and warm water. Avoid harsh chemical agents such as degreasing compounds, turpentine, paint thinner, gasoline and other solvents. Wipe tape dry before storing to avoid rust buildup.

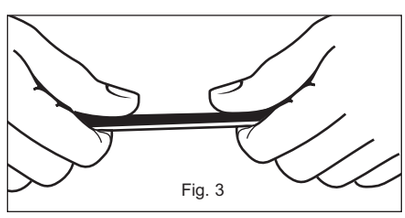


Fig. 3

4. To reform the pulling loop at the end of the flat-steel tape: (a) Heat the tape end to a dull red color with a torch, holding tape with pliers to protect your hands from the hot tape. (b) With the tape red hot, bend the end over 1/2" with another pair of pliers. (c) While tape is still red hot, bend the end over again 1-1/2" to create a double loop, as shown below.

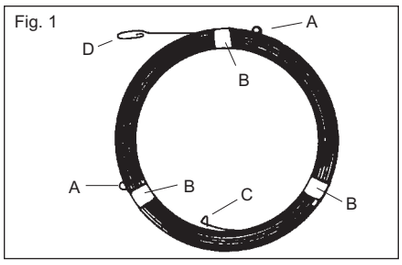
Fig. 4

⚠WARNING: **Never** form the pulling loop into a single loop (that is, into the shape of a fish hook) or create some sharp edge that could cause the fish tape to catch on other objects or cut into the insulation of surrounding wires. The pulling loop should **only** be formed into a double loop as shown in Fig. 4.

How to Replace Flat Steel Fish Tape in Klein Winder Reel

1. **WARNING: Before disassembling your Klein Winder Reel, pull all old fish tape out of the reel as far as it will go. NEVER REMOVE SCREWS WHILE FISH TAPE IS COILED IN THE REEL. RAPID UNCOILING MAY CAUSE INJURY.**

Fig. 1

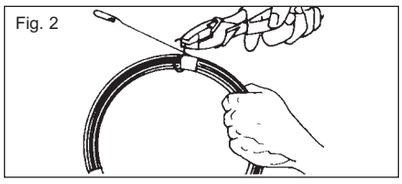


2. After all fish tape has been pulled out, remove all four screws and nuts, and open the reel halves. To remove the old fish tape from the winder handle, simply slide tape out of open slot in handle. **(Note: If your fish tape has a Klein leader attached, be sure to remove it for reuse on your new fish tape. See removal and installation instructions on this sheet.)**

3. **WARNING: Remove only the wire ties (A in Fig. 1) from the replacement fish tape as shown in Fig. 2. DO NOT REMOVE THE ADHESIVE TAPE (B in Fig. 1).**

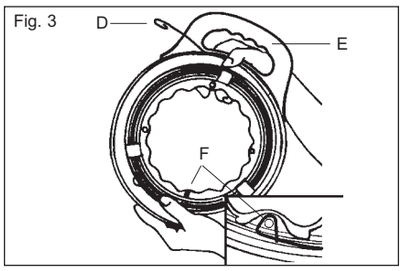
This adhesive tape is provided to keep the spring-steel tape coiled and under tension during replacement. It will break automatically when fish tape is unwound from the reel after it is completely reassembled. The pieces of adhesive tape that remain in the reel will not interfere with fish-tape performance.

Fig. 2



4. To get the pre-formed pulling loop (D in Fig. 3) of the new fish tape through the handle (E in Fig. 3), place edge of fish tape in open slot in handle.

Fig. 3

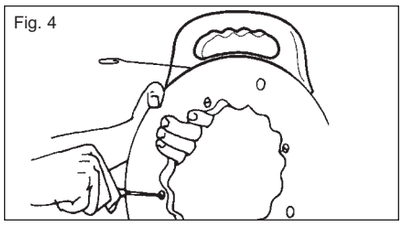


5. Locate the special anchor screw hole (F in Fig. 3) which is located on the end of the case where the warnings are imprinted. Insert a screw through this hole and lay the replacement tape inside the reel with the anchoring loop (C in Fig. 1) over the screw as shown in Fig. 3 (see enlarged inset view).

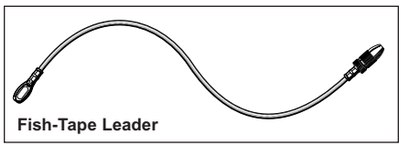
NOTE: Make sure the handle (E in Fig. 3) is PROPERLY ALIGNED IN THE GROOVE at the outside edge of the reel. Klein Cinch® Dark Blue™ Silicone Lubricant can be placed in groove area of the case to reduce friction during use.

6. Reassemble the reel halves, making sure the imprinted Klein Tools names on each half are in alignment. Then replace the remaining three screws and tighten all four nuts as shown in Fig. 4. **IMPORTANT: Before initial use of tape, pull out 4'-6' of tape by hand (DO NOT HOLD HANDLE) to break the adhesive tape described in Step 3.**

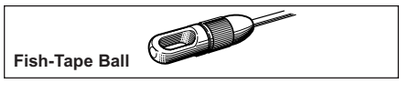
Fig. 4



How to Attach a Klein Fish-Tape Leader or Klein Fish-Tape Ball



Fish-Tape Leader

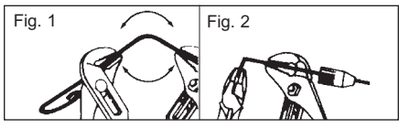


Fish-Tape Ball

1. **WARNING: Wear approved eye protection.**

2. Cut or break off formed pulling loop at end of flat steel tape (Fig. 1). (If your tape has an old Klein fish-tape leader on it, unscrew tapered fitting at bottom of leader as shown in Fig. 2. Push tape out of fitting, cut or break off bent end of tape and remove fitting.)

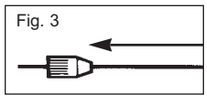
Fig. 1 Fig. 2



To remove an old fish-tape ball, unscrew head from base of fish-tape ball, as shown at right).

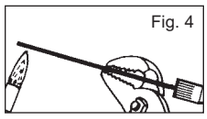
3. Unscrew tapered fitting and push tape end through opening (Fig. 3).

Fig. 3



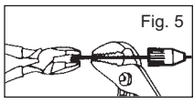
4. Heat tape end to a dull red color with a torch, holding tape with pliers to protect your hands from hot tape (Fig. 4).

Fig. 4



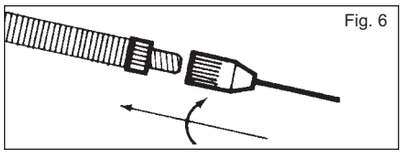
5. While tape is red hot, bend the end over 3/16" with another pair of pliers (Fig. 5). When tape has cooled, be sure bent end of tape turns freely inside the tapered fitting. This permits the leader/ball to rotate without kinking or bending. Reheat and reform the bend if the fitting does not rotate freely.

Fig. 5



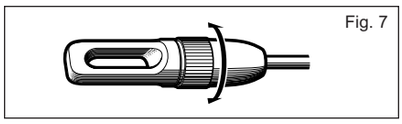
6. To Reassemble Fish-Tape Leader: When tape has cooled, turn tapered fitting onto exposed threads of leader (Fig. 6). Be sure leader turns freely on tape end (if not, see Step 5).

Fig. 6



7. To Reassemble Fish-Tape Ball: When tape has cooled, pull bent end of tape into base, and replace head of fish-tape ball. Firmly tighten to ensure two sections are secure (Fig. 7).

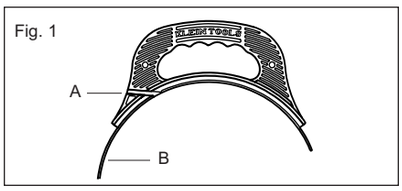
Fig. 7



How to Replace a Klein Fish-Tape Handle

1. **WARNING: Before disassembling your Klein Winder Reel, pull all fish tape out of the reel as far as it will go. NEVER REMOVE SCREWS WHILE FISH TAPE IS COILED IN THE REEL. RAPID UNCOILING MAY CAUSE INJURY.**

Fig. 1



2. After tape is pulled out as far as it will go, remove all screws and nuts except for the anchor screw, which is located on the end of the case where the warnings are imprinted. (Leaving one end of the fish tape on the anchor screw will simplify reassembly.) Then open the reel halves and remove the old handle.

3. Align the new handle in the groove at the outside edge of the reel. **Make sure the inner strap or web (B in Fig. 1) is PROPERLY ALIGNED IN THE GROOVE .**

4. Apply lubricant in the groove area of the case. We suggest Klein Cinch® Dark Blue™ Silicone Lubricant (silicone lubricant is long-lasting, and it helps preserve the plastic parts).

5. Make sure fish tape is looped over the anchor screw. If not, place fish tape anchoring loop over the anchor screw before reassembling the case (the hole for the anchor screw is located on the end of the case where the warnings are imprinted). Make sure the fish tape sits in the exit slot in the handle (A in Fig. 1).

6. Reassemble the reel halves, making sure the imprinted Klein Tools names and imprinted warnings on each half are properly aligned. Replace and tighten all four screws and nuts.

7. Holding the handle firmly, reel in all uncoiled fish tape with free hand. If handle is hard to move, first ensure that fish tape is assembled properly. If action is stiff after checking for proper assembly, additional lubricant may be added to reduce friction.

To order replacement fish-tape handles, see the Klein Replacement Parts Price List or call Customer Service at 1-800-553-4676.

Cautions

The use of fish tapes and fish-tape reels without the proper instructional materials and training could result in serious injury or death.

Klein Tools will supply additional copies of instructional materials and warning tags, or will answer questions on any piece of Klein equipment, free of charge. Call Klein Tools, Inc. at 1-800-553-4676.

- **Read, understand and follow** all instructions and cautions attached to and/or packed with each fish tape before use.
- **Employer** — instruct employee as to proper use and warnings before use of equipment.
- **Only** use a fish tape reel for the specific purpose for which it was designed and intended.

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