



► **LOOSENS** stuck cables by softening binding agents such as wax, rust, soap, dirt, bitumen.

► **LEAVES** empty conduit undamaged and ready for re-use after cleaning and drying.

► **LUBRICATES** to minimize the force required to pull the cable out once it has broken free.

► **LOWERS** duct reclamation costs by eliminating expensive cut-ins.

CableFree® Loosener is designed to loosen and remove cables that are held in conduits by wax, rust, dirt, soap, or other adhesive residues. CableFree® Loosener will dissolve a great variety of binding agents. However, because of the large variety of causes of “stuck” cable, 100% success cannot be guaranteed.

The money saved by a successful removal of stuck cable(s) can be very high. Even a partial success rate can make the investment of time and effort worthwhile. The end-user must make this determination, however, based on the potential economic alternatives to any particular cable removal.

Limitations: The use of CableFree® Loosener is not intended to allow re-use of the cable being removed. The cable(s) being removed may be ruined by the solvent nature of the product and the high pulling forces required for removal.

Also, the removal of a single cable from a group of cables is usually not possible. All the cables in a conduit should be removed in bulk, and new cables installed.

Ordering Information

Quantity: As a rule of thumb, one quart of CableFree® Loosener should be used for every 50 feet of 1" conduit (1 liter per 15 m of 2.5 cm conduit). For larger conduits, the following equation provides a starting estimate of the amount of Loosener for a particular cable removal.

$$Q = .02 \times L \times D$$

Metric Formula: $Q = .024 \times L \times D$

Q = quantity required in quarts (liters for metric)
 L = length of the conduit in feet (meters for metric)
 D = diameter of the conduit in inches (centimeters for metric)

Standard Package	Product Number	Product Description
Pail	CF-640	5-gallon (18.9 liter) Pail of CableFree® Loosener
4 Cans/Case	CF-128	1-gallon (3.78 liter) Can of CableFree® Loosener
12 Bottles/Case	CF-35	1-quart (.95 liter) Bottle of CableFree® Loosener

Use Procedure

► Preparation

- A. All circuits should be de-energized for safe operation. **Do not work with liquid chemicals around live circuits.** Critical switch gear, etc., should be covered and protected from spillage and drippage.
- B. **NOTE: Caution should be exercised when working with these liquid materials. Wear protective goggles and gloves at all times. Consult the material safety data sheets for more complete details.**

► Application

- C. Fish a tape through the conduit system, if possible. Attach a sponge or a rag to the tape, sized to fit snugly in the conduit. If the conduit cannot be fished, see step E.
- D. Pour, pump, or squirt the appropriate quantity of CableFree® Loosener into the higher end of the conduit system. Spread the cleaner throughout the conduit by pulling the sponge or rag back and forth with the tape(s).
- E. Another practical way to spread the Loosener is to use air pressure to “blow” it through the system. If only small amounts of CableFree® Loosener can be loaded at one time, alternate air blasts with doses of Loosener. For long segments, the Loosener can be blown in from both ends of the conduit.
- F. The objective is to get the CableFree® Loosener to all points of the conduit so it can dissolve the binding materials. This may take several swab pull-throughs or air blasts, as well as some persistence.
- G. If there are pull-through boxes with access, treat each segment separately, performing the procedure for each segment.
- H. Place the cable puller, if required, at the optimal pulling location. For easier removal, the cable

should be pulled out at the lower end of a vertical conduit system. It is also best to have any bends in the system as far away from the puller as possible. Attach a hydraulically crimped pulling eye or other strong fastening method to the cable conductors. Pull on the conductors (metal) to take advantage of their strength.

► Removal

- I. Once the CableFree® Loosener has been spread through the conduit, allow it to sit in the system as long as possible (for at least 2 but preferably 24 hours). The older the system, the longer the time required. For long waiting times or hot conduit systems, the conduit ends should be plugged with a rag to trap vapors inside. After waiting, attempt to free the cables by pulling on them. Twisting the cables in one direction can help break them free. Also, pulling on individual cables and breaking them free one at a time sometimes works.
- J. If the cables fail to move, attach a hydraulic jack or try pulling from the opposite end. Raise and maintain high tension on the cables. Try pulling again after a 20-to-30 minute waiting period under tension. Increase tension and repeat steps, if necessary. Introduce “vibration” by hitting the tight cables with a pipe or bat. Such vibration can help break the cables free.
- K. If the cable is still stuck, cut the conduit somewhere where it’s accessible and try pulling the cables out from the middle. Repeat the loosening process with additional CableFree® Loosener, if necessary. Keep trying the procedures above until you break the cable free.

► Cleanup

- L. Once the cable is removed, pull a water-soaked rag through the conduit, then pull a drying swab back and forth until the conduit is dry. Blow air through the conduit until no CableFree® Loosener odor remains.

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Important Notice: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end-user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use.

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