

## HANDLINES

### DESCRIPTION AND USE

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#### 1. GENERAL

**1.01** This section covers the description and use of handlines which are used by outside plant craftsmen for raising or lowering tools and materials in aerial or underground work operations. Precautions which must be observed in the use of handlines are also outlined.

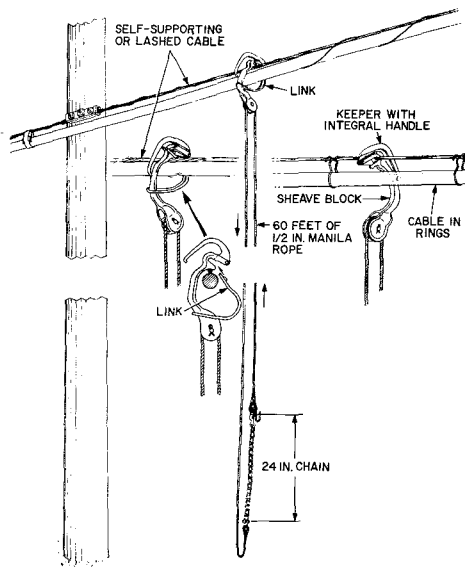
**1.02** This section is reissued to include information on two additional handlines available for use by outside plant forces.

**1.03** ♦Refer to Section 081-510-101 for the inspection, cleaning, care, and storage of manila rope.♦

#### 2. AERIAL HANDLINE

**2.01** The Aerial Handline illustrated in Fig. 1 consists of a supporting hook with integral one-sheave block fitted with 60 feet of 1/2-inch manila rope. The supporting hook is shaped to keep clear of the cable and is equipped with a handle having a keeper at one end to lock the

hook to the strand on ring-supported cable. A metal link is provided to prevent disengagement of the block from the strand when the handline is used on lashed cable or self-supporting cable.



**Fig. 1—Aerial Handline**

**2.02** The 60-foot manila rope has a solid steel ring in the eye splice at one end and a hook in addition to the ring at the other end. ♦Thimbles in the eye of the splices prevent an abrading action of the rings or hook on the manila rope.♦ A 24-inch length of chain with a shackle at one end and snap-hook at the other is used to prevent scorching

the rope fibers on hot solder pots when the ends of the rope are attached to make a continuous line for ease in guiding objects being raised or lowered.

**2.03** Fig. 1 illustrates the methods for attaching the aerial handline to strand where the cable is supported by rings as well as where the cable is lashed or is self-supporting cable.

### 3. B AERIAL HANDLINE

**3.01** The B Aerial Handline, Fig. 2, attaches to the strand in the same manner as the Aerial Handline. It is intended primarily for one-man use and is equipped with a locking mechanism which permits clamping the rope temporarily to hold the load at any desired height to free the hands of the workman. The rope is clamped by pulling the fall line away from the load line and is released by a straight pull on the fall line. This handline is fitted with 60 feet of 3/8-inch manila rope equipped with ring in one end and ring and hook in the other end. The 24-inch length of chain can be used in this handline as described in 2.02 for the Aerial Handline. Because of its lower load capacity due to the smaller rope and locking mechanism, this handline is restricted to raising and lowering loads not exceeding 100 pounds.

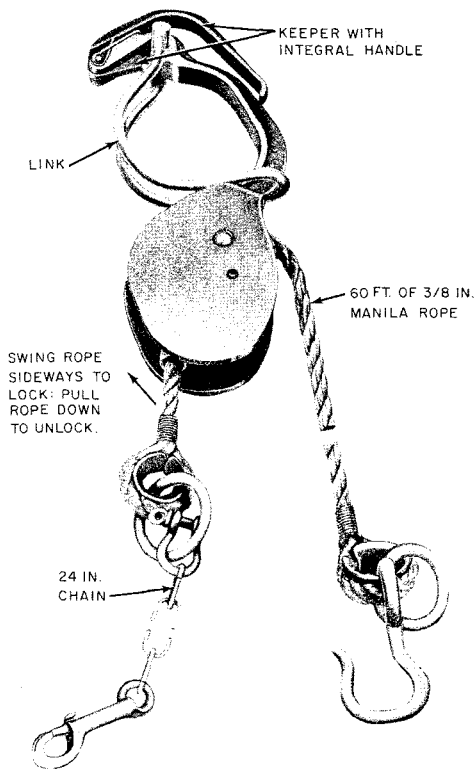


Fig. 2—B Aerial Handline

### 4. HANDLINES (GENERAL USE)

**4.01** The two handlines shown in Fig. 3 are available for use in outside plant operations.

**4.02** The 3/8-inch manila rope handline is intended for use by the installation forces to raise service drop wires to pole mounted aerial distribution cable plant. The 3/8-inch handline is available in either 50- or 100-foot lengths. One end of the handline is terminated in an eye splice and the other end in a crown splice. Both ends are served with waxed linen cord for approximately 1/2 inch.

**4.03** The 1/2-inch manila rope handline is intended for general construction work. It is available in a 60-foot length only. One end of the handline is terminated in an eye splice and the other in a crown splice with approximately 1/2-inch servings at both ends.

### 5. UNDERGROUND HANDLINE

**5.01** The underground handline shown in Fig. 4 is intended for use in outside plant splicing operations. It consists of 20 feet of 5/8-inch manila rope with an eye splice at one end to facilitate setting up cables in manholes and a hook at the other end for attaching tools and materials to the handline for raising or lowering operations.

### 6. PRECAUTIONS

**6.01** When working above or near electric power or trolley feeder wires, exercise extreme caution in using handlines to avoid making contact with the wires.

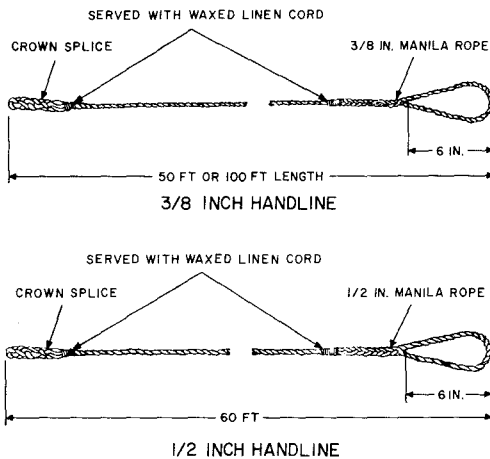


Fig. 3—Handlines

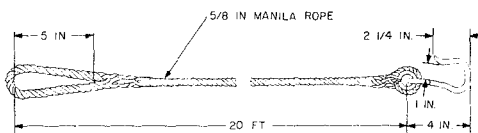


Fig. 4—Underground Handline

**6.02** Do not use a wet handline where there is any chance that it may contact an electrical power source except in an emergency and then only when craftsmen are protected by insulating gloves.

**6.03** Extreme care should be exercised when using a wet handline since it is more difficult to grip the rope securely. Air and dry wet handlines as described in Section 081-510-101.

**6.04** Make sure the block and locking handle is properly installed on the strand before the aerial handlines are used for any purpose.

**6.05** Make sure that tools and materials are securely attached to a handline before they are raised or lowered.

**6.06** Do not drop aerial handlines from the pole or strand.

**6.07** Do not permit the rope to slip through the hand in lowering a load. Use the hand over hand lowering procedure.

**6.08** Whenever practical, raise and lower tools and materials while standing in a position where the movement of the load to its destination can be observed. **Always stand on the ground when lowering a load with aerial handlines in order to keep the hands from being pulled into the block.**

**6.09** Stand clear as far as possible when raising and lowering heated material, such as solder pots, paraffin pots, etc.

**6.10** Ensure that no one is under a load while it is being positioned, raised, or lowered with a handline.

**6.11** Do not leave loads suspended on aerial handlines for extended periods. The locking mechanism on the B Aerial Handline is only to be used as a convenience for temporarily holding a load during raising and lowering operations. An example would be when holding an aerial platform in the raised position while a workman ascends or descends a ladder to perform the next step of the operation.

**6.12** When a handline is not being used, secure the lower end out of the way of traffic or pedestrians by securely tying it to the ladder or pole.

## 7. MAINTENANCE

**7.01** Inspect the rope before the handline is used to ensure that it is in good condition.

**7.02** Do not store handlines where they will come in contact with hot paraffin or solder pots, furnaces, and sharp edged tools.

**7.03** Lubricate the sheave bearing of the aerial handlines occasionally with any commonly used automobile engine oil. Keep oil from the locking mechanism in the B Aerial Handline.