

# ELECTROLINE

## ASSEMBLY INSTRUCTIONS

For the following "M" Series Plugs: 300, 500, 700, 800, 1500, 1600, 1700, 1800, 1900, 2500, 2600, 3200

Electroline terminations have been used with ropes since 1933. The strength of the termination, ease of assembly, and the ability to inspect for proper termination, contribute to the continued acceptance of these fittings. Following these simple steps is your assurance of a durable installation. However, many factors determine the safety of any rope assembly. **PLEASE OBSERVE ALL USE AND CARE INSTRUCTIONS SUPPLIED WITH THE ROPE.**

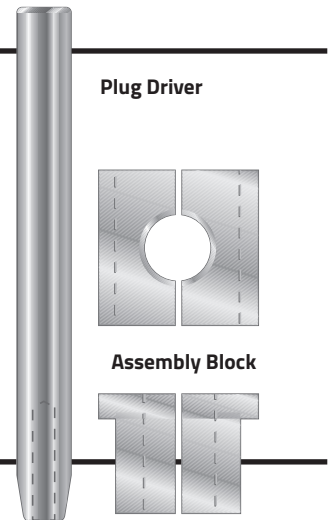
### RECOMMENDED TOOLS:

- Assembly Blocks\*
- Hammer
- Screwdriver
- Plug Driver\*
- Wrench
- Vise

### ASSEMBLY KITS

Rope Size	Kit#
1/16-3/32"	SP-307-D
1/8-5/32"	SP-307-E
3/16-7/32"	SP-307-E
1/4-9/32"	SP-307-G
5/16"	SP-307-H
3/8"	SP-307-J
7/16"	SP-307-K
1/2"	SP-307-L
9/16"	SP-307-M
5/8"	SP-307-N
3/4"	SP-307-P
7/8"	SP-307-Q
1"	SP-307-R
1-1/8"	SP-307-S
1-1/4"	SP-307-T
1-3/8"	SP-307-V
1-1/2"	SP-307-W

\*Assembly kits are recommended for easier and more efficient assembly of the fittings. The assembly block helps prevent damage to the rope during assembly. The plug drivers help seat the plug. The assembly kits are available from Electroline.



**STEP 1: Slide the sleeve over the rope, secure the rope in the assembly blocks and tighten the vise.** (Figure 1) If the Esmet assembly kit is not available, assembly blocks with a hole 1/32" less than the diameter of the rope can be made. If the rope has seizing, it may be easier to install the sleeve after the seizing has been removed. Before tightening the vise, be sure enough rope extends beyond the sleeve. (see dimensions in Figure 1).

**STEP 2: If the rope has a fiber core, remove it.** Remove the sleeve, unlay two strands and cut out the fiber core as far down as possible then replace the sleeve.

**STEP 3: Unlay the rope.** (Figure 2) Gently force a screwdriver between the strands to unlay the rope. When done correctly, the strands will form a symmetrical basket. Do not straighten the spiral lay of the strands, unlay any wires that make up the strand, or allow the strands to cross each other inside the sleeve.

Rope Size	B
1/16"	9/16"
3/32-1/8"	5/8"
5/32-3/16"	3/4"
7/32-1/4"	13/16"
9/32-5/16"	1"
3/8"	1-1/8"
7/16"	1-5/16"
1/2"	1-1/2"
9/16-5/8"	1-5/8"
3/4"	1-7/8"
7/8"	2-1/4"
1"	2-3/4"
1-1/8"	3-1/8"
1-1/4"	3-5/8"
1-3/8"	4-5/16"
1-1/2"	5-1/8"

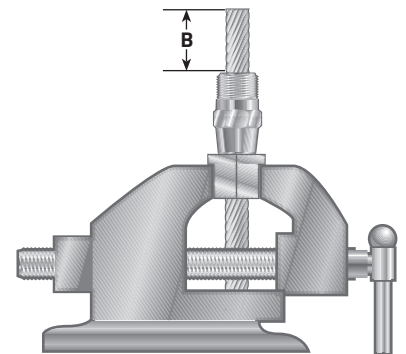


Figure 1

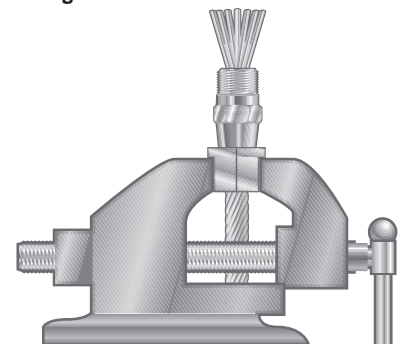


Figure 2



**STEP 4: Install the Plug.** (Figure 3) Go to A, B or C depending on the plug type and follow the instructions below.

- A) **Solid plug:** Place the plug in the center of the strands starting with the tapered end.
- B) **Plug with a center hole:** Slide the plug over the core.
- C) **Two-part plug:** Place the two plugs around the center core of the rope

Using a hammer and the plug driver (if the Esmet assembly kit is not available a metal tube can be used), pound the plug into the sleeve while assuring that the strands are spaced somewhat equally around the plug. Drive the plug until firmly seated and no more than 1/3 of the plug is visible above the sleeve.

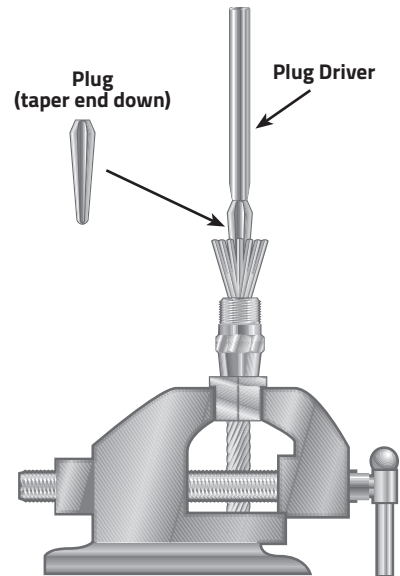


Figure 3

**STEP 5: Form the rope around the plug.** (Figure 4) Re-clamp the assembly in the vise on the flat sides of the sleeve. Using the hole in the plug driver, bend the outer strands toward the center so the socket can be easily applied over all the strands. On larger ropes, a hose clamp may be helpful.

**STEP 6: Lubricate Threads.** If assembling stainless steel parts, all threads must be coated with a dry film lubricant (MIL-L-23398) or an anti-seize lubricant (MIL-A-907). A lubricant may also ease in the assembly of fittings manufactured from other materials.

**STEP 7: Install the Socket.** By twisting the socket over the strands, engage the threads and tighten until four or fewer threads are visible. If four or more threads are visible, proof-load the cable and re-tighten the socket. **Caution:** There is no specific requirement for torque. However, damage can occur to the socket if it is overtightened on the sleeve.

**STEP 8: Inspect for proper assembly.** (Figure 5) Prior to proof-loading, strands visible through the inspection hole are your assurance of a proper assembly. The end of the rope may not be visible in the inspection hole after proof-loading.

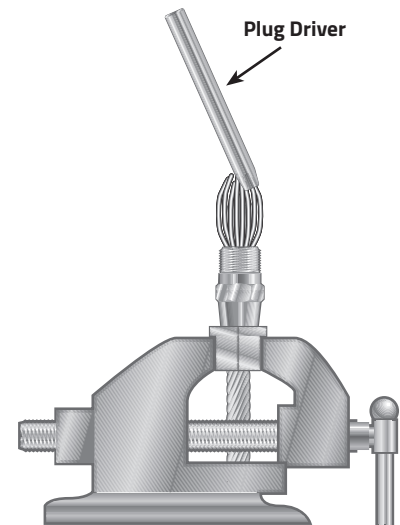


Figure 4

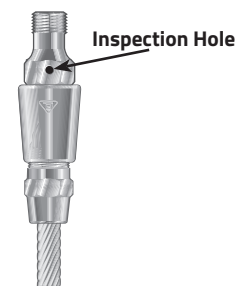


Figure 5

Most fittings are rated for 100% of EIP rope (for straight-line pull only). Please consult an Electroline sales associate or review the Electroline catalog for specification information. Rarely do applications require a fastening device (i.e. set-screw, Loctite®, lock-wire, etc.) to retain the sleeve in the socket. The socket can be removed from the sleeve at any time for inspection and will not affect the holding efficiency of the sleeve and plug. However, a new plug is necessary if the rope is re-terminated. Periodically inspect the socket for tightness.