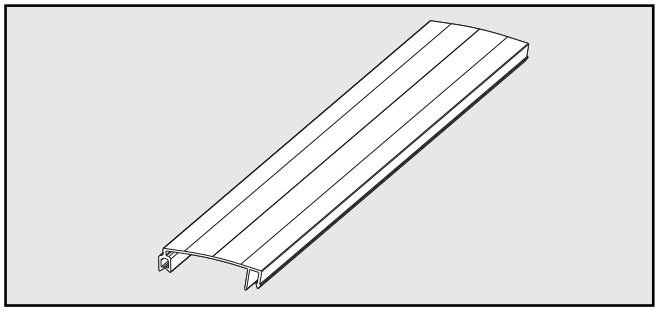
INSTALLATION INSTRUCTIONS

EPP-4041-9/22

Medium Voltage Line Cover

MVLC-18



TE's Insulation & Protection

Scan / Click QR codes and get video support.

This installation manual contains video information.

In the case of any inconsistency, the written installation instructions shall prevail.

Product Information

Product Description	Voltage Class (kV)	Application Range Conductor Size (mm^2)	Application Range Conductor Diameter (mm)
MVLC-18-A/U	15	Up to 185	18
MVLC-18-A/241	25	Up to 185	18

Tool Description	Tool Information
MVLC-HAND-TOOL-02	MVLC-18 Hand Tool
MVLC-18-TOOL-03-2006	MVLC-18 Mechanical Tool

Please dispose of all waste according to environmental regulations.

For more information: te.com/energy

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Before Starting

- Check to ensure that the kit you are going to use fits the insulator/bushing.
- Refer to the kit label and the title of the installation instructions.
- Components or working steps may have been modified since you last installed this product.
- Carefully read and follow the steps in the installation instructions.

General Information

- Check core preparation dimensions before installing the product.

Safety Instructions

DANGER

When installing electrical power system accessories, failure to follow applicable personal safety requirements and written installation instructions could result in fire or explosion and serious or fatal injuries.

DANGER

As TE Connectivity (TE) has no control over field conditions which influence product installation, it is understood that the user must take this into account and apply his own experience and expertise when installing product.

DANGER

Working around energized high-voltage systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling high-voltage electrical equipment. De-energize and ground all electrical systems before installing product.

DANGER

Power distribution and transmission products must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures.

CAUTION

Read and understand the contents of these instructions before installation and follow all locally approved procedures and safety practices before installing or operating this equipment.

CAUTION

These instructions cannot cover all details or variations in the equipment, procedures, or processes described, nor provide directions for meeting every possible contingency during installation, operation, or maintenance. When additional information is desired to satisfy a problem not covered sufficiently for the user’s purpose, please contact your TE sales representative. These instructions are not intended to supersede or replace existing safety and operating procedures.

NOTICE

Upon receipt of a product, inspect it thoroughly for damage and loss of parts incurred during shipment. If damage or loss is discovered, file a claim with the carrier immediately or contact your TE representative.

Do Not Touch MVLC

DANGER

The MVLC is not a shielded device and therefore must be treated as a bare conductor. DO NOT touch an energized MVLC covered line at any time without the proper safety precautions to avoid an electrical shock. Use rubber cover up materials to protect workers from the installed MVLC on one phase as work is completed on other phases.

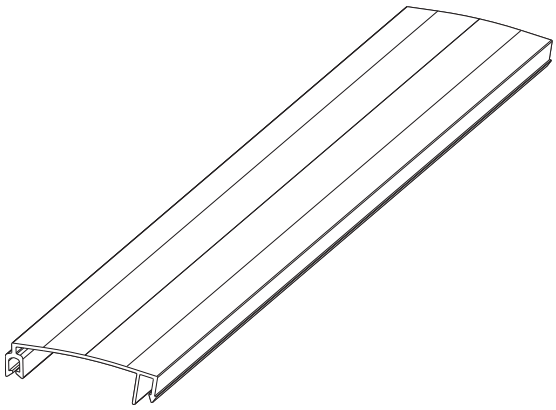
The MVLC installation must be made in accordance with company approved safe work practices when working with an energized conductor. Failure to do so can result in serious injury or death.

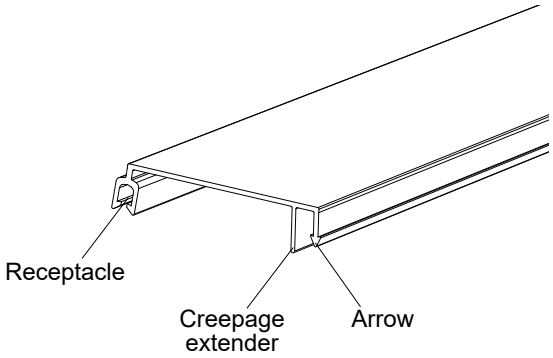
Personal protective equipment must be utilized at all times during MVLC installations.

Tool, Product Information and Features

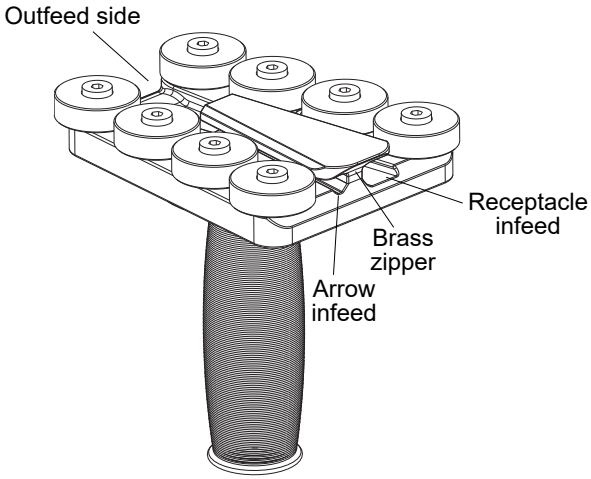
Watch video
(View-0218)

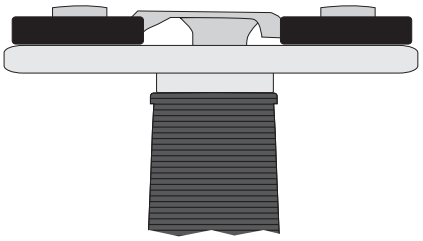
MVLC-18 Profile (as supplied)



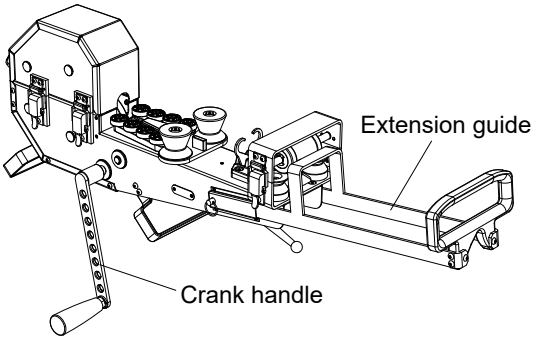


MVLC-18 Hand Tool

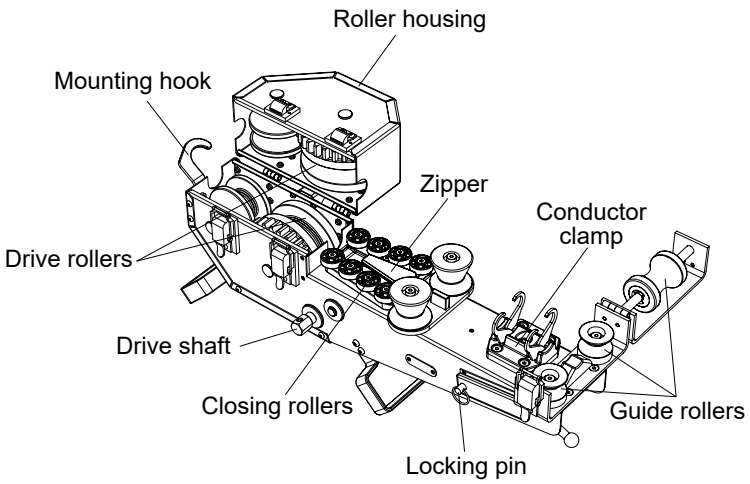




MVLC-18 Mechanical Tool



MVLC-18-Tool-03-2006



A. Installation Instructions-MVLC-18 Hand Tool

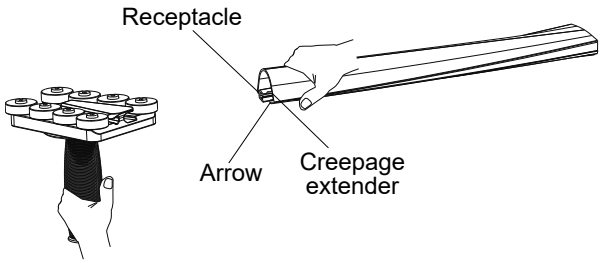
Recommended Before Installation on Conductor

Place a 6-12" (150-300 mm) length of MVLC in your right hand and MVLC hand tool in your left hand.

NOTE

Place your strongest hand on the MVLC.

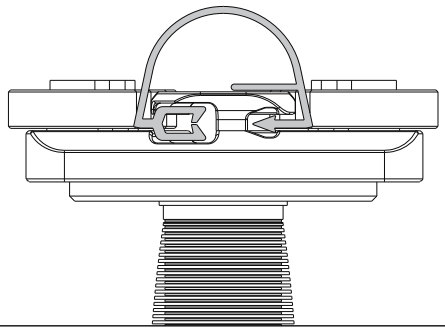
A1



Alignment With the Tool

Make sure that the arrow and creepage extender are on the near side and the receptacle is on the far side.

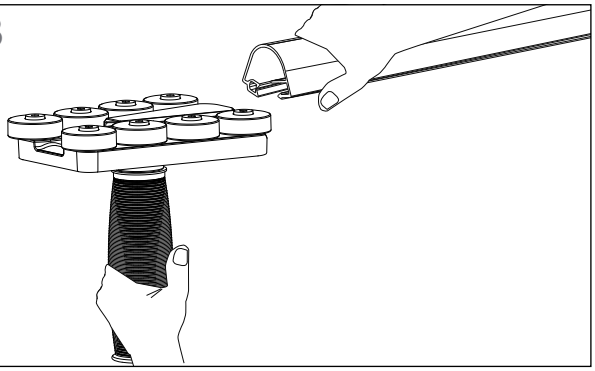
A2



Aligning the Profile

Feed either end of the cut length of MVLC-18 into the MVLC hand tool. Use your right hand as a funnel to initiate the wrapping/closing of the product.

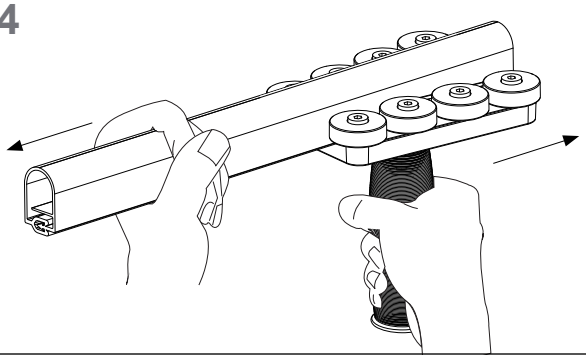
A3



Closure Operation

While keeping the creepage extender above the brass zipper, slide the arrow and receptacle into their respective compartments underneath the brass zipper. Use your hand to continue funnelling the MVLC-18 extrusion as you push it through the MVLC-18 hand tool.

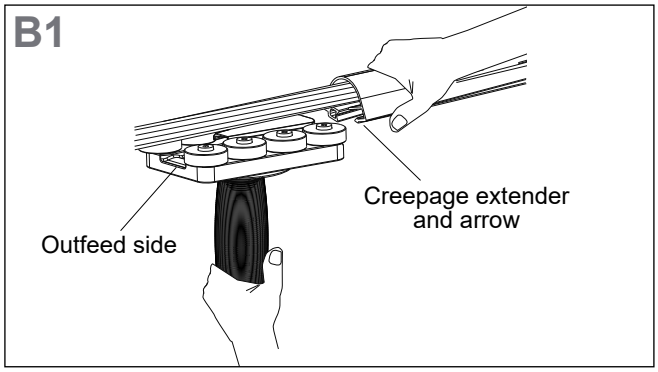
A4



B. Install MVLC-18 on Conductor (Short length)

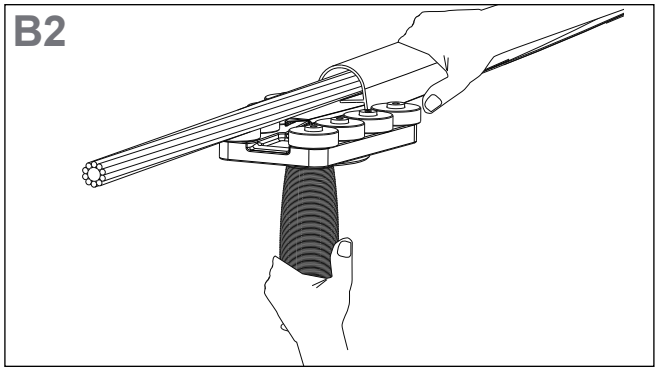
Placement and Setup

To install MVLC on conductor, place the hand tool under the conductor. Feed either end of the cut length of MVLC-18 into the MVLC-18 hand tool. Use your right hand as a funnel to initiate the wrapping/closing of the product.



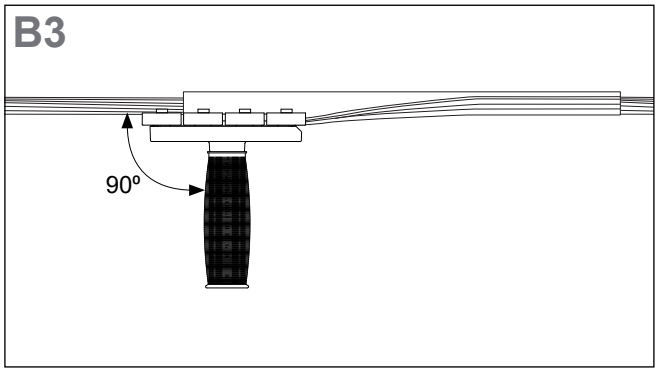
Beginning Installation

Align the guide ribs of the MVLC-18 extrusion with the roller grooves as you push the MVLC-18 between the closing roller of the MVLC-18 hand tool.



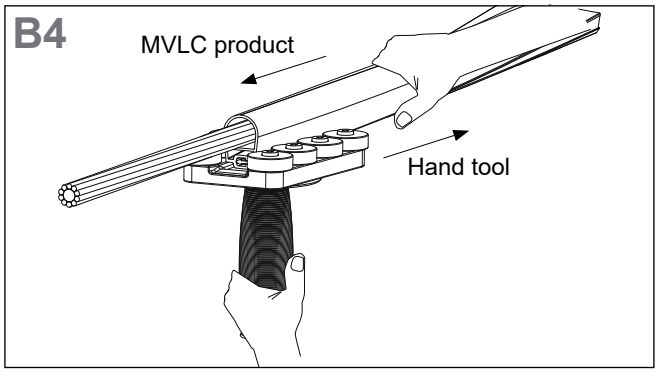
Tool Orientation

Keep the angle between the conductor and the MVLC-18 hand tool approximately 90 degrees.



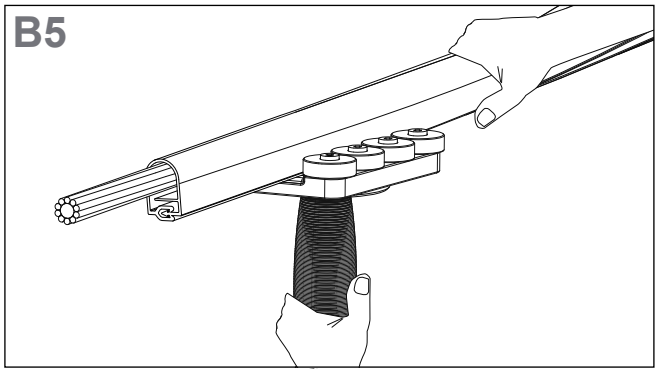
Follow Through

Continue sliding the MVLC towards the hand tool, ensuring that the creepage extender stays below the conductor, but slides on top of the brass zipper. Slide the arrow and receptacle into their respective compartments under the brass zipper.



Closure Operation

Continue pushing the product to the left and the hand tool to the right untill the MVLC installation is complete.

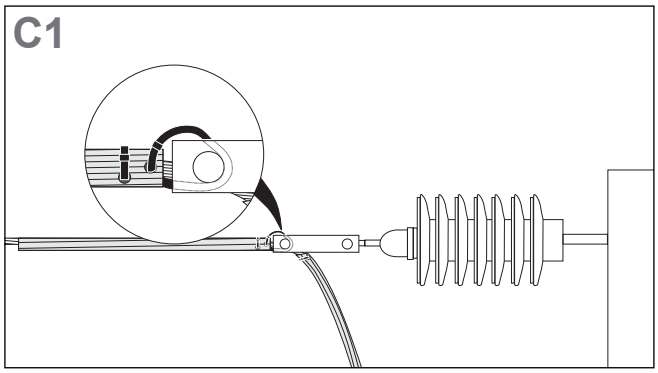


C. Securing MVLC-18 on Conductor (Short length)

Watch video
(View-0219)

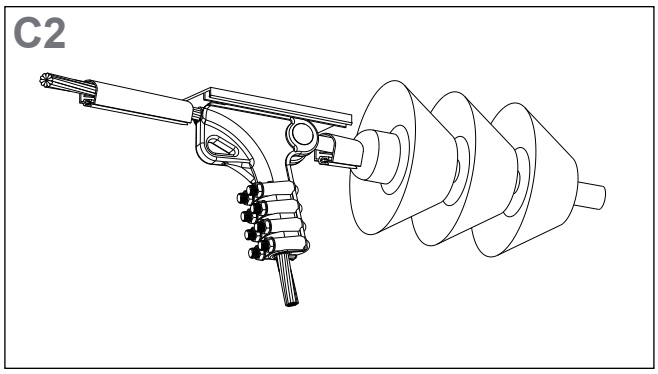
Securing With Cable Tie

With the MVLC installed around the conductor it can be secured using a cable tie around insulator connection. Make small holes in the end of the MVLC (ideally before installing) and then wrap a cable tie around and through the hole.



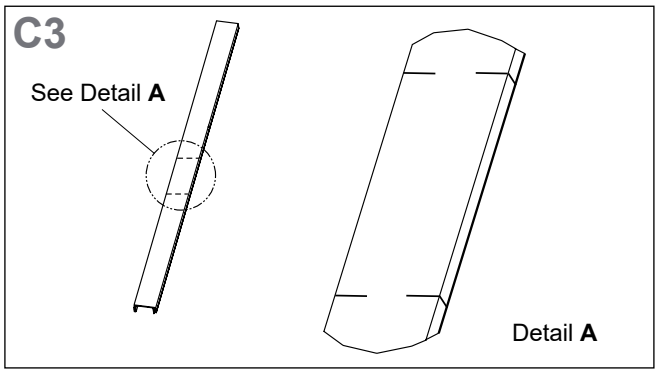
Self Securing

Prepare the MVLC before installing around the conductor and secure in place without the need for additional fixings.



Prepare the Self Securing MVLC

Create small cuts from each edge of the profile in 2 locations (slightly longer than the top of the connector).



D. Installation Instructions-MVLC Machine Tool

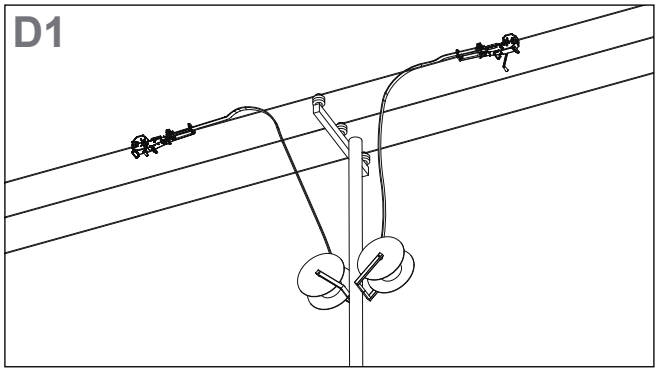
Position Spool of MVLC

Secure MVLC spool to the pole, to the bucket, or from the ground depending on the safe work practice of your company. Position the spool to insure the MVLC will feed correctly into the MVLC installation tool without sharp bends.

NOTE

Before installing on a conductor, follow steps below without a conductor as a trial to make sure the installation procedure is understood.

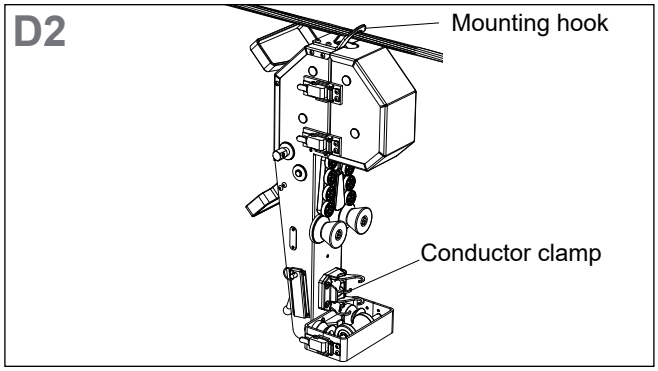
D1



Attach Tool to Conductor

Open the conductor clamp, and hang the installation tool on the conductor by the mounting hook.

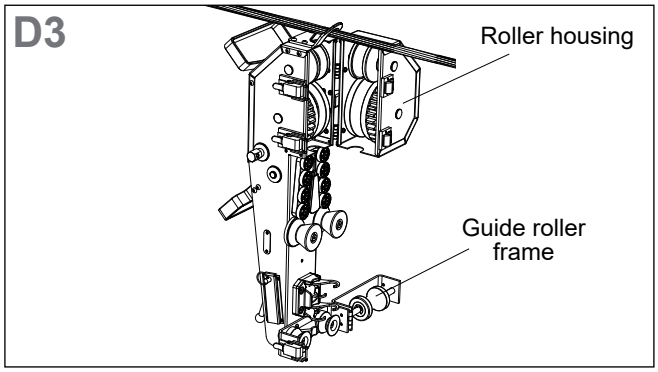
D2



Open the Tool

Unlatch and open the roller housing and guide roller frame.

D3



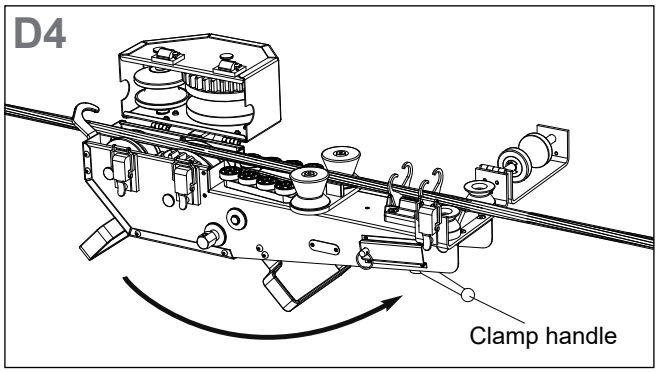
Fasten the Tool to the Conductor

Swing the installation tool up to the conductor and tighten the conductor clamp. DO NOT OVER-TIGHTEN!

NOTE

It is recommended that the section of the conductor which going to be secured on has PVC insulation tape installed to protect during installation.

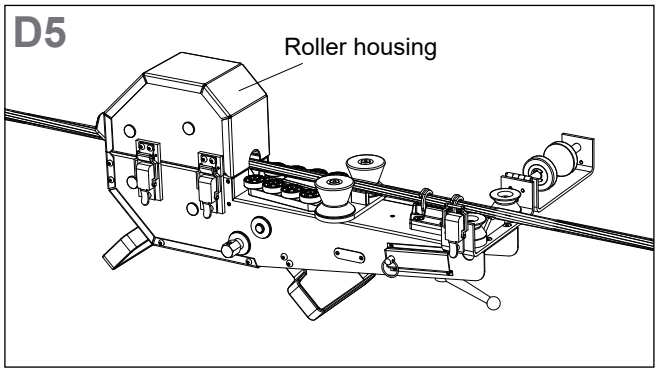
D4



Close and Latch Roller Housing

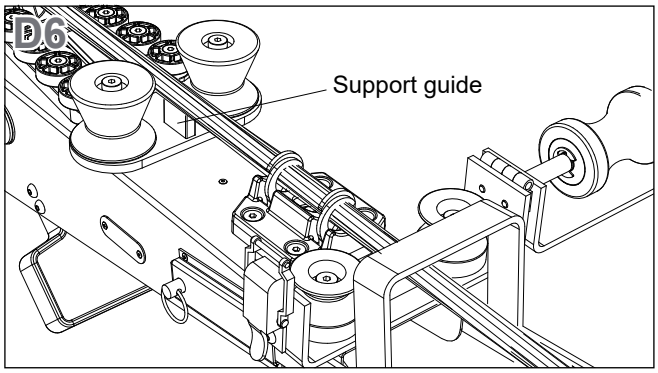
While lifting the drive roller end of the tool, close and latch the roller housing.

D5



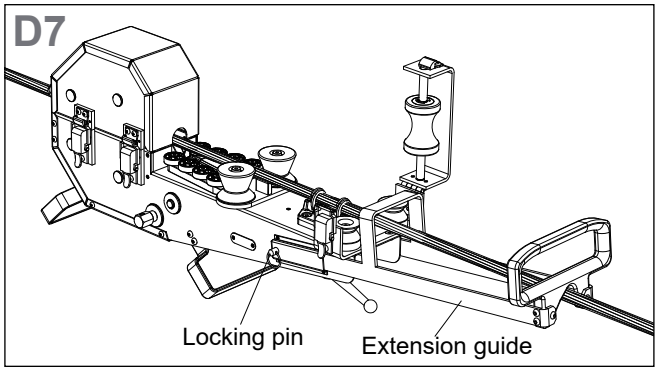
Check Alignment

Make sure the conductor rests in the center of the conductor support guide.



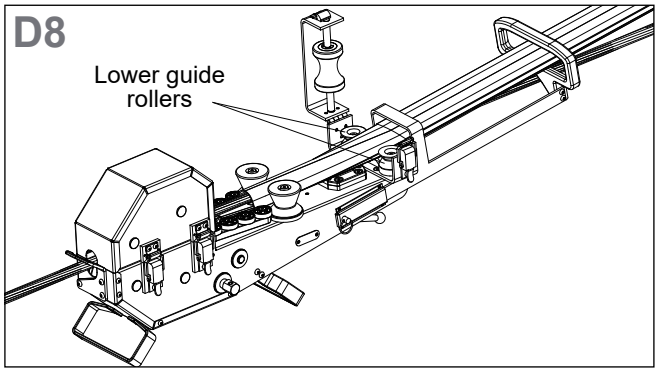
Install Extension Guide

Install the extension guide and secure it with the locking pin.



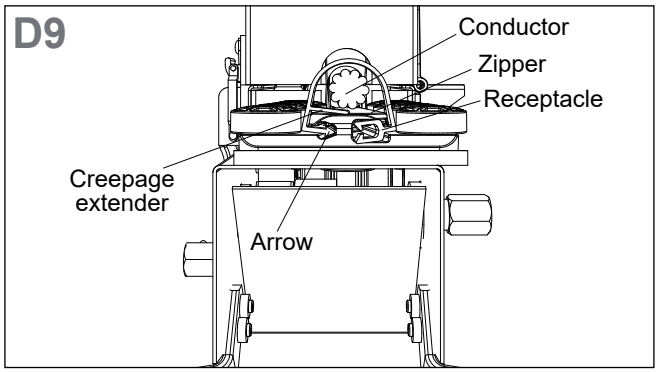
Align the MVLC-18 Extrusion

Feed the extrusion through the extension guide and start it into the closing mechanism. Push the extrusion down between the lower guide rollers.



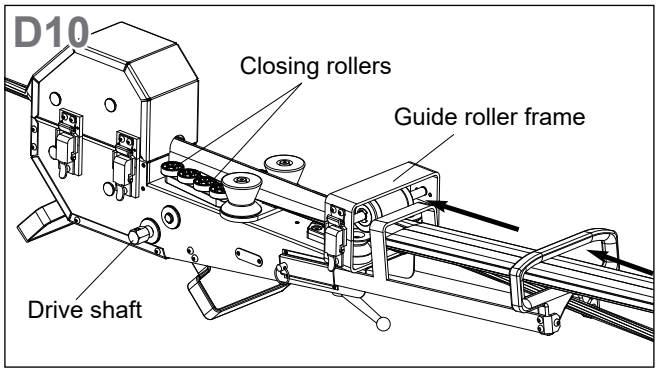
Check Alignment

The receptable and arrow of the MVLC extrusion must be in the pockets completely under the zipper. The creepage extender must be above the zipper and under the conductor.



Close and Latch the Guide Roller Frame

Close and latch the guide roller frame. Shove the MVLC-18 extrusion through the closing rollers and into the drive rollers until you see the drive shaft rotate.



Start Manual Installation

CAUTION

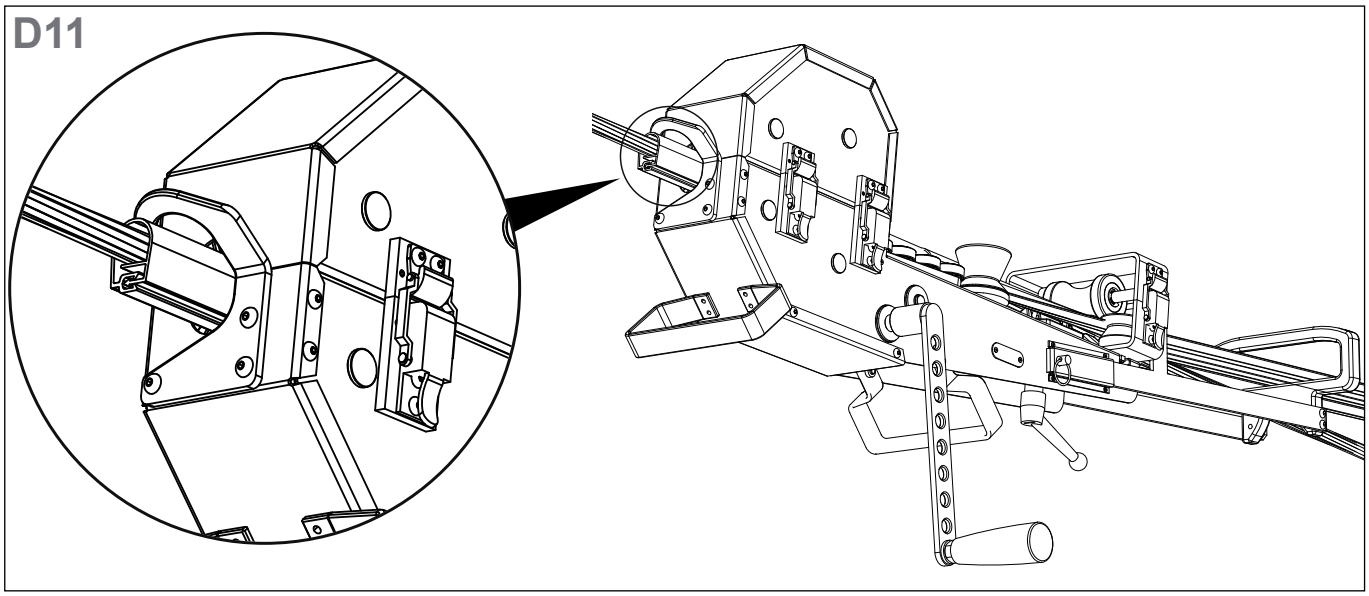
Keep hands and other objects away from openings and rollers to avoid pinching.

Hand crank a few turns until the MVLC exits the MVLC tool. Check to see that the MVLC is properly closed and positioned on the conductor as shown.

NOTE

If the MVLC is not properly closed, cut at the feed guide and hand crank forward to remove the short length.

Do not try and "back out" the MVLC, as it will damage the tool. Start a new piece of MVLC.



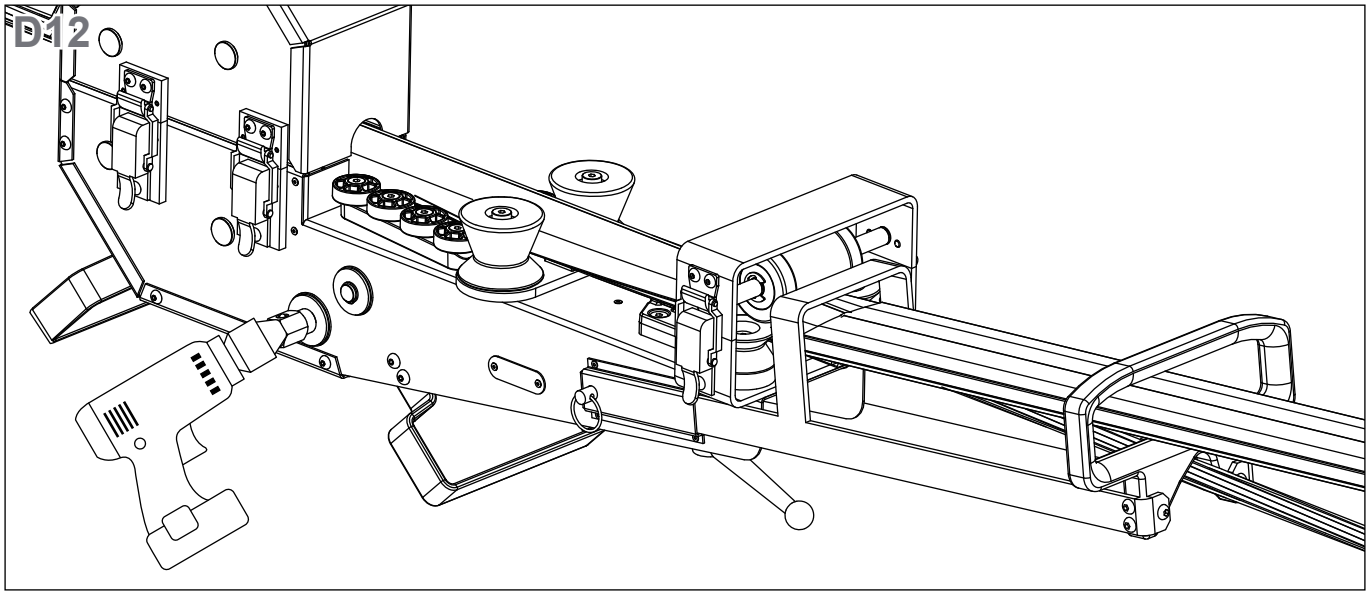
Switch to Motorized Installation

Replace the hand crank with a motorized drill that is approved for use by your company.

IMPORTANT

Use a non-impact drill only! Impact drills will damage this tool.

Continue to drive the MVLC down the line. Stop driving when ready to install the drainage point.



E. Drainage on MVLC-18 on Conductor (Long length)

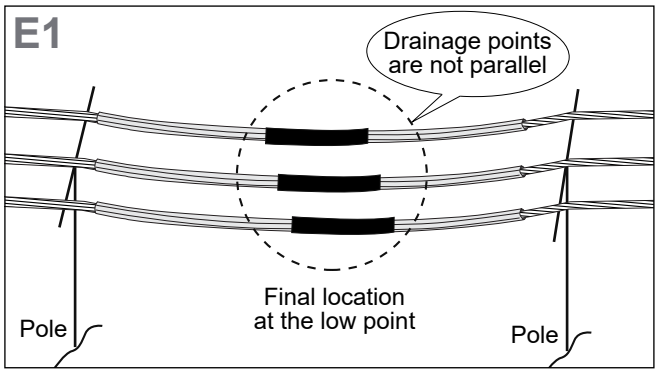
Watch video
(View-0220)

Install Drainage Point

When MVLC is installed on the conductor from end to end, it is necessary to install a drainage point to allow water escape freely from inside the MVLC. It is best to provide this drain point at the lowest point of the span. This point will be in the center of the span on level ground but will vary when installed in areas with elevation changes. Two options exist:

NOTE

Drainage locations should be spaced apart so that the insulation drainage holes are not in alignment in the event of conductor clashing.

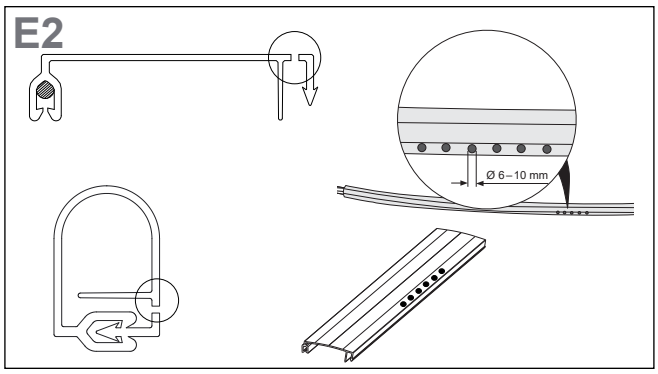


Option 1: Drainage Holes

Punch a series of drainage points into the flat section between the arrow and creepage extender.

NOTE

This method can ensure optimal insulation.



Option 2: Spliced Length

Roughly determine the length untill the lowest part of the conductor, either cut the MVLC and start a new piece (**a**) or cut a small section around the arrow and receptacle (**b**).

The gap left between the two MVLC pieces will act as a drainage point.