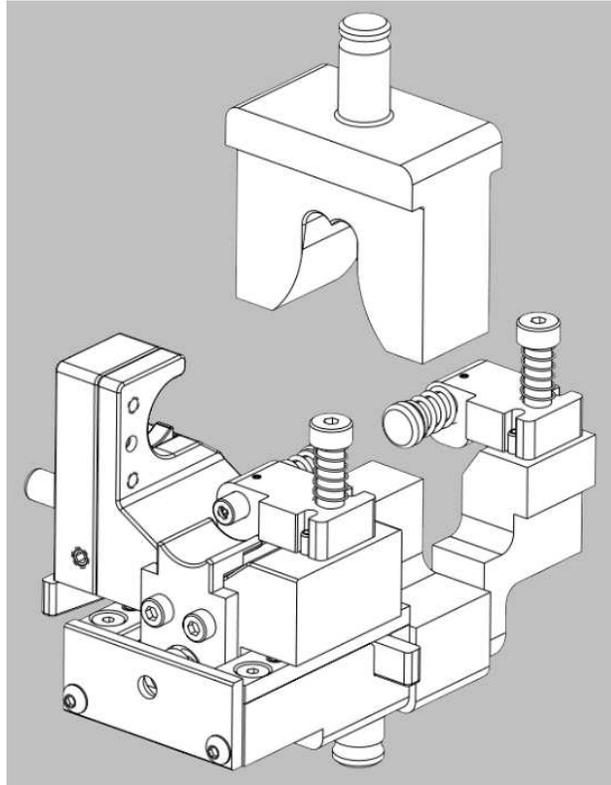


Figure 1: Crimping Die Assemblies for Circle Contact 90° Version



## 1 Introduction

The crimping die assemblies listed in Table 1 are designed to be installed in the modular tool holders listed in Table 2. These crimping die assemblies are designed to be fed wire from the right or left side of the modular tool holder, producing a Circle Contact 90° Version with either right side crimp or left side crimp termination.

Table 1: Part numbers

Crimping die assembly	Wire size mm <sup>2</sup>	Terminals	Application specification
2326055-1	16	2-2306180-1 2-2306177-1	114-94436
2385663-1		2343462-7	114-94578
2234156-1		2325606-1	114-101059
2234184-1	50	2304314-1	
2326060-1	50	2306180-1	114-94436
	70	2306177-1	

Table 2: Modular tool holders

Modular tool holder	Instruction sheet
2305470-1	408-35048
2326378-1	408-35049



**NOTE**

Dimensions in this instruction sheet are in millimeters with [inches in brackets]. Figures are for reference only and are not drawn to scale.

Read these instructions thoroughly before crimping connectors.

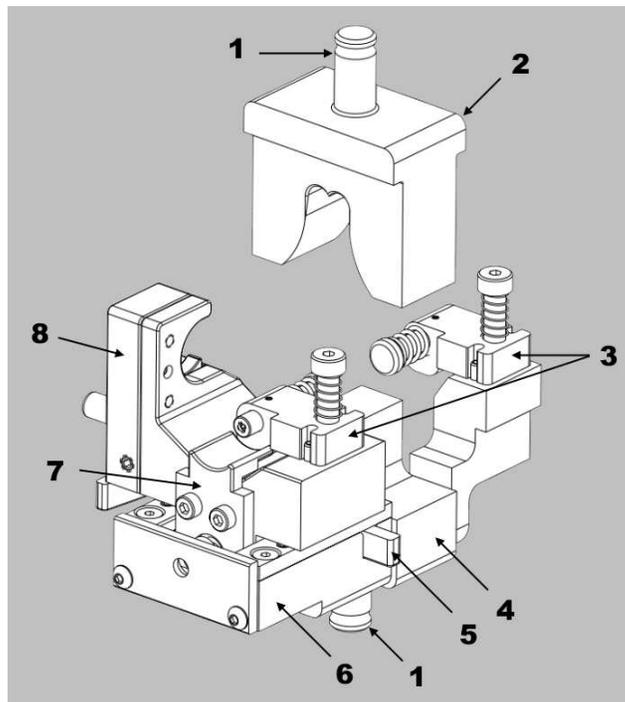
## 2 Description

Each die assembly consists of a crimper, an anvil, a terminal locator assembly and a terminal block assembly (which consists of terminal supports, a terminal hold-down, and wire stop assemblies).

The terminal locator and terminal block are designed to maintain terminal position during the crimping process. They are supplied pre-assembled to the crimping die.

The adjustment block is used to switch the left and right crimping directions. It is supplied pre-assembled to the crimping die.

Figure 2: Components



- |                             |                             |
|-----------------------------|-----------------------------|
| <b>1</b> Shank              | <b>5</b> Adjustment block   |
| <b>2</b> Crimper            | <b>6</b> Terminal locator   |
| <b>3</b> Wire stop assembly | <b>7</b> Terminal hold-down |
| <b>4</b> Anvil              | <b>8</b> Terminal block     |

## 3 Installing the die set and locator assembly

For information concerning die installation and removal, as well as the general performance of the modular tool holders, refer to the instruction sheet packaged with the tool holder (Table 2).



To avoid injury, disconnect electrical power before installing the die set and locator assembly in the tool holder.



To avoid injury, disconnect air supply before installing the die set and locator assembly in the tool holder.

### 3.1 Tooling

To achieve proper orientation of the dies during installation, ensure that the alignment dots (Figure 3) face toward the wire clamp on the modular tool holder (Figure 4). This applies to both right side and left side crimp.

Figure 3: Alignment dots

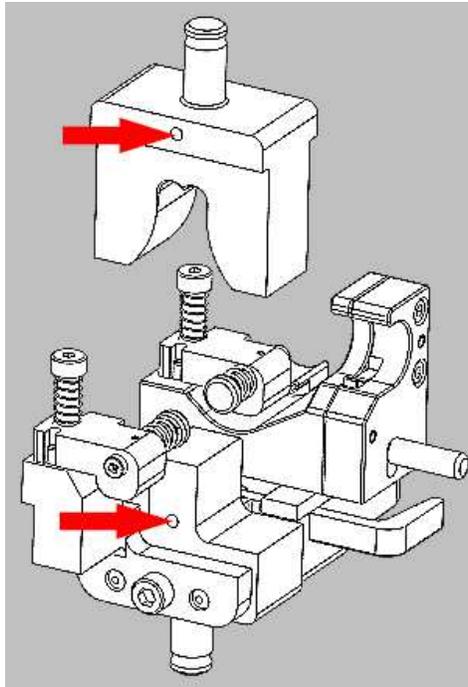
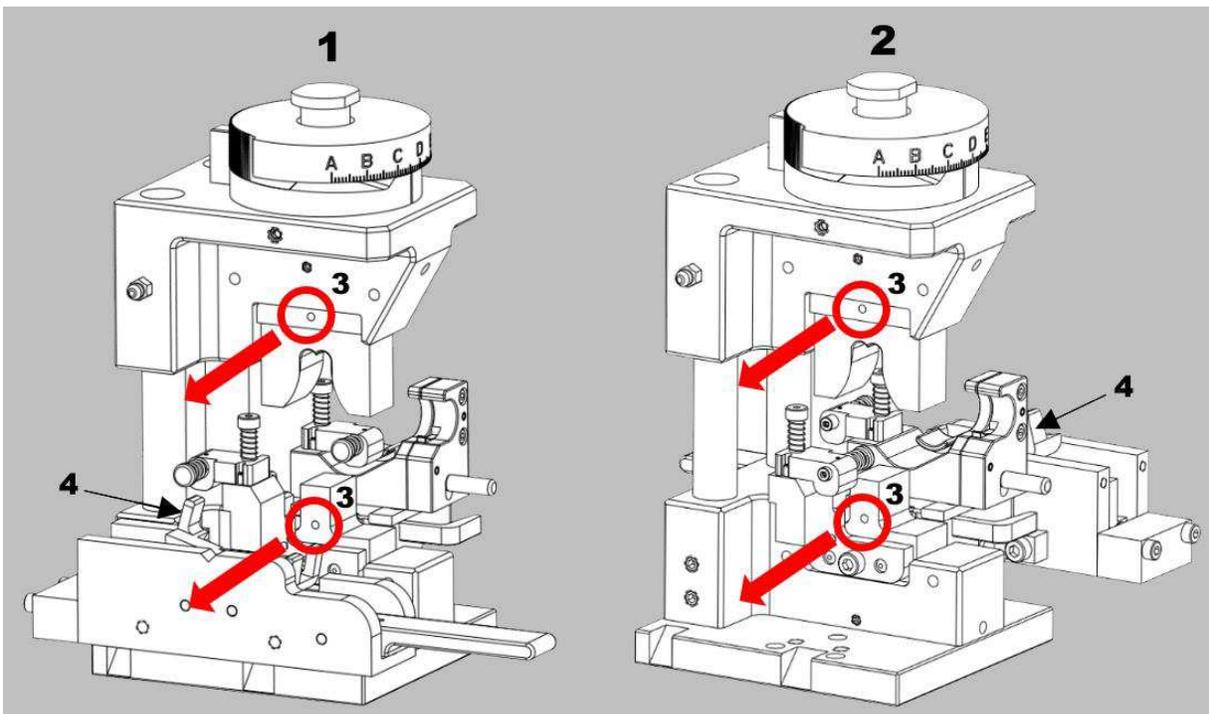


Figure 4: Alignment dots and wire clamps



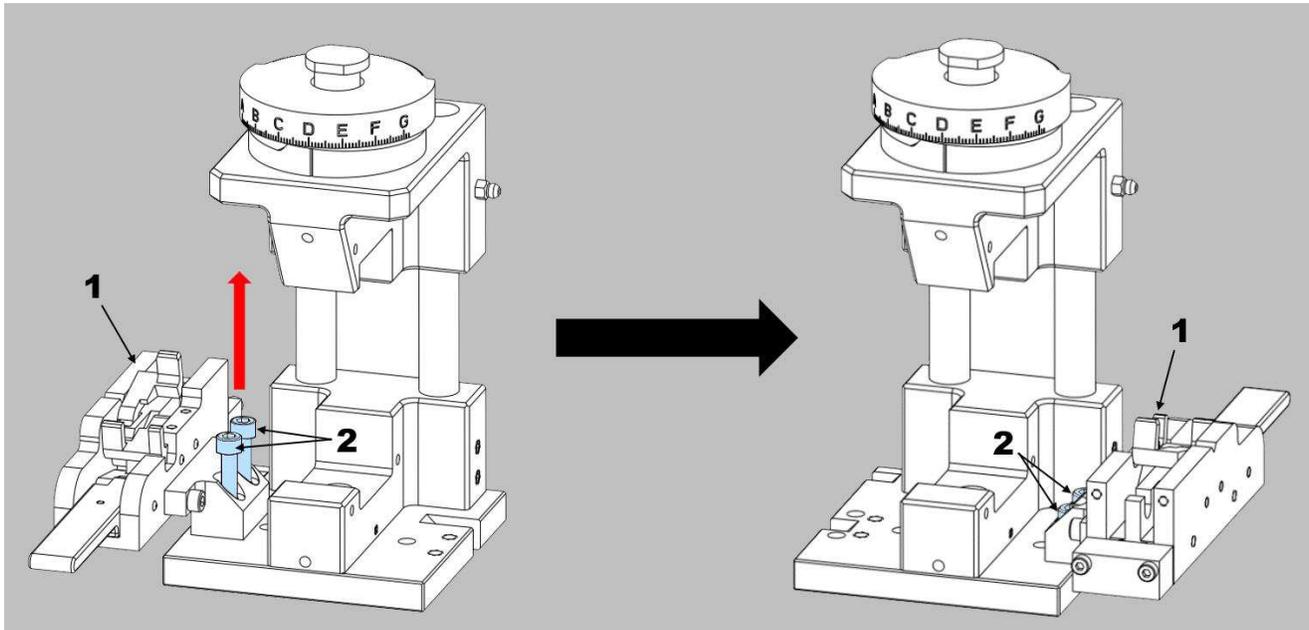
- 1 Right side crimp
- 2 Left side crimp
- 3 Alignment dots
- 4 Wire clamp

### 3.2 Relocating the wire clamp

For left side crimp **only**, the wire clamp must be relocated to the other side of the modular tool. Complete the following steps:

1. Remove the two M6 screws (Figure 5).
2. Move the wire clamp to the other side.
3. Attach the wire clamp with the two M6 screws.

Figure 5: Relocating the wire clamp



- 1 Wire clamp
- 2 M6 screws

## 4 Crimping

Wire strip length and specific crimp information for each terminal can be found in the application specification listed in Table 1.



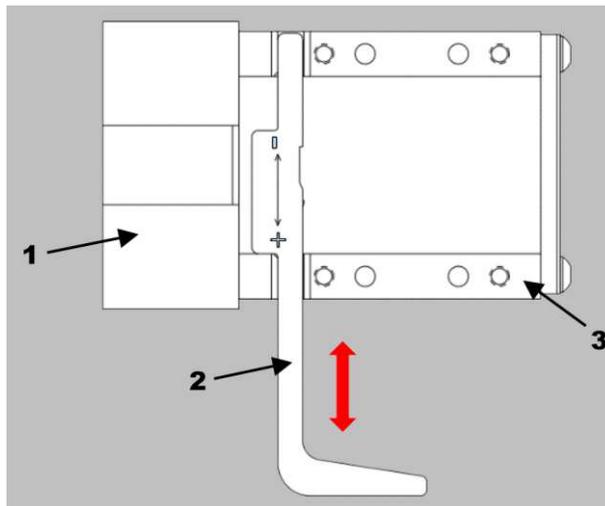
**CAUTION**

If the tool holder is equipped with a crimp height (fine adjust) adjustment, you can avoid damage to the terminator, modular tool holder, or die assembly by starting at setting A on the crimp disc and incrementally adjusting to the specified crimp height. If the machine has crimp height/shut height adjustment, refer to the applicable 412 series customer manual for guidance.

### 4.1 Right side crimp

1. Pull the adjustment block until the side marked **+** touches the housing terminal locator (Figure 6).

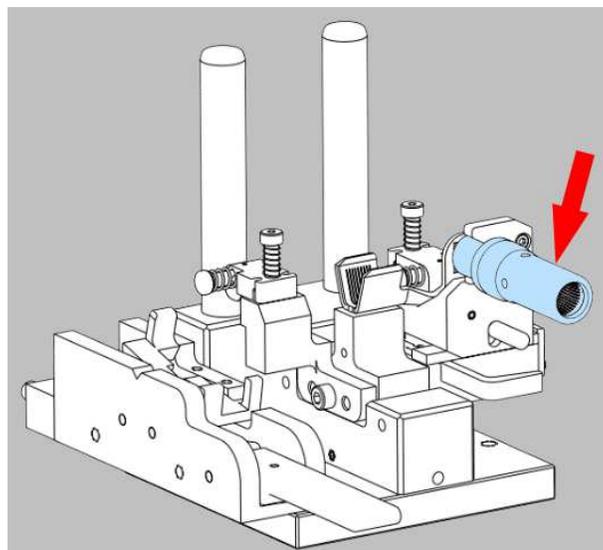
Figure 6: Adjustment block



- 1 Anvil
- 2 Adjustment block
- 3 Housing terminal locator

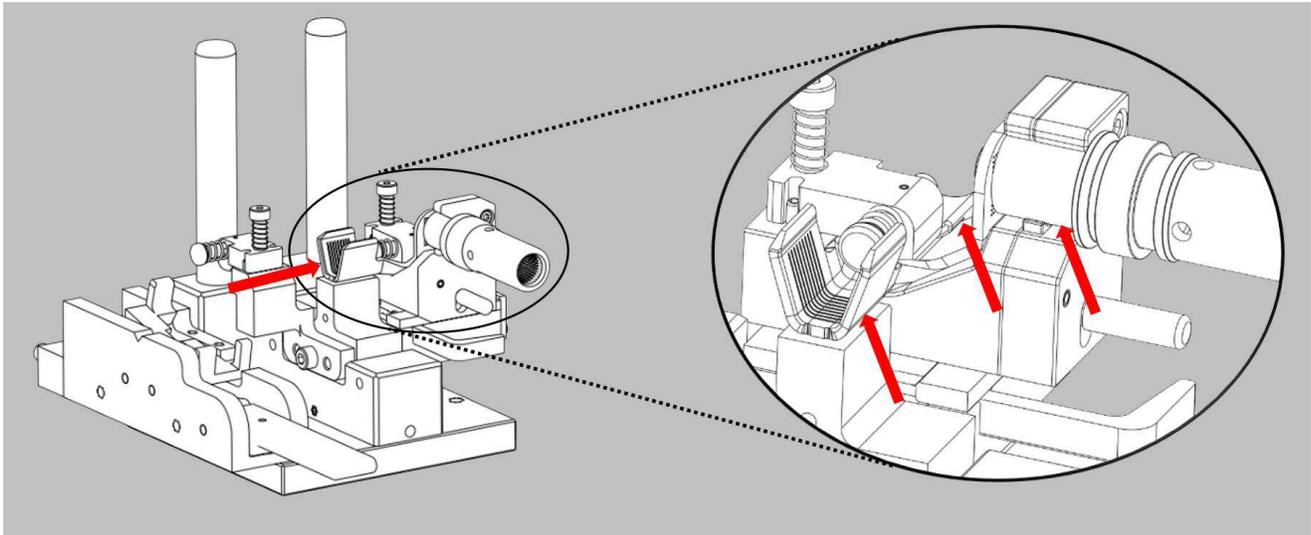
2. Pull down the knob (Figure 7).

Figure 7: Knob



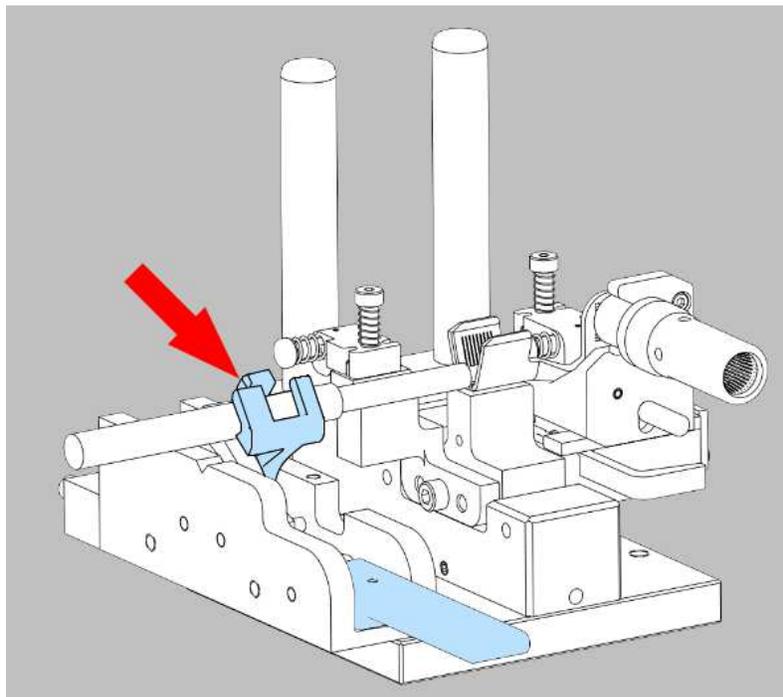
3. Insert the Circle Contact 90° Version into the terminal block assembly (Figure 8). The terminal is correctly located and clamped when:
  - The pin contact is in the locating slot of the terminal block.
  - The bus bar is in the slot of the terminal hold-down.
  - The crimp barrel is seated on the anvil.
  - The knob is in the UP position.

Figure 8: Inserting the contact



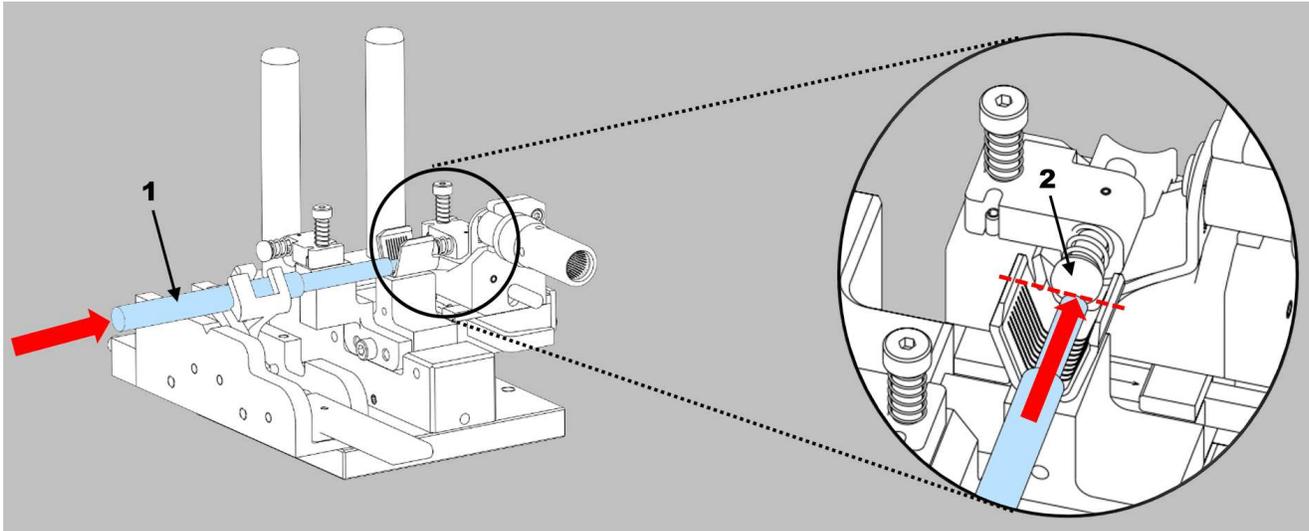
4. Open the wire clamp (Figure 9).

Figure 9: Wire clamp



5. Insert the properly stripped wire into the wire barrel of the terminal (Figure 10). The wire is correctly located when:
  - All strands are positioned in the wire barrel in accordance with the application specification listed in Table 1.
  - The wire strands butt against the wire stop.

Figure 10: Inserting the wire (right side)



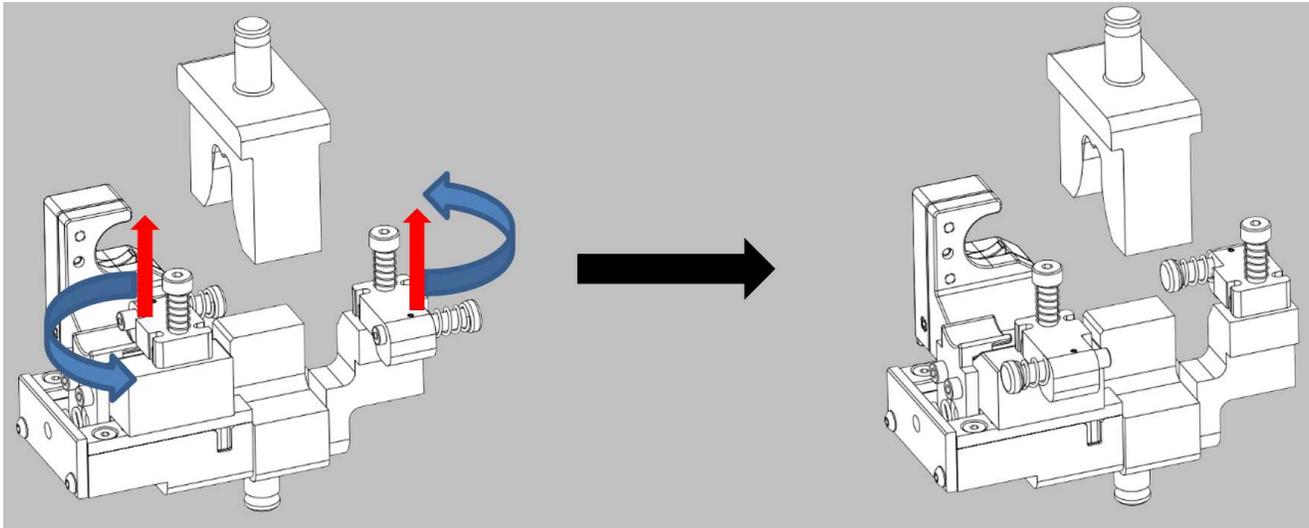
- 1** Wire
- 2** Wire stop

6. Close the wire clamp to clamp the wire in place.
7. Cycle the terminator to perform the crimp.
8. Pull down the knob.
9. Open the wire clamp to remove the crimped assembly from the tooling.
10. Pull the knob back to reset the terminal block assembly.

## 4.2 Left side crimp

1. Raise each wire stop against the spring and rotate it 180 degrees (Figure 11).

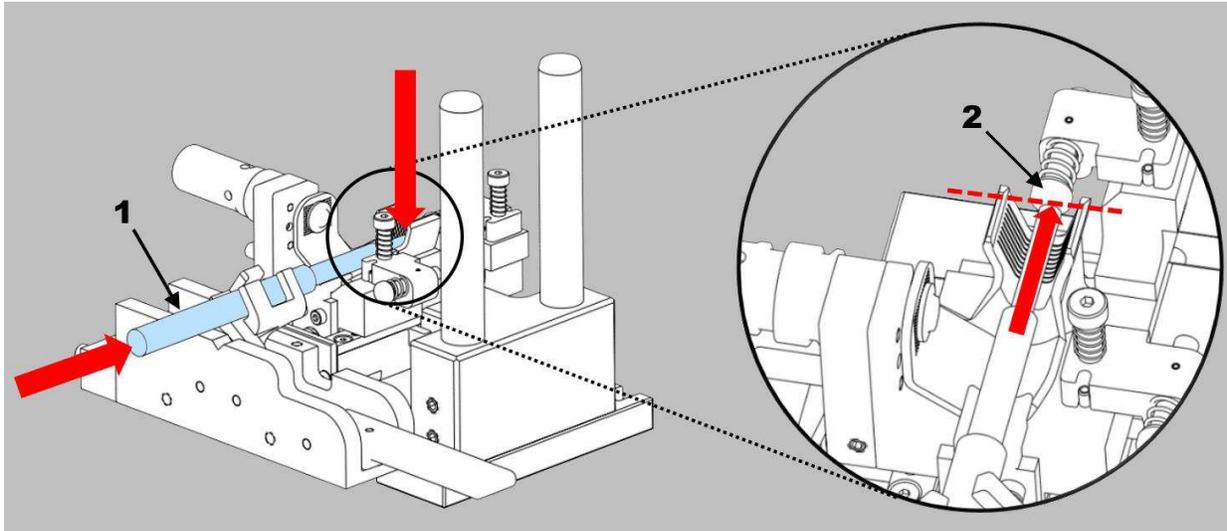
Figure 11: Rotating the wire stops



2. Pull the adjustment block until the side marked — touches the housing terminal locator (Figure 6).
3. Pull down the knob (Figure 7).
4. Insert the Circle Contact 90 Degree Version into the terminal block (see Figure 8, except that the wire stop assemblies are rotated). The terminal is correctly located and clamped when:
  - The pin contact is in the locating slot of the terminal block.
  - The bus bar is in the slot of the terminal hold-down.
  - The crimp barrel is seated on the anvil.
  - The knob is in the UP position.
5. Open the wire clamp.

6. Insert the properly stripped wire into the wire barrel of the terminal. The wire is correctly located when:
  - All strands are positioned in the wire barrel in accordance with the application specification listed in Table 1.
  - The wire strands butt against the wire stop.

Figure 12: Inserting the wire (left side)



- 1** Wire
- 2** Wire stop

7. Close the wire clamp to clamp the wire in place.
8. Cycle the terminator to perform the crimp.
9. Pull down the knob.
10. Remove the crimped assembly from the tooling.
11. Pull the knob back to reset the terminal block assembly.

## 5 Adjusting the bellmouth

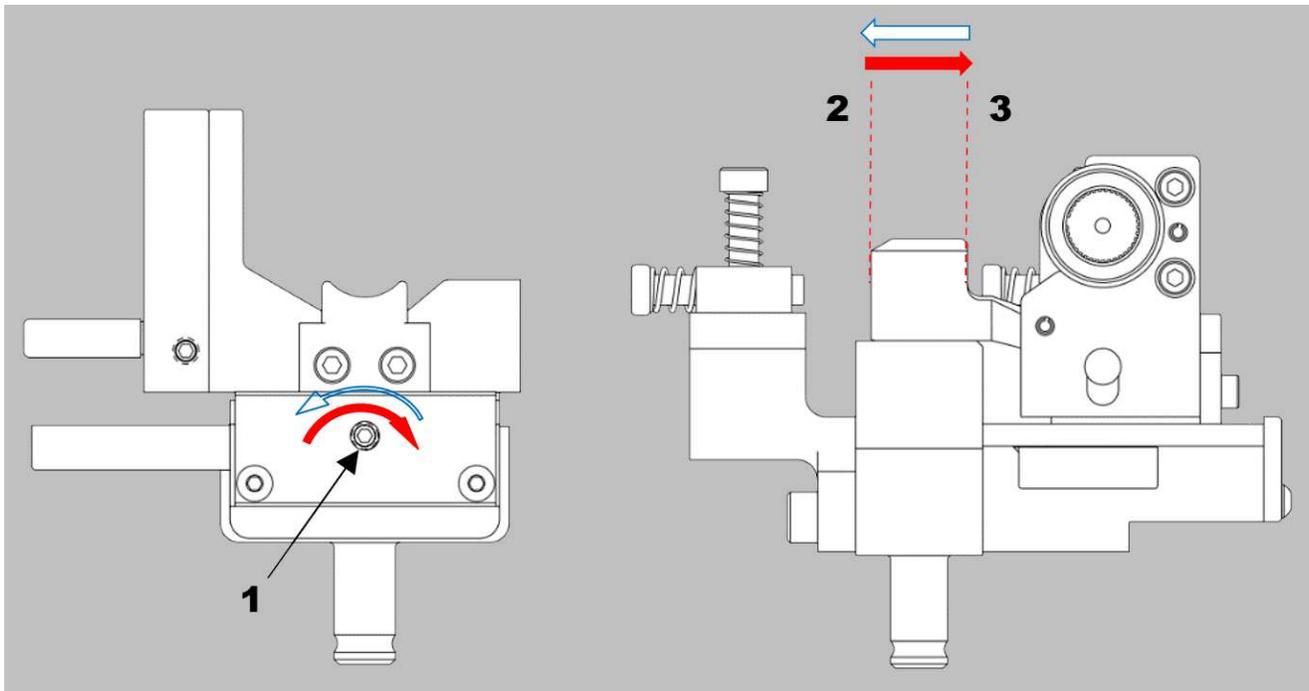
The bellmouth requirement for each terminal being crimped can be found in the application specification listed in Table 1. Adjust the size of the bellmouth by turning the M4 headless screw (see Figure 13 and Figure 14).

### 5.1 Right side crimp

Turn the M4 headless screw to adjust the bellmouth size (Figure 13).

- Turning clockwise makes the front bellmouth larger and the rear bellmouth smaller.
- Turning counter-clockwise makes the front bellmouth smaller and the rear bellmouth larger.

Figure 13: Adjusting the bellmouth (right side)



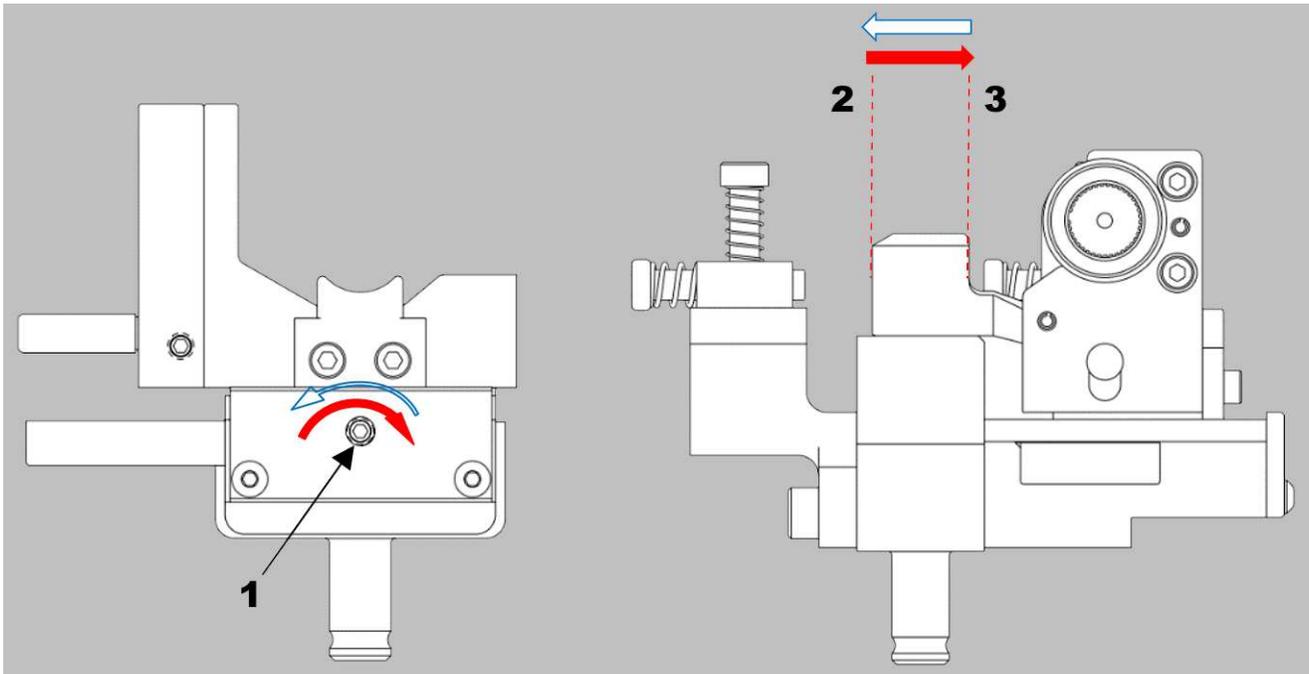
- 1** M4 headless screw
- 2** Rear
- 3** Front

## 5.2 Left side crimp

Turn the M4 headless screw to adjust the bellmouth size (Figure 14).

- Turning clockwise makes the front bellmouth smaller and the rear bellmouth larger.
- Turning counter-clockwise makes the front bellmouth larger and the rear bellmouth smaller.

Figure 14: Adjusting the bellmouth (left side)



- 1** M4 headless screw
- 2** Rear
- 3** Front

## 6 Maintenance and inspection

Each die assembly is inspected before shipment. When it arrives at your facility, inspect it immediately to verify that it was not damaged during shipping.

### 6.1 Daily maintenance

Make each operator aware of (and responsible for) the following daily maintenance requirements:

- Remove dust, moisture, and other contaminants with a clean, soft brush or soft, lint-free cloth. Do **not** use objects that could damage the dies or tool.
- When the dies are not in use, store them in a clean, dry area.

### 6.2 Periodic inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the dies or be supplied to personnel responsible for the dies. Perform at least one inspection per month. Base your inspection frequency on the amount of use, ambient working conditions, operator training and skill, and established company standards. Perform the inspection as follows:

- Remove all contaminants with a clean, soft brush or soft, lint-free cloth. Do **not** use objects that could damage the dies.
- Inspect the crimp area for flattened, chipped, cracked, worn, or broken areas.
- If damage or abnormal wear is evident, replace the tool or dies. Refer to section 7, **Replacement and repair**.

## 7 Replacement and repair

If the dies are damaged or worn excessively, they must be replaced. Order replacement dies through your TE representative, or go to [TE.com](http://TE.com) and click the **Shop TE Store** link at the top of the page.

For field service, go to the [Service and Repair](#) page on the TE website, or send an e-mail to the address for your region in Table 3.

Figure 15: Service and repair



Table 3: Field service e-mail addresses

Region	Address
Asia	<a href="mailto:Tefe1ap@te.com">Tefe1ap@te.com</a>
EMEA (including India)	<a href="mailto:Tefe1@te.com">Tefe1@te.com</a>
North America	<a href="mailto:Fieldservicesnorthamerica@te.com">Fieldservicesnorthamerica@te.com</a>
South America	<a href="mailto:FSE@te.com">FSE@te.com</a>

## 8 Revision summary

Since the last revision of this document, the following changes were made:

- Added crimping die assemblies 2326055-1 and 2385663-1 to Table 1.