

# AMP 5K/30, AMP 5K/40 and G II CE Terminating Machines with Defective Crimp Cut Module

Part number 2362229-[ ]

## General information

- The information provided is intended solely for product description purposes. Users must carry out their own assessments and tests. Our products are subject to natural wear and aging processes.
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- The front cover shows a sample configuration. The supplied product may vary from what is shown.
- This operating manual is only intended for internal use by the user of the crimping machine for FFC and F crimping (referred to herein as "FFC-FFC-CM") and their personnel.
- The relevant supplementary operating manual contains descriptions, technical drawings, specifications and instructions, no part of which may be reproduced, circulated, disclosed, or used for the purpose of competition without permission.
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PRODUCT INFORMATION 1-800-522-6752

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## SAFETY PRECAUTIONS — AVOID INJURY — READ THIS FIRST!



**NOTE**

Keep all decals clean and legible. Replace them when necessary.



**DANGER  
ELECTRIC SHOCK HAZARD**

This tool is not insulated. When using this unit near energized electrical lines, use proper personal protective equipment.



Failure to observe this warning could result in severe injury or death.



**DANGER**

Denotes an imminent hazard that can result in moderate or severe injury.



**SKIN INJECTION HAZARD**

Do not use hands to check for oil leaks. Highly pressurized oil punctures the skin, causing serious injury, gangrene, or death. If injured, seek immediate medical help to remove the oil.



**DANGER  
FIRE HAZARD**

Do not use solvents or flammable liquids to clean the crimping tool. Solvents or flammable liquids could ignite and cause serious injury or property damage.



Failure to heed these warnings could result in severe injury from harmful fumes or burns from flying debris.



**DANGER**

Inspect the tool and jaws/dies before each use. Replace any worn or damaged parts. A damaged or improperly assembled tool can break and strike nearby personnel.

Failure to observe this warning could result in severe injury or death.



**CAUTION**

Do not place the tool in a vise. The crimping tool is designed for hand-held operation.

Protect the crimping tool from rain and moisture. Water damages the crimping tool and battery.

Failure to observe these precautions can result in injury or property damage.



**CAUTION**

Do not perform any service or maintenance other than as described in this manual. Injury or damage to the tool can result.

Failure to observe these precautions can result in injury or property damage.

Safeguards are designed into this application equipment to protect operators and maintenance personnel from most hazards during equipment operation. However, certain safety precautions must be taken by the operator and repair personnel to avoid personal injury, as well as damage to the equipment. For best results, application equipment must be operated in a dry, dust-free environment. Do not operate equipment in a gaseous or hazardous environment.

Carefully observe the following safety precautions before and during operation of the equipment:



Always wear approved eye protection while operating equipment.



Always wear appropriate ear protection while using equipment.



Moving parts can crush and cut. Always keep guards in place during normal operation.



Electrical shock hazard.



Always turn off the main power switch and disconnect the electrical cord from the power source when performing repair or maintenance on the equipment.



Always turn off the main power switch and disconnect the electrical cord from the power source when performing repair or maintenance on the equipment.



Never alter, modify, or misuse the equipment.



Do not operate equipment if the guards are removed.



Read and understand this entire document before using equipment.

# 1 Introduction

This manual contains supplemental information on the operation and adjustments of the AMP 5K/40, 5K/30, and GII (PN 2362229-[ ]) CE Terminating Machines with a Defective Crimp Cut Module (DCCM) installed (see Figure 1).

Table 1 lists the specifications and requirements for the CE Terminating Machines with a DCCM installed that differ from the specifications and requirements of the standard machine.

Table 1: Specifications and requirements

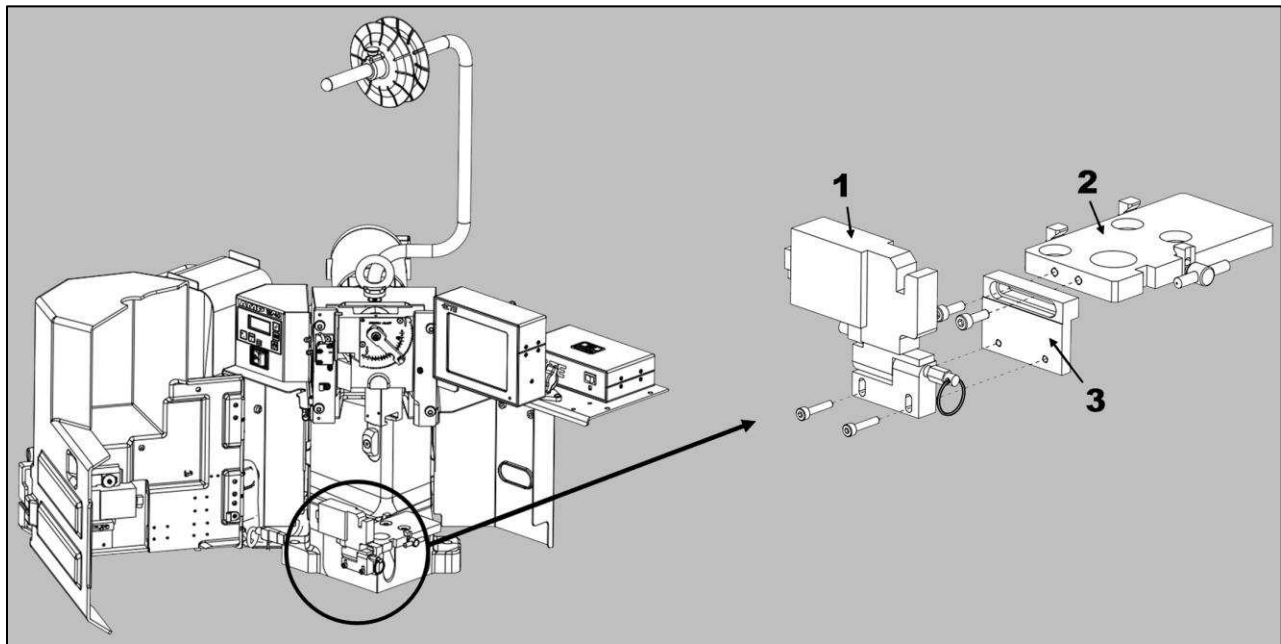
<b>Weight</b>	2362229-1	77.6 kg [171.1 lb]
	2362229-2	
	2362229-3	107.2 kg [236.3 lb]
<b>Air</b>	80 - 100 psi supplied to DCCM	



**NOTE**

Information in this manual highlights the specific differences of machines with a DCCM installed when compared with those that do not have a DCCM installed. This manual does not provide complete information on the operation and maintenance of the overall terminating machine. For information on the operation and preventative maintenance of 5K or GII machines, refer to the applicable 409 series customer manual listed in Table 2.

Figure 1: AMP 5K/40 with DCCM



- 1 DCCM unit
- 2 Applicator baseplate (Atlantic style shown)
- 3 Mounting bracket

Table 2: Part numbers and manuals

Terminator part number	Description	Stroke	Customer manual	
			Standard machine	CQM
2362229-1	AMP 5K Atlantic DCCM Terminator	40mm	<a href="#">409-10204</a>	<a href="#">409-10100</a>
2362229-2	AMP 5K Pacific DCCM Terminator	30mm		
2362229-3	G II Atlantic DCCM Terminator	40mm	<a href="#">409-32035</a>	

When reading this manual, pay particular attention to DANGER, CAUTION, and NOTE statements.

**DANGER**

*Denotes an imminent hazard that may result in moderate or severe injury.*

**CAUTION**

*Denotes a condition that may result in product or equipment damage.*

**NOTE**

*Highlights special or important information.*

Reasons for reissue of this document are provided in section **Error! Reference source not found.**, Error!  
Reference source not found..

## 2 Description

The AMP 5K/40, 5K/30, and GII CE Terminating Machines with a DCCM installed are designed to be used as stand-alone semi-automatic bench units that cut the wire when there is a defective crimp, severing a questionable crimp before it can be withdrawn from the machine.

These machines are assembled with metric hardware.

**NOTE**

*Measurements are in metric units [followed by U.S. customary units in brackets] unless otherwise indicated. Some commercial items may contain non-metric hardware.*

## 2.1 Functional description

These machines are equipped with an automatic wire chopper that works in conjunction with the Crimp Quality Monitor [CQM] to immediately remove terminations that do not meet the requirements for a good crimp as set in the CQM. These machines have two important differences from the standard machines:

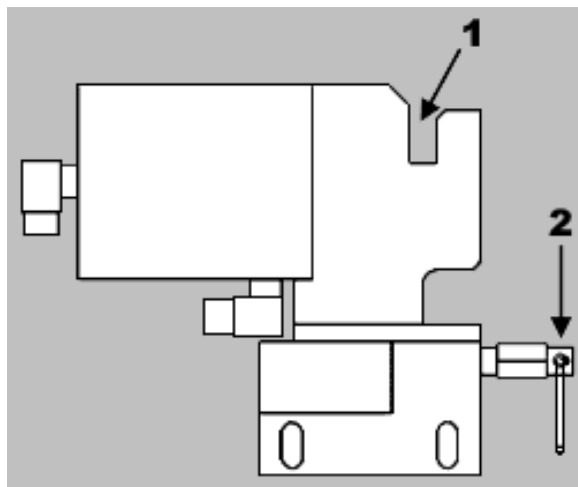
- The Defective Crimp Cut Module is a pneumatically operated chopping blade that is mounted to the front of the terminator's base plate. The DCCM cutting blade is actuated when the pneumatic solenoid connected to DCCM receives a signal from the CQM. The DCCM is hinged and can pivot away from the machine baseplate to provide more access when installing, adjusting, or inspecting an applicator. **Error! Reference source not found.** shows the DCCM Unit. **Error! Reference source not found.** shows the DCCM solenoid that is attached to the left side of the machine, and identifies the air supply hose.
- The Guard and Guard Insert on machines equipped with a DCCM are designed specifically for use on these terminators. The guard insert is adjustable to bring the opening in line with the DCCM window. The main guard is interlocked to the control system of the machine to prevent the machine from operating with the main guard open.



### **DANGER**

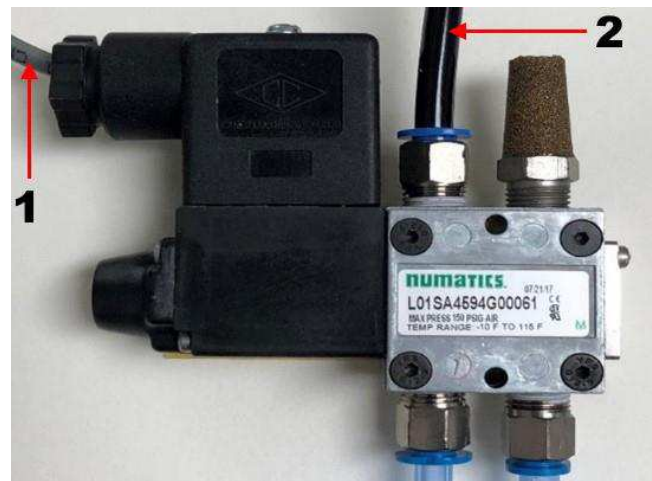
*Do not operate the machine without the guards or guard insert installed. Operating the machine without all guards in place can result in serious injury to the operator.*

Figure 2: DCCM unit



- 1** Cut window
- 2** Hinge pin

Figure 3: DCCM solenoid



- 1** DCC output solenoid cable
- 2** Air supply line (80-100 psi)

## 3 Receiving inspection and installation

Inspect and install the machine in accordance with the applicable 409 series customer manual (see Table 2).

Air (regulated to 80-100 psi) must be supplied to the DCCM solenoid through the port identified in **Error! Reference source not found.**

The DCC output solenoid cable connects to the DCCM solenoid as shown **Error! Reference source not found.** The 15-pin connector end connects to J16 on the terminator CPU board.

### 3.1 Initial CQM setup

When the machine is set up for the first time, complete the following steps to ensure that the CQM is properly configured to operate with the DCCM.

1. Turn the machine and CQM on.
2. On the CQM screen, select the **Use DCCM** radio button.
3. Proceed with normal CQM setup as described in customer manual [409-10100](#).

**NOTE**

*The DCCM does not operate during the learning process of the CQM. After the learning process is complete, the DCCM operates when the CQM detects a non-conforming crimp.*

### 3.2 Configuring the CQM for use with DCCM

**NOTE**

*The following steps must be performed only if the Use CQM option is not seen on the CQM screen when the machine is turned on.*

1. In the CQM Control Panel screen, select **System Setting > DCCM Installed**.
2. Turn the machine and CQM off.
3. Wait approximately ten seconds.
4. Turn the machine and CQM on.
5. On the CQM screen, select the **Use DCCM** radio button.
6. Proceed with normal CQM setup as described in customer manual [409-10100](#).

## 4 Operation

**NOTE**

*For complete instructions on the operation of the bench terminator and applicator installation and setup, reference the applicable 409 series customer manual (see Figure 1).*

**NOTE**

*For complete instructions on the setup and operation of the CQM, refer to customer manual [409-10100](#).*

### 4.1 Machine cycle with a good crimp as determined by the CQM

1. Place the stripped wire through the opening in the guard insert, through the DCCM cutting window, and against the wire stop of the applicator.
2. Press the foot switch.
  - The terminator cycles to apply a terminal to the wire.
  - The CQM analyzes the crimp and determines that it is good.
3. Remove the terminated wire from the machine.



## 4.2 Machine cycle with a defective crimp as determined by the CQM



### CAUTION

When the DCCM severs a bad crimp, the operator must open the guard and remove the severed terminal. **Failure to remove the severed terminal could interfere with proper application of future crimps.**

1. Place the stripped wire through the opening in the guard insert, through the DCCM cutting window, and against the wire stop of the applicator.
2. Press the foot switch.
  - The terminator cycles to apply a terminal to the wire.
  - The CQM analyzes the crimp and determines that it does not conform to the learned requirements.
  - The CQM activates the DCCM, which severs the defective terminal from the wire.
3. Open the guard and remove the severed terminal from the crimping area.
4. Close the guard and clear the error via the CQM screen.

## 5 Adjustments

The DCCM module and the insert in the machine guard are both adjustable to properly align the windows in the guard and the DCCM with the applicator crimping area. Proper alignment ensures that the wire is in the correct place when the machine is cycled.



### DANGER

To avoid personal injury, **always** disconnect electrical and air supplies before performing adjustments.

### 5.1 DCCM adjustment

Adjust the DCCM before adjusting the guard insert. To adjust the position of the DCCM, complete the following steps.



### NOTE

Install the applicator to be used in the machine **before** adjusting the DCCM or the machine guards.

#### 5.1.1 Horizontal adjustment

1. Install the applicator in the machine according to the instructions packaged with the applicator.
2. Observe the position of the DCCM cut window relative to the height of the applicator anvil. The bottom of the window should be in line with, or just below, the top of the anvil and centered right to left with respect to the anvil.
3. Use the unit's detent hinge to pivot the DCCM unit away from the applicator.
4. Loosen the screws holding the DCCM mounting bracket to the applicator base plate until the bracket can move right to left.
5. Adjust the mounting bracket position until the DCCM cut window, when the DCCM is rotated back into the operating position, is centered relative to the applicator anvil.
6. Tighten the DCCM mounting bracket screws securely.

## 5.1.2 Vertical adjustment

1. With the DCCM unit in the normal operating position, loosen the screws holding the DCCM to the DCCM mounting bracket.
2. Adjust the vertical position of the DCCM unit until the bottom of the cut window is in line with or just below the top of the applicator anvil.
3. Tighten the DCCM unit screws securely.
4. Double-check the vertical and horizontal position of the DCCM cut window.

If adjustments are still required, repeat the necessary steps above.

## 5.2 Guard insert adjustment

The DCCM guard insert is adjustable to align the guard insert window with the DCCM cut window and the applicator crimp area. To adjust the guard insert, complete the following steps.

1. Open the main guard door.
2. Loosen the three screws that secure the guard insert.
3. Close the main guard door.
4. Align the vertical slot in the guard insert with the center of the DCCM cut window.

If the DCCM unit was aligned correctly as described in section 5.1, then centering the window of the guard insert with the cut window of the DCCM unit should center the guard with the crimping area of the applicator.

5. While holding the guard in the correct position, and the main guard door.
6. Tighten the two inside screws securing the guard insert.
7. Tighten the outside screw.
8. Close the main guard door.
9. Double-check the guard insert slot alignment.

If adjustments are still required, repeat the necessary steps above.

## 6 Troubleshooting

Contact the Support Center at 1-800-522-6752.

## 7 Disposal

Contact TE Connectivity for disposal.

## 8 Replacement and repair

These machines have no customer-replaceable parts. For customer repair service, call 1-800-522-6752.

## 9 Restriction on hazardous substances

For Information on the occurrence and location of all substances subject to the Restriction of Hazardous Substances (RoHS) Directive, refer to the TE Connectivity [Product Environmental Compliance](#) page.

Enter part numbers in the **Search by part # or keyword** field at the top of the page.

## 10 Revision summary

Revisions to this customer manual include:

- Converted to standard format for customer manuals.
- Updated Figure 3 to identify the DCC output solenoid cable.
- Updated section 3 to add information about the DCC output solenoid cable.