

## QD3 Quik-Drive Tap-Changer Motor Resistor Replacement Kit Number 5791844A01



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## Safety for life



Eaton's Cooper Power series products meet or exceed all applicable industry standards relating to product safety. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Eaton employees involved in product design, manufacture, marketing and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high-voltage lines and equipment and support our "Safety For Life" mission.

## Safety information

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians who are familiar with this equipment should install, operate, and service it.

A competent technician has these qualifications:

- Is thoroughly familiar with these instructions.
- Is trained in industry-accepted high and low-voltage safe operating practices and procedures.
- Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.
- Is trained in the care and use of protective equipment such as arc flash clothing, safety glasses, face shield, hard hat, rubber gloves, clampstick, hotstick, etc.

Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

### Hazard Statement Definitions

This manual may contain four types of hazard statements:

#### DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

#### WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

#### CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

#### CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

### Safety instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.

#### DANGER

**Hazardous voltage. Contact with hazardous voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.**

G103.3

#### WARNING

**Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.**

G101.0

#### WARNING

**This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply can result in death, severe personal injury and equipment damage.**

G102.1

#### WARNING

**Power distribution and transmission equipment 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. Failure to properly select, install or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.**

G122.3

# QD3 Quik-Drive Tap-Changer Motor Resistor Replacement Kit Number 5791844A01

## Product information

### Introduction

Service Information MN225049EN provides the installation instruction for a replacement motor resistor for the QD3 Quik-Drive Tap Changer for an Eaton Cooper Power series voltage regulators.

### Read this manual first

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

### Additional information

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. For additional information, contact your Eaton's Cooper Power series product representative.

### Acceptance and initial inspection

Each resistor kit is in good condition when accepted by the carrier for shipment. Upon receipt, inspect the shipping container for signs of damage. Unpack the resistor kit and inspect it thoroughly for damage incurred during shipment. If damaged is discovered, file a claim with the carrier immediately.

### Handling and storage

Be careful during handling and storage of the resistor kit to minimize the possibility of damage. If the resistor kit is to be stored for any length of time prior to installation, provide a clean, dry storage area.

### Standards

ISO 9001 Certified Quality Management System

### Parts supplied

Item	Part Number	Description	Qty
1	2291844A01	40 ohm, 100 W Resistor	1

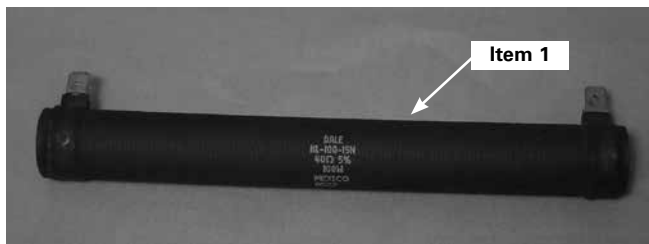


Figure 1. Kit parts

## Tools required

Description	Qty
Allen Wrench 1/8 inch	1
243 Locktite	1
Needle Nose Pliers	1

## Procedure

### Resistor removal

- Using a pair of needle nose pliers remove the push on connections from each end of the resistor. See Figure 2.

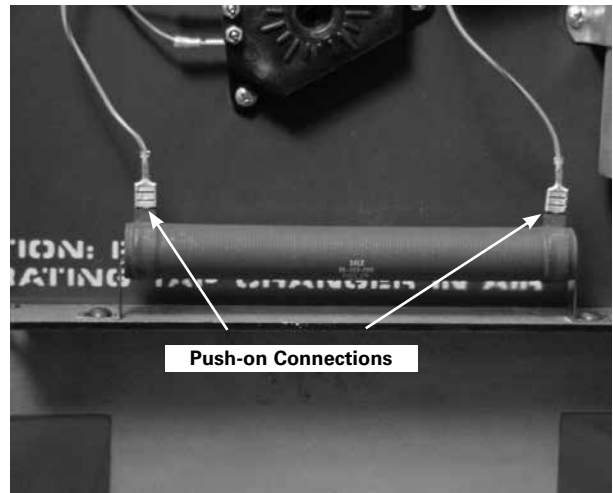


Figure 2. Resistor connections

- Use a 1/8 inch Allen wrench and remove the screw from one resistor mounting clips See Figure 3.

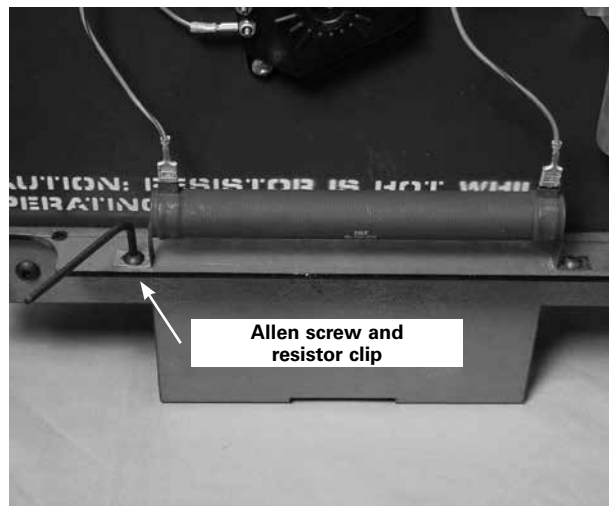


Figure 3. Removing the resistor clip fastener

3. Remove the mounting clip from the resistor. See Figure 4.

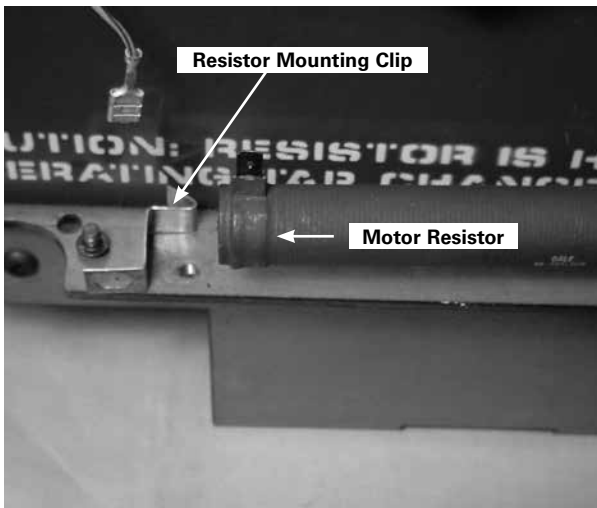


Figure 4. Resistor clip removed

6. Press the loose mounting clip into the open end of the resistor. See Figure 6.

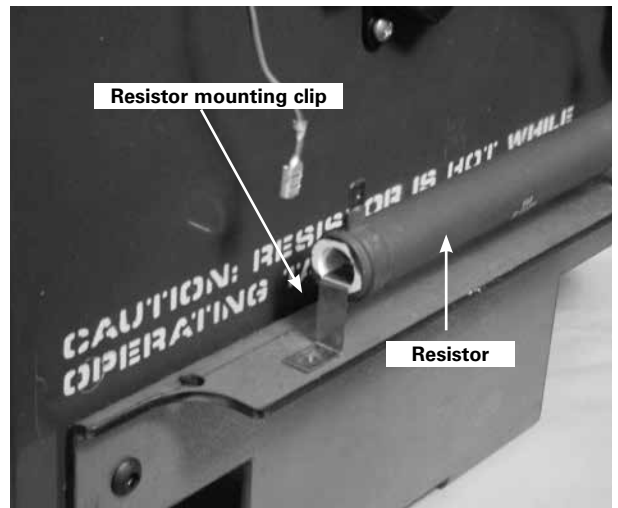


Figure 6. Installing the resistor clip

4. Work the resistor off of the second mounting clip by rotating and pulling on the resistor.

## Resistor installation

5. Push the new resistor onto the mounting clip that is fastened to the lower tap changer mounting bracket. The resistor terminals must be pointing upward. See Figure 5.

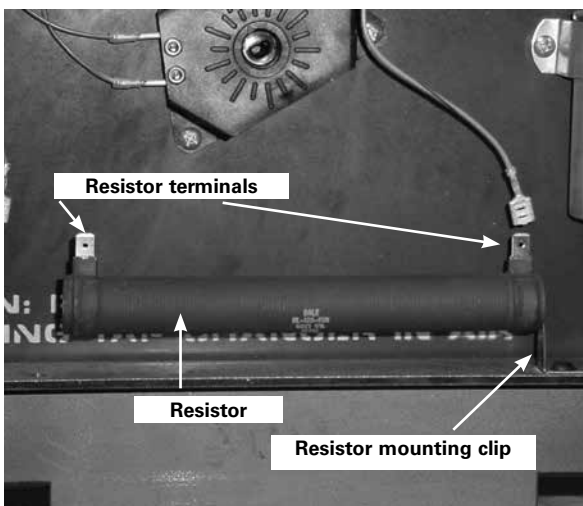


Figure 5. Installing the new resistor

7. Place a drop of 243 Loctite on the mounting screw threads.
8. Fasten the resistor mounting clip to the tap changer base using the screw and tighten with a 1/8 inch Allen wrench. See Figure 7.

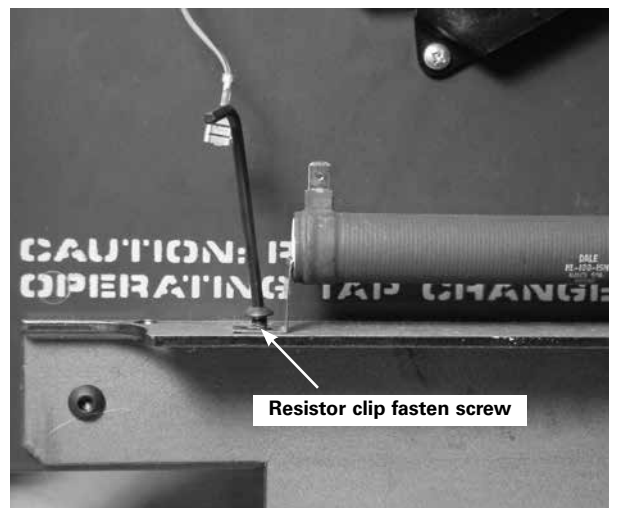
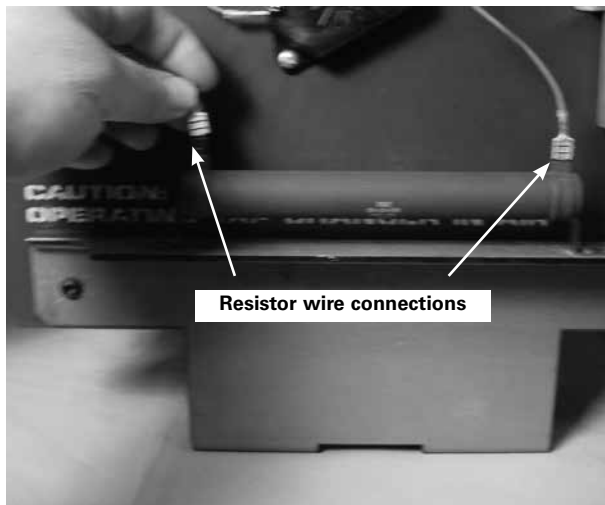


Figure 7. Fastening the resistor assembly

## QD3 Quik-Drive Tap-Changer Motor Resistor Replacement Kit Number 5791844A01

9. Replace the blue/red wire on each end of the resistor by pushing the terminals onto the resistor spade connectors. See Figure 8.



**Figure 8. Resistor lead connections**



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