

SERVICE BULLETIN

Subject: Motor Overload Relay

Date: 12/2/15

Distribution: A & A-2 Pinsetter Customers

Bulletin No. SB09-5

i *Note: This bulletin applies only to A and A-2 customers with American wired electrical boxes. It does not apply to customers with Japanese pinsetters with Japanese wired electrical boxes.*

This Bulletin is to inform A and A-2 pinsetter customers that the Motor Overload Relay, part number 10-679151-000, is no longer available. Critical components to the original relay can no longer be manufactured by the supplier. This relay is used to protect the pinsetter motor and electronics when the motor starts to draw excessive amps during operation.

To continue supporting Pinsetters that utilize this relay, a replacement has been designed. The replacement overload relay performs the same as the original, but is larger with different dimensions, and requires modification to the electrical box to operate safely. Instructions will be provided when a replacement relay is ordered to make this modification. The part number of the replacement Motor Overload Relay is 12-860334-000. Refer to *Figure 1*.

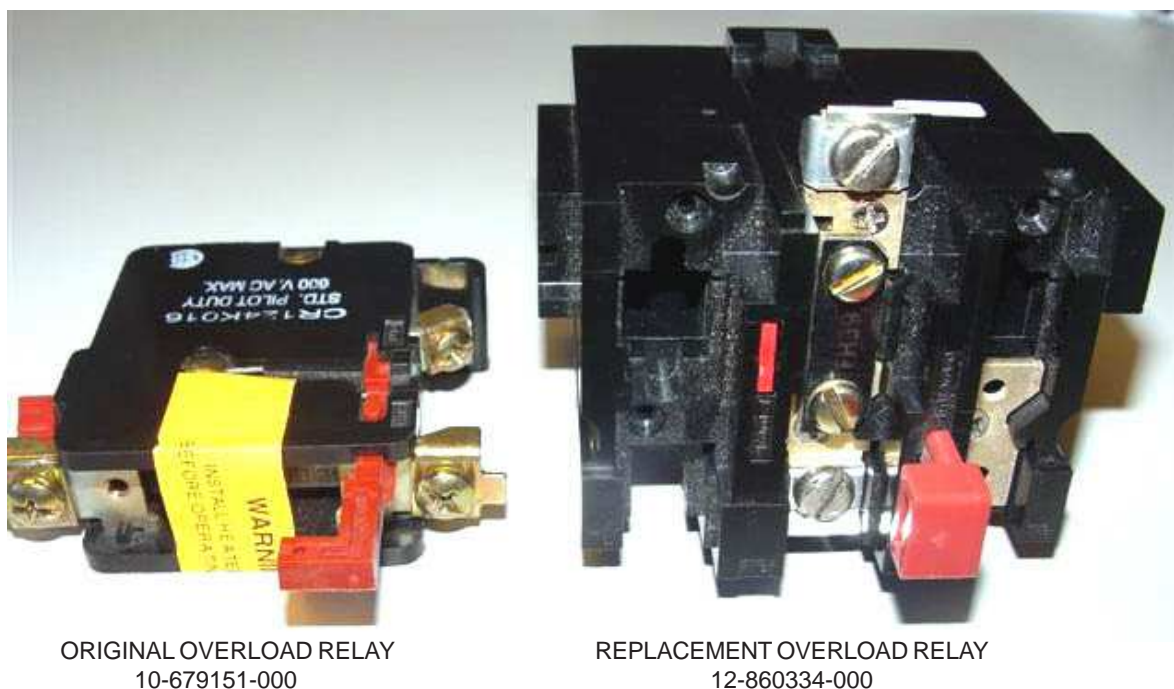


Figure 1

To determine if your pinsetter uses the Motor Overload Relay, look for a manual reset button located on the pinsetter motor. This button is usually red in color. Refer to *Figure 2*.



Figure 2

Pinsetter Motor with Thermal Overload Reset Button:

Pinsetter motors that have thermal overload protection and can be reset by the user, and **DO NOT** require the use of a Motor Overload Relay. This is common for many A-2 Pinsetters.

Pinsetter Motor Does Not Have a Visible Thermal Overload Reset Button:

If no reset button is visible, you may have one of two motor styles:

Option 1: Motor with built-in protection that can not be reset by the user. These motors have to cool down and then power will automatically be restored. Brunswick does not offer or recommend using these types of motors due to safety concerns.

Option 2: If the motor does not have a thermal overload built in, the Motor Overload Relay will be necessary for the electrical box. Customers should order the replacement relay, part number 12-860334-000.

It is common for A and early A-2 pinsetters to have a motor without a reset button. The motor overload protection was integrated into the original Federal Pacific or Allen Bradley contactors. The electrical box cover has a manual reset button located on the outside cover to reset the thermal overload protection for the motor with these styles of contactors.

As an option, the Motor Overload Relay can be eliminated by upgrading the pinsetter drive motor to the Brunswick Universal Pinsetter Motor 12-752056-000, which has thermal overload protection built in.

Important Replacement Information

If the Motor Overload Relay, part number 12-860334-000, is required, the relay must be installed with a heating element. To determine the appropriate heating element, check the Full Load Amps on the motor identification plate. Noted below are the heater part numbers for the redesigned Motor Overload Relay:

i *Note: Old heaters are not compatible with the new Motor Overload Relay.*

<u>Part Number</u>	<u>Description</u>
10-679125-001	HEATER-MOTOR OVERLOAD RELAY 4.3-4.7A
10-679125-002	HEATER-MOTOR OVERLOAD RELAY 4.7-5.1A
10-679125-003	HEATER-MOTOR OVERLOAD RELAY 5.1-5.6A
10-679125-004	HEATER-MOTOR OVERLOAD RELAY 5.7-6.2A
10-679125-005	HEATER-MOTOR OVERLOAD RELAY 6.3-6.8A
10-679125-006	HEATER-MOTOR OVERLOAD RELAY 6.9-7.5A
10-679125-007	HEATER-MOTOR OVERLOAD RELAY 7.6-8.2A
10-679125-008	HEATER-MOTOR OVERLOAD RELAY 8.2-9.0A
10-679125-009	HEATER-MOTOR OVERLOAD RELAY 9.1-9.9A
10-679125-010	HEATER-MOTOR OVERLOAD RELAY 10-10.8A
10-679125-011	HEATER-MOTOR OVERLOAD RELAY 10.9-11.9A
10-679125-012	HEATER-MOTOR OVERLOAD RELAY 12-13.1A
10-679125-013	HEATER-MOTOR OVERLOAD RELAY 13.2-14.3A
10-679125-014	HEATER-MOTOR OVERLOAD RELAY 14.4-15.7A
10-679125-015	HEATER-MOTOR OVERLOAD RELAY 15.8-17.2A



CAUTION!

Failure to install the proper heating element could result in premature failure of the motor and/or failure to electrical components within the electrical box.

A copy of this Bulletin can be found on the Brunswick Bowling web site www.brunswickbowling.com. If you have any questions regarding this or any other Service Bulletins, please contact the Customer Response Center at 1-800-937-2695 or 1-231-725-4966.

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