



Harsco Track Technologies

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SERVICE BULLETIN MAINTENANCE OF WAY EQUIPMENT

DATE: 8-8-2002 **BULLETIN NO:** 02-016

TITLE: F026006 PRE-SQUEEZE TIMER RELAY

RATING:

<input type="checkbox"/>	DIRECTIVE (Action Is Required)	<input checked="" type="checkbox"/>	ALERT (Potential Problem)
<input type="checkbox"/>	INFORMATION (Action Is Optional)	<input type="checkbox"/>	PRODUCT IMPROVEMENT (Enhance Product)

PRODUCT SERIES / MODEL: RMC306 Series A / B ANCHOR BOXER[®] Anchor Applicators

SERIAL NO: All Models

SUMMARY: The original pre-squeeze timer relay part # 502663000 manufactured by Syralac is no longer available and is being replaced by a new pre-squeeze timer relay part # F026006 manufactured by Infitec.

Some of the new timer relays part # F026006 had a problem in that the polarity was reversed. With the incorrect polarity, the timer relay will not operate properly.

If the original timer relay part # 502663000 is replaced with the new timer relay part # F026006, the original pre-squeeze 150k potentiometer part # 108329000 marked 800T - U50 - 0.15 mΩ (meg ohms) must also be replaced with a new pre-squeeze 500k potentiometer part # 200022 marked 800T - U55 - 0.5 mΩ (meg ohms) for the new timer relay to operate properly. See Service Bulletin 02-020 to change the pre-squeeze potentiometer.

OPERATIONAL IMPACT: The pre-squeeze circuit may not operate properly.

ACTION: Check the pre-squeeze circuit for proper operation and the new timer relay for proper pin configuration, if installed.

CONTACT: If you have any questions or if we can be of any service, please contact the Service Department at the Columbia, SC. facility, (803) 822-9160.

PRE-SQUEEZE TIMER RELAY OPERATION

1. Locate the machine so the work-head is centered over a tie without anchors.
2. When checking the pre-squeeze circuit:
 - 2.1 DO NOT load anchors into the work-head tooling.
 - 2.2 MAKE SURE the anchor clamps are open before cycling the work-head.
3. To determine if the pre-squeeze timer relay is operating properly, the pre-squeeze circuit must be checked at the three following settings; WIDE, NARROW and MID.
4. Checking the pre-squeeze Wide setting:
 - 4.1 Rotate the pre-squeeze potentiometer to the WIDE position.
 - 4.2 Press the START switch to start the cycle of the work-head.
 - 4.3 As soon as the rail clamps emerge from underneath the rail, press the STOP switch to stop the cycle of the work-head.
 - 4.4 Note the position of the rail clamps. The rail clamps should have closed very little or not at all.
 - 4.5 Press the HEAD REVERSE switch to return the work-head to the fully raised and swung in position.
5. Checking the pre-squeeze Narrow setting:
 - 5.1 Rotate the pre-squeeze potentiometer to the NARROW position.
 - 5.2 Press the START switch to start the cycle of the work-head.
 - 5.3 As soon as the rail clamps emerge from underneath the rail, press the STOP switch to stop the cycle of the work-head.
 - 5.4 Note the position of the rail clamps. The rail clamps should be close or against the sides of the tie.
 - 5.5 Press the HEAD REVERSE switch to return the work-head to the fully raised and swung in position.
6. Checking the pre-squeeze MID setting:
 - 6.1 Rotate the pre-squeeze potentiometer to the MID position, half-way between the WIDE and NARROW positions.
 - 6.2 Press the START switch to start the cycle of the work-head.
 - 6.3 As soon as the rail clamps emerge from underneath the rail, press the STOP switch to stop the cycle of the work-head.
 - 6.4 Note the position of the rail clamps. The rail clamps should be approximately 1 - 2 inches away from the sides of the tie.
 - 6.5 Press the HEAD REVERSE switch to return the work-head to the fully raised and swung out position.

PRE-SQUEEZE TIMER RELAY OPERATION

7. If the pre-squeeze circuit functioned as described in all three settings; WIDE, NARROW and MID, the pre-squeeze timer relay is operating properly.
8. If the pre-squeeze circuit did not function as described in all three settings; WIDE, NARROW and MID, the pre-squeeze timer relay is not operating properly. Go to Pre-Squeeze Timer Relay Identification.

PRE-SQUEEZE TIMER RELAY IDENTIFICATION



- **FOLLOW APPLICABLE RAILROAD LOCKOUT - TAGOUT PROCEDURE TO REMOVE ALL ENERGY SOURCES FROM MACHINE. FAILURE TO COMPLY COULD RESULT IN SEVERE BODILY INJURY.**

9. All Models Except B2-27 and Brainerd Rebuilt: See Figure 1. Open the panel of the Control Box located on the right side of the machine. Locate the pre-squeeze timer relay K63 (1) inside of the Control Box.
10. Models B2-27 and Brainerd Rebuilt Only: See Figure 2 and Figure 3. Open the cover of the Relay Box located on the rear of the machine next to the fuel tank. Locate the pre-squeeze timer relay K3225 (1) inside of the Relay Box.
11. Timer Relay Part # 502663000 - Not Illustrated: This relay is manufactured by Syralac and is no longer available. This relay is orange in color, has .1 - 1 Sec stamped on it, and may also have a light emitting diode on the the top which illuminates when it is energized.
 - 11.1 Troubleshoot the pre-squeeze circuit to determine the cause or replace the original timer relay part # 502663000 with the new timer relay part # F026006.
 - 11.2: **Important:** If the original timer relay part # 502663000 is replaced with the new timer relay part # F026006, the original pre-squeeze 150k potentiometer part # 108329000 marked 800T - U50 - 0.15 mΩ (meg ohms) must also be replaced with a new pre-squeeze 500k potentiometer part # 200022 marked 800T - U55 - 0.5 mΩ (meg ohms) for the new timer relay to operate properly. See Service Bulletin 02-020.
12. Timer Relay Part # F026006 - See Figure 4. This relay is manufactured by Infitec. This relay is black in color, has a wiring schematic on the side cover, and has a label on the front cover with identification # ES1164-D. This is the new timer relay part # F026006 that replaces the original timer relay part # 502663000.
 - 12.1 Inspect the timer relay for the proper pin configuration wiring as shown in Figure 5 and Figure 6. The positive (+) wire must be connected to pin #2 and the negative (-) wire must be connected to pin #10. The wire at pin #6 will be cut off.
 - 12.2 If the timer relay is found to have the wrong pin configuration wiring, contact the vendor from where the relay was purchased to obtain a new timer relay with the proper pin configuration wiring.

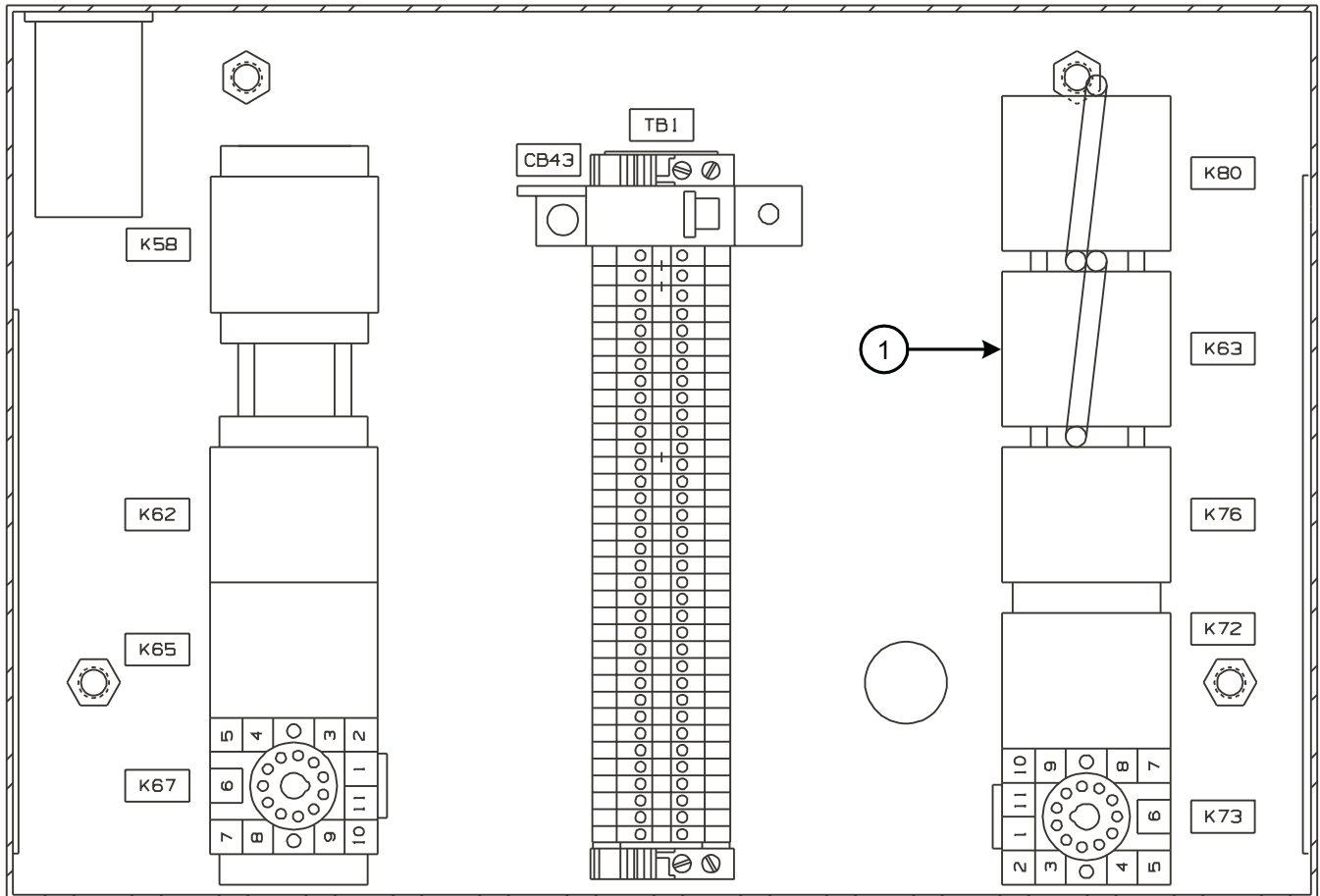
PRE-SQUEEZE TIMER RELAY IDENTIFICATION

- 12.3 If the timer relay is found to have the correct pin configuration wiring, verify that the new pre-squeeze 500k potentiometer part # 200022 marked 800T - U55 - 0.5 mΩ (meg ohms) is installed for the new timer relay to operate properly. See Service Bulletin 02-020.
- 12.4 If the new pre-squeeze 500k potentiometer is installed, troubleshoot the pre-squeeze circuit to determine the cause or replace the the existing timer relay with another new timer relay.

13. Close and secure the panel of the Control Box or the cover of the Relay Box.

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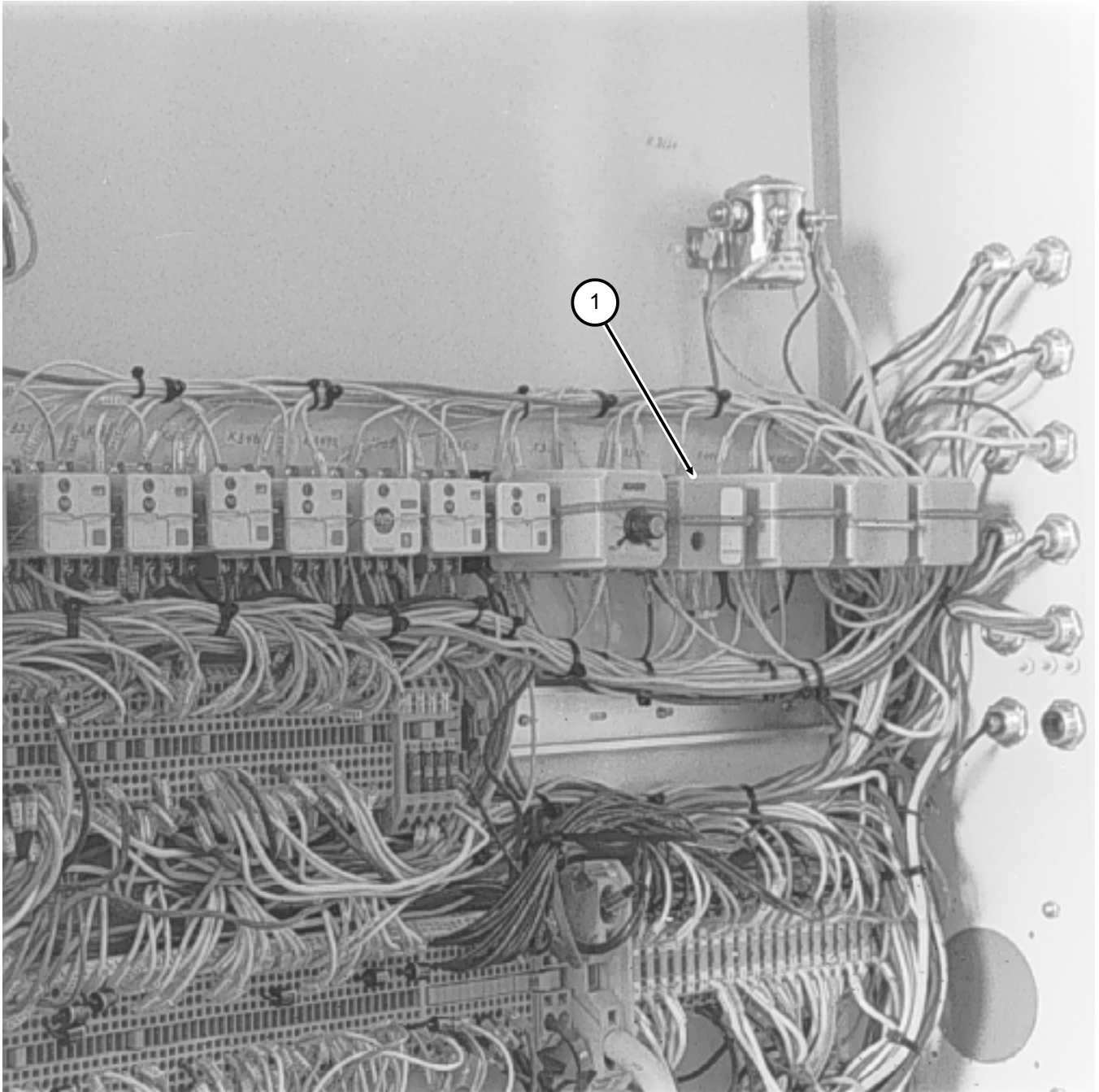
FIGURE 1
PRE-SQUEEZE TIMER RELAY LOCATION
Control Box - All Models Except B2-27 and Brainerd Rebuilt



PRE-SQUEEZE TIMER RELAY IDENTIFICATION

97-207

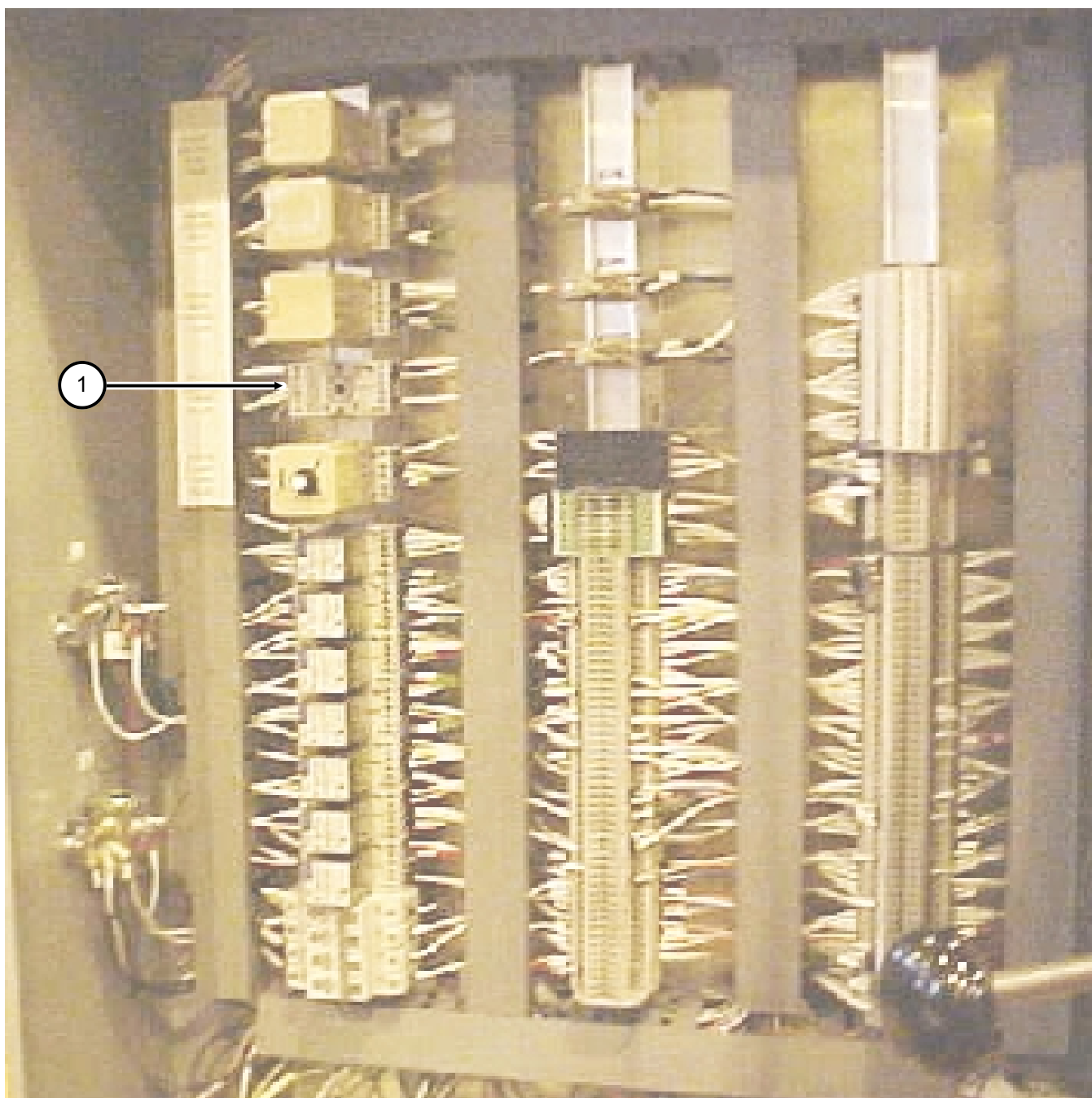
FIGURE 2
PRE-SQUEEZE TIMER RELAY LOCATION
Relay Box - Models B2-27 Only



PRE-SQUEEZE TIMER RELAY IDENTIFICATION

Brainerd 3

FIGURE 3
PRE-SQUEEZE TIMER RELAY LOCATION
Relay Box - Brainerd Rebuilt Models Only



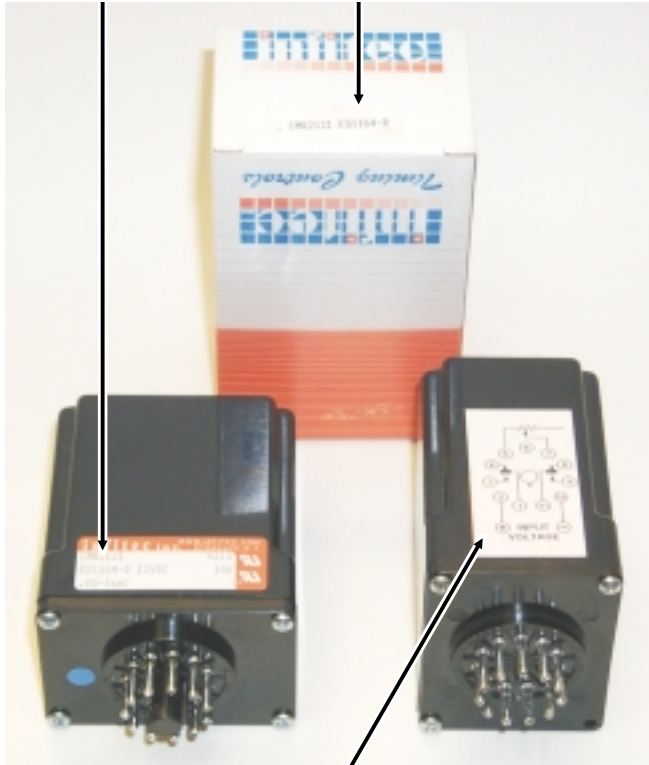
PRE-SQUEEZE TIMER RELAY IDENTIFICATION

02-144

FIGURE 4

F026006 RELAY IDENTIFICATION

Relay Is Labeled ES1164-D
On The Relay And On The Box



Relay Will Have The Schematic Shown
in Figure 6 On The Side Cover

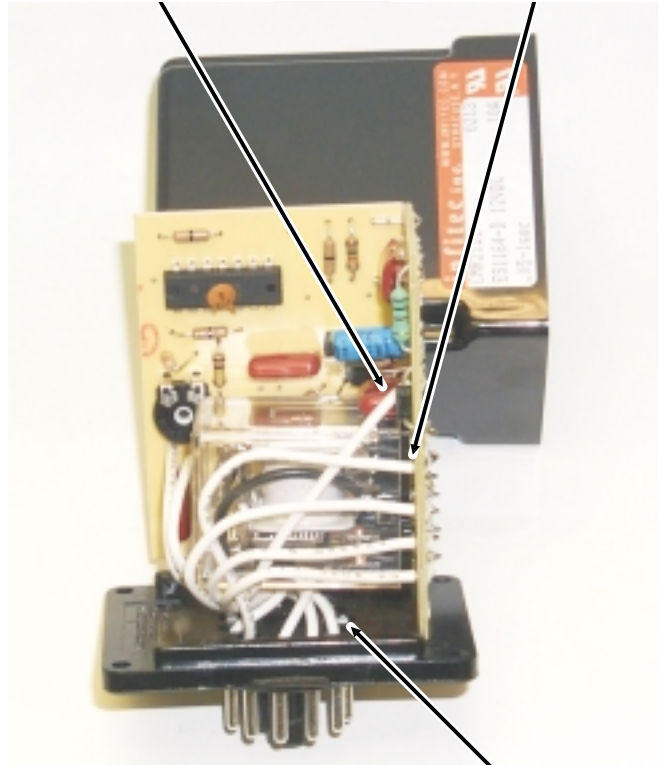
FIGURE 5

02-143

F026006 RELAY PIN WIRING

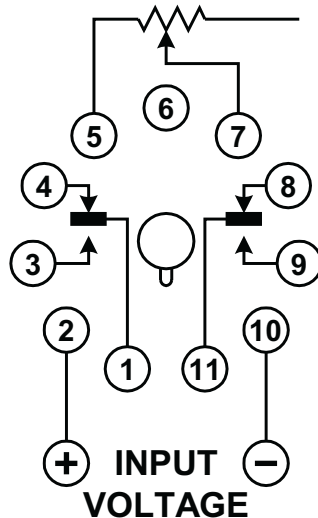
This Wire (+) Will
Go To Pin #2

This Wire (-) Will
Go To Pin #10



This Wire Will Be
Cut Off At Pin #6

FIGURE 6
F026006 RELAY SCHEMATIC



SERVICE GROUP PARTS LIST - See Figure 1, Figure 2 or Figure 3

ITEM	PART NO	DESCRIPTION	QTY
1	F026006	Timer Relay - Pre-Squeeze	1

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