



# INSTRUCTION BULLETIN

No. 3689

Machine: 550E, 550E SRS

Published: 4-95/00

System: ELECTRICAL

**NOTE: DO NOT DISCARD the Parts List from the Instruction Bulletin. Place the Parts List in the appropriate place in your machine manual for future reference. Retaining the Parts List will make it easier to reorder individual parts and will save you the cost of ordering an entire kit.**

*NOTE: Numbers in parenthesis ( ) are reference numbers for parts listed in Bill of Materials.*

Installation Instructions for Kit number 21666

## SYNOPSIS / PROBLEM:

This kit contains the parts needed to replace relay part # 76097 on the machines listed above. The relay provided in this kit is the replacement for this relay. Some rework is needed to fit the new relay. Please follow step-by-step instructions.

## SPECIAL TOOLS / CONSIDERATIONS: 1. Electrical pliers

(Estimated Time to complete: 1 hours)

## PREPARATION:

(Refer to Figures 1, 3 and 4)

**FOR SAFETY: Before leaving or servicing machine, stop on level surface and set parking brake. Then turn off machine and remove key.**

1. Disconnect battery cables from machine. (Refer to Fig. 1)



**WARNING: Always disconnect battery cables from machine before working on electrical components.**

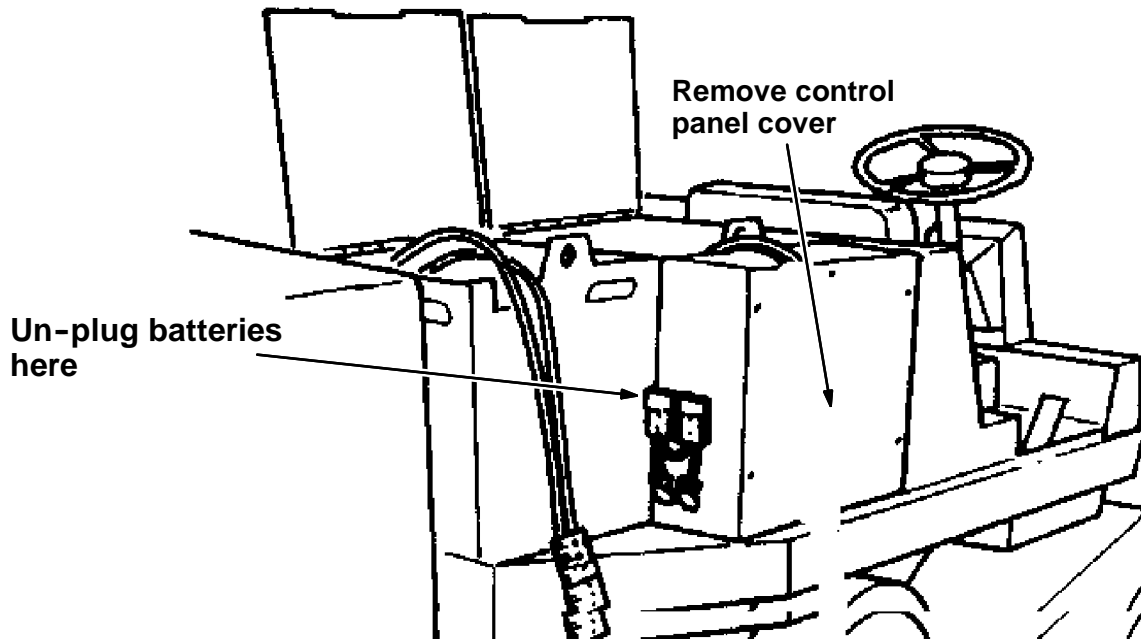
2. Remove the control panel cover. (Refer to Fig. 1)
3. Locate the relay that needs to be replaced. Disconnect the wires leading to that relay. Remove and discard the old relay. (Refer to Fig. 1, 3, and 4)

## INSTALLATION:

(Refer to FIG. 1, 2, 3, and 4)

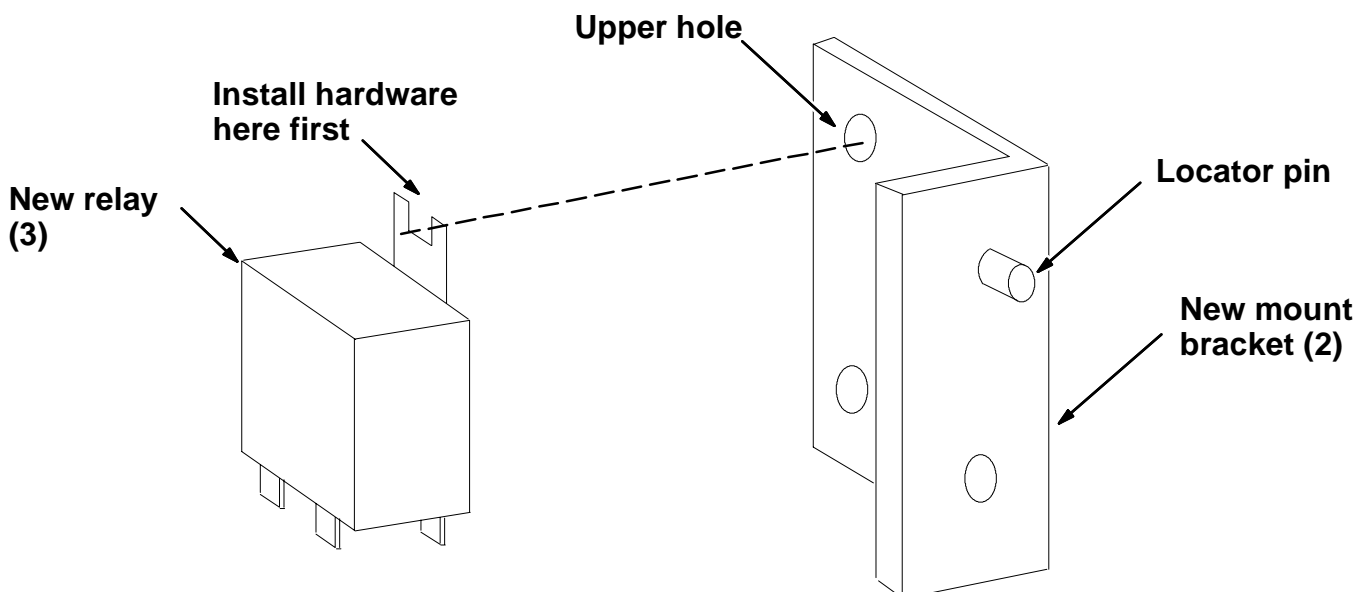
1. The 3/16 in. female terminals need to be removed from the wires leading to the relay that needs to be changed. (Refer to Fig. 3 and 4)
2. Crimp the new 1/4 in. female terminals (1) on the wires leading to the new relay (3).
3. Install one #6 pan screw (7), flat washer (8), and #6 hex nut (9) in the upper hole in the new relay mount bracket (2). (Refer to Fig. 2)
4. Position the end of the relay opposite the end with the terminals on the hardware and tighten lightly. Pivot the relay up to gain access to the lower bracket mount hole. (Refer to Fig. 2)

5. Position the new mount bracket (2) and new relay (3) in the location of the old relay. Use the locator pin on the new mount bracket (2) in the upper mount hole and the #8 pan screw (4), loc washer (5), and #8 hex nut (6) in the lower hole. Hand tighten. (Refer to Fig. 2)
6. Pivot the new relay (3) down so the lower mount hole in the relay lines up with the lower hole in the mount bracket (2). (Refer to Fig. 2)



**FIG. 1 - Control Panel Cover**

7. Install the second #6 pan screw (7), flat washer (8), and #6 hex nut (9) in the lower hole of the new relay (3) and mount bracket (2). Hand tighten. (Refer to Fig. 2)
8. Re-connect the wires to the new relay (3) according to the way they were removed from the old relay. (Refer to Fig. 3 and 4)
9. Reinstall the control panel cover and plug in the machine batteries. Check for proper relay operation. (Refer to Fig. 1)



**FIG. 2 - New Relay And Mount Bracket**

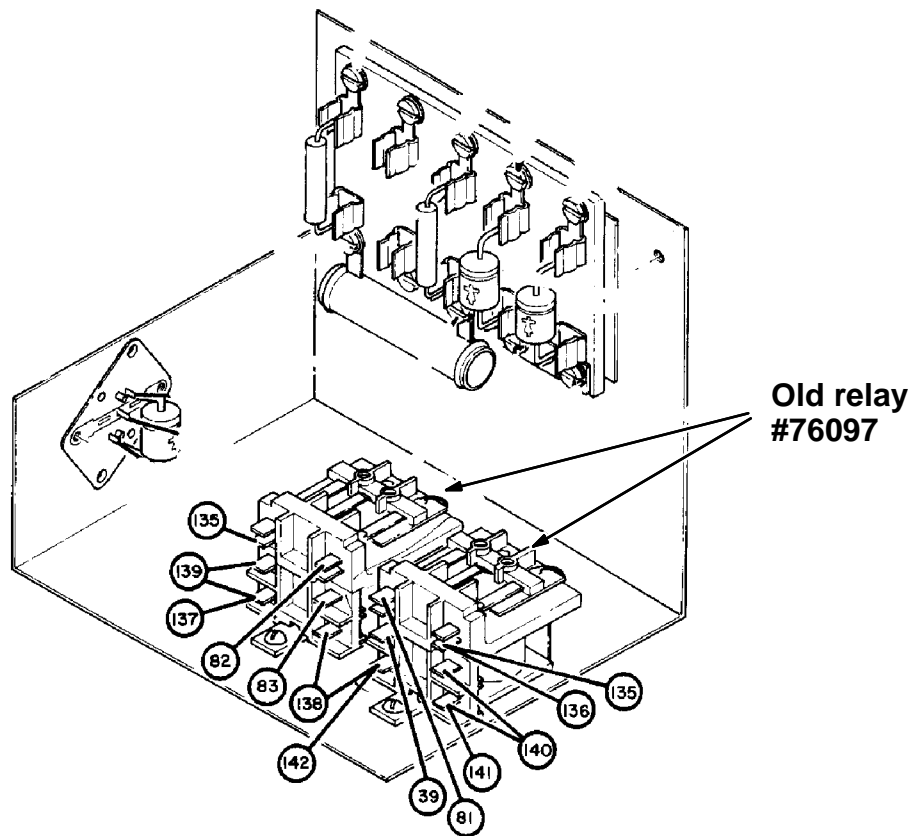


FIG. 3 - MFR Control Assembly

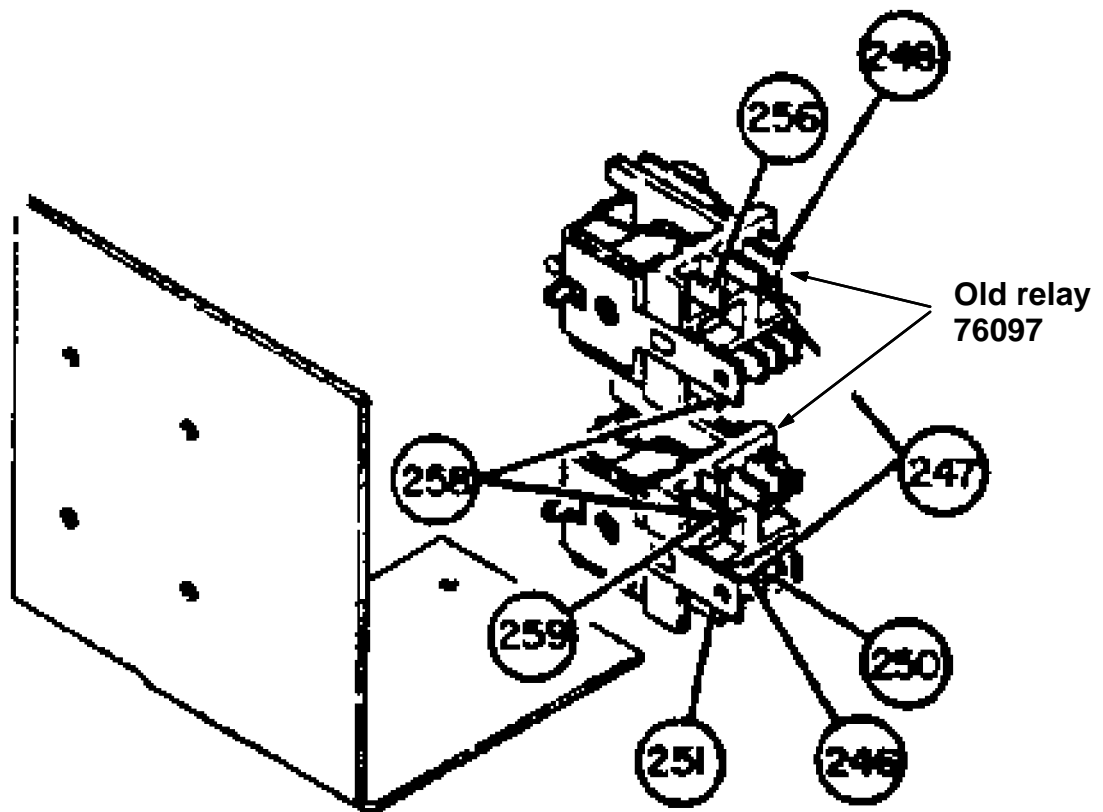


FIG. 4 - Control Panel Component

**BILL OF MATERIALS FOR RELAY REPLACEMENT KIT 21666**

<b>Ref.</b>	<b>TENNANT Part No.</b>	<b>Description</b>	<b>Qty.</b>
1	43942	1/4 in. female terminal	4
2	21668	Relay bracket	1
3	87284	Relay	1
4	32515	#8 pan screw	1
5	32978	#8 lock washer	1
6	19310	#8 hex nut	1
7	19320	#6 pan screw	2
8	41578	#6 flat washer	2
9	19309	#6 hex nut	2

TENNANT COMPANY  
P. O. Box 1452  
Minneapolis, MN 55440-1452