

**WARNING:** Only a single machine operator should be within reach of the machine sealing head, to avoid accidental pinching in the moveable jaw.

**OPERATION:** To start a machine cycle, simultaneously push down on the two green buttons (on the yellow boxes mounted on the front of the machine's sealing head). The buttons must be held down long enough for the moveable jaw to completely close. Early release of the buttons will cause the jaw to immediately reopen.

If the vacuum pump is not already running, closure of the jaw will start it. The pump will shut down, automatically, if the machine is not used again for approximately 20 minutes.

At the end of a packaging cycle, the jaw will automatically reopen.

#### **TROUBLE-SHOOTING:**

**WARNING:** Trouble-shooting should only be done by a qualified technician. Special care must be taken to avoid pinch hazards with the moveable jaw, as some trouble-shooting tests in the machine may activate the jaw, without pushing the green buttons.

To adjust the opening or closing speed of the jaw, adjust the pneumatic flow controls on the pneumatic cylinder powering the jaw.

If the jaw does not close when the two buttons are pushed, first check the following:

1. Do you have electrical power and compressed air at the machine?
2. Have you selected a program?
3. Are both buttons being pushed at the same time?

If these points are OK, check the following:

1. When you hold down Push-Button 2 (PB-2), on the right side of the machine head, do Micro-Controller lights I8 and Q12 illuminate?

If only I8 illuminates, the Micro-Controller has probably failed.

If I8 is not illuminated and you can measure 24 VDC between terminals I8 and TB2-5, the Micro-Controller has probably failed.

If you do not find 24 VDC between I8 and TB2-5, check for continuity through PB-2, as follows. Open the Operator Interface (display) Box, and check for 24 VDC between terminals TB4-13A and TB4-10C. If there is no voltage, PB-2 has probably failed.

If there is voltage, check for a bad wire connection to TB2-13A or onward to I8.

2. If both I8 and Q12 are on, is the light on Solenoid Valve 9 illuminated?
  - a. If it is, push in the white button on the end of the valve body. If this causes the jaw to close then the solenoid for the valve has probably failed.

If this does not activate the valve, then the valve body has probably failed.
  - b. If Solenoid Valve 9's light does not illuminate, check for 24 VAC between terminal 5 on the Safety Relay and ground. If there is power, then look for a bad wire connection back to TB2-23B on the terminal strip in the main electrical compartment.
  - c. If there is no voltage at terminal 5, either the Safety Relay has failed, or there is no signal coming to the Relay from the Push Buttons.
  - d. When both Buttons are up, you should find 24 VAC between terminal 3 of the Safety Relay and ground, and no voltage between terminal 2 and ground.

When both Buttons are pushed down, you should find 24 VAC between terminal 2 and ground, and no voltage between terminal 3 and ground.

If these measurements do not check out, one or both of the Push Buttons has probably failed.

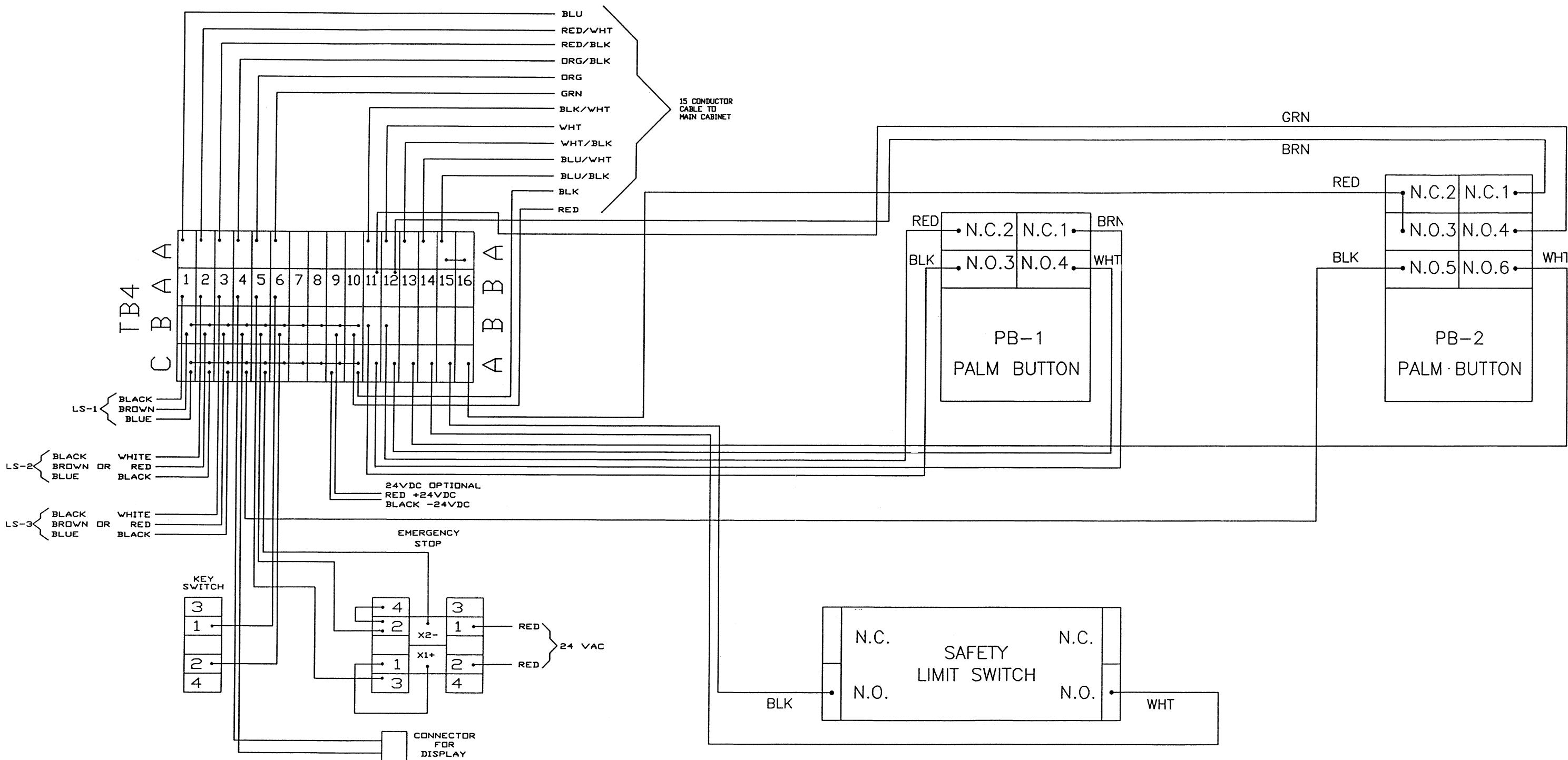
If these measurements check out, the Safety Relay has probably failed.

If the jaw does not remain closed after you release the green buttons, the Safety Limit Switch SLS-1 (on the sealing head, near the Operator Interface Box) should be checked.

The Switch roller/arm must be adjusted so that it closes the Switch electrical contacts just as the shaft arm is locking the jaw shut. Once the contacts close, you should measure 24 VAC between terminal 6 of the Safety Relay and the machine chassis (ground).

1. If you do not find 24 VAC, the switch is out of adjustment or has failed.
2. If 24 VAC is present, then the Safety Relay has failed.

# DISPLAY BOX AUTO JAW OPENER/CLOSER



# INTER-CONNECTIONS AUTO JAW OPENER

