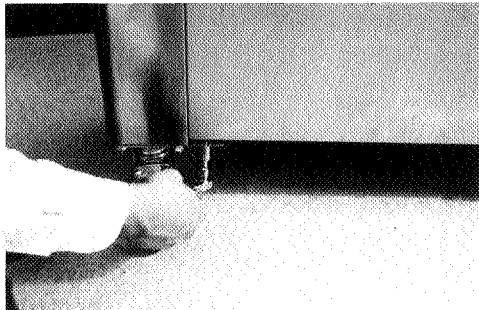
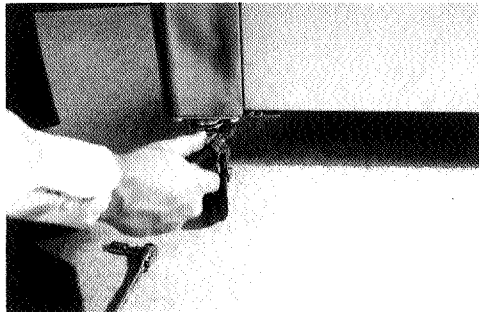


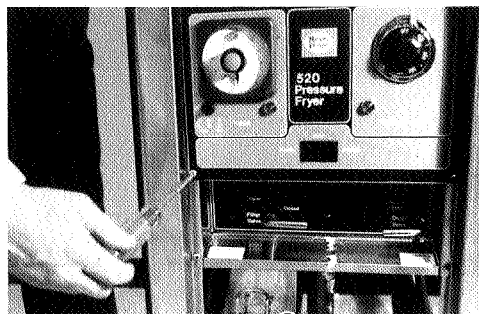
SECTION 5. MAINTENANCE**5-1. INTRODUCTION**

This section provides procedures for the replacement of the various parts used within the pressure fryer. Before replacing parts, refer to the troubleshooting section of this manual. It will aid you in determining the cause of the malfunction.

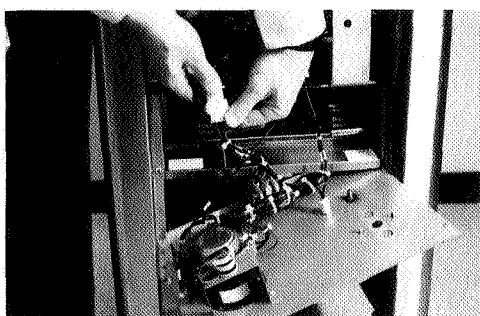
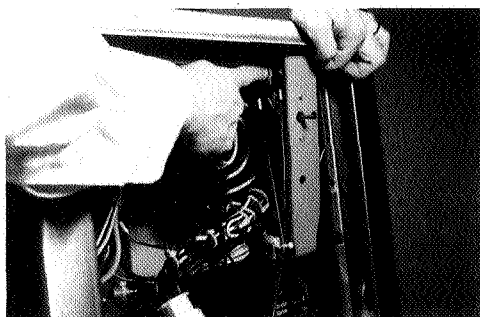
5-2. REMOVAL OF SIDE PANEL**Step 1****Step 2****WARNING**

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

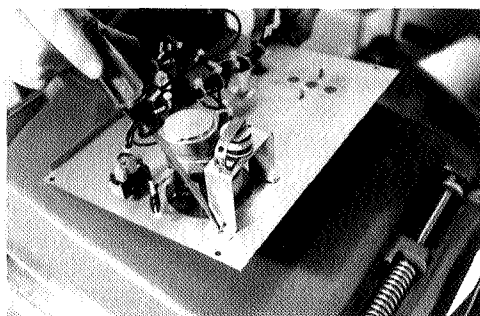
1. Remove two 3/8" nuts from bottom of side panel.
2. Using a straight blade screwdriver, gently pry side panel straight up.
3. Slide side panel from unit.

5-3. REMOVAL OF CONTROL PANEL**Step 1a****WARNING**

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

5-3. REMOVAL OF CONTROL PANEL (Continued)**Step 1b****Step 2****Step 3**

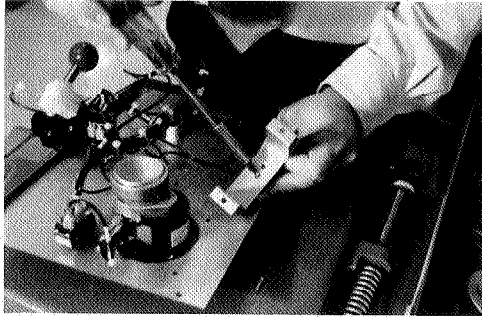
1. Remove four screws securing control panel to unit and also thermostat knob.
2. Unplug the nine pin connector.
3. Remove two wires from thermostat (wire number 13 & 16) and remove control panel.

5-4. REPLACEMENT OF TIMER BUZZER COIL**Step 2****WARNING**

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Follow steps 1, 2 and 3 in Removal of Control Panel.
2. Remove two screws from the buzzer coil bracket.

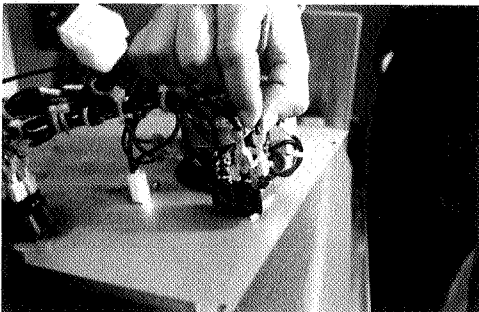
5-4. REPLACEMENT OF TIMER BUZZER COIL (Continued)



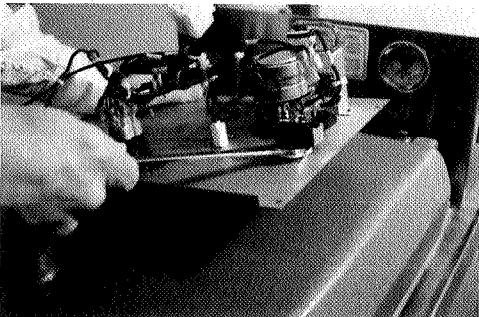
Step 3

3. Remove screw mounting buzzer coil to bracket.
4. Cut wires on old buzzer. (Note: Mark wires before cutting.)
5. Install new buzzer and splice cut wires.

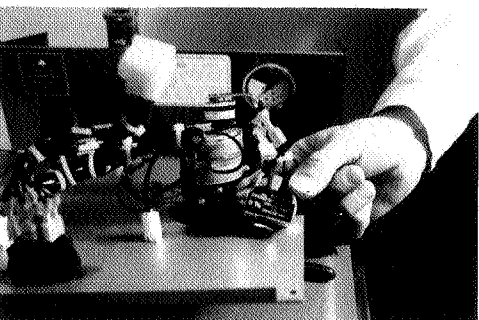
5-5. REPLACEMENT OF TIMER SWITCH



Step 2



Step 3



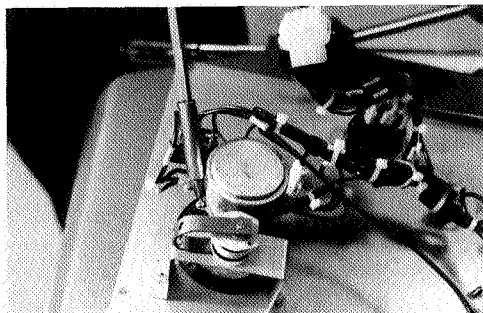
Step 4

WARNING

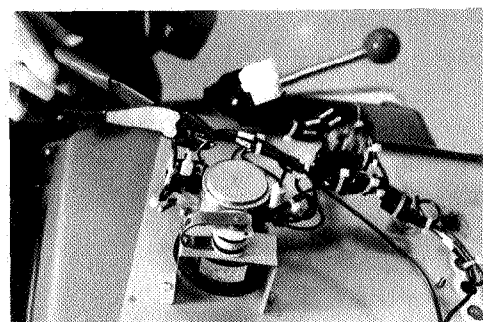
Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Follow steps 1, 2 and 3 in Removal of Control Panel.
2. Unplug wires from old timer switch. (Note: Mark wires before unplugging.)
3. Loosen the 9/16" retainer nut behind timer switch.
4. Remove front retainer nut of timer switch and install new switch.

5-6. REPLACEMENT OF TIMER MOTOR



Step 2



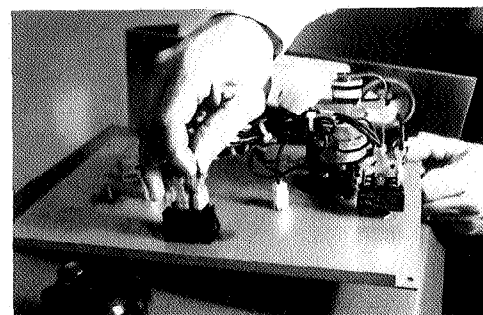
Step 3

WARNING

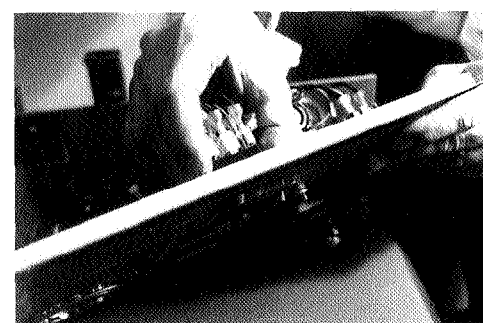
Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Follow steps 1, 2 and 3 in Removal of Control Panel.
2. Remove the two screws securing motor to timer.
3. Cut wires on old motor. (Note: Mark wires before cutting.)
4. Install new motor and splice cut wires.

5-7. REPLACEMENT OF POWER SWITCH



Step 2

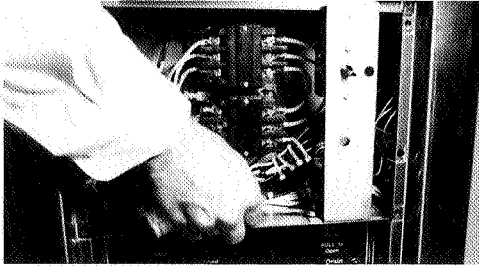
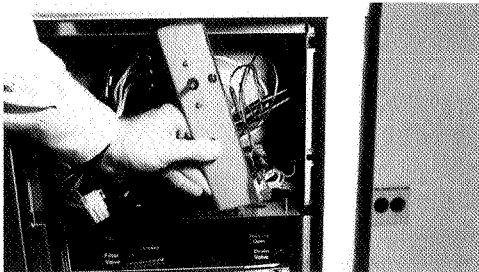
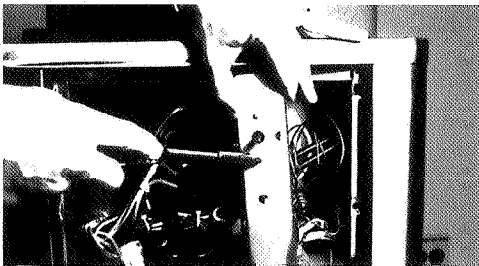
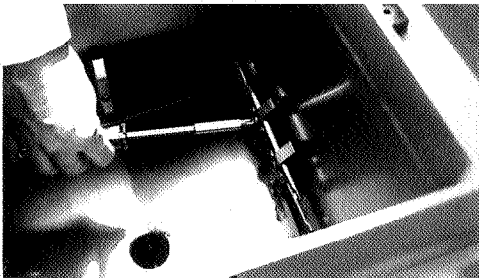
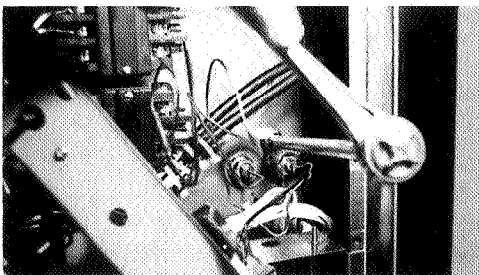


Step 3

WARNING

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Follow steps 1, 2 and 3 in Removal of Control Panel.
2. Unplug wires from old power switch. (Note: Mark wires before removing.)
3. Depress retainers on rear of switch and push switch out towards front of control panel.
4. Install new power switch.

5-8. REPLACEMENT OF THERMOSTAT**Step 2a****Step 2b****Step 3****Step 4****Step 5****WARNING**

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Follow steps 1, 2 and 3 in Removal of Control Panel.
2. Remove two 3/8" nuts securing thermostat bracket to control area.
3. Remove two screws holding thermostat to bracket.
4. On the inside of pot, loosen screws on bracket securing thermostat bulb.
5. Remove 11/16" nut from pot wall and remove thermostat.
6. Install new thermostat in reverse order.

5-9. CALIBRATING THE THERMOSTAT

WARNING

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

Whenever the thermostat fails to maintain the selected temperature within $\pm 5^{\circ}\text{F}$ (-15°C) of the thermostat setting, it should be calibrated.

To calibrate the thermostat, it is necessary to perform step increases in the temperature of shortening. Follow this procedure:

1. Place the main power switch in the POWER position. Be sure there is shortening in the frypot.
2. Set the thermostat knob to 250°F (121°C).
3. Allow enough time for the shortening to heat. When the shortening reaches the set temperature on the thermostat, the indicator light will go off. Usually, it will take no longer than 15 minutes for the shortening to heat to the set temperature.
4. Remove the fry basket from the shortening.
5. Stir the shortening with the basket handle.
6. Measure the temperature of the shortening using an accurate, mercury tube type, deep fat thermometer capable of measuring temperatures in the 250°F to 400°F (121°C to 204°C) range. (Henny Penny part number 12106.)
7. Insert the thermometer near the center of the frypot to a depth of about 3 inches below the level of shortening.
8. Carefully stir the shortening with the thermometer.
9. Allow the mercury in the thermometer to rise to the temperature of the shortening. Hold the thermometer straight up and down.

NOTE

The temperature reading is to be taken just as the TEMP indicator light goes off. This will give the correct temperature rather than an override temperature.

10. If the temperature is within 5°F (-15°C) of the temperature set on the thermostat, increase the thermostat setting approximately 25°F (-4°C). Wait until the indicator light goes off, then again check the temperature

**5-9. CALIBRATING THE
THERMOSTAT (Continued)**

of the shortening. If it is again within 5°F (–15°C), the thermostat does not require calibration.



If the thermometer is accidentally broken, and mercury and pieces of broken glass fall into the shortening, discard the shortening and clean the frypot thoroughly. Mercury is highly poisonous.

11. If the temperature indicated on the thermometer differs more than 5°F (–15°C), remove the thermostat knob by pulling it off its stem.

NOTE

Do not rotate the knob while removing it.

12. Turn the adjustment screw in the center of the hollow stem, using a small blade screwdriver. If the thermometer reading was higher than the setting, rotate the screw clockwise. If lower, counter-clockwise. For example:

setting:	250°F (121°C)
reading:	275°F (135°C)
adjustment:	1/4 turn clockwise.

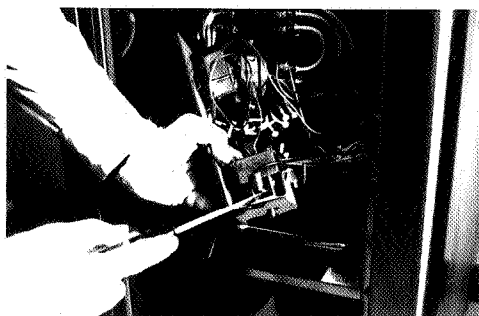
13. After adjusting the screw, install the knob and reset the thermostat to 250°F (121°C). Again, measure the temperature of the shortening with the deep fat thermometer. Wait a few moments for the shortening to reach the 250°F (121°C) temperature setting, indicated on the thermometer. The indicator light should go off when the temperature reaches 250°F (121°C). Readjust screw if necessary.
14. Set the thermostat to 275°F (135°C).
15. Check the temperature of the shortening when the indicator light goes off.
16. If the temperature measured on the thermometer is not within 5°F (–15°C) of the thermometer setting, adjust for the correct temperature as in steps 12 and 13 of this procedure.

NOTE

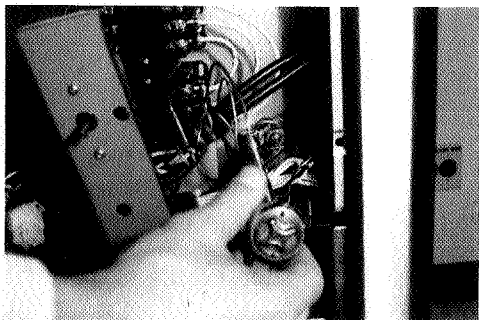
Once the thermostat has been calibrated and set at the desired cooking temperature, do not use the thermostat to turn the fryer off. Use the ON-OFF switch.

5-10. REPLACEMENT OF HIGH LIMIT

Checkout



Step 3



Step 4

Replacement

This high temperature control is a manual reset control which senses the temperature of the shortening. If the shortening temperature exceeds the safe operating limit, this control switch will open and shut off the heat to the frypot. When the temperature of the shortening drops to the safe operating limit, the control must manually be reset.

Before replacing a high temperature limit control, check to see that its circuit is closed.

NOTE

The shortening temperature must be below 380°F (192°C) to accurately perform this check.

1. Remove electrical power supplied to the fryer.

WARNING

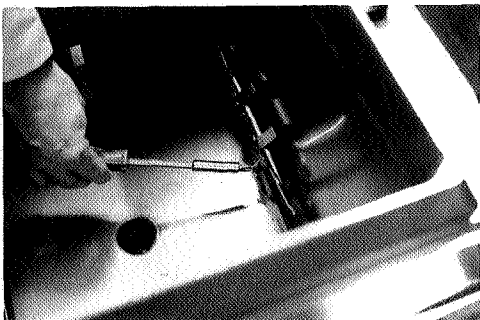
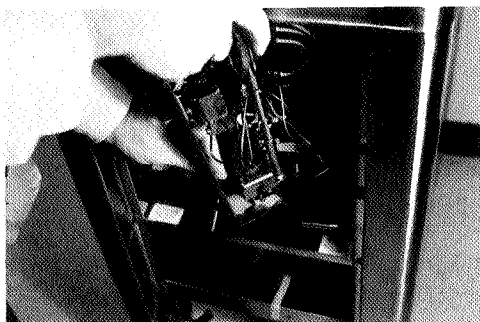
Place POWER/OFF/PUMP switch in the OFF position, and unplug the power cord or open the wall circuit breaker, or electrical shock could result.

2. Remove the control panel.
3. Remove the two electrical wires from the high temperature limit control.
4. Check for continuity between the two terminals after resetting the control. If the circuit is open, replace the control, then continue with this procedure. (If the circuit is closed, the high limit is not defective. Reconnect the two electrical wires.)

WARNING

Before following these steps, place POWER/OFF/PUMP switch in the OFF position, and unplug the power cord or open the wall circuit breaker, or electrical shock could result.

1. If the tube is broken or cracked, the control will open, shutting off electrical power. The control cannot be reset.

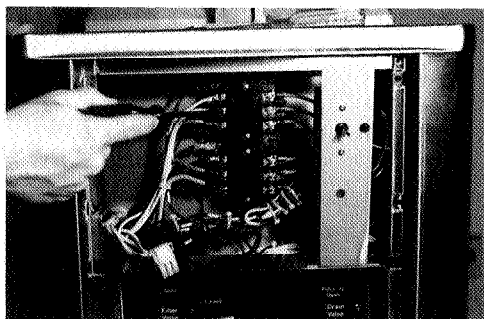
5-10. REPLACEMENT OF HIGH LIMIT (Continued)**Step 5****Step 8**

2. Drain shortening from the frypot.
3. Remove control panel.
4. Loosen small inside screw nut on capillary tube.
5. Remove capillary bulb from bulb holder inside the frypot.
6. Straighten the capillary tube.
7. Remove larger outside nut that threads into pot wall.
8. Remove the two screws that secure the high limit to the high limit bracket.
9. Remove defective control from control panel area.
10. Insert new control and replace screws.
11. Uncoil capillary line, starting at capillary tube, and insert through frypot wall.

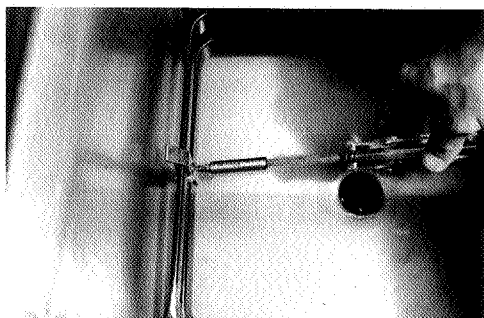
WARNING

To avoid electrical shock or other injury, the capillary line must run under and away from all electrical power wires and terminals. The tube must never be in such a position where it could accidentally touch the electrical power terminals.

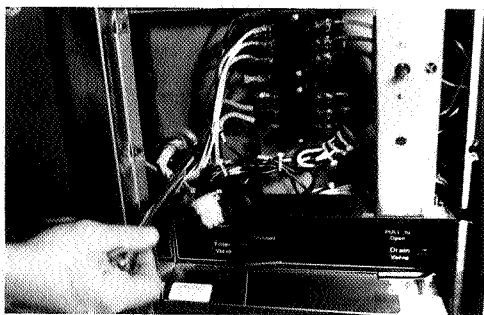
5-11. REPLACEMENT OF HEATING ELEMENT



Step 3



Step 4



Step 5

WARNING

Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Drain the shortening.
2. Remove the thermostat and high limit bulb holder from the heating element inside the frypot.
3. Remove the heating element wires from the contactor. Label each so it can be replaced in the same position on the new element.
4. Slide the element spreaders to the center of the heating element.
5. Remove the brass nut and washer, which secure the ends of the element through the frypot wall.
6. Remove the heating element from the frypot by lifting the far end and sliding it up and out toward the rear of the frypot.

NOTE

Always install new rubber O rings (2) when installing heater elements.

7. Install new heating element with new rubber O rings (2) mounted on terminal ends, and spreaders loosely mounted in the center of the stacked elements.
8. Replace the heating elements, terminal end first at approximately 45° angle, slipping the terminal ends through the front wall of the frypot.
9. Replace the brass nut and washer on the heating element terminals. Tighten the brass nuts to 30 foot lbs. of torque.
10. Move the element spreaders from the center of the element, and tighten.
11. Replace the thermostat and high limit bulb holder and tighten screw which holds the bulb in place.
12. Reconnect the wires to the appropriate terminal as labeled when they were removed.
13. Replace the front control panel.

5-11. REPLACEMENT OF HEATING ELEMENT (Continued)

14. Connect the power cord to the wall receptacle or close wall circuit breaker.

CAUTION

Heating element should never be energized without shortening in the frypot, or damage to element could result.

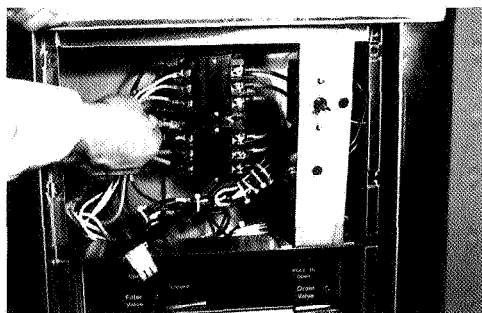
15. Replace the shortening in the frypot.

5-12. REPLACEMENT OF CONTACTORS

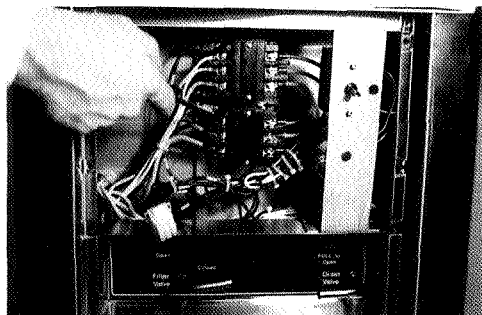
If either contactor is defective it must be replaced as follows:

WARNING

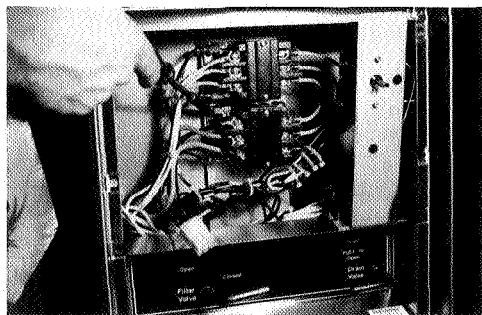
Remove electrical power supplied to the fryer, by unplugging or opening the wall circuit breaker, or electrical shock could result.



Step 1a



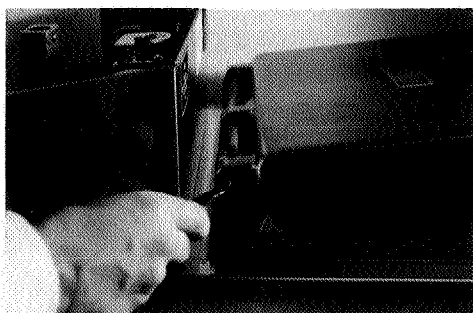
Step 1b



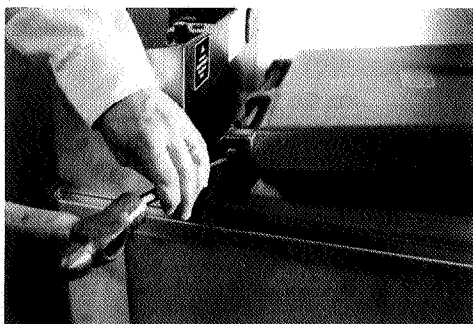
Step 2

1. Remove only those wires directly connected to the contactor being replaced. Label the wires.
2. Remove the two mounting screws on the base plate and remove contactor.
3. Install the new contactor and tighten the two mounting screws.
4. Connect the labeled wires to their respective positions.
5. Install the control panel.
6. Reconnect power to the fryer and test the fryer for proper operation.

5-13. REPLACEMENT OF LID HINGE SPRING



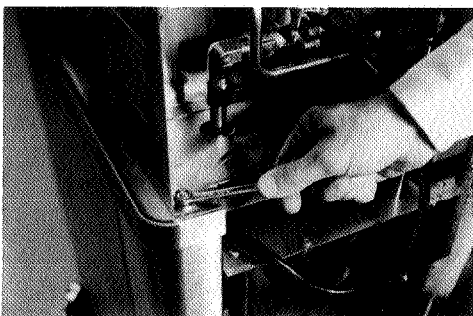
Step 1



Step 2



Step 4



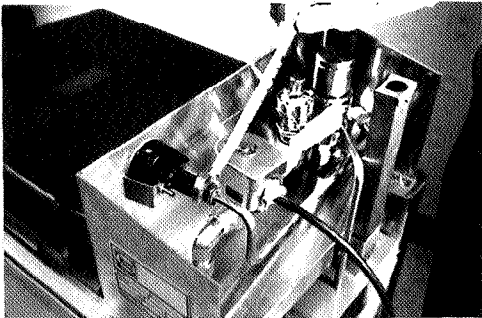
Step 5a

WARNING

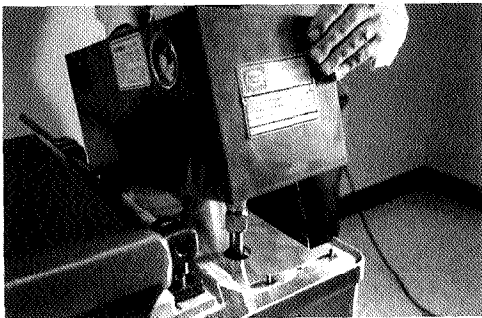
Place power switch in the OFF position, shut off power at the fuse or breaker box. Failure to do so could result in electrical shock.

1. Remove retaining ring from hinge pin.
2. Using a punch and hammer, drive hinge pin out from spring.
3. Remove old spring.
4. Remove stops from cam.
5. Loosen 3/8" nuts from rear shroud, remove nut from pressure gauge, and remove shroud.

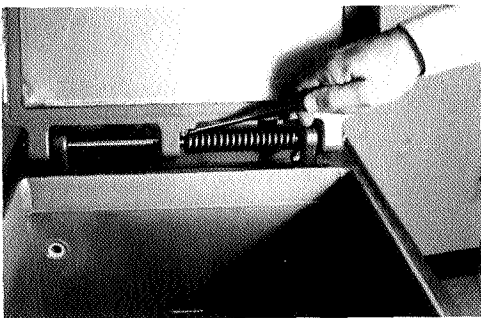
5-13. REPLACEMENT OF LID HINGE SPRING (Continued)



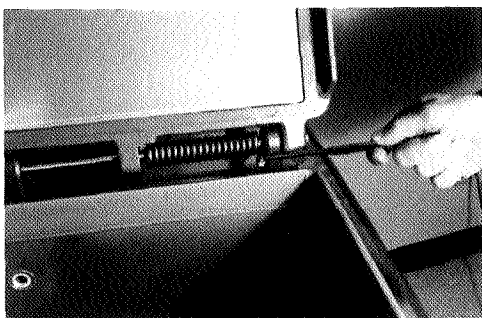
Step 5b



Step 5c



Step 6a



Step 6b

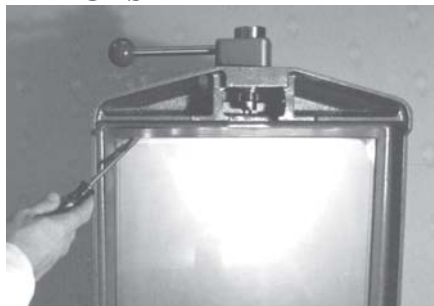
6. Position new spring as shown in illustration at left.

NOTE

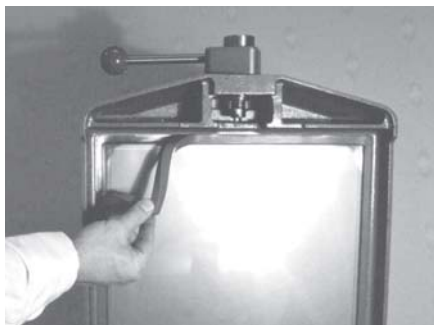
Spring must be in this position to accurately install lid hinge spring.

7. Open lid to rear of unit as far as possible.
8. Using a punch and hammer, drive hinge pin back into lid and spring.
9. Reattach lid stops and rear shroud.

5-14. REPLACEMENT OF LID GASKET



Step 1



Step 2

WARNING

Place power switch in the OFF position, pull fuse or turn off wall circuit breaker, or electrical shock could result.

1. Using a straight blade screwdriver, pry one corner of gasket out from liner.
2. Pull gasket from lid.
3. Clean gasket and gasket seat with soap and hot water.
4. Reinstall lid gasket with “good” side facing out, or install new gasket.

NOTE

Reverse lid gasket every 90 days to keep gasket in good condition.

5-15. LID LATCH LUBRICATION

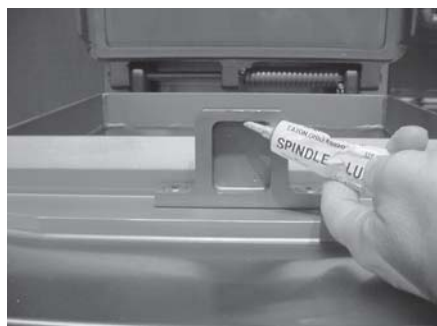


Figure 1



Figure 2

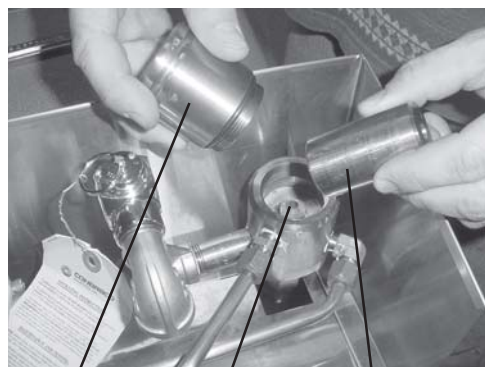
The cam shaft and latch plate should be lubricated every 90 days to prevent early wear and failure of latch parts.

1. Using spindle lube, part number 12124, place a small amount of spindle lube in the top portion of the latch plate. See Figure 1.
2. Using spindle lube, part number 12124, place a small amount of spindle lube on the cam shaft. See Figure 2.

5-16. DEADWEIGHT VALVE ASSEMBLY



Deadweight Valve



CAP

ORIFICE

WEIGHT



Do not attempt to remove the valve cap while the fryer is in operation, or severe burns or other injuries could result.

The deadweight valves are located behind the lid. The valve, left of the pressure gauge, is a 14 1/2 lb. (999 mbar) safety relief valve, and the one on the right is the operating valve.

Valves are working properly, when the pointer on the gauge is in the "OPERATING ZONE" (green area). The gauge pointer should not normally exceed the operating zone. If the pressure builds to 14-1/2 lbs.(999 mbar), the safety relief valve will open to release steam pressure from inside cookpot.



DO NOT MANUALLY ACTIVATE THE SAFETY RELIEF VALVE. Hot steam will be released from valve when ring is pulled. Keep away from safety valve exhaust, or severe burns could result.

1. AT THE END OF EACH DAY'S USAGE OF THE FRYER, THE OPERATING VALVE MUST BE CLEANED. The fryer must be OFF and the pressure released. Open the lid and then remove the dead weight valve cap and dead weight.

WARNING

Failure to clean the operating control valve daily could result in the fryer building too much pressure. Severe injuries and burns could result.

2. Wipe both the cap and weight with a soft cloth. Make certain to thoroughly clean inside cap, the weight seat, and around valve orifice.
3. Dry the parts and replace immediately to prevent damage or loss.

5-17. REMOVAL & CLEANING OF SAFETY RELIEF VALVE

SAFETY VALVE



Step 1



Step 2



Step 3

The safety relief valve should be cleaned once a year.



DO NOT ATTEMPT TO REMOVE VALVE WHILE FRYER IS OPERATING, or severe burns or other injuries could result.

1. Using 3/8" socket, remove the 4 nuts securing back shroud.
2. Loosen nut on pressure gauge, and pull the back shroud from fryer.
3. Unscrew Deadweight cap and remove cap and weight.
4. Use a wrench to loosen the valve from the pipe tee, turn counterclockwise to remove.
5. Clean the inside of the pipe tee with hot water.
6. Immerse the safety relief valve in a soapy water solution for 24 hours. Use a 1 to 1 dilution rate. The valve cannot be disassembled. It is factory preset to open at 14 1/2 pounds of pressure. If it does not open or close, it must be replaced.



DO NOT DISASSEMBLE OR MODIFY THIS VALVE. Tampering with this valve could cause serious injuries and also voids agency approvals and appliance warranty.