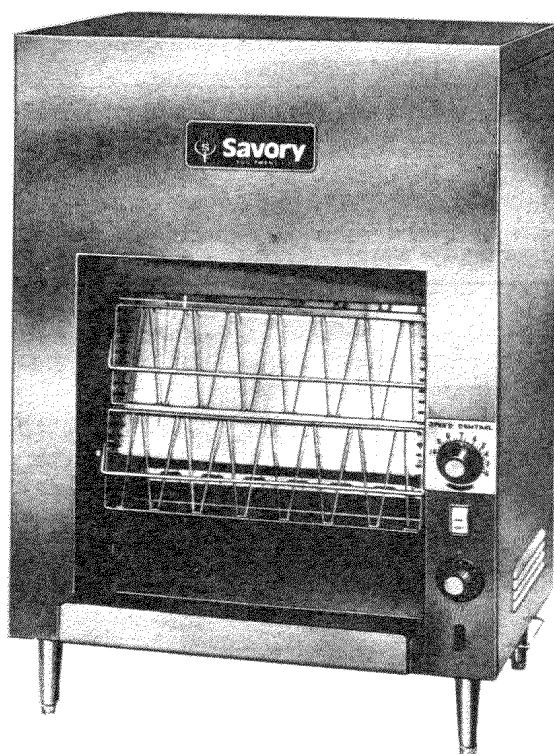


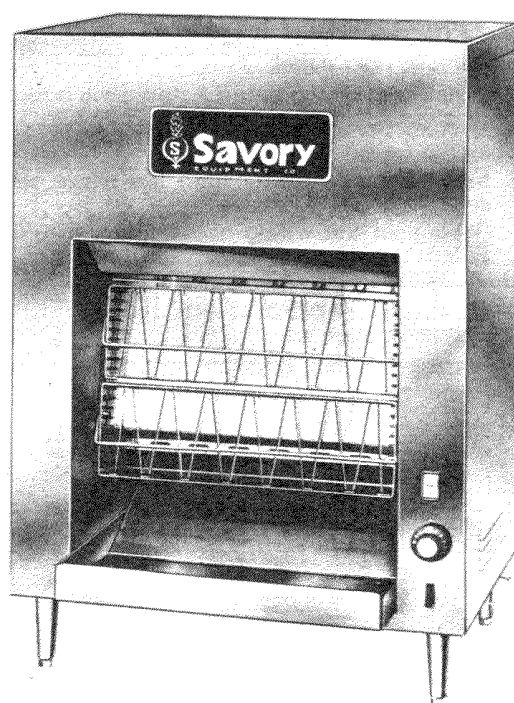


Enodis

PARTS & SERVICE for C-40VS/C-40 Vertical Conveyor Toaster



C-40VS



C-40

The C-40VS and C-40 are high volume conveyor toasters, constructed of brushed Stainless Steel. The C-40VS has a variable speed control enabling the toasting of not only bread, but English Muffins, bagels, as well as buns, with one pass through the conveyor. Standard features for both machines include variable heat and bun-toast switch for toasting on one or both sides. Each is available in 208V or 240V, single phase (Check data plate).

NOTICE

All repair operations described in this Manual should only be carried out by a Savory Certified Service Technician.

IMPORTANT

Disconnect power before attempting service or disassembling components.

Service: All electrical and drive components are accessible for servicing by removal of the right side panel. Remove the two screws from underside of panel and pull handle to release.

A On/Off Switch Replacement:

1. Remove right side panel.
2. Remove two retaining screws from front panel.
3. Disconnect wiring harness from switch terminals.
4. Connect wiring harness to new switch and install switch in panel. Refer to wiring diagram.

B Bun/Toast Switch Replacement:

1. Remove right side panel.
2. Disconnect wiring harness from switch terminals.
3. Depress two spring clips on top of switch and tilt switch forward.
4. Insert the new switch into the panel opening, snapping snugly into place.
5. Reconnect the wiring harness to the terminals. Refer to wiring diagram.

C Thermostat Replacement:

(Refer to Figure #3)

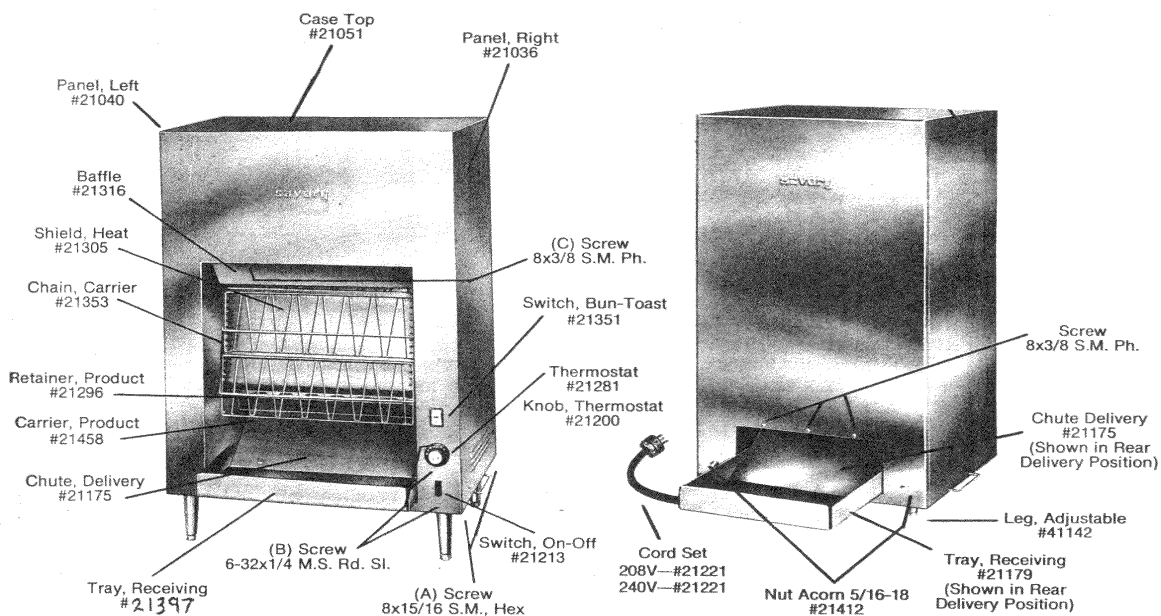
1. Remove left and right side panels.
2. Remove insulation

NOTE: The wiring harness must be disconnected from heating elements to remove insulation on right side. Hold terminals with pliers to prevent bending. (Figure #4)

3. Remove rear heating element. (Refer to Section D)
4. Remove wire guard. (Refer to Section O)
5. Remove two baskets from conveyor chain, then rotate the chain so that this opening is at the bottom directly under the thermostat bulb.
6. Pull off thermostat knob.
7. Remove the two retaining screws from front panel.
8. Remove wires from thermostat.
9. Push as much capillary tube as possible through the plastic grommet located on the upper portion above the shelf and pull thermostat bulb out of the hole.
10. Feed capillary tube and bulb through plastic grommet into the lower portion below shelf and remove from toaster.
11. To install new thermostat, feed bulb and tube through bottom of plastic grommet.

CAUTION: Avoid sharp bends or kinks in the capillary tube as this will create restrictions preventing proper thermostat operation.

12. Insert bulb into hole and through center guide. The bulb can be seen through the openings for the wire guard and read heater element.
13. Push bulb through hole in left side inner panel. It can be manually guided by reaching through rear delivery opening and up through opening in conveyor where baskets have been removed. Bulb should be extended about 1-1/2" from left inner panel.
14. Attach wires to thermostat. (Refer to wiring diagram)



15. Install new thermostat with two screws and replace knob.
16. Position the balance of tube so it runs from bottom of thermostat along inside of front panel. Coil excess parallel to and under shelf. Make certain tube is away from all electrical connections.
17. Check tube positioning before replacing panel to be sure the tube will clear all electrical connections.
18. Replace heater element, wire guard, insulation, heater wires, (refer to wiring diagram) and side panels.

Figure 3
Thermostat Installation

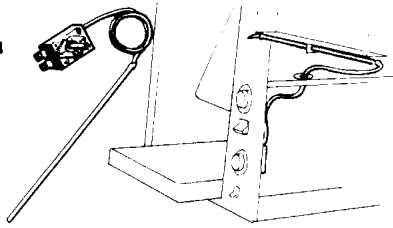
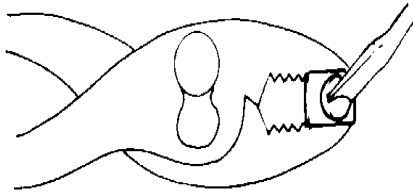


Figure 4



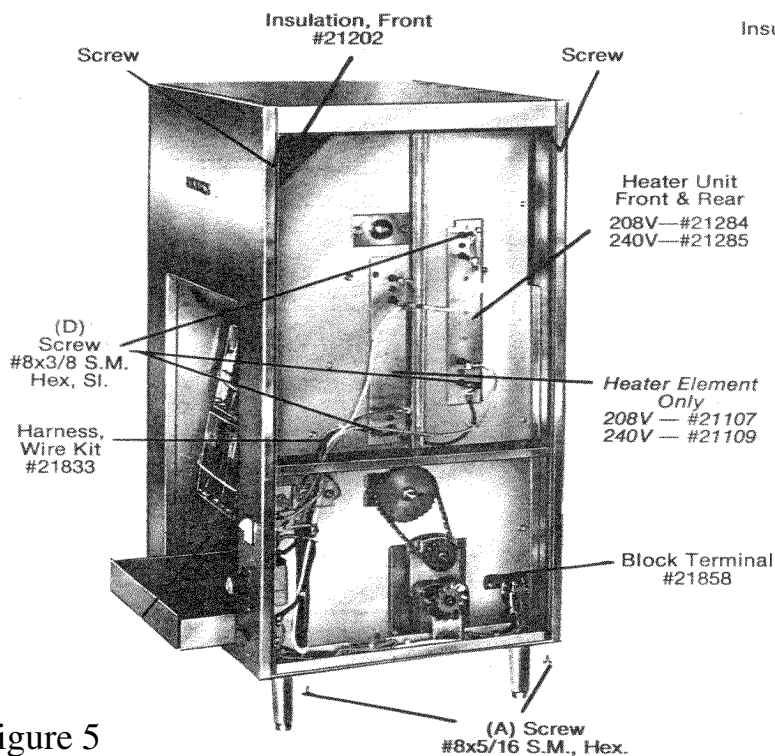
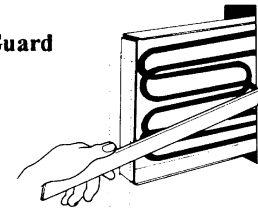
D Heater Unit Assembly Replacement:

(Refer to Figure #5)

1. Remove right panel.
2. Holding the heater connections with pliers to prevent bending, remove the three screws retaining the wiring harness on the heater connections of the unit being replaced. (Figure #4)
3. Remove insulation.
4. Remove the two screws holding heater element to inside panel.
5. Slide heater unit out the side.

NOTE: Because of air space required in some heating elements they may not easily pass thru the opening. If element does not slide out completely, remove left side panel, insulation and wire guard. (Refer to Section O). Use a suitable "flat" tool such as a yardstick or 24" ruler and insert through wire guard opening. Gently pry heating element at curvature so it can clear opening and slide out. (Figure #6)

Figure 6
Left Side Wire Guard Opening



Insulation, Side #21203

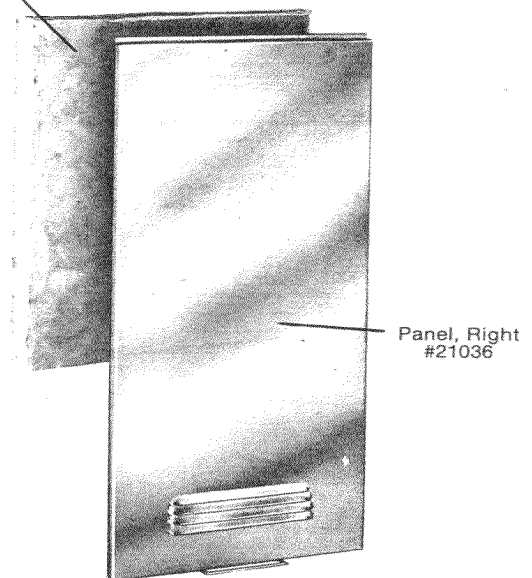


Figure 5

6. Slide new heater unit into place and fasten with two screws.
7. Replace insulation.
8. Reconnect wiring harness (Refer to Wiring Diagram). Hold heater terminals with pliers. Be sure all connections are tight and jumper has been installed between upper heater unit connections.

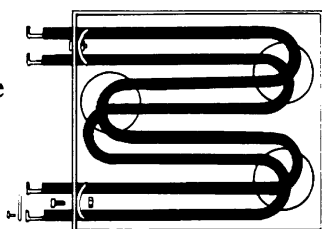
E Individual Heater Element Replacement:

Each heater unit is equipped with two elements.

These may be replaced individually as follows:

1. Remove heater unit as described in Section D.
2. Place unit on a flat surface and remove jumper and the two screws, nuts and retainers.
3. Bend holding tabs away from element and lift out at an angle that will let terminal ends clear holes.
4. When replacing elements, make certain that element with "raised bend" is on top and "flat" on bottom. There should be air space at points circled in (Figure #7). Elements must not touch at these points.

Figure 7
Heating Element Unit.
There must be air space
at circled areas.
Element Only
208V-21107
240V-21109



F Motor Replacement:

(Refer to Figure 8, 9 & 9A)

1. Remove right side panel.
2. Disconnect motor lead wire from terminal block and conveyor speed control (and or P.C. board if your unit contains one). Or on-off switch on C-40 only units.
3. Remove two mounting bolts from under toaster that attach motor bracket. Slip off drive chain.
4. Lift out motor and bracket assembly and remove four screws holding motor to bracket.
5. Using 1/16" Allen wrench, loosen Allen screws and remove clutch sprocket from motor shaft.
6. Mount clutch sprocket on new motor shaft and mount new motor on bracket.
7. Install motor and bracket assembly attaching with the two mounting bolts. Do not tighten bolts.
8. Mount drive chain on sprocket by sliding motor to the left then adjust chain by sliding motor to the right (Figure #8). Tighten bolts.

Figure 8
Drive Chain Orientation

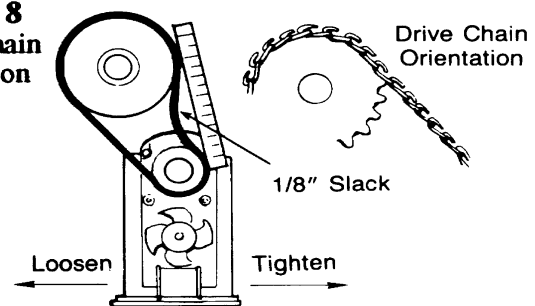
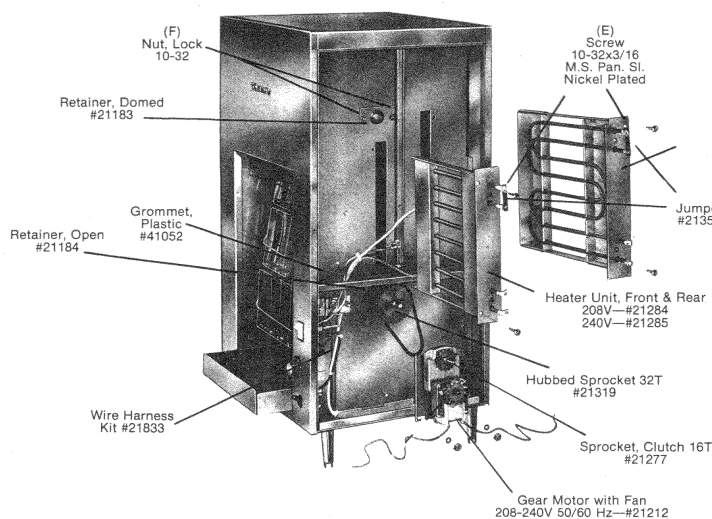
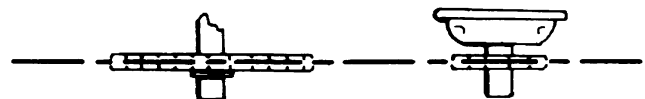


Figure 9
Sprocket Orientation



9. Check sprocket alignment (Figure #9) and adjust if necessary by moving clutch sprocket on motor shaft. See Section G, Number 5.
10. Reconnect wires (Refer to Wiring Diagram) and replace side panel.

G Drive Chain Replacement:

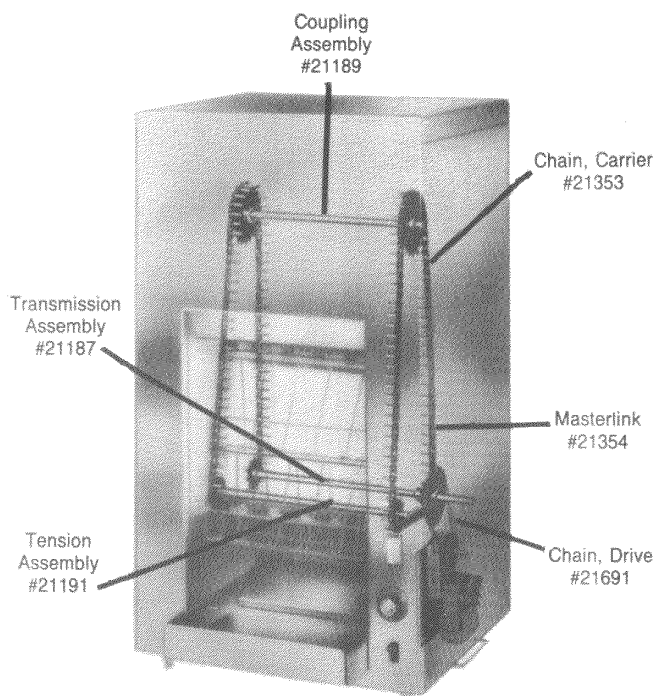
(Refer to Figure 8 & 9)

1. Remove right side panel.
2. Loosen motor mounting bolts and slide motor to left to loosen chain.
3. Lift off old chain and position new chain over sprockets. Check orientation. (Figure #9).
4. Slide motor to right to remove chain slack and tighten motor mounting bolts.
5. Check chain tension. (Figure #8). Too tight will result in premature wear of chain, sprocket and bearing and may bind drive components. Too loose will result in chain slipping or falling off sprockets.

H Clutch Sprocket Replacement:

(Refer to Figure 8)

1. Remove right side panel.
2. Loosen motor mounting bolts and slide motor to left and remove drive chain.



3. Loosen Allen screws on clutch sprocket and remove sprocket from motor shaft.
4. Install new sprocket on motor shaft and tighten screws. Check sprocket alignment (Figure #9).
5. Position chain on sprocket and slide motor to right to remove slack. Tighten mounting bolts. Check chain orientation.
6. Check chain tension (Figure #8) and adjust if necessary. See Section G Number 5.
7. Replace right side panel.

I Hubbed Sprocket Replacement:

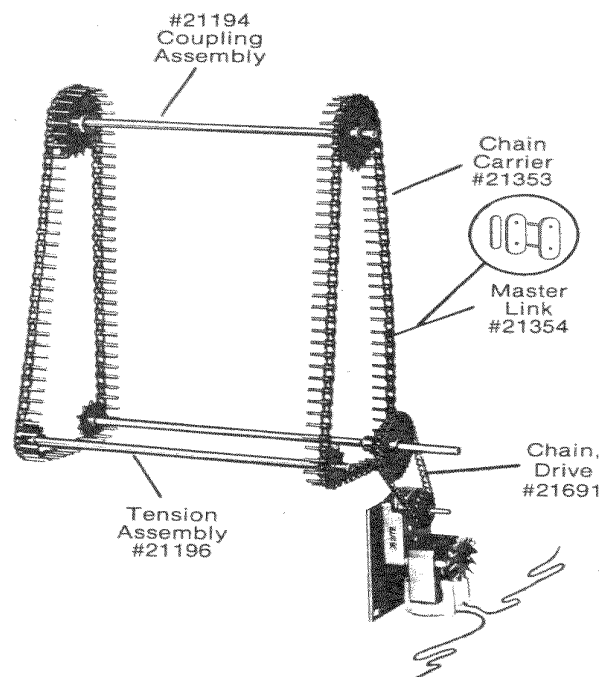
(Refer to Figure 10)

1. Remove right side panel.
2. Loosen motor mounting bolts and slide motor to left.
3. Remove drive chain and loosen Allen screws on hub of sprocket and slide off shaft.
4. Install new sprocket and align set screws with indents in transmission shaft.
5. Replace drive chain and slide motor to right to tighten (Figure #8) see Section G Number 5.
6. Replace right side panel.

J Bearing Replacement:

Coupling Bearing (Right Side)

1. See Section D, follow steps 1, 2 and 3.
2. Remove the two lock nuts holding bearing retainer and remove retainer.
3. Remove old bearing.



4. Install new bearing and seat in opening.
5. Replace retainer, nuts, insulation, heater wiring and side panel.

Coupling Bearing (Left side)

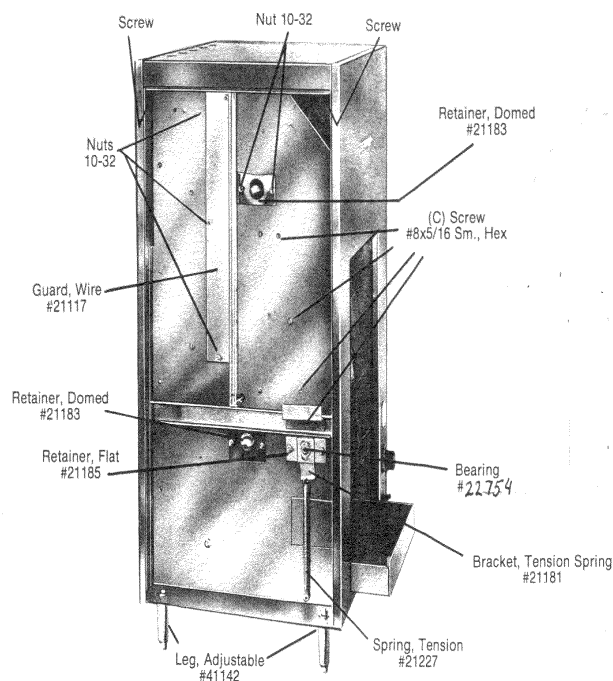
1. Remove left side panel and insulation.
2. Remove the two lock nuts holding bearing retainer and remove retainer.
3. Remove old bearing.
4. Install new bearing and seat in opening.
5. Replace retainer and lock nuts.

Tension Assembly Bearing (Right or Left)

1. Remove either side panel.
 2. Remove one end of tension spring from tension bracket.
 3. Remove the two lock nuts holding bearing retainer and remove retainer.
 4. Remove tension bracket and old bearing.
 5. Install new bearing and seat in opening (Figure 12).
 6. Replace tension bracket, retainer, lock nuts and spring.
- NOTE: If tension bracket has two anchor holes for spring use hole closest to the front of machine.

Transmission Bearing (Right side)

1. See Section 1; follow steps 1, 2 and 3.
2. Remove the two lock nuts holding bearing retainer and remove retainer.
3. Remove old bearing.
4. Install new bearing and seat in opening.
5. Replace retainer and lock nuts.
6. See Section 1; Follow steps 4, 5 and 6.



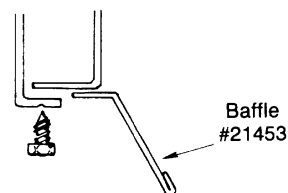
Transmission Bearing (Left side)

1. Remove left side panel.
2. Remove the two lock nuts holding bearing retainer and remove retainer.
3. Remove old bearing.
4. Install new bearing and seat in opening.
5. Replace retainer, nuts and left side panel.

K Conveyor Chain Replacement:

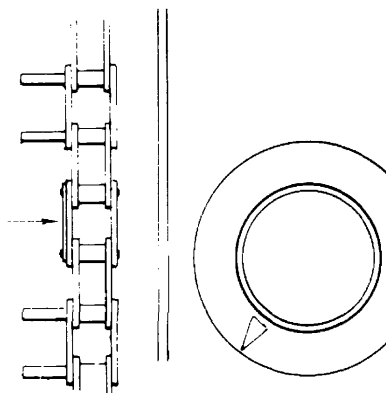
1. Remove toast receiving tray, delivery chute, left and right side panels.
2. Remove the two screws in upper edge of front opening that hold the front baffle. Slide baffle toward back of machine to remove (Figure #14).

Figure 14
Conveyor Chain
Baffle

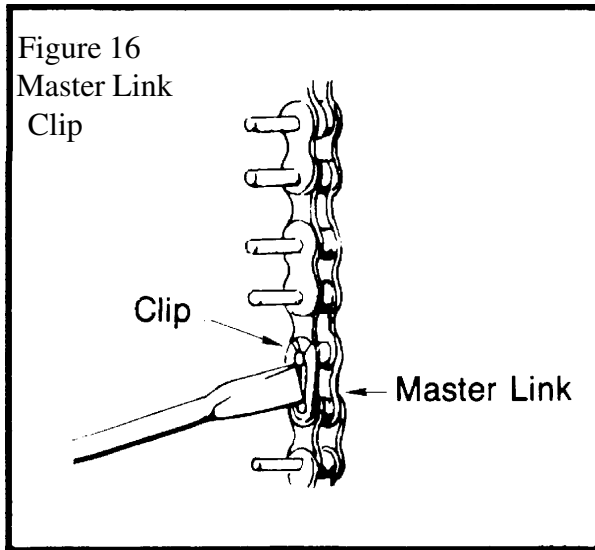


3. Remove baskets by slightly spreading chains, sliding basket to one side and lifting out.
4. Release the tension spring from spring bracket on both sides of tension assembly.

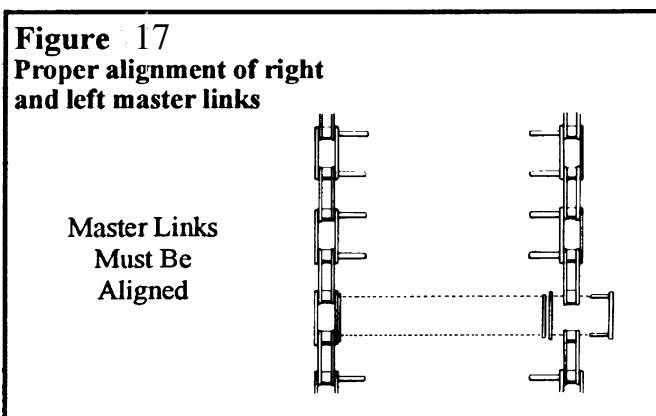
Figure 15



5. Locate master link (link without extended pins, (Figure #15). Remove clips on master link (Figure #16) and remove. Pull chain out from bottom.



6. With extended pins facing inward, drape new chain over the top of the coupling assembly. Make certain links of chain are meshed over sprocket and from bottom opening, lift it across transmission assembly and tension assembly sprockets. Visually check for fit over sprocket teeth and bring two ends of chain together. Install master link and clips. Repeat procedure for other chain. **IMPORTANT!** Align right and left side master links to insure proper alignment of baskets. (Figure #17).



7. Replace baskets, spring on tension brackets, front baffle, receiving tray. Delivery chute and left and right side panels.

L Transmission Assembly Replacement:

(Figure #11)

1. Follow steps 1 thru 5 in Section K.
2. Remove drive chain, hubbed sprocket, bearing retainers and bearings. (Refer to Sections I & J)
3. Slide assembly shaft to right side and lift left end of shaft out of bearing hole and remove shaft. **NOTE:** Free-wheeling (left) sprocket is mounted with hub side inward.
4. Inspect shaft bearing for wear or binding. Replace with new if necessary.
5. Replace new assembly in reverse order.
6. Check conveyor chain line-up. Refer to Section K Step 6.
7. Check drive chain tension. Refer to section G Step 5.

M Tension Assembly Replacement:

(Refer to Figure #11)

1. Remove receiving tray, delivery chute, left and right side panels.
2. Remove all baskets and both conveyor chains. Refer to Section K Steps 2 thru 5.
3. Unhook tension springs from brackets. (Figure #12)
4. Remove bearing retainers and bearings.
5. Lift one end of assembly shaft and remove carrier chain from sprocket. Move chain to one side; repeat for opposite end of shaft.
6. Slide shaft to one side and lift opposite end out of bearing hole. Lift assembly out and under to clear carrier chains.
7. Reverse above procedure to install new assembly. **NOTE:** Free-wheeling (left) sprocket is mounted with hub side inward.
8. Inspect bearing for wear or binding. Replace with new if necessary.
9. Install bearing, spring brackets and retainers. Attach springs to bracket.
10. Check conveyor chain line up. (Figure #17).
11. Install baskets, left and right side panels.

N Coupling Assembly Replacement:

(Refer to Figure #11)

1. Follow steps 1 thru 5 Section K.
2. Remove insulation. Refer to Steps 2 & 3 Section D.
3. Remove wire guard. Refer to Section O.
4. Locate the four screws on the upper inside corners of the toaster that hold case top in place. Loosen screws and lift off top. A rubber mallet or similar "soft" tool may be helpful in lifting a tight fitting top. (Figure #18)
5. Remove insulation.
6. Remove the twelve screws holding the inner top panel assembly in place and lift off. (Figure #19)
7. Remove coupling assembly bearing from both sides. Refer to Section J.
8. Remove the three screws from the left inside panel that attach to the front reflector. (Circled in Figure #19).
9. Standing at right side of machine gently push on left inner wall to expand toasting chamber. (Figure #20) This will allow enough clearance for coupling assembly to be lifted from toaster.
10. To install new assembly spread inner walls as in step 9 for clearance.
11. Check bearing for wear or binding. Replace with new if necessary.
12. Install bearings, retainers and lock nuts.
13. Replace three screws into front reflector.
14. Replace conveyor chains, springs to tension brackets, front baffle, inner top assembly, insulation and case top. Be certain case top is seated properly in retaining channels.
15. Replace side insulation, wiring, side panels and baskets.

Figure 18
Upper inside
corner of toaster

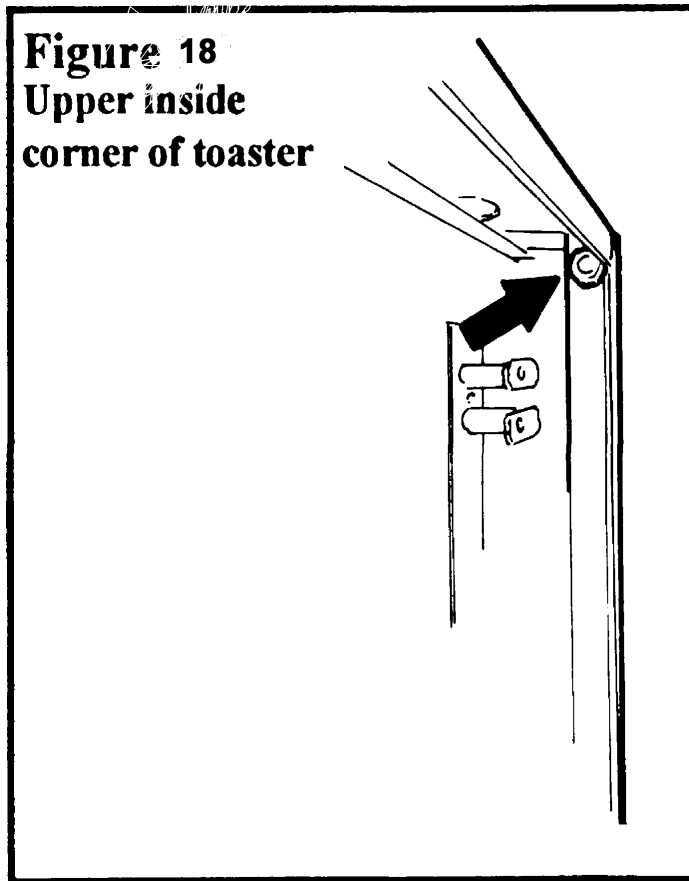
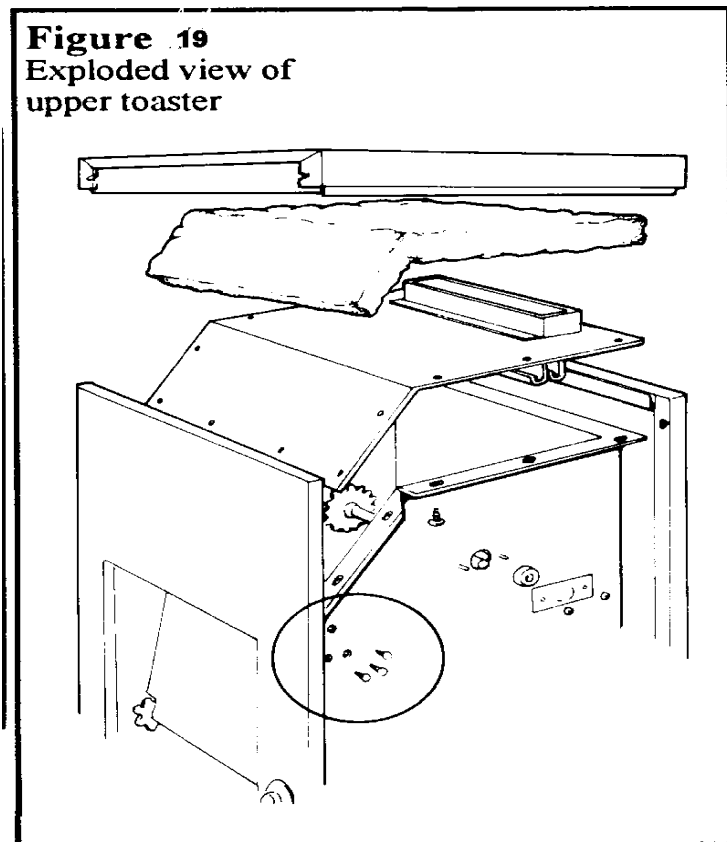


Figure 19
Exploded view of
upper toaster



0 Wire Guard Replacement:

(Refer to Figure #21)

1. Remove left side panel and insulation.
2. Remove the three nuts holding end plate and remove plate.
3. Slide out wire guard.
4. Insert new wire guard into track. NOTE: Use rear track for toasting buns or bread. Use forward track for toasting bread only.
5. Replace end plate, nuts, insulation and side panel.

P P.C. Board Assembly Replacement:

(Refer to Figure #22)

NOTICE: PROCEED WITH THE BELOW LISTED STEPS, **ONLY**, IF YOUR UNIT CONTAINS THE P.C. BOARD ASSEMBLY.

1. Remove right side panel.
2. Loosen set screw and remove speed control knob.
3. Remove nut securing potentiometer.
4. Disconnect wires from P.C. Board and remove screws, nuts and washer holding guard to toaster frame.
5. Remove board with potentiometer.
6. Install new board assembly reversing above procedure. (Refer to Wiring Diagram).

Figure 21

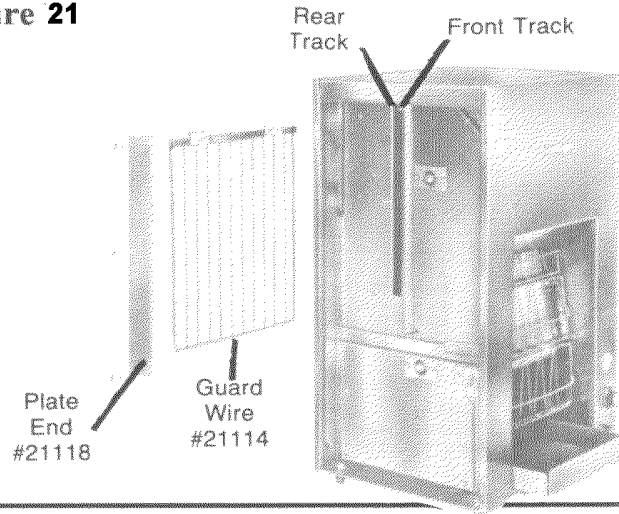


Figure 20
Removal of coupling
assembly

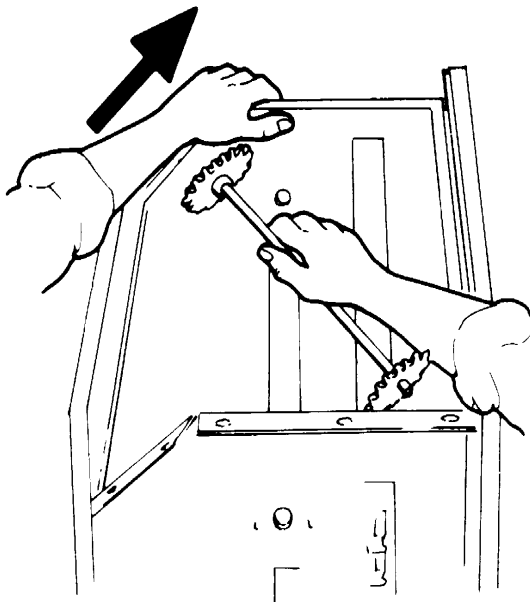
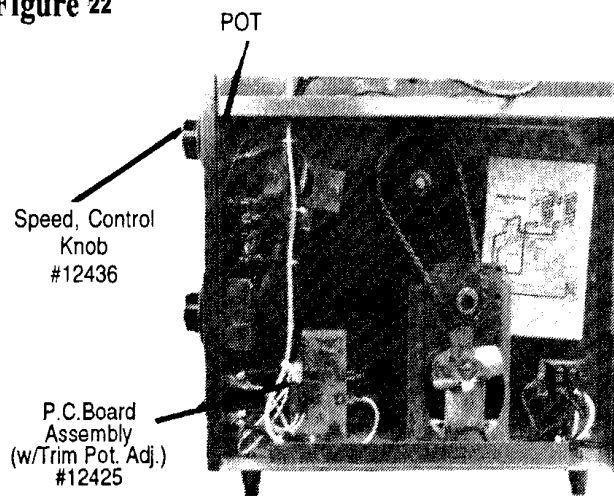
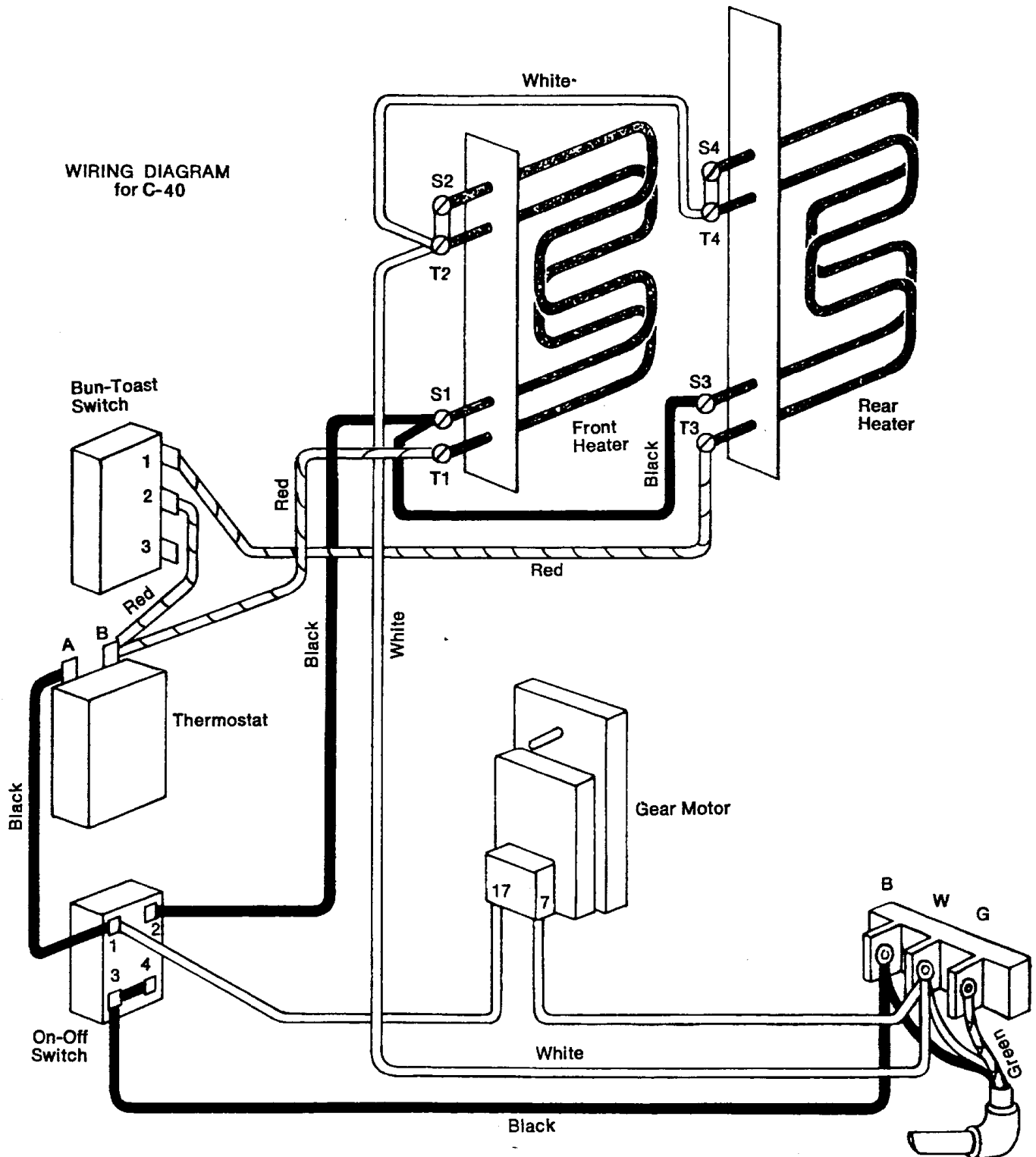


Figure 22



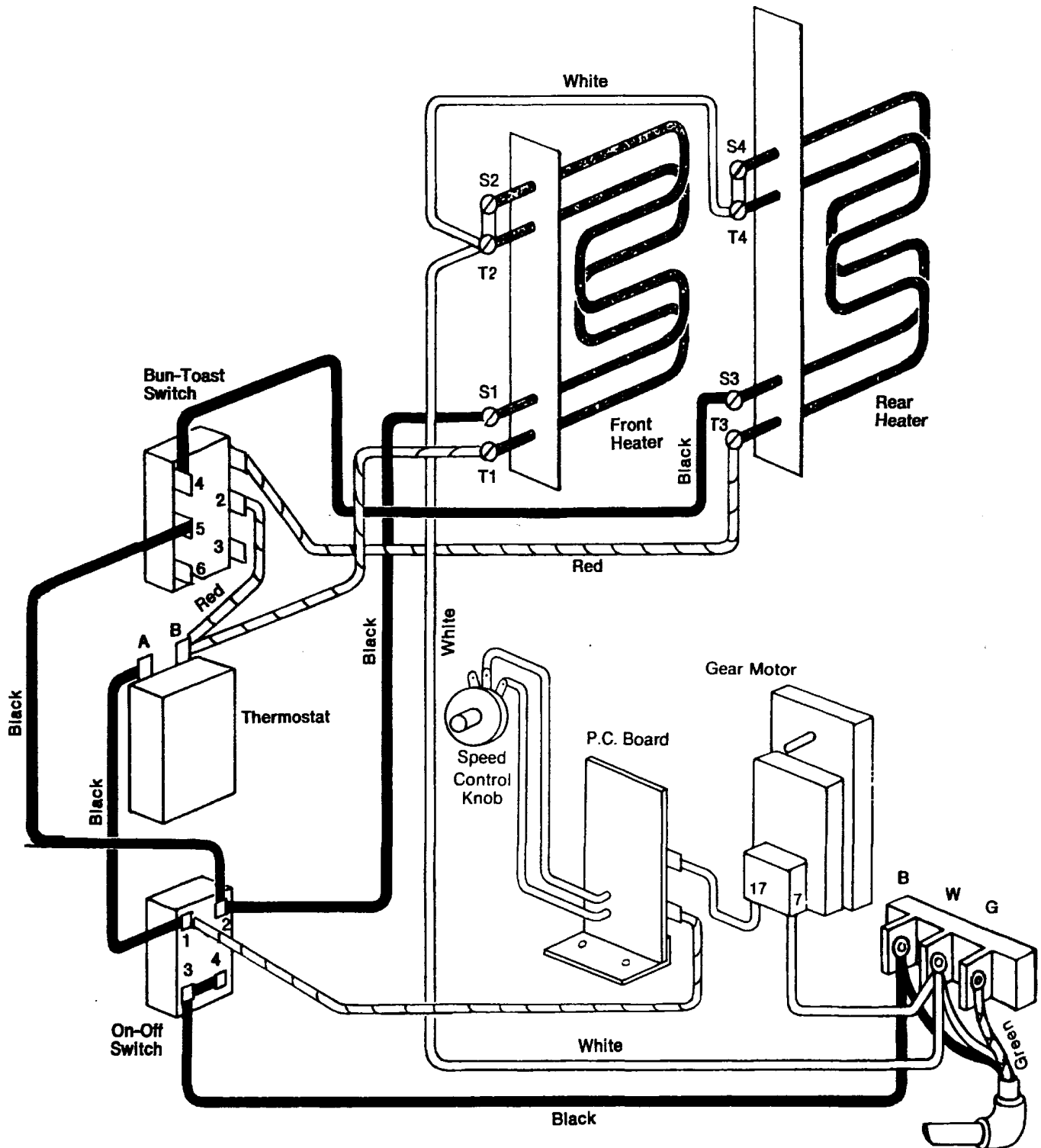
Wiring Diagram

C-40



Wiring Diagram

C-40VS





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