

Instructions for Service Kit 43315

TC14 to TC14A 120V Toaster Update Kit

KIT COMPONENTS - Check that the kit includes ALL of these parts BEFORE you begin!

| <u>Qty.</u> | <u>P/N</u> | <u>Description</u> | <u>Qty.</u> | <u>P/N</u> | <u>Description</u> |
|-------------|------------|---|-------------|------------|--|
| 1 | 42444 | Drive motor, 120VAC | 16 | 1501D8803 | Flat washer, #10 (motor mounting spacers) |
| 1 | 42718 | Speed controller, AC motor | 4 | 7A2S15 | Screw, #10-32 x 3/4" TRS HD (motor mounting) |
| 1 | 42598 | Sprocket, motor, 20T (with set screw) | 1 | 43306 | Wire, TC14A 120V Retro Kit |
| 1 | 34129 | Sprocket, drive shaft, 12T (with set screw) | 3 | 3002693 | Wire tie, nylon, 5-1/2" (140mm) |
| 1 | 7007605 | Drive chain | 1 | 43312 | Instructions, TC14A 120V Update Kit |

A. OVERVIEW

The Model TC14 Conveyor Toaster has been produced in three distinct types:

- **TC14** - Produced through 3/00. The Model TC14 Conveyor Toaster featured a DC conveyor drive motor and a 3:5 motor-to-conveyor drive ratio.
- **TC14A Type 1** - Produced 4/00-7/00. This redesign included an AC conveyor drive motor. The 120V toaster included motor and drive shaft sprockets to permit a 1:1 motor-to-conveyor drive ratio.
- **TC14A Type 2** - Produced 8/00 or later. The current design restores the original 3:5 motor-to-conveyor drive ratio to permit more flexibility in the selection of the conveyor speed.

This Service Kit will update one 120V TC14 toaster to the current-production TC14A Type 2.

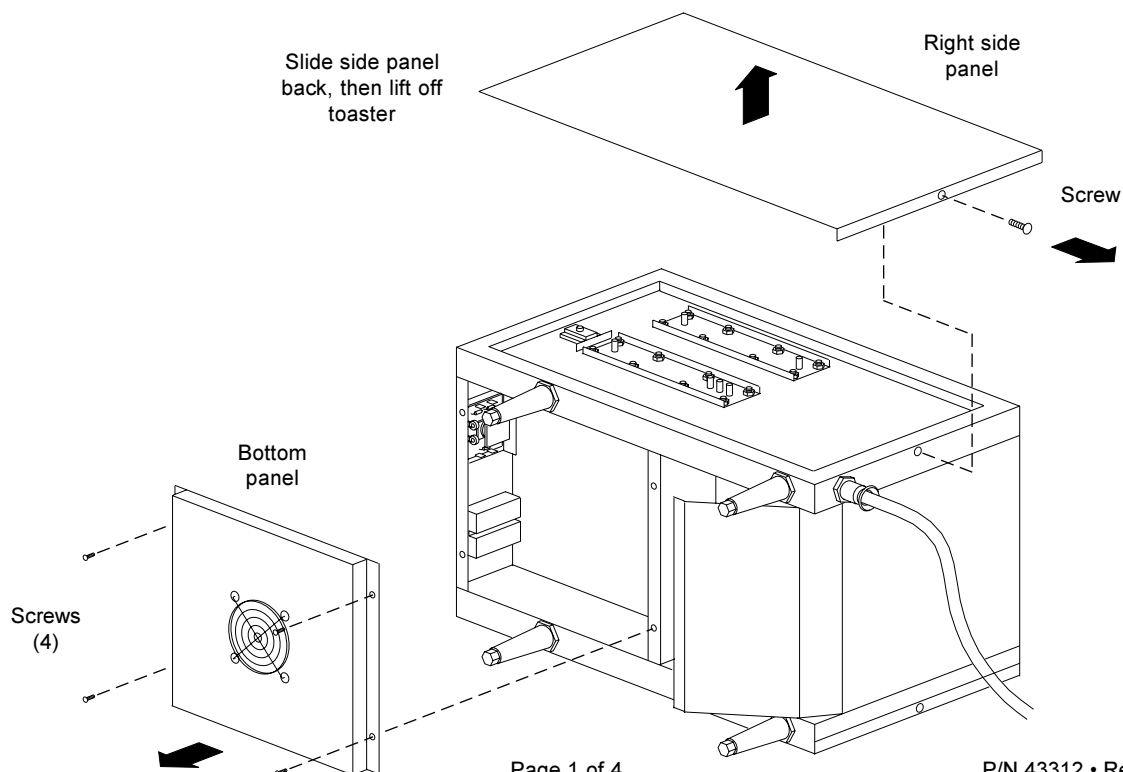
B. INITIAL DISASSEMBLY

1. Disconnect the toaster from its electrical power supply. Remove AND RETAIN the crumb tray.
2. Turn the toaster onto its left side.
3. Remove AND RETAIN the screw that holds the right side panel in place. Then, remove AND RETAIN the panel. See Figure 1.
4. Remove AND RETAIN the four screws that hold the bottom panel in place. Then, remove AND RETAIN the bottom panel. As you pull the panel away from the toaster, remove the fan cord plug from its socket on the side of the fan.
5. Cut the wire ties bundling the toaster's wiring together. Then, cut the wire tie that holds the power cord to the floor of the toaster.

C. SPEED CONTROLLER REPLACEMENT

6. Disconnect the wiring from the conveyor speed con-

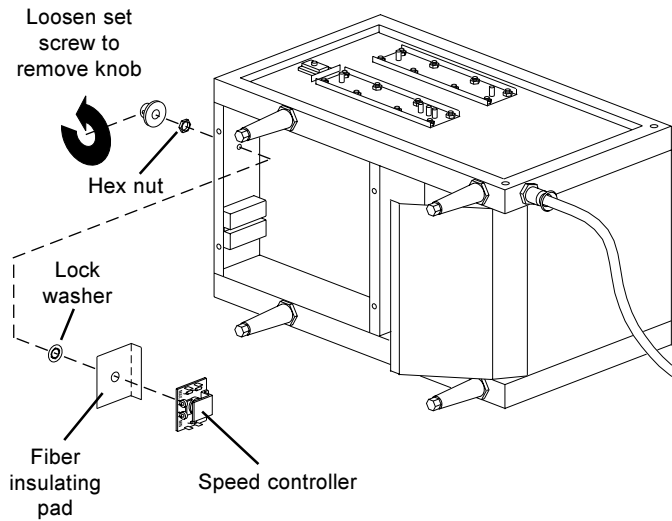
Figure 1 - Disassembly



troller.

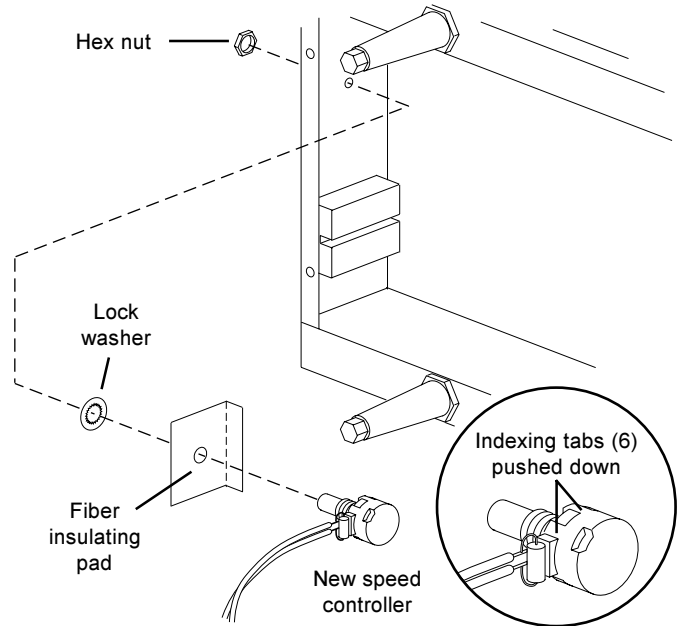
7. Loosen the set screw that holds the conveyor speed controller knob in place. Then, remove AND RETAIN the knob. See Figure 2.
8. Remove the hex nut that fastens the speed controller to the control panel.
9. Pull the controller free of the rear of the control panel.
10. Remove AND RETAIN the fiber insulating pad from the speed controller. Discard the rest of the speed controller.
11. Check that all of the indexing tabs on the new speed controller are pushed down. See Figure 3.

Figure 2 - Speed controller removal



12. Remove AND RETAIN the hex nut from the shaft of the new speed controller.
13. Slip the fiber insulating pad (from the original speed controller) over the end of the shaft on the new speed controller.
14. Install the new speed controller as shown in Figure 3. The lockwasher fits on the inside face of the control panel. The hex nut is tightened on the outside face of the panel. Do not connect the wiring at this time.
15. Turn the shaft of the speed controller in a COUNTERCLOCKWISE direction as far as it will turn to set the controller to its minimum setting. See Figure 4.

Figure 3 - Installing the new speed controller

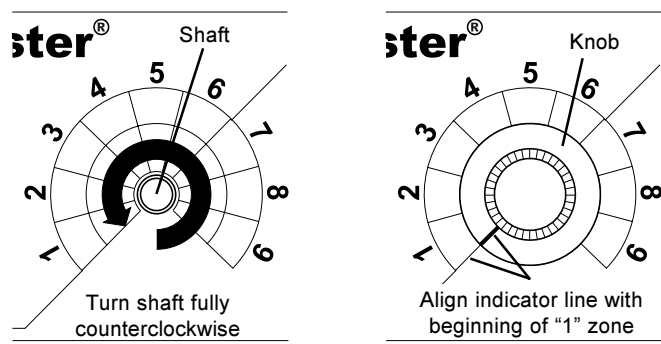


16. Replace the knob onto the shaft of the speed controller. Adjust the position of the knob until the painted indicator is aligned with the line on the control panel at the beginning of the "1" range. See Figure 4.
17. Tighten the knob's set screw to fasten it in place.

D. DRIVE MOTOR AND SPROCKET REPLACEMENT

18. Loosen the four screws that hold the drive motor in place. Then, slide the motor towards the rear of the

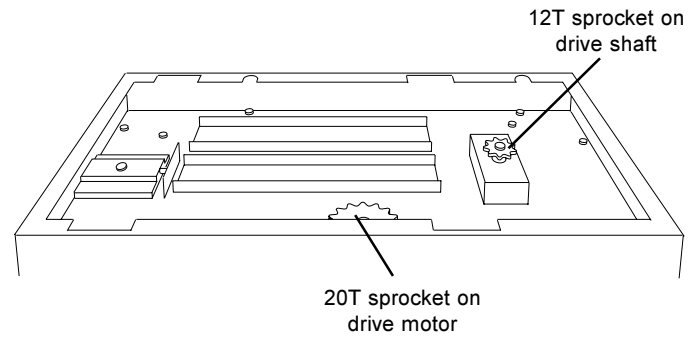
Figure 4 - Replacing the speed controller knob



toaster to loosen the drive chain. Remove and discard the drive chain.

19. Loosen the set screw that holds the drive motor sprocket (20T) to the motor shaft.
20. Remove and discard the four screws that hold the drive motor to the wall of the toaster. Gently pull the motor free of the inside wall. As you remove the motor, slide the sprocket off its shaft.
21. Discard the motor, its attached wiring, and the motor sprocket.
22. Loosen the set screw on the rear drive shaft sprocket (12T). Remove and discard the sprocket.
23. Install the new kit-supplied 12T sprocket onto the conveyor shaft, as shown in Figure 5. Tighten its set screw to hold it in place.
24. Hold the new AC motor with the drive shaft extending straight up. Stack four of the kit-supplied #10 washers onto one of the motor's corner mounting pads, as

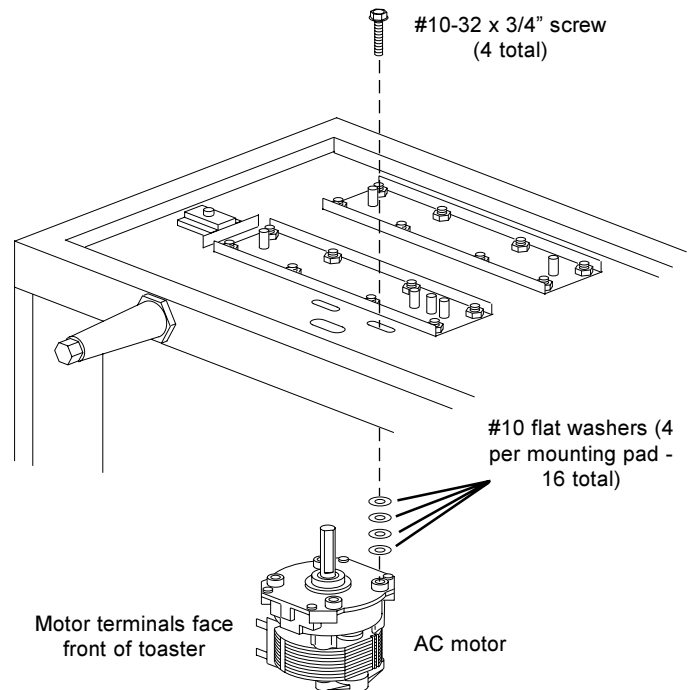
Figure 5 - Replacing the conveyor shaft sprocket



shown in Figure 6.

25. Carefully hold the motor in place against the inside wall of the toaster. Then, insert one of the kit-supplied #10-32 x 3/4" screws through its hole in the wall of the toaster, through the washers, and into the corner mounting pad on the motor. Insert the screw only far enough to catch the threads. This will temporarily hold the motor in place while allowing you to move the motor as necessary to slide in the remaining washers on the other three mounting pads. See Figure 6.
26. Install 4 washers and 1 screw at each of the three remaining corner mounting pads. Again, keep the screws loose to allow the motor to be repositioned.
27. Slip the new kit-supplied 20T sprocket in place on the motor shaft, as shown in Figure 5. Tighten its set screw to hold it in place.
28. Install the new kit-supplied drive chain.
29. Slide the motor forward to tighten the drive chain. **DO NOT OVERTIGHTEN THE CHAIN.** When the motor is correctly positioned, tighten its four mounting screws to hold it firmly in place.

Figure 6 - Installing the new motor



E. REPOSITIONING THE FAN

30. In order to clear the new AC motor, the fan must be rotated 45°. See Figure 7. To reposition the fan:

- Remove AND RETAIN the four screws that hold the fan and grill to the bottom panel.
- Hold the grill in place against the bottom panel. Rotate it 45°, or until its four mounting holes are halfway in between the holes in the bottom panel.
- While holding the grill in place, mark the locations of its four mounting holes onto the bottom panel. Drill out the holes with a #11 drill bit.
- Reassemble the fan and grill onto the panel.

F. FINAL REASSEMBLY

34. Reconnect the fan cord plug into its socket on the side of the fan.
35. Replace the bottom panel, and fasten it in place with its four screws.
36. Replace the left side panel onto the toaster. Fasten it in place with its original mounting screw.
37. Reconnect the toaster to its electrical power supply. The toaster is now ready for operation.

F. WIRING CONNECTIONS

31. Wire the toaster as shown in Figure 8.
32. Bundle the wires using the kit-supplied wire ties. Use one tie inside the right side of the toaster, and one inside the bottom cavity of the toaster.
33. Tie the power cord to the floor of the toaster using the remaining wire tie. Check that the cord is clear of the drive motor sprocket.

Figure 7 - Repositioning the fan

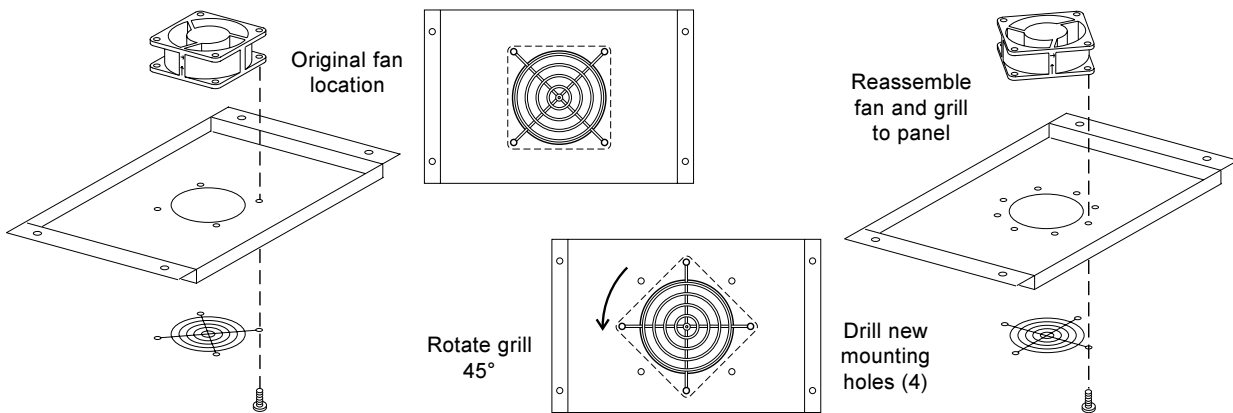
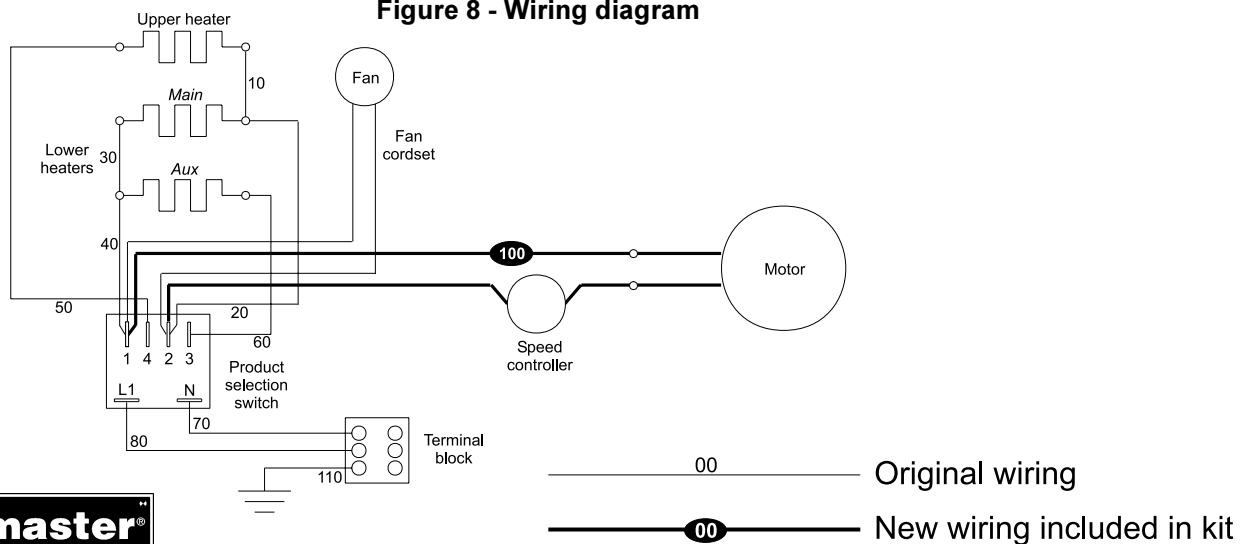


Figure 8 - Wiring diagram



Toastmaster
A MIDDLEBY COMPANY

Middleby Cooking Systems Group • 1400 Toastmaster Drive • Elgin, IL 60120 • USA • (847) 741-3300 • FAX (847) 741-4406

Middleby Corporation Service Hotline 1-800-238-8444

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