

In Kit 826-1587		
Quantity	Description	Part Number
1	Motor	807-3328
6	Wire wraps	814-0015
3	Terminals	807-0735
1	Sprocket	810-1629
1	Setscrew	809-0730
1	Instructions	819-5765
2	Screw	809-0434
1	Lubricant	NA
1	Crumb Tray	200-0179
1	Heat shrink	811-0068
Also Needed		
4	Roller sprockets	810-1728
2	Idler Sprockets	810-1690
1	11/64 Drill bit	NA

Motor and upgrade kit for McDonald's Vertical Toaster Kit 826-1587



Fig 1: Here's a look at the drive chain in the vertical Toaster with the vertical brace removed.

Follow these steps to install Kit 826-xxxx (\$193.00 list) in a McDonald's Vertical Toaster.

- Check line voltage. Ensure toaster is set for line voltage. If not, restrap transformer and motor for applicable voltage.
- Remove power from toaster.
- Remove the compression knobs and controller side of the toaster.
- Cut the wire wraps from the vertical brace in the cabinet and remove the brace, which provides access to the bolts holding the motor in place.
- Loosen the idler and release the tension on the chain.

Replacing Motor

- Remove the chain. Fig 1.
- Remove the two screws that hold the drive sprocket to the motor's shaft. Note that one bolt rests against the flat side of the motor's shaft. Fig. 2

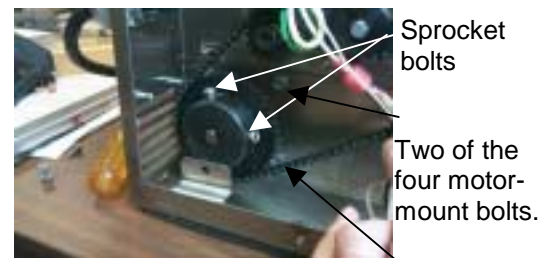


Fig 2: Two bolts hold the drive sprocket on the motor's drive shaft. When the sprocket is removed, the four machine bolts that hold the motor in place are accessible.



Fig 3 Rest the unit on a 2x4 or some similar object to avoid stressing the power cord.



Fig 4 Here the motor is shown in place on the bottom of the toaster.

- Lay the unit on its back. Use a 2x4 or a similar block under the toaster to avoid stressing the power cord. Fig 3.
- Remove the bottom of the unit. Fig. 4.
- Remove the bolts that hold the motor in place. It is necessary to support the motor with your hand as you remove the final bolt.

Note: The new motor may have a longer drive shaft than the original motor. Fig. 5.

- Disconnect the wiring and remove the old motor.

Note: The holes in the mounting points on the new motor are not tapped. The self-tapping machine bolts used to attach the motor tap the mountings. For this reason, it is best to run the bolts into the motor casing on a workbench prior to putting the motor in place in the toaster.

- Put the new motor in place and use the machine bolts to bolt it in position. Ensure it is shifted as far toward the front of the toaster as possible. Fig. 6.
- Attach the cooling fan on the rear of the motor. Ensure it is flush with the end of the shaft. Fig. 9.

Note: New wiring terminals are provided to attach wiring harnesses from early production toasters.

Replacing Drive Sprocket

- Replace the bottom of the unit and sit it upright.
- Position the new sprocket on the end of the drive shaft with the setscrews facing out. Fig 9.

Use a ruler to measure the distance from the cabinet wall to the drive-roller sprocket. Use this measure to set the depth of the drive sprocket. Use the new setscrews to attach the sprocket, ensuring one setscrew is resting against the flat on the shaft. **Do not over tighten the bolts on the sprocket.** Fig 7.



Fig: 5 The new motor (in front) has a longer drive shaft. Also the mounting points are not tapped. It is best to run the self-tapping bolts into the casing prior to placing the motor in place in the cabinet.



Fig: 6 Check the mounting slots before tightening the motor mounting bolts to ensure the motor is shifted toward the front of the toaster.

Fig: 7 The sprocket goes on the drive shaft with setscrews facing out. It is critical this sprocket be positioned at the same distance from the cabinet wall as the drive roller sprockets. The chain must run in a flat plane to prevent popping.



Examining Sprockets



Fig: 8 A badly worn idler sprocket is shown at right above. A new sprocket is shown at left for comparison. Note the sawtooth-like directional curve of the worn sprocket's teeth. Also note the depth and uneven wear between the teeth. Sprockets showing this type of wear should be replaced.

- Examine the drive and idler sprockets carefully. The wear between the sprocket's teeth should be evenly distributed. If the sprocket's teeth have a pronounced sawtooth-like curve (see photo) the sprocket should be replaced. Fig. 8

Pinning Idler

- Re-install the chain. With idler loose, twist idler assembly clockwise with the top stud resting on the left side of the idler and the bottom stud resting against the right side of the bracket. Tighten mounting bolts,



Fig: 9 The cooling fan on the rear of motor shaft should be flush with the end of the shaft as shown.

ensuring there is 1/4" deflection in the chain from center with light pressure. Fig 10.

- Run the unit with the side panel off to ensure the chain runs in a flat plane.
- With the idler properly positioned, use a high-quality 11/64-inch drill bit to drill through the bracket and the cabinet wall. Fig 10, Fig. 11.
- Secure the idler in this position with a #10 screw. Fig 12

Fig: 10 Cock the idler assembly, as shown at right to ensure proper tension on the chain and tighten nuts. (Shown with chain off to reveal position of studs.)



Fig: 11

Fig: 12

Use a high-quality 11/64" drill bit to drill through bracket and the cabinet. Use a #10 screw to lock the bracket in place.

Installing Heat Shrink

- Cut the wire wraps from the power cord lines that enter through the stress relief.
- Cut the supplied heat shrink into two equal lengths.
- Disconnect the power cord lines from the latching relay. Pull the wire from the wiring bundle, creating a clear path from the terminal end to the point the wire enters the cabinet.
- Fig. 13 Slide the heat shrink on the white wire, pushing it flush to the stress relief. Fig 15.
- Leave enough material on the terminal end to partially cover the terminal. Fig. 14.



Fig: 13



Fig: 14

Slide the heat shrink (left) into place on the power cords, one cord at a time. Leave the terminal (above) partially covered.



The heat shrink (left) tubing should rest firmly against the

Fig: 15

- Apply heat to the shrink wrap. Fig. 16.
- Plug terminal back on latching relay while the heat shrink is still warm. The wire will stiffen as the heat shrink cools, making handling more difficult.
- Repeat procedure for black wire.
- Realign power cord lines with wiring bundle and secure with wire wraps.

Installing Crumb Catcher

- Remove the rear screw securing the controller-side front roller to the cabinet wall. Fig 17.
- Place crumb catcher in place in cabinet and replace roller-securing screw, which now also holds the crumb catcher in place. Ensure the screw securing the crumb tray is tight and the tray does not rattle in the cabinet. Fig.18.
- Lubricate chain with supplied lubricant.
- Replace angled bracket and secure wiring bundle with wire wraps.
- Reinstall side.
- Replace the side panel and replace compression knobs. The setscrews in the knobs go to the flats on the compression setting shafts.
- Set knobs to 3 and C.
- Apply power and verify correct operation.



Fig: 16 Use a heat gun to secure the shrink wrap in place..



Fig: 17 This screw on the controller side of the front upper roller is removed to accommodate the placement of a crumb catcher.



Fig: 18 Position the crumb catcher inside the top of the controller-side cabinet. It mounts under the axles of the front rollers. Replace the screw removed from the front axle to secure the crumb catcher. Ensure the screw holding the crumb catcher is tight and the tray does not rattle in the cabinet.