

# Vertical Toaster Retrofit Kit 826-1567

Vertical Toaster kit 826-1567 should be installed on any toaster built prior to series AD. This kit includes new bushings for the upper rollers, springs, bushing-lock clips and assorted minor hardware. The servicer should also have on hand drive rollers, a motor and lower bushings (see chart at left) and replace these parts as necessary.

This Kit Contains		
Quantity	Part Number	Description
6	810-1818	Springs
6	810-1810	Bushings
1	910-9528	Bushing retainer
4	809-0728	Screw
6	810-1776	Shaft-retainer clip
1	809-0647	E-clip
1	819-5732	Instructions
2	809-0745	Washer
1	802-1834 A	Series AD label
2	910-9537	Bushing retainer

The kit's new bushing will eliminate squeaking. The much larger springs are more tolerant of small variations in belt lengths and the presence of crumbs, and will halt belt slipping. The bushing locks prevent the lower bushings from spinning inside the toaster's framework.

Each toaster requires six new springs and six new bushings, two for each upper roller. The retrofit kit will take approximately 1 hour per toaster to install.

Each restaurant has two toasters; upgrade both toasters on the same trip.

Needed Additional Parts		
Quantity	Part No.	Description
2	806-9318	Drive roller
2	806-9199	Drive roller
1	807-2813	Motor
8	810-1525	Lower bushings

**Note:** The new springs are longer and larger in diameter than the originals. It is critical to check that they fit loosely in the plunger assembly. The inserted springs should fall freely from the assembly when the assembly is inverted. If a spring fails this test, use a pair of screwdrivers to widen the opening.

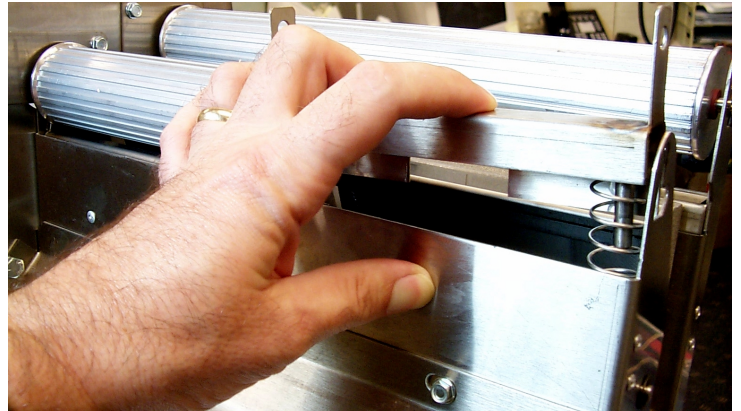
Also, it is helpful to complete the spring installation on the front rollers before attempting the more involved installation of the rear springs.



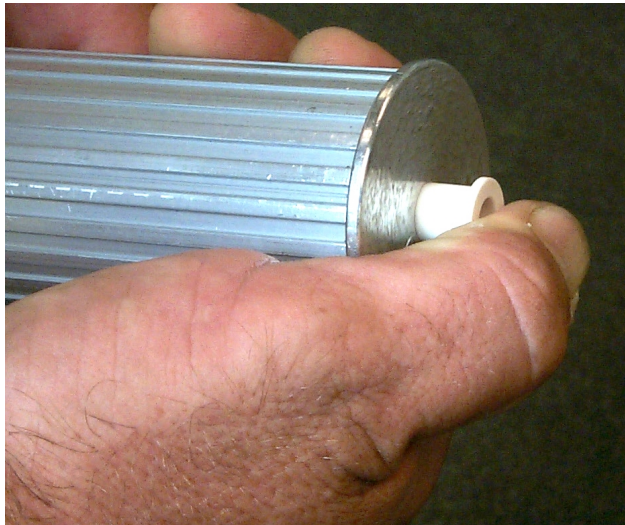
The new springs should fit so loosely in the plunger that they fall out if inverted. If they catch in the assembly (left), use screwdrivers (right) to widen the opening until the springs fall freely from the assembly.

### Follow these steps for the front rollers:

- Disconnect electric power.
- Set compression knobs to E and 5, the lightest settings.
- Remove cover, belts, back, knobs, and side plate. Check for sharp edges on back and cover; deburr if necessary.
- With the front rollers up, remove cotter keys and remove axle shafts.
- Remove the roller.
- The axles on the front left roller must be removed from the control panel side.
- Replace original red bushings with white bushings provided in kit. **See Photo.**
- With rollers removed, the springs under the front rollers are easily accessed. Simply lift plunger that holds roller. Inspect plunger for debris. Clean and deburr if necessary.
- Remove original springs and **spacers** and discard.
- Place new, larger, springs in place and position plunger. Ensure springs fit loosely as described on page 1.
- Reassemble the front roller assembly, adding the  $\frac{3}{4}$ " washer, Part No. 809-0745, on the shaft on the inside of the electrical component compartment.



The plunger that carries an upper roller is returned to the toaster.



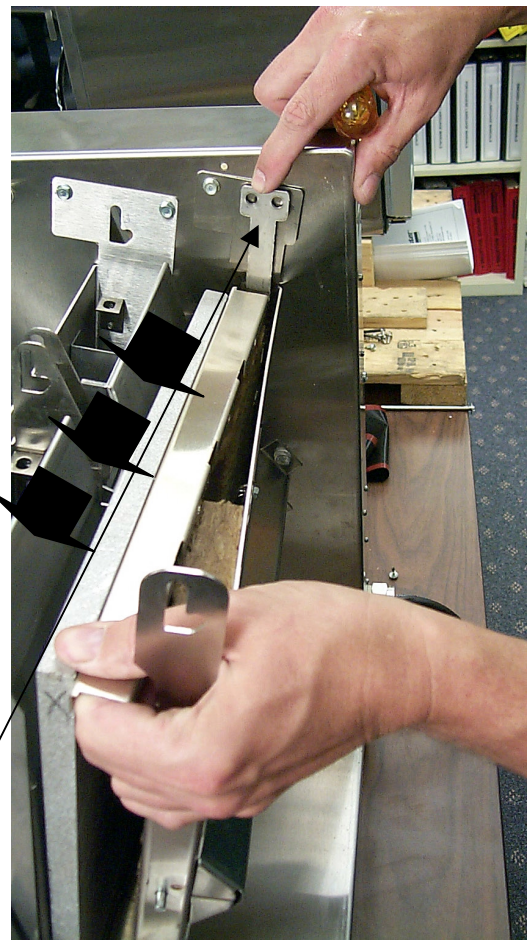
A new white bushing is pressed into a roller.

**NOTE:** Use well maintained  $\frac{5}{64}$  and  $\frac{3}{32}$  allen wrenches for removal of side panel knobs and sprockets.



After removing the screws that attach the platen to the rear toasting conveyor, the platen can be displaced slightly to allow removal of the spring plunger. The outside plunger is removed first.

The inner plunger is removed after the platen is shifted slightly out from the conveyor assembly and away from the control housing.

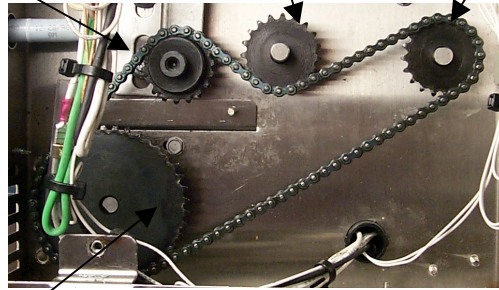


### Follow these steps for the upper rear roller's springs

- Remove the roller axle through the control panel side.
- Remove the roller.
- Replace original red bushings with white bushings provided in kit.
- Remove the eight screws at the top and bottom of the rear toasting conveyor. These screws secure the platen to the toasting conveyor.
- Work platen assembly slightly outward and remove outer plunger.
- Pull platen gently away from the control housing until the leads clear. Remove inner plunger.
- Remove and discard original springs and spacers.
- Put new spring in place and reposition plunger on inner or control panel side.
- Slide platen back toward control housing, being careful to feed lead back into control housing.
- Install outer plunger with new spring, slipping the plunger assembly behind the platen.
- Replace screws at top and bottom of toasting conveyor.
- Reassemble the upper rear roller assembly, adding the  $\frac{3}{4}$ " washer, part no. 809-0745, on the shaft on the inside of the electrical component compartment.

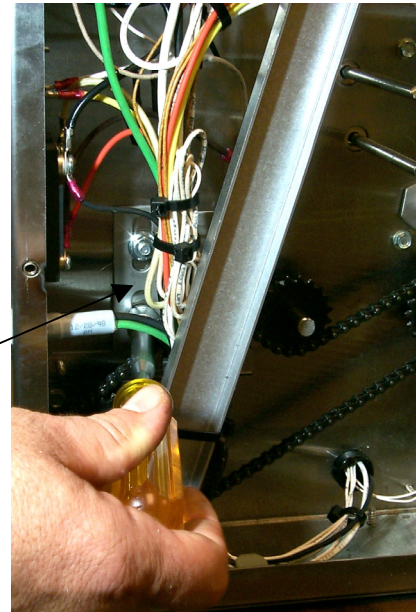
Idler gear      Rear drive roller sprocket      Front drive roller sprocket

The first step in accessing the drive rollers is removal of the roller sprockets. Here's a view of the drive train (with the vertical cabinet brace removed) for use in identifying the relevant parts.



Drive sprocket

Loosen bracket holding idler sprocket. Lower bracket to release tension on the chain.

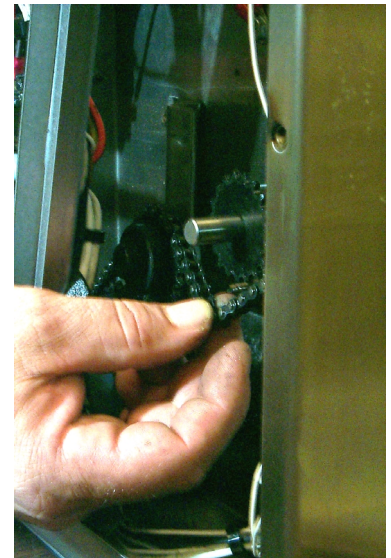


### Removing drive rollers

- With the side panel still off, loosen the idler sprocket assembly and slide it to the bottom. This creates maximum slack in the chain.
- Remove the chain from the rear roller sprocket, then the front sprocket.
- Loosen the two setscrews that secure the small sprockets to the drive roller shafts. Remove sprockets from shafts.

**NOTE:** Use well-maintained 5/64 and 3/32 allen wrenches for removal of side panel knobs and sprockets. Wrenches with rounded edges may damage setscrews.

Remove chain from rear-roller sprocket. Note the chain runs on the underside of this sprocket.

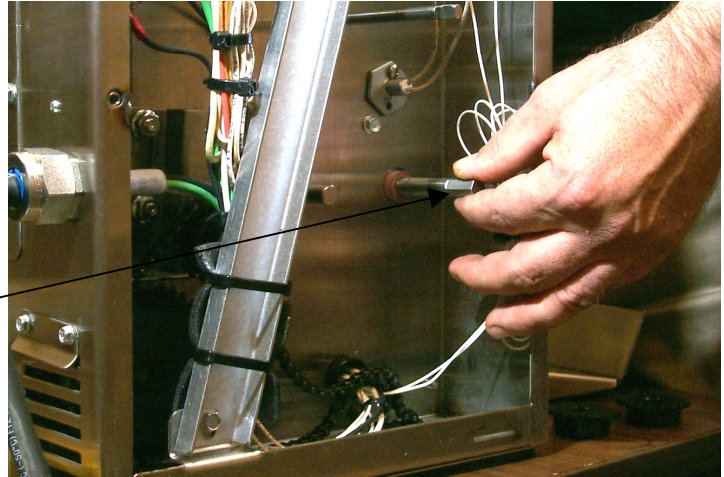
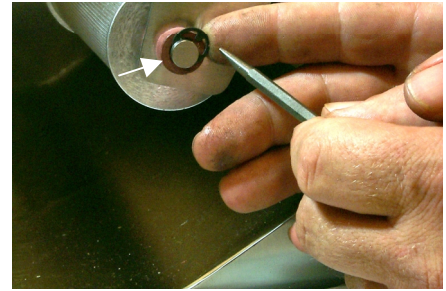


The sprockets are held on with setscrews. Remove setscrews with appropriate allen wrench and then remove sprockets.



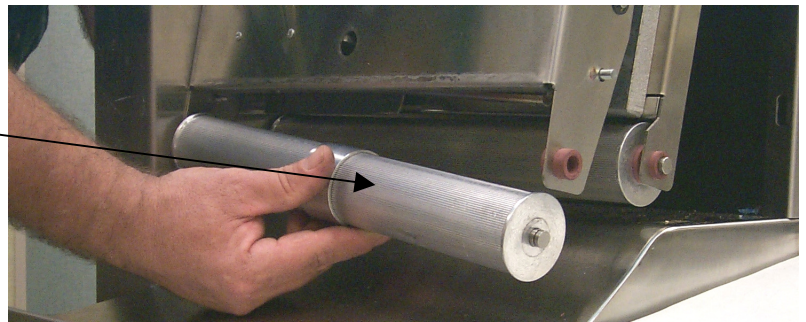
- On the opposite end of both roller shafts, remove the E-clips.
- Pull drive shaft on sprocket end until shaft clears bushing on E-clip end of roller.
- Lower the E-clip end of the roller assembly and remove the roller from the unit.
- Repeat process for other roller.
- Remove the front roller and then the rear roller.
- Remove roller bushings from toaster framework for installation of bushing clips.

The drive rollers are held on with E-clips on the side opposite the drive sprockets. Use a flat-blade screwdriver to remove E-clips.



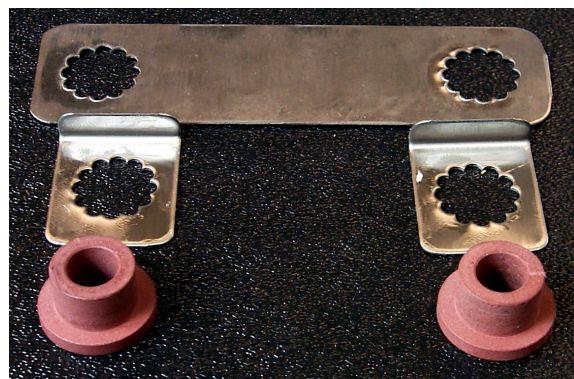
Pull the roller axle out slightly on the drive-sprocket side. This allows the roller to slip clear of the bushing on the opposite side. The axles are not removable from the rollers.

Examine splines on drive rollers for uniform ridges around the cylinder. There should be no flat or bare spots. The roller must have sufficient grip to pull the belts without slipping. Replace if needed.



### Installation of bushing Clips in lower rollers

Keepers are provided in the kit to stop the bushings in the drive rollers from turning in the framework of the toaster.

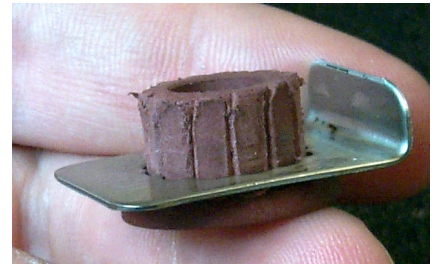


The kit includes two types of bushing clips. The dual (top of photo) fits inside the toaster cabinet on the controller side. The single fits on the opposite side of the drive roller. Replace existing bushings as necessary.

The existing lower roller bushings are pressed into the provided bushing clips, which have serrations to prevent the bushing from turning in the toaster's framework. Replace any bushing that has been damaged by rotation in the framework.

**To install bushing clips follow these steps:**

- Remove red bushings from toaster framework. Inspect and replace any damaged bushings.
- Place the bushing on a firm, flat surface with the lip side down.
- Using an appropriately sized socket and drive extension, press the clip on to the bushing. Do the dual clip one side at a time.
- The single clips go on the side away from the controller, with the lip curling under the toaster framework to prevent rotation. **See photo below.**
- The dual clip mounts on the controller side of the cabinet. **See photo below.**
- Reinstall the rollers.



The bushing clips are pushed on (left) using a socket and extension. On the single clip, the flange side of the bushing (above) is pressed flush against the flat side of the clip.

Note the drive roller with the spacer/ collar goes in the front position. The spacer separates the front belts.

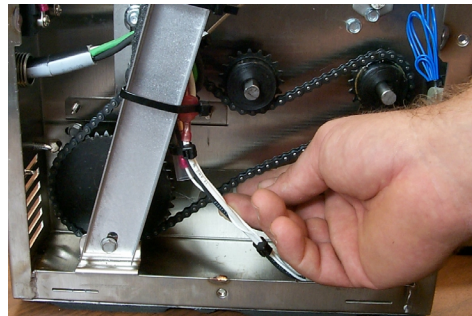
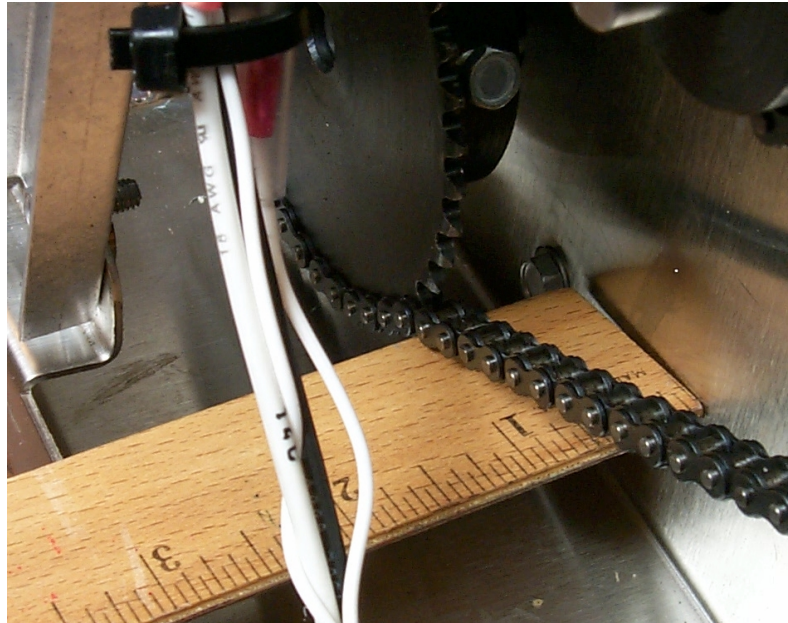


The dual clip mounts above the heater tray (above) on the controller side of the unit. The bushings, with clip in place, are simply pressed into place prior to installing the drive roller. The single clips (right) mount with the lip curling under the toaster's framework.



## Reinstall sprockets, chain

- Replace drive sprockets. Ensure the chain travels in a flat plane. Use a ruler to ensure the drive-roller sprockets are set at the same depth as the drive sprocket.
- Use the idler to adjust the chain tension. There should be  $\frac{1}{4}$ " deflection from center with about two pounds of force applied.
- With rollers in place and the side panel off, run the unit to ensure correct tracking of the chain. Misaligned sprockets will cause the chain to pop. Correct as necessary.
- Listen carefully to the motor. If it makes an erratic or grinding noise, replace it.

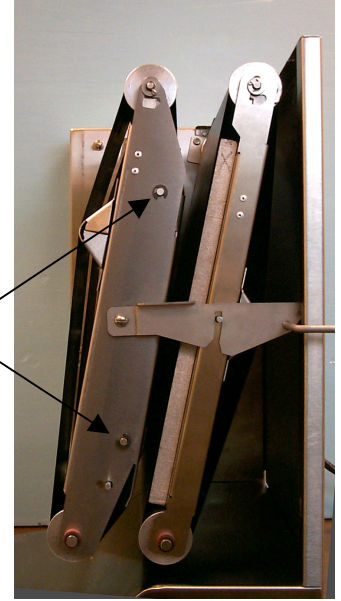


The drive sprockets should be aligned with the motor sprocket (above) to ensure the chain runs in a flat plane. The chain tension (left) should allow  $\frac{1}{4}$ " deflection from center.

- Check strain relief to ensure it's secure.
- Ensure all wires are secure and all are well away from the heat of the platen.
- Check line voltage to ensure it matches rating plate. If line voltage differs from rating plate, move wiring on transformer and motor taps to reflect line voltage.

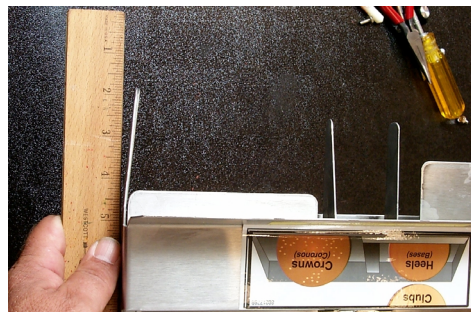
- Check for missing E-clips on end of cam assemblies and replace as required.
- Replace the side panel and replace knobs. The setscrews in the knobs go to the flats on the compression setting shafts.
- Set knobs to 3 and C.
- Replace cover and put bun guide in place. Note: the insertion guides on the edges of the bun guide should angle in slightly.
- Put four sets of buns in the toaster, four crowns and four heels. The last heel should pass through the toaster in 13 seconds or less.

The E-clips that secure the cam assembly can be loosened or knocked out by the rotation of the latch. Ensure E-clips are properly placed. Replace if necessary.



- If the time exceeds 13 seconds, the belt is probably slipping.

1. Recheck the spring tension by pushing down on each roller to check for even and firm tension.
2. Clean the inside of the belt and rollers, with special attention to the drive rollers.
3. Check the bottom rollers for missing splines.
4. If these steps do not correct the excess time through the toaster, call Frymaster at 1-800-551-8633.



The insertion guides (left) on the bun guide should angle in slightly.

- Place the AD label over the series number on the rating plate on the back of the toaster.

Reports, including serial number and locations of reworked toasters, must be faxed (318-219-7785) to Frymaster's Technical Service Center weekly. Send them to the attention of Gary Johnson.