



# MODEL T24631 8" SPIRAL CUTTERHEAD INSTALLATION INSTRUCTIONS

For questions or help with this product contact Tech Support at (570) 546-9663 or techsupport@grizzly.com

## Introduction

The Model T24631 spiral cutterhead is designed to replace the straight-knife cutterhead on the Model G0656/G0656P 8" Jointer.

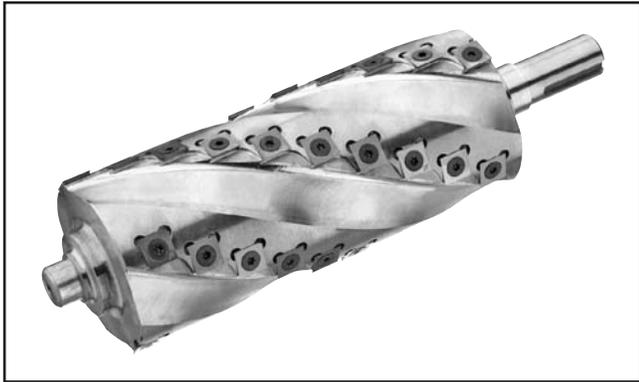


Figure 1. T24631 Spiral Cutterhead.

It takes approximately one hour to install this cutterhead and re-adjust the jointer. The job consists of (1) removing the old cutterhead, (2) installing/shimming the new spiral cutterhead, and (3) re-adjusting the outfeed table to be even with the carbide inserts at TDC (top dead center).

**Note: We strongly recommend replacing the old cutterhead bearings during installation.**

## Specifications

Length.....	8"
Diameter.....	3"
Number of Spirals.....	4
Number of Inserts.....	40
Insert Size .....	14 x 14 x 2mm
Insert Screw Thread Size.....	M6-1.0
Shaft Diameter (Long Side).....	20mm
Shaft Diameter (Short Side).....	17mm
Weight .....	18 lbs.

## Inventory (Figure 2)

- A. Spiral Cutterhead w/Inserts..... 1
- B. Torx Drivers T20 .....
- C. Torx L-Wrenches T20 .....
- D. Flat Head Torx Screws T20 M6-1 x 15..... 3
- E. Indexable Carbide Inserts 14 x 14 x 2..... 5

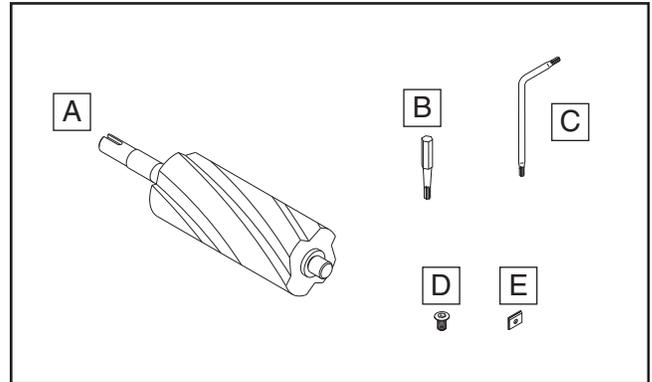


Figure 2. Spiral cutterhead inventory.

## Items Needed for Installation

- Wrench 14mm .....
- Wrench 17mm.....
- Socket Driver 1/4" .....
- Precision Straightedge .....
- Feeler Gauge Set (sizes not important) .....
- Pulley Puller.....
- Pair of Heavy Leather Gloves .....
- Rubber Dead Blow Hammer .....
- 2x4 Wood Block 4" Long.....

## Recommended, but Not Required

- Inch/Pound Torque Wrench.....
- Arbor Press .....
- Ball Bearing 6204ZZ.....
- Ball Bearing 6203ZZ .....

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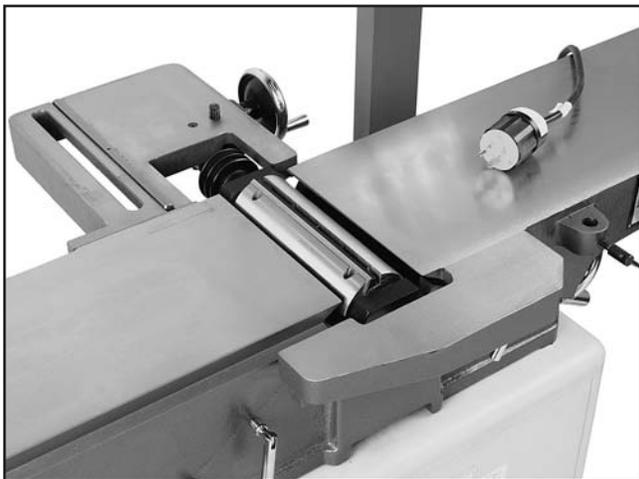
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## Installation

1. DISCONNECT JOINTER FROM POWER!
2. Remove the jointer fence and cutterhead guard.
3. Remove the V-belt from the pulleys.
4. Lower both beds to make enough room for the cutterhead to come out, as shown in **Figure 3**.

**Note:** When lowering, make sure that the fence support does not come in contact with the cutterhead pulley.



**Figure 3.** Example of jointer disassembly Steps 1-4.

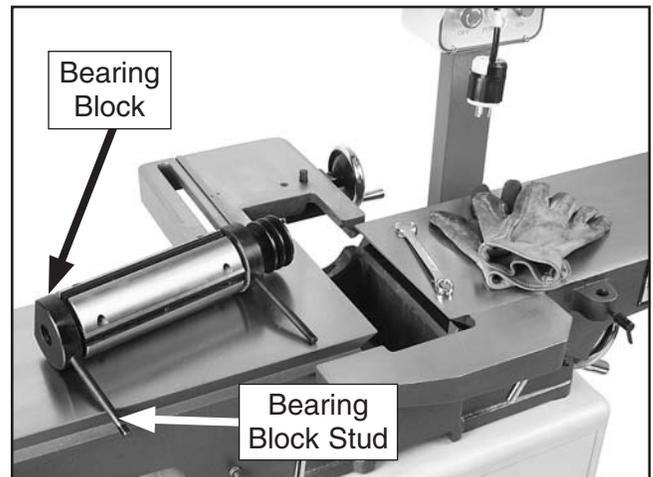
5. Remove the nut and lock washer on the bearing block stud, as shown in **Figure 4**, and repeat on the other side.



**Figure 4.** Example of removing nut and lock washer on bearing block stud.

6. Wearing heavy leather gloves, carefully remove the cutterhead from the casting (see **Figure 5**).

**Note:** Your cutterhead may have paper shims stuck to the bearing block or where the bearing block rests. These were included at the factory when they calibrated your cutterhead to be even with the outfeed table. Your new cutterhead may or may not need these. If you see any shims, carefully pull them off and set them aside for later use—or keep them with your cutterhead in the event that you Re-install it later. Also, mark the side of the cutterhead where they were used, so the future install will go smoothly.



**Figure 5.** Example of cutterhead removed.

7. Remove the bearing block studs from the bearing blocks.
8. Loosen the two pulley set screws and use a pulley puller to remove the pulley (see **Page 5**). Make sure to remove the key from the cutterhead shaft keyway and set it aside so it does not get lost or fall out during the next step.



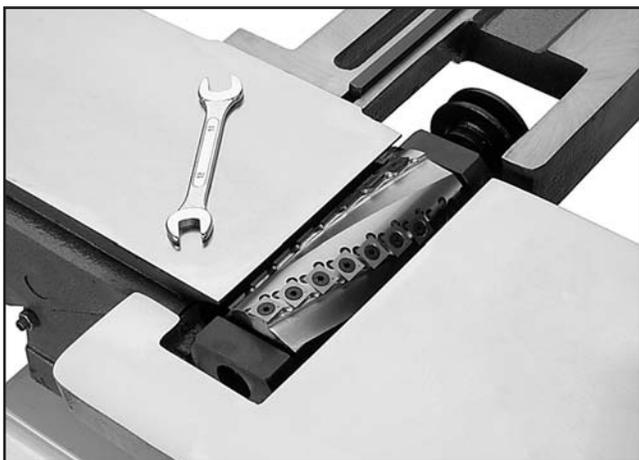
- Remove the bearings and bearing blocks from the cutterhead. There are numerous ways to do this, but avoid prying on them—they must be pulled off evenly and with care. If you are unsure about how to proceed, seek help from a mechanic/machinist, or numerous resources can be found on the internet.

**Note:** *It is difficult to remove the bearings without damaging them. This is why we strongly recommend installing new bearings on the cutterhead—instead of trying to reuse the original ones and then repeating this procedure again in the near future.*

- Install bearings in the bearing blocks, then install the bearing blocks on the cutterhead. To avoid damaging the new bearings or the cutterhead shaft, use an arbor press or have a mechanic/machinist install these for you.

If neither of the above are acceptable options, install the bearings by gently tapping them with a block of wood and a rubber dead blow hammer. If you do this, take your time and make sure they install as evenly as possible.

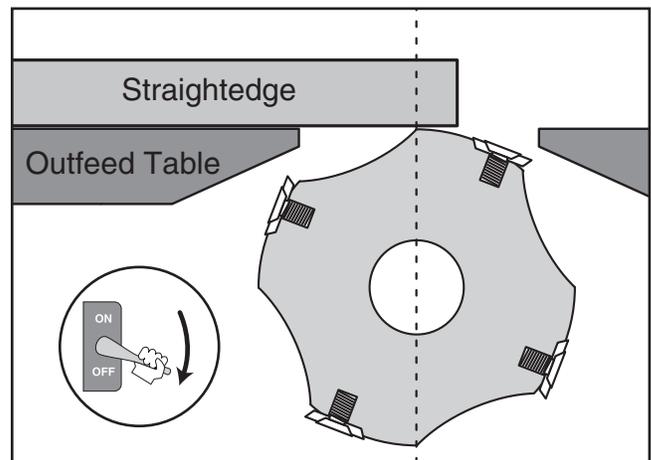
- Re-install the key onto the keyway, then press the pulley onto the new cutterhead shaft.
- Re-install the bearing block studs onto the bearing blocks.
- Install the cutterhead (**Figure 6**) with the lock washers and hex nuts previously removed.



**Figure 6.** Example of spiral cutterhead installed.

- Tighten the spiral cutterhead in place, and ensure both pulley setscrews are tight.

- Using the straightedge and feeler gauge set, inspect the cutterhead parallelism with the outfeed table as shown in **Figure 7**. With the straightedge in position, raise or lower the outfeed table until the cutterhead body (not the carbide insert) just touches the straight-edge.



**Figure 7.** Checking cutterhead parallelism.

- Move the straightedge to the other side to determine if one end of the cutterhead body is higher/lower than the other. (Place the feeler gauge between the cutterhead body and the straightedge to determine the height difference.)

—If the cutterhead is even or within 0.004" with the outfeed table from one side to the other, skip to **Step 19**.

—If the cutterhead is over 0.004" from one side to the other, go to **Step 17**.

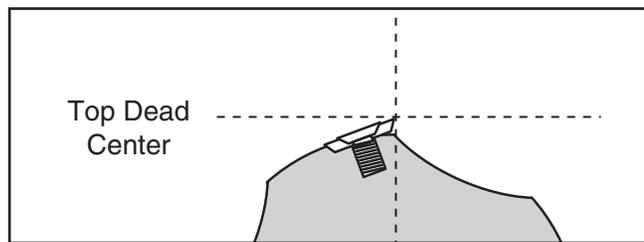
- Loosen the hex nuts securing both bearing block studs, lift the spiral cutterhead slightly, then place a shim beneath the bearing block that needs to be adjusted.

**Note:** *Use the shims from your old cutterhead if available. If not available, newspaper is approximately 0.003" thick and will work for shimming (we don't recommend shimming more than 0.004" on either side, as this may affect how the bearing block seats in the casting).*

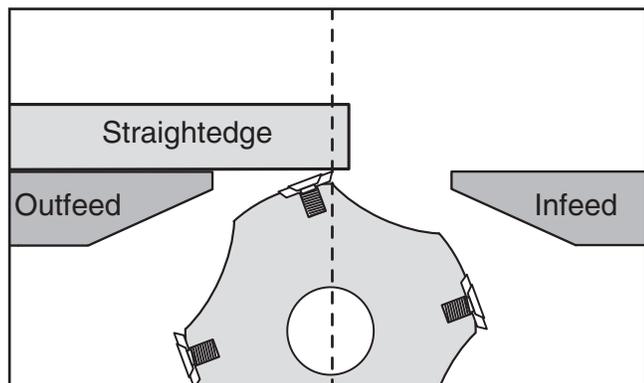
- Repeat **Steps 15–17** and adjust if necessary, then tighten the hex nuts on the bearing block studs.



- Place a straightedge on the outfeed table so it extends over the cutterhead, and rotate the cutterhead pulley until one of the carbide inserts is at top-dead-center (TDC), as shown in **Figures 8 & 9**.



**Figure 8.** Cutterhead insert at top-dead-center.



**Figure 9.** Setting outfeed table height.

When correctly set, the carbide insert will just touch the straightedge when the insert is at its highest point of rotation (**Figure 9**).

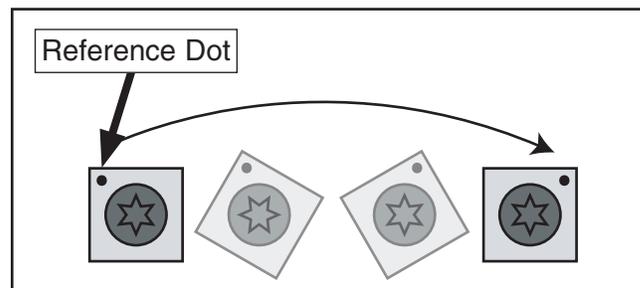
—If your outfeed table is correctly set, no adjustments are necessary.

—If the insert lifts the straightedge off the table or the table is below the straight-edge, adjust the outfeed table height with the handwheel until the straightedge just touches an insert at its highest point of rotation.

- Lock the outfeed table, then Re-install the fence.
- Install the cutterhead guard back over the cutterhead, making sure that the spring tension in the guard is properly set so the guard springs back over the cutterhead when it is pulled back and released.
- Re-adjust the infeed table.

## Rotating Inserts

The cutterhead is equipped with 40 indexable carbide inserts. Each insert can be rotated to reveal any one of its four cutting edges. Therefore, if one cutting edge becomes dull or damaged, simply rotate it clockwise 90° to reveal a fresh cutting edge (**Figure 10**).



**Figure 10.** Rotating indexable carbide inserts.

In addition, each insert has a reference dot on one corner. As the insert is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. The insert must be replaced when all four edges are dull.

### Installing or adjusting a carbide cutter:

- DISCONNECT JOINTER FROM POWER!
  - Remove any sawdust from the head of the carbide insert Torx screw.
  - Remove the Torx screw and carbide insert.
  - Clean all dust and dirt off the insert and the cutterhead pocket from which the insert was removed, and replace the insert so a fresh, sharp edge is facing outward.
- Note:** *Proper cleaning is critical to achieving a smooth finish. Dirt or dust trapped between the insert and cutterhead will slightly raise the insert, and make noticeable marks on your workpieces the next time you cut.*
- Lubricate the Torx screw threads with a light machine oil, wipe the excess oil off the threads, and torque the Torx screw to 48-50 INCH pounds.

**Note:** *Excess oil may squeeze between the insert and cutterhead or in the screw hole, thereby lifting the insert or screw slightly and affecting workpiece finishes.*



## Accessories

### T21348—10 Pack of Indexable Carbide Inserts

Replacement carbide inserts for T24631 cutterhead.

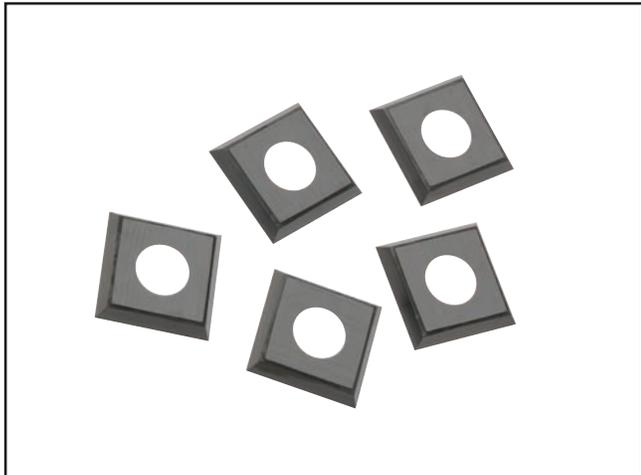


Figure 11. T21348 Indexable Carbide Inserts.

### G8995—4" Heavy Duty Pulley Puller

Indispensable for pulling gears or pulleys off of press-fit shafts. Can be used in either a 2 or 3 jaw configuration. The 4" jaw fingers are also reversible so they can grab an outside or inside diameter. The forcing screw has a live center and is made of tough hardened steel. Keep one of these handy in your tool box.

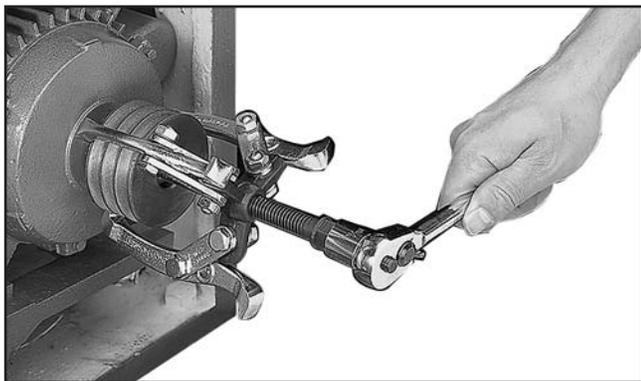


Figure 12. G8995 4" Heavy Duty Pulley Puller.

### H7830—2 Ton Arbor Press



Figure 13. H7830 Arbor Press.

### G9644—12" Precision Straightedge

### H2675—16" Precision Straightedge

If you don't have a good straightedge for precision setup work, order one from us. These grade 00 heavy-duty stainless steel straightedges are manufactured to DIN874 standards for professional results in setup and inspection work.



Figure 14. Precision straightedges.

### G9615—15-Pc Feeler Gauge Set

This 3 1/2" long Feeler Gauge Set provides a quick and accurate method of determining gap widths. Includes: .002", .003", .004", .005", .006", .008", .011", .012", .013", .014", .016", .018", .020", .022" and .025" blade thickness.

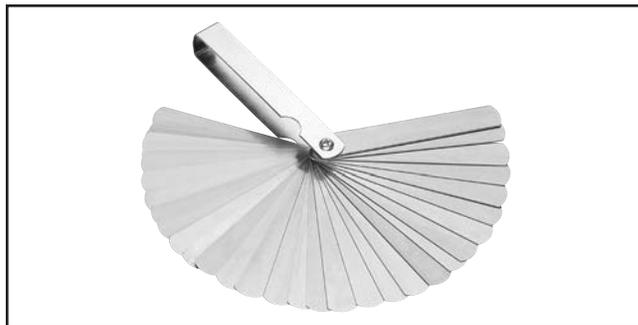


Figure 15. Example feeler gauge set.

### P6204ZZ—Ball Bearing 6204ZZ

### P6203ZZ—Ball Bearing 6203ZZ

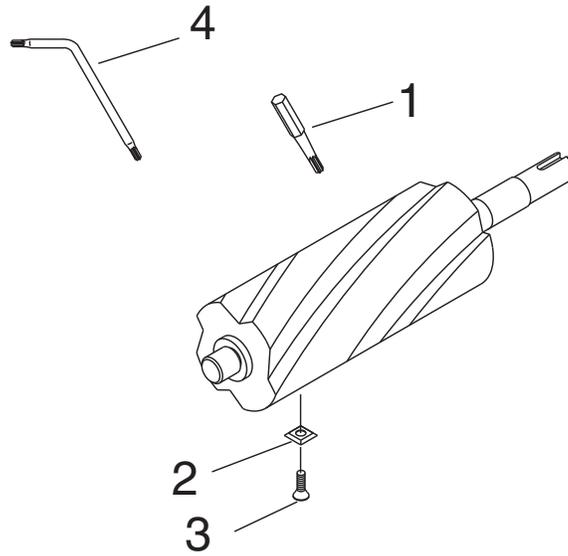
Replacement bearings available from Grizzly Parts Department.



Figure 16. Ball bearing.



# T24631 Parts Breakdown and List



REF	PART #	DESCRIPTION
1	P0452Z001	DRIVER BIT TORX T20
2	P0452Z002	INDEXABLE INSERT 14 x 14 x 2
3	PFH35M	FLAT HD TORX SCR T20 M6-1 X 15
4	P0452Z009	L-WRENCH TORX T20

