



# MODEL T10128/T10129 15" & 20" SPIRAL CUTTERHEAD INSTRUCTIONS

The T10128 15" and T10129 20" indexable insert spiral cutterheads are designed to replace straight-knife cutterheads from the Grizzly planer Models G0453 and G0454.

The total procedure of changing the cutterhead and setting up the planer takes approximately three hours. We recommend you read these instructions thoroughly before beginning. These instructions make reference to many procedures detailed in your planer manual. Always consult your manual for these procedures. Call Technical Support at (570) 546-9663 if you need help.

## **!WARNING**

The T10128/T10129 spiral cutterhead is only designed to be used with the Grizzly Model G0453/G0454 Planers. Do NOT install these cutterheads in any other planer model or make. Doing so could result in property damage or serious personal injury.

## Specifications

### T10128

Maximum Width of Cut..... 15"  
Cutterhead Diameter .....3"  
Number of Indexable Carbide Inserts .....74

### T10129

Maximum Width of Cut.....20"  
Cutterhead Diameter .....3<sup>1</sup>/<sub>8</sub>"  
Number of Indexable Carbide Inserts ..... 98

## Recommended Tools

Hex Wrench 5mm.....	1
Wooden Blocks 2x4 x 4" .....	6
Pair of Heavy Leather Gloves .....	1 Per Person
Wooden or Rubber Mallet .....	1
Steel Hammer .....	1
Screw or Bolt M6-1 x 25.....	1
Open-End Wrench 12 x 14 .....	1
Shop Rags.....	As Needed
Drain Pan.....	1
Sprocket Oil 80-90W .....	As Needed
Oil Funnel .....	1
Assistants .....	1-2
Sprocket/Pulley Puller .....	1
Open-End Wrench to Fit Pulley Puller.....	1
Heavy Cardboard .....	As Needed
Heavy Tape .....	As Needed
Replacement Bearing.....	1
Replacement Gaskets and Seals.....	As Needed

## Inventory

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

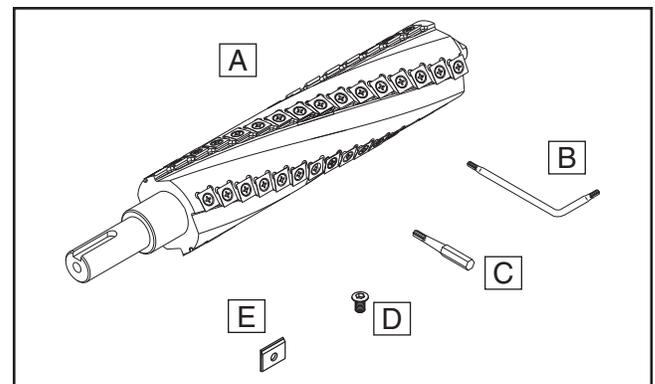


Figure 1. Model T10128/T10129 inventory.

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## **!WARNING**

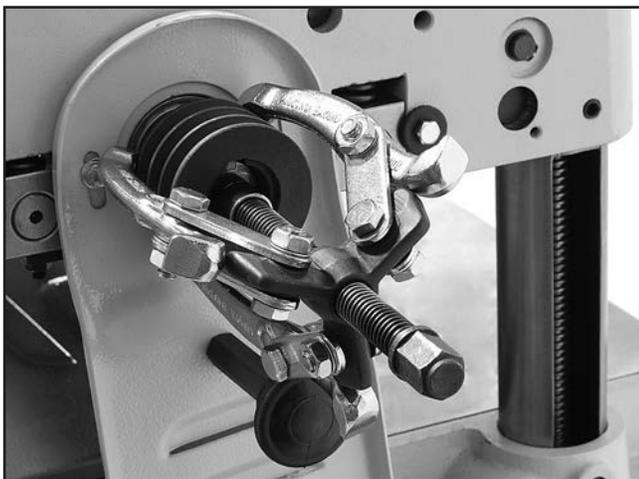
Cutterhead knives and inserts are razor sharp! Always wear heavy leather gloves when handling cutterheads, and avoid contact with cutters whenever possible. Failure to comply can result in serious personal injury!

### Cutterhead Removal

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the top cover and dust port to expose the cutterhead.
3. Remove the knives from the existing cutterhead.
4. Remove the belt cover, and then remove the V-belts from the pulleys.

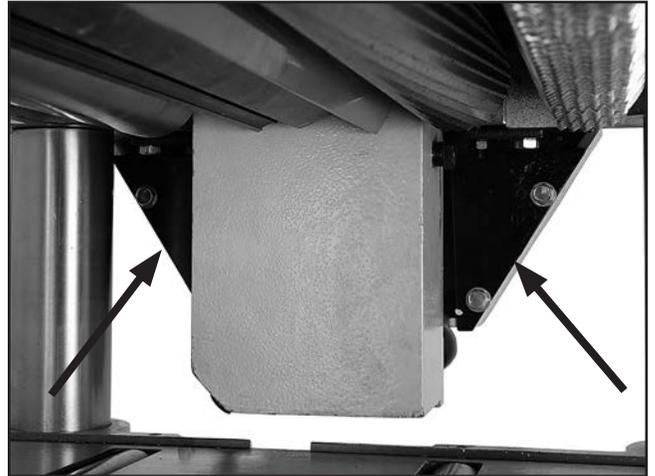
**Note:** This may require loosening the belt tension. This procedure is outlined in the *SERVICE* section of your planer manual.

5. Remove the hex bolt that holds the cutterhead pulley in place.
6. Rotate the cutterhead until the cutterhead pulley key is at an upright position.
7. Remove the pulley and key. If the pulley is difficult to remove, use a pulley puller, as shown in **Figure 2** (see **Page 6** of this instruction sheet if you do not have a pulley puller).



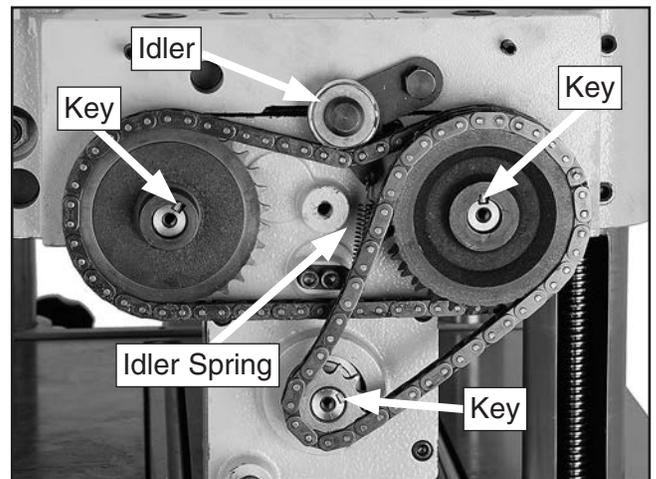
**Figure 2.** Using a pulley puller.

8. Remove the table elevation handwheel and key.
9. Remove both rear guards from the sprocket cover, as shown in **Figure 3**.



**Figure 3.** Sprocket cover rear guards.

10. Remove the sprocket cover cap screw and the sprocket cover.
11. Remove the hex bolts and washers from the three sprockets, shown in **Figure 4**, to expose the sprocket keys.

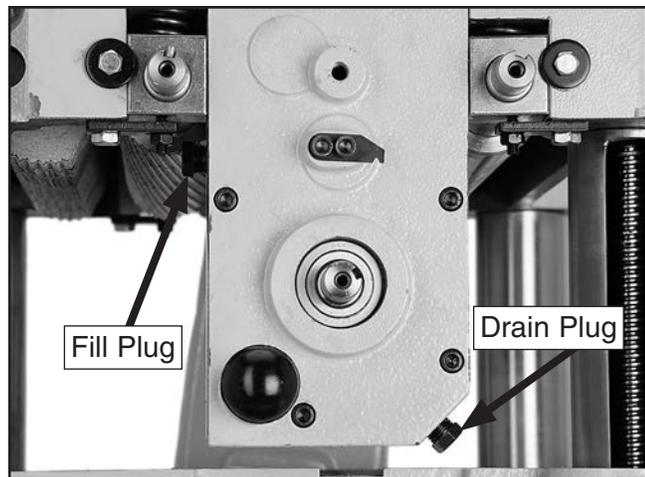


**Figure 4.** Sprockets and chains.

12. Unhook the idler spring shown in **Figure 4** and move the idler up out of the way.
13. Rotate the cutterhead so that the sprocket keys are in a generally upright position.

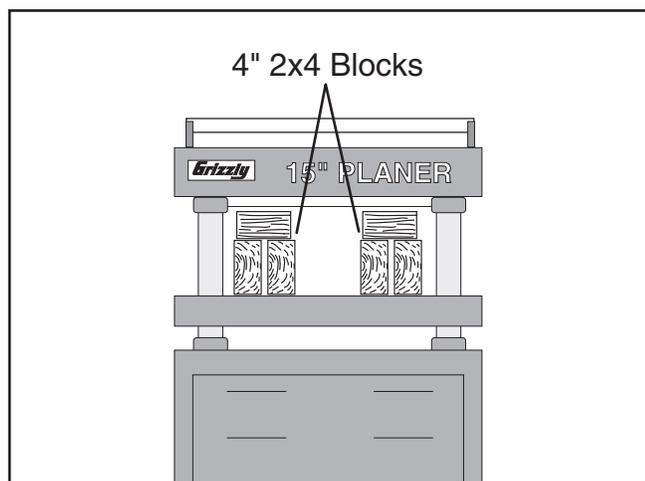


14. Mark the outside of the sprockets with correction fluid as a way of remembering which side of each sprocket faces outward.
15. Remove the sprockets, keys and chains all at once, taking care to keep the chains unbroken.
16. Thoroughly drain the planer gearbox into the drain pan by removing the drain plug shown in **Figure 5**.



**Figure 5.** Drain and fill plug location.

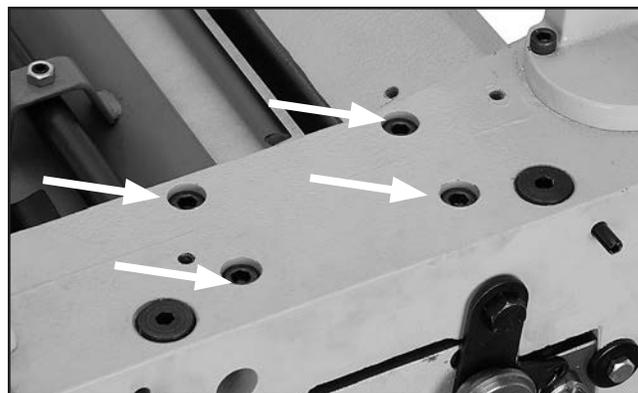
17. Insert six 4" 2x4 blocks directly beneath the cutterhead, as shown in **Figure 6**.



**Figure 6.** Support block location.

18. Reinstall the handwheel and key, and carefully lower the headstock so the cutterhead just touches the blocks.

19. Remove the four cap screws at the top of the gearbox, shown in **Figure 7**.



**Figure 7.** Gearbox cap screw location.

20. Have an assistant hold the gearbox steady while you use a rubber or wooden mallet to unseat the cutterhead out from the headstock, as shown in **Figure 8**.

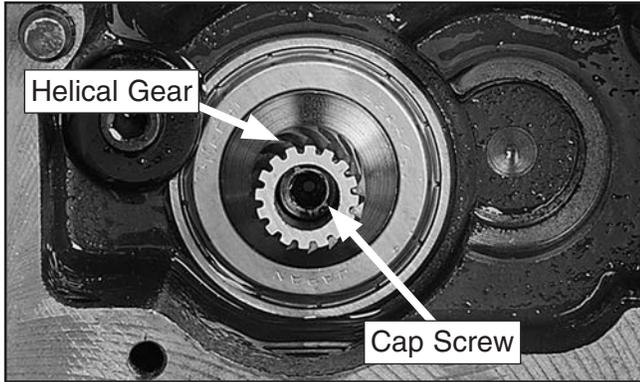


**Figure 8.** Unseating the cutterhead.

21. Continue resting the gearbox-cutterhead assembly on the 2x4 blocks for the following steps.
22. Remove the five cap screws from the front of the gearbox cover.
23. Separate the gearbox cover by gently tapping near the gasket using a mallet and flat head screwdriver.

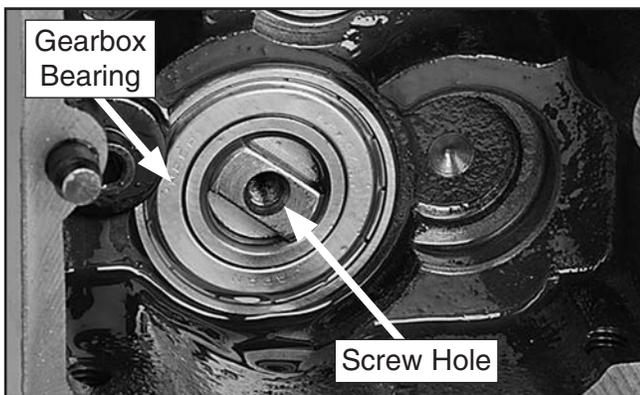


24. Remove the cap screw from inside of the helical gear shown in **Figure 9**, and remove the sprocket.



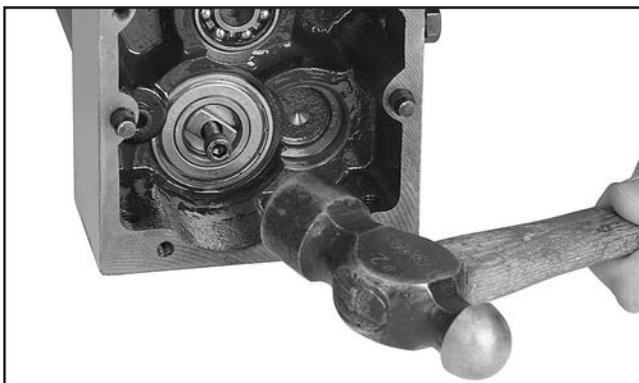
**Figure 9.** Helical gear and cap screw.

25. Insert the spare M6-1 screw or bolt into the hole at the gearbox end of the cutterhead shown in **Figure 10**.



**Figure 10.** Cutterhead removal.

26. While supporting the gearbox, remove the cutterhead by tapping on the screw or bolt with a hammer, as shown in **Figure 11**. It may also be necessary to tap on the back of the gearbox with a rubber or wooden mallet.



**Figure 11.** Cutterhead removal.

27. Visually inspect all bearing bores, both on the headstock and in the gearbox, and remove any burrs or rough spots that are present.

## Spiral Cutterhead Installation

We recommend that all gearbox seals and gaskets are replaced before cutterhead installation, even if the seals or gaskets appear to be in good condition.

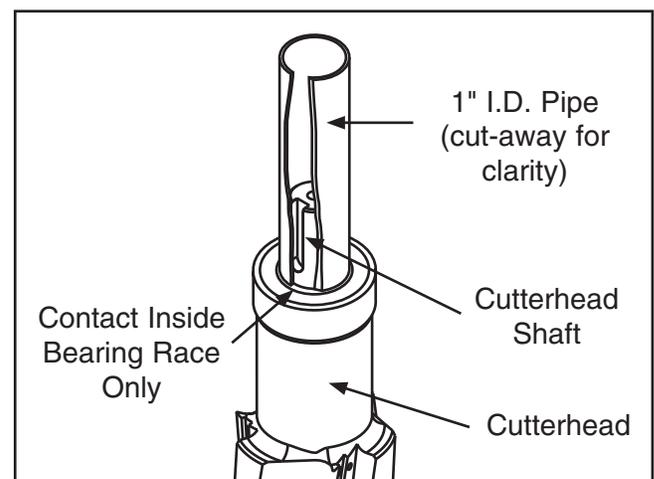
### **NOTICE**

**Before removing any seals, note their orientation and how far they are driven into the bore (typically the lip of a seal will face inward toward the oil reservoir or body of liquid). This will aid in the replacement process. Failure to heed this notice can lead to fluid leakage and gearbox failure.**

1. Wrap the new cutterhead in the cardboard and securely fasten it with heavy tape.
2. Install a new bearing on the cutterhead by very gently tapping it on, using a mallet and a 4" length of 1" inside diameter (I.D.) pipe, as shown in **Figure 12**.

**Tip:** Place the wrapped cutterhead in a freezer overnight before installing a new bearing. This will cause the cutterhead metal to contract, making the bearing easier to install.

**Important:** The pipe should contact the inside race of the bearing only, as shown in **Figure 12**. Force on any other portion of the bearing WILL ruin the bearing!

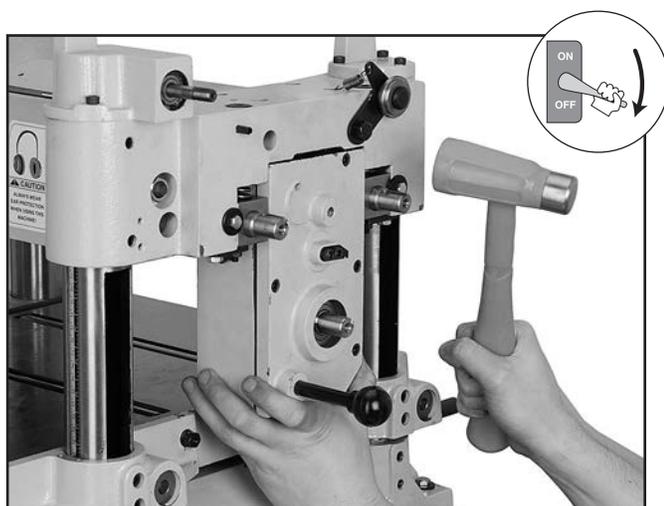


**Figure 12.** Close-up of bearing installation.

T10128/T10129 15" & 20" Spiral Cutterheads



3. Install the cutterhead in the gearbox by fitting it into place, and seat it by tapping on the pulley end with a wooden or rubber mallet. Ensure the cutterhead end is flush with the inside face of the gearbox bearing, as previously shown in **Figure 10**.
4. Reinstall the helical gear and cap screw, ensuring the helical gear and the cutterhead are engaged.
5. Ensure that gasket surfaces are clean and free of oil, grit or contaminants. If these are damaged, replace them.
6. Re-assemble the gearbox, taking care to seat the rubber gasket in alignment with the gearbox covers.
7. Re-fill the gearbox with clean 80-90W sprocket oil via the fill plug shown in **Figure 5**.
8. Install the cutterhead-gearbox assembly into the planer. Seat the cutterhead shaft bearing by tapping on the gearbox with a rubber or wooden mallet, as shown in **Figure 13**.



**Figure 13.** Seating cutterhead-gearbox assembly.

9. Secure the gearbox in place with the cap screws removed in **Step 19** of the **Cutterhead Removal** instructions.
10. Rotate all sprocket shafts so that the keyways are in a generally upwards position.

11. Re-install the sprockets, chains and idler. Fasten the sprockets using the washers and bolts removed in **Step 11** of the **Cutterhead Removal** instructions.
12. Re-install the sprocket cover, including both rear guards on the sprocket cover.
13. With the cutterhead shaft keyway in an upright position, install the cutterhead pulley key into the keyway.
14. Slide the cutterhead pulley onto the shaft, and secure with the hex bolt removed in **Step 5** of the **Cutterhead Removal** instructions.
15. Remove the protective cardboard and tape from around the cutterhead.
16. Re-install all belts and the belt cover. Readjust the V-belt tension if it was loosened in **Step 4** of the **Cutterhead Removal** instructions.
17. Re-install all remaining covers and guards.
18. Follow the procedures outlined in your planer manual for the adjustment and calibration of your planer.

## Rotating/Changing Carbide Inserts

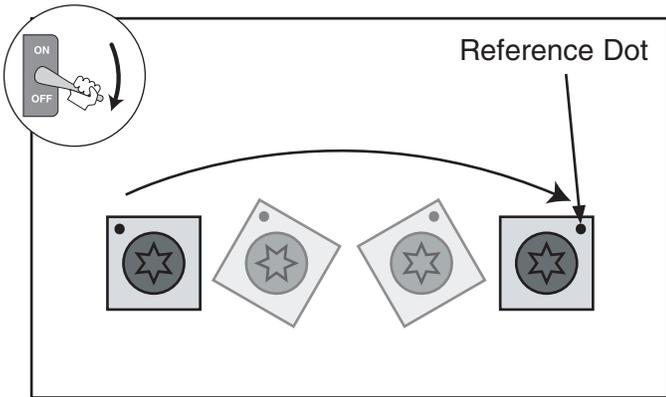
### Tools Needed:

L-Wrench Torx T20 .....	1
Torx Driver T20.....	1

The 15" cutterhead is equipped with 74 indexable carbide inserts; the 20" cutterhead has 92. 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 90° to reveal a fresh cutting edge (**Figure 14**).

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. When the reference dot revolves back around to its starting position, the insert should be replaced.





**Figure 14.** Carbide insert rotating sequence.

**To rotate or change a carbide insert:**

1. DISCONNECT PLANER FROM POWER!
2. Remove any sawdust from the head of the carbide insert Torx screw.
3. Remove the Torx screw and carbide insert.
4. 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 a noticeable marks on your workpieces the next time you plane.*

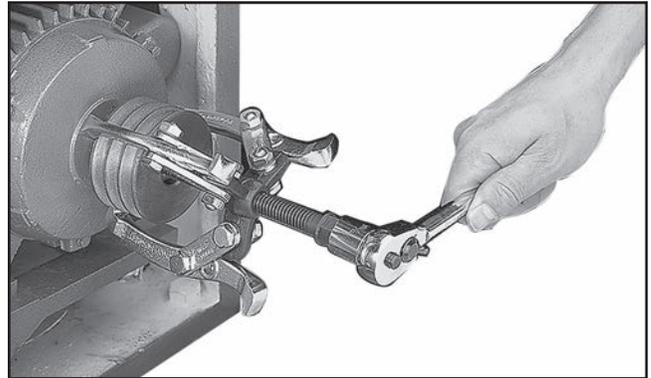
5. Lubricate the Torx screw threads with a light machine oil, wipe the excess oil off the threads, and torque the Torx screw to 48-50 inch/pounds.

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

**Accessories**

**G8995—4" Heavy Duty Pulley Puller**

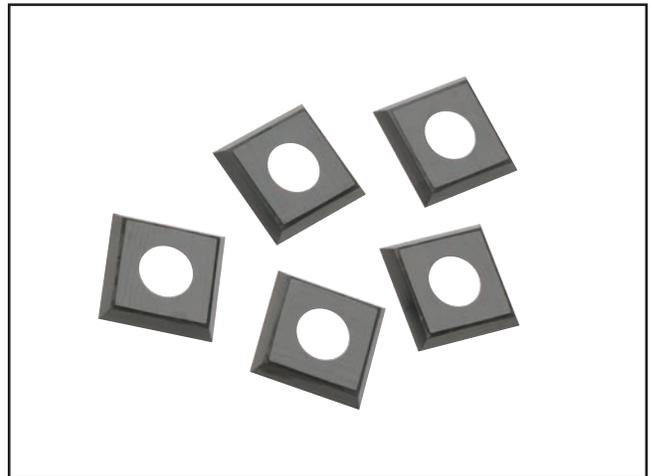
Indispensable for pulling gears or pulley off of press-fit shafts. Can be used in either a 2 or 3 jaw configuration. The 4" jaw fingers are also reversible so they can grab an outside or inside diameter. The forcing screw has a live center and is made of tough hardened steel. Keep one of these handy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



**Figure 15.** G8995 4" Heavy Duty Pulley Puller.

**T21348—10 Pack of Indexable Carbide Inserts**

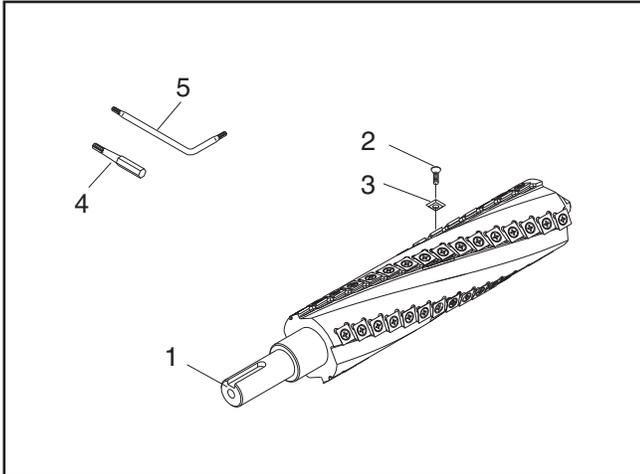
Replacement carbide inserts for T10128 and T10129 cutterheads.



**Figure 16.** T21348 Indexable Carbide Inserts.

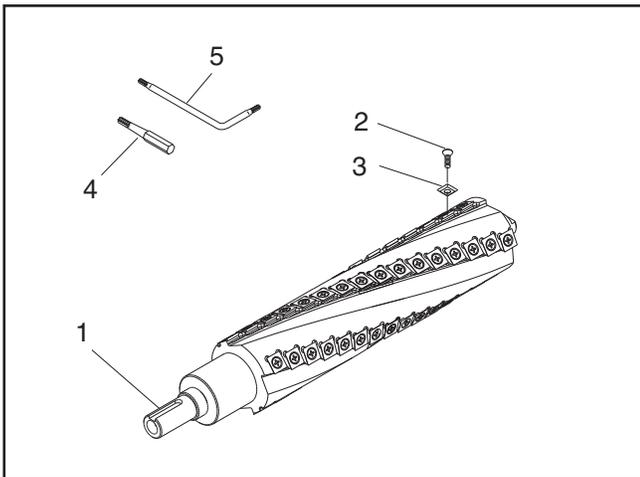


## T10128 Parts Breakdown and List



REF	PART #	DESCRIPTION
1	P0453Z048	SPIRAL CUTTERHEAD ASSY
2	PFH35M	FLAT HD TORX SCR T20 M6-1 X 15
3	P0452Z002	INDEXABLE INSERT 14 x 14 x 2
4	P0452Z001	DRIVER BIT TORX T20
5	P0452Z009	L-WRENCH TORX T20

## T10129 Parts Breakdown and List



REF	PART #	DESCRIPTION
1	P0454Z053	SPIRAL CUTTERHEAD ASSY
2	PFH35M	FLAT HD TORX SCR T20 M6-1 X 15
3	P0452Z002	INDEXABLE INSERT 14 x 14 x 2
4	P0452Z001	DRIVER BIT TORX T20
5	P0452Z009	L-WRENCH TORX T20



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