



Tormach Tool Upgrade Program

Tormach tool holders require a groove in the major diameter to work with an automatic tool changer. This groove gives the tool changer a way to grip the tool holder.

LittleMachineShop.com has partnered with Z-Bot to provide a service that will machine the correct groove in your existing tool holders. The configuration of this groove meets the standard developed by Tormach and Z-Bot, so it will work with any automatic tool changer that handles Tormach tooling. All machining is done on a state-of-the-art CNC lathe.

The LittleMachineShop.com Tormach Tool Upgrade Program provides identification labels, shipping labels, and the paperwork required to identify your tool holders through the modification process. This program also includes the cost of shipping your tool holders back to you when the modifications are complete.

The LittleMachineShop.com Tormach Tool Upgrade Program does not cover the actual machining cost to modify the tool holders. You will be billed \$8.95 per tool holder at the time the machining is complete.

You should have received the following as part of the LittleMachineShop.com Tormach Tool Upgrade Program:

Tool holder labels	A sheet of small labels, each with the same 7-digit number on them. This number (your order number) identifies the tool holders as yours as they go through the machining process.
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Shipping label addressed to Z-Bot	Use this shipping label to send your tool holders to Z-Bot.
Shipping label addressed to you	Z-Bot will use this label to return your modified tool holders to you. Confirm that the shipping address on this label is correct.
Order form	The order form tells Z-Bot how many tool holders you are sending and where to return them.

Instructions for Shipment

Follow these steps as you prepare your tool holders for shipment:

1. Gather the tool holders that you want modified. There are several kinds of Tormach tool holders, including end mill holders, drill chuck arbors, boring head arbors, and collet holders.



Tools that require modification have the $\frac{3}{4}$ " smooth shank shown on the right side of the photo.

Don't put a label on this surface. It will be used to chuck the tool holder during machining.

The groove will be machined.

Place the label here.

Remove boring heads from the shanks. You can send drill chucks mounted to the arbor.

Do not send other Tormach tools, such as collets or height setting fixtures. These tools do not require modification.

2. Clean any oil or grease from the tool holders so the labels will adhere.
3. Remove the nuts and collets from collet holders. Do not send nuts or collets.
4. Apply a numbered identification label to the "front" of each tool holder. On end mill holders, wrap the label around the blackened cylindrical part. On drill chucks, wrap the label around the chuck. On boring head shanks, wrap the label around the threads. On collet holders, wrap the label around the threads. Always start your wrap from the blank end of the label so the number does not get covered if the label wraps over itself.

5. Apply a layer of clear tape over the labels to protect them during the machining process. Scotch tape will work, but clear carton sealing tape is better. Trim the excess with a sharp knife.
6. Package your tool holders carefully. Use the original sleeve containers if you have them. Otherwise wrap each tool holder in some form of cushioning. (Newspaper will work if that is all you have.)
7. Complete the order form, providing a complete inventory of the tool holders you are sending.
8. Place the wrapped tool holders in a USPS Priority Mail Flat Rate Box (these boxes are available for free at any post office). Place the order form and the shipping label that is addressed to you on top of the tool holders before you seal the box.
9. Fill the box with packing filler. (Newspaper will work if that is all you have.)
10. Apply the shipping label that is addressed to Z-Bot to the carton.
11. Take the carton to the post office and purchase appropriate postage. (Currently postage is \$8.95.) Mail the package to Z-Bot.

When Z-Bot receives your tool holders they will process them with the next scheduled batch of tool holders and then return them to you. You will be billed \$8.95 for each tool holder that they modify.