

LTAGA CBN Retrofit

Part No. 010723



Safety is our #1 concern! Read and understand all safety information and instructions before performing installation.

Form #572

FORM 572

LTAGA CBN RETROFIT INSTRUCTIONS

Part No. 010723

As a result of Wood-Mizer's continuous pursuit of quality, safety and/or durability of its products, the following retrofit has been made available for the LTAGA. This retrofit is designed to enable the sharpener to plunge profile grind.

Pre-Installation Instructions

1. Prior to installation, disconnect and lock out all power to the sharpener.
2. Unplug all motor and hall effect wires.
3. Drain coolant and clean pan.

4. Install clamp retrofit 010755 if needed.

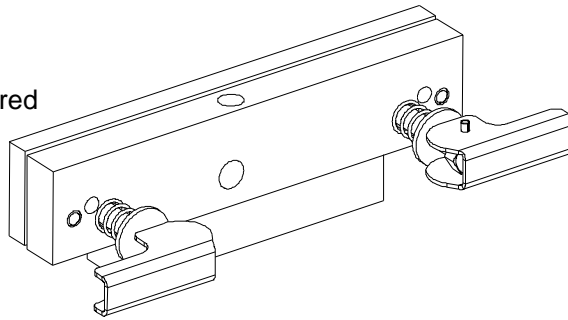
See Figure 1. If you have the clamp originally supplied on revision A-N sharpeners, you *must* install clamp retrofit 010755 (available from Wood-Mizer). The retrofit is designed to hold the blade vertical to enhance the grind geometry and is required for plunge profile grinding.

If you have the clamp originally supplied on revision P-Q sharpeners, you *may* install clamp retrofit 010755 to sharpen 1 1/2" blades. If you only sharpen 1" and 1 1/4" blades, you do not need to install the retrofit.

If you have the clamp originally supplied on revision R and later sharpeners, you do not need to install the retrofit.

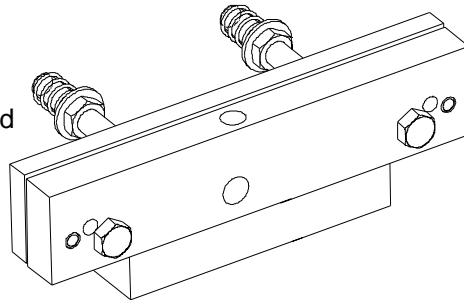
Rev. A - N Sharpeners

Clamp retrofit kit 010755 required to enhance grind geometry



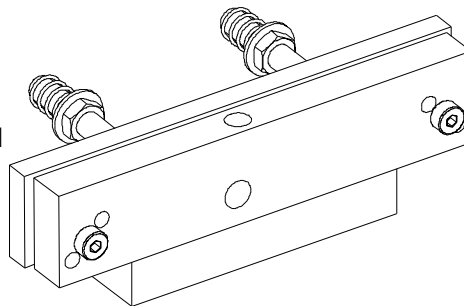
Rev. P-Q Sharpeners

Clamp retrofit kit 010755 required to sharpen 1 1/2" blades



Rev. R+ Sharpeners

Clamp retrofit NOT required



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FIG. 1

5. If you have a sharpener with a depth stop knob, remove the knob and knob rest plate to prevent interference with the CBN profile wheel. To remove, unscrew the depth stop knob and set aside. Cut or saw the depth stop knob rest plate just below the bending point (less than 1" from the back of the grinding wheel housing).

See Figure 2.

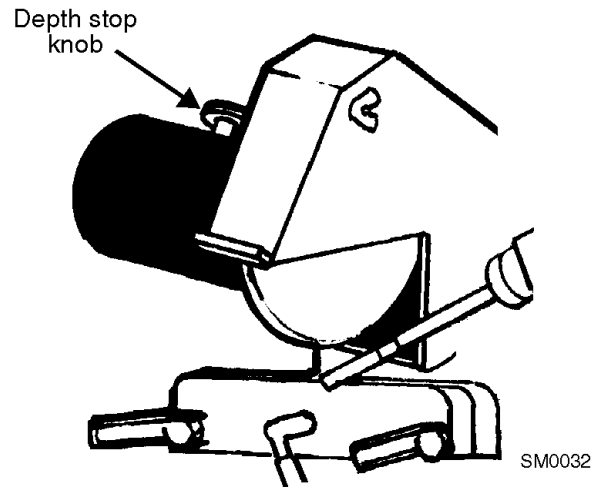
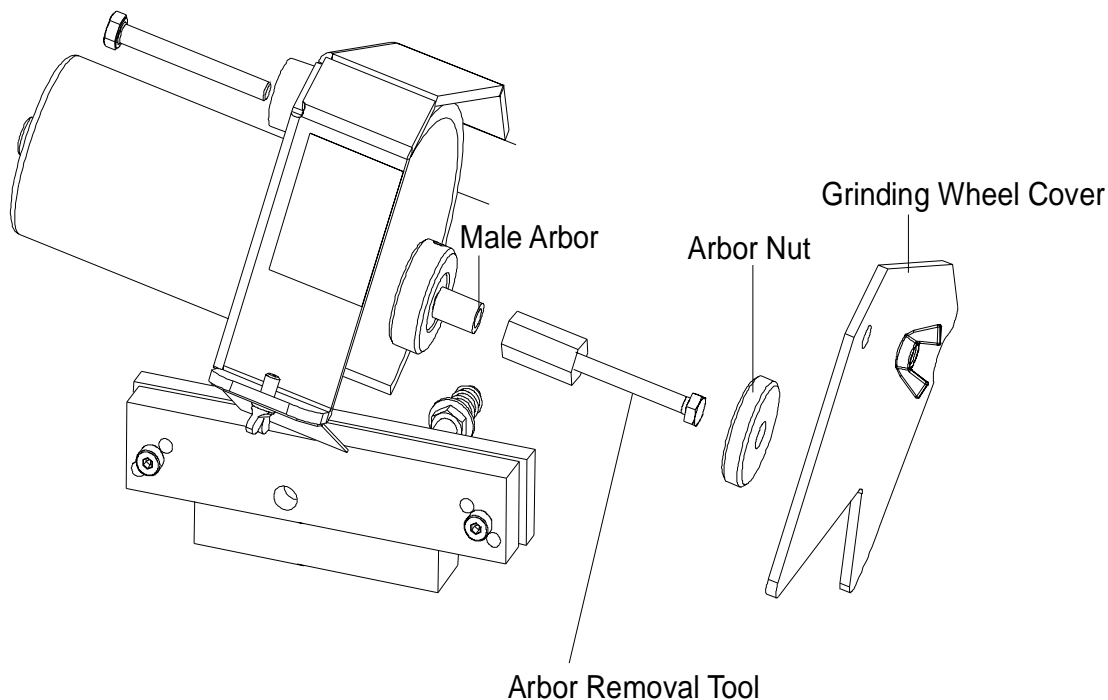


FIG. 2

Installation Instructions

1. Install the CBN profile grinding wheel.
 - Remove the grinding wheel cover and set aside.
 - Remove the existing arbor nut and grinding wheel from the grinder motor shaft.
 - Remove the existing male arbor from the grinder motor shaft. To remove, thread the arbor removal tool onto the arbor. Using a 5/8" wrench to hold the hex-shaped tool base in place, turn the tool's hex bolt clockwise as needed.
 - Install the new male arbor (with 1/4-28 x 3/8" cup point set screw), CBN profile grinding wheel (packaged separately), and arbor nut to the shaft.
 - If you have a sharpener originally equipped with a depth stop knob, make sure enough of the depth stop knob rest plate has been removed to clear the CBN wheel.
 - Reinstall the grinding wheel cover.

See Figure 3.



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FIG. 3

2. Install the oiler assembly.

- Remove the plate guard and wing nut from the front tab of the grinding wheel housing. If the hole of the front tab is not already tapped 1/4-20, use a 9/32" drill bit to enlarge the hole.

See Figure 4.

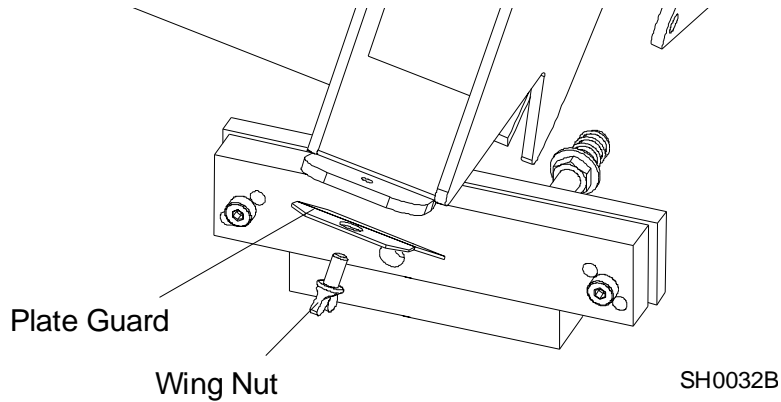


FIG. 4

- Install the oiler assembly to the grinding wheel housing, using the provided fasteners as shown to secure in place. Make sure the oiler assembly does not contact the grinding wheel.
- Make sure the oiler assembly does not interfere with the CBN wheel. If it does, place additional 1/4" flat washer(s) between the front tab and the oiler assembly to shim.

See Figure 5.

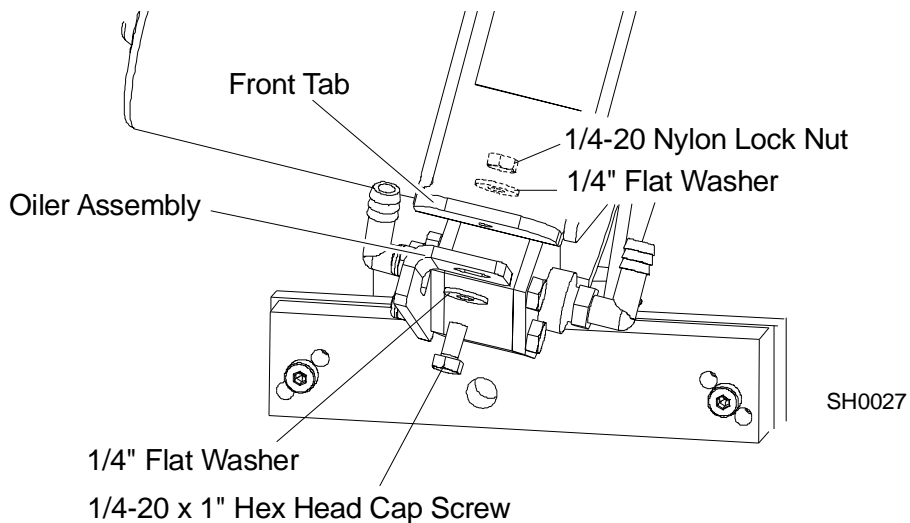


FIG. 5

3. Install the oil flow control valve.

- Use the provided fasteners as shown to secure the valve components to the top of the grinding wheel housing.

See Figure 6.

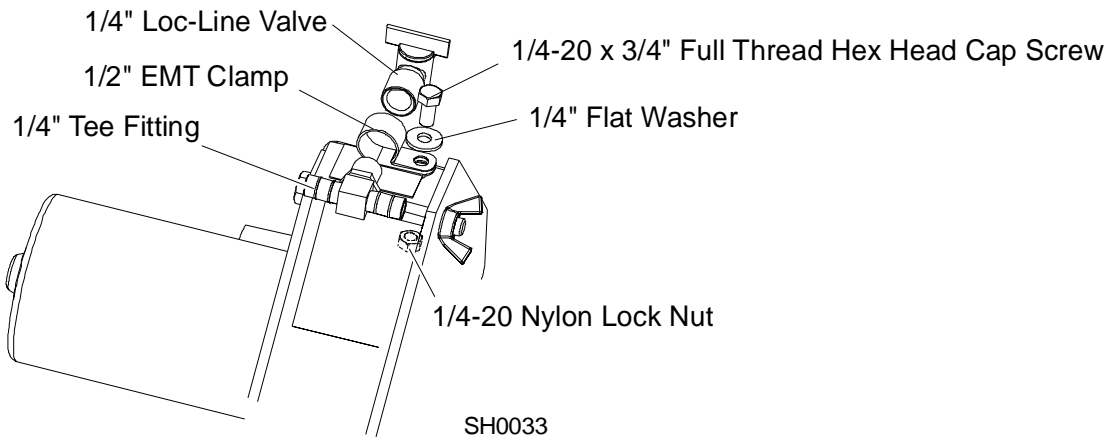


FIG. 6

IMPORTANT! If your LTAGA does not already have a hole in the top of the grinding wheel housing, use a 9/32" bit to drill one in the location shown.

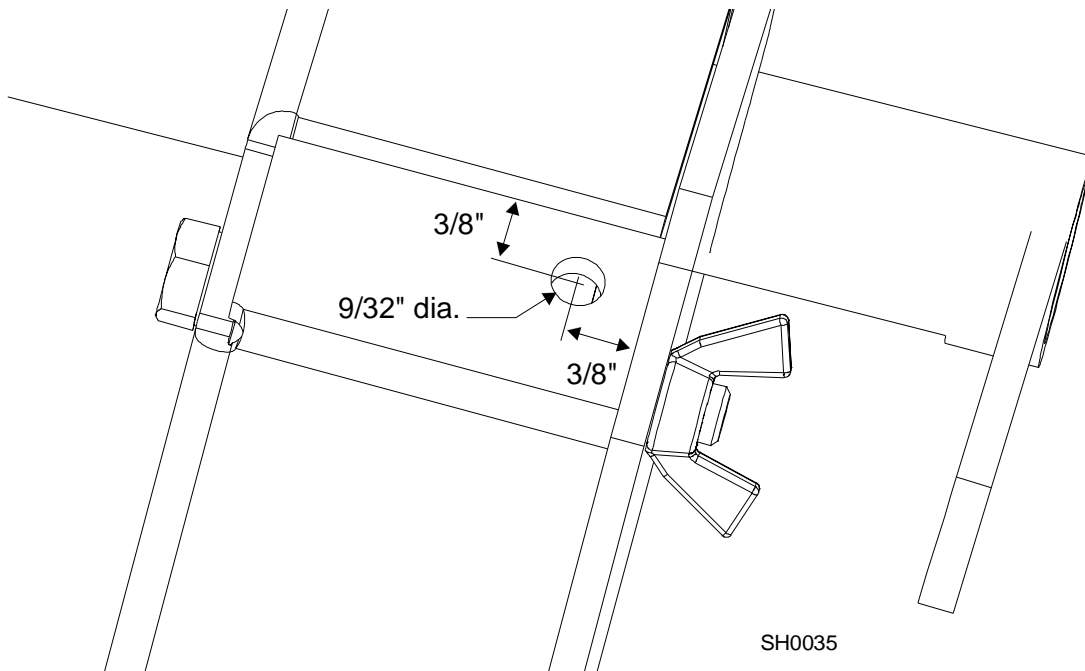


FIG. 6

4. Cut the provided oil hose to length as needed. Install hose from:
 - (A) the right of the flow control valve tee fitting to the right elbow fitting of the oiler assembly;
 - (B) the left of the flow control valve tee fitting to the left elbow fitting of the oiler assembly;
 - (C) the flow control valve EMT fitting to the oil pump.
5. Install the wiper assembly.
 - Remove the 1" bolt and existing washer from the bottom of the blade clamp.
 - Install the wiper assembly to the clamp, using the provided 1/2-20 x 1 1/4" bolt and the existing washer to secure in place.

See Figure 7.

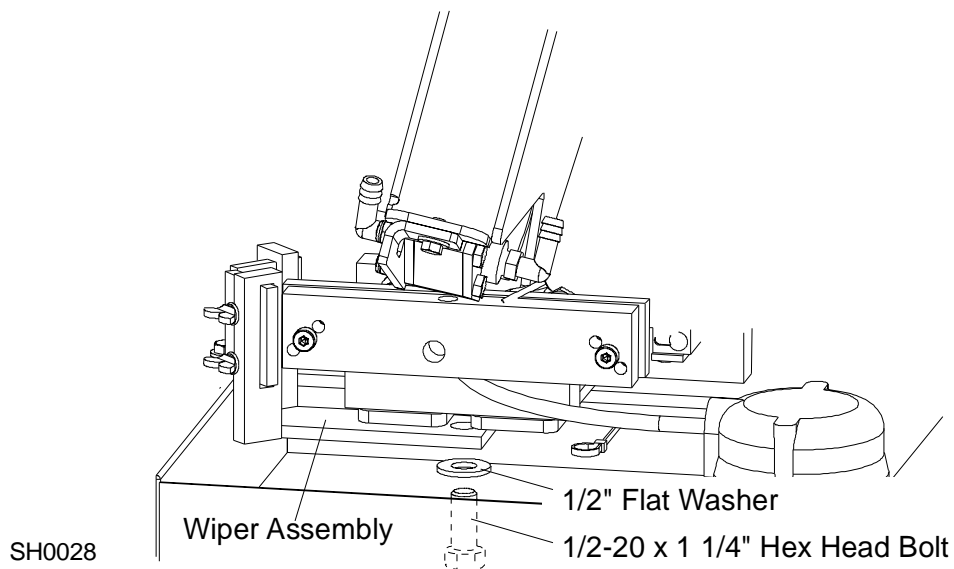


FIG. 7

6. Install the rear splash guard.

- Install the rear splash guard to the sharpener. Use the existing bolts and nuts and the provided 1/4" flat washers to secure in place as shown.
- Make sure the index motor does not interfere with the rear splash guard. If it does, rotate the cam/index motor 180°.
- Install the provided grommet and plug to the rear splash guard. Route the grinder motor wire through the grommet. Route the hall effect wire through the index motor hole.

See Figure 8.

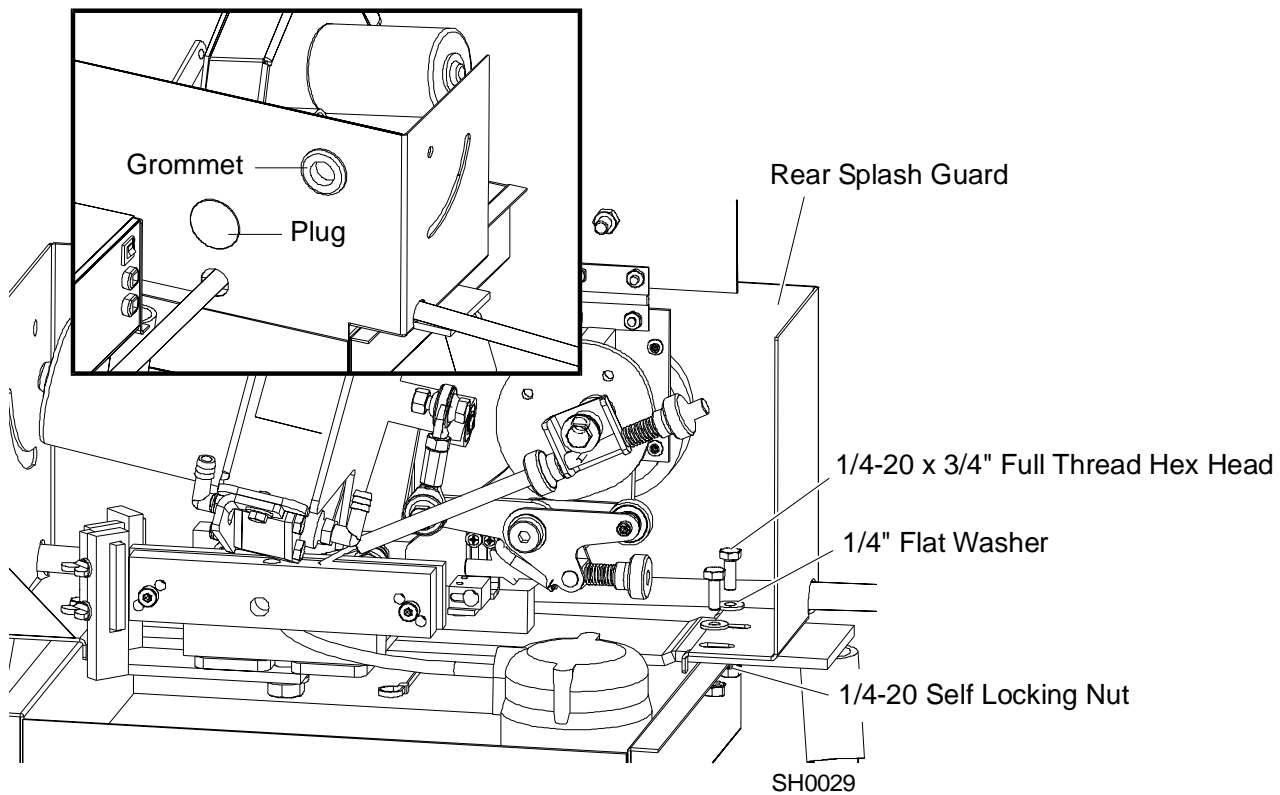


FIG. 8

7. Install the front splash guard.

- Install the front splash guard to the rear splash guard. Use the provided fasteners as shown to secure in place. Tighten the nuts so the front guard will "stay" in any position.
- Using the provided 3/8" self-tapping bolts, install the handle to the front splash guard as shown.
- Install the wiper to the front splash guard. Locate the wiper so that the bottom of the wiper is 1/2" beneath the edge of the guard. Secure in place with the provided wiper plate, 1/2" machine screws and self-locking nuts.

See Figure 9.

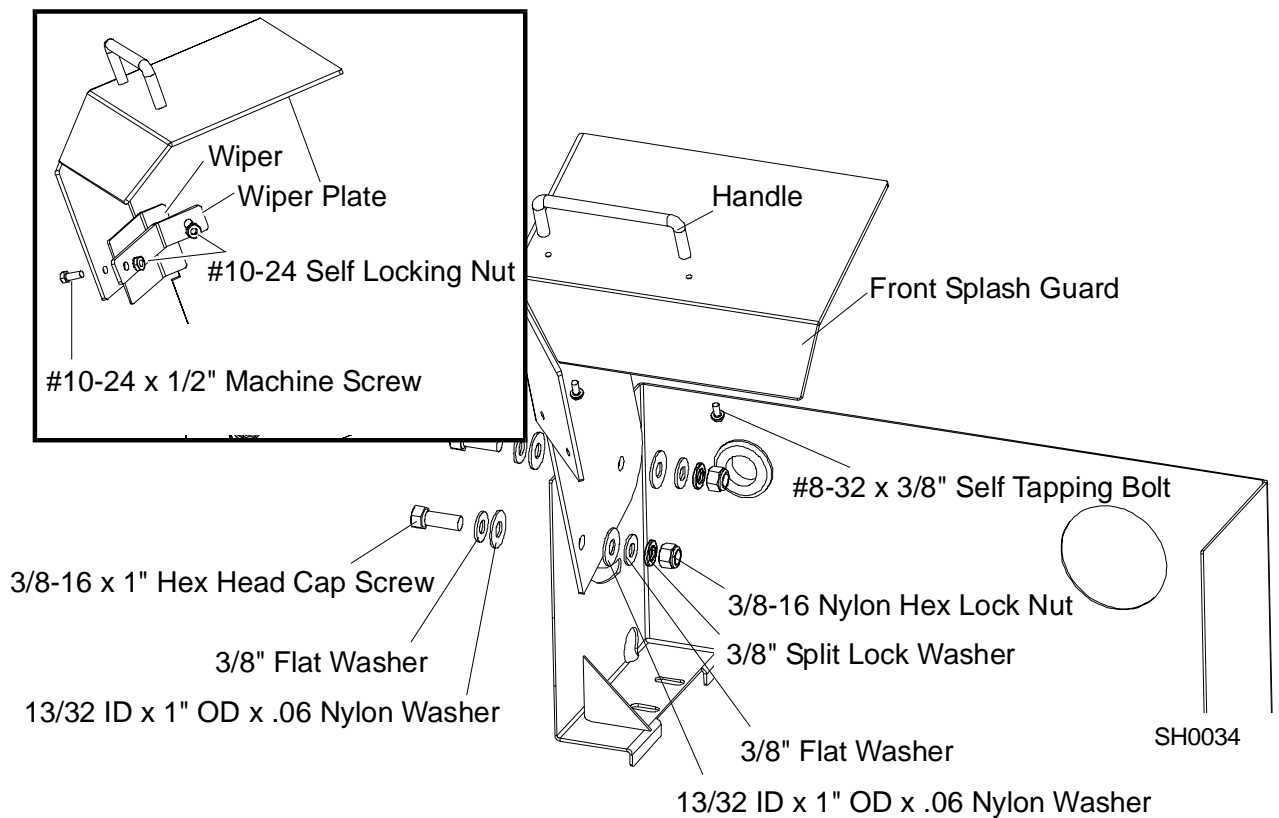


FIG. 9

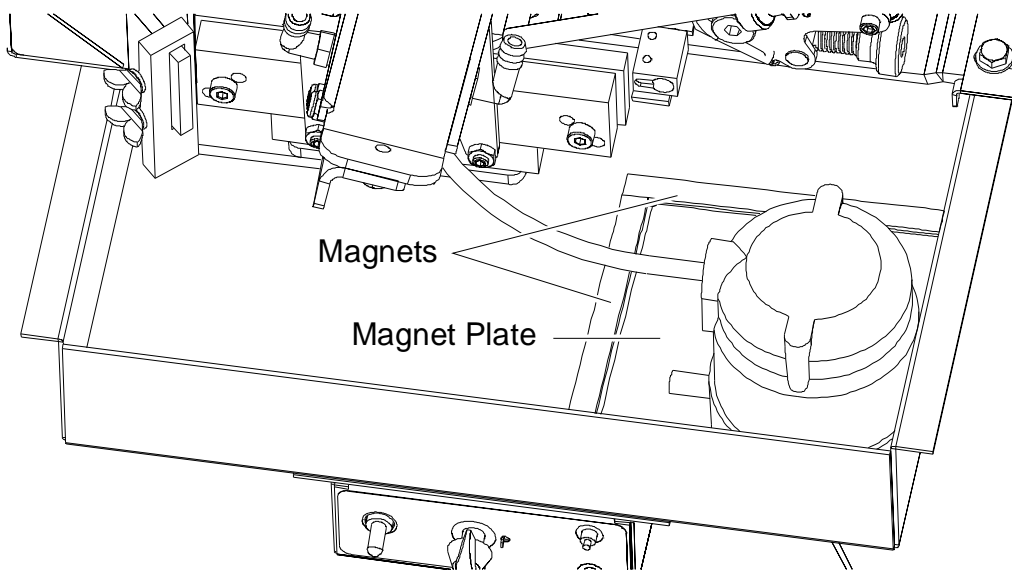
8. Install the cam/push pawl assembly.

- Remove the existing cam/push pawl assembly.
- Use the provided router wrench to install the CBN cam/push pawl assembly to the sharpener.

9. Install the magnets.

- Make sure the rubber stop is properly installed in the oil tray. Fill the tray with the provided #165-CE grinding oil to 1" (2.5 cm) from the top.
- Place the provided magnet plate and two filter magnets as shown to collect sediment. Orient the magnet plate so that the face of the plate lies directly against the bottom of the oil tray.

See Figure 10.



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FIG. 10

- Connect all motor and hall effect wires. Reconnect all power.

Alignment Instructions

Once the retrofit has been completely installed, you will need to align the grinding head.

1. Use the LTAGA alignment tool as necessary to achieve accurate alignment between the blade clamp and the grinding wheel.

IMPORTANT! Do not attempt to adjust the tool gauge points. They have been pre-calibrated at the factory to ensure accurate alignment results.

2. For all revision sharpeners: Make sure the grinder motor is OFF. Cycle the cam until the grinding wheel is at the tip of the tooth (about to begin face grind).
3. Remove the grinding wheel cover and female arbor. Remove the grinding wheel.
4. Install the alignment tool to the grinder motor shaft as shown. Position the tool so all three gauge points are in line with the front clamp plate. Secure the tool in position with the female arbor.

See Figure 11.

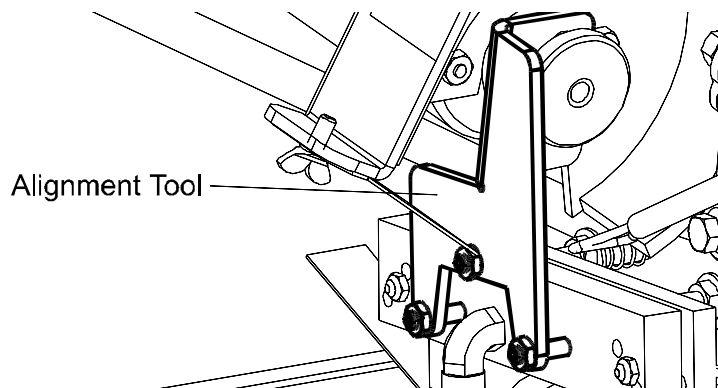


FIG. 11

5. Use a 3/4" wrench to loosen the bottom clamp adjustment nut. Position the clamp assembly so the front clamp plate touches all three tool gauge points. Secure in position by tightening the clamp adjustment nut.
6. Use the spring adjustment nuts (one nut on each of the two threaded clamp studs) to adjust the springs until they are compressed to 11/16" - 3/4". Make sure the springs hit the back plate before the studs.

See Figure 12.

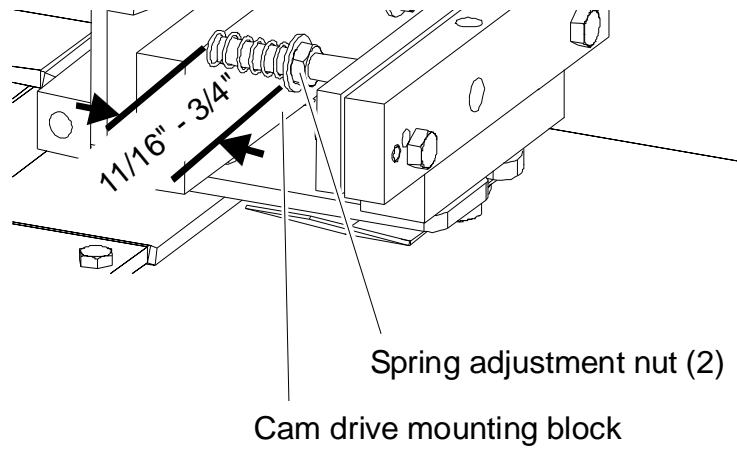


FIG. 12

7. Remove the female arbor and alignment tool. Reinstall the grinding wheel and secure in place with the female arbor. Reinstall the grinding wheel cover.

Operation Instructions



WARNING! Always wear eye protection when operating the sharpener. Failure to do so may result in serious injury.

1. Follow the safety, operation and maintenance instructions originally supplied with your LTAGA sharpener in the LTAGA Owner's Manual. Differences are outlined below.
2. Use the provided angled template to set the angle of the grinding wheel head to 15°. **NOTE:** The head angle must be set at 15° to ensure proper blade geometry. *Hook* angle will depend on the CBN wheel profile.
3. Adjust the push arm so that it pushes the tooth currently being ground rather than the tooth *prior* to the one being ground.
4. Adjust the face grind so the entire tooth face is lightly ground from the tip to the base of the tooth.
5. Adjust the depth/back grind knob so enough gullet is removed to sharpen the entire tip of the tooth.
6. Do NOT attempt to dress the CBN wheel.
7. To operate, push the start button, open the oil flow control valve, and turn the grinder switch on. Slowly increase the feed rate to begin the blade moving.
8. Increase the feed rate to a moderate speed. How fast you can grind will be determined by how much material you are removing from the blade.

Maintenance Instructions

- Wipe the sharpener dry after each day's use.
- Keep clean of dirt, rust, and metal filings.
- Remove the clamp regularly and clean out any buildup that might cause it to not clamp the blade firmly. When replacing clamp, replace it flat against the stop block.
- Change the oil and clean out the pan as needed. Also clean the magnets around the filter pump as needed. To clean the magnets, remove the magnets. Use a cloth to remove any debris and/or sediment, then place the magnets back into position.
- Use a light penetrating oil to keep moving parts lubricated. These include: blade clamp, face grind adjustment knob and back grind adjustment knob.

CBN RETROFIT ASSEMBLY COMPONENTS				
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART NUMBER	QTY.	
	CBN RETROFIT ASSEMBLY	010723	1	
1	Arbor, Female	S04554	1	
2	Arbor, Male Profile	010750	1	
3	Screw, 1/4-28 x 3/8" Cup Point Set Black Oxide	F05005-24	1	
4	Oiler Assembly, Grinding Wheel	010724	1	
5	Bolt, 1/4-20 x 1" Hex Head Grade 2	F05005-38	1	
6	Washer, 1/4" SAE Flat	F05011-11	7	
7	Nut, 1/4" Nylon	F05010-69	2	
8	Fitting, 1/4" NPT x 3/8" Barbed Male Branch Tee	010747	1	
9	Clamp, 1/2" EMT Coated	010748	1	
10	Valve, 1/4" Loc-Line	P09835	1	
11	Screw, 1/4-20 x 3/4" Full Thread Hex Head Cap	F05005-1	1	
12	Hose, 3/8" x 1/2" x 4 ft. Oil	010739	1	
13	Oil, 5 Gallons #165-CE Grinding	010740	1	
14	Wiper Assembly, LTAGA	010727	1	
15	Bolt, 1/2-20 x 1 1/4" Hex Head	F05008-108	1	
16	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
17	Guard Weldment, Rear Splash	010729	1	
18	Grommet, 7/8" ID x 1 1/4" Groove Diameter	P702	1	
19	Plug, 1 1/2" Steel Finishing	010749	1	
20	Guard, Front Splash	010736	1	
21	Bolt, 3/8-16 x 1" Hex Head	F05007-7	2	
22	Washer, 3/8" Flat	F05011-3	4	
23	Washer, 3/8" Split	F05011-4	2	
24	Washer, 13/32 ID x 1" OD x .06" Nylon	F05011-83	4	
25	Handle, 4"	P08065	1	
26	Screw, #8-32 x 3/8" Self Tapping	F05015-8	2	
27	Plate, Splash Guard	010751	1	
28	Wiper, Rubber	010752	1	
29	Bolt, #10-24 x 1/2" Hex Head Stainless Steel	F05004-27	2	
30	Nut, #10-24 Self Locking	F05010-14	2	
31	Cam/Push Pawl Assembly, LTAGA CBN Profile	010746	1	
32	Magnet, Filter	P31347	2	
33	Wrench, Router	P07032	1	
34	Plate, Hook Angle Gauge	010753	1	

