

UL9010 Ultra-Lok[®] Tool



Table of Contents

Warranty	2
Safety Guidelines	2
Setup Instructions	3
Settings	4
Clamp Application	
Free-End	5-6
Preformed	7
Parts List	8
Assembly Instructions	9-10
Troubleshooting	10
Maintenance	11-12



Warranty: For warranty information visit the following URL

www.BAND-IT-IDEX.com/Warranty.html

NOTE: Any performance data published herein is based on laboratory tests, which cannot duplicate conditions that may be encountered in field installations. Such conditions may vary results substantially from those shown (such as abuse in handling and installation, failure to follow recommended handling and installation practices, abnormal environmental conditions, disregard of operating instructions for BAND-IT tools or non-recommended combinations of BAND-IT products). BAND-IT cannot be responsible for performance characteristics from such variables.

METABO Drill is covered solely by the Metabo warranty as described in the Metabo literature. BAND-IT does not extend any warranty of any kind to the drill.

General Safety Guidelines

Read and understand all instructions prior to operating this tool

- Maintain a safe working environment. Keep your work area clean and well lighted. Cluttered benches and dark areas invite accidents.
- Protect yourself and others in the area with proper safety gear including protective eye ware.
- When applying clamps, care should be taken to make certain that fingers are not in the way of the clamp being applied. Tensioning the clamp can be stopped immediately by releasing the trigger. This manual contains detailed instructions. The operator is advised to read it and become familiar with instructions prior to operating the tool.
- Clamping objects other than hose requires similar precautions.
- Improperly tightened clamps may result in dangerous hose assemblies, which could cause injuries or property damage.
- Abuse or use of a hose outside the manufacturers recommended conditions may cause it to quickly deteriorate and become a safety hazard. This could result in serious injury or property damage. Inspect and test hose assemblies frequently.

Setup Instructions



UL9010 Ultra-Lok® Tool

Warning:

Always wear safety glasses when operating this tool. Keep both hands away from clamp being tensioned. Use common sense, squeezing force of ¾" clamp can reach as high as 2 tons. Never attempt to clamp objects which can shatter, or otherwise cause bodily harm.

Note: Read safety instructions and operator's manual of the METABO electric drill. Check to make sure drill is properly set up for use with BAND-IT Ultra-Lok tool as follows:

- Drill spindle has adapter clutch (BAND-IT # M03990) installed in place of standard drill chuck.
 - Gear selector must be on slow (turtle symbol), and set as shown on page 4.
 - Impact drive must be disengaged and set to (drill symbol).
1. Plug drill into standard 115V AC, 60 Hz outlet. If using an extension cord, a 14 gauge cord is suggested for lengths up to 50 feet, 12 gauge cord required if running longer than 50 feet, 10 gauge cord if running over 100 feet.
 2. To mount drill onto BAND-IT Ultra-Lok tool: First use the two #10-32 x 3/8" screws supplied with tool to tighten tool adapter body to the tool. With adapter clamp on tool adapter body, insert drill into back of tool through the adapter clamp. Turn drill manually to desired position in relation to tool. Press the drill firmly into tool. Actuate drill if necessary to engage drill safety clutch (M03990) to tension screw. Tighten clamp screw while keeping the drill firmly pressed against the tool. To remove drill from tool: loosen the clamp screw and pull drill away from the tool. NOTE: When tightening the adapter clamp screw, safety clutch (M03990) must be engaged with tension screw inside of BAND-IT tool.
 3. This tool was designed for, and can only be used with BAND-IT Ultra-Lok clamps. Do not attempt to use on any other type of clamp, it may damage tool. Note: An optional adapter can be purchased to apply ½" Ultra-Lok clamp, see pages 4 and 9 of this manual.

Use only with BAND-IT ¾" Ultra-Lok Free-End and Preformed Clamps



Recommended Drill Clutch Torque Settings:

(Speed-Torque)

	1/2"	3/4"
Single Wrap	C-2	D-2
Double Wrap	D-2	E-4
*Preformed	D-2	E-4

Torque
Selector



Speed
Selector

NOTE: These torque settings are suggested settings only, individual tools should be adjusted for the clamping application. See pages 6-7.

**IMPORTANT: Larger sizes of preformed clamps (5" and up) may require a lower setting to avoid overstressing the lock and creating potentially unsafe assemblies. Inspect lock per instructions on page 7.*

Important: Changing the speed setting will alter tension output. Drill switch must be depressed fully by the operator to attain correct tension when installing clamps. Tension output may be somewhat different depending on condition and wear of internal components from tool to tool on same setting.

Pre-set tension is achieved when drill stops and on some models, may pulsate. Excessive pulsation (more than twice) will result in more tension applied to the clamp.

Use of Alternate Drills

CAUTION !

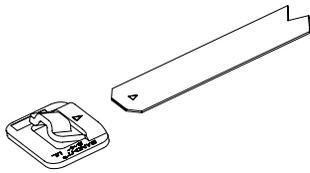
The UL9010 tool is designed to work mounted securely to the Metabo drill Model SBE 850 IMPULS. Use of any other drill may result in unsatisfactory performance, hazards to the operator and/or the tool, or unsafe clamps. Use of alternate drills must be approved in writing by the Vice President of Engineering and Manufacturing at BAND-IT-IDEX, Inc. Disregard of this caution voids the warranty of the tool and releases BAND-IT of any and all liabilities arising from such misuses.

Clamp Application Free-End Clamps

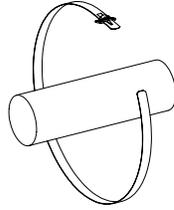


UL9010 Ultra-Lok® Tool

Warning: Always wear safety glasses when operating tool.



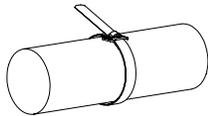
1. Break off an Ultra-Lok Free-End tie from the roll. Slide the buckle onto band with indented arrows pointing in same direction and same side up. Slide buckle all the way onto band until it comes to a stop between the two buckle dimples at opposite end of tie.



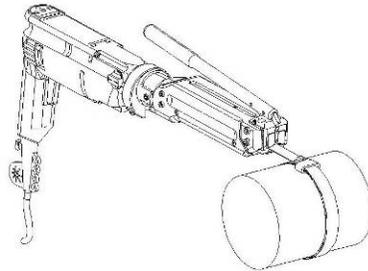
2. Wrap tie around object to be clamped. Insert the tie through buckle once for single-wrap or twice for double-wrap. Double-wrapped clamps have more than 3 times the loop-tensile strength.



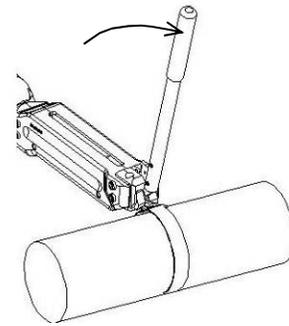
3. If desired, you may pre-form a clamp in the same fashion as step 2, or use a preformed clamp in place of a Free-End.



4. Position the clamp on the object you are clamping. Pull the wrapped clamp hand-tight. Slightly bend the tail up to keep the clamp in place.

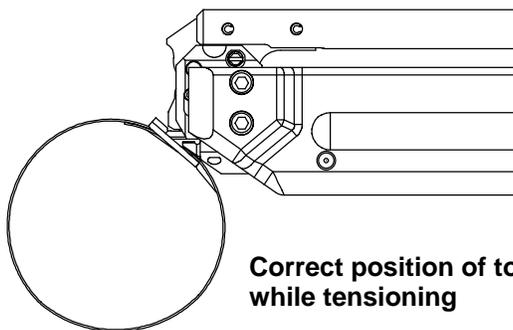


5. Actuate drill until tension block is all the way forward against the tool body. Set drill to clock-wise rotation. With cut-off handle down as shown, insert clamp tail into tool head slot. Actuate drill until drill's built-in clutch disengages. If tension block comes near its end of travel, release actuator switch and reverse drill to pull more on clamp tail. Excessive use of disengaging clutch indicated by a loud ratcheting sound leads to premature wear of tension screw.

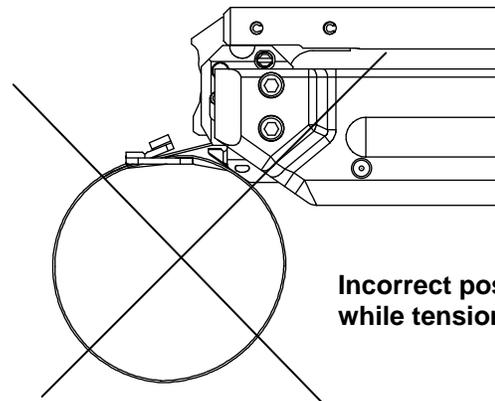


Push all the way forward to a solid stop. DO NOT JAM THE CUT-OFF HANDLE FORWARD BEYOND INTENDED TRAVEL DURING OPERATION

6. Lift the cut-off handle to cut tail off and form a lock, then push handle all the way down. Reverse drill and feed clamp tail out of tool. Do not force tool against clamp, it may result in a folded clamp tail. Break away clamp tail (if necessary) by bending it up and down. Tap down buckle shroud to complete clamp. Tool is ready for next clamp.



Correct position of tool while tensioning



Incorrect position of tool while tensioning

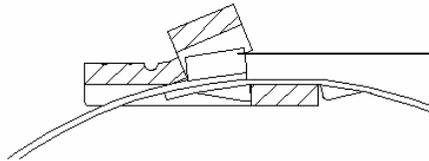
Clamp Application Free-End Clamps



UL9010 Ultra-Lok[®] Tool

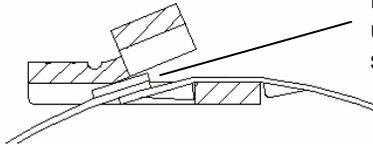
Inspect buckle on completed clamp and tap down buckle shroud.

Section View
Proper clamp
Installation



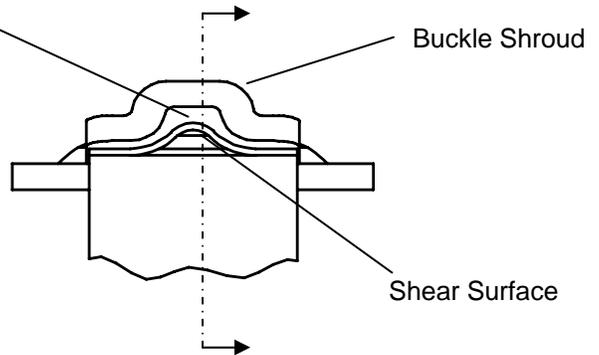
Lock sheared in center
and formed inside
shroud

Section View
Defective Clamp
Installation



Lock has slipped back
under sheared buckle
surface

FRONT VIEW
Completed Free-End Clamp
(Visually inspect lock)

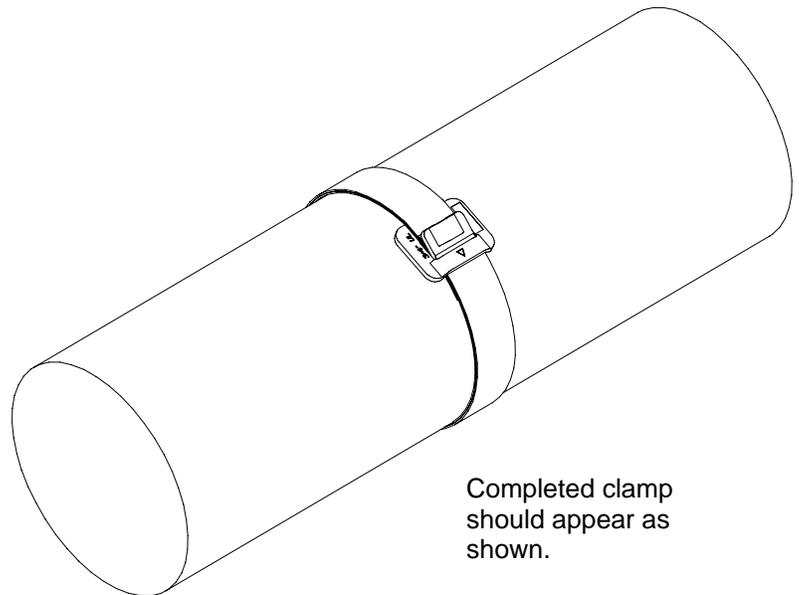
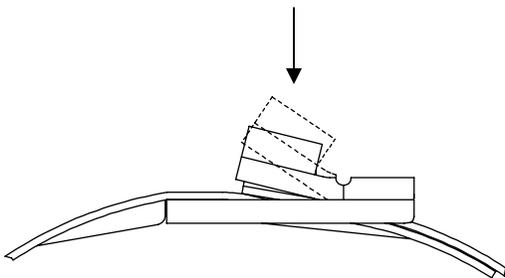


Buckle Shroud

Shear Surface

Important: Visually inspect lock formed in band as shown. If lock has slipped under the sheared surface of the buckle, remove clamp and install a new one at reduced tension by lowering the drill clutch torque setting.

SIDE VIEW
Completed Free-End
Clamp with buckle
shroud tapped down
as required



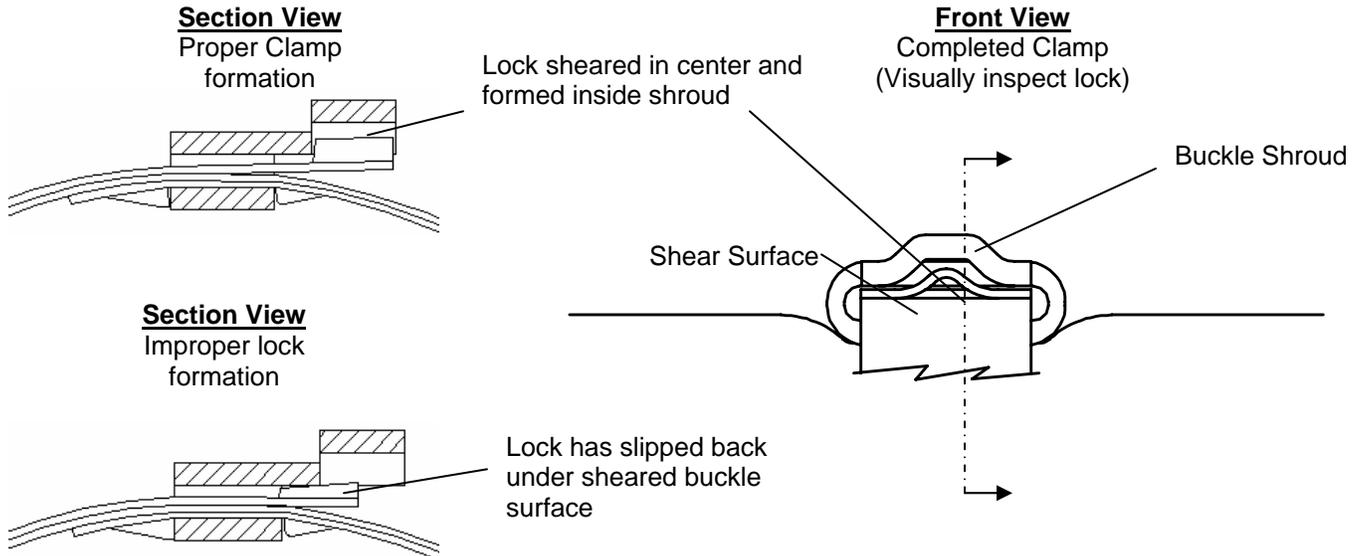
Completed clamp
should appear as
shown.

Clamp Application Preformed Clamps

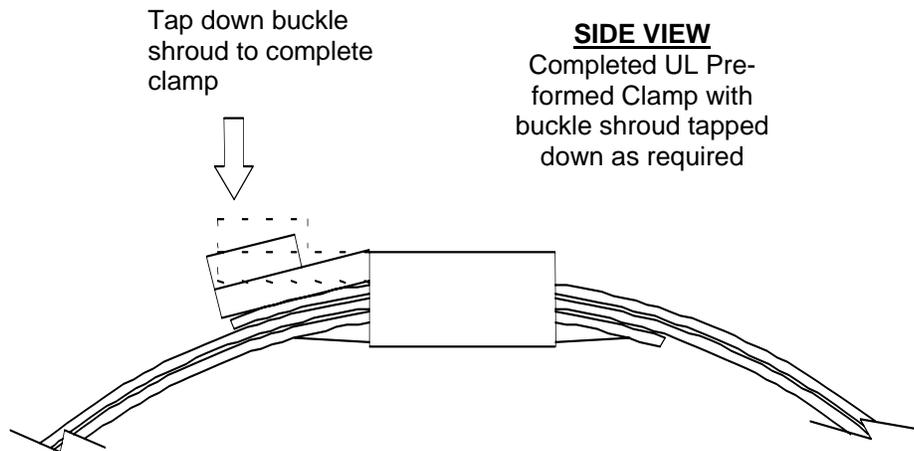


UL9010 Ultra-Lok[®] Tool

Place clamp in desired position on object to be clamped.
Follow steps 5 and 6 on page 5.
Inspect lock in buckle on completed clamp, and then tap down buckle shroud as shown below.



Important: Visually inspect lock formed in band as shown. If lock has slipped under the sheared surface of the buckle, remove clamp and install a new clamp at reduced tension by lowering the drill clutch torque setting.



When applying clamps on soft, thick-walled hose, tension clamp then wait 10-15 seconds. Clamps may be retensioned by squeezing the actuator switch on the power unit a second time prior to forming the lock and cutting the excess clamp tail. This allows hose to "settle" under the band of the clamp. This hose material attribute is called Cold Flow. Finally, complete clamp by tapping down the buckle shroud as described above.

Parts List



UL9010 Ultra-Lok® Tool

Notes:

Apply Item 34 (Grease) to:
 Item 4 (Cut off cam)
 Item 3 (Cutter knife) at contact point with item 1 (Tool head)
 Item 27 (Spring) Before installation

Apply Item 35 (Grease) to:
 Item 7 (Tension screw) Threads and at grooved end
 Item 2 (Cutter blade) Counter-bore only, after item 14 (Bearing tip) has been installed.

Tighten the following:
 Item 24 (#10-32 Screw)
 to 60 – 70 in-lbs.
 Item 23 (1/4-28 Screw)
 to 90 – 110 in-lbs.

Adjust Item 25 (Plunger) for positive detent action when item 6 (Handle) is actuated.

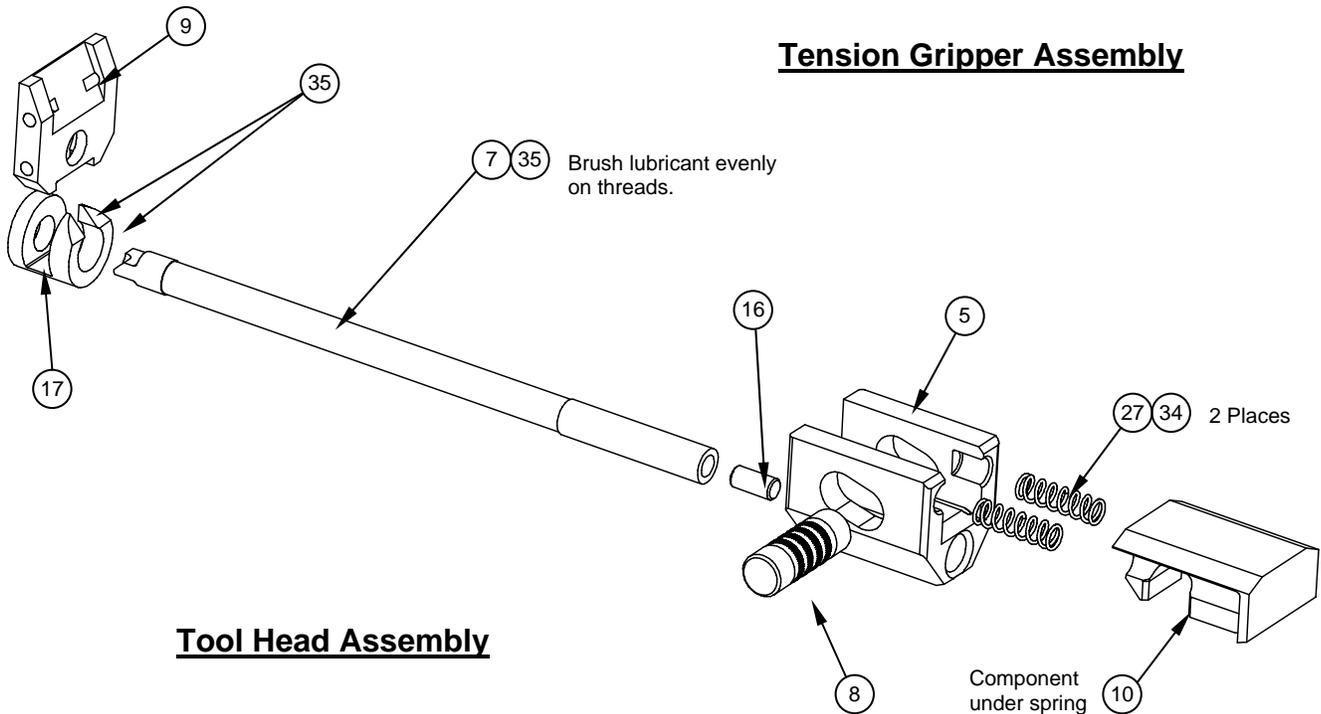
Part M09887, Shear Plate has two cutting edges. This part can be rotated to use the second edge prior to replacement.

NOTE:

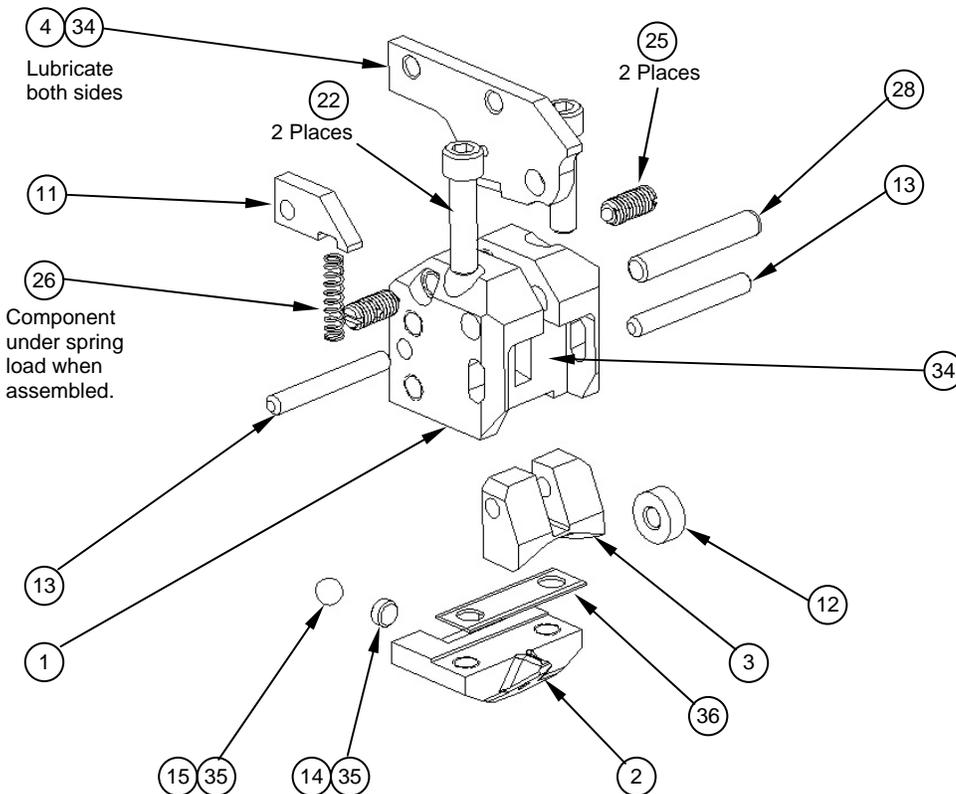
Part M09387, (Optional) 1/2" Shear Plate - Required replacement for # 36 M09887 shear plate in order to install 1/2" wide Ultra-Lok Clamps

Item	Part Number	Quantity	Description
1	M00587	1	Tool Head, Fin. UL
2	M09787	1	Cutter Blade, UL
3	M08687	1	Cutter Knife, UL
4	M08987	1	Cam, Cut-off, UL
5	M09087	1	Tension Block, Mach., UL
6	M04687	1	Handle, Cut-off, finished
7	M00987	1	Tension Screw, Fin.
8	M08887	1	Gripper, UL
9	M01787	1	Plate, Back, Cast/Fin.
10	M09187	1	Gripper Guide, UL
11	M02387	1	Plate, Release, cast/fin.
12	M00287	1	Roller, Cut-off, Fin.
13	M01388	2	Pin, .187 Dia X 1.50 Long, Fin.
14	M05387	1	Bearing Tip, Fin.
15	M06587	1	Ball, 1/4" Diameter
16	M02287	1	Tip, Load Bearing, Fin.
17	M04387	1	Tripper Bracket, Cast/Fin.
18	M07387	1	Body, Left, Finished, UL
19	M07487	1	Body, Right, Finished, UL
20	M07587	2	Wear Plate, Fin.
21	M05687	1	Grip, Textured, Gray
22	M05787	2	Screw, Socket Head Cap, 1/4 X 1"
23	J67287	4	Screw, Socket Head Cap, 1/4 X 1/2"
24	M06187	4	Screw, Socket Head Cap, #10-32 X 3/8"
25	M02487	2	Screw, Spring Plunger, 1/4-20
26	A33887	1	Spring, Compression, .180 X .813 Long
27	A53587	2	Spring, Compression, .300 X 1.00 Long
28	M01487	1	Pin, Dowel, 1/4 Dia X 1.50 Long
29	M08187	4	Washer, .128 ID X .238 OD
30	J64387	2	Pin, Spring, 3/16 X 5/8 Long
31	M08087	4	Rivet, Blind, .125 X .328 Long
32	M07987	2	Threaded Insert, #10-32
33	S19787	0.01	Adhesive, Bonding, #415 (cc)
34	I16387	0.05	Lubricant, Super Lube w/ Teflon (cc)
35	C23187	0.03	Lubricant, Black Moly, Hi-Temp (cc)
36	M09887	1	Shear Plate, 3/4", UL

Tension Gripper Assembly

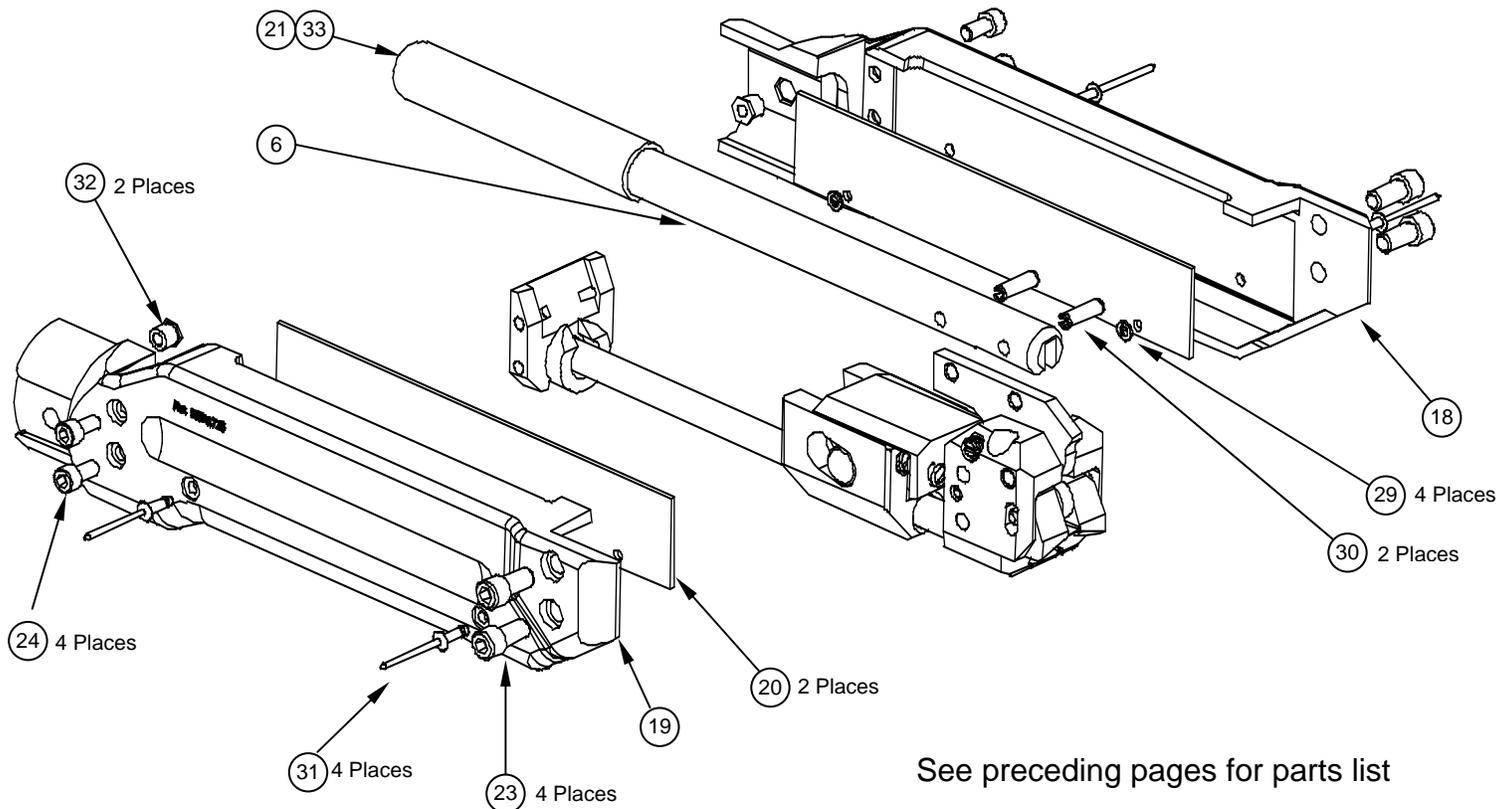


Tool Head Assembly



* M09387 (Optional)
1/2" Shear Plate Insert
can be substituted for
item # 36

See preceding pages for parts



See preceding pages for parts list

Troubleshooting

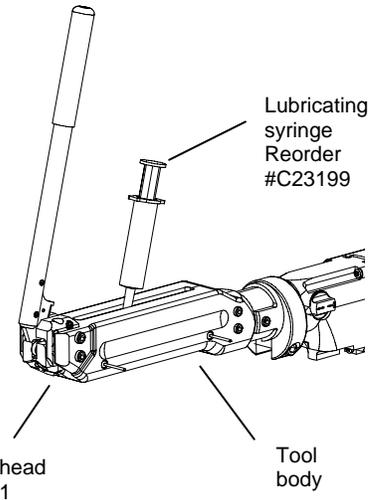
1. **Lock slips down in buckle:** Verify tightness of blade mounting screws. If lock on clamp is still not adequate, reduce tension on tool by setting torque control knob to a lower number or reduce speed of the drill. (See "Setting up proper tension")
2. **Drill makes loud, rapid clicking noise:** Make sure hammer drill setting is off and indicator is pointing to drill symbol. (Hammer symbol on selector knob pointing to back)
3. **Drill makes whining noise when clamp gets tight:** The drill is equipped with its own internal safety clutch. If this clutch disengages usually above torque setting 6, reduce torque setting and lubricate tension screw. Do not confuse this clutch with the coupling between drill and tool.
4. **Safety clutch between drill and tool releases prematurely:** Make sure tool is fully seated on drill and safety clutch is fully engaged with tip of tension screw. (Loosen clamping screw and re-tighten while pressing tool into drill). If problem still remains, replace tension screw (BAND-IT # M00987)

Note: To prevent safety clutch wear, do not over-use. When tensioning clamp, let drill switch go as tension block nears its end of travel. Reverse drill and send tension block all the way forward for a second pull on the band.

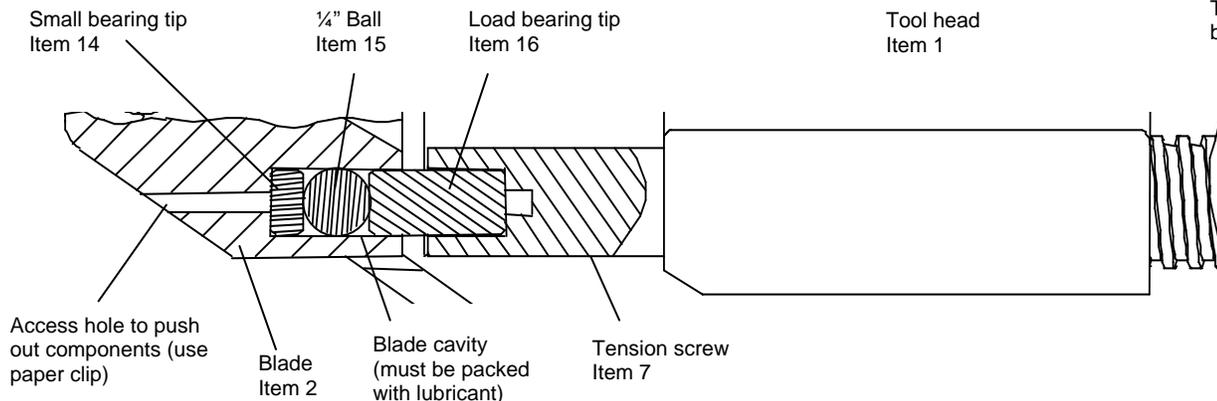
1. Lubricate tension screw with molybdenum disulfide lubricant or equivalent approximately every 500 clamps.
Make sure the tension block is all the way forward against the tool head. Insert tip of the Lubricating syringe into slot on top of tool body. Press the tip against the tension screw just behind the tension block and squeeze out approximately 1/2" long bead of lubricant. Remove syringe, and actuate tool without a clamp a couple of times to spread lubricant evenly on tension screw.

To order more lubricant, specify BAND-IT #C23199

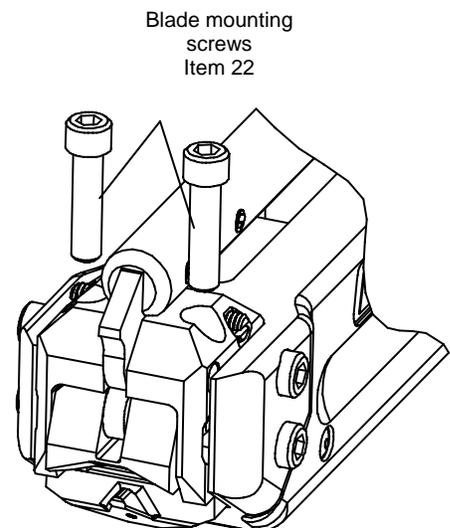
2. Every 500-1000 clamps, depending on tension setting, inspect and repack front bearing with same lubricant. Turn load bearing tip and small bearing tip over for a new bearing surface.



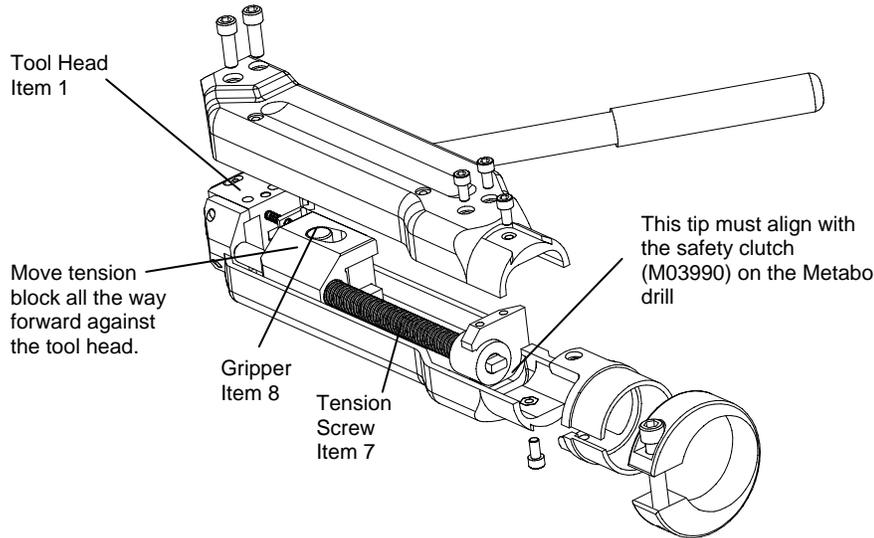
Bearing Lubrication Detail



3. To gain access to bearing components: With the tension body already separated from the power drill, remove blade mounting screws (2 places) and slide blade free. Paper clip may be used to push bearing components out of blade. Wipe lubricant from all components and examine for wear. If ball or bearing tips appear heavily worn, replace with new parts. Note: 1/4" ball is made from hard tungsten carbide material, do not replace with regular ball bearing. (A smooth indentation from ball in the bearing tips is normal)
4. To re-assemble bearing components: wipe blade cavity clean. Push small bearing tip into blade cavity. Apply lubricant to ball and push into blade cavity and fill remaining space with lubricant. Push load bearing tip firmly into blade cavity, some lubricant will be squeezed out. Re-attach blade to tool head, making sure that Load Bearing Tip extends into tension screw. While turning blade mounting screws into blade, push on blade rearwards. Tighten screws to approximately 120 in-lbs.
5. When replacing worn blade follow instructions above to properly re-assemble bearing components.



6. To replace gripper: Make sure tension block is all the way forward against the tool head. Remove drill. Remove tool adapter body. Remove only one side of the tool body, not both. Slide gripper out sideways and replace with a new one. Re-attach tool body side. **Caution:** Do not push or move tension block while gripper is out of tool.



7. To replace tension screw: Move tension block all the way back (away from tool head) using drill in tensioning mode (clock-wise). Remove Ultra-Lok[®] tool from drill. Remove the tool adapter body from the Ultra-Lok[®] tool. Remove blade and load bearing tip from tensioning screw (see bearing detail). Remove only one side of the tool body, not both. Grasp the smooth barrel on tension screw and pull all the way forward until tension block is against the tool head. If tension screw is stuck, use a punch and tap the center of the screw from the back end of the tool. Turn tension screw out of tension block. Lubricate new tension screw with Molybdenum Disulfide lubricant, or equivalent. Install new tension screw in reverse order, making sure that back end of tension screw extends well beyond the back end of the tension block. Push the assembly all the way back and extend the round portion of the tension screw through holes on the tripper bracket and back guide plate. Reinstall tool body side. Reinstall blade and tighten the blade mounting screws approximately 120 in-lbs. Reattach tool adapter body to Ultra-Lok[®] tool. Reattach tool to drill and drive tension block all the way forward.

Note: Drills needing repair must be forwarded to an authorized 'METABO' repair center in your area. Be sure to remove BAND-IT safety clutch (M03990) from drill.

METABO Drill is covered solely by the Metabo warranty as described in the Metabo literature. BAND-IT does not extend any warranty of any kind to the drill.