

# FORM 2486

## MP360 HELICAL TOP CUTTER KIT INSTALLATION INSTRUCTIONS

**Part No. THH360.TC-A**

REF	DESCRIPTION (♦ Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	<b>Kit, MP360 Helical Top Cutterhead</b>	THH360.TC-A	1	
	Cutterhead, Helical W/80 Tip HM-MP360 TC	THH360.TC	1	
	Screw, 10-32x1/2 FH BO; Torx Plus	F05004-325	1	
	Insert, HM 15x15x2.5 R=100 (10PCS)	TIK.19HM	1	
	Bearing, 6206 2RSR P6 Rolling	100787	2	
	Inst Sheet, MP360 Helical Cutter Kit	THH-2486	1	



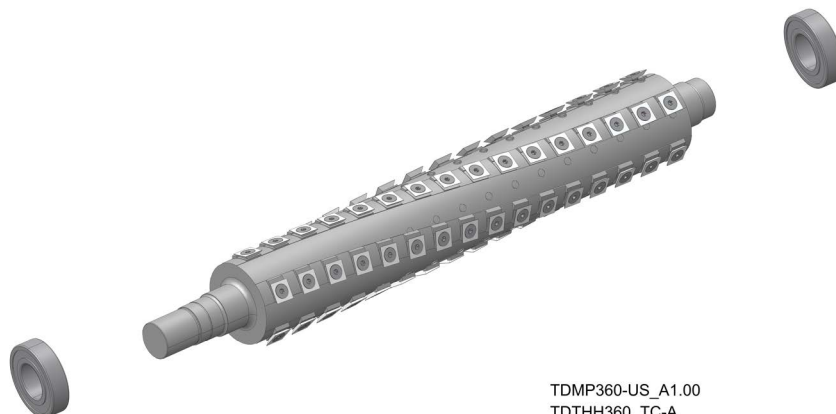
**DANGER!** Disconnect and lock out power supply before performing any maintenance work, cleaning, or servicing the planer/moulder. Failure to do so will result in death or serious injury.



**WARNING!** Wear hand protection while servicing the Planer/Moulder knives.

**NOTICE** Utilize two people to perform cutter removal/installation.

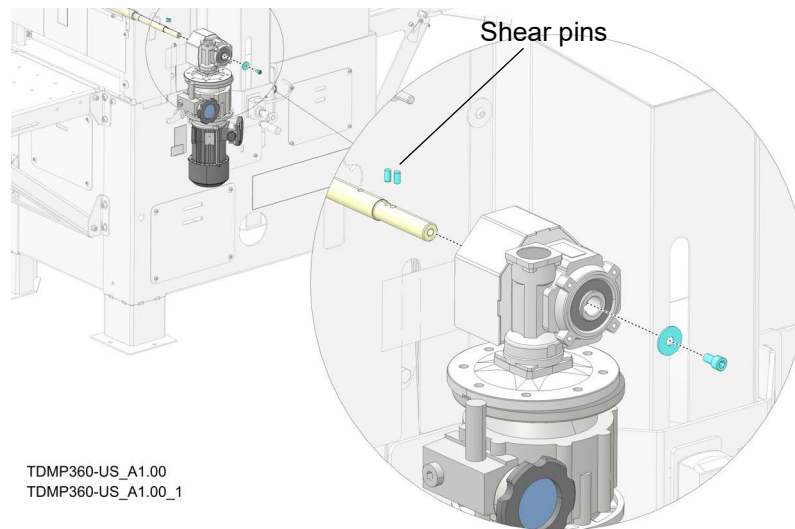
**THE CUTTER HEAD REPLACEMENT PROCESS REQUIRES REMOVAL OF MANY HARDWARE PARTS. ORGANIZE THEM AS THEY ARE REMOVED TO PREVENT REINSTALLATION ERRORS.**



**FIG. 1**

## **Remove Feed Drive Assembly**

1. Use hex key to remove socket head cap screw and washer from feed roller shaft. See FIG. 2.
2. Carefully slide drive assembly off of shaft and place on sturdy surface.
3. Pull shear pins and set aside for safe keeping.

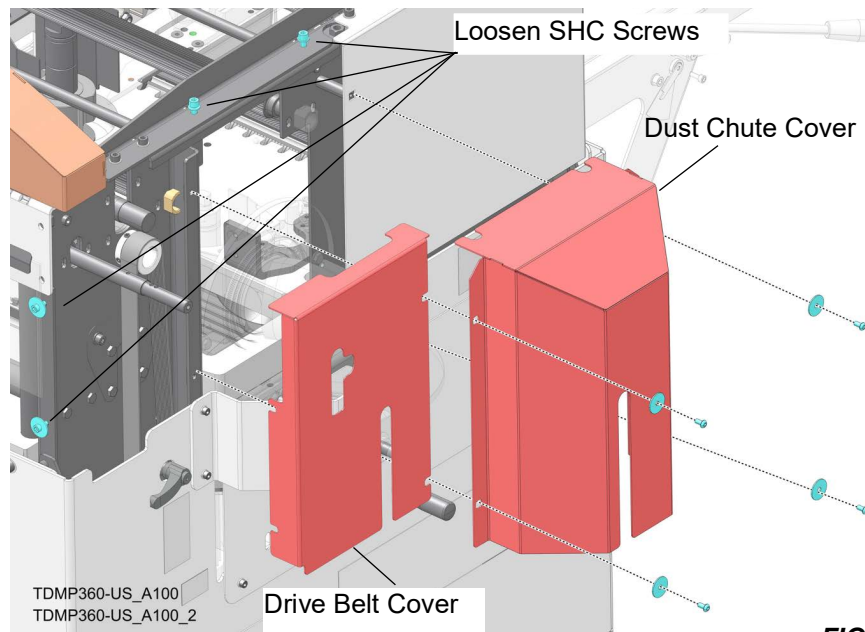


**FIG. 2**

## **Remove Covers and Guards**

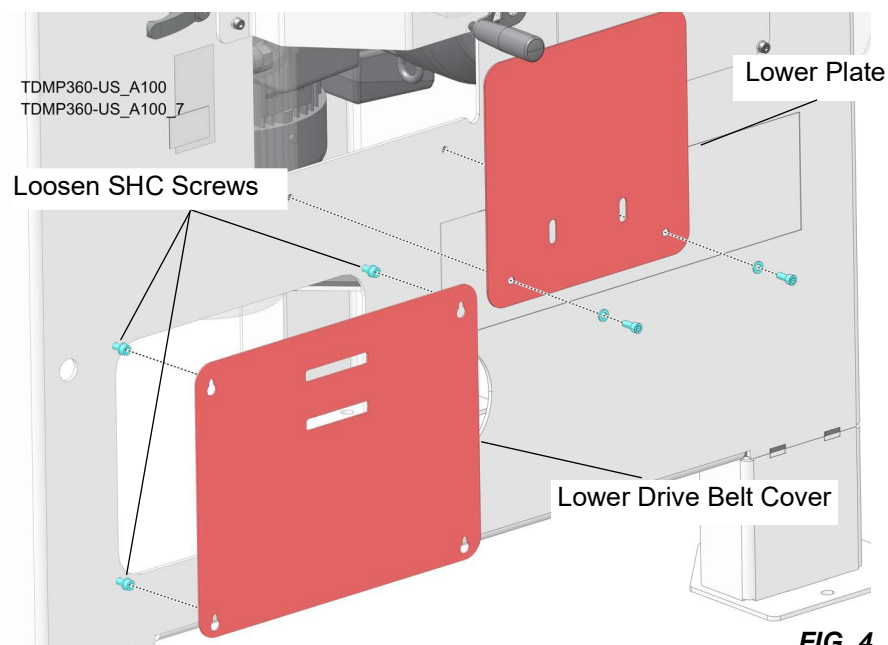
### **REMOVE FRONT COVERS**

1. Lift top cover.
2. Raise cutterhead to highest level.
3. Loosen (2) socket head hex screws on side of machine and (2) on top of machine.
4. Remove (4) button head hex screws and flat washers from dust chute cover.
5. Remove drive belt cover and dust chute cover. See FIG. 3.



**FIG. 3**

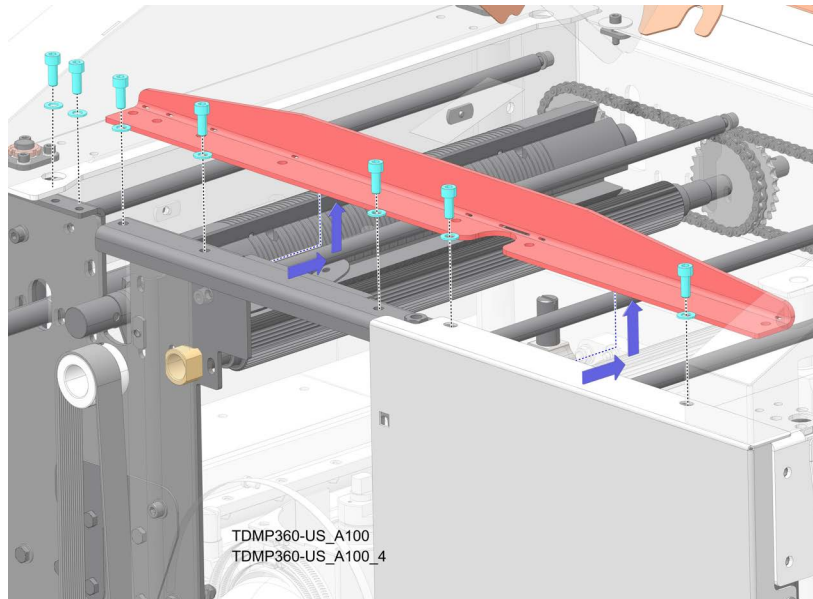
6. Remove (2) socket head cap screws from lower plate.
7. Remove lower plate. See FIG. 4.
8. Loosen (4) socket head cap screws from lower drive belt cover.
9. Remove lower drive belt cover. See FIG. 4.



**FIG. 4**

### **REMOVE LOCK BRACKET**

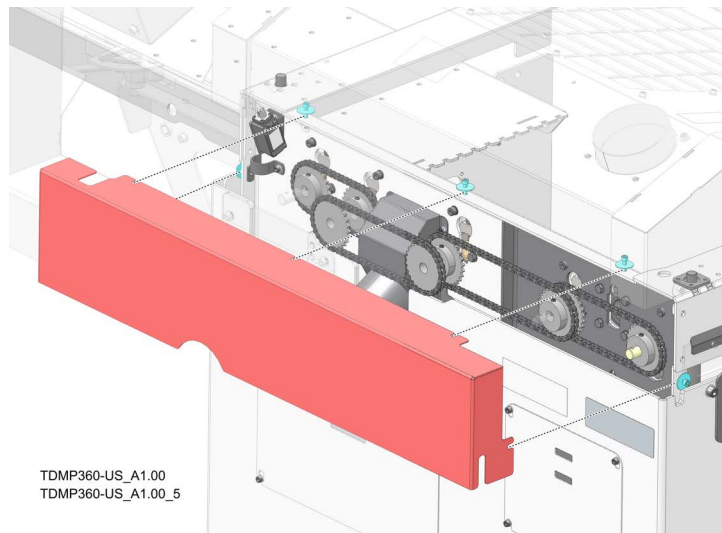
1. Remove (7) socket head cap screws from top cover lock bracket.
2. Remove bracket by sliding toward machine and lifting up. See FIG. 5.



**FIG. 5**

### **REMOVE CHAIN GUARD**

1. Loosen (5) socket head cap screws.
2. Slide chain guard off backside of machine. See FIG. 6.



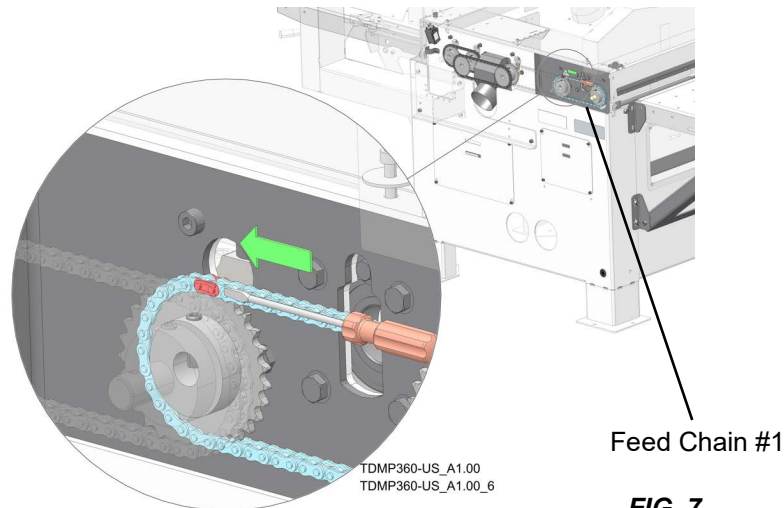
**FIG. 6**

### **Remove Feed Chain**

1. Locate master link on feed chain #1. See FIG. 7.
2. Use a flat-head screw driver to push master link clip off of link pins.

**NOTE:** The direction of the clip should be noted. The clip will be reinstalled in the same direction in a later step.

3. Remove side plate from link.
4. Pull master link from chain.
5. Remove chain from sprockets.



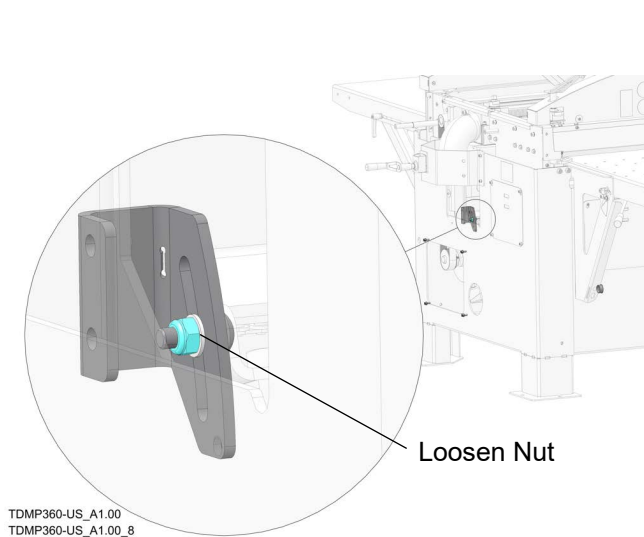
**FIG. 7**

### Remove Drive Belt and Pulley

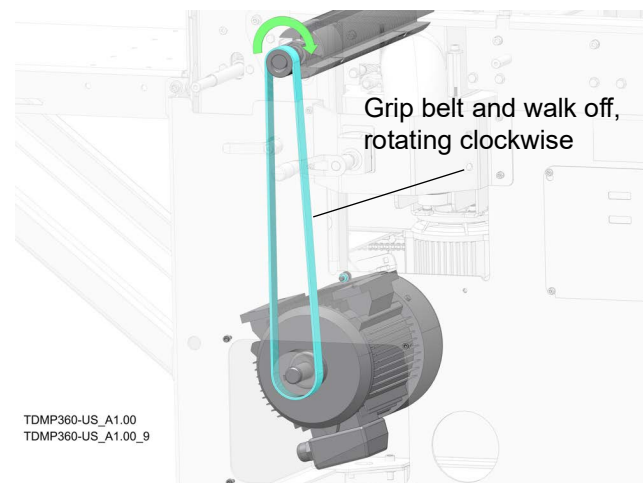
1. Loosen nut securing lower pulley drive mount.

**NOTE:** Access to carriage bolt and nut is attained through opening from removed lower plate. See FIG. 8

2. Firmly grip the drive belt and lift slightly on lower pulley.
3. Rotate belt clockwise while pulling belt off of top pulley as shown in FIG. 9.
4. Set belt aside.

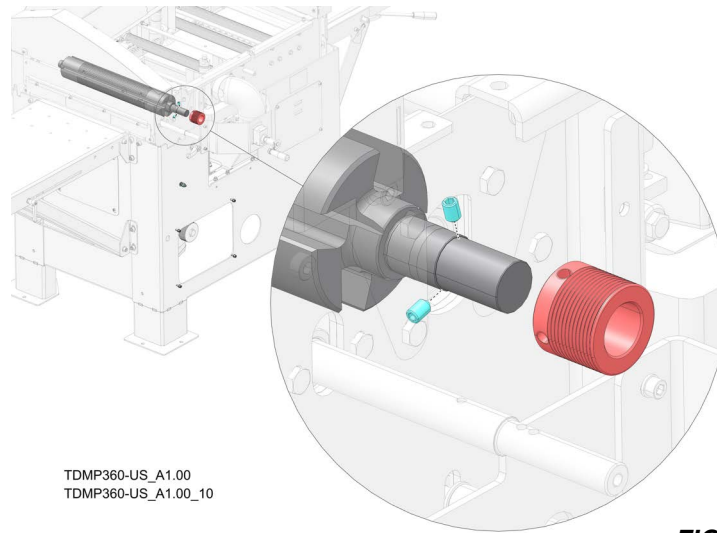


**FIG. 8**



**FIG. 9**

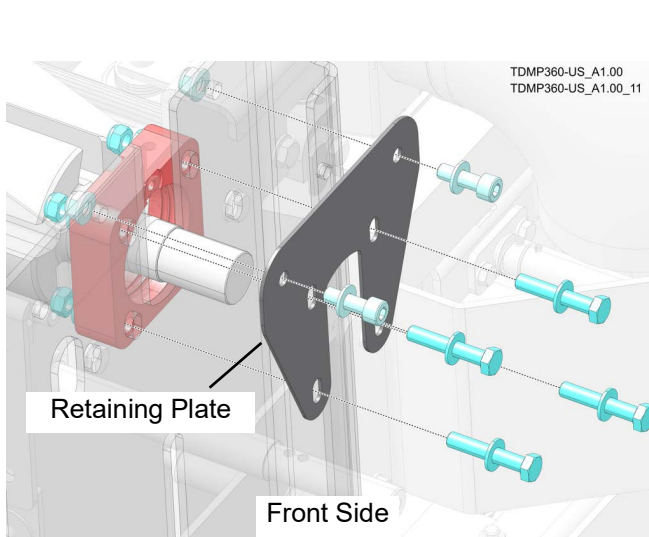
5. Remove (2) set screws from pulley on frontside of cutter head shaft. See FIG. 10.
6. Remove pulley from shaft.



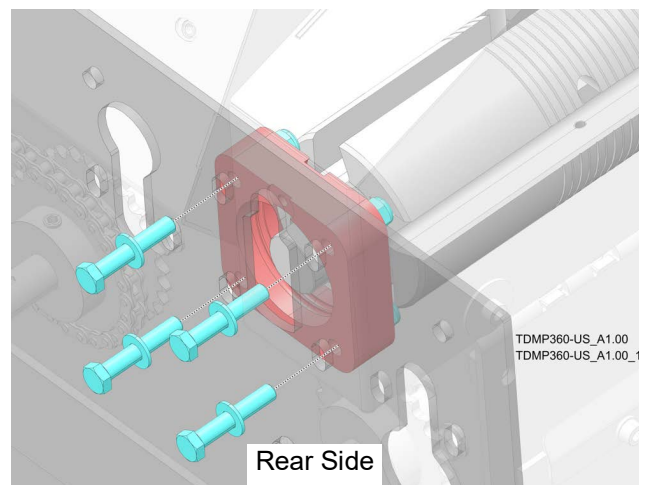
**FIG. 10**

## **Remove Cutter Assembly**

1. Remove (4) nuts, (8) flat washers, and (4) M8 HH bolts from front cutter bearing housing.
2. Remove (2) socket head cap screws, (4) flat washers, and (2) nuts from cutter retaining plate.
3. Remove retaining plate as shown in FIG. 11.
4. Remove (4) nuts, (8) flat washers, and (4) M8 HH bolts from rear cutter bearing housing as shown in FIG. 12.
5. Lift cutter assembly out of machine.



**FIG. 11**



**FIG. 12**

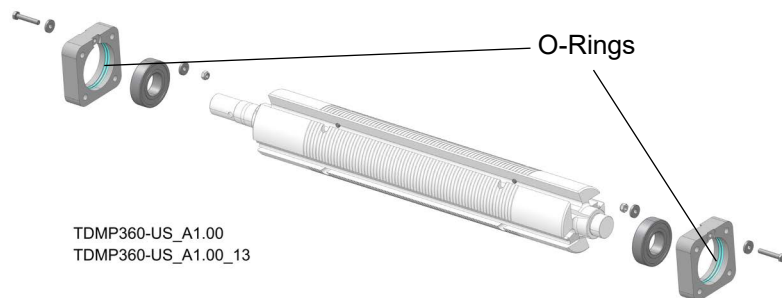


## Remove Bearing Housing

1. Place assembly on flat, sturdy workspace. See FIG. 13.
2. Remove nut, bolt, and (2) flat washers from each bearing housing.
3. Use a rubber mallet to knock housing off of each end of cutter shaft.
4. Knock out bearing from housing.

**NOTE:** Bearings can be discarded. Helical Cutter kit includes (2) new bearings.

5. Leave (2) O-rings in each housing for reuse.



**FIG. 13**

## Install New Bearings

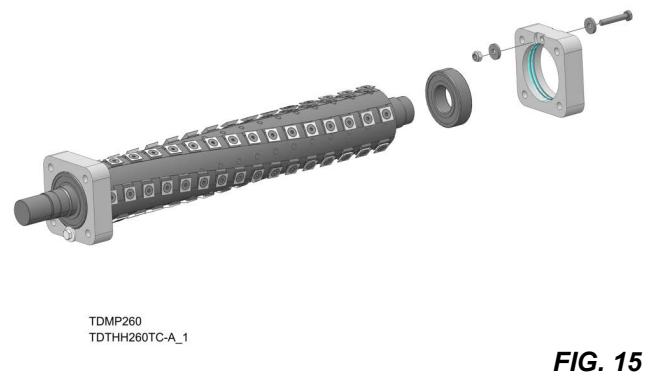
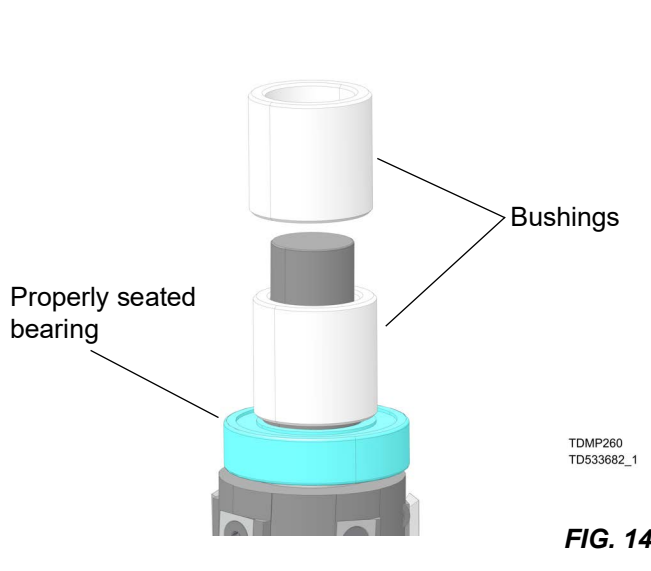
1. Use rubber mallet to seat (1) bearing on short end of cutter shaft.
2. On long end, use mallet and (2) 1 5/8" OD x 1 1/2" bushings to seat bearing fully onto shaft as shown in FIG. 14.

**NOTE:** Bushings are included with MP360 Additional Part Kit. If bushings are not available, use a similar object.

Bushings will not stay on shaft after bearing is seated.

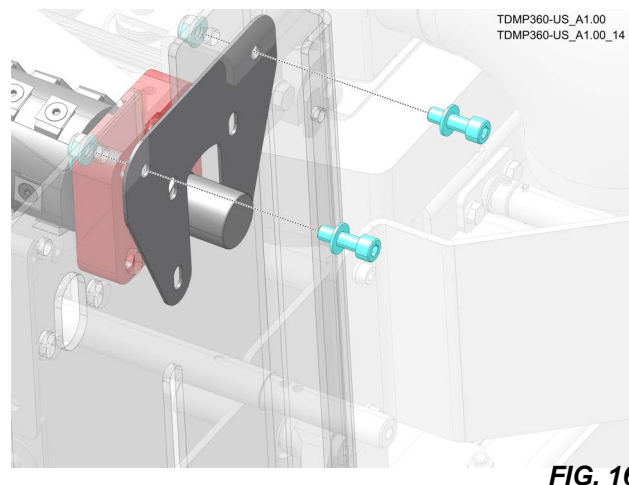
3. Slide bearing house on each seated bearing. O-rings must stay in housing grooves to secure bearing.

4. Install nut, bolt, and (2) flat washers on each bearing housing as shown in FIG. 15.



## Install New Cutterhead Assembly

1. Place cutterhead assembly into machine.
2. Install retaining plate on front side of cutter head using (2) socket head cap screws, (4) flat washers, and (2) nuts from cutter shaft retaining plate. See FIG. 16.



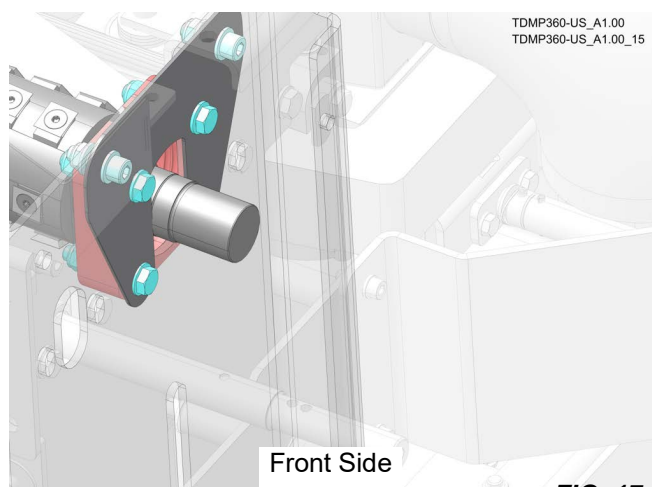
3. Align bearing housing holes with mounting holes.
4. Install (4) nuts, (8) flat washers, and (4) M8 HSH screws to loosely attach each cutter bearing housing to machine. See FIG. 17.

**NOTE:** Before tightening, the cutterhead assembly must be parallel to table below.

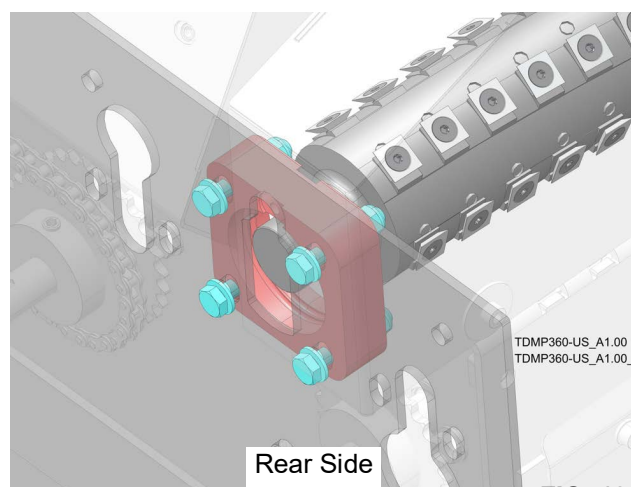
5. Place level object below cutterhead and raise table to support the cutterhead.



6. Tighten (8) nuts and hex screws on both front and rear bearing housings. See FIG. 18.



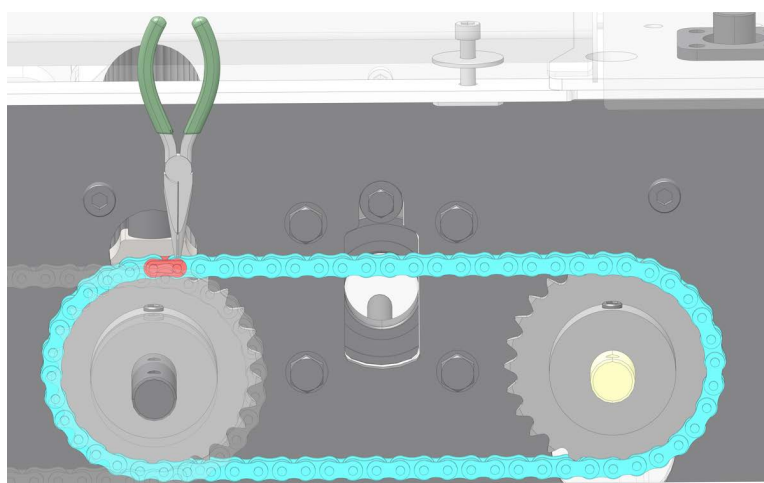
**FIG. 17**



**FIG. 18**

### Install Feed Chain

1. Route chain #1 around sprockets as shown in FIG 19.
2. Install master link with clip opening facing away from the control box.
3. Use long-nose pliers to snap clip fully onto link pins.



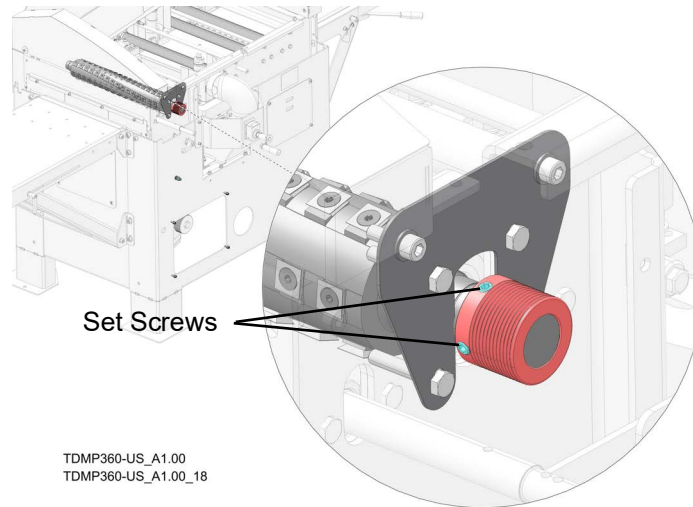
**Chain #1**

TDMP360-US\_A1.00  
TDMP360-US\_A1.00\_17

**FIG. 19**

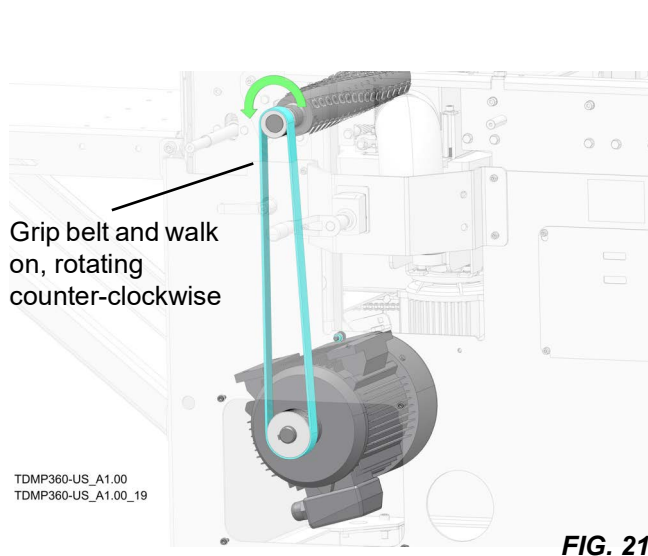
## **Install Pulley and Drive Belt**

1. Slide pulley onto cutterhead shaft. See FIG. 20.
2. Tighten set screws into pulley slots.

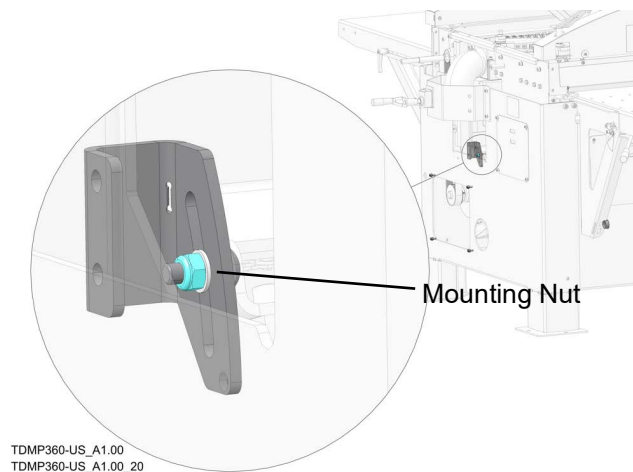


**FIG. 20**

3. Place belt onto lower drive pulley.
4. Walk belt onto cutterhead pulley while rotating counter-clockwise as shown in FIG. 21.
5. Tighten drive mounting nut. See FIG. 22.



**FIG. 21**

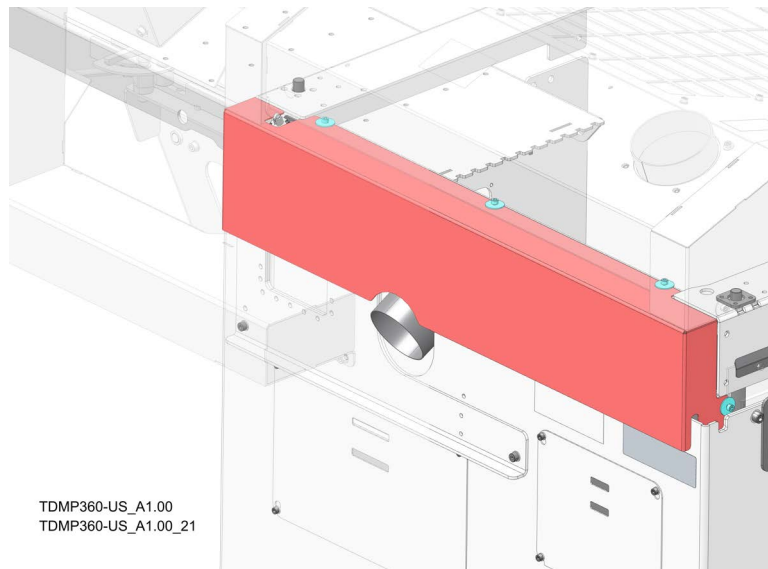


**FIG. 22**

## Install Covers and Guards

### INSTALL CHAIN GUARD

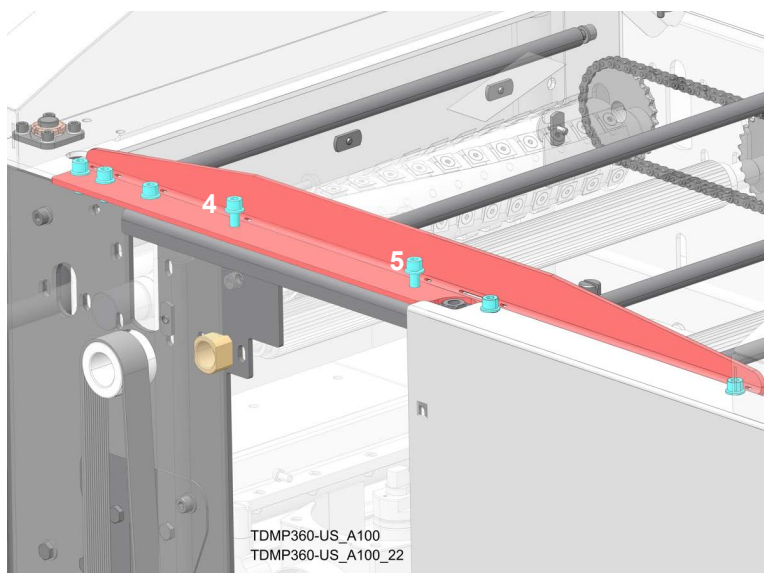
1. Slide chain guard onto backside of machine, aligning slots with (5) loose socket head cap screws. See FIG. 23.
2. Tighten screws.

**FIG. 23**

### INSTALL LOCK BRACKET

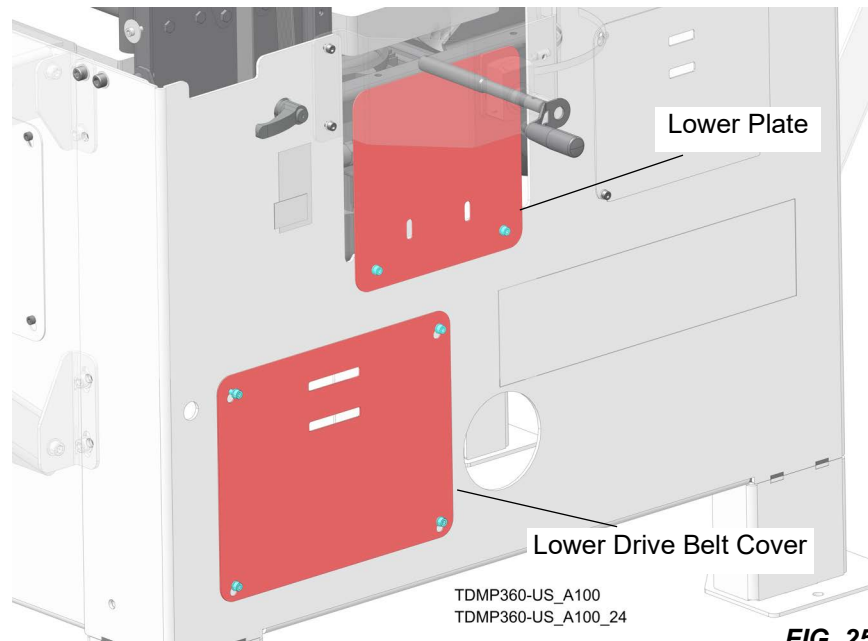
1. Align bracket with holes on top, front side of machine cabinet.
2. Install (7) socket head cap screws as shown in FIG 24.

**NOTE:** Leave screws #4 and #5 loose as shown.

**FIG. 24**

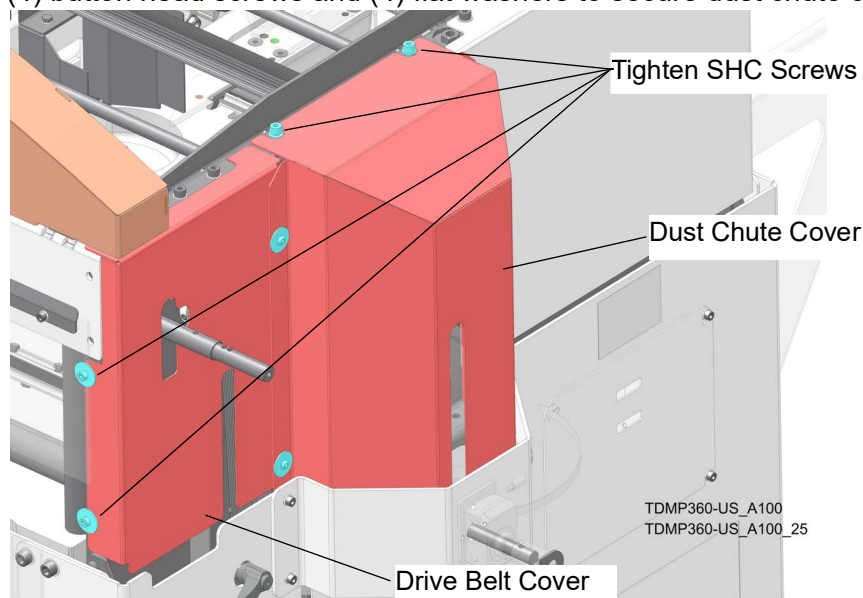
### **INSTALL FRONT COVERS**

1. Place lower drive belt cover over (4) loose socket head cap screws. See FIG. 27.
2. Tighten (4) screws from on drive belt cover.
3. Align lower plate with holes. See FIG. 27.
4. Install (2) socket head cap screws and (2) flat washers onto lower plate.



5. Install drive belt cover over loose cap screws on left side of cabinet. See FIG. 26.
6. Install dust chute cover over loose cap screws on lock bracket at top of cabinet. See FIG. 26.
7. Tighten (4) socket head cap screws.

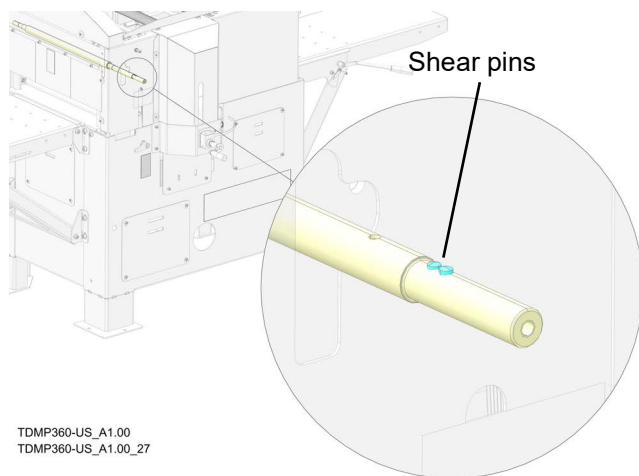
8. Install (4) button head screws and (4) flat washers to secure dust chute cover.



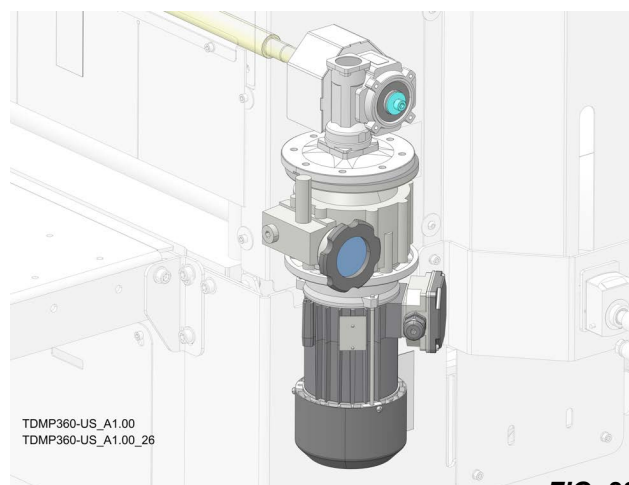
**FIG. 26**

### Install Feed Drive Assembly

1. Insert (2) shear pins into feed roller shaft as shown in FIG. 27.
2. Slide drive assembly onto shaft.
3. Use hex key to install socket head cap screw and washer into feed roller shaft as shown in FIG. 28.



**FIG. 27**



**FIG. 28**