

# FORM 1345 LT28 POWER FEED INSTALLATION

## Part No. PF28-A

The enclosed parts include a power feed module and mounting hardware to replace the original manual feed on Wood-Mizer LT28 sawmills.

Item	Description	Part No.	Qty.
1	<b>FEED MODULE, LT28 12V POWER (FIELD INSTALLED)</b>	PF28-A	1
2	Feed/Control Assembly, LT28 Power	059591	1
3	Bracket, Feed Chain	015008	1
4	Bolt, 3/8-16 x 1" Hex Head Grade 5	F05007-87	2
5	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2
6	Tensioner Weldment, Power Feed Chain	015721	1
7	Nut, 1/2-20 Hex Jam	F05010-16	2
8	Washer, 1/2" Split Lock	F05011-9	2
9	Link, #40 Master	P04200	2
10	Chain, 40 Roller 267 1/2"	014745	1
11	Fuse, 150A Mega	052370-150	1
12	Bolt, 5/16-18 x 1" Hex Head	F05006-1	2
13	Nut, 5/16-18 Self-Locking Hex	F05010-20	4
14	Washer, 5/16" SAE Flat	F05011-17	6
15	Tie Wrap, 5/16" x 15" UV Black	F05089-5	2
16	Tie Wrap, 3/16" x 6" UV Black	F05089-3	7

See Form #1338/Form #1643 LT28 Operator's Manual for complete safety, setup, operation and maintenance information on LT28 sawmills equipped with the provided optional power feed assembly. This manual also includes Electrical Information for the power feed system.

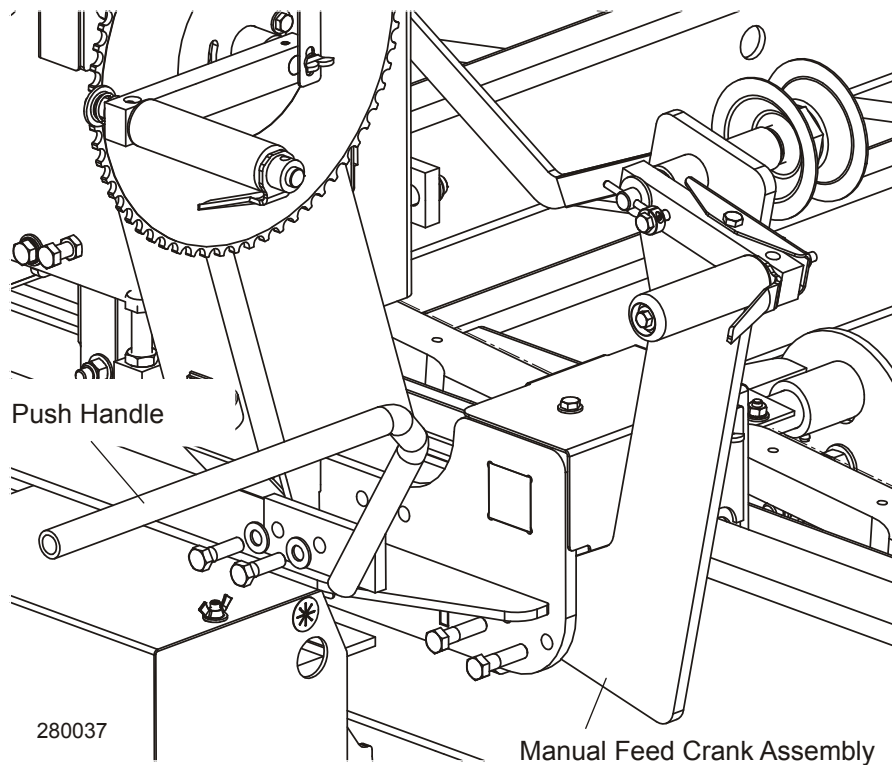
See Form #1339/Form #1642 LT28 Replacement Parts Manual for complete parts lists of the provided optional power feed assembly.

## Manual Feed Hardware Removal

Move the carriage to the travel position over the rear bed rail. Position the hole in the saw head over the travel rest pin and lower the saw head until it is seated firmly on the rest pin.

1. Unhook the feed rope from both ends of the sawmill main tube and remove the rope from the feed pulleys.
2. Remove the feed rope eyebolt from the stop bracket at the rear end of the sawmill main frame tube.
3. Uninstall the manual feed crank assembly and the push handle from the sawmill.

See Figure 1.



**FIGURE 1**

4. Remove the feed pulley bracket and the feed rope pulley located at the bottom left side of the saw head mast next to the battery box.

See Figure 2.

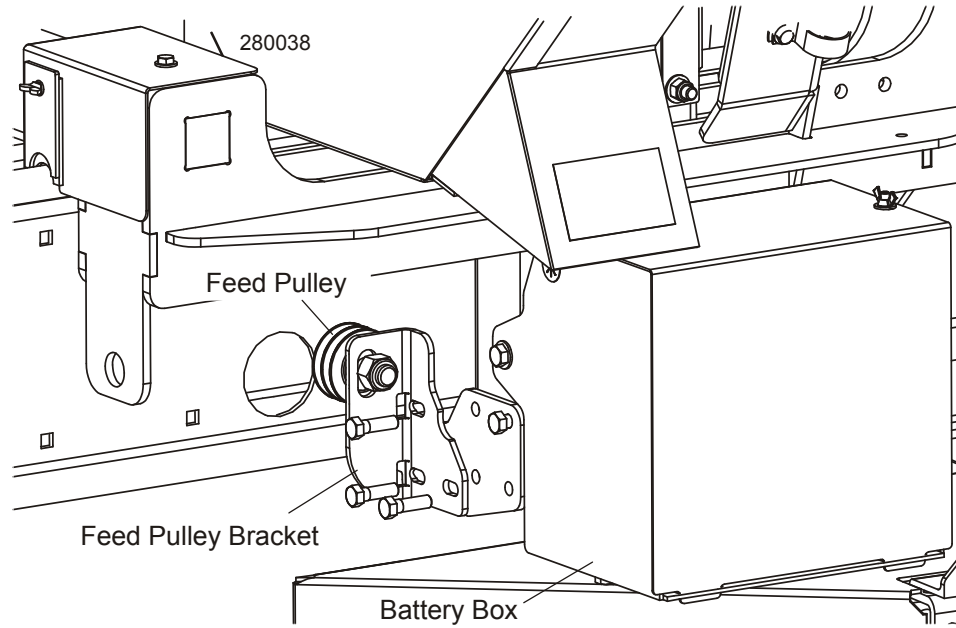


FIGURE 2

## Installation Instructions

1. Install the provided control box mount plate to the saw head carriage to replace the manual feed crank assembly. Secure the mount plate in place with the provided fasteners.

See Figure 3.

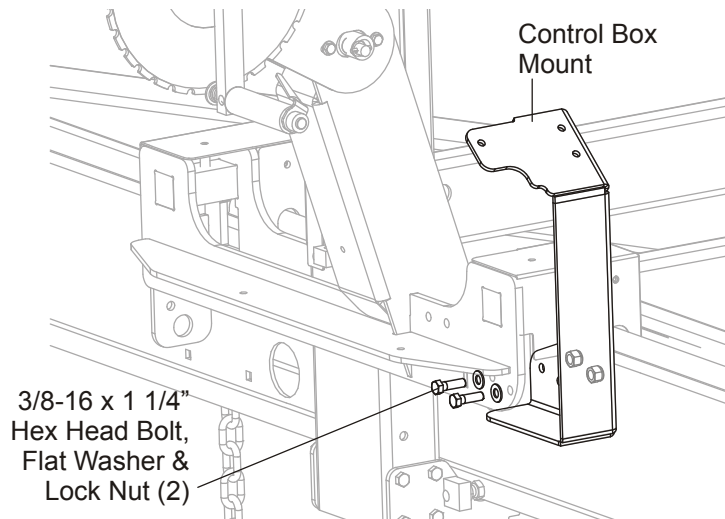


FIGURE 3

2. Remove the three 5/16-18 x 3/4" hex head bolts, lock washers and flat washers from the back of the control box.

See Figure 4. Install the power feed control box to the control box mount plate and secure in place with the previously removed hardware.

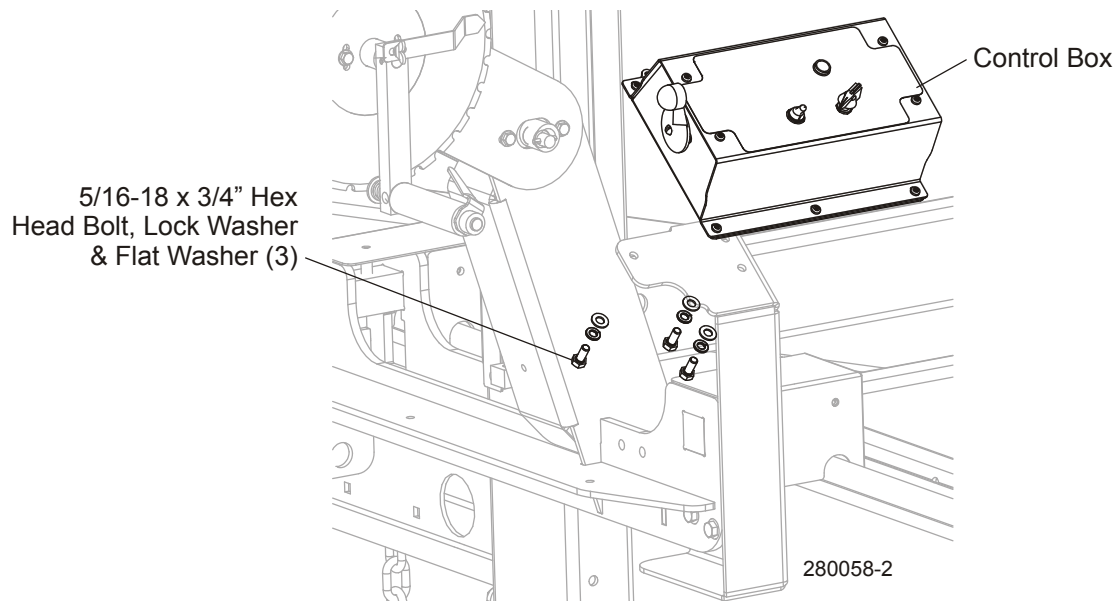
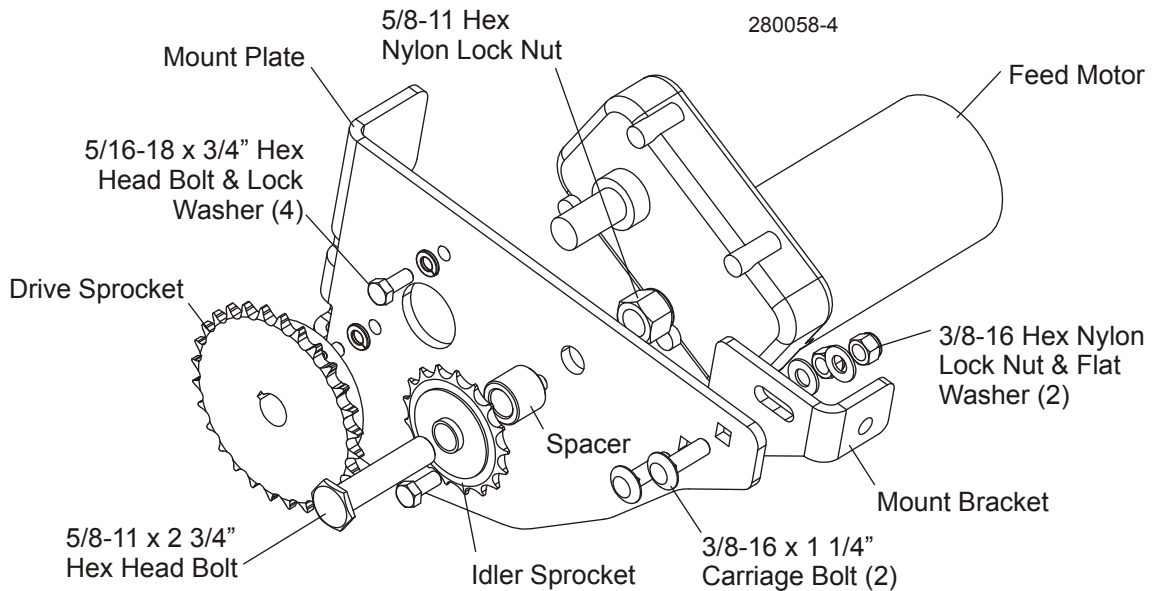


FIGURE 4

3. Assemble the feed motor to the mount plate with four provided 5/16-18 x 3/4" hex head bolts and lock washers. Install the idler sprocket and spacer to the mount plate with the 5/8-11 x 2 3/4" hex head bolt and lock nut. Slide the drive sprocket onto the motor shaft, align with idler sprocket and tighten the set screws to secure to the shaft. Assemble the mount bracket to the mount plate with two 3/8-16 x 1 1/4" carriage bolts, flat washers and lock nuts. Leave the bracket loose to allow adjustment until the feed motor is positioned on the sawmill.

**See Figure 5.**



**FIGURE 5**

4. At the left of the battery box, locate the four lower cam bracket mounting bolts. Remove the two outer bolts and lock nuts. Place the feed motor assembly in position so the holes in the mount plate align with the holes in the cam bracket. Replace the bolts and lock nuts. Extend the mount bracket until the hole mates against the hole in the upper cam plate. Secure with the provided 3/8-16 x 1 1/4" hex head bolt, two flat washers and lock nut. Tighten the two nuts to secure the mount bracket to the mount plate.

See Figure 6.

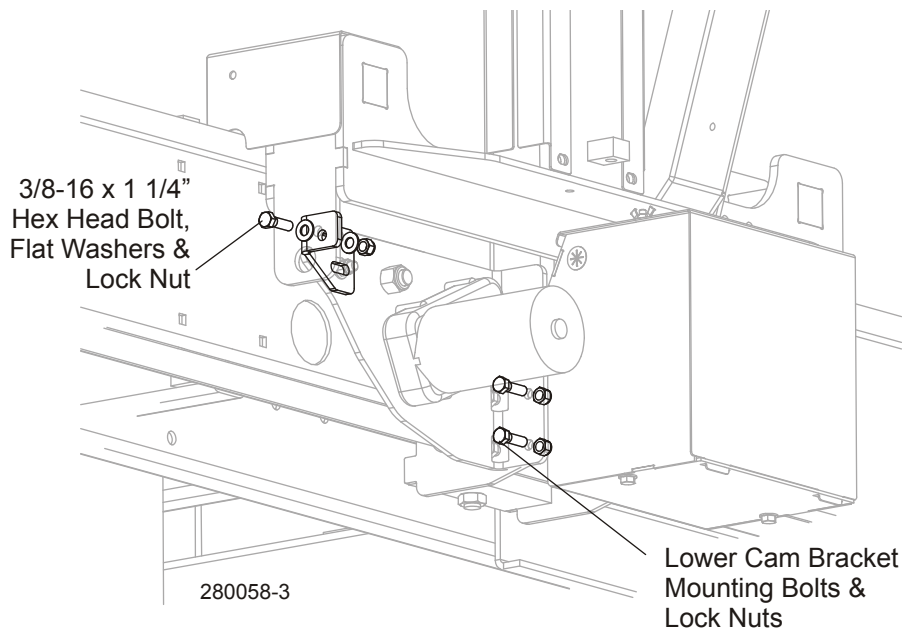
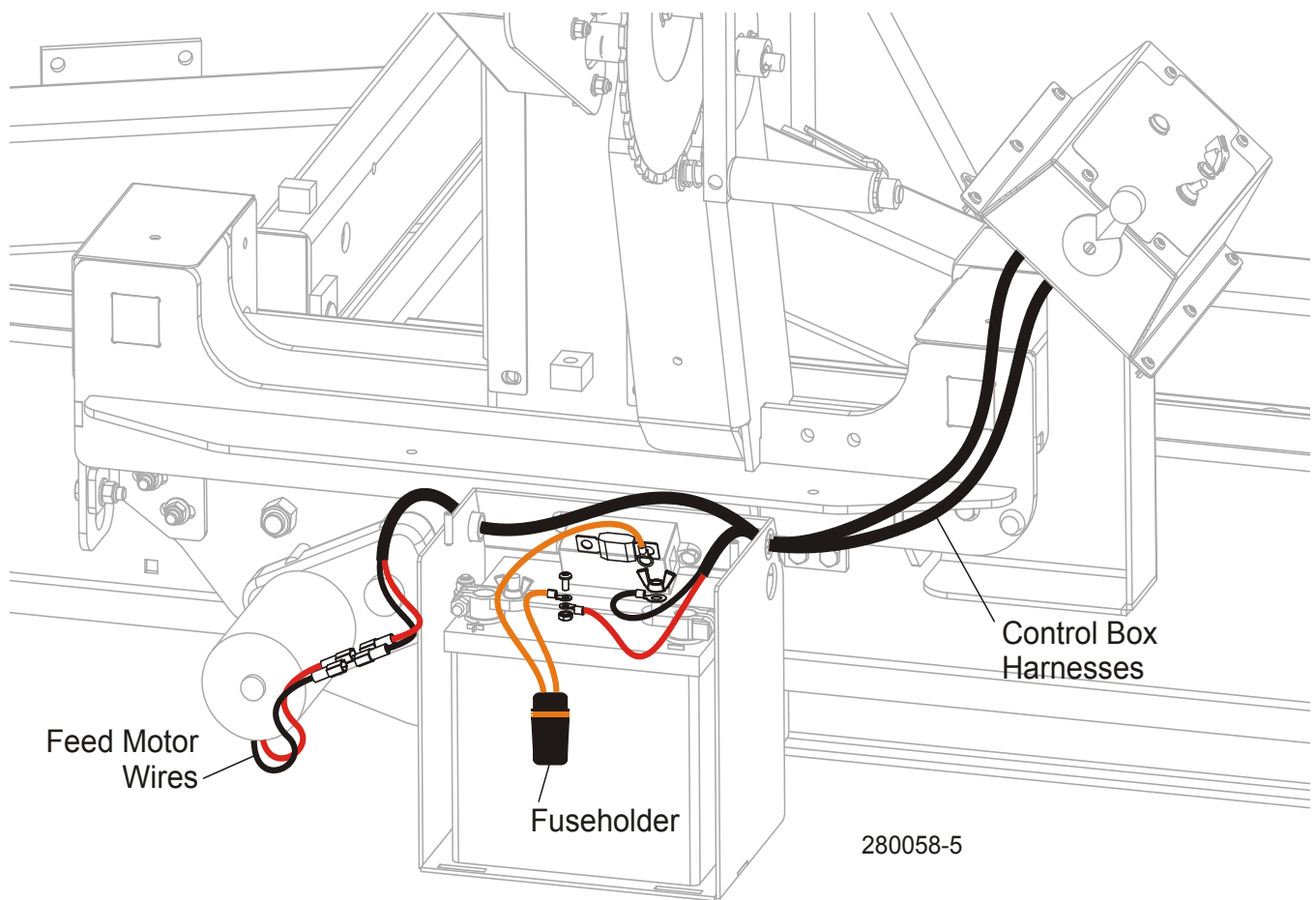


FIGURE 6

5. Remove the cover from the battery box. Route the two control box harnesses to the battery box, through the hole in the right side of the battery housing. Then, route the black cable through the hole in the left side of the battery to the power feed motor.

**See Figure 7.** Continue the longer motor harness through the hole in the left side of the battery box and connect the wires to the feed motor wires (red to red; black to black). Remove the plastic cover from the fuse box inside the battery box. Connect the fuseholder wire with large ring terminal to the right terminal of the fuse as shown below. Connect the other fuseholder wire to the red control box wire. Slide the piece of provided 3/8" tubing over one of the wires, connect the two wire ring terminals with the #10-24 x 3/8" screw and self-locking hex nut provided. Slide the tubing over the terminal connection. Connect the black control box wire to the negative post on the battery.

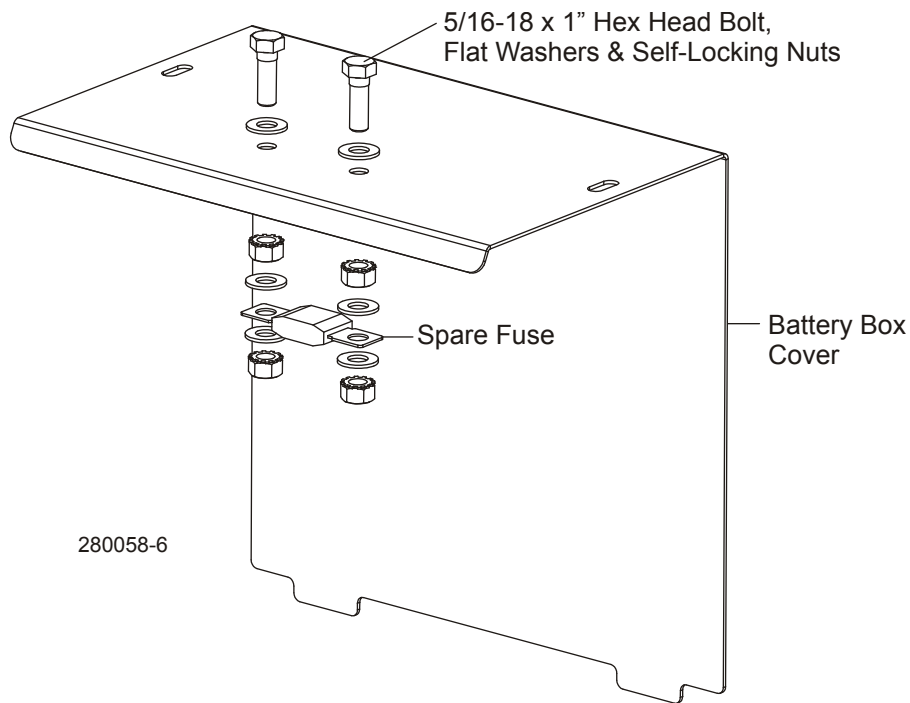


**FIGURE 7**

6. Reinstall the plastic cover to the fuse inside the battery box.

7. Remove the two plugs from the battery box cover and install the provided spare mega fuse with the two 5/16-18 x 1" hex head bolts, six flat washers and four self-locking nuts provided.

**See Figure 8.**



**FIGURE 8**

8. Reinstall the battery box lid cover and secure in place with the wing nuts.
9. Use the provided long tie wraps to secure the control harnesses to the control box mount. Use the shorter tie wraps to secure the harnesses to the feed motor and along the length of the harnesses.



10. Install the feed chain mount bracket to the front end of the sawmill main frame tube with two provided 3/8-16 x 1" hex head bolts and lock nuts. Remove the feed rope eye-bolt from the rear stop plate and install the feed chain tensioner with two 1/2-20 hex jam nuts and lock washers provided.

See Figure 9.

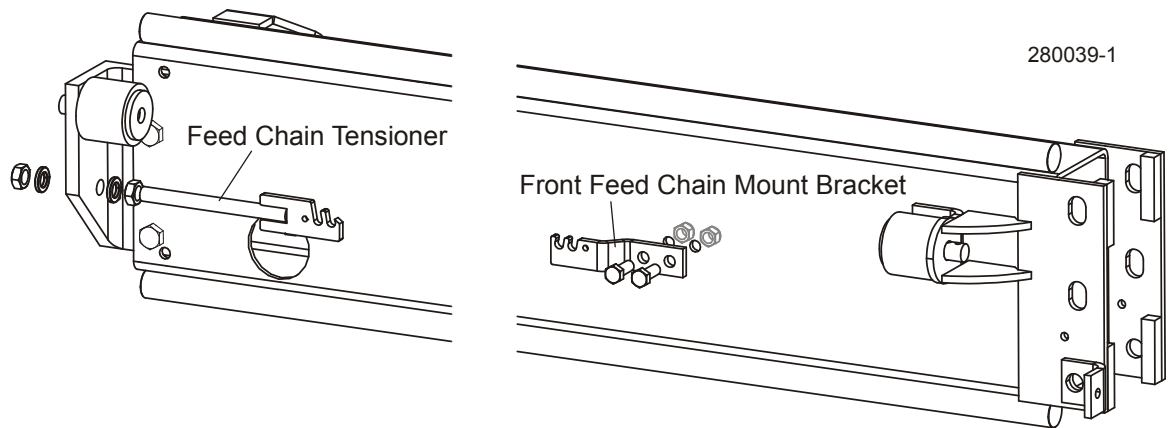


FIGURE 9

11. Install the provided feed chain to the front chain mount bracket with one of the provided master links. Route the feed chain towards the rear end of the sawmill and through the power feed sprockets as shown below. Secure the rear end of the feed chain to the tensioner with a second master link.

See Figure 10.

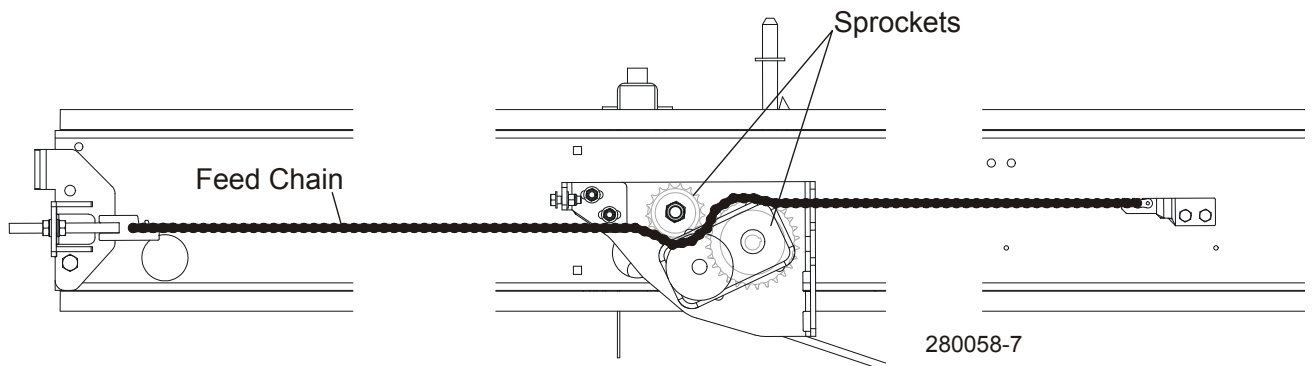


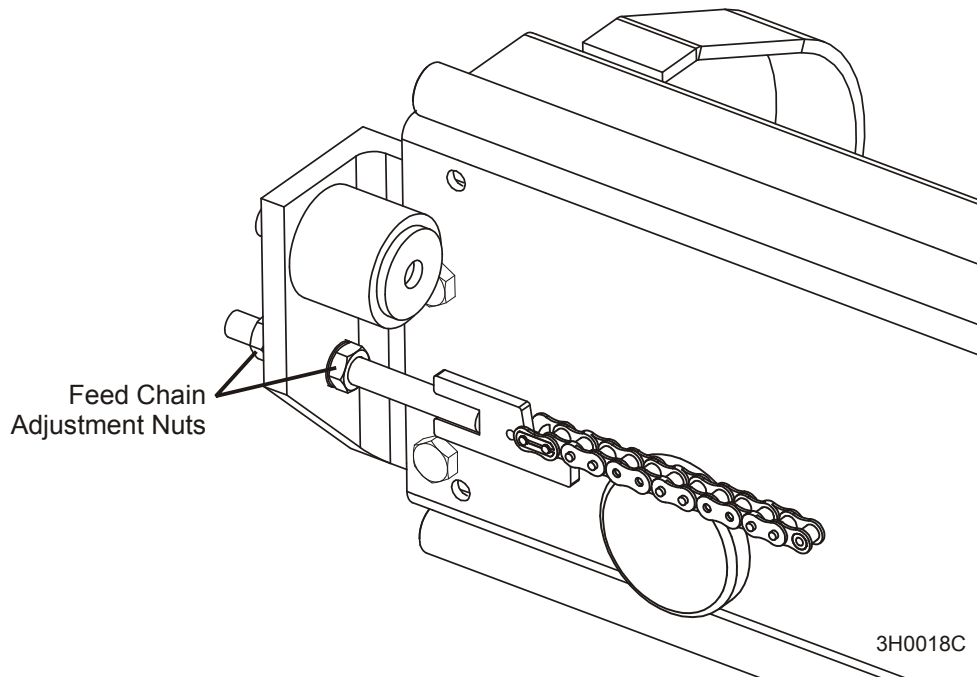
FIGURE 10

12. Adjust the power feed chain. Measure the power feed chain tension with the saw head all the way toward the rear of the mill. Use the adjustment nut on the feed tensioner at the front of the mill to tighten or loosen the power feed chain. Adjust the chain until it measures 7 to 8 inches (17.8 to 20.3 cm) from the top of the top rail at its lowest point.



**CAUTION!** Do not overtighten the feed chain. Damage to the power feed system may result.

See Figure 11.



**FIGURE 11**