

FORM 2024

WM4000 POWER TAPER SET ROLLER INSTALLATION

This WM4000 Power Taper Set Roller Option help adjust the position of the log on the bed by moving the log forward or backward as necessary. The enclosed parts include mounting hardware necessary to install the Rear Power Taper Set Roller Option or the Rear and Front Power Taper Set Roller Option to the WM4000 sawmill Rev. A1.00 and later.

Part No. PTSR-A-4000 (Rear Only)

Item	Description	Part No.	Qty.
1	ROLLER, WM4000 REAR POWER TAPER SET	PTSR-A-4000	1
2	Hose, 3/8" Hydraulic w/Fittings 295" HP	074105	2
	Hose, 3/8" Hydraulic Double Braided H24506	042828	24.583 ft.
	Fitting, 3/8" Hose End 37Deg Swivel	042829	2
3	Roller Assembly, Rear Power Taper Set	066880	1
4	Fitting, 1/8" NPT Socket Pipe Plug	P30127	2
5	Fitting, 8 SAE-6 JIC	P12703	2

Part No. PTSR-FRA-4000 (Front and Rear)

Item	Description	Part No.	Qty.
1	ROLLER, WM4000 FRONT AND REAR POWER TAPER SET	PTSR-FRA-4000	1
2	Hose, 3/8" Hydraulic w/Fittings 295" HP	074105	1
	Hose, 3/8" Hydraulic Double Braided H24506	042828	24.583 ft.
	Fitting, 3/8" Hose End 37Deg Swivel	042829	2
3	Hose, 3/8" Hydraulic w/Fittings 223" HP	074106	1
	Hose, 3/8" Hydraulic Double Braided H24506	042828	18.583 ft.
	Fitting, 3/8" Hose End 37Deg Swivel	042829	2
4	Hose, 3/8" Hydraulic w/Fittings 114" HP	074107	1
	Hose, 3/8" Hydraulic Double Braided H24506	042828	9.5 ft.
	Fitting, 3/8" Hose End 37Deg Swivel	042829	2
5	Roller Assembly, Front Power Taper Set	066980	1
6	Roller Assembly, Rear Power Taper Set	066880	1
7	Fitting, 1/8" NPT Socket Pipe Plug	P30127	4
8	Fitting, 8 SAE-6 JIC	P12703	2

Installation Instructions (PTSR-A-4000 Rear Taper Set Roller Only)

Power Taper Set Roller Installation



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the machine off and perform the lockout procedure. If the machine is turned on and moving parts activated, serious injury may result.

1. Locate the middle rear bed rail with the toe board installed to the sawmill bed.
2. Remove the toe board with the hydraulic cylinder from the middle rear bed rail.

See Figure 1.

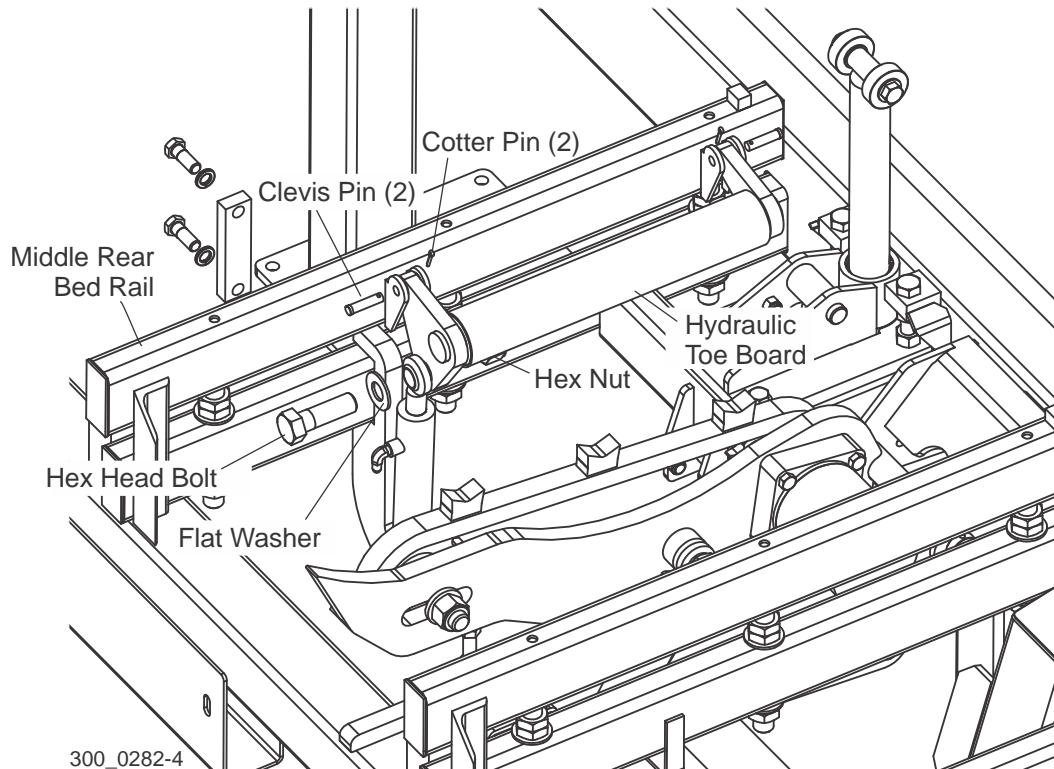


FIG. 1

3. Remove the hydraulic cylinder from the toe board assembly. The hydraulic cylinder will be reinstalled to the provided power taper set roller.

4. Cut off the four toe board mount brackets from the middle rear bed rail.

See Figure 2.

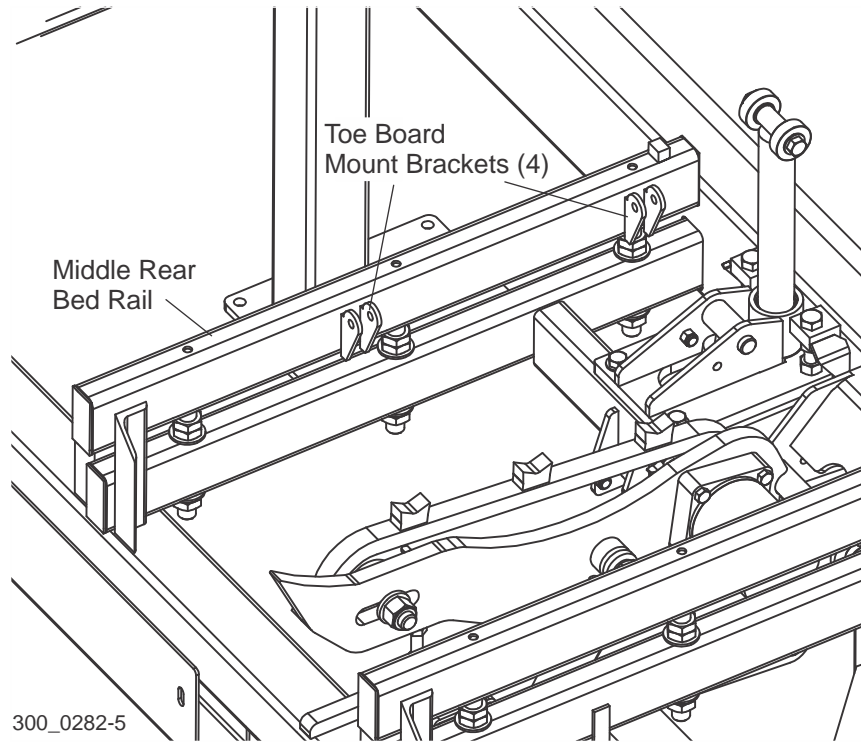


FIG. 2

5. Install the provided power taper set roller assembly to the bed tube under the middle rear bed rail. Use the provided hardware to secure the roller assembly in place.

See Figure 3.

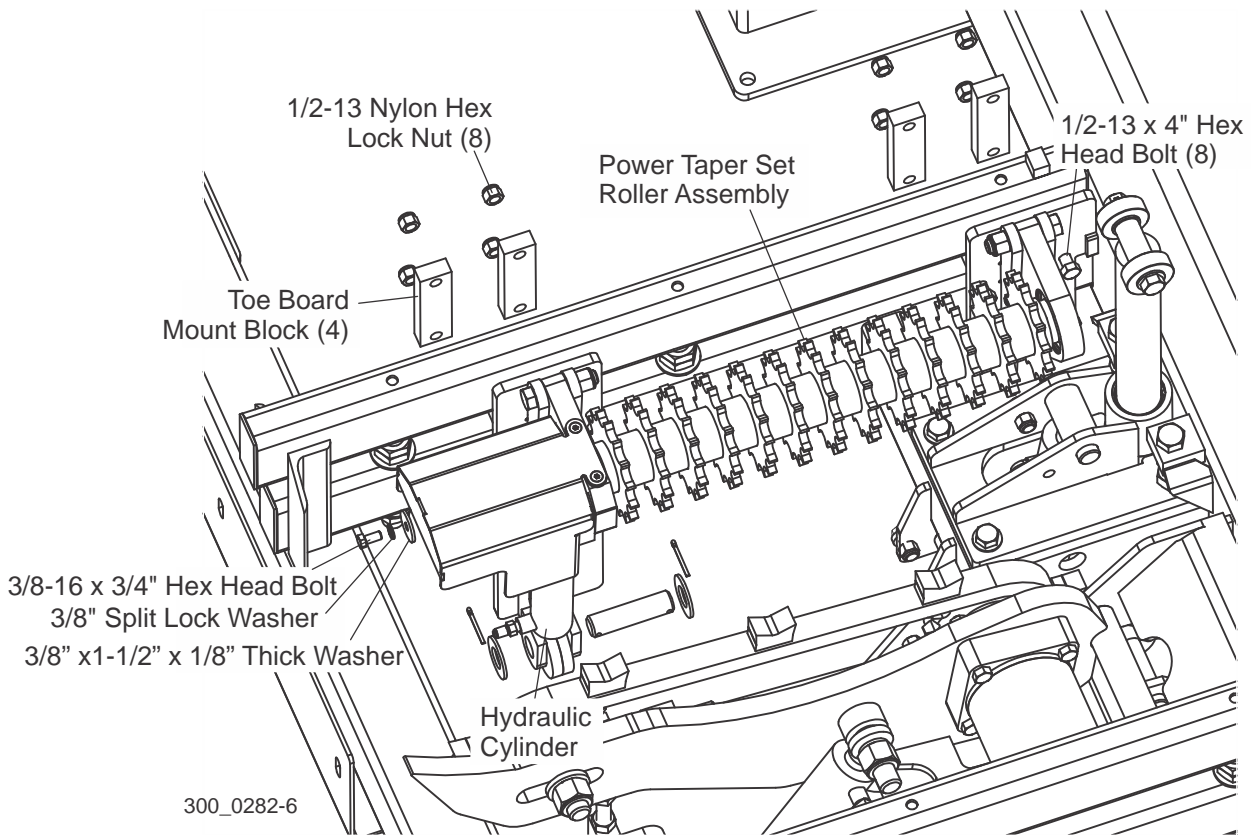


FIG. 3

6. Install the existing hydraulic cylinder to the power taper set roller and secure in place with the provided and existing hardware.

Bed Rail Adjustment

See Figure 3-1. Move the log clamp in until it is 10" from the clamp stop. Adjust the clamp down to its lowest position. Raise the saw head until the blade measures 17 5/16" above the top of the clamp. Move the saw carriage so the blade is positioned over the front bed rail. Measure the distance from the bottom of the blade to the bed rail at each end of the bed rail. Both measurements should be 15" (2 5/16" above the clamp [$\pm 1/16$ "]). Turn the bed rail adjustment nuts to raise or lower the bed rail, if necessary. Repeat for the remaining bed rails.

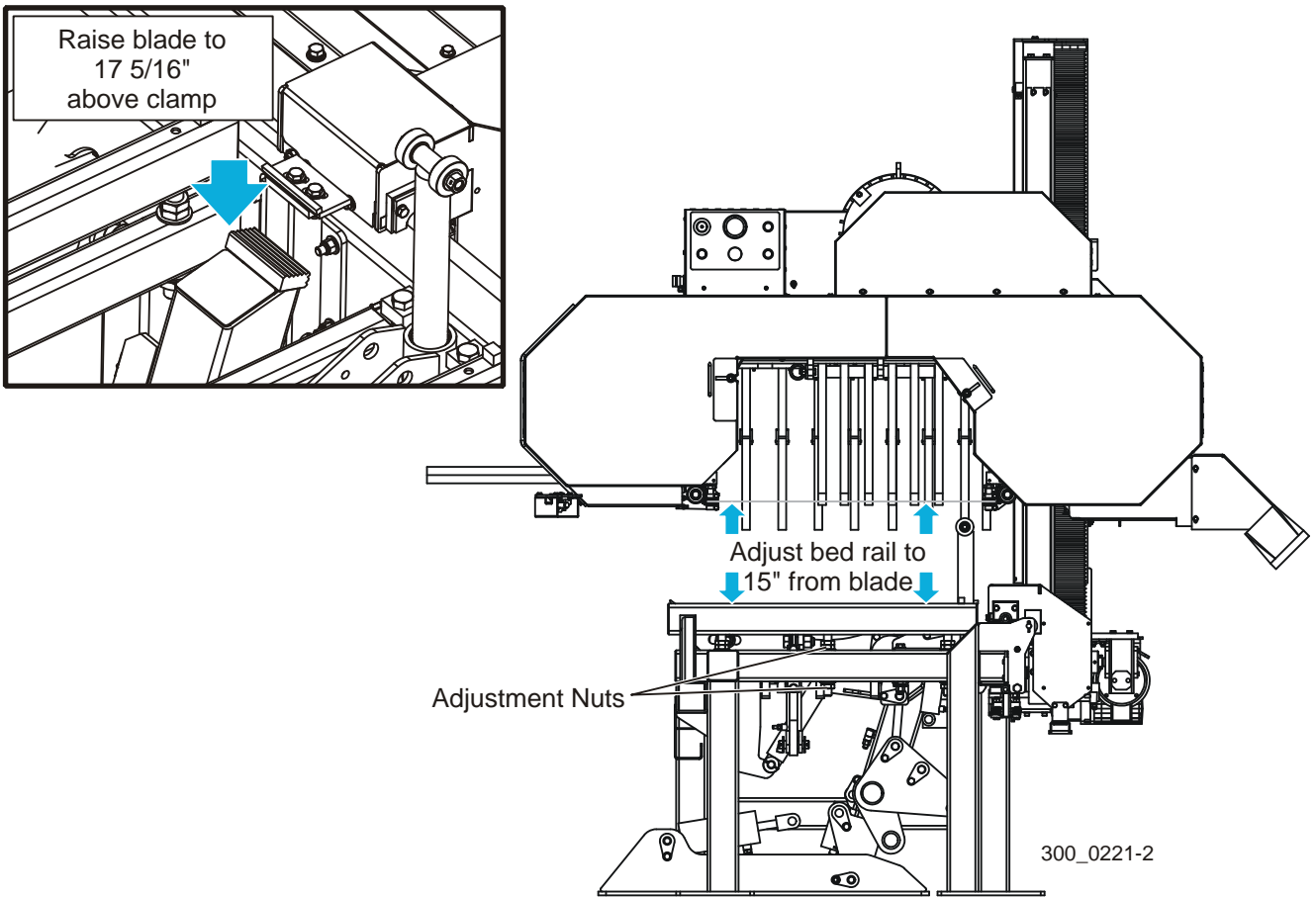


FIG. 3-1

Hydraulic Installation

1. Use the provided 3/8" hydraulic hoses to connect the power taper set roller hydraulic motor to the power taper set roller valve.

See Figure 4. Connect the two provided hoses to the fittings located on the power taper set roller hydraulic motor.

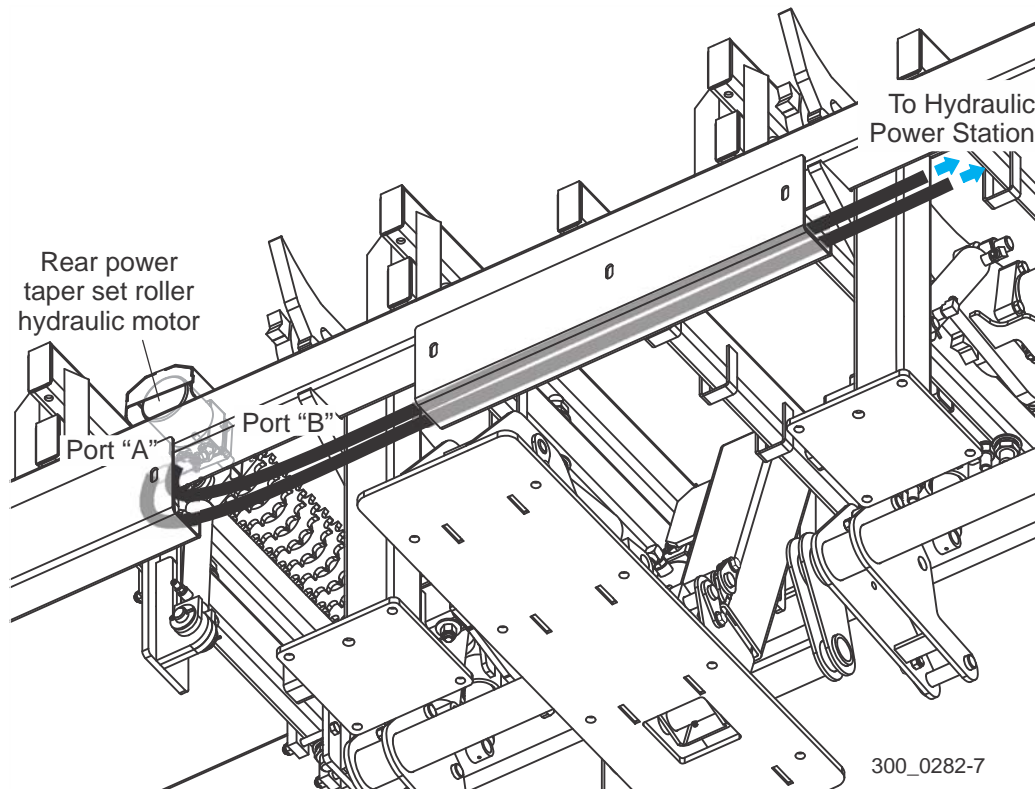


FIG. 4

2. Route the hoses along the existing hydraulic hoses to the hydraulic power station.

3. Replace the two existing plugs on the power taper set roller valve with the two provided 8SAE-6JIC fittings. Make sure the fittings are tight to prevent hydraulic fluid leaks.
4. Connect the other end of each hose from the power taper set roller hydraulic motor to the power taper set roller valve fittings.

See Figure 5. Connect the hose from the hydraulic motor fitting labeled #A to the power taper set roller valve fitting labeled #A. Connect the hose from the hydraulic motor fitting labeled #B to the power taper set roller valve fitting labeled #B. Make sure the hoses are tight to prevent hydraulic fluid leaks.

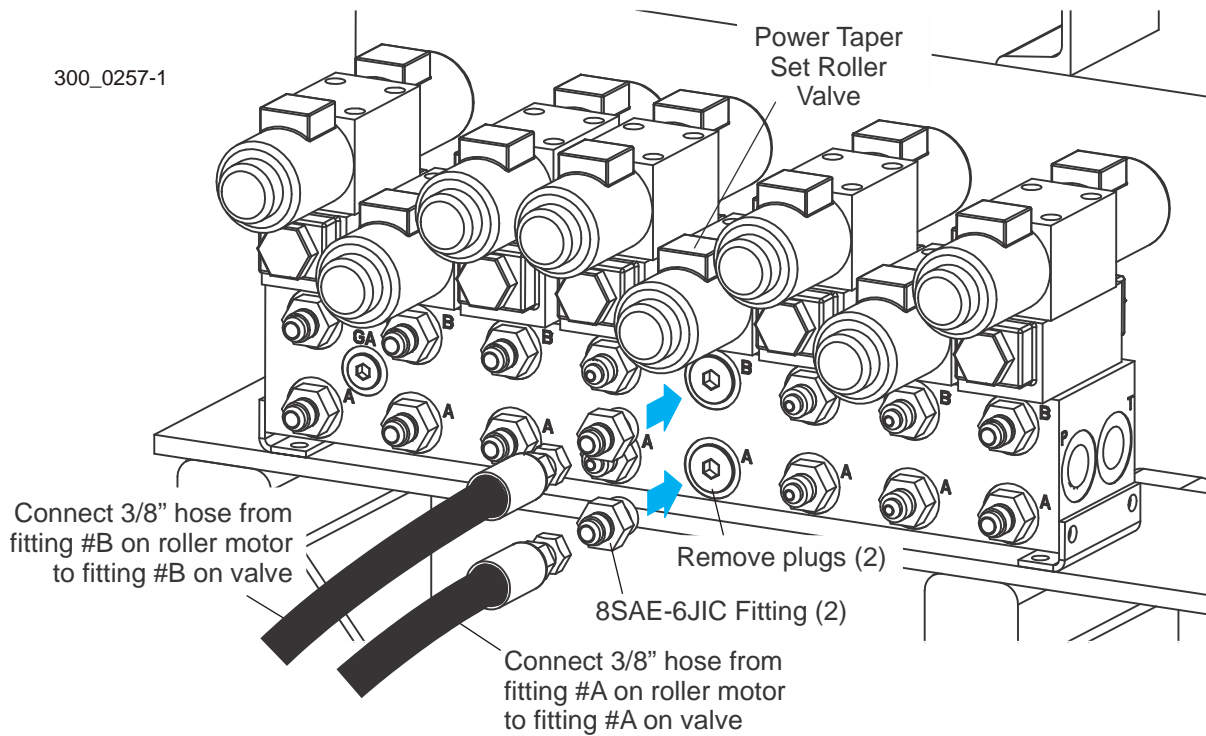


FIG. 5

Installation Instructions (PTSR-FRA-4000 Front and Rear Taper Set Roller Only)

Power Taper Set Roller Installation



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the machine off and perform the lockout procedure. If the machine is turned on and moving parts activated, serious injury may result.

1. Install the rear taper set roller to the sawmill bed as described above but skip the hydraulic installation instructions.
2. Locate the middle front bed rail with the front toe board installed to the sawmill bed.
3. Remove the toe board with the hydraulic cylinder from the middle front bed rail.

See Figure 6.

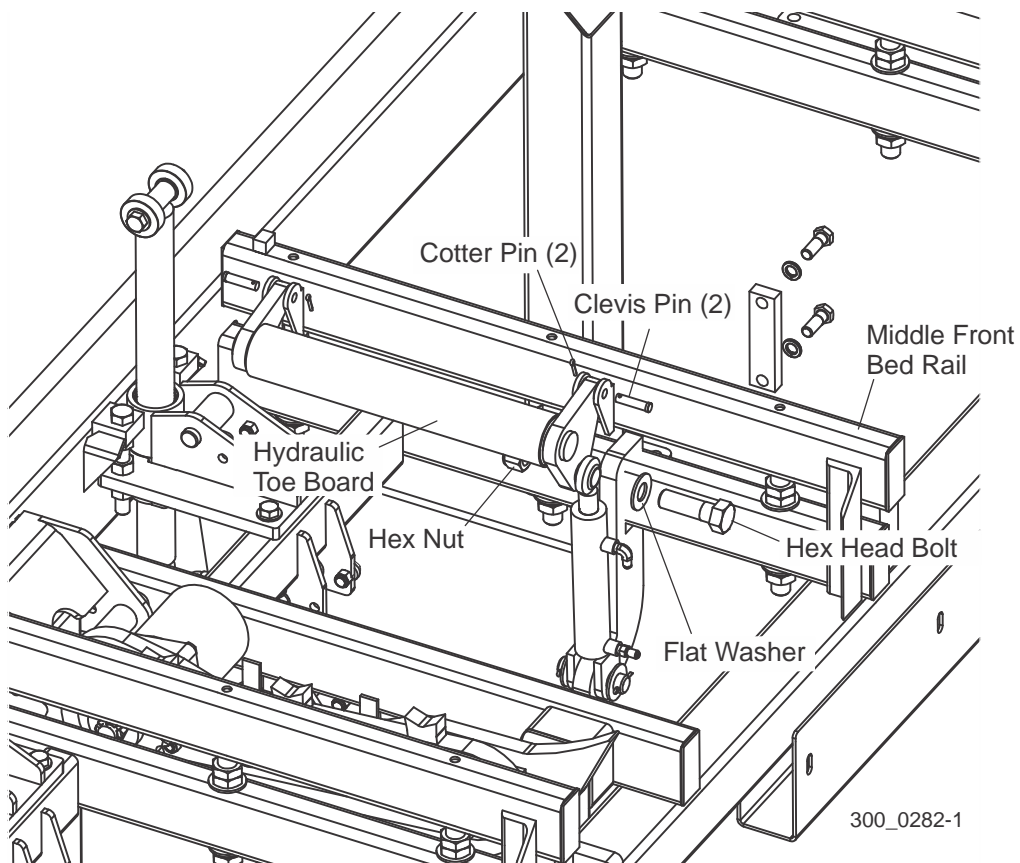


FIG. 6

4. Remove the hydraulic cylinder from the toe board assembly. The hydraulic cylinder will be reinstalled to the provided power taper set roller.
5. Cut off the four toe board mount brackets from the middle front bed rail.

See Figure 7.

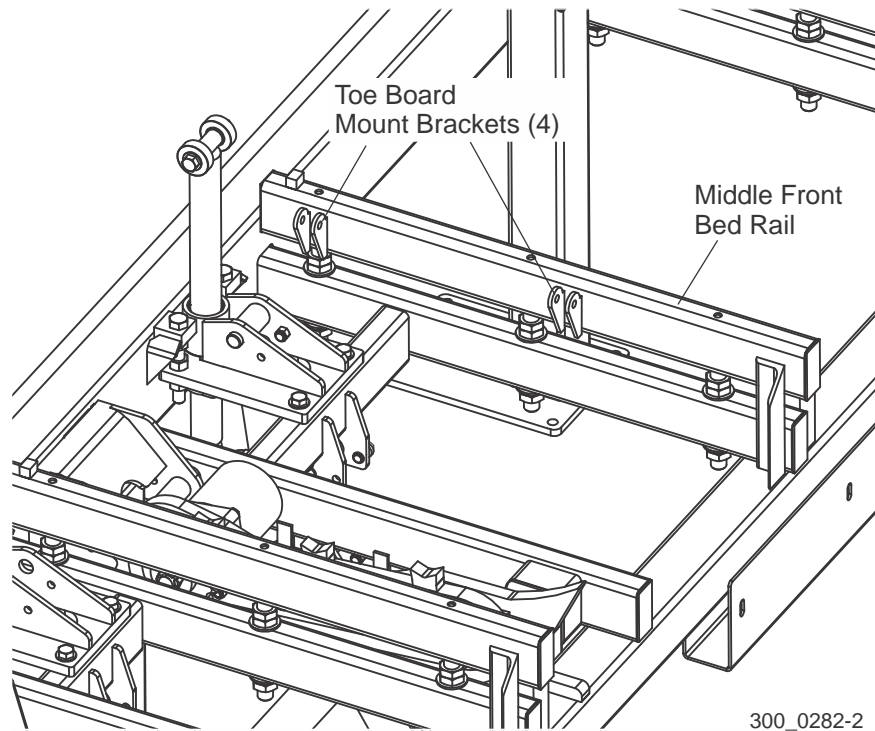


FIG. 7

6. Install the provided power taper set roller assembly to the bed tube under the middle front bed rail. Use the provided hardware to secure the roller assembly in place.

See Figure 8.

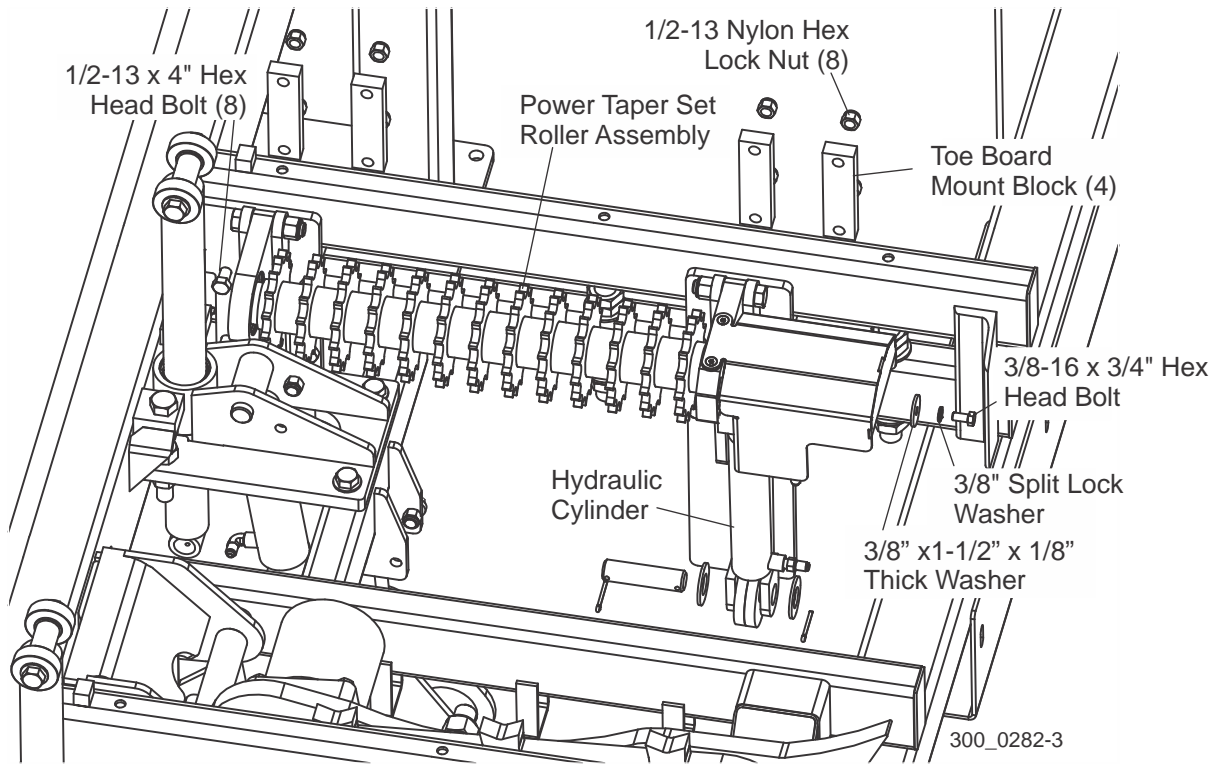


FIG. 8

7. Install the existing hydraulic cylinder to the power taper set roller and secure in place with the provided and existing hardware.

Bed Rail Adjustment

See Figure 8-1. Move the log clamp in until it is 10" from the clamp stop. Adjust the clamp down to its lowest position. Raise the saw head until the blade measures 17 5/16" above the top of the clamp. Move the saw carriage so the blade is positioned over the front bed rail. Measure the distance from the bottom of the blade to the bed rail at each end of the bed rail. Both measurements should be 15" (2 5/16" above the clamp [$\pm 1/16"$]). Turn the bed rail adjustment nuts to raise or lower the bed rail, if necessary. Repeat for the remaining bed rails.

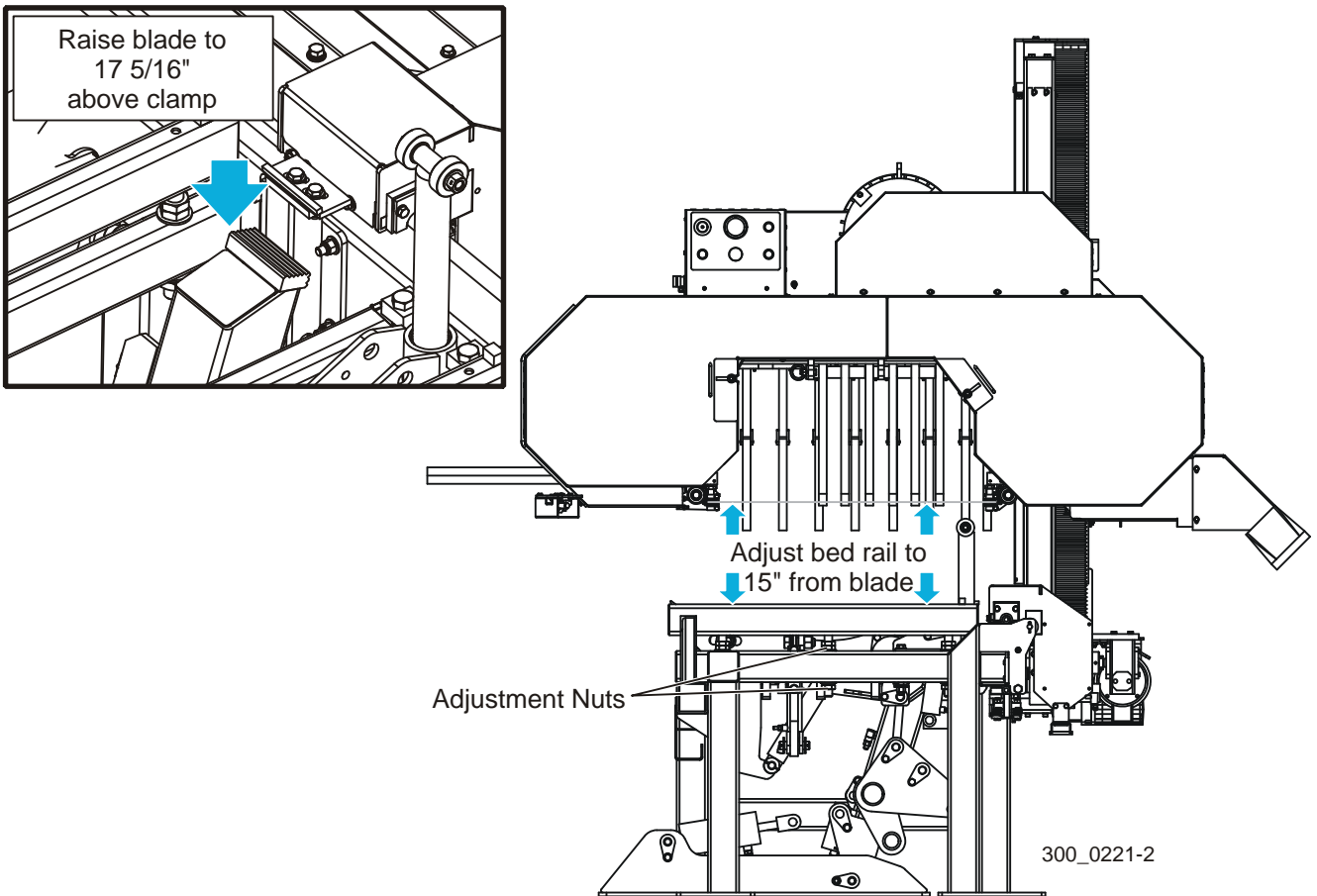


FIG. 8-1

Hydraulic Installation

1. Use the provided 3/8" hydraulic hoses to connect the power taper set roller hydraulic motors to the power taper set roller valve.

See Figure 9. Connect the provided hoses to the fittings on the front and rear power taper set roller hydraulic motors as shown below.

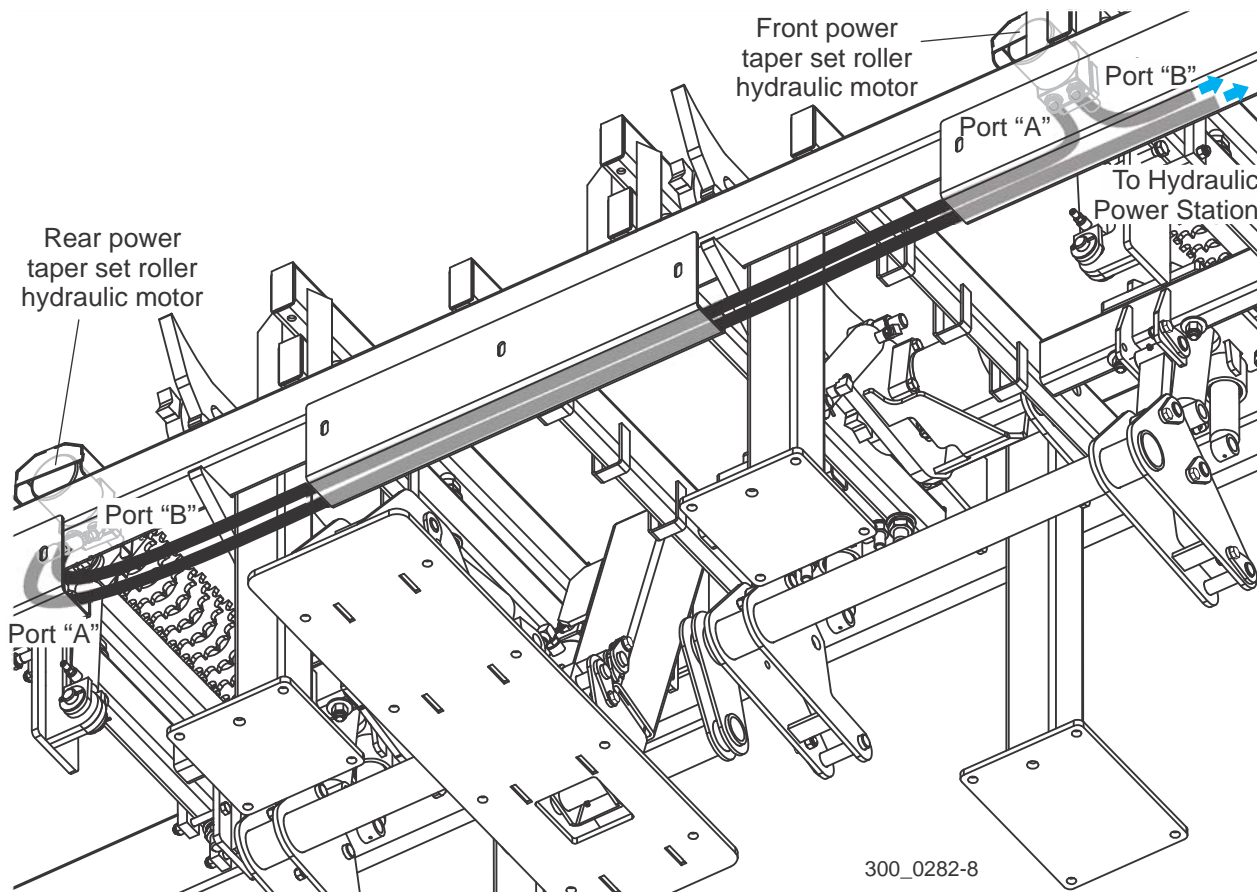


FIG. 9

2. Route the hoses along the existing hydraulic hoses to the hydraulic power station.

3. Replace the two existing plugs on the power taper set roller valve with the two provided 8SAE-6JIC fittings. Make sure the fittings are tight to prevent hydraulic fluid leaks.
4. Connect the other end of each hose the power taper set roller hydraulic motors to the power taper set roller valve fittings.

See Figure 10. Connect the hose from the rear hydraulic motor fitting labeled #A to the power taper set roller valve fitting labeled #A. Connect the hose from the front hydraulic motor fitting labeled #B to the power taper set roller valve fitting labeled #B. Make sure the hoses are tight to prevent hydraulic fluid leaks.

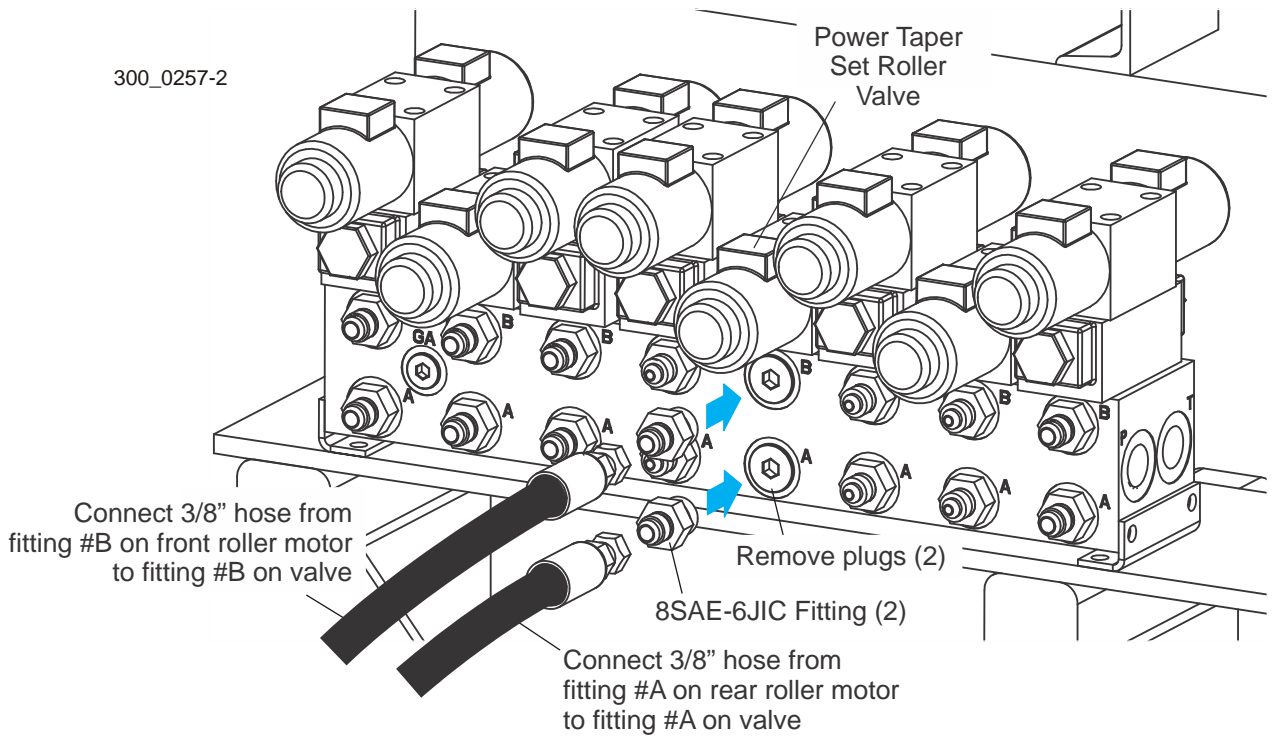


FIG. 10

Power Taper Set Roller Operation

! DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.

! WARNING! Keep all persons out of the path of moving equipment and logs while operating the power taper set roller. Failure to do so may result in serious injury or death.

After the Power Taper Set Roller is installed, you can start to operate the unit. Press the rear switch of the left joystick to change to bed mode. To raise all the bed rollers, push the bottom head button to raise all the toe boards. To lower all the bed rollers, press the rear switch. Press the top left head button to raise toe #2. Press the top right head button to raise toe #1. Press the thumbstick forward to turn the power taper rollers forward and press it down to move the power taper rollers backward.

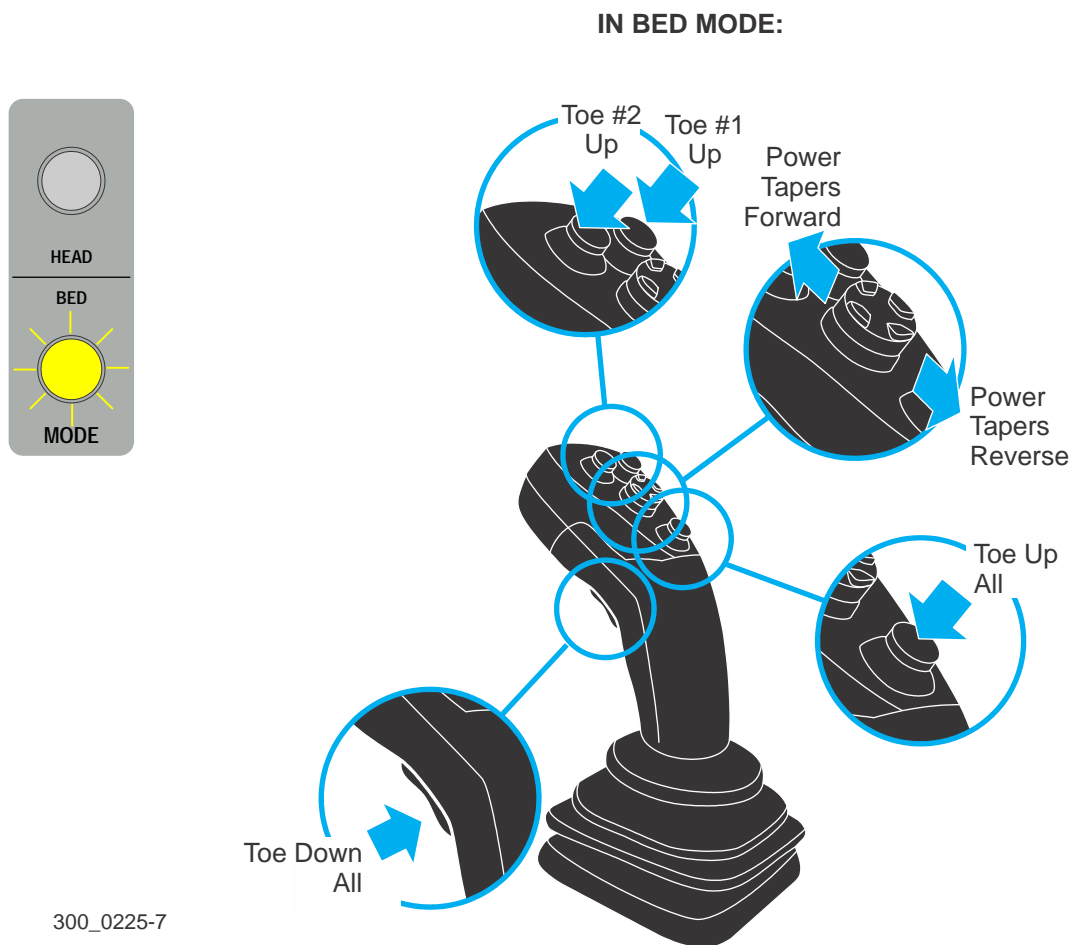
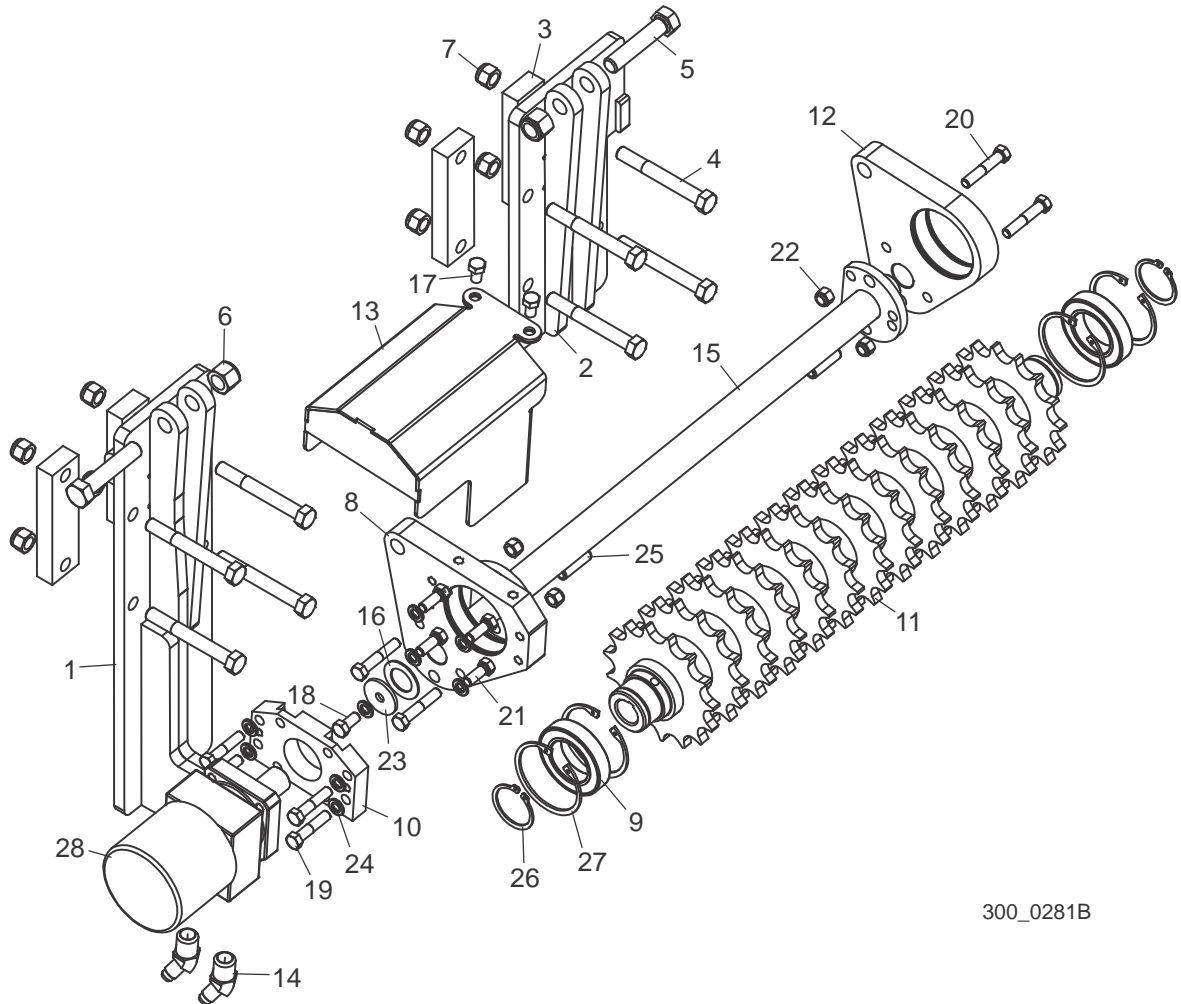


FIG. 10

Power Taper Set Roller Replacement Parts



300_0281B

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	BOARD ASSEMBLY, REAR ROLLER TOE	066880	1
	BOARD ASSEMBLY, FRONT ROLLER TOE	066890	1
1	Mount Weldment, Rear Toeboard Cylinder	066881	1
	Mount Weldment, Front Toeboard Cylinder	066894	1
2	Mount Weldment, Rear Toeboard	066885	1
	Mount Weldment, Front Toeboard	066896	1
3	Block, Toe Board Mount	066892	4
4	Bolt, 1/2-13 x 4" Hex Head Grade 5	F05008-78	8
5	Bolt, 5/8-11 x 3" Hex Head Grade 5	F05009-37	2
6	Nut, 5/8-11 Nylon Lock	F05010-34	2
7	Nut, 1/2-13 Nylon Hex Lock	F05010-8	8
	Roller Assembly, Rear Toe Board	066888	1
	Roller Assembly, Front Toe Board	066895	1
8	Plate, Toe Board Main Drive	066889	1
9	Bearing, 45mm x 75mm x 16mm Sealed	066900	2

10	Plate, Toe Board Motor Mount	066901	1	
11	Roller Weldment, Toeboard	066902	1	
12	Plate, Toe Board End	066905	1	
13	Guard Weldment, Rear Motor	066908	1	
	Guard Weldment, Front Motor	066897	1	
14	Fitting, 3/8JIC x 1/2 NPT Male 45 Deg	066912	2	
15	Arm Weldment, Toe Board Link	066918	1	
16	Plate, 1.01 x 1.63x.06 Spacer	074280	1	
17	Bolt, 3/8-16 x 5/8" Hex Head Grade 5	F05007-148	2	
18	Bolt, 3/8-16 x 3/4" Hex Head Grade 5	F05007-118	1	
19	Bolt, 3/8-16 x 1 3/4" Hex Head Grade 5	F05007-119	4	
20	Bolt, 3/8-16 x 2" Hex Head Grade 8	F05007-223	4	
21	Bolt, 3/8-16 x 1" Hex Head Grade 5	F05007-87	4	
22	Nut, 3/8-16 Hex Nylon Lock	F05010-10	4	
23	Washer, 3/8 x1-1/2 x 1/8 Thick Hardened	F05011-104	1	
24	Washer, 3/8" Split Lock	F05011-4	9	
25	Pin, 1/2" x 1 1/2" Roll	F05012-150	2	
26	Ring, 45mm External Retaining	F81090-32	2	
27	Ring, 75mm Internal Retaining	F81090-41	4	
28	Motor, Hydraulic, TB0130FP130AAAA	074281	1	
	Seal Kit, Hydraulic Motor	061136	1	