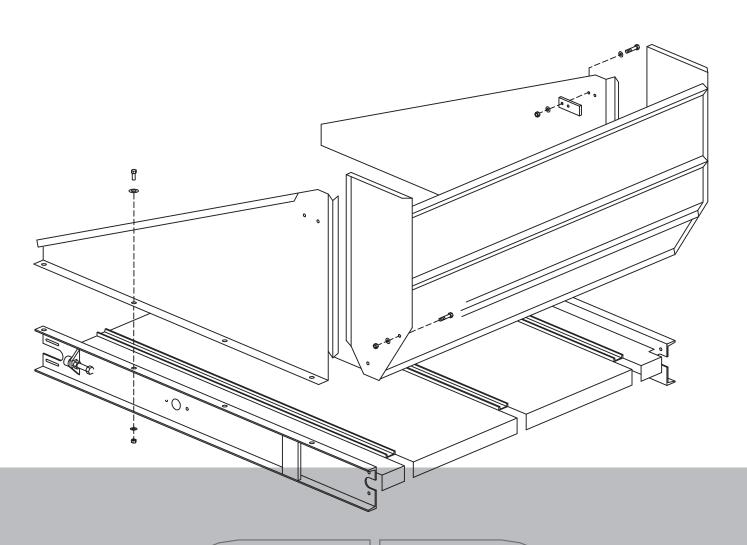
S3 SUPER SLICER







Thank you for purchasing a Deweze S3

TO THE OWNER OR OPERATOR:

As with all Harper products, the S3s have been thoroughly tested and built to provide a sturdy, dependable product. This manual is written as an aid to operating and maintaining the DewEze S3. Read and understand the manual thoroughly before operation to avoid damage to the unit or injury to the operator or bystanders.

A S3 can present hazards to an operator who follows unsafe procedures in either the operation or maintenance of the unit. Therefore, **SAFETY WARNINGS** are present at certain locations in the text. Harper Industries is not responsible for accidents or injuries that result from the misuse or lack of maintenance of the S3.

SYMBOL:



SAFETY WARNING!



MEANING: Failure to understand and obey this warning may result in injury to you or others. Whenever this symbol is used, please pay very close attention to the information presented, and make sure you fully understand. If you do not, contact your dealer or Harper Industries for clarification.

IIIHARPER'INDUSTRIES,INC.

151 E. HWY. 160 Harper, KS 67058 (620) 896-7381 • Fax (620) 896-7129 Toll Free 800-835-1042 Email info@deweze.com Website www.deweze.com

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Statement of Warranty

Harper Industries, Inc. (HII) warrants to each purchaser of a new DewEze S3 from an authorized dealer or representative, that such equipment is free of manufacturer's defects in workmanship and materials which appear while in normal service for a period of ONE YEAR commencing with delivery to the original user.

The obligation of HII under this warranty is expressly limited, at our option, to replacement or repair at a service facility designated by Harper Industries or at the manufacturing plant in Harper, KS. A part will be replaced after inspection discloses it to have been defective. This warranty does not apply to defects caused by damage or unreasonable use (including failure to provide reasonable and necessary maintenance, or by performing functions without genuine DewEze S3 accessories) while in the possession of the consumer.

Warranty is limited to parts, labor and ground freight delivery of replacement parts. HII shall not be liable for the consequential damages of any kind, including but not limited to consequential labor costs or transportation charges in connection with replacement or repair of defective parts.

This warranty does not apply to parts subjected to misuse, abuse, alteration, improper or inadequate maintenance, or normal wear (including belts, chains, sickles).

Harper Industries makes no warranty with respect to trade accessories. They are subject to the warranties of their respective manufacturers.

ANY IMPLIED OR STATUTORY WARRANTIES, INCLUDING ANY WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. HII makes no other express warranty, nor is anyone authorized to make any on behalf of HII.

For further information please contact your nearest DewEze S3 dealer.

RECORDS

Date of Purchase	/	/	-
Dealer's Name			
Dealer's Phone			
Serial Number Machine			



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Specifications

Power	Hydraulic or PTO powered
Dimensions	91.63" H x 148" L x 119" W (in field position)
Weight	2750 lbs. w/ trailer
Cutting Device	81" Sickle Bar - 27 individual sickle sections (knives)
Shipping Width	91.63" H x 148" L 102.0" W
Tire Pressure	35 psi cold

NOTE: Following publication of this manual, certain changes in standard equipment and options may have occurred which would not be included in these pages. Your Harper dealer is the best source for up-to-date information.



Safety Guidelines

- Use genuine factory parts or parts
 with equivalent characteristics, including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or others.
- If hardware is not secure, or if some of the hardware is over-tightened, equipment failure may result, posing possible safety hazards.
- To prevent possible eye injury, always wear SAFETY GLASSES while operating equipment.
- Replace locknuts and locking screws if you can tighten them without feeling considerable resistance for several turns before they are completely tight.
 Replace them with factory authorized parts or their equivalent.

Guards & Shields

- Keep all safety devices in place.
- Replace all worn, damaged, unusable, missing or lost safety shields and guards before operating the equipment.
- Keep the equipment in good operating condition.
- Table safety stops have been provided by the manufacturer and we do not recommend removing them for any reason. See parts page 1.5.

Safety Decals

- If safety related or instructional decals become illegible or are removed, replace them immediately. New decals may be obtained from your local Harper Dealer.
- If you replace parts that have such decals attached to them, make sure the decals are replaced with current versions, and are on the replacement parts before the machine is operated again.

Hydraulics

To prevent serious injury or death:

- Relieve pressure on system before repairing, adjusting or disconnecting any hydraulic hose or fitting.
- Wear proper hand and eye protection when searching for leaks.
- Use wood or cardboard instead of hands when looking for leaks.
- Keep all hoses, fittings and components in good operating condition.
- Do not use any type of heat or flame (welding, soldering, cutting torch, etc.) near pressurized hydraulic lines.

SAFETY WARNING!
HIGH-PRESSURE FLUID HAZARD!
Escaping fluid under pressure can penetrate skin causing serious injury or death.

Set-Up Instructions

S3 Load Arm Assembly

- Remove Load arm from inside of table, and lay on ground
- Align load arm bolt flanges with table flanges
- Bolt the load arm flanges on the back side of the table flanges, with the (9) bolts, flat & lock washers that are provided. (Refer to Image Below)



Connect Load Cylinder to Load Arm

- Connect loading fork through loading fork frame arm flanges
- Insert washers as necessary so cotter pin sits flush (Refer to Images Below)





 Grease Lubrication Points on lower fork (3 Grease Zerks)



Install Outside Fork

- Raise load arm up enough to slide the outer sleeve of the fork over the load arm, slide down to align the pin to go in place, and insert cotter pin.
- Raise load arm to upright position, and hook safety chain in place.

Install Kicker Arm

Install the Kicker Arm by pinning in place, ensuring that the curved side is facing down so that it can rest on the load arm slides, and insert cotter pins.

*Kicker Arm can only be installed if the table has been shifted over into fieldposition.



5. Slide table into feeding position (fig 3) and secure with bolts. The feeding position is marked on the underside of the table with bolt hole slots. The slots are located on the trailer on the angle iron rails the table is sitting on. They are shown in figures 4 & 5 on next page.

OPERATING THE S3 LIFTING ARM WITH THE TABLE IN THE ROAD/TRANSPORT POSITION WILL DO DAMAGE TO THE LIFT ARM LINKAGE!

Fig. 4

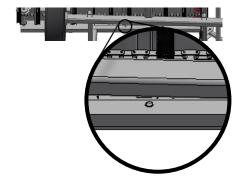
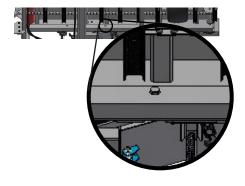


Fig. 5



For PTO machines we have installed a PTO stand for your convenience. It also contains key slots for your hydraulic hoses. The PTO shaft rests in the cutout on top of the stand and the hydraulic hoses insert into the key slots. When using S3, be sure PTO stand is

in down (working) position. Do so by pulling pin and pushing down. Then reinstall pin.

Operation

NOTE: BEFORE OPERATING YOUR NEW S3 MAKE A COMPLETE INSPECTION OF ALL COMPONENTS TO INSURE THAT ALL THE NUTS AND BOLTS ARE TIGHT AND THAT NO DAMAGE HAS OCCURRED DURING SHIPPING.

HYDRAULIC REQUIREMENTS

Your new DEWEZE S3 is designed to be used as a mobile feeding unit mounted on a trailer or as a stationary unit in a permanent installation. Regardless of the type of use the S3 WILL REQUIRE 15 GPM (gallons per minute) of hydraulic oil flow and a minimum of 1800 PSI (pounds per square inch) hydraulic pressure to operate properly. Be sure that the hydraulic system you intend to use is functioning properly and that the oil is clean and of good quality.

Two hydraulic remotes are required to operate the trailer mounted S3. One is to control the lift arm for loading the bales and the other is to operate the slicer table. Each remote must be capable of reversible flow. You may want to mark the remotes to make sure that you hook up the hydraulics the same way each time you use the machine.

NOTE: When using a hydraulically driven S3 continuously (for more than 3 bales in 10 minutes) the following adjustments must be made to tractors equipped with a high flow, pressure compensated load sense hydraulic system.

- 1. Flow (speed) must be controlled on the tractor remote outlet. To set this speed first set the Slicer flow as outlined in the manual. Secondly, turn the flow control toward the "turtle" on the tractor selective control outlet until the speed begins to decrease. Stop turning as soon as you can notice a decrease in speed. Failure to follow these procedures may result in the overheating of the tractor hydraulic system, as the system will be at maximum flow and pressure. (Load is sensed at the tractor selective control valve and if this valve is wide open the system is at constant maximum pressure / flow.
- 2. The alternative to the above is to buy a "flow limiter valve" and attach it between the quick disconnect and the hose on the pressure side.
- 3. On PTO model S3, flow must also be regulated at the selective control outlet for the slat motor.

NOTE: If the above instructions are not followed, the following symptoms may develop:

Rapid heating of the tractor hydraulic oil, this will show up as a loss of speed on the hydraulic motor speed. These motors lose efficiency rapidly when oil over heats.

LOADING INSTRUCTIONS

(Trailer Mounted Unit Only)

Approach the bale on its right side with the lift arm lowered to the ground. Cradle the bale in the lift fork by moving forward so that the bale is against the back of the fork. Lift the bale all the way up so that the bale rolls onto the table slats. Move the bale toward the sickle by activating the feeder and stop as the bale reaches the sickle. To load and carry a second bale, repeat the above process and raise the second bale until it rests snuggly against the first.

NOTE: Be sure to raise the lift arm to the upright position and latch the safety chain whenever you transport your S3 on the road!

FEEDING INSTRUCTIONS

To engage the feeding operation of the S3, idle the tractor engine, engage the slicer table hydraulics and increase the engine speed to the tractor manufacturer's suggested rated speed. On a PTO slicer the PTO RPM is 540. To engage the PTO we recommend idling the engine, engaging the PTO then accelerating the tractor's engine to rated speed for correct 540 PTO RPM operation.



SAFETY WARNING!



Stay clear of the table and cutter bar when the machine is in operation!

If the system stalls, reverse the slats and try again.

NOTE: Always wait until the first bale has been processed completely and the table slats have stopped before loading the second bale onto the table.



Adjustments

FEEDING RATE

The feeding rate may be adjusted by changing the speed of the feeder chain, or by adjusting the distance between the sickle and the table slats. To change this distance, use the following procedure.

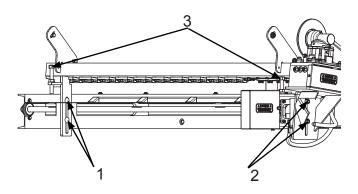


SAFETY WARNING!



Turn off tractor and disconnect the hydraulic hoses before making any adjustments to the sickle! Failure to do so could result in serious personal injury!

1. Loosen the two 5/8" hex bolts (1) and two 5/8" carriage bolts (2) that hold the sickle bar in place. (See Fig. 3)



2. Screw the 3/4" all thread adjustment bolts (3) in or out at each end of the sickle. Make sure that each end is adjusted so that the sickle is parallel with the table slats. Use a tape measure to gauge each end.

Suggestion: When adjusting the sickle and the backboard sliding with it, loosen the bolts and nuts shown. There are nuts, bolts, and straps on both the front and rear sides of the machine.

3. Retighten the four 5/8" bolts loosened in step one on previous page.

FLOW CONTROL VALVE ADJUSTMENT

The flow control valve on the right controls the speed of the sickle. Loosen the knob on the valve to adjust the lever and move the lever to a higher number to increase the speed. To lower the number is to decrease speed. After moving the lever, tighten the knob to hold the lever in place.

For initial setting of the valves, set each adjusting lever on "2". Fine tune the speed of the sickle and slats by adjusting the valves individually to get the proper cutting for the type of hay you are processing.

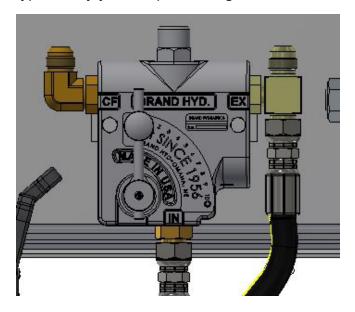


TABLE SPEED OPERATING RANGE

- Flow Control Valve Between 2 7.
- Below 2 can cause the table to stall out.
- Above 7 any increase in speed with be negligible, and could allow flow to bypass.

SUGGESTED REBALING SETTINGS

 Leave Sickle Height at Factory Setting (3")*.

*This measurement is taken at the top of the slat to the bottom of the sickle guard.

- Set Flow Control Valve at 2.
- Set Tractor RPM between 1500-1800 RPM
- Set Square Baler at Manufacturers Recommended Speed.
- Adjust Table Flow accordingly to Desired Output.

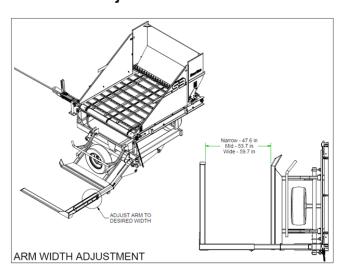
SUGGESTED BUNK FEEDING SETTINGS

 Leave Sickle Height at Factory Setting (3").

*This measurement is taken at the top of the slat to the bottom of the sickle guard.

- Set Flow Control at 3.
- Set Tractor RPM between 1500-1800 RPM.
- Make Adjustment to Table Speed, Sickle Height, and Ground Speed Accordingly, Based on Desired Feed Output.

Arm Width Adjustment Measurements



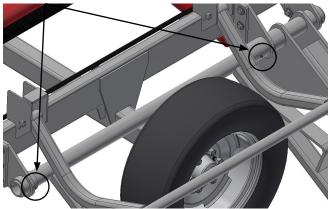


Maintenance

TRAILER MAINTENANCE

MONTHLY (Or every 100 bales)

☐ Grease the linkage of the lift arm to avoid binding and rust.



ANNUALLY

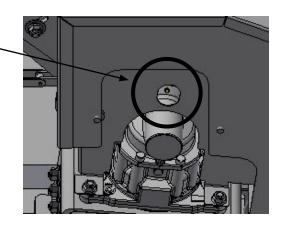
☐ Clean and repack the wheel bearings.

TABLE MAINTENANCE

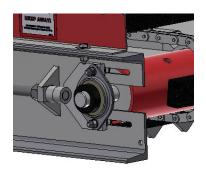
MONTHLY (Or every 100 bales)

☐ Grease Shumacher gear box with MAX 5 shots of lithium based grease every 50 operating hours.

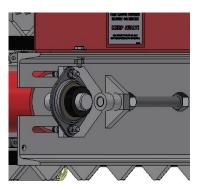




- ☐ Knife-head bearing should be greased every 12 operating hours with 1 shot of grease.
- ☐ Check the conveyor chain for tightness. The chain should not swag more than 6" from the bottom of the table at the center. Adjust the take-up roller equally at each end for maximum chain life.



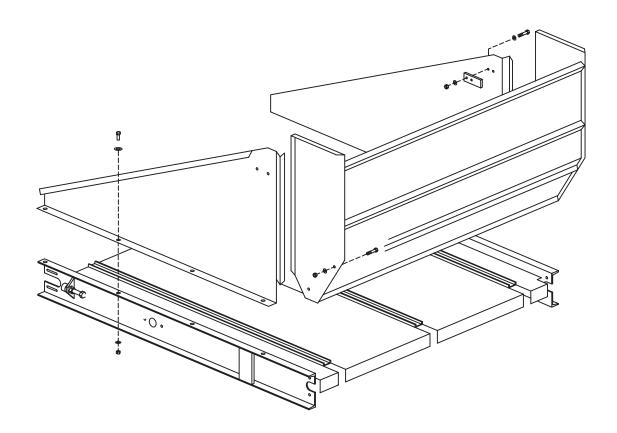




	Lubricate the system drive chains with chain oil Non-detergent petroleum based or synthetic, multigrade 20/50 oil.
	Inspect Schumacher drive belt for stretching from normal wear, tighten belt as necessary. Inspect for unusual/excessive belt wear such as fraying, glazing, or other abnormalities, replace as necessary. part # 440081 - 25-30 lbs. of tension with 3/4" deflection between tensioner pulley and Schumacher pulley.
	PANGER 2
	Inspect sickle sections for wear, and replace as necessary.
	Remove lower Schumacher shield and remove excess hay from drive area.
BI-AN	NUALLY Check belt tension - 25-30 lbs. with 3/4" deflection between tensioner pulley and Schumacher pulley.
	E SHAFT MAINTENANCE THLY (Or every 100 bales) Grease all grease zerks on the drive shaft. (Zerks located at each end and one in the middle of the shaft.)

☐ Check for loose bolts on drive shaft.





PARTS SECTION

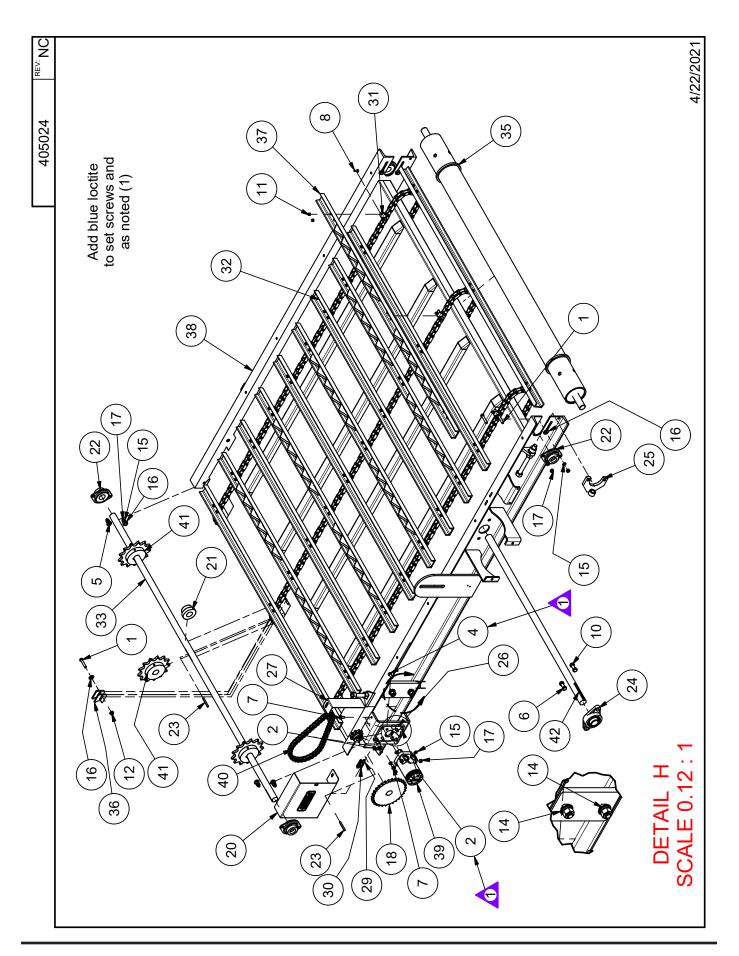


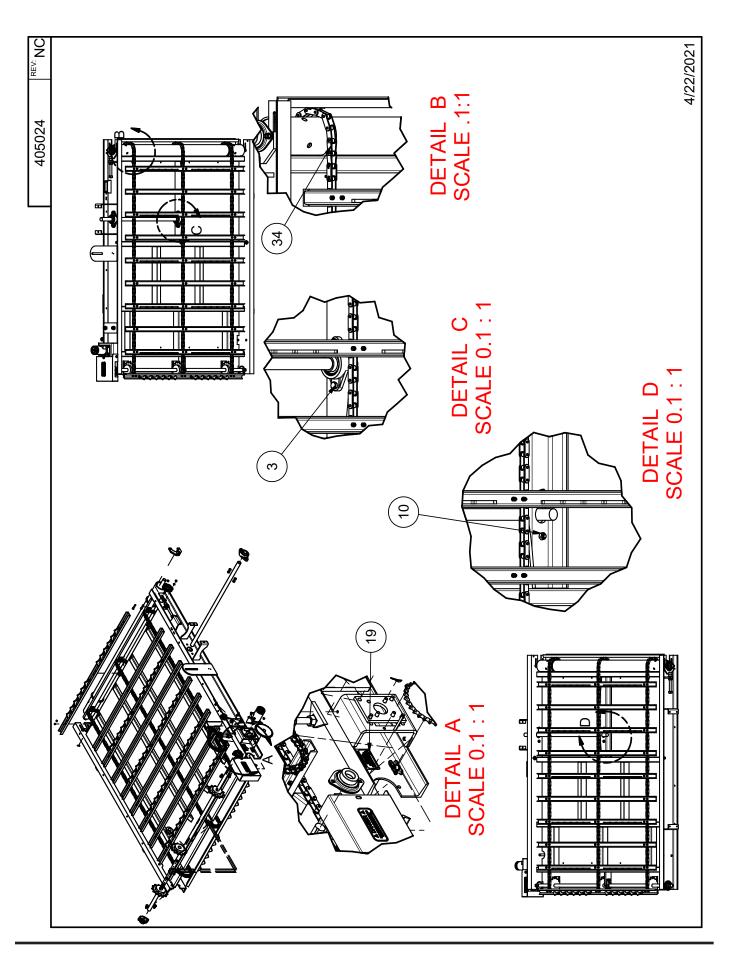
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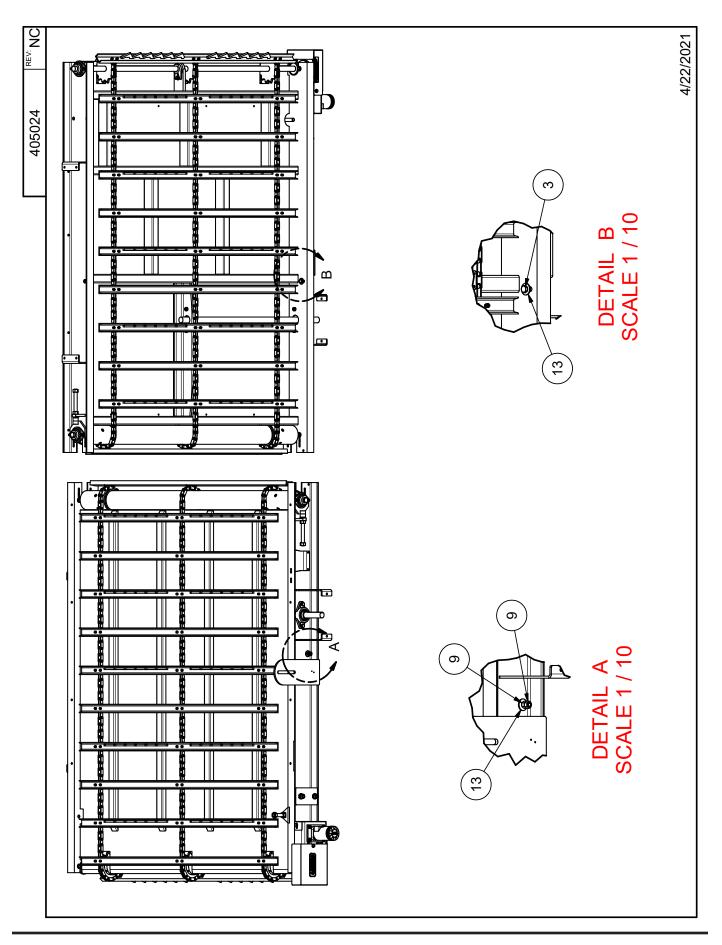
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Twine Box - Optional	1.8
Decals	1.9
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Sickle Drive Assembly	2.1
PTO Kit	2.2
Sickle Assy	2.3
PTO Holder	2.4
Hose Assy - PTO	2.5
Hose Assy - Hydraulic	2.6

	-							4030Z4 NO
				Parts List		ļ	-	Parts List
	ITEM	ı ΣΤ	PART#	DESCRIPTION	ITEM	- ΣΤΟ	PART #	DESCRIPTION
	-	2	110400	BOLT, 3/8-16 X 2.0	22	8	410233	Flange, 2 Hole
	7	4	110402	Bolt, 3/8-16 X 1.25 in Carriage	23	4	410238	Key, 1/4 X 1/4 X 2.25
	3	4	110419	BOLT, 1/2-13 X 1.75	24	2	410243	BEARING, 2fng Sd 1.375
	4	4	110420	BOLT, 3/8-16 X 1.0	25	2	410281	ADJUSTMENT BRACKET ASSY
	2	4	110425	BOLT, 3/8-16 X 1.25	56	-	410365	MOTOR ADJ. PLATE
	9	2	110429	BOLT, 1/2-13 X 1.5	27	-	410370	Shield, Slat Motor
	7	3	110437	BOLT, 3/8-16 X 0.75, WIZ FLANGE	28	-	410375	SPROCKET, 60b10 X 1.0
	8	126	110561	BOLT, 1/4-20 X .75	29	1	410441	Connecting Link, Half-offset #60
	6	4	110610	NUT, 1/2-13	30	-	410442	Connecting Link, #60 Chain
	10	4	110615	NUT, 1/2-13, UNITORQUE LOCK	31	3	411117	Chain, Feeder
	7	126	110630	NUT, 1/4-20 LOCK (NYLON INSERT)	32	10	411135	SLAT
	12	-	110645	NUT, 3/8-16 WIZ FLANGE	33	-	411137	SHAFT, SLAT DRIVE
	13	4	110658	WASHER, 1/2" FLAT STANDARD	35	е	411170	Half Link, Offset, 2060h
	14	2	110663	WASHER, 5/8" FLAT SAE	32	-	411171	WELDMENT, SLAT ROLLER
	15	16	110672	WASHER, 3/8" LOCK	36	2	411294	CENTER BEARING MOUNT
	16	21	110676	WASHER, 3/8" FLAT STANDARD	37	7	415003	Toothed Slat
	17	12	110826	NUT, 3/8-16 GR 5	38	-	415022	WELDMENT, TABLE
	18	-	340007	Sprocket, 6030 X 1.25	39	-	420128	Motor, Eaton 101-1014 (14.1 CI)
	19	-	400014	DECAL, SHIELD REMOVED	40	-	440034	Chain, Slat Drive
	20	1	405015	assembly, drive chain cover	41	3	440070	Sprocket, 2062 b13x1.25k2ss, time
	21	2	410232	Bearing Insert, 2.83, 1.25" ec Lk	42	1	440078	DRIVE shaft
Slats with teeth, teeth should be on far side from back board of slicer. Should be 11 slats with teeth and 10 without.	n should be rd of slicer h teeth and 10 without							
Table and feed chain	$\frac{c}{c}$	lair	_					4/22/2021

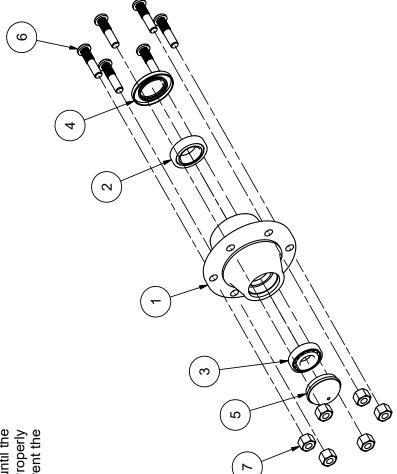






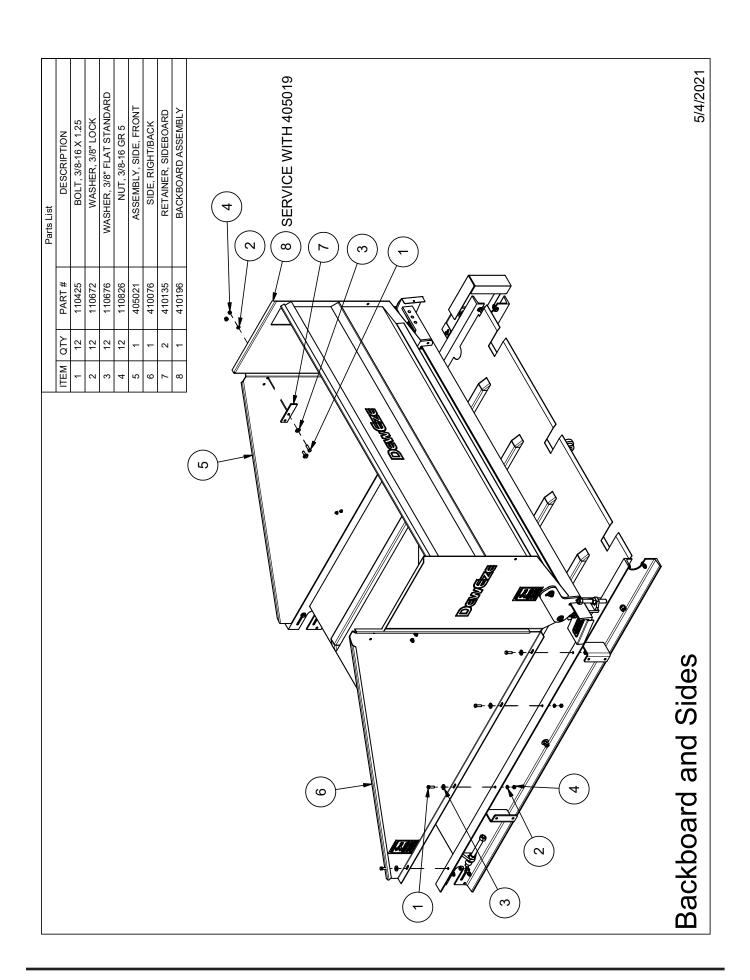


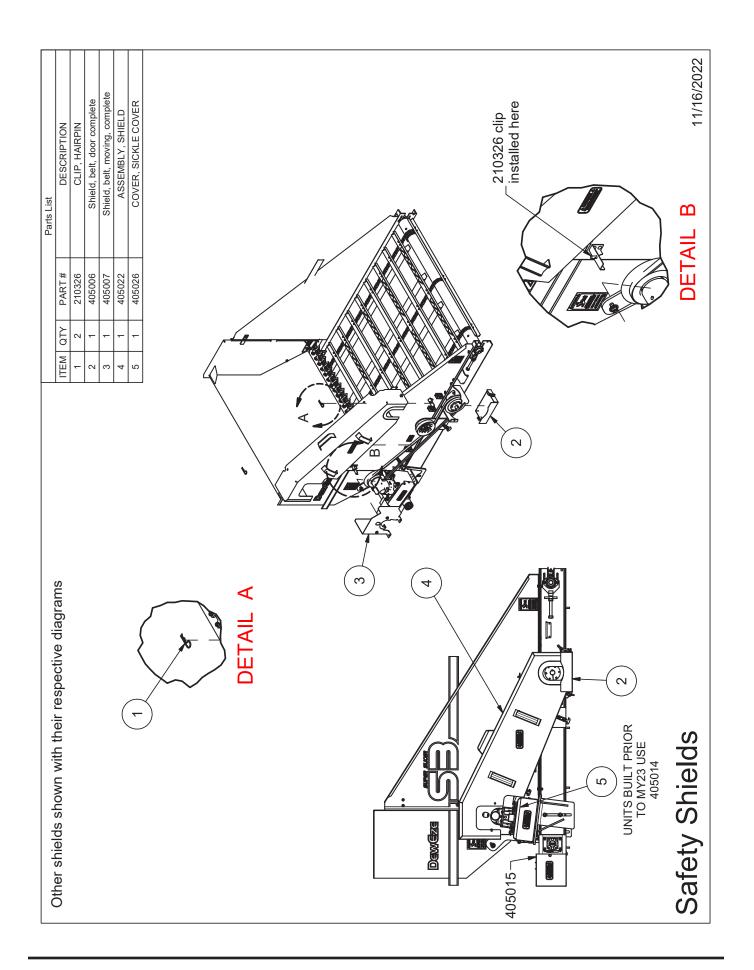
l			Part	Parts List
	ITEM QTY	QTY	PART#	DESCRIPTION
	-	_	410111	Hub 6X6in
	2	1	410104/410114	INNER RACE AND BEARING
	3	1	410103/410115	OUTER RACE AND BEARING
	4	1	410105	SEAL
	2	1	410112	DUST CAP
	9	9	113006	Stud 9/16-18
	7	9	113007	Nut 9/16-18

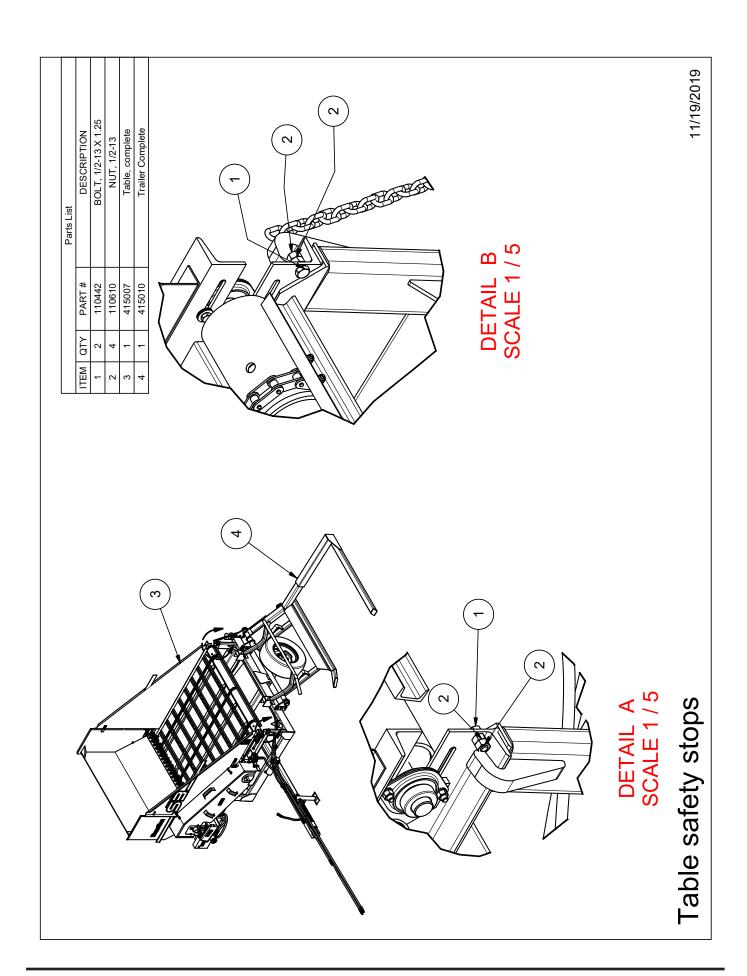


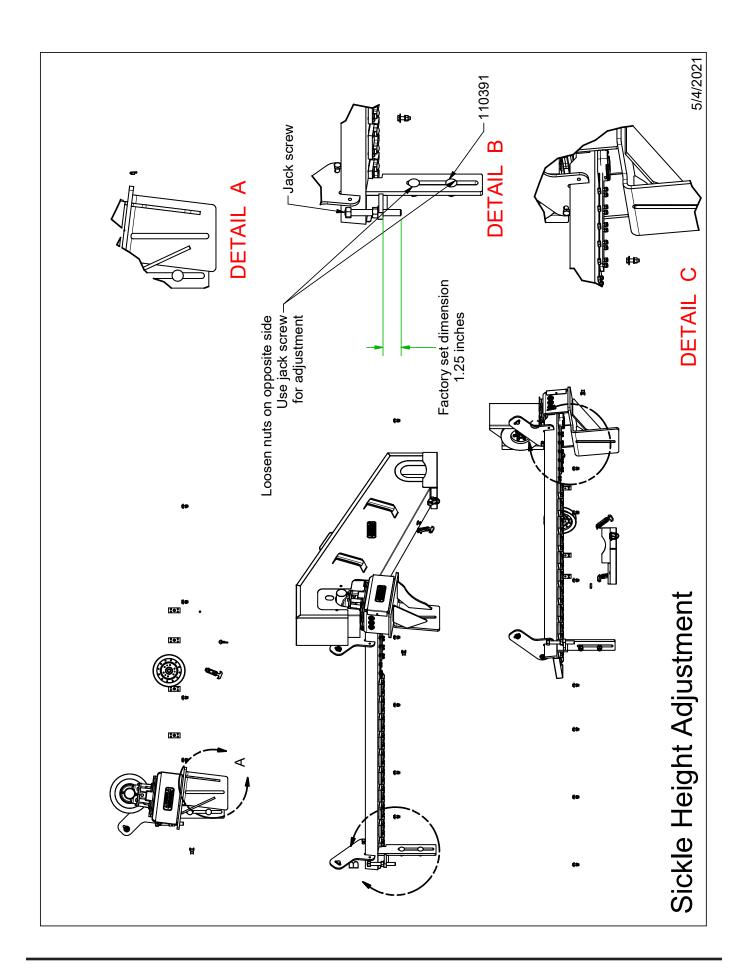
NOTE: Pack bearing cones and lubricate seal lip with grease before assembly.

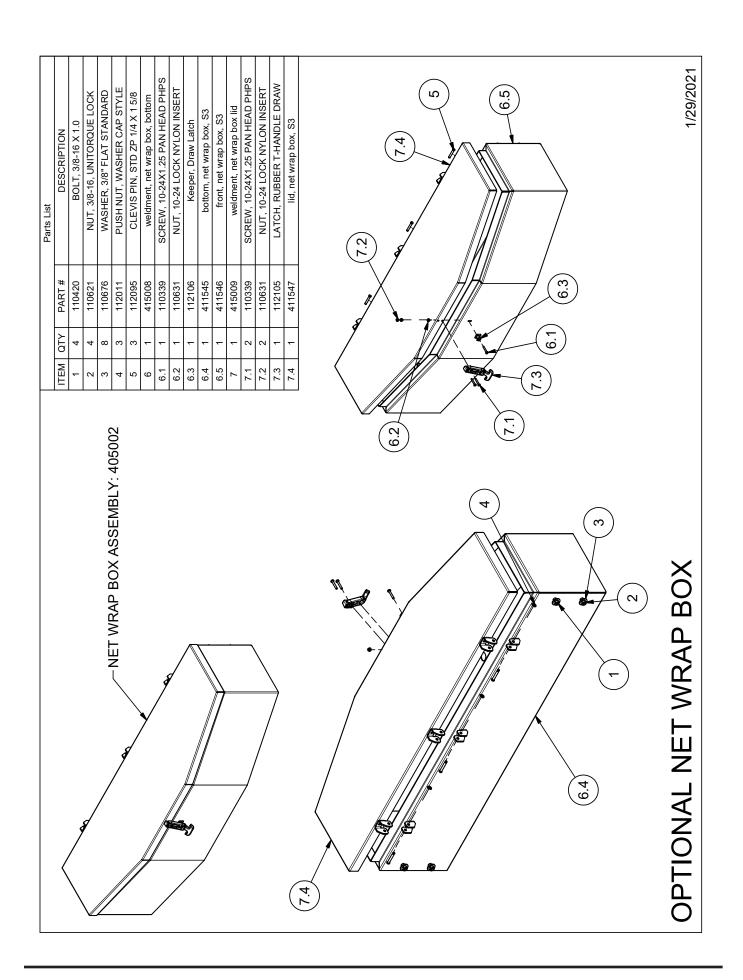
NOTE:

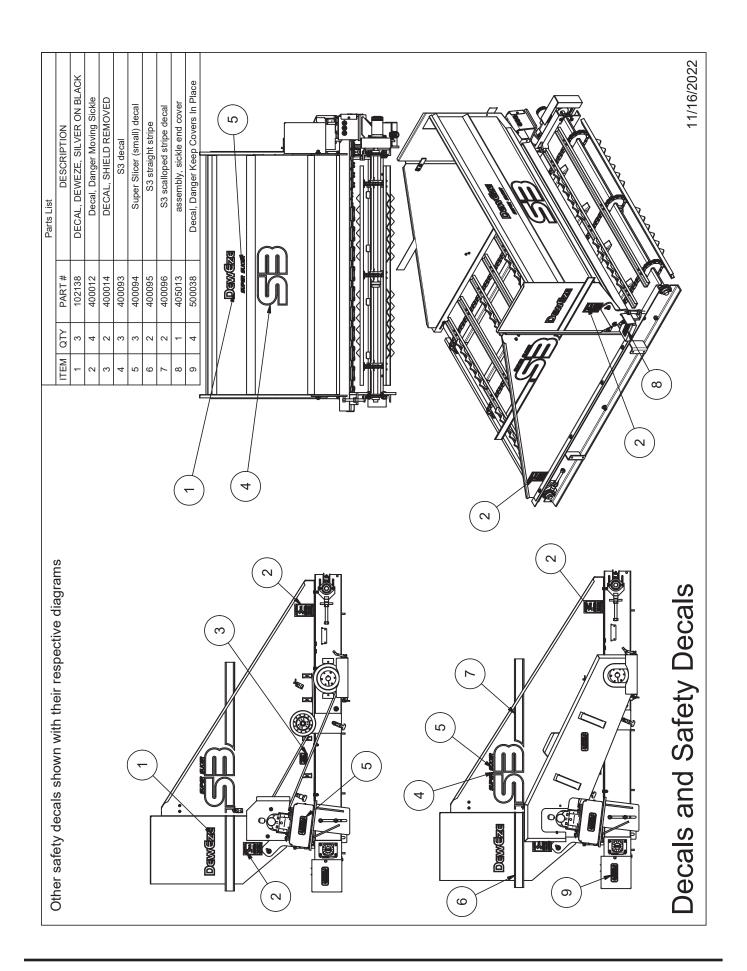


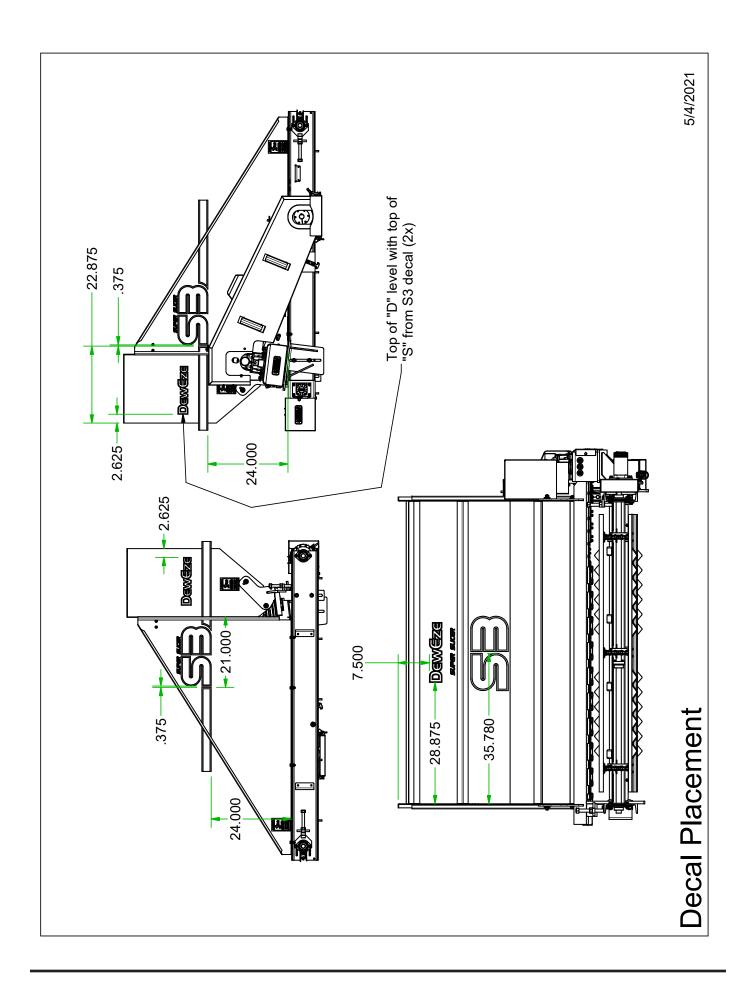


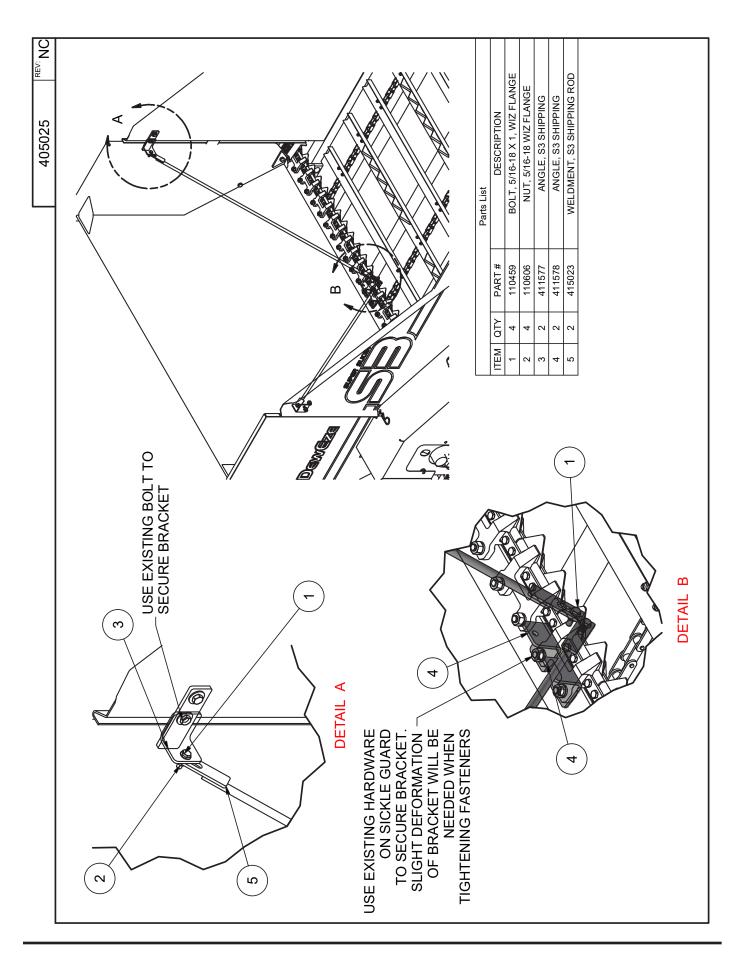


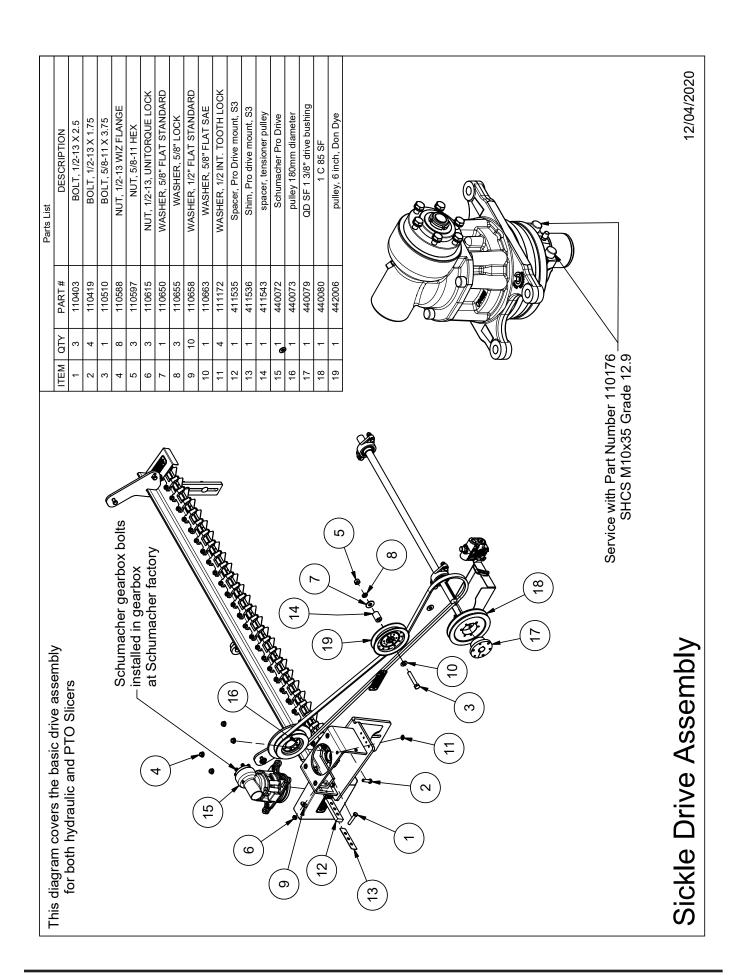




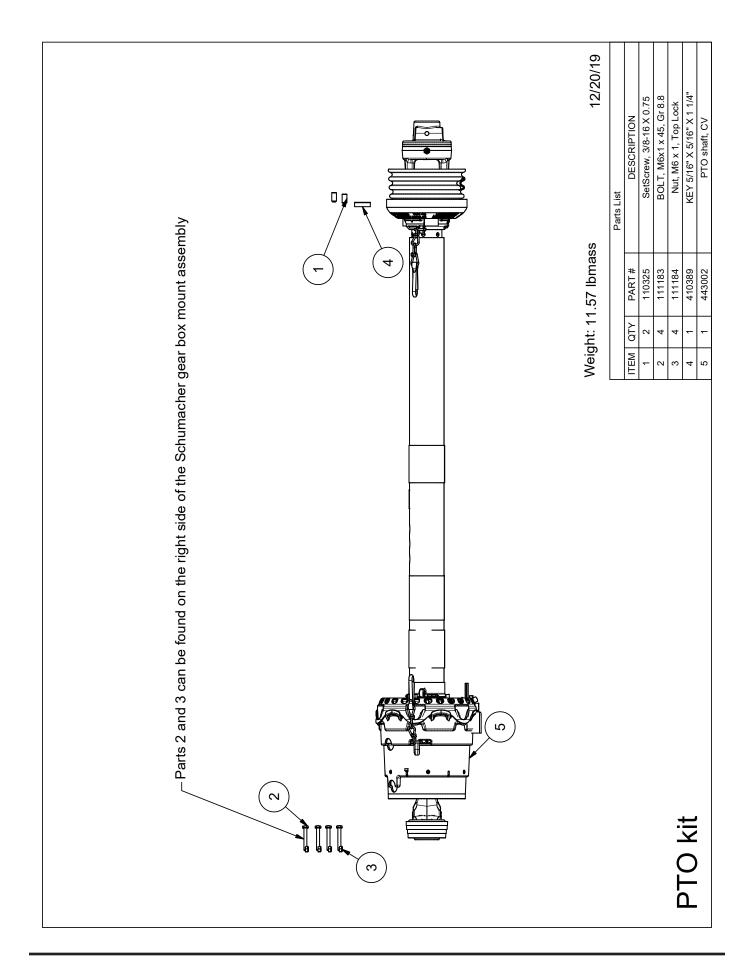


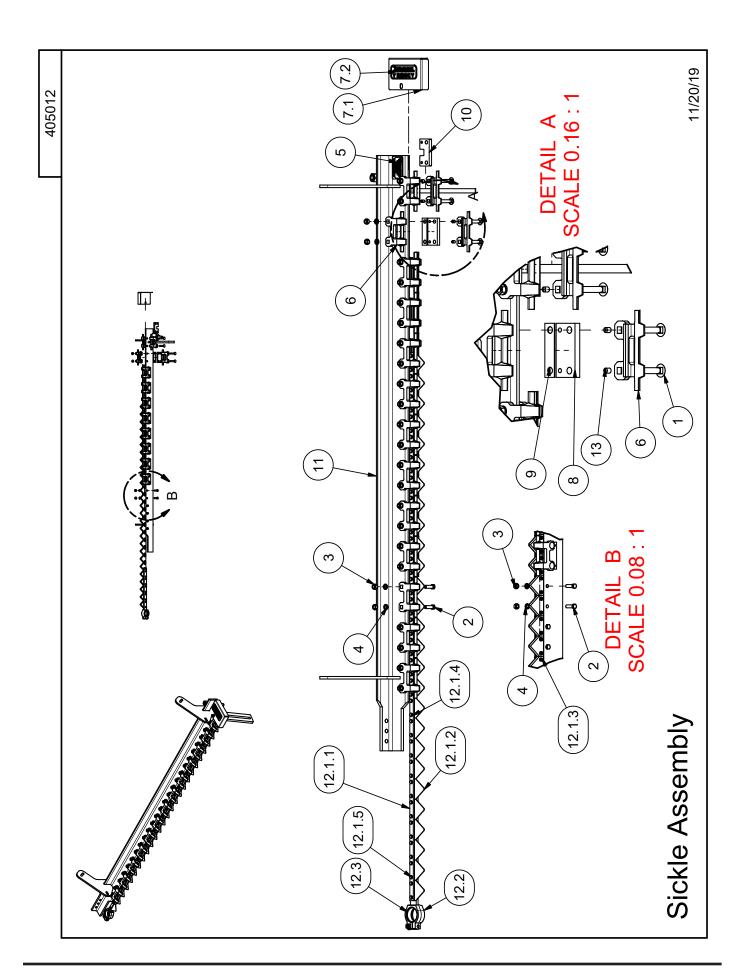






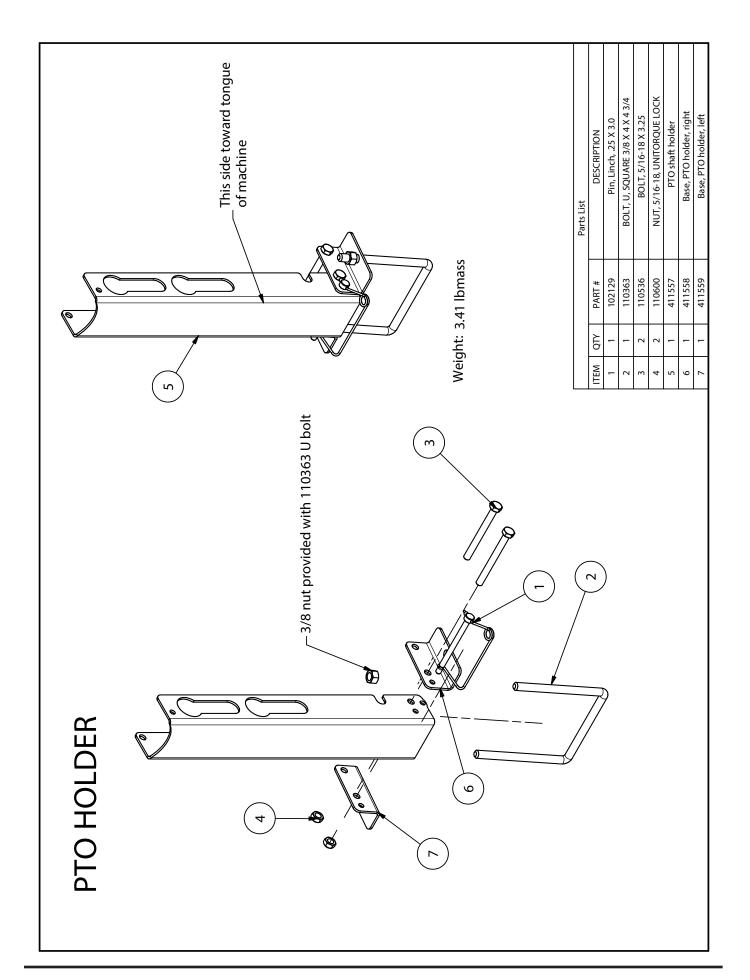


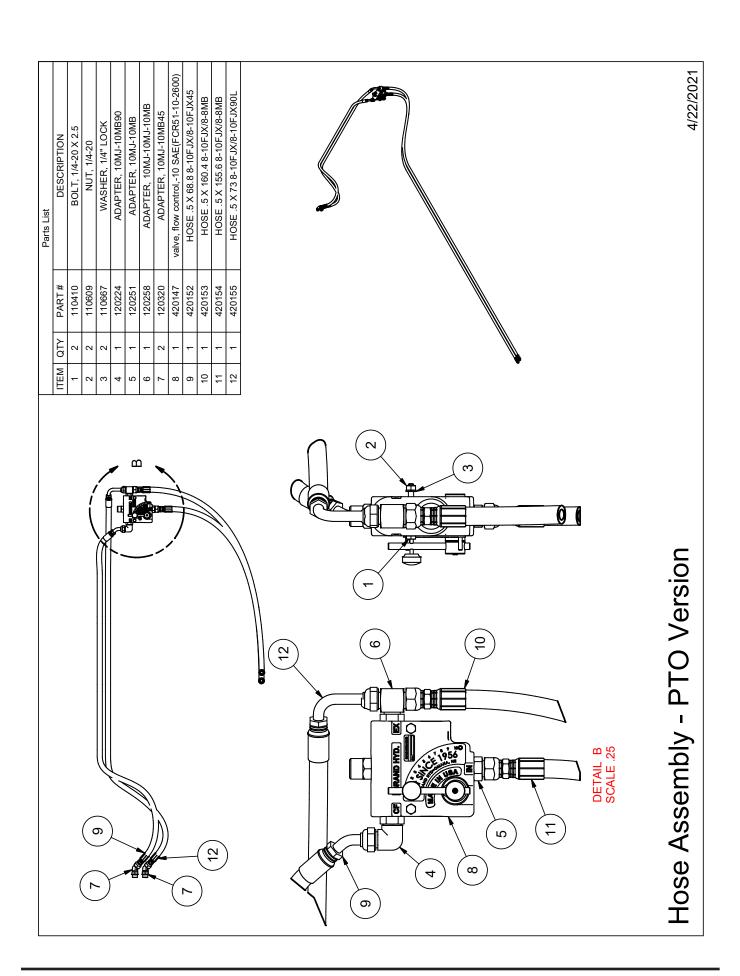


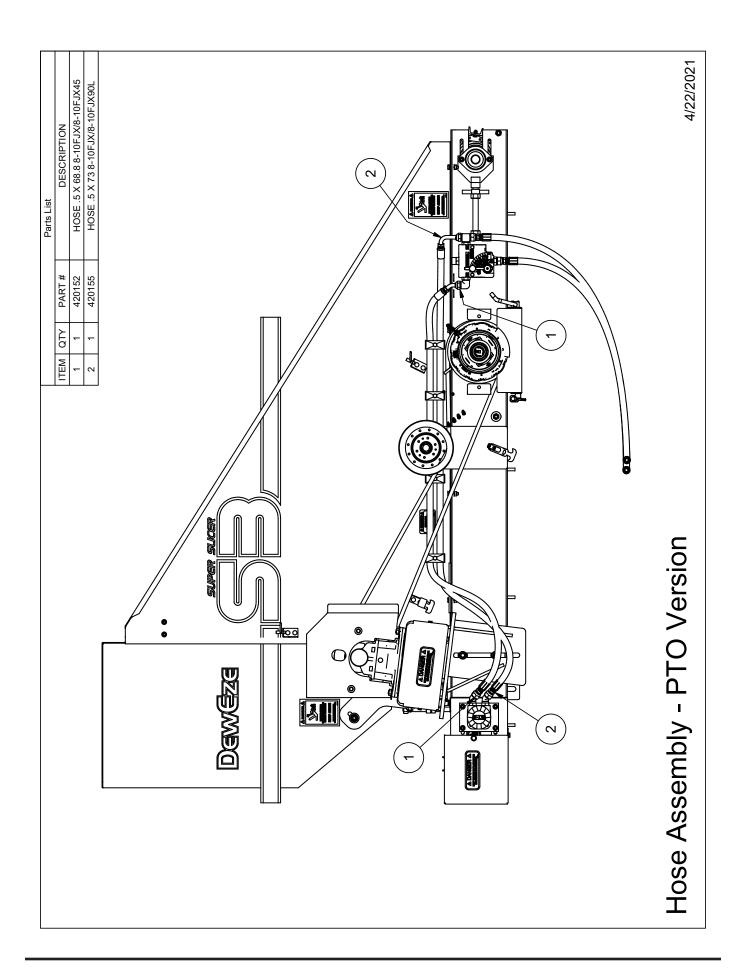


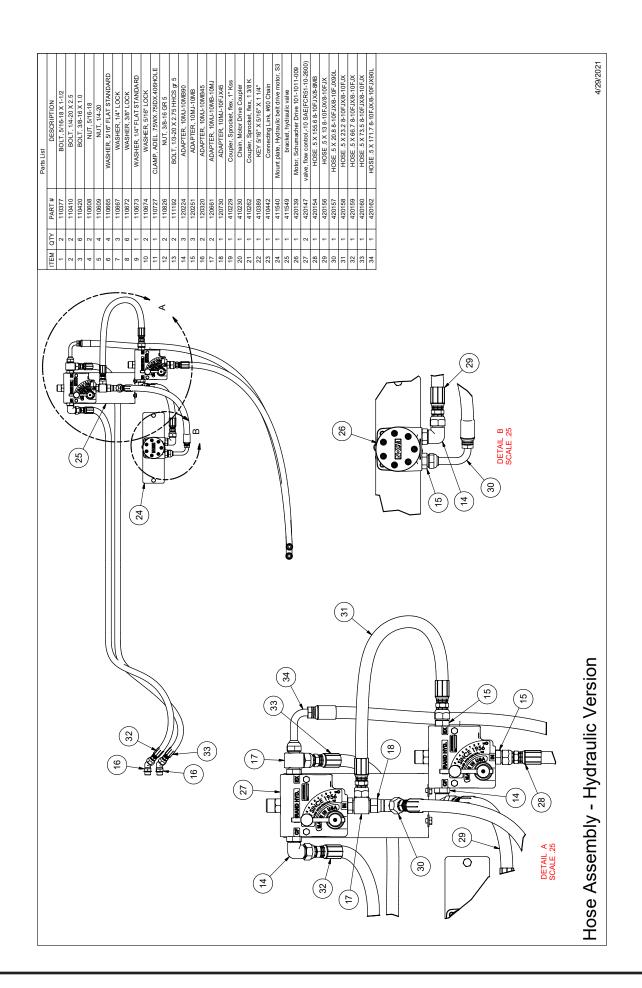
Sickle parts list

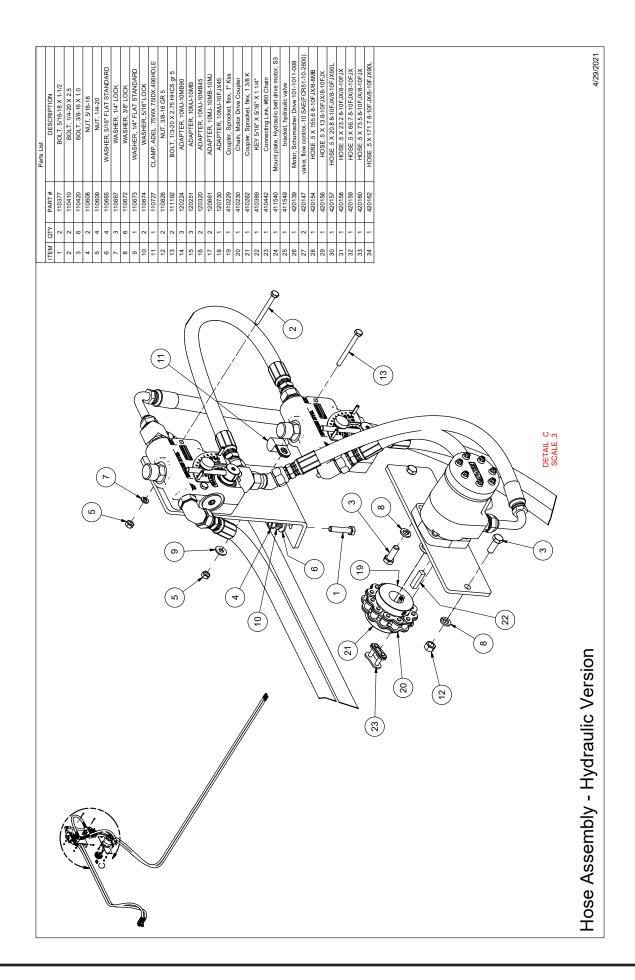
Parts List	DESCRIPTION	Weldment, Sickle mount, S3	complete, sickle assy	sickle, assy, S3	Sickle Bar	Sickle Section, 3"	NUT, 1/4-20 LOCK (NYLON INSERT)	BOLT, 1/4-20 X .75	BOLT, 1/4-20 X 1-1/4	Schumacher sickle connector	Schumacher nylon bushing	SetScrew, 3/8-16 X 0.5	
	PART#	415005	440077	440076	410192	410193	110630	110561	110430	442004	442005	510161	
	QTY	1	1	1	1	27	24	43	11	1	1	20	
	ITEM	11	12	12.1	12.1.1	12.1.2	12.1.3	12.1.4	12.1.5	12.2	12.3	13	
Parts List	DESCRIPTION	Bolt, 7/16-14 X 2.5 in Carriage	BOLT, 7/16-14 X 1.5	NUT, 7/16-14	WASHER, 7/16" LOCK	DECAL, SHIELD REMOVED	Stub Guard, Super Slicer II	assembly, sickle end cover	shield, sickle end plate	Decal, Danger Keep Covers In Place	PLATE, STUB GUARD ADJ.	SHIM, STUB GUARD	Plate, notched stub guard, adj
	PART #	110054	110535	110641	110671	400014	400031	405013	411542	500038	410710	410711	411539
	QTY	20	9	56	56	1	23	-	1	1	6	10	1
	ITEM	-	2	3	4	2	9	7	7.1	7.2	8	6	10

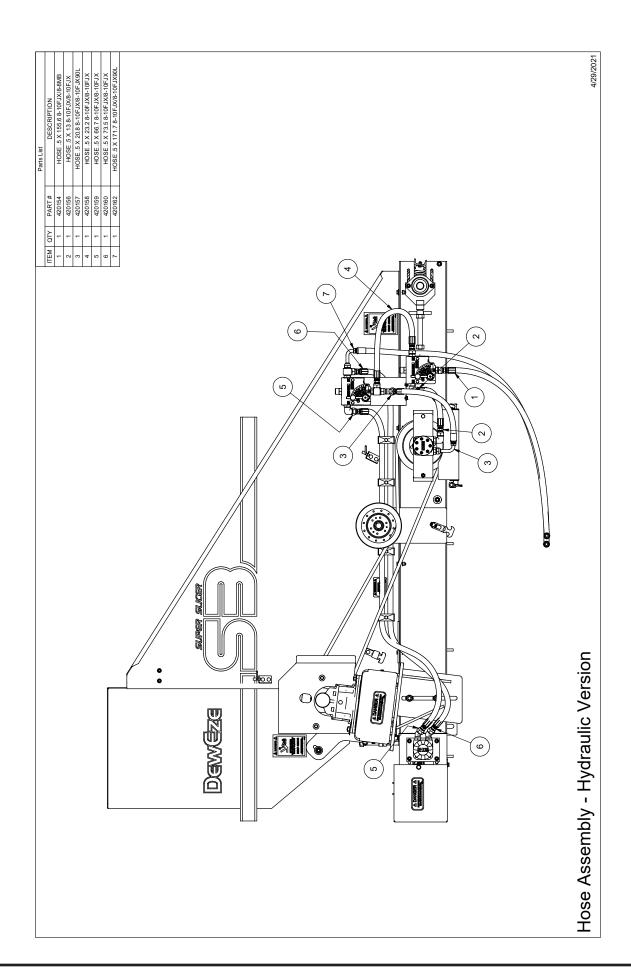












NOTES

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