



BOSS II

SQUARE BALE PROCESSOR



OPERATOR'S MANUAL

2008



BOSS TWO SQUARE BALE PROCESSOR

INTRODUCTION

Your **BOSS TWO SQUARE BALE PROCESSOR** is designed to load and shred all types of forage in large square bales up to 2800 pounds (1270 kg). Maximum length of bales is 102" (274cm) or 8 ½' and the width of bales may vary from 24" (61cm) to 58" (147cm).

The **BOSS TWO SQUARE BALE PROCESSOR** has multiple uses:

1. Laying windrows in open fields.
2. Filling feed bunks – fence line, circular, etc.
3. Spreading forage for livestock bedding.
4. Spreading mulch over perennial plants such as strawberries and mushrooms.
5. Retractable knife section for commodity chopping.

The purpose of this owner's manual is to explain the maintenance requirements and routine adjustments for the most efficient operation of your "BOSS". There is also a troubleshooting section which may help in case of any problems in the field. Any information not covered in this manual may be obtained from your dealer or by contacting the factory at:

Tube – Line Manufacturing Inc.
RR#3 Listowel
Ontario, Canada
N4W 3G8

Tel: 519-291-4162

Fax: 519-291-5388

E-mail: sales@tubeline.com

Sold and Serviced by

SPECIFICATIONS

Tractor horsepower required 60 – 180 H.P
(Higher Horse Power May Be Used With Caution)

Capacity Two (2) Large square bales 2800 lb (1270 kg)

Chamber Size . . . 52" (132 cm) high to 60" (152 cm) wide
102" (259 cm) maximum length

Tire Size 11L15 Tire

Length 132" (335 cm)

Width 140" (356 cm)

Height 93" (236 cm)

P.T.O 1000 R.P.M. (540 Optional)

Dual Hydraulics . . 2500 PSI

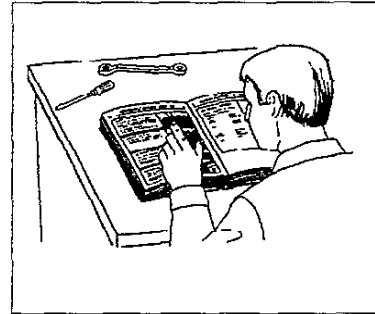
SAFETY

LEARN MACHINE SAFETY

Carefully read this manual. Learn how to operate the machine and how to use the controls properly.

Do not let anyone operate this machine without proper instruction.

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.



UNDERSTAND SIGNAL WORDS

A signal word - DANGER, WARNING, or CAUTION- is used with the safety-alert symbol. DANGER identifies the most serious hazards.

Safety signs with signal word DANGER or WARNING are typically near specific hazards.

General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this user manual

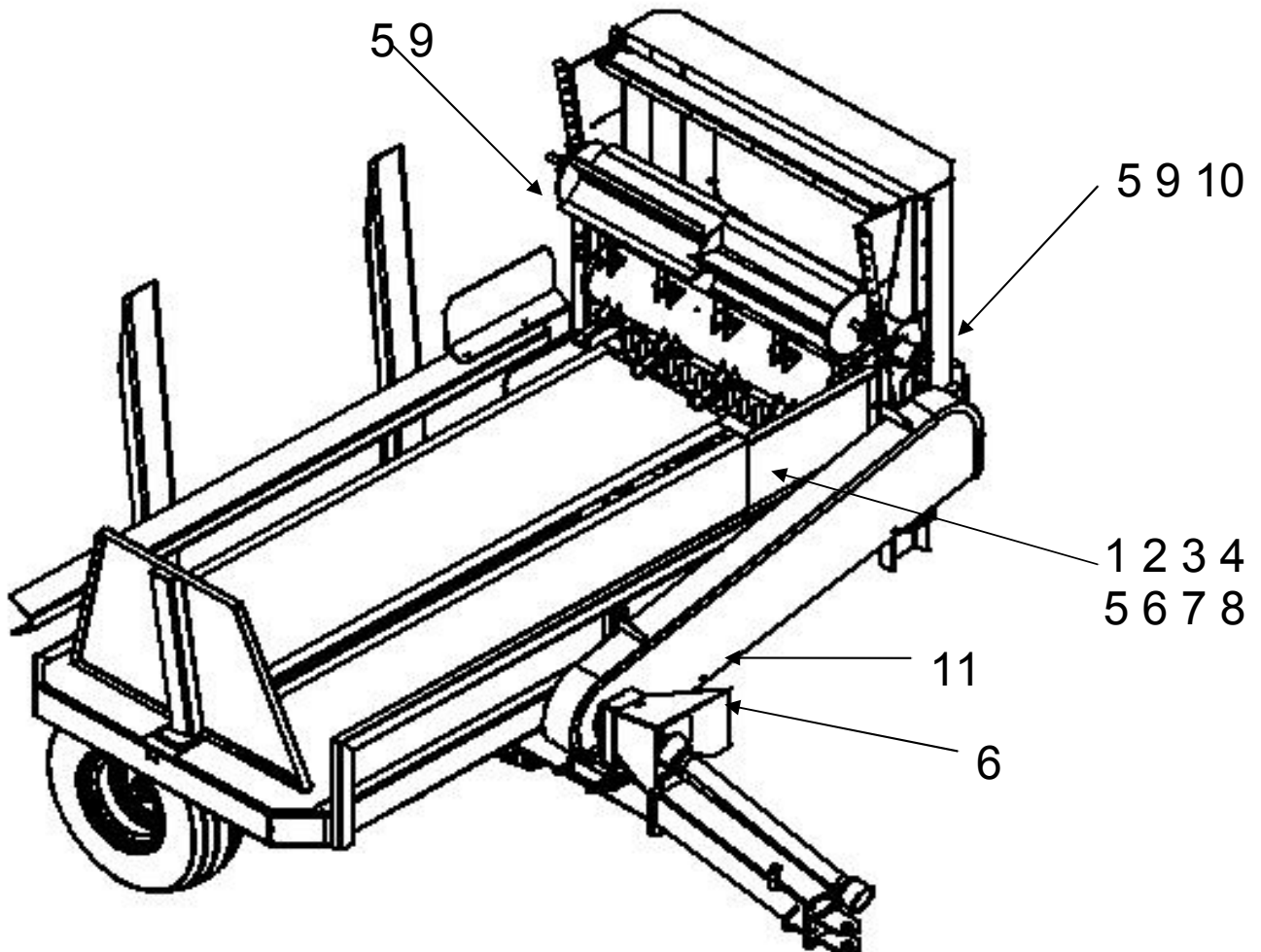


TRANSPORT SAFELY

- Disengage P.T.O. and store jackstand.
- Do not tow loads that weigh more than twice the weight of the tractor.
- Reduce the tractor ground speed when the ground is rough.
- Always keep the tractor in gear when travelling down steep grades.
- To assure adequate braking performance and control, tow only with an agricultural tractor. Safe towing speed depends on the weight of the tractor and the weight of the towed load. Speed should never exceed 32 km/h (20 mph).

SAFETY SIGN LOCATIONS

NO.	DESCRIPTION	
1	WARNING!	Moving Part Hazard
2	WARNING!	High Pressure Fluid Hazard
3	DANGER!	Injury or Death From Pinching
4	WARNING!	Thrown Object Hazard
5	DANGER!	Keep Hands and Feet Away
6	DANGER!	Do Not Operate Without.....
7	WARNING!	To Prevent Serious Injury or Death
8	CAUTION!	To Avoid Injury or Machine Damage..
9	DANGER!	Stop Engine and Remove Key....
10	WARNING!	Stay Clear While Engine is Running
11	WARNING!	Moving Part Hazard



DANGER SIGNS

3

! DANGER



To prevent serious injury or death from pinching:

- Keep all persons and objects clear while any part of this machine is in motion.

SW205

9

! DANGER



Stop engine and remove key before opening cleanout doors.

6

! DANGER



**SHIELD MISSING
DO NOT OPERATE**

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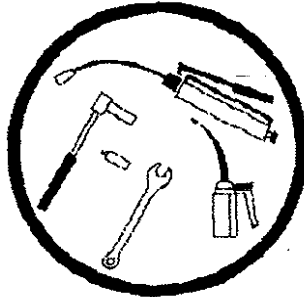
! DANGER

KEEP HANDS AND FEET AWAY



SW803

8



! CAUTION

To Avoid Injury Or Machine Damage:

- When servicing machine use proper tools and equipment.
- Refer to operations manual for instructions.

SW2

WARNING SIGNS

1

WARNING

MOVING PART HAZARD


To prevent serious injury or death from moving parts:

- Close and secure guards and shields before starting.
- Keep hand, feet, hair and clothing away from moving parts.
- Disconnect and lockout power source before adjusting or servicing.
- Do not stand or climb on machine when operating.

SW406

11

WARNING



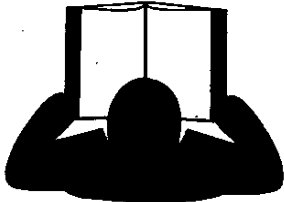
MOVING PART HAZARD

To prevent serious injury or death from moving parts:

- Close and secure guards and shields before starting.
- Keep hand, feet, hair and clothing away from moving parts.
- Disconnect and lockout power source before adjusting or servicing.
- Do not stand or climb on machine when operating.

SW403

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To Prevent Serious Injury or Death



- Avoid unsafe operation or maintenance.
- Do not operate or work on this machine without reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.

10



Stay clear while engine is running.

2

HIGH-PRESSURE FLUID HAZARD

To prevent serious injury or death:

- Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair.

4

WARNING



THROWN OBJECT HAZARD
KEEP AWAY

- To prevent serious injury or death from thrown object:
- Stay away from discharge area during operation. Keep others away.
- Do not point discharge toward people, animals or property.

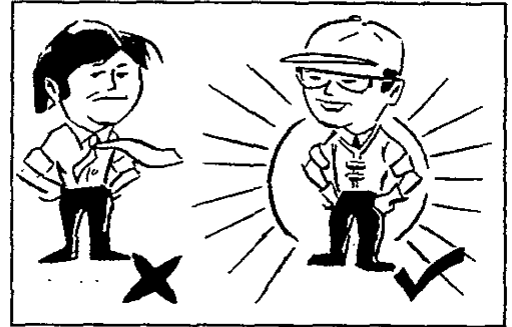
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SAFETY

OPERATE SAFELY

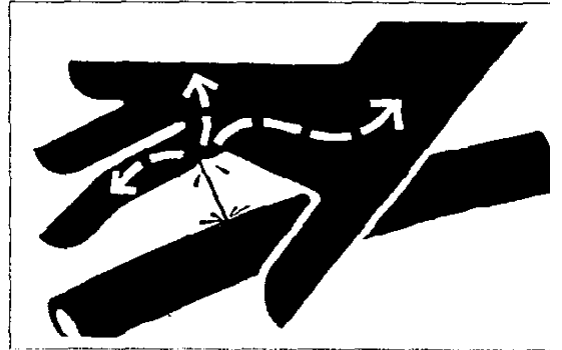
Clothing worn by the operator must be fairly tight and belted. Loose jackets, shirts, or sleeves must never be worn.

Any time work work is being done under the forks, the hydraulic cylinder safety stop must be placed in the safety position.



AVOID HIGH PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve the pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.



If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury or gangrene may result.

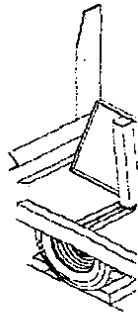
SAFETY

CHECK BEFORE OPERATING

- Become familiar with all controls
- √ Check all hardware; especially knife and knife drive hardware
- √ Check the condition of hydraulic hoses and connections.
- √ Check the condition of the drive belts.
- Remove foreign objects from the machine.
- Inspect driveline shield for free rotation.
- Be sure all shields are in place.

OPERATE SAFELY

- Keep all shields in place
- Avoid operating processor when making sharp turns or in steep banked gullies.
- Under no circumstance should a processor equipped for 540 rpm PTO be operated with 1000 rpm PTO. Nor should a 1000 rpm PTO processor be operated with a tractor equipped with 540 PTO.
- DO NOT allow riders on processor.
- Drive slowly through gates and doors.
- Reduce tractor ground speed when turning or travelling on rough terrain. Avoid travelling over loose fill, rocks, ditches or holes.

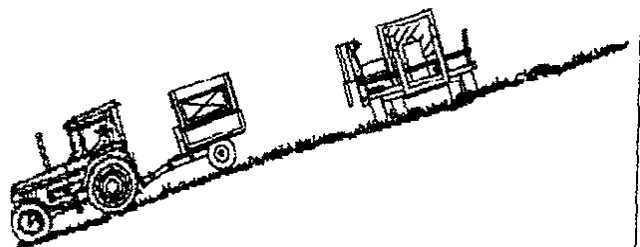


PARK SAFELY

Always park the processor on level ground and block the wheels when not in use.

WORKING ON INCLINES

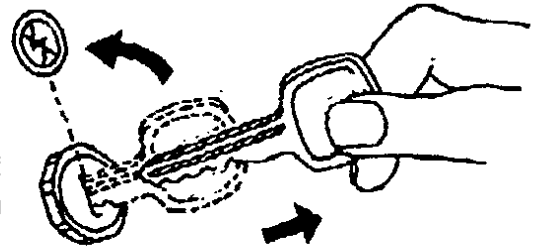
When working on inclines or slopes, travel uphill or downhill. Be sure to keep tractor transmission in gear when travelling downhill.



SAFETY

SERVICE MACHINE SAFELY

- Always engage tractor parking brake or place transmission in "PARK", lower forks to the ground, shut off engine, and remove key before servicing.
- Do not work under raised machine parts unless it is securely blocked or safety props are in position
- Before disconnecting hydraulic hoses, relieve all hydraulic pressure.



PRACTICE SAFE MAINTENANCE



- Understand service procedures before doing work.
- Never lubricate or service machine while it is moving. Keeps hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower forks to the ground.
- Securely support any machine elements that must be raised for service work.
- Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

PROTECT BYSTANDERS

- Never operate the machine near people. Do not stand near the machine when the machine is running.
- Keep all shields in place.
- DO NOT allow children to operate the tractor.
- Operate the machine from the tractor seat only.

BEFORE OPERATING

KEEP CHAINS AND BELT AT PROPER TENSION

- √ Machine is assembled complete at the factory less hitch mountings.
- √ Adjust the height of the machine so that it is parallel with the ground.



Improper hitch adjustments may cause separation of the PTO driveline when operating over uneven terrain.

- √ The machine's hydraulic system requires dual outlets on the tractor.

BEFORE OPERATING

P. T. O. DRIVELINE

P. T. O. shaft driveline maintenance instructions must be read before attaching and operating driveline. The maintenance instructions are attached to the chain supplied on the driveline.

FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE DRIVELINE AND MACHINE AND MAY VOID WARRANTY

When lubricating driveline telescoping shafts, it is imperative that yokes remain phased. In order to maintain phasing, the flat profile of the inner tube must be engaged with the flat profile of the outer tube. Failure to do so will result in damage to cross and bearings and premature shearing of the shear bolt.

Shear bolt replacement must be done only with shear bolts of the same grade and diameter supplied on driveline.

Proper and adequate length of driveline must be maintained in order to have maximum one third engagement of telescoping tubing.

*Too short of a driveline will result in premature failing of driveline.
Too long of a driveline will result in damage to driveline, tractor P. T. O.
and implement.*

P. T. O. shaft driveline must not be opened without all safety shields in place.

P. T. O. shaft driveline must be attached securely before operating.

At no time should any persons be in the immediate area of the P. T. O. shaft driveline and machine while the P. T. O. shaft driveline is being operated.

CAUTION:

Tractor P. T. O. must be disengaged and tractor must be **SHUT OFF** before approaching or contacting the P. T. O. shaft driveline.

MAINTENANCE and ADJUSTMENTS

CAUTION:

The flail tube in this machine is a fully balanced assembly. If for any reason the flails must be removed, they **MUST BE RETURNED** to the **SAME POSITION** they were taken from. If this is not done a balance problem will result causing machine vibration. Number flails and inserts and their positions before you do any work.

Before performing any maintenance or adjustments make sure machine is **NOT** running. If for any reason arc welding is to be done, always ground the cylinder to the frame of the machine to prevent arcing in the bearings.

1. Check for loose or badly worn parts.
2. Conveyor chain should be adjusted to allow chain slack 1" (2.54 cm) to 1 1/2" (3.8 cm)
3. Follow the Lubrication Chart.
4. Inspect rotor and all rotating parts for twine or wire build-up.
5. Inspect and tighten Allen screws on bearing after the first 10 hours of operation.
6. Check air pressure in tires - 35 lb (15.9 kg).
7. Discharge deflector has adjustments to allow forage to be spread to any desired width.
8. Check for broken flails. Replace with new "BOSS" flails to keep the machine in balance.

STARTING MACHINE

WARNING:

- √ Make sure that bales are free from foreign objects. Foreign objects in bale may cause damage to the machine or cause serious injury or death to livestock, bystanders or operator.
- √ Make sure any bystanders are away from the machine and discharge before engaging P. T. O. Flying objects can cause serious **INJURY** or even **DEATH**.

This machine is set up to operate on a 1000 R.P.M P. T. O. (540 R.P.M is optional)

The machine's hydraulic system performs two (2) functions. One function tilts forks for loading bales on top of the machine. The second function powers the bale pusher by means of a hydraulic motor. Desired speed of the pusher is controlled by a flow control valve located on the front of the machine. Decreasing the speed of the pusher allows flail knives to chop forage finer, increasing the speed leaves forage coarser when the knives are in the upward position.

The table knives may be lowered for coarse chopping, spreading forage over perennial plants or livestock bedding.

Operating the tractor at maximum PTO R.P.M. allows machine to do a better job of chopping forage.

Twine build-up should be kept to a minimum to reduce fire hazard and keep the machine in balance.

Always load one bale at a time. A second bale may be carried on the forks. If bales are frozen, put the frozen side down to the table for better operation.

Centre the bale on the forks before loading on to the table. Slide forks lightly on the ground when loading bales on the forks. Store bales on level ground so that bales can be loaded with ease. Bales should be stored on a clean surface free from rocks and other foreign objects.

Check for cylinder wear and broken flails and flail bracket wear.

BOSS TWO SQUARE BALE PROCESSOR WARRANTY

For one year from delivery date TUBE-LINE MANUFACTURING LTD. will replace or repair for the original purchaser, free of charge, any part or parts found upon examination at our factory in Elmira, Ontario, to be defective in material or workmanship under normal use and maintenance.

This warranty does not apply to tires, bearings, flails, Knives or any other trade accessories not manufactured by TUBE-LINE MANUFACTURING. The buyer must rely solely on the existing warranty, if any, of those respective manufacturers.

Limited warranty on commercial use.

This warranty shall become void if the processor has been subject to misuse, negligence, alterations, accident or lack of required maintenance.

This warranty does not cover personal injury or any damage done to the processor or anything else if caused by foreign material put through the processor.

Wheel nuts must be tightened at 150 km and periodically thereafter.
Flail bolts must be tightened before use and periodically thereafter.

The 'Warranty Registration' form must be filled out and signed to validate warranty.

Replacement parts are available only through your "Boss" Bale Processor dealer.

To obtain the fastest service, please remember to:

- 1) Order by part number
- 2) Give the model year
- 3) Include the serial number

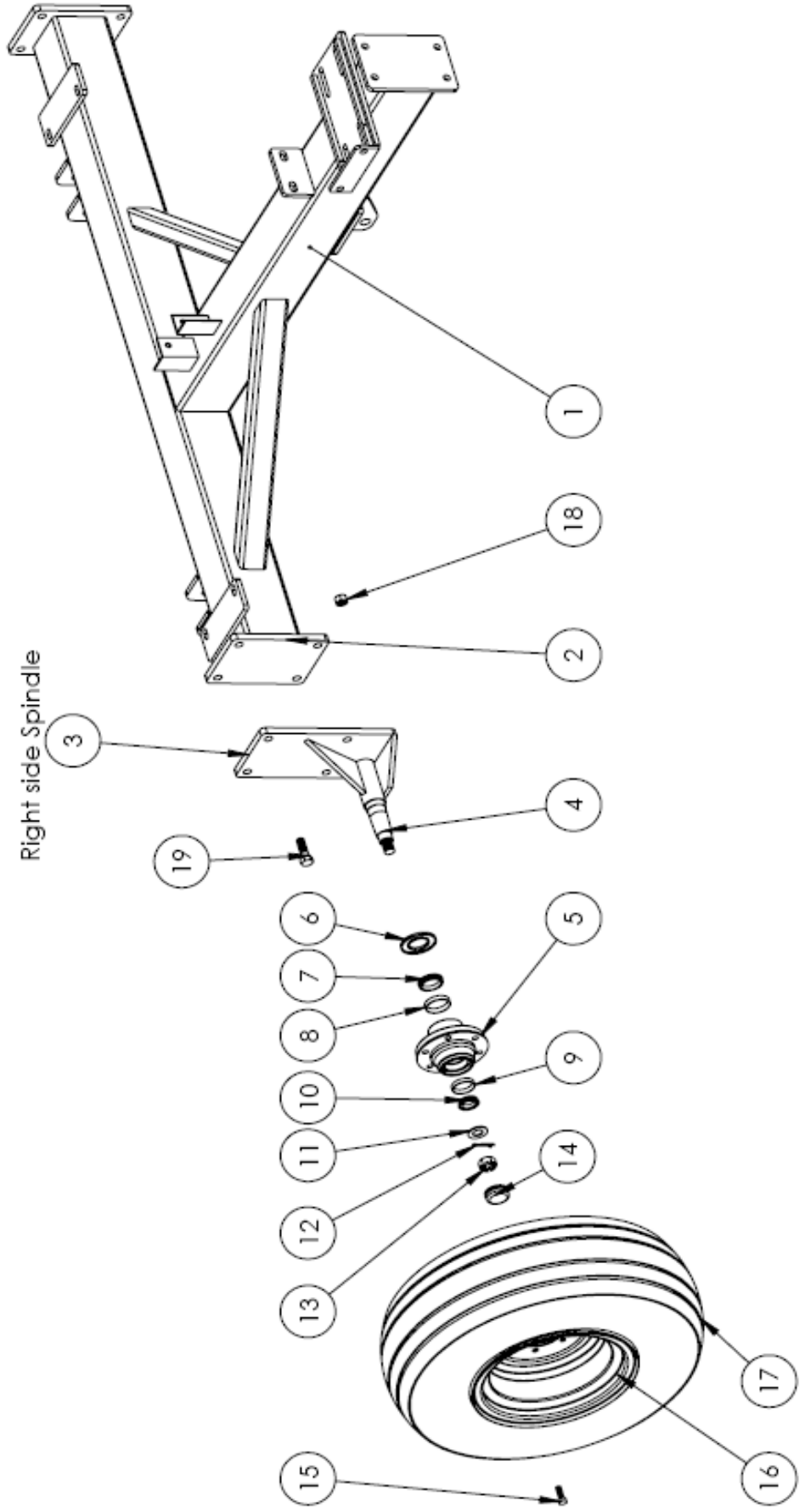
Purchaser _____
Date of Purchase _____
Serial Number _____

Always use your Serial Number when referring to parts or problems.

TIRE AND AXLE ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	200092A	Axle Tube, Main Hitch	1
2	200095A	Bolt-on Spindle Plate	2
3	208120	Right Spindle Weld Assembly	1
	208121	Left Spindle Weld Assembly	1
4	208122	Straight Spindle (2 ¼" x 12 ¾")	
5	208126	Hub (W-6000)	2
5A	208127	Hub c/w Parts (W-6000) (Ref.#6-15)	
6	208123	Seal	2
7	208124	Inner Bearing	2
8	208125	Inner Cup	2
9	208128	Outer Cup	2
10	208129	Outer Bearing	2
11	208130	1" Washer	2
12	208131	Cotter Pin	2
13	208132	1" Slotted Hex Nut (1 – 14)	2
14	208133	Dust Cap	2
15	208134	Wheel Bolt (9/16 x 1 ¾)	12
16	208135	15 x 8 x 6 Rim	2
17	208136	11L – 15 x 6 Ply Tire	2
18		¾ – 10 Locknut	8
19		¾ – 10 x 2 ½	8

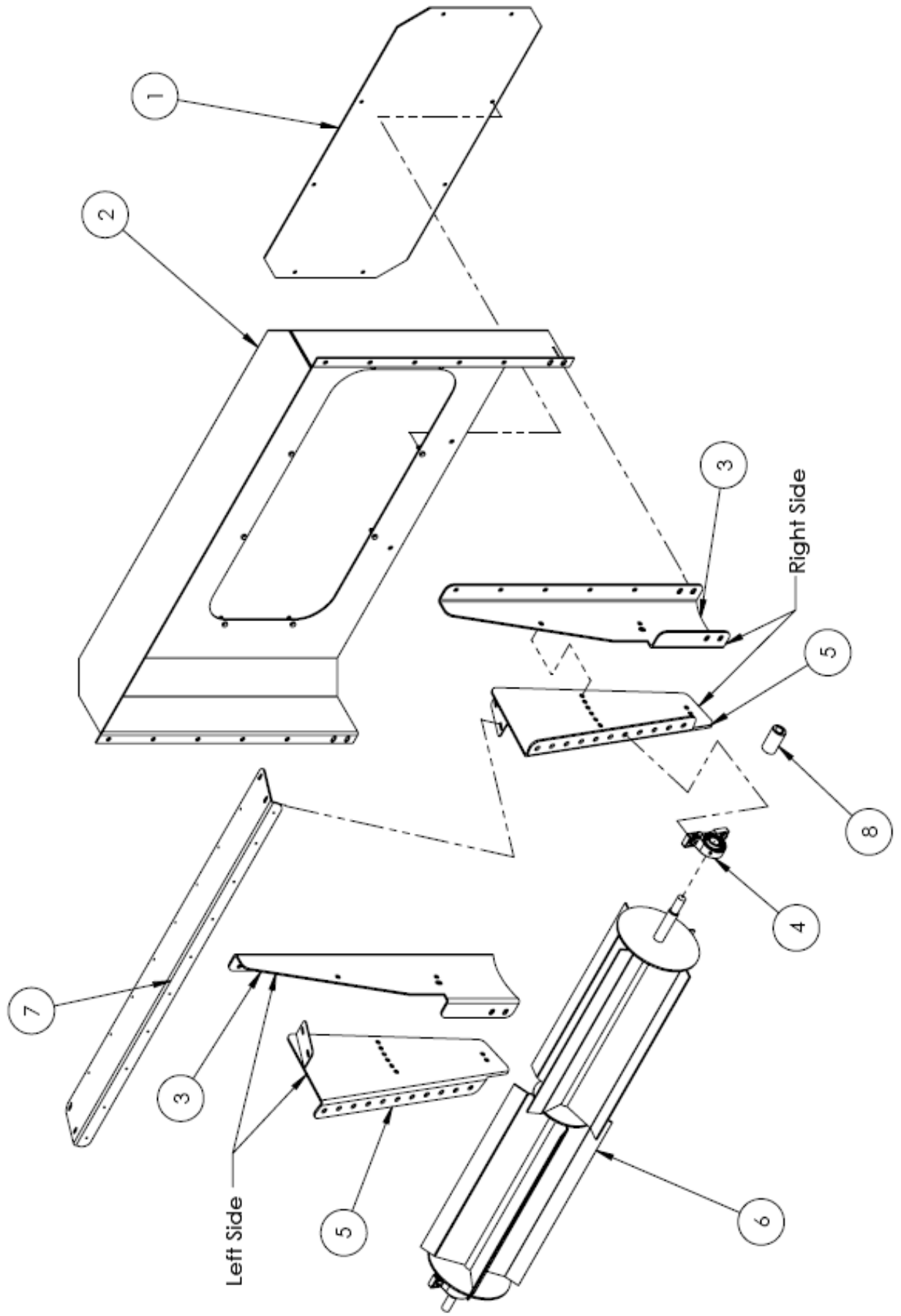
TIRE AND AXLE ASSEMBLY



UPPER BEATER ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	200174 B	Front Plate, Upper Lid	1
2	200170 D	Front Shield	1
3	200172 C	Outer Side Plate, Right & Left	2
4	208137	1 ¼ Pillow Block Bearing	2
5	208138	Inner Side Plate, Right & Left	2
6	208139	Upper Beater	1
7	200175 B	Top Plate Roof Cover	1
8	208115 A	Top Beater Motor Coupler	1

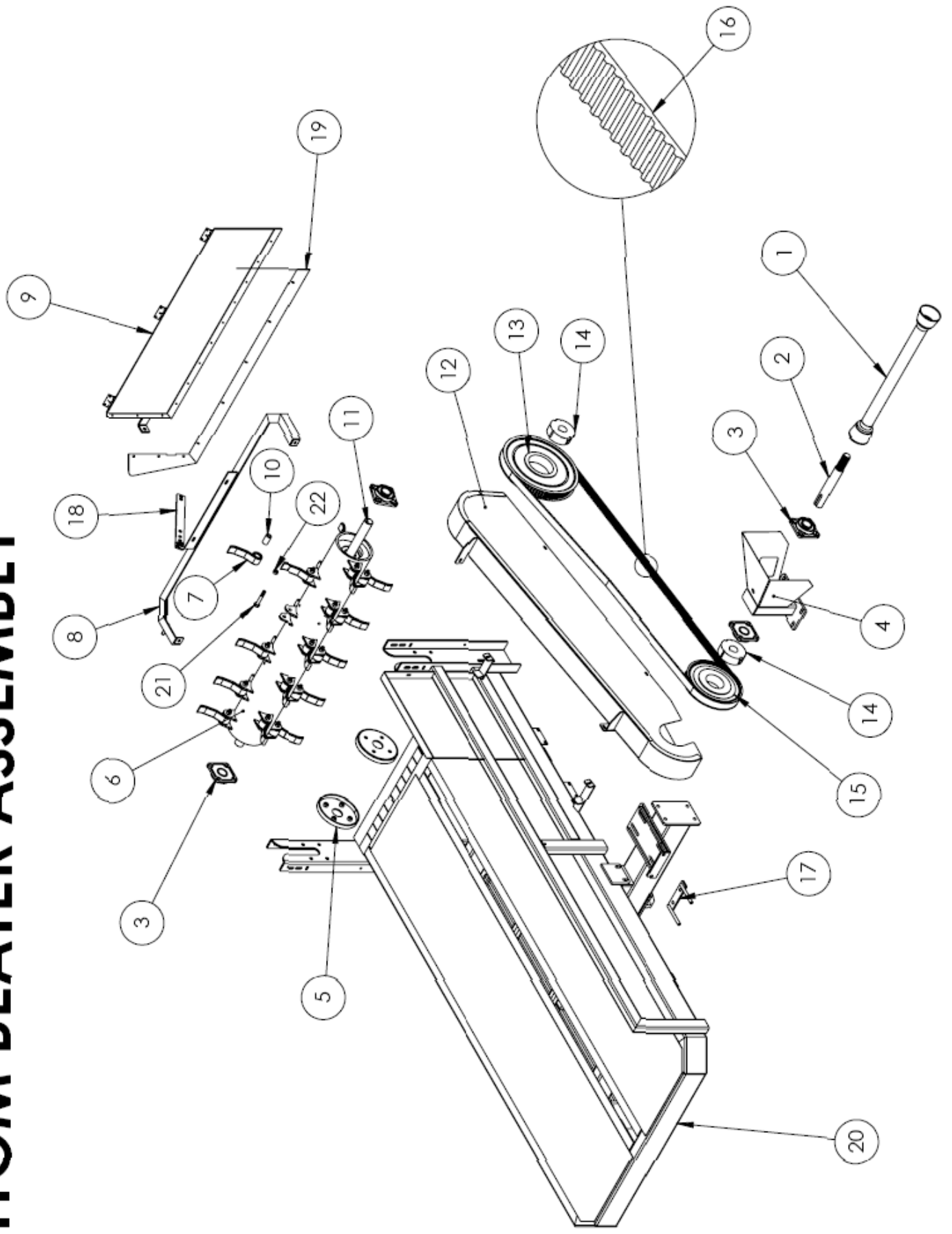
UPPER BEATER ASSEMBLY



BOTTOM BEATER ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	208140	PTO Complete	1
2	200163 A	PTO Stub Shaft	1
3	199399 A	Square Bearing, 2" Bore c/w zerk	4
4	200150 A	PTO Shield	1
5	208141	Bearing Protector	2
6	208142	Bottom Beater	1
7	200060 A	Flail	20
8	200177 B	Outer Lid Support Angle	1
9	208143	Front Bottom Beater Lid	1
10	200059 A	Flail Bushing	20
11	200169 A	2" Shaft, Flail Tube	1
12	208144	Belt Shield	1
13	208102	Pulley Sprocket 80T	1
14	208103	Taper Lock Hub c/w Setscrews	2
15	208104	Pulley Sprocket 60T	1
16	200165 A	Drive Belt	1
17	200106A	Pulley Adjusting Bracket	1
18	208105	Side Discharge Adjuster	1
19	208106	Side Discharge Deflector	1
20	200100 A	Main Frame, Deck	1
21	208150	5/8-18NFT x 4 GR8 Bolt	20
22	208151	5/8-18NFT Steel Locknut	20

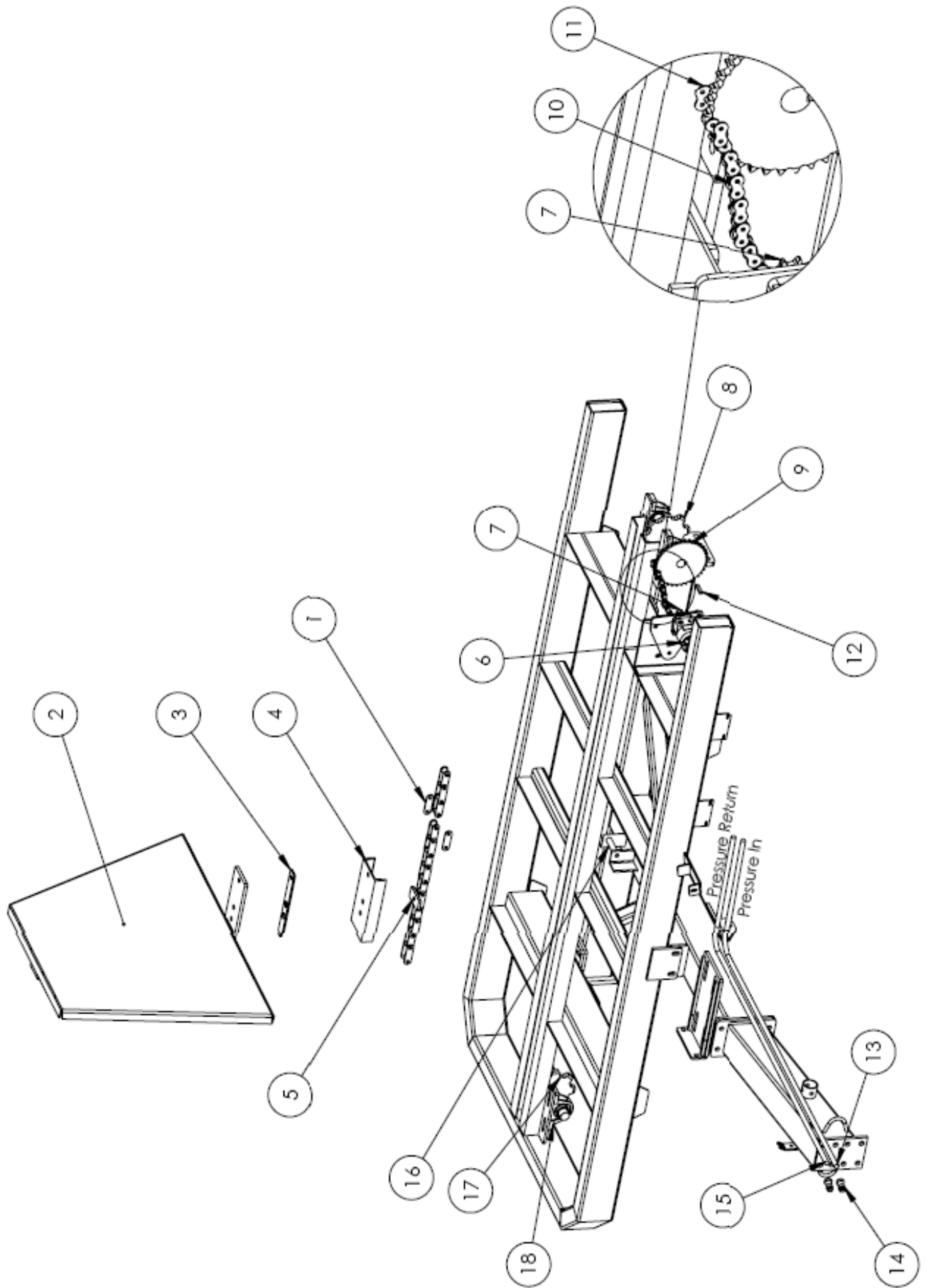
BOTTOM BEATER ASSEMBLY



BALE PUSHER ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	199199 A	Connector Link	1
2	200003 A	Bale Pusher	1
3	200001 A	Guide Plate,Bale Pusher	1
4	200000 A	Mount Channel, Bale Pusher	1
5	200145 A	Conveyor Chain	1
6	208107 A	1006 Hydraulic Motor	1
7	198998 A	Sprocket 60B11	1
8	200141 A	Drive Sprocket, 8T	1
9	208108 A	Sprocket 60B36	1
10	208109 A	Roller Chain #60H x 37 3/8" (50 Links)	1
11	208110 A	Connector Link #60H	1
12	200143 A	3/8" Keystock, 2" Long	1
13	BS-01	Hydraulic Hose Pressure In	1
14	HF 8010 – 4	Pioneer Ends 1/2"FPT	2
15	BS-04	Hydraulic Hose Pressure Out	1
16	200090 A	Conveyor Chain Bushing	1
17	200138 A	Idler Sprocket, 8T	1
18	199398 A	Pillow Block Bearing, 1-1/2" Bore	4

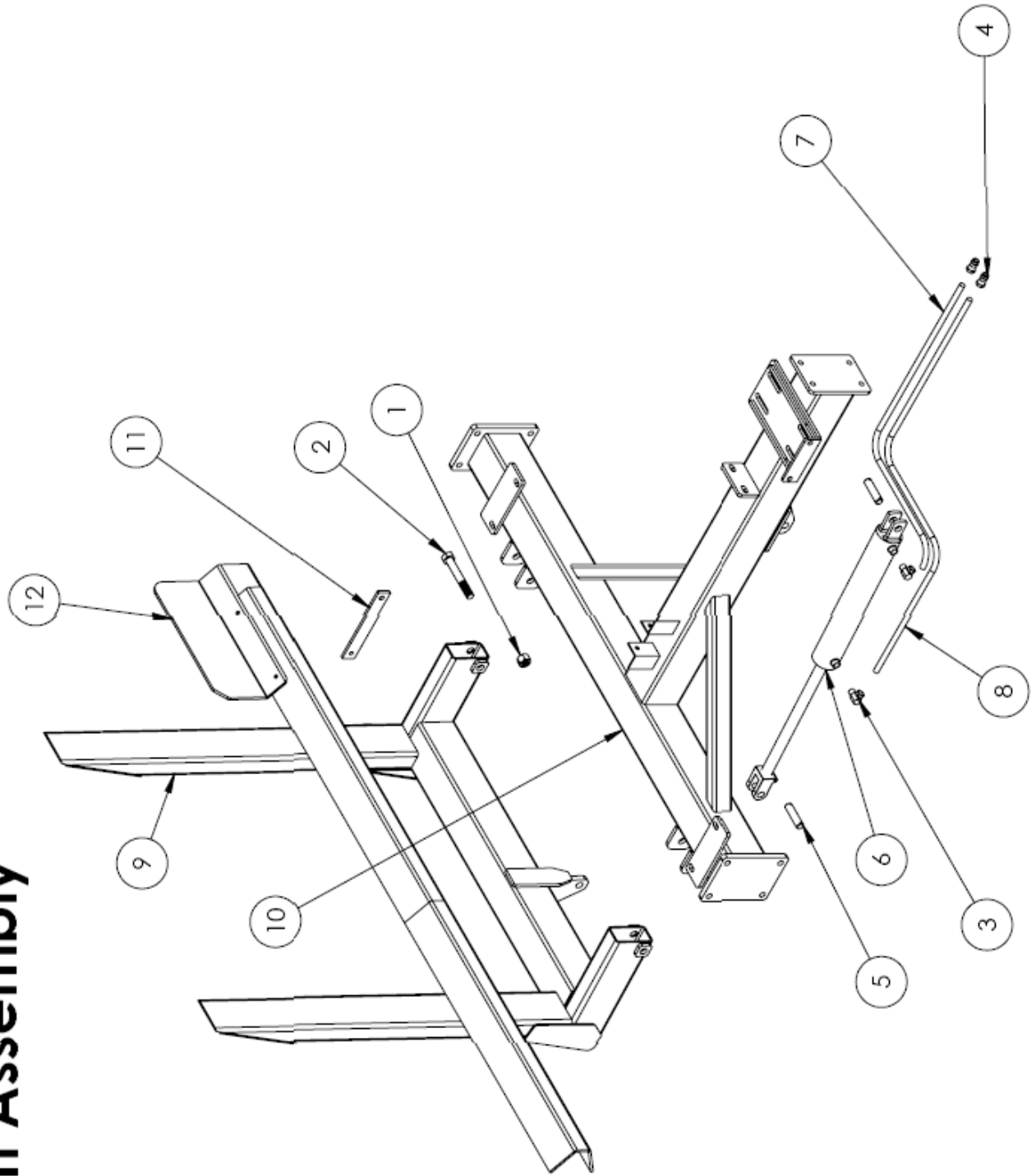
BALE PUSHER ASSEMBLY



FORK LIFT ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1		1"-8 Lock Nut	2
2		1"-8 x 7 Hex Bolt Gr.5	2
3	HF 1501 – 8 – 8	Elbow Swivel 90°, 1/2" MPT x 1/2" FPT	2
4	HF 8010 – 4	Pioneer Ends 1/2" FPT	2
5	199799 A	Cylinder Pin 1"	2
6	199899 A	Fork Lift Cylinder	1
7	BS-09	Cylinder Blank End Hydraulic Hose	1
8	BS-10	Cylinder Rod End Hydraulic Hose	1
9	208145	Fork Lift	1
10	200091 A	Main Hitch	1
11	208112	Lock Strap, Fork Lift	1
12	208146	De-Dribbler	1

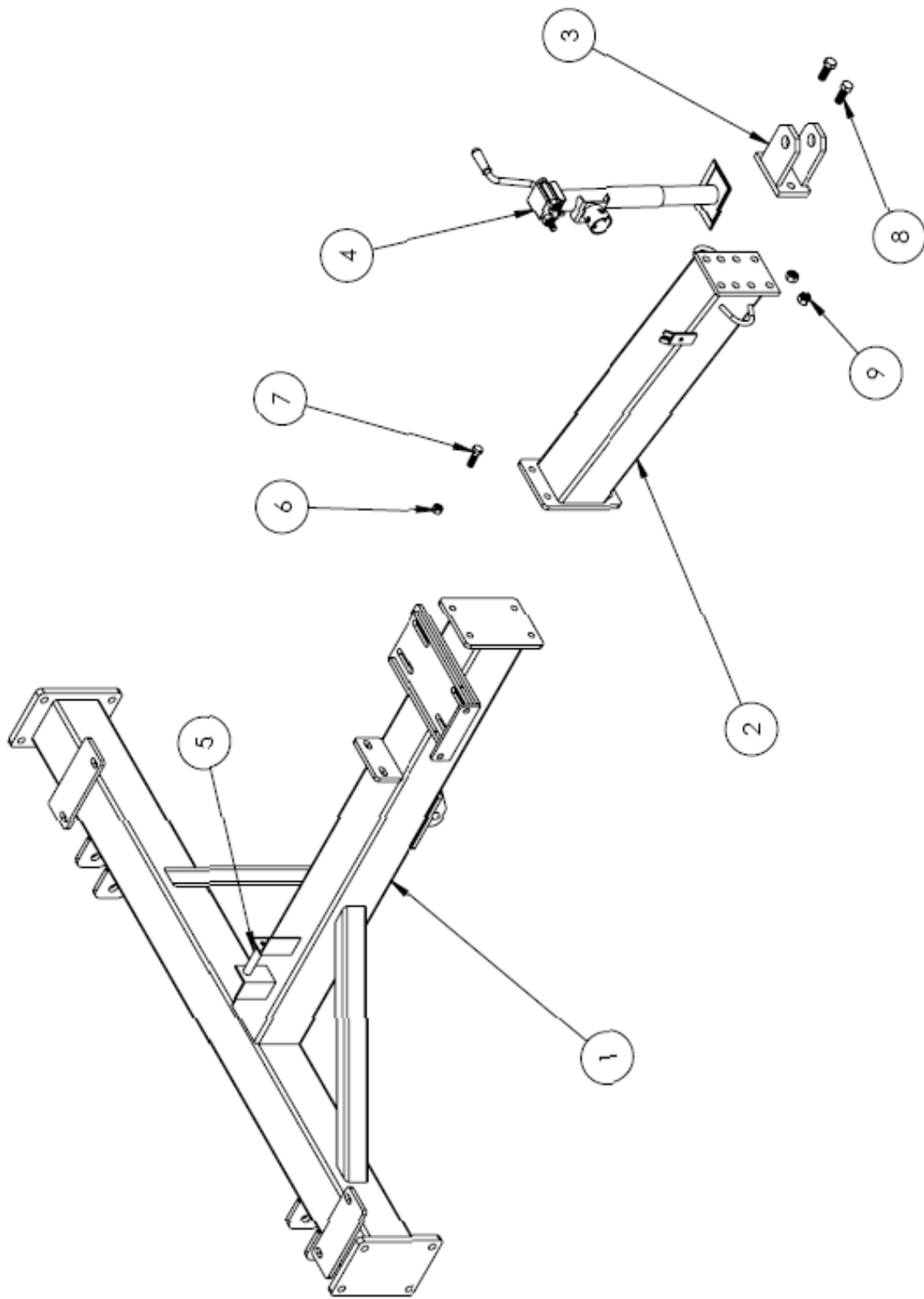
Fork Lift Assembly



HITCH ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	200091 A	Main Hitch	1
2	208147	Bolt-On Hitch Tube	1
3	208148	Bolt-On Tongue	1
4	199599 A	Jack	1
5	200185 A	Chain Idler	1
6		5/8-11 Lock Nut	4
7		5/8-11 x 2 Gr.5 Bolt	4
8		3/4-10 x 2 Gr.5 Bolt	2
9		3/4-10 Lock Nut	2

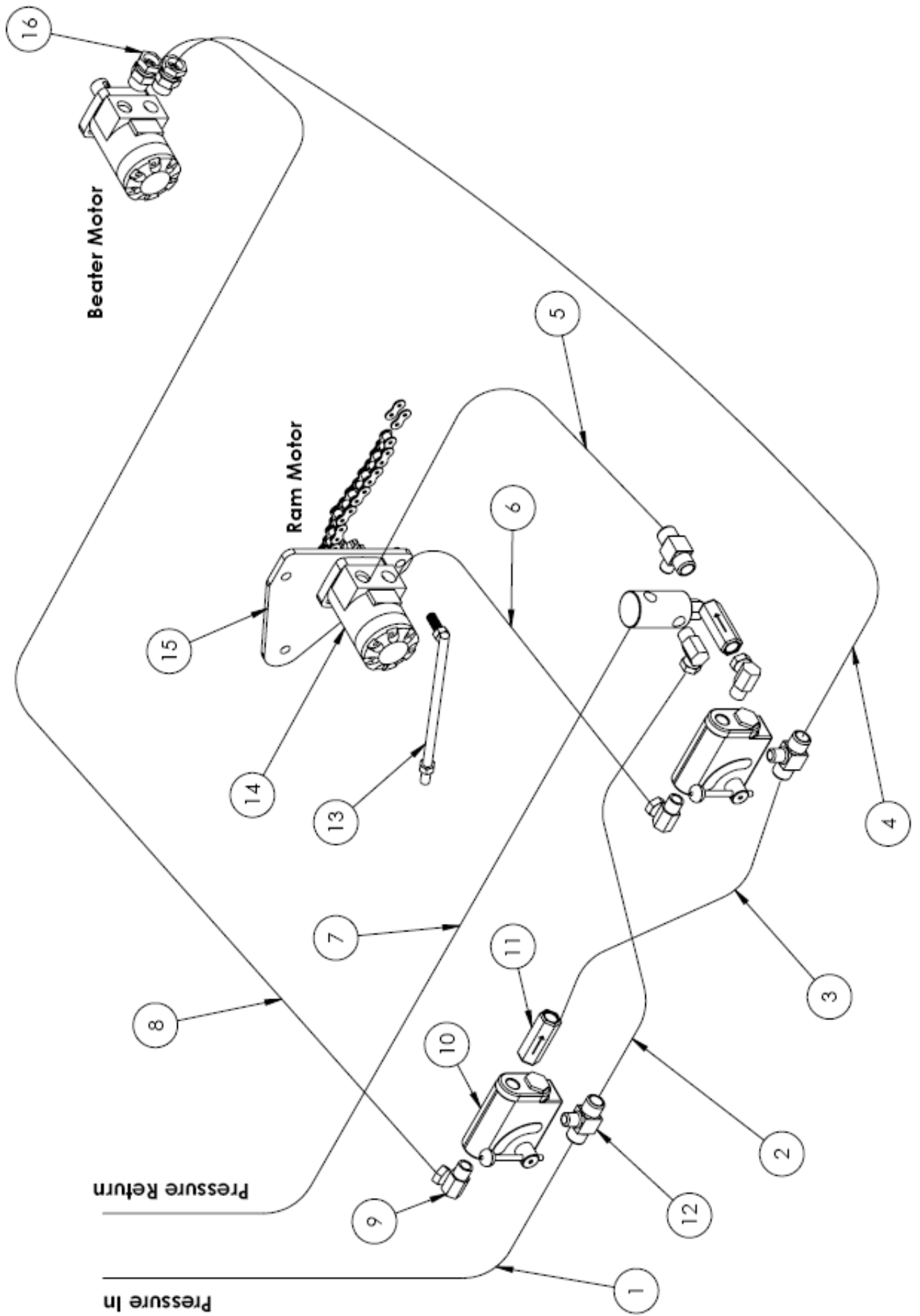
HITCH ASSEMBLY



HYDRAULIC ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
1	BS-01	Hydraulic Hose 1/2- 128"	1
2	BS-02	Hydraulic Hose 1/2- 20"	1
3	BS-03	Hydraulic Hose 1/2- 16"	1
4	BS-08	Hydraulic Hose 3/8- 68"	1
5	BS-07	Hydraulic Hose 3/8- 27"	1
6	BS-06	Hydraulic Hose 3/8- 40"	1
7	BS-04	Hydraulic Hose 1/2- 150"	1
8	BS-05	Hydraulic Hose 3/8- 96	1
9	HF 1501-8-8	1/2-90° Swivel Fitting	4
10	208116 A	Flow Control	2
11	208117 A	Check Valve	2
12	HF 5604-8-8	½ Tee Fitting	3
13	208118 A	Chain Tightener	1
14	208107 A	1006 Hydraulic Motor	2
15	208119 A	Ram Motor Mount	1
16	HF 1404-8-8	½ Straight Swivel	5

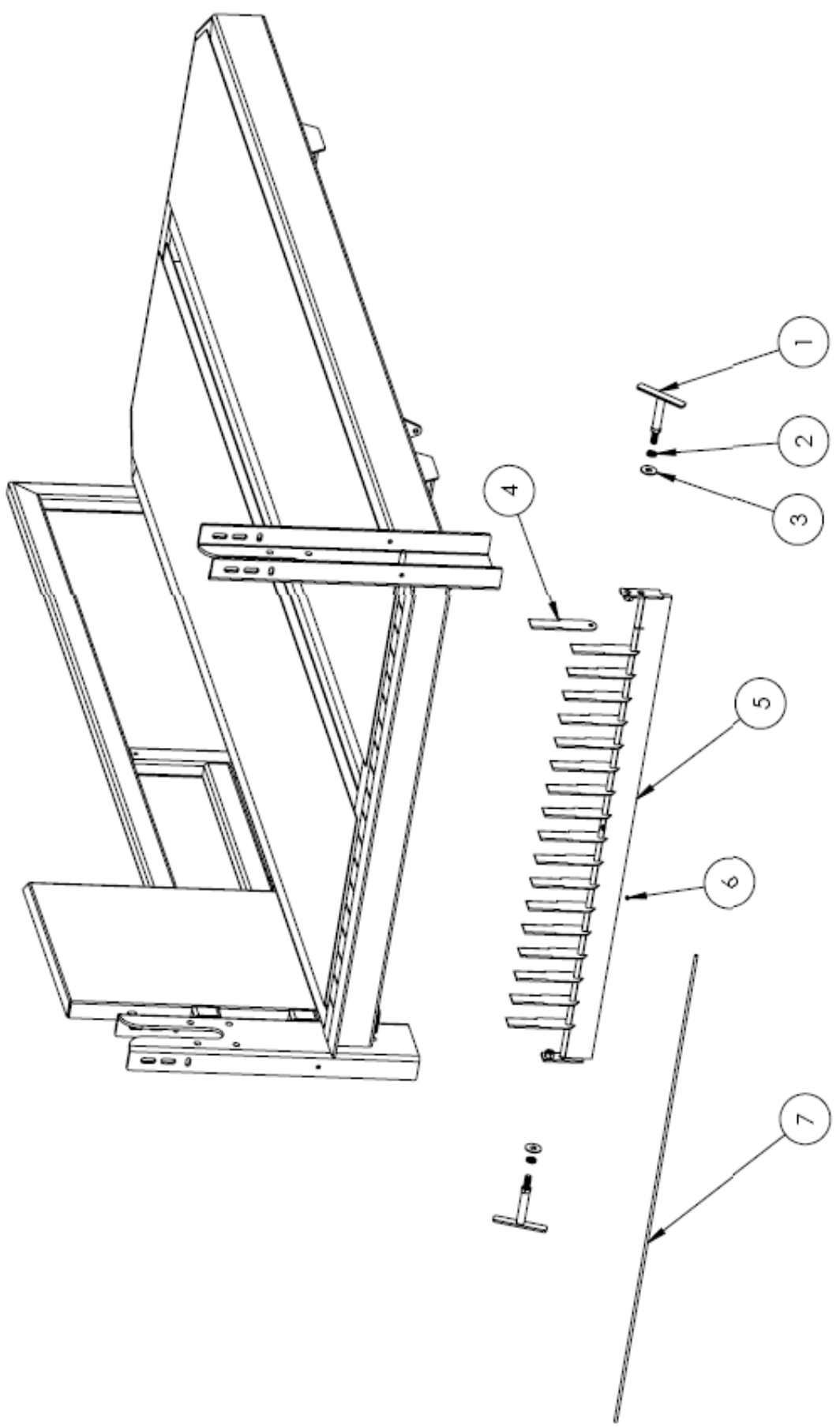
HYDRAULIC ASSEMBLY

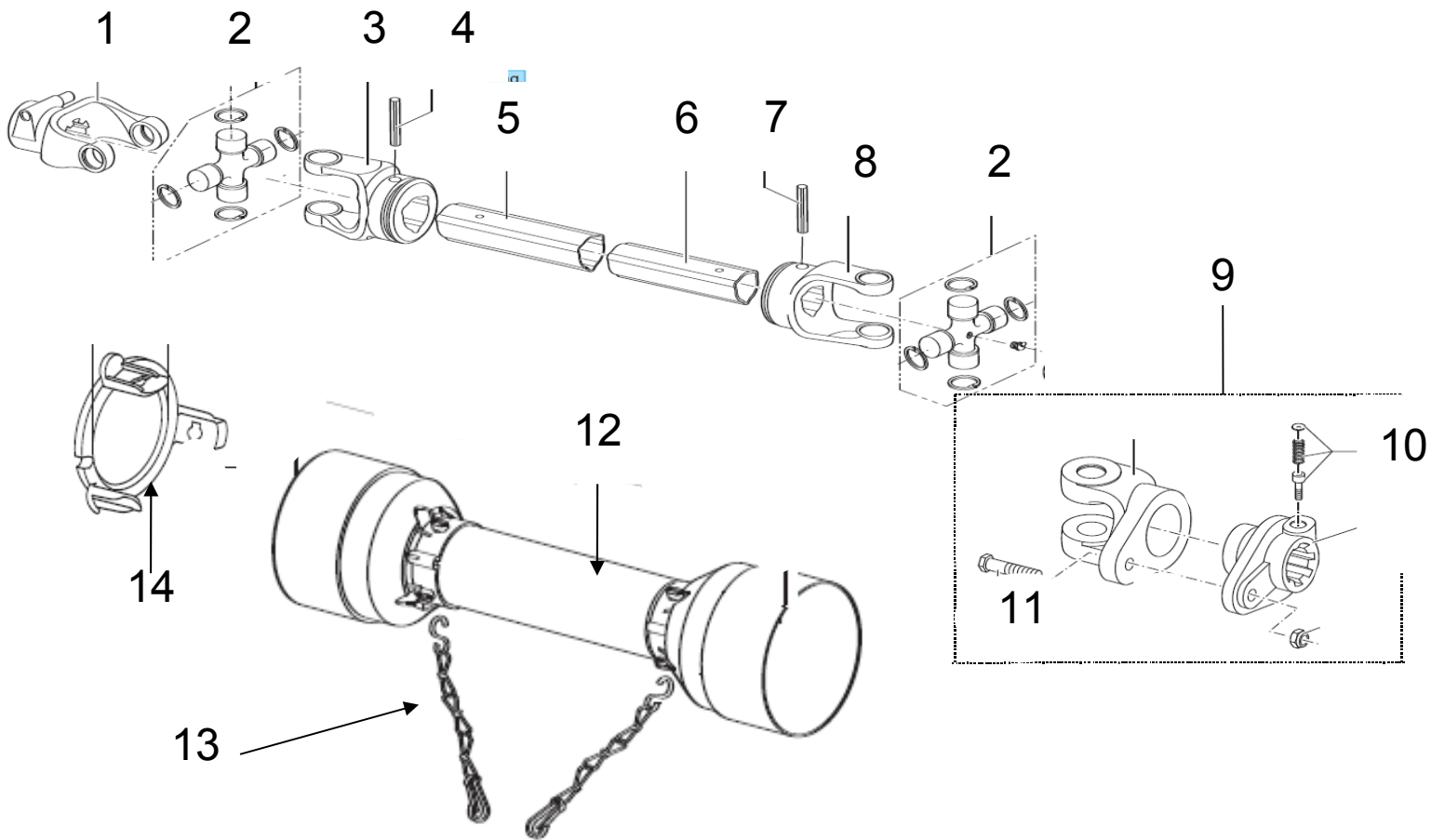


(OPTIONAL) KNIFE KIT ASSEMBLY

NO.	PART NUMBER	DESCRIPTION	QUANTITY
	BOSSCK	Knife Kit (Ref.# 1 – 7)	
1	200038	Tee Handle	2
2		5/8 Lockwasher	2
3		5/8 Flatwasher	2
4	200058	Knife	18
5	200034	Knife Support Bracket	1
6		5/16 – 18 x 3/8 Set Screw	1
7	200050	Knife Rod	

(OPTIONAL) KNIFE ASSEMBLY





PTO Parts			
NO.	PART NUMBER	DESCRIPTION	QUANTITY
	208140	(1000 RPM) Complete PTO	
	208540	(540 RPM) Complete PTO	
1	141.028.426	1 3/8-21 Spline Yoke (tractor end 1000rpm)	1
1	141.028.423	1 3/8-6 Spline Yoke (tractor end 540rpm)	1
2	180.018.130	Cross & Bearing Kit	2
3	151.018.133	Inner Profile Yoke (Female T Tube)	1
4	190.000.243	Roll Pin (Female end)	1
5	152.198.145.0700	Female T Tube	1
6	153.190.012	Male T Tube	1
7	190.000.271	Roll Pin (Male end)	1
8	151.018.134	Inner Profile Yoke (Male T Tube)	1
9	143.280.004	1 3/4-20 Spline Shearbolt Yoke (Machine end)	1
10	166.026.055	Push Pin Kit	2
11	12mm x 65 x 8.8 Metric	Shear Bolt c/w Locknut	1
12	142.286.012.9830	Complete Shield Kit	1
13	180.016.125	Safety Chain	2
14	180.019.121	Retaining Collar (female)	1
14	180.019.122	Retaining Collar (Male)	1