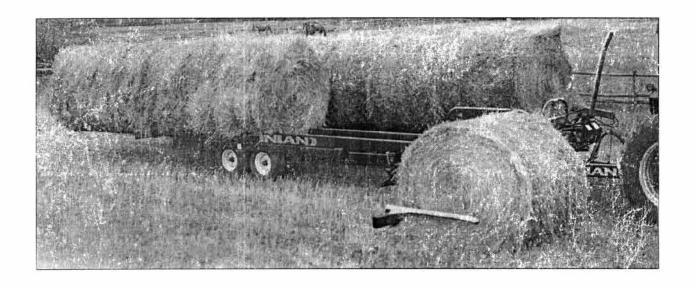
# HAYLINER 2000

# OPERATOR'S MANUAL & PARTS LIST



# Manufactured by: INLAND INDUSTRIES INC.

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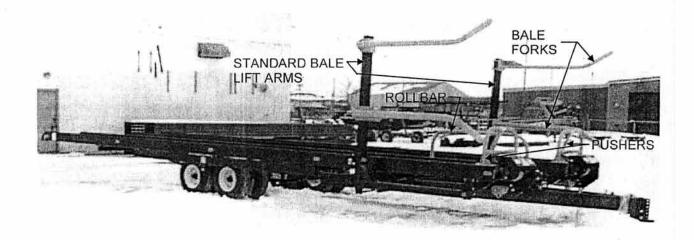
### INTRODUCTION

Your new bale carrier is designed to retrieve and transport a wide range of round bales. Sizes that can be accommodated range from 4' (1.2 m) diameter to 6' (1.8 m) diameter in a variety of hay crops as well as small grain and flax straw.

This manual contains useful information regarding operation, safety, and maintenance. Keep this manual handy for reference and to pass on to new operators or owners.

Call your bale carrier dealer if you need assistance, information, or additional copies of the manual.

Note: Right and Left designations are determined from the operator's position, facing forward.



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### SAFETY

#### SAFETY ALERT SYMBOL



This safety alert symbol indicates important safety messages in this manual and on safety signs on the bale carrier. This symbol means:

ATTENTION!
BECOME ALERT!
YOUR SAFETY IS INVOLVED!

Carefully read and follow the safety message accompanying this symbol. Why is SAFETY important to you? THREE BIG REASONS:

- ! ACCIDENTS DISABLE AND KILL
- ! ACCIDENTS COST
- ! ACCIDENTS CAN BE AVOIDED

#### SIGNAL WORDS

Note the use of the signal words DANGER, WARNING, and CAUTION with safety messages. The appropriate signal word for each message has been selected using the following guidelines:



An immediate and specific hazard or forbidden practice which WILL result in severe personal injury or death if the message is not followed.



A specific hazard or unsafe practice which COULD result in severe personal injury or death if the message is not followed.



Unsafe practice which COULD result in personal injury if the message is not followed, or a reminder of good safety practices.

#### SAFETY SIGNS

The safety signs reproduced below appear on the bale carrier at the locations listed. Make sure all safety signs are clearly legible. Signs that have become illegible should be replaced. New signs can be purchased from your dealer or directly from the manufacturer. If new parts are installed, make sure that the appropriate signs are in place, if applicable.

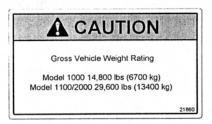
When affixing new signs, clean the area where they are to be applied, remove the backing paper, and apply directly in original location.



#### CABLE DRUM GUARD



#### **PUSHER**



LEFT OUTSIDE CARRIER BEAM (front)





#### CABLE DRUM GUARD



BALE LIFT ARM



# SUBFRAME (over TANDEM AXLES)



**CHAIN GUARD** 



**ROLL BAR** 



**OUTSIDE CARRIER BEAMS** 



**OUTSIDE CARRIER BEAMS** 

# **GENERAL SAFETY PRECAUTIONS**

- · Always read operator's manual and familiarise yourself with new equipment before operating
- Do not let inexperienced operators run this equipment.
- Do not remove shields or guards.
- Do not service or clean equipment while it is operating.
- Relieve all hydraulic pressure from systems before servicing or inspecting.
- Periodically inspect valves, hydraulics hoses and fittings for leakage.
- Obey all local laws when transporting equipment on roads or highways.

### **SPECIFICATIONS**

#### **DIMENSIONS:**

Length: 43' (13.1 m) Deck Length: 36' (11.0 m) Width: 12' 8" (3.9 m)

Weight (empty): 7300 lbs. (3310 kg)

#### CAPACITY:

GVW: 29600 lbs (13426 kg)

16 - 4' bales 14 - 5' bales

#### TIRES:

11L x 15 - 6 ply, rib implement, load range D (max. load 3744 lbs. at 60 psi for speeds less than 25 mph)
6 bolt hubs with twine guards
Heavy duty wheels

#### CONTROL HANDLE:

Power: 12v Fuse: 10 amp

#### **HYDRAULICS:**

External source: 12 gallons per minute at 2000 psi

Two double acting auxiliary circuits required

LIFT CYLINDER: 3" bore x 16" stroke - 24" closed center with restrictor TILT CYLINDER: 3" bore x 16" stroke - 24" closed center with restrictor

#### TRACTOR:

80 hp minimum

#### **HITCH WEIGHTS:**

With standard forks: 1575 lbs.

With rotating pickup forks: 1650 lbs.

Less forks: 1150 lbs.

Forks bundled as counterweight: 750 lbs.

#### WARRANTY

Inland Industries Inc. warrants its products to be free from defects in material and workmanship under normal use for a period of **one year** from the date of purchase by the original purchaser and **90 days** from the date of purchase by a commercial operation.

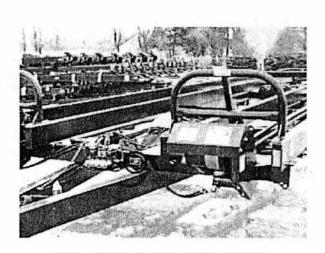
The warranty will be limited to the replacement or repair of parts by the factory. This warranty will not apply if the parts have been altered, misused or involved in an accident. All claims must be processed through the dealer where purchase was made and must include serial number of the machine, date of purchase, part number, and an explanation of the problem.

Unless otherwise stated, parts requiring repair must be kept until the warranty claim has been approved.

The labor costs for replacing parts under warranty will be credited at a rate determined by Inland.

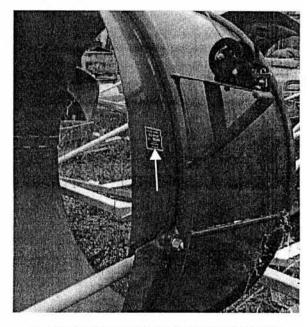
All components not manufactured by Inland (such as wheels, valves, motors, tires, hydraulic hoses, etc.) will be covered by the original manufactures' warranties.

All claims must be made within 30 days of mechanical breakdown. Inland reserves the right to require parts sent to its factory prepaid. If warranty applies, freight will be paid by Inland.



BALE CARRIER SERIAL PLATE LOCATION

Serial #:	
Date purchased:	
Dealer:	



BAGGER SERIAL PLATE LOCATION

Seliai #	
Date purchased:	
Dealer:	

### BALE CARRIER ASSEMBLY INSTRUCTIONS

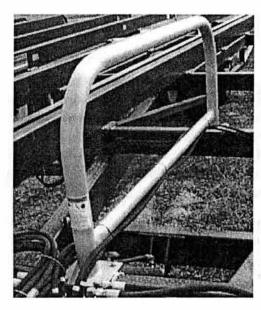
The bale carrier is usually shipped fully assembled at the manufacturing plant. However, some components may have been dismantled to reduce shipping costs and it is normally the dealer's responsibility to complete assembly.

If your unit has not been fully reassembled, please follow the assembly instructions outlined below.



CAUTION: Make sure area is clear of obstructions, well lit, and has sufficient room for safe assembly.

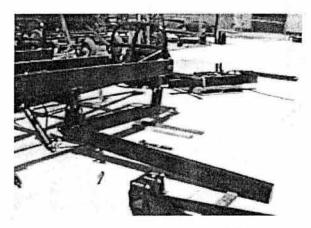
 Bolt ROLL BAR (decal forward) to top of FRONT and SECOND CROSSMEMBER using 1/2 x 1-1/4" bolts.



**ROLL BAR** 

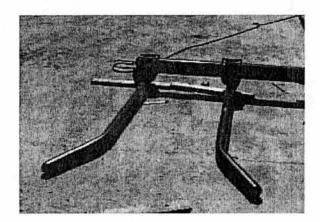
 Connect LEFT BALE LIFT ARM to FRONT and SECOND CROSSMEMBER using LIFT ARM PIN and secure with 3/8 x 2-1/2" bolt. Repeat for right side.

NOTE: All CYLINDERS have a flow restrictor in the clevis port.



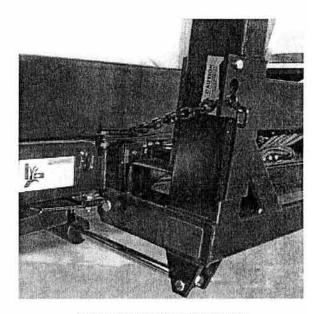
STANDARD BALE LIFT ARM

3. Slide a LEFT and RIGHT BALE FORK onto each BALE LIFT ARM and secure with a 5/8 x 6" bolts with the heads forward. Position FORKS to suit bale. It is recommended that the outside BALE FORK be positioned at the end of BALE LIFT ARM and the inner BALE FORK about 36" from the end.



**BALE FORKS** 

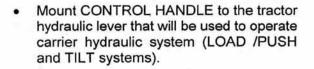
CAUTION: Use the SAFETY LOCK BRACKET to secure the BALE LIFT ARM in the raised position FOR TRANSPORT. Make sure the CHAIN LATCH is in place to prevent CHAIN from dislodging.



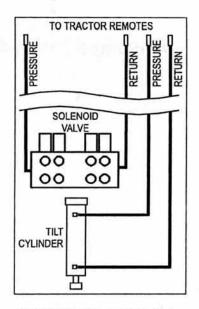
SAFETY LOCK BRACKET

#### **ELECTRICAL CONTROL**

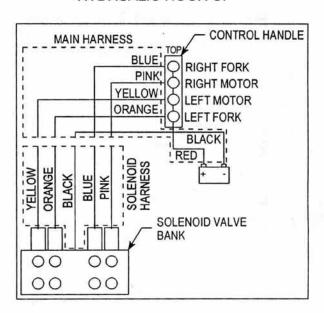
 Two remote outlets (12 gal/min at 2000 psi) are required to operate the bale carrier. One outlet controls the TILT CYLINDER and the second outlet controls all other functions through the SOLENOID VALVE BANK.



- Connect main wiring harness to the SOLENOID HARNESS. Connect SOLENOID HARNESS to SOLENOID VALVE BANK. NOTE: the black ground wire is to be attached to one of the valve mounting bolts.
- Battery connections
   Attach the red and black wires (from the control handle) to the battery or main tractor power posts:
   Red to positive terminal
   Black to negative



HYDRUALIC HOOK-UP



CONTROL HANDLE WIRING

### **OPERATION**

#### YOUR RESPONSIBILITIES AS AN OWNER/OPERATOR



#### **CAUTION:**

- 1. It is your responsibility to read and understand this manual completely before operating the bale carrier. Contact your dealer if an instruction is not clear to you.
- 2. Follow all safety messages in the manual and on safety signs on the machine.
- 3. Remember that YOU are the key to safety. Good safety practices protect you and the people around you.
- 4. Before allowing anyone to operate the machine, for however short a time or distance, make sure they have been instructed in its safe and proper use.
- 5. Review the manual and all safety related items with all operators annually.
- 6. Be alert for other operators not using recommended procedures or not following safety precautions. Correct these mistakes immediately, before an accident occurs.
- 7. Maintain the bale carrier correctly. Be sure all controls are functioning properly before use.
- 8. Do not modify or remove shields. Unauthorized modifications may impair the function and/or safety and affect machine life.
- The safety information given in this manual does not replace safety codes, insurance needs, or laws governing your area. Be sure your machine meets the standards set by these regulations.

#### TO THE NEW OPERATOR

It's natural for an operator to be anxious to get started with a new machine. Please take the time to familiarize yourself with the bale carrier by reading this manual and all safety signs before attempting operation. Study the operating procedures so you will know what to expect.

#### ATTACHING BALE CARRIER TO TRACTOR

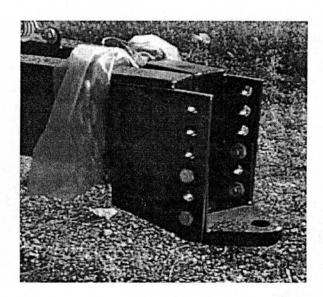


CAUTION: Shut off tractor, engage parking brake and remove key before working around hitch.



CAUTION: Never attach bale carrier to rear axle or three point hitch arms. Use only the drawbar. Make sure tractor size is adequate and drawbar is capable of supporting the torque whether empty or loaded.

- HITCH CLEVIS adjustment: With the bale carrier on level ground the BALE FORKS should be about 2" above the ground when the BALE LIFT ARMS are level.
- Using the tongue jack, raise tongue to align with hitch pin. Position tractor and secure with locking type drawbar pin (use approved hitch pin with mechanical retainer).
- Route SAFETY CHAIN around the adjustable hitch weldment, around drawbar support and back hook. IMPORTANT: Adjust CHAIN length to remove all slack except what is needed for turns.
- 4. Do not use intermediate support on drawbar as attaching point.
- Store SAFETY CHAIN off the ground when not in use. If safety chain is damaged in any way, contact your dealer for a replacement.
- If tractor is equipped with adjustable flow control, set flow to CYLINDERS to <u>about</u> 10 gpm.
- 7. NOTE: Connect quick couplers to tractor remote outlets so that tractor graphics correspond with cylinder movement.
- 8. Connect lighting coupler, if so equipped.



HITCH CLEVIS

#### CABLE TENSION

Correct cable tension is <u>critical</u> to the service life of the pusher cable.

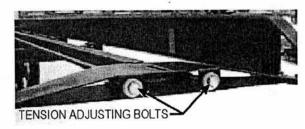
A loose CABLE will not track true and may destruct.

It is normal for a new cable to stretch during initial operation. CHECK tension after each load for the first six loads.

CORRECT TENSION: With the machine unloaded adjust tension until the lower CABLE clears the CROSSMEMBERS.

After initial break-in check CABLE tension frequently.

Cable damage due to neglect is <u>not</u> covered by warranty.



CABLE TENSION ADJUSTMENT

#### CARRIER OPERATION



DANGER: Make sure area is clear before lowering BALE LIFT ARMS. Failure to do so could result in serious injury or death.



#### CAUTION:

When transporting on public roadways use amber flashers day or night. Do not tow over 20 mph (32 km/h) if loaded weight is 1.5 times the weight of the towing unit.

#### CARRIER CONTROLS

The control handle (attached to the top of the tractor's hydraulic lever) is fitted with four (4) button type switches. These provide the operator with the functional control of the carriers loading and unloading systems.

The control grip is connected to the solenoid valve bank mounted on the frame of the bale carrier.

Depressing the button, while operating the hydraulic lever, at the same time, results in one of eight (8) functions to being activated.

- 1<sup>st</sup> (Top) button operates RIGHT loading arm.
- 2<sup>nd</sup> button activates the RIGHT bale pusher.
- 3<sup>rd</sup> button operates the LEFT bale pusher.
- 4th (Bottom) button controls LEFT loading arm

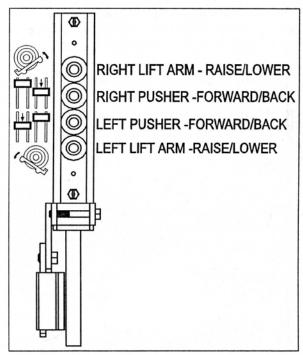
#### LOADING BALES

The Left bale lift arm is used to load bales onto the left side of the carrier. Whilst the right lift arm loads the right side.

NOTE: Before loading bale the PUSHER(S) must be positioned at the FRONT of the carrier deck(s).

Driving direction and position, relative to the bale depends on which type of loading arm is used.

 Standard Pick up arm requires the operator to drive at 90° to the baling direction. The bales are loaded "End on".



CONTROL HANDLE



STANDARD PICKUP ARM (RAISED POSITION)

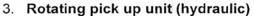
2. **Bale deflector** attached to standard pick up arm.

Allows the bales to be picked up from either "End on" or "Side on" (same direction as baler traveled).

When picking up bales in "Side on" direction, the bale deflector rotates the bale 90° before it is lifted up onto the carrier. Forward travel is used to rotate the bale.

Approach the bale so that the outer end of the bale rides up on the bale deflector as the loading arm moves under the bale.

To pick up bales that are placed "End on", drive so that the inner arm of the loading fork is against the inner edge of the bale. The bale will then be loaded onto the carrier in the same direction as it was picked up.



The carrier travels in the same direction as the baler. Bales are approached "Side on".

The loading arm automatically rotates the bale 90° as it loads it onto the carrier.

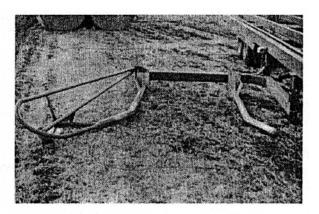
Raise BALE LIFT ARM, by pressing the appropriate button and operating the hydraulic lever until bale rolls off arm and onto CARRIER BEAMS.

Return the LOADING ARM to loading position, before activating the PUSHER to push back the bale.

<u>NOTE</u>: Loading arm interferes with bale when arm is in fully raised position.

Continue loading bales until bale carrier is fully loaded.

AVOID BOTTOMING LIFT CYLINDER ON EACH STROKE AS THIS WILL CAUSE PREMATURE FAILURE OF CYLINDER.



BALE DEFLECTOR



**ROTATING PICK UP UNIT** 

#### BALE PUSHER OPERATION

Start PUSHER and move bale far enough to the rear to provide room to load another bale.

Return PUSHER all the way to the front.

Pusher is activated by pressing the appropriate button on the control handle while operating the hydraulic lever: 2<sup>nd</sup> button for RIGHT side. 3<sup>rd</sup> button for LEFT side.

NOTE: There is a hydraulic bypass valve that provides protection for the system when the pusher hits the front stop.



#### CAUTION:

Avoid over balancing the load do not move bales to rear until ready to load the next bale.

The bale carrier is designed to handle the majority of dry round bales but the specified GVW of 29,600 pounds **must not be exceeded**.

Heavy, wet or sticky bales may require hydraulic pressures higher than some tractors can deliver. Contact your dealer for possible solutions.

#### UNLOADING



#### DANGER:

Make sure area is clear before unloading. Failure to do so could result in serious injury or death.

- Tilt Carrier bed up, using the separate hydraulic lever.
- Push bales off with PUSHER. Press the both middle buttons on the control grip while operating the hydraulic lever. NOTE, Left or Right decks can be unloaded individually or together. However the pusher moves faster and has more torque when operated individually.

 Once Rear bale has been pushed off the carrier, driving slowly forward at the same time as pushing the bales back (unloading) will keep the bales in a neat row.

When amber reflector on inside of CARRIER BEAM becomes visible the PUSHER is 26" from end of CARRIER BEAM. Stop PUSHERS and drive forward. The last bale will fall off and the PUSHER can be returned to the forward position ready for another load.



#### CAUTION:

Do not run PUSHER all the way to the end, the resulting shock load may cause damage to driveshaft of the CABLE DRUM and cable.

If PUSHERS requires excessive force to unload bales we recommend that the CARRIER BEAMS and GUIDE RAIL be painted with "Slip-Plate" lubricant.

Under adverse conditions the rows can be moved alternately about 18" until the load has been decreased and both sides will move simultaneously.

Additional torque may be obtained by replacing the 14 tooth DRIVE SPROCKET with an 11 tooth #60 - 1" bore sprocket. This will provide approximately 20% greater torque to CABLE DRUM and may be necessary if tractor pressure is low.



#### CAUTION:

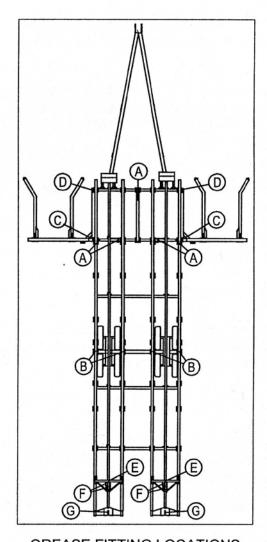
If bale carrier is equipped with lighting kit, turn on flashing lights when transporting on public roadways.

Do not transport on public roads after dark unless so equipped.

Obey local regulations regarding road transport.

#### **MAINTENANCE**

- 1. Inspect hydraulic hoses, fittings, connections and hydraulic parts at the beginning of each season for wear, leaks and tightness.
- 2. Replace any damaged or worn hoses. Make sure hoses have sufficient clearance and do not rub. Check all bolts for tightness after the first 10 hours and every 50 hours thereafter.
- 3. Inspect and tighten chains and sprockets after the first 10 hours and every 50 hours thereafter.
- 4. Inspect CABLE and PULLEY at the start of each season. Replace frayed or worn CABLES. The CABLE should be cleaned and lubricated with a dry type wire rope lubricant.
- 5. Replace PULLEY HOLDER WITH PULLEY if there is excessive wobble in the pulley.
- 6. Grease all fittings before operating the bale carrier at the start of the season.
- 7. Grease all fittings and daily during the season.
  - There are 18 grease fittings to lubricate:
  - At both ends of each HYDRAULIC CYLINDER - 6 fittings (A).
  - Under AXLE BEARINGS 4 fittings (B).
  - Bushing at each end of SECOND CROSSMEMBER - 2 fittings (C).
  - Bushing at each end of FRONT CROSSMEMBER - 2 fittings (D).
  - On PUSHER 2 fitting (E), and 1 oil fitting on each 4" pulley (F).
  - In PULLEY HOLDER at rear of machine - 2 fitting (G).
  - The PULLEY CENTER PIN is provided with a grease zerk for lubrication. Lubricate daily.



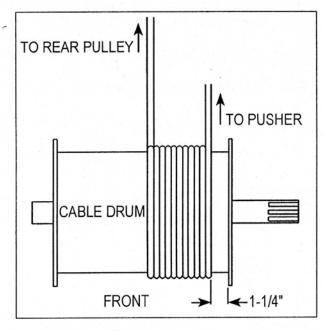
**GREASE FITTING LOCATIONS** 

- 8. The wheel bearings should be inspected and re-packed annually.
- 9. When reinstalling the wheels, the HUB BOLTS should be torqued to 125 ft-lbs. (note: the valves should be facing away from the HUBS). A thread locking compound such as Locktite 271 is recommended for the HUB BOLTS.
- 10. The CABLE DRUM bearings are sealed bearings and normally do not require greasing.
- 11. To prevent rust wipe top of CARRIER BEAMS with an oily rag after each day's service.
- 12. Repaint with "Slip-Plate" at end of season to prevent rust.

#### CABLE REPLACEMENT

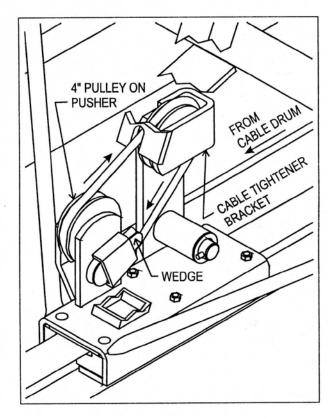
Replacement CABLES must have a minimum ultimate breaking strength of 14,400 lbs. Follow the installation instructions outlined below.

- Position PUSHER about 18" from front of GUIDE RAIL and prevent PUSHER from sliding forward.
- Remove DRUM GUARD and wrap CABLE 9-1/2 times around CABLE DRUM starting from non-sprocket bottom side and bring off top of CABLE DRUM 1-1/4" from sprocket side flange.



CABLE DRUM

Insert this end of CABLE at bottom of 4" pulley on PUSHER, pull CABLE around to the top of this pulley, then insert CABLE at top of pulley on CABLE TIGHTENER BRACKET and pull it around to the bottom of this pulley. Form loose end of CABLE into a U-shape, insert through narrow end of holder on PUSHER and secure with WEDGE.

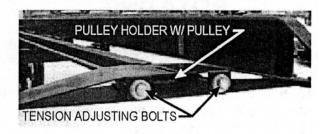


CABLE INSTALLATION

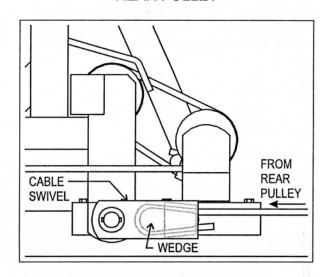
- 4. Position the rear pulley holder to the front of it's slot. This is achieved by unscrewing both the rear facing 5/8" bolts on the pulley mount.
- Pull CABLE tight. Check that rear PULLEY HOLDER WITH PULLEY is in its maximum forward position and wrap long end of CABLE around this pulley.
- 6 Form loose end of CABLE in U-shape and insert cable end through holder in CABLE SWIVEL. Secure with WEDGE.

NOTE: The free end of the CABLE must be at the bottom of the CABLE SWIVEL with WEDGE and HOLDER to the inside.

- Slip CABLE SWIVEL onto pin on CABLE TIGHTENER BRACKET. Secure CABLE SWIVEL with flatwasher and cotter pin.
- Check that rear PULLEY clears GUIDE RAIL and adjust tension until CABLE clears CROSS MEMBERS.
- 9. Reinstall DRUM GUARD.



**REAR PULLEY** 



CABLE SWIVEL



#### CAUTION:

CABLE tension is <u>CRITICAL</u>. A loose CABLE will not track true and may destruct.

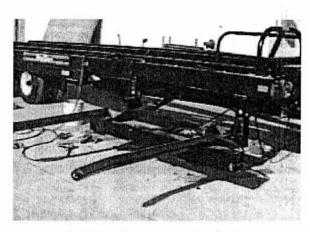
On a new CABLE, check tension after each load for the first six loads. With the machine unloaded adjust tension until the lower CABLE clears the CROSSMEMBERS. After initial break-in check CABLE tension frequently.

# **ROTATING PICKUP UNIT (OPTIONAL)**

The Rotating Pickup Unit (RPU) is optional bale lift arm assembly that can replace one or both standard lift arm assemblies. The unit automatically picks up the bale, rotates it 90° and loads it onto the carrier. This allows the operator to follow the baler around the field.

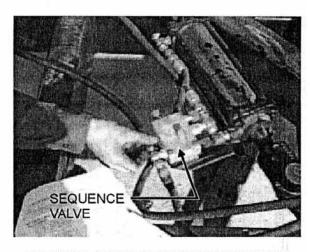
# INSTALLING RPU ON A NEW BALE CARRIER

 Remove the RPU from its shipping pallet and Connect ROTATING BALE LIFT ARM to front and second crossmembers using LIFT ARM PIN supplied. Secure with 3/8 x 2-1/2" bolt. Use SHORT CYLINDER PIN to attach rod end of LIFT CYLINDER to BALE LIFT ARM (secure with 3/8 x 2" bolt).



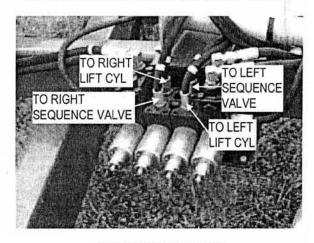
ROTATING PICKUP UNIT

 Disconnect the 132" hose, between the SOLENOID VALVE and <u>clevis end</u> of LIFT CYLINDER, at the LIFT CYLINDER, guide hose through loops at rear of FRONT CROSSMEMBER and connect to male tee in port #1 of sequence valve.



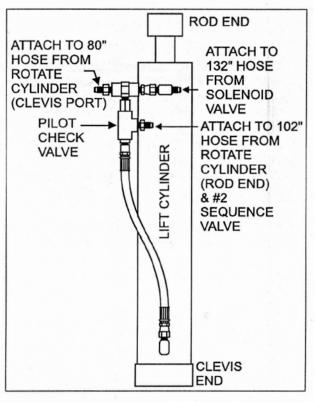
ATTACH HOSE TO SEQUENCE VALVE

 Disconnect the other 132" hose, between SOLENOID VALVE and <u>rod end</u> port of the LIFT CYLINDER, at the LIFT CYLINDER; replace elbow with male tee. Reconnect 132" hose.



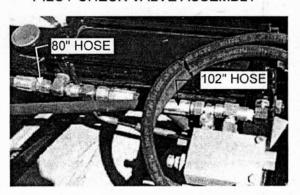
SOLENOID VALVE

4. Install pilot check valve assembly on LIFT CYLINDER, hose end to elbow on clevis end port and female swivel to tee fitting on rod end port of the LIFT CYLINDER. Connect 102" hose from rod end port of the ROTATE CYLINDER and #2 sequence valve to pilot check valve.



PILOT CHECK VALVE ASSEMBLY

Connect 80" hose between the <u>clevis end</u> port of the ROTATE CYLINDER and <u>rod</u> end port of LIFT CYLINDER (note: hose must run through loops along top of BALE LIFT ARM). Follow the same procedure for the other side.



**ROTATE CYLINDER HYDRAULICS** 

# CONVERTING EXISTING STANDARD FORK TO RPU

 Remove existing standard BALE LIFT ARM. Remove the RPU from its shipping pallet and connect ROTATING BALE LIFT ARM to front and second crossmembers using LIFT ARM PIN supplied. Secure with 3/8 x 2-1/2" bolt. Use SHORT CYLINDER PIN to attach rod end of LIFT CYLINDER to BALE LIFT ARM (secure with 3/8 x 2" bolt).

Follow steps 2 to 5 in the previous section (Installing RPU on a New Bale Carrier).

#### **OPERATION**

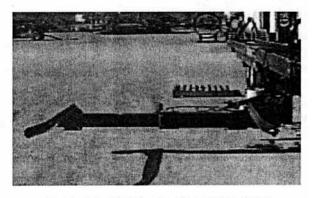
- The ADJUSTABLE FORK on the SLIDING ARM should be set so the distance between the forks with the squeeze cylinder fully extended is about 6" wider than the width of the bales you are loading.
- 2. The sequence valve attached to the rotate cylinder is preset to open at 1800 psi. If the bale falls out of the forks before rotating and lifting operations are completed, either reduce the space between the forks by moving the ADJUSTABLE FORK in or increase the opening pressure of the sequence valve. This can be done by removing the cap and turning the screw in. Be sure to replace the cap.

#### LOADING

- Lower BALE LIFT ARM. Drive forward until FORKS are positioned around ends of bale with the inside stationary fork as close as possible to bale. Engage hydraulics. This will start an automatic sequence. First oil flows to the squeeze cylinder. When the squeeze pressure reaches 1800 psi, the line to the rotate and lift cylinder opens and the bale is rotated and lifted into position.
- Reverse the oil flow and the squeeze cylinder opens dropping the bale onto the carrier. The LIFT ARM then returns to the lowered position ready to pick up the next bale. With a little practice an operator can pick and load bales "on the go".

#### UNLOADING

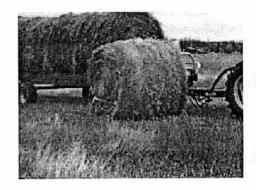
To unload lower BALE LIFT ARM sufficiently to allow the bales to pass, then hydraulically tilt the CARRIER BEAMS and push bales off with PUSHER.



FULLY EXTENDED SLIDING ARM



SEQUENCE VALVE ADJUSTMENT

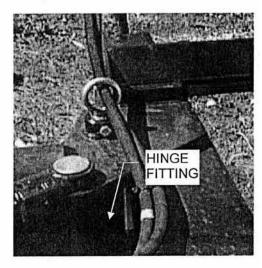


**ROTATING PICK UP UNIT** 

#### **MAINTENANCE**

Inspect hydraulic hoses, fittings and connections at the beginning of each season for wear, leaks and tightness. Replace any damaged or worn hoses. Check that hoses have sufficient slack to allow the full range of motion and that the hoses do not rub, abrade or catch on any parts.

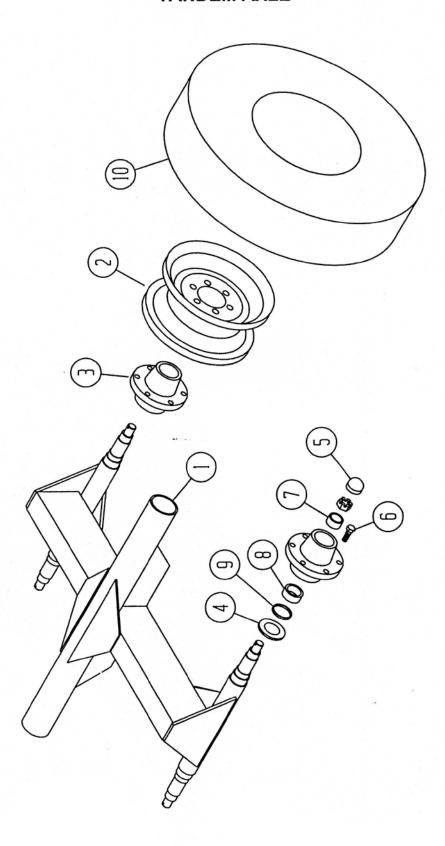
Grease the hinge fitting before operating the RPU at the start of the season and daily during the season.



HINGE POINT GREASE FITTING

# **PARTS**

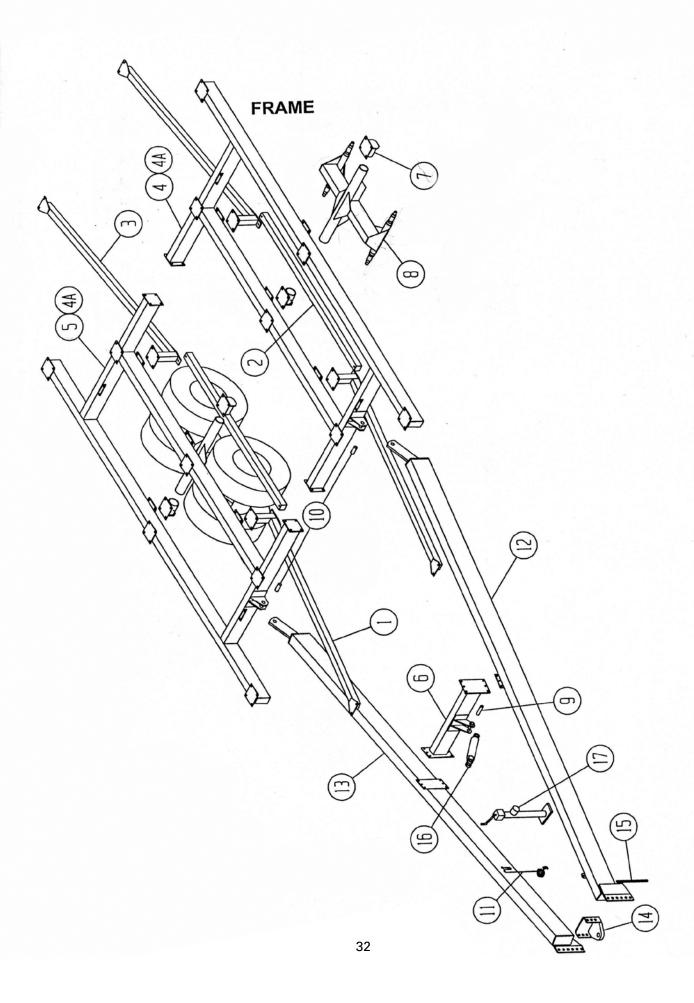
# **TANDEM AXLE**



**TANDEM AXLE** 

REF	PART NUMBER	DESCRIPTION	QTY
1	C2333-00	TANDEM AXLE	2
2	20029	15 x 8 - 6 BOLT RIM 85 PSI	8
3	20045	6 BOLT WHEEL HUB	8
4	20045-01	SHIELD	8
5	20059	HUB CAP	8
6	20071	9/16" WHEEL BOLT	48
7	967205	INNER BEARING	8
8	967208	OUTER BEARING	8
9	20321	OIL SEAL	8
10	21645	11L x 15 TIRE	8

NOTE: Part #20034-01 double ended spindle for item 1

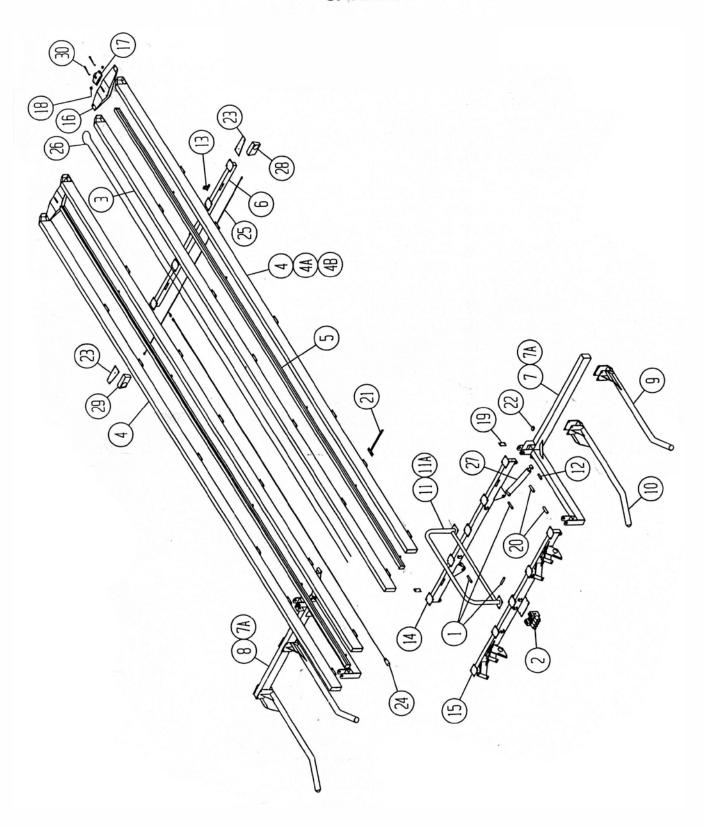


## **FRAME**

REF	PART NUMBER	DESCRIPTION	QTY
1	B2301-00	FRONT BRACE	2
2	B2302-00	CENTER BRACE	2
3	B2303-00	REAR BRACE	2
4	B2311-00	LEFT SUBFRAME	1
4A	21858	TIRE INFLATION DECAL	2
5	B2312-00	RIGHT SUBFRAME	1
6	B2321-00	HITCH CROSSMEMBER	1
7	B2322-00	AXLE BEARING	4
8	C2333-00	TANDEM AXLE	2
9	E2345-00	SHORT CYLINDER PIN	1
10	E2348-00	HITCH BEAM PIN	2
11	B2363-00	HOSE HOLDER	1
12	B2367-00	LEFT HITCH BEAM	1
13	B2368-00	RIGHT HITCH BEAM	1
14	B2462-00	HITCH	1
15	21442	SAFETY CHAIN (30000 lbs.)	1
16	22047	3 x 16" HYDRAULIC CYLINDER	1
17	31045	7TM - 15-0 CROWN JACK	1

NOTE: Part #20034-01 double ended spindle for item 8

# CARRIER

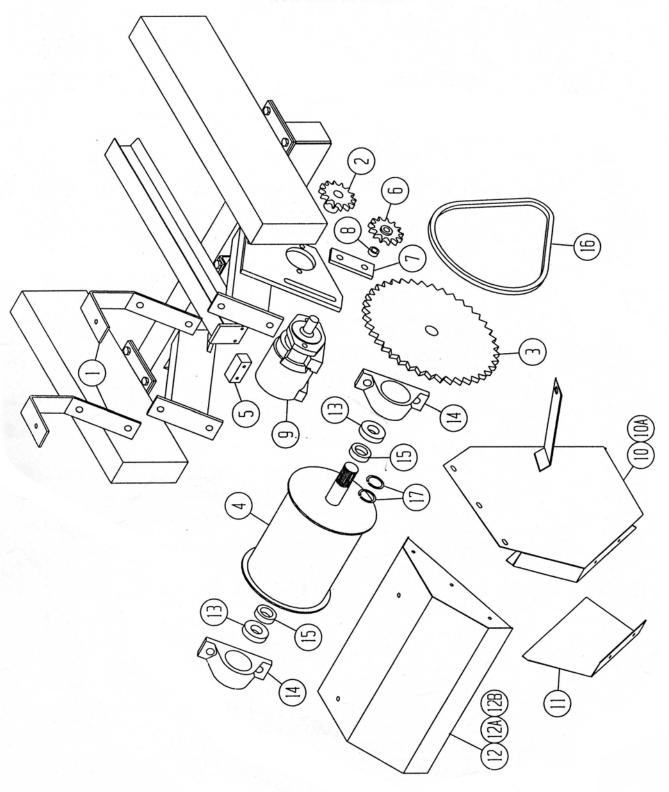


### **CARRIER**

REF	PART NUMBER	DESCRIPTION	QTY
1	E1932-00	AXLE PIN	3
2	B2300-61	SOLENOID VALVE BANK	1
3	B2307-00	INSIDE BEAM	2
4	B2308-00	OUTSIDE BEAM	2
4A	21860	GROSS WEIGHT DECAL	1
4B	21861	CAUTION CABLE DECAL	1
5	B2309-00	GUIDE RAIL	2
6	B2313-00	REAR CROSSMEMBER	1
. 7	C2315-00	LEFT BALE LIFT ARM	1
7A	21877	SAFETY CHAIN DECAL	2
8	C2316-00	RIGHT BALE LIFT ARM	/1
9	C2329-00	LEFT BALE FORK	2
10	C2330-00	RIGHT BALE FORK	2
11	B2334-00	ROLLBAR	1
11A	21841	HYDRAULIC OIL SAFETY DECAL	1
12	E2345-00	SHORT CYLINDER PIN	2
13	B2365-00	SMV BRACKET	1
14	B2372-00	SECOND CROSSMEMBER	1
15	B2378-00	FRONT CROSSMEMBER	1
16	B2381-00	PULLEY BRACKET	2
17 .	B2382-00	PULLEY HOLDER WITH PULLEY	2
18	E2397-00	THRUST WASHER	4
		11/16 x 1-3/4" FLATWASHER	4
19	E2413-00	ARM CUSHION	2
20	E2445-00	LIFT ARM PIN	4
21	B2484-00	SAFETY LOCK BRACKET	2
22	B2485-00	SAFETY LATCH	2
23	B2486-00	LIGHT BRACKET (OPTIONAL)	2
24	E2488-00	MAIN HARNESS (OPTIONAL)	1
25	E2490-00	CROSSMEMBER HARNESS (OPTIONAL)	1
26	21258-01	3/8 x 99' 8" CABLE	2
27	22047	3 x 16" HYDRAULIC CYLINDER	2
28	25050	DUAL LAMP LEFT HAND (OPTIONAL)	1
29	25051	DUAL LAMP RIGHT HAND (OPTIONAL)	1
30	E2398-00	5/8 x 7" HEX BOLT	4

NOTE: Part #E2461-00 pulley 6" for item 17

## **DRIVE ASSEMBLY**



### **DRIVE ASSEMBLY**

REF	PART	DESCRIPTION	QTY
	NUMBER		
1	B2304-00	DRUM GUARD BRACKET	4
2	B2444-00	DRIVE SPROCKET (#60 - 14 TEETH)	2
3	B2459-00	CABLE DRUM SPROCKET (#60 - 60 TEETH)	2
4	B2460-00	CABLE DRUM	2
5	E2465-00	CABLE SPACER	2
6	B2470-00	CHAIN TIGHTENER SPROCKET (#60 - 13 TEETH)	2
7	B2471-00	CHAIN TIGHTENER SPROCKET PLATE	2
8	B2472-00	CHAIN TIGHTENER SPROCKET SPACER	2
9	B2474-00	HYDRAULIC MOTOR	2
10	B2487-00	CHAIN GUARD	2
10A	21878	MOVING PART HAZARD DECAL	2
11	B2493-00	INSIDE CHAIN GUARD	2
12	B2494-00	CABLE DRUM GUARD	2
12A	21547	CAUTION DECAL	2
12B	21592	HIGH PRESSURE FLUID HAZARD DECAL	2
13	20198-01	1-1/2" BEARING	4
14	20198-02	BEARING HOUSING	4
15	20198-03	LOCKING COLLAR	4
16	21439	#60 x 76 LINK CHAIN	2
17	813604	SNAP RING	4

#### NOTE:

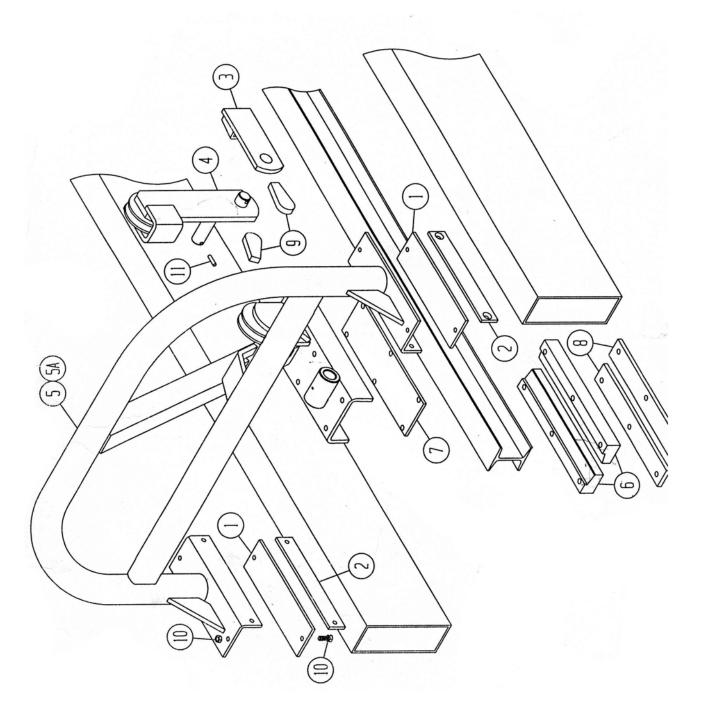
Item #2 - #B2444-00 is 1" Keyed

Item #3 - #60 - 60 tooth cable drum sprocket part # B2459-00 is splined and part #B2392-00 is keyed

Item #4 - #B2460-00 cable drum is splined and #INE2460-01 splined axle for cable drum

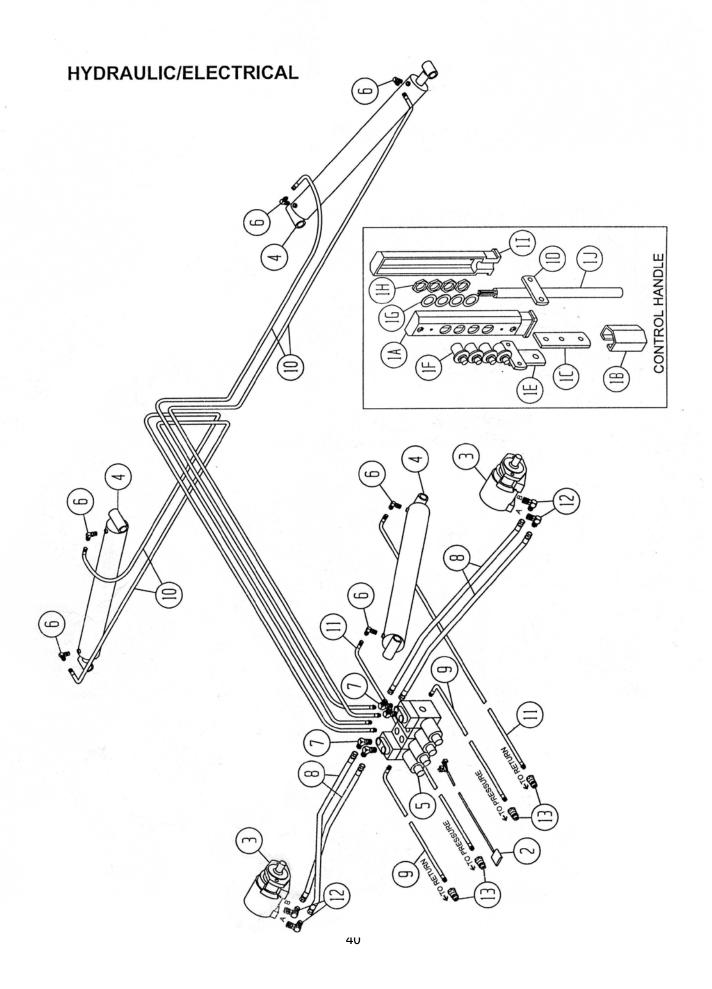
Item #6 - #B2470-00 is 7/8" Smooth

# **PUSHER ASSEMBLY**



# **PUSHER ASSEMBLY**

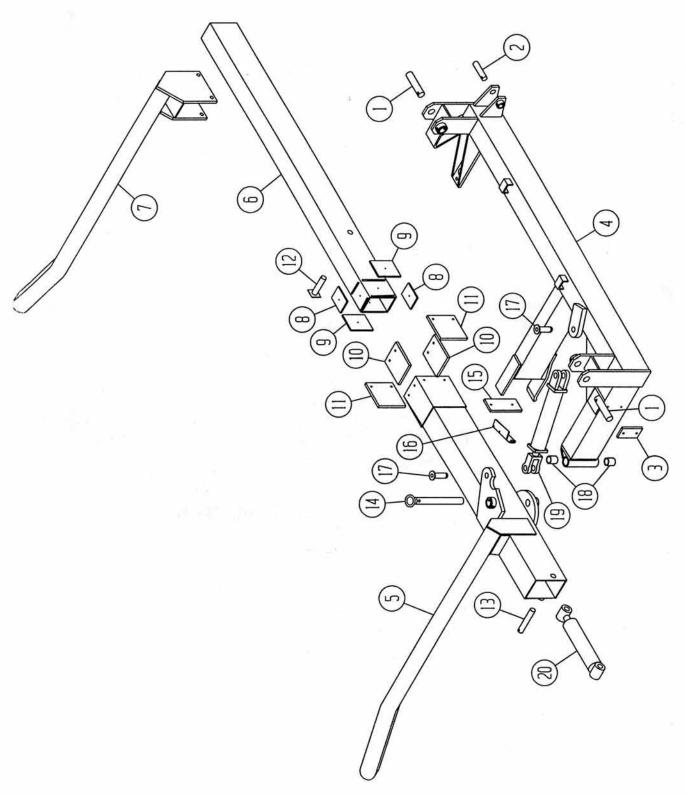
REF	PART	DESCRIPTION	QTY
	NUMBER		
1	E2386-00	TOP SLIDER	4
2	E2387-00	SIDE SLIDER	4
3	B2396-00	CABLE SWIVEL	2
4	B2463-00	CABLE TIGHTENER BRACKET	2
5	B2464-00	PUSHER	2
5A	21850	CAUTION DECAL	2
6	E2473-00	BEAM SLIDER	4
7	E2474-00	FRONT TOP SLIDER	2
8	INE2497-00	SLIDER BACKUP	4
9	21414	WEDGE	4
10	55101	BRASSS NUTS (813561) BRASS BOLTS (813558)	16
11	59013010	/4" ROLL PIN	



# HYDRAULIC/ELECTRICAL

REF	PART	DESCRIPTION	QTY
	NUMBER		
1	B2393-00	CONTROL HANDLE WITH HARNESS	1
1A	E2393-00	4 BUTTON CONTROL HANDLE HALF	1
1B	E2414-00	CONTROL HANDLE CLAMP BRACKET	1
1C	E2491-00	CONTROL HANDLE PLATE	1
1D	E2492-00	CLAMP PLATE	1
1E	C2493-00	MOUNTING CLAMP	1
1F	22094	SWITCH	4
1G	22094-01	WASHER '	4
1H	22094-02	NUT	4
11	22096-03	CONTROL HANDLE HALF	1
1J	22096-04	12' MAIN HARNESS	1
2	22096-05	12' SOLENOID HARNESS	1
3	22089	HYDRAULIC MOTOR (ROSS)	2
4	22047	HYDRAULIC CYLINDER	3
5	B2300-61	SOLENOID VALVE BANK	1
	22083-01	SPOOL SECTION	4
	22083-02	RELIEF VALVE	2
	22083-03	COIL	4
6	29012	#6 ORB x JIC MALE ELBOW ADAPTOR	6
7	29013	#8 ORB x JIC MALE ELBOW ADAPTOR	4
8	29070	1/2 x 46" HYDRAULIC HOSE	4
9	29060	3/8 x 120" HYDRAULIC HOSE	2
10	29063	3/8 x 132" HYDRAULIC HOSE	4
11	29064	3/8 x 144" HYDRAULIC HOSE	2
12	29007	#8 JIC x #10 ORB 90° ADJUSTABLE ELBOW	4
13	22046	PIONEER COUPLING	4

# RPU (OPTIONAL)





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