



H3PL 3 Point Harrow Lift

Instruction Manual and Parts List



Use this manual for safety instructions and operating instructions.
Make sure everyone who operates this machine has read this manual completely!
Save for future use.

Specifications are subject to change without prior notice



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3 POINT HARROW LIFT

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Introduction

The 3 Point Hydraulic Fold Flexible Harrow Lift has been engineered and built for ease of operation and long service life. The Flexible Harrow Lift has been designed to transport and operate with 7/16" x 8', 1/2" x 8' or 5/8" x 6' Flex Tine Harrow Sections.

It is important that you thoroughly understand the operation of the Harrow Lift before use. Read through this manual completely, watching especially for safety symbols (*see illustration below*) which will alert you to possible safety hazards. This safety alert symbol is used throughout this manual to identify possible safety hazards. It is the user's responsibility to read the operator's manual and comply with all the instructions pertaining to operation and maintenance. It is also the user's responsibility to inspect the machine at regular intervals and repair or replace worn or damaged parts when continued use would cause damage or excessive wear to other parts.



The word "**Note**" will alert you to special information such as specifications, techniques, reference information and other supplementary information. The word "**Important**" is used to point out a note which is of an immediate and urgent nature.

The manufacturer reserves the right to make improvements, discontinue or change specifications, models or design without notice and without incurring obligation.

When ordering parts for your 3 Pont Harrow Lift, please specify the part number and the part description as shown in the parts listing in this manual. Please give the serial number of the Harrow Lift in all correspondence when referring to the Harrow Lift. Record the serial number and purchase date here for future use.

Serial Number _____

Model _____ **Purchase date** _____

Dealer _____

Address _____

IMPORTANT: When this machine is traded or sold, make sure this manual accompanies the machine so future operators will have complete operating instructions and safety warnings available to them.

Safety Instructions



CAUTION: This machine should never be operated by anyone who is not familiar with the product and has not read the instruction manual. Do not allow children to operate the Harrow Cart.

All persons operating this machine should read and understand the Instruction Manual.

Read and understand all safety decals located on the machine.

Keep Safety Decals clean and legible at all times.

Replace Safety Decals that are missing or become illegible.

Do not allow anyone to ride on the machine.

Be sure machine is attached securely to the tractor before operating or transporting.

Inspect the Harrow Lift daily. Lubricate and repair or replace parts as needed.

Maintain and keep all Safety Shields in place.

Make sure Wings are raised all the way up whenever they are in the folded position before working around the machine or for transporting.

Before operating the machine inspect for loose or damaged bolts or parts and make necessary repairs before starting.

All bystanders should be a safe distance from the machine when in operation.

High-pressure oil leaks can penetrate skin causing serious injury. Do not use your finger or other skin to check for leaks.

Apply parking brake and stop tractor engine before dismounting tractor.

Keep hands, feet and clothing away from moving parts.

Never transport faster than surface conditions allow.

Display the SMV Emblem when transporting with a tractor.

Make sure you are in compliance with all local regulations regarding transporting agriculture equipment on public roads and highways. Consult your local law enforcement agency for further details.

Ensure that the Slow Moving Emblem (SMV) and all reflectors and lights required by the local highway and transport authorities are in place and are clean and visible by overtaking and oncoming traffic.

Decals


Important: The following decals or similar decals are located on your H3PL 3 Point Harrow Lift. Before you operate the H3PL 3 Point Harrow Lift, read and understand the purpose for each decal. Replace any damaged decals. Keep all decals clear and readable.



WARNING

TO AVOID SERIOUS INJURY OR DEATH:

<ol style="list-style-type: none"> 1. READ AND UNDERSTAND OPERATOR'S MANUAL. 2. TRACTOR MUST BE EQUIPPED WITH ROLL-OVER PROTECTION (ROPS) AND SWAY CHAINS. 3. ALWAYS WEAR SAFETY GLASSES, SAFETY SHOES, AND SEAT BELT FASTENED TIGHTLY. 4. STOP TRACTOR, LOCK BRAKES, AND BLOCK UP OR SUPPORT IMPLEMENT SECURELY BEFORE WORKING UNDER RAISED COMPONENTS. 5. ALLOW NO RIDERS AT ANY TIME ON TRACTOR OR IMPLEMENT. FALLING OFF CAN KILL. 	<ol style="list-style-type: none"> 6. KEEP BYSTANDERS CLEAR OF MOVING PARTS AND WORKING AREA. KEEP CHILDREN AWAY! 7. DO NOT LIFT, LOWER, OR OPERATE UNLESS EVERYONE IS CLEAR OF IMPLEMENT. 8. USE INCREASED CAUTION ON SLOPES & NEAR BANKS AND DITCHES TO PREVENT OVERTURN. 9. LOCK LIFT LEVER UP FOR TRANSPORT. HAVE SMV SIGN VISIBLE. FOLLOW LOCAL LAWS. 10. USE PARKING STAND OR BLOCK UP WHEN UNHITCHING FROM TRACTOR.
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CAUTION

HIGH PRESSURE OIL LEAKS CAN PENETRATE SKIN CAUSING SERIOUS INJURY AND GANGRENE.
SEE OPERATOR'S MANUAL & CONSULT A PHYSICIAN IMMEDIATELY.
DO NOT USE FINGER OR OTHER SKIN TO CHECK FOR LEAKS.
LOWER LOAD, RELEASE PRESSURE & BE SURE OIL IS COOL BEFORE LOOSENING FITTING.




CAUTION

STAY CLEAR WHEN OPERATING.
READ AND UNDERSTAND INSTRUCTION MANUAL BEFORE OPERATING.



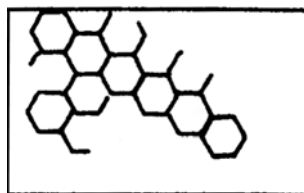
WARNING

<ul style="list-style-type: none"> Tractor's rearing up may cause machine damage, injury, or death. Never use tractor without ROPS. Keep seatbelt fastened snugly to prevent falling off and injury. NO RIDERS. 	
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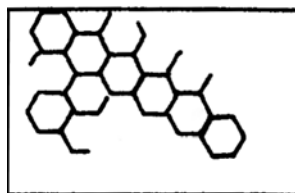
- Add tractor front weight as needed to maintain safe steering traction.
- Slow down in curves and rough places.
- Stay away from soft banks and holes.

- Never start or accelerate suddenly to maintain safe steering traction.
- Do not lift heavy implement while going up steep slopes.

Red Reflector



Yellow Reflector



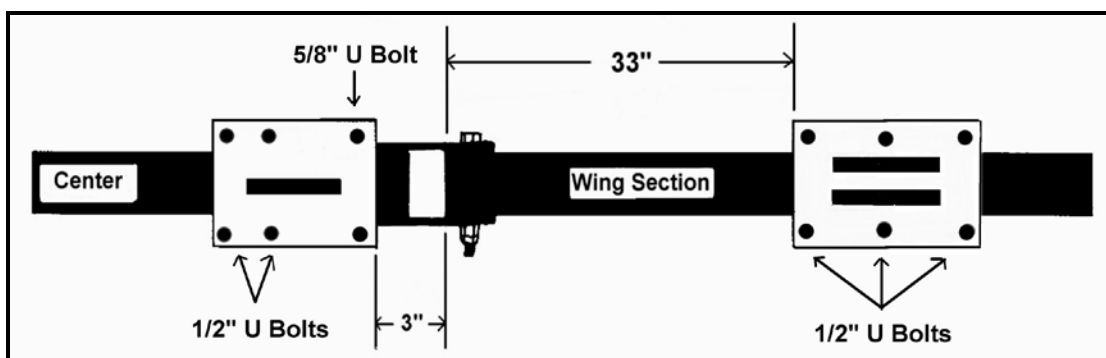
ASSEMBLY INSTRUCTIONS

CAUTION!

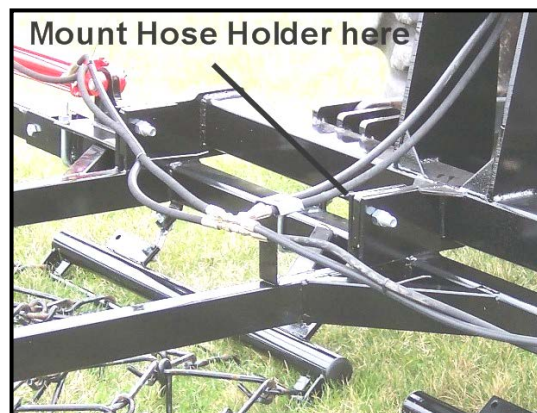


Wear proper protective equipment such as safety glasses and protective shoes when assembling.

1. Lay out and identify all parts.
2. Attach the 3 Point Hitch to the Center Section using 3 - $\frac{3}{4}$ " x 3 $\frac{1}{2}$ " capscrews and nylock hex nuts. Install Hose Holder Bracket on center bolt as instructed in step #9.
3. Insert the lower Hitch Pins and Top Link Pin into the 3 Point Hitch.
4. Attach the Operator's Manual Holder to the 3 Point Hitch using 2 - $\frac{3}{8}$ " x 1" hex capscrews.
5. Attach the Wing Sections to Center Section using 2 - $\frac{5}{8}$ " x 5" Capscrews on the front bar and 2 - $\frac{5}{8}$ " x 3 $\frac{1}{2}$ " capscrews on the back bar with nylock nuts.
6. Install the Hydraulic Wing Fold Brackets on the Center Section and Wing Sections according to the diagram.
Note: The Wing Section Brackets for the 16' model only have 2 u bolts. The Wing Brackets should be positioned so when unfolded the Wings are held level with the Center Section.



7. Mount the hydraulic cylinders on the Brackets with the ports to the rear. The ram end of the Cylinder with the Slotted Bracket will attach to the Mounting Bracket on the Wing using a $\frac{3}{4}$ " x 3 $\frac{1}{2}$ " hex capscrew and nylock hex nut. Do not tighten the hex capscrew completely. The Slotted Bracket on the ram must be able to move.
8. When installing the Hoses, install the Flow Restrictor in the tractor end of one of the Hoses. Prior to installing, operate the Hydraulic Cylinders in and out several times to purge the air out of the system. Failure to do so may result in the Wings dropping abruptly.
9. Install the Hose Holder Bracket on the center bolt of the hitch not on the frame as shown below.



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CAUTION! Do not exceed the manufacturers' maximum hydraulic system pressure of 2500 psi.



WARNING! Always wear protective eye goggles and use a magnifying glass or hold a piece of wood on suspected leaks. Pinhole hydraulic leaks can penetrate skin. Do not touch.



Note: If fluid penetrates the skin, it must be surgically removed within a few hours by a doctor familiar with the form of injury or gangrene may result. Make sure the weight of the machine has been taken off of the hydraulic cylinder before disconnecting the hydraulic hoses.

10. Attach the Pull Bars to the Mounting Brackets using ½" Capscrews, Flatwashers and Nylock Nuts. Attach Pull Bar Brackets to the back side of the Center and Wing Sections using ½" U Bolts, Lockwashers and Nuts. Parking Stand Mounts attach to the outside Pull Bar Mounting Brackets on the Center Section using ½" x 4 ¾" Hex Capscrews, Lockwashers and Hex Nuts. Use the correct number of 4' and 6' Pull Bars according to the size of Center or Wing Section. Mount 1 – 4' Pull Bar on a 4' section, 1 – 6' Pull Bar on a 6' section and 2 – 4' Pull Bars on an 8' section. Allow a 9" or 9 ½" space, depending on the hook spacing of the Harrow Section, between the ends of the Pull Bars.

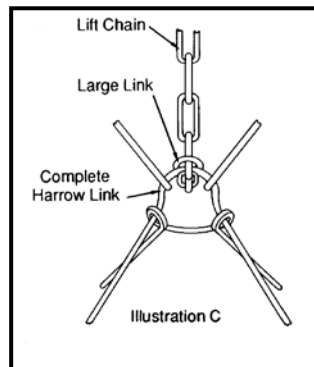


Install the Rear Parking Stand Mount in the center of the Center Section using the Back Plate, ½" x 3" Hex Capscrew, Lockwashers and Hex Nuts.

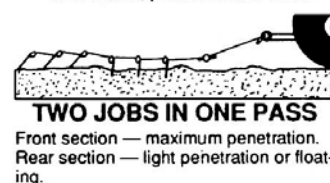
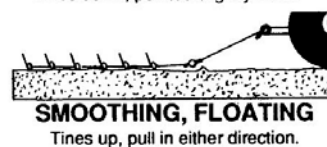
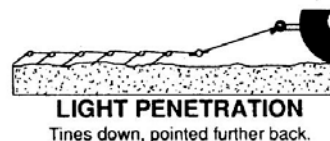
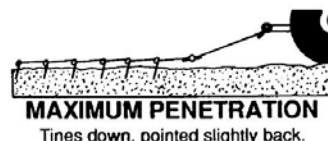


Installing Harrow Sections

To install Harrow Sections insert Front Harrow Section Hooks over the bars on the back of the Pull Bars. Connect Rear Harrow Section to Front Harrow Section. Pull the sections back stretching them out as far as possible. Total length of 8' Harrow Sections will be approximately 1 ½' longer than Harrow Cart Frame. The 5/8" x 6' Harrow Sections will only slightly extend past the back bar of the frame. Loop Lift Chain (see picture below) around Harrow Section Expander Bar or Link approximately 1 ½' from the end, and attach to Harrow Cart Frame using a 3/8"x 2 ½" Carriage Bolt, Lockwasher and Nut.



ADJUSTABLE PENETRATION FOR GREATER VERSATILITY



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Before using the Harrow Check The Following

Check and retighten all bolts and nuts.

Check Hydraulic System for leaks before using.

Purge air from Hydraulic System.

Operation

Important: Before operation, the operator should be familiar with these operation instructions and the operation of the tractor. Do not allow an unqualified person or one under the influence of medication or intoxicating substances to operate the tractor.

1. Connect the Harrow Lift to the tractor using the Pins supplied.
2. Connect the hydraulic hoses to the tractor hydraulic system.
3. Raise the machine using the tractors 3 point lift system and fold the wings using the tractors hydraulic lift system. Raise and secure the Parking Stands.

CAUTION!



Make sure a restrictor is installed in one of the hydraulic lines. Failure to use a restrictor will allow Wings to raise and lower rapidly and could result in damage to the machine and injury to bystanders.

4. When preparing to use the Harrow Lift lower the Harrow to the working position using the tractor's 3 point hitch control. Use the tractor hydraulics and unfold the Harrow Wings. Adjust the top link to level the Harrow Lift when in the working position.

CAUTION!



Make sure area around Harrow Cart is clear before lowering. Do not lower when people or pets are near.

CAUTION!



Operate the cylinders through the cycle a few times to expel air from the system. Failure to fully charge the hydraulic system could result in injury when the Wings fall abruptly to the ground.

5. When in field operating position the frame should be level or slightly higher in the rear. Do not operate the Harrow Lift with the rear frame dragging on the ground.

6. Working speed is normally 5 to 10 mph. Speed varies with different conditions or terrain.

Transporting

When transporting, raise the Harrow using the tractor's 3 point hitch control and fold the Wings up all the way using the tractor's hydraulics. Raise the Parking Stands and secure in place.

CAUTION!



When traveling on public roads, a slow moving vehicle (SMV) sign should be installed on the tractor so it is visible to vehicles following. Warning lights should also be installed on the tractor so they are visible to other motorists. Comply with state and local safety requirements at all times.

CAUTION!



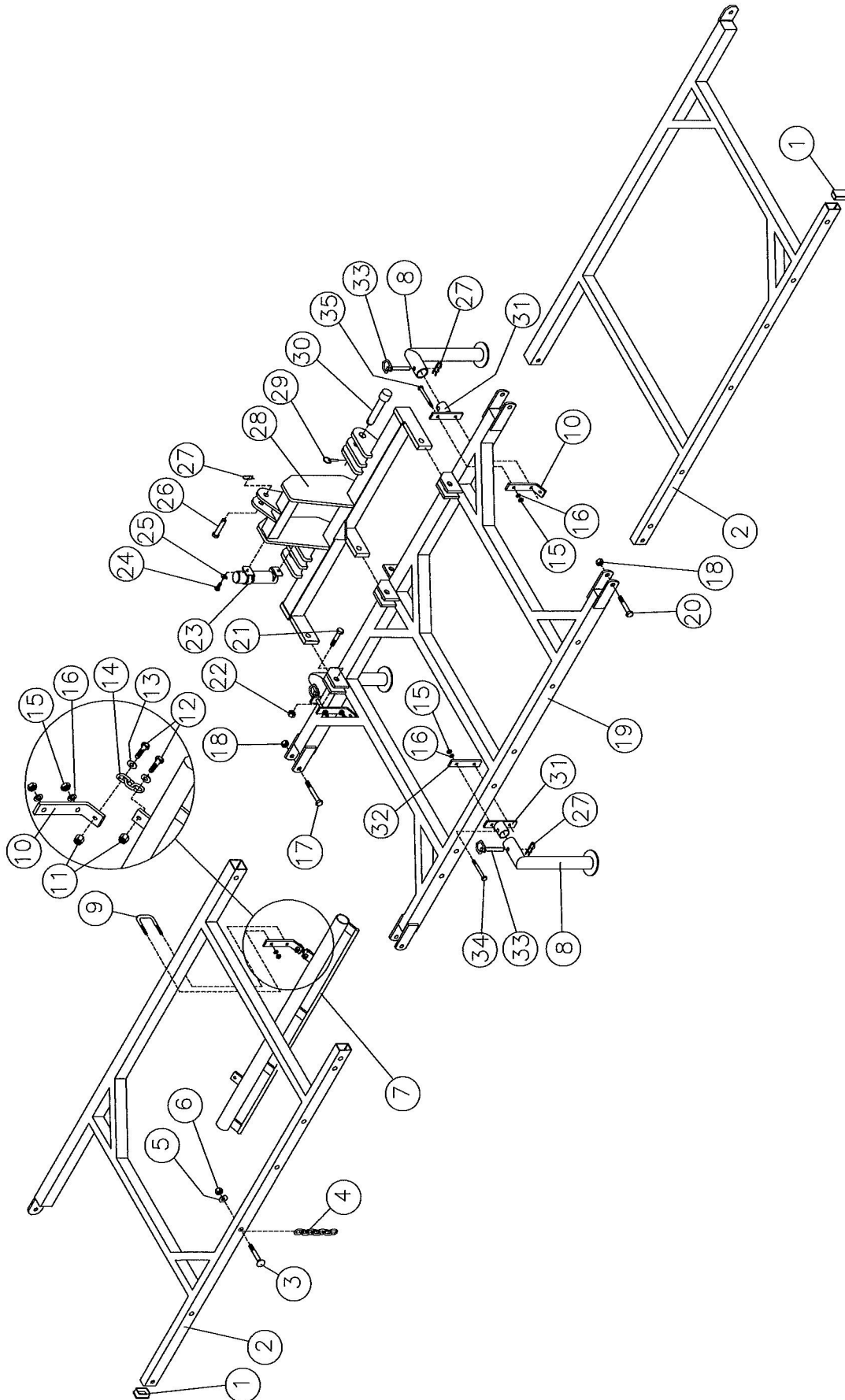
Never transport faster than road surface conditions allow.

Maintenance

1. Check hydraulic hoses periodically for cracks, abrasions or leaks. Replace defective hose immediately. Replace worn or broken hoses and fittings with factory replacement parts only.
2. To extend the life of the cylinder and hoses, store the Harrow Lift under cover. If cover is not available, remove the cylinder and hoses and store under cover.
3. Check tightness of all bolts after one hour of operation and every six months thereafter.
4. Lubricate hinge points as needed.

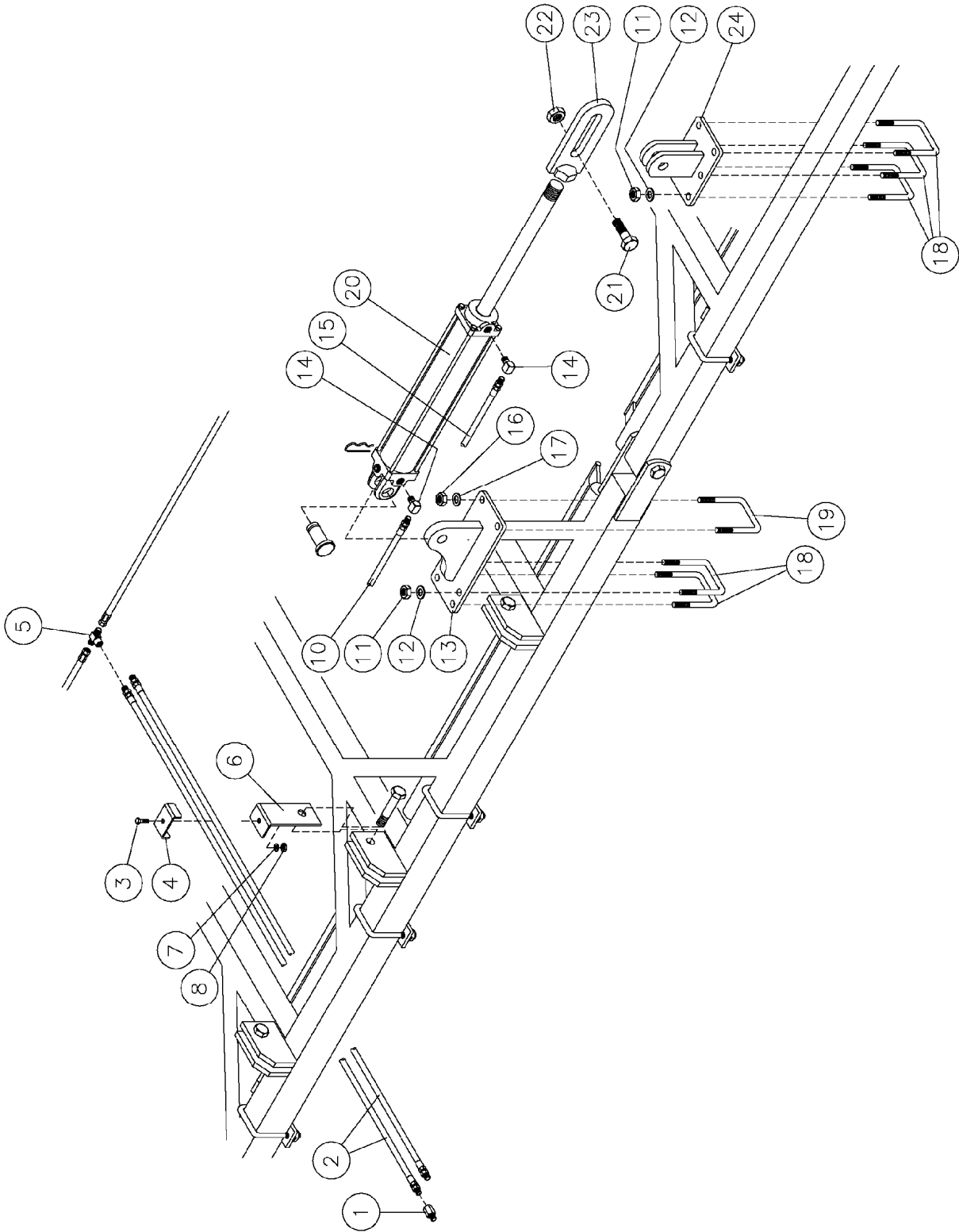
Specifications

<i>Model Number</i>	<i>H3PL16</i>	<i>H3PL20</i>
<i>Working Width</i>	15'	19' 6"
<i>Approx. Wt. Lift only</i>	695 lbs.	785 lbs.
<i>Transport Width</i>	8' 8"	8' 8"
<i>3 Point Hitch</i>	Cat I & II	Cat I & II
<i>Center Section</i>	8'	8'
<i>Wing Sections</i>	4'	6'



H3PL Harrow Lift Parts List

Item No.	Part No.	Description	H3PL16	H3PL20
1	CAP153	Plastic Insert	2	2
2	W4	4' Wing Weldment	2	
	W6	6' Wing Weldment		2
3	CB38250	Carriage Bolt, 3/8" x 2 1/2"	12	14
4	HCLC	Lift Chain	12	14
5	0-158	Lockwasher, 3/8"	12	14
6	0-159	Hex Nut, 3/8"	12	14
7	HD4	Pull Bar, 4'	4	
	HD6	Pull Bar, 6'	2	2
8	H3104	Parking Stand	3	3
9	U BOLT	U Bolt, 1/2"x 3.06"x 4 1/4"	8	8
10	PBMB	Pull Bar Mounting Bracket	8	8
11	0-161	Nylock Hex Nut, 1/2"	16	16
12	HHC2175	Capscrew, 1/2"x 1 3/4"	16	16
13	K-322	Flatwasher, 1/2"	16	16
14	HCPC	Chain, 7mm, 3 links	8	8
15	0-153	Hex Nut, 1/2"	16	16
16	0-173	Lockwasher, 1/2"	16	16
17	HCS585	Capscrew, 5/8"x 5"	2	2
18	OC-76	Nylock Hex Nut, 5/8"	4	4
19	H3102	8' Center Weldment	1	1
20	K-327	Capscrew, 5/8"x 3 1/2"	2	2
21	0-168	Capscrew, 3/4"x 3 1/2"	3	3
22	NL34	Nylock Nut, 3/4"	3	3
23	MH	Operator's Manual Holder	1	1
24	0-181	Hex Capscrew, 3/8"x 1"	2	2
25	0-158	Lockwasher, 3/8"	2	2
26	57182	Top Link Pin	1	1
27	K-232	Hairpin	1	1
28	H3100	Hitch	1	1
29	K-340	Lynch Pin	2	2
30	H3101	Hitch Pin	2	2
31	H3105	Mount, Parking Stand	3	3
32	H3106	Back Plate	1	1
33	H3107	Pin, Stand	3	3
34	H3H123	Hex Capscrew, 1/2" x 3"	2	2
35	H3H12434	Hex Capscrew, 1/2" x 4 3/4"	4	4



Hydraulic System Parts List

Item No.	Part No.	Description	16'	20'
1	0-57	Swivel Restrictor, ½"NPT, 1/32"	1	1
2	HF120	72" Hydraulic Hose, ¼" JIC F x ½" MP	2	2
3	0-157	Capscrew, 3/8" x 1 ½" GR5	1	1
4	0-302	Hose Holder Clip	1	1
5	HF103	¼" JIC M Tee	2	2
6	H3103	Hose Holder	1	1
7	0-158	Lockwasher, 3/8"	1	1
8	0-159	Hex Nut, 3/8"	1	1
10	HF104	48" Hyd. Hose, ¼" JIC F x ¼" JIC F	2	2
11	0-153	Hex Nut, ½"	16	20
12	0-173	Lockwasher, ½"	16	20
13	HF101	Mounting Bracket, Center Section	2	2
14	HF110	90° Elbow, ¼" JIC M x 3/8" MP	4	4
15	HF105	66" Hyd. Hose, ¼" JIC F x ¼" JIC F	2	2
16	OE-154	Hex Nut, 5/8"	4	4
17	OE-155	Lockwasher, 5/8"	4	4
18	U BOLT	U Bolt. 3" x 3.06" x 4 ¼"	8	10
19	0-67	U Bolt, 4" x 5 ¼" x 5/8"	2	2
20	HYDCYL	Hydraulic Cylinder, 2 ½" x 16"	2	2
21	HCS343	Capscrew, ¾" x 3"	2	2
22	NL34	Nylock Nut, ¾"	2	2
23	CYLEND	Bracket, Slotted Cylinder Rod	2	2
24	HF100	Bracket, Wing Mounting		2
	HF100-16	Bracket, 16' Lift Wing Mounting	2	

Notes



Warranty Policy

Ogden Metalworks, Inc. warrants this product to be free from defects in material and or workmanship under normal use and service, when set up and operated as intended and under normal service and conditions and in accordance with the instruction manual, for one year from the date of delivery by the dealer to the original purchaser. Ogden Metalworks, Inc.'s obligation under this warranty is limited to the replacement of any part or parts which are determined defective by Ogden Metalworks, Inc. due to factory workmanship and or material. This warranty does not cover common wear items. Credit for required labor will be issued at the company's discretion.

This warranty is void on any unit which has been modified or which has been subject to misuse, negligence or accident. Ogden Metalworks, Inc., reserves the right to request the return of any part in question to be sent to the factory for inspection. All returned parts must be sent to the factory freight prepaid.

This warranty is extended solely to the original purchaser and is not transferable. This warranty is not valid unless the warranty card has been returned to Ogden Metalworks, Inc. within 30 days from the date of purchase by the end user.

Ogden Metalworks, Inc.

Ogden Metalworks, Inc. reserves the right to change specifications and dimensions without notice.

Warranty will not be valid unless card is returned

3 Point Harrow Lift Warranty Card

Please print Purchased Date _____

Name _____

Address _____

Address _____

Serial Number _____ Model _____

Dealer _____

Address _____

