

Pik Rite

Plastic Wrapper
Model: 5000
Parts & Operator's Manual
1998



Part No.: MAN-0016



ABOVE:

Pik Rite is located in Lewisburg, Pennsylvania.

TO THE RIGHT:

Elvin Stoltzfus, President, (left) and Joe Yoder, Vice President, are pictured standing with their wives in front of a Cucumber Harvester.



BELOW:

Pik Rite employs approximately 27 full-time employees and 7 part-time.





101 fairfield road lewisburg, pa. 17837-9214

717-523-8174 fax 717-523-8175

February 13, 1998

Dear Customer,

Congratulations on your purchase of a quality designed and manufactured Pik Rite product!

You should expect a return on your investment in the form of outstanding performance in the field, affordable parts and minimum maintenance.

Should your equipment need parts or service, we have a team that is fully equipped and committed to meet your needs.

In order to maintain maximum performance, it is extremely important that all the information in the manual be reviewed and studied carefully before operation.

Thank you for your confidence in Pik Rite!

Sincerely,

A handwritten signature in black ink, appearing to read "Elvin Stoltzfus". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Elvin Stoltzfus, President

Company History

Pik Rite, Inc, is a designer and manufacturer of innovative, quality-built vegetable harvesting equipment. Located 2 miles west of Lewisburg in Union County, Pennsylvania, Pik Rite operates from manufacturing facilities which encompass 28,000 square feet in addition to office space utilizing an additional 2700 square foot area. The company is owned by its' two founders who have diverse backgrounds in farming and welding shop activities. For the first ten years of Pik Rite's existence, Joseph Yoder served as President and Elvin Stoltzfus as Vice-President. Upon Mr. Yoder's move to California in mid-1997, the two owners exchanged administrative positions in order to afford Mr. Yoder more time in his area of expertise, product improvement, and take advantage of Mr. Stoltzfus' managerial capabilities. Pik Rite presently employs 30-35 people.

In 1983, the first vegetable harvesting machine was built for the purpose of providing a mechanical method of picking tomatoes for the local processing industry. After three years of testing and modifying the original machine, three Pik Rite harvesters were built in 1986. Two more machines were subsequently manufactured in 1987 and again in 1988. Activities in 1989 were limited to research and further development of the tomato harvester, with concentration in several areas, including a new forced balance shaker system. As a result of these efforts, Pik Rite now holds a domestic patent for a Double Brush Shaker System.

During the 1990's, Pik Rite has experienced steady growth in product sales, market coverage, and technological innovations. The pull-type design of the tomato harvester has allowed the growers who purchase the machines a great degree of adaptability for harvesting in different growing environments. Pik Rite has subsequently developed and added new product lines for harvesters which can be used to pick cucumbers and peppers. A vine windrower was developed in 1994 to assist the growers in preparing for the harvest by rearranging vines prior to picking to allow for more efficient harvesting. In the fall of 1997, Pik Rite introduced a new product to the marketplace - a plastic wrapper. This piece of equipment will allow fast, efficient removal of plastic mulch from the fields after harvest, and will result in disposal cost savings for the grower.

Markets

Pik Rite, Inc. has basically captured and dominated the new tomato harvester sales market in the Midwest and Eastern sections of North America, including Ontario, Canada. Machines are also presently being used for crop harvesting in Kentucky, Texas, New Mexico, California, Colorado, and Washington. In addition to the Canadian market, Pik Rite harvesters have also been exported to Russia, Australia, and Mexico. New opportunities are now being considered for sales to several South American countries and Saudi Arabia. In 1993, Pik Rite entered into a licensing agreement with the Italian firm, Gallignani Ortofrutta, to build tomato harvesters using the double brush shaker system. Gallignani's sales territory includes most of the countries in the Mediterranean Basin.

As the United States manufacturing sector looks forward to the beginning of the 21st century, Pik Rite continues to lead the way with production of efficient, dependable, vegetable harvesting equipment which provides the grower with the best value for the dollar. These efforts have been recognized by the Commonwealth of Pennsylvania as Pik Rite, Inc. was presented with the state's Agribusiness Achievement Award in January 1997.

Introduction



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury & carefully read the message that follows.

“Right-hand” & “left-hand” sides are determined by facing in the direction the machinery will travel.

Record your product’s serial number in the space provided below:

S.N. _____ Purchase Date _____

Please review the warranty for this equipment which appears on the sales order that was signed when the sales order was placed. This warranty provides you the assurance that Pik Rite will back its products where defects appear within the warranty period. Pik Rite also provides field improvements, in some circumstances without charge to the customer, even if the product’s warranty is expired.

Warranty & field improvements are a part of Pik Rite’s product support program for customers who operate & maintain their equipment as described in this manual. If the equipment is abused or modified causing a change in its performance beyond the original factory specifications, the warranty will become void & field improvements may be denied.

For information and service call or write to:

Pik Rite Inc.
101 Fairfield Rd.
Lewisburg PA 17837
800-326-9763

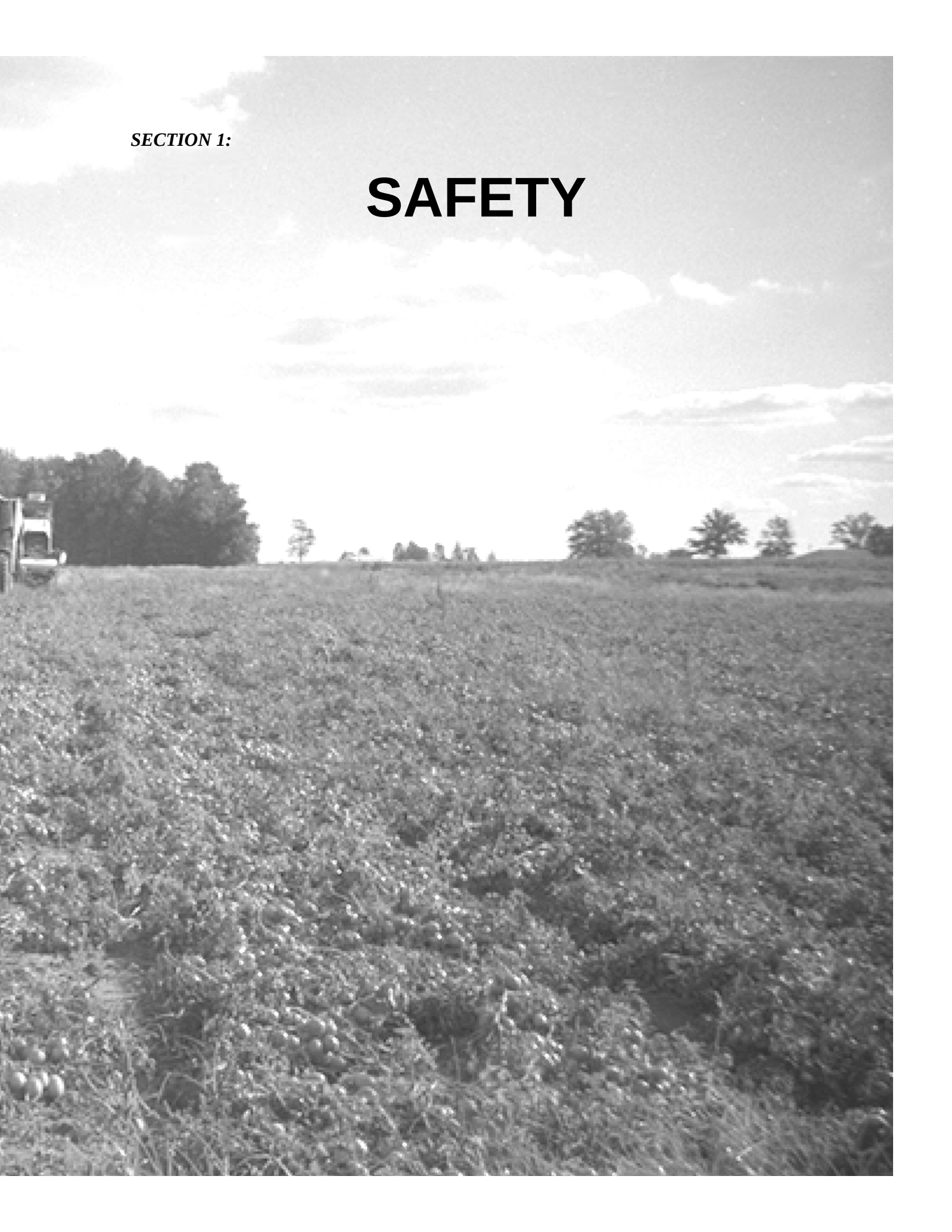
Tables of Contents

SECTION 1: SAFETY	8
SECTION 2: PREPARATION, OPERATION & MAINTENANCE	20
2-1: Mounting the Plastic Wrapper	22
2-2: Operating the Plastic Wrapper	22
2-3: Tensioning of the Plastic Being Wrapped	23
2-4: Maintenance	23
2-5: Additional Safety Information	23
SECTION 3: PARTS	26
500-1: Arm, Roller, Stand to Frame Assembly	28
500-2: Cutter Bar & Coulter to Frame Assembly	30
500-3: Hydraulic Assembly	32
500-4: Safety Decal Placement	34



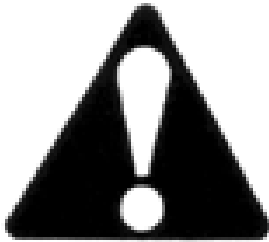
SECTION 1:

SAFETY



SECTION 1: SAFETY

The operator's safety was one of the prime considerations in the minds of Pik Rite engineers when designing Pik Rite equipment. Shielding, simple adjustments & other safety features were built into the equipment wherever possible. Modifications to the equipment may impair the function &/or safety & affect machine life.



Recognize Safety Information

This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, be aware of the potential for personal injury.

Follow recommended precautions & safe operating practices.

SAFE0103/ASAE SAFETY-ALERT SYMBOL



Understand Signal Words

A signal word—DANGER, WARNING or CAUTION—is used with the safety-alert symbol.

DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs.

SAFE0001/DANGER, SAFE0002/WARNING, SAFE0003/CAUTION



Follow Safety Instructions

Carefully read all safety messages in this manual & on your equipment's safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure that all new equipment components & repair parts include the current safety signs. Replacement safety signs are available from Pik Rite.

Learn how to operate the equipment & how to use controls properly. Do not allow anyone to operate without instruction.

Keep your equipment in proper working condition. Unauthorized modifications to the equipment may impair function &/or safety and affect equipment life.

If you do not understand any part of this manual & need assistance, please contact your Pik Rite representative.

SAFE0104/READ OPERATOR'S MANUAL



Prepare for Emergencies

Be prepared if a fire starts.

Keep a first aid kit & fire extinguisher handy.

Keep emergency numbers for the ambulance service, hospital, fire department, & doctors near your telephone.

SAFE0106

SECTION 1: SAFETY



Operate Equipment Safely

All equipment must be operated by responsible persons who have been properly instructed & delegated to do so.

The equipment may move suddenly or fall while detaching. Use blocks under the wheels & release all stored energy from pickup float system before detaching equipment.

To avoid injury or death:

Disengage drives, shut off engine, & make sure electrical power is off before servicing or unplugging the equipment.

Do not stand between equipment & tractor when detaching equipment.

This equipment is intended for mobile field operation only. Never use equipment in a stationary position or modify it to be used in one.

Tomato Harvester & Cucumber Harvester

Do not stand or work under discharge conveyor or header while harvester is operating.

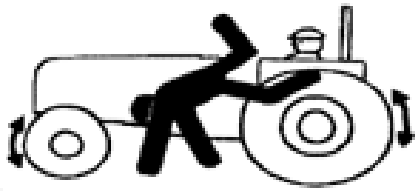
Do not stand between harvester & tongue while positioning tongue.

Do not put hands or feet between tongue & frame opening while positioning tongue.

Always operate machine at rated PTO speed.

Do not use your hands or feet to feed plants into the harvester. Disks & chains can feed plants faster than you can release your grip on the plants.

SAFE0087/8.1 LARGE THROWN OR FLYING OBJECT

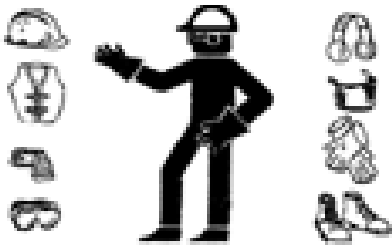


Keep Riders Off Equipment & Tractor

Only allow the operator on the tractor & laborers in the places designed for them. Keep riders off.

Workstations are built into the Pik Rite tomato & cucumber harvesters to ensure that laborers can safely stand while doing grading. Riders on equipment are subject to injury such as being struck by foreign objects & being thrown off of the equipment. Riders also obstruct the operator's view resulting in the equipment being operated in an unsafe manner.

SAFE0105



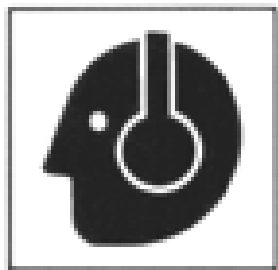
Wear Protective Clothing

Wear close fitting clothing & safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating equipment.

SAFE0107

SECTION 1: SAFETY



Protect Against Noise

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

SAFE0095/9.1 LOUD NOISE--HEARING PROTECTION REQUIRED



Handle Chemical Products Safely

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used in conjunction with Pik Rite equipment include such items as lubricants & paints.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical & health hazards, safety procedures, & emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are & how to do the job safely. Then follow the advised procedures & make use of the recommended equipment.

(Contact the Pik Rite Lewisburg, PA office for MSDS's on chemical products used with Pik Rite equipment.)

SAFE0108



Stay Clear of Rotating Drive lines

Entanglement in rotating driveline can cause serious injury or death.

Keep the tractor master shield & drive line shields in place at all times. Make certain that rotating shields turn freely.

Wear close fitting clothing. Stop the engine & be sure the PTO driveline is stopped before making adjustments, connections, or cleaning out the PTO driven equipment.

SAFE0070/7.9 WHOLE BODY ENTANGLEMENT-IMPLEMENT INPUT DRIVELINE



Use a Safety Chain

A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Use a chain with a strength rating equal to or greater than the gross weight of the equipment (*Weights listed below*). Do not use safety chain for towing.

Tomato Harvester & Cucumber Harvester

Attach the chain to the harvester main frame & the tractor drawbar support or another specified anchor location. Provide only enough slack in the chain to permit turning.

Gross Weights

Tomato Harvester:	15,000 lbs.
Cucumber Harvester:	20,000 lbs.
Plastic Wrapper:	2,500 lbs.

SAFE0110

SECTION 1: SAFETY



Practice Safe Maintenance

Understand service procedure before doing work. Maintain cleanliness & dryness in work area.

Never lubricate or service equipment while it is in motion. Be sure to keep hands, feet, & clothing away from power-driven parts. Disengage all power & manipulate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow equipment to cool.

Securely support any equipment elements that must be raised for service work.

Keep all parts in good condition & properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on equipment.

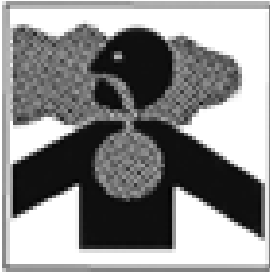
SAFE0019/3.6 FALLING OR SLIPPING ON WET AREA



Avoid Heating Near Pressurized Fluid Lines

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to you & bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can be accidentally cut when heat goes beyond the immediate flame area.

SAFE0112



Remove Paint Before Welding or Heating

Avoid potentially toxic fumes & dust.

Hazardous fumes can be generated when paint is heated by welding, soldering or using a torch.

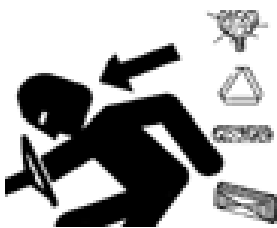
Do all work outside or in a well-ventilated area. Dispose of paint & solvent properly.

Remove paint before welding or heating:

- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.

If you use solvent or paint stripper, remove stripper with soap & water before welding. Remove solvent or paint stripper containers & other flammable material from the area. Allow fumes to disperse at least 15 minutes before welding or heating.

SAFE0005/1.2 POISONOUS FUMES OR TOXIC GASES--ASPHYXIATION



Use Safety Lights & Devices

Slow moving tractors & towed implements carry the potential to create a hazard when driven on public roads. They are difficult to see, especially at night. Avoid personal injury or death resulting from collision with a vehicle.

Flashing warning lights & turn signals are recommended whenever driving on public roads. To increase visibility, use the lights provided with your equipment.

SAFE0109

SECTION 1: SAFETY



Avoid High-Pressure Fluids

Fluid escaping under pressure carries the potential to penetrate the skin resulting in serious injury.

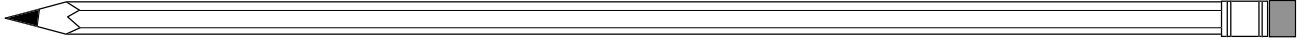
Avoid this hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands & body from high-pressure fluids.

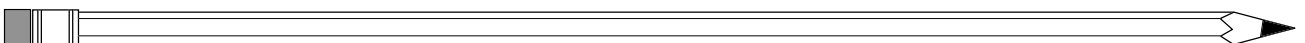
If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source.

SAFE0022/4.1 HIGH PRESSURE FLUID--INJECTION INTO BODY

NOTES



A large, empty rectangular box with a thin black border, intended for writing notes.





SECTION 2:

PREPARATION OPERATION & MAINTENANCE



SECTION 2: PREPARATION, OPERATION & MAINTENANCE

2-1: MOUNTING THE PLASTIC WRAPPER

Mount the lifter onto the 3-point hook-up of your tractor.

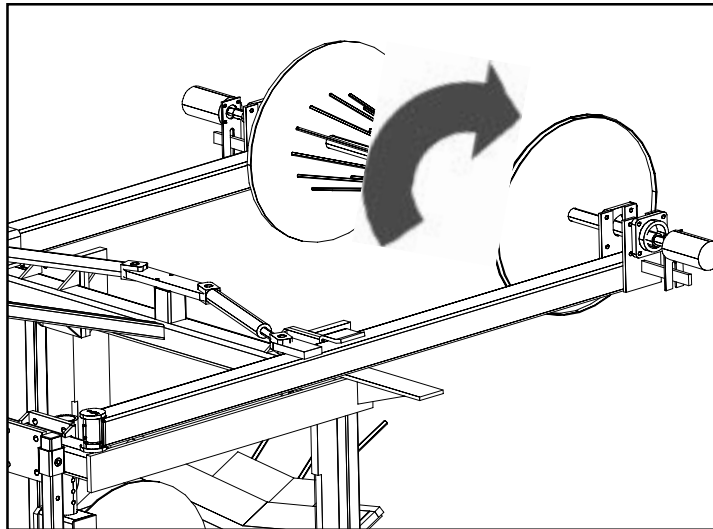
Secure the needle valve tension control in a convenient location for operator.

Lift jack stands up and secure.

2-2: OPERATING THE PLASTIC WRAPPER

Lift approximately 15' of plastic; shut machine off.

Wrap plastic on cones by hand starting over the top of the cones. (See figure below.)



Secure plastic to cone.

Turn needle valve tension control counter clockwise, relieving cone tension.

Engage hydraulics turn needle valve tension control clockwise increasing cone tension, at same time start traveling. (See tension instructions for correct tension.)

Ground speed must be synchronized with the wrapping of plastic to keep an even flow.

When blade is at desired depth, level the machine by adjusting the top link arm on tractor. (This may vary depending on depth of beds.)

2-3: TENSIONING OF PLASTIC BEING WRAPPED

Using needle valve tension control, tension plastic on cones so it is just snug enough leaving plastic loose as it comes over the blade. Turning needle valve tension control clockwise will result in more tension. Counterclockwise will give less tension.

NOTE: Over tensioning plastic will result in difficulty unloading and tearing of plastic.

2-4: MAINTENANCE

Grease pivot on cone arms and slide plate every 50 hours of operation.

Grease cone bearings every 50 hours of operation.

Grease coulter arm every 50 hours of operation.

2-5: ADDITIONAL SAFETY INFORMATION

Always stay clear of coulters and cutter bars when operating machine.

Be sure persons that are tying plastic to roller cones are clear before engaging hydraulics.

Be sure persons are clear of roller arms and roller cones before unloading plastic.

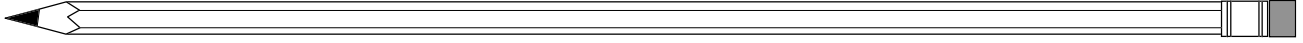
Always lower wrapper and shut down hydraulics and tractor before servicing or cleaning machine.

Never go under plastic wrapper when supported only by three-point hitch. Drop machine to ground or lower jack stands, lock them in place and rest machine on ground.

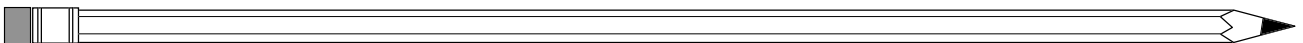
Always lower machine to ground before unloading plastic.

Never stand between roller arms or roller cones when tractor is running.

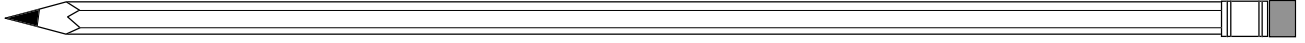
NOTES



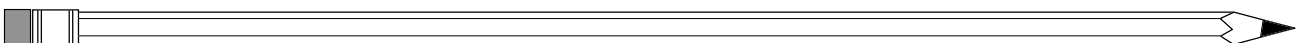
A large, empty rectangular box with a thin black border, intended for writing notes.



NOTES



A large, empty rectangular box with a thin black border, intended for writing notes.



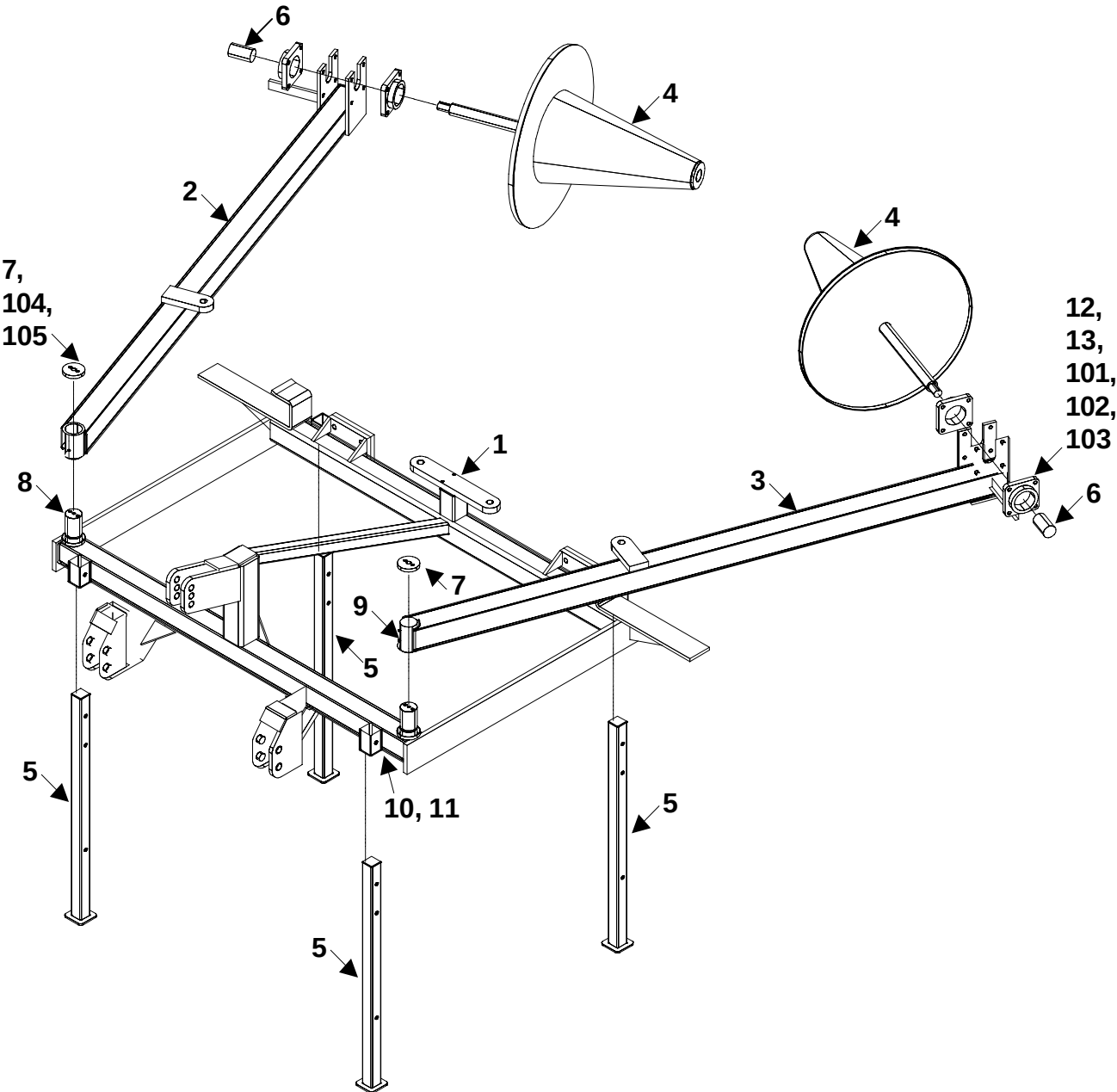


SECTION 3:

PARTS



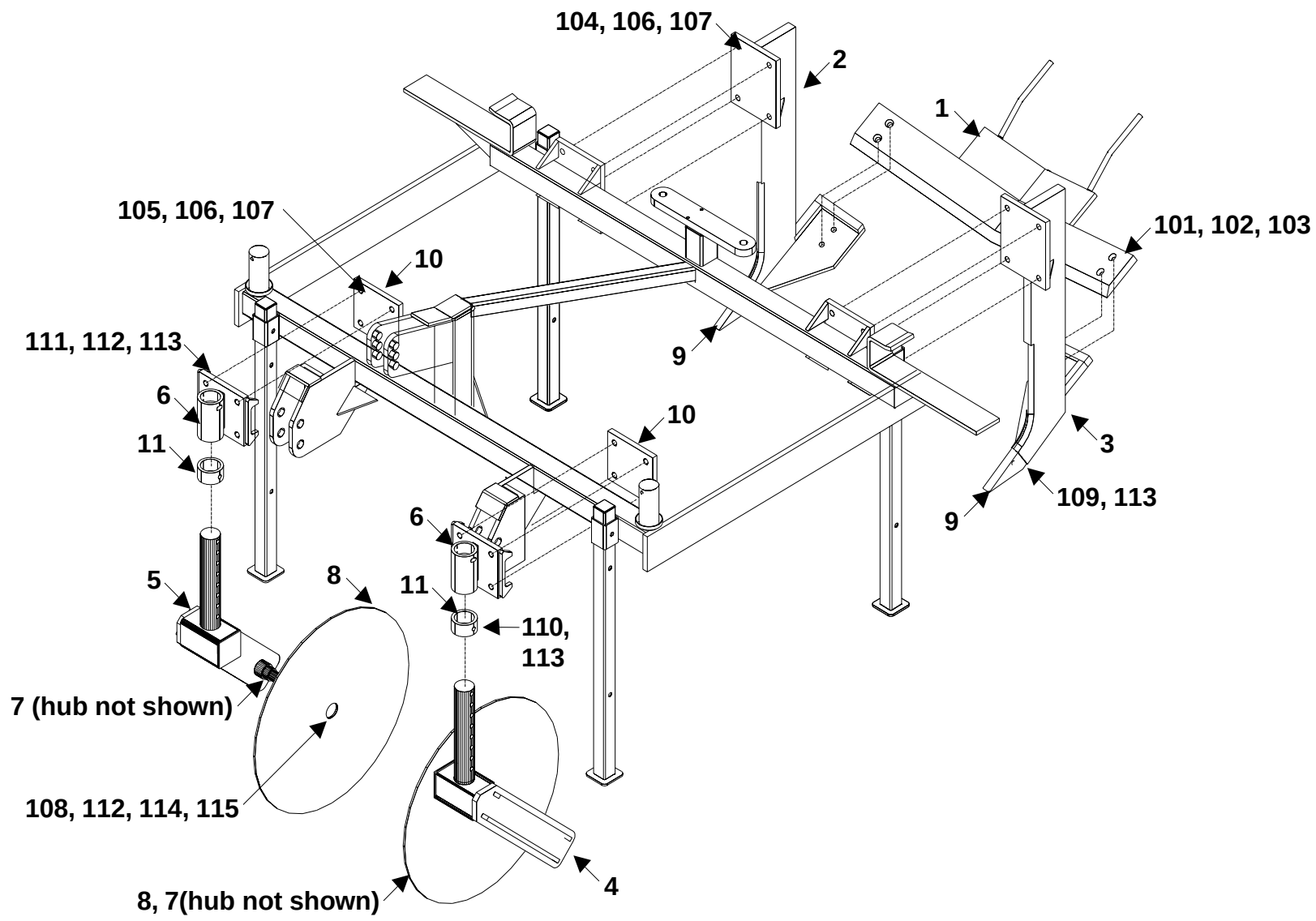
500-1 Arm, Roller, Stand to Frame Assembly



500-1 Arm, Roller, Stand to Frame Assembly

<i>Ref</i>	<i>Part No.</i>	<i>Description</i>	<i>Parts – Assembly</i>	<i>Will Fit SN</i>	<i>Remarks</i>
1	500-1-1	Main Frame Weldment	1	59701-	
2	500-1-2	Roller Arm Weldment, C/S	1	59701-	
3	500-1-3	Roller Arm Weldment, R/S	1	59701-	
4	500-1-4	Roller Cone Weldment	2	59701-	
5	500-1-5	Stand Weldment	4	59701-	
6	CPS-6056	Steel Coupler (offcenter) 1 1/4" x 1 1/4"	2	19101-19525 30095001- 60096001- 61096001- 61396001-	Replaces CPS-231
7	5044	End Cap, Roller Arm Pivot	2	59701-	
8	GF-1428	Grease Fitting 1/4" x 28 straight	2	20095001-	
9	GF-1827	Grease Fitting 1/8 NPT Straight	4		
10	5061	Pin Weldment	4	59701-	
11	PIN-H8	Hairpin, 1/2-5/8 Rod Dia Range	4	59701-	
12	BR-085-RCJ	RCJ Bearing Housing	4	11001	
13	BR-175-085	Fafnir Bearing 1 3/4 Tri Seal	4	19101	
101	BL-8-225-H	1/2-13 X 2 1/4 HEX CAP G5 ZC	16		
102	BL-8-FW	1/2 USS FW ZC	16		
103	BL-8-LN	1/2-13 HEX LOCK NUT NYLON INSERT ZC	16		
104	BL-6-125-H	3/8-16 X 1 1/4 HHCS G5 ZC	4	193-729K 194-231K	
105	BL-6-LW	3/8 SPLIT LW ZC	4	193-729K 194-806K	

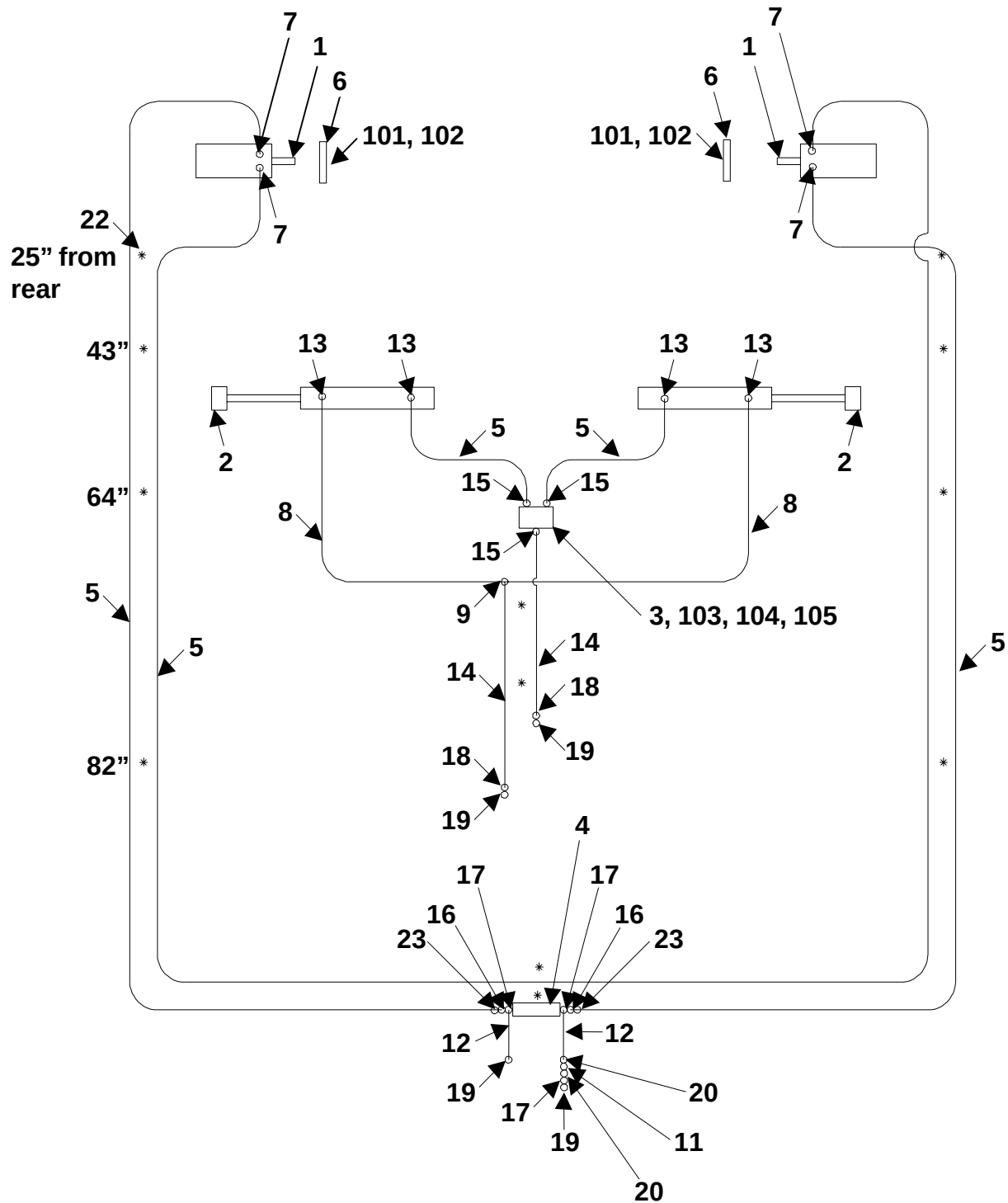
500-2 Cutter Bar & Coulter to Frame Assembly



500-2 Cutter Bar & Coulter to Frame Assembly

<i>Ref</i>	<i>Part No.</i>	<i>Description</i>	<i>Parts – Assembly</i>	<i>Will Fit SN</i>	<i>Remarks</i>
1	500-2-1	Cutter Bar Weldment	1	59701-	
2	500-2-2	Tyne Weldment, C/S	1	59701-	
3	500-2-3	Tyne Weldment, R/S	1	59701-	
4	500-2-4	Coulter Arm Weldment, C/S	1	59701-	
5	500-2-5	Coulter Arm Weldment, R/S	1	59701-	
6	500-2-6	Coulter Mount Weldment	2	59701-	
7	CLT-0060	Hub	2		
8	CLT-0027	Coulter Blade, 27"	2		
9	CLT-0027-P	Sub Soiler Point	2		
10	5066	Mount, Coulter Mounting Bracket, Plastic Wrapper	2	59701-	same as and must match 5058
11	5063	Sleeve, Coulter, Plastic Wrapper	2	59701-	
101	BL-10-225-FS	5/8-11 x 2 1/4, Flat Head Cap Screw	4		
102	BL-10-LW	5/8 SPLIT LW ZC	4	194-161K	
103	BL-10-N	5/8-11 HEX FIN NUTS ZC	4	194-161K	
104	BL-12-250-H	3/4-10 X 2 1/2 HH GR5 ZC	8		
105	BL-12-700-H	3/4-10 X 7 HH GR5 ZC	8		
106	BL-12-FW	3/4" Flat Washer	32		
107	BL-12-LN	3/4" Lock Nuts w/Nylon Inserts	16		
108	BL-8-150-C	1/2 UNC X 1 1/2 CARRIAGE BOLT GR5 ZINC	8	194-161K	
109	BL-8-225-H	1/2-13 X 2 1/4 HEX CAP G5 ZC	2		
110	BL-8-425-H	1/2-13 X 4 1/4 HEX CAP G5 ZC	2		
111	BL-8-450-H	1/2-13 X 4 1/2 HEX CAP G5 ZC	2	194-101K	
112	BL-8-FW	1/2 USS FW ZC	12		
113	BL-8-LN	1/2-13 HEX LOCK NUT NYLON INSERT ZC	6		
114	BL-8-LW	1/2 SPLIT LW ZC	8		
115	BL-8-N	1/2-13 HEX FIN NUTS ZC	8		

500-3 Hydraulic Assembly

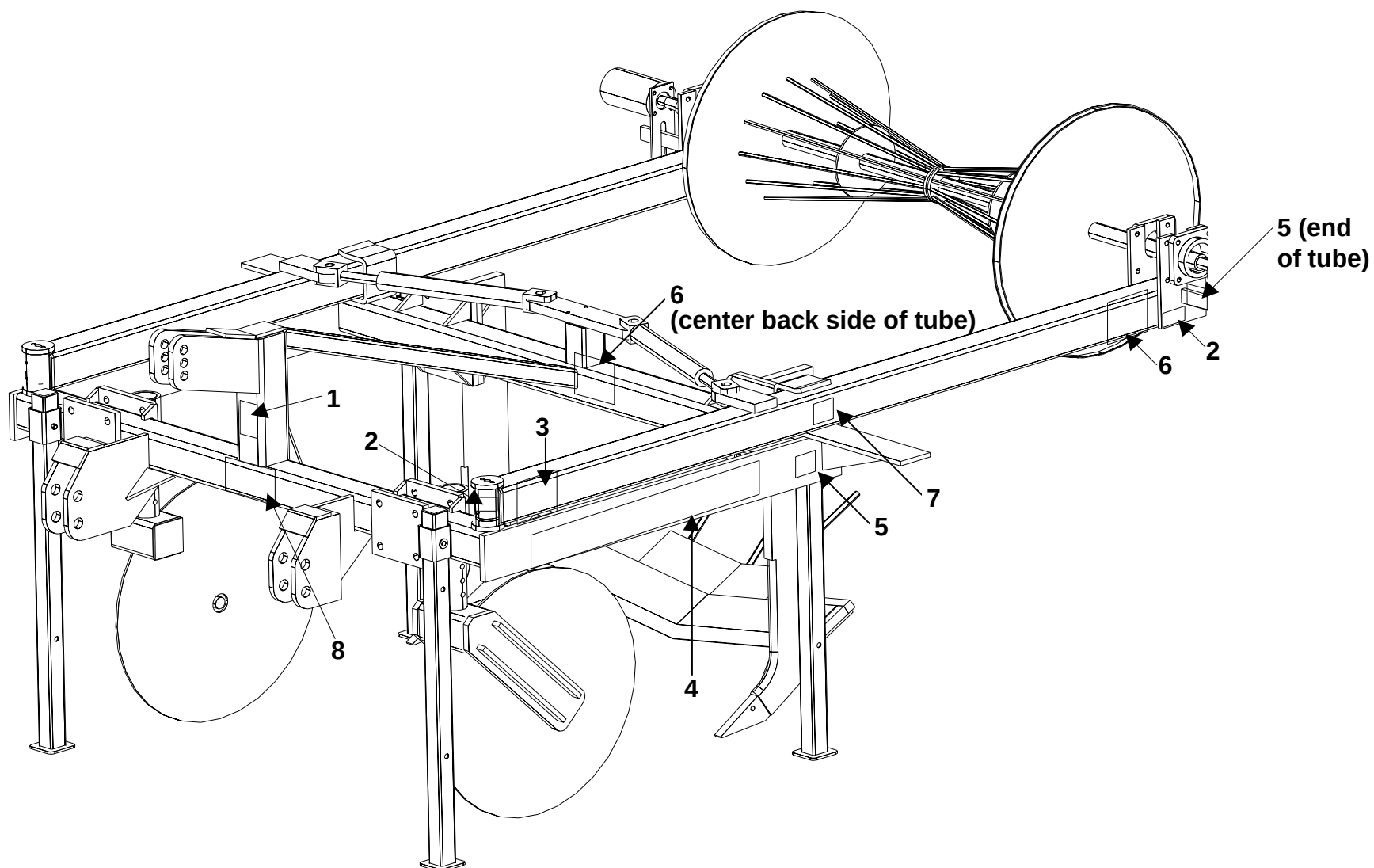


* Indicates hose clamps

500-3 Hydraulic Assembly

<i>Ref</i>	<i>Part No.</i>	<i>Description</i>	<i>Parts – Assembly</i>	<i>Will Fit SN</i>	<i>Remarks</i>
1	HM-103-CH	Char-Lvnn Motor	2		
2	AB-12-8	3/4 X 1/2 Bushing	2		
2	HC-250-1208	Tie Rod Cylinder, Standard 2 1/2" x 12"	2		
3	HV-FD-50-AB	Flow Divider Valve	1		
4	HVE-1023	Speed Control Valve	1		
5	H8-260-8MP-8MP	1/2 in hose 1/2MP x 1/2MP x 260 in long	3	59701-	
6	5030	Mount, Motor	2	59701-	
7	A-6900-10-8	10 SAE x 1/2 FPX	4	20095001-	
8	H4-25-6MP-6MP	1/4 in hose 3/8MP x 3/8MP x 25 in long	2	59701-	
9	A-1603-6-6-6	Swivel T 3/8" NPTF	1		
10	H4-18-6MP-6MP	1/4 in hose 3/8MP x 3/8MP x 18 in long	2	59701-	
11	HV-CKV-1200S	Check Valve	1		
12	H8-72-8MP-8MP	1/2 in. hose 72 in. 1/2 x 1/2	2		
13	A-6901-8-6	8 SAE x 3/8" FPX90	4	20095001-	
14	H4-105-6MP-6MP	1/4 in hose 3/8MP x 3/8MP x 105 in long	2		
15	A-1404-6-6	3/8 MP x 3/8 FPX	3		
16	A-1603-8-8-8	Swivel T 1/2" NPTF	2	20095001-	
17	A-5404-8-8	Hex Nipple 1/2" x 1/2"	3		
18	AB-8-6	1/2 X 3/8 Bushing	2		
19	A-QD2010-8-8	Tractor Quick Couplers, 1/2"	4		
21	HA-1031	Hydraulic Hose Holder 3/8	4		
22	HA-1032	Hydraulic Hose Holder 1/2	19	19101	
23	A-1501-8-8	1/2 MP x 1/2 FPX90	2		
101	BL-6-100-H	3/8 UNC X 1 HH C/S BOLT GR5 ZINC	8		
102	BL-6-LW	3/8 SPLIT LW ZC	8	193-729K 194-806K	
103	BL-4-225-H	1/4 UNC X 2 1/4 HH C/S BOLT GR5 ZINC	2		
104	BL-4-FW	1/4 USS FW ZC	4		
105	BL-4-LW	1/4 SPLIT LW ZC	2		

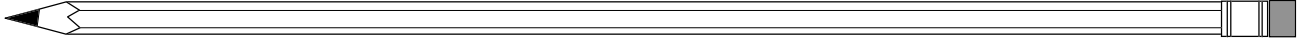
500-4 Safety Decal Placement



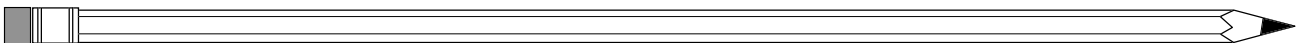
500-4 Safety Decal Placement

<i>Ref</i>	<i>Part No.</i>	<i>Description</i>	<i>Parts – Assembly</i>	<i>Will Fit SN</i>	<i>Remarks</i>
1	DC-1180	Serious Injur/Death Decal. Read Manual	1		
2	DC-0050	Decal. Grease Every 50 hrs.	4		
3	DC-1179	Moving Part Hazard Decal	2		
4	DC-1182	Decal, Small White 3 1/4" x 23"	2	Plastic Wrapper & Windrower	
5	DC-3025	Red and White Reflective Tape @ 150 ft Roll	0.007		
6	DC-0008	Rotating Parts Hazard, Stay Away, Warning	3	597-	
7	DC-1174	Decal, Danger Keep Hands and Feet Away	2		
8	DC-1183	Company Information Decal, 3" x 7.75"	1		

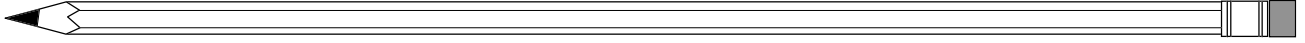
NOTES



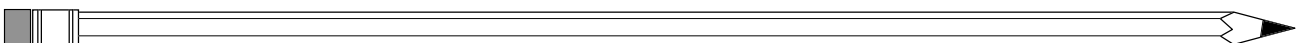
A large, empty rectangular box with a thin black border, intended for writing notes. It occupies the central portion of the page, below the top pencil and above the bottom pencil.



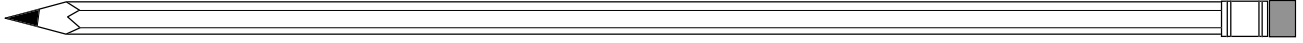
NOTES



A large, empty rectangular box with a thin black border, intended for writing notes.



NOTES



A large, empty rectangular box with a thin black border, intended for writing notes. It occupies the central portion of the page, below the top pencil and above the bottom pencil.

