

HIGHLINE MFG.
INC.

1998

XL-6084 ROCK PICKER

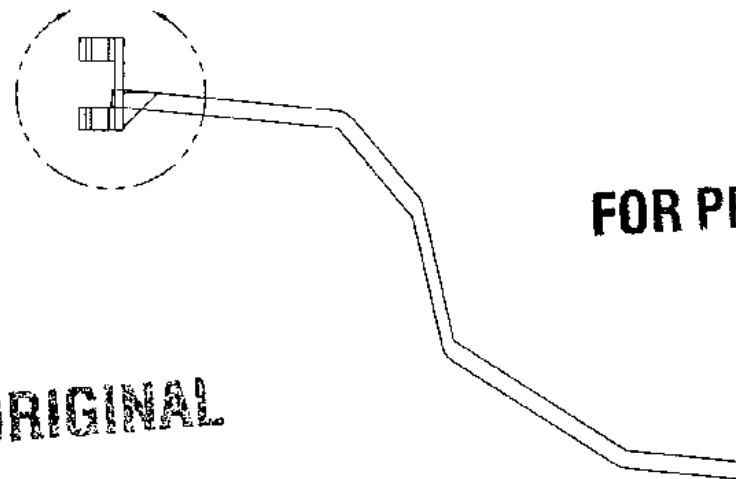
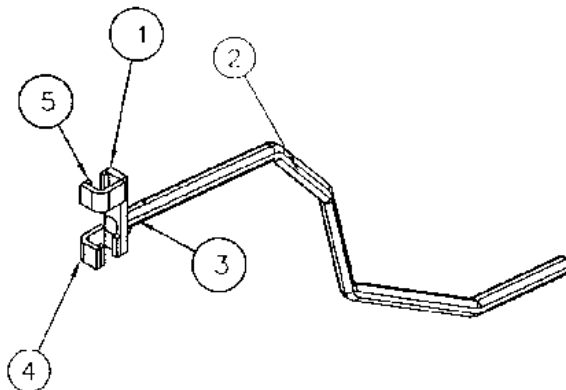
**Assembly-Operator
Parts Manual**

MADE IN CANADA

NOTES:

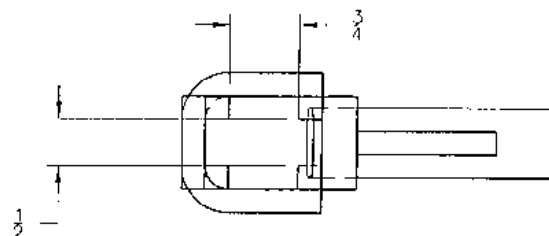
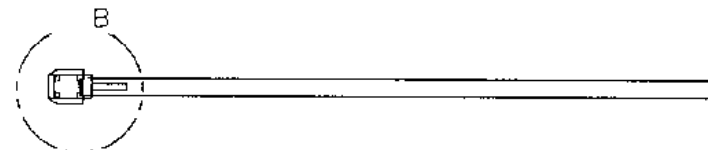
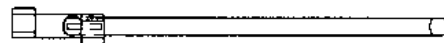
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Def	Tolerances:
1. UN.	2. $\pm .005$
	3. $\pm .001$
	4. $\pm .005$
	5. $\pm .005$
	6. $\pm .005$
	7. ANGLES $\pm 1/2^\circ$
	8. CONCENTRICITY .010 RB
	9. SURFACE FINISH 125 MICRO INCH RMS
	10. MACHINING MATERIAL: RADI .005
	11. BREAK SHARP CORNERS
DIM'S ARE IN INCHES	
HAND ANGLE PROJECTION	

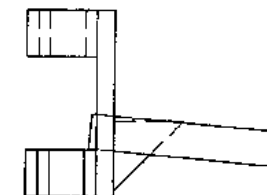


FOR PRODUCTION USE

ORIGINAL



VIEW B



VIEW A

REVISIONS				Date:		Models:	
LTR	DESCRIPTION	DATE	CHANGED BY	Engineering: SUT		ROCK PICKER	
A	INITIAL RELEASE	20 SEPT 98	BJW	Drawn By: BJW		Description:	
B	REPLACES COMPONENTS WITH NEW REVISION	26 JAN 99	BJW	26 SEPT 98		TOOL, ROCK PICKER	
C	REPLACED COMPONENTS WITH NEW REVISION	28 JAN 99	BJW	Page: 1 of 1		Size: A	
D				Scale: 1:8		MATERIAL	
E				HIGHLINE MFG INC.		Dwg No: 70179	
F						Rev: B	

Warranty

HIGHLINE Mfg. Inc. warrants its products to the original owner for a period of two years from date of purchase, subject to the following provisions:

- 1st year Warranty covers Parts & Labor
- 2nd year Warranty covers Parts Only
- Warranty registration must be submitted to HIGHLINE Mfg. Inc. within 30 days of purchase.
- Highline Mfg Inc. is not liable for any damages to this equipment resulting from use of this equipment that is inconsistent with this manual and such is not covered under this warranty.
- Warranty will be void, and Highline Mfg. Inc. will not be liable in any way, if the equipment is used for any other purpose than the intended agricultural application.
- All warranty service must be handled through an authorized HIGHLINE Mfg. Inc. dealer. At the time of requesting warranty service, the purchaser must present evidence of the delivery date of the equipment. The purchaser shall pay any premium for requested overtime, any charge for making service calls, and any charges incurred in transporting the equipment to and from the location of the warranty service. Freight costs associated with warranty repairs are not reimbursable.
- Any labor subject to warranty must be authorized by a HIGHLINE Mfg. Inc. Representative, before work is started.
- Warranty will be void if any component of this equipment is altered or modified in any way, unless written permission is given by HIGHLINE Mfg. Inc.
- Equipment used for rental, custom work, industrial or construction use will not be warranted by Highline Mfg. Inc.
- HIGHLINE Mfg. Inc. will not assume any responsibility for any damage occurring to equipment which this equipment may be attached.
- Warranty terms and conditions are subject to provincial and state legislation.
- Warranty is limited to the Purchase price paid for the equipment, up to the Manufacturers suggested retail price. ***ANY LIABILITY RESULTING FROM THE WORKMANSHIP OF THIS EQUIPMENT*** is limited to the purchased price paid. Highline Mfg. Inc. assumes no responsibility whatsoever for liability resulting from the misuse or improper operation and maintenance of this equipment.

President's Message

The XL-6084, a proven name in the rock picking field is manufactured by **HIGHLINE Mfg Inc.** The XL-6084 rock picker was designed to work in the most difficult of rock picking situations. A little time and effort spent in proper maintenance will assure the performance and durability of your rock picker.

This operator manual has been prepared to provide information necessary for the safe and efficient operation of your rock picker. In it you will find safety procedures, maintenance routines and detailed parts diagrams.

In order to maintain high standards, changes or improvements are made from time to time. **HIGHLINE Mfg Inc.** reserves the right to make those changes and add improvements when practical to do so without incurring any obligation to make such changes and improvements on machines sold previously.

Should the need arise, this manual will assist you in acquiring replacement parts. Should your dealer not have the parts you require in stock, the dealer will be happy to order them for you. If you should find that you require information not covered in this manual, feel free to consult **HIGHLINE Mfg Inc.** or your local dealer.

HIGHLINE Mfg Inc. thanks and congratulates you for selecting a XL-6084 rock picker as the machine for your rock picking needs.



Raymond Bussiere
President

Safety Precautions

CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT

- Always disengage PTO and hydraulic motors before dismounting tractor.
- Do not operate unless guards are in place.
- Keep yourself and others clear of rotating parts to prevent injury.
- Never allow anyone to stand near the bale mover while loading or unloading bales.
- Never allow anyone to stand near rock picker while dumping or picking rocks.
- Never attempt to manually remove rocks from tynes while hydraulic motor is engaged.
- Lower transport locks before raising bucket. To remove transport locks, raise apron slightly and lower brackets. **DO NOT** lift bucket when transport locks are in position otherwise sever damage **WILL** occur.
- Relieve pressure in hydraulic lines before disconnecting lines or performing maintenance on the hydraulic system.

1 Pre-Delivery & Installation Instructions

1.1 General Description of XL-6084 Rock Picker

The XL-6084 rock picker covers a width 60" wide and has a dumping height of 84". One set of hydraulic lines are required for dumping and lowering the picker's collecting apron. The rock picker may either be PTO or hydraulic driven however the hydraulic driven reel may be reversed if the rock picker becomes plugged.

1.2 Pre-Delivery Check List

The following is a list of parts required if the XL-6084 rock picker has not been assembled prior to delivery. If any parts are not included contact your authorized Highline dealer or **HIGHLINE Mfg Inc.**

Quantity	Description	Part No.
1	XL-6084 Rock Picker	
2	Tire Assy, 16.5I x 16.1 Tire	70080
2	Axle Assembly	70155
8	Bolt, Hex, 3/4" x 2 1/2", UNC, Grade 5	31040
8	Nut, Nylock, 3/4", UNC	31175
8	Washer, Lock, 3/4" Plated	31246

2 Operating Instructions

2.1 Field Preparation

Field preparation plays a major role affecting the picking performance of the XL-6084. For best picking conditions, the field should be cultivated prior to picking. This operation brings stones to the surface and buries field residue.

2.2 Pre-Start Instructions

Transport chains need to be removed before operation of the forks. To remove transport chains, raise forks slightly and remove transport pins. DO NOT lower forks when transport chains are in position otherwise severe damage WILL occur.

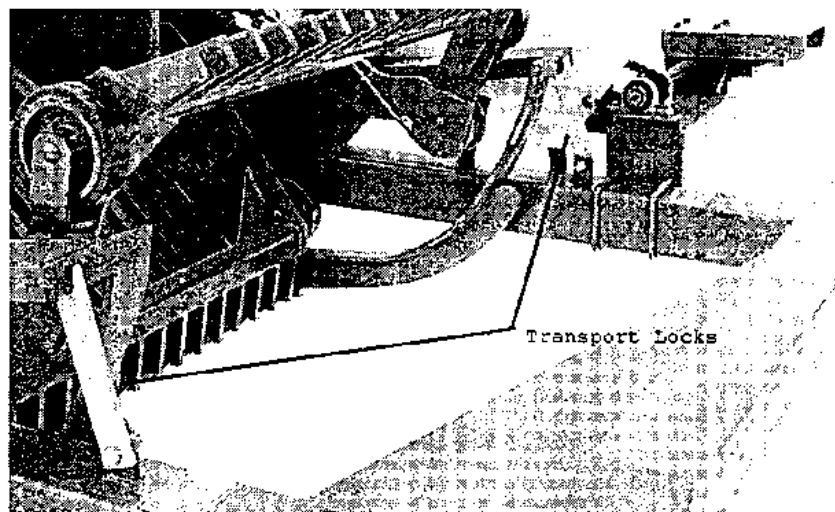


Figure 1. Locks in Transport Position

2.3 Transporting Instructions

To ensure safe transport of the XL-6084 rock picker, the transport locks and reel should be raised to prevent the apron from dragging. To put transport locks in place, raise the apron until the transport locks catch on the reel frame. To lower transport locks, raise apron until locks are free and turn them forward..

For road transport, the hitch may be turned to reduce the travel width of the rock picker. To change the position of the hitch, the wedge is removed and the hitch is positioned for field or transport position. The wedge is then placed back into position and ready for field or transport.

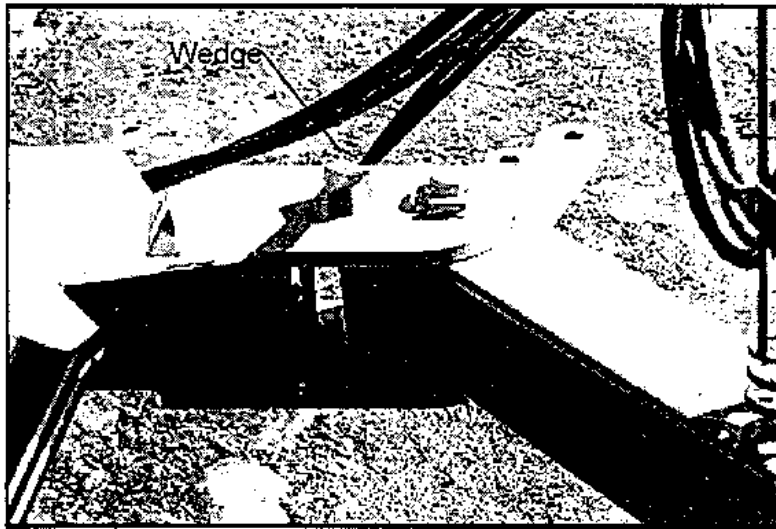


Figure 2. Hitch Wedge

2.4 Apron Height Adjustment & Bucket Dumping

The apron (Figure 3) height is adjustable through the hydraulics cylinders. By lowering the cylinders completely, the apron will be at its lowest picking level. The working height of the apron will depend upon the soil conditions and the size of rocks. By extending the cylinder, the apron will lower. Extending the cylinder more will raise the bucket into dumping position.

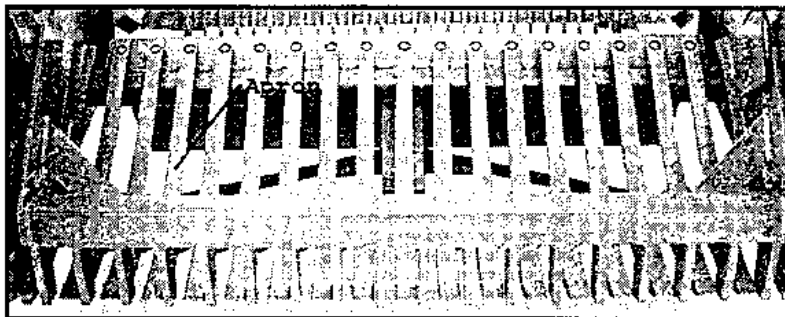


Figure 3. Front View of Apron

2.5 Field Instructions

For proper operation, the XL-6084 should run at a field speed of 3-4 mph (4.8-6.5 km/h) and the reels rotating at 35 rpm. When picking large rocks, field speed should be decreased to reduce possible damage of large impacts. The operating height of the apron varies depending on the size of stones picked. For small stones, the apron should be as low as possible to the ground and be raised to a suitable level for larger stones.

3 Maintenance Instructions

To ensure long operating life of your XL-6084 Rock Picker, follow this maintenance procedure.

- Periodically check tire air pressure to maintain equal tire pressure.
- Check gear box oil and add #90 gear oil if needed
- Periodically check all bolts and set screws for tightness.
- Grease the following points as described.

3.1 Grease Locations



Figure 4. Hitch Grease Location

Grease No	Description	Frequency
1	Hitch Pivot	Monthly

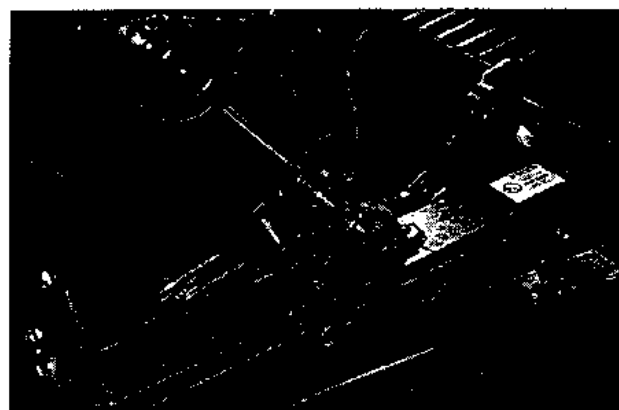
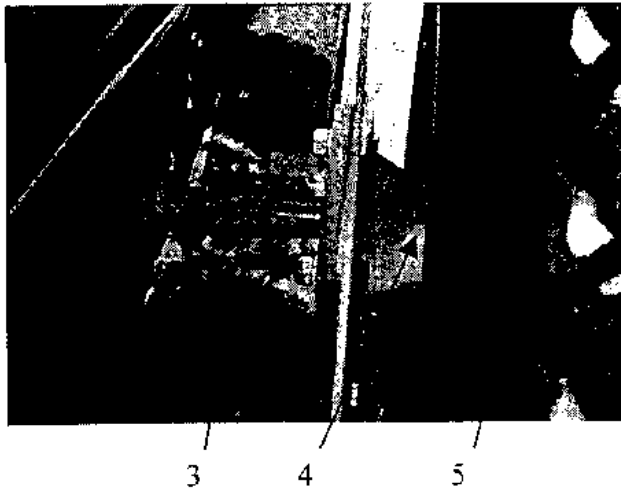


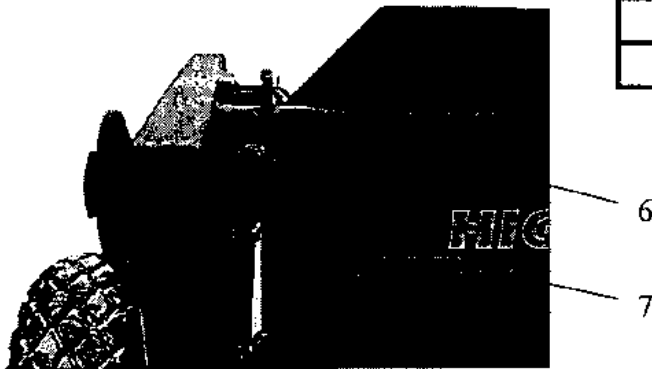
Figure 5. Reel Greasing Locations

Grease No	Description	Frequency
2	Reel Bearings	Yearly



Grease No	Description	Frequency
3	Apron Pivot	Daily
4	Wheel Hub	4 Times/Year
5	Tire Pressure	As Specified

Figure 6. Apron & Tire Maintenance Locations



Grease No	Description	Frequency
6	Front Bucket Pivot	Daily
7	Bucket Dump Pivot	Daily

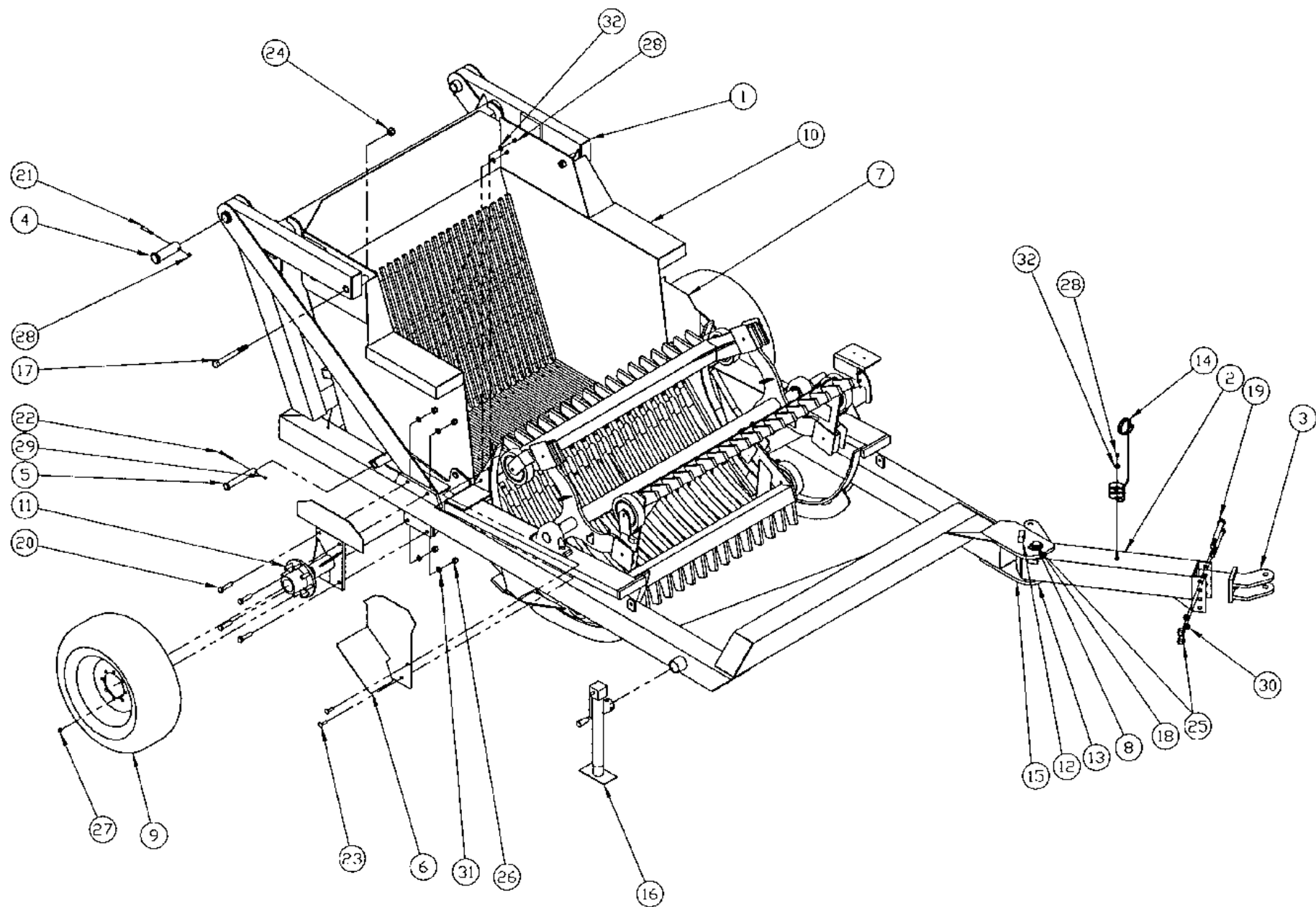
Figure 7. Dump Mechanism Grease Locations

4 Parts Information

4.1 **Main Assembly**

Item	Part No.	Description	Quantity
1	70001	Dump, Bucket	1
2	70002	Arm, Hitch	1
3	70003	Hitch, Clevis	1
4	70025	Pin, Dump	2
5	70027	Pin, Apron	2
6	70051	Guard, Cylinder, Dump, Right	1
7	70052	Guard, Cylinder, Dump, Left	1
8	70068	Pin, Hitch	1
9	70080	Tire Assy, 16.5in, 6 Ply	2
10	70148	Bucket	1
11	70155	Axle, Assembly	2
12	E2233	Wedge	1
13	E2240	Washer, Hitch, Bottom	1
14	30206	Holder, Hose, Hydraulic, ½"	1
15	91609	Pin, Hitch, 5/32"	1
16	92095	Jack, Sidewind, 5000 Lbs x 15 in	1
17	31035	Bolt, Hex, 1 ¼ x 8, UNC, Gr5, Pltd	2
18	31036	Bolt, Hex, 1 x 10, UNC, Gr5, Pltd	1
19	31038	Bolt, Hex, 1 x 7 ½, UNC, Gr5, Pltd	2
20	31040	Bolt, Hex, ¾ x 2 ½, UNC, Gr5, Pltd	8
21	31021	Bolt, Hex, ½ x 3, UNC, Gr5, Pltd	2
22	31045	Bolt, Hex, 3/8 x 2 ½, UNC, Gr5, Pltd	2
23	31010	Bolt, Carr, ½ x 2 ½, UNC, Gr5, Pltd	4
24	31171	Nut, Nylock, 1 ¼	2
25	31172	Nut, Nylock, 1	3
26	31175	Nut, Nylock, ¾	8
27	32319	Nut, Wheel, 5/8"	16
28	31173	Nut, Nylock, ½	5
29	31176	Nut, Nylock, 3/8	2
30	31243	Washer, Lock, 1	2
31	31246	Washer, Lock, ¾	8
32	31236	Washer, Flat, ½	3

Part No.	Description
32324	Tire, 16.5L x 16.1, 6 Ply
32325	Rim, w14x 16.1
32327	Hub, Complete, HA817-3

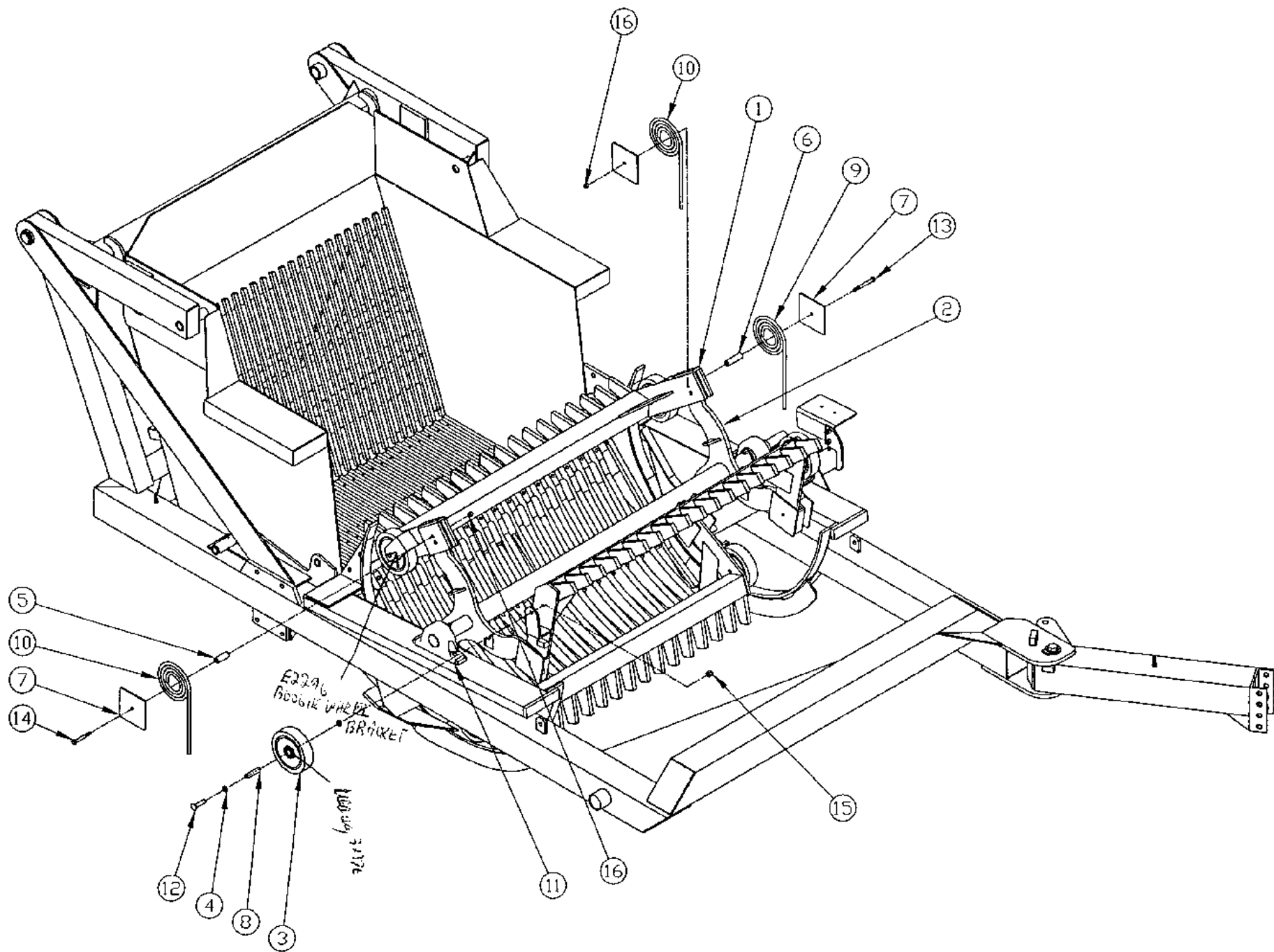


4.2 Reel Assembly

Item	Part No.	Description	Quantity
1	70144	Batt, Reel	3
2	70145	Reel	1
3	70106	Wheel, Bogie, Complete	6
4	E2304	Bushing, Wheel, Bogie	12
5	E2306	Bushing, Batt, Reel, Right	3
6	E2307	Bushing, Batt, Reel, Left	3
7	E2314	Plate, Retainer, Spring	9
8	32354	Bushing, Spanner, SB040	6
9	32362	Spring, Reel, Left	3
10	32363	Spring, Reel, Right	6
11	32373	Drv, Brg, Pillow, 2-7/16	2
12	31015	Bolt, Carr, 5/8 x 4 1/2, UNC, GR5, Pltd.	6
13	31309	Bolt, Hex, 9/16 X 4 1/2, UNC, GR5, Pltd	3
14	30424	Bolt, Hex, 9/16 X 3 3/4, UNC, GR5, Pltd	3
15	31178	Nut, Nylock, 5/8", UNC	6
16	31236	Nut, Nylock, 9/16", UNC	9

17 E2244 REEL BATT TOOTH

18 E2246 BOOGIE WHEEL BRACKET.



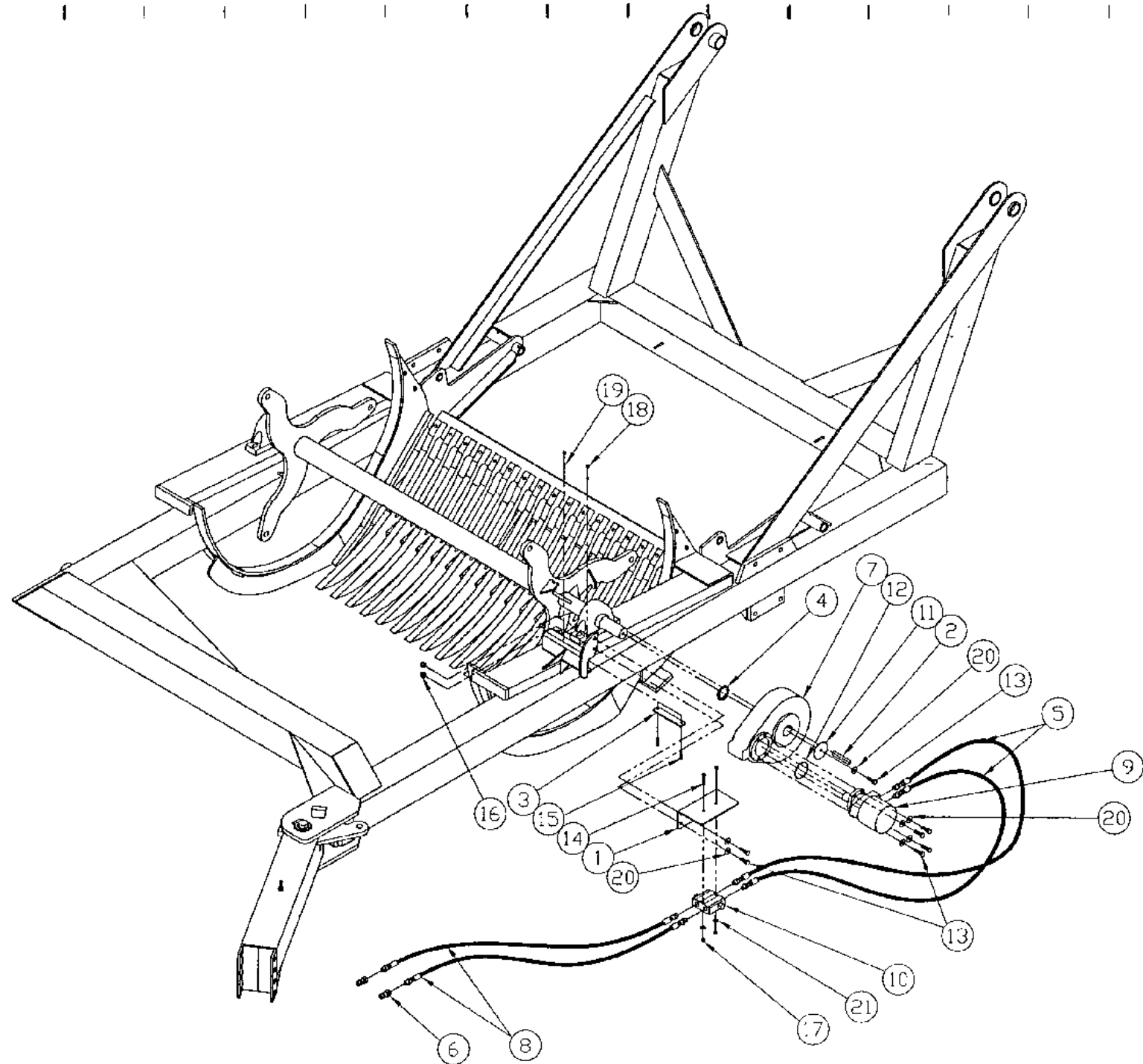
4.3. Apron Assembly

Item	Part No.	Description	Quantity
1	32466	Tyne, Apron, 65-45-12	17
2	31024	Bolt, Hex, ½ x 3 ½, UNC, Gr8	17
3	31019	Bolt, Hex, ½ x 2 ½, UNC, Gr8	17
4	31173	Nut, Nylock, ½	34

5 Hydraulic Systems

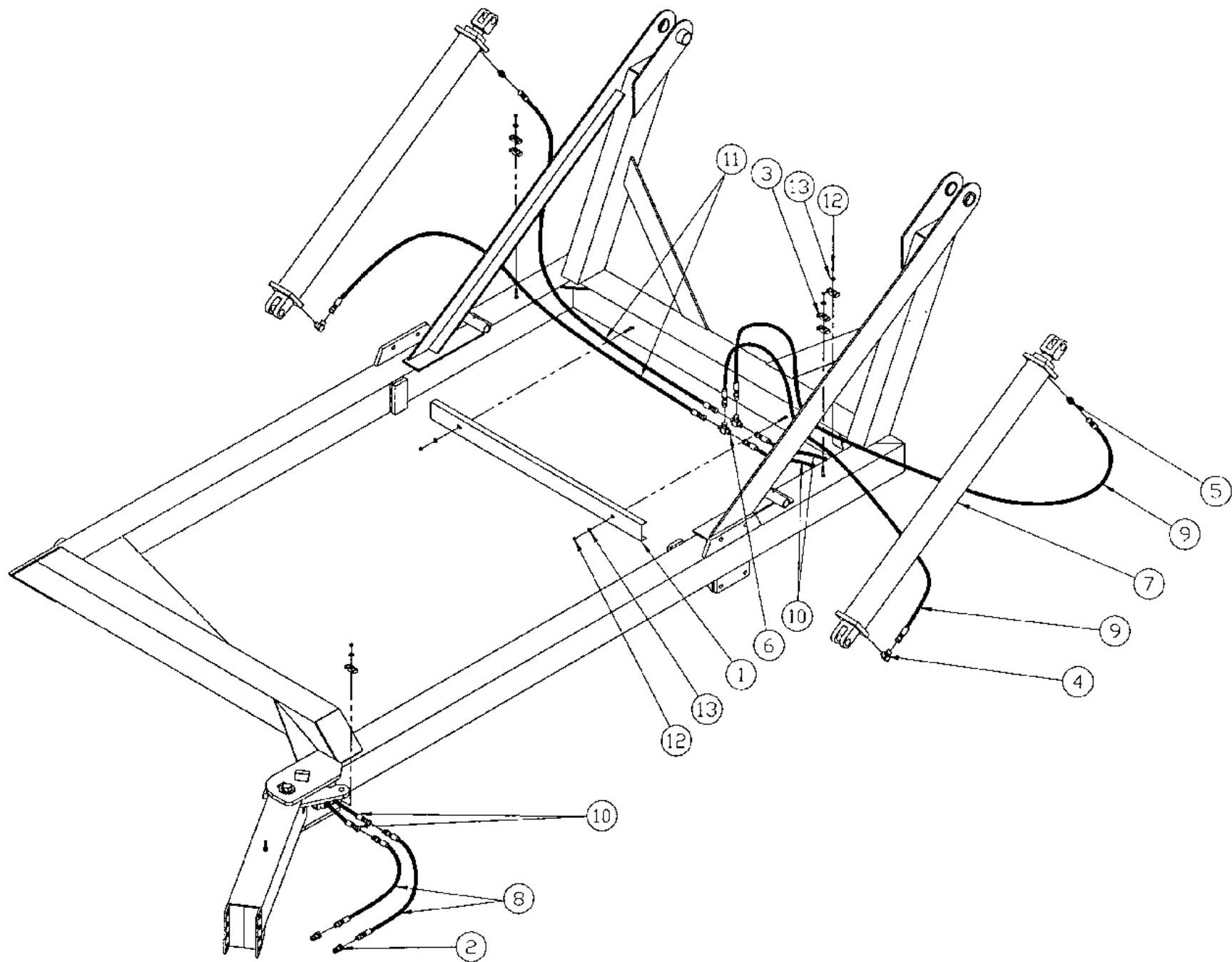
5.1 Motor Hydraulics

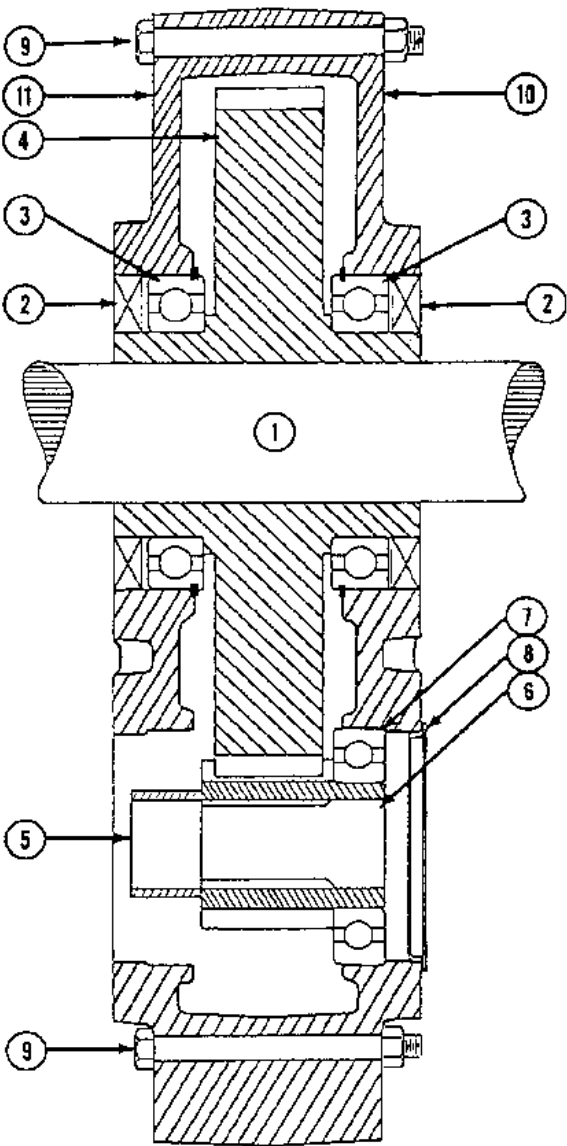
Item	Part No.	Description	Quantity
1	E2339	Anchor, Valve, Cushion, Hydraulic	1
2	E3045	Key, Drive, Reel	1
3	E4502	Bumper, Mount, Hydraulic	1
4	E4571	Bushing, Reel, Gearbox	1
5	30156	Hose, Hydraulic, ½ x 20, 8MP-10MBX	2
6	30209	Hydraulic, Tip, Pioneer, ½, 8MP	2
7	32209	Gearbox, Complete, 590	1
8	32583	Hose, Hydraulic, ½ x 144, 8MP-8MP	2
9	32644	Motor, Hydraulic <i>RE 18080500</i>	1
10	32660	Hydraulic, Valve, Cushion, DXV50	1
11	32734	Washer, Flat, 3 1/8 x ½	1
12	32786	Hydraulic, O-Ring, 151	1
13	31008	Bolt, Hex, ½ x 1 ½, UNC, Pltd	7
14	31048	Bolt, Hex, 5/16 x 2 ½, UNC, Pltd	2
15	31060	Bolt, Stover, ¼ x 1, UNC, Pltd	2
16	31173	Nut, Nylock, ½	2
17	31177	Nut, Nylock, 5/16	2
18	31310	Nut, Stover, ¼	2
19	31245	Washer, Lock, ¼	2
20	31236	Washer, Flat, ½	5
21	31239	Washer, Flat, 5/16	2
	<i>31647</i>	<i>SEAL KIT</i>	<i>1</i>



5.2 Cylinder Hydraulics

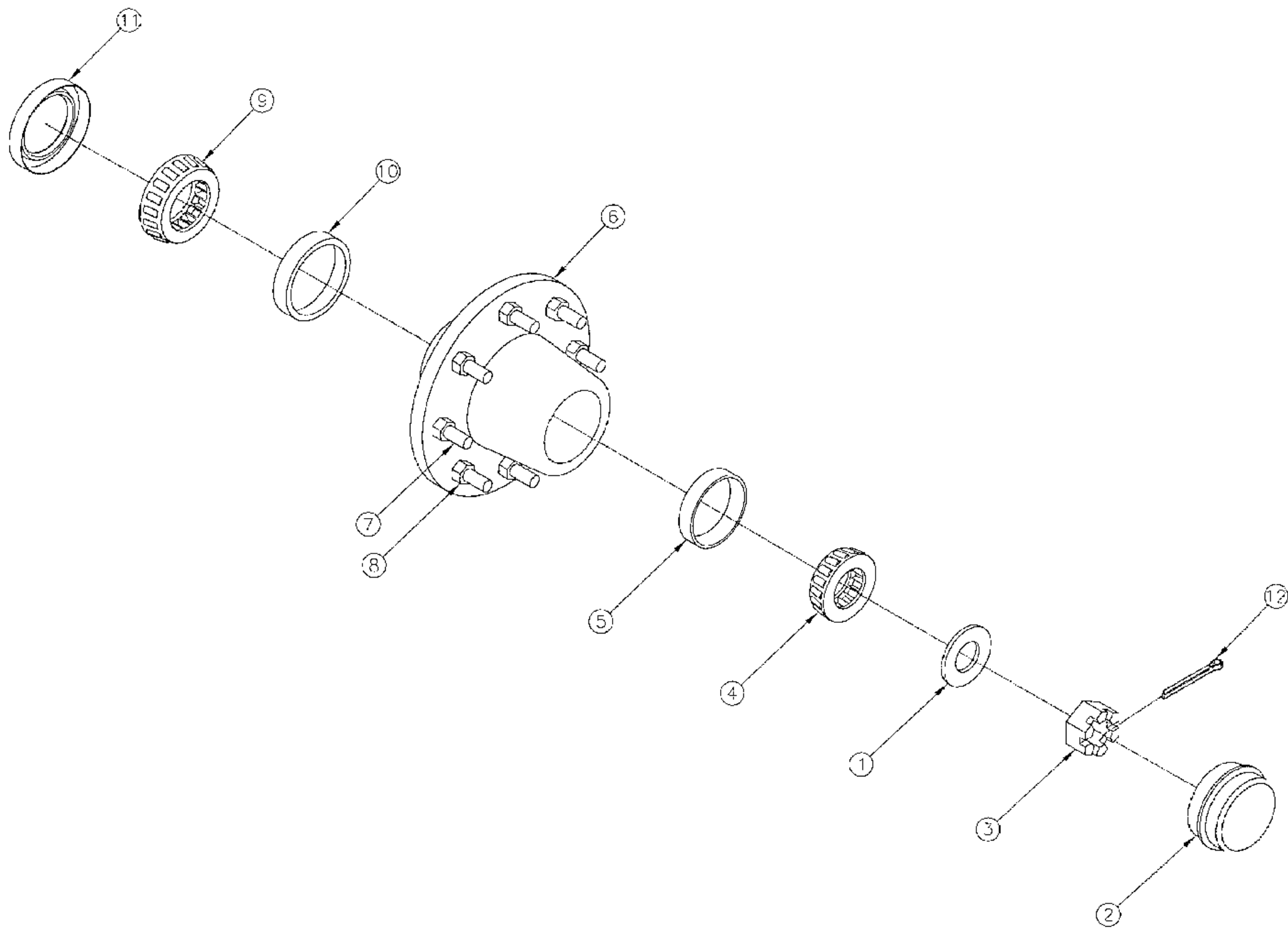
Item	Part No.	Description	Quantity
1	E2636	Guard, Line, Hydraulic	1
2	30209	Hydraulic, Tip, Pioneer, ½, 8MP	2
3	30210	Hydraulic, Clamp, Oil, ½	8
4	30212	Hydraulic, Fitting, Elbow 8MP-8MJ90	2
5	31148	Hydraulic, Fitting, Adapter, 8MP-8MJ	2
6	31149	Hydraulic, Fitting, Tee, 8MJ-8FJ-8MJ	2
7	32260	Hydraulic, Cylinder, 3 ½ x 42	2
8	30159	Hose, Hydraulic, ½ x 96, 8MP-8MJ	2
9	32601	Hose, Hydraulic, 3/8 x 55, 8MJ-8FJ	2
10	32613	Hose, Hydraulic, ½ x 144, 8MJ-8FJ	2
11	32614	Hose, Hydraulic, 3/8 X 108, 8MJ-8FJ	2
12	31177	Nut, Nylock, 5/16	6
13	31239	Washer, Flat, 5/16	6





7 H817 Hub

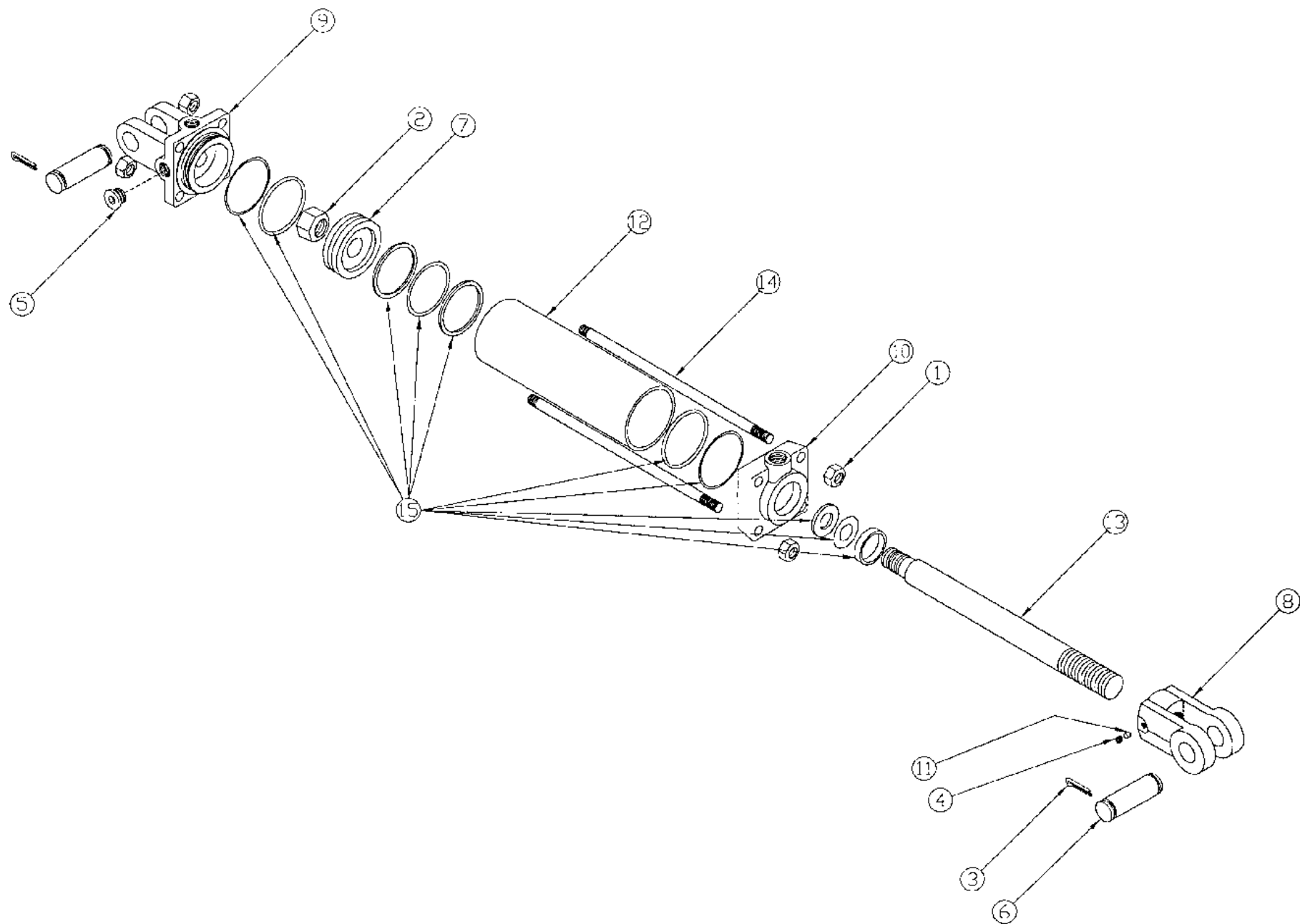
Item	Part No.	Description	Quantity
1	30223	Washer, Flat, 1" SAE	1
2	32313	Cap, Dust	1
3	32314	Nut, Slotted, 1 1/4"-UNF	1
4	32315	Bearing, Outer	1
5	32316	Race, Outer	1
6	32318	Hub, 8-Bolt	1
7	32319	Stud, 5/8 x 2 1/4, UNF, WB46	8
8	32320	Nut, 5/8, UNF, WB18	8
9	32321	Bearing, Inner	1
10	32322	Race, Inner	1
11	32323	Seal, Grease	1
12	31183	Pin, Cotter, 3/16 x 2	1



8 Cylinders

8.1 3 1/2 x 42, 1 1/4 Rod

Item	Part No.	Description	Quantity
1	30236	Nut, Hex, 5/8" UNF Grade 5	8
2	30237	Nut, Hex, 1"-14 UNS Grd 5 Phosphate	1
3	30238	Cotterpin, Hammerlock, 3/16" x 1 1/2"	4
4	30239	Screw, Set, Sckt, 3/8"UNC x 1/2" Knur	1
5	30240	Fitting, Plug, 1/2"-14 NPTF Dry Seal	1
6	30241	Pin, 1" Dia, H5552	2
7	30251	Piston, 3 1/2" Dia, H6888	1
8	30253	Clevis, Rod, 1 1/4", 1" Pin	1
9	30258	Cap, Clevis, 3 1/2" NPTF	1
10	30259	Cap, Rod, 3 1/2" x 1 1/2" NPTF	1
11	30261	Lock, Thread, Nylon	1
12	32262	Tube, Cyl., 3 1/2" x 42", H6228 R3	1
13	32265	Rod, 1 1/2" x 42"	1
14	32267	Rod, Tie, 5/8" x 42", H6772	4
15	30263	Kit, Repair, 3 1/2" Cyl.	1



9 Specifications

Weight	Approximately 5200 lbs (2360 kg)
Total Length	16'3"
Total Width	9'4"
Total Height	6'8"
Picking Width	60"
Dumping Height	Approximately 84"
Ground Clearance	17"
Maximum Capacity	2.4 cubic yards (1.83 m ³)
Tires	16.5L x 16.1 Softrac Tires
Horsepower Required	50 - 135 Horsepower 18 gpm flow required
Hydraulic Outlets	2
Hydraulic Pressure	2500 psi.(17240 KPa)