HIGH-LINE

BALEMASTER

BALE PRO 6600

1995

Assembly-Operator Parts Manual

MADE IN CANADA

Warranty

High-Line 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 Parts & Labour
- 2nd year Parts Only

- All matters related with the warranty of products must be handled through an authorized High-Line Manufacturing dealer.
- Any labour subject to warranty must be authorized by a High-Line Mfg. Inc. Representative, before work is started.
- Machines used for rental, custom work, industrial or construction use will be warranted for a period of 30 days from date of purchase. (Parts and Labour)
- Warranty will be void if any component of this machine is altered or modified in any way, unless written permission is given by High-Line Mfg. Inc.
- High-Line Mfg. Inc. will not assume any responsibility for whatever damage may occur to equipment to which this machine may be attached.
- Warranty terms and conditions are subject to provincial and state legislation.

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2. President's Message

Congratulations on your purchase of the Bale Pro 6600! Bale Pro, a new name in livestock feed handling equipment, is manufactured by High-Line Manufacturing Inc. A company with a manufacturing team that has over 25 years experience in the farm implement industry.

This operator's manual has been prepared to provide information necessary for safe and efficient operation of your Bale Pro 6600. In it you will find safety procedures, maintenance routines and detailed parts diagrams.

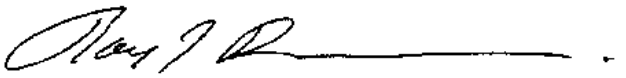
The Bale Pro 6600 was designed for controlled, more aggressive processing with less bunching. A little time and effort spent in proper maintenance will increase the performance and durability of your bale processor.

In order to maintain high standards, improvements are made from time to time. High-Line Manufacturing Inc. reserves the right to make those changes and 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. Also if you should find that you require information not covered in this manual, feel free to consult us or your local dealer.

High-Line Manufacturing Inc. thanks and congratulates you for selecting a Bale Pro 6600 as the machine of your choice.

Sincerely,



Raymond J. Bussiere, President

P.O. Box 307, Vonda, Saskatchewan, S0K 4N0
Phone 1-800-665-2010 Fax (306) 258-2010

3. Safety Precautions

WORK SAFELY - FOLLOW THESE RULES

CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT

- Keep children and adults away from discharge area while processing.
- Know the controls and what they do.
- Check machine to ensure nothing restricts moving or rotating parts.
- Ensure PTO is disengaged before starting tractor.
- Never leave tractor while PTO is engaged.
- Lower forks to ground after operation.
- Never attempt to manually remove debris while PTO is on. Disconnect PTO before unplugging or adjusting processor.
- Always keep safety PTO shields in place.
- Relieve pressure in hydraulic lines before disconnecting lines or performing other work on the hydraulic system.
- Never allow anyone to stand behind processor while loading bales.

4. Controls

Before operating the Bale Pro 6600, be sure to review all the instructions and familiarize yourself with the processor's features.

1. Discharge chute adjustment handle.

   For feeding place down and for spreading bedding position up.

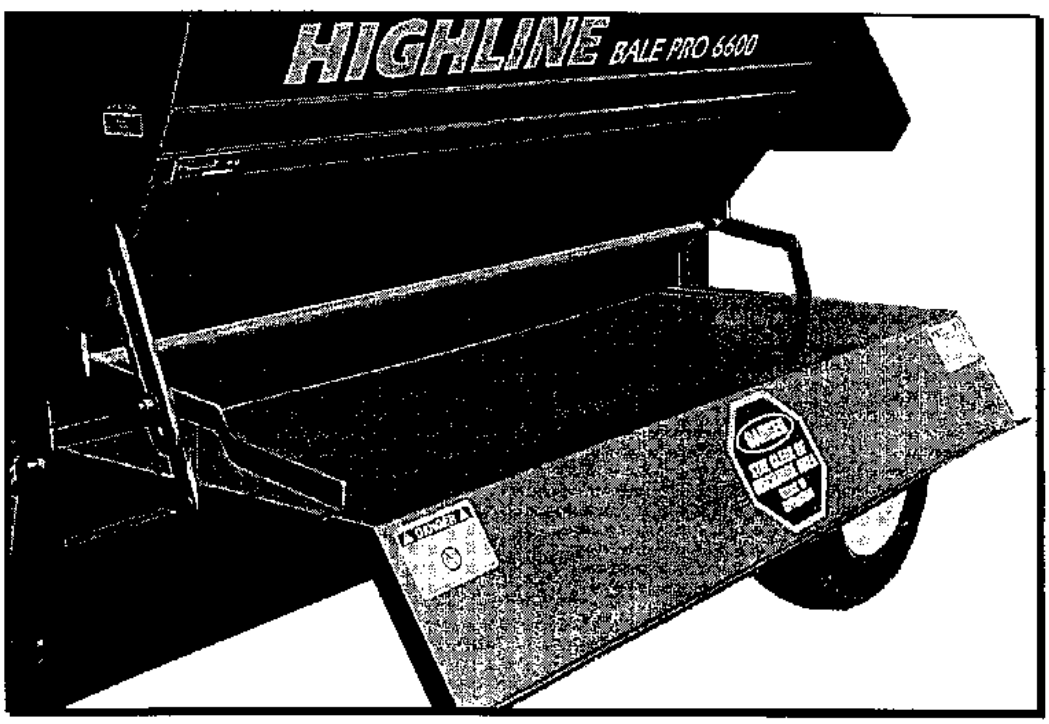


Figure 1 Discharge Chute

2. Feeder drum height adjustment.

   Using the feeder adjustment screws to change height of feeder drum changes the amount of bite taken from the bale. To avoid unnecessary strain on the motor take care to keep the drum level.

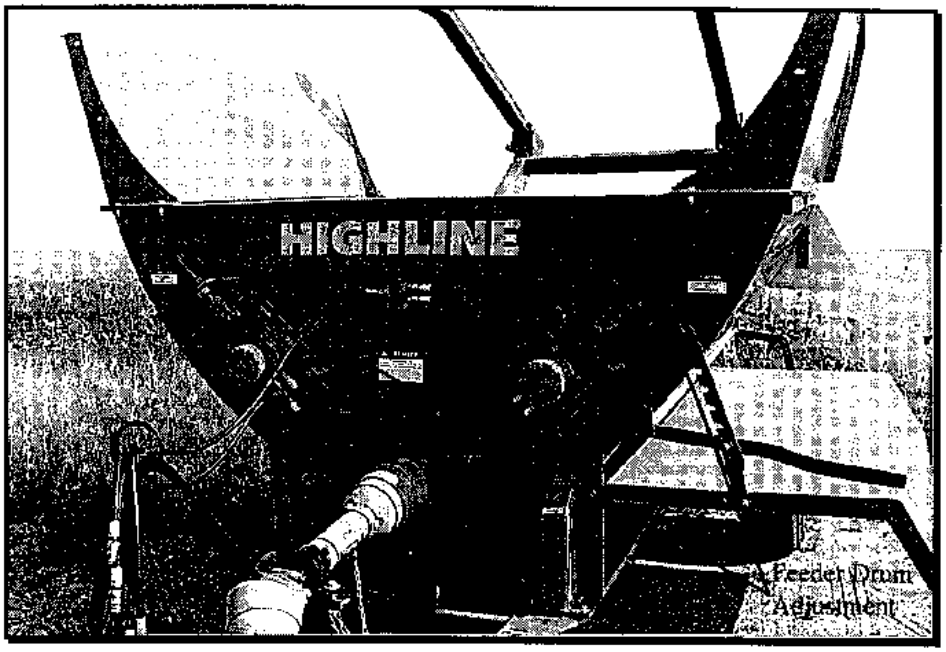


Figure 2 Feeder Drum

3. Flail drum height adjustment.

   Insert flail spacers to raise height of flail bar. This reduces the amount of bite taken from the bale.

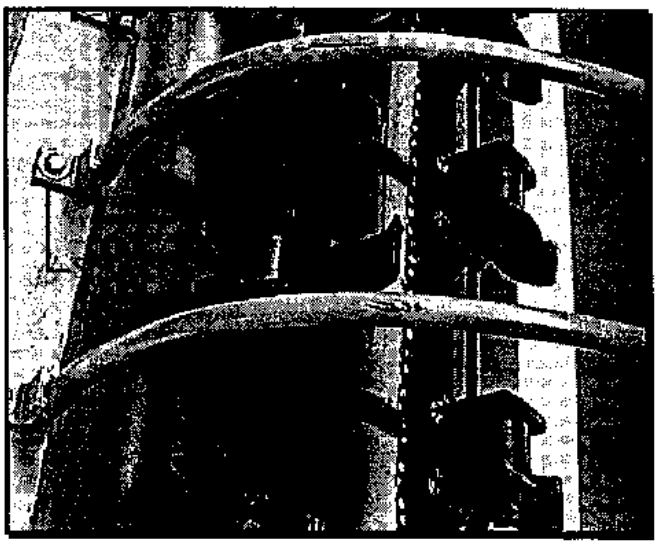


Figure 3 Flail Drum

4. Flail drum activated through PTO control in your tractor.
5. Feeder drum and fork lift operated through the hydraulic control in your tractor.

5. Maintenance

Please follow these maintenance steps, to ensure trouble free operation of your Bale Pro 6600.

Lubrication

Maintaining proper lubrications is crucial for trouble free operations. Figure 2 shows eleven which require regular greasing. Table 1 lists the lubrication points and the frequency greasing.

1. PTO Shaft-front
2. PTO Shaft-rear
   Grease every ten bales.
3. PTO Extension Shaft Bearing
   Grease every fifty bales

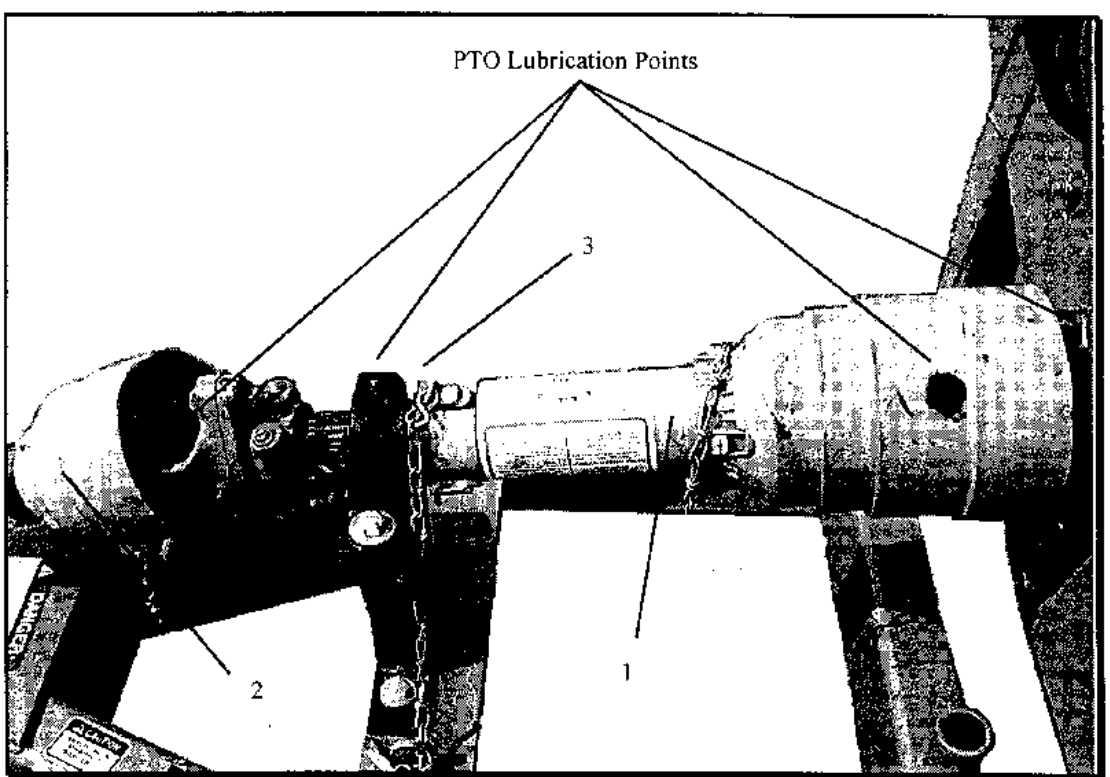


Figure 4 PTO Lubrication

4. Feeder Drum bearing-right
5 Feeder Drum Bearing-left
Grease every fifty bales.
6. Flail drum bearing
Grease every fifty bales.
7. Fork Pivot shaft-left
8. Fork Pivot shaft-right
Grease every one hundred bales.
9. Tire Hub-left
10. Tire Hub-right
Greasing dependent upon travel

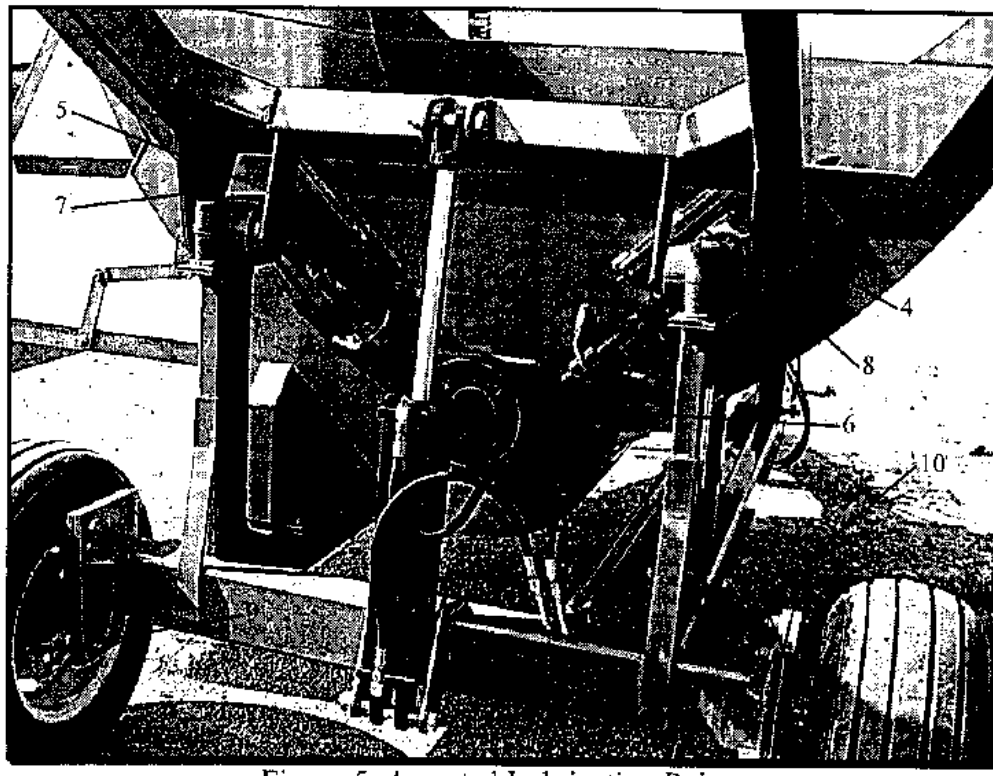


Figure 5 Assorted Lubrication Points

11. Fork-left
12. Fork-right
Grease every one hundred bales.

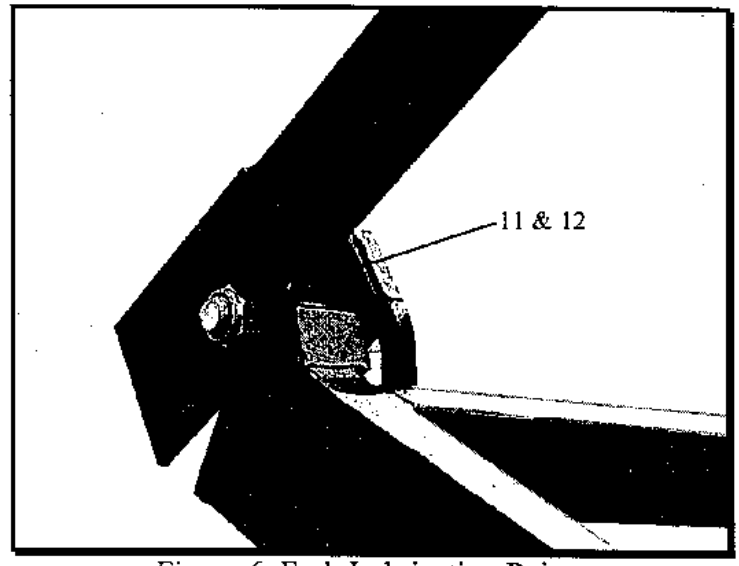


Figure 6 Fork Lubrication Points

General

Flail bolts should be tightened after the first ten bales then rechecked after approximately 200 bales, Figure 7. If twine is not cut from the bale before processing, it will rap around the flail drum and periodic removal is required to allow free movement of the flail. If a flail requires replacing, also replace the opposite flail to keep the drum in balance.

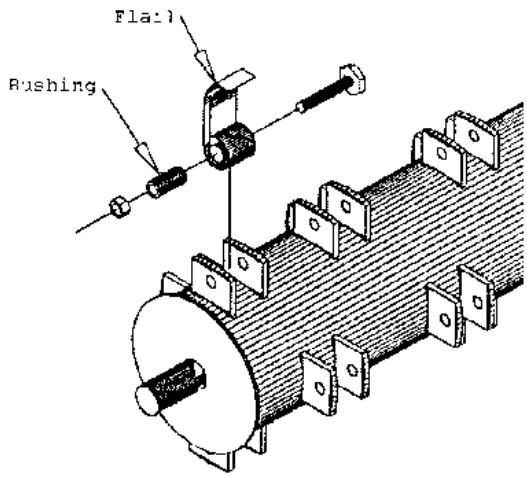


Figure 7. Flail Drum

6. Operating Instructions

Successful operation of the Bale Pro 6600 is dependent upon the quality of the bale, height of the feeder drum, flail guard and the operator. The following steps ensure proper operation.

1. Before loading bale, engage PTO drive to check the flail drum if it is operating adequately. Start feed rollers using the hydraulics and check if the feed rollers turn clockwise and counter clockwise. If your tractor has hydraulic flow control, alter flow so the feed rollers rotate at an adequate speed for the conditions of your bales.

2. To load, lower forks **completely** and back up to bale **slowly**. Raise forks until bale falls into the processor. Another bale may be loaded onto the forks while a bale is in the processor. If a bale is loaded on the forks while one is shredded, raise the forks approximately to a 45° angle to reduce pressure on the hydraulic cylinder lift. Orientation of the bale during loading causes the hay/straw to discharge from the processor differently. If the bale is shredded in the same direction as it was baled, the hay/straw will generally come off in layers. If the bale is shredded in the opposite way, feeding may be uneven.

3. Before engaging flail drum, check that the forks are not interfering with the rotating bale and position the discharge deflector for your application. For spreading bedding the deflector is placed up and for feeding in rows the deflector is placed down.

4. When ready, rotate feed rollers in one direction before starting the flail drum. Once the PTO is engaged, increase engine speed until the PTO rotates at 1100 rpm. 1100 rpm is a recommended flail drum operating speed however this varies depending upon the bale quality, hay/straw type and weather. In most cases the feed drums need to be turning periodically to prevent the flail drum from overloading.

5. If the feed rate is too fast, three items may be changed.

   a. Decrease tractor RPM, however make sure the flails remain extended so they don't "back slap" on the drum. Severe damage may occur if the flails repeatedly hit the drum.

   b. Raise feeder drum using adjusting bolts on the front and rear side of the processor (Figure 8 below). This decreases the amount the flail penetrates the bale.

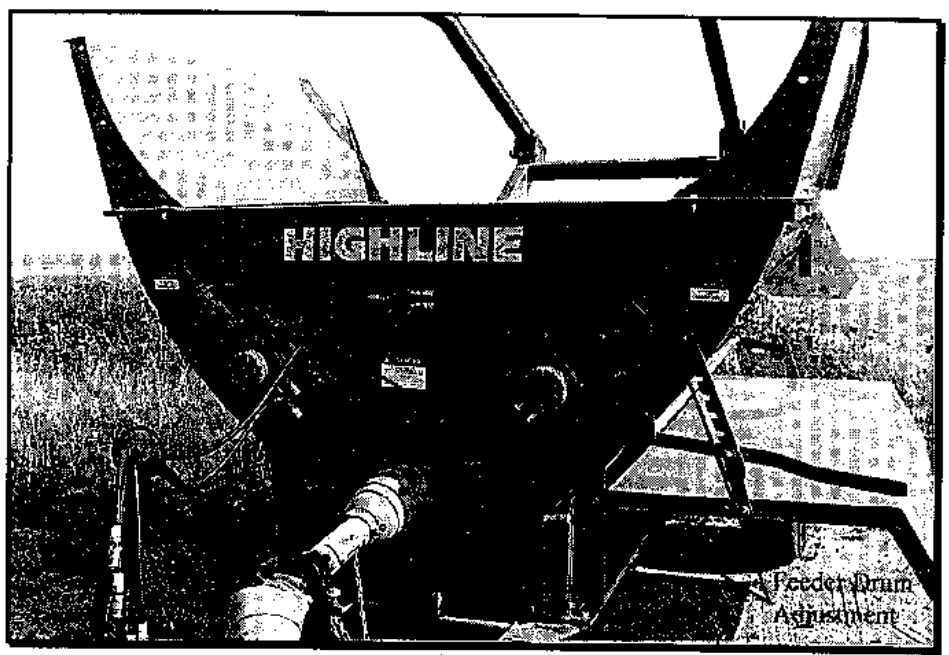


Figure 8

   c. Raise flail guard bars using spacers (Figure 9). This raises the bale decreasing the amount the flail penetrates the bale.

In all three cases, do not allow the flail to "back slap" on the drum.

6. If the feed rate is too slow, the same three items may be altered however "back slap" may occur if the feed rate is too high.

7. If the bale quits turning or straw bunches up one side, reverse feed drums in opposite direction and periodically alternate direction. If the bale is loaded on end rather than on its side, it is better to keep reversing the feed drums back and forth to prevent spillage.

8. Before stopping PTO, idle tractor down to reduce flail "black slap".

WARNING: Warranty will be void if any component of this machine is altered or modified in any way, unless written permission is given by High-Line Mfg. Inc.

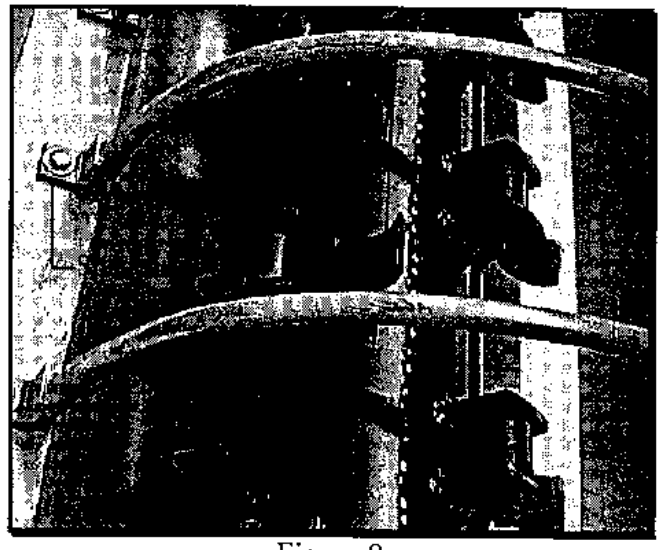
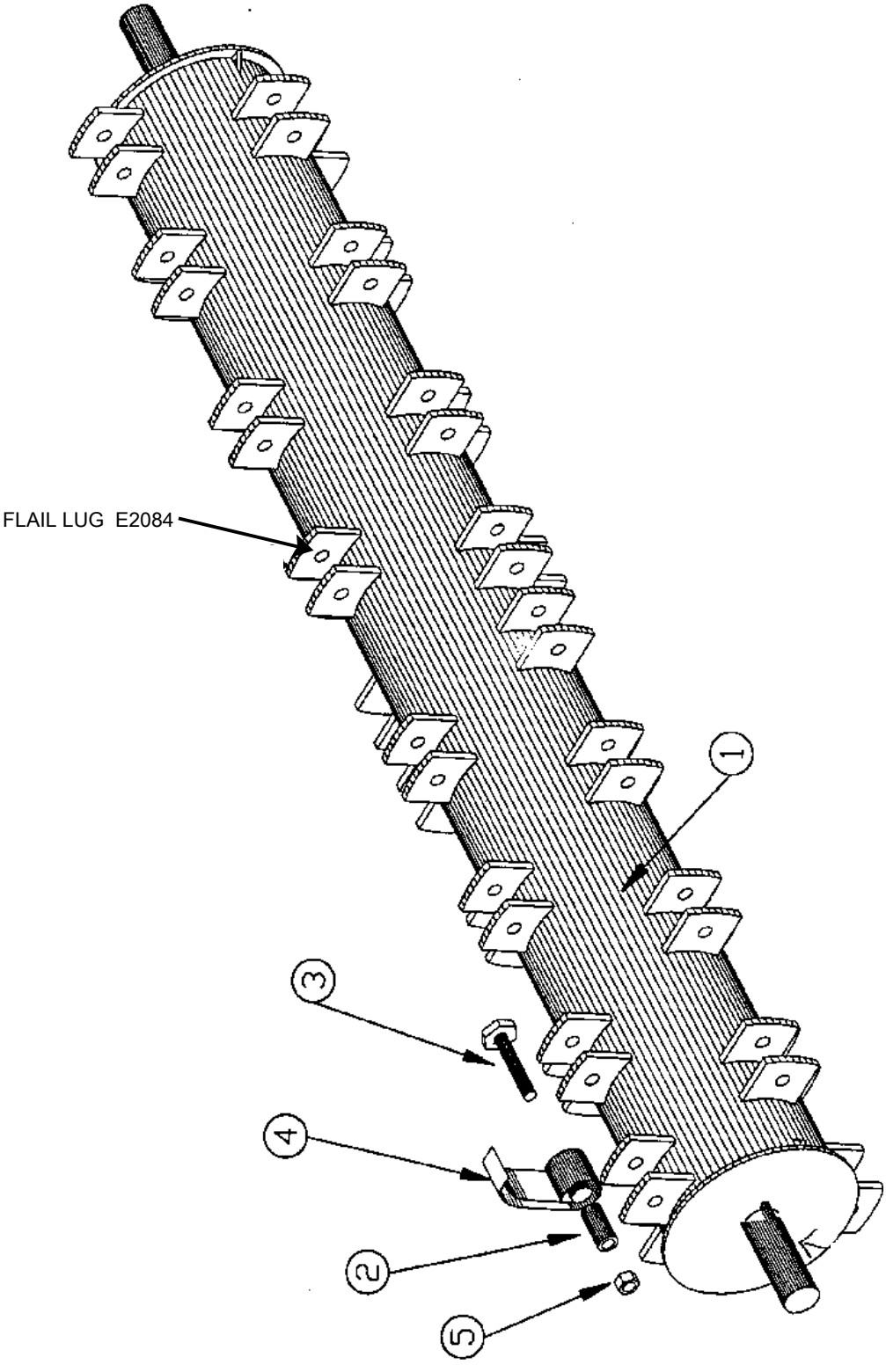


Figure 9

Operating Notes

7. Assembly & Installations

Flail Assembly



Double-click to add text.

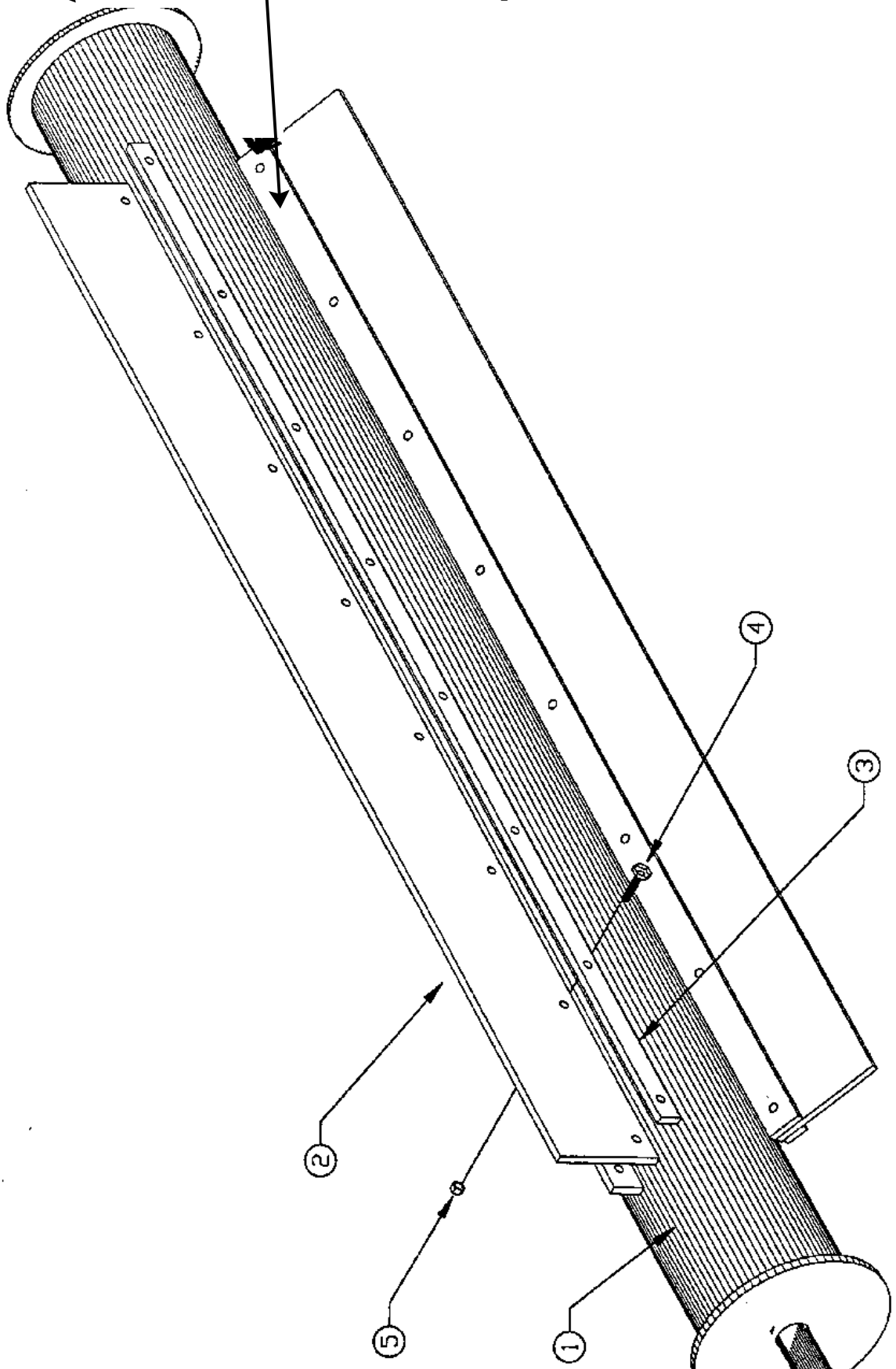
Item No.	Part No.	Description
1	45165	REPLACED BY 45199 +2 OF E3233
2	45072	Flail Bushing @ 2.50
3	45099	5/8" x 3-3/4" UNF GR 8 Stud
4	45075	Flail 10.00
5	45099	5/8" UNF Locknut
6	45146	REPLACED BY 45200 + 2 OF E3233

NOTE: If a flail requires replacing, also replace the opposite flail to keep the drum in balance.

SPLINED HUB 30274
KEYED HUB .32682

FLAT BAR E2912

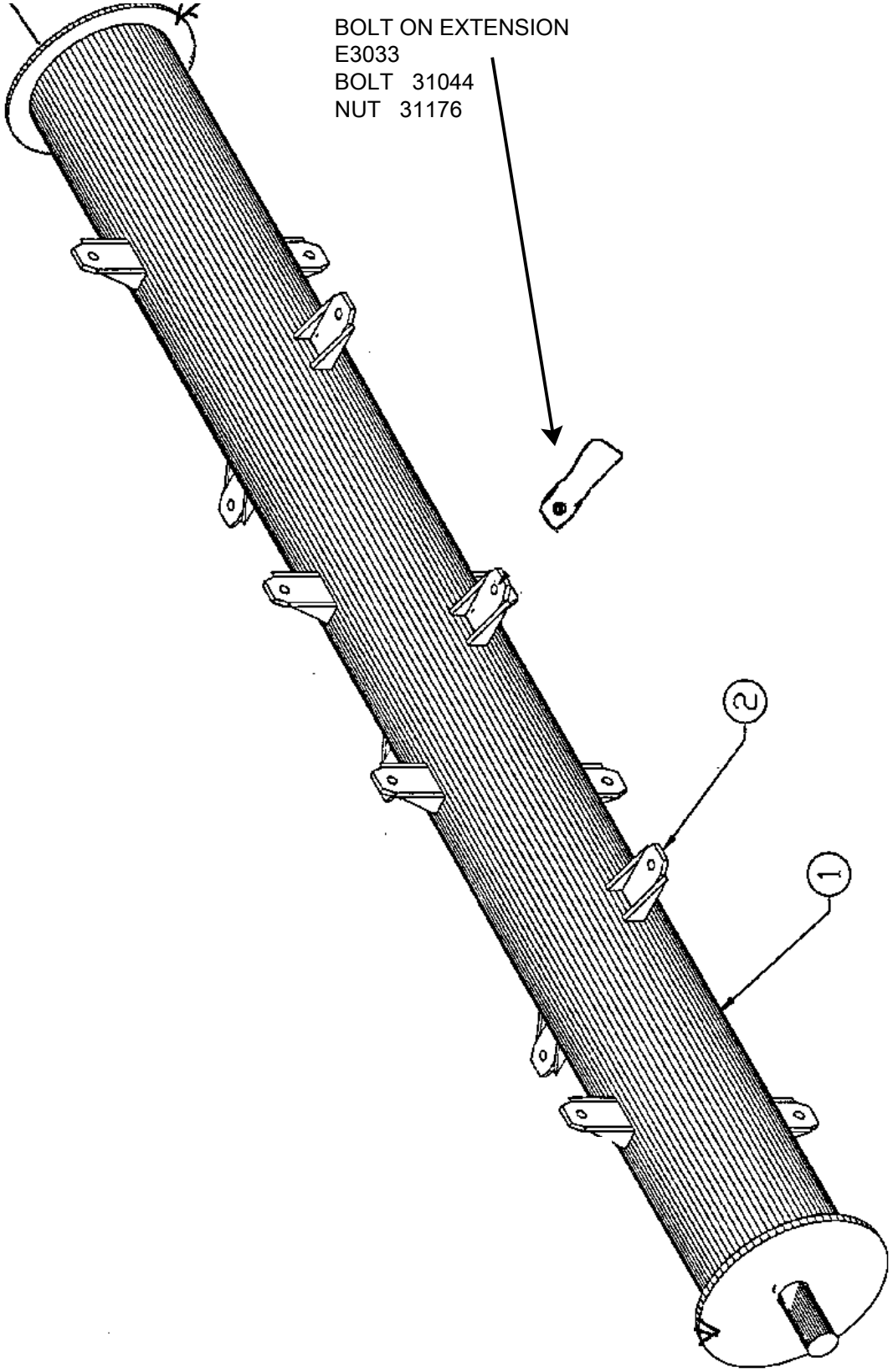
Right Feed Roller



Item No.	Part No.	Description
1	45148	Right Feed Roller 341.95
2	45155	3/8"x5"x55" belting 42.75
3	45156	1/4"x1"x55" Back Plate 8.50
4	B5C0524P	5/16"x1-1/2" Bolt UNC Gr. 5 .11
5	LNC05	5/16" UNC Lock Nut .09

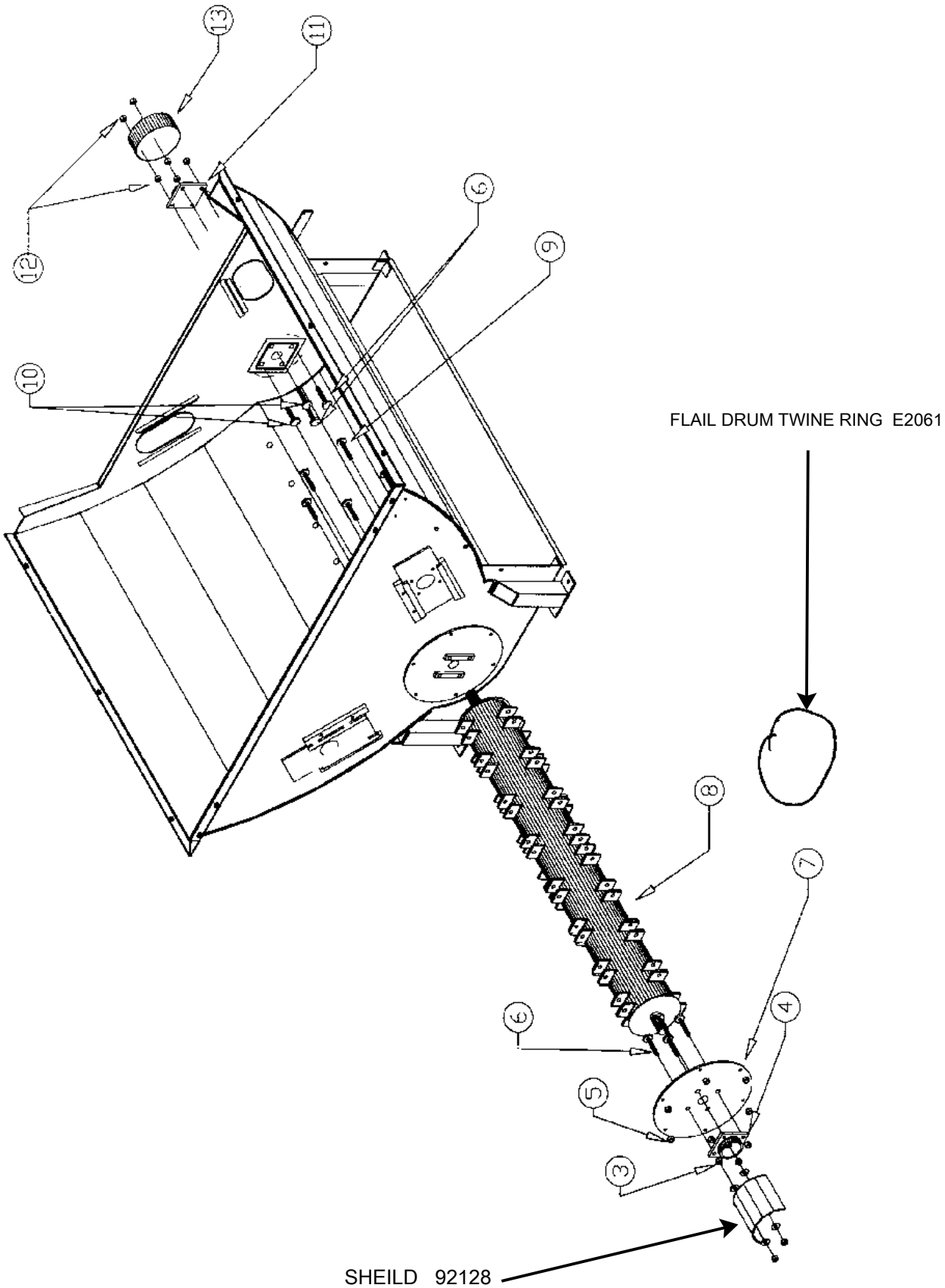
45216 guards (frame)
45217 guards (frame)

Left Feed Roller



Item No.	Part No.	Description
1	45147	Left Feed Drum Complete 239.53
2	E3085	Left Feed Roller Lug 1.15

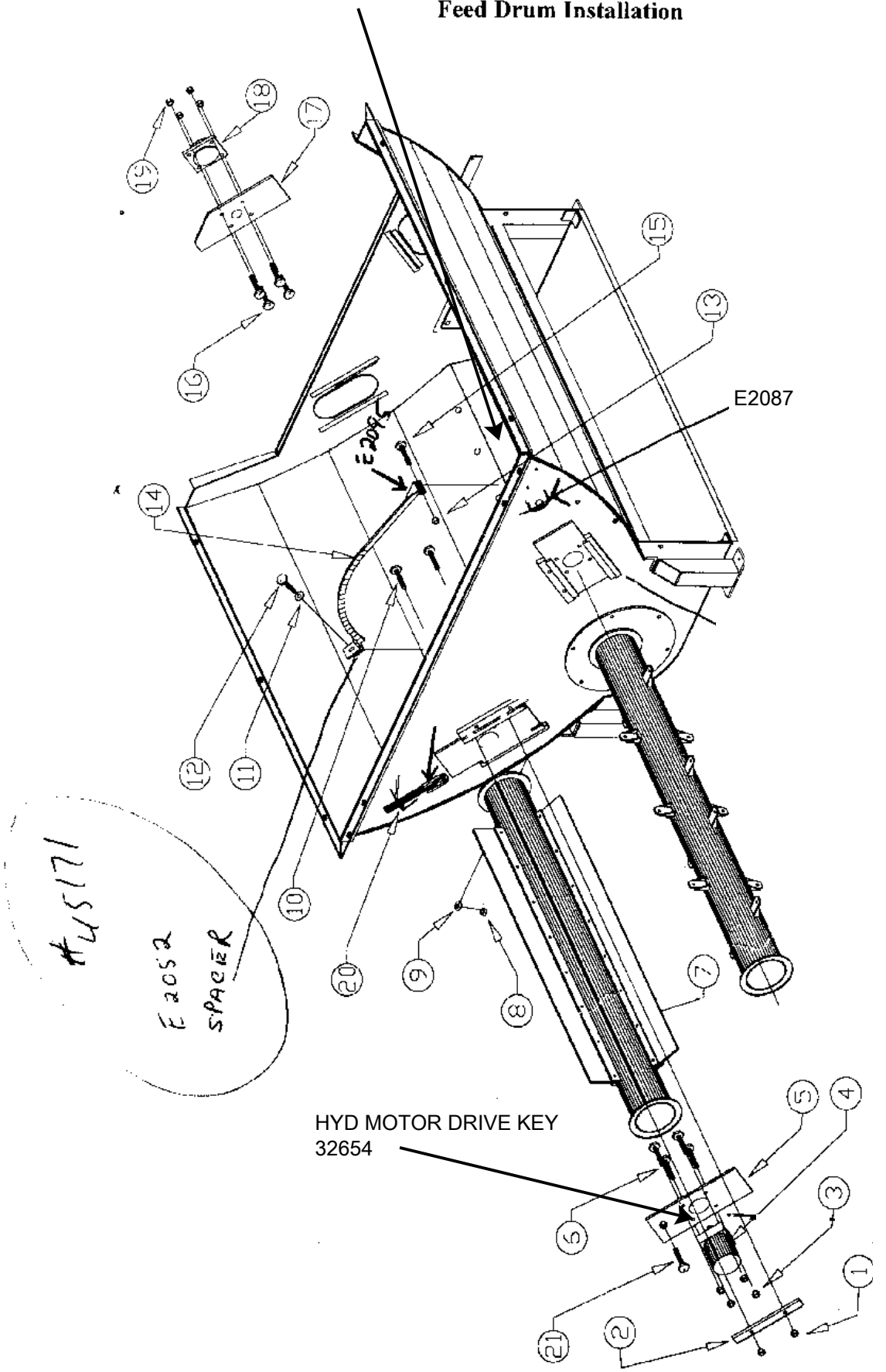
Flail Drum Installation



Item No.	Part No.	Description
1		Omitted
2		Omitted
3	SLNC10	5/8" Stover Locknut .68
4	92091	1-3/4" Flange Bearing 49.48
5	LNC08	1/2" Locknut .14
6	C5C1040	5/8"x2-1/2" UNC Carriage Bolt 1.26
7	45089	Flail Drum Mounting Plate 71.73
8	45146	Flail Drum Complete —
9	B5C0824	1/2"x1-1/2" UNC GR 5 Bolt .25
10	C5C1048	5/8"x3" UNC Carriage Bolt 1.38
11	92091	1-3/4" Flange Bearing 49.48
12	SLNC10	5/8" Stover Locknut .68
13	45135	Rear Bearing Guard 13.60

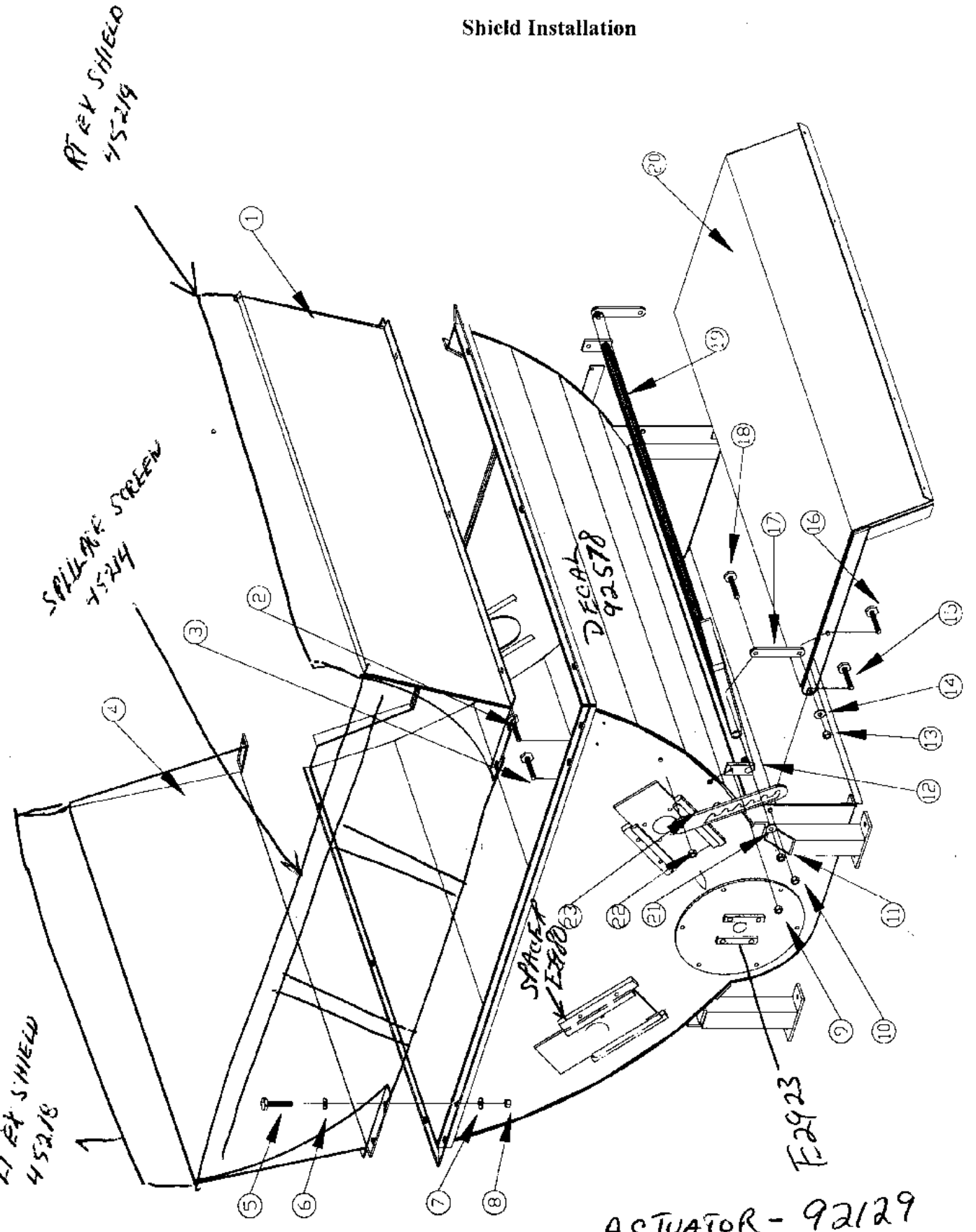
FLAIL ROD MOUNTING TABS E2088

Feed Drum Installation



Item No.	Part No.	Description
1	LNC08	1/2" Lock Nut
2	45158	Motor Slide Plate Retainer
3	LNC08	1/2" Lock Nut
4	92066	Hydraulic Motor
5	45124	Feed Roller Motor Mounts
6	B5C0840P	1/2"x2-1/2" UNC GR 5 Bolt
7	- 45148	Right Feed Roller
	- 45147	Left Feed Roller
8	LNC08	1/2" Lock Nut
9	FW08	1/2" Flatwasher
10	B5C0828	1/2"x1-3/4" UNC GR 5 Bolt
11	FW08	1/2" Flatwasher
12	B5C0840	1/2"x2-1/2" UNC GR 5 Bolt
13	LNC09	9/16" Locknut
14	45159	Flail Guard Rod
15	B5C0964P	9/16"x4" UNC GR 5 Bolt
16	B5C0828	1/2"x1-3/4" UNC GR 5 Bolt
17	45123	Feed Roller Bearing Mount
18	92094	1-3/8" Flange Bearing
19	LNC08	1/2" Lock Nut
20	45127	Feed Drum Adjusting Rod
31159	31159	1" ACME Right Hand Nut
21	B5C1624	1"x1-1/2" UNC GR 5 Bolt
	NC16	1" Nut

Shield Installation



Item No.	Part No.	Description
1	45065	Left Bale Deflector
2	C5C0824P	1/2"x1-1/2" UNC GR 5 Carriage Bolt
3	C5C0824P	1/2"x1-1/2" UNC GR 5 Carriage Bolt
4	45083	Right Bale Deflector
5	B5C0824P	1/2"x1-1/2" UNC GR 5 Bolt
6	FW08P	1/2" Flat Washer
7	FW08P	1/2" Flat Washer
8	LNC08	1/2" UNC Lock Nut
9	LNC08	1/2" UNC Lock Nut
10	LNC08	1/2" UNC Lock Nut
11	LNC08	1/2" UNC Lock Nut
12	45162	Deflector Arm Pivot
13	LNC08	1/2" UNC Lock Nut
14	FW08P	1/2" Flat Washer
15	B5C0824P	1/2"x2" UNC GR 5 Bolt
16	B5C0836P	1/2"x2-1/4" UNC GR 5 Bolt
17	45164	Deflector Link
18	B5C0836P	1/2"x2-1/4" UNC GR 5 Bolt
19	45160	Deflector Shield Lever
20	45163	Discharge Deflector
21	FW08P	1/2" Flat Washer
22	LNC08	1/2" UNC Lock Nut
23	45119	Deflector Adjusting Bar

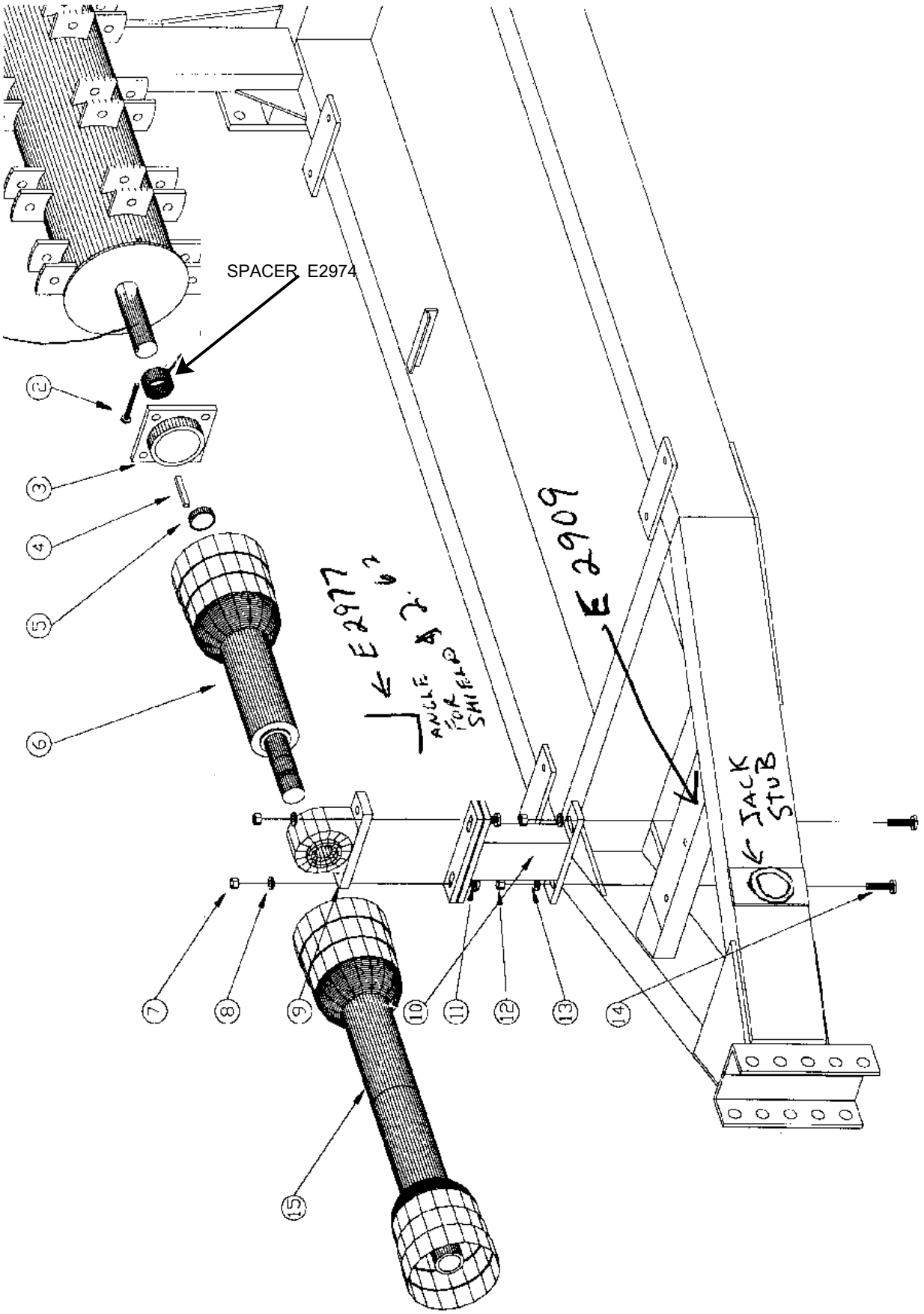
Pulley's - 92131

Rubber Handle - 92127

Twine Guards Left 45216

Right 45217

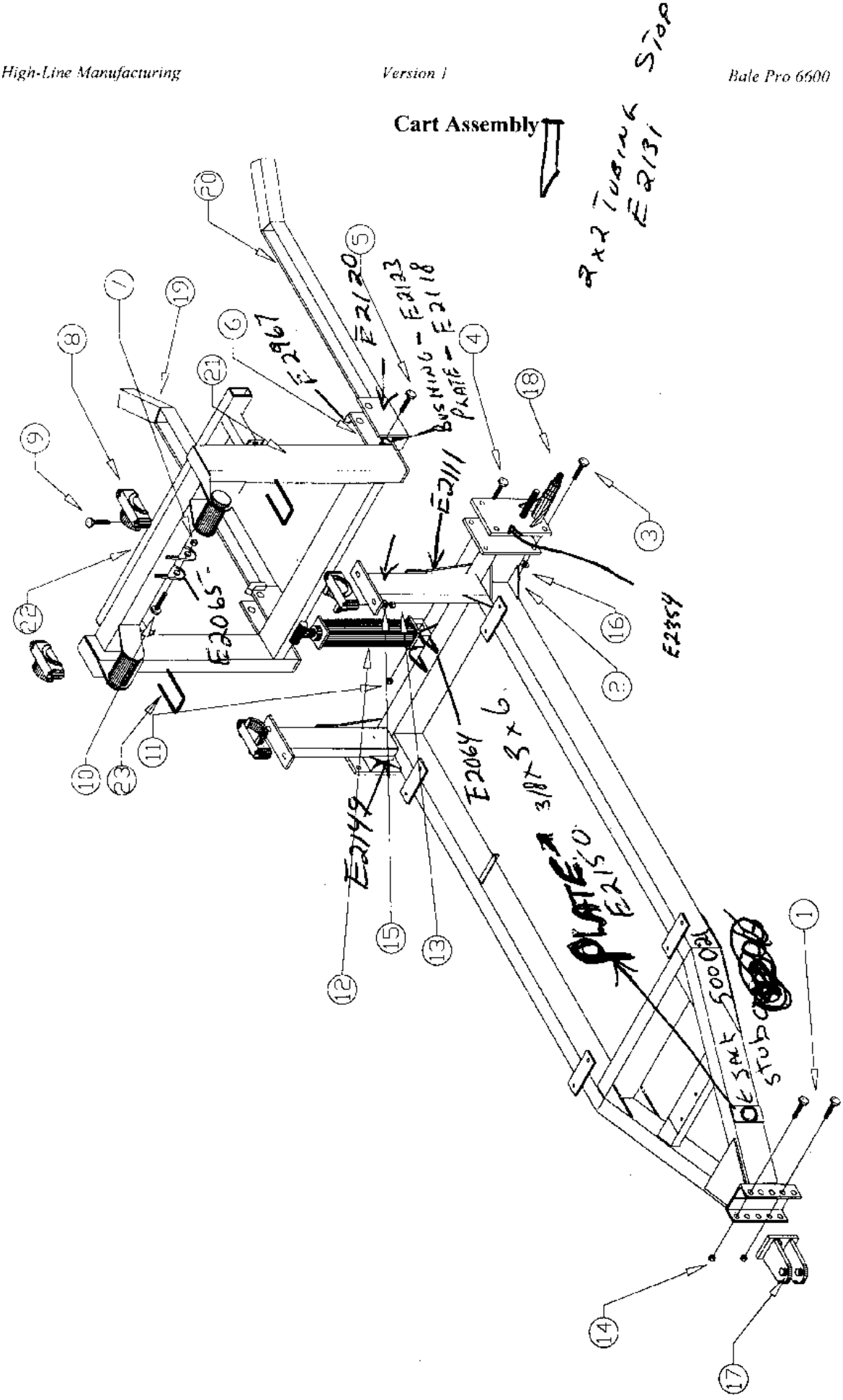
PTO Installation



Item No.	Part No.	Description
1		Omitted
2	32794	5/16" x 3" Spring Pin
3	92091	1-3/4" Flange Bearing
4	45170	3/8"x3/8"x2" Key
5	NA	1-3/4" I.D. x 1/2" Bushing
6	32899	PTO Shaft Extension
7	LNC09	9/16" UNC Lock Nut
8	FW09	9/16" Flat Washer
9	92031	1-3/4" Pillow Bearing
10	45149	PTO Stub Stand
11	B5C0940P	9/16"x2-1/2" UNC Gr. 5 Bolt
12	LNC09	9/16" UNC Lock Nut
13	FW09	9/16" Flat Washer
14	B5C0932P	9/16"x2" UNC Gr. 5 Bolt
15	32906	PTO Shaft

E 2977 - 2.62
92128 - 1875
E 2974 - 178
E 2973 - 195

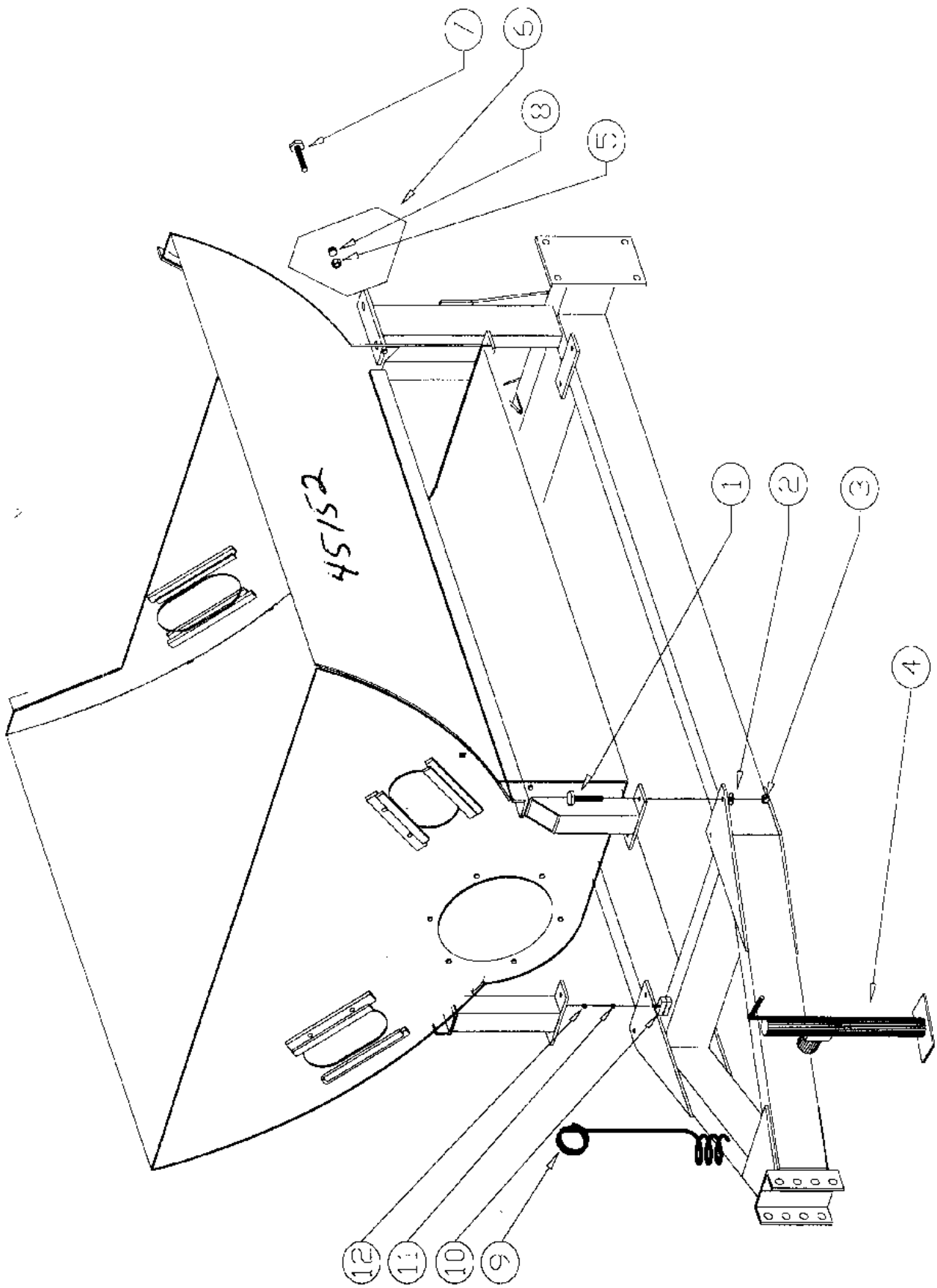
Cart Assembly



Item No.	Part No.	Description
1	B5C16120P	1"x7-1/2" UNC GR 5 Bolt
2	NC12P	3/4" UNC Nut
3	B5C1240	3/4"x2-1/2" UNC GR 5 Bolt
4	B5C16112P	1"x7" UNC GR 5 Bolt
5	B5C2096P	1-1/4" x 6" UNC GR 5 Bolt
6	LNC20	1-1/4 " UNC Locknut
7	LNC16	1" UNC Locknut
8	30230	CLAMP TOP
9	B5C1080	5/8"x5" UNC GR 5 Bolt
10	B5C1680P	1"x5" UNC GR 5 Bolt
11	LNC16	1" UNC Locknut
12	90103	3-1/2" x 16" Hydraulic Cylinder
13	LNC10	5/8" UNC Lock Nut
14	LNC16	1" UNC Locknut
15	FW10	5/8" Flatwasher
16	LW12P	3/4" Lockwasher
17	45060	Double Hitch Tongue
18	45081	Axle Plate and Spindle
19	45143	Right Fork
20	45142	Left Fork
21	45079	Fork Mechanism
22	45087	Bumper
23	UB0848112	3"x7" Clamp (1/2" nut not shown)

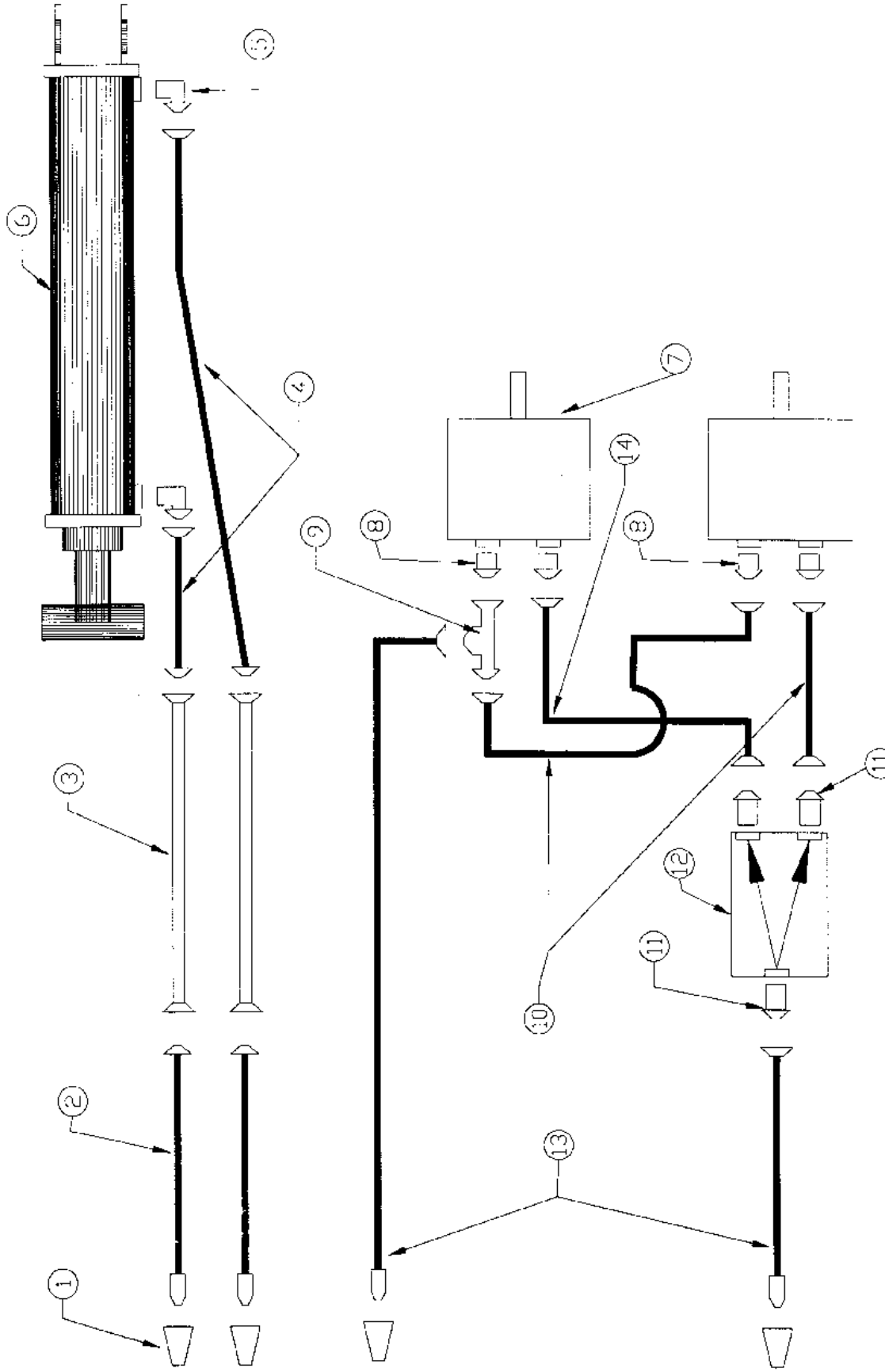
NOT SHOWN BOTTOM CLAMP
30231

Tub on Cart Installation



Item No.	Part No.	Description
1	B5C0828P	1/2"x1-3/4" UNC GR 5 Bolt
2	FW08P	1/2" Flat Washer
3	LNC08P	1/2" UNC Locknut
4	92095	5000 lb. x 15" Hitch Jack
5	B5C0412P	1/4" Locknut
6	92028	Slow Moving Sign
7	LNC04P	1/4"x3/4" UNC GR 5 Bolt
8	FW04	1/4" Flat Washer
9	500001	Hose Holder
10	801702	Frame Hydraulic Line Clamps
11	LNC05	5/16" UNC Locknut
12	FW05	5/16" Flat Washer

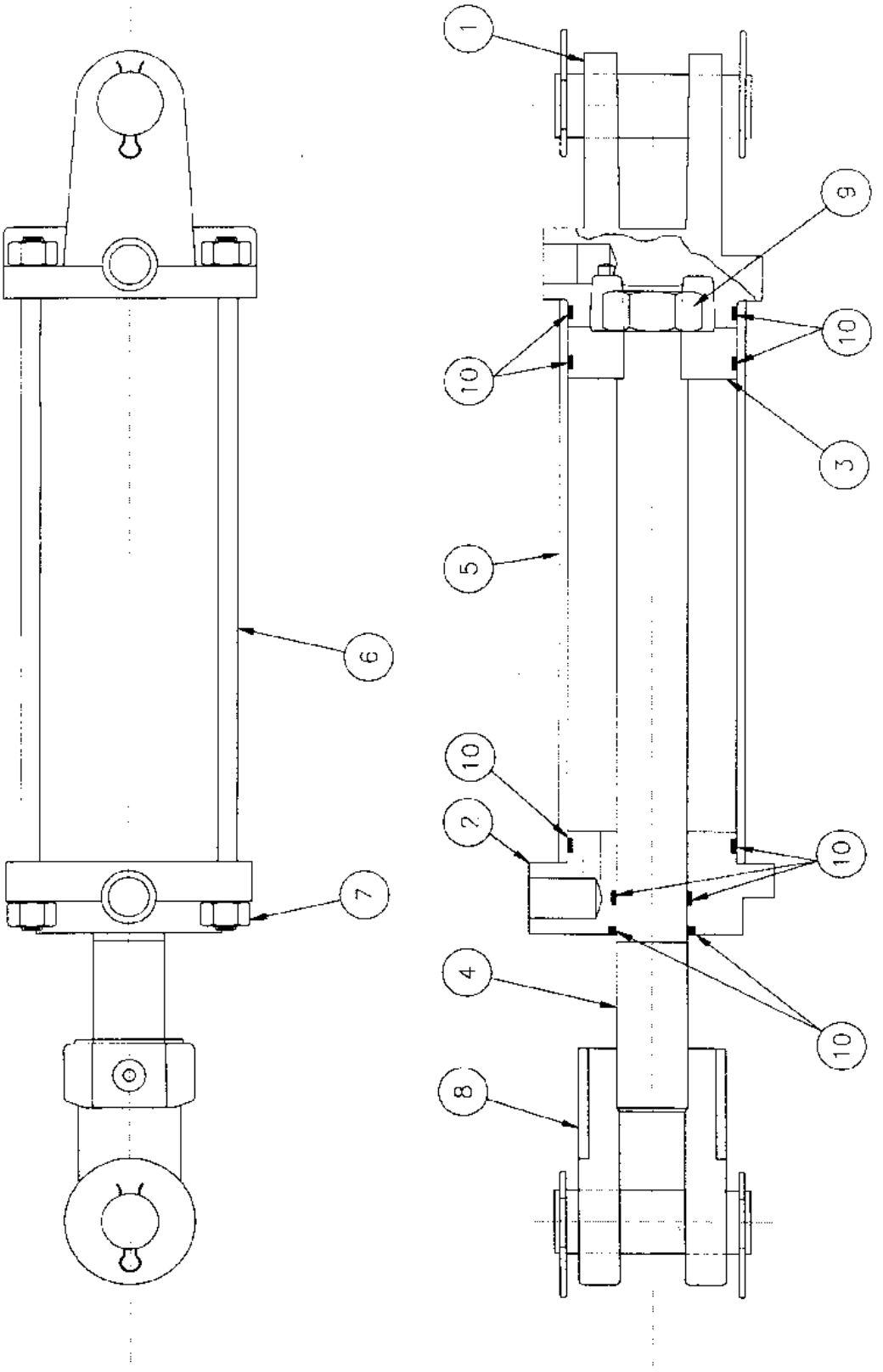
Hydraulic Layout



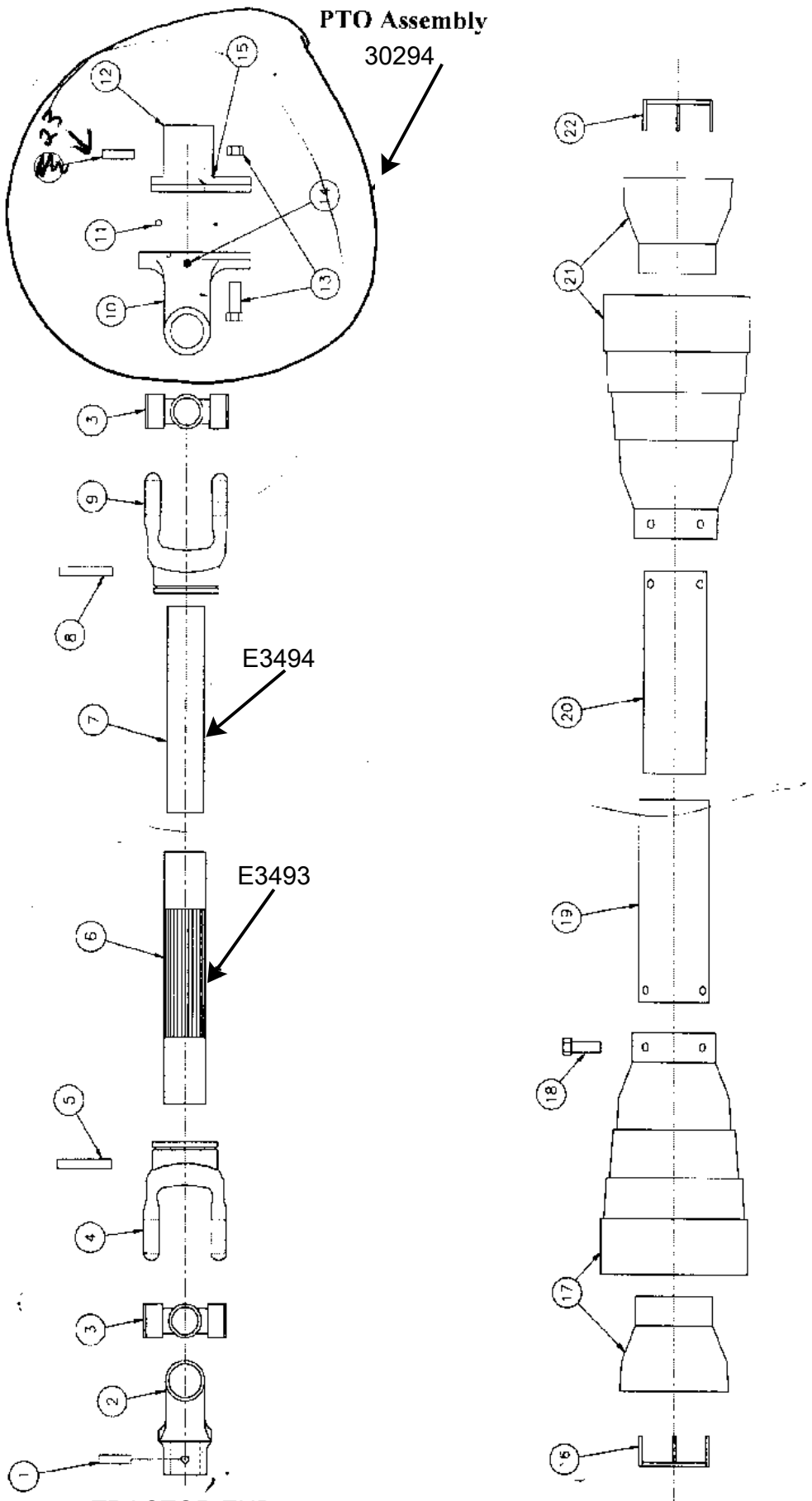
Item No.	Part No.	Description
1	601217	1/2" Pioneer end 30209
2	601003	3/8"x96" 1/2" MNPT - 1/2" MJIC hose
3	90442	1/2"x108" Steel Lines
4	90245	3/8"x28" 1/2" FJIC 1/2" MJIC hose
5	849FS0808	90 deg. 1/2" MNPT - 1/2" MJIC
6	90103	3-1/2" x 16" Hydraulic Cylinder
7	92066	Hydraulic Motor RE 330D400
8	848FS00810	1/2" MJIC - 7/8" MORB
9	871FS08	1/2" FJIC - 1/2" MJIC - 1/2" MJIC" Tee
10	90240	3/8"x36" 1/2" FJIC - 1/2" FJIC hose
11	848FS00806	1/2" MJIC -9/16" MORB
12	92101	Flow Divider
13	601034	3/8"x96" 1/2" MNPT - 1/2" FJIC hose
14	90271	3/8"x42" 1/2" FJIC - 1/2" FJIC hose
Optional	61SA0808062	Restrictor

HYD MOTOR SEAL KIT
32647
SPLINED SHAFT 32653

Cylinder Assembly



Item No.	Part No.	Description
1	90844	Clevis Cap
2	30259	Rod Cap
3	90700	Piston
4	90846	1-1/2" Rod
5	90740	Cylinder Tube
6	90847	5/8" Tie Rod
7	90848	5/8" UNF Nut
8	90849	Rod Clevis
9	90722	1-14 UNS Nut
10	32268	Seal Kit
NA	90103	3-1/2"x16" 1-1/2" Rod Cylinder Complete


PTO Assembly
30294
E3494
E3493
TRACTOR END

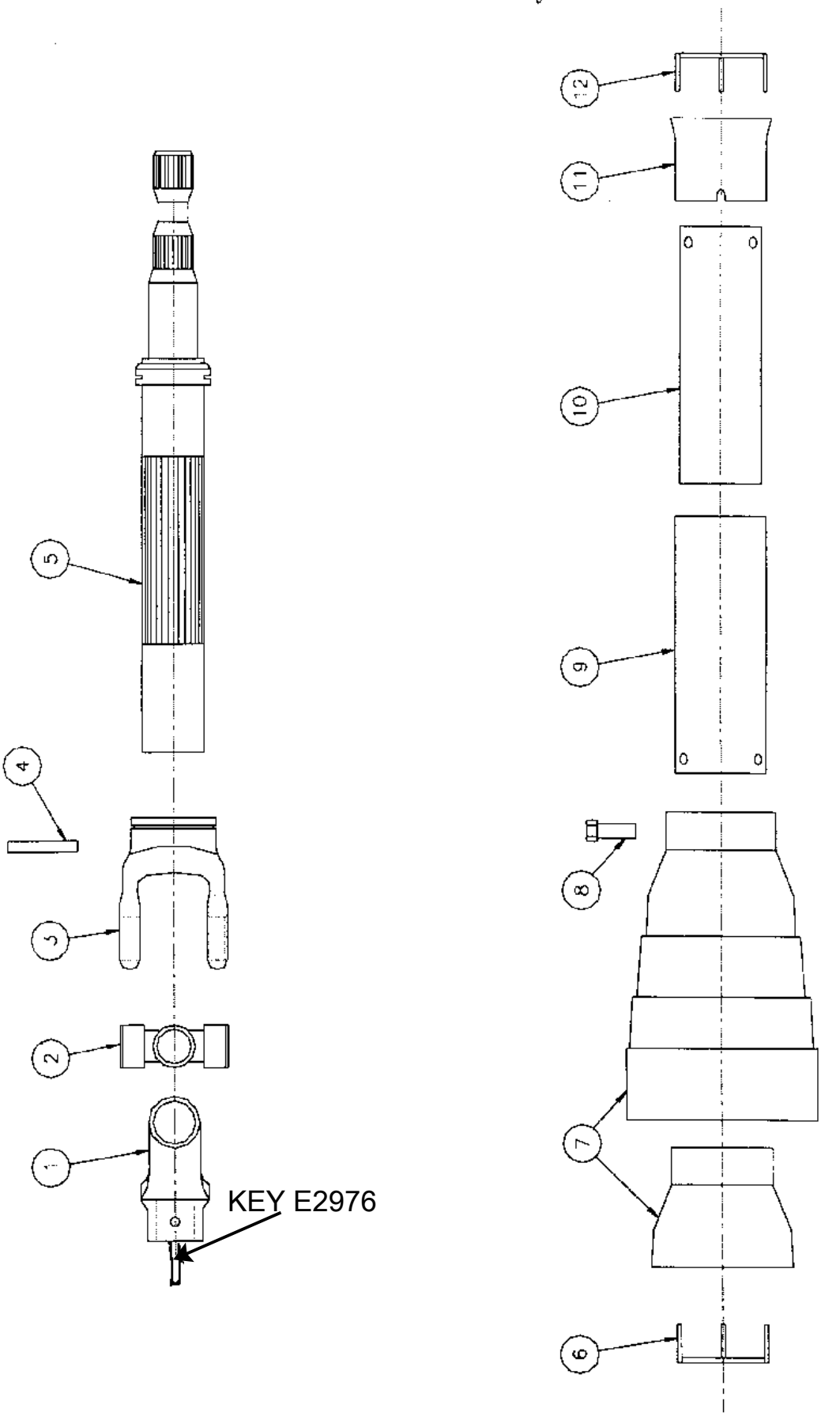
COMPLETE PTO 32906

Item No.	Part No.	Description
1	32868	Push Pin Set 1-3/8" 32860
2	32897	Push Pin Yoke 113 32897
3	32863	Cross Journal Set 32863
4	32864	Outer Yoke 32864
5	E3493	Roll Pin for Outer Tube 32865
6	E3494	Outer Tube E3493
7	32809	Inner Tube E3494
8	32873	Roll Pin for Inner Tube 32869
9	32900	Inner Yoke 32873
10	32903	Yoke for B05 32907
11	32893	Ball 5/16". 32900
12	32901	Hub B05 32903
13	32904	Bolt M10x60 cl.8.8 & Nut 32893
14	32881	Grease Nipple. 32901
15	32908	Complete Shear Bolt B05 212.50 32904
16	32909	Guard Retaining Collar for Outer Tube 4.03 32881
17	32910	Cone for Outer Tube 19.05 32908
18	32911	Bolt 32882
19	32888	Outer Shield 32909
20		Inner Shield 9" 32910
21		Cone for Inner Tube 32911
22		Guard Retaining Collar for Inner Tube 32888

PUSH PIN SET MACHINE END 32917

chains for PTO 32920.
4 for complete drive line

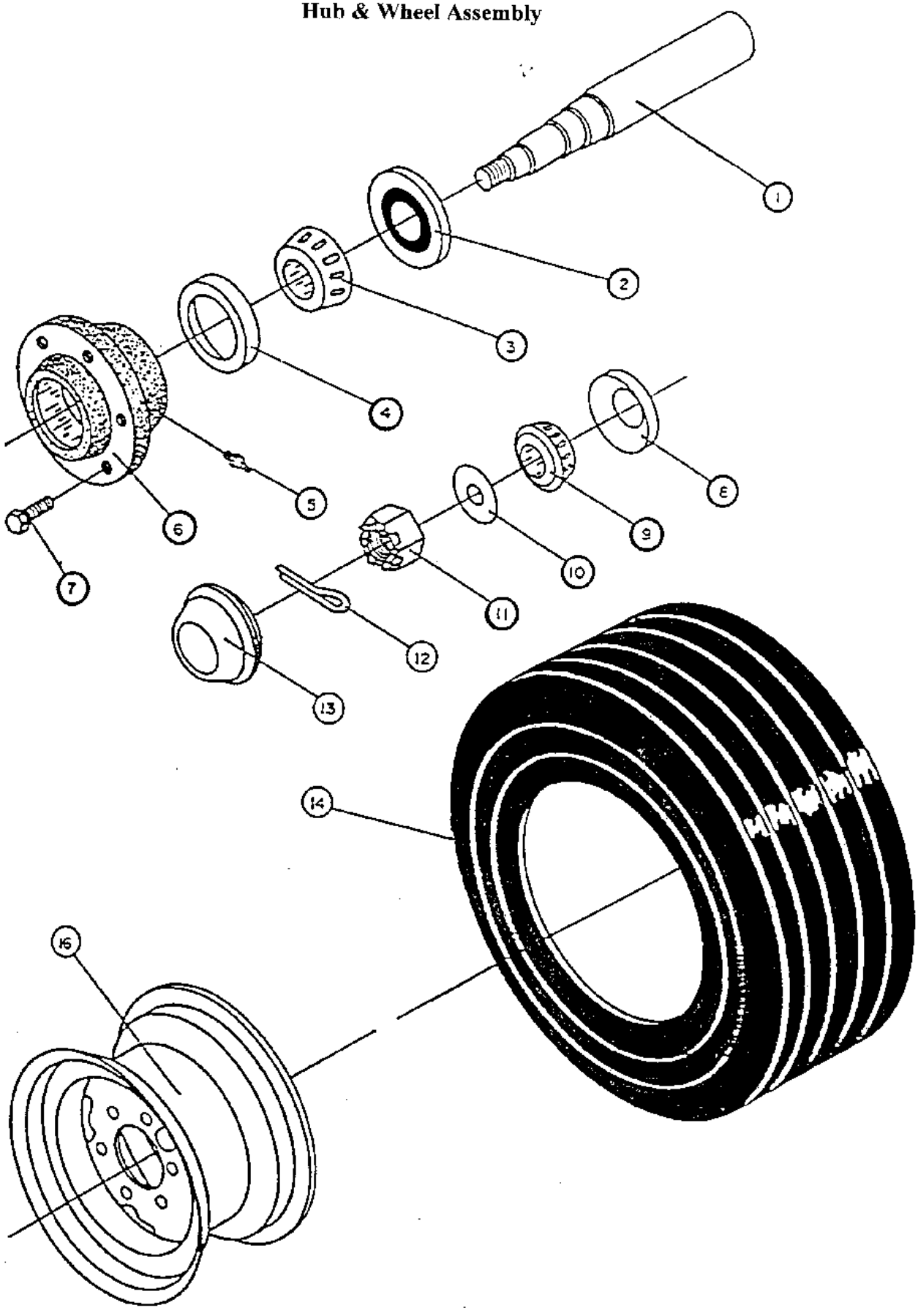
PTO Extension Assembly



32899 901154 Complete Extension

Item No.	Part No.	Description
1	901147	Special Yoke 32892
2	901118	Cross Journal Set 32863
3	901119	Yoke for Outer Tube 32864
4	901120	Roll Pin for Outer Tube 32865
5	901168	Outer Tube With Splined Shaft 32912
6	901136	Guard Retaining Collar for Outer Tube 32881
7	901169	Extended Cone for Outer Tube 32913
8	901137	Bolt 32882
9	901170	Outer Shield 32914
10	901171	Inner Shield 32915
11	901172	Centering Ring 32916
12	901143	Guard Retaining Collar for Inner Tube 32888
13	E2976	KEY 3/16 x 2

Hub & Wheel Assembly



Item No.	Part No.	Description
1	301008	SE16 Spindle only 32303
2	301011	SE16 Grease Seal 32306
3	301010	LM603049 Inner cone 32305
4	301009	LM603012 Inner cup 32304
5	91700	1/8 NPT Straight Zerk
6	301007	H614 Hub 32312
7	301006	WB12 Wheel Bolt 9/16" 32301
8	301004	LM48510 Outer cup 32299
9	301005	LM48548 Outer Cone 32300
10	301003	WA17 Washer 1" ID x 2"OD 32298
11	301002	Castellated Nut 1" 14 UNS 32297
12	CP0324	3/16" x 1-1/2" Cotter Pin
13	301001	DC15 Dust Cap 32296
14	301013	11L x 15 6 PLY Tubeless 32308
16	~~91050~~	15 x 8 x 6 RIM

~~301017~~
91050

301017 HUB WITH BEARINGS 45228

Specifications

Recommended Minimum Horsepower Required:	85 HP
Capacity:	6' diameter bale
Height:	90"
Width	100"
Weight	4000 lb.
PTO Requirements:	1000 R.P.M.
Dual Hydraulics:	2000 psi.

Report: BM081R
Date: 5/01/98
Time: 11:13:04
By: BJW @ QPADEV0008

CMS Bill of Materials - Single Level BOM Report

Parent Part #: 49052
*KIT,CYL,TWO,UPDATE
Customer:

Customer Part #:
ECN #:
Eng. Drwg. #:
Location:
Revision: 0 1/01/01
Size:

Seq/Line	Component Part #	Description	Quantity Per	Units	Engineering Drawing #	Stock Type	ECN#	Vendor #	Stock Location
10- 1	90103	HYD,CYL,3.5X16,1.5,8FP	1.0000	EA		P			WRH
10- 2	90333	HYD,HOSE,3/8X28,8FJX-8FJX	2.0000	EA		P			WRH
10- 3	90332	HYD,HOSE,3/8X20,8FJX-8FJX	2.0000	EA		P			WRH
10- 4	90444	HYD,SLNR,1/2X116-1/2,8FJ	2.0000	EA		P			WRH
10- 5	30313	HYD,FIT,TEE,8MJ-8MJ-8MJ	2.0000	EA		P			WRH
10- 6	E3234	LUG,CYL,BOTTOM	2.0000	EA		P			WRH
10- 7	E3248	GUSSET,CUTOFF	4.0000	EA		P			WRH
10- 8	30212	HYD,FIT,ELBOW,8MP-8MJ90	2.0000	EA		P			WRH
10- 9	E2065	LUG,CYL,TOP	4.0000	EA		P			WRH
10- 10	45184	PIN,CYL,TOP,LONG,BP	2.0000	EA		M			WRH
10- 11	45185	PIN,CYL,BOTTOM,SHORT,BP	2.0000	EA		M			WRH

Qty Updated Manually

41263 Kept