

HIGHLINE :-:tcf:

1998

BALE MOVER 1400

**Assembly-Operator
Parts Manual**

MADE IN CANADA

Memo

To: AH Departments
 From: Shene Tulik
 CC: Mario Piche
 Date: 12/23/98
 Re: Manitoba Highways and Transportation - Lighting and Marking

As discussed previously, legislation was passed in Manitoba requiring light, 19 and marking on all agricultural equipment. This legislation applies to all equipment manufactured on or after January 1, 1998 and must be adhered to for all machines sold into Manitoba. The following Highline machines are affected by this legislation:

1. 5008M Balemover
2. 700BM Balemover
3. Salepro Hitch
4. Topgun
5. BP6800 Baleprocessor
6. BP7800 Baleprocessor
7. XL6084 Rockpicker
8. XL78 Rockpicker.

I would like to again express the need to address this situation immediately by supplying either the dealers or the end user with the required lighting and marking in order to meet the Manitoba legislation. The details of supplying the safety kits will be shared by the sales, production, and customer service departments. These measures will supply the equipment owners with the necessary safety equipment and will allow us to retroactively meet and exceed the required legislation by following ASAE S279.10. The following light kits can be found in CMS:

Model	Light Kit Part No.	Other Requirements
500BM Balemover	40164	reflectors
700BM Balemover	40164	reflectors
5008M Balemover	40164	reflectors
Salepro Hitch	Same requirement as BM	reflectors
Topgun	48089	reflectors
BP6800 Baleprocessor	48101	reflectorS
BP7800 Baleprocessor	48103	reflectors
XL78 Rockpicker	To be completed	reflectors
XL6084 Rockpicker	To be completed	reflectors

HIGHLINE WARRANTY IS **INVALID** IF THE WARRANTY
REGISTRATION FORM IS NOT SIGNED AND RETURNED

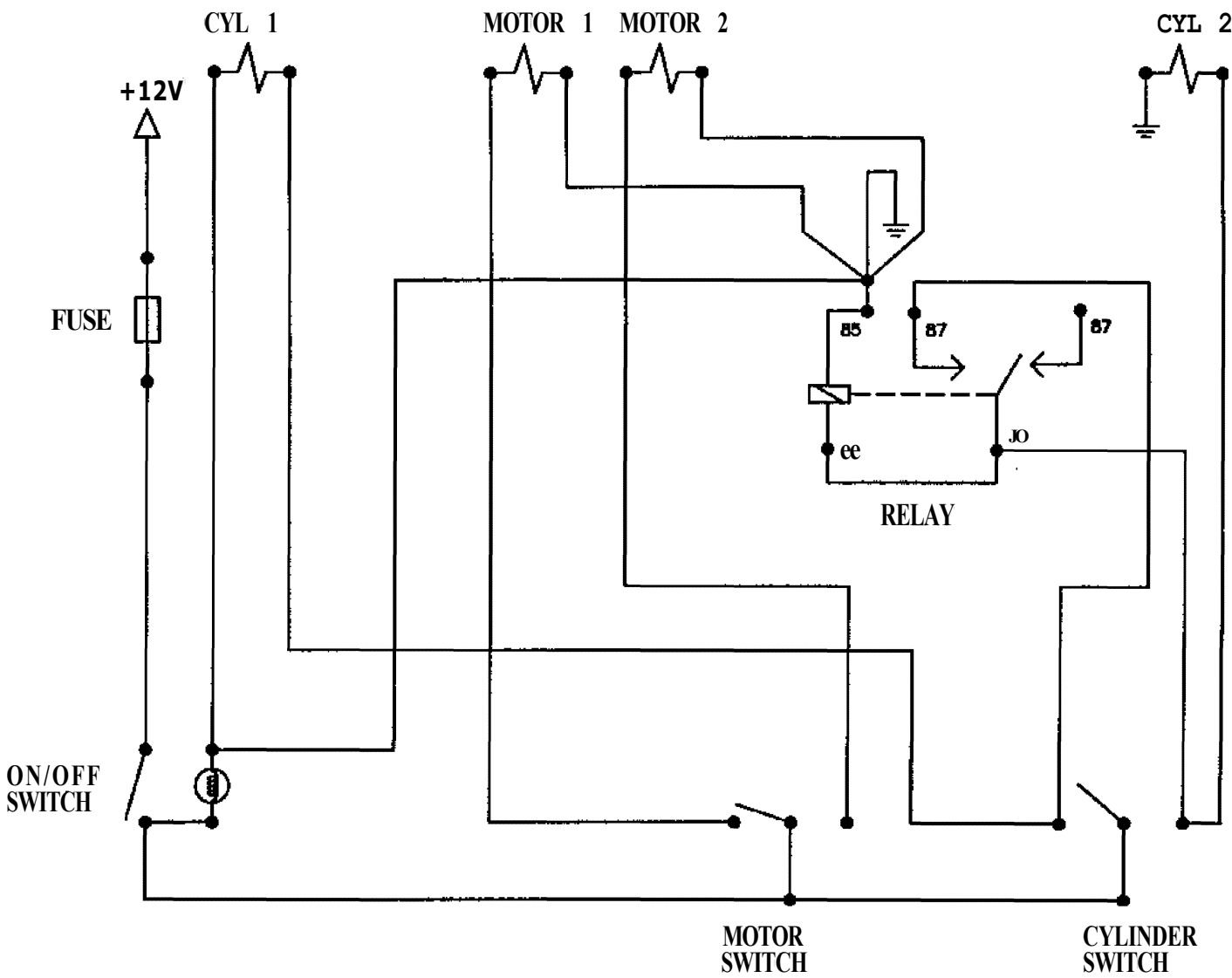
THE WARRANTY REGISTRATION FORM IS ENCLOSED
WITH THE MANUAL

PLEASE COMPLETE AND MAIL WHEN UNIT IS **SOLD**

NOTES:

Highline Mfg. Inc. retains proprietary rights to the material disclosed herein. This drawing is intended for engineering information only. It may not be reproduced nor the information herein be used for any purpose without written permission from Highline Mfg. Inc.
The equipment shown is protected by patent.

Default Tolerances:
1. LINEAR DIMS. $\pm .000$
FRACTIONAL $\pm .001$
2. ANGLES $\pm 1/2^\circ$
3. CONCENTRICITY $\pm .010$ DIA
4. HATCHING, PROVIDE THE MICRO INCH VALUE
5. HATCHING, INTERNAL RADIUS $\pm .015$
6. BREAK SPACES (CORNERS)
0.005, 1E-1, INQC
THIRD ANGLE Projection



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CONTROL BOX SCHEMATIC 148M
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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.

Presidents Message

The 1400 Bale Mover, a proven name in the bale handling field is manufactured by HIGHLINE Mfg Inc. The 1400 Bale Mover was designed to work in the most difficult of bale handling situations. A little time and effort spent in proper maintenance will assure the performance and durability of your bale mover.

This operator manual has been prepared to provide information necessary for the safe and efficient operation of your bale mover. 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 1400 Bale Mover as the machine for your bale handling needs.



Raymond Bussiere
President

Safety Precautions

CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT
--

- Always disengage PTO and hydraulic motors before dismounting tractor.
- 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 attempt to manually remove bales from rails while hydraulic motors are engaged. Disconnect hydraulic motors before cleaning the bale mover.
- Remove transport locks before lowering forks. To remove transport locks, raise forks to slacken transport chain and remove transport pin. DO NOT lower forks when transport locks are in position otherwise severe damage WILL occur.
- Relieve pressure in hydraulic lines before disconnecting lines or performing maintenance on the hydraulic system.

1.0 Pre-delivery & Installation Instructions

1.1 General Description of 1400 Bale Mover

The 1400 Bale Mover is 15' wide and a length of 42'. One set of hydraulic lines is required for engaging hydraulic motors, and one set of hydraulic lines is required for operation of forks and deck cylinder. The 1400 Bale Mover may either load or unload bales for easy transport and organization of bales.

1.2 Pre-Delivery Check List

Enclosed is a list of parts required if the 1400 Bale Mover has not been assembled prior to delivery. If any parts are not included contact your authorized Highline dealer or HIGHLINE Mfg Inc.

2.0 Operating Instructions

2.1 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 \VILL occur.

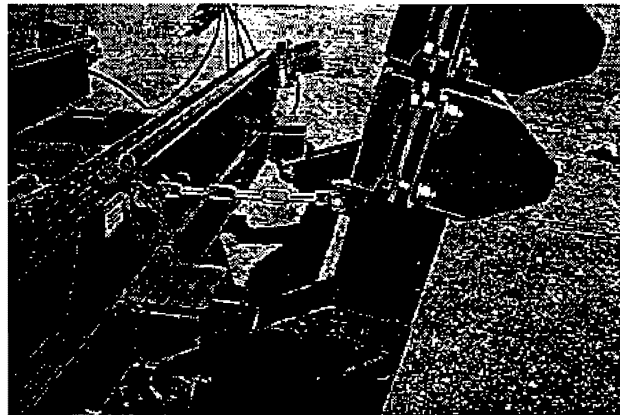


Figure 1. Locks in Transport Position

2.3 Transporting Instructions

To ensure safe transport of the 1400 Bale Mover, forks should be in the transport position with the transport chains in place. To put transport chains in place, raise the forks until the transport pin can be put in place safely. Lower forks to take the slack up in the transport chains.

2.4 Bale Size Adjustment

The bale size is adjustable through the fork adjusting plate. By moving the forks (Figure 2) to adjust for the correct size of bale.

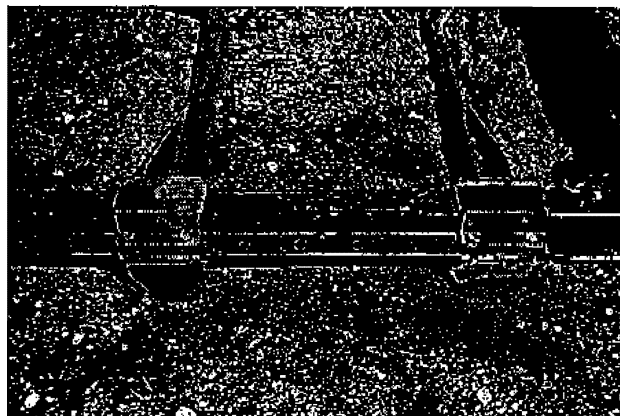


Figure 2. Fork Adjusting

2.5 Field Instructions

For proper operation, the 1400 Bale Mover should run at a field speed of 3•4 mph (4.8•6.5 km/h). When picking bales, a full stop is not required. Bales are picked and placed on the bed continuously by lifting the bale into position and moving the preceding bales back to fit the new bale on.

3.0 Maintenance Instructions

To ensure long operating life of your 1400 Bale Mover, follow this maintenance procedure.

- Periodically check tire air pressure to maintain equal tire pressure. The operating tire pressure should be 90 psi
- Periodically check all bolts for tightness.
- Periodically check chain tightner. The chain should appear to be 2 inches off the bottom of the rail
- Grease the following points as described.

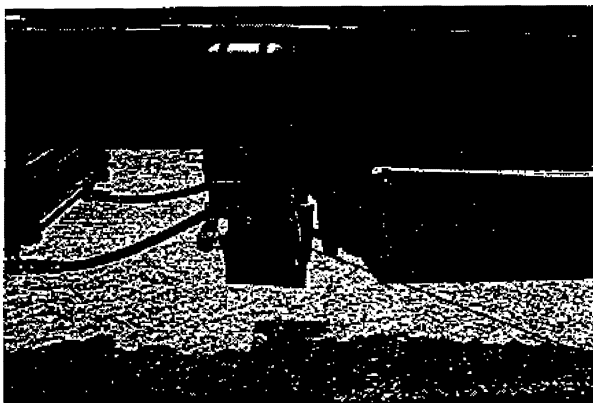
3.1 Grease Locations



Grease No	Description	Frequency
1	Ann, Pivot, Left	Daily
2	Ann, Pivot, Right	Daily

2

Figure 3. Pivot Arm Grease Location



Grease No	Description	Frequency
3	Arm, Slide, Pivot, Left	Daily
4	Arm, Slide, Pivot, Right	Daily

4

Figure 4. Pivot Slide Ann Grease Location

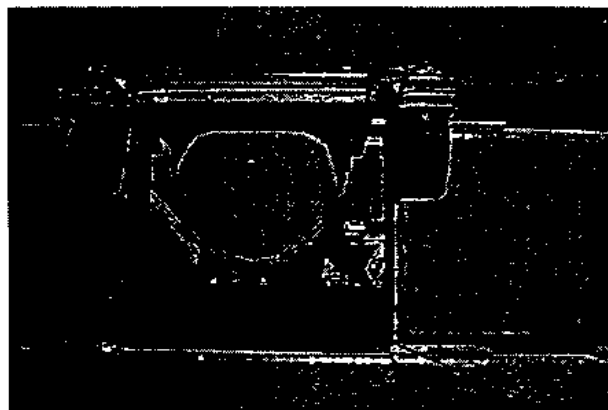


Figure 5. Oscillating Tandem Grease Location

Grease No	Description	Frequency
5	Pocket, Beam Walking, Left, Outside	Daily
6	Pocket, Beam Walking, Left, Inside	Daily
7	Pocket, Beam Walking, Right, Inside	Daily
8	Pocket, Beam Walking, Right, Outside	Daily

8



Figure 6. Rear Sprocket Pin

Grease No	Description	Frequency
9	Pin, Sprocket, Rear, Left, Outside	Weekly
10	Pin, Sprocket, Rear, Left, Inside	Weekly
11	Pin, Sprocket, Rear, Right, Inside	Weekly
12	Pin, Sprocket, Rear, Right, Outside	Weekly

12

Note: Wheel bearings should be repacked yearly.

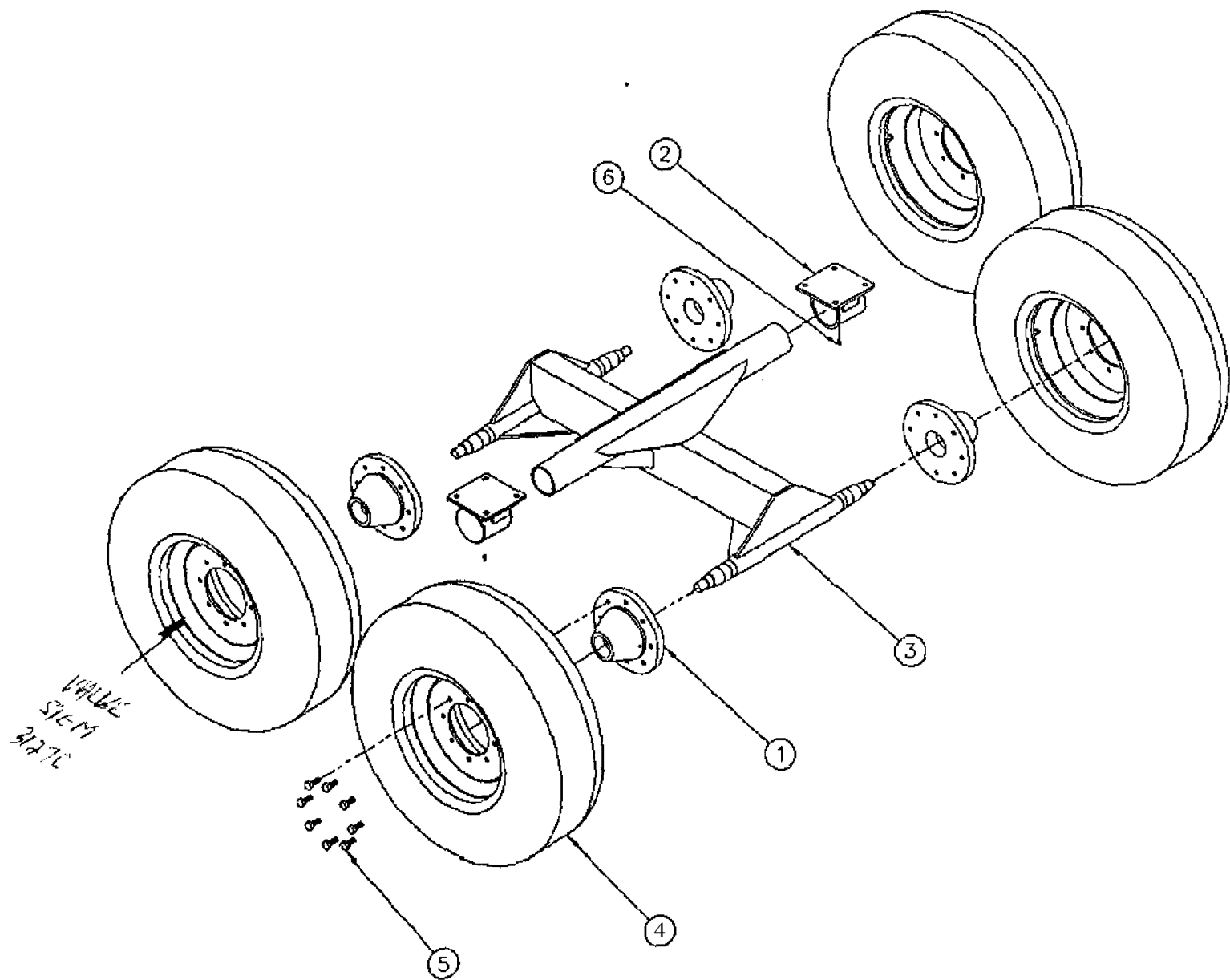
4.0 Parts Information

4.1 Tandem

Item	Part No.	Description	Quantity
1	30102	Hub, 8 Bolt, 5000 lbs, Complete	8
2**	40024	Pocket, Beam Walking	4
3	40106	Beam, Walking, Main	1
4	40122	Assembly, eel, Complete	8
5	91061	Bolt, Wheel, 9/16"	64
6	91704	Zerk Grease, 1/4-28, 90 Degree	4
7	31270	VALVE STEM	8

Part No.	Description
30100	Tire, 11L-15FI, 12Ply
30104	Rim, 15 x 8 x 8, 1.5 Off, 6000#

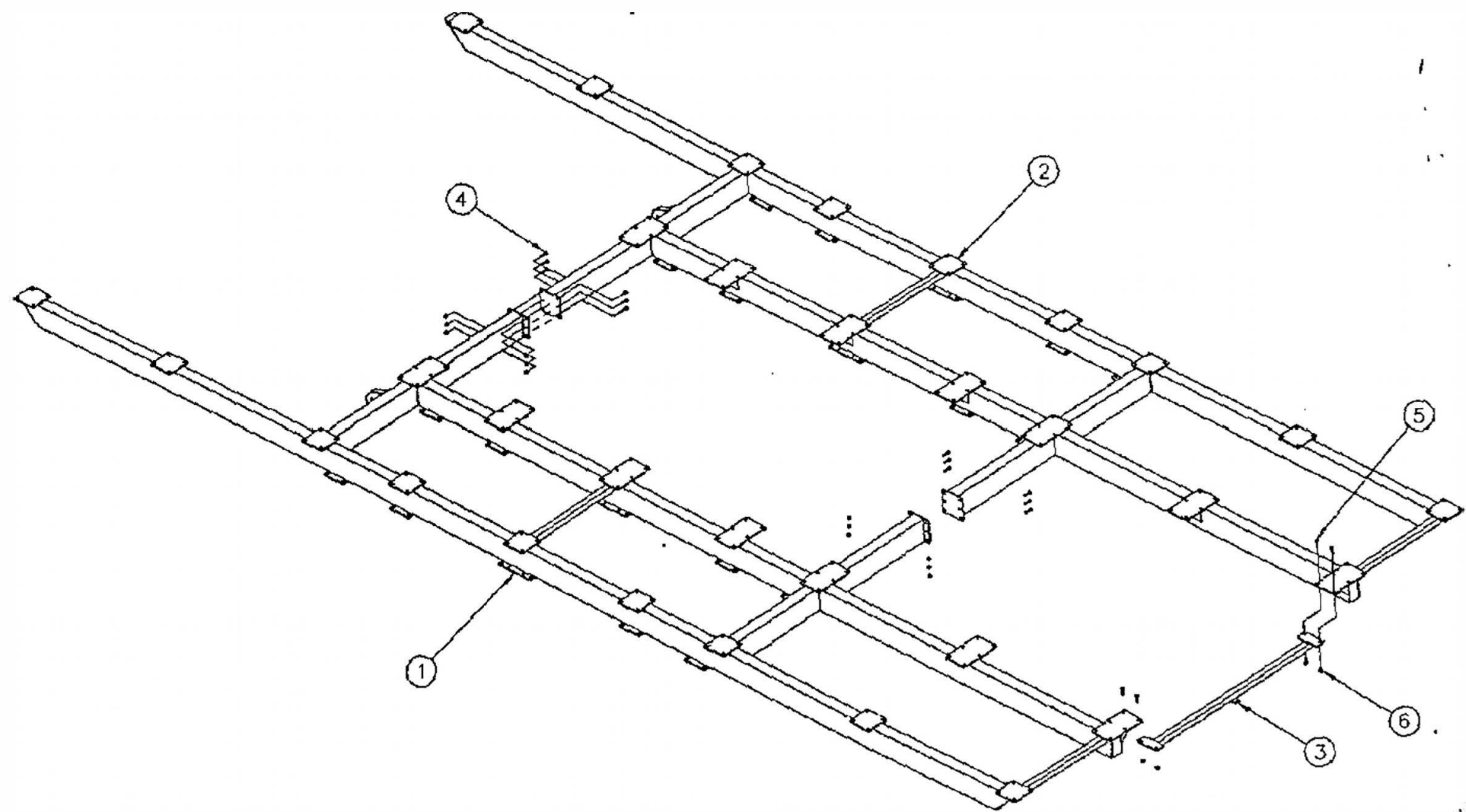
** Replacement **44432 (ASSY,POCKET,END,AXLE)** available. The new assembly can be used to replace existing walking beam end pocket 40024 only if upgrading walking beam axle to the heavier design at the same time.



4.2 Subframe

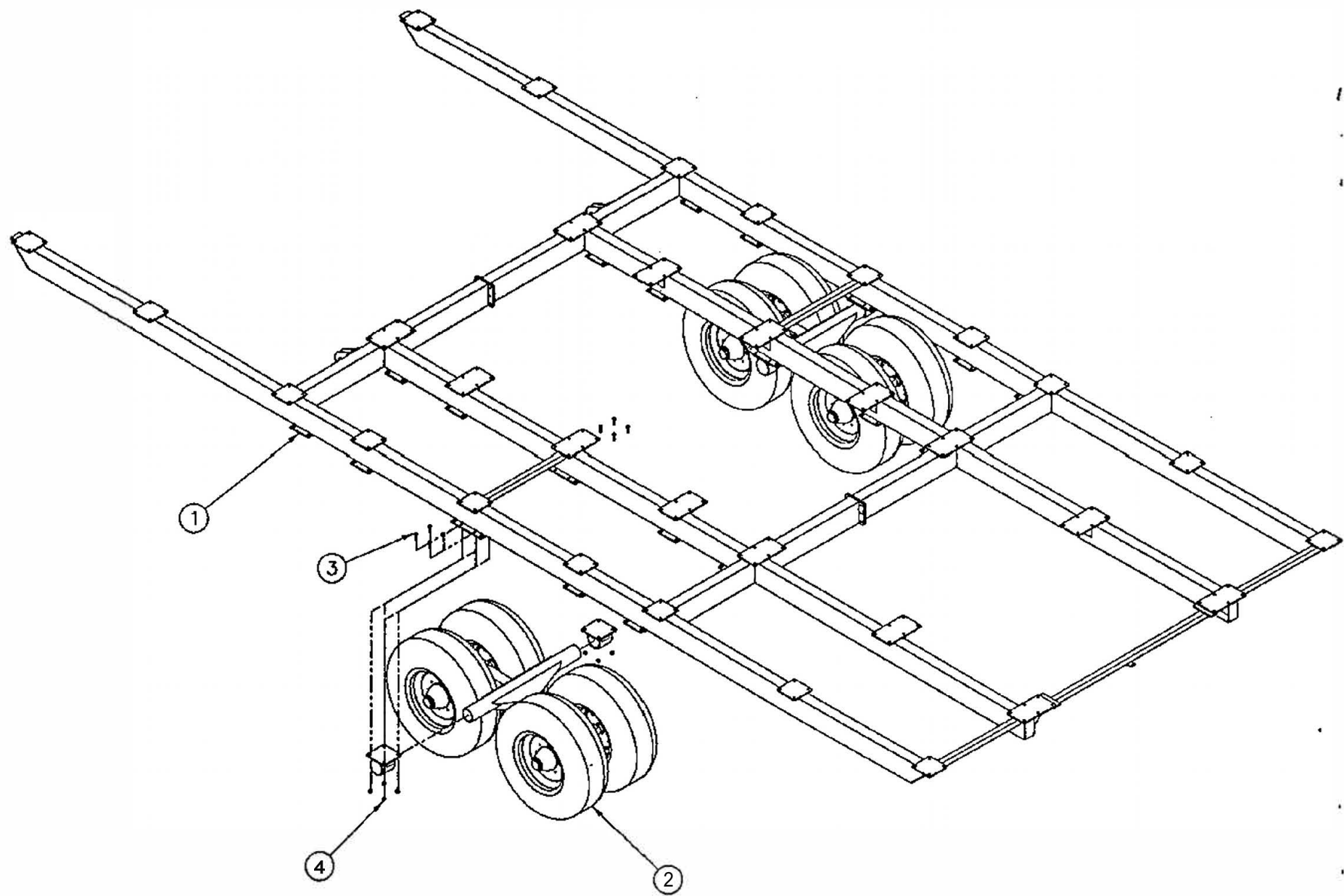
Item	Part No.	Description	Quantity
I	40098	Subframe, Main, Left	I
2	40099	Subframe, Main, Right	I
3	40105	Crossmember, Sign, Slow Moving	I
4	B5C0824P	Bolt, 1/2" x 1 1/4", Pltd.	12
5	B5C0828P	Bolt, 1/2" x 1 3/4", Pltd.	4
6	LNC08	Nut, Nylock, 1/2"	16

i,



4.3 Tandem and Subframe

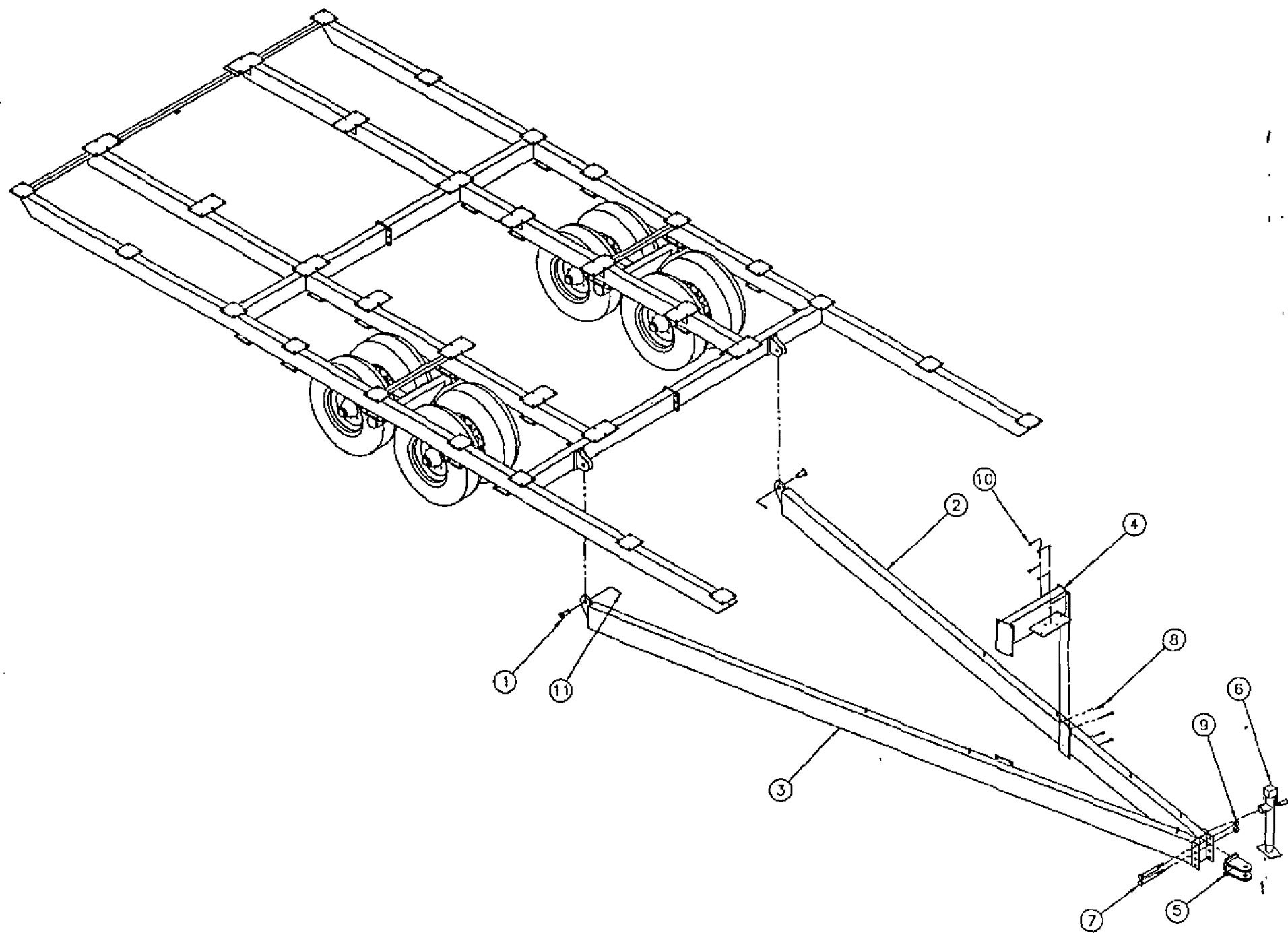
Item	Part No.	Description	Quantity
1		Assembled Subframes	1
2		Assembled Tandems	2
J	B5C0824P	Bolt, 112 ⁿ x 1 1/2", Pitd,	16
4	LNC08	Nut, Nylock, 1/2"	16



4.4 Hitch

Item	Part No.	Description	Quantity
1	40003	Pin, Hitch, Subframe	2
2	40062	Hitch, A-Frame, Left	1
3	40063	Hitch, A-Frame, Right	1
4	40487	Crossmember, Hitch	1
5	40142	Hitch, Tongue, Double	1
6	92095	Jack, Sidewind, 5000 lbs x 15"	1
7	B5CI6120P	Bolt, 1" x 7 1/2", Pltd	2
8	B5CI032P	Bolt, 5/8" x 2", Pltd.	8
9	LNC16	Nut, Nylock, 1"	2
10	LNCIO	Nut, Nylock, 5/8"	8
11	CP440	Cotterpin, 1/4" x 2 1/2"	2

NOTE: Place hitch crossmember in place leaving bolts loose.
Insert double tongue hitch and tighten making sure angles are flush.

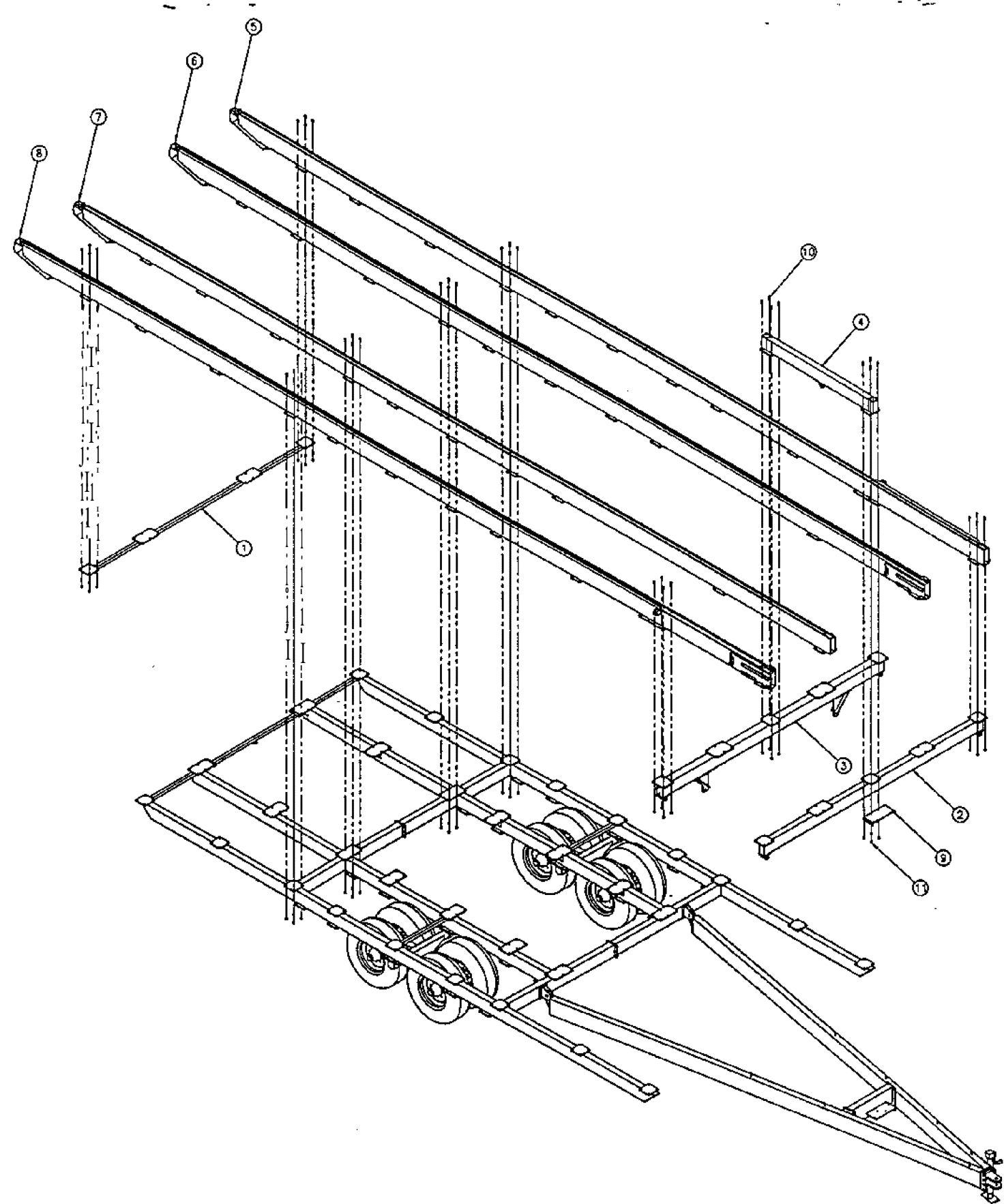


4.5 Rail and Crossmember Subframe

Item	Part No.	Description	Quantity
1	40006	Subframe, Rear	1
2	40064	Subframe, Front	1
3	40143	Subframe, Middle	1
4	40486	Tube, Deck, Cylinder	1
5	40144	Rail, Outside, Left	1
6	40145	Rail, Inside, Left	1
7	40146	Rail, Inside, Right	1
8	40147	Rail, Outside, Right	1
9	E4740	Guard, Support, Hydraulic	0
10	B5C0824P	Bolt, 1/2" x 1 1/2", Pltd.	180
11	LNC08	Nut, Nylock, 1/2"	180

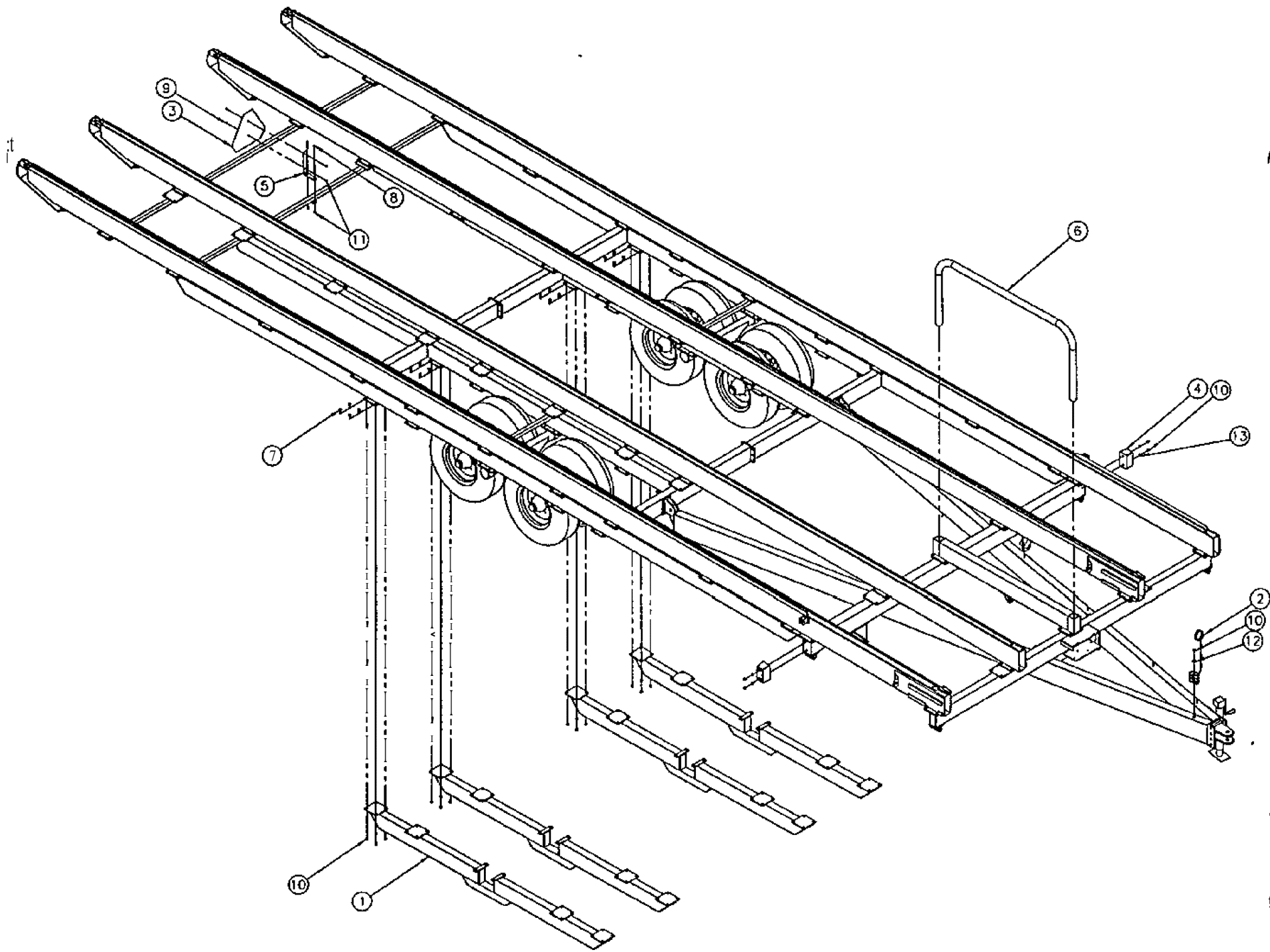
Note:

- Install all rails on subframe leaving bolts loose.
- Install front crossmembers leaving bolts loose.
- Install cylinder deck tube leaving bolts loose.
- Install deck cylinder in the fully closed position between the hitch and deck tube.
- Lift hitch until front of the bale mover is fully supported then tighten all bolts.



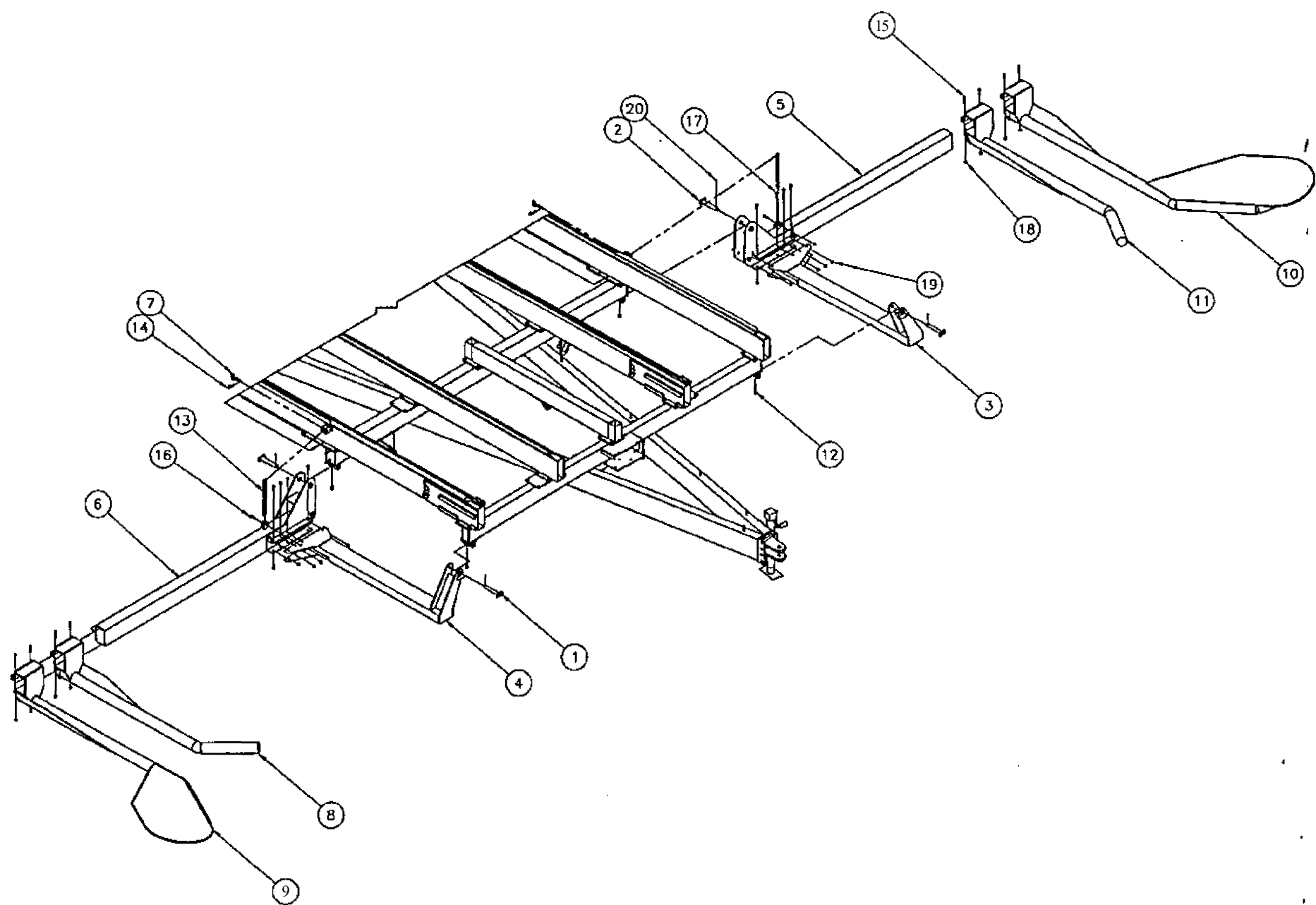
4.6 Subframe Supports

Item	Part No.	Description	Quantity
1	40107	Beam, Support, Frame	4
2	30206	Holder, Hose, Hydraulic, 1/2"	1
3	92028	Sign, Vehicle, Moving, Slow	1
4	92061	Bumper, Rubber	2
5	E4710	Bracket, Sign, SMV	1
6	E4779	Divider, Bale	1
7	B5C0824P	Bolt, 1/2" x 1 1/2", Pltd.	100
8	B5C0432P	Bolt, 1/4" x 2 1/2", Pltd.	2
9	B5C0412P	Bolt, 1/4" x 3/4", Pltd.	2
10	LNC08	Nut, Nylock, 1/2"	105
11	LNC04	Nut, Nylock, 1/4"	4
12	FWOBP	Washer, Flat, 1/2", Pltd	1
13	FW07P	Washer, Flat, 7/16", Pltd	4



4.7 Forks

Item	Part No.	Description	Quantity
1	4000&	Pin, Arm, Pivot	4
2	40010	Pin, Ann, Side, Pivot	2
3	40011	Arm. Pivot, Left	1
4	40012	Arm. Pivot, Right	1
5	40148	Arm, Slide, Pivot, Left	1
6	40149	Ann, Slide, Pivot, Right	1
7	40019	Pin, Lock, Safety	2
8	40151	Fork, Right	1
9	40152	Fork, Right, 1/4 Turn	1
10	40153	Fork, Left, 1/4 Turn	1
11	40154	Fork, Left	1
12	30207	Zerk, Grease, 1/8 28	4
13	30217	Chain, Transport, Bale Mover	2
14	91608	Hairpin, 1/8" x 2 1/2"	2
15	BFC1248P	Bolt, 3/4" x 3" Pltd.	8
16	B5C1032P	Bolt, 5/8", x 2", Pltd.	2
17	B5C1024P	Bolt, 5/8" x 1 1/2" Pltd	16
18	LNC12	Nut, Nylock, 3/4"	8
19	LNC10	Nut, Nylock, 5/8"	18
20	CP0440	Cotterpin, 1/4" x 2 1/2"	6

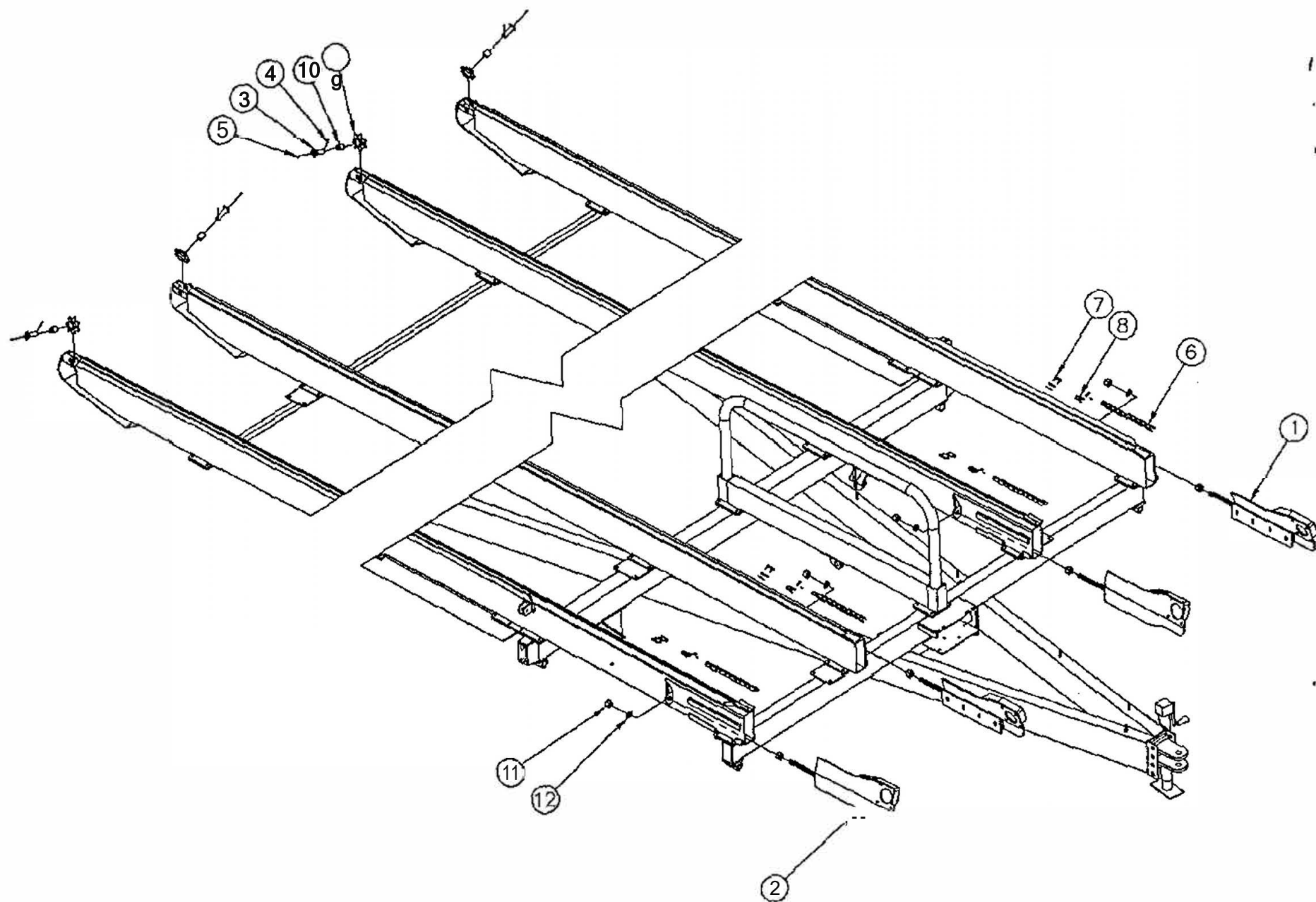


4.8 Chain Tightner and Chain

Item	Part No.	Description	Quantity
1	40115	Slide, Mount, Motor, Left	2
2	40116	Slide, Mount, Motor, Right	2
3	40121	Pin. Sprocket, Rear	4
4	30197	Pin, Roll, 3/16" x 1 1/2"	4
5	30207	Zerk. Grease, 1/4"-28	4
6	91508	Chain, C2062H x 304PI	8
7	91510	Link, Connecting, C2062	4
8	91511	Link, Offset, C2062	4
9	92023	Sprocket, Rear	4
10	92024	Bushing, Brass	4
11	NRHACME16	Nut, Acme, 1" - 5 RH	8
12	LW16P	Washer, Lock, 1", Pltd.	4

Part No.	Description
91517	Chain, C2062H x 304PI, per/foot

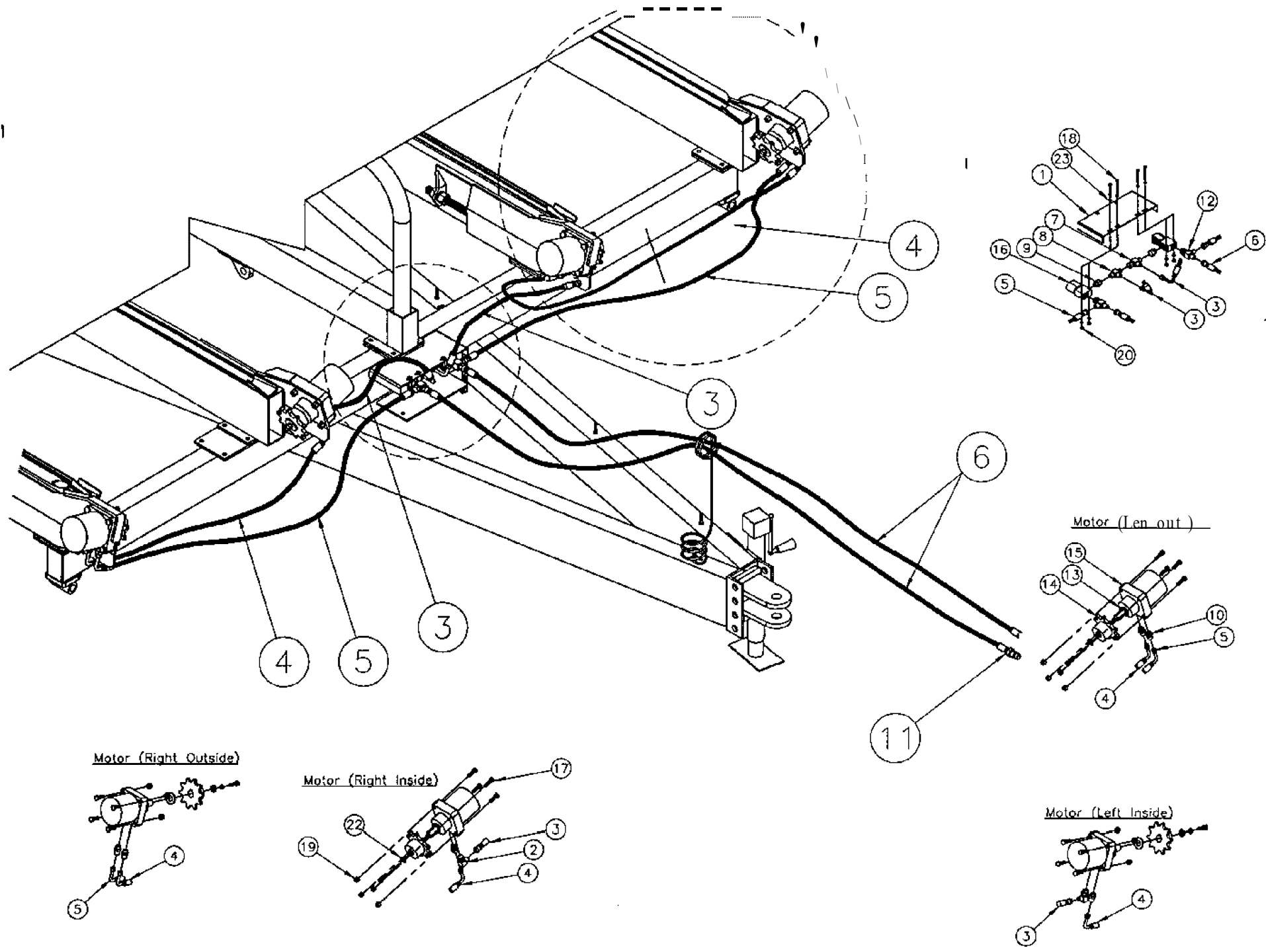
Note: Install inside motor hydraulic fittings before installing chain and chain tightners.
 The motors have to be loosened so that the fittings can be turned into place.
 The fittings go in the back port of the motors.
 Chain is fed from the back of the machine.
 This is accomplished by feeding a piece of wire from the front through the tube and pulling the chain through.
 This can be accomplished by one person, but two people would make the operation easier.



5.0 Hydraulics

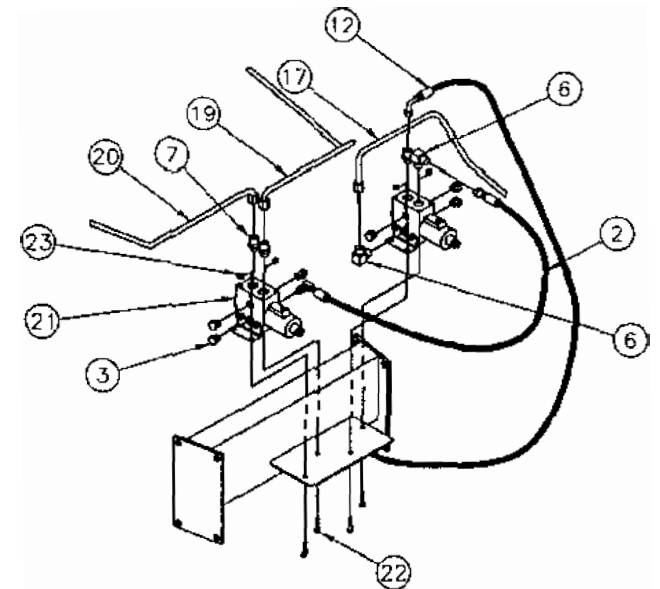
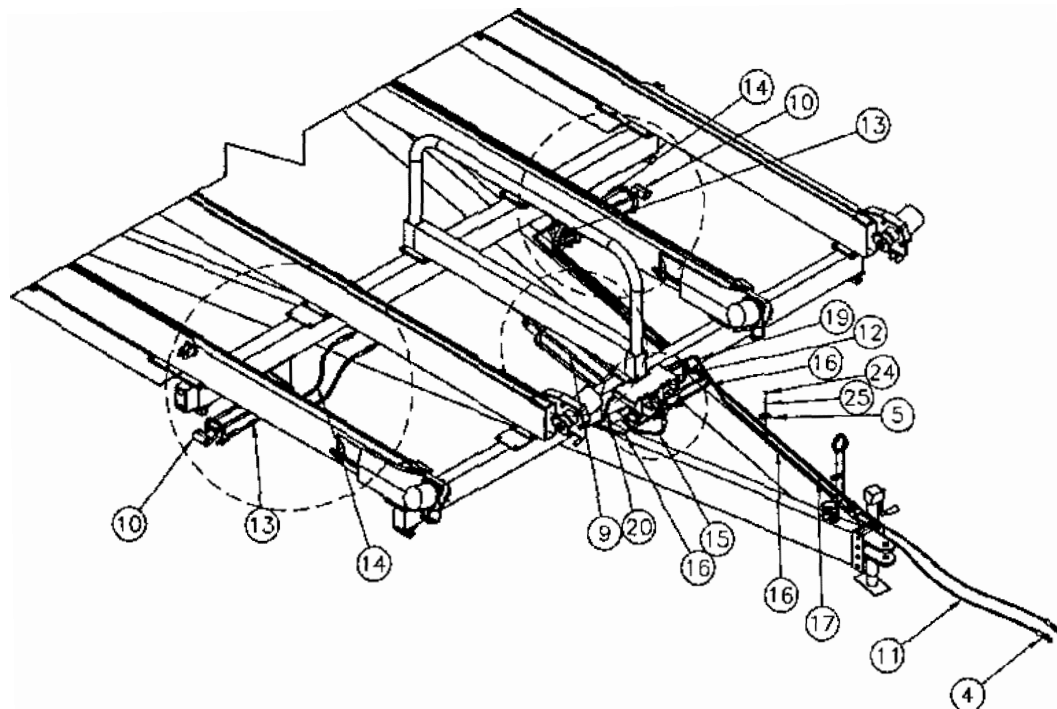
5.1 Motor Hydraulics

Item	Part No.	Description	Quantity
1	E4740	Guard, Support, Hydraulic	1
2	30145	Fitting, Hyd, 10MBX-8MJ90	2
3	30146	Hose, 1/2" x 33", 8FJX-8FJ90T	2
4	30147	Hose, 1/2" x 52", 8FJ90TL	2
5	30148	Hose, 1/2" x 72", 8FJX-8FJ90TL	2
6	30149	Hose, 1/2" x 108", 8FJX-8MP	2
7	30150	Fitting, Hyd, 8FJXR-8MJT	1
8	30151	Fitting, Hyd, 8MJT	1
9	30152	Fitting, Hyd, 8MB-8FJX	2
10	30204	Fitting, Hyd, 10MB-8MJ	6
11	30209	Tip, Male, Pioneer, 1/2"	2
12	30214	Fitting, Hyd, S:MBR 8MJT	2
13	40077	Washer, Motor, 1 1/4" ID x 1 7/8" OD	4
14	92063	Sprocket, Motor	4
15	92184	Motor, Hydraulic	4
16	92070	Valve, Solenoid	2
17	B5C0844P	Bolt. 1/2" x 2 3/4", Pltd.	16
18	B5C0432P	Bolt, 1/4" x 2", Pltd.	4
19	LNC08	Nut, Nylock, 1/2"	16
20	LNC04	Nut, Nylock, 1/4"	4
21	LW04P	Washer, Lock, 1/4", Pltd.	4
22	FW10P	Washer, Flat, 5/8" Pltd.	4
23	FW04P	Washer, Flat, 1/4", Pltd.	8

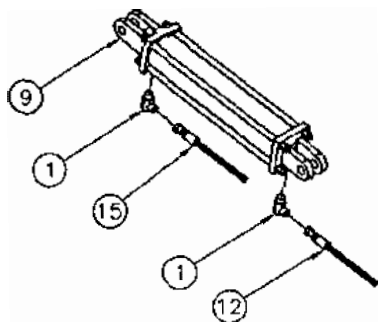
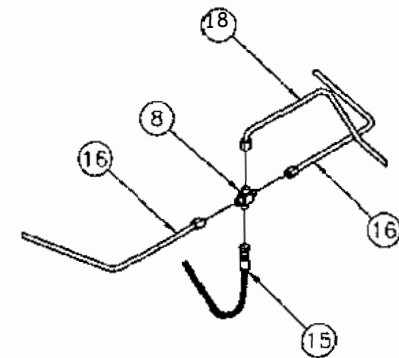


5.2 Cylinder Hydraulics

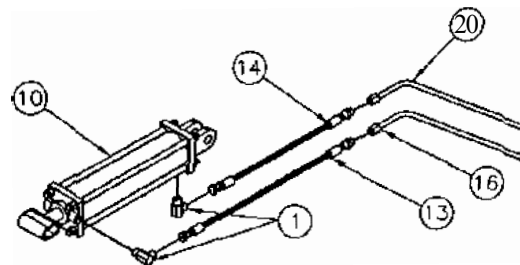
Item	Part No.	Description	Quantity
1	30153	Fitting, Hyd, 8MP-8MJ90	6
2	30154	Hose, 3/8" x 19", 8FJX-8MBX90	1
3	30200	Fitting, Plug 8MB	6
4	30209	Tip, Male, Pioneer, 1/2"	2
5	30210	Clamp, Line, Oil	6
6	30211	Fitting; 8MB-8MJ90	2
7	30215	Fitting, 8rvIB-8MJ	3
8	30216	Fitting, Cross, 8MJ	1
9	90103	Cylinder, 3 1/2" x 16", 1 1/2" Rod	1
10	90120	Cylinder, 3 1/2" x 13", 1 1/2" Rod	2
11	90223	Hose, 3/8" x 58", 8MJ-8MP	2
12	90224	Hose, 3/8" x 26", 8FJX-8FJ90T	1
13	90243	Hose, 3/8" x 44", 8FJX-8MJ	2
14	90245	Hose, 3/8" x 28", 8FJX-8MJ	2
15	90252	Hose, 3/8" x 50", 8FJX-8FJX	1
16	90421	Line, Steel, Outer, 8FJ-8FJ	2
17	90422	Line, Tractor, Outer, 8FJ 8FJ	1
18	90423	Line, Tractor, Inner, 8FJ-8FJ	1
19	90424	Line, Steel, Inner, Left, 8FJ-8FJ	1
20	90425	Line, Steel, Inner, Right 8FJ-8FJ	1
21	92089	Valve	2
22	BFC0616P	Bolt, 3/8 x 1, Pltd	4
23	LNC06	Nut, Nylock, 3/8	4
24	LNCOS	Nut, Nylock, 5/16"	6
25	FW05P	Washer, Flat, 5/16", Pltd.	6



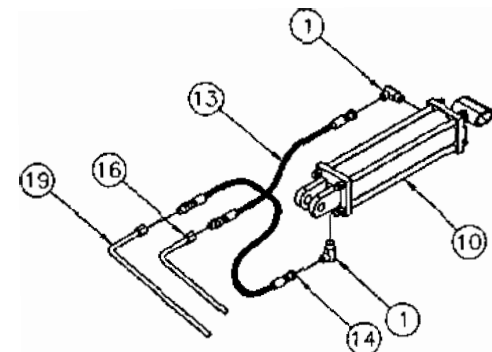
Solenoids



Deck Cylinder



Right_Fork Cylinder

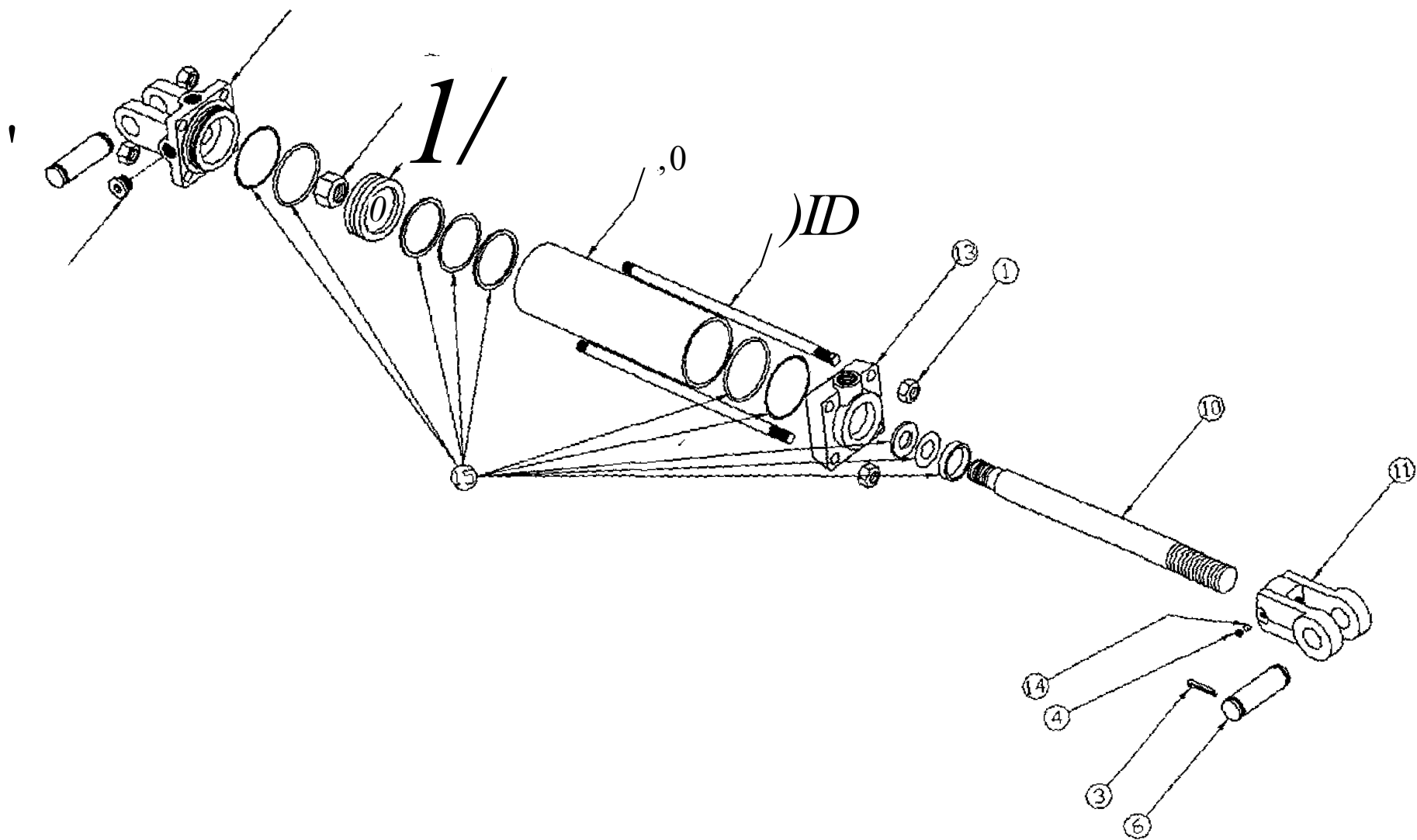


Left Fork Cylinder

6.0 Cylinders

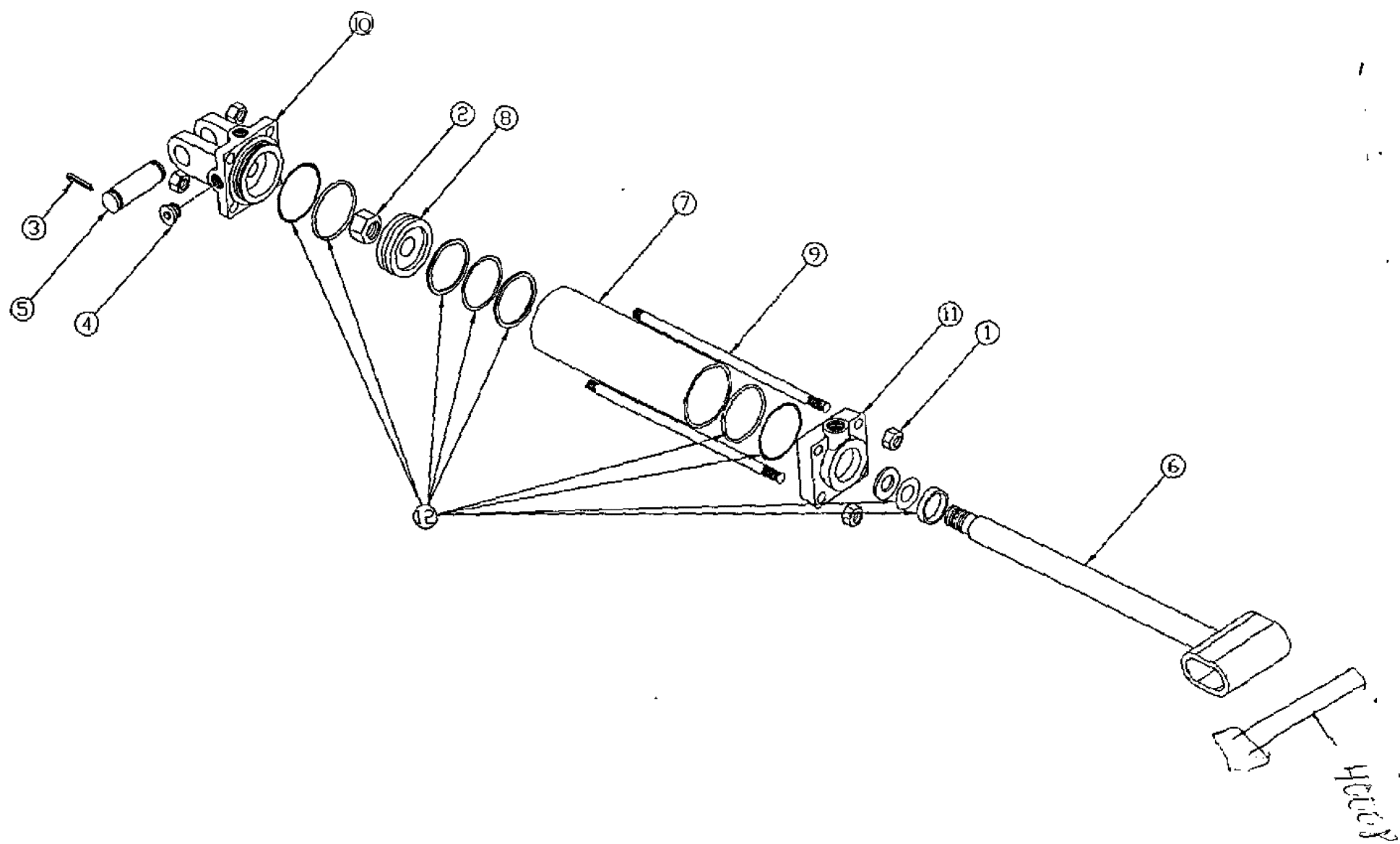
6.1 3 1/2 x 16, 1 1/2 Rod

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	30246	Tube, Cyl., 3 1/2" x 16", H6206	1
8	30249	Rod, Tie, 5/8" x 16", H6746	4
9	30251	Piston, 3 1/2" Dia, H6888	1
10	30252	Rod, 1 1/2" x 16"	1
11	30253	Clevis, Rod, 1 1/4", 1" Pin	1
12	30258	Cap, Clevis, 3 1/2" NPTF	1
13	30259	Cap, Rod, 3 1/2" x 1 1/2" NPTF	1
14	30261	Lock, Thread, Nylon	1
15	30263	Kit, Repair, 3 1/2" Cyl.	1



6.2 3 1/2 X 13, 11/2 Rod

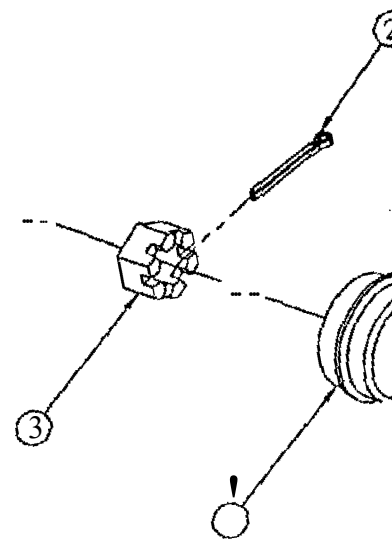
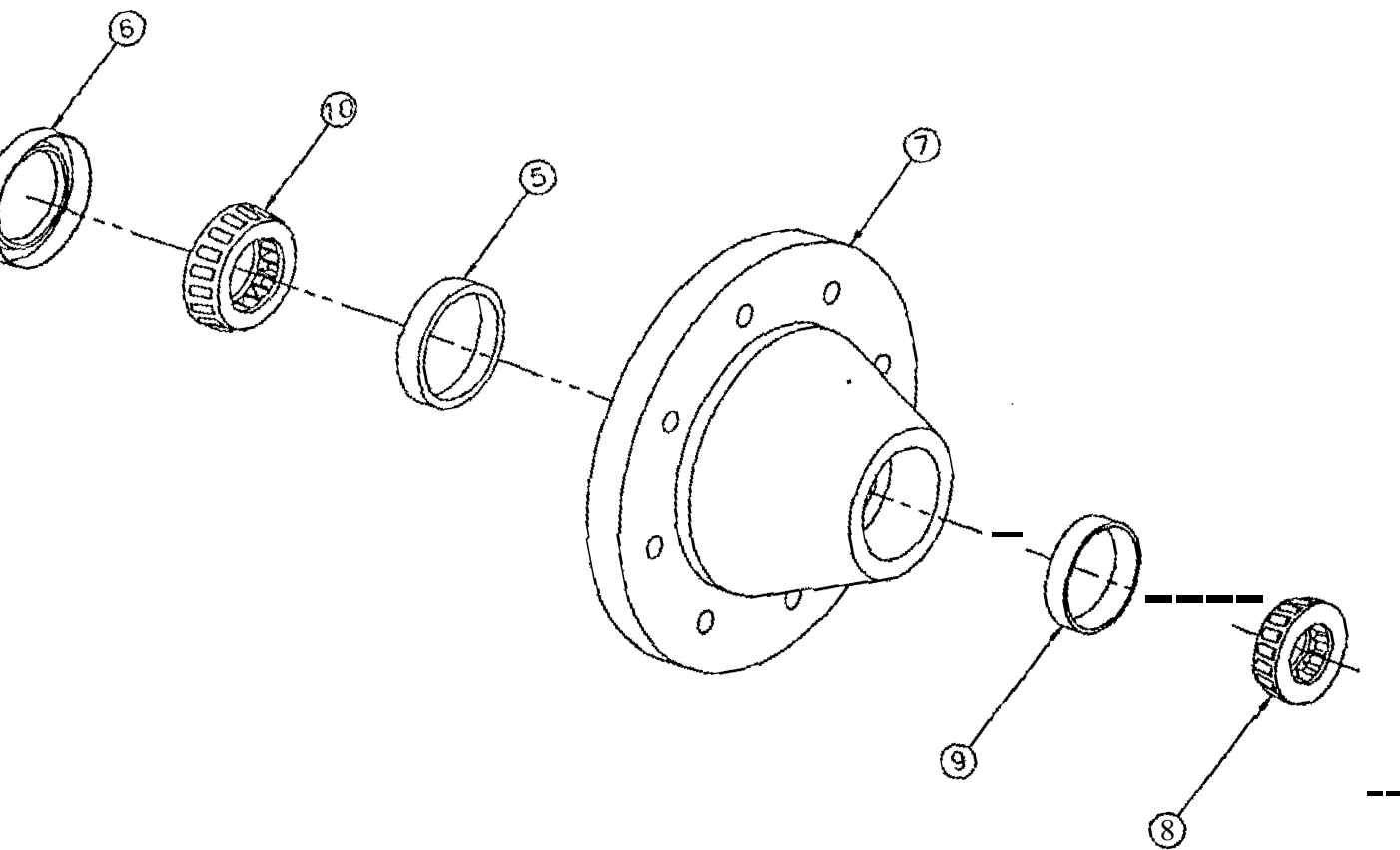
Item	Part No.	Description	Quantity
1	30236	Nut, Hex, 5/8" UNC Grade S	8
2	30237	Nut, Hex., 1"-14 UNS Grd 5 Phosphate	1
3	30238	Cotterpin, Hamerlock, 3/16" x 1 1/2"	2
4	30240	Filling, Plug, 1/2"-14 NPTF D _{ry} Seal	1
5	30241	Pin, 1" Dia, H5552	1
6	30242	Rod, 1 1/2" x 13", Weldment	1
7	30245	Tube, Cyl., 3 1/2" x 13", H6203	1
8	30251	Piston, 3 1/2" Dia, H6888	1
9	30255	Rod, Tie, 5/8" x 13", Special	4
10	30258	Cap, Clevis, 3 1/2" NPTF	1
11	30259	Cap, Rod, 3 1/2" x 1 1/2" NPTF	1
12	30263	Kit, Repair, 3 1/2" Cyl.	1



7.0 Hub

Item	Part No.	Description	Quantity
1	30220	Cap, Dust	1
2	30221	Cotterpin, 3/16" x 1 3/4"	1
3	30222	Nut, Slotted, 1 1/4"	1
4	30223	Washer, Flat, 1• SAE	1
5	30226	Race, Inner	1
6	30228	Seal, Grease	1
7	30229	Hub, 8-Bolt	1
8	91111	Bearing, Outer	1
9	91131	Race, Outer	1
10	91133	Bearing, Inner	1

Note: Wheel bearings should be repacked yearly.

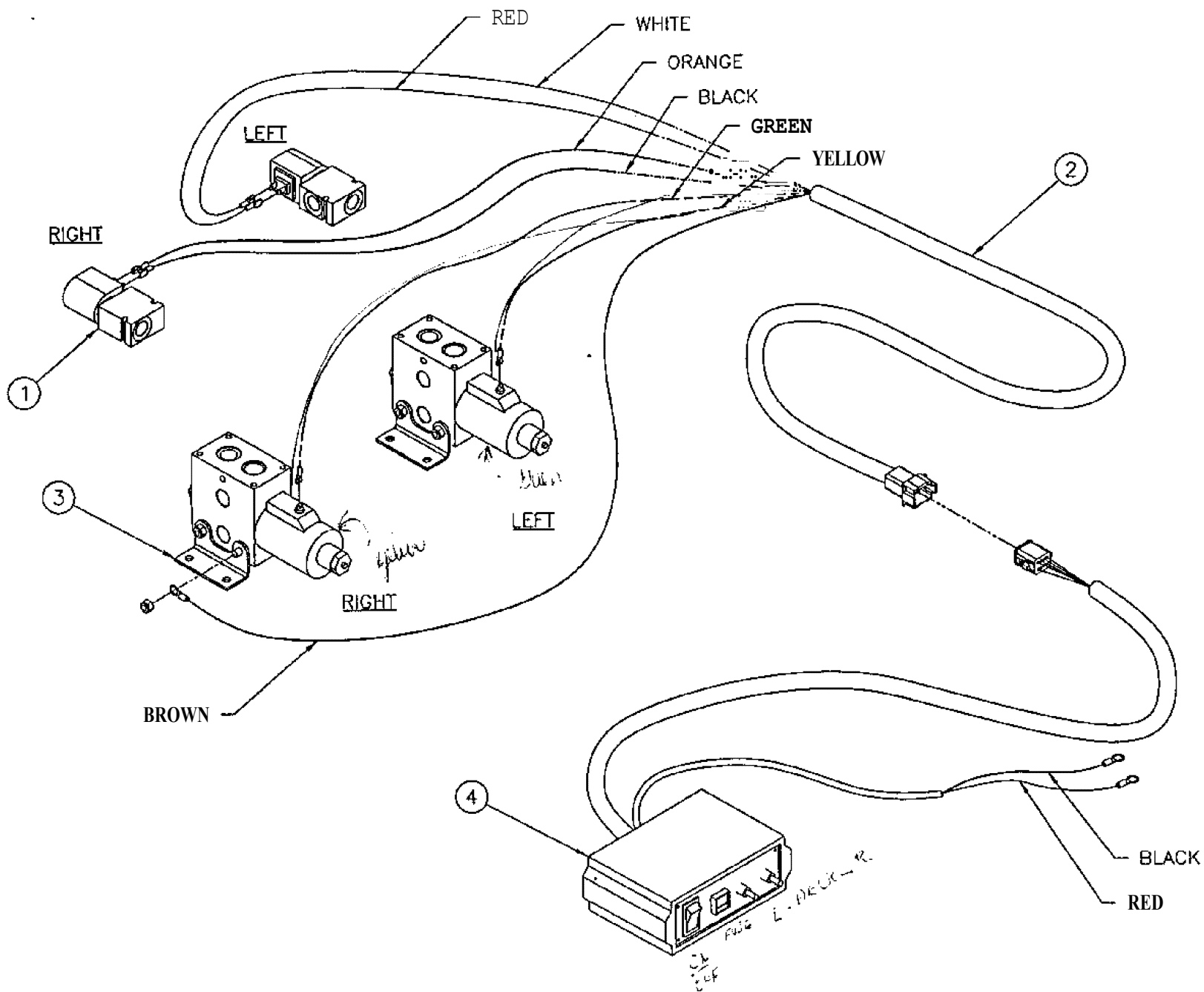


8.0 Electrical Schematic

8.1 Electrical Schematic

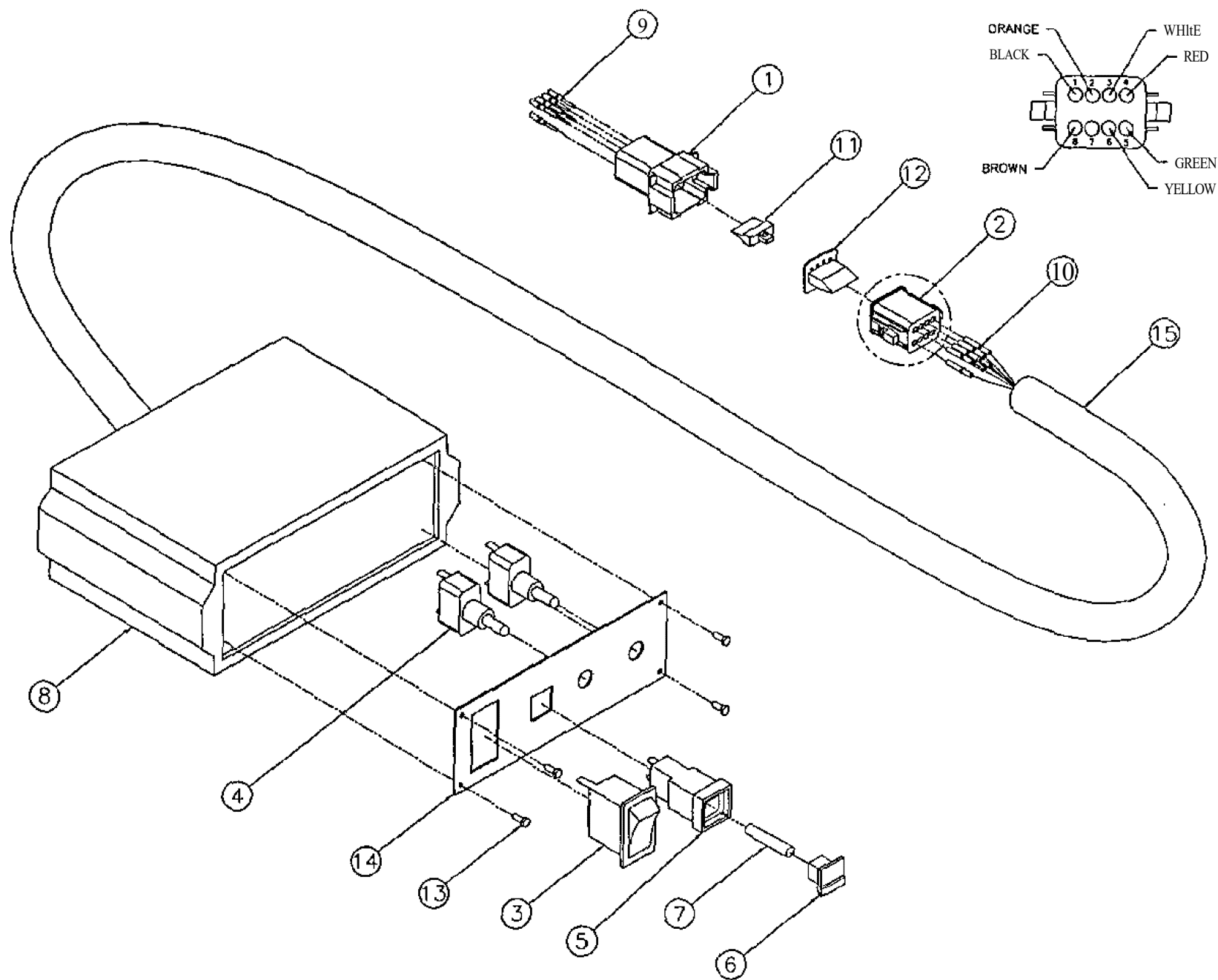
Item	Part No.	Description	Quantity
1	92070	Valve _t Solenoid	0
2	92077	Harness, Extension, 14BM	1
3	92089	Valve	0
4	92125	Box, Control, 1400BM (1994)	1

Note: Black wire from control box to tractor ground
Red wire from control box to tractor ignition accessory.



8.2 Control Box and Wiring Harness

Item	Part No.	Description	Quantity
1	92104	Electrical, Plug Male	1
2	92106	Electrical, Plug Female	1
3	92107	Switch, On/Off	1
4	92108	Switch, Toggle	2
5	92138	Fuse, Body	1
6	92139	Fuse, Cap	1
7	92140	Fuse, 20 Amp	1
8	92146	Enclosure, Plastic	1
9	92157	Pin, Male Plug	7
10	92158	Socket, Female Plug	7
11	92161	Wedge, Locking, Male Plug	1
12	92162	Wedge, Locking, Female Plug	1
13	92164	Screw, Tapping, #4 x 1/4	4
14	92220	Plate, Face, Box, Control	1
15		Wiring, Box, Control, 6 ft	1



BIT L O, MATERIAL REPORT

BILL OF MATERIAL DESCRIPTION

SEQ.	ITEM NUMBER	DESCRIPTION	QUANTITY	U/M	OPT	PIECES	LENGTH	W/OTH	MATL	UNITS
92125	1400 BM CONTROL	BOX(1994)								
- SUB 0-000001	E4751	BRACKET,BOX,CONTROL	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000002	92106	OT06-08S 14BM FEMALE PLUG	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000003	92107	LTILA51-6S-BL-RC-NBL/12V	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000004	92108	2FC63-73/TABS TOGGLE	2.000	EA	N	2	0.00	0.00	2.00	EA
- RAI 0-000005	92119	THUMBSCREW	2.000	EA	N	2	0.00	0.00	2.00	EA
- RAI 0-000006	92130	p&B VF4-45F1t RELAY	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000007	92138	LITTLEFUSE 348670 SCRY	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000008	92139	LITTLEFUSE 348001 CAP	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000009	92140	AGC 20 AMP FUSE	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000010	92141	1260 STRAIN RELIEF BUSH	1.000	PER/C	N	1	0.00	0.00	1.00	EA
- RAI 0-000011	92143	LCP-413 SLIT CORR LOON	5.000	FT	N	1	5.00	0.00	5.00	FT
- RAI 0-000012	92146	PLASTIC ENCLOSURE	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000013	92147	FACEPLATE,1400BM	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000014	92149	16 GA BLACK WIRE	5.500	FT	N	1	5.50	0.00	5.50	FT
- RAI 0-000015	92150	16 GA WHITE WIRE	5.000	FT	N	1	5.00	0.00	5.00	FT
- RAI 0-000016	92151	16 GA RED WIRE	6.000	FT	N	1	6.00	0.00	6.00	FT
- RAI 0-000017	92152	16 GA ORANGE WIRE	5.000	FT	N	1	5.00	0.00	5.00	FT
- RAI 0-000018	92153	16 GA GREEN WIRE	5.000	FT	N	1	5.00	0.00	5.00	FT
- RAI 0-000019	92154	16 GA YELLOW WIRE	5.500	FT	N	1	5.50	0.00	5.50	FT
- RAI 0-000020	92155	16 GA BROWN WIRE	5.000	FT	N	1	5.00	0.00	5.00	FT
- RAI 0-000021	92156	2C-16GA W/PVC CABLE	8.500	FT	N	1	8.50	0.00	8.50	FT
- RAI 0-000022	92158	OTSCH 0462-209-16141 SOCK	7.000	EA	N	7	0.00	0.00	7.00	EA
- RAI 0-000023	92162	DEUTSCH WAS LOCKING WEDGE	1.000	EA	N	1	0.00	0.00	1.00	EA
- RAI 0-000024	92163	PKGE 22 CA TRANSORB	1.000	EA	N	1	0.00	0.00	1.00	EA

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HIGHLINE HFG. INC.

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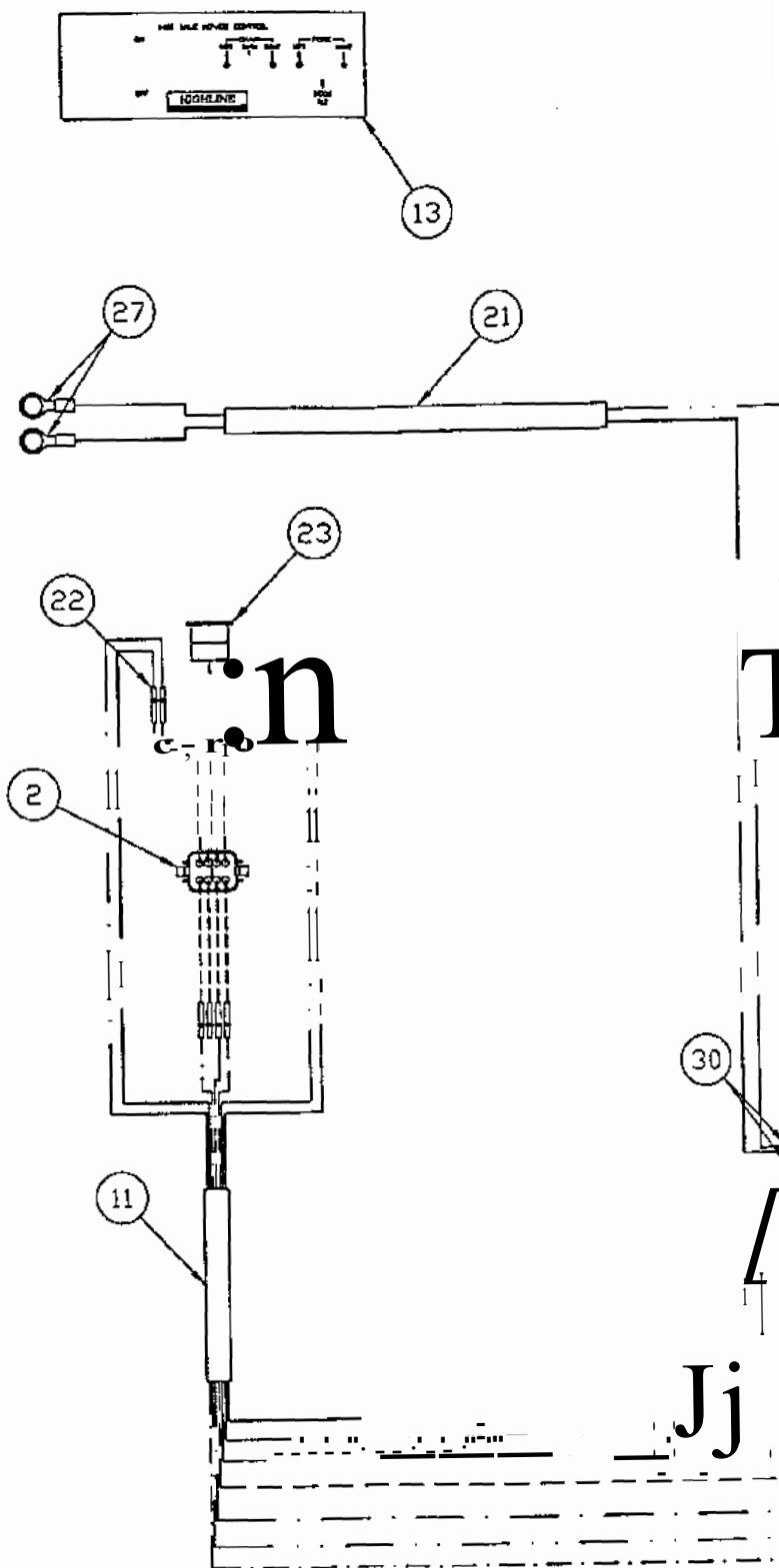
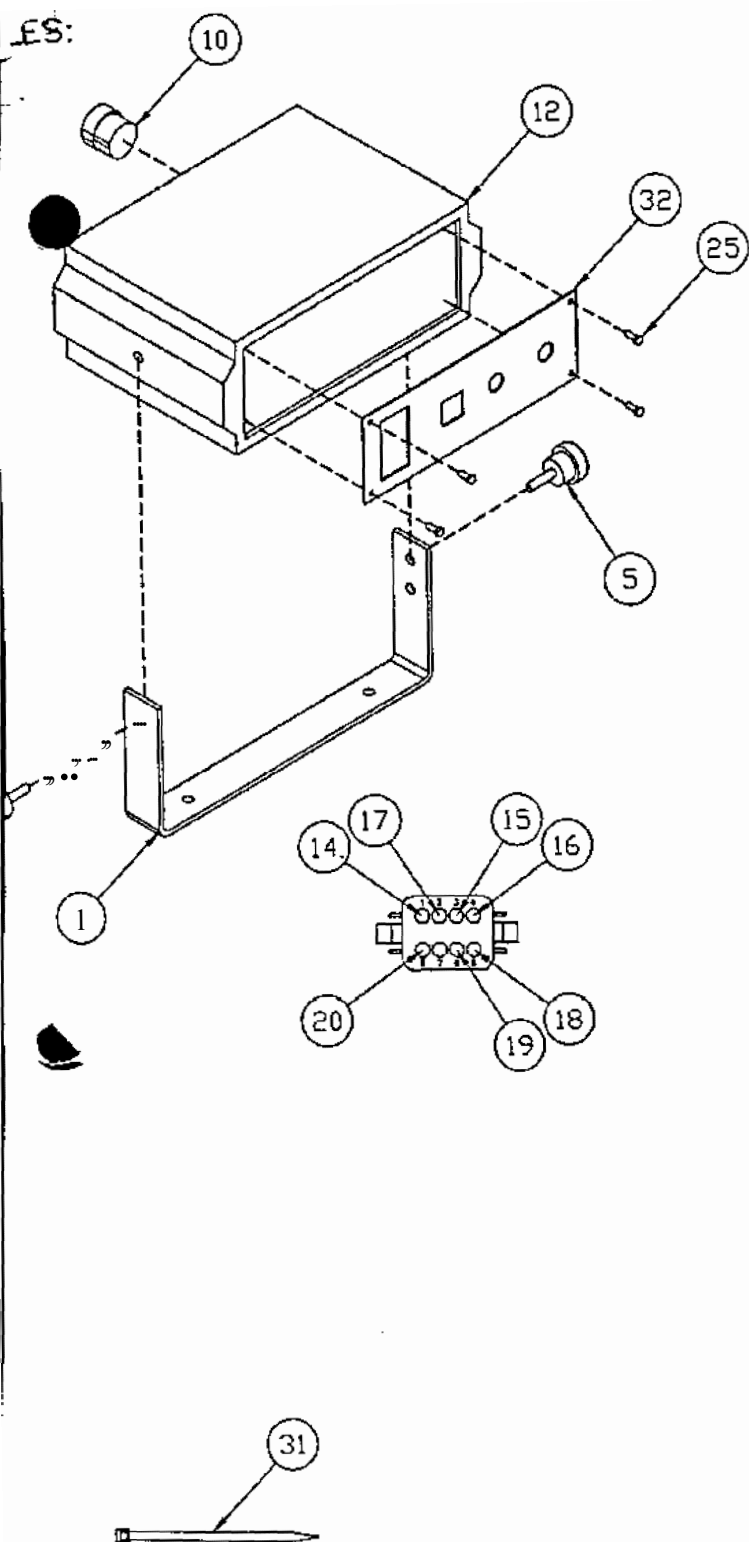
OF MATERIAL DESCRIPTION									
SEO.	ITEM NUMBER	DESCRIPTION	QUANTITY U/M OPT	PIECES	LENGTH	1110TH	HATL	Wins	
-RAIJ	0-000025 92164	#4 X 1/4" TAPPING SCREII	4.000 PER/C N	4	0.00	0.00	4.00	EA	
-RAW	0-000026 92\65	3/16 FEM QD 16GA NON-INSU	2.000 PER/C N		0.00	0.00	2.00	EA	
-RAI	0-000027 92166	3/8 RING Hi GA.	2.000 PER/C N		0.00	0.00	2.00	EA	
-11A1	0"000028 92167	1/4 FEM QD 16 GA. INSUL.	11.000 PER/C N	11	0.00	0.00	11.00	EA	
-!!All	0-000029 92168	1/4 F/M/M QD ADAPTOR	2.000 PER/C N		0.00	0.00	2.00	EA	
--R\I	0-000030 92169	1/4 FEM QD 16GA NON-INSUL	4.000 PER/C N	4	0.00	0.00	4.00	EA	
-RAY	0-000031 92170	4" BLACK CABLE TIES	5.000 PER/M N		0.00	0.00	5.00	EA	
-RAY	0-000032 92220	PL TE,FACE,BOX,CONTROL	1.000 EA	1	0.00	0.00	1.00	EA	

1 BILL OF MATERIAL ITEMS PRINTED.

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FOR INFORMATION ONLY

ES:



- BLACK WIRE (14)
 - - - - - BRDN WIRE (20)
 GREEN WIRE (18)
 - - - - - ORANGE WIRE (17)
 - - - - - RED WIRE (16)
 - - - - - WHITE WIRE (15)
 - - - - - YELL ☒ WIRE (19)

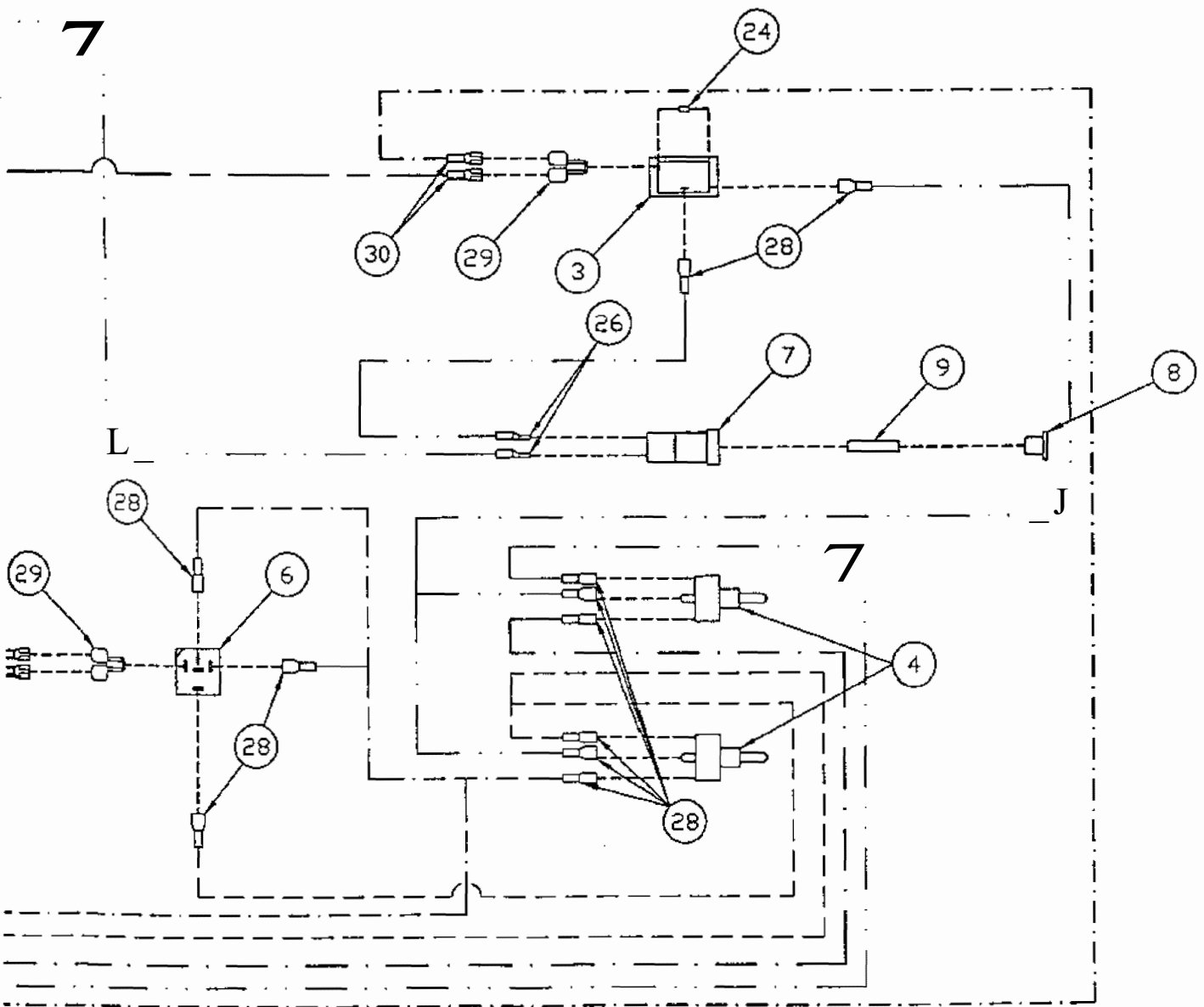
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 herein be used for any purpose without written
 The equipment shown is protected

ZONE	LTR	DESCRIPTION	DATE	APPROVED
A		INITIAL RELEASE	19 AUG 97	
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G				

FOR INFORMATION
ONLY

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No. 92125 SH 1

MWI.1: 8 M

Size: 8 Page: 1 of 1

Descr. 1400 CONTROL BOX (1994)

Default Tolerance

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92125

HOHLNE

2125

Rev: A

Other, disclosed herein. This document is to be reproduced nor the information contained herein from HighThe LHg Inc. bit ?CJtenl3.

9.0 Specifications

Weight	Approximately 8500 lbs (3,860 kg)
Total Length	43'5"
Bed Length	37'
Total Width	16'9"
Bed Width	11'2"
Total Height	9'2"
Bed Height	3'3"
Ground Clearance	13 1/2"
Maximum Capacity	14 - 5 Ft. Bales
Chain & Sprocket	Heavy Duty ASA 2062, 1 1/2 Pitch
Tires	Goodyear, 11L-15FI 12 Ply Fann Highway Service
Undercarriage	2 - 4 wheel oscillating tandems
Horsepower Required	90 Horsepower
Hydraulic Outlets	2
Hydraulic Pressure	2500 psi.(17240 kPa)

Hydraulic Bag - Motors

Part#	Description	Quantity	Included
30145	FITTING,HYD, 10MBX-8MJ90	2	
30150	FITTING,HYD,8FJXR-8MJT	1	
30152	FITTING,HYO,8MB-8FJX	2	
30204	FITTING, 10MB-BMJ	6	
30209	TIP,MALE,PIONEER,1/2	2	
30214	FITTING,8MBR-8MJT	2	
92070	VALE,SOLENOID	2	

Crate Parts

Part#	Description	Quantity	Included
30206	HOLD ER HOSE,HYDRAU LIC, 1/2	1	
40024	POCKET,BEAM,WALKING	4	
40142	HITCH ,TONGU E,DOUBLE	1	
91508	C2062H X 304PI CHAIN	8	
91511	C2062 OFFSET LINK	1	
92023	SPROCKET, REAR,BM ,C2062C7	4	
92028	SLOW MOVING VEHICLE SIGN	1	
92061	RUBBER BUMPER	2	
92063	SPROCKET, MOTOR,HYDRAU LIC	4	
92066	MOTOR, HYDRAULIC	4	
92077	HARNESS.EXTENSION, 14BM	1	
92125	1400 BM CONTROL BOX(1994)	1	
92095	5000LB X 15" SIDEWIND JACK	1	
90103	31/2 X 16 CYL. 11/2 ROD	1	
90120	3 1/2 X 13 CYL. 1 1/2 ROD	2	
40140	BRACKET, CYLINDER MOUNT	2	
40118	BUMPER, MOUNT	4	
40115	TIGHTENER, MOTOR, LEFT	2	
40116	TIGHTENER, MOTOR, RIGHT	2	
E4710	BRACKET,SIGN,SMV	1	
E4740	GUARD, SUPPORT, HYDRAULIC	1	
30146	HOSE, 112 X 33,8FJX•8FJ90T	2	
30147	HOSE, 112 X 52,8FJ90TL	2	
30148	HOSE, 1/2X72,8FJX-8FJ90TL	2	
30149	HOSE, 112 X 108,8FJX-8MP	2	
30154	HOSE ,H,3/8X19,8rJX•8MBX90	1	
90223	HOSE,3/8 X 58,8MJ-8MP	2	
90224	HOSE,3/8 X 26,BFJX-8FJ90T	1	
90243	HOSE,3/8 X 44,BFJX-BMJ	2	
90245	HOSE,3/8 X 28,8FJX-SMJ	2	
90252	HOSE,3/8 X 50,8FJX-8FJX	1	
90421	LINE,STEEL,OUTER,BFJ-BFJ	2	
90422	LINE,TRACTOR,OUT,8FJ-8FJ	1	
90423	LINE,TRACTOR,IN,8FJ-BFJ	1	
90424	LINE,STEEL,JN,L,8FJ-8FJ	1	
90425	LINE,STEEL,IN,R,SFJ-SFJ	1	
92089	VALVE(COILS & MOUNTS)	2	

Pin Bag

Part#	Description	Quantity	Included
30197	PIN,ROLL,3/16 X 1 1/2	4	
40003	PIN,HITCH,SUBFRAME	2	
40008	PIN,ARM,PIVOT	4	
40010	PIN,ARM,S/OE,PIVOT	2	
40019	PIN,LOCK,SAFTEY	2	
40121	PIN,SPROCKET.REAR	4	
	CYLINDER PINS	2	
91608	1/8 X 2 1/2 HAIRPIN	2	
CP0440	3/16" X 2" COTTERPIN	2	

Nuts and Bolts Bag

Part#	Description	Quantity	Included
30217	CHAIN,TRANSPORT,BM	2	
B5C0412P	1/4 X 3/4 UNG GR5 PLATED	2	
B5C0432P	1/4 X 2 UNC GR 5 PLTD	4	
B5C0440P	1/4 X 2.5 UNG GR5 PLATED	2	
B5C0616P	3/8 X 1 UNG GR5 PLTD	4	
B5C0824P	1/2 X 1 1/2 UNC GR5 PLTD	104	
B5C0832P	1/2 X 2 UNG GR5 PLATED	4	
B5C0844P	1/2 X 2 3/4 UNC GR5 PLTD	16	
B5C1024P	5/8 X 1 1/2 UNC GR5 PLTD	32	
B5C1032P	5/8 X 2 UNC GR5 PLATED	12	
85C1248P	3/4 X 3 UNG GR5 PLATED	8	
B5C16120P	1 X 7.5 UNC GR5 PLATED	2	
CP0440	1/4" X 2 1/2" COTTERPIN	8	
FW04P	1/4 FLAT WASHER PLATED	8	
FW0SP	5/16 FLATWASHER PLTD	6	
FW07P	7/16 FLA1WASHER PLTD	4	
FW08P	1/2 FLAT WASHER PLATED	17	
FW12P	3/4 FLAT WASHER	4	
FW10P	5/8 FLAT WASHER PLATED	4	
40077	1 7/8 x 1 1/4 FLAT WASHER	8	
LNC04	1/4" UNC LOCKNUT	8	
LNC05	5/16" UNC LOCKNUT	6	
LNC06	3/8" UNG LOCKNUT	4	
LNC08	1/2" UNC LOCKNUT	129	
LNC10	5/8" UNG LOCKNUT	56	
LNC12	3/4" UNG LOCKNUT	10	
LNC16	1" UNG LOCKNUT	2	
30269	U-BOLT 5/8 X 6W X 4 3/8L	4	

Hydraulic Bag - Cylinders

Part#	Description	Quantity	Included
30153	FITTING,HYD,8MP-8MJ90	6	
30200	FITTING,PLUG,BMB	2	
30209	TIP,MALE,PIONEER, 1/2	2	
30210	CLAMP,LIN,OIL	6	
30211	FITTING,8MB-8MJ90	2	
30215	FITTING,8MB-8MJ	3	
30216	FITTING,CROSS,BMJ	1	
30269	FITTING,8MJT	1	

BILL OF MATERIAL REPORT

Bumper *BALE*
KIT

BILL OF MATERIAL DESCRIPTION

ITEM	ITEM NUMBER	DESCRIPTION	QUANTITY	UOM	QTY	PIECES	LENGTH	WIDTH	MATL	UNIT
48188	<u>KIT, BUMPER, BALE</u>	<i>1 Bale mount</i>				<i>700, 500</i>				
80R 0-000001	40086	BUMPER, BALE	1.000	EA	N	1	0.00	0.00	1.00	EA
80R 1-000001	E0611	TUBE, BUMPER, BALE	1.000	EA	N	1	0.00	2.00	1.00	EA
80W 2-000001	80W03700100H8R	2.375 OD X .150 H80 ROUND	6.056	FT	N	1	63.50	2.00	63.50	IN
80S 1-000002	E0613	TUBE, BUMPER, BALE	2.000	EA	N	2	0.00	2.00	1.00	EA
80W 2-000001	80W03050100T	2.5 X 2.5 X .125 SQUARE	9.360	/CWT	N	1	10.00	2.00	1.00	EA
80S 1-000003	E0614	SUSSET, BUMPER, BALE	2.000	EA	N	2	0.00	2.00	2.00	EA
80W 2-000001	80W03050100T	1/4 X 5 FLAT BAR	5.120	/CWT	N	1	6.00	2.00	2.00	EA
EACH LENGTH TAKES 2 PARTS										
80W 1-000004	N0060	1/2" UNC NUT PLATED	2.000	PER/2	N	2	3.00	1.00	2.00	EA
80S 2-000002	40113	31	2.000	EA	N	2	2.00	0.00	2.00	EA
80S 1-000001	E0165	TUBE, BUMPER, BALE	2.000	EA	N	1	0.00	0.00	1.00	EA
80W 1-000001	80W02100T	3 X 2 X .125 TUBING	11.552	/CWT	N	1	14.00	2.00	14.00	IN
80S 1-000002	E0612	PLATE, BUMPER, BALE	2.000	EA	N	1	0.00	2.00	1.00	EA
80W 2-000001	80W03050100T	3/8 X 2 FLAT BAR	3.700	/CWT	N	1	3.00	2.00	3.00	IN
80W 0-000003	30269	WELT, 5/8 X 5/8 X 5/8 LEG	2.000	EA	N	2	2.00	0.00	2.00	EA
80W 2-000004	40110	5/8" UNC NUT PLATED	4.000	PER/2	N	4	0.00	2.00	4.00	EA

1 BILL OF MATERIAL ITEMS PRINTED.

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