

1400 Bale Mover

2006 Owner's Manual



Before operating the Bale Mover 1400, be sure to review *all* the instructions and familiarize yourself with its features.

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Warranty

Highline New Agricultural Equipment Limited Warranty

Effective January 1, 2004 One (1) Year / 12 Months

Parts and Labour

Highline Mfg. Inc (hereinafter "Highline") warrants this new Agricultural product of Highline's manufacturer to be free from defects in material and workmanship, under normal use and service for one (1) full year after initial purchase/retail sale. Highline will warrant its product for one (1) year parts and labour, if performed by a qualified Dealer. This Limited Warranty shall apply only to complete machines of Highline's manufacture, parts are covered by a separate Limited Warranty.

EQUIPMENT AND ACCESSORIES NOT OF HIGHLINE'S MANUFACTURE ARE WARRANTED ONLY TO THE EXTENT OF THE ORIGINAL MANUFACTURER'S WARRANTY AND SUBJECT TO THEIR ALLOWANCE TO HIGHLINE ONLY IF FOUND DEFECTIVE BY SUCH MANUFACTURER.

During the Limited Warranty period specified above, any defect in material or workmanship in any warranted item of Highline Agricultural Equipment not excluded below shall be repaired or replaced at Highline's option without charge by any authorized independent Highline Dealer. An authorized Dealer must make the warranty repair or replacement. Labour in accordance with Highline's labour reimbursement policy. Highline reserves the right to supply remanufactured replacement parts as it deems appropriate.

RETAIL PURCHASER RESPONSIBILITY: This Limited Warranty requires proper maintenance and periodic inspections of the Agricultural Equipment as indicated in the Operator's Manual furnished with each new Agricultural Equipment. The cost of routine or required maintenance and services is the responsibility of the retail purchaser. The retail purchaser is required to keep documented evidence that these services were performed. This Highline New Agricultural Equipment Limited Warranty may be subject to cancellation if the above requirements are not performed

EXCLUSIONS AND LIMITATIONS

The warranties contained herein shall **NOT APPLY TO:**

- (1) Any defect which was caused (in Highline's sole judgement) by other than normal use and service of the Agricultural Equipment, or by any of the following: (i) accident (ii) misuse or negligence (iii) overloading (iv) lack of reasonable and proper maintenance (v) improper repair or installation (vi) unsuitable storage (vii) non-Highline approved alteration or modification (viii) natural calamities (ix) vandalism (x) parts or accessories installed on Agricultural Equipment which were not manufactured or installed by Highline authorized Dealers (xi) the elements (xii) collision or other accident.
- (2) Any Agricultural Equipment whose identification numbers or marks have been altered or removed.
- (3) Any Agricultural Equipment which any of the required or recommended periodic inspection or services have been performed using parts not manufactured or supplied by Highline or meeting Highline Specifications including, but without limitation, lubricants (oil, grease), belt lacings, and hydraulic fluids.
- (4) Equipment used for rental, custom work, industrial and construction or if equipment is used for any other purpose than the intended agricultural application.
- (5) Any Agricultural Equipment used in demonstrations not performed by a Highline Dealer. Warranty will be at the discretion of Highline for all other demonstration warranty.
- (6) **New Agricultural Equipment delivered to the retail purchaser in which the warranty registration has not been completed and returned to Highline within ten (10) days from the date of purchase.**
- (7) Any defect that was caused (in Highline's sole judgement) by operation of the Agricultural Equipment not abiding by standard operating procedures outlined in the Operator's Manual.
- (8) Tire Limited Warranties and support are the responsibility of the respective product's manufacturer.
- (9) Transportation costs, if any, of transporting to the Highline Dealer.
- (10) In no event shall Highline's liability exceed the purchase price of the product.
- (11) Highline shall not be liable to any person under any circumstances for any incidental or consequential damages (including but not limited to, loss of profits, out of service time and damage to equipment which this equipment may be attached) occurring for any reason at any time.
- (12) Diagnostic and overtime labour premiums are not covered under this Limited Warranty Policy.
- (13) Depreciation damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, and/or lack of proper protection during storage.
- (14) Accessory systems and electronics not of Highline's manufacture are warranted only to the extent of such manufacturer's respective Limited Warranty if any.
- (15) Wear items which are listed by product group below:

COMMON WEAR ITEMS: roller chain, sprockets, clutches, shear bolts, clutch components, chains, gearbox housings bolts/torqued parts, flails, feed roller belting, coupler chain, DRV couplers, bogie wheels, apron tines and hoses.

PARTS WARRANTY

Parts replaced in the warranty period will receive the balance of the one year New Agricultural Equipment Limited Warranty. Replacement parts after the original machine warranty are warranted to be free from defects of material for ninety (90) days or the part will be repaired or replaced, without labour coverage for removal and reinstallation.

EXCLUSION OF WARRANTIES. UNLESS OTHERWISE REQUIRED BY LAW, AND EXCEPT FOR THE WARRANTIES EXPRESSLY AND SPECIFICALLY MADE HEREIN, HIGHLINE MAKES NO OTHER WARRANTIES, AND ANY POSSIBLE LIABILITY OF HIGHLINE HEREIN UNDER IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HIGHLINE RESERVES THE RIGHT TO MODIFY, ALTER AND IMPROVE ANY PRODUCT WITHOUT INCURRING ANY OBLIGATION TO REPLACE ANY PRODUCT PREVIOUSLY SOLD WITH SUCH MODIFICATION. NO PERSON IS AUTHORIZED TO GIVE ANY OTHER WARRANTY, OR TO ASSUME ANY ADDITIONAL OBLIGATION ON HIGHLINE'S BEHALF.

President's Message

The Bale Mover 1400, a proven name in the bale handling field, is made by Highline Mfg. Inc. The Bale Mover 1400 was designed to work in the most difficult of bale handling situations. A little time and effort will ensure the performance and durability of your Bale Mover.

This manual has been prepared to provide the 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 our 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 on machines previously sold.

Should the need arise, this manual will assist you in acquiring replacement parts. If your dealer does not have the parts you need in stock, they will be happy to order them for you. Feel free to contact Highline Mfg. Inc. or your local dealer if you need information that is not included in this manual.

Highline Mfg. Inc. thanks and congratulates you for selecting the Bale Mover 1400 as the machine for your bale handling needs.

*Chuck Lepage, President
Highline Mfg. Inc.*

P.O. Box 307, Vonda, Saskatchewan, S0K 4N0

Phone 1-800-665-2010 Fax (306) 258-2010

Internet Address: <http://www.highlinemfg.com>

Safety Precautions

WORK SAFELY – FOLLOW THESE INSTRUCTIONS

Failure to follow these safety instructions could result in serious injury or death.

CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT!

- Always disengage the hydraulic motors before dismounting tractor for any reason.
- Keep yourself and others clear of any rotating or moving 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 the transport chain and then remove the transport pin. **DO NOT** lower the 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 Operating Instructions

1.1 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 WILL occur.

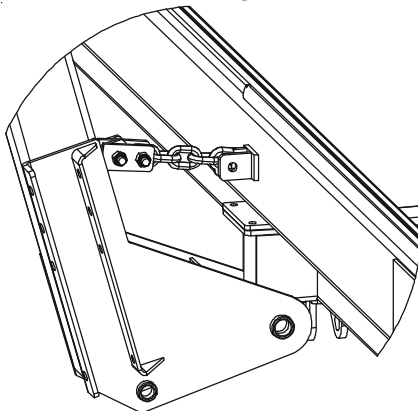


Figure 1 - Locks in Transport Position

1.2 Transporting Instructions

To ensure safe transport of the Bale Mover 1400, 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.

1.3 Bale Size Adjustment

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



Figure 2 – Adjusting Forks

1.4 Field Instructions

Two tractor remotes are required to power the functions of the bale mover. There are three modes of operation for the bale mover which are as follows:

1. Electric rocker switch centered – hydraulic control of push back and tilt functions
2. Electric rocker switch right – hydraulic control of right side lift and push back.
3. Electric rocker switch left – hydraulic control of left side lift and push back.

Mode of operation 1 will be used for unloading. To operate the unload function, use one tractor remote to tilt the bed to the unload position. Second, use the other tractor remote to operate the push back function to mechanically slide the bales off of the deck. When the bales are cleared from the deck the deck is then tilted back into operating position.

Mode of operation 2 will be used for loading bales on the right hand side of the machine. With the rocker switch in the right position one tractor remote will be used lift the bales into position onto the right side of the deck. The other tractor remote will be used to push the bale back on the deck once it is in position.

Mode of operation 3 will be used for loading bales on the left hand side of the machine. With the rocker switch in the left position one tractor remote will be used lift the bales into position onto the left side of the deck. The other tractor remote will be used to push the bale back on the deck once it is in position.

For proper field operation, the 1400 Bale Mover should be operated at field speeds in the 3-4 mph. (4.8-6.5 km/h) range. When picking bales a full stop is not required, however a more moderate field speed will provide more control of all functions of the picking process.

When loading the Bale Mover care should be taken to load both the left and right sides as evenly as possible. This will ensure maximum stability for the machine especially when operating on uneven terrain.

2.0 Maintenance Instructions

To ensure a long operating life of your Bale Mover 1400, follow these maintenance procedures.

- Periodically check tire air pressure to maintain equal tire pressure. The operating tire pressure on hard surface sure should be 90 psi.
- Periodically check all bolts for tightness.
- Periodically check the chain tightener. The chain should be just off the bottom of the rail.
This can be seen through the sight hole in the rail.
- Wheel bearings should be repacked yearly.
- Grease the following points as described.

2.1 Grease Locations



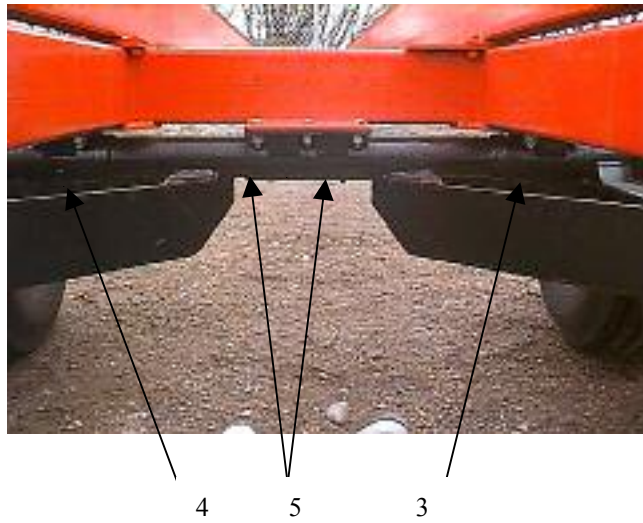
Figure 3 - Pivot Arm Grease Location

Grease No	Description	Frequency
1	Arm, Pivot, Right	Daily



Figure 4 - Pivot Slide Arm Grease Location

Grease No	Description	Frequency
2	Arm, Slide, Pivot, Right	Daily



Grease No	Description	Frequency
3	Pocket, Beam Walking, Left,	Weekly
4	Pocket, Beam Walking, Right	Weekly
5	Pocket, Beam Walking, Middle	Weekly

Figure 5 - Oscillating Tandem Grease Location



Grease No	Description	Frequency
6	Pin, Sprocket, Rear, Left,	Weekly
7	Pin, Sprocket, Rear, Right,	Weekly

Figure 6 - Rear Sprocket Pin

2.2 Tire Removal Procedure

There are several methods used to remove the tires on the 14 Bale Mover. Following are the common procedures used.

RAISING THE TIRES OFF THE GROUND

A.

1. Leaving the tractor hitched to the Bale Mover and apply the parking brake.
2. Block the Bale Mover tires opposite the side which the tire will be removed.
3. Use two jacks (hydraulic or pin) under the main frame of the Bale Mover to raise the side of the Bale Mover high enough to swing the axle so the tire can be removed. Block the Bale Mover frame in this location.

B.

1. Leave the tractor hitched to the Bale Mover and apply the parking brake.
2. With the deck cylinder retracted, secure the end of the Bale Mover rails so they cannot be lowered. This can be done by blocking each rail or backing the bale mover into a sloped roadway and then applying the tractor parking brake.
3. Extend the deck cylinder to raise the tires off the ground.

****ENSURE THE DECK AND/OR DECK CYLINDER IS SECURED SO THE DECK CANNOT BE LOWERED****

TIRE REMOVAL

A.

1. With the tires off the ground, rotate the axle so the tire to be removed is below the frame. Secure the axle so the axle cannot rotate.
2. Remove the tire.

B.

1. With the tires off the ground, remove the outside axle mount and loosen the inside axle mount. Remove the axle with tires attached.
2. Remove the tire.

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3.0 Safety Messages

General safety messages appear in this Safety Messages section. Specific safety messages are located in appropriate sections of the manual where a potential hazard may occur if the instructions or procedures are not followed.

Understand Safety Alert Symbol

This is the safety alert symbol. This symbol placed on your machine or in the manual is used to alert you to the potential for bodily injury or death.



Understand Signal Words.

A signal word “**Danger**”, “**Warning**”, or “**Caution**” is used with the safety alert symbol.

Safety signs with signal word “**Danger**”, “**Warning**” or “**Caution**” are located near specific hazards.

Danger – Imminent hazards which, if not avoided, will result in serious personal injury or death.

Warning – Potential hazards or unsafe practices which, if not avoided, could result in serious personal injury or death.

Caution – Potential hazards or unsafe practices which, if not avoided, could result in minor personal injury or product or property damage.

Read, Understand, and Follow Safety Instructions

Read, understand and follow all instructions and safety messages included in this manual and on decals attached to the machine. These instructions and safety messages contain important information.

Allow only responsible, properly instructed individuals to operate and service the machine.

Failure to follow the instructions and safety messages in this manual and on the decals attached to the machine could result in serious injury or death.

Keep all safety and instruction decals in good condition. Replace any missing or damaged decals.



Keep Machine in Good Condition

Be sure the machine is in good operating condition and that all safety devices are installed and functioning properly.

Visually inspect the machine daily before starting the machine.

Make no modifications to your equipment unless specifically recommended or requested by Highline Mfg Inc.

Keep Spectators Away From Machine

Keep all spectators and other workers away from the machine and work area while in operation.

Avoid Moving Parts

Contact with moving parts can cause death or serious injury.

Keep away from power-driven parts such as the reel.

Wear close-fitting clothing and confine long hair. Avoid wearing jewelry, such as rings, wrist watches, necklaces, or bracelets.

Avoid High Pressure Leaks

Pressurized fluid can penetrate body tissue and result in serious injury or death. Leaks can be invisible. Relieve pressure before working on system. When searching for a leak, use an object like cardboard – not your hand. Fluid injected under the skin must be removed immediately by a surgeon familiar with this type of injury.

Avoid Tire Explosion

Tire explosion can result if the following procedures are not followed:

- Maintain correct tire pressure. Do not inflated tire above recommended pressure.
- Low tire pressure can cause internal tire damage. Inflate to recommended pressure.
- Replace any tire with cuts or bubbles. Replace any damaged rims.
- Do not weld or heat wheel assembly. Heating will increase tire pressure.

Working on the Balemover

For your safety and safety of others, the Shutdown Procedure, see below, must be followed before dismounting from the tractor for inspecting, lubricating, cleaning, unplugging, servicing, or repairing the balemover.

Warning: Failure to follow any of the above safety instructions, or those that follow within this manual, could result in serious injury or death. This machine is to be used only for those purposes for which it was intended, as explained in this Operator's manual.

Safety Decal Maintenance

Safety decals located on your machine contain important and useful information that will help you operate your equipment safely.

To assure that all decals remain in place and in good condition, follow these instructions.

- Keep decals clean. Use soap and water – not mineral spirits, abrasive cleaners, or other similar cleaners that will damage the decal
- Replace any damaged or missing decals. When attaching decals, the temperature of the mounting surface must be at least 5°C (40°F). The mounting surface must also be clean and dry.
- When replacing a machine component with a decal attached, replace the decal also.
- Replacement decals can be purchased from your Highline equipment dealer.

SHUTDOWN PROCEDURE

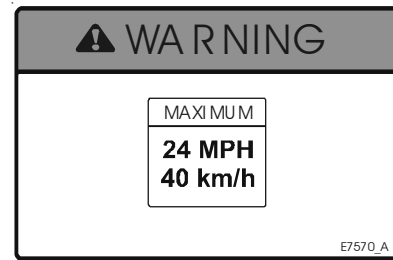
Important: For your safety and the safety of others, this procedure must be followed before dismounting from the tractor for repairing, servicing, cleaning, or lubricating the rock picker.

A variation of this procedure may be used if so instructed within this manual, or the tractor manual, or if an emergency requires it.

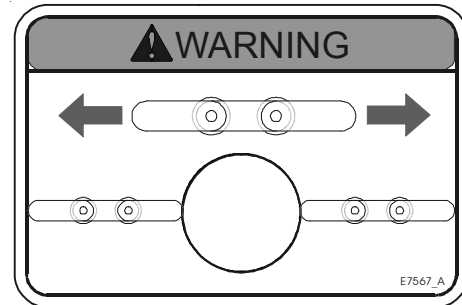
- Step 1: Reduce the engine speed to idle.
- Step 2: Fully lower left & right fork lifts.
- Step 3: Disengage hydraulic motors.
- Step 4: Set the tractor park brake.
- Step 5: Shut off tractor engine and remove key.



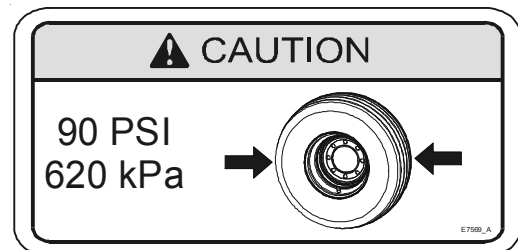
Warning: Do not transport loaded Balemover faster than 24 mph/40 km/h. Loss of control may occur if this speed is not observed.



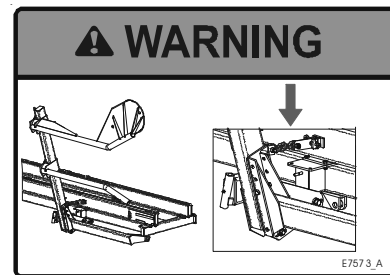
Warning: Keep rail chain tension in window of rails. Chain damage may occur if chains are not properly tensioned. Lubricate chains regularly during use.



Caution: Keep tires properly inflated to 90 psi/ 620 kPa. Tire damage may occur if tires are under inflated



Warning: Always use fork transport chains when transporting balemover on public road ways. Forks may descend rapidly if hydraulic pressure is lost to lift cylinder.

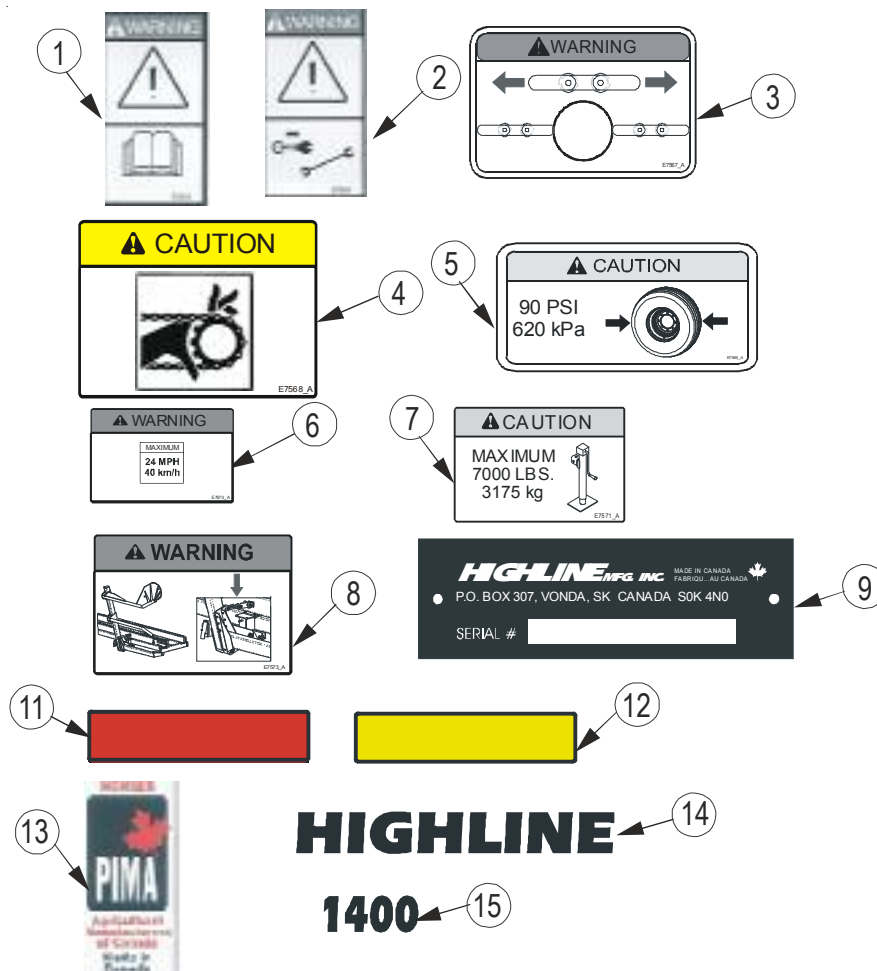


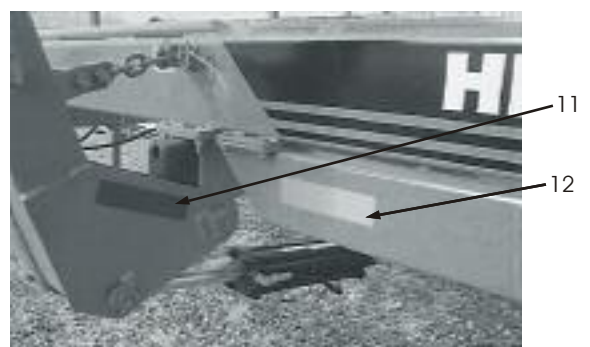
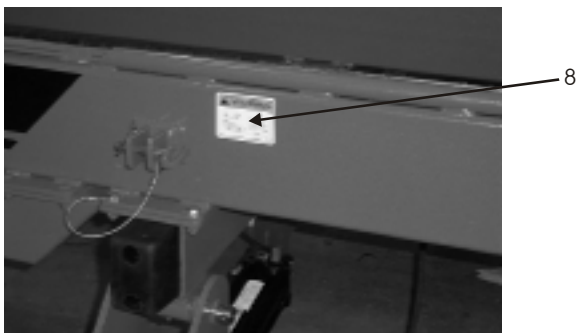
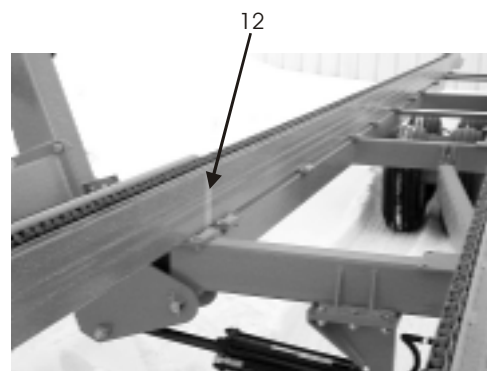
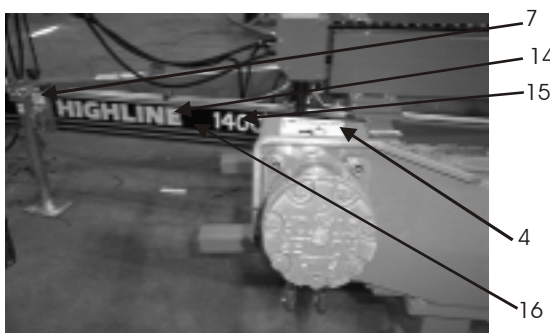
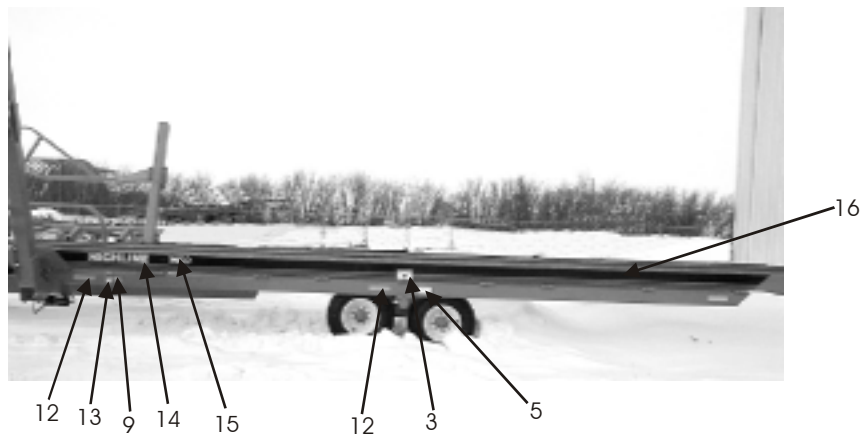
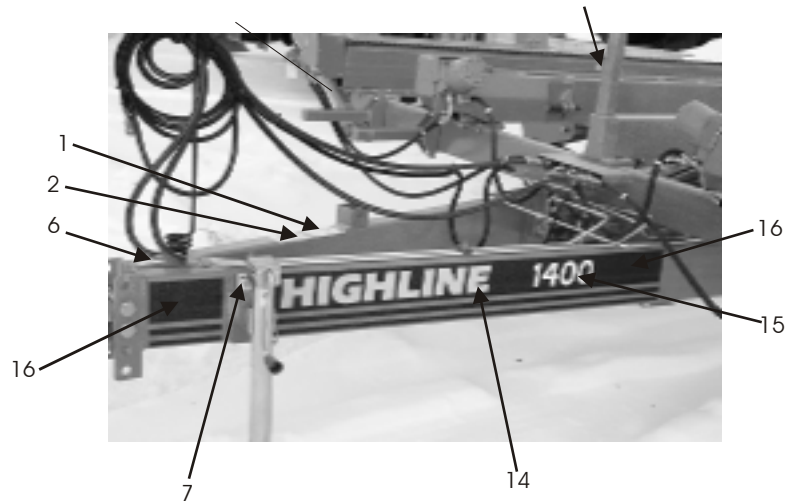
Caution: Keep hands and loose clothing away from moving chains. Entanglement resulting in injury may occur.



3.1 Decal Assembly (Part No. 45258)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E7552	DECAL, WARNING, OWNERS MANUAL	1
2	E7553	DECAL, WARNING, STOP ENGINE/SERVICE	1
3	E7567	DECAL, WARNING, CHAIN TENSION, NT	4
4	E7568	DECAL, CAUTION, CHAIN ENTANGLEMENT	4
5	E7569	DECAL, CAUTION, TIRE PRESSURE	4
6	E7570	DECAL, WARNING, TOW SPEED	1
7	E7571	DECAL, CAUTION, JACK, 7000LBS	1
8	E7573	DECAL, WARNING, TRANSPORT PINS	2
9	30208	PLT, SERIAL#	1
*10	30288	RIVET, ST, 1/8X.390, .250 HEAD	2
11	30577	DECAL, RED REFL, 2X9	2
12	30578	DECAL, AMBER REFL, 2X9	10
13	32981	DECAL, PIMA	1
14	92583	DECAL, HIGHLINE, 3-1/2	4
15	92584	DECAL, HIGHLINE, 1400	4
*16	92586	DECAL, PINSTRIPPING, 7	62

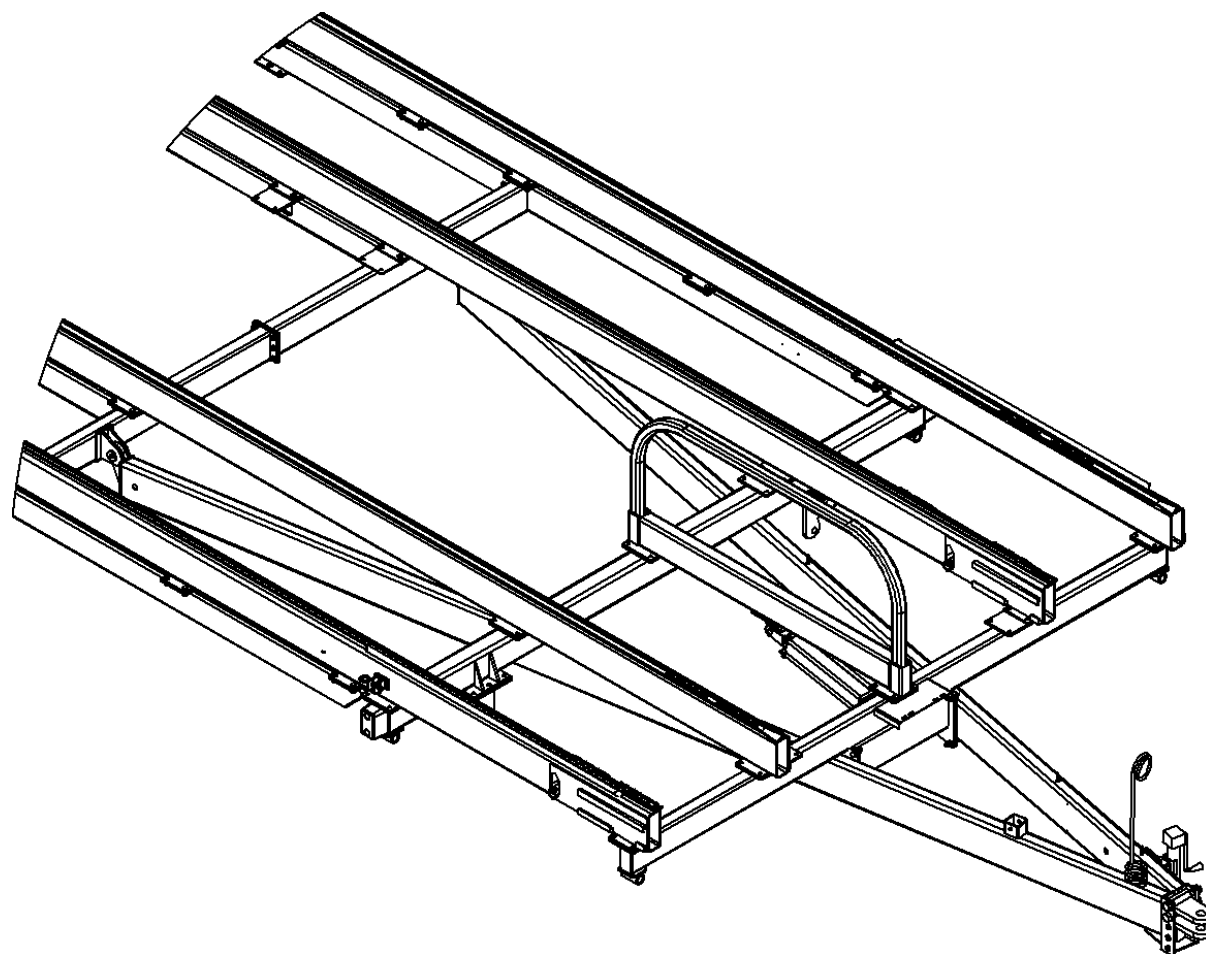


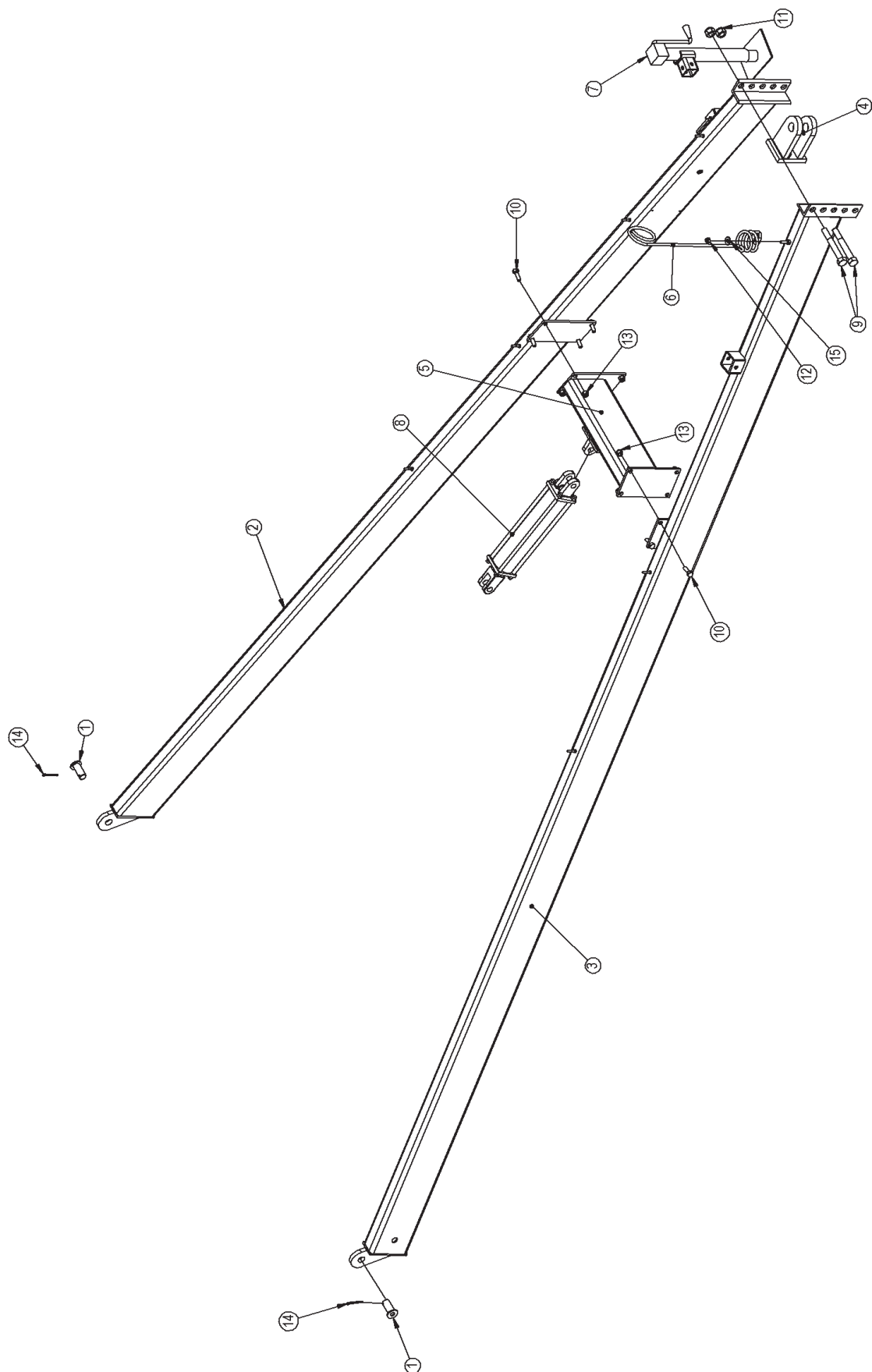


4.0 Parts Information

4.1 Hitch Assembly (Part No. 42056)

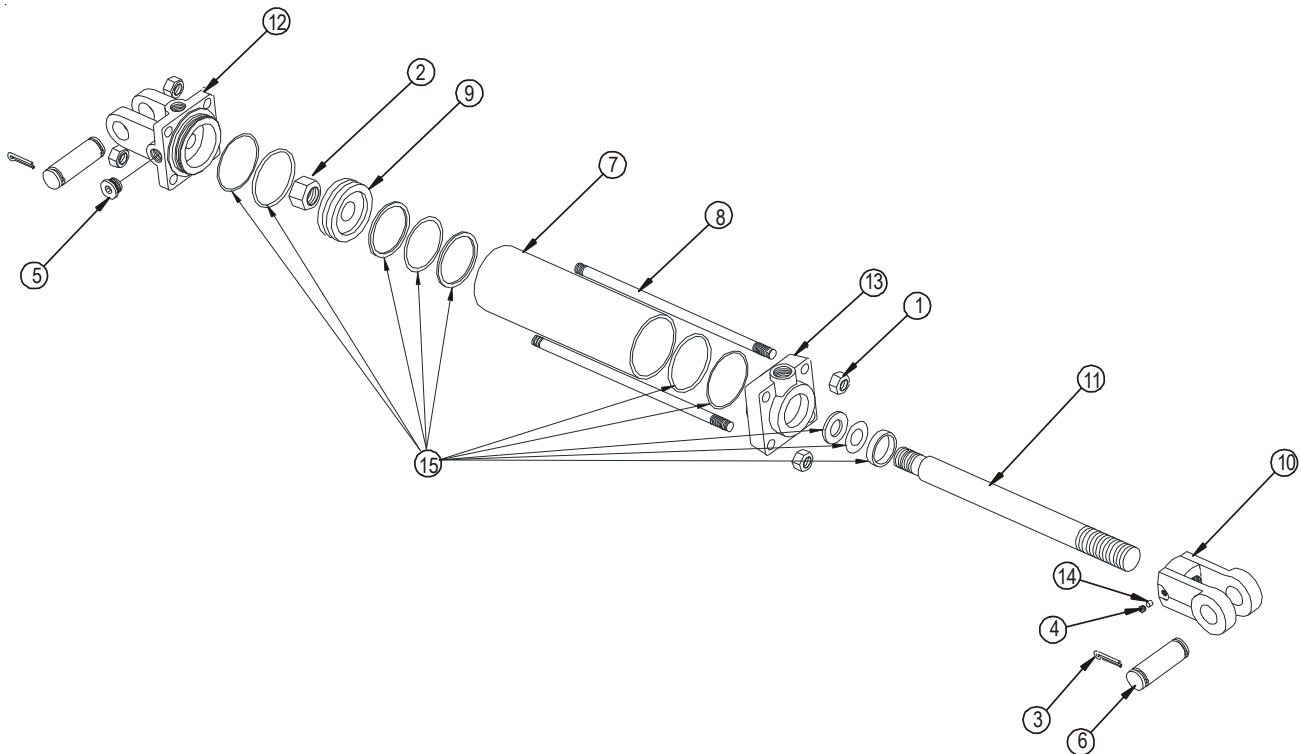
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40003	PIN,HITCH	2
2	40062	HITCH,A-FRAME,LEFT	1
3	40063	HITCH,A-FRAME,RIGHT	1
4	40142	HITCH,TONGUE,DOUBLE	1
5	40487	HITCH,CROSSMEMBER	1
6	30206	HYD,HOLDER,HOSE,1/2	1
7	31933	JACK,7000LBX15,SQ MNT,SIDEWIND	1
8	90103	HYD,CYL,3.5X16,1.5,8FP	1
9	31038	BOLT,HEX,1X7-1/2,UNC,GR5,ZP	2
10	31053	BOLT,HEX,5/8X1-3/4,UNC,GR5,ZP	8
11	31172	NUT,NYLOCK,1,UNC,ZP	2
12	31173	NUT,NYLOCK,1/2,UNC,ZP	1
13	31178	NUT,NYLOCK,5/8,UNC,ZP	8
14	31182	PIN,COTTER,1/4X2-1/2	2
15	31236	WASHER,FLAT,1/2,ZP	1





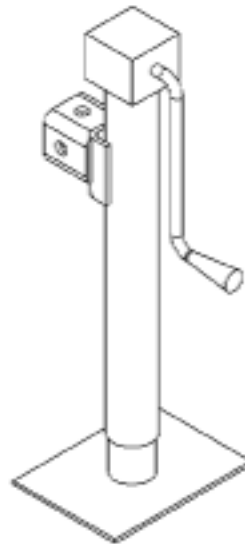
4.1.1 3.5x16 Hydraulic Cylinder (Part No. 90103)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31178	NUT, HEX, 5/8, UNC, ZP	4
2	30237	Nut, Hex, 1, UNS, GR5	1
3	30238	Pin, Cotter, 3/16 x 1-1/2	4
4	30239	Setscrew, Socket, 3/8 x 1/2 Knur	1
5	30240	Hyd, Fit, Plug, 1/2-14 NPTF, Dry	1
6	32250	Hyd, Cyl, Pin, 1	2
7	30246	Hyd, Cyl, 3-1/2 x 16, H6206	1
8	30249	Hyd, Cyl, Tie rod, 5/8 x 16, H6678	4
9	30251	Hyd, Cyl, Piston, 3-1/2, H6688	1
10	30253	Hyd, Cyl, Clevis, 1-1/4, 1 Pin	1
11	30252	Hyd, Cyl, Rod, 1-1/2 x 16	1
12	30258	Hyd, Cyl, Clevis, Cap, 3-1/2, NPTF	1
13	30259	Hyd, Cyl, Cap, Rod, 3-1/2 x 1-1/2	1
14	30261	Lock, Thread, Nylock	1
15	30263	Hyd, Cyl, Seal kit, 3-1/2	1



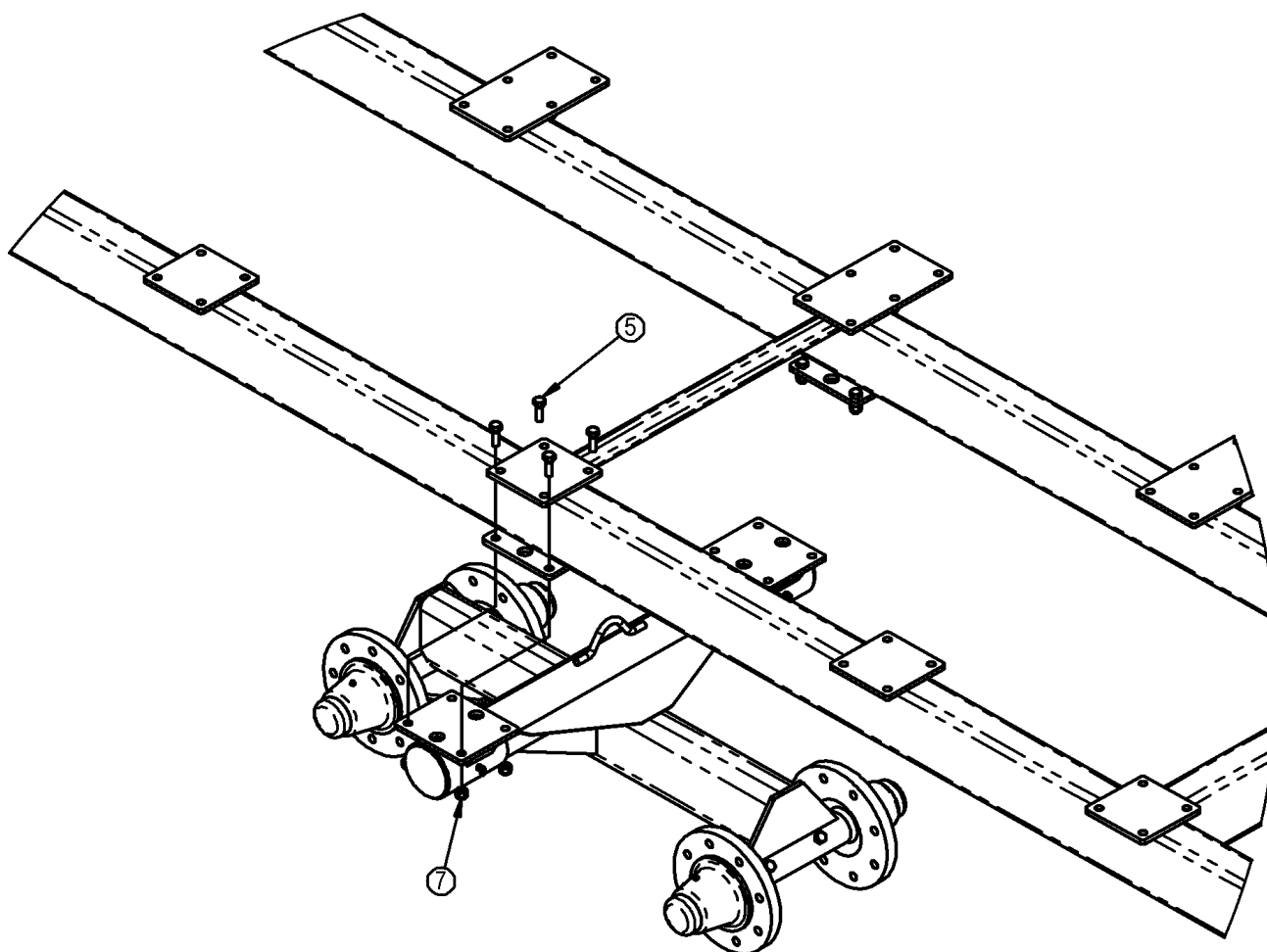
4.1.2 7000 lb Jack (Part No. 31933)

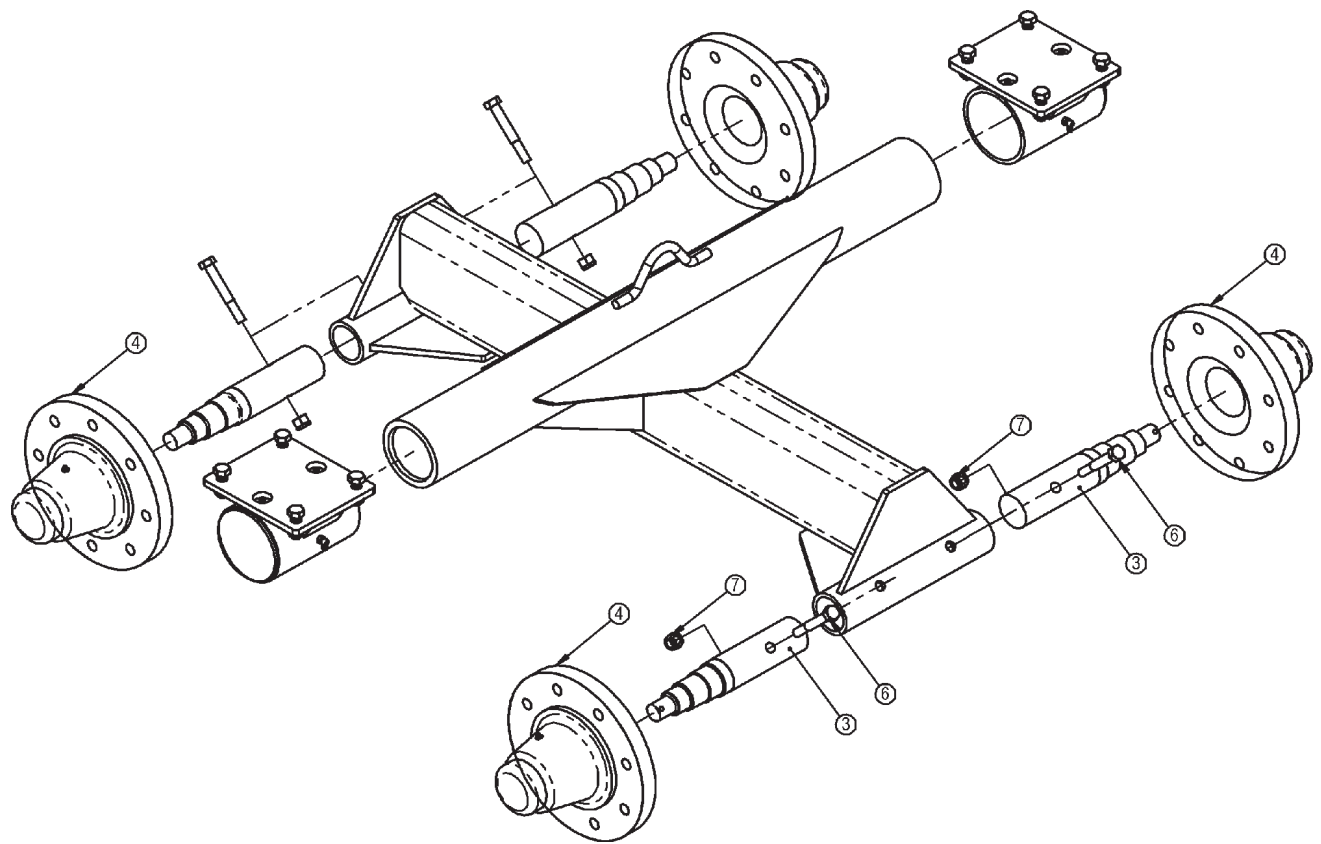
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31933	JACK,7000LBX15,SQ MNT,SIDEWIND	1
2	33438	KIT,PIN & CHAIN-5/8"X4.25"	1
3	33442	COVER, GEARBOX	1
4	33512	KIT,SW,7K BEARING REPLACEMENT	1
5	33513	KIT, 7K SW GEAR REPLACEMENT	1
6	33514	KIT, 7K SW CRANK REPLACEMENT	1



4.2 Tandem Axle Assembly (Part No. 42057)

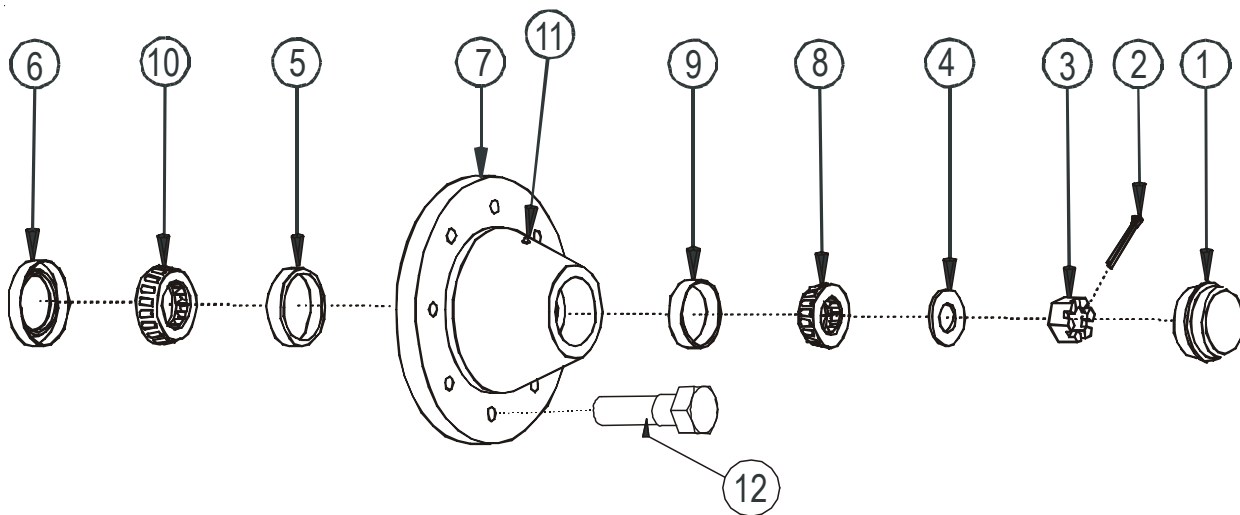
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49811	AXLE, 14BM	1
2	45243	POCKET, END, AXLE	2
3	E7565	SUSP, SPINDLE, EM5500, 10-1/2, 9/16H	4
4	30102	SUSP, HUB, COMPLETE, EM5500	4
5	31016	BOLT, HEX, 1/2X1-1/2, UNC, GR5, ZP	8
6	31023	BOLT, HEX, 1/2X3-1/2, UNC, GR5, ZP	4
7	31173	NUT, NYLOCK, 1/2, UNC, ZP	12





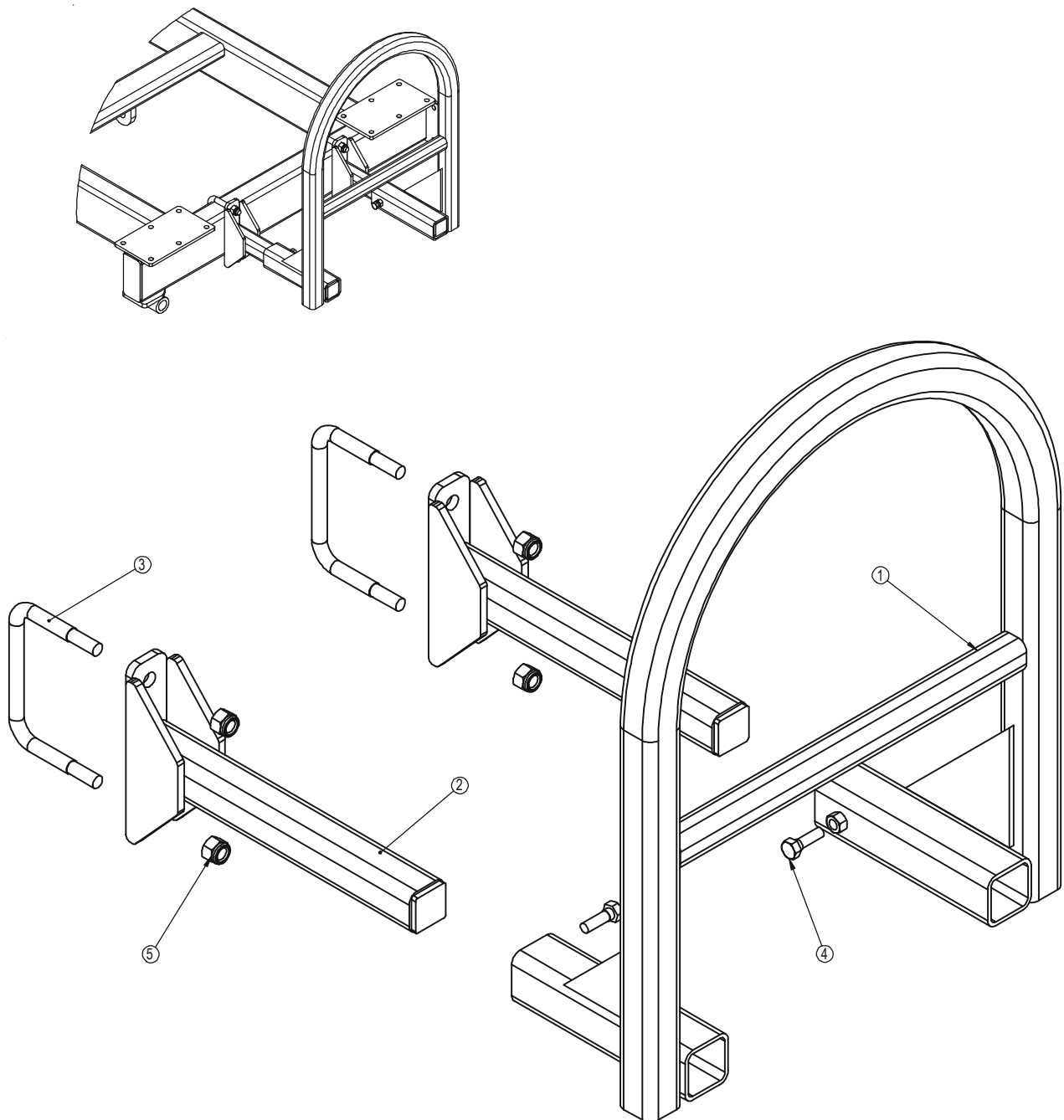
4.2.1 EM5500 Hub Assembly (Part No. 30102)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30220	SUSP,CAP,DUST	1
2	30221	PIN,COTTER,3/16X1-3/4	1
3	30222	NUT,SLOTTED,1,UNF	1
4	30223	WASHER,FLAT,1IDX2OD,.2385	1
5	30226	DRV,BRG,RACE,INNER,1.781	1
6	30228	DRV,BRG,SEAL,1.98	1
7	30229	SUSP,HUB,EM5500,8BOLT	1
8	91111	DRV,BRG,TAPERED,OUTER,1.375	1
9	91131	DRV,BRG,RACE,OUTER,1.375	1
10	30102	SUSP,HUB,COMPLETE,EM5500	1
10	91133	DRV,BRG,TAPERED,INNER,1.781	1
11	30207	ZERK,1/4-28,GF641,STRAIGHT	1
12	32301	SUSP,BOLT,WHEEL,9/16x1-1/4Tx1-13/16L	8



4.3 Front Bale Bumper Assembly (Part No. 42059)

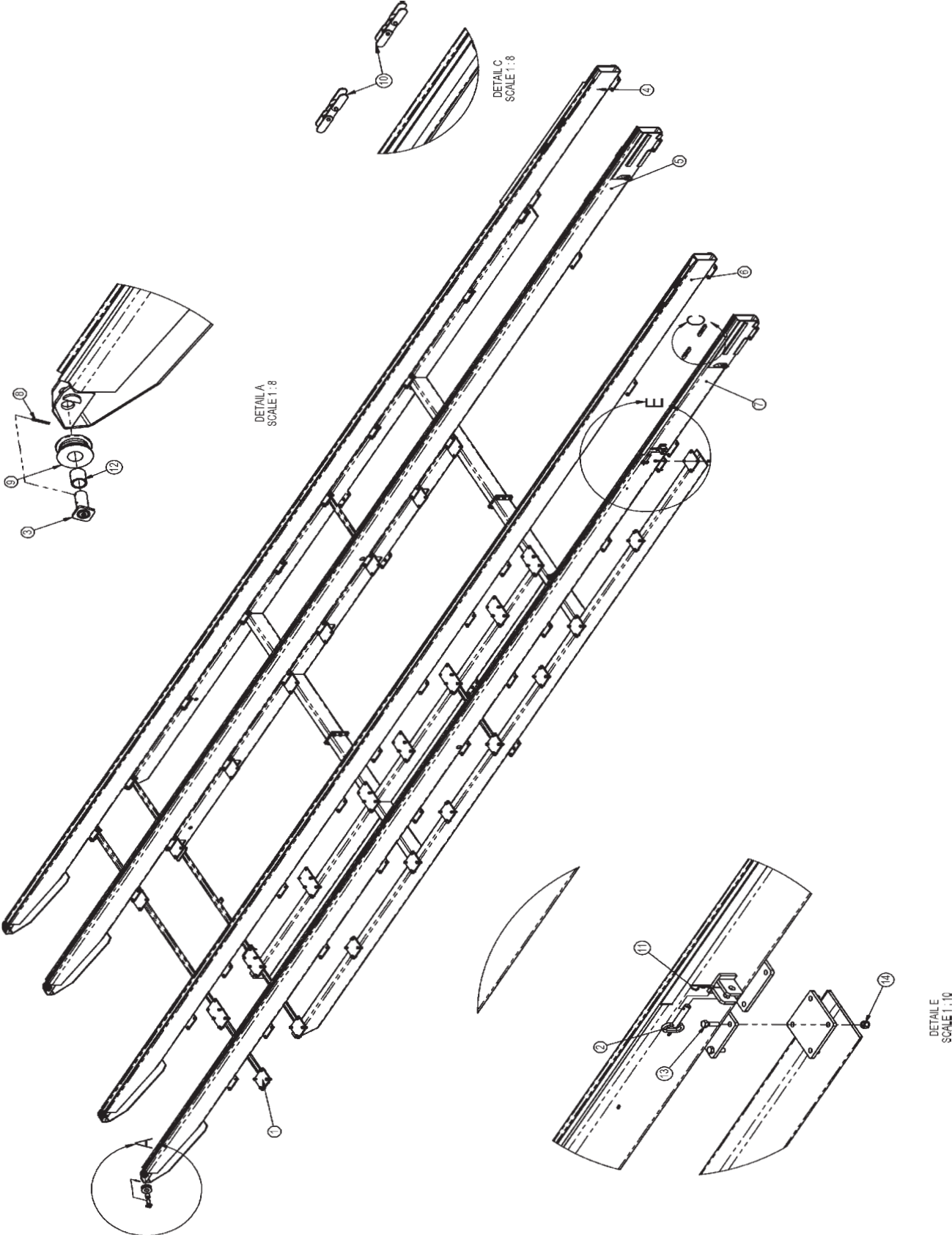
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40088	BUMPER,BALE	1
2	40118	MOUNT,BUMPER,BALE	2
3	30269	BOLT,U,SQ,5/8-11,6x4-1/2,1-1/2	2
4	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	2
5	31178	NUT,NYLOCK,5/8,UNC,ZP	4



4.4 Rail Assembly (Part No. 42062)

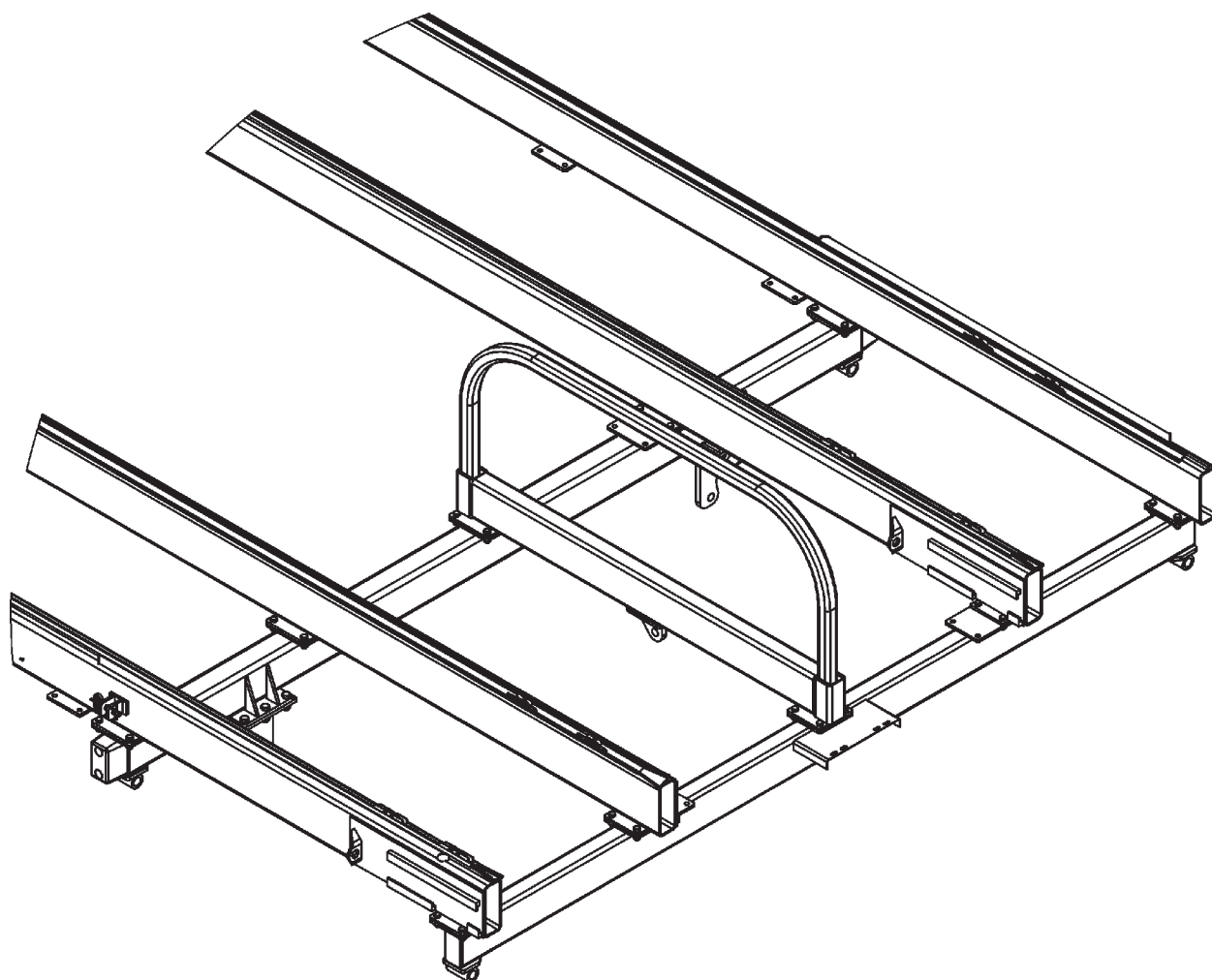
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40006	FRAME,SUB,REAR	1
2	42061	ASSY,TETHERED LOCK PIN	2
3	40121	PIN,SPROCKET,REAR	4
4	40144	RAIL,OUTSIDE,LEFT	1
5	40145	RAIL,INSIDE,LEFT	1
6	40146	RAIL,INSIDE,RIGHT	1
7	40147	RAIL,OUTSIDE,RIGHT	1
8	30197	PIN,SPRING,3/16X1-1/2	4
9	30651	ROLLER,CHAIN,3ODX1-1/4ID	4
10	91508	DRV,CHAIN,ROLLER,2062H,304	8
11	91608	PIN, HAIR, 1/8x2-9/16	2
12	92024	DRV,BUSHING,2232400-24	4
13	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	144
14	31173	NUT,NYLOCK,1/2,UNC,ZP	144

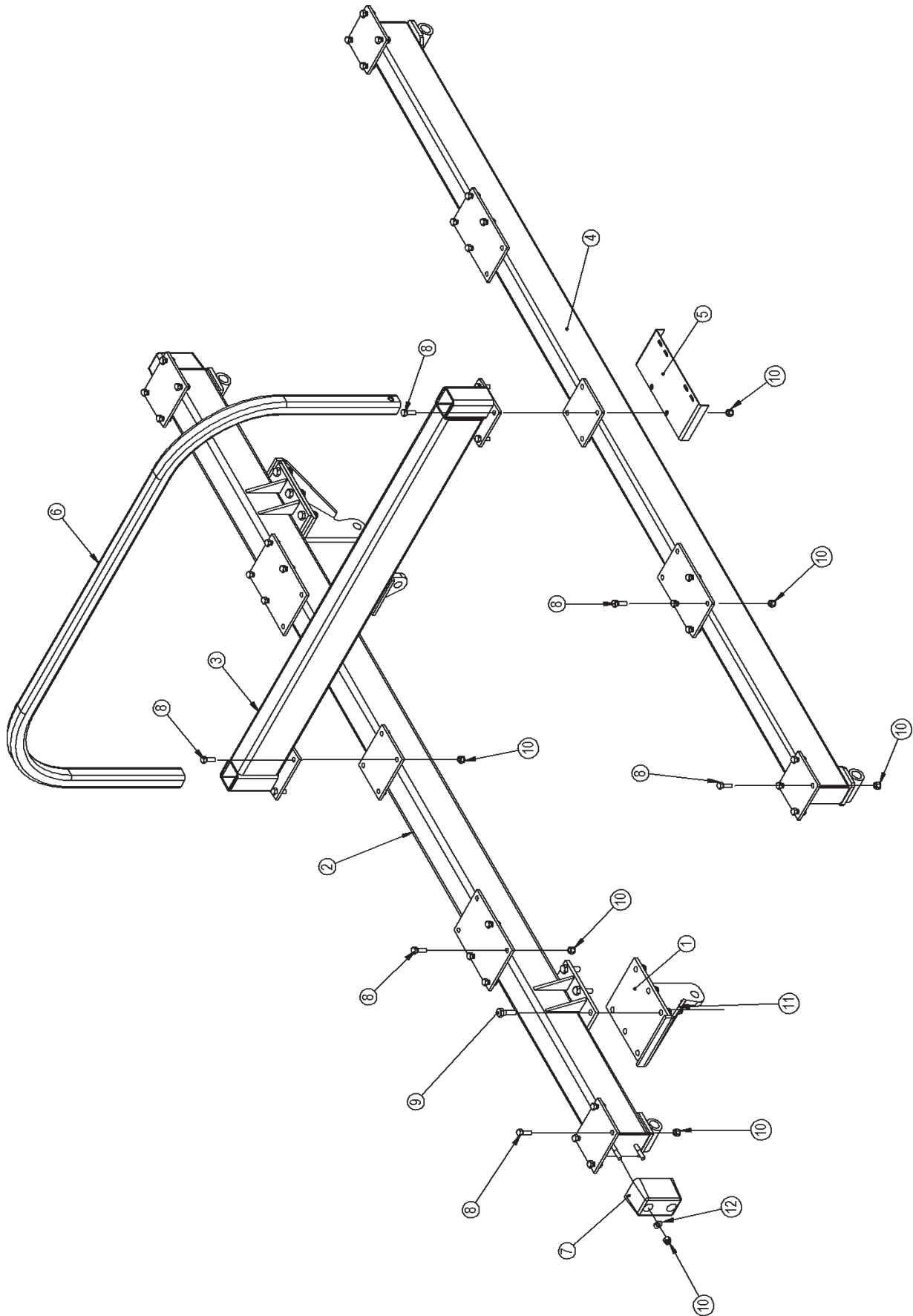
PART NO.	DESCRIPTION
91510	CHAIN CONNECTOR
E5307	ROLLER LINK
91517	CHAIN PER FOOT
91511	OFFSET LINK



4.5 Fork Mount Assembly (Part No. 42064)

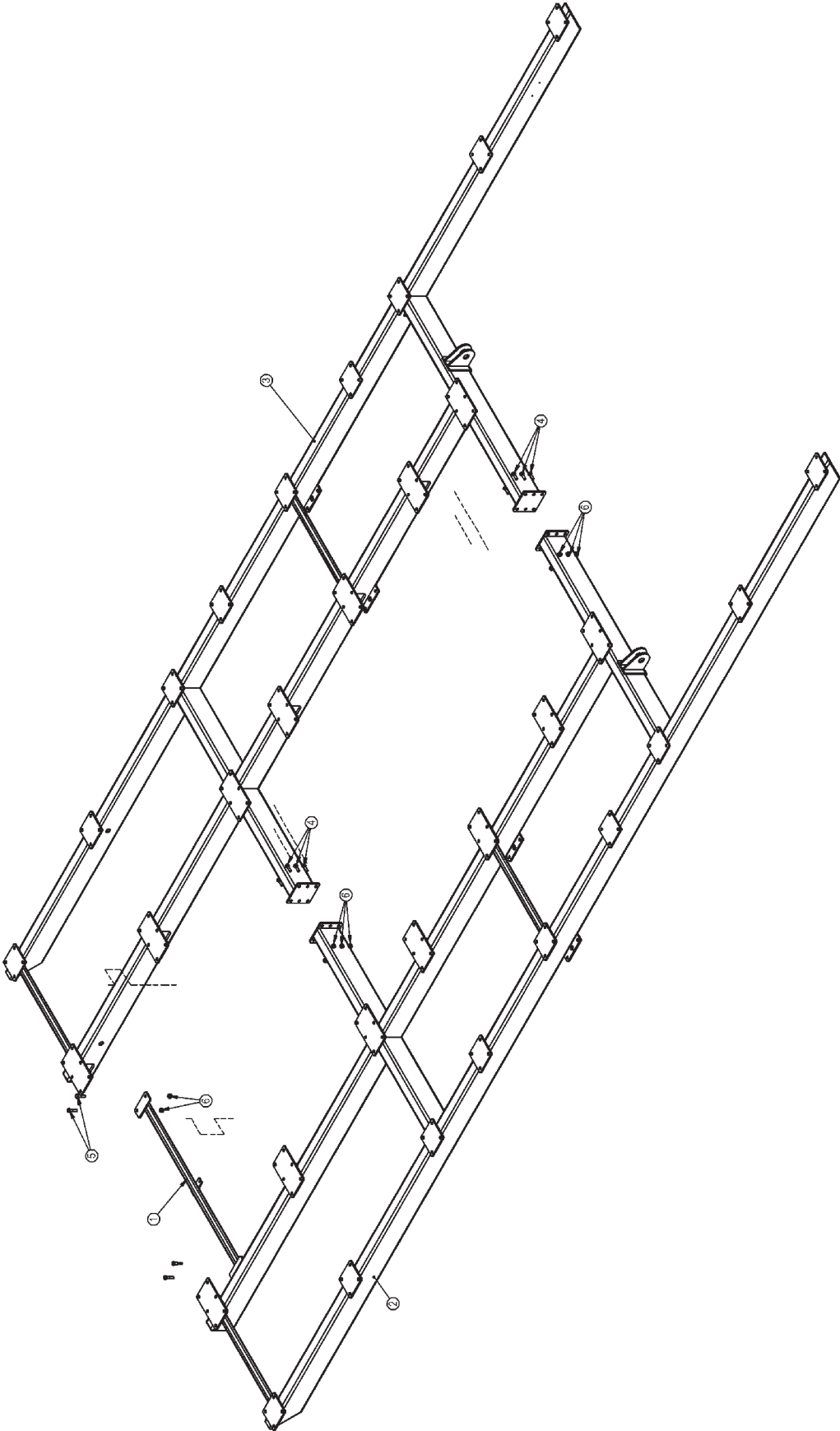
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40140	BRACKET,CYLINDER	2
2	40143	FRAME,MIDDLE	1
3	40486	TUBE,DECK,CYL	1
4	45235	FRAME,SUB,FRONT	1
5	E4740	PLT,S,BRACKET,SOLENOID,HYD	1
6	E4779	TUBE,DIVIDER,BALE	1
7	92061	BUMPER,RUBBER	2
8	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	40
9	31052	BOLT,HEX,5/8X2,UNC,GR5,ZP	12
10	31173	NUT,NYLOCK,1/2,UNC,ZP	44
11	31178	NUT,NYLOCK,5/8,UNC,ZP	12
12	33879	WASHER,FLAT,SAE,1/2,ZP	4





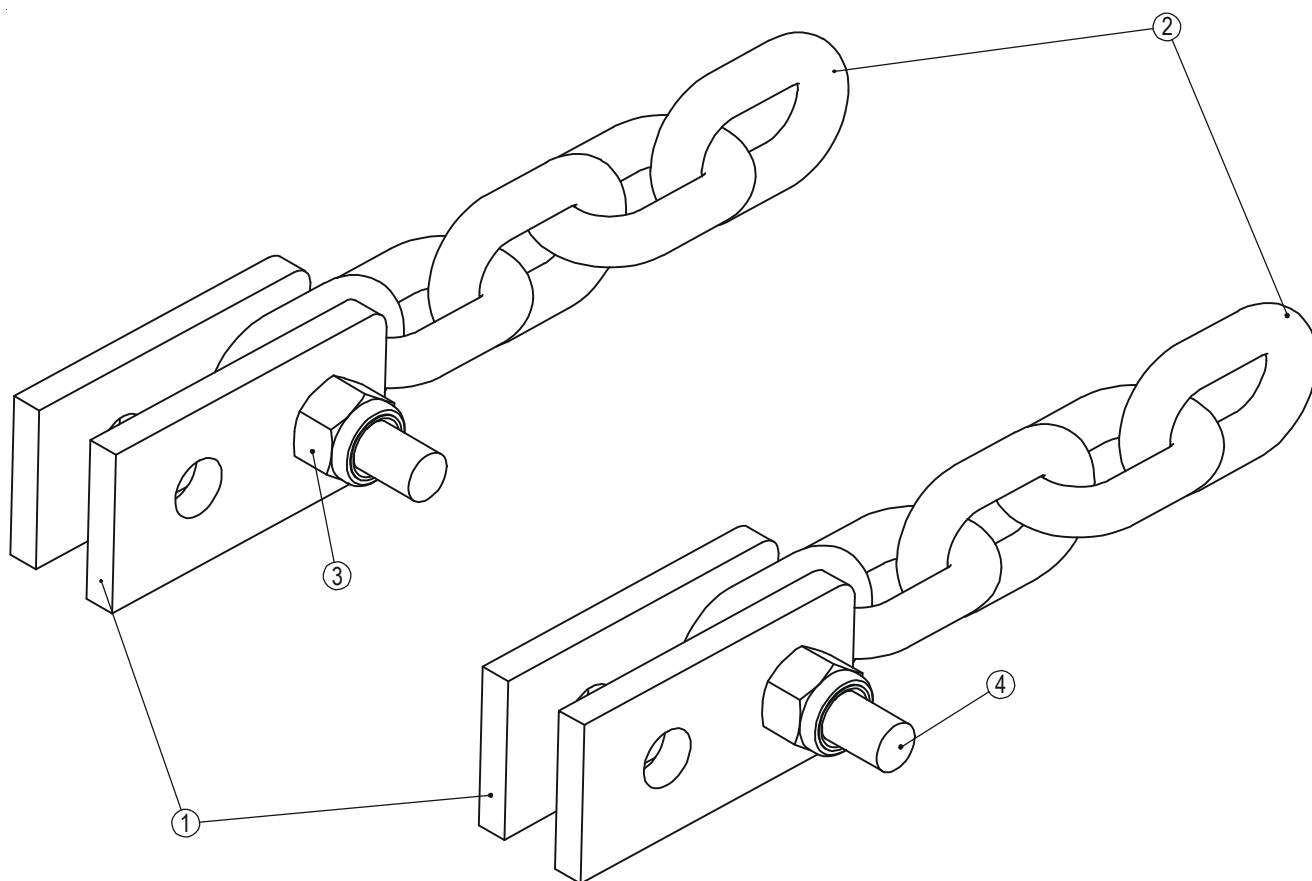
4.6 Frame Assembly (Part No. 42065)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40105	FRAME,SUB,SIGN,SMV	1
2	45245	FRAME,MAIN,RIGHT	1
3	45246	FRAME,MAIN,LEFT	1
4	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	12
5	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	4
6	31173	NUT,NYLOCK,1/2,UNC,ZP	16



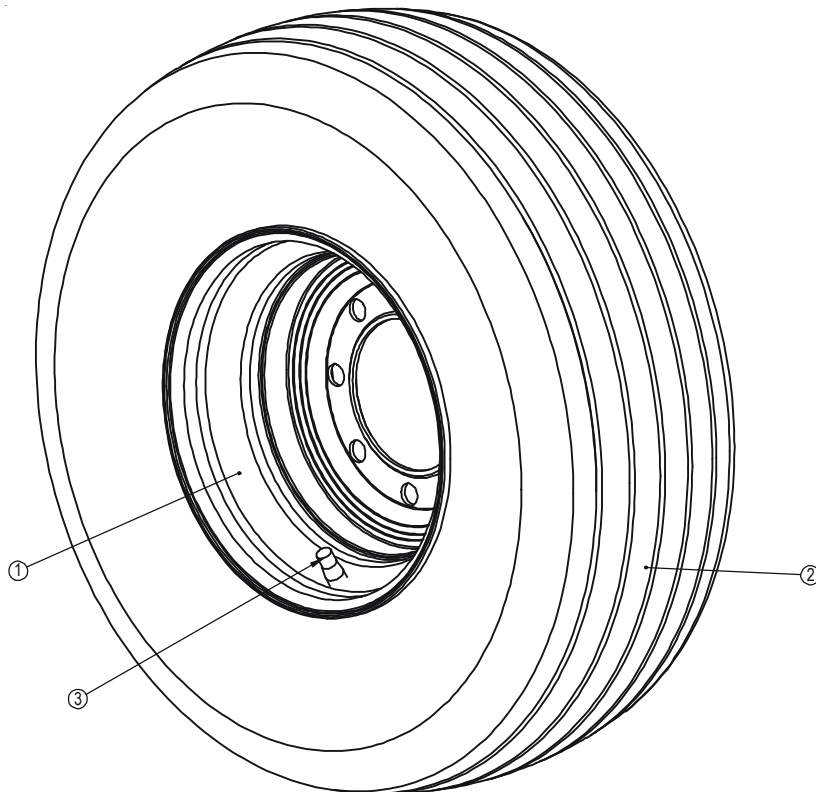
4.7 Fork Chain Assembly (Part No. 42079)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E5652	LUG, EXTENSION	4
2	E5653	CHAIN, LINK, 1/2, GR40, 5 LINKS	2
3	31178	NUT, NYLOCK, 5/8, UNC, ZP	2
4	31336	BOLT, HEX, 5/8X3, UNC, GR5, ZP	2



4.8 Wheel Complete Assembly (Part No. 31795)

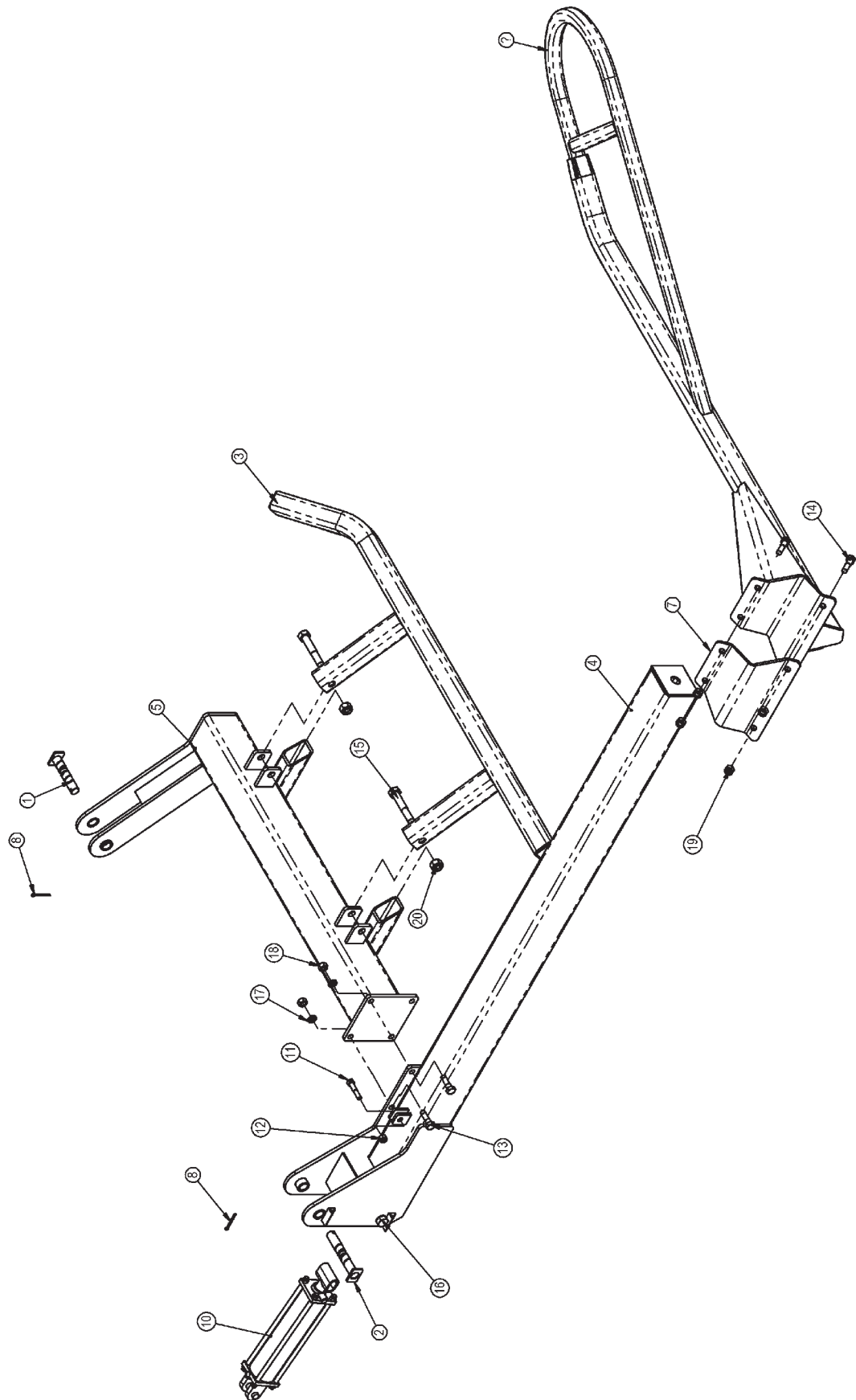
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30104	RIM,1.5X8,-1.5,8,OFFWHITE	1
2	30100	SUSP,TIRE,11LX15FI,12PLY	1
3	91048	SUSP,STEM,VALVE,TR801HP	1
4	33014	SUSP,TUBE,11L-15	1



4.9 Right Fork Lift Assembly (Part No. 42114)

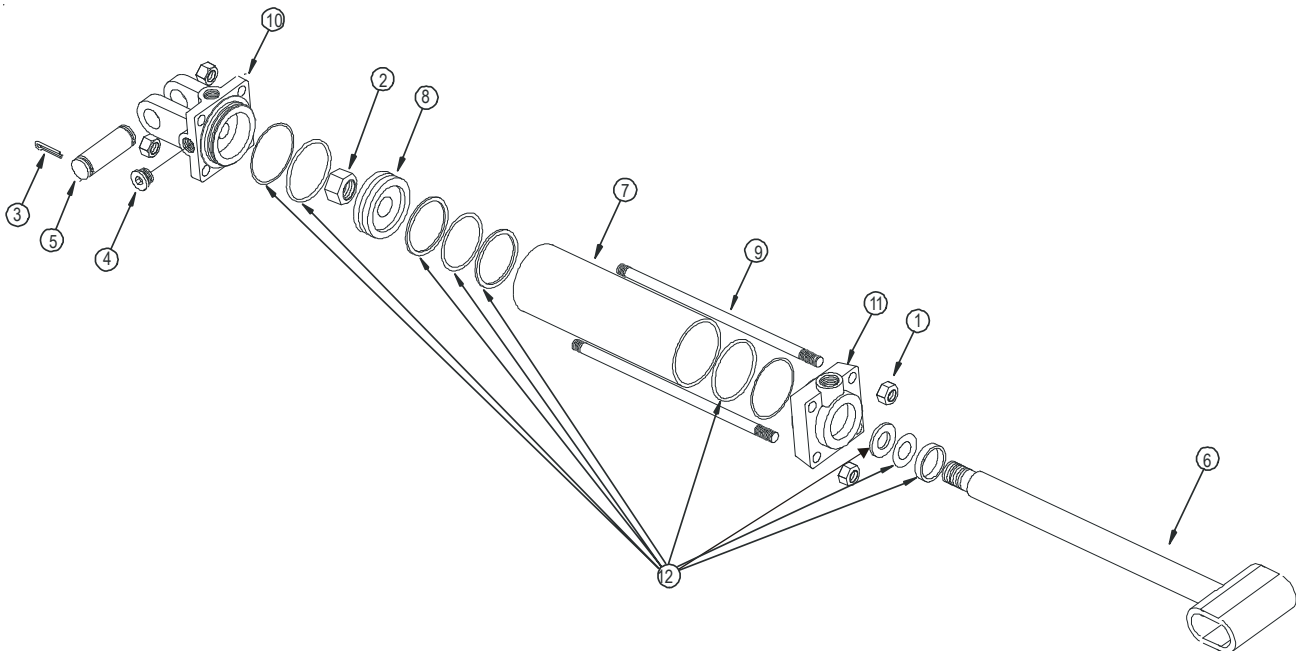
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40010	PIN,ARM,SIDE,PIVOT	1
2	42103	WLDT,PIN,FORK,PIVOT	1
3	42109	WLDT,FORK,INNER	1
4	42115	WLDT,ARM,INNER,FF,RT	1
5	42116	WLDT,FORK,INNER,FF,RT	1
6	49813	WLDT,FORK,OUTER,RT	1
7	E7731	PLT,S,TUBE,CLAMP	1
8	31182	PIN,COTTER,1/4X2-1/2	2
9	33316(1.5)	OIL,HYDRAULIC,UTF	1
10	90120	HYD,CYL,3.5X13,1.5NITRO,8FP	1
11	31336	BOLT,HEX,5/8X3,UNC,GR5,ZP	1
12	31178	NUT,NYLOCK,5/8,UNC,ZP	1
13	31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	4
14	31041	BOLT,HEX,3/4X3,UNC,GR5,ZP	4
15	31473	BOLT,HEX,1X5-1/2,UNC,GR5,ZP	2
16	33517	BOLT,HEX,1X9,UNC,GR8,ZP	1
17	31246	WASHER,LOCK,3/4,ZP	4
18	33234	NUT,STOVER,3/4,UNC,GR5,ZP	4
19	31175	NUT,NYLOCK,3/4,UNC,ZP	4
20	31172	NUT,NYLOCK,1,UNC,ZP	3

ITEM #9 NOT SHOWN



4.9.1 3.5x13 Hydraulic Cylinder (Part No. 90120)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30663	NUT, HEX, 5/8, UNC, GR5, ZP	8
2	30237	NUT, HEX, 1, UNS, GR5	1
3	30238	PIN, COTTER, 3/16X1-1/2	2
4	30240	HYD, FIT, PLUG, 1/2-14, NPTF, DRYSEAL	1
5	32250	HYD, CYL, PIN, 1	1
6	30242	HYD, CYL, ROD, 1-1/2X17, NITRO	1
7	30245	HYD, CYL, 3-1/2X13, H6203	1
8	30251	HYD, CYL, PISTON, 3-1/2, H6688	1
9	30255	HYD, CYL, TIEROD, 5/8X13, SPECIAL	4
10	30258	HYD, CYL, CLEVIS, CAP, 3-1/2, NPTF	1
11	30259	HYD, CYL, CAP, ROD, 3-1/2X1-1/2, 8FP	1
12	30263	HYD, CYL, SEALKIT, 3-1/2, 639578	1

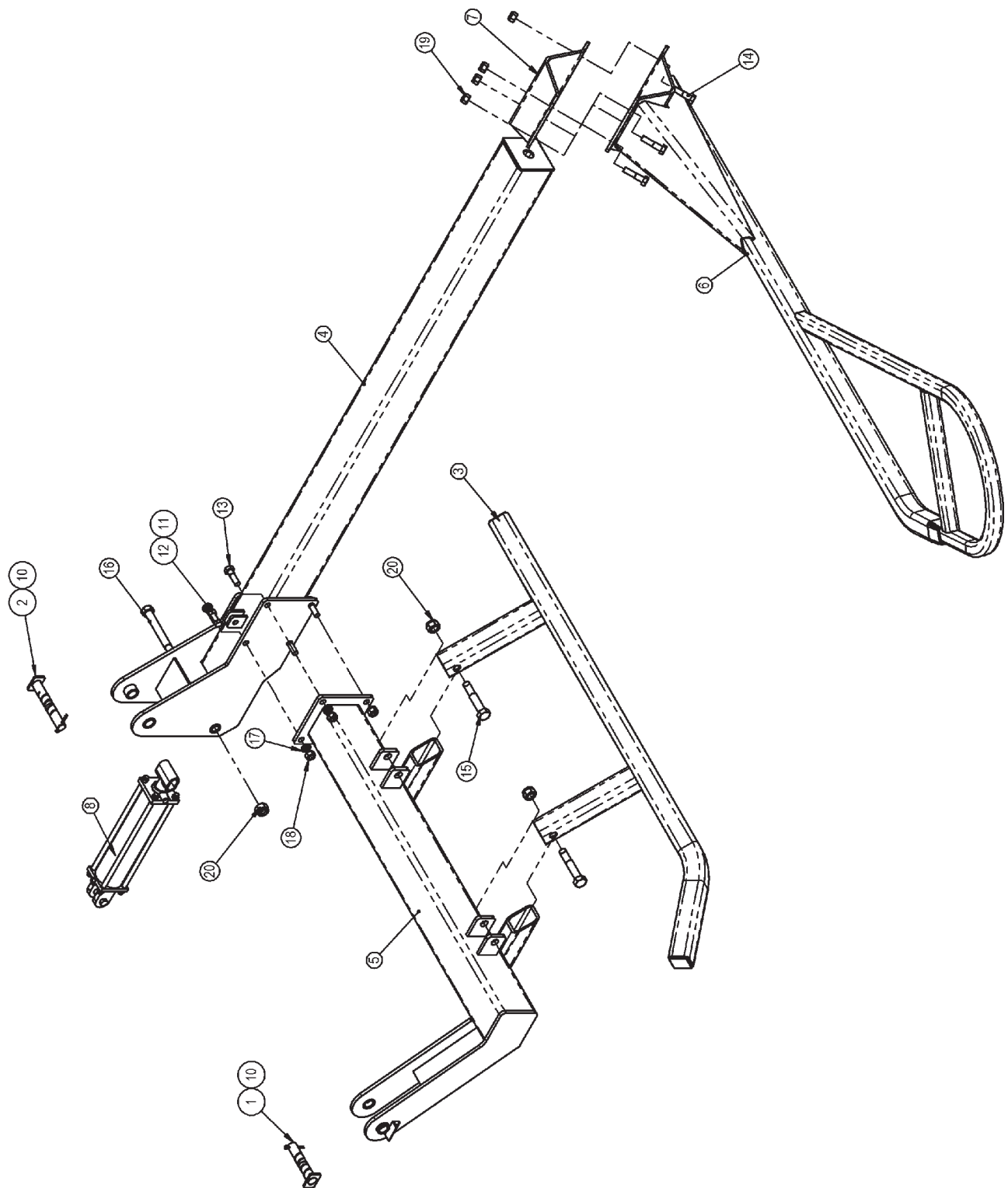


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4.10 Left Fork Lift Assembly (Part No. 42110)

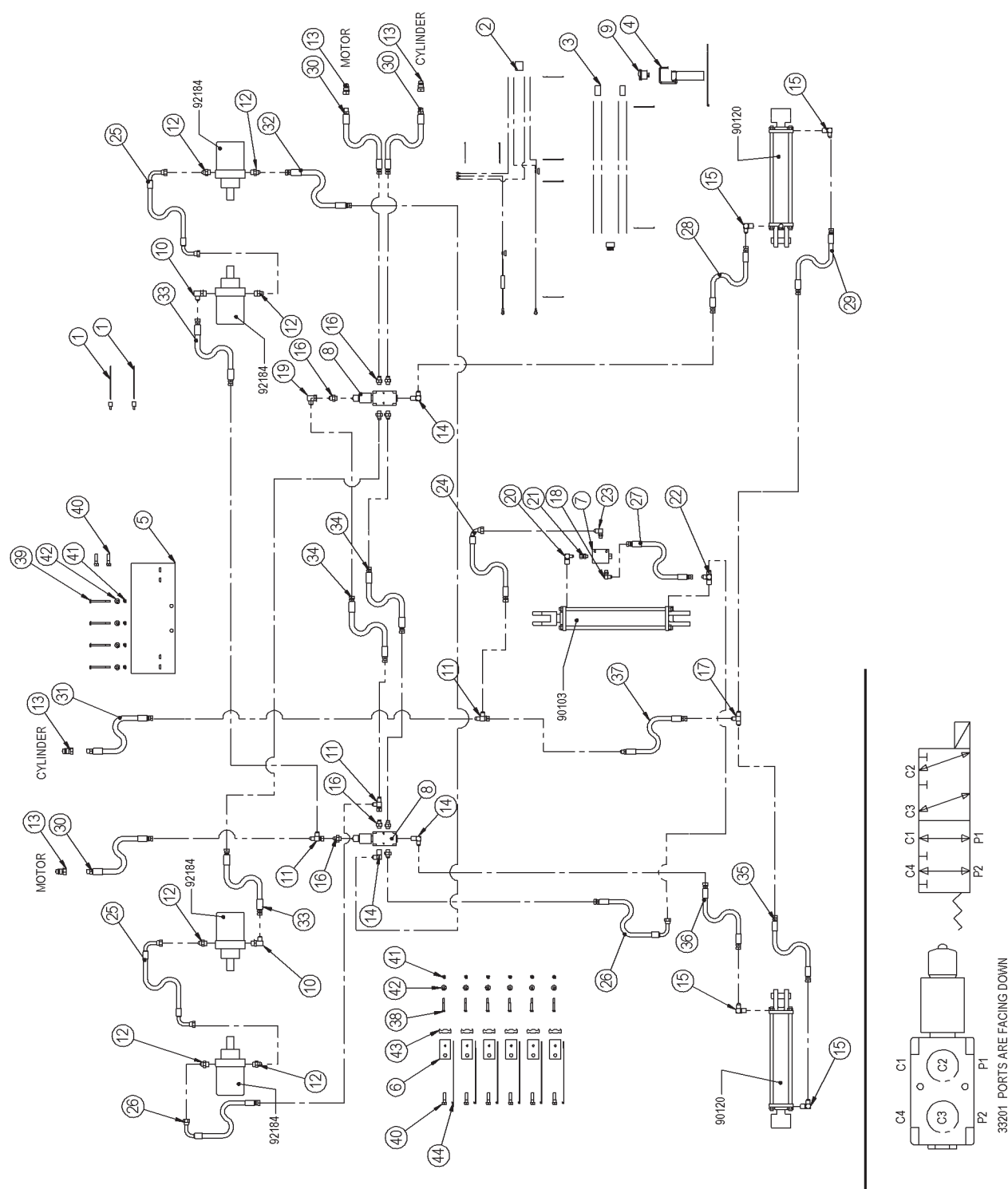
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40010	PIN,ARM,SIDE,PIVOT	1
2	42103	WLDT,PIN,FORK,PIVOT	1
3	42109	WLDT,FORK,INNER	1
4	42111	WLDT,ARM,INNER,FF,LT	1
5	42113	WLDT,FORK,INNER,FF,LT	1
6	49812	WLDT,FORK,OUTER,LT	1
7	E7731	PLT,S,TUBE,CLAMP	1
8	90120	HYD,CYL,3.5X13,1.5NITRO,8FP	1
9	33316(1.5)	OIL,HYDRAULIC,UTF	1
10	31182	PIN,COTTER,1/4X2-1/2	2
11	31336	BOLT,HEX,5/8X3,UNC,GR5,ZP	1
12	31178	NUT,NYLOCK,5/8,UNC,ZP	1
13	31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	4
14	31041	BOLT,HEX,3/4X3,UNC,GR5,ZP	4
15	31473	BOLT,HEX,1X5-1/2,UNC,GR5,ZP	2
16	33517	BOLT,HEX,1X9,UNC,GR8,ZP	1
17	31246	WASHER,LOCK,3/4,ZP	4
18	33234	NUT,STOVER,3/4,UNC,GR5,ZP	4
19	31175	NUT,NYLOCK,3/4,UNC,ZP	4
20	31172	NUT,NYLOCK,1,UNC,ZP	3

ITEM #9 NOT SHOWN



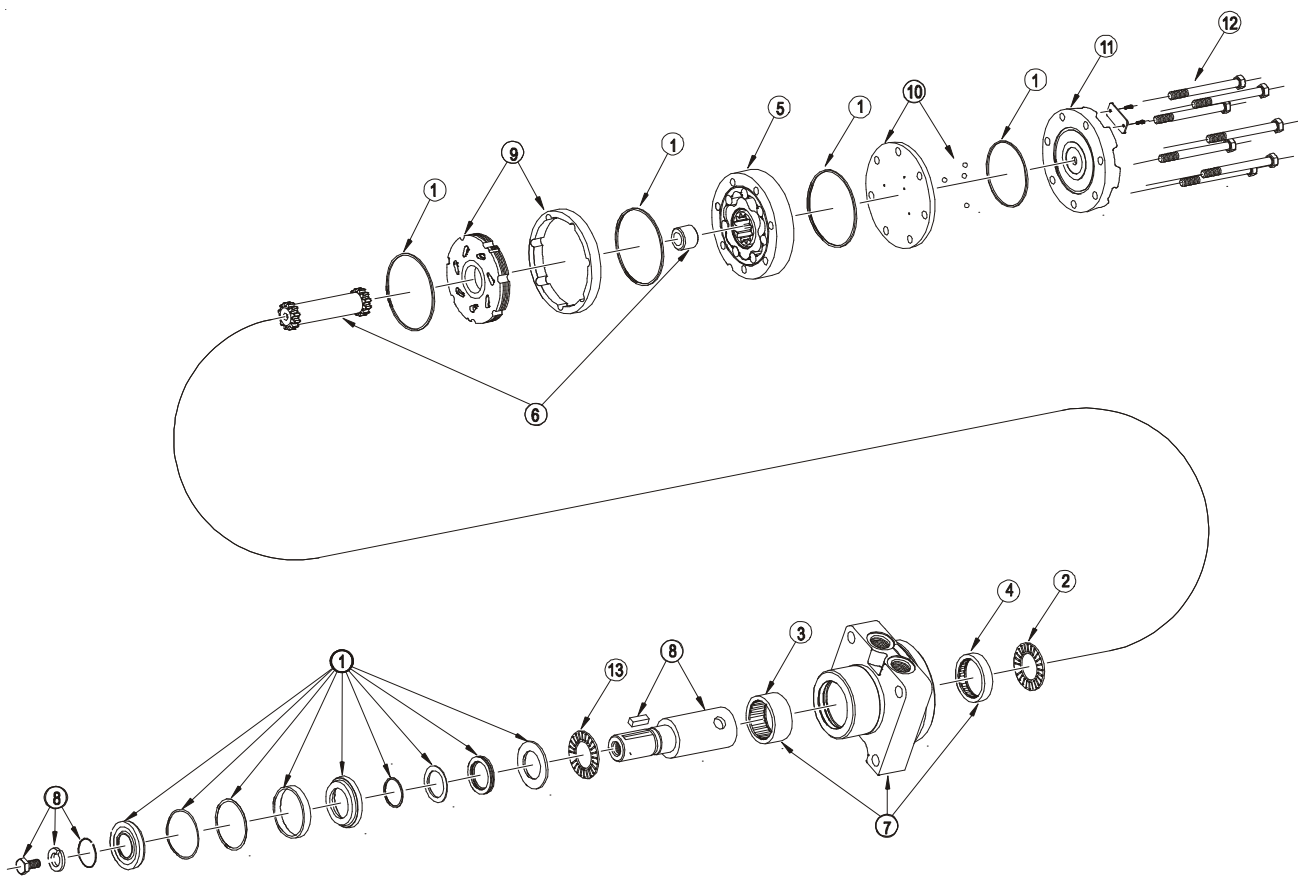
4.11 Hydraulic Cylinder Schematic (Part No. 42152)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	42153	ASSY,ELEC_ADAPTER,VALVE	2
2	49841	ELEC,HARNESS,SWITCH	1
3	49842	ELEC,HARNESS,10FT	1
4	49844	ASSY,GRIP,CONTROL	1
5	E4295	PLT,S,MOUNT,VALVE	1
6	E4296	PLT,S,MOUNT,HOSE	6
7	30653	HYD,CHECK,PILOT,3X6MB	1
8	33201	HYD,VALVE,ELEC_DOUBLE_SELECTOR	2
9	33546	ELEC,SWITCH,ROCKER,OFO,12V,20A	1
10	30145	HYD,FIT,ELBOW,10MB-8MJ90	2
11	30150	HYD,FIT,TEE,8FJX-8MJ-8MJ	3
12	30204	HYD,FIT,ADAPTER,10MB-8MJ	6
13	30209	HYD,FIT,PIONEER,MALE,8FP	4
14	30211	HYD,FIT,ELBOW,8MB-8MJ90	3
15	30212	HYD,FIT,ELBOW,8MP-8MJ90	4
16	30215	HYD,FIT,ADAPTER,8MB-8MJ	9
17	30313	HYD,FIT,TEE,8MJ-8MJ-8MJ	1
18	30390	HYD,FIT,ELBOW,6MB-6MJ90	1
19	30436	HYD,FIT,ELBOW,8FJX-8MJ90	1
20	30580	HYD,FIT,ELBOW,8MP-6MJ90	1
21	30581	HYD,FIT,ADAPTER,6FJX-6MB	1
22	32035	HYD,FIT,TEE,8MP-8MJ-8MJ	1
23	32079	HYD,FIT,ELBOW,6MB-8MJ90	1
24	30146	HYD,HOSE1/2X33,8FJX-8FJ90T,1W	1
25	30147	HYD,HOSE,1/2X52,8FJ90TL,1W	2
26	30148	HYD,HOSE1/2X72,8FJX-8FJ90L,1W	2
27	30582	HYD,HOSE,3/8X14.5,8FJX-6FJX,1W	1
28	31792	HYD,HOSE,3/8X139,8FJX-8FJX,2W	1
29	33173	HYD,HOSE,3/8X78,8FJX-8FJX,2W	1
30	33788	HYD,HOSE,1/2X132,8MP-8FJX,2W	3
31	33789	HYD,HOSE,1/2X138,8MP-8FJX,2W	1
32	33790	HYD,HOSE,1/2X96,8FJX-8FJX,2W	1
33	33791	HYD,HOSE,1/2X48,8FJX-8FJX,2W	2
34	33792	HYD,HOSE,1/2X12,8FJX-8FJX,2W	2
35	33794	HYD,HOSE,3/8X72,8FJX-8FJX,2W	1
36	37693	HYD,HOSE,3/8X144,8FJX-8FJX,2W	1
37	90243	HYD,HOSE,3/8X44,8FJX-8MJ,1W	1
38	31049	BOLT,HEX,5/16X2-1/4,UNC,GR5,ZP	6
39	33524	BOLT,HEX,5/16X3-1/2,UNC,GR5,ZP	4
40	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	8
41	31177	NUT,NYLOCK,5/16,UNC,ZP	10
42	31239	WASHER,FLAT,5/16,ZP	10
43	30210	HYD,CLAMP,HOSE,1/2	6
44	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	6



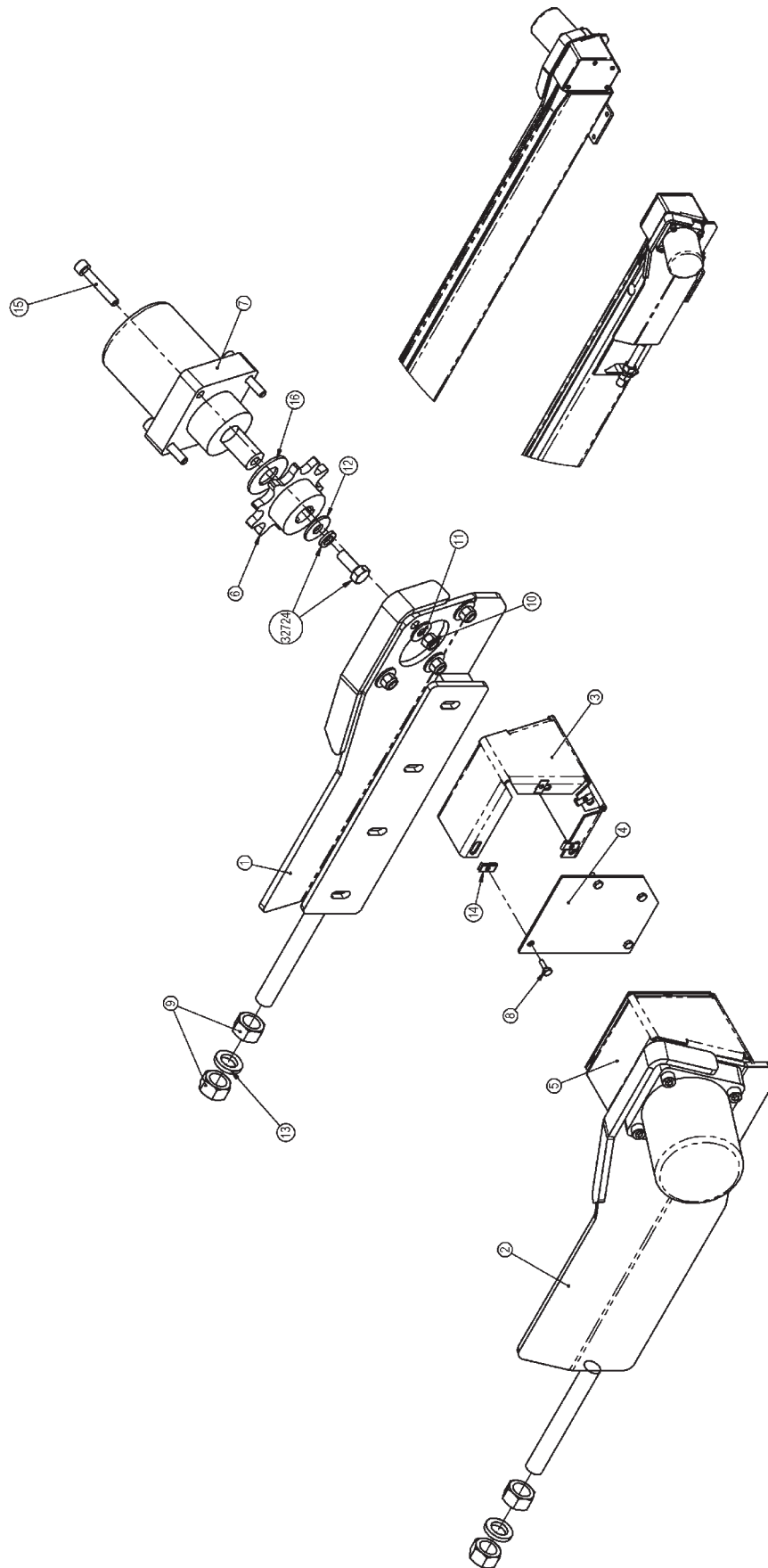
4.12 45 Cubic Inch Hydraulic Motor (Part No. 92184)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	32647	HYD,MOTOR,SEALKIT,ROLLER,STATOR	1
2	32651	BEARING,THRUST,REAR	1
3	32720	BRG,HOUSING,FRONT	1
4	32649	BEARING,HOUSING,REAR,1/2"	1
5	32721	KIT,ROTOR,FOR RE4507040	1
6	32722	KIT,LINK,DRIVE,FOR RE4507040	1
7	32723	KIT,HOUSING,FOR RE4507040	1
8	32724	KIT,SHAFT,FOR RE4507040	1
9	32725	KIT,MANIFOLD,FOR RE4507040	1
10	32726	PLATE,BALANCE,FOR RE4507040	1
11	32727	COVER,END,FOR RE4507040	1
12	32728	KIT,BOLT,FOR RE4507040	1
13	32639	BEARING,THRUST,FRONT	1



4.13 Motor Assembly (Part No. 42073)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	40115	TIGHTENER,MOTOR,LEFT	1
2	40116	TIGHTENER,MOTOR,RIGHT	1
3	E4802	HOUSING,GUARD,RIGHT	1
4	E4803	PLT,S,FACE,GUARD	2
5	E4810	HOUSING,GUARD,LEFT	1
6	92063	DRV,SPROCKET,2062,10TOOTH,1-1/4	2
7	92184	HYD,MOTOR,45,2000PSI	2
8	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	8
9	31159	NUT,ACME,1,5TPI,RH	4
10	31173	NUT,NYLOCK,1/2,UNC,ZP	8
11	31236	WASHER,FLAT,1/2,ZP	8
12	31240	WASHER,FLAT,5/8,ZP	2
13	31243	WASHER,LOCK,1,ZP	2
14	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	8
15	31797	BOLT,SOCKET,1/2X2-3/4,UNC,GR5	8
16	32071	WASHER,FLAT,1-1/4	2



5.0 Options

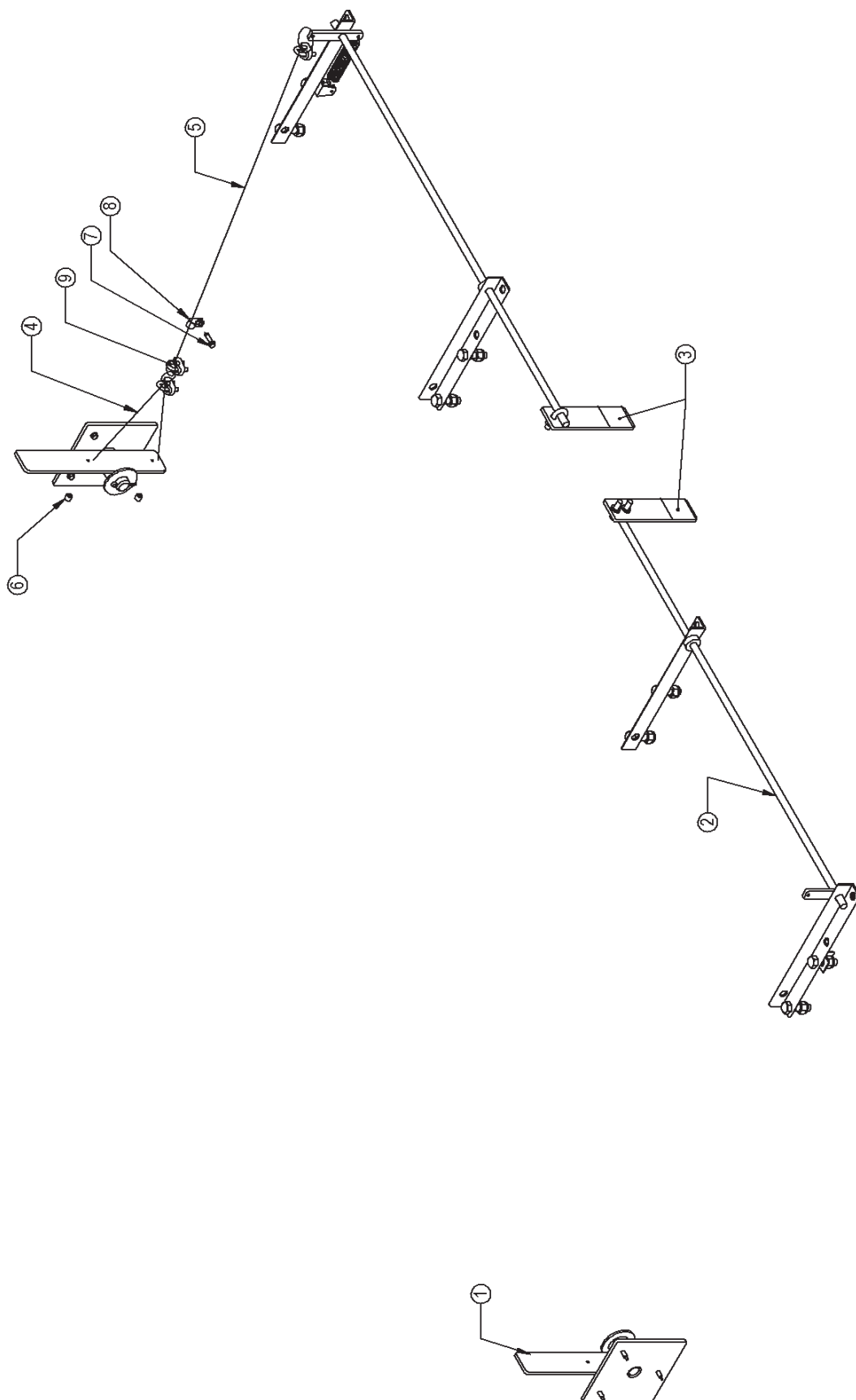
5.1 Indicator Option (Part No. BMO14BI-6 (89033))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49453	ASSY, INDICATOR, REAR	2
2	49455	ASSY, INDICATOR, FRONT	2
3	E6328	REFLECTIVE, TAPE, SELECTOR	2
4	33207(4.5)	ROPE, WIRE, 5/32", STRAND	2
5	33207(35)	ROPE, WIRE, 5/32", STRAND	2
6	33208	SLEEVE, STOP, CABLE, 5/32"	4
7	30294	SCREW, TEK, 1/4X1	18
8	31649	ELEC, CLAMP, CABLE, 1/2	18
9	92014	CLAMP, CABLE, 1/4	6
10	30295(.9)	PAINT, ORANGE, HIGHLINE	1
11	30296(.05)	PAINT, CATALYST, SPO3937P2	1

WIRE ROPE DIMENSIONS IN() ARE IN FEET

A. USE ASSEMBLY INSTRUCTION FROM 49453 AND 49455 TO INSTALL THE FRONT AND REAR INDICATORS

1. MOUNT 31649 TWO FEET FROM THE FRONT AND REAR INDICATOR PIVOT POINTS ON THE INSIDE OF THE RAIL WHICH IS NEXT TO THE FORK AND NEXT TO THE RAIL MOUNTING PLATES.
2. SPACE REMAINING 31649'S AT APPROXIMATELY 4 FOOT INTERVALS. USE 30294 SCREWS TO ATTACH EACH 31649.
3. RUN LONG CABLE THROUGH 31649'S AND MAKE A 1" LOOP WITH 1/4" CLAMP(92014) THROUGH THE HOLE IN THE ROD ASSY AT THE FRONT OF THE MACHINE.
4. RUN SHORT CABLE THROUGH HOLES IN PADDLE PLATE AND ATTACH CABLE STOPS(33208). MAKE 1" LOOP AT THE CENTER OF THE CABLE WITH 1/4" CLAMP.
5. REMOVE AS MUCH SLACK AS POSSIBLE IN LONG CABLE AND MAKE 1" LOOP WITH 1/4" CLAMP THROUGH THE LOOP IN THE SHORT CABLE. SPRING SHOULD BE SLIGHTLY PRETENSIONED.
6. ENSURE THE INDICATOR AT THE REAR OF THE MACHINE IS VERTICAL ONCE ALL CABLES CLAMPS HAVE BEEN TIGHTENED.
7. TRIM EXCESS CABLE.
8. ATTACH E6328 TO EACH INDICATOR FLAG AT THE FRONT OF THE MACHINE.



5.1.1 Rear Indicator Assembly (Part No. 49453)

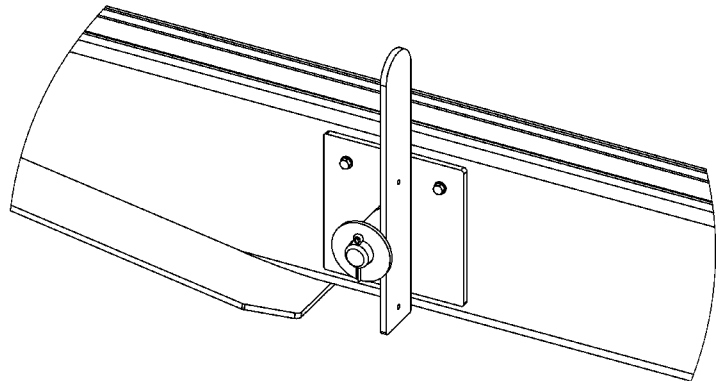
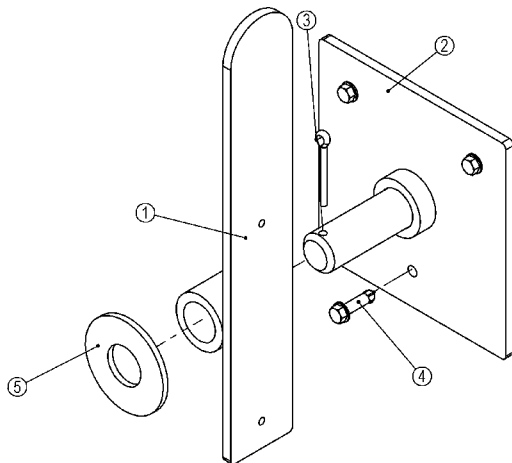
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49454	WLDT,PADDLE,INDICATOR	1
2	49457	WLDT,BRACKET,REAR	1
3	30238	PIN,COTTER,3/16X1-1/2	1
4	30294	SCREW,TEK,1/4X1	3
5	31235	WASHER,FLAT,1,ZP	1

MOUNT 49457 ON INSIDE OF THE RAIL NEXT TO THE FORK.

THE BACK OF EDGE OF THE PLATE SHOULD BE DIRECTLY
ABOVE LEADING EDGE OF SKIDPAD.

THE BOTTOM EDGE OF THE PLATE SHOULD BE 1" FROM BOTTOM OF RAIL.

ATTACH WITH SCREWS PROVIDED



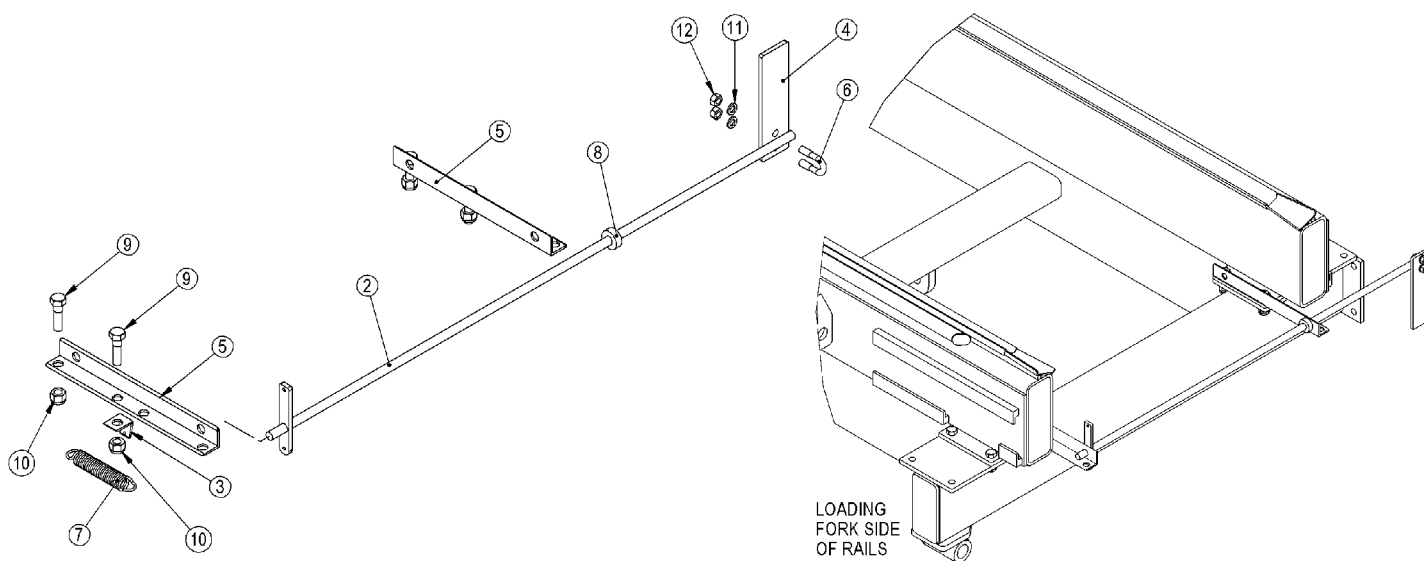
MOUNT DETAIL
SCALE 1:5

5.1.2 Front Indicator Assembly (Part No. 49455)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49456	WLDT, ROD, INDICATOR	1
2	E6423	ANGLE, MOUNT, SPRING	1
3	E6425	PLT, FLAG, INDICATOR	1
4	E6858	ANGLE, MOUNT, ROD	2
5	30456	CLAMP, CABLE, 3/8"	1
6	31667	SPRING, .120 HD, OD .859, 4.75"	1
7	33206	COLLAR, SHAFT, 1/2, 2_PIECE	1
8	31017	BOLT, HEX, 1/2X1-3/4, UNC, GR5, ZP	4
9	31173	NUT, NYLOCK, 1/2, UNC, ZP	4
10	31319	WASHER, LOCK, 3/8, ZP	2

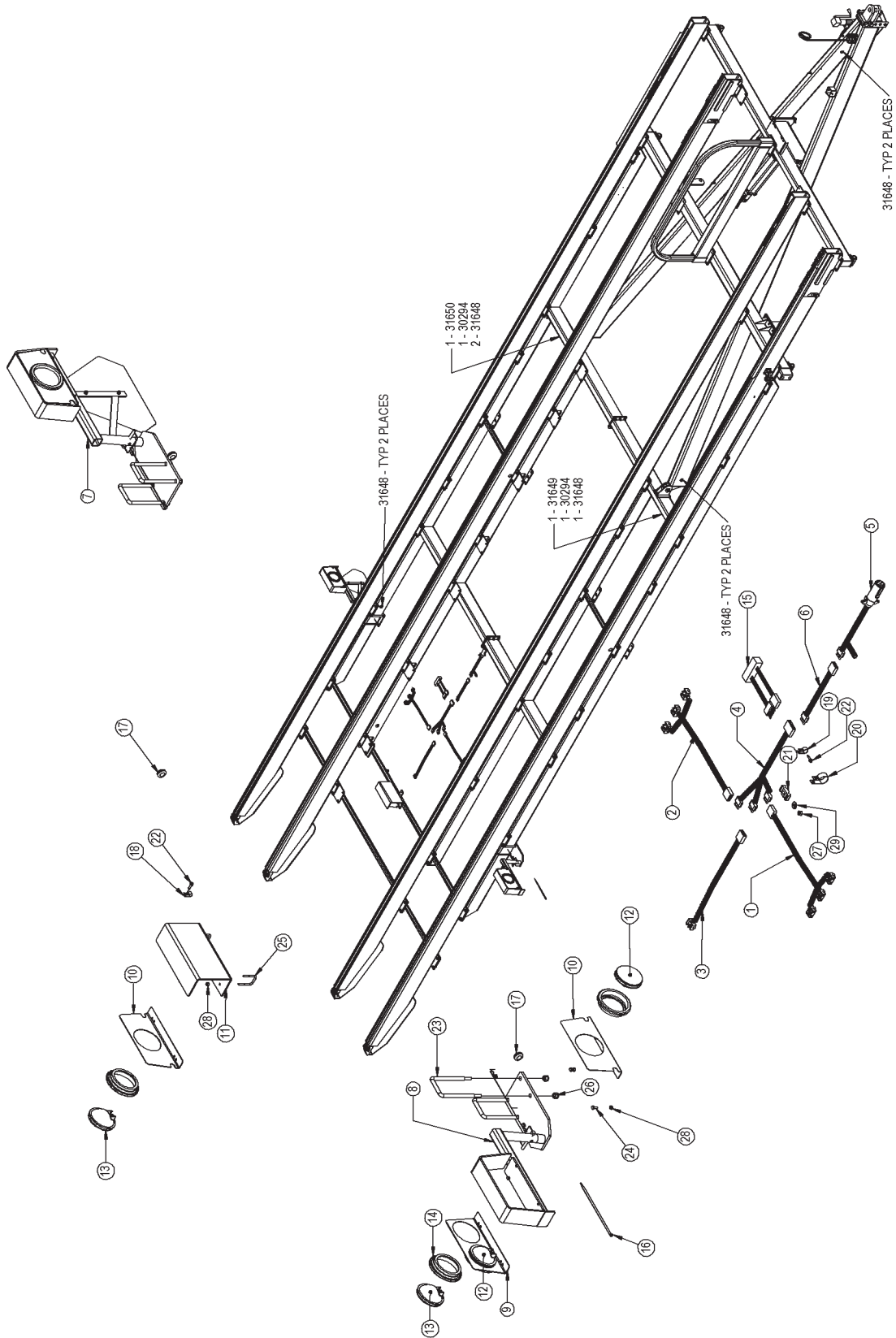
* USE ONLY U-BOLT AND NUTS

1. MOUNT ANGLES (E6423) ON TOP OF RAIL MOUNT PLATES AND TO THE INSIDE OF THE RAILS.
2. REPLACE EXISTING MOUNT BOLTS WITH 1/2" BOLTS PROVIDED (31017)
3. SLIDE PUSH ROD (49456) THROUGH THE ANGLES (E6858) AS SHOWN WITH INDICATOR FLAG OPPOSITE LOADING FORK.
4. ADJUST COLLAR (33206) TO 1/4" TO 1/8" CLEARANCE FROM OPPOSITE ANGLE (E6417).
5. ATTACH E6425 AND POSITION SO THAT FLAG IS FACING OPERATOR.
6. ATTACH SPRING BETWEEN E6423 AND 49456.



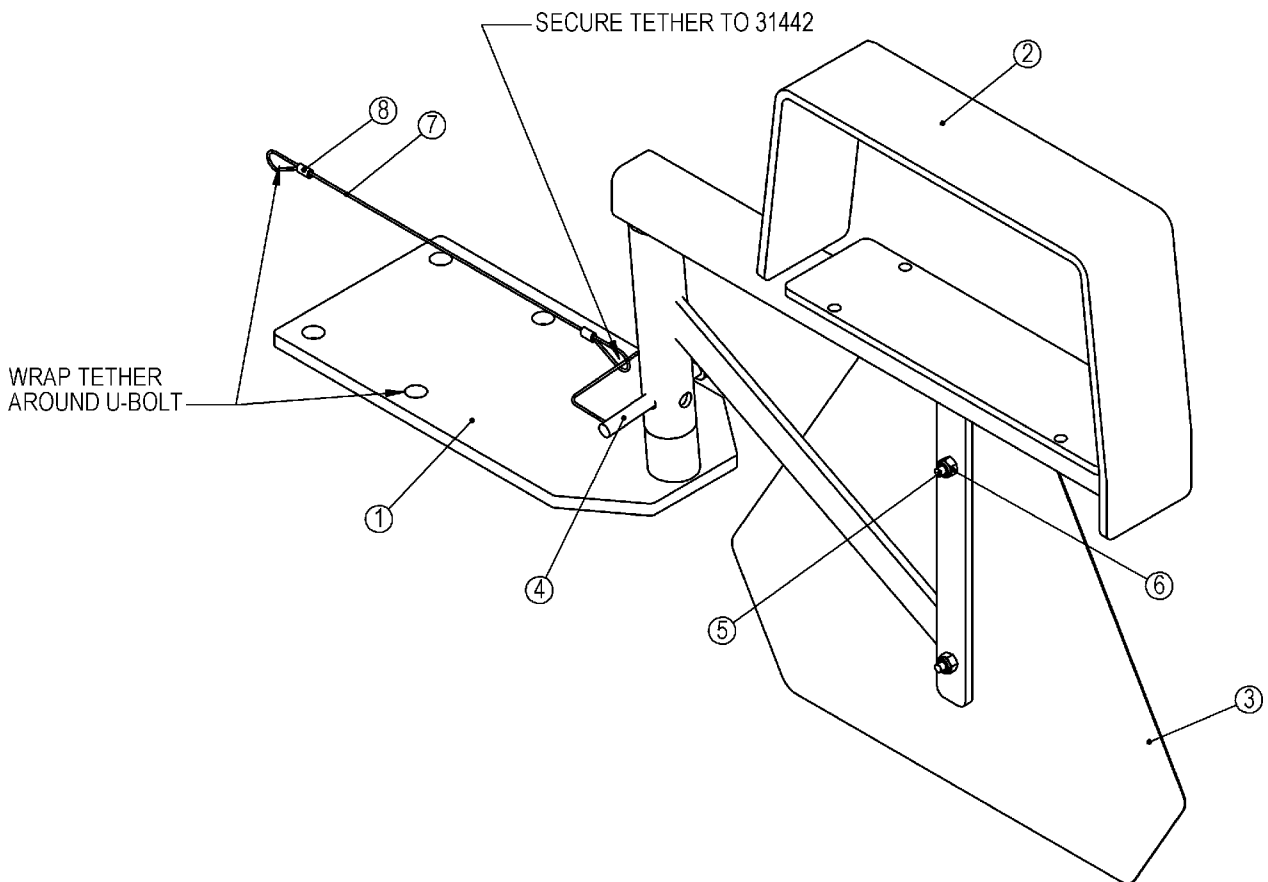
5.2 Clearance Light Option (Part No. BMO14CL-6 (45297))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	42160	ASSY,HARN,LIGHT,BM14,RT,RR	1
2	42161	ASSY,HARN,LIGHT,BM14,LT,RR	1
3	42162	ASSY,HARN,LIGHT,BM14,MID,RR	1
4	42163	ASSY,HARN,LIGHT,BM14,SPLITTER	1
5	49889	ASSY,HARNESS,ELEC,FRT,VMR,HL	1
6	34005	ASSY,HARN,LIGHT,BM14,EXT	1
7	45282	ASSY,MOUNT,LIGHT,BM,LT	1
8	45283	ASSY,MOUNT,LIGHT,BM,RT	1
9	E7743	MOUNT,LIGHT,GROMMET,X2	2
10	E7744	MOUNT,LIGHT,GROMMET,X1	3
11	E7746	GUARD,LIGHT,CENTER,BM14	1
12	31951	ELEC_LIGHT,AMBER,4DIA,S/T/T	4
13	31952	ELEC_LIGHT,RED,4DIA,S/T/T	3
14	31953	GROMMET,LIGHT,4X4-1/2	7
15	33929	ELEC,MODULE,AG,HL PUR	1
16	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	10
17	31648	GROM,RUBBER,1-3/8,3/4,1-1/16	10
18	31649	ELEC,CLAMP,CABLE,1/2	2
19	31650	ELEC,CLAMP,CABLE,3/4	13
20	34006	ELEC,CLAMP,CABLE,1-1/2	1
21	30210	HYD,CLAMP,HOSE,1/2	2
22	30294	SCREW,TEK,1/4X1	16
23	31061	BOLT,U,SQ,1/2-13,3X7,1-1/4THREAD	4
24	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	8
25	31663	BOLT,U,SQ,1/4-20,1-1/2x2-1/4,1	2
26	31173	NUT,NYLOCK,1/2,UNC,ZP	8
27	31176	NUT,NYLOCK,3/8,UNC,ZP	2
28	31174	NUT,NYLOCK,1/4,UNC,ZP	12
29	31351	WASHER,FLAT,3/8,ZP	2



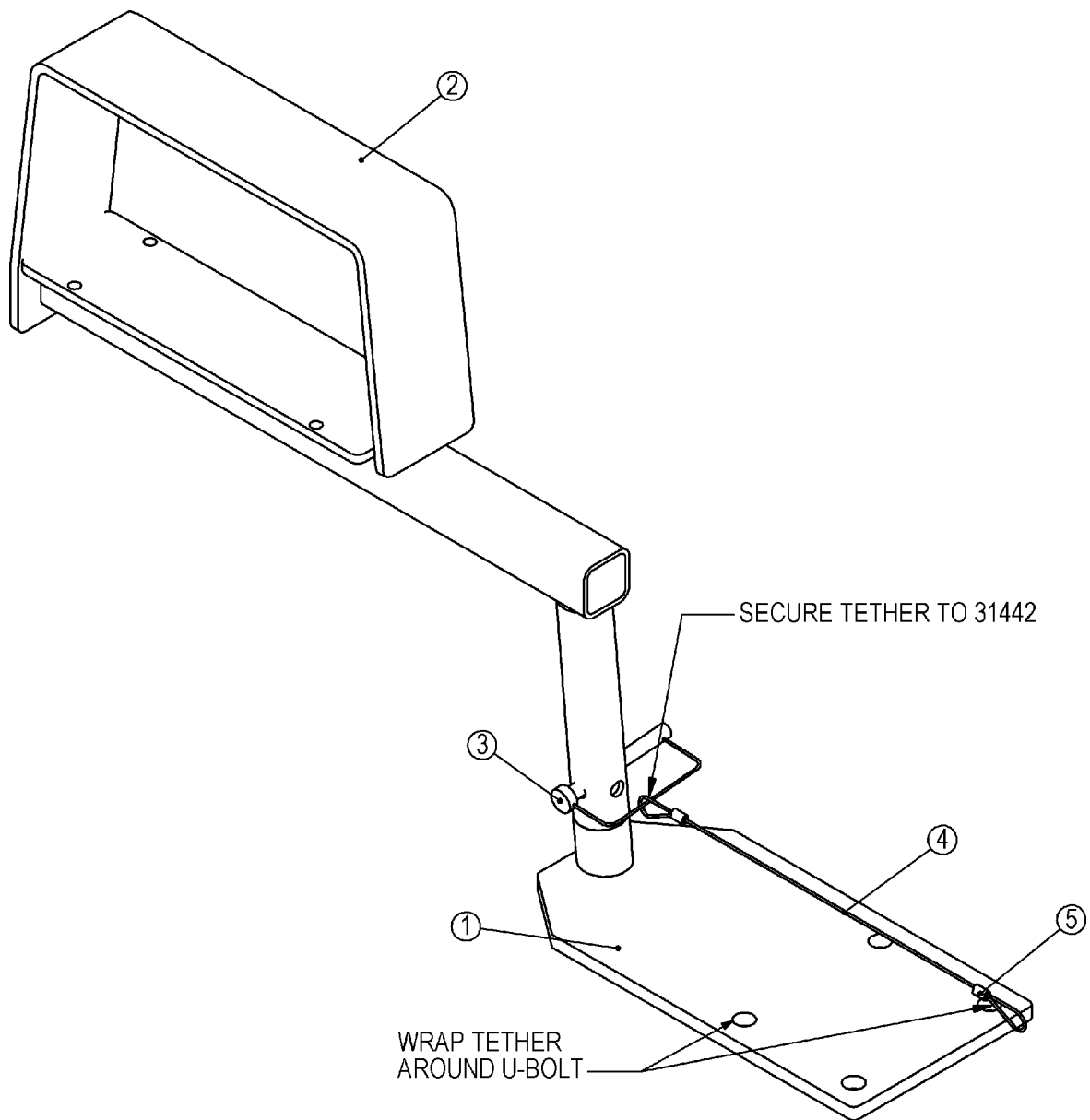
5.2.1 Left Light Mount Assembly (Part No. 45282)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	45278	MOUNT, LIGHT, BM, LEFT	1
2	45280	MOUNT, BRKT, LIGHT, BM, LT	1
3	92028	SIGN, SLOWMOVING, S276.5	1
4	31442	PIN, HITCH, 3/8X3	1
5	31033	BOLT, HEX, 1/4X3/4, UNC, GR5, ZP	2
6	31174	NUT, NYLOCK, 1/4, UNC, ZP	2
7	E5351	TETHER, 16"	1
8	30559	CLAMP, ROPE, WIRE, 1/16	2



5.2.2 Right Light Mount Assembly (Part No. 45283)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	45279	MOUNT, LIGHT, BM, RIGHT	1
2	45281	MOUNT, BRKT, LIGHT, BM, RT	1
3	31442	PIN, HITCH, 3/8X3	1
4	E5351	TETHER, 16"	1
5	30559	CLAMP, ROPE, WIRE, 1/16	2



6.0 Parts Index

PART#	DESCRIPTION	PAGE			
			30263	HYD,CYL,SEALKIT,3-1/2,639578	38
30100	SUSP,TIRE,11LX15FI,12PLY	35	30269	BOLT,U,SQ,5/8-11,6x4-1/2,1-1/2	27
30102	SUSP,HUB,COMPLETE,EM5500	24	30288	RIVET,ST,1/8X.390,.250HEAD	18
30102	SUSP,HUB,COMPLETE,EM5500	26	30294	SCREW,TEK,1/4X1	47
30104	RIM,15X8,-1.5,8,OFFWHITE	35	30294	SCREW,TEK,1/4X1	49
30145	HYD, FIT, ELBOW, 10MB-8MJ90	42	30294	SCREW,TEK,1/4X1	51
30146	HYD,HOSE1/2X33,8FJX-8FJ90T,1W	42	30313	HYD,FIT,TEE,8MJ-8MJ-8MJ	42
30147	HYD,HOSE,1/2X52,8FJ90TL,1W	42	30390	HYD,FIT,ELBOW,6MB-6MJ90	42
30148	HYD,HOSE1/2X72,8FJX-8FJ90L,1W	42	30436	HYD, FIT, ELBOW,8FJX-8MJ90	42
30150	HYD,FIT,TEE,8FJX-8MJ-8MJ	42	30456	CLAMP,CABLE,3/8"	50
30197	PIN,SPRING,3/16X1-1/2	28	30559	CLAMP,SLEEVE,SWAGE,OVAL,3/32	53
30204	HYD,FIT,ADAPTER,10MB-8MJ	42	30559	CLAMP,SLEEVE,SWAGE,OVAL,3/32	54
30206	HYD,HOLDER,HOSE,1/2	20	30577	DECAL,RED REFL,2X9	18
30207	ZERK,1/4-28,GF641,STRAIGHT	26	30578	DECAL,AMBER REFL,2X9	18
30208	PLT,SERIAL#	18	30580	HYD,FIT,ELBOW,8MP-6MJ90	42
30209	HYD,FIT,PIONEER,MALE,8FP	42	30581	HYD,FIT,ADAPTER,6FJX-6MB	42
30210	HYD,CLAMP,HOSE, 1/2	42	30582	HYD,HOSE,3/8X14.5,8FJX-6FJX,1W	42
30210	HYD,CLAMP,HOSE, 1/2	51	30651	ROLLER,CHAIN,3ODX1-1/4ID	28
30211	HYD,FIT,ELBOW,8MB-8MJ90	42	30653	HYD,CHECK,PILOT,3X6MB	42
30212	HYD,FIT,ELBOW,8MP-8MJ90	42	30663	NUT,HEX,5/8,UNC,GR5,ZP	38
30215	HYD,FIT,ADAPTER,8MB-8MJ	42	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	24
30220	SUSP,CAP,DUST	26	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	27
30221	PIN,COTTER,3/16X1-3/4	26	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	28
30222	NUT,SLOTTED,1,UNF	26	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	30
30223	WASHER,FLAT,1IDX2OD,2385	26	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	32
30226	DRV,BRG,RACE,INNER,1.781	26	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	42
30228	DRV,BRG,SEAL,1.98	26	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	50
30229	SUSP,HUB,EM5500,8BOLT	26	31023	BOLT,HEX,1/2X3-1/2,UNC,GR5,ZP	24
30237	Nut,Lock,Hex,1, UNF,GR5,ZP	22	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	45
30237	NUT,LOCK,HEX,1,UNF,GR5,ZP	38	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	51
30238	PIN,COTTER,3/16X1-1/2	49	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	53
30239	Setscrew, Socket, 3/8 x 1/2 Knur	22	31038	BOLT,HEX,1X7-1/2,UNC,GR5,ZP	20
30240	Hyd, Fit, Plug, 1/2-14 NPTF, Dry	22	31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	36
30240	HYD,FIT,PLUG,1/2-14,NPTF,DRYSEAL	38	31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	40
30242	HYD,CYL,ROD,1-1/2X17,NITRO	38	31041	BOLT,HEX,3/4X3,UNC,GR5,ZP	36
30245	HYD,CYL,3-1/2X13,H6203	38	31041	BOLT,HEX,3/4X3,UNC,GR5,ZP	40
30246	Hyd, Cyl, 3-1/2 x 16, H6206	22	31049	BOLT,HEX,5/16X2-1/4,UNC,GR5,ZP	42
30249	Hyd, Cyl, Tie rod, 5/8 x 16, H6678	22	31052	BOLT,HEX,5/8X2,UNC,GR5,ZP	30
30251	Hyd, Cyl, Piston, 3-1/2, H6688	22	31053	BOLT,HEX,5/8X1-3/4,UNC,GR5,ZP	20
30251	HYD,CYL,PISTON,3-1/2,H6688	38	31061	BOLT,U,SQ,1/2-13,3X7,1-1/4THREAD	51
30252	Hyd, Cyl, Rod, 1-1/2 x 16	22	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	32
30253	Hyd, Cyl, Clevis, 1-1/4, 1 Pin	22	31159	NUT,ACME,1,5TPI,RH	45
30255	HYD,CYL,TIEROD,5/8X13,SPECIAL	38	31172	NUT,NYLOCK,1,UNC,ZP	20
30258	Hyd, Cyl, Clevis, Cap, 3-1/2, NPTF	22	31172	NUT,NYLOCK,1,UNC,ZP	36
30258	HYD,CYL,CLEVIS,CAP,3-1/2,NPTF	38	31172	NUT,NYLOCK,1,UNC,ZP	40
30259	Hyd, Cyl, Cap, Rod, 3-1/2 x 1-1/2	22	31173	NUT,NYLOCK,1/2,UNC,ZP	20
30259	HYD,CYL,CAP,ROD,3-1/2X1-1/2,8FP	38	31173	NUT,NYLOCK,1/2,UNC,ZP	24
30261	Lock, Thread, Nylock	22	31173	NUT,NYLOCK,1/2,UNC,ZP	28
30263	Hyd, Cyl, Seal kit, 3-1/2	22	31173	NUT,NYLOCK,1/2,UNC,ZP	30

PART#	DESCRIPTION	PAGE			
31173	NUT,NYLOCK,1/2,UNC,ZP	32	31792	HYD,HOSE,3/8X139,8FJX-8FJX,2W	42
31173	NUT,NYLOCK,1/2,UNC,ZP	45	31797	BOLT,SOCKET,1/2X2-3/4,UNC,GR5	45
31173	NUT,NYLOCK,1/2,UNC,ZP	50	31933	JACK,7000LBX15,SQ MNT,SIDEWIND	20
31173	NUT,NYLOCK,1/2,UNC,ZP	51	31933	JACK,7000LBX15,SQ MNT,SIDEWIND	23
31174	NUT,NYLOCK,1/4,UNC,ZP	51	31951	ELEC_LIGHT,AMBER,4DIA,S/T/T	51
31174	NUT,NYLOCK,1/4,UNC,ZP	53	31952	ELEC_LIGHT,RED,4DIA,S/T/T	51
31175	NUT,NYLOCK,3/4,UNC,ZP	36	31953	GROMMET,LIGHT,4X4-1/2	51
31175	NUT,NYLOCK,3/4,UNC,ZP	40	32035	HYD,FIT,TEE,8MP-8MJ-8MJ	42
31176	NUT,NYLOCK,3/8,UNC,ZP	51	32071	WASHER,FLAT,1-1/4	45
31177	NUT,NYLOCK,5/16,UNC,ZP	42	32079	HYD,FIT,ELBOW,6MB-8MJ90	42
31178	NUT,HEX,5/8,UNC,ZP	22	32250	Hyd, Cyl, Pin, 1	22
31178	NUT,NYLOCK,5/8,UNC,ZP	20	32250	HYD,CYL,PIN,1	38
31178	NUT,NYLOCK,5/8,UNC,ZP	27	32301	SUSP,BOLT,WHEEL,9/16x1-1/4Tx1-13/16L	26
31178	NUT,NYLOCK,5/8,UNC,ZP	30	32639	BEARING,THRUST,FRONT	44
31178	NUT,NYLOCK,5/8,UNC,ZP	34	32647	HYD,MOTOR,SEALKIT,ROLLER,STATOR	44
31178	NUT,NYLOCK,5/8,UNC,ZP	36	32649	BEARING,HOUSING,REAR,1/2"	44
31178	NUT,NYLOCK,5/8,UNC,ZP	40	32651	BEARING,THRUST,REAR	44
31182	PIN,COTTER,1/4X2-1/2	20	32720	BRG,HOUSING,FRONT	44
31182	PIN,COTTER,1/4X2-1/2	36	32721	KIT,ROTOR,FOR RE4507040	44
31182	PIN,COTTER,1/4X2-1/2	40	32722	KIT,LINK,DRIVE,FOR RE4507040	44
31235	WASHER,FLAT,1,ZP	49	32723	KIT,HOUSING,FOR RE4507040	44
31236	WASHER,FLAT,1/2,ZP	20	32724	KIT,SHAFT,FOR RE4507040	44
31236	WASHER,FLAT,1/2,ZP	45	32725	KIT,MANIFOLD,FOR RE4507040	44
31239	WASHER,FLAT,5/16,ZP	42	32726	PLATE,BALANCE,FOR RE4507040	44
31240	WASHER,FLAT,5/8,ZP	45	32727	COVER,END,FOR RE4507040	44
31243	WASHER,LOCK,1,ZP	45	32728	KIT,BOLT,FOR RE4507040	44
31246	WASHER,LOCK,3/4,ZP	36	32981	DECAL,PIMA	18
31246	WASHER,LOCK,3/4,ZP	40	33014	SUSP,TUBE,11L-15	35
31289	Pin, Cotter, 3/16 x 1-1/2	22	33173	HYD,HOSE,3/8X78,8FJX-8FJX,2W	42
31289	PIN,COTTER,3/16X1-1/2	38	33201	HYD,VALVE,ELEC_DOUBLE_SELECTOR	42
31319	WASHER,LOCK,3/8,ZP	50	33206	COLLAR,SHAFT,1/2,2_PIECE	50
31336	BOLT,HEX,5/8X3,UNC,GR5,ZP	34	33208	SLEEVE,STOP,CABLE,5/32"	47
31336	BOLT,HEX,5/8X3,UNC,GR5,ZP	36	33234	NUT,STOVER,3/4,UNC,GR5,ZP	36
31336	BOLT,HEX,5/8X3,UNC,GR5,ZP	40	33234	NUT,STOVER,3/4,UNC,GR5,ZP	40
31351	WASHER,FLAT,3/8,ZP	51	33438	KIT,PIN & CHAIN-5/8"X4.25"	23
31442	PIN,HITCH,3/8X3	53	33442	COVER, GEARBOX	23
31442	PIN,HITCH,3/8X3	54	33512	KIT,SW,7K BEARING REPLACMENT	23
31473	BOLT,HEX,1X5-1/2,UNC,GR5,ZP	36	33513	KIT, 7K SW GEAR REPLACMENT	23
31473	BOLT,HEX,1X5-1/2,UNC,GR5,ZP	40	33514	KIT, 7K SW CRANK REPLACMENT	23
31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	45	33517	BOLT,HEX,1X9,UNC,GR8,ZP	36
31613	TIE,CABLE,NYLON,BLACK,11 1/2"	42	33517	BOLT,HEX,1X9,UNC,GR8,ZP	40
31613	TIE,CABLE,NYLON,BLACK,11 1/2"	51	33524	BOLT,HEX,5/16X3-1/2,UNC,GR5,ZP	42
31648	GROM,RUBBER,1-3/8,3/4,1-1/16	51	33546	ELEC,SWITCH,ROCKER,OFO,12V,20A	42
31649	ELEC,CLAMP,CABLE,1/2	47	33788	HYD,HOSE,1/2X132,8MP-8FJX,2W	42
31649	ELEC,CLAMP,CABLE,1/2	51	33789	HYD,HOSE,1/2X138,8MP-8FJX,2W	42
31650	ELEC,CLAMP,CABLE,3/4	51	33790	HYD,HOSE,1/2X96,8FJX-8FJX,2W	42
31663	BOLT,U,SQ,1/4-20,1-1/2x2-1/4,1	51	33791	HYD,HOSE,1/2X48,8FJX-8FJX,2W	42
31667	SPRING,.120 HD,OD .859,4.75"	50	33792	HYD,HOSE,1/2X12,8FJX-8FJX,2W	42

PART#	DESCRIPTION	PAGE			
33794	HYD,HOSE,3/8X72,8FJX-8FJX,2W	42	45282	ASSY,MOUNT,LIGHT,BM,LT	51
33879	WASHER,FLAT,SAE,1/2,ZP	30	45283	ASSY,MOUNT,LIGHT,BM,RT	51
33929	ELEC,MODULE,AG,HL PUR	51	49453	ASSY,INDICATOR,REAR	47
34005	ASSY,HARN,LIGHT,BM14,EXT	51	49454	WLDT,PADDLE,INDICATOR	49
34006	ELEC,CLAMP,CABLE,1-1/2	51	49455	ASSY,INDICATOR,FRONT	47
37693	HYD,HOSE,3/8X144,8FJX-8FJX,2W	42	49456	WLDT,ROD,INDICATOR	50
40003	PIN,HITCH	20	49457	WLDT,BRACKET,REAR	49
40010	PIN,ARM,SIDE,PIVOT	36	49811	AXLE,14BM	24
40010	PIN,ARM,SIDE,PIVOT	40	49812	WLDT,FORK,OUTER,LT	40
40062	HITCH,A-FRAME,LEFT	20	49813	WLDT,FORK,OUTER,RT	36
40063	HITCH,A-FRAME,RIGHT	20	49841	ELEC,HARNESS,SWITCH	42
40088	BUMPER,BALE	27	49842	ELEC,HARNESS,10FT	42
40105	FRAME,SUB,SIGN,SMV	32	49844	ASSY,GRIP,CONTROL	42
40115	TIGHTENER,MOTOR,LEFT	45	49889	ASSY,HARNESS,ELEC,FRT,VMR,HL	51
40116	TIGHTENER,MOTOR,RIGHT	45	90103	HYD,CYL,3.5X16,1.5,8FP	20
40118	MOUNT,BUMPER,BALE	27	90120	HYD,CYL,3.5X13,1.5NITRO,8FP	36
40121	PIN,SPROCKET,REAR	28	90120	HYD,CYL,3.5X13,1.5NITRO,8FP	40
40140	BRACKET,CYLINDER	30	90243	HYD,HOSE,3/8X44,8FJX-8MJ,1W	42
40142	HITCH,TONGUE,DOUBLE	20	91048	SUSP,STEM,VALVE,TR801HP	35
40143	FRAME,MIDDLE	30	91111	DRV,BRG,TAPERED,OUTER,1.375	26
40144	RAIL,OUTSIDE,LEFT	28	91131	DRV,BRG,RACE,OUTER,1.375	26
40145	RAIL,INSIDE,LEFT	28	91133	DRV,BRG,TAPERED,INNER,1.781	26
40146	RAIL,INSIDE,RIGHT	28	91508	DRV,CHAIN,ROLLER,2062H,304	28
40147	RAIL,OUTSIDE,RIGHT	28	91608	PIN, HAIR, 1/8x2-9/16	28
40486	TUBE,DECK,CYL	30	92014	CLAMP,CABLE,1/4	47
40487	HITCH,CROSSMEMBER	20	92024	DRV,BUSHING,2232400-24	28
42061	ASSY,TETHERED LOCK PIN	28	92028	SIGN,SLOWMOVING,S276.5	53
42103	WLDT,PIN,FORK,PIVOT	36	92061	BUMPER,RUBBER	30
42103	WLDT,PIN,FORK,PIVOT	40	92063	DRV,SPROCKET,2062,10TOOTH,1-1/4	45
42109	WLDT,FORK,INNER	36	92184	HYD,MOTOR,45,2000PSI	45
42109	WLDT,FORK,INNER	40	92583	DECAL,HIGHLINE,3-1/2	18
42111	WLDT,ARM,INNER,FF,LT	40	92584	DECAL,HIGHLINE,1400	18
42113	WLDT,FORK,INNER,FF,LT	40	92586	DECAL,PINSTRIPPING,7	18
42115	WLDT,ARM,INNER,FF,RT	36	30295(.9)	PAINT,ORANGE,HIGHLINE	47
42116	WLDT,FORK,INNER,FF,RT	36	30296(.05)	PAINT,CATALYST,SPO3937P2	47
42153	ASSY,ELEC_ADAPTER,VALVE	42	33207(35)	ROPE,WIRE,5/32",STRAND	47
42160	ASSY,HARN,LIGHT,BM14,RT,RR	51	33207(4.5)	ROPE,WIRE,5/32",STRAND	47
42161	ASSY,HARN,LIGHT,BM14,LT,RR	51	33316(1.5)	OIL,HYDRAULIC,UTF	36
42162	ASSY,HARN,LIGHT,BM14,MID,RR	51	33316(1.5)	OIL,HYDRAULIC,UTF	40
42163	ASSY,HARN,LIGHT,BM14,SPLITTER	51	E4295	PLT,S,MOUNT,VALVE	42
45235	FRAME,SUB,FRONT	30	E4296	PLT,S,MOUNT,HOSE	42
45243	POCKET,END,AXLE	24	E4740	PLT,S,BRACKET,SOLENOID,HYD	30
45245	FRAME,MAIN,RIGHT	32	E4779	TUBE,DIVIDER,BALE	30
45246	FRAME,MAIN,LEFT	32	E4802	HOUSING,GUARD,RIGHT	45
45278	MOUNT,LIGHT,BM,LEFT	53	E4803	PLT,S,FACE,GUARD	45
45279	MOUNT,LIGHT,BM,RIGHT	54	E4810	HOUSING,GUARD,LEFT	45
45280	MOUNT,BRKT,LIGHT,BM,LT	53	E5351	TETHER,16"	53
45281	MOUNT,BRKT,LIGHT,BM,RT	54	E5351	TETHER,16"	54

PART#	DESCRIPTION	PAGE
E5652	LUG, EXTENSION	34
E5653	CHAIN, LINK, 1/2, GR40, 5 LINKS	34
E6328	REFLECTIVE,TAPE,SELECTOR	47
E6423	ANGLE,MOUNT,SPRING	50
E6425	PLT,FLAG,INDICATOR	50
E6858	ANGLE,MOUNT,ROD	50
E7552	DECAL,WARNING,OWNERS_MANUAL	18
E7553	DECAL,WARNING,STOP_ENGINE/SERVICE	18
E7565	SUSP,SPINDLE,EM5500,10-1/2,9/16H	24
E7567	DECAL,WARNING,CHAIN_TENSION,NT	18
E7568	DECAL,CAUTION,CHAIN ENTANGLEMENT	18
E7569	DECAL,CAUTION,TIRE PRESSURE	18
E7570	DECAL,WARNING,TOW SPEED	18
E7571	DECAL,CAUTION,JACK,7000LBS	18
E7573	DECAL,WARNING,TRANSPORT PINS	18
E7731	PLT,S,TUBE,CLAMP	36
E7731	PLT,S,TUBE,CLAMP	40
E7743	MOUNT,LIGHT,GROMMET,X2	51
E7744	MOUNT,LIGHT,GROMMET,X1	51
E7746	GUARD,LIGHT,CENTER,BM14	51

7.0 Specifications

<i>Weight</i>	<i>Approximately 9,700 lbs (4,400 kg)</i>
<i>Hitch Weight (empty)</i>	<i>1740 lbs (789 kg)</i>
<i>Total Length</i>	<i>43'5"</i>
<i>Bed Length</i>	<i>37"</i>
<i>Total Width</i>	<i>16'9"</i>
<i>Bed Width</i>	<i>11'2"</i>
<i>Total Height</i>	<i>9'2"</i>
<i>Bed Height</i>	<i>3'3"</i>
<i>Ground Clearance</i>	<i>13-1/2"</i>
<i>Maximum Capacity</i>	<i>Fourteen - 2,200 lb Bales to Max. 30,800 lb payload</i>
<i>Chain & Sprocket</i>	<i>Heavy Duty ASA 2062, 1-1/2 Pitch</i>
<i>Tires</i>	<i>Goodyear, 11L-15F1, F Ply Farm Highway Service</i>
<i>Undercarriage</i>	<i>Two – 4 wheel oscillating tandems</i>
<i>Horsepower Required</i>	<i>100 hp</i>
<i>Hydraulic Outlets</i>	<i>Two</i>
<i>Hydraulic Pressure</i>	<i>2,500 psi. (17,240 KPa)</i>

Dealer Information

Dealer: _____

Address: _____

City: _____

Province / State: _____

Postal Code / Zip Code: _____

Phone: _____



Identification Numbers

Model Number: _____

Serial Number: _____

Dealer Checklist

Bale Mover Dealer Checklist

Serial #: _____

Pre- Assembled Units	Packaged Units	✓	Check List Item
			Install SMV sign
			Orange fluorescent stripe installed (BM1400 only).
			Tail/warning lights installed (if so equipped)
			Ensure all grease points are lubricated.
			Check tire pressure adjusted as required (as specific on the tire)
			Install deck cylinder.
			Install hitches, Hitch crossmember, and Hitch tongue.
			Install Jack.
			Verify serial plate is attached
			Check tire hubs for proper bearing adjustment
			Hook up to tractor and check all functions - cylinders, motors, lights

Inspected By: _____

Date: _____