

4510 Grain Conveyor 2002 Owner's Manual

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Warranty

Highline New Agricultural Equipment Limited Warranty

Effective July 1, 2000 Two (2) Year / 24 Months

1st Year Parts and Labour – 2nd Year Parts Only

Highline Mfg. Inc (hereinafter "Highline") warrants each new Agricultural product of Highline's manufacturer to be free from defects in material and workmanship, under normal use and service for two (2) full years after initial purchase/retail sale. Highline will warrant its product for one (1) year parts and labour, if performed by a qualified Dealer and on the second year parts only. 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 two 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 MERCHANTABILITY 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

Thank you for your recent purchase of the 4510 Grain Conveyor, the fastest 10" conveyor. The Grain Conveyor is the only conveyor to combine gentle handling with auger-like speed. With proper maintenance, the Grain Conveyor will provide years of outstanding performance.

This Operator's Manual has been prepared to provide information necessary for the safe and efficient operation of your Grain Conveyor. 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 changes and add improvements when practical to do so without incurring any obligation to make such changes on previously sold machines.

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 in 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. would like to thank you again for entrusting your grain handling needs to the 4510 Grain Conveyor.

Chuck LePage, President

Highline Mfg. Inc.

PO 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

CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT!

 Before operating the Accelerator, be sure to review *all* of the instructions and familiarize yourself with its features.

- Keep yourself and others clear of rotating parts to prevent injury.
- Exercise extreme caution while loading or unloading grain.
- Never attempt to manually remove debris while the conveyor drive is engaged. Disengage the conveyor drive before unplugging the Grain Conveyor.
- Relieve pressure in hydraulic lines before disconnecting lines or performing any maintenance on the hydraulic system.
- Keep away from the discharge and intake area while moving material.
- Know all of the controls and what they do.
- Check machine to ensure nothing restricts the moving or rotating parts.
- Ensure PTO is disengaged before starting tractor.
- Lower the conveyor to transport position after operation.
- Do not transport conveyor on highway with any material in the conveyor. Ensure hitch is in transport mode and transport lock is in place before transporting unit.
- Do not operate without safety shields and guards in place.
- Do not stand on any guards.
- Lower conveyor when transporting to prevent contact with overhead lines.
- Make sure the ball valve on the main lift cylinder is closed after raising the Grain Conveyor and open before lowering.

1.0 Operating Instructions

1.1 Pre-Operation Instructions

Prior to operating the Grain Conveyor with material in it, operate it empty to familiarize yourself with the hydraulic controls and ensure the conveyor belt is centered. If the belt is not centered make the adjustments as described below to center it.

1.Belt Alignment

Run the Grain Conveyor at idling speed without product to identify if the belt is centered. The belt should run centered in three locations; intake roller, drive roller, and discharge roller. Belt adjustment can be made by moving the 2" vertical guide rollers located to the rear of the drive box. Before making any adjustments to the guide rollers, THE CONVEYOR DRIVE MUST BE DISENGAGED.

To center the belt, loosen the nut and slide the roller within the slot. Ensure that the rollers are at least 12-1/4" apart to allow free movement of the belt. Re-engage the drive and check the alignment. This procedure may have to be repeated to attain proper belt alignment.

Note: When belt is in operation, some travel may occur in a side to side manner on the rollers. The acceptable tolerance is approximately 3/4" overall.

**Figure 1.1(a)
Belt Tracking Adjustment**



2. Belt Tension

Belt tension is set at the factory and should not need adjustment.

If the belt still slips a section of the belt can be removed and the tensioning system reset. This will need to be done by a qualified technician.

Figure 1.1(b) - Belt Tensioning System



1.2 General Operating Instructions

Watch the conveyor belt to ensure that it is centered on all rollers. If it is not centered, refer to the Pre-operation Instructions for directions on how to center the belt.

At no time should the belt be allowed to slip on the main drive roller. If slippage occurs, **IMMEDIATELY** shut down the conveyor, determine where the problem has occurred and correct it.

If the Grain Conveyor belt slips with material in the tube, stop the machine and evenly and slowly re-engage the conveyor drive.

If the Grain Conveyor belt stops due to overfilling of a bin, clear the material from the discharge. Restart the conveyor slowly, making sure the belt does not slip on the drive roller.

Never transport the conveyor with material in the tube.

Watch for overhead lines. Always lower the conveyor when moving. Maintain a minimum of 10' between the conveyor and overhead lines at all times.

Place the spout of the conveyor 3" above the bin opening. Never rest the spout on the bin opening.

A restrictor valve is used on the main lift cylinder to prevent the cylinder from compressing quickly if a hose fails (Figure 1.2(a)). A ball valve has also been added to prevent the oil flow from lowering the Conveyor into the bin. Always engage the ball valve after raising the conveyor into operating position.

Figure 1.2(a) - Cylinder Valves



Stand clear of the conveyor when raising or lowering.

Do not spill or allow oil to come into contact with the belt.

Do not run the conveyor without shields in place.

Keep all nuts, bolts, bearing lock collars, etc. tight at all times.

Note: When the Conveyor is run for the first time, the skirting in the intake will show signs of wear and may heat up and smoke. This break-in period is common and may last up to 4 hours of operation. If it lasts longer than that time, please contact your dealer or Highline Representative.

1.3 Cable Adjustment

Adjustment of the cable should be done very carefully. The cable can be adjusted at the top adjustment bolt (Figure 1.3). When tightening cable, do not tighten more than three revolutions before rechecking.

Up and Down (Horizontal) Adjustment: Proper cable tension will limit the amount of sag in the conveyor and will reduce tube deflection while being loaded and transported. To check the horizontal straightness of the tube, lower the conveyor to the transport position and look up the tube from the intake end. The cables should be tightened so the tube is straight (or has a slight upward shape near the discharge end). Periodically check if the tube is straight, especially before and after transporting the conveyor over long distances.

Figure 1.3 - Cable Tensioner



PTO Drive

For the PTO option, the main roller shaft (PTO output) should run between 500 and 600 RPM. ***Do not exceed a PTO speed of 600 RPM!***

Gas Engine Drive

The gas engine should be operated at full engine RPM while conveying grain. While operating the conveyor and feeding grain into the intake, avoid overfeeding the intake which may cause the engine RPM to drop. Overfeeding with dense material may cause the engine RPM to drop enough to stall the engine.

2.0 Maintenance Instructions

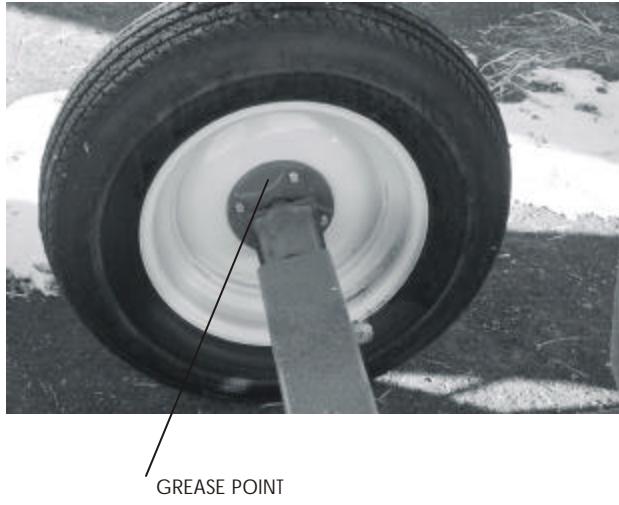
To ensure a long operating life of your Grain Conveyor, follow these maintenance procedures.

- Periodically check all bolts for tightness.
- Periodically inspect belt splice for signs of wear and tear.
- Periodically check belt alignment and adjust as required.
- Grease points as described below.
- Ensure tire air pressure is maintained at rated psi. Fluctuation in the air pressure may result in damage to the tire.

2.1 Grease Locations

	Description	Frequency
1	Frame Linkage	Every 8 hours
2	Castor Pivot	Every 8 hours
3	Hub Assembly - Figure 2.1(a)	Every 8 hours
4	PTO Shaft - Not Shown	Every 8 hours

Figure 2.1(a) - Hub Assembly



Drive Chain Lubrication

Use an industrial grade spray-on lubricant to lubricate the roller chain. Maintain every 100 hours.

Auger Drive Gearbox

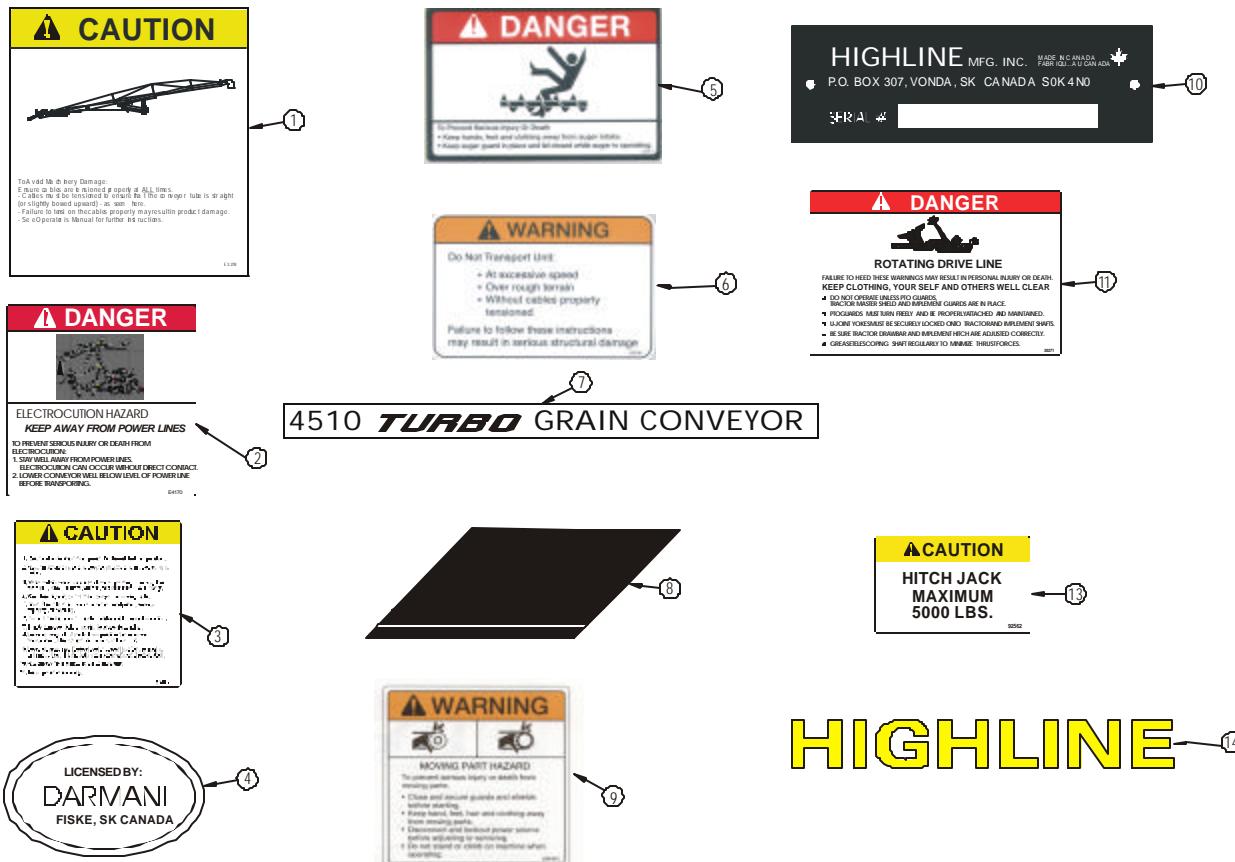
This gearbox is grease lubricated. Only if the gearbox is overheating (above 100°C) or there is obvious signs of grease leaking out of the gearbox, should the gearbox require maintenance. This should be checked every 100 hours. Use NLF100EP grease if required.

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3.0 Decal Location (Part No. 50545)

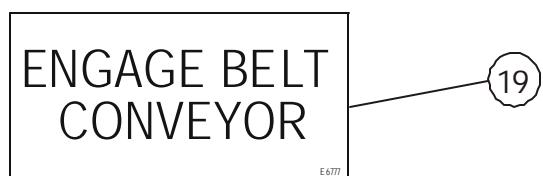
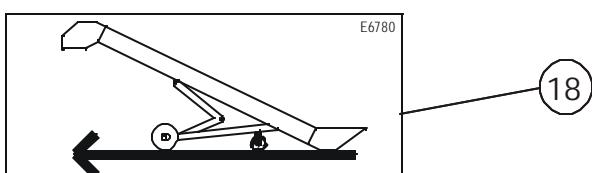
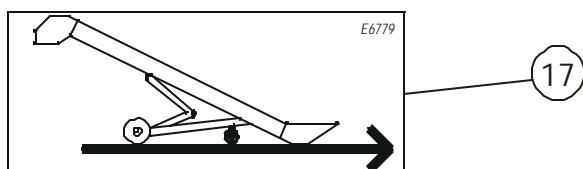
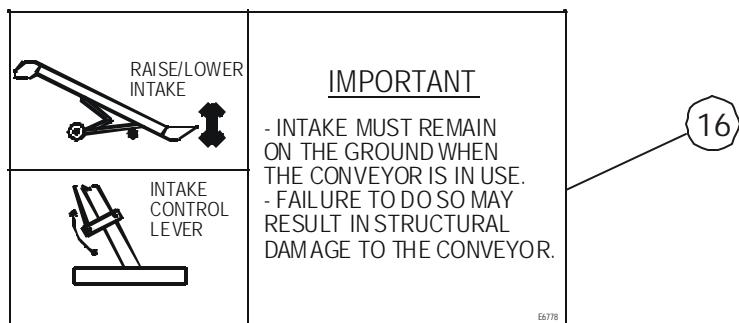
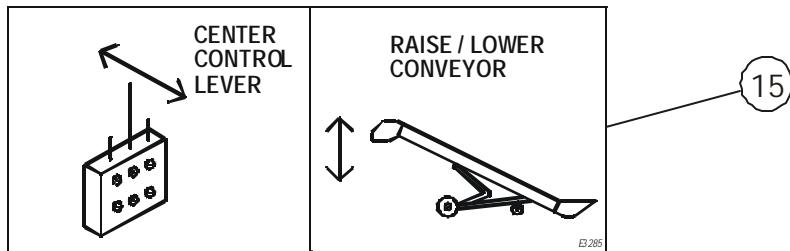
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E3278	DECAL, CAUTION, CABLE, SIDE	1
2	E4170	DECAL,DANGER,ELECTROCUTION	1
3	E4171	DECAL,CAUTION,READ	1
4	E5190	DECAL,LICENSED BY DARMANI	1
5	E5325	DECAL,AUGER,ACC	1
6	E5339	DECAL,DAMAGE,STRUCTURAL	1
7	E6625	DECAL,GC,4510_TURBO,GC	2
8	E6626	DECAL,PINSTRIPE,GC4510	2
9	E6627	DECAL,WARNING,MOVING_PART	2
10	30208	PLT,SERIAL#	1
11	30271	DECAL,DANGER,ROTATING DRIVE	2
12*	30288	RIVET,ST,1/8X.390,.250HEAD	2
13	92562	DECAL,WARNING,HITCH,JACK	1
14	92579	DECAL,HIGHLINE,4X30	2

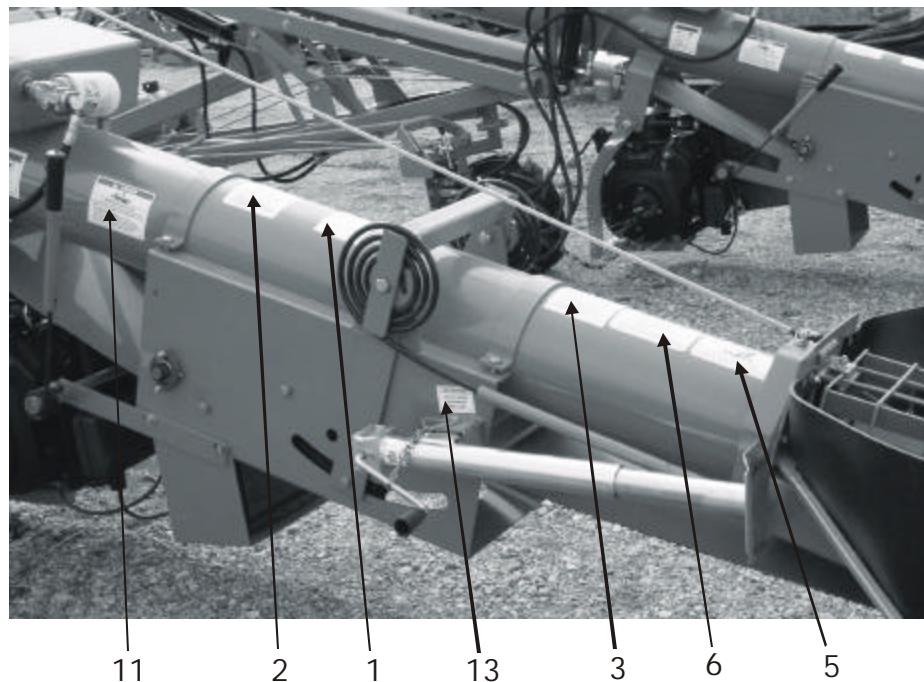
*Not Shown

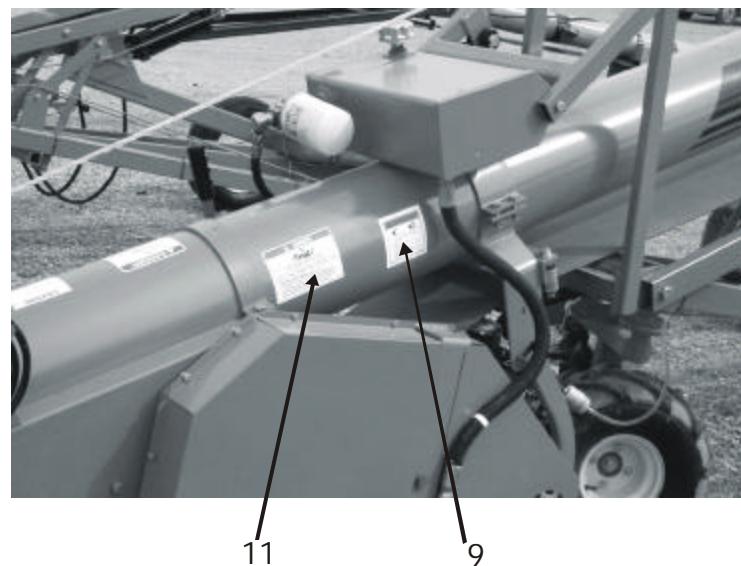
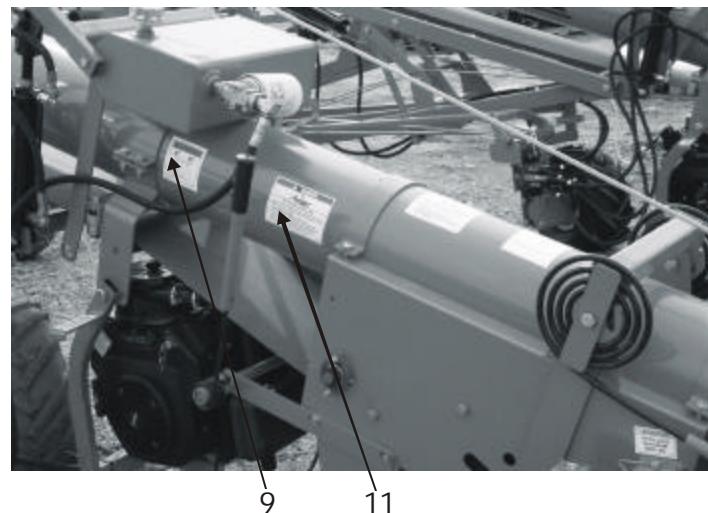


3.0(a) Decal Location for Optional Equipment

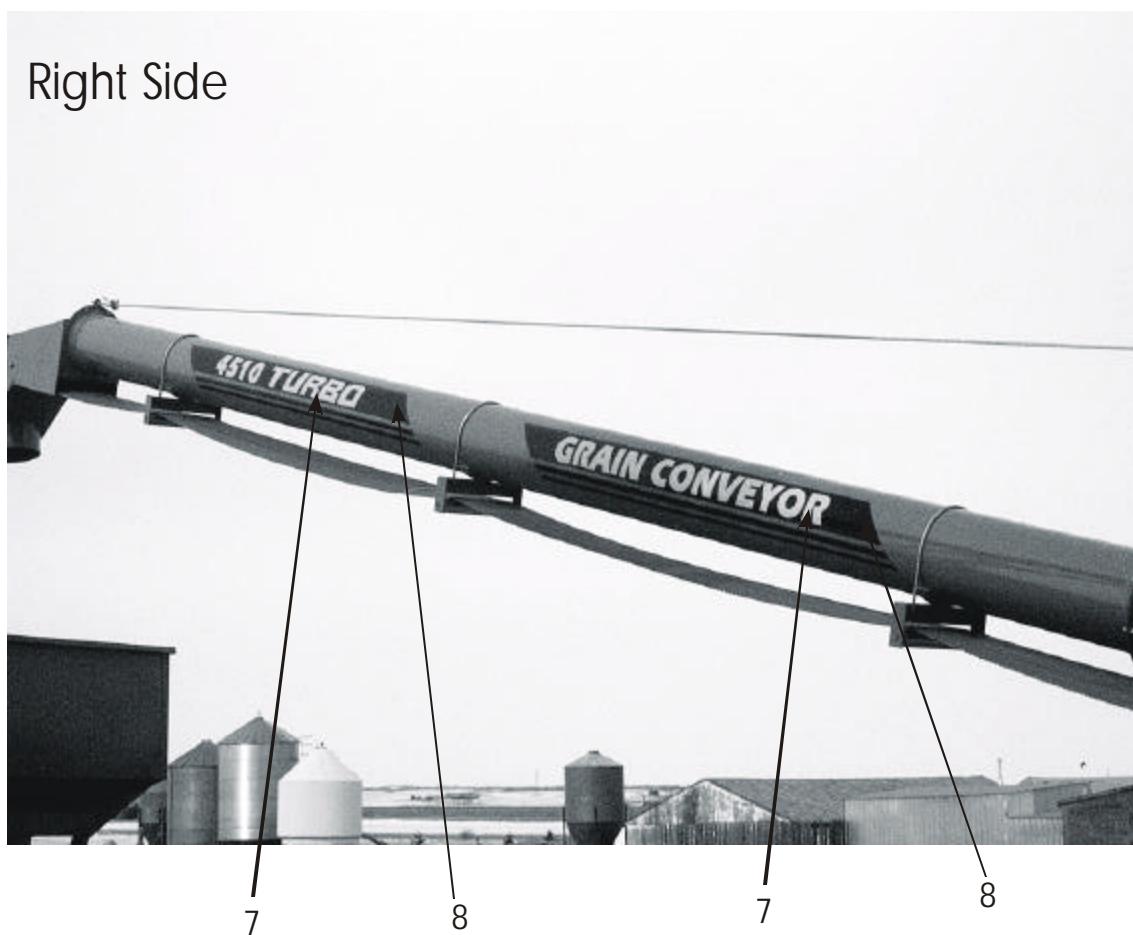
ITEM NO.	PART NO.	DESCRIPTION	QTY
15	E3285	DECAL,4510,CONTROL,VALVE	1
16	E6778	DECAL,4510,CONTROL,INTAKE	2
17	E6779	DECAL,4510,FORWARD,CONVEYOR	2
18	E6780	DECAL,4510,REVERSE,CONVEYOR	2
19	E6777	DECAL,4510,TENSION,BELT	1



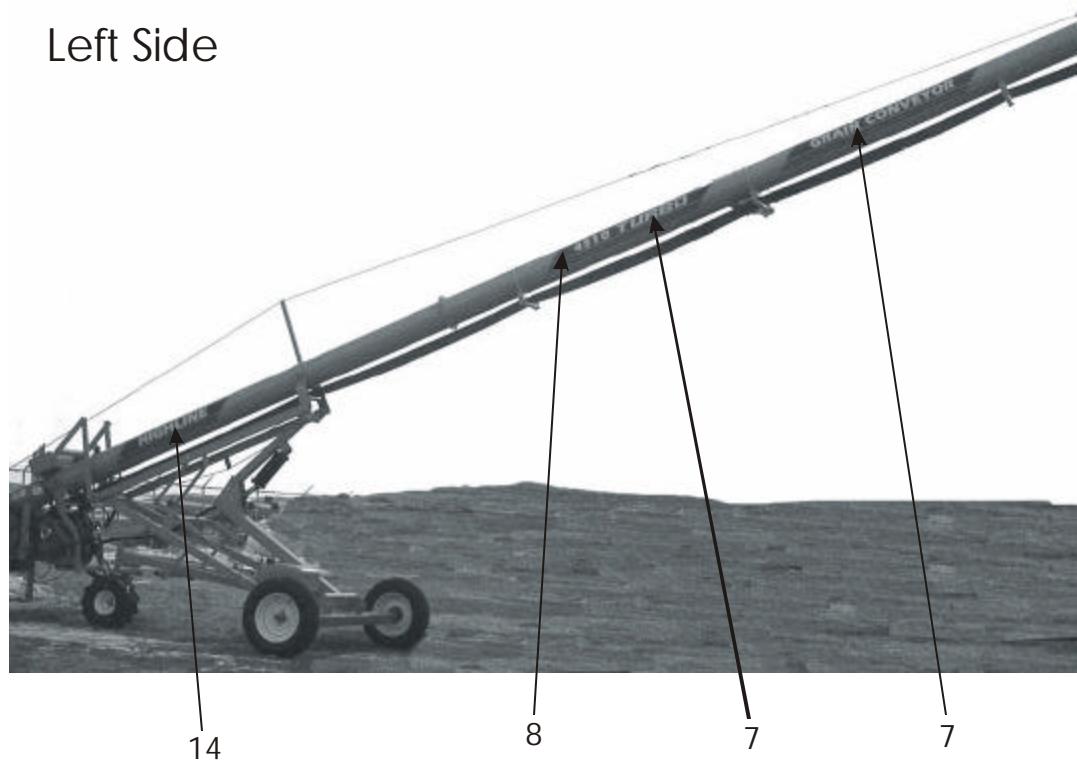


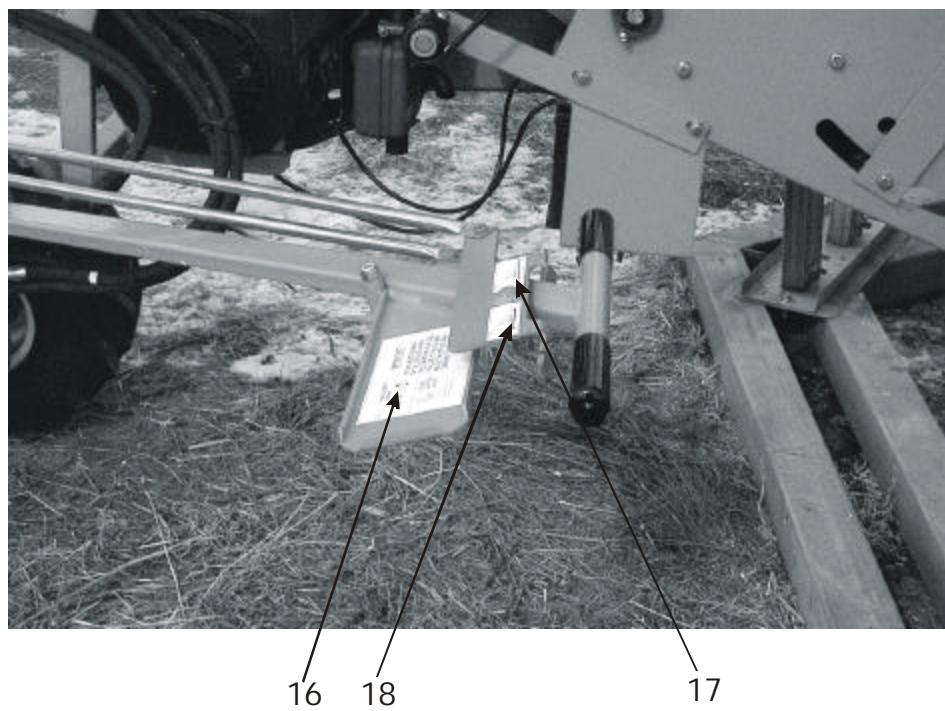
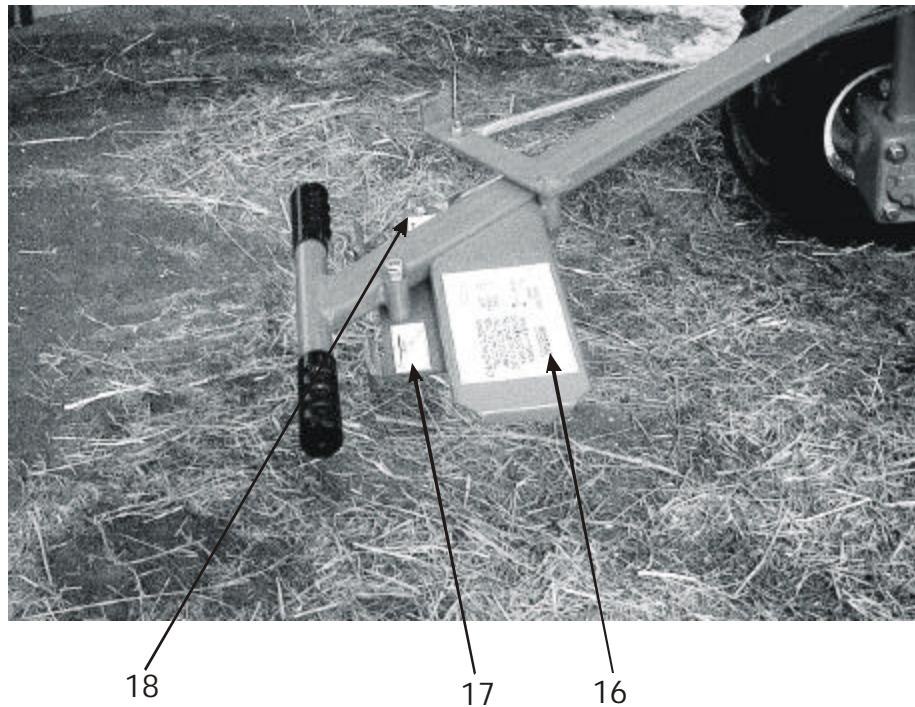


Right Side



Left Side

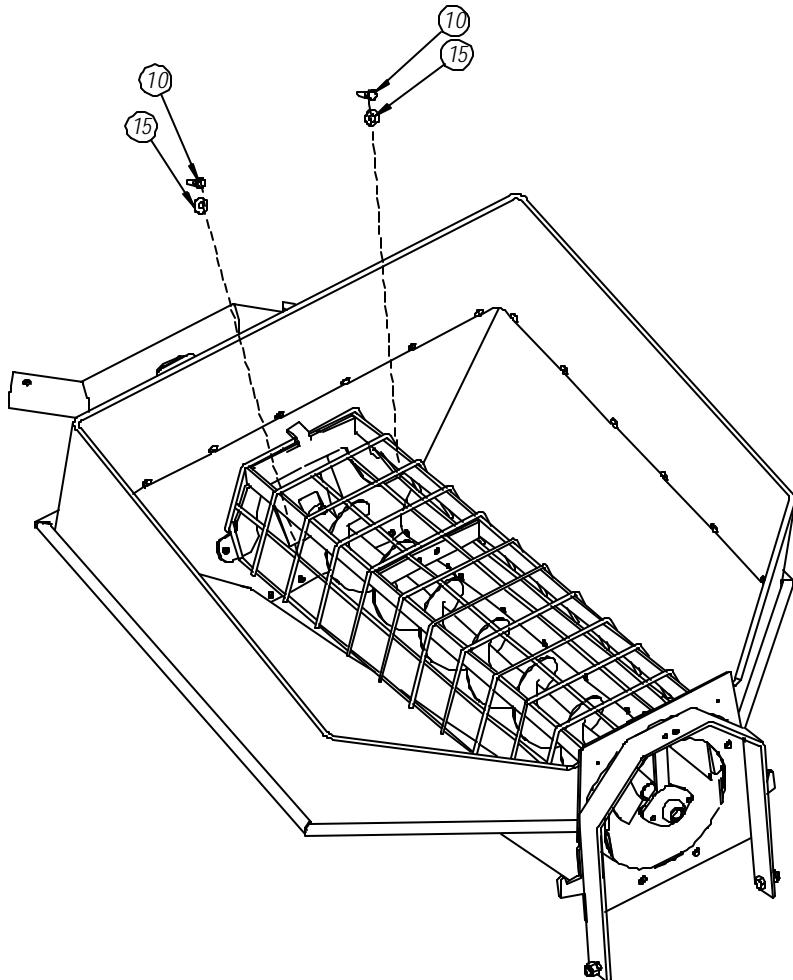


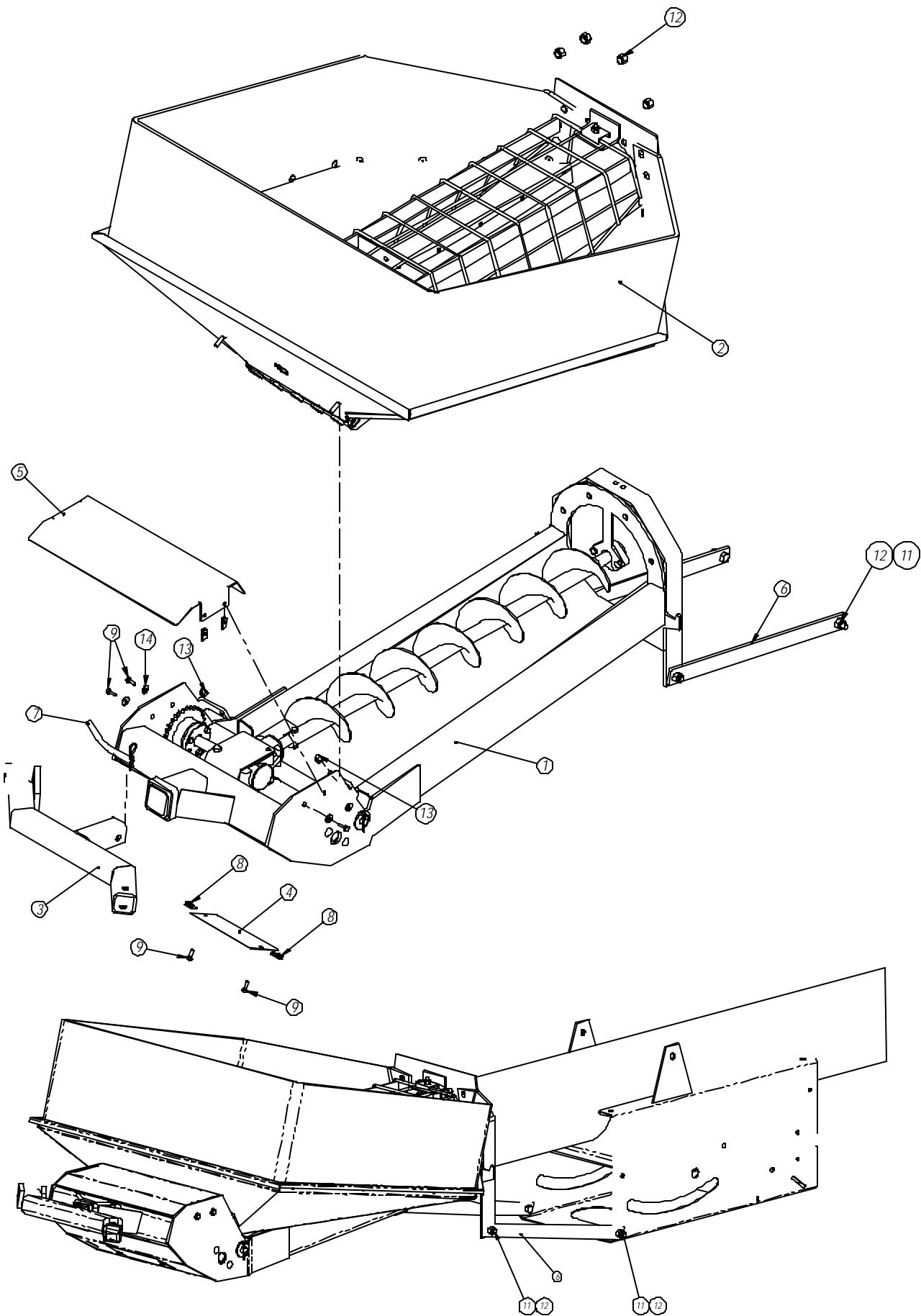


4.0 Main Assembly Parts Information

4.1 Complete Intake Assembly (Part No. 50550)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50556	ASSY,INTAKE,4510	1
2	50557	ASSY,HOPPER,COMPLETE	1
3	50558	WLDT,HITCH,2X2,OFFSET	1
4	E6432	PLT,COVER,SKID	1
5	E6861	GUARD,INTAKE,CHAIN	1
6	E7047	PLT,S,STRAP,INTAKE	2
7	31917	PIN,HITCH,1/2X3,ZP	1
8	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	6
9	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	6
10	31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	2
11	31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	4
12	31173	NUT,NYLOCK,1/2,UNC,ZP	10
13	31176	NUT,NYLOCK,3/8,UNC,ZP	2
14	31237	WASHER,FLAT,1/4,ZP	4
15	31351	WASHER,FLAT,3/8,ZP	2





4.1.1 Intake Assembly (Part No. 50556)

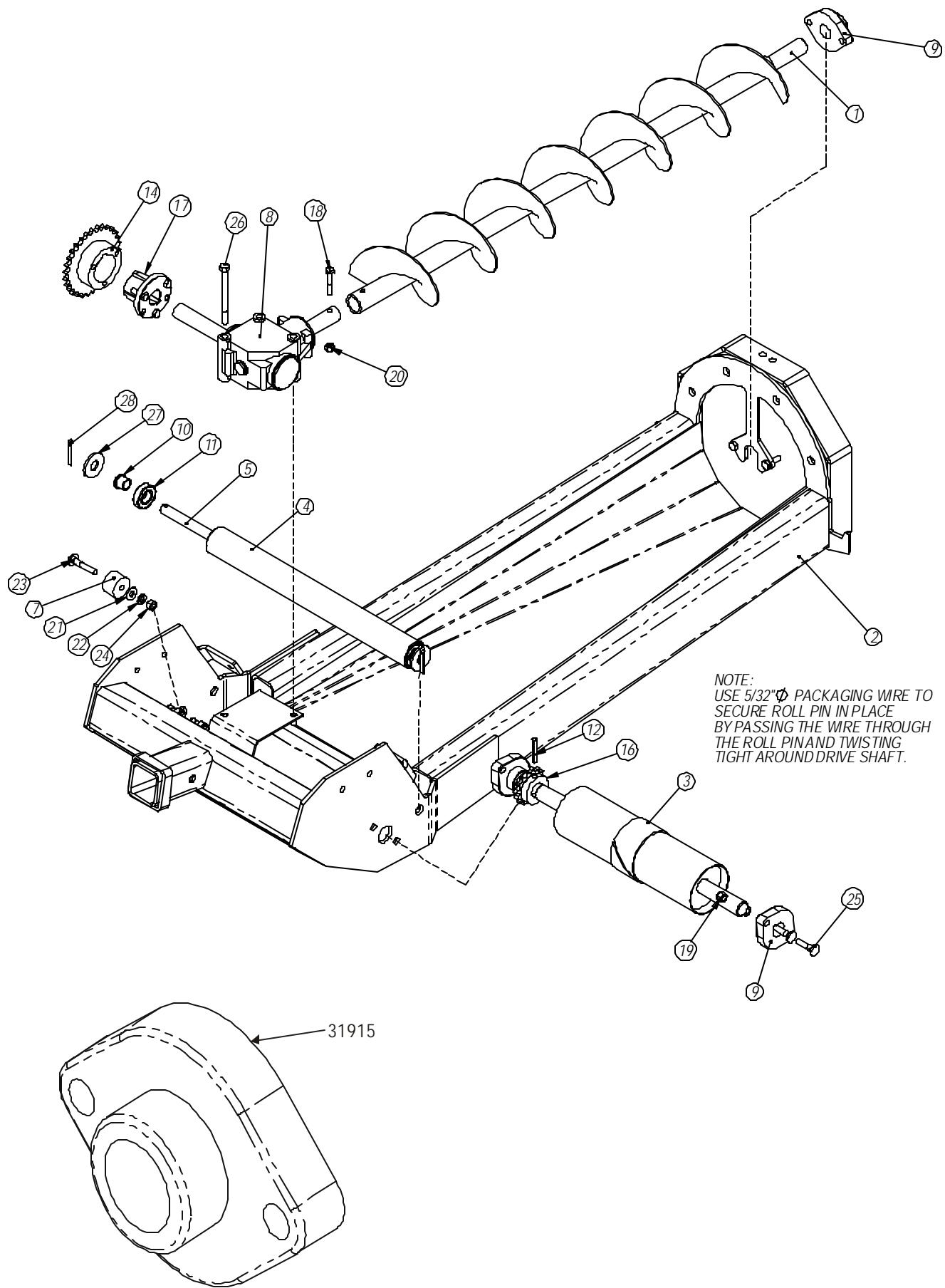
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50552	WLDT,AUGER,INTAKE,4510	1
2	50553	WLDT,INTAKE,FRAME	1
3	50554	WLDT,ROLLE R,3-1/2,CROWN,INTAKE	1
4	E5604	PIPE,ROLLER R,1.9X18-1/8	1
5	E5605	SHAFT,5/8X20,DRILLED	1
6	E6741	CHAIN,ROLLER,#40,20 LINKS	1
7	E6863	GUIDE,CHAIN,PLASTIC,1.5"	1
8	E7068	DRV,GEARBOX,90DEG,25MM,1:1,MOD	1
9	31915	BEARING,FLANGE,2BOLT,1	3
10	31967	DRV,BUSHING,PRESSFIT,20MM-5/8"	2
11	32376	DRV,BRG,ROLLER,6004-2RS	2
12	32782	PIN,SPRING,5/16X1-3/4	1
13	33219	CHAIN,CONNECTOR LINK,#40	1
14	33230	DRV,SPRKT,#40,30,P1,TAPER	1
15	33231	CHAIN,HALF_LINK,#40	1
16	33290	DRV,SPROCKET,#40,15,1,1	1
17	33296	DRV,BUSHING,S TAPER,P1,25MM	1
18	31047	BOLT,HEX,5/16X1-3/4,UNC,GR5,ZP	1
19	31176	NUT,NYLOCK,3/8,UNC,ZP	5
20	31177	NUT,NYLOCK,5/16,UNC,ZP	1
21	31239	WASHER,FLAT,5/16,ZP	1
22	31319	WASHER,LOCK,3/8,ZP	1
23	31424	BOLT ,CARR,3/8X2,UNC,GR5,ZP	1
24	31485	NUT,HEX,3/8,UNC,GR5,ZP	1
25	31585	BOLT ,CARR,3/8X1-1/2,UNC,GR5,ZP	4
26	33313	BOLT ,HEX,3/8X4-1/4,UNC,GR5,ZP	1
27	31240	WASHER,FLAT,5/8,ZP	2
28	31289	PIN,COTTER,3/16X1-1/2	2

ITEM #6 ,#12 AND #14 ARE NOT SHOWN

4.1.1.1 Bearing Flange (Part No. 31915)

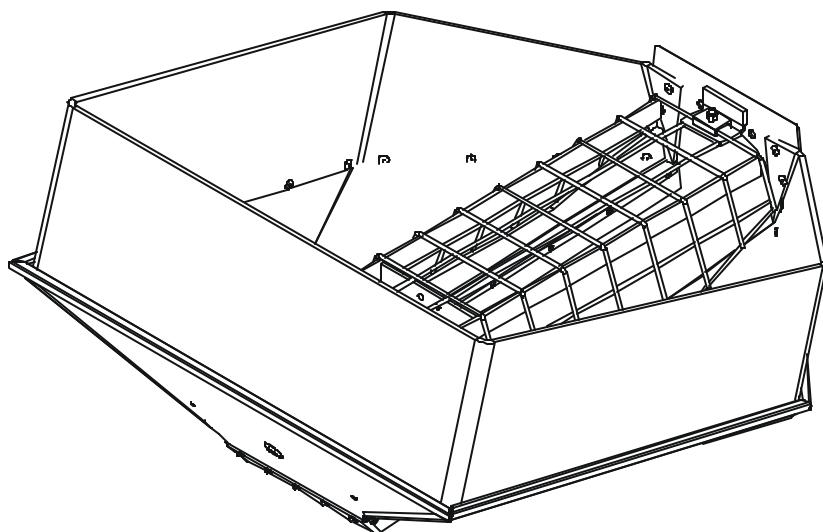
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31915	BEARING,FLANGE,2BOLT,1	1
	31915-1	BEARING	1
	31915-2	HOUSING	1

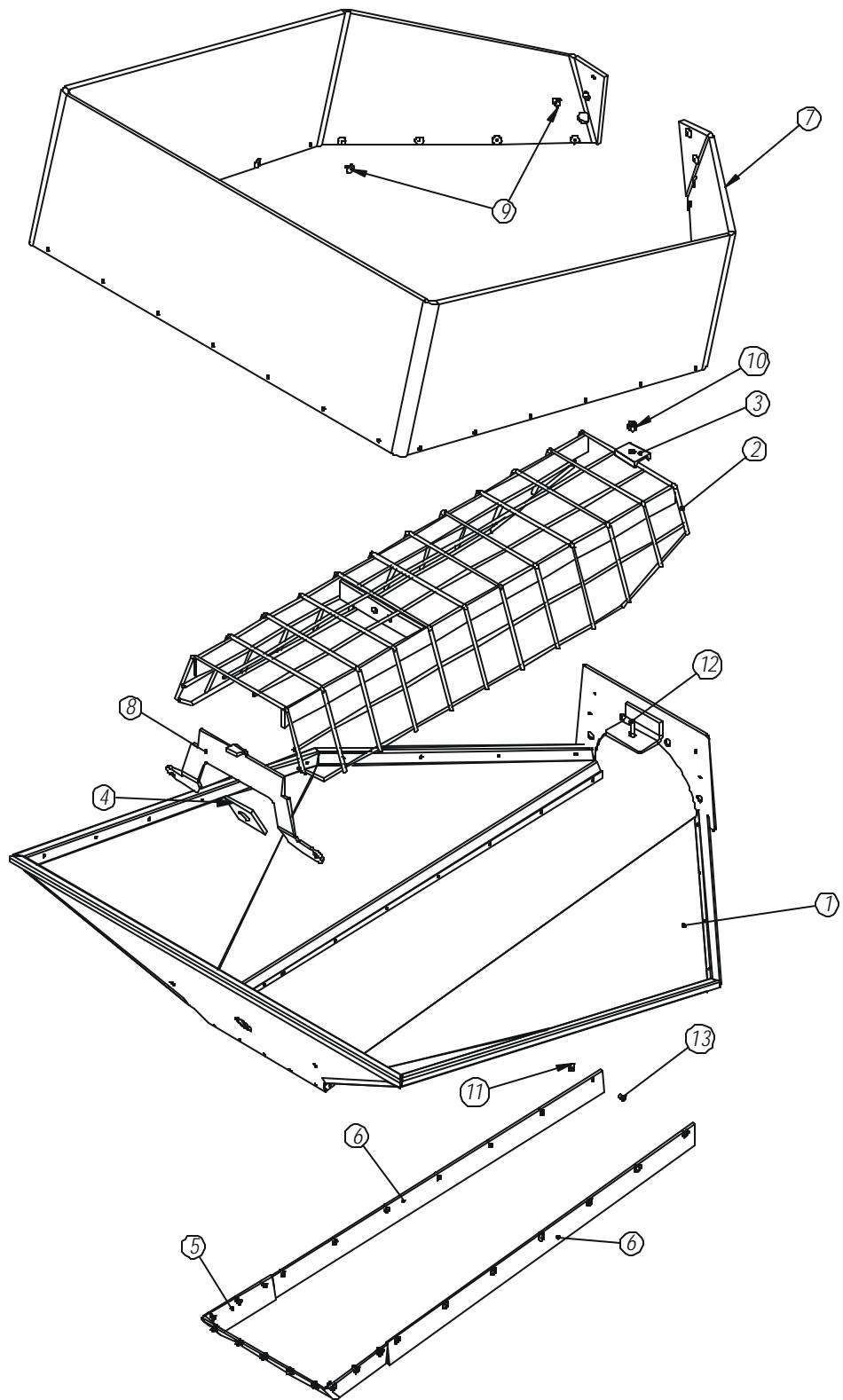
NOTE: 2-BOLT FLANGED BEARING UNIT, CAST HOUSING
ECCENTRIC LOCKING COLLAR TYPE



4.1.2 Complete Hopper Assembly (Part No. 50557)

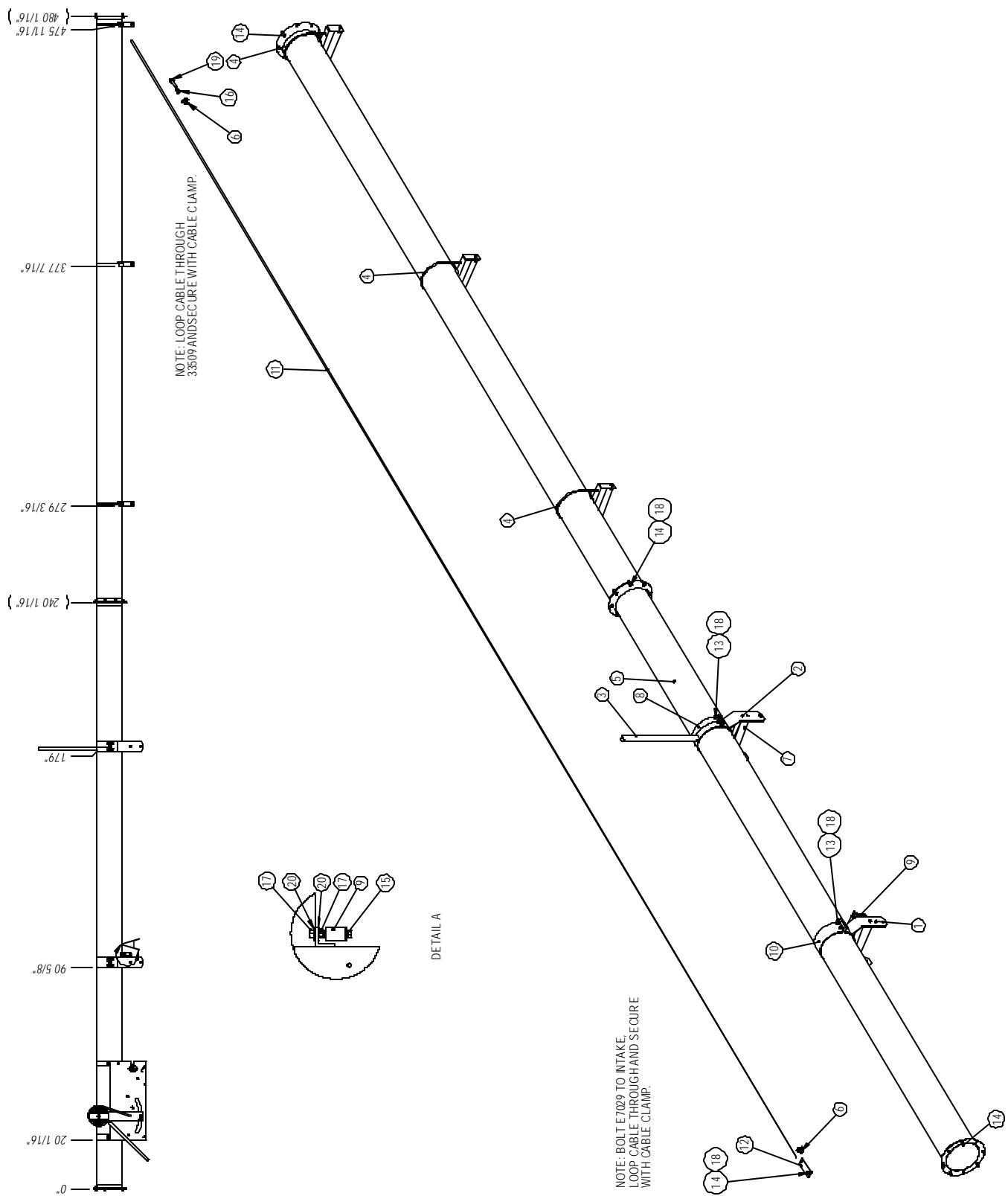
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50551	WLDT,HOPPER	1
2	55084	WLDT, GUARD, INTAKE	1
3	E6343	CHANNEL, GUARD, LOCK	1
4	E6746	SEAL,AUGER,_SHAFT	1
5	E6749	SKIRT, FRONT, HOPPER	1
6	E6752	SKIRT, SIDE, HOPPER	2
7	E6758	RUBBER, EXTENSION, HOPPER	1
8	E6759	PLT,S,END, GUARD	1
9	30552	RIVET, ST, 3/16x.565,.625 HEAD	31
10	31176	NUT, NYLOCK, 3/8,UNC,ZP	1
11	31536	WASHER, FLAT , 1/8,ZP	25
12	31585	BOLT,CARR,3/8X1-1/2,UNC,GR5,ZP	1
13	31739	RIVET, ST, 3/16x.565,.375 HEAD	25





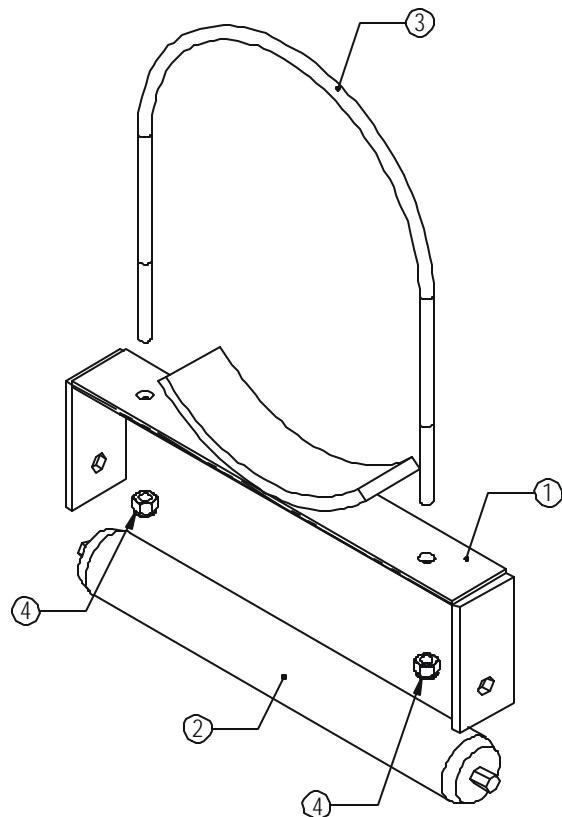
4.2 Tube Assembly (Part No. 55076)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55061	CLAMP,PIVOT,ROLLER,GUIDE	1
2	55067	WLDT,PIVOT,FRAME,MAIN	1
3	55072	WLDT,FRAME,TRUSS	1
4	55075	ASSY,ROLLER,RETURN	3
5	55079	WLDT,TUBE,CONVEYOR	2
6	30456	CLAMP,CABLE,3/8"	2
7	33284	ROLLER, 1.9x14, 7/16 HEX	2
8	E5160	CLAMP,PIPE,10" X 2"	1
9	E5075	ROLLER,IDLER,TRAINING	2
10	E5163	CLAMP,PIPE,10"X4"	1
11	E6734	CABLE,3/8X40FT	1
12	E7029	PLT,S,STRAP,CABLE	1
13	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	8
14	31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	19
15	31026	BOLT,HEX,1/2X4,UNC,GR5,ZP	2
16	33509	BOLT,EYE,HVY,5/8X5-1/2,UNC,GR5,ZP	1
17	31163	NUT,HEX,1/2,UNC,GR5,ZP	4
18	31173	NUT,NYLOCK,1/2,UNC,ZP	17
19	31178	NUT,NYLOCK,5/8,UNC,ZP	1
20	31236	WASHER,FLAT,1/2,ZP	4



4.2.1 Return Roller Assembly (Part No. 55075)

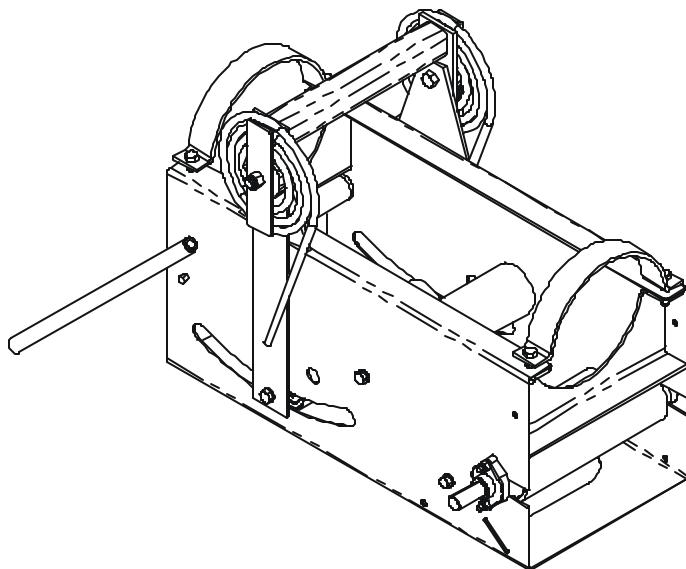
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55074	WLDT,ROLLER,RETURN	1
2	33284	ROLLER, 1.9x14, 7/16 HEX	1
3	33298	BOLT,U,3/8X10X11-3/4	1
4	31176	NUT,NYLOCK,3/8,UNC,ZP	2

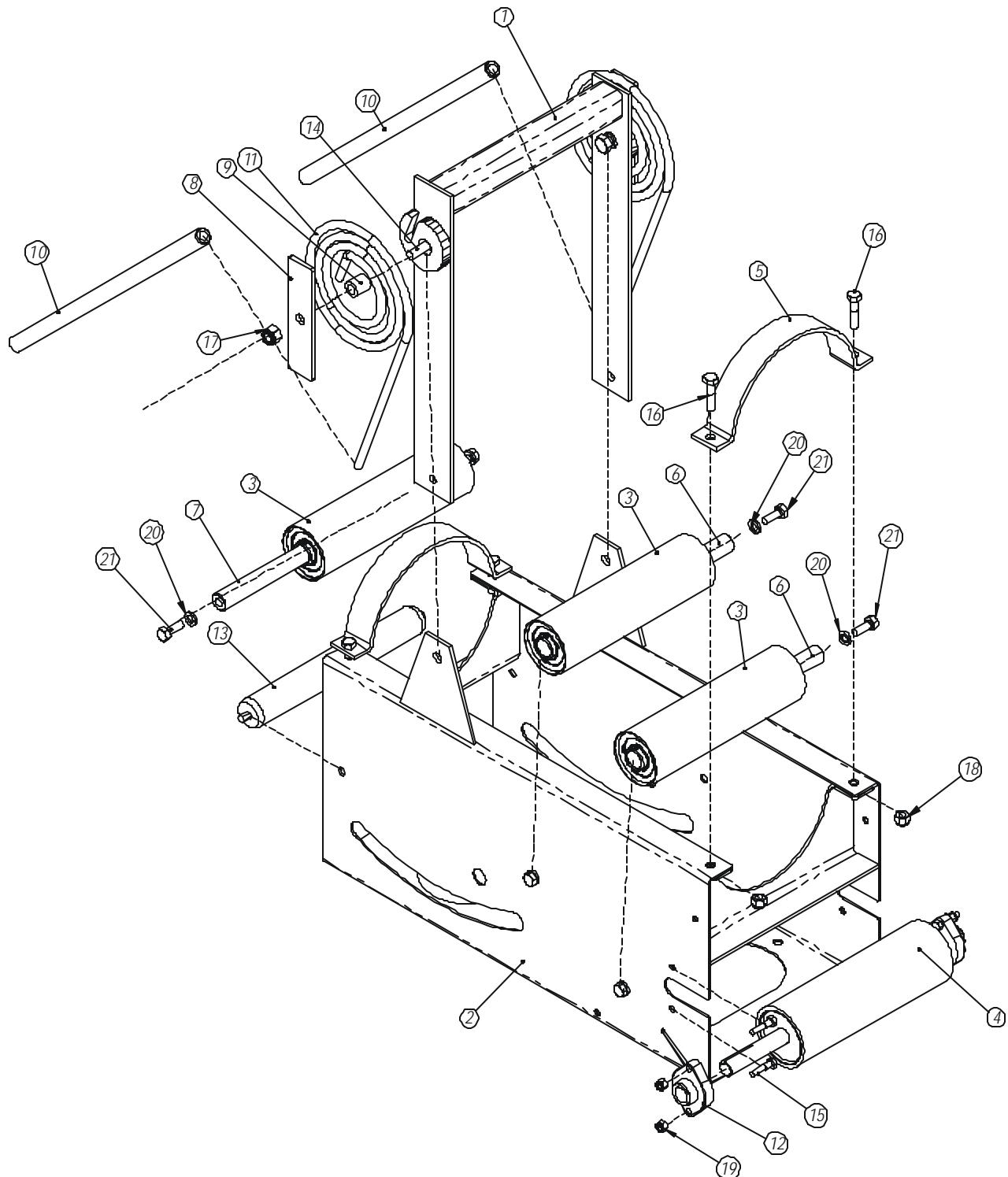


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4.3 Drive Box Assembly (Part No. 55055)

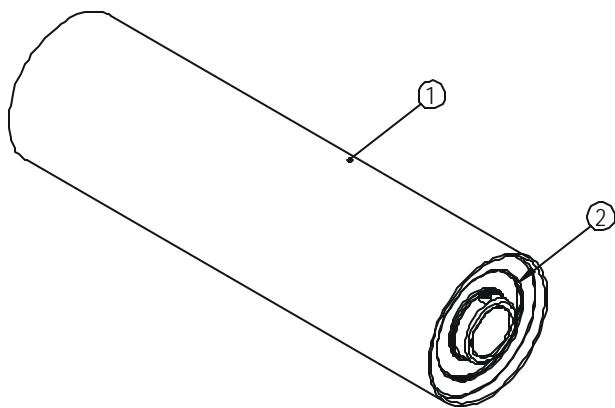
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55051	WLDT,MOUNT,TENSIONER,SPRING	1
2	55052	WLDT,BOX,DRIVE	1
3	55053	ASSY,ROLLER,IDLER	3
4	55056	WLDT,ROLLER,DRIVE	1
5	E5160	CLAMP,PIPE,10" X 2"	2
6	E6636	SHAFT,ROLLER,IDLER,DRIVE	2
7	E6637	SHAFT,ROLLER,TENSIONER	1
8	E6638	PLT,RETAINER,SPRING	2
9	E6642	PIPE,SMLS,1x.188x1-1/8L	2
10	E6747	SHAFT,TENSIONER,SPRING	2
11	30138	SPRING,REEL	2
12	31915	BEARING,FLANGE,2BOLT,1	2
13	33284	ROLLER, 1.9x14, 7/16 HEX	1
14	31054	BOLT,HEX,5/8X2-1/2,UNC,GR5,ZP	2
15	31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	4
16	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	4
17	31178	NUT,NYLOCK,5/8,UNC,ZP	2
18	31173	NUT,NYLOCK,1/2,UNC,ZP	4
19	31176	NUT,NYLOCK,3/8,UNC,ZP	4
20	31244	WASHER,LOCK,1/2,ZP	6
21	31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	6





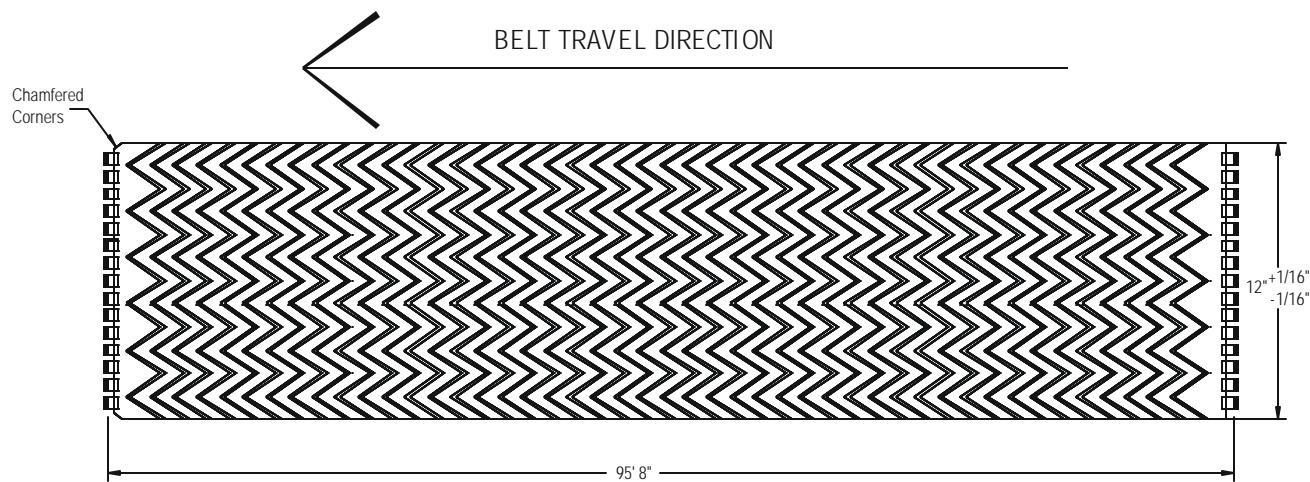
4.3.1 Idler Roller Assembly (Part No. 55053)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E6628	PIPE,ERW,3-1/2X16GA,12-3/8L	1
2	33263	BEARING,CARTRIDGE,1.125,3.3465	2

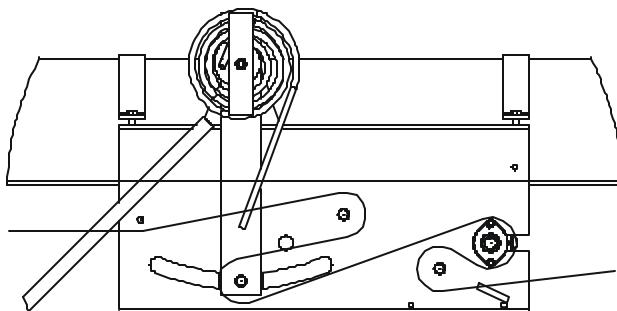


4.4 Belting (Part No. E6770)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30640	KIT,LACE,SSRS125,15,PN,WASHER	1
2	30641	LACE,SSRS125, 15"	1
3	30642	LACE,PIN,NC-1,100'	1
4	30643	LACE,PIN,WASHER,50	1
5	30644	LACE,SPLICETOOL,RS125,4"	1
6	33020	BELT ,15",REPLACEMENT,1'	1



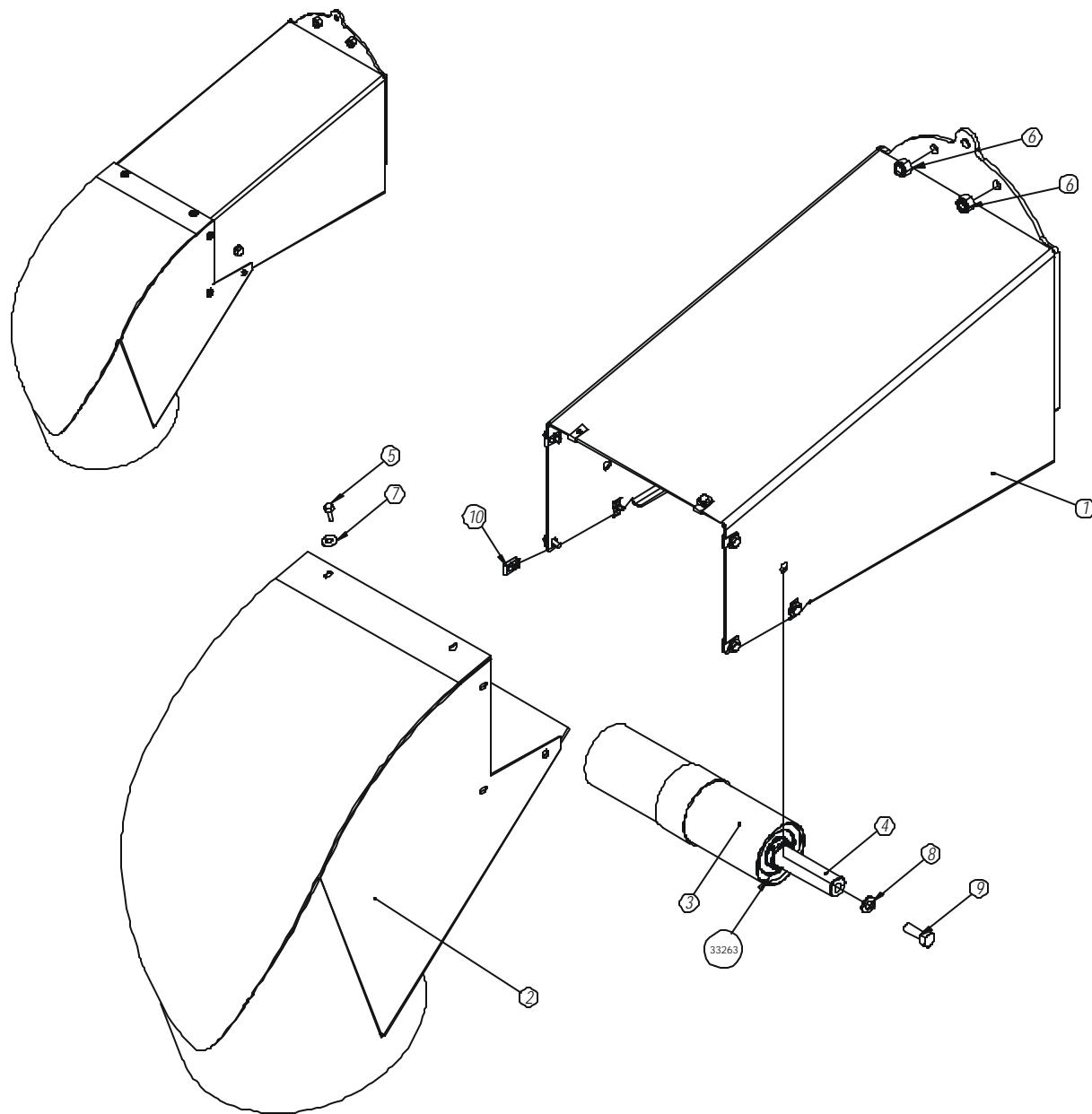
Note: Belt travel direction is determined by the location of the chamfer on the corners of the belt. Leaving the trailing end of the belt without a chamfer will help protect the lacing and retaining washers.



Direction of Belt Installation

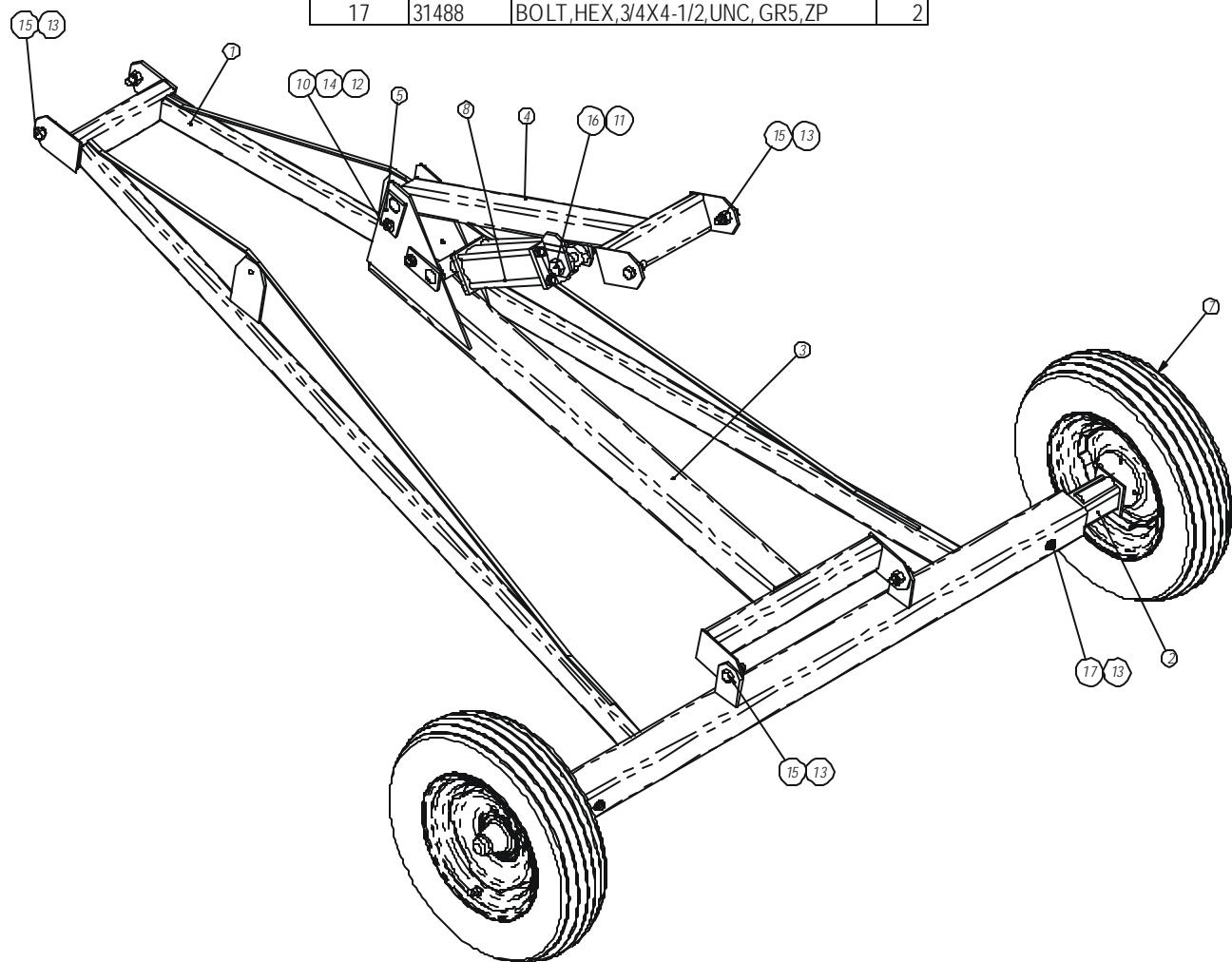
4.5 Discharge Assembly (Part No. 50548)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50546	WLDT,DISCHARGE,TRANSITION	1
2	50547	WLDT,DISCHARGE,HOOD	1
3	50549	ASSY,ROLLER,DISCHARGE	1
4	E6629	SHAFT,ROLLER,IDLER	1
5	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	8
6	31173	NUT,NYLOCK,1/2,UNC,ZP	4
7	31237	WASHER,FLAT,1/4,ZP	8
8	31244	WASHER,LOCK,1/2,ZP	2
9	31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	2
10	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	8



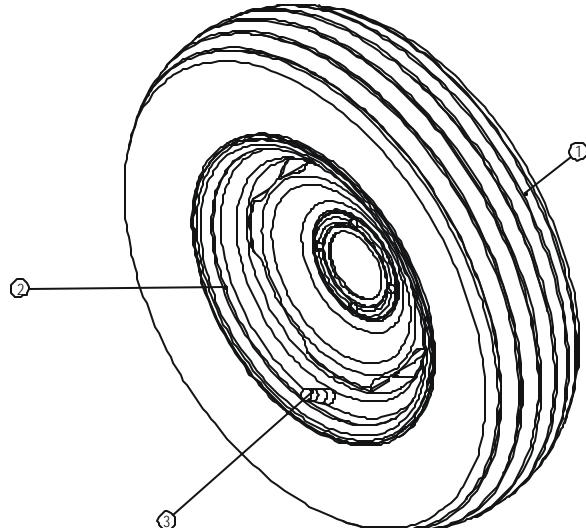
4.6 Frame & Suspension Assembly (Part No. 55077)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50538	WLDT,AXLE,FRAME	1
2	50540	WLDT,AXLE,ADJ,4510	2
3	50543	WLDT,SUPPORT,FRAME,LOWER	1
4	50544	WLDT,SUPPORT,FRAME,UPPER	1
5	55070	PIN,ANTIROT,1-1/2 X 4-7/8	2
6	33182	SUSP,HUB,H411,1250lbs	2
7	33183	WHEEL,COMPLETE,205/75D15,4,WH	2
8	49443	WLDT,CLEVIS,CYLINDER	1
9	91703	ZERK,1/4-28 X 45 °	1
10	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	2
11	31172	NUT,NYLOCK,1,UNC,ZP	1
12	31173	NUT,NYLOCK,1/2,UNC,ZP	2
13	31175	NUT,NYLOCK,3/4,UNC,ZP	8
14	31236	WASHER,FLAT,1/2,ZP	2
15	31339	BOLT,HEX,3/4X2,UNC,GR5,ZP	6
16	31472	BOLT,HEX,1X5,UNC,GR5,ZP	1
17	31488	BOLT,HEX,3/4X4-1/2,UNC,GR5,ZP	2



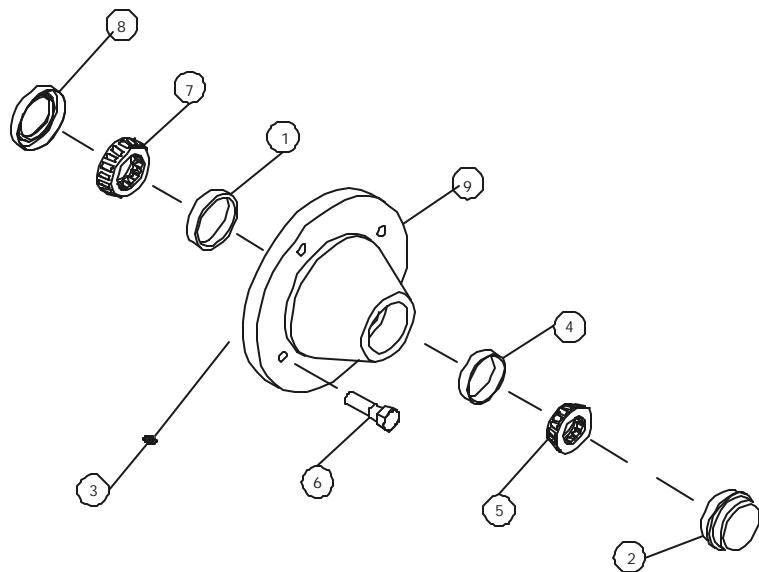
4.6.1 Wheel Assembly (Part No. 33183)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33180	SUSP,TIRE,205/75D15,LR-B	1
2	33181	SUSP,WHEEL,15X5X4,.38,WH	1
3	91048	SUSP,STEM,VALVE, TR801HP	1



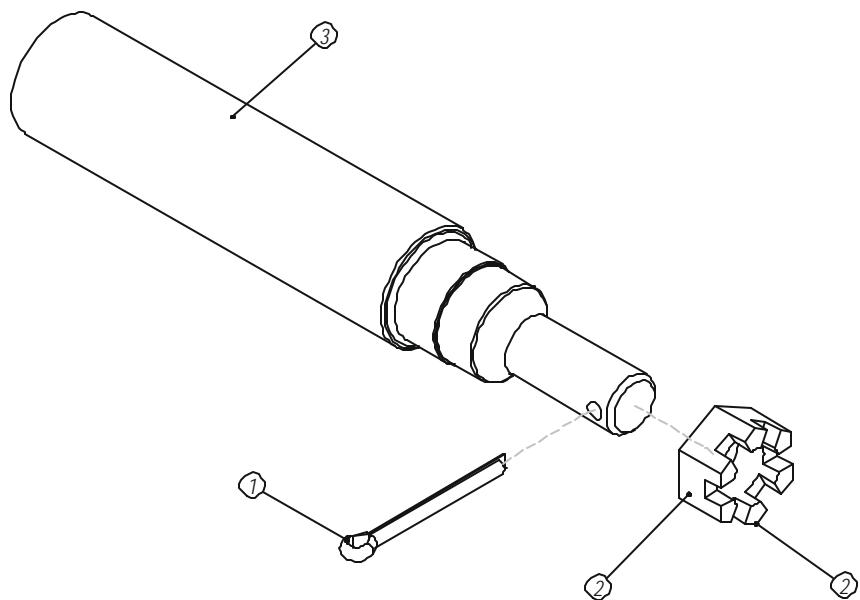
4.6.2 Hub Assembly (Part No. 33182)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	91130	SUSP, BRG,RACE,LM67010	1
2	91234	SUSP, DUSTCAP, DC12	1
3	30207	ZERK,1/4-28,GF641,STRAIGHT	1
4	33187	DRV,BRG,RACE,OUTER,.75	1
5	91154	SUSP, BRG,LM11949	1
6	32336	SUSP, BOLT,WHEEL,1/2X1-1/4T	4
7	91110	SUSP, BRG,LM67048	1
8	91093	SUSP, BRG,SEAL,SE11	1
9	33192	SUSP, HUB,H411	1



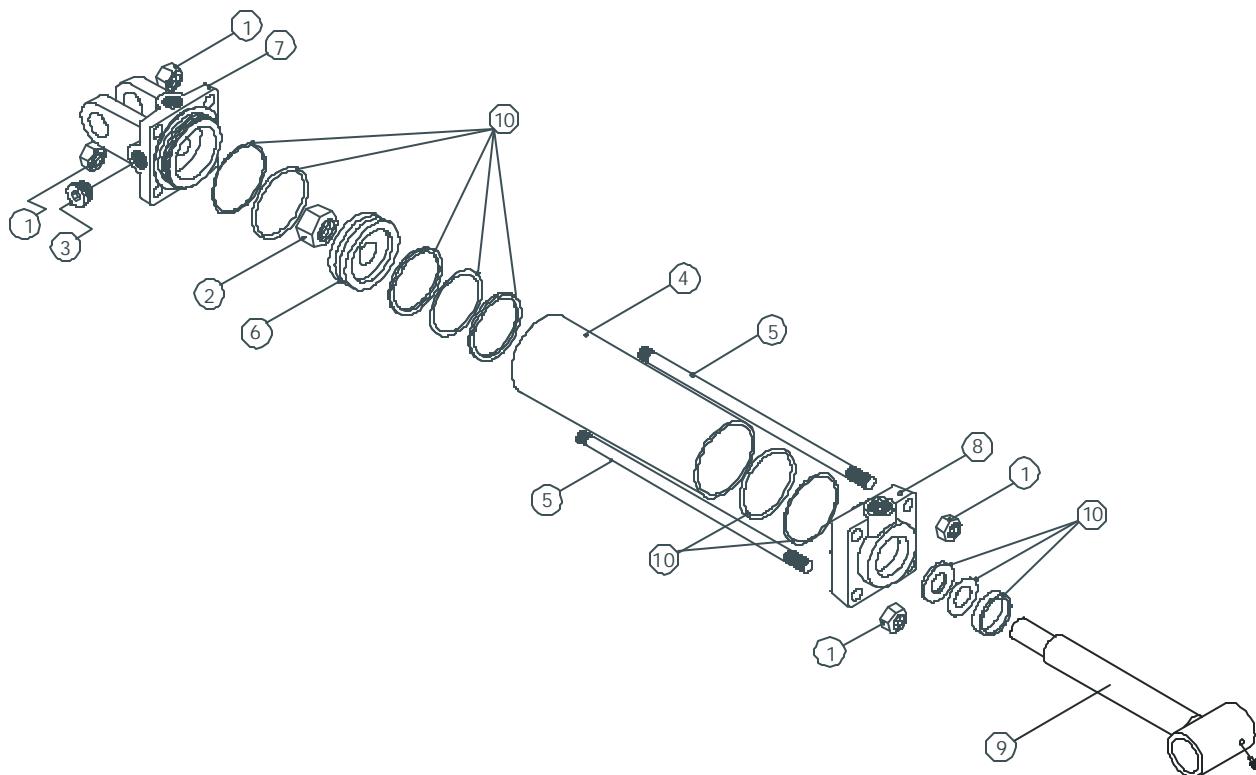
4.6.3 Spindle Assembly (Part No. 33179)

ITEMNO.	PART NO.	DESCRIPTION	QTY.
1	31183	PIN,COTTER,3/16X2	1
2	31666	NUT,CASTELLED,3/4,UNF	1
3	33185	SUSP,SPINDLE,S411	1



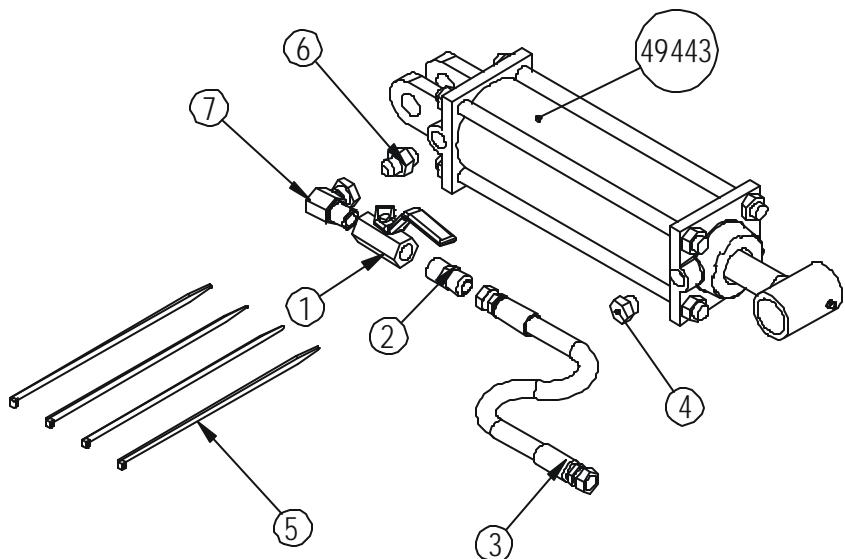
4.7 3.5x10 Hydraulic Cylinder (Part No. 32982)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30663	NUT,HEX,5/8,UNF,GR5,ZP	8
2	30237	NUT,HEX,1,UNS,GR5	1
3	30193	FITTING,PLUG,3/4"-16 UNF,STR THD	1
4	33131	HYD,CYL,TUBE,3-1/2X10	1
5	33132	HYD,CYL,TIE,ROD,5/8X10	4
6	30251	HYD,CYL,PISTON,3-1/2,H6688	1
7	33133	HYD,CYL,CLEVIS CAP,3.5_3/4O_1.0	1
8	33134	HYD,CYL,ROD CAP,3.5_1.25_3/4O	1
9	49563	WLDT,ROD,1-1/4,10	1
10	90677	HYD,CYL,SEALKIT,MO NARCH,3-1/2	1



4.8 Hydraulic Base Assembly (Part No. 55078)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30469	HYD,VALVE,BALL,8FP	1
2	31148	HYD,FIT,ADAPTOR,8MP-8MJ	1
3	33210	HYD,HOSE,3/8X110,8FJX-8FJX,2W	1
4	33211	HYD,FIT,VENT,8MB	1
5	31613	TIE,CABLE,NYLON ,BLACK,11 1/2"	4
6	33224	HYD,FIT,ADAPTER,8MB-8MJ,031ORIFICE	1
7	33308	HYD,FIT,ADAPTER,8MP-8FJX90	1



5.0 Options

5.1 Electric Motor Drive Option (Part No. GCO45EMD-2)

The Electric Motor Drive Option includes a mount for an Electric Motor and means to drive the main Conveyor Belt and the Hydraulic System. The Electric Motor used for this application must operate at a nominal 3500 RPM and have a minimum 1-1/8" diameter x 4" long keyed shaft. For more information on mounting an Electric Motor, please contact **HIGHLINE MFG INC.**

Installation

Ensure the Pump Guard Housing (55057) is firmly attached to the Drive Box of the Conveyor and to the Motor assembly. The Pump Guard Housing can be tilted to allow for motors with different drive shaft locations.

Ensure all sheaves and belts are properly aligned and the belt tensioners are operating properly before operation.

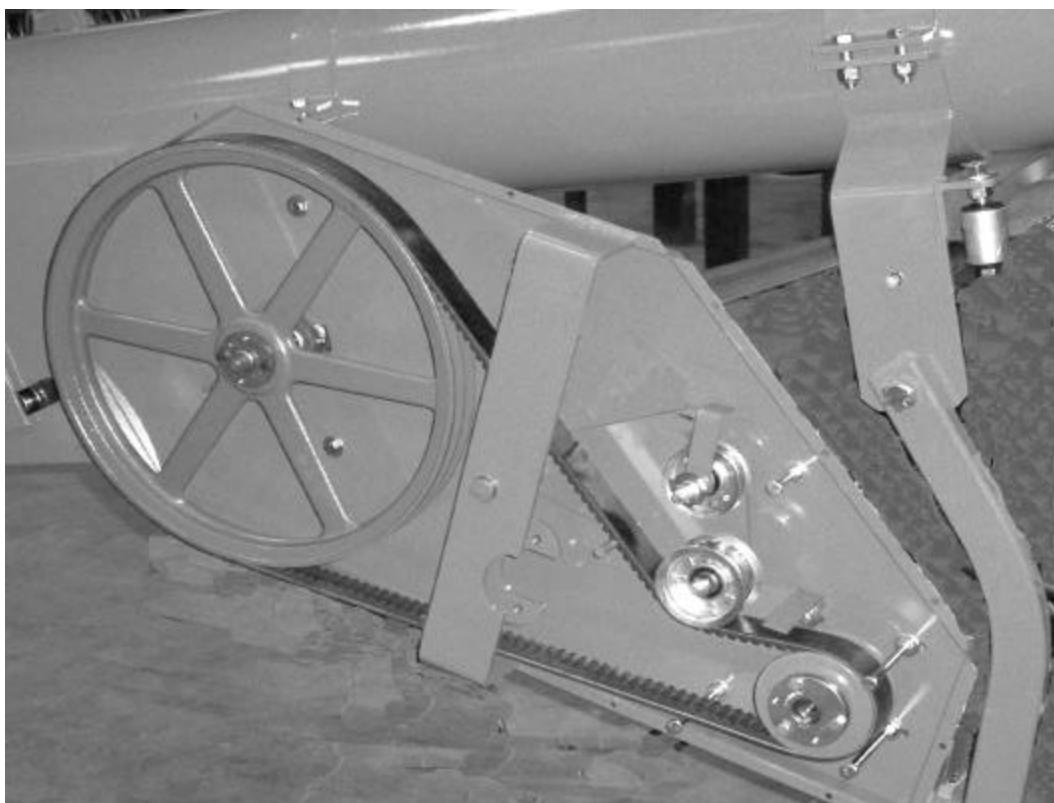
Ensure all hoses and wiring allows for full range of motion of the conveyor when fully raised.

Operation

The Drive system is designed to drive the main Conveyor belt when the Belt Tensioner Handle is in the ENGAGE CONVEYOR position. The lift cylinder is connected to a tractor to raise and lower the Conveyor.

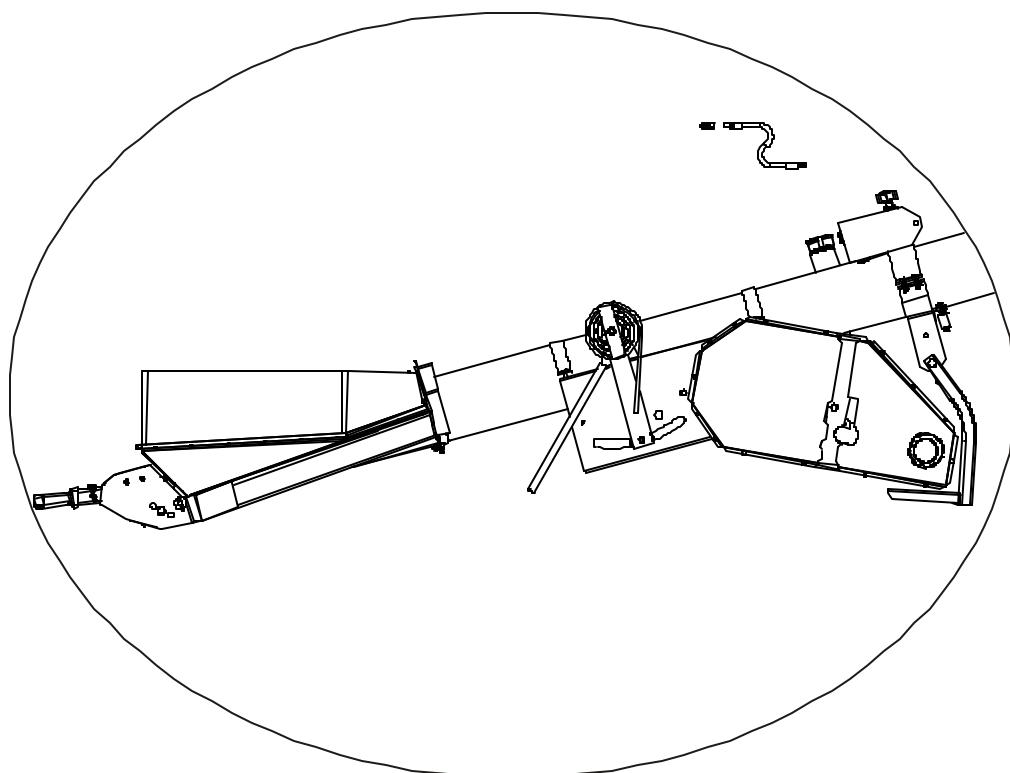
Note: The lock valve connected to the lift cylinder must be used whenever the Conveyor is in an elevated position.

Ensure the Operator is familiar with the Drive Controls before operating the machine to avoid Personal Injury or Damage to the machine.



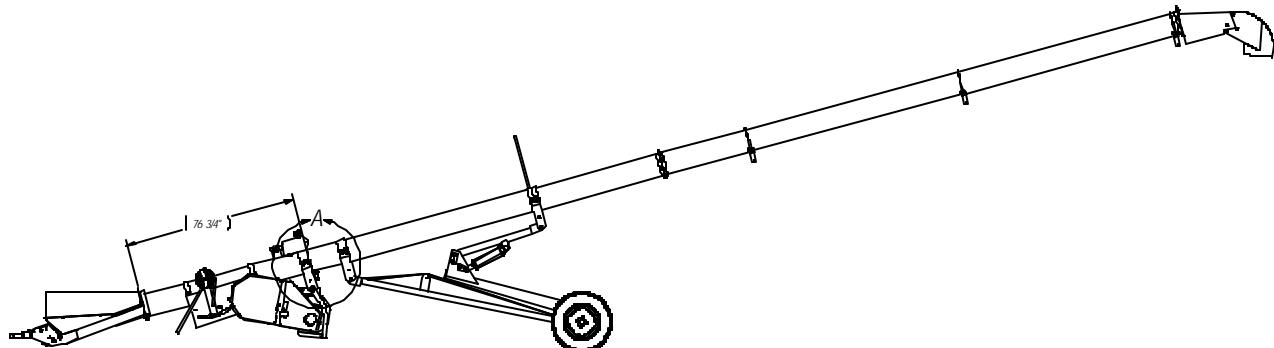
5.1 Electric Motor Drive Option (Part No. GCO45EMD-2) - cont'd

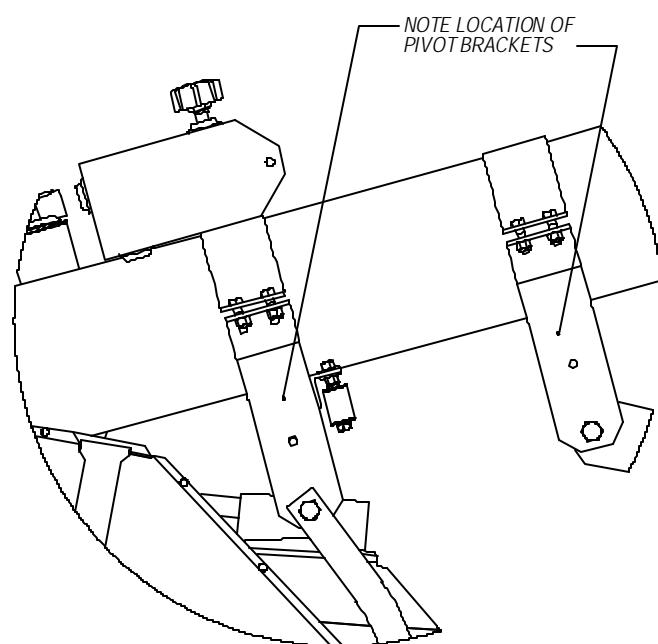
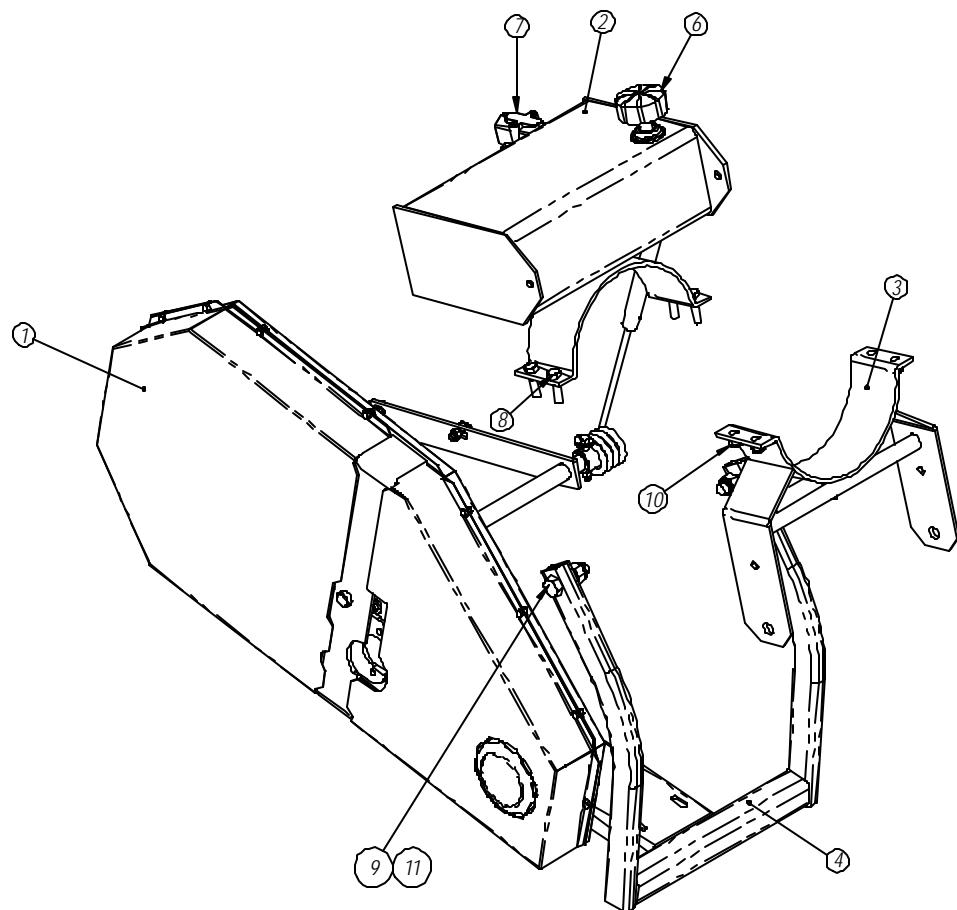
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55089	ASSY,DRIVE_PUMP	1
2	30209	HYD,FIT,PIONEER,MALE,8FP	1
3	90280	HYD,HOSE,3/8X191,8MJ-8MP,1W	1



5.1.1 Drive Pump Assembly (Part No. 55089)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55059	ASSY,GUARD,PUMP	1
2	55064	WLDT,CLAMP,TANK,OIL	1
3	55067	WLDT,PIVOT,FRAME,MAIN	1
4	55069	WLDT,MOUNT,ENGINE	1
5	E6777	DECAL,4510,TENSION,BELT	1
6	30394	HYD,CAP,BREATHER,12MP	1
7	92181	HYD,FILTER,ASSY,GRESEN	1
8	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	4
9	31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	2
10	31173	NUT,NYLOCK,1/2,UNC,ZP	4
11	31175	NUT,NYLOCK,3/4,UNC,ZP	2

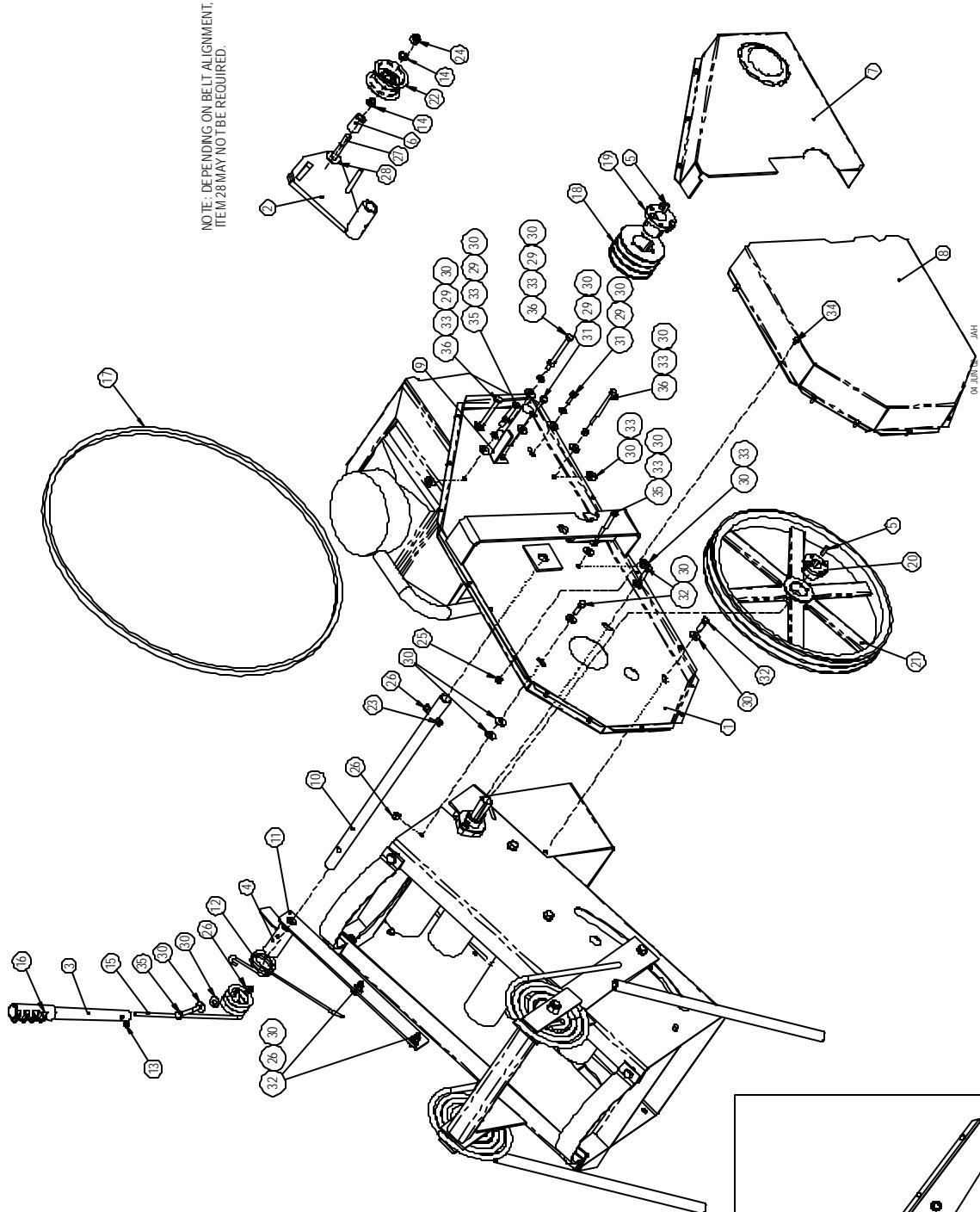




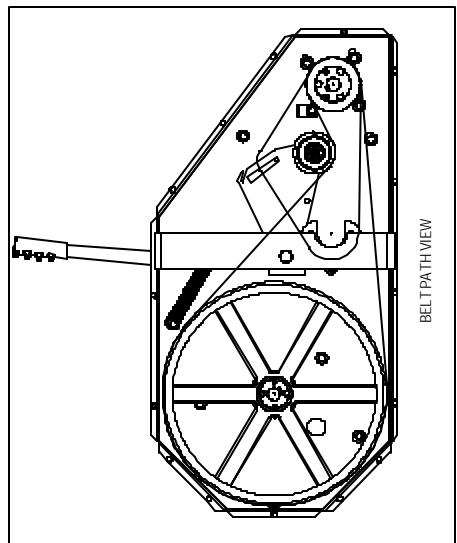
DETAIL A

5.1.1.1 Pump Guard Assembly (Part No. 55059)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55057	WLDT, GUARD,PUMP	1
2	55058	WLDT,TIGHTENER,BELT _PUMP	1
3	55086	WLDT,TENSIONER,BELT,HANDLE	1
4	50590	WLDT,COLLAR,SPRING	1
5	E5569	PLT,1/4X1/4X1	2
6	E6302	PIPE,SMLS,1x.188x1-9/16L	1
7	E6617	SHIELD,DRIVE, FORWARD	1
8	E6618	SHIELD,DRIVE, REAR	1
9	E6765	PLT,S,GUIDE,BELT	1
10	E6767	SHAFT,TENSIONER,BELT	1
11	E6768	PLT,MOUNT,SHAFT,TENSIONER	1
12	E7415	SPRING,TORSION,HYD,CONVEYOR	1
13	30037	SETSCREW,3/8UNCX3/8	1
14	30339	DRV,BUSHING,PRESSFIT,17MM-1/2	2
15	30454	SPRING,COIL,CONVEYER,LEFT	1
16	31810	GRIP,HANDLE,1-1/4IDX4-1/2	1
17	33212	DRV BELT,B,91.8,2,N	1
18	33272	DRV,SHEAVE,3V, 3.8A,4.2B	1
19	33273	DRV,BUSHING,S TAPER,P1,1-1/8	1
20	33274	DRV,BUSHING,SPLIT TAPER,H,1	1
21	33275	DRV,SHEAVE,2V,18.0A,18.4B	1
22	33276	DRV, IDLER,FLAT ,3-1/2DIA,1-1/2W	1
23	31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	1
24	31173	NUT,NYLOCK,1/2,UNC,ZP	1
25	31174	NUT,NYLOCK,1/4,UNC,ZP	15
26	31176	NUT,NYLOCK,3/8,UNC,ZP	7
27	31211	BOLT,CARR,1/2X3-1/2,UNC,GR5,ZP	1
28	31236	WASHER,FLAT ,1/2,ZP	1
29	31319	WASHER,LOCK,3/8,ZP	5
30	31351	WASHER,FLAT ,3/8,ZP	19
31	31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	2
32	31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	5
33	31485	NUT,HEX,3/8,UNC,GR5,ZP	8
34	31534	BOLT, HEX,1/4X1/2,UNC,GR5,ZP	15
35	31544	BOLT,HEX,3/8X2-3/4,UNC,GR5,ZP	3
36	33313	BOLT,HEX,3/8X4-1/4,UNC,GR5,ZP	3



BELT PATH VIEW



5.2 Gas Engine Drive Option (Part No. GCO45GED-2)

The Gas Engine Drive Option includes a mount for a Gas Engine and means to drive the main Conveyor Belt. This Option also includes a Fuel Tank with Fuel Line and Battery Holder with Battery Cables.

Installation

Ensure the Pump Guard Housing (55057) is firmly attached to the Drive Box of the Conveyor and to the Engine assembly. The Pump Guard Housing can be tilted to allow for motors with different drive shaft locations.

Ensure all sheaves and belts are properly aligned and the belt tensioners are operating properly before operation.

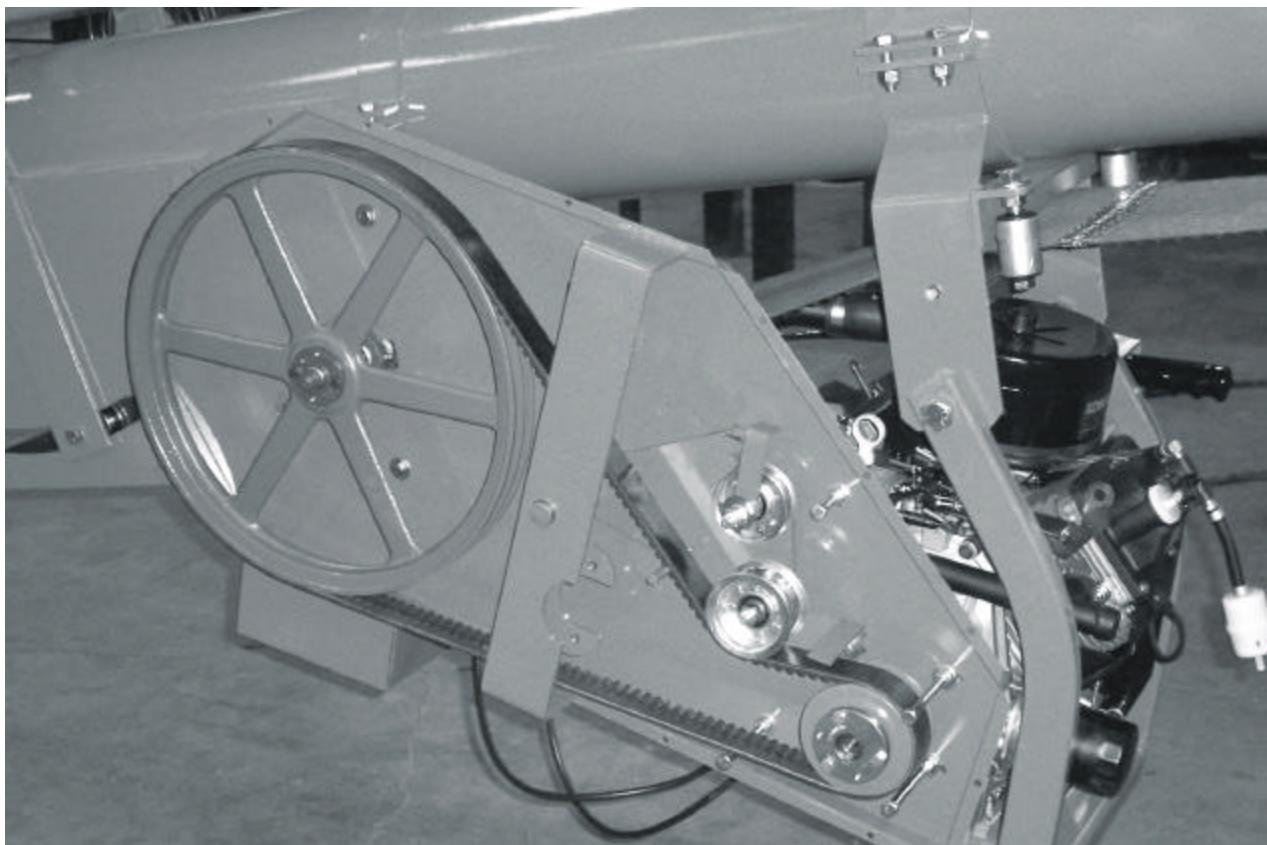
Ensure all hoses (including the Fuel Line) and wiring allows for full range of motion of the conveyor when fully raised.

Operation

The Drive system is designed to drive the main Conveyor belt when the Belt Tensioner Handle is in the ENGAGE CONVEYOR position. The lift cylinder is connected to a tractor to raise and lower the Conveyor.

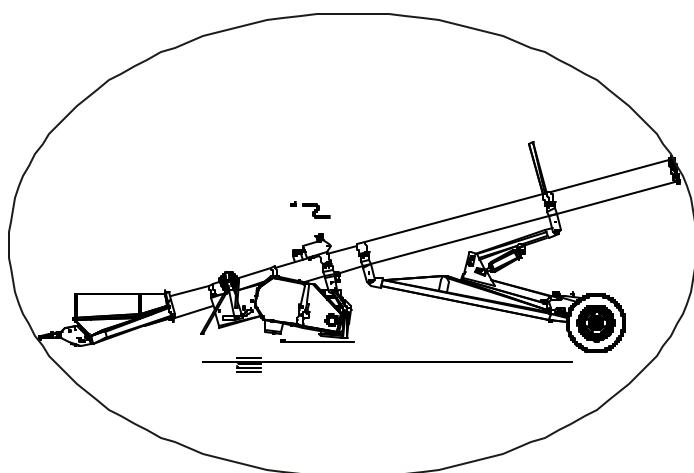
Note: The lock valve connected to the lift cylinder must be used whenever the Conveyor is in an elevated position.

Ensure the Operator is familiar with the Drive Controls before operating the machine to avoid Personal Injury or Damage to the machine.



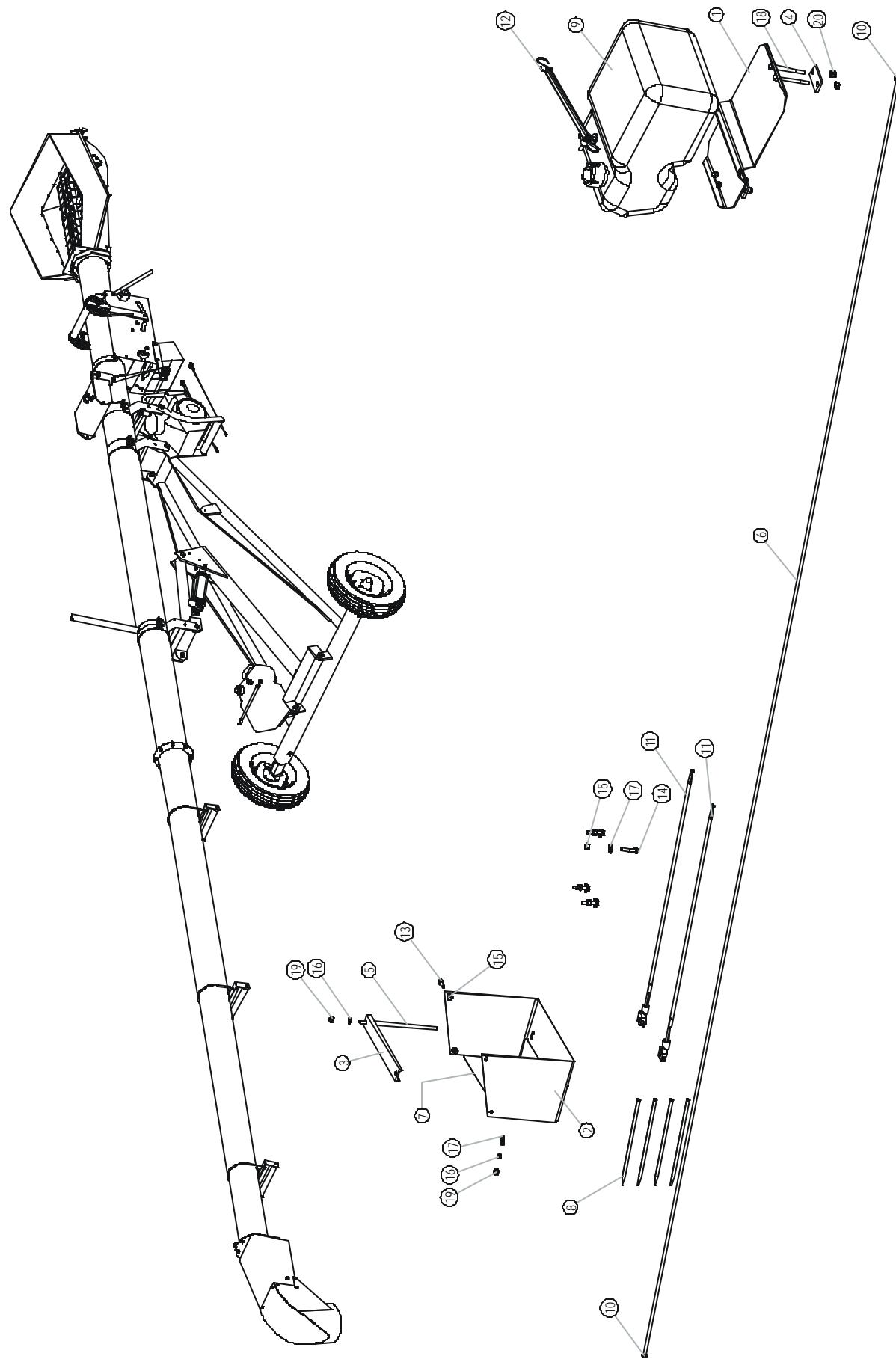
5.2 Gas Engine Drive Option (Part No. GCO45GED-2) - cont'd

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55089	ASSY,DRIVE_PUMP	1
2	55090	ASSY,GASTANK_BATHHOLDER	1
3	30209	HYD,FIT,PIONEER,MALE,8FP	1
4	90280	HYD,HOSE,3/8X191,8MJ-8MP,1W	1



5.2.1 Gas Tank Bat Holder (Part No. 55090)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E6298	MOUNT,GASTANK	1
2	E6705	PLATE,BOX,BATTERY	1
3	E6724	CHANNEL,MOUNT,BATTERY	1
4	E6725	PLT,S.MOUNT,TANK	2
5	E6726	ROD,THREADED,3/8X9-1/2	2
6	E6727	TUBE,POLY-U,1/4ID,3/8OD,168	1
7	E6775	GUARD,BATTERY	1
8	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	4
9	33198	TANK,FUEL,PLASTIC,25L	1
10	33279	CLAMP,HOSE,GEAR,1/4-5/8	2
11	33292	CABLE,BATTERY,4 GA,37"	2
12	33297	STRAP,TARP,15	1
13	31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	2
14	31066	BOLT,HEX,3/8X1-3/4,UNC,GR5,ZP	4
15	31176	NUT,NYLOCK,3/8,UNC,ZP	6
16	31319	WASHER,LOCK,3/8,ZP	4
17	31351	WASHER,FLAT,3/8,ZP	6
18	31455	BOLT,HEX,7/16X4,UNC,GR5,ZP	4
19	31485	NUT,HEX,3/8,UNC,GR5,ZP	4
20	31560	NUT,NYLOCK,7/16,UNC,GR5,ZP	4



5.3 Mover Option (Part No. GCO45MV-2)

The Mover Options includes a Mover Frame, Castor Wheel Assembly, and additional hydraulic components to drive the Mover Wheel, Intake Tilt Cylinder, and Main Lift Cylinder.

Installation

Ensure all hoses and wiring allows for full range of motion of the conveyor when operating in all conditions.

Operation

The Mover Option contains three hydraulic systems including the Mover Wheel, Intake Tilt Cylinder, and Main Lift Cylinder. The Mover Wheel and Intake Tilt Cylinder controls are located on the handle of the Castor Wheel and the Main Lift Cylinder control is located on the Selector Valve. Decals on these components show how to control each function. The speed in which these functions operate is dependant on the Engine speed, however, ***it is not recommended to run the engine at full speed when using the Hydraulic System.***

Ensure that the Operator is familiar with the Hydraulic Controls before operating the machine to avoid Personal Injury or Damage to the machine.



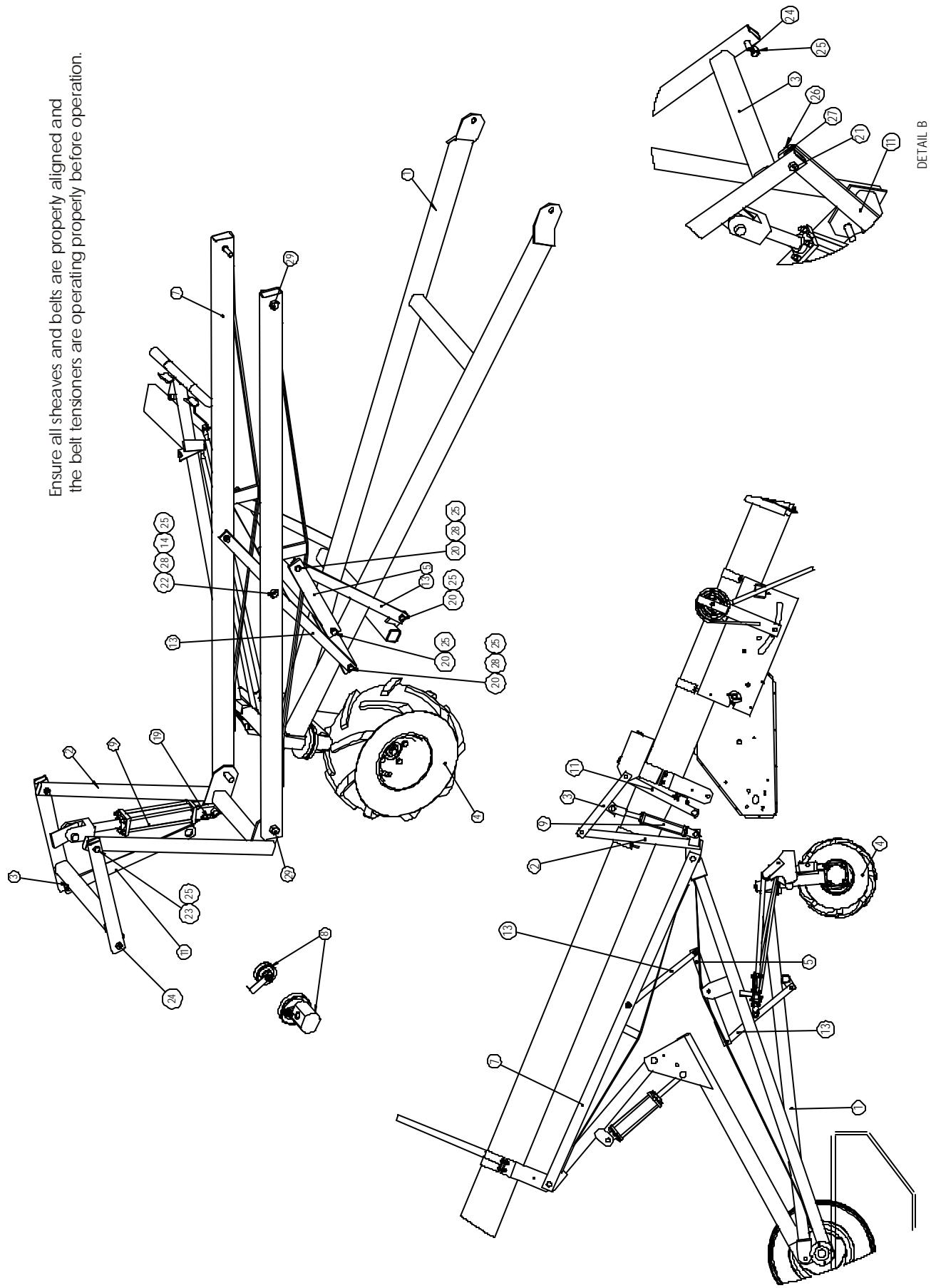


Hydraulic Hose Routing

5.3 Mover Option (Part No. GCO45MV-2) - cont'd

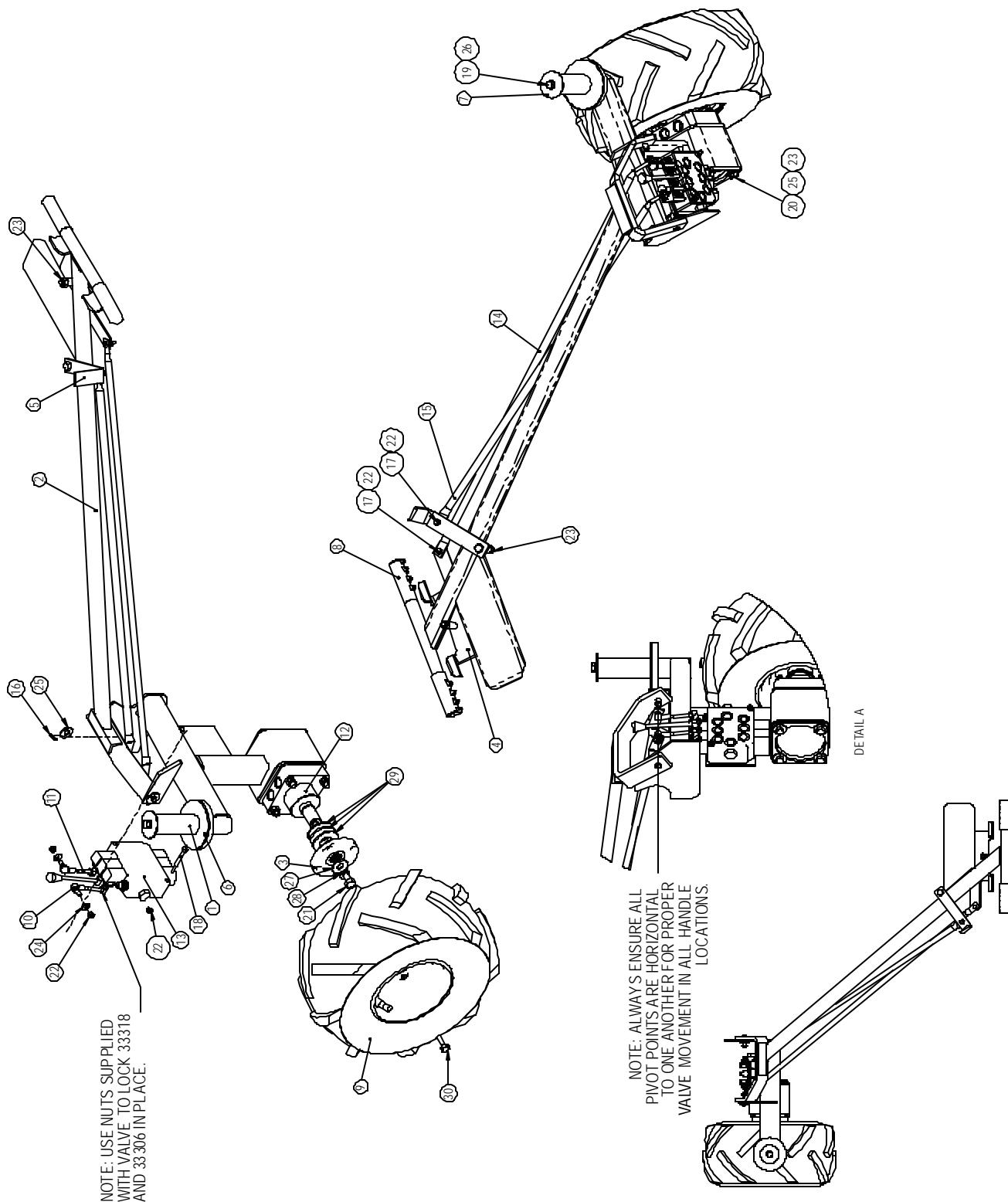
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50539	WLDT,FRAME,DRIVE	1
2	55062	WLDT,LINKAGE,FRAME,MOVER	1
3	55063	WLDT,LINKAGE,TUBE,MOVER	1
4	55065	ASSY,CASTOR,WHEEL_HANDLE	1
5	55066	WLDT,PIVOT,Z_LINKAGE	1
6	55082	ASSY,HYD,MOVER	1
7	55085	WLDT,TRUSS,ARM,MOVER	2
8	55091	ASSY,DRIVE,PUMP	1
9	90104	HYD,CYL,2X8,1.125,8FB	1
10	E3285	DECAL,4510,CONTROL,VALVE	1
11	E3287	PLT,S,LOCK,MOVER	1
12	E3289	DECAL,LOCK,TRANSPORT	1
13	E6612	PLT,FRAME,LINK	4
14	E6707	PIPE,SMLS,3/4x.120x1-9/16L	2
15	E6778	DECAL,4510,CONTROL,INTAKE	2
16	E6779	DECAL,4510,FORWARD,CONVEYOR	2
17	E6780	DECAL,4510,REVERSE,CONVEYOR	2
18	30207	ZERK,1/4-28,GF641,STRAIGHT	1
19	91609	PIN,HITCH,5/32X3	1
20	31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	8
21	31018	BOLT,HEX,1/2X2-1/2,UNC,GR5,ZP	1
22	31020	BOLT,HEX,1/2X2-3/4,UNC,GR5,ZP	2
23	31021	BOLT,HEX,1/2X3,UNC,GR5,ZP	2
24	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	1
25	31173	NUT,NYLOCK,1/2,UNC,ZP	13
26	30611	NUT,NYLOCK,JAM,1/2,UNC,ZP	1
27	31163	NUT,HEX,1/2,UNC,GR5,ZP	1
28	31236	WASHER,FLAT,1/2,ZP	6
29	31340	BOLT,HEX,3/4X3-1/2,UNC,GR5,ZP	4
30	30295(2)	PAINT,ORANGE,HIGHLINE	1
31	30296(.22)	PAINT,CATALYST,SPO3937P2	1

Ensure all sheaves and belts are properly aligned and the belt tensioners are operating properly before operation.



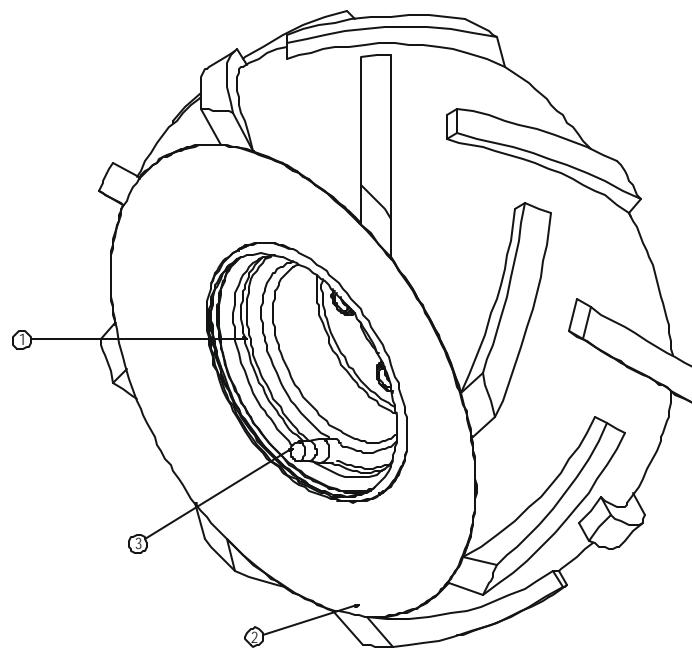
5.3.1 Castor Wheel Handle Assembly (Part No. 55065)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	55060	WLDT,CASTER	1
2	55080	WLDT,HANDLE,STEERING	1
3	55081	WLDT,HUB,SPLINE	1
4	55083	WLDT,LEVER,STEERING	1
5	55087	WLDT,LEVER,TLT	1
6	E6739	PLT ,C,UHMW-PE,3/16X5X2	1
7	E6706	PLT ,C.,119X17/32X2-3/4	1
8	31810	GRIP,HANDLE,1-1/4IDX4-1/2	2
9	33195	WHEEL,COMPLETE,LUG,OFWH	1
10	33306	BALLJOINT,DIRCONTROL	2
11	33318	STUD,8M1.25X80MM,12MM+27MM	2
12	92145	HYD,MOTOR,RE3207050	1
13	E3288	HYD,VALVE,3-SPOOL,1500PSI	1
14	E6738	LINK,CONTROL,DIRECTION	1
15	E6783	LINK,CONTROL,INTAKE	1
16	31450	PIN,COTTER,1/8X1	2
17	31062	BOLT,HEX,5/16X1,UNC,GR5,ZP	2
18	31050	BOLT,HEX,5/16X3,UNC,GR5,ZP	2
19	31069	BOLT,HEX,1/2X1,UNC,GR5,ZP	1
20	31478	BOLT,HEX,1/2X7-1/2,GR5,UNC,ZP	4
21	31545	BOLT,HEX,5/8X1,UNF,GR5,ZP	1
22	31177	NUT,NYLOCK,5/16,UNC,ZP	6
23	31173	NUT,NYLOCK,1/2,UNC,ZP	6
24	31239	WASHER,FLAT,5/16,ZP	2
25	31236	WASHER,FLAT,1/2,ZP	6
26	31244	WASHER,LOCK,1/2,ZP	1
27	31240	WASHER,FLAT,5/8,ZP	1
28	31218	WASHER,LOCK,5/8,ZP	1
29	32071	WASHER,FLAT,1-1/4	3
30	32336	SUSP,BOLT,WHEEL,1/2x1-1/4Tx1-3/4L	4



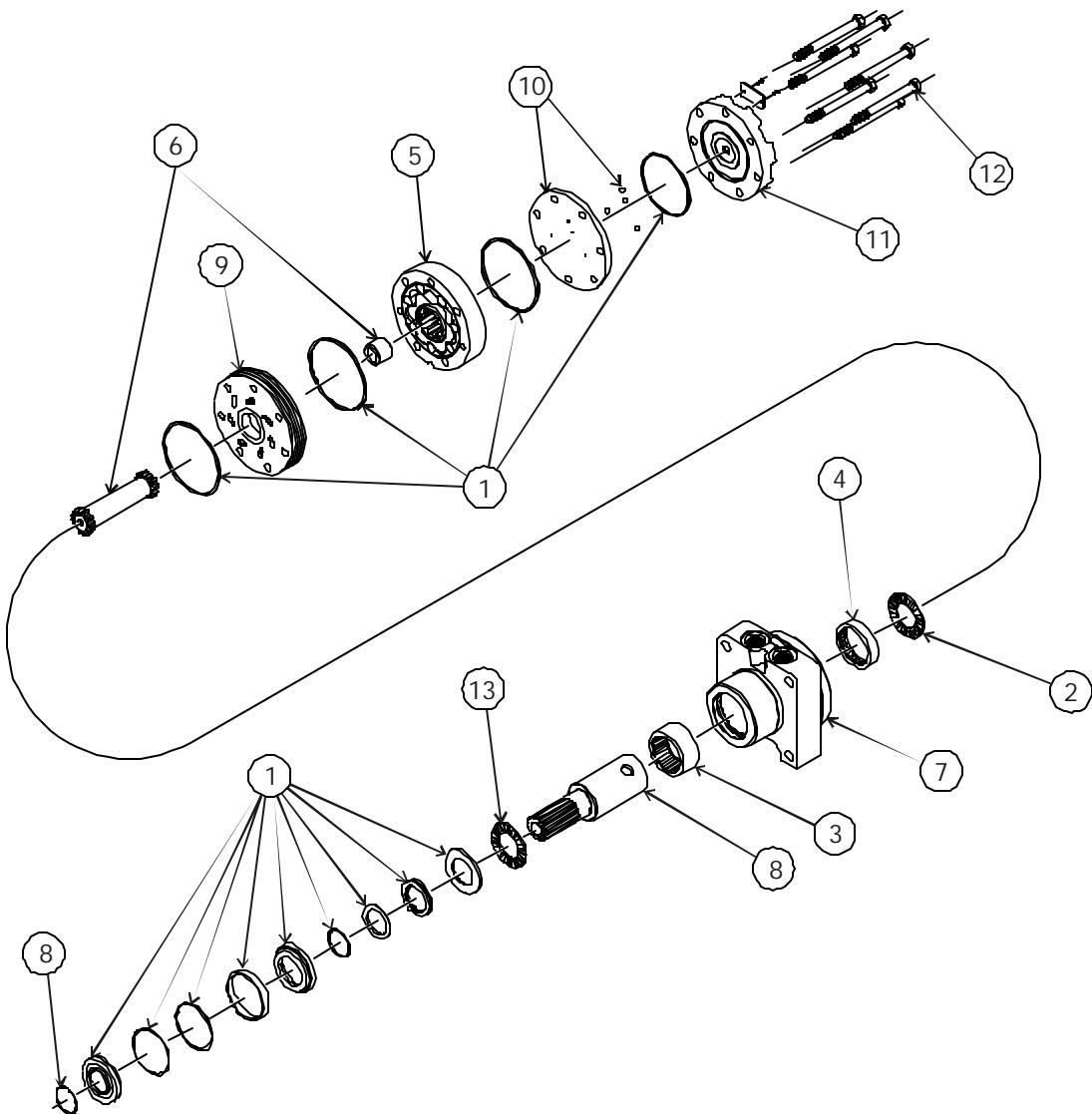
5.3.1.1 Wheel Assembly (Part No. 33195)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33193	SUSP,WHEEL,8X7X4.0,OFWH	1
2	33194	SUSP,TIRE,20X10-8,4 PLY,LUG	1
3	91048	SUSP, STEM,VALVE,TR801HP	1



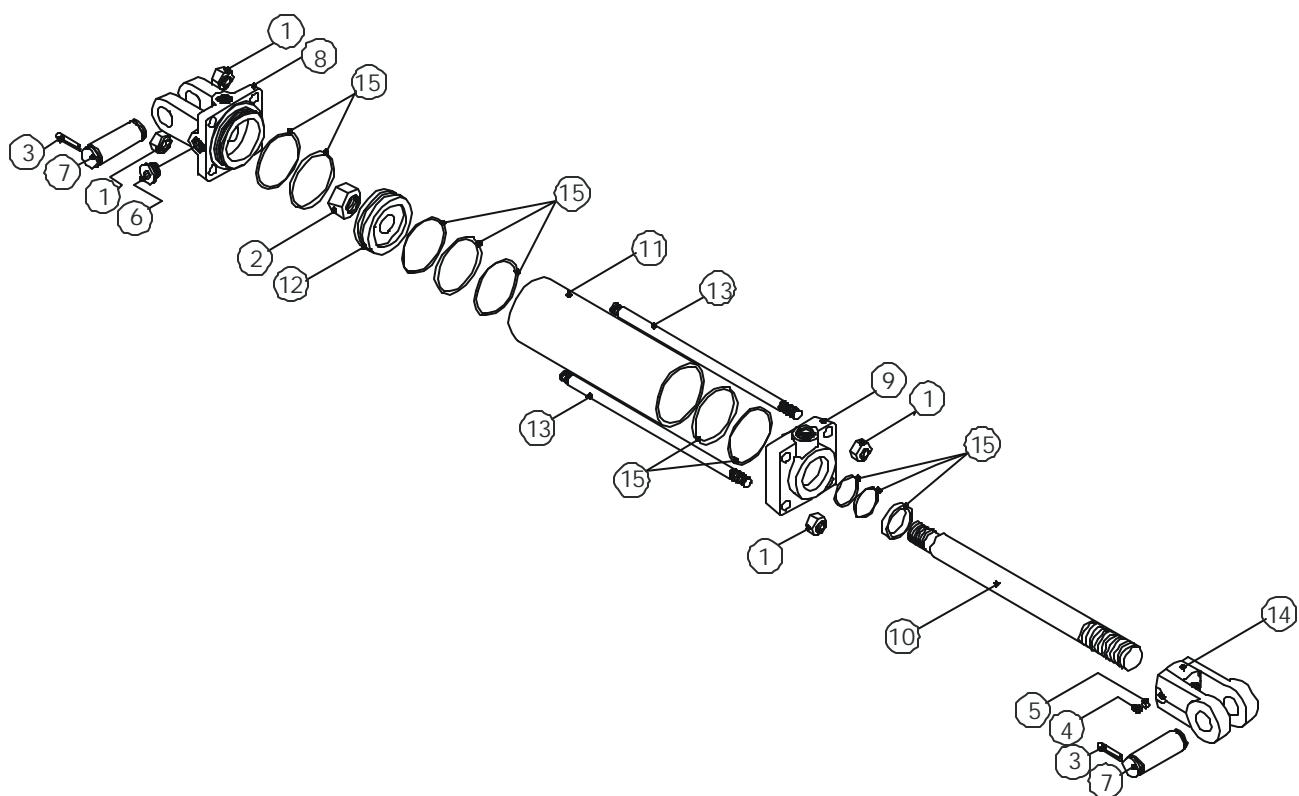
5.3.1.2 Hydraulic Motor (Part No. 92145)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	32647	SEAL KIT,ROLLER STATOR	1
2	32651	BEARING,THRUST,REAR	1
3	32720	BEARING,HOUSING,FRONT	1
4	32649	BEARING,HOUSING,REAR,1/2	1
5	32643	ROTOR KIT	1
6	32722	DRIVE LINK KIT	1
7	32723	HOUSING KIT	1
8	32653	SHAFT KIT	1
9	32725	MANIFOLD	1
10	32726	BALANCE PLATE & BALLS	1
11	32727	END COVER	1
12	32655	BOLT KIT	1
13	32639	BEARING,THRUST,FRONT	1



5.3.1.3 2x8 Hydraulic Cylinder (Part No. 90104)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31485	NUT,HEX,3/8,UNC,ZP	8
2	31588	NUT,HEX,3/4,UNF	1
3	30238	PIN,COTTER,3/16X1-1/2	4
4	30239	SETSCREW,SOCKET,3/8X1-1/2KNUR	1
5	30261	LOCKTHREAD,NYLOCK	1
6	33026	HYD,FIT,PLUG,8ORB,HOLLOWHEX	1
7	32250	HYD,CYL,PIN,1	2
8	33027	HYD,CYL,CLEVIS,CAP,2,8ORB	1
9	33028	HYD,CYL,CAP,ROD,2X1-1/8,8ORB	1
10	33029	HYD,CYL,ROD,1-1/8X14-3/4	1
11	33030	HYD,CYL,2X8,H6203	1
12	33031	HYD,CYL,PISTON,2,H6688	1
13	33032	HYD,CYL,TIEROD,3/8X8	4
14	33033	HYD,CLEVIS,1-1/8,1PIN	1
15	33034	HYD,CYL,SEALKIT,2,639572	1



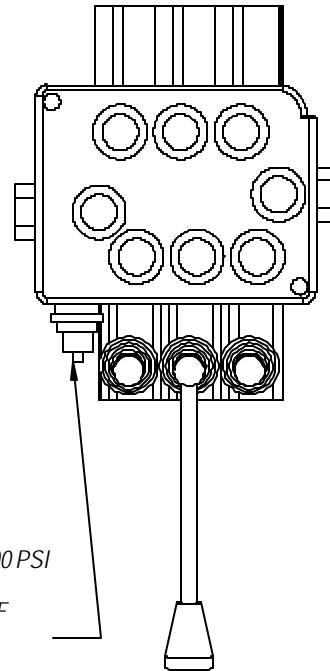
5.3.1.4 Hydraulic Valve (Part No. E3288)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33226	HYD,VALVE,3-SPOOL,W/RELIEF	1

TO SET THE INTERNAL RELIEF OF THE SELECTOR VALVE AT 1500 PSI, FOLLOW THESE INSTRUCTIONS:

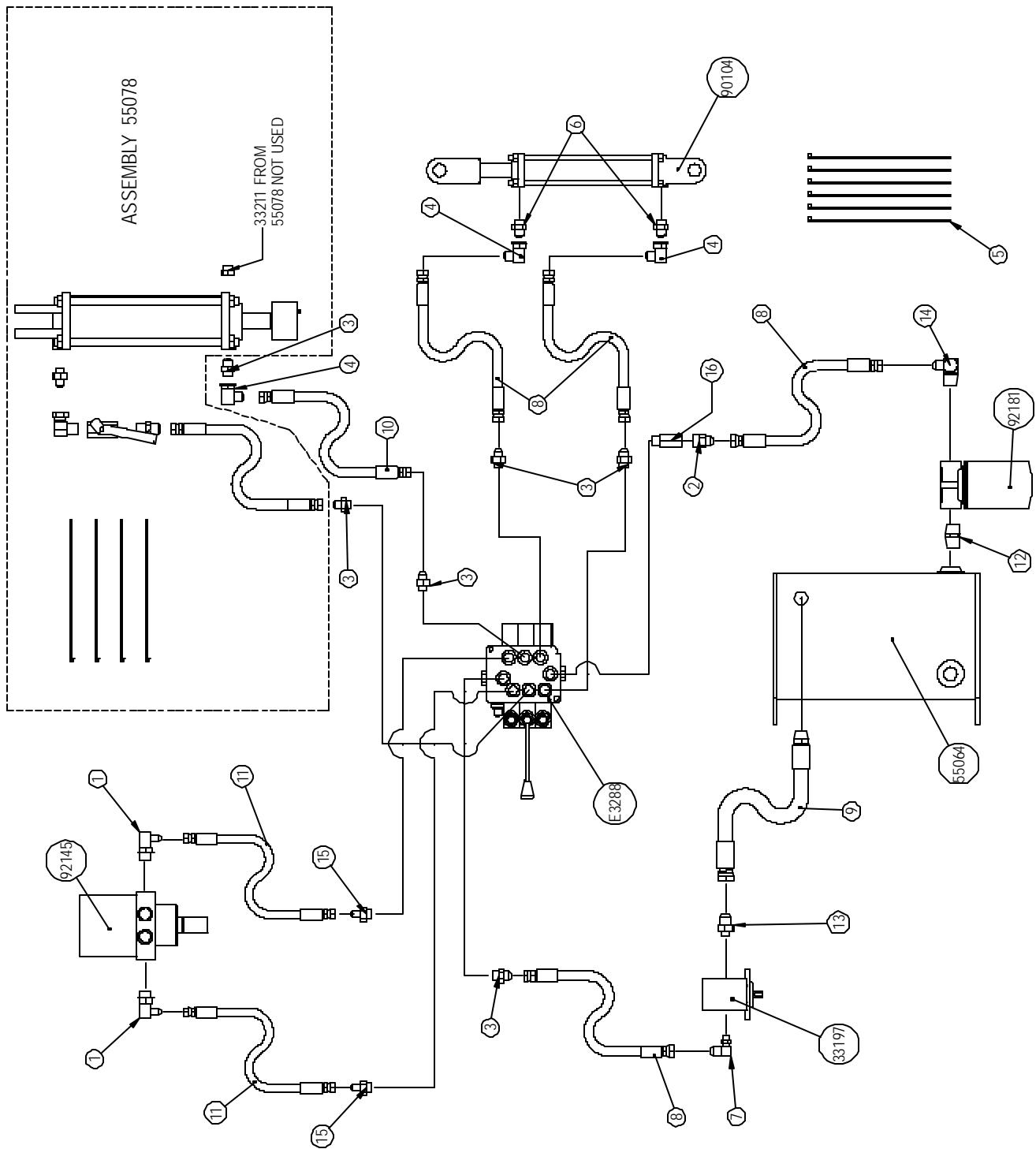
TURN THE SET SCREW CLOCKWISE (IN)
UNTIL IT BOTTOMS OUT. THEN TURN THE
SET SCREW COUNTER-CLOCKWISE (OUT) 6-1/2 TURNS
TO SET THE RELIEF PRESSURE.

WHEN CHECKING THE PRESSURE ON A SET UP MACHINE,
THE SYSTEM PRESSURE READING MUST BE 1600 PSI +/- 100 PSI
WHILE THE ENGINE IS RUNNING AT IDLE SPEED.
AS A RESULT, THIS WILL SET THE SELECTOR VALVE RELIEF
SETTING AT 1500 PSI.



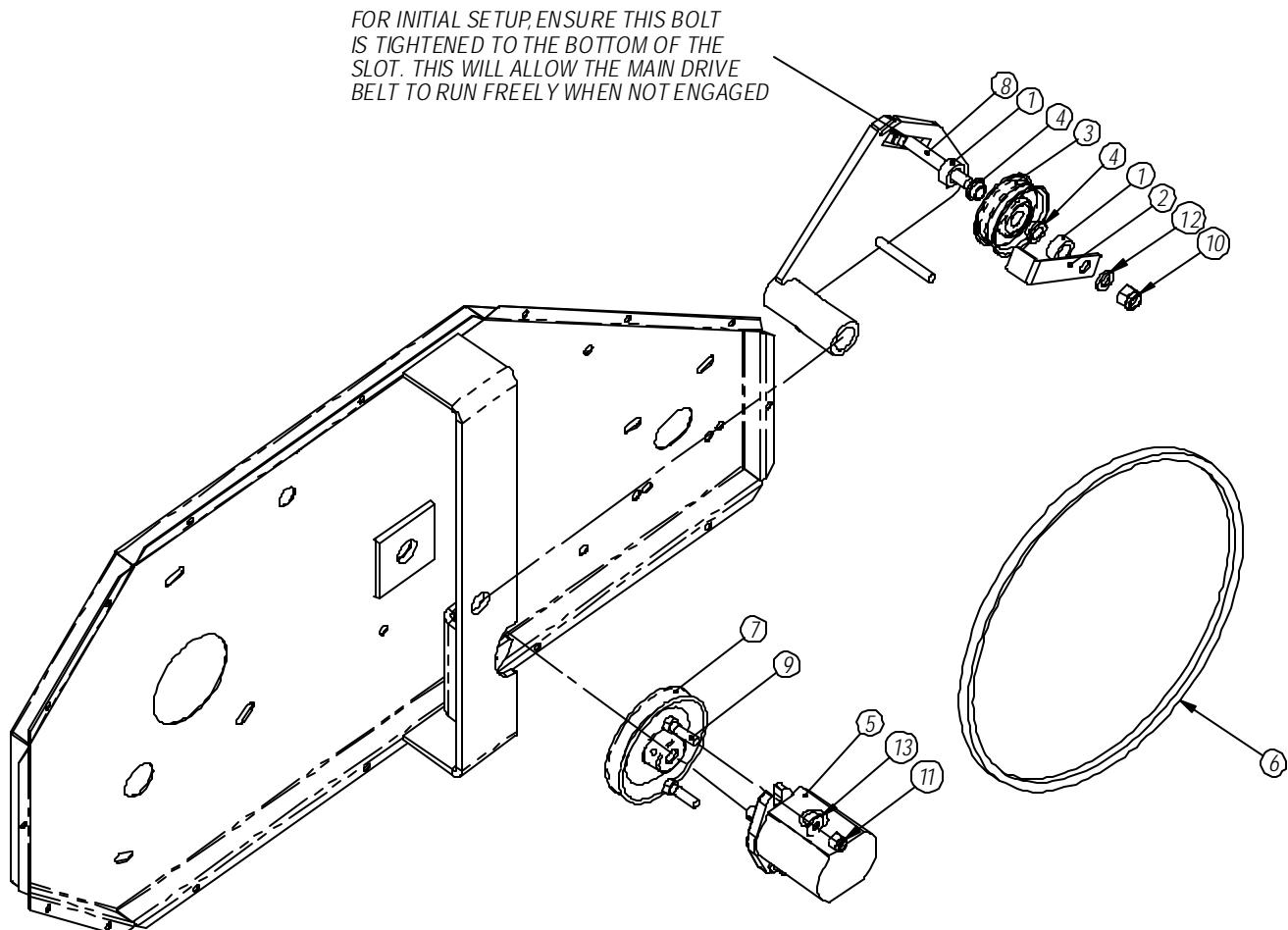
5.3.2 Hydraulic Mover Assembly (Part No. 55082)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30046	HYD, FIT, ELBOW, 10MB-6MJ90	2
2	30204	HYD,FIT,ADAPTER,10MB-8MJ	1
3	30215	HYD,FIT,ADAPTER,8MB-8MJ	6
4	30436	HYD, FIT, ELBOW,8FJX-8MJ90	3
5	31613	TIE,CABLE, NYLON, BLACK,11 1/2"	6
6	31957	HYD,FIT,ADAPTER,8MB-8MJ,028ORIFICE	2
7	32079	HYD,FIT,ELBOW,6MB-8MJ90	1
8	33173	HYD,HOSE,3/8X78,8FJX-8F JX,2W	4
9	33300	HYD,HOSE,3/4X32,12MP-12F JX,2W	1
10	33301	HYD,HOSE,3/8X100,8FJX-8FJX,2W	1
11	33302	HYD,HOSE,1/4X16,6FJX-6F JX,2W	2
12	33303	HYD,FIT,ADAPTOR,12MP-12MP	1
13	33304	HYD,FIT,ADAPTER,8MB-12MJ	1
14	33305	HYD,FIT,ELBOW,12MP-8MJ90	1
15	33307	HYD,FIT,ADAPTER,8MB-6MJ	2
16	33315	HYD,VALVE,CHECK,300PSI_CRACK	1



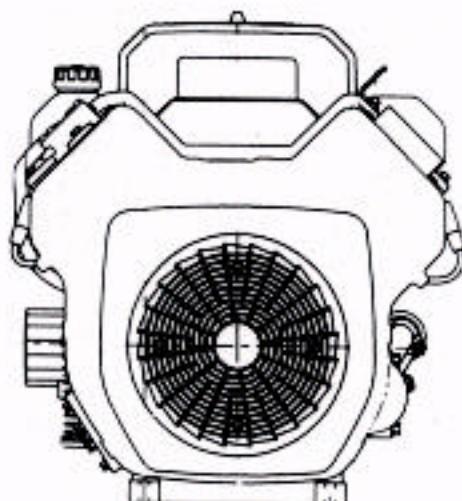
5.3.3 Drive Pump Assembly (Part No. 55091)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E6708	PIPE,SMLS,1x.188x7/16L	2
2	E6766	PLT,S,GUIDE,BELT,SHEAVE	1
3	30319	DRV, IDLER, FLAT, 3.09DIA, 0.69W	1
4	30339	DRV, BUSHING, PRESSFIT, 17MM-1/2	2
5	33197	HYD,PUMP,6.1,2500PSI	1
6	33213	DRV BELT,B,44.8,1,N	1
7	33278	DRV,SHEAVE,1V,4.0-A,4.4-B	1
8	31211	BOLT,CARR,1/2X3-1/2,UNC,GR5,ZP	1
9	31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	2
10	31173	NUT,NYLOCK,1/2,UNC,ZP	1
11	31176	NUT,NYLOCK,3/8,UNC,ZP	2
12	31244	WASHER,LOCK,1/2,ZP	1
13	31239	WASHER,FLAT,5/16,ZP	2



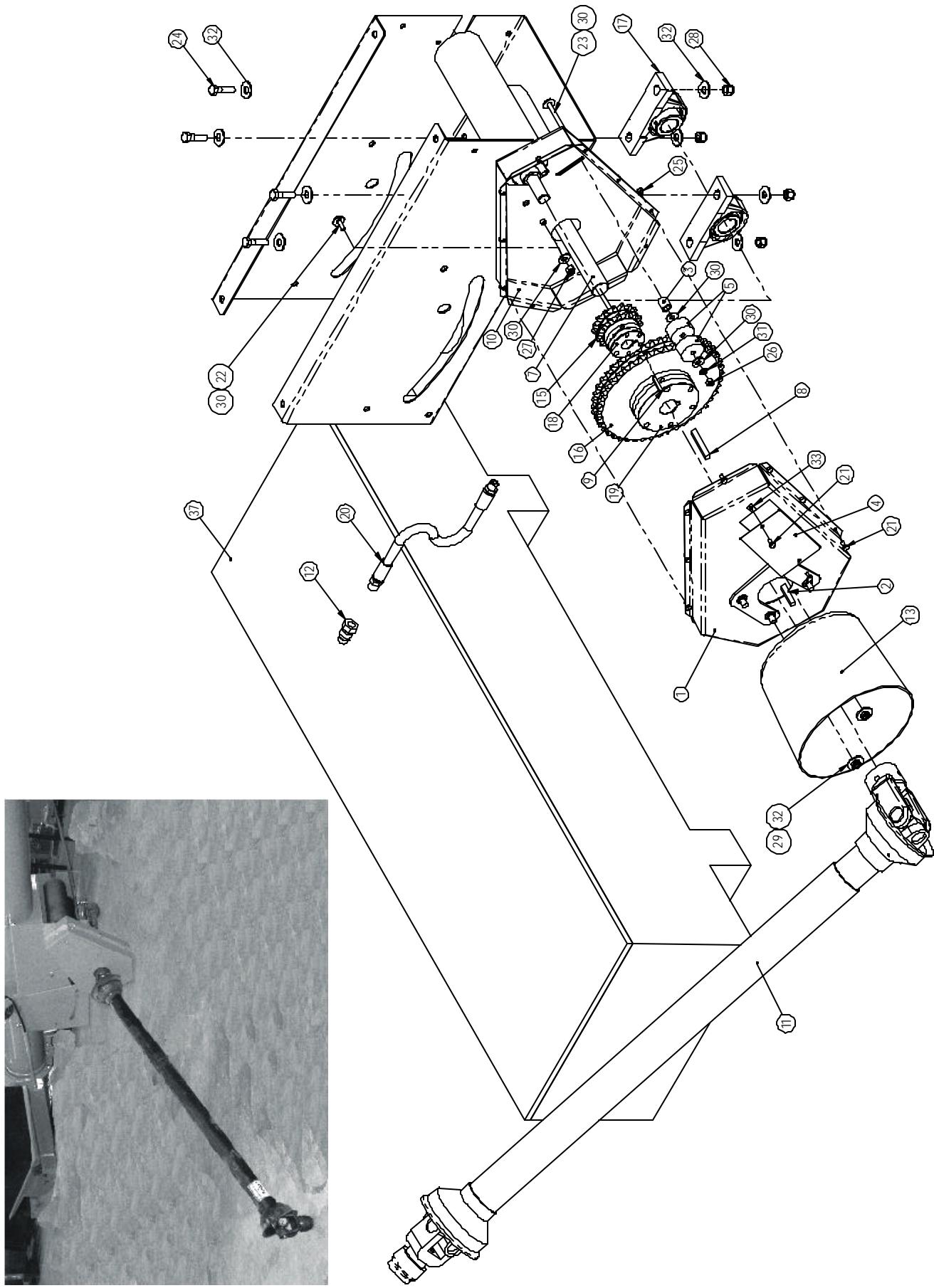
5.4 Gas Engine Option (Part No. GCO45GE-2)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33253	ENGINE,AIR,FILTER	1
2	33254	ENGINE,PRE-CLEANER	1
3	33255	ENGINE,OIL,FILTER	1
4	33256	ENGINE,FUEL,FILTER	1
5	33257	ENGINE,PLUG,SPARK	2
6	33258	ENGINE,KEYS,IGNITION,2	1
7	33259	ENGINE,STARTER,MOTOR	1
8	33260	ENGINE,STARTER,SOLENOID	1
9	33261	ENGINE,PUMP, FUEL	1
10	33262	ENGINE,MODULE,SPARK	



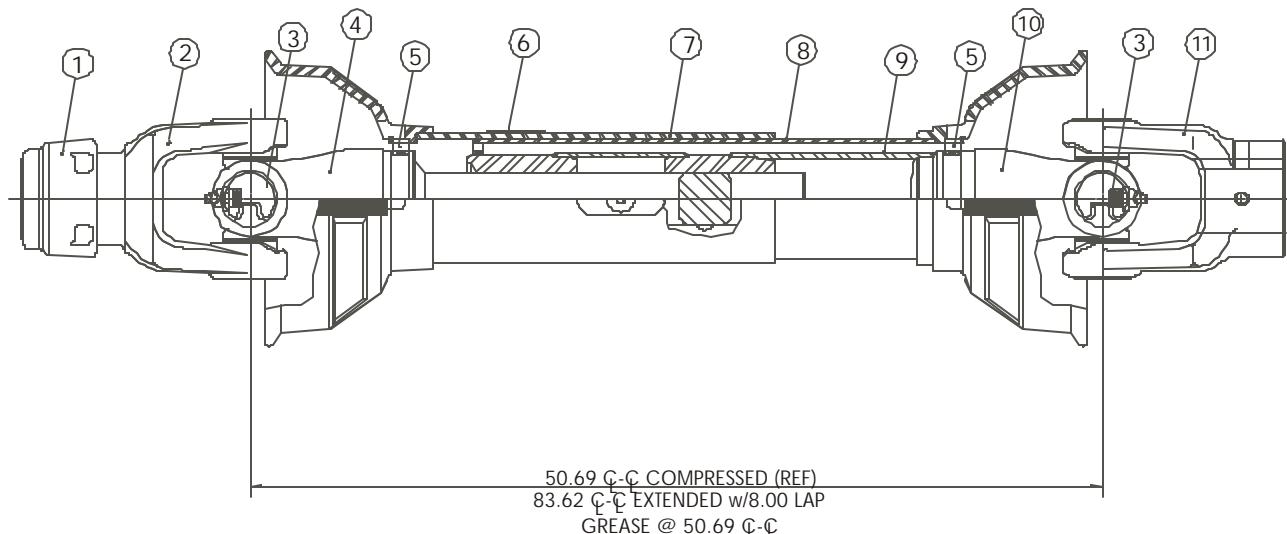
5.5 PTO Option (Part No. GCO45PTO-2)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50592	WLDT,GUARD,PTO_DRV,OUTER	1
2	E4182	KEY,3/8X2	1
3	E6188	PIPE,SMLS,3/4x.120x7/8L	1
4	E6432	PLT,COVER,SKID	1
5	E6449	GUIDE,CHAIN,PLASTIC	2
6	E6742	CHAIN,ROLLER,#60DBL,30LINKS	1
7	E6850	SHAFT,DRIVE,PTO	1
8	E6851	KEY,3/8X2-7/8	1
9	E6852	KEY,1/4X1-1/2	1
10	E6853	GUARD,PTO_DRV,INNER	1
11	30126	DRV,DL,UJ,35R,540	1
12	30209	HYD,FIT,PIONEER,MALE,8FP	1
13	30284	DRV, GUARD, CV	1
14	33220	CHAIN,CONNECTOR_LINK,#60DBL	1
15	33285	DRV,SPROCKET,#60DBL,15,12	1
16	33286	DRV,SPROCKET,#60DBL,45,12	1
17	33287	BEARING,PILLOW-BLOCK,1-1/2,3	2
18	33288	DRV,BUSHING,STAPER,P1,1	1
19	33289	DRV,BUSHING,STAPER,R1,1-1/2	1
20	90280	HYD,HOSE,3/8X191.8MP-8MJ.1W	1
21	31534	BOLT, HEX,1/4X1/2,UNC,GR5,ZP	12
22	31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	1
23	33221	BOLT,HEX,3/8X4,UNC,GR5,ZP	1
24	31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	4
25	31174	NUT,NYLOCK,1/4,UNC,ZP	10
26	31485	NUT,HEX,3/8,UNC,GR5,ZP	1
27	31176	NUT,NYLOCK,3/8,UNC,ZP	1
28	31173	NUT,NYLOCK,1/2,UNC,ZP	4
29	30611	NUT,NYLOCK,JAM,1/2,UNC,ZP	4
30	31351	WASHER,FLAT,3/8,ZP	5
31	31319	WASHER,LOCK,3/8,ZP	1
32	31236	WASHER,FLAT,1/2,ZP	12
33	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	2
34	E7413	CRATE,GCO45PTO	1



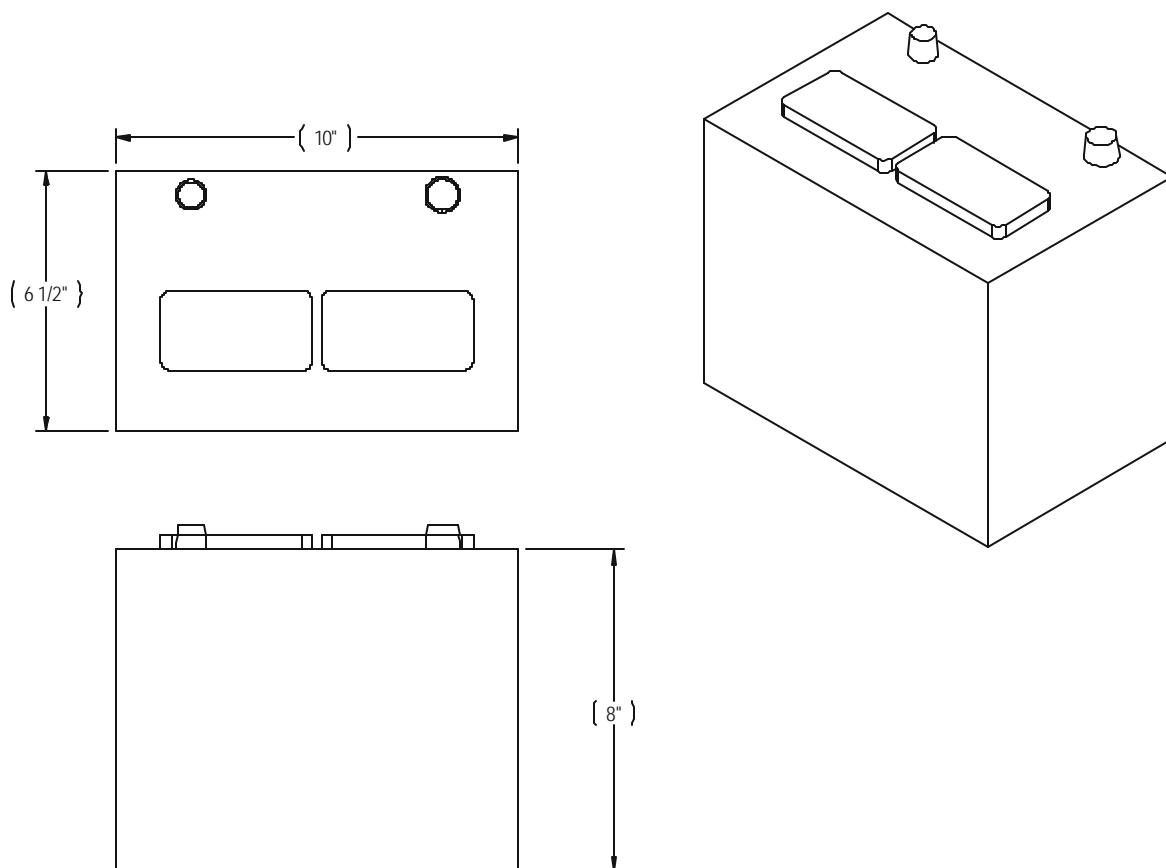
5.5.1 PTO Breakdown (Part No. 30126)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30352	KIT,REPAIR,LOCK,AUTO	1
2	30499	DRV,DL,YOKE,1/2,540RPM	1
3	30365	DRV,DL,U-JOINT,CROSS&BEARING,35R	2
4	33039	DRV,DL,YOKE&SHAFT	1
5	30616	DRV,DL,KIT,REPAIR,R	2
6	30359	SIGN,SAFETY	1
7	33040	DRV,DL,GUARD,OUTER	1
8	33041	DRV,DL,GUARD,INNER	1
9	33059	DRV,DL,SIGN,SAFETY,540RPM	1
10	33042	DRV,DL,YOKE,TUBE&SLIPSLEEVE	1
11	33043	DRV,DL,YOKE	1



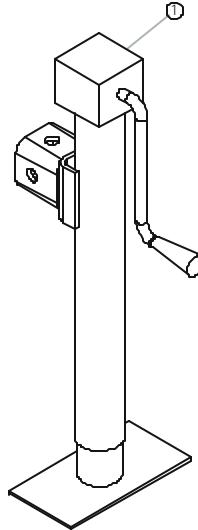
5.6 Battery Option - 450 CCA (Part No. GCOBAT-2)

CRANKING AMPS @ -18° C: 450CCA minimum
CRANKING AMPS @ 0° C: 550CA

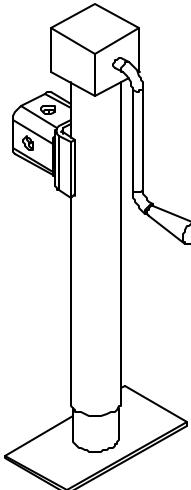


5.7 Hitch Jack Option (Part No. GCO45HJ-2)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31800	JACK,5000LBX15,SQ MNT,SIDEWIND	1

**5.7.1 Jack Assembly (Part No. 31800)**

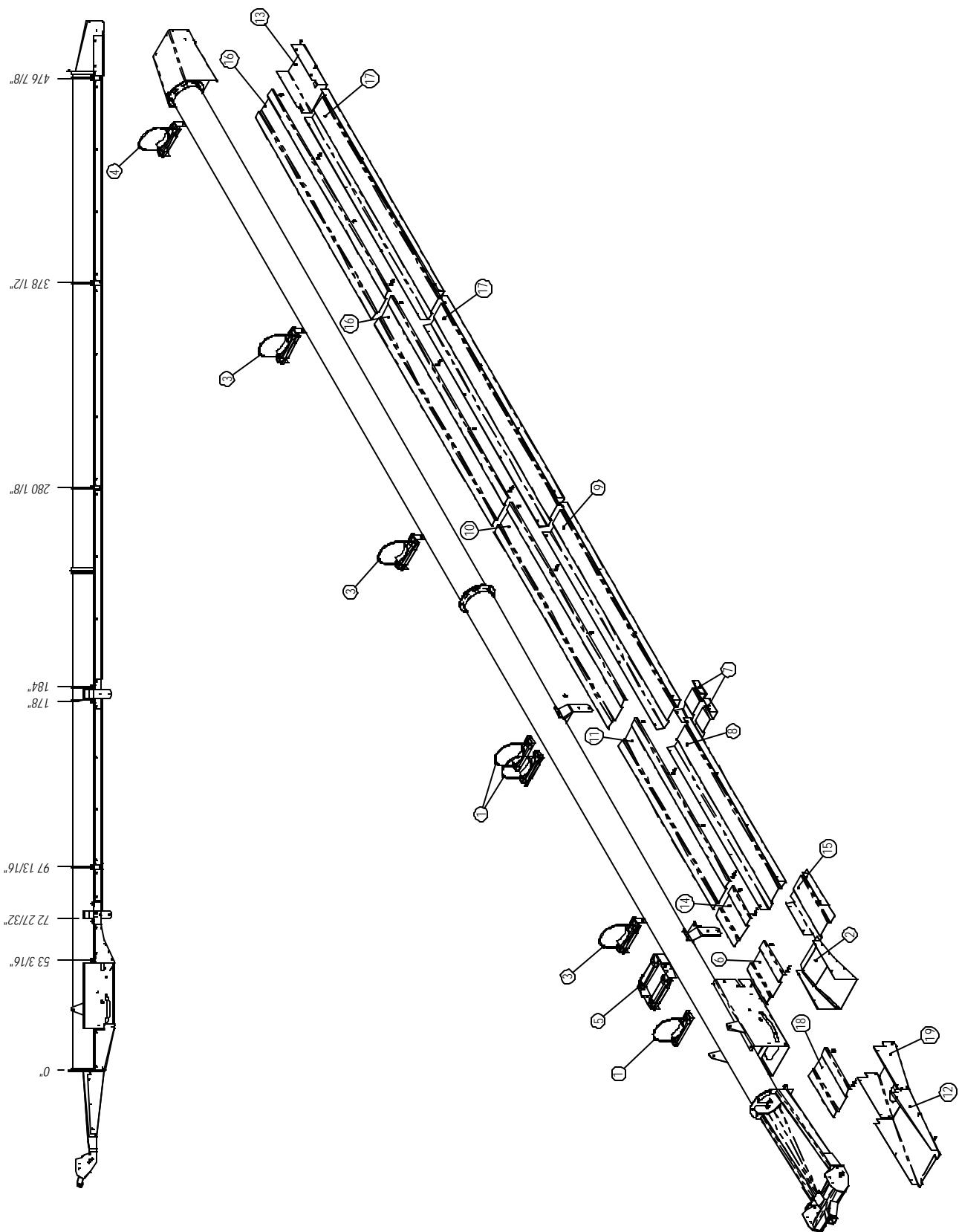
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31800	JACK,5000LBX15,SQ MNT,SIDEWIND	1
2	33438	KIT,PIN & CHAIN-5/8"X4.25"	1
3	33439	KIT,5K BEARING REPLACEMENT	1
4	33440	KIT,STD BEVEL GEAR REPLAC.	1
5	33441	KIT,SW CRN CRANK REPLAC.	1
6	33442	COVER,GEARBOX	1

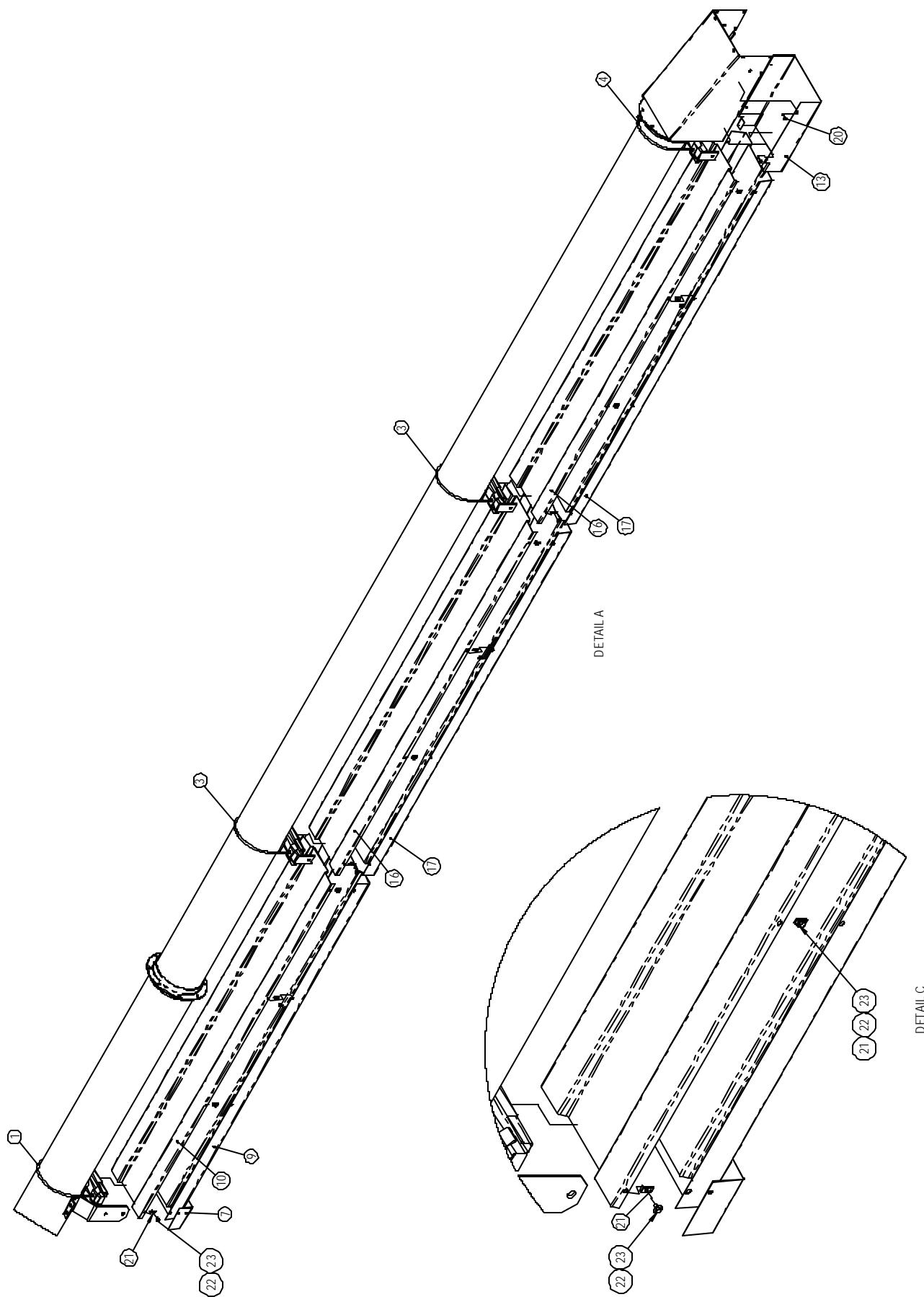


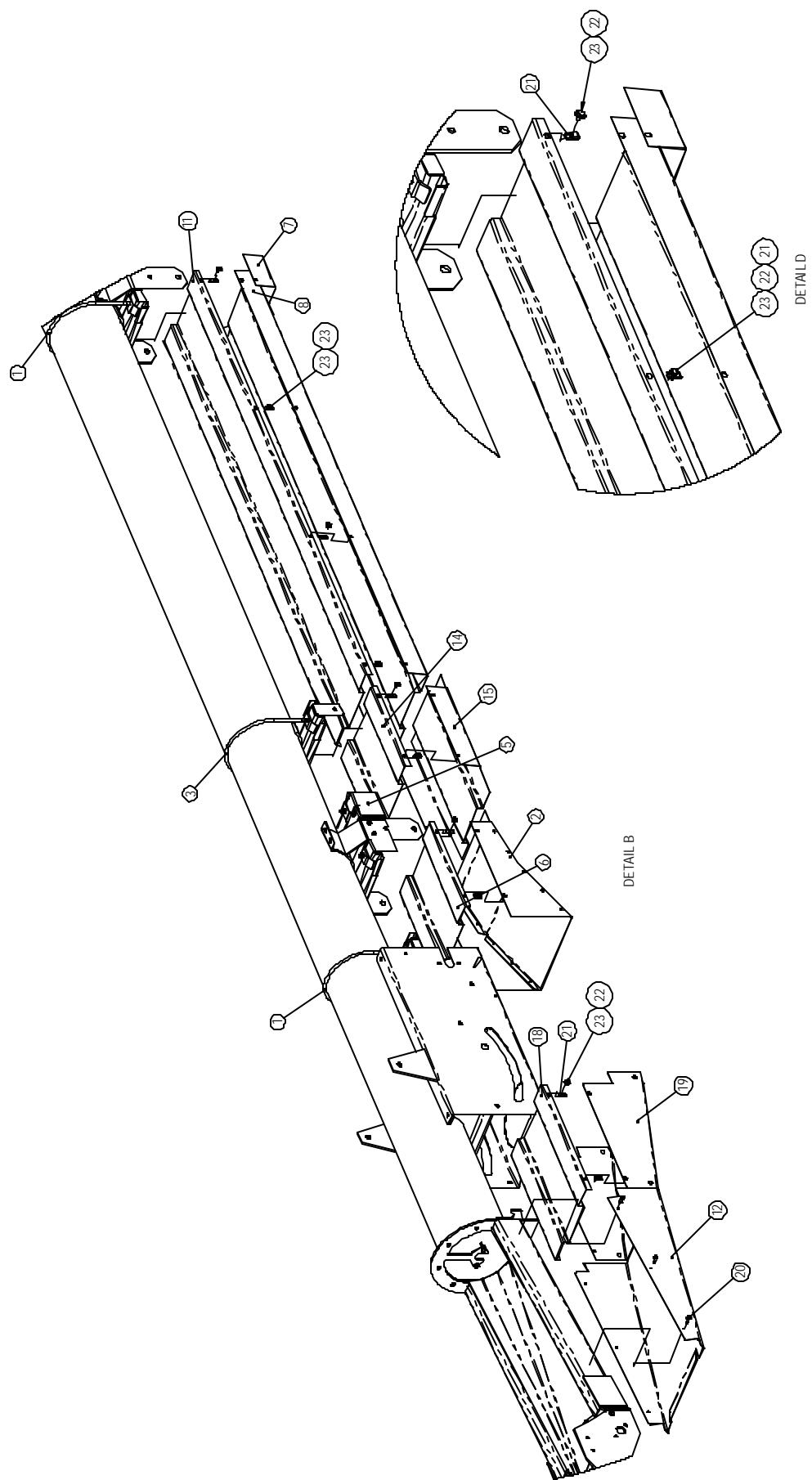
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5.8 Wind Guard Option (Part No. GCO45WG-2 (89039))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50579	ASSY,BRACKET,HALF,SHORT	3
2	50580	ASSY,SHIELD,TOP,DRV_BOX	1
3	50582	ASSY,ROLLER,RETURN	3
4	50584	ASSY,BRACKET,HALF,LONG	1
5	50585	ASSY,BRACKET,TRAINING_ROLLER	1
6	E7073	GUARD,BELT,CONVEYOR,16 3/16	1
7	E7078	GUARD,PIVOT,BELT,CONVEYOR	2
8	E7079	GUARD,BELT,CONVEYOR,77 5/8	1
9	E7080	GUARD,BELT,CONVEYOR,93 3/4	1
10	E7081	GUARD,BELT,CONVEYOR,TOP,93 3/4	1
11	E7082	GUARD,BELT,CONVEYOR,TOP,77 5/8	1
12	E7084	SHIELD,BOTTOM,INTAKE	1
13	E7087	GUARD,DISCHARGE_BELT	1
14	E7088	GUARD,BELT,CONVEYOR,TOP,15 1/4	1
15	E7089	GUARD,BELT,CONVEYOR,CUT	1
16	E7092	GUARD,BELT,CONVEYOR,TOP,96	2
17	E7093	GUARD,BELT,CONVEYOR,96	2
18	E7094	GUARD,BELT,CONVEYOR,20	1
19	E7095	SHIELD,BOTTOM,DRV_BOX	1
20	30294	SCREW,TEK,1/4X1	10
21	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	44
22	31237	WASHER,FLAT,1/4,ZP	44
23	31534	BOLT ,HEX,1/4X1/2,UNC,GR5,ZP	44

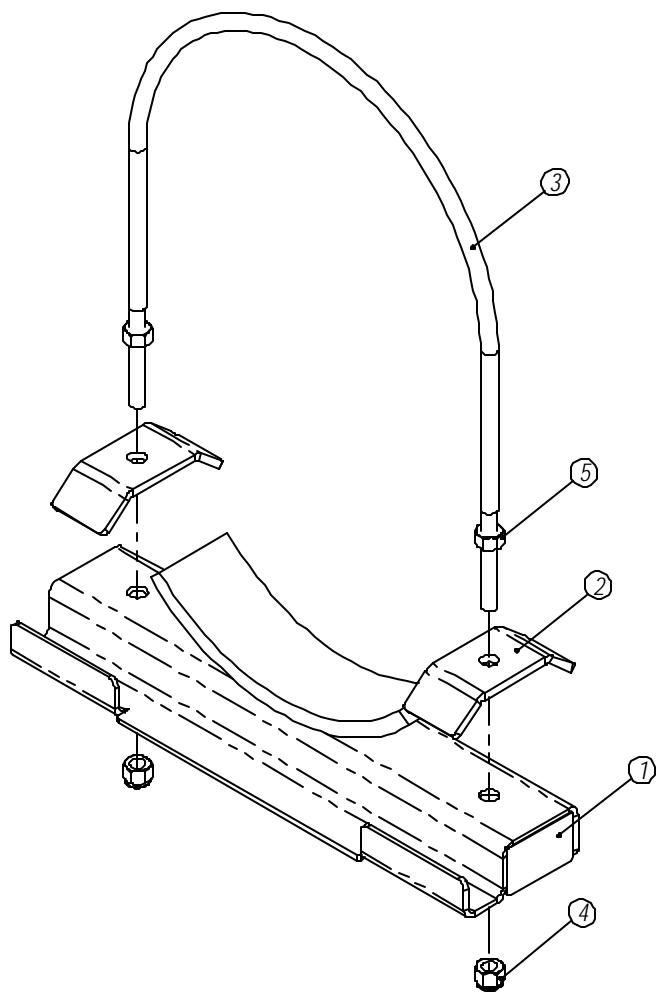






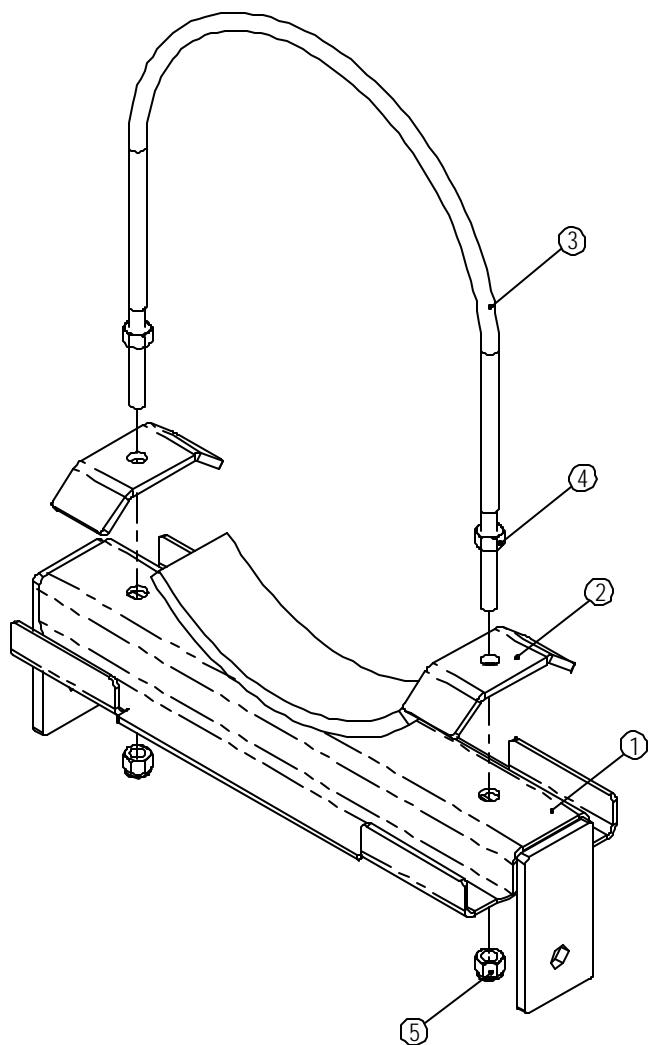
5.8.1 Short Bracket Assembly (Part No. 50579)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50578	WLDT,BRACKET,HALF,SHORT	1
2	E7075	CLIP,SHEILD	2
3	33298	BOLT,U,3/8X10X11-3/4	1
4	31176	NUT,NYLOCK,3/8,UNC,ZP	2
5	31485	NUT,HEX,3/8,UNC,GR5,ZP	2



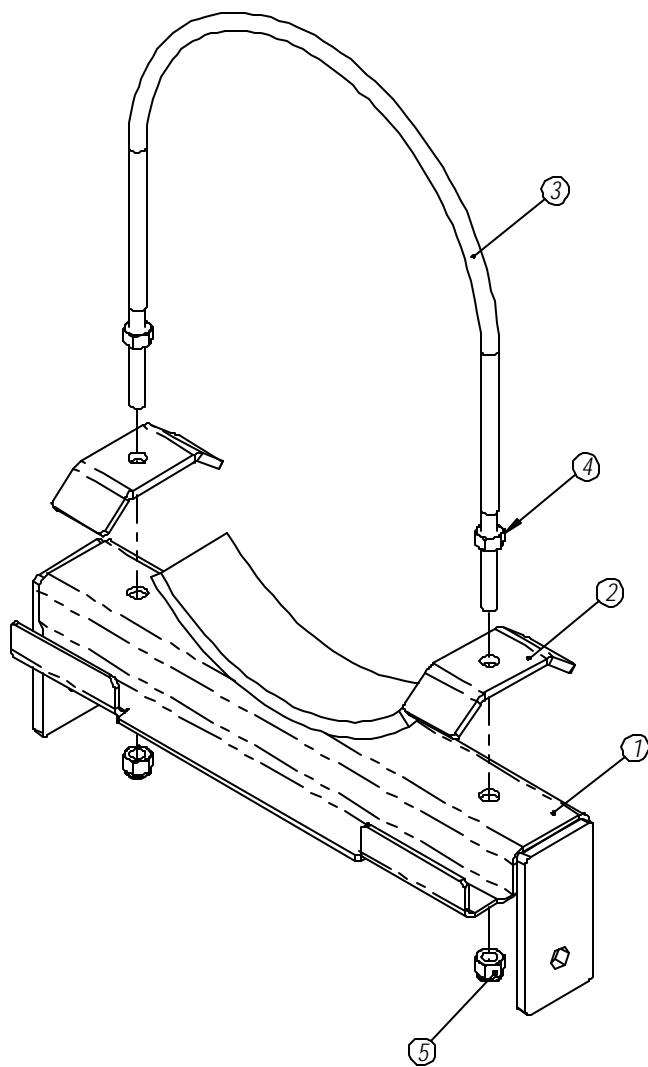
5.8.2 Return Roller Assembly (Part No. 50582)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50581	WLDT,ROLLER,RETURN	1
2	E7075	CLIP,SHEILD	2
3	33298	BOLT,U,3/8X10X11-3/4	1
4	31485	NUT,HEX,3/8,UNC,GR5,ZP	2
5	31176	NUT,NYLOCK,3/8,UNC,ZP	2



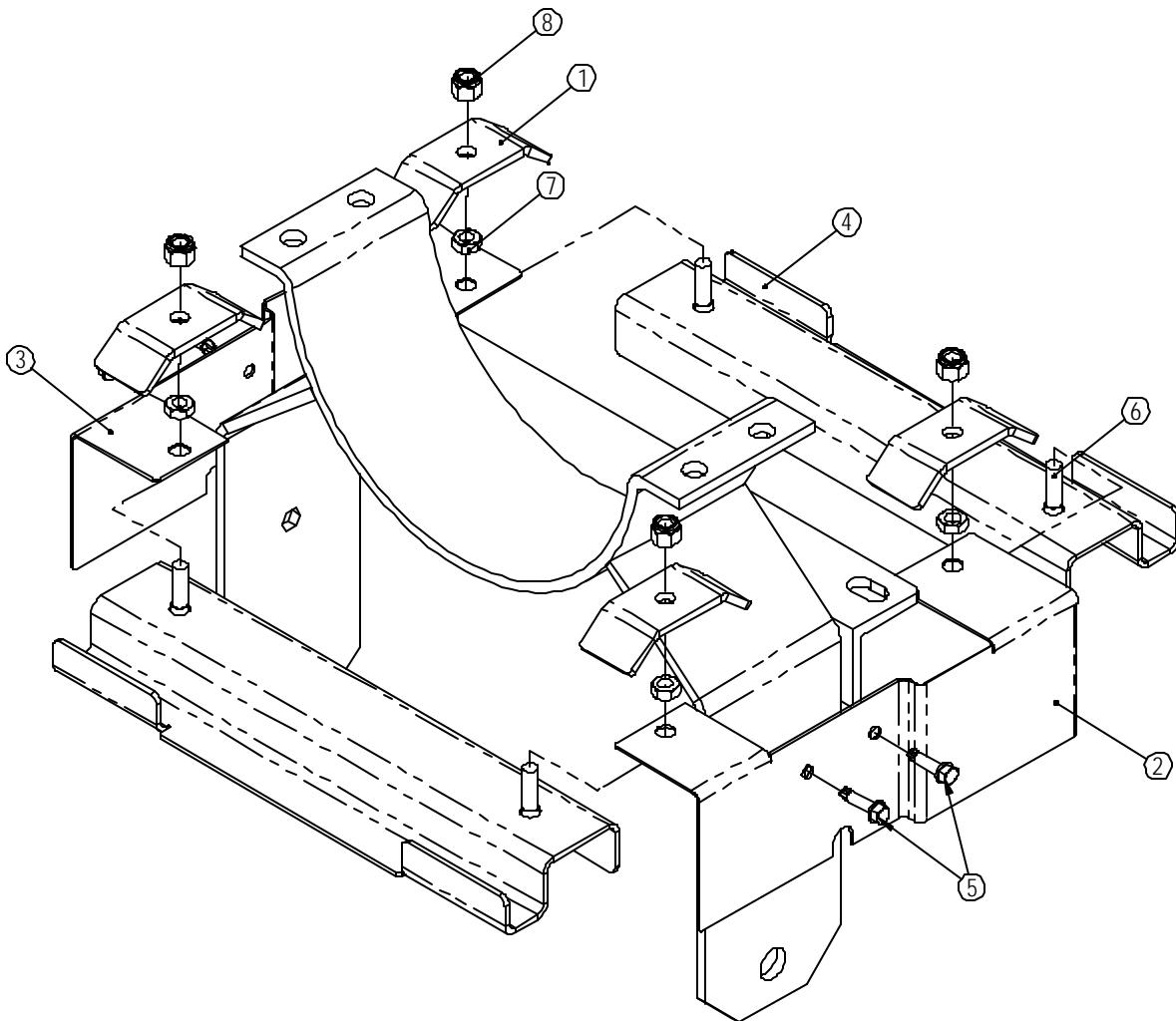
5.8.3 Long Bracket Assembly (Part No. 50584)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50583	WLDT,BRACKET,HALF,LONG	1
2	E7075	CLIP,SHEILD	2
3	33298	BOLT,U,3/8X10X11-3/4	1
4	31485	NUT,HEX,3/8,UNC,GR5,ZP	2
5	31176	NUT,NYLOCK,3/8,UNC,ZP	2



5.8.4 Training Roller Bracket Assembly (Part No. 50585)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	E7075	CLIP,SHEILD	4
2	E7077	BRACKET, IDLER,SHIELD,LEFT	1
3	E7083	BRACKET, IDLER,SHIELD,RIGHT	1
4	E7090	MOUNT,BELT COVER,1/2,SHORT	2
5	30294	SCREW,TEK,1/4X1	4
6	31479	BOLT ,HEX,3/8X1-1/4,UNC,GR5,ZP	4
7	31768	NUT,HEX,JAM,3/8,UNC,GR5,ZP	4
8	31176	NUT,NYLOCK,3/8,UNC,ZP	4



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Part No.	Description	Page	Item
30037	SETSCREW,3/8UNCX3/8	44	13
30046	HYD,FIT,ELBOW,10MB-6MJ90	60	1
30126	DRV,DL,UJ,35R,540	64	11
30138	SPRING,REEL	30	11
30193	FITTING,PLUG,3/4"-16 UNF,STR THD	38	3
30204	HYD,FIT,ADAPTER,10MB-8MJ	60	2
30207	ZERK,1/4-28,GF641,STRAIGHT	36	3
30207	ZERK,1/4-28,GF641,STRAIGHT	52	18
30209	HYD,FIT,PIONEER,MALE,8FP	41	2
30209	HYD,FIT,PIONEER,MALE,8FP	47	3
30209	HYD,FIT,PIONEER,MALE,8FP	64	12
30215	HYD,FIT,APAPTER,8MB-8MJ	60	3
30237	NUT,HEX,1,UNS,GR5	38	2
30238	PIN,COTTER,3/16X1-1/2	58	3
30239	SETSCREW,SOCKET,3/8X1-1/2KNUR	58	4
30251	HYD,CYL,PISTON,3-1/2,H6688	38	6
30261	LOCKTHREAD,NYLOCK	58	5
30271	DECAL,DANGER,ROTATING DRIVE	14	10
30284	DRV,GUARD,CV	64	13
30294	SCREW,TEK,1/4X1	70	20
30294	SCREW,TEK,1/4X1	77	5
30319	DRV,IDLER,FLAT,3.09DIA,0.69W	62	3
30339	DRV,BUSHING,PRESSFIT,17MM-1/2	44	14
30339	DRV,BUSHING,PRESSFIT,17MM-1/2	62	4
30352	KIT,REPAIR,LOCK,AUTO	66	1
30359	SIGN,SAFETY	66	6
30365	DRV,DL,U-JOINT,CROSS&BEARING,35R	66	3
30394	HYD,CAP,BREATHER,12MP	42	6
30436	HYD,FIT,ELBOW,8FJX-8MJ90	60	4
30454	SPRING,COIL,CONVEYOR,LEFT	44	15
30456	CLAMP,CABLE,3/8"	26	6
30469	HYD,VALVE,BALL,8FP	39	1
30499	DRV,DL,YOKE,1/2,540RPM	66	2
30552	RIVET,ST,3/16X.565,.625HEAD	24	9
30611	NUT,NYLOCK,JAM,1/2,UNC,ZP	52	26
30611	NUT,NYLOCK,JAM,1/2,UNC,ZP	64	29
30616	DRV,DL,KIT,REPAIR,R	66	5
30640	KIT,LACE,SSRS125,15,PIN,WASHER	33	1
30641	LACE,SSRS125,15"	33	2
30642	LACE,PIN,NC-1,100'	33	3
30643	LACE,PIN,WASHER,50	33	4
30644	LACE,SPLICETOOL,RS125,4"	33	5
30663	NUT,HEX,5/8,UNF,GR5,ZP	38	1
31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	35	10
31016	BOLT,HEX,1/2X1-1/2,UNC,GR5,ZP	52	20
31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	26	13
31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	42	8
31017	BOLT,HEX,1/2X1-3/4,UNC,GR5,ZP	64	24
31018	BOLT,HEX,1/2X2-1/2,UNC,GR5,ZP	52	21
31020	BOLT,HEX,1/2X2-3/4,UNC,GR5,ZP	52	22

31021	BOLT,HEX,1/2X3,UNC,GR5,ZP	52	23
31026	BOLT,HEX,1/2X4,UNC,GR5,ZP	26	15
31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	20	9
31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	34	5
31040	BOLT,HEX,3/4X2-1/2,UNC,GR5,ZP	42	9
31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	44	31
31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	48	13
31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	64	22
31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	20	10
31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	30	15
31047	BOLT,HEX,5/16X1-3/4,UNC,GR5,ZP	22	18
31050	BOLT,HEX,5/16X3,UNC,GR5,ZP	54	18
31054	BOLT,HEX,5/8X2-1/2,UNC,GR5,ZP	30	14
31062	BOLT,HEX,5/16X1,UNC,GR5,ZP	54	17
31066	BOLT,HEX,3/8X1-3/4,UNC,GR5,ZP	48	14
31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	44	23
31069	BOLT,HEX,1/2X1,UNC,GR5,ZP	54	19
31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	30	16
31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	52	24
31148	HYD,FIT,ADAPTOR,8MP-8MJ	39	2
31163	NUT,HEX,1/2,UNC,GR5,ZP	26	17
31163	NUT,HEX,1/2,UNC,GR5,ZP	52	27
31172	NUT,NYLOCK,1,UNC,ZP	35	11
31173	NUT,NYLOCK,1/2,UNC,ZP	20	12
31173	NUT,NYLOCK,1/2,UNC,ZP	26	18
31173	NUT,NYLOCK,1/2,UNC,ZP	30	18
31173	NUT,NYLOCK,1/2,UNC,ZP	34	6
31173	NUT,NYLOCK,1/2,UNC,ZP	35	12
31173	NUT,NYLOCK,1/2,UNC,ZP	42	10
31173	NUT,NYLOCK,1/2,UNC,ZP	44	24
31173	NUT,NYLOCK,1/2,UNC,ZP	52	25
31173	NUT,NYLOCK,1/2,UNC,ZP	54	23
31173	NUT,NYLOCK,1/2,UNC,ZP	62	10
31173	NUT,NYLOCK,1/2,UNC,ZP	64	28
31174	NUT,NYLOCK,1/4,UNC,ZP	44	25
31174	NUT,NYLOCK,1/4,UNC,ZP	64	25
31175	NUT,NYLOCK,3/4,UNC,ZP	35	13
31175	NUT,NYLOCK,3/4,UNC,ZP	42	11
31176	NUT,NYLOCK,3/8,UNC,ZP	20	13
31176	NUT,NYLOCK,3/8,UNC,ZP	22	19
31176	NUT,NYLOCK,3/8,UNC,ZP	24	10
31176	NUT,NYLOCK,3/8,UNC,ZP	28	4
31176	NUT,NYLOCK,3/8,UNC,ZP	30	19
31176	NUT,NYLOCK,3/8,UNC,ZP	44	26
31176	NUT,NYLOCK,3/8,UNC,ZP	48	15
31176	NUT,NYLOCK,3/8,UNC,ZP	62	11
31176	NUT,NYLOCK,3/8,UNC,ZP	64	27
31176	NUT,NYLOCK,3/8,UNC,ZP	74	4
31176	NUT,NYLOCK,3/8,UNC,ZP	75	5
31176	NUT,NYLOCK,3/8,UNC,ZP	76	5
31176	NUT,NYLOCK,3/8,UNC,ZP	77	8
31177	NUT,NYLOCK,5/16,UNC,ZP	22	20

31177	NUT,NYLOCK,5/16,UNC,ZP	54	22
31178	NUT,NYLOCK,5/8,UNC,ZP	26	19
31178	NUT,NYLOCK,5/8,UNC,ZP	30	17
31183	PIN,COTTER,3/16X2	37	1
31211	BOLT,CARR,1/2X3-1/2,UNC,GR5,ZP	44	27
31211	BOLT,CARR,1/2X3-1/2,UNC,GR5,ZP	62	8
31218	WASHER,LOCK,5/8,ZP	54	28
31236	WASHER,FLAT,1/2,ZP	26	20
31236	WASHER,FLAT,1/2,ZP	35	14
31236	WASHER,FLAT,1/2,ZP	44	28
31236	WASHER,FLAT,1/2,ZP	52	28
31236	WASHER,FLAT,1/2,ZP	54	25
31236	WASHER,FLAT,1/2,ZP	64	32
31237	WASHER,FLAT,1/4,ZP	20	14
31237	WASHER,FLAT,1/4,ZP	34	7
31237	WASHER,FLAT,1/4,ZP	70	22
31239	WASHER,FLAT,5/16,ZP	22	21
31239	WASHER,FLAT,5/16,ZP	54	24
31239	WASHER,FLAT,5/16,ZP	62	13
31240	WASHER,FLAT,5/8,ZP	22	27
31240	WASHER,FLAT,5/8,ZP	54	27
31244	WASHER,LOCK,1/2,ZP	30	20
31244	WASHER,LOCK,1/2,ZP	34	8
31244	WASHER,LOCK,1/2,ZP	54	26
31244	WASHER,LOCK,1/2,ZP	62	12
31289	PIN,COTTER,3/16X1-1/2	22	28
31319	WASHER,LOCK,3/8,ZP	22	22
31319	WASHER,LOCK,3/8,ZP	44	29
31319	WASHER,LOCK,3/8,ZP	48	16
31319	WASHER,LOCK,3/8,ZP	64	31
31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	20	11
31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	26	14
31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	30	21
31332	BOLT,HEX,1/2X1-1/4,UNC,GR5,ZP	34	9
31339	BOLT,HEX,3/4X2,UNC,GR5,ZP	35	15
31340	BOLT,HEX,3/4X3-1/2,UNC,GR5,ZP	52	29
31351	WASHER,FLAT,3/8,ZP	20	15
31351	WASHER,FLAT,3/8,ZP	44	30
31351	WASHER,FLAT,3/8,ZP	48	17
31351	WASHER,FLAT,3/8,ZP	64	30
31424	BOLT,CARR,3/8X2,UNC,GR5,ZP	22	23
31450	PIN,COTTER,1/8X1	54	16
31455	BOLT,HEX,7/16X4,UNC,GR5,ZP	48	18
31472	BOLT,HEX,1X5,UNC,GR5,ZP	35	16
31478	BOLT,HEX,1/2X7-1/2,GR5,UNC,ZP	54	20
31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	44	32
31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	62	9
31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	77	6
31485	NUT,HEX,3/8,UNC,GR5,ZP	22	24
31485	NUT,HEX,3/8,UNC,GR5,ZP	44	33
31485	NUT,HEX,3/8,UNC,GR5,ZP	48	19
31485	NUT,HEX,3/8,UNC,ZP	58	1

31485	NUT,HEX,3/8,UNC,GR5,ZP	64	26
31485	NUT,HEX,3/8,UNC,GR5,ZP	74	5
31485	NUT,HEX,3/8,UNC,GR5,ZP	75	4
31485	NUT,HEX,3/8,UNC,GR5,ZP	76	4
31488	BOLT,HEX,3/4X4-1/2,UNC,GR5,ZP	35	17
31534	BOLT,HEX,1/4X1/2,UNC,GR5,ZP	44	34
31534	BOLT,HEX,1/4X1/2,UNC,GR5,ZP	64	21
31534	BOLT,HEX,1/4X1/2,UNC,GR5,ZP	70	23
31536	WASHER,FLAT,1/8,ZP	24	11
31544	BOLT,HEX,3/8X2-3/4,UNC,GR5,ZP	44	35
31545	BOLT,HEX,5/8X1,UNF,GR5,ZP	54	21
31560	NUT,NYLOCK,7/16,UNC,GR5,ZP	48	20
31585	BOLT,CARR,3/8X1-1/2,UNC,GR5,ZP	22	25
31585	BOLT,CARR,3/8X1-1/2,UNC,GR5,ZP	24	12
31588	NUT,HEX,3/4,UNF	58	2
31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	20	8
31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	34	10
31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	64	33
31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	70	21
31613	TIE,CABLE,NYLON,BLACK,11 1/2"	39	5
31613	TIE,CABLE,NYLON,BLACK,11 1/2"	48	8
31613	TIE,CABLE,NYLON,BLACK,11 1/2"	60	5
31666	NUT,CASTELLED,3/4,UNF	37	2
31739	RIVET,ST,3/16X.565,.375HEAD	24	13
31768	NUT,HEX,JAM,3/8,UNC,GR5,ZP	77	7
31800	JACK,5000LBX15,SQ MNT,SIDEWIND	68	1
31810	GRIP,HANDLE,1-1/4IDX4-1/2	44	16
31810	GRIP,HANDLE,1-1/4IDX4-1/2	54	8
31915	BEARING,FLANGE,2BOLT,1	22	1
31915	BEARING,FLANGE,2BOLT,1	22	9
31915	BEARING,FLANGE,2BOLT,1	30	12
31917	PIN,HITCH,1/2X3,ZP	20	7
31957	HYD,FIT,ADAPTER,8MB-8MJ,028ORIFICE	60	6
31967	DRV,BUSHINGPRESSFIT,20MM-5/8"	22	10
32071	WASHER,FLAT,1-1/4	54	29
32079	HYD,FIT,ELBOW,6MB-8MJ90	60	7
32250	HYD,CYL,PIN,1	58	7
32336	SUSP,BOLT,WHEEL,1/2X1-1/4T	36	6
32336	SUSP,BOLT,WHEEL,1/2X1-1/4TX1-3/4L	54	30
32376	DRV,BRG,ROLLER,6004-2RS	22	11
32639	BEARING,THRUST,FRONT	57	13
32643	ROTOR KIT	57	5
32647	SEAL KT,ROLLER STATOR	57	1
32649	BEARING,HOUSING,REAR,1/2	57	4
32651	BEARING,THRUST,REAR	57	2
32653	SHAFT KIT	57	8
32655	BOLT KIT	57	12
32720	BEARING,HOUSING,FRONT	57	3
32722	DRIVE LINK KIT	57	6
32723	HOUSING KIT	57	7
32725	MANIFOLD	57	9
32726	BALANCE PLATE AND BALLS	57	10

32727	END COER	57	11
32782	PIN,SPRING,5/16X1-3/4	22	12
33020	BELT,15",REPLACEMENT,1'	33	6
33026	HYD,FIT,PLUG,8ORB,HOLLOWHEX	58	6
33027	HYD,CYL,CLEVIS CAP,2,8ORBF	58	8
33028	HYD,CYL,CAP,ROD,2X1-1/8,8ORBF	58	9
33029	HYD,CYL,ROD,1-1/8X14-3/4	58	10
33030	HYD,CYL,2X8,H6203	58	11
33031	HYD,CYL,PISTON,2,H6688	58	12
33032	HYD,CYL,TIEROD,3/8X8	58	13
33033	HYD,CLEVIS,1-1/8,1PIN	58	14
33034	HYD,CYL,SEALKIT,2,639572	58	15
33039	DRV,DL,YOKE&SHAFT	66	4
33040	DRV,DL,GUARD,OUTER	66	7
33041	DRV,DL,GUARD,INNER	66	8
33042	DRV,DL,YOKE,TUBE&SLIPSLEEVE	66	10
33043	DRV,DL,YOKE	66	11
33059	DRV,DL,SIGN,SAFETY,540RPM	66	9
33131	HYD,CYL,TUBE,3-1/2X10	38	4
33132	HYD,CYL,TIE,ROD,5/8X10	38	5
33133	HYD,CYL,CLEVIS CAP,3.5_3/4O_1.0	38	7
33134	HYD,CYL,ROD CAP,3.5_1.25_3/4O	38	8
33173	HYD,HOSE,3/8X78,8FJX-8FJX,2W	60	8
33180	SUSP,TIRE,205/75D15,LR-B	36	1
33181	SUSP,WHEEL,15X5X4,-.38,WH	36	2
33182	SUSP,HUB,H411,1250LBS	35	6
33183	WHEEL,COMPLETE,205/75D15,4,WH	35	7
33185	SUSP,SPINDLE,S411	37	3
33187	DRV,BRG,RACE,OUTER,.75	36	4
33192	SUSP,HUB,H411	36	9
33193	SUSP,WHEEL,8X7X4,0,OFWH	56	1
33194	SUSP,TIRE,20X10-8,4 PLY,LUG	56	2
33195	WHEEL,COMPLETE,LUG,OFWH	54	9
33197	HYD,PUMP,6.1,2500PSI	62	5
33198	TANK,FUEL,PLASTIC,25L	48	9
33210	HYD,HOSE,3/8X110,8FJX-8FJX,2W	39	3
33211	HYD,FIT,VENT,8MB	39	4
33212	DRVBELT,B,91.8,2,N	44	17
33213	DRVBELT,B,44.8,1,N	62	6
33219	CHAIN,CONNECTOR_LINK,#40	22	13
33220	CHAIN,CONNECTOR_LINK,#60DBL	64	14
33221	BOLT,HEX,3/8X4,UNC,GR5,ZP	64	23
33224	HYD,FIT,ADAPTER,8MB-8MJ,031 ORIFICE	39	6
33226	HYD,VALVE,3-SPOOL,W/RELIEF	59	1
33230	DRV,SPRKT,#40,30,P1,TAPER	22	14
33231	CHAIN,HALF_LINK,#40	22	15
33253	ENGINE,AIR,FILTER	63	1
33254	ENGINE,PRE-CLEANER	63	2
33255	ENGINE,OIL,FILTER	63	3
33256	ENGINE,FUEL,FILTER	63	4
33257	ENGINE,PLUG,SPARK	63	5
33258	ENGINE,KEYS,IGNITION,2	63	6

33259	ENGINE,STARTER,MOTOR	63	7
33260	ENGINE,STARTER,SOLENOID	63	8
33261	ENGINE,PUMP,FUEL	63	9
33262	ENGINE,MODULE,SPARK	63	10
33263	BEARING,CARTRIDGE,1.125,3.3465	32	2
33272	DRV,SHEAVE,3V,3.8A,4.2B	44	18
33273	DRV,BUSHING,S TAPER,P1,1-1/8	44	19
33274	DRV,BUSHING,SPLIT TAPER,H,1	44	20
33275	DRV,SHEAVE,2V,18.0A,18.4B	44	21
33276	DRV,IDLER,FLAT,3-1/2DIA,1-1/2W	44	22
33278	DRV,SHEAVE,1V,4.0-A,4.4-B	62	7
33279	CLAMP,HOSE,GEAR,1/4-5/8	48	10
33284	ROLLER,1.9X14,7/16 HEX	26	7
33284	ROLLER,1.9X14,7/16 HEX	28	2
33284	ROLLER,1.9X14,7/16 HEX	30	13
33285	DRV,SPROCKET,#60DBL,15,12	64	15
33286	DRV,SPROCKET,#40,45,12	64	16
33287	BEARING,PILLOW-BLOCK,1-1/2,3	64	17
33288	DRV,BUSHING,S TAPER,P1,1	64	18
33289	DRV,BUSHING,S TAPER,R1,1-1/2	64	19
33290	DRV,SPROCKET,#40,15,1,1	22	16
33292	CABLE,BATTERY,4 GA,37"	48	11
33296	DRV,BUSHING,S TAPER,P1,25MM	22	17
33297	STRAP,TARP,15	48	12
33298	BOLT,U,3/8X10X11-3/4	28	3
33298	BOLT,U,3/8X10X11-3/4	74	3
33298	BOLT,U,3/8X10X11-3/4	75	3
33298	BOLT,U,3/8X10X11-3/4	76	3
33300	HYD,HOSE,3/4X32,12MP-12FJX,2W	60	9
33301	HYD,HOSE,3/8X100,8FJX-8FJX,2W	60	10
33302	HYD,HOSE,1/4X16,6FJX-6FJX,2W	60	11
33303	HYD,FIT,ADAPTOR,12MP-12MP	60	12
33304	HYD,FIT,ADAPTER,8MB-12MJ	60	13
33305	HYD,FIT,ELBOW,12MP-8MJ90	60	14
33306	BALLJOINT,DIRCONTROL	54	10
33307	HYD,FIT,ADAPTER,8MB-6MJ	60	15
33308	HYD,FIT,ADAPTER,8MP-8FJX90	39	7
33313	BOLT,HEX,3/8X4-1/4,UNC,GR5,ZP	22	26
33313	BOLT,HEX,3/8X4-1/4,UNC,GR5,ZP	44	36
33315	HYD,VALVE,CHECK,300PSI_CRACK	60	16
33318	STUD,8M1.25X80MM,12MM+27MM	54	11
33438	KIT,PIN&CHAIN-5/8"X4.25"	68	2
33439	KIT,5K BEARING REPLACEMENT	68	3
33440	KIT,STD BEVEL GEAR REPLAC.	68	4
33441	KIT,SW CRN CRANK REPLAC.	68	5
33442	COVER,GEARBOX	68	6
33509	BOLT,EYE,HVY,5/8X5-1/2,UNC,GR5,ZP	26	16
49443	WLDT,CLEVIS,CYLINDER	35	8
49563	WLDT,ROD,1-1/4,10	38	9
50538	WLDT,AXLE,FRAME	35	1
50539	WLDT,FRAME,DRIVE	52	1
50540	WLDT,AXLE,ADJ,4510	35	2

50543	WLDT,SUPPORT,FRAME,LOWER	35	3
50544	WLDT,SUPPORT,FRAME,UPPER	35	4
50546	WLDT,DISCHARGE,TRANSITION	34	1
50547	WLDT,DISCHARGE,HOOD	34	2
50549	ASSY,ROLLER,DISCHARGE	34	3
50551	WLDT,HOPPER	24	1
50552	WLDT,AUGER,INTAKE,4510	22	1
50553	WLDT,INTAKE,FRAME	22	2
50554	WLDT,ROLLER,3-1/2,CROWN,INTAKE	22	3
50556	ASSY,INTAKE,4510	20	1
50557	ASSY,HOPPER,COMPLETE	20	2
50558	WLDT,HITCH,2X2,6" OFFSET	20	3
50578	WLDT,BRACKET,HALF,SHORT	74	1
50579	ASSY,BRACKET,HALF,SHORT	70	1
50580	ASSY,SHIELD,TOP,DRV_BOX	70	2
50581	WLDT,ROLLER,RETURN	75	1
50582	ASSY,ROLLER,RETURN	70	3
50583	WLDT,BRACKET,HALF,LONG	76	1
50584	ASSY,BRACKET,HALF,LONG	70	4
50585	ASSY,BRACKET,TRAINING_ROLLER	70	5
50590	WLDT,COLLAR,SPRING	44	4
50592	WLDT,GUARD,PTO_DRV,OUTER	64	1
55051	WLDT,MOUNT,TENSIONER,SPRING	30	1
55052	WLDT,BOX,DRIVE	30	2
55053	ASSY,ROLLER,IDLER	30	3
55056	WLDT,ROLLER,DRIVE	30	4
55057	WLDT,GUARD,PUMP	44	1
55058	WLDT,TIGHTENER,BELT PUMP	44	2
55059	ASSY,GUARD,PUMP	42	1
55060	WLDT,CASTER	54	1
55061	CLAMP,PIVOT,ROLLER,GUIDE	26	1
55062	WLDT,LINKAGE,FRAME,MOVER	52	2
55063	WLDT,LINKAGE,TUBE,MOVER	52	3
55064	WLDT,CLAMP,TANK,OIL	42	2
55065	ASSY,CASTOR,WHEEL_HANDLE	52	4
55066	WLDT,PIVOT,Z LINKAGE	52	5
55067	WLDT,PIVOT,FRAME,MAIN	26	2
55067	WLDT,PIVOT,FRAME,MAIN	42	3
55069	WLDT,MOUNT,ENGINE	42	4
55070	PIN,ANTIROT,1-1/2X4-7/8	35	5
55072	WLDT,FRAME,TRUSS	26	3
55074	WLDT,ROLLER,RETURN	28	1
55075	ASSY,ROLLER,RETURN	26	4
55079	WLDT,TUBE,CONVEYOR	26	5
55080	WLDT,HANDLE,STEERING	54	2
55081	WLDT,HUB,SPLINE	54	3
55082	ASSY,HYD,MOVER	52	6
55083	WLDT,LEVER,STEERING	54	4
55084	WLDT,GUARD,INTAKE	24	2
55085	WLDT,TRUSS,ARM,MOVER	52	7
55086	WLDT,TENSIONER,BELT,HANDLE	44	3
55087	WLDT,LEVER,TLIT	54	5

55089	ASSY,DRIVE_PUMP	41	1
55089	ASSY,DRIVE PUMP	47	1
55090	ASSY,GASTANK_BATHHOLDER	47	2
55091	ASSY,DRIVE,PUMP	52	8
90104	HYD,CYL,2X8,1.125,8FB	52	9
90280	HYD,HOSE,3/8X191,8MJ-8MP,1W	41	3
90280	HYD,HOSE,3/8X191,8MJ-8MP,1W	47	4
90280	HYD,HOSE,3/8X191,8MP-8MJ,1W	64	20
90677	HYD,CYL,SEALKIT,MONARCH,3-1/2	38	10
91048	SUSP,STEM,VALVE,TR801HP	36	3
91048	SUSP,STEM,VALVE,TR801HP	56	3
91093	SUSP,BRG,SEAL,SE11	36	8
91110	SUSP,BRG,LM67048	36	7
91130	SUSP,BRG,RACE,LM67010	36	1
91154	SUSP,BRG,LM11949	36	5
91234	SUSP,DUSTCAP,DC12	36	2
91609	PIN,HITCH,5/32X3	52	19
91703	ZERK,1/4-28X45°	35	9
92145	HYD,MOTOR	54	12
92181	HYD,FILTER,ASSY,GRESEN	42	7
92562	DECAL,WARNING,HITCH,JACK	14	11
92579	DECAL,HIGHLINE,4X30	14	12
31915-1	BEARING	22	1
31915-2	HOUSING	22	1
E3278	DECAL,CAUTION,CABLE,SIDE	14	1
E3285	DECAL,4510,CONTROL,VALVE	15	13
E3285	DECAL,4510,CONTROL,VALVE	52	10
E3287	PLT,S,LOCK,MOVER	52	11
E3288	HYD,VALVE,3-SPOOL,1500PSI	54	13
E3289	DECAL,LOCK,TRANSPORT	52	12
E4170	DECAL,DANGER,ELECTROCUTION	14	2
E4171	DECAL,CAUTION,RED	14	3
E4182	KEY,3/8X2	64	2
E5075	ROLLER,IDLER,TRAINING	26	9
E5160	CLAMP,PIPE,10"X2"	26	8
E5160	CLAMP,PIPE,10"X2"	30	5
E5163	CLAMP,PIPE,10"X4"	26	10
E5190	DECAL,LICENSED BY DARMANI	14	4
E5325	DECAL,AUGER,ACC	14	5
E5339	DECAL,DAMAGE,STRUCTURAL	14	6
E5569	PLT,1/4X1/4X1	44	5
E5604	PIPE,ROLLER,1.9X18-1/8	22	4
E5605	SHAFT,5/8X20,DRILLED	22	5
E6188	PIPE,SMLS,3/4X.120X7/8L	64	3
E6298	MOUNT,GASTANK	48	1
E6302	PIPE,SMLS,1X.188X1-9/16L	44	6
E6343	CHANNEL,GUARD,LOCK	24	3
E6432	PLT,COVER,SKID	20	4
E6432	PLT,COVER,SKID	64	4
E6449	GUIDE,CHAIN,PLASTIC	64	5
E6612	PLT,FRAME,LINK	52	13
E6617	SHIELD,DRIVE,FORWARD	44	7

E6618	SHIELD,DRIVE,REAR	44	8
E6625	DECAL,GC,4510_TURBO,GC	14	7
E6626	DECAL,PINSTRIPES,GC,9"	14	8
E6627	DECAL,WARNING,MOVING_PART	14	9
E6628	PIPE,ERW,3-1/2X16GA,12-3/8L	32	1
E6629	SHAFT,ROLLER,IDLER	34	4
E6636	SHAFT,ROLLER,IDLER,DRIVE	30	6
E6637	SHAFT,ROLLER,TENSIONER	30	7
E6638	PLT,RETAINER,SPRING	30	8
E6642	PIPE,SMLS,1X.188X1-1/8L	30	9
E6705	PLATE,BOX,BATTERY	48	2
E6706	PLT,C,.119X17/32X2-3/4	54	7
E6707	PIPE,SMLS,3/4X.120X1-9/16L	52	14
E6708	PIPE,SMLS,1X.188X7/16L	62	1
E6724	CHANNEL,MOUNT,BATTERY	48	3
E6725	PLT,S,MOUNT,TANK	48	4
E6726	ROD,THREADED,3/8X9-1/2	48	5
E6727	TUBE,POLY-U,1/4ID,3/8OD,168	48	6
E6734	CABLE,3/8X40FT	26	11
E6738	LINK,CONTROL,DIRECTION	54	14
E6739	PLT,C,UHMW-PE,3/16X5X2	54	6
E6741	CHAIN,ROLLER,#40,20 LINKS	22	6
E6742	CHAIN,ROLLER,#60DBL,30LINKS	64	6
E6746	SEAL,AUGER_SHAFT	24	4
E6747	SHAFT,TENSIONER,SPRING	30	10
E6749	SKIRT,FRONT,HOPPER	24	5
E6752	SKIRT,SIDE,HOPPER	24	6
E6758	RUBBER,EXTENSION,HOPPER	24	7
E6759	PLT,S,END,GUARD	24	8
E6765	PLT,S,GUIDE,BELT	44	9
E6766	PLT,S,GUIDE,BELT,SHEAVE	62	2
E6767	SHAFT,TENSIONER,BELT	44	10
E6768	PLT,MOUNT,SHAFT,TENSIONER	44	11
E6775	GUARD,BATTERY	48	7
E6777	DECAL,4510,TENSION,BELT	15	17
E6777	DECAL,4510,TENSION,BELT	42	5
E6778	DECAL,4510,CONTROL,INTAKE	15	14
E6778	DECAL,4510,CONTROL,INTAKE	52	15
E6779	DECAL,4510,FORWARD,CONVEYOR	15	15
E6779	DECAL,4510,FORWARD,CONVEYOR	52	16
E6780	DECAL,4510,REVERSE,CONVEYOR	15	16
E6780	DECAL,4510,REVERSE,CONVEYOR	52	17
E6783	LINK,CONTROL,INTAKE	54	15
E6850	SHAFT,DRIVE,PTO	64	7
E6851	KEY,3/8X2-7/8	64	8
E6852	KEY,1/4X1-1/2	64	9
E6853	GUARD,PTO DRV,INNER	64	10
E6861	GUARD,INTAKE,CHAIN	20	5
E6863	GUIDE,CHAIN,PLASTIC,1.5"	22	7
E7029	PLT,S,STRAP,CABLE	26	12
E7047	PLT,S,STRAP,INTAKE	20	6
E7068	DRV,GEARBOX,90DEG,25MM,1:1,MOD	22	8

E7073	GUARD,BELT,CONVEYOR,16-3/16	70	6
E7075	CLIP,SHIELD	74	2
E7075	CLIP,SHIELD	75	2
E7075	CLIP,SHIELD	76	2
E7075	CLIP,SHIELD	77	1
E7077	BRACKET,IDLER,SHIELD,LEFT	77	2
E7078	GUARD,PIVOT,BELT,CONVEYOR	70	7
E7079	GUARD,BELT,CONVEYOR,77-5/8	70	8
E7080	GUARD,BELT,CONVEYOR,93-3/4	70	9
E7081	GUARD,BELT,CONVEYOR,TOP,93-3/4	70	10
E7082	GUARD,BELT,CONVEYOR,TOP,77-5/8	70	11
E7083	BRACKET,IDLER,SHIELD,RIGHT	77	3
E7084	SHIELD,BOTTOM,INTAKE	70	12
E7087	GUARD,DISCHARGE_BELT	70	13
E7088	GUARD,BELT,CONVEYOR,TOP,15-1/4	70	14
E7089	GUARD,BELT,CONVEYOR,CUT	70	15
E7090	MOUNT,BELT_COVER,1/2,SHORT	77	4
E7092	GUARD,BELT,CONVEYOR,TOP,96	70	16
E7093	GUARD,BELT,CONVEYOR,96	70	17
E7094	GUARD,BELT,CONVEYOR,20	70	18
E7095	SHIELD,BOTTOM,DRV_BOX	70	19
E7413	CRATE,GCO45PTO	64	34
E7415	SPRING,TORSION,HYD,CONVEYOR	44	12

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7.0 Specifications

Accelerator 4510

Tube Diameter	10"
Belt Width	12"
Belt Speed	Maximum of 1500 ft/min.
Capacity	up to 120 bu/min. or 215 tons/hour at 30°
Travel Width	8' transport width axles extend up to 11' for stability
Travel Height	11'8" (depending on hitch height)
Travel Length	47'9" hitch pin to discharge end

Dealer Information

Dealer: _____

Address: _____

City: _____

Province / State: _____

Postal Code / Zip Code: _____

Phone: _____

Identification Numbers

Model Number: _____

Serial Number: _____

Dealer Checklist

4510 Grain Conveyor Dealer Checklist

✓	Check List Item
	Verify all bolts tight and no loose bolts or other debris sitting on belt.
	Verify serial number plate attached.
	Hydraulic lift, up/down. Cycle through lift a minimum of 3 times.
	Ensure there is enough Hydraulic Hose at full extension.
	Inspect conveyor belt splice for condition and correct installation.
	Check alignment of tube and adjust with cables. Check cable tension - accelerator not sagging .
	PTO installed correctly with proper warning decals, both allen head bolts installed on shaft.
	Drive Roll installed correctly - all rollers aligned.
	Belt alignment to be adjusted at Alignment Rollers.
	Return idlers inspected for proper installation and operation.
	Check tensioning roller to ensure it slides freely.
	Check for excessive belt wear on both sides of belt. Grooving in belt after run-in is a failure.
	Check tire pressure and adjust as required. (as specified on tire)
	Verify the auger gearbox drive is functioning properly with no interference

Installed Options:

- GC045PTO-2 (PTO Drive Option)**
- GC045EMO-2 (Electric Motor Option)**
- GC045GED-2 (Gas Engine Drive)**
- GC045GE-2 (Gas Engine Option) Serial #:**_____
- GC045MV-2 (Mover Option)**
- GCOBAT-2 (Battery Option)**
- GCO45HJ-2 (Hitch Jack)**