

# **TRANSFER CONVEYOR**

## **TC 1600-3 Model**

### **Owner's Manual**

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# Table of Contents

Warranty .....	4
President's Message .....	5
Safety Precautions .....	7
1.0 Operating Instructions .....	8
1.1 Pre-Operation Instructions .....	8
1.2 General Operating Instructions .....	9
2.0 Maintenance Instructions .....	10
2.1 Grease Locations .....	10
3.0 Safety .....	14
3.1 Decal Assembly (Part No. 54021) .....	18
4.0 Parts Information .....	20
4.1 Frame Assembly (Part No. 54015) .....	20
4.2 Belting (Part No. E6025) .....	22
4.3 Axle and Lift Assembly (Part No. 54016) .....	24
4.3.1 Wheel Assembly (Part No. 31940) .....	25
4.4 Hopper Assembly (Part No. 54017) .....	26
4.5 Lock, Hitch and Cover Assembly (Part No. 54018) .....	28
4.6 Hydraulic Assembly (Part No. 54020) .....	30
4.6.1 Hydraulic Auger Kit (Part No. 50285) .....	31
4.6.2 Hydraulic Motor Assembly (Part No. 30087) .....	32
4.7 Pivot Assembly (Part No. 54026) .....	33
5.0 Transfer Transport .....	34
5.1 Transfer Transport (Part No. TCT-3) .....	34
5.1.1 Conveyor Lock Assembly (Part No. 50596) .....	36
6.0 Parts Index .....	42
7.0 Specifications .....	47
Dealer Information .....	48
Identification Numbers .....	48
Dealer Checklist .....	49

## **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 this 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 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**

Thank you for your recent purchase of the Transfer Conveyor. The Transfer Conveyor is the only conveyor to combine gentle handling with auger-like speed. With proper maintenance, the Transfer 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 Transfer 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 Transfer Conveyor.

*Chuck LePage, President  
Highline Mfg. Inc.*

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*PO Box 307, Vonda, Saskatchewan, S0K 4N0*

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

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


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## **Safety Precautions**

### **WORK SAFELY – FOLLOW THESE INSTRUCTIONS**

***CAREFUL OPERATION IS THE BEST INSURANCE AGAINST AN ACCIDENT!***

 **Before operating the Transfer Conveyor, 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 hydraulic motor is engaged. Disengage the hydraulic motor before unplugging the Transfer 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.
- Place the Transfer Conveyor on the transport lock support after operation.
- Do not transport Transfer Conveyor above 30 km/hr (20 miles/hr). Ensure hitch is in transport position and transport locking pin is in before transporting unit.
- Do not operate without safety shields and guards in place.
- Do not stand on any guards.

## **1.0 Operating Instructions**

### **1.1 Pre-Operation Instructions**

Prior to operating the Transfer 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.

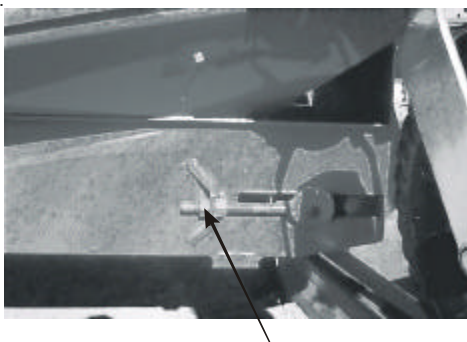
#### **1. Belt Alignment and Belt Tension**

Run the Transfer Conveyor at slow speed without product to adjust (center) the belt. There are two locations where belt adjustment may be required. These adjustment points are the intake and discharge. If the belt is running off to one side, begin with the intake adjustment (Figure 1 and Figure 2). Loosen the two 1/2" nuts on the tensioning "I" bolts. If the belt is running to the left extend the left adjusting "I" bolt. If the belt is running off to the right, shorten the left "I" bolt. When the belt is running straight retighten the nuts. These steps may have to be repeated to bring both adjustment points to alignment.

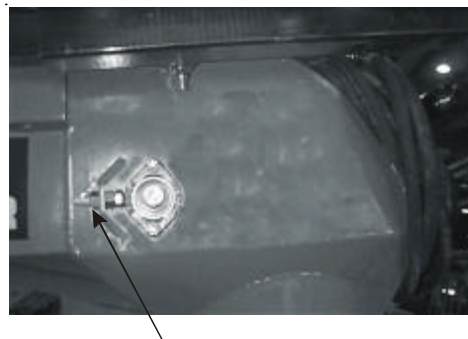
If the belt is now centered on the intake roller but not the discharge roller, adjust the 3/8" drive bearing on the left side of the machine. Loosen the nuts on the drive bearing. If the belt is running to the left side at the discharge, extend the adjusting bolt (located on left side of machine), if the belt is running to the right side at the discharge, shorten the adjusting bolt. Check intake belt alignment and repeat at intake if necessary.

Note: When belt is in operation, some travel may occur in a side to side manner on the rollers. The acceptable tolerance is approximately 1/2" overall.

**Figure 1**  
**Belt tracking adjustment - Intake**



**Figure 2**  
**Belt tracking adjustment - Discharge**





Belt tension is set at the factory and should not need adjustment. If however after running the conveyor, it is found to be slipping under some conditions tension can be increased by following the procedure set out below.

Extend both adjusting "I" bolts at the intake 2 full threads. If the belt continues to slip, adjust again extending both adjusting "I" bolts 2 full threads.

If the belt still slips and there is no adjustment left on the tensioning rod, a section of the belt can be removed and the tensioning system reset. This will need to be done by a qualified technician. Please contact Highline for proper direction.

## 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 Transfer Conveyor belt slips with material in the tube, stop the machine and evenly and slowly re-engage the hydraulics.

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

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.

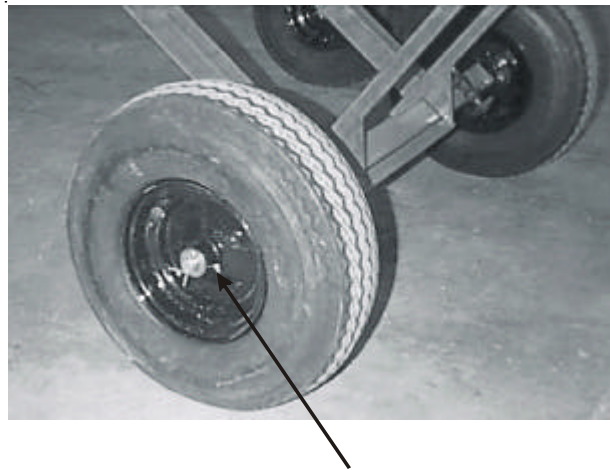
## **2.0 Maintenance Instructions**

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

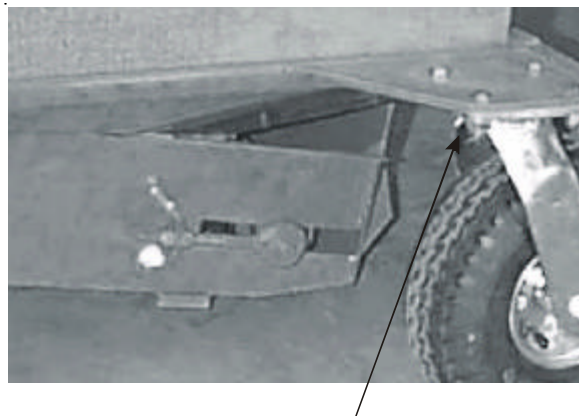
- Periodically check all bolts for tightness.
- Periodically inspect belt splice for signs of wear and tear.
- Periodically check belt alignment and adjust as required.
- Grease points as described below.
- Ensure tire air pressure is maintained at rated psi. Main wheels 50 psi. Caster wheels 50 psi. Fluctuation in the air pressure may result in damage to the tire.

### **2.1 Grease Locations**

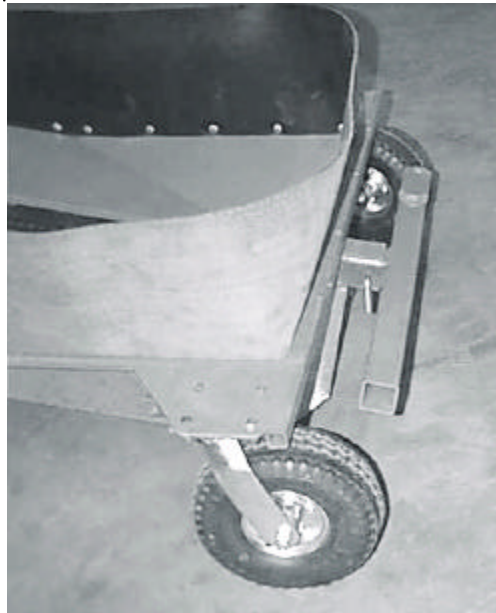
**Figure 3**  
**Main wheel grease location - 200 hours**



**Figure 4**  
**Caster wheel grease location**



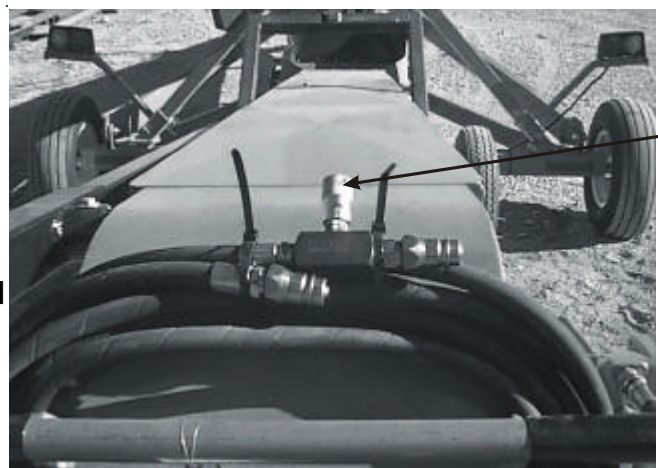
**Figure 5**  
**Hitch in storage position**



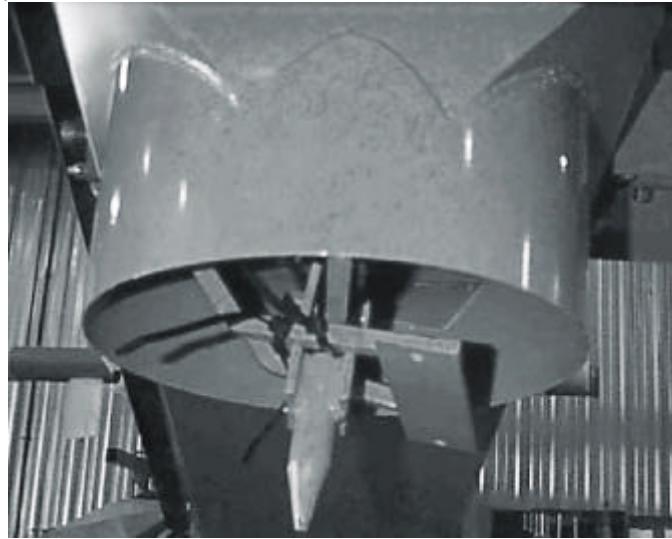
**Figure 6**  
**Hitch in transport position**



**Figure 7**  
**Flow control**  
**- turn out for maximum belt speed**

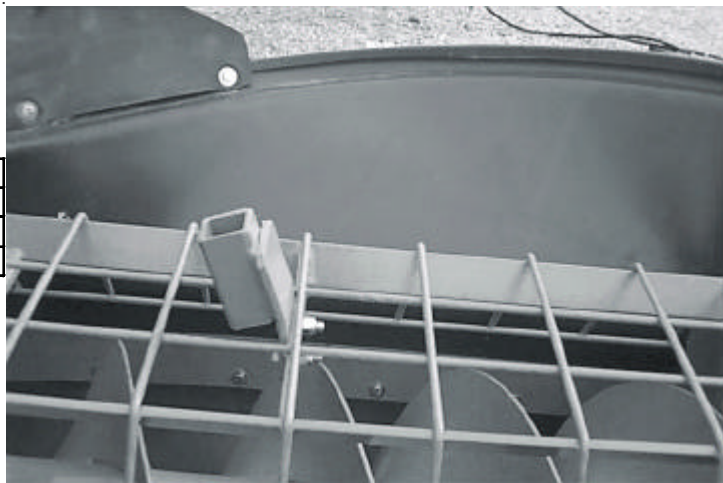


**Figure 8**  
**Transfer pivot shipping location**



**Figure 9**  
**Transfer pivot location**

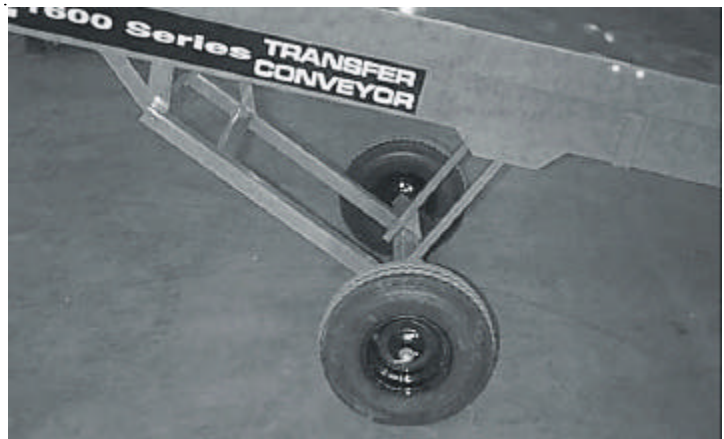
PART NO.	DESCRIPTION	QTY.
50510	WLDT.PIVOT.MOUNT	1
31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	2
31176	NUT,NYLOCK,3/8,UNC,ZP	2



**Figure 10**  
Undercarriage transport lock  
in storage position



**Figure 11**  
Undercarriage transport lock  
in transport position



### 3.0 Safety

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 belt and drive roller.

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 Transfer Conveyor

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 transfer conveyor.

**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 transfer conveyor.

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: Disengage tractor hydraulic circuit.
- Step 3: Set tractor park brake.
- Step 4: Shut off tractor engine and remove key
- Step 5: Cycle tractor controls to relieve any residual circuit pressure
- Step 6: Wait for belt to stop moving.

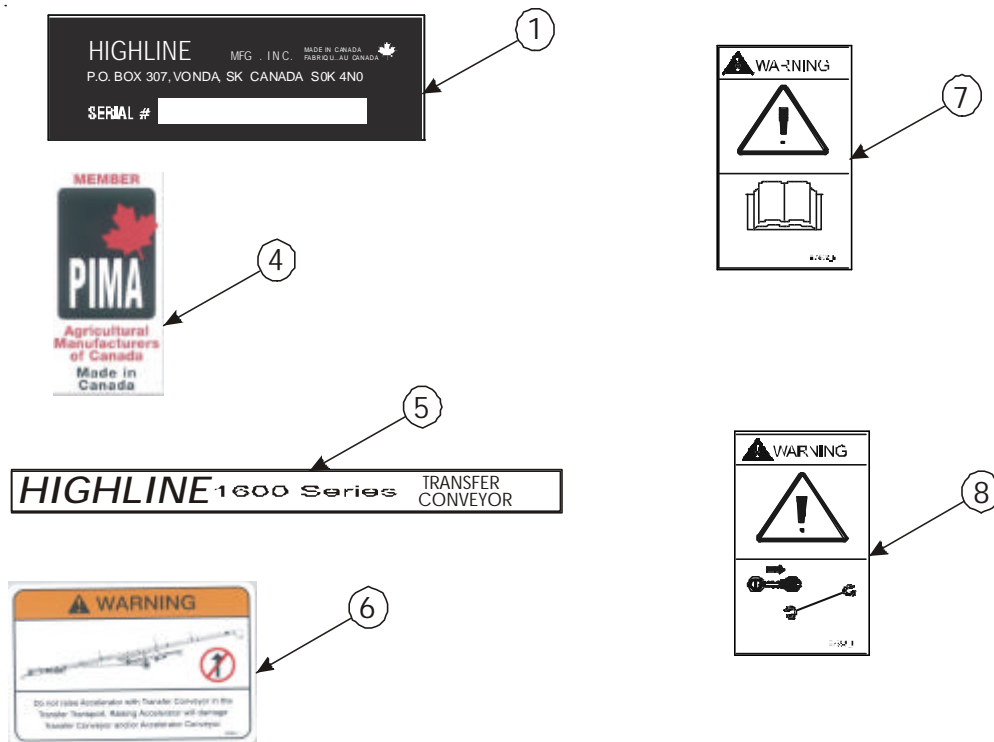




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### 3.1 Decal Assembly (Part No. 54021)

ITEMNO.	PARTNO.	DESCRIPTION	QTY.
1	30208	PLT,SERIAL#	1
2	30295(10)	PAINT,ORANGE,HIGHLINE	1
3	30296(1)	PAINT,CATALYST,SPO3937P2	1
4	32981	DECAL,PIMA	1
5	E6028	DECAL,TRANSFER,1600	2
6	E6051	DECAL,T_TRANSPORT,DO_NOT_LIFT	1
7	E7552	DECAL,WARNING,OWNERS_MANUAL	1
8	E7553	DECAL,WARNING,STOP_ENGINE/SERVICE	1
9	31598	RIVET,ST,1/8x.203,.250HEAD	2





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**HIGHLINE 1600 Series** TRANSFER CONVEYOR

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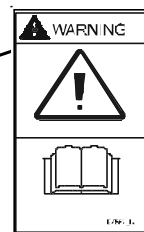
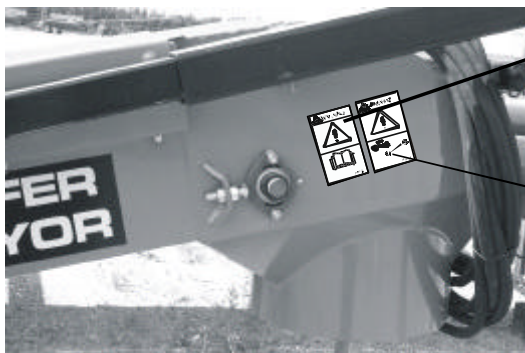


**HIGHLINE** MFG. INC. MADE IN CANADA  
P.O. BOX 307, VONDA, SK CANADA S0K 4N0  
SERIAL # [REDACTED]

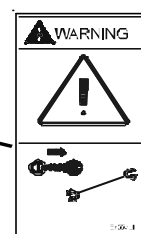
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7



8

## **4.0 Parts Information**

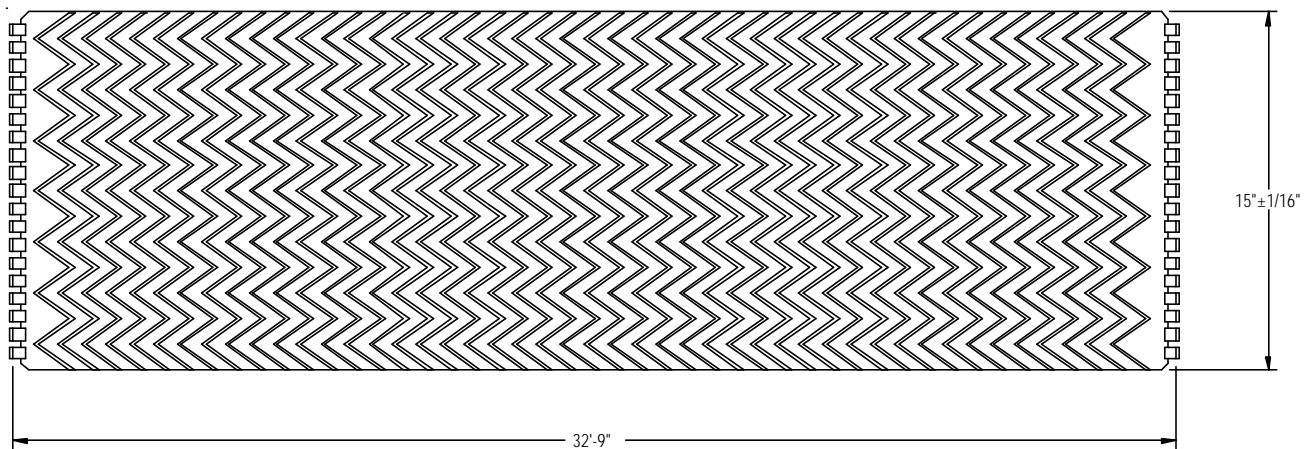
### **4.1 Frame Assembly (Part No. 54015)**

ITEMNO.	PARTNO.	DESCRIPTION	QTY.
1	54005	FRAME,TRANSFER	1
2	54012	ROLLER,DRIVE,TRANSFER,ASSM	1
3	54014	BOLT,EYE,1/2X5X1DIA,WELDED	2
4	50618	ASSY,ROLLER,INTAKE,TC	1
5	E5955	SHT,PAN,CHARGE,CENTER	2
6	E8114	SHAFT,1-1/8X15-3/4,TAPPED3/8UNC	1
7	E6020	BUSHING,13/32X1X1L	2
8	E6024	SHT,BACKING,STRIPPER,TRANSFER	2
9	E6025	BELT,15",TRANSFER	1
10	E6027	SKIRT,TRANSFER,DISCHARGE	2
11	31915	BEARING,FLANGE,2BOLT,1	1
12	37998	BOLT,CARR,1/4X3/4,UNC,GR5,ZP	36
13	31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	2
14	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	4
15	31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	2
16	31515	BOLT,HEX,1/2X2,UNC,GR5,ZP,FT	1
17	31319	WASHER,LOCK,3/8,ZP	2
18	31234	WASHER,SP,FLAT,25/64IDX1-1/2OD	4
19	31237	WASHER,FLAT,1/4,ZP	36
20	31351	WASHER,FLAT,3/8,ZP	2
21	31163	NUT,HEX,1/2,UNC,GR5,ZP	6
22	31174	NUT,NYLOCK,1/4,UNC,ZP	44
23	31176	NUT,NYLOCK,3/8,UNC,ZP	2



## 4.2 Belting (Part No. E6025)

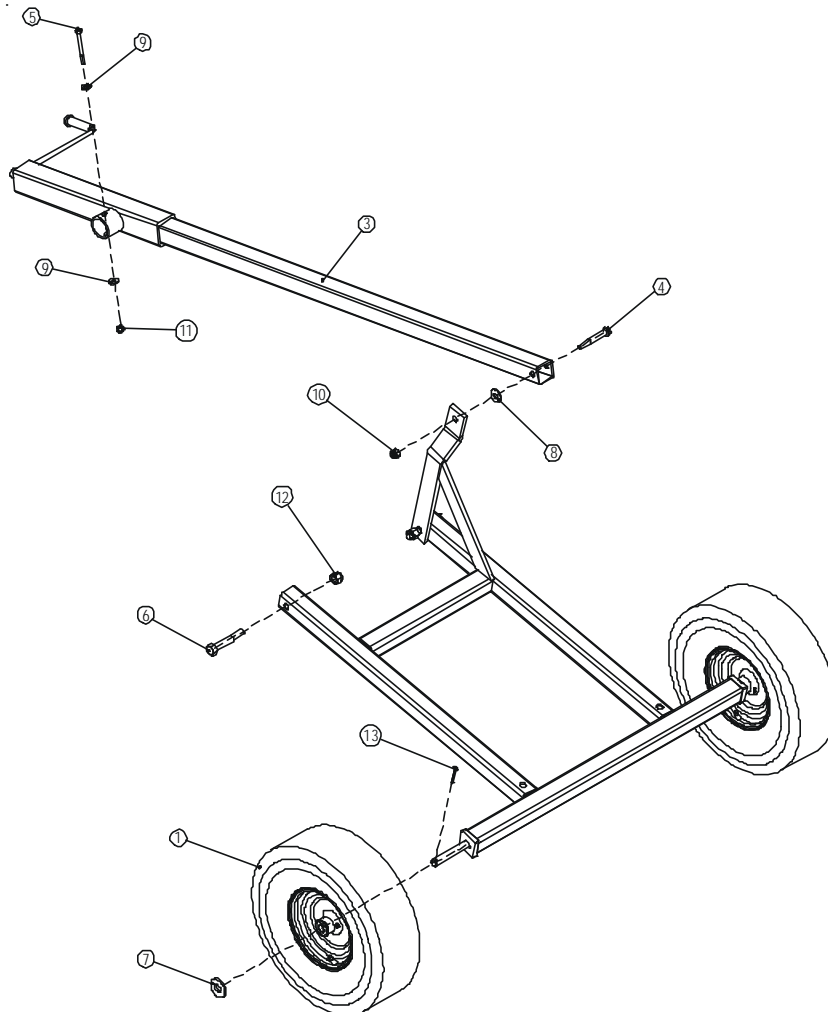
ITEMNO.	PARTNO.	DESCRIPTION	QTY.
1	30640	KIT,LACE,SSRS125,15,PIN,WASHER	1
2	30641	LACE,SSRS125,15"	1
3	30642	LACE,PIN,NC-1,100'	1
4	30643	LACE,PIN,WASHER,50	1
5	30644	LACE,SPLICETOOL,RS125,4"	1
6	33020	BELT,15",REPLACEMENT,1'	1
7	E5812	CABLE,LACING,16"U	1



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### 4.3 Axle and Lift Assembly (Part No. 54016)

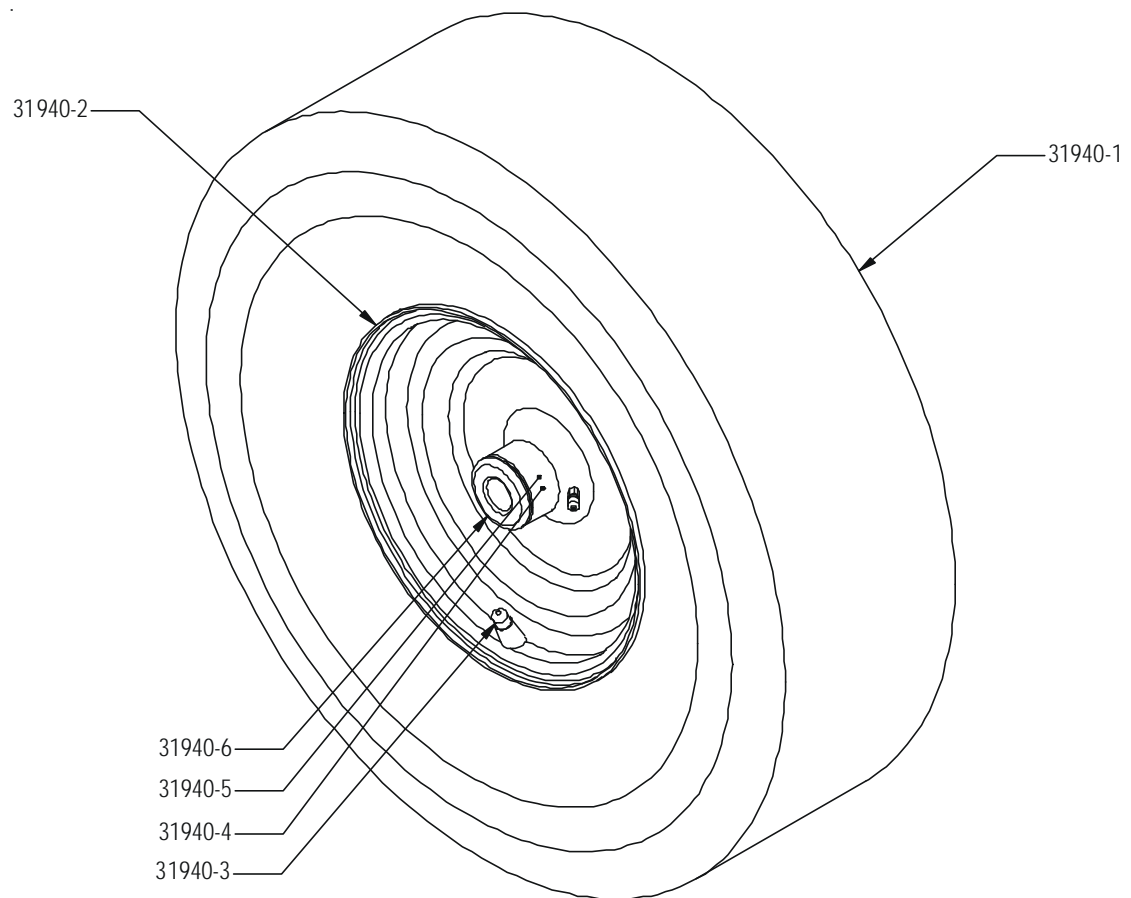
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31940	WHEEL, ASSM, 570X8, 3/4X4 BEARING	2
2	54004	UNDERCARRIAGE, TRANSFER	1
3	E6008	JACK, SCREW, TRANSFER	1
4	31023	BOLT, HEX, 1/2X3-1/2, UNC, GR5, ZP	1
5	31781	BOLT, HEX, 3/8X3-1/2, UNC, GR5, ZP	1
6	31337	BOLT, HEX, 5/8X4, UNC, GR5, ZP	2
7	31238	WASHER, FLAT, 3/4, ZP	2
8	31236	WASHER, FLAT, 1/2, ZP	1
9	31351	WASHER, FLAT, 3/8, ZP	2
10	31173	NUT, NYLOCK, 1/2, UNC, ZP	1
11	31176	NUT, NYLOCK, 3/8, UNC, ZP	1
12	31178	NUT, NYLOCK, 5/8, UNC, ZP	2
13	30221	PIN, COTTER, 3/16X1-3/4	2





**4.3.1 Wheel Assembly (Part No. 31940)**

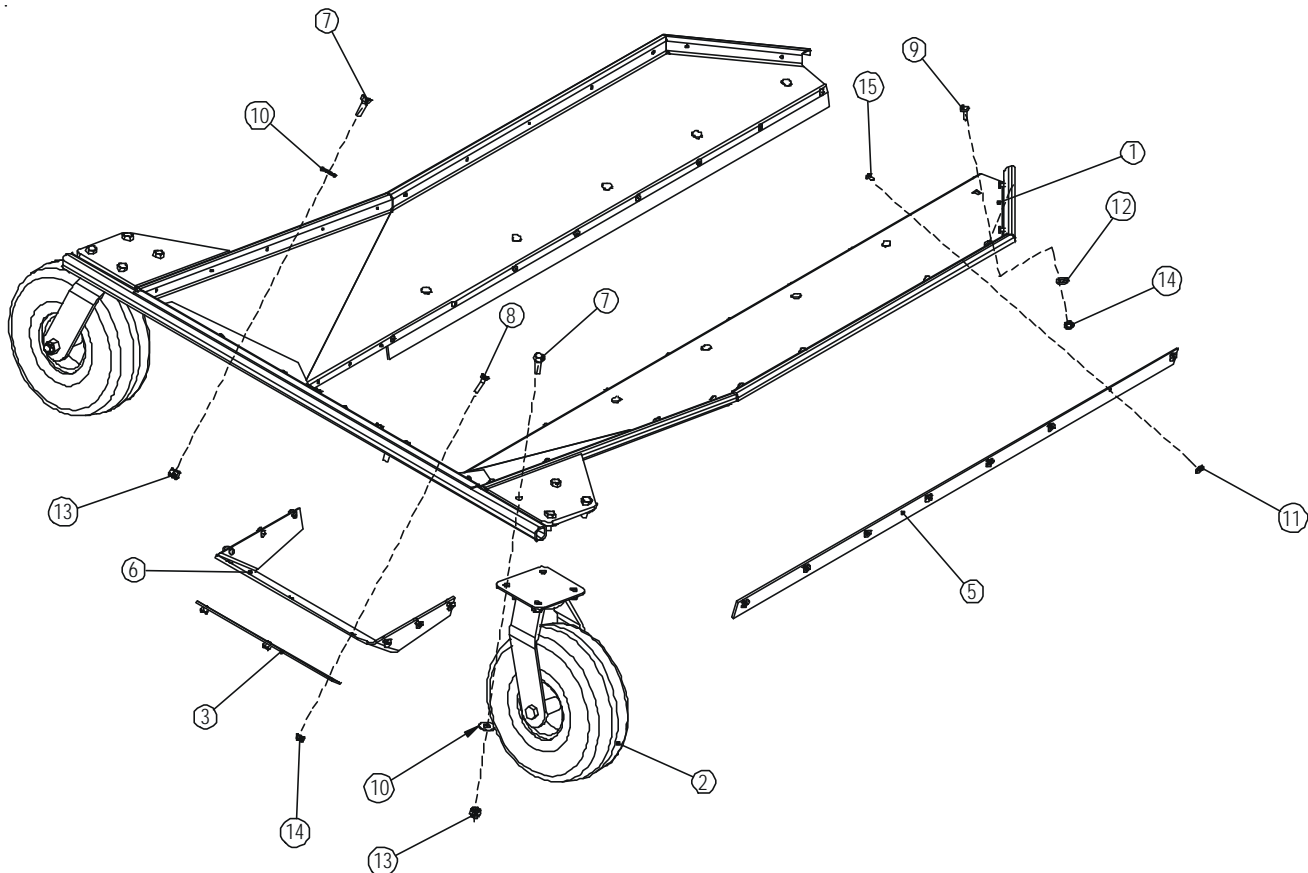
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31940-1	WHEEL, STEEL, 5.70X8	1
2	31940-2	TIRE, 5.70X8	1
3	31940-3	TR-413 VALVE	1
4	31940-4	2-1/4" NEEDLE BEARING	1
5	31940-5	1" NEEDLE BEARING	1
6	31940-6	RETAINER BUSHING	2

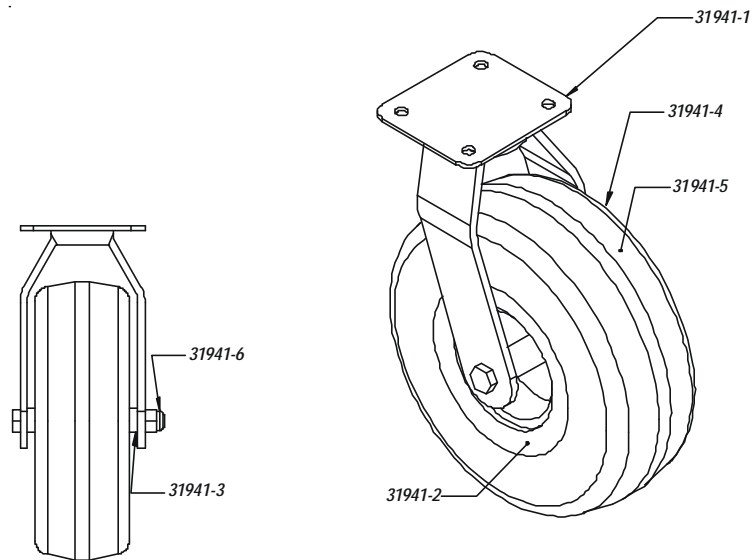
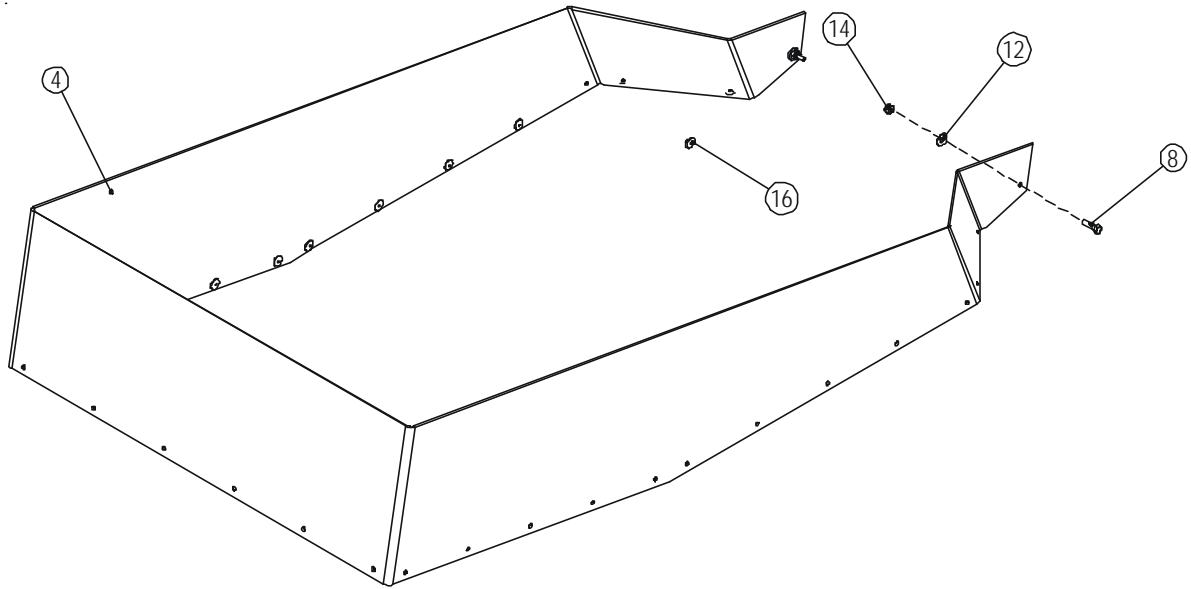


Note: Inflate tire to 50 psi.

#### 4.4 Hopper Assembly (Part No. 54017)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	54000	HOPPER, CONVEYOR, 18, ASSM	1
2	31941	TIRE, CASTER, SWIVEL, 410/350X4, 4PLY	2
3	E6023	SHT, BACKING, HOPPER, FRT, TRANSFER	1
4	E6030	RUBBER, EXTENSION, HOPPER, TRANSFER	1
5	E6031	SKIRT, TRANSFER, SIDE, HOPPER	2
6	E6032	SKIRT, TRANSFER, HOPPER, FRONT	1
7	31043	BOLT, HEX, 3/8X1, UNC, GR5, ZP	10
8	31029	BOLT, HEX, 1/4X1, UNC, GR5, ZP	5
9	37998	BOLT, CARR, 1/4X3/4, UNC, GR5, ZP	10
10	31351	WASHER, FLAT, 3/8, ZP	10
11	31536	WASHER, FLAT, 3/16, ZP	24
12	31237	WASHER, FLAT, 1/4, ZP	12
13	31176	NUT, NYLOCK, 3/8, UNC, ZP	10
14	31174	NUT, NYLOCK, 1/4, UNC, ZP	15
15	31739	RIVET, ST, 3/16x.565, .375 HEAD	24
16	30552	RIVET, ST, 3/16x.565, .625 HEAD	25



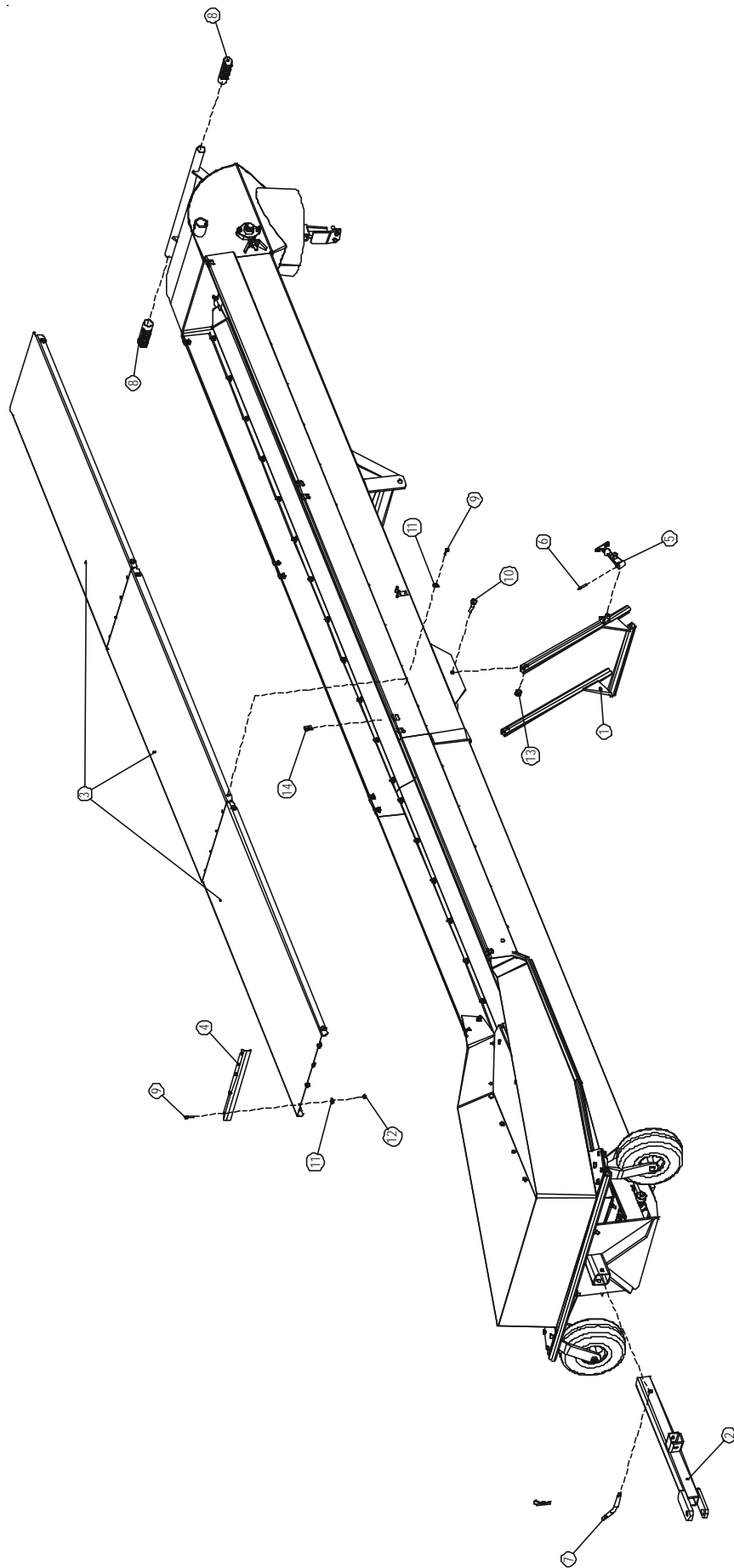


Note: Inflate tire to 50 psi.

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31941-1	YOKE/SWIVEL ASSEMBLY	1
2	31941-2	HUB,C/W BEARINGS & TIRE	1
3	31941-3	1/2"IDX1.375"OD BALL BEARINGS	2
4	31941-4	TIRE,410/350X4,2 PLY	1
5	31941-5	TUBE,410/350X4	1
6	31941-6	USE ONE 31028 AND ONE 31173	1
7	31941	TIRE,CASTER,SWIVEL,410/350X4,4 PLY	1

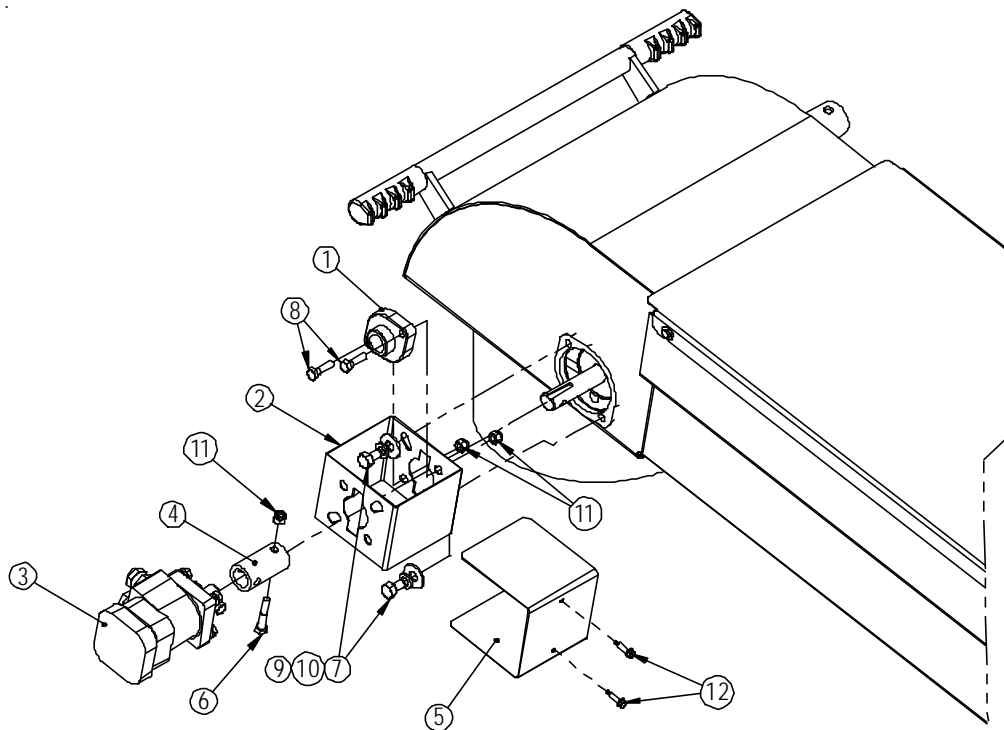
**4.5 Lock, Hitch and Cover Assembly (Part No. 54018)**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	54006	LOCK,TRANSPORT,TRANSFER	1
2	54007	HITCH,TRANSFER	1
3	E5961	COVER,TRANSFER	3
4	E6021	SHT,STRIPPER,TRANSFER	1
5	31773-01	STRAP,RUBBER	1
6	31773-04	PIN	1
7	31917	PIN,HITCH,1/2X3,ZP	1
8	31810	GRIP,HANDLE,1-1/4IDX4-1/2	2
9	31029	BOLT,HEX,1/4X1,UNC,GR5,ZP	16
10	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	2
11	31237	WASHER,FLAT,1/4,ZP	16
12	31174	NUT,NYLOCK,1/4,UNC,ZP	4
13	31173	NUT,NYLOCK,1/2,UNC,ZP	2
14	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	12



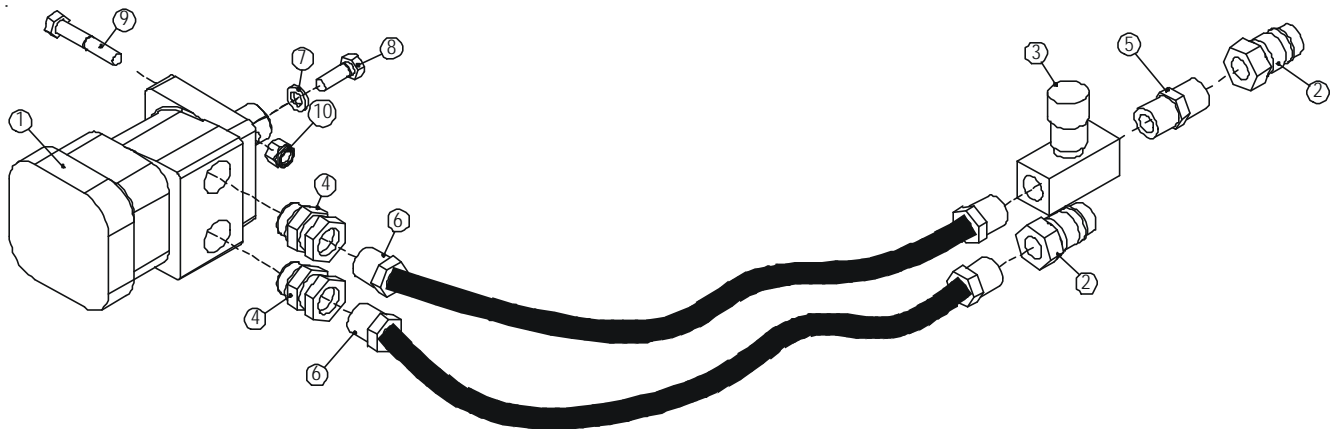
#### 4.6 Hydraulic Assembly (Part No. 54020)

ITEMNO.	PARTNO.	DESCRIPTION	QTY.
1	31915	BEARING, FLANGE, 2BOLT, 1	1
2	54010	MOTORMOUNT, TRANSFER	1
3	50285	HYD, KIT, AUGER, CONVEYOR	1
4	E6017	COUPLER, TRANSFER	1
5	E6275	GUARD, COUPLER, HYDRAULIC_DRIVE	1
6	31067	BOLT, HEX, 3/8X2, UNC, GR5, ZP	1
7	30405	BOLT, HEX, 1/2X3/4, UNC, GR5, ZP	2
8	31479	BOLT, HEX, 3/8X1-1/4, UNC, GR5, ZP	2
9	31236	WASHER, FLAT, 1/2, ZP	2
10	31244	WASHER, LOCK, 1/2, ZP	2
11	31176	NUT, NYLOCK, 3/8, UNC, ZP	3
12	30294	SCREW, TEK, 1/4X1	2



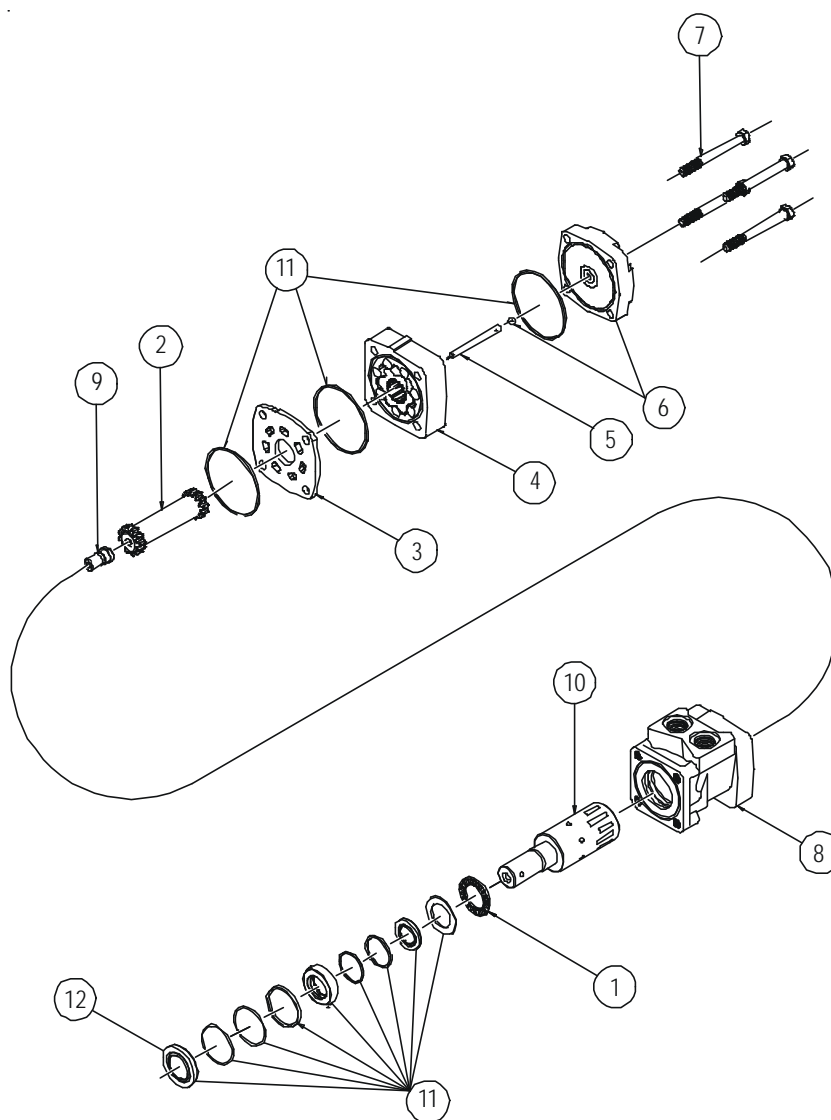
#### 4.6.1 Hydraulic Auger Kit (Part No. 50285)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30087	HYD,MOTOR,2.8,914RPM,1800PSI	1
2	30209	HYD,FIT,PIONEER,MALE,8FP	2
3	32975	HYD,VALVE,CONTROL,FLOW,8FP	1
4	32017	HYD,FIT,ADAPTOR,8FP-MB	2
5	32082	HYD,FIT,ADAPTOR,8MP-8MP	1
6	30036	HYD,HOSE,3/8X256,8MP-8MP,2W	2
7	31319	WASHER,LOCK,3/8,ZP	4
8	31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	4
9	31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	1
10	31176	NUT,NYLOCK,3/8,UNC,ZP	1



### 4.6.2 Hydraulic Motor Assembly(Part No. 30087)

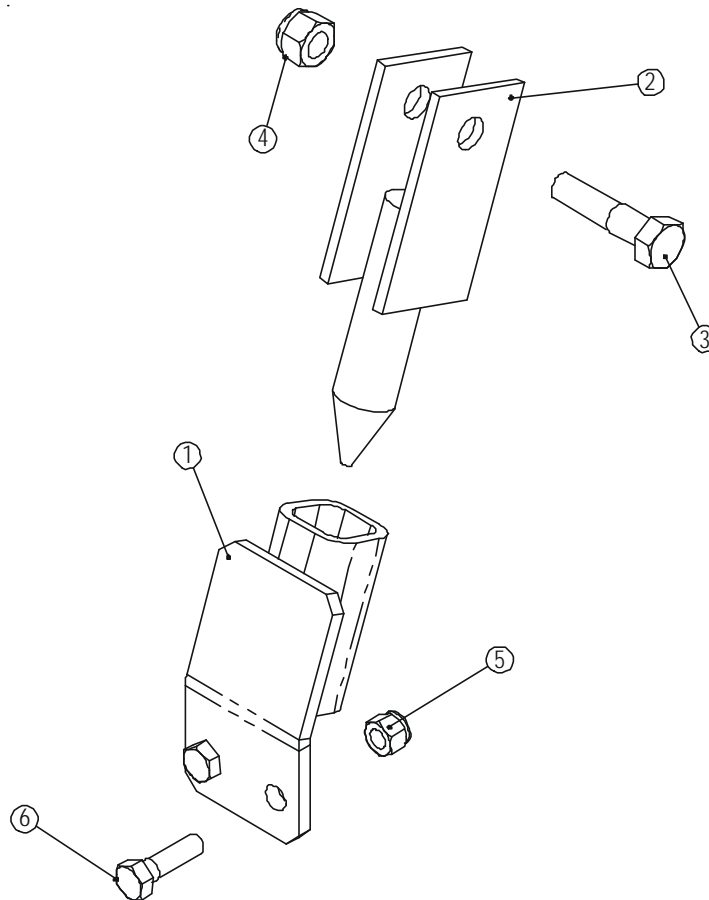
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31833	HYD,THRUST BEARING	1
2	31843	HYD,DRIVE LINK	1
3	31835	HYD,WEAR PLATE	1
4	31844	HYD,ROTOR ASSEMBLY	1
5	31845	HYD,DRIVE LINK PIN	1
6	31838	HYD,ENDCOVER KIT	1
7	31846	HYD,BOLT,ENDCOVER	4
8	31840	HYD,HOUSING	1
9	31841	HYD,COOLING PLUG	1
10	31842	HYD,SHAFT	1
11	32735	SEAL KIT	1
12	31986	HYD,MOTOR,SEAL,WHITE	





**4.7 Pivot Assembly (Part No. 54026)**

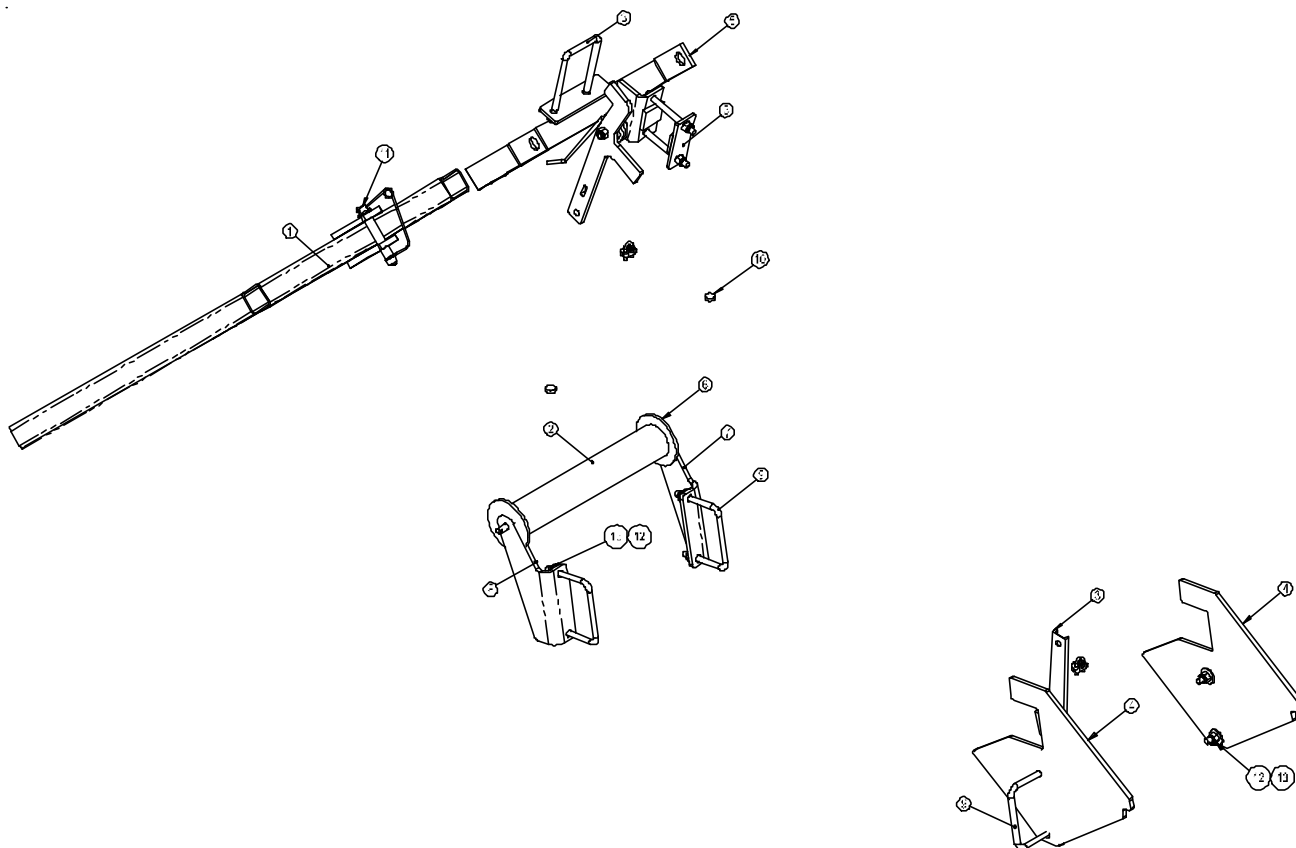
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50510	WLDT,PIVOT,MOUNT	1
2	54008	PIVOT,TRANSFER	1
3	31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	1
4	31173	NUT,NYLOCK,1/2,UNC,ZP	1
5	31176	NUT,NYLOCK,3/8,UNC,ZP	2
6	31479	BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	2



## 5.0 Transfer Transport

### 5.1 Transfer Transport (Part No. TCT-3)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	54023	HOOK ASSM, TRANSFER, TRANSPORT	1
2	54024	ROLLER, TRANSFER, TRANSPORT	1
3	50596	ASSY, LOCK, CONVEYOR	1
4	E6033	PLT, LOCK, HITCH, TRANSFER, TRANSPORT	2
5	E6036	LOOP, TRANSFER, TRANSPORT	1
6	E6046	DISK, UHMW, 4-1/2 O.D. X 9-1/16 I.D. X 1/4 T	2
7	E6048	BRACKET, ROLLER, TRANSPORT, LEFT	1
8	E6049	BRACKET, ROLLER, TRANSPORT, RIGHT	1
9	31942	BOLT, U, SQ, 1/2-13 X 5 X 4-1/2	4
10	31943	BUMPER, AD-BACK, PVC, 0.83 D X 1/4 T, BLK	2
11	31949	PIN, HITCH, SAFETY, 3/4 X 4	1
12	31173	NUT, NYLOCK, 1/2, UNC, ZP	8
13	31236	WASHER, FLAT, 1/2, ZP	10
14	30295(.9)	PAINT, ORANGE, HIGHLINE	1
15	30296(.1)	PAINT, CATALYST, SPO3937P2	1

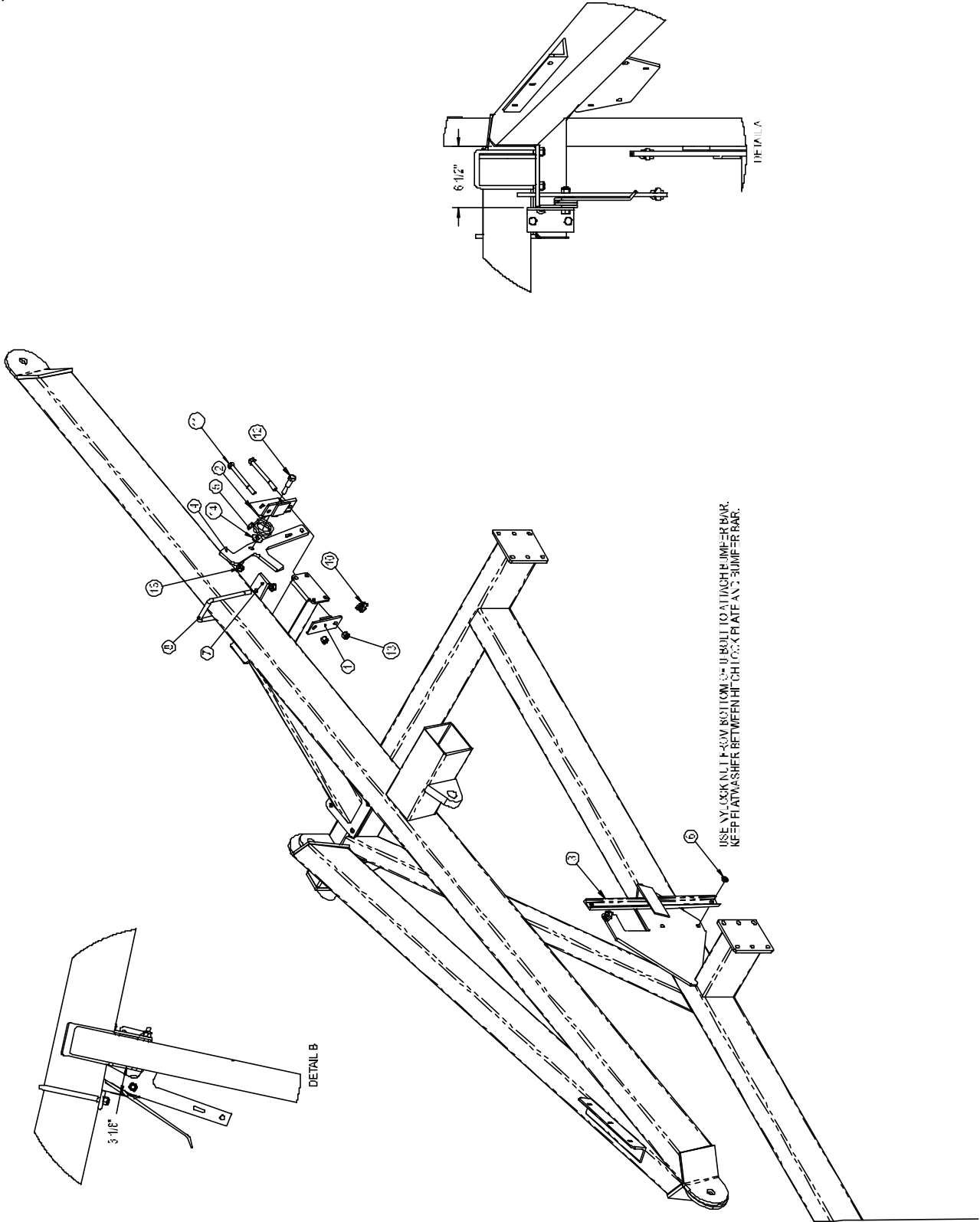


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**5.1.1 Conveyor Lock Assembly (Part No. 50596)**

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	50593	WLDT,PLT,BACKING	1
2	50594	WLDT,PLT,MOUNT,LOCK	1
3	50595	WLDT,BAR,BUMPER	1
4	E7586	LOCK,ARM,HOOK	1
5	E7415	SPRING,TORSION,HYD,CONVEYOR	1
6	E7580	PIPE,SMLS,3/4X,120X3/16L	1
7	E7582	PLT,R,3/8X2X6-1/2,17/32X2	1
8	3'061	BOLT,U,SQ,1/2-13,3X7,1-1/4THREAD	1
9	33207(6)	ROPE,WIRE,5/32",STRAND	1
10	920'4	CLAMP,CABLE,1/4	2
11	31028	BOLT,HEX,1/2X5,UNC,GR5,ZP	2
12	3'0'8	BOLT,HEX,1/2X2-1/2,UNC,GR5,ZP	1
13	3'173	NUT,NYLOCK,1/2,UNC,ZP	5
14	3'236	WASHER,FLAT,1/2,ZP	1

WIRE ROPE NOT SHOWN



**Figure 12**  
**Transport side plate location**

PART NO.	DESCRIPTION	QTY
E6033	PLT, LOCK, HITCH, TRANSFER TRANSPORT	2
31942	BOLT, U, SQ	2
31173	NUT, NYLOCK, 1/2, UNC	4
31236	WASHER, FLAT, 1/2	4



**Figure 13**  
**Roller Location**

PART NO.	DESCRIPTION	QTY
54024	ROLLER, TRANSFER TRANSPORT	1
E6046	DISK, UHMW, 4-1/2 O.D. X 9-1/16 I.D. X 1/4 T	2
E6048	BRACKET, ROLLER, TRANSFER TRANSPORT, LEFT	1
E6049	BRACKET, ROLLER, TRANSFER TRANSPORT, RIGHT	1
31942	BOLT, U, SQ	2
31173	NUT, NYLOCK, 1/2	4
31236	WASHER, FLAT, 1/2	6



**Figure 14**  
**Transfer Transport Carrier Location**  
**(use existing bolts)**

PART NO.	DESCRIPTION	QTY
E6036	LOOP, TRANSFER TRANSPORT	1



**Figure 15**  
**Transfer Transport Carrier and**  
**Bumper locations**

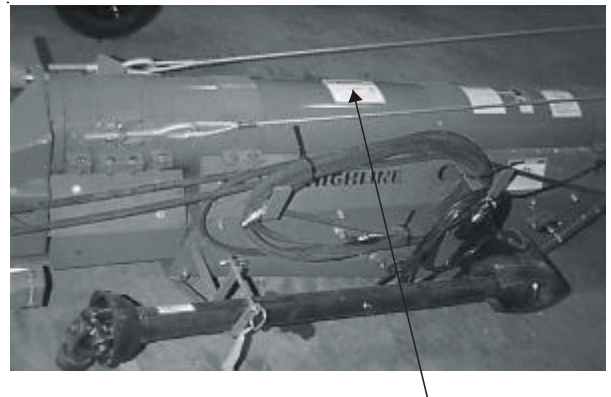
PART NO.	DESCRIPTION	QTY
31943	BUMPER,AD-BACK,PVC	2
54023	HOOK,ASSM,TRANSFER TRANSPORT	1



**Figure 16**  
**Decal (E6051) Location #1**



**Figure 17**  
**Decal (E6051) Location #2**



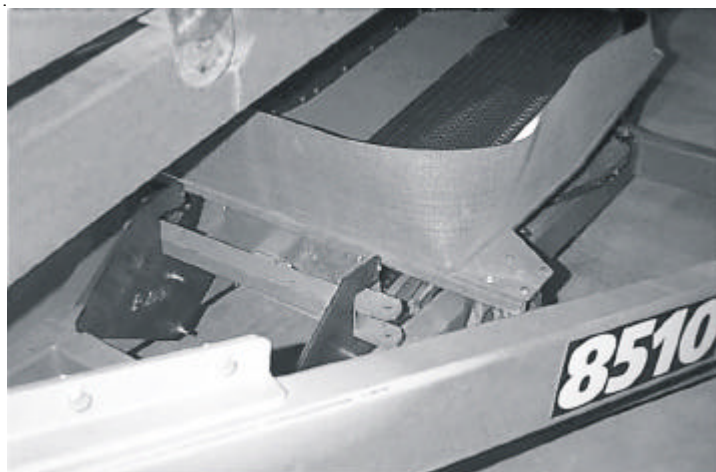
**Figure 18**  
**Push Transfer Conveyor in**



**Figure 19**  
**Hook carrier linkage**



**Figure 20**  
**Intake location in Transfer**  
**Transport**





**Figure 21**  
**Raise undercarriage to tighten**  
**carrier linkage**



**Figure 22**  
**Transfer Transport**



- As shown – Use the jack on Transfer Conveyor to fully raise Transfer Conveyor wheels to the position shown. This is the recommended position for transporting the Transfer Conveyor.

**6.0 Parts Index**

<b>PartNum</b>	<b>DESCRIPTION</b>	<b>PAGE</b>	<b>ITEM</b>
30036	HYD,HOSE,3/8X256,8MP-8MP,2W	31	6
30087	HYD,MOTOR,2.8,914RPM,1800PSI	31	1
30208	PLT,SERIAL,#	18	1
30209	HYD,FIT,PIONEER,MALE,8FP	31	2
30221	PIN,COTTER,3/16X1-3/4	24	13
30294	SCREW,TEK,1/4X1	30	12
30405	BOLT,HEX,1/2X3/4,UNC,GR5,ZP	30	7
30552	RIVET,ST,3/16X.565,.625 HEAD	26	16
30640	KIT,LACE,SSRS125,15,PIN,WASHER	22	1
30641	LACE,SSRS125,15"	22	2
30642	LACE,PIN,NC-1,100'	22	3
30643	LACE,PIN,WASHER,50	22	4
30644	LACE,SPLICETOOL,RS125,4"	22	5
31018	BOLT,HEX,1/2X2-1/2,UNC,GR5,ZP	36	12
31023	BOLT,HEX,1/2X3-1/2,UNC,GR5,ZP	24	4
31028	BOLT,HEX,1/2X5,UNC,GR5,ZP	36	11
31029	BOLT,HEX,1/4X1,UNC,GR5,ZP	26	8
31029	BOLT,HEX,1/4X1,UNC,GR5,ZP	28	9
31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	20	14
31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	26	7
31043	BOLT,HEX,3/8X1,UNC,GR5,ZP	31	8
31044	BOLT,HEX,3/8X1-1/2,UNC,GR5,ZP	20	15
31061	BOLT,U,SQ,1/2-13,3X7,1-1/4 THREAD	36	8
31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	20	13
31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	30	6
31067	BOLT,HEX,3/8X2,UNC,GR5,ZP	31	9
31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	28	10
31070	BOLT,HEX,1/2X2,UNC,GR5,ZP	33	3
31163	NUT,HEX,1/2,UNC,GR5,ZP	20	21
31173	NUT,NYLOCK,1/2,UNC,ZP	24	10
31173	NUT,NYLOCK,1/2,UNC,ZP	28	13
31173	NUT,NYLOCK,1/2,UNC,ZP	33	4
31173	NUT,NYLOCK,1/2,UNC,ZP	34	12
31173	NUT,NYLOCK,1/2,UNC,ZP	36	13
31173	NUT,NYLOCK,1/2,UNC	38	
31173	NUT,NYLOCK,1/2,UNC	38	
31174	NUT,NYLOCK,1/4,UNC,ZP	20	22
31174	NUT,NYLOCK,1/4,UNC,ZP	26	14
31174	NUT,NYLOCK,1/4,UNC,ZP	28	12
31176	NUT,NYLOCK,3/8,UNC,ZP	12	
31176	NUT,NYLOCK,3/8,UNC,ZP	20	23
31176	NUT,NYLOCK,3/8,UNC,ZP	24	11
31176	NUT,NYLOCK,3/8,UNC,ZP	26	13
31176	NUT,NYLOCK,3/8,UNC,ZP	30	11
31176	NUT,NYLOCK,3/8,UNC,ZP	31	10
31176	NUT,NYLOCK,3/8,UNC,ZP	33	5
31178	NUT,NYLOCK,5/8,UNC,ZP	24	12

31234 WASHER,SP,FLAT,25/64X1-1/2OD	20	18
31236 WASHER,FLAT,1/2,ZP	24	8
31236 WASHER,FLAT,1/2,ZP	30	9
31236 WASHER,FLAT,1/2,ZP	34	13
31236 WASHER,FLAT,1/2,ZP	36	14
31236 WASHER,FLAT,1/2,ZP	38	
31236 WASHER,FLAT,1/2,ZP	38	
31237 WASHER,FLAT,1/4,ZP	20	19
31237 WASHER,FLAT,1/4,ZP	26	12
31237 WASHER,FLAT,1/4,ZP	28	11
31238 WASHER,FLAT,3/4,ZP	24	7
31244 WASHER,LOCK,1/2,ZP	30	10
31319 WASHER,LOCK,3/8,ZP	20	17
31319 WASHER,LOCK,3/8,ZP	31	7
31337 BOLT,HEX,5/8X4,UNC,GR5,ZP	24	6
31351 WASHER,FLAT,3/8,ZP	20	20
31351 WASHER,FLAT,3/8,ZP	24	9
31351 WASHER,FLAT,3/8,ZP	26	10
31479 BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	12	
31479 BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	30	8
31479 BOLT,HEX,3/8X1-1/4,UNC,GR5,ZP	33	6
31515 BOLT,HEX,1/2X2,UNC,GR5,ZP,FT	20	16
31536 WASHER,FLAT,3/16,ZP	26	11
31593 CLIP,AUTOMOTIVE,1/4,GR5,ZP	28	14
31598 RIVET,ST,1/8X.203,.250 HEAD	18	9
31739 RIVET,ST,3/16X.565,.375 HEAD	26	15
31781 BOLT,HEX,3/8X3-1/2,UNC,GR5,ZP	24	5
31810 GRIP,HANDLE,1-1/4IDX4-1/2	28	8
31833 HYD,THRUST BEARING	32	1
31835 HYD,WEAR PLATE	32	3
31838 HYD,ENDCOVER KIT	32	6
31840 HYD,HOUSING	32	8
31841 HYD,COOLING PLUG	32	9
31842 HYD,SHAFT	32	10
31843 HYD,DRIVE LINK	32	2
31844 HYD,ROTOR ASSEMBLY	32	4
31845 HYD,DRIVE LINK PIN	32	5
31846 HYD,BOLT,ENDCOVER	32	7
31915 BEARING,FLANGE,2BOLT,1	20	11
31915 BEARING,FLANGE,2BOLT,1	30	1
31917 PIN,HITCH,1/2X3,ZP	28	7
31940 WHEEL,ASSM,570X8,3/4X4 BEARING	24	1
31941 TIRE,CASTER,SWIVEL,410/350X4,4PLY	26	2
31941 TIRE,CASTER,SWIVEL,410/350X4,4PLY	27	7
31942 BOLT,U,SQ,1/2-13X5X4-1/2	34	9
31942 BOLT,U,SQ,1/2-13X5X4-1/2	38	
31942 BOLT,U,SQ,1/2-13X5X4-1/2	38	
31943 BUMPER,AD-BACK,PVC,0.83DX1/4T,BLK	34	10
31943 BUMPER,AD-BACK,PVC	39	

31949 PIN,HITCH,SAFETY,3/4X4	34	11
31986 HYD,MOTOR,SEAL,WHITE	32	12
32017 HYD,FIT,ADAPTER,8FP-10MB	31	4
32082 HYD,FIT,ADAPTER,8MP-8MP	31	5
32735 SEAL KIT	32	11
32975 HYD,VALVE,CONTROL,FLOW,8FP	31	3
32981 DECAL,PIMA	18	4
33020 BELT,15",REPLACEMENT,1'	22	6
33207 ROPE,WIRE,5/32",STRAND	36	9
37998 BOLT,CARR,1/4X3/4,UNC,GR5,ZP	20	12
37998 BOLT,CARR,1/4X3/4,UNC,GR5,ZP	26	9
50285 HYD,KIT,AUGER,CONVEYOR	30	3
50510 WLDT,PIVOT,MOUNT	12	
50510 WLDT,PIVOT,MOUNT	33	1
50593 WLDT,PLT,BACKING	36	1
50594 WLDT,PLT,MOUNT,LOCK	36	2
50595 WLDT,BAR,DUMPER	36	3
50596 ASSY,LOCK,CONVEYOR	34	3
50618 ASSY,ROLLER,INTAKE,TC	20	4
54000 HOPPER,CONVEYOR,18,ASSM	26	1
54004 UNDERCARRIAGE,TRANSFER	24	2
54005 FRAME,TRANSFER	20	1
54006 LOCK,TRANSPORT,TRANSFER	28	1
54007 HITCH,TRANSFER	28	2
54008 PIVOT,TRANSFER	33	2
54010 MOTOR MOUNT,TRANSFER	30	2
54012 ROLLER,DRIVE,TRANSFER,ASSM	20	2
54014 BOLT,EYE,1/2X5X1DIA,WELDED	20	3
54023 HOOK,ASSM. TRANSFER,TRANSPORT	34	1
54023 HOOK,ASSM,TRANSFER,TRANSPORT	39	
54024 ROLLER,TRANSFER,TRANSPORT	34	2
54024 ROLLER,TRANSFER,TRANSPORT	38	
92014 CLAMP,CABLE,1/4	36	10
31773-01 STRAP,RUBBER	28	5
31773-04 PIN	28	6
31940-1 WHEEL,STEEL,5.70X8	25	1
31940-2 TIRE,5.70X8	25	2
31940-3 TR-413 VALVE	25	3
31940-4 2 1/4" NEEDLE BEARING	25	4
31940-5 1" NEEDLE BEARING	25	5
31940-6 RETAINER BUSHING	25	6
31941-1 YOKE/SWIVEL ASSEMBLY	27	1
31941-2 HUB,C/W_BEARINGS&TIRE	27	2
31941-3 1/2"IDX1.375"OD_BALLBEARINGS	27	3
31941-4 TIRE,410/350X4,2 PLY	27	4
31941-5 TUBE,410/350X4	27	5
31941-6 USE ONE 31028 AND ONE 31173	27	6
E5812 CABLE,LACING,16"U	22	7
E5955 SHT,PAN,CHARGE,CENTER	20	5

E5961 COVER,TRANSFER	28	3
E6008 JACK,SCREW,TRANSFER	24	3
E6017 COUPLER,TRANSFER	30	4
E6020 BUSHING,13/32X1X1L	20	7
E6021 SHT,STRIPPER,TRANSFER	28	4
E6023 SHT,BACKING,HOPPER,FRT,TRANSFER	26	3
E6024 SHT,BACKING,STRIPPER,TRANSFER	20	8
E6025 BELT,15",TRANSFER	20	9
E6027 SKIRT,TRANSFER,DISCHARGE	20	10
E6028 DECAL,TRANSFER,1600	18	5
E6030 RUBBER,EXTENSION,HOPPER,TRANSFER	26	4
E6031 SKIRT,TRANSFER,SIDE,HOPPER	26	5
E6032 SKIRT,TRANSFER,HOPPER,FRONT	26	6
E6033 PLT,LOCK,HITCH,TRANSFER,TRANSPORT	34	4
E6033 PLT,LOCK,HITCH,TRANSFER,TRANSPORT	38	
E6036 LOOP,TRANSFER,TRANSPORT	34	5
E6036 LOOP,TRANSFER,TRANSPORT	38	
E6046 DISK,UHMW,4-1/2ODX9/16IDX1/4T	34	6
E6046 DISK,UHMW,4-1/2ODX9/16IDX1/4T	38	
E6048 BRACKET,ROLLER,TRANSPORT,LEFT	34	7
E6048 BRACKET,ROLLER,TRANSFER TRANSPORT,LEFT	38	
E6049 BRACKET,ROLLER,TRANSPORT,RIGHT	34	8
E6049 BRACKET,ROLLER,TRANSFER TRANSPORT,RIGHT	38	
E6051 DECAL,T_TRANSPORT,DO_NOT_LIFT	18	6
E6275 GUARD,COUPLER,HYDRAULIC DRIVE	30	5
E7415 SPRINT,TORSION,HYD,CONVEYOR	36	5
E7552 DECAL,WARNING,OWNERS_MANUAL	18	7
E7553 DECAL,WARNING,STOP_ENGINE/SERVICE	18	8
E7580 PIPE,SMLS,3/4X.120X3/16L	36	6
E7582 PLT,R,3/8X2X6-1/2,17/32X2	36	7
E7586 LOCK,ARM,HOOK	36	4
E8114 SHAFT,1-1/8X15-34,TAPPED 3/8 UNC	20	6

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## **7.0 Specifications**

### Transfer Conveyor

<i>Weight</i>	<i>570 lbs (Hydraulic Drive)</i>
<i>Travel Length</i>	<i>20'</i>
<i>Total Width</i>	<i>47-1/2"</i>
<i>Max. Working Height</i>	<i>42"</i>
<i>Transport Height</i>	<i>51"</i>
 <i>Hydraulic Pressure</i>	 <i>2000 psi (13.8 MPa)</i>
<i>Hydraulic Flow</i>	<i>13 gpm (49 L/min)</i>

**Dealer Information**

Dealer: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province / State: \_\_\_\_\_

Postal Code / Zip Code: \_\_\_\_\_

Phone: \_\_\_\_\_



**Identification Numbers**

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_



## **Dealer Checklist**

Transfer Conveyor Dealer Checklist

Checked	Check List Item
	Verify all bolts tight an no loose bolts or other debris sitting on belt.
	Verify serial number plate attached.
	Manual lift, up/down. Cycle through lift a minimum of 3 times.
	Check hyd. Motor driving the belt for proper rotation, leaks and possible interference.
	Inspect conveyor belt splice for condition and correct installation.
	Belt alignment to be adjusted at Intake Roller, and Discharge Roller.
	Conveyor must be run through complete operating range, up to 13 gpm.
	Check for excessive belt wear on both sides belt.
	Check tire pressure and adjust as required. (as specified on tire)
	Ensure transport lock functions correctly.
	Grease main wheel bearings.

Transfer Transport Dealer Checklist

Checked	Check List Item
	Verify all bolts tight an no loose bolts or other debris sitting on belt.
	Decal placement.
	Load and unload Transfer Conveyor.
	Verify lock operation.