BALE PRO 8100
Owner's Manual

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Table of Contents

Warranty

Highline New Agricultural Equipment Limited Warranty

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

Parts and Labour

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

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

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

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

EXCLUSIONS AND LIMITATIONS

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

(1) Any defect which was caused (in Highline's sole judgement) by other than normal use and service of the Agricultural Equipment, or by any of the following: (i) accident (ii) misuse or negligence (iii) overloading (iv) lack of reasonable and proper maintenance (v) improper repair or installation (vi) unsuitable storage (vii) non-Highline approved alteration or modification (viii) natural calamities (ix) vandalism (x) parts or accessories installed on Agricultural Equipment which were not manufactured or installed by Highline authorized Dealers (xi) the elements (xii) collision or other accident.

(2) Any Agricultural Equipment whose identification numbers or marks have been altered or removed.

(3) Any Agricultural Equipment which any of the required or recommended periodic inspection or services have been performed using parts not manufactured or supplied by Highline or meeting Highline Specifications including, but without limitation, lubricants (oil, grease), belt lacings, and hydraulic fluids.

(4) Equipment used for rental, custom work, industrial and construction or if equipment is used for any other purpose than the intended agricultural application.

(5) Any Agricultural Equipment used in demonstrations not performed by a Highline Dealer. Warranty will be at the discretion of Highline for all other demonstration warranty.

(6) New Agricultural Equipment delivered to the retail purchaser in which the warranty registration has not been completed and returned to Highline within ten (10) days from the date of purchase.

(7) Any defect that was caused (in Highline's sole judgement) by operation of the Agricultural Equipment not abiding by standard operating procedures outlined in the Operator's Manual.

(8) Tire Limited Warranties and support are the responsibility of the respective product's manufacturer.

(9) Transportation costs, if any, of transporting to the Highline Dealer.

(10) In no event shall Highline's liability exceed the purchase price of the product.

(11) Highline shall not be liable to any person under any circumstances for any incidental or consequential damages (including but not limited to, loss of profits, out of service time and damage to equipment which this equipment may be attached) occurring for any reason at any time.

(12) Diagnostic and overtime labour premiums are not covered under this Limited Warranty Policy.

(13) Depreciation damage caused by normal wear, lack of reasonable and proper maintenance, failure to follow operating instructions, misuse, and/or lack of proper protection during storage.

(14) Accessory systems and electronics not of Highline's manufacture are warranted only to the extent of such manufacturer's respective Limited Warranty if any.

(15) Wear items which are listed by product group below:

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

PARTS WARRANTY

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

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

President's Message

Congratulations on your purchase of the Bale Pro 8100 *manufactured by Highline Manufacturing Ltd. We are a company with over 25 years experience in the farm implement manufacturing industry.*
This operator's manual has been prepared to provide information necessary for safe and efficient operation of your BP 8100*. In the manual you will find safety procedures, installation instructions, maintenance routines and detailed parts diagrams.*

Should the need for acquiring replacement parts arise; this manual will assist you in identifying these parts. If your dealer does not have the parts you need in stock, Highline's Parts Department is ready to promptly ship the required parts to your dealer. Also, if you find that you require information not covered in this manual, please feel free to consult your local dealer or Highline Manufacturing Ltd. Highline's Service department is always ready to back up your dealership's service personnel.

In our continuous effort to design and manufacturer equipment that meets the ever-changing needs of farmers, improvements are made from time to time. Highline Manufacturing Ltd. reserves the right to make those changes and improvements when practical to do so without incurring any obligation to make such changes and improvements on machines previously sold. Highline Manufacturing Ltd. thanks and congratulates you for selecting an BP 8100 *as your machine of choice.*

Sincerely,

Gerry Bourgault, President
Highline Manufacturing Ltd.

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!

- Keep children and adults away from discharge area while processing.
- Know the controls and what they do.
- Check the machine to ensure nothing restricts moving or rotating parts.
- Ensure PTO is disengaged before starting tractor.
- Never leave tractor while PTO is engaged.
- Lower forks to ground after operation.
- Never attempt to manually remove debris while the PTO is activated.
- Do not transport Bale Pro on highway with CV extension shaft on machine or with bales in tub or on the forks.
- Disconnect CV before unplugging or adjusting processor.
- Always keep safety shields in place.
- Relieve pressure in hydraulic lines before disconnecting lines or performing other work on the hydraulic system.
- Never allow anyone to stand behind the processor while loading bales.
- Ensure the discharge door is raised completely with transport lock installed to lock it to the tub when transporting machine.
- Use twine cutter tool only as directed. The blade is very sharp and could cause serious injury if handled improperly.

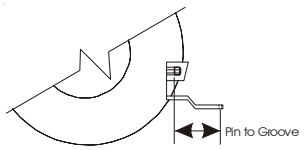
Before operating the Bale Pro 8100, be sure to review *all* of the instructions and familiarize yourself with its features.

1.0 Operating Instructions

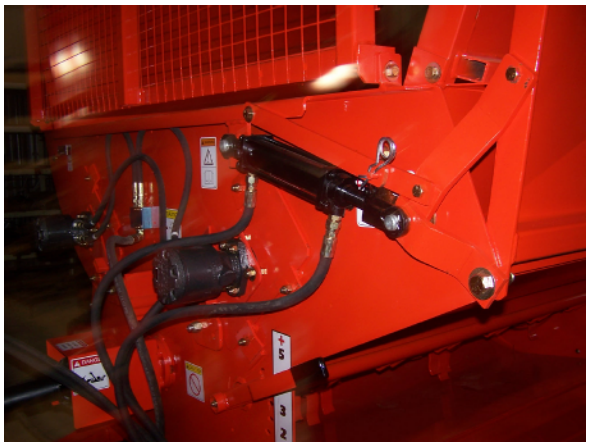
1.1 General Operating Instructions

Successful operation of the Bale Pro 8100 is dependent upon the quality of the bale, the height of the feed rollers and flail guard rod and also upon the operator. The following steps ensure proper and efficient operation. Please read them all carefully before operating your new BP 8100.

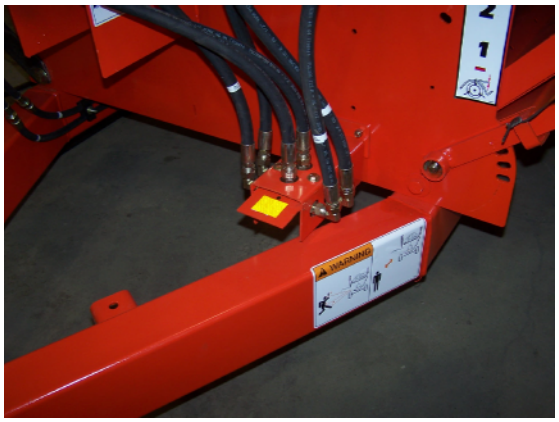
1. Ensure that the drawbar on the tractor is extended so that the pin is 17" from the groove on the tractor PTO for the standard 1-3/8" diameter, 1000 rpm yoke. For the 1-3/8" diameter, 540 rpm optional yoke, the distance should be 15-1/2". For the 1-3/4" diameter, 1000 rpm optional yoke, the distance should be 21-1/2".

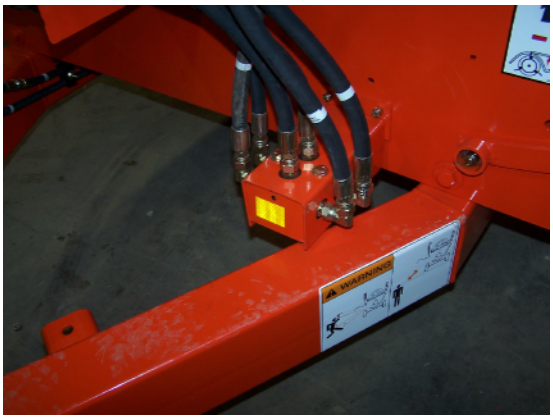


2. It is recommended that the hitch tongue be placed so that the Bale Pro 8100 frame is level. This will ensure that the bale forks are low enough to load a bale. Depending on tractor drawbar height and the tire option selected with your Bale Pro 8100 it may be necessary to alter the position of the hitch bridles/tongue to ensure adequate clearance for the PTO shaft. If possible, the hitch bridles should extend below the Bale Pro frame to eliminate the possibility of PTO driveline contact.
3. Ensure that the machine stays properly greased at all recommended locations (See Maintenance Instructions).
4. The top discharge deflector door has a transport lock that must be released before the door can be lowered. Remove the hair pin and pull the transport lock link toward the hitch end of the bale processor. Rotate the short link of the transport lock clockwise away from the clevis end of the cylinder and reinstall the hair pin. The top discharge deflector door is operated by a hydraulic cylinder, which is linked to either the feed roller hydraulic circuit or has its own circuit from the tractor. The deflector door stroke has been preset at the factory to bring the door up to the fully raised position. The cylinder can be adjusted as necessary by removing the rod pin and turning the clevis in or out to adjust the stroke.



Note: *If your machine has the **Mechanical Valve Option** then the selection of door function is determined by the position of the bale forks. The normal mode is for the feed rollers to be operational, the door operation is enabled only when the bale forks are in the fully down position (a "fork down indicator" has been provided and is placed on the front of the hydraulic selector valve). With the selector valve shifted by the down position of the bale forks, the tractor hydraulic valve will control the door position cylinder.*

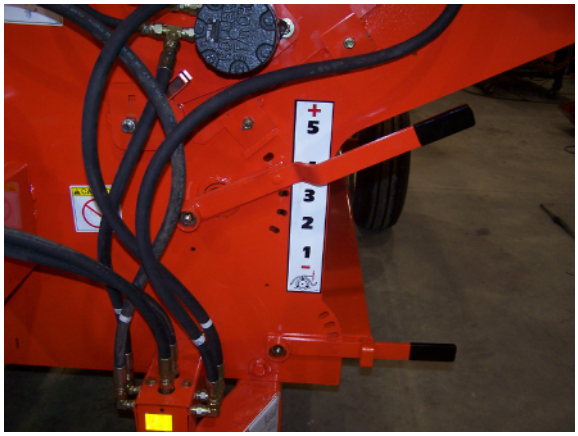




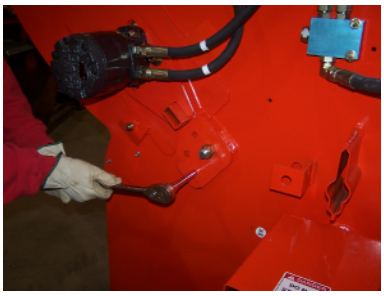
Note: The feed rollers should not operate with the bale forks in the full down position. If the feed rollers move while the door is actuated see Section 1.2 - Selector Valve Assembly Adjustment. The door cylinder and selector valve circuit are not "zero leakage" components and the weight of the door will cause the cylinder to slowly leak down over a long period of time. Use the door transport lock to prevent door leak down.

The door may drop a small amount (1/4") as the bale forks are brought to the fully down position and up again even if the door is not adjusted. This is caused by cross leakage inside the selector valve and should not be a problem except for repeated actuation of the selector valve. This leakage can be compensated for by noting the position of the door before raising the bale forks and adjusting the door height as required.

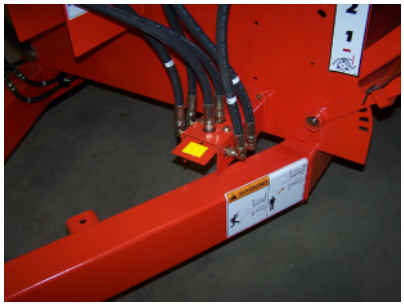
5. To adjust the bottom deflector, simply stand in front of the machine, pull the lower handle toward yourself, and raise or lower the door as required.



6. The adjustment of the flail guard rods is similar to the bottom deflector adjustment. Pull the upper handle (see previous photo) towards yourself and raise or lower the handle. Raising the handle will make the Bale Pro more aggressive while lowering the handle will make it less aggressive. There are five different settings for the flail guard rods as shown on the decal by the handle. If the processor is operated too aggressively, the flails will slap back on the flail drum. Continued 'backslap' can cause damage and unnecessary wear to the flail drum, flails, and flail bushings. Therefore, avoid excessive and prolonged 'backslap' whenever possible by adjusting the flail guard rods to a slightly less aggressive setting.
7. Adjust the feed roller position with the feed roller adjusting plates to accommodate the bale size. Using a 1/2" drive ratchet handle rotate the plates to one of the three avalible positions. Generally the feed rollers should be raised for larger bales and lowered for smaller bales. Major adjustments may affect the aggressiveness of the processor.



8. The feed roller speed should be set to a maximum of 40 rpm. Faster feed roller speeds will result in a faster discharge of material. Slower speeds will result in a slower discharge of material. The speed can be adjusted by changing the flow control setting on your tractor (if it is equipped with a flow control). If you do not have a flow control on your tractor, a flow control kit can be purchased from your Highline dealer. It is HIGHLY RECOMMENDED for first time users to run the feed rollers slower to become aquainted with the relationship between the feed roller speed and material discharge rate. Running the feed rollers too fast may cause the feed rollers to dig into the bale to the point where the bale cannot be processed. The direction of the rollers can be changed by choosing the opposite postion on your tractor hydraulic lever.
9. Before loading the bale, engage the PTO at an idle. Ensure that the flail drum is operating properly. Start the feed rollers using the hydraulic controls and check to ensure the feed rollers turn in both directions.
10. Ensure the bale loader forks are adjusted to the proper width which is determined by the size of bale being processed. If processing bales six feet (2 m) in diameter, position the left and right fork mounts as far as possible toward the ouside of the machine. If processing bales five feet (1.5 m) in diameter the outer edges of the fork mounts should be three inches (7.6 cm.) from the inside of the bale loader frame upright. If processing bales four feet (1.2 m) in diameter, the outer edges of the fork mounts should be six inches (15.2 cm.) from the inside of the bale loader frame upright. To load bales, lower the forks **completely** (fork indicator) and back up to the bale **slowly** until the forks are completely under the bale. Raise the forks until the bale falls into the processor. Another bale may be loaded onto the forks while a bale is in the processor. *If you have selected the **Mechanical Valve Option**, a "fork down indicator" has been provided to show when the forks are fully down. The indicator plate is located on the discharge frame member in front of the tub. The normally vertical indicator pops out 45° when the bale forks are fully down and can be seen from the tractor seat.*



If a bale is loaded onto the forks while one is being shredded, raise the forks as high as possible, making sure the bale on the forks does not interfere with the bale already in the tub. Raising the forks will reduce the pressure on the hydraulic lift assembly. Orientation of the bale during loading causes the hay/straw to discharge from the processor differently. If the bale is shredded in the same direction in which it was baled, the hay/straw tends to come off in layers. If the bale is shredded in the opposite direction, feeding may be uneven. **Do not dislodge frozen bales with forks. Damage to the lift mechanism may result. Likewise, do not use the twine cutter tool to dislodge jammed material.**

12. When ready to process, engage the tractor PTO at an idle. Increase the tractor RPM until PTO speed is reached. NOTE: before processing, ensure that the bale forks or the carried bale are not interfering with the bale in the tub. To begin processing the current bale, start rotation using the feed rollers. NOTE: The top of the bale should rotate toward the discharge side. Rotational direction will be opposite for right and left hand discharge machines. If the bale stops moving, reverse the direction of the feed rollers.
13. Before stopping the PTO, idle down (tractors with PTO brakes) to reduce flail 'backslap'.

WARRANTY WILL BE VOID IF ANY COMPONENT OF THIS MACHINE IS ALTERED OR MODIFIED IN ANY WAY WITHOUT WRITTEN PERMISSION FROM HIGHLINE MFG. LTD.

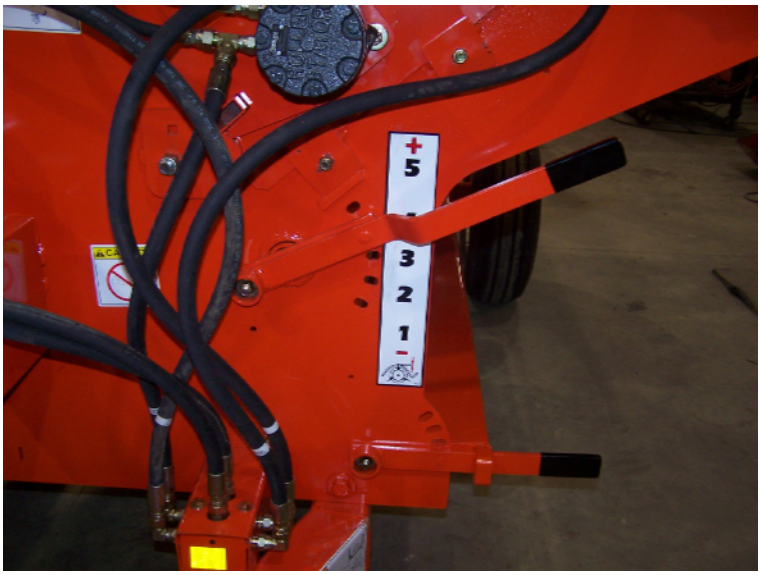
1.2 Twine Removal Procedure

IT IS RECOMMENDED TO REMOVE THE TWINE FROM THE FLAIL DRUM EVERY 25 BALES. PREMATURE BEARING FAILURE CAN OCCUR IF TWINE IS ALLOWED TO BUILD UP ON THE FLAIL DRUM.

SHUT OFF THE TRACTOR ENGINE AND LET THE FLAIL ROTATION COME TO A COMPLETE STOP BEFORE ATTEMPTING TO REMOVE THE TWINE FROM THE FLAIL DRUM.

1. Ensure the forks are in the fully raised position. Lock the forks in the raised position with the cylinder lock.

2. Ensure the flail guard rod adjustment lever is NOT in position #5. Failure to do so will result in damage to the twine cutter blade.



3. Engage the flail drum lock and rotate the flail drum slowly from the discharge side until the flail drum is locked into position. If it is not possible to rotate the flail drum, the PTO must be disconnected from the tractor.

4. Ensure that no flails are obstructing the path of the knife on the flail drum. Failure to do so will result in damage to the twine cutter blade.

5. Remove the twine cutter from the storage position on the non-discharge side of the Bale Pro.

6. Align the twine cutter (as shown in figure A) in the twine cutter guide. (Figure A). Slide the tool into the groove on the flail drum and cut through the twine in a saw-like action (Figure B).

Figure A

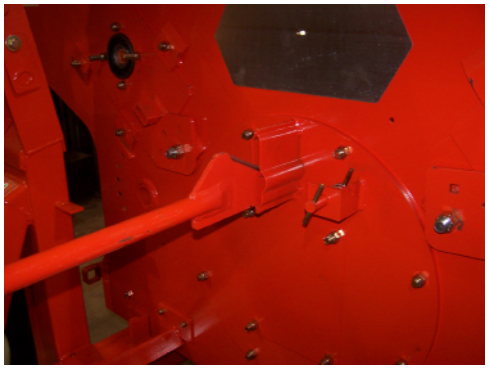
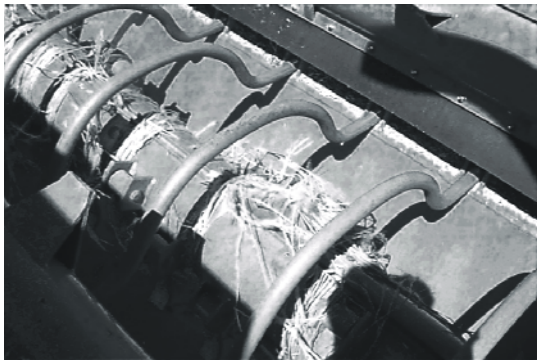


Figure B



7. After cutting through all of the twine wrapped around the entire length of the drum, remove the twine cutter and place it back into the storage position. Ensure the handle is facing down and is locked into either the spring clips (if equipped - figure C) or the key hole slot (if equipped - figure D)

Figure C

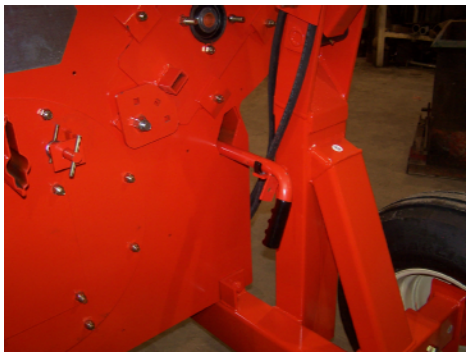
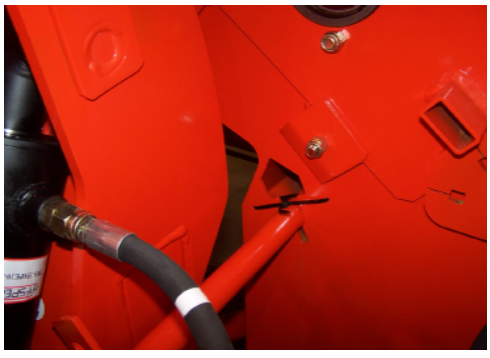
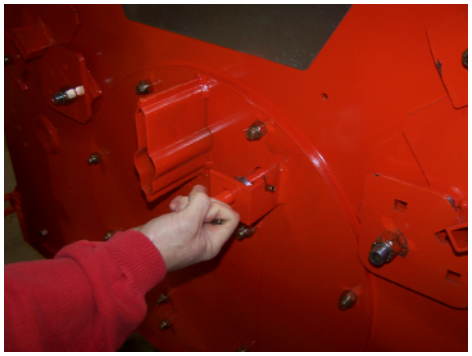


Figure D



8. Unlock the flail drum. Failure to do this will result in damage to the machine during start up.



9. Remove the twine from the flail drum on the discharge side of the Bale Pro.

10. Remove the hydraulic cylinder lock and store on the rear wall.

2.0 Maintenance Instructions

Please follow these maintenance procedures to ensure years of trouble free operation of your Bale Pro 8100.

Twine must be removed from the flail drum *at least* every 25 bales. Premature bearing failure can occur if twine is allowed to build up on the flail drum.

Flail bolts should be tightened after the first ten bales and rechecked after approximately 200 bales.

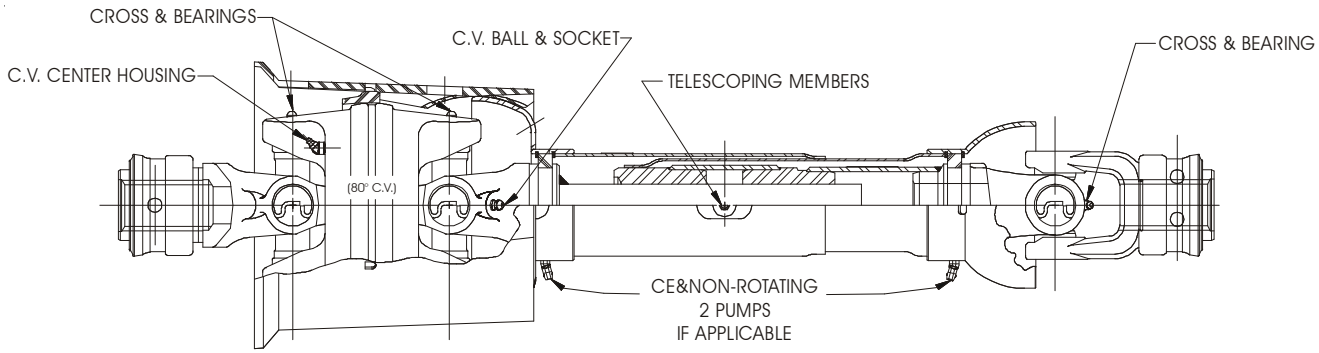
Maintaining proper lubrication of the Bale Pro 8100 is crucial for proper operation. Lubricate all fittings with a good quality lithium soap base E.P. grease meeting the N.L.G.I. #2 specifications and containing no more than 1% molyboenum disulfide.
An E.P. grease meeting the N.L.G.I. #2 specifications and containing 3% molyboenum disulfide may be substituted in the telescoping, CV Ball and socket, and CV centre housing member only. For applications operationg below 0°F (-18°C) a good quality polyurea grease, meeting the N.L.G.I. #2 specifications and containing no more than 1% molyboenum disulfide, may be subsituted for lubricating all fittings. Below is a list of the points and the frequency with which these points should be greased. Also shown are figures indicating the points that require lubrication. The first lube interval should be 16-24 hours of operation after initial start-up then follow the schedule below.

CAUTION: REPLACEMENT PARTS ARE NOT LUBRICATED

USE LEVER TYPE GREASE GUN

INTERVAL	LOCATION	AMOUNT
8 HRS**	CROSS AND BEARINGS	2-3 PUMPS
8 HRS	TELESCOPING MEMBERS	8-10 PUMPS
8 HRS**	CV BALL & SOCKET	4-6 PUMPS
24 HRS**	CV CENTER HOUSING	12-15 PUMPS

**Constant angle applications must have a lube interval of 4 hours.



Replacement parts must be lubricated at time of assembly. Use lubrication intervals listed below per location.

1. Flail Drum Bearing Figure A: Bearing shown is on rear of machine for a right hand discharge machine. On a left hand discharge machine it is directly behind the input driveline. Grease interval: 50 hrs.
2. Flail Drum Bearing Figure B: Bearing shown is on front for a right hand discharge machine. On a left hand discharge machine this bearing it is at the rear. Grease interval: 50 hrs.
3. Wheel Hub Bearings (Left and Right): Every 100 hrs.
4. Dump pivot locations (Left and Right): Every 10 hrs.
5. Lift Cylinders (Left and Right): Every 10 hrs.

For more details on location see Section 3.2 - Grease Zerk Locations.

***Use low temperature grease when the temperature reaches below 0° Celsius (32° Fahrenheit).**

Figure A

Figure B

3.0 Safety Messages

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

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

Understand Signal Words.
A signal word **"Danger"**, **"Warning"**, or **"Caution"** is used with the safety alert symbol.

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

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

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

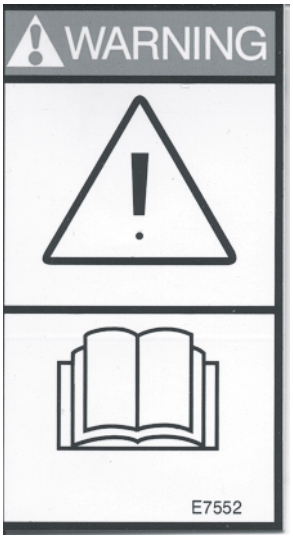
Caution – Potential hazards or unsafe practices which, if not avoided, could result in minor personal injury or product or property damage.

Read, understand and follow 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 Manufacturing Ltd.

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

Avoid Moving Parts
Contact with moving parts can cause death or serious injury.

- Keep away from power-driven parts such as the reel.
- Wear close-fitting clothing and confine long hair. Avoid wearing jewelry, such as rings, wrist watches, necklaces, or bracelets.
- Keep all shields and doors closed during operation.

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 Bale Processor

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 bale processor.

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 bale processor.

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

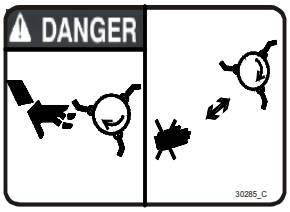
Step 1: Reduce the engine speed to idle.
Step 2: Disengage tractor power takeoff.
Step 3: Set tractor park brake.
Step 4: Lower bale loader forks to the ground
Step 5: Shut off tractor engine and remove key
Step 6: Cycle tractor controls to relieve any residual circuit pressure
Step 7: Wait for rotor to stop turning.

Stay Clear Of Rotating Driveline

Entanglement in rotating driveline can cause death or serious injury.

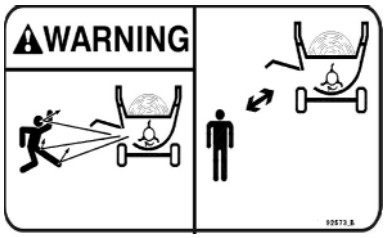
- Keep driveline shields in place at all times. Ensure shields turns and telecope freely.
- Wear close-fitting clothing and confine long hair.
- Stop engine and ensure the PTO driveline is stopped before working on driveline

DANGER: Contact with moving parts can result in death or serious injury. Always disengage power takeoff, set park brake, lower loader forks to the ground, shut off tractor engine, remove key, and wait for PTO to stop turning before un-plugging by hand.



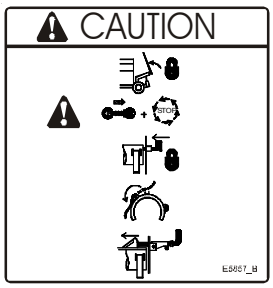
Avoid Discharge Area

Stay away from discharge side of Bale Processor when PTO is engaged. Injury of blindness is possible from material leaving discharge area.

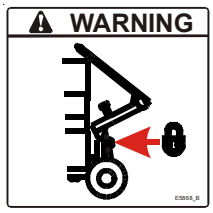


Twine Cutter

1. Lock forks in raised position.
2. Ensure the flail guard rod adjustment lever is NOT in position #5
3. Engage flail drum lock and rotate drum until locked into position.
4. **Rotate any obstructing flails away from twine cutter guides to prevent damage to blade.**
5. Use twin cutter in saw-like action to cut the twine.
6. Store twine cutter in holder.
7. Unlock flail drum.
8. Remove twine from discharge side of Bale Pro.
9. Remove cylinder lock and store in position.



WARNING: Install and secure cylinder lock before using twine cutter.



CAUTION: Exceeding an 80° angle at tractor joint will void CV warranty.

Depth of Cut Lever

Controls depth of material cut by flails

Up ..... Increase depth of cut

Down ..... decrease depth of cut

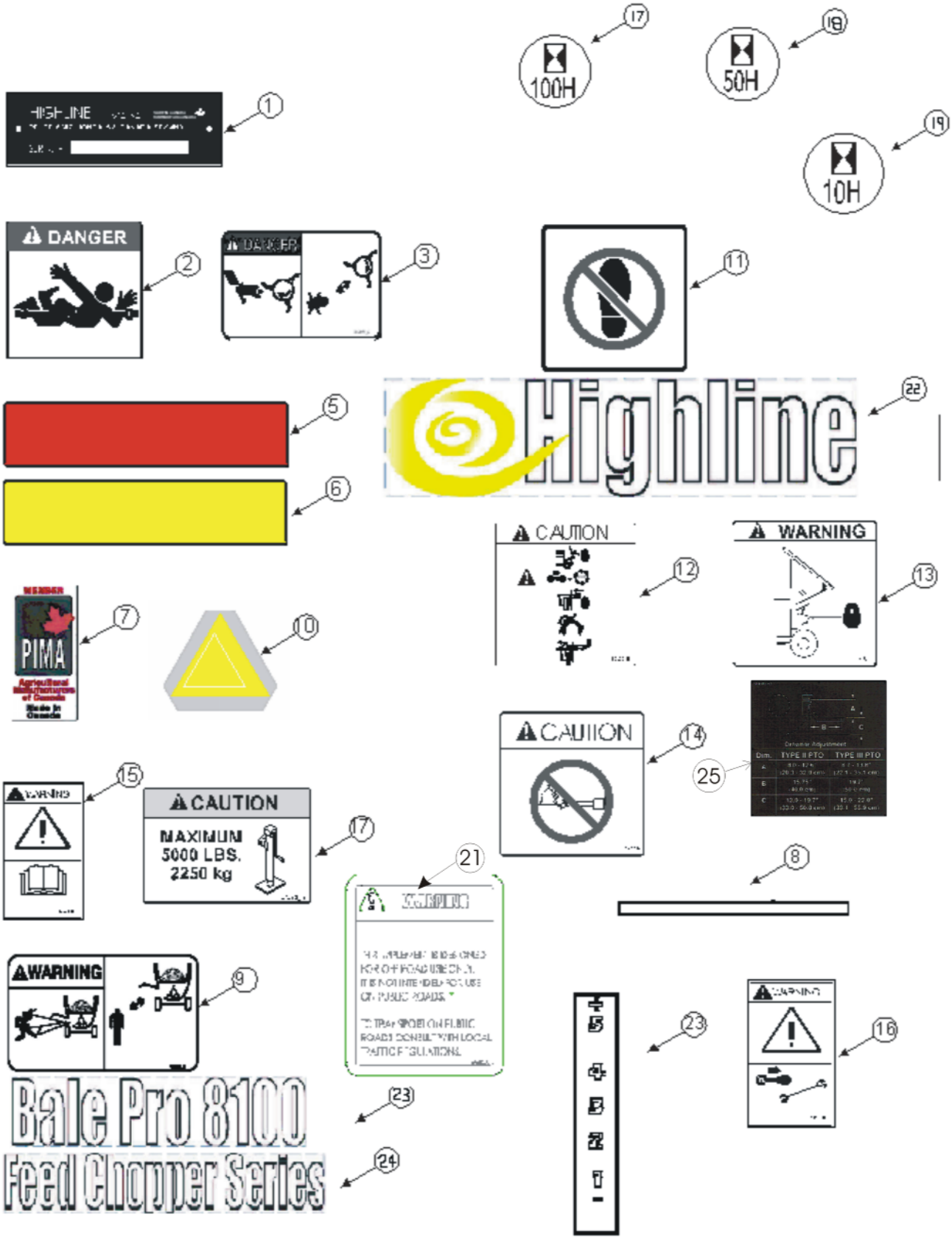
Recommended intial setting ..... either of two bottom holes

Warning: Implement is designed for off road use only.

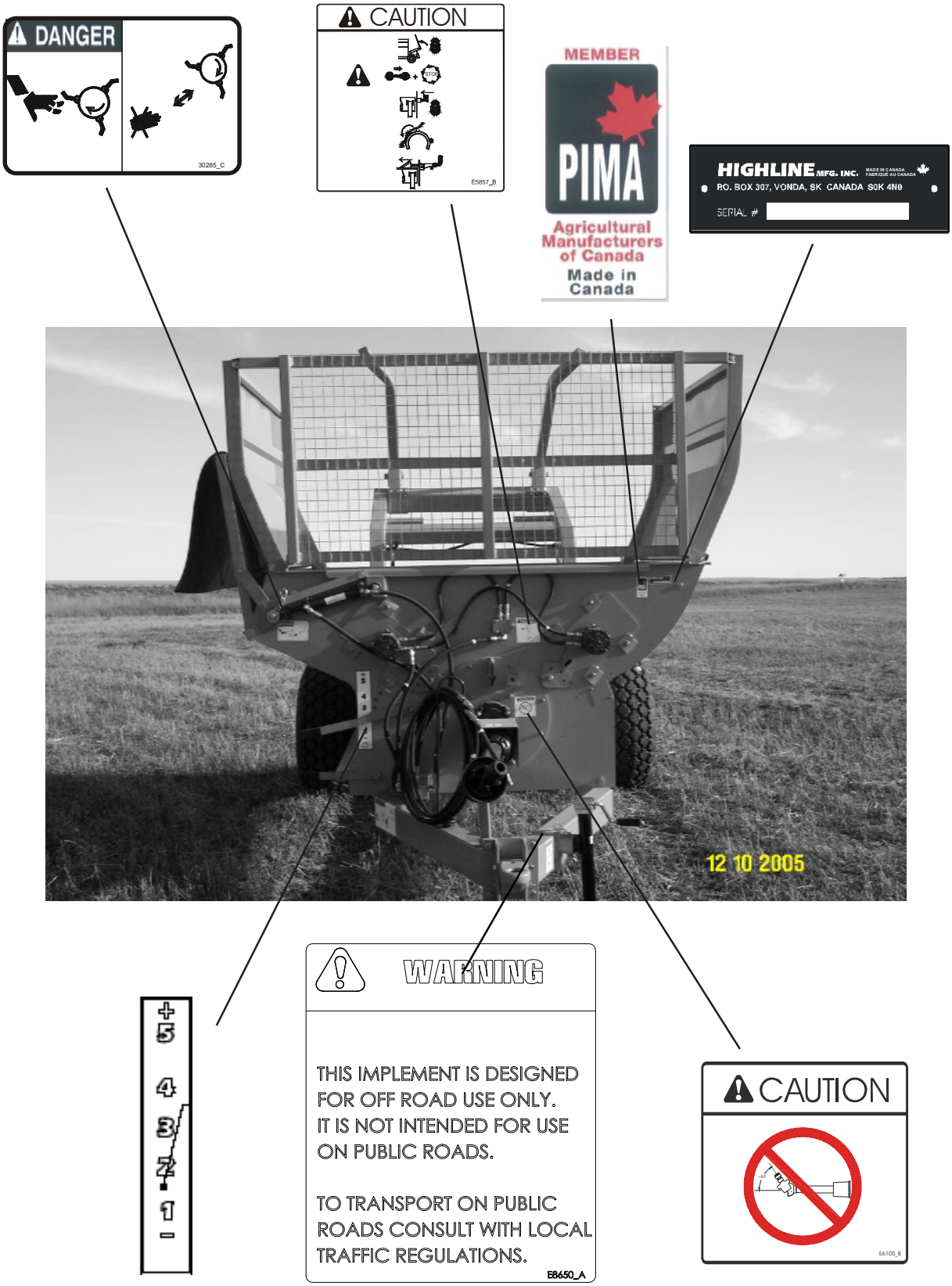
3.1 Decal Location

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30208	PLT,SERIAL#	1
2	30271	DECAL,DANGER,ROTATING DRIVE	2
3	30285	DECAL,DANGER,TO PREVENT	2
4	30288	RIVET,ST,1/8X.390,.250HEAD	2
5	30577	DECAL,RED REFL,2X9	2
6	30578	DECAL,AMBER REFL,2X9	2
7	32981	DECAL,AMC	1
8	92573	DECAL,WARNING,DISCHARGE	2
9	92028	SIGN,SLOWMOVING,S276.5	1
10	E3834	DECAL,DANGER,DO NOT STAND	1
11	E5857	DECAL,TWINE CUTTER	2
12	E5868	DECAL,LOCK,CYLINDER	1
13	E6105	DECAL,WARNING,CV ANGLE	1
14	E7552	DECAL,WARNING,OWNERS_MANUAL	2
15	E7553	DECAL,WARNING,STOP_ENGINE/SERVICE	1
16	E7572	DECAL,CAUTION,JACK,5000LBS	1
17	E8497	DECAL,GREASEZERK,100H	2
18	E8590	DECAL,GREASEZERK,50H	2
19	E8591	DECAL,GREASEZERK,10H	4
20	E8592	DECAL,ADJ,FGR	1
21	E8650	DECAL,WARNING,OFF ROAD	1
22	E8793	DECAL,HIGHLINE,5X26-3/4,LOGO	2
23	E8794	DECAL,BP8100,3-1/2X24-7/8	2
24	E8826	DECAL,FC SERIES,3-1/2X33-1/8	2
25	7000B064	DECAL,DRAWBAR	1
26	31174	NUT,NYLOCK,1/4,UNC,ZP	4
27	37998	BOLT,CARR,1/4X3/4,UNC,GR5,ZP	2

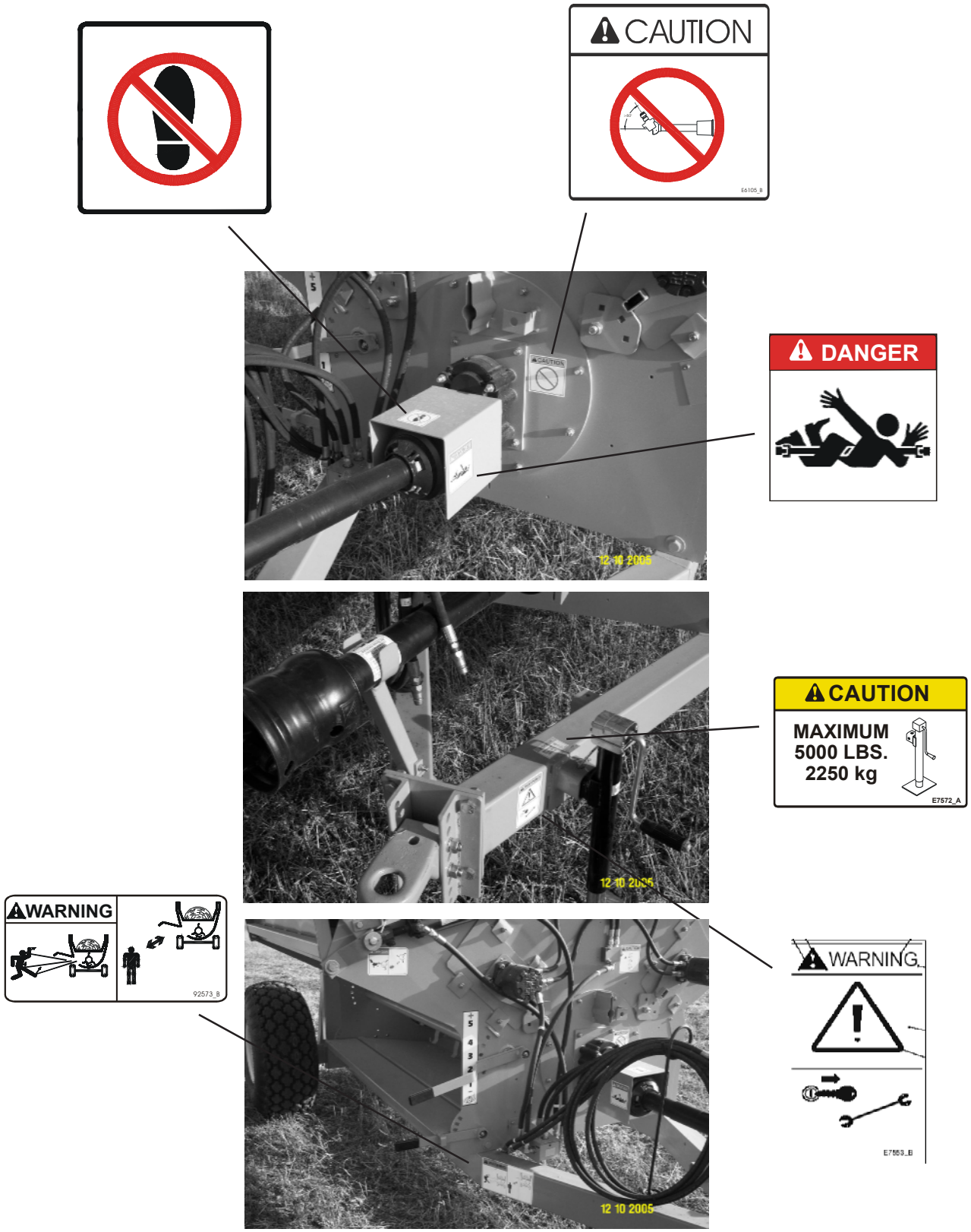
Decals are featured on a right hand Bale Pro 8100


100H
50H
10H
DANGER
DANGER
CAUTION
WARNING
PIMA
CAUTION
MAXIMUM
5000 LBS.
2250 kg
WARNING
WARNING
Highline
Bale Pro 8100
Feed Chopper Series

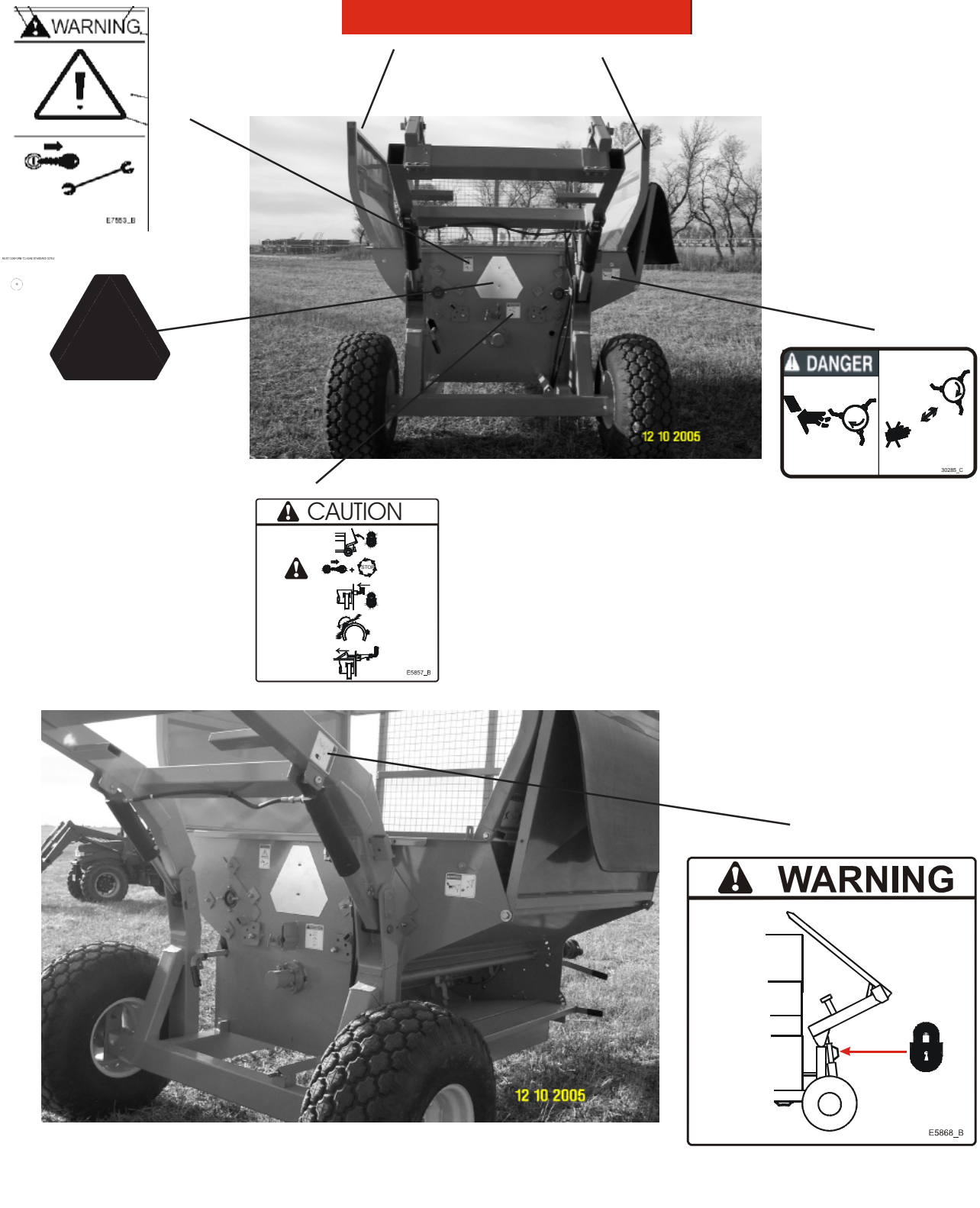
3.1 Decal Location (cont'd)



3.1 Decal Location (cont'd)



3.1 Decal Location (cont'd)



3.1 Decal Location (cont'd)

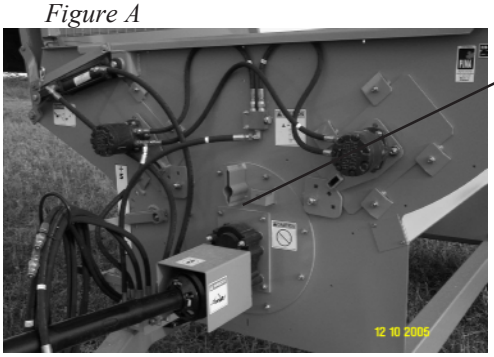
Bale Pro 8100
Feed Chopper Series

Highline

3.2 Grease Zerk Locations

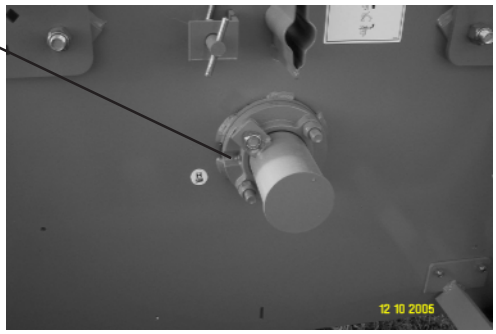
1. Flail Drum Bearings

Figure A



50 hours

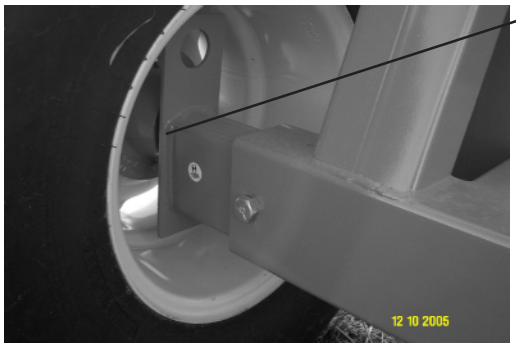
Figure B



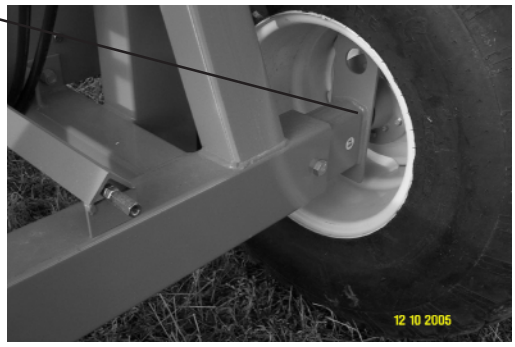
2. Bale Dump Lift Cylinders

10 hours

3. Wheel Hub Bearings



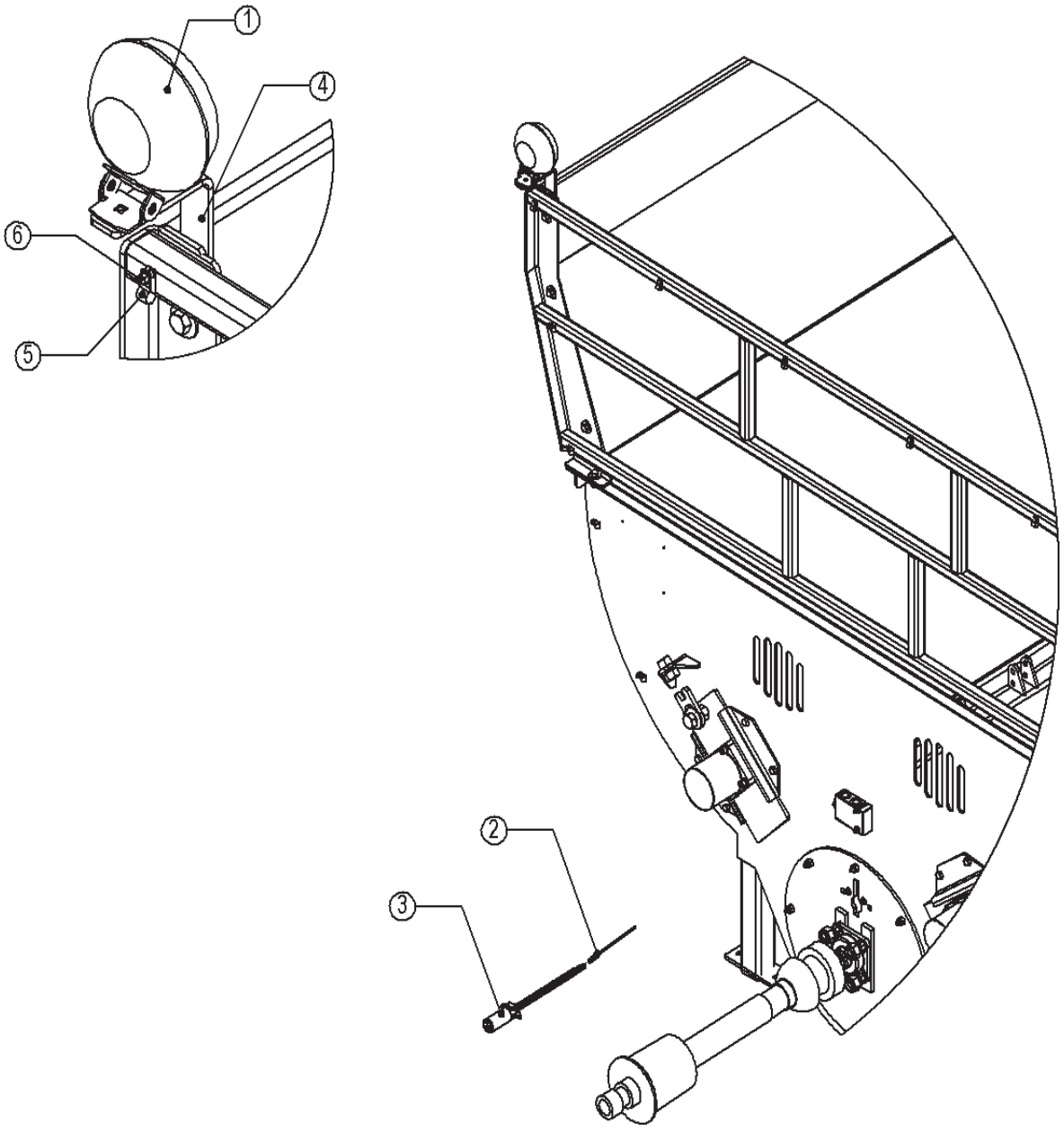
100 hours



4.0 Options

4.1 Field Light Option (Part No. BPORFL (89003))

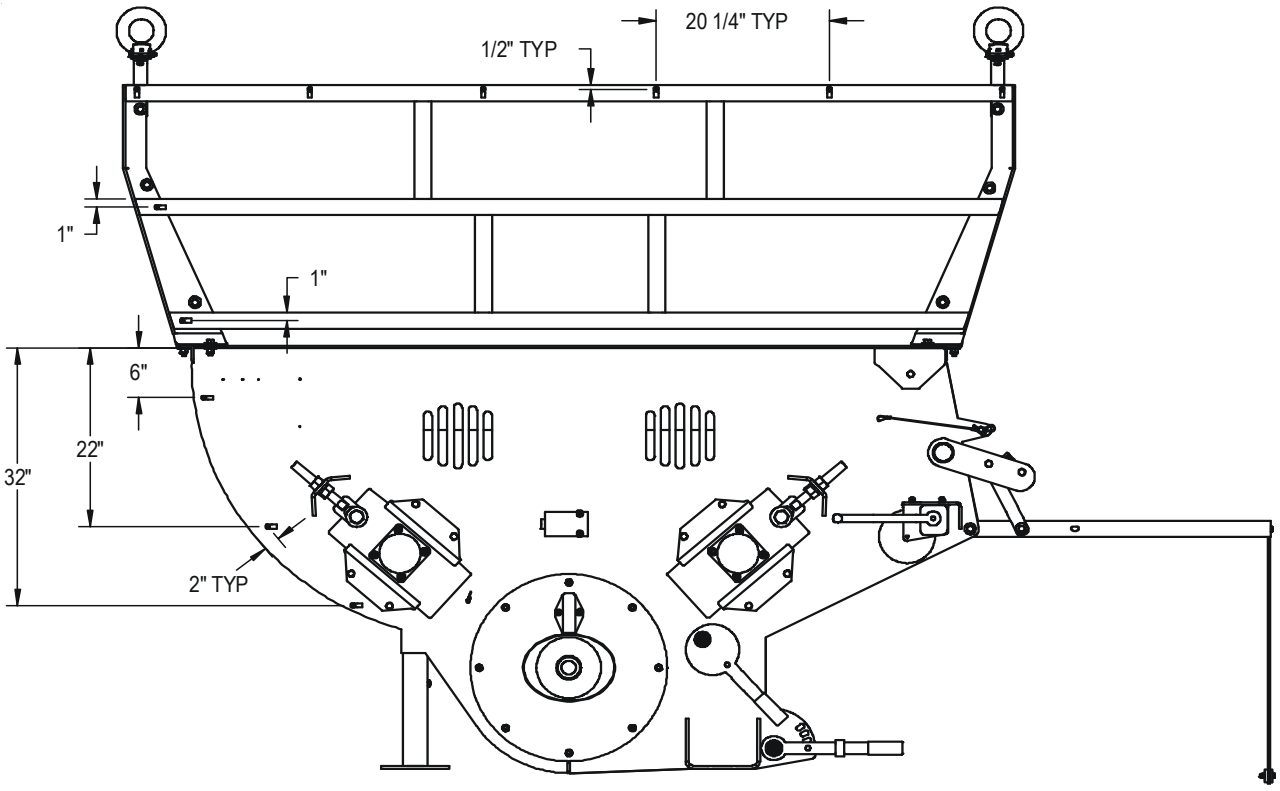
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49204	ELEC,LIGHT,12V,REWORKED	2
2	49205	ELEC,HARNESS,LIGHT,OPTIONAL	1
3	49420	ELEC,HARNESS,TRACTOR_RFLIGHT	1
4	E5673	BRACKET,MOUNT,LIGHT	2
5	31649	ELEC,CLAMP,CABLE,1/2	11
6	30294	SCREW,TEK,1/4X1	11
7	31741	BOX,CARDBOARD,21X4X4	1


1
4
6
5
2
3

Option Light Kit Installation Procedure

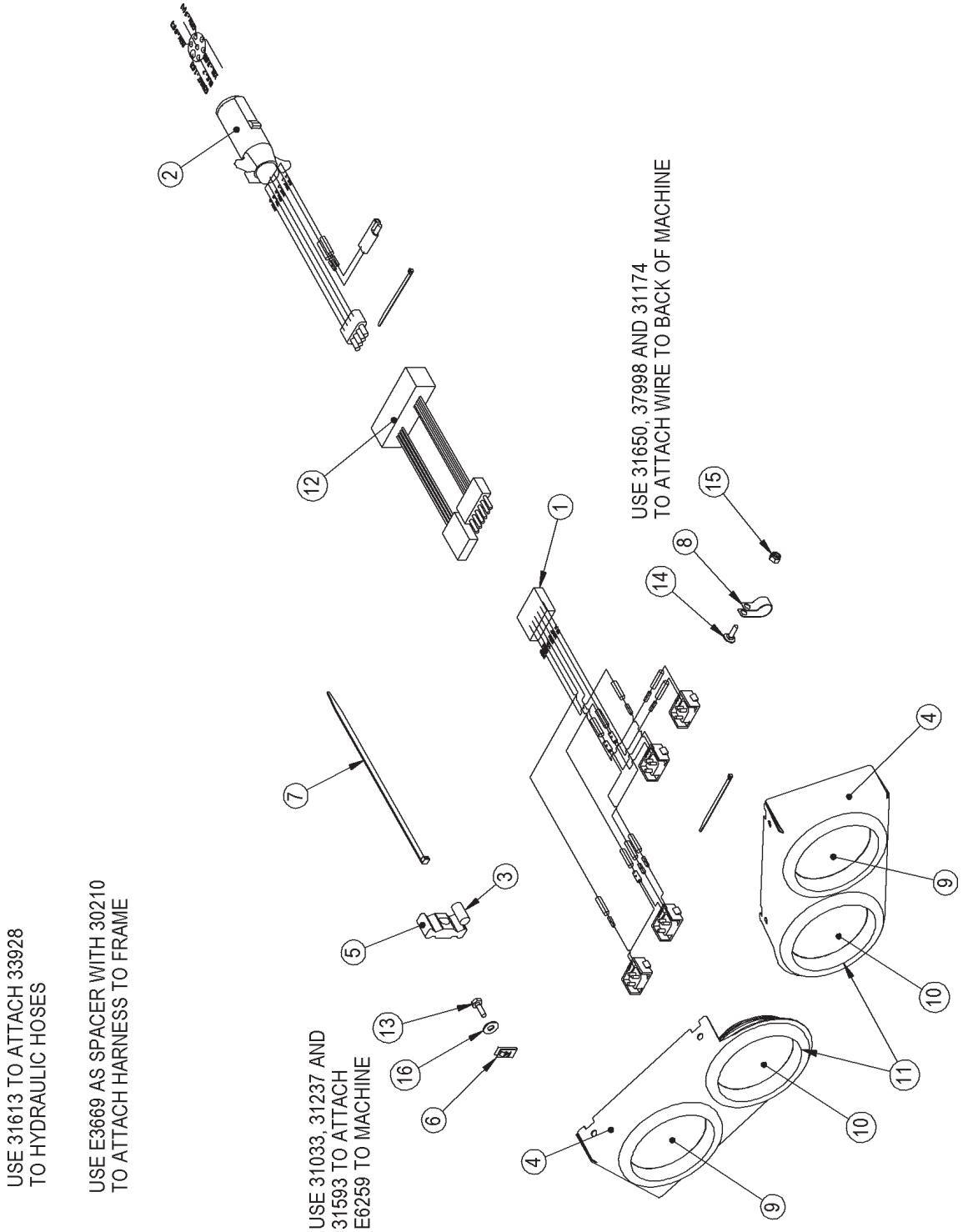
- Ensure the harness located on the Bale Pro is disconnected from tractor connection.
- Drill eleven ¼" holes in the approximate locations shown in Figure 1.
- Remove the top two bolts and locknuts that secure the screen to the bale deflectors and attatch the light mounting brackets (E5673).
- Mount the lights to the mounting brackets. Leave the 5/16" locknuts loose for now.
- Connect the wiring harness to the left and right lights. The short 9" end of the wiring harness connects to the right light and the longer end connects to the left light. Ensure that the connections are black to black and white to white.
- Mount the harness to the screen and tub in the holes drilled previously using eleven cable clamps and ¼" tek screws.
- Plug the male – female end of the wiring harness to the plug located on the wiring harness on the Bale Pro.
- Turn on tractor light to ensure proper function.
- Adjust the position of the lights until the visibility required is achieved. Tighten the lights to the mounting brackets.

NOTE: Right and lift sides of the machine are determined by facing in the direction of forward travel.


20 1/4" TYP
1/2" TYP
1"
1"
6"
22"
32"
2" TYP

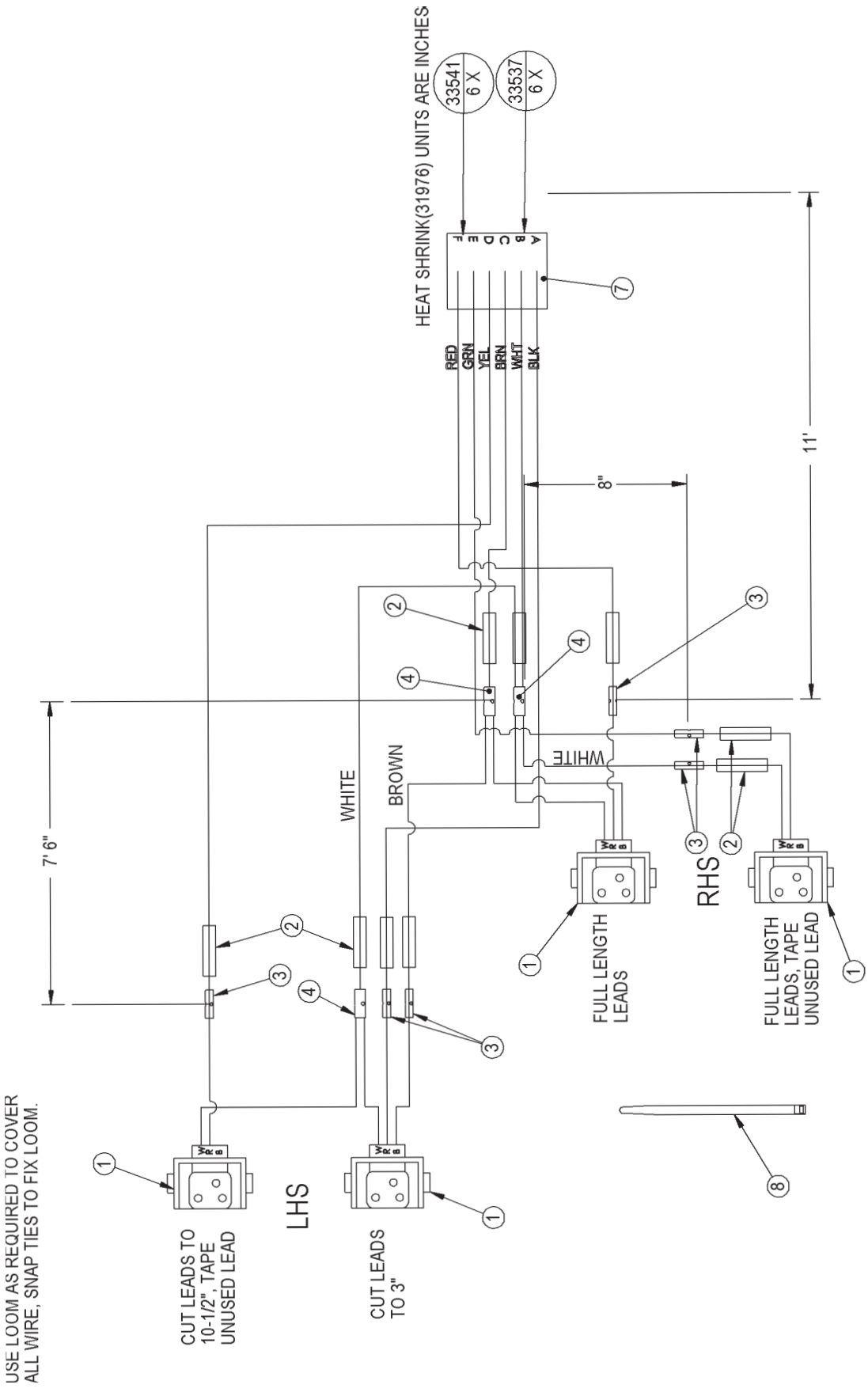
4.2 Clearance Light Option (Part No. BPOCL (89075))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49888	ASSY,HARN,ELEC,REAR,VMR,HL	1
2	49889	ASSY,HARNESS,ELEC,FRT,VMR,HL	1
3	E3669	SHAFT,1/2x1	3
4	E6259	MOUNT,LAMP,GROMMET,2X4-1/2	2
5	30210	HYD,CLAMP,HOSE,1/2	3
6	31593	CLIP,AUTOMOTIVE,1/4,GR5,ZP	4
7	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	4
8	31650	ELEC,CLAMP,CABLE,3/4	9
9	31951	ELEC_LIGHT,AMBER,4DIA,S/T/T	2
10	31952	ELEC_LIGHT,RED,4DIA,S/T/T	2
11	31953	GROMMET,LIGHT,4X4-1/2	4
12	33929	ELEC,MODULE,AG,HL PUR	1
13	31033	BOLT,HEX,1/4X3/4,UNC,GR5,ZP	4
14	37998	BOLT,CARR,1/4X3/4,UNC,GR5,ZP	9
15	31174	NUT,NYLOCK,1/4,UNC,ZP	9
16	31237	WASHER,FLAT,1/4,ZP	4


USE 31613 TO ATTACH 33928
TO HYDRAULIC HOSES
USE E3669 AS SPACER WITH 30210
TO ATTACH HARNESS TO FRAME
USE 31033, 31237 AND
31593 TO ATTACH
E6259 TO MACHINE
USE 31650, 37998 AND 31174
TO ATTACH WIRE TO BACK OF MACHINE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

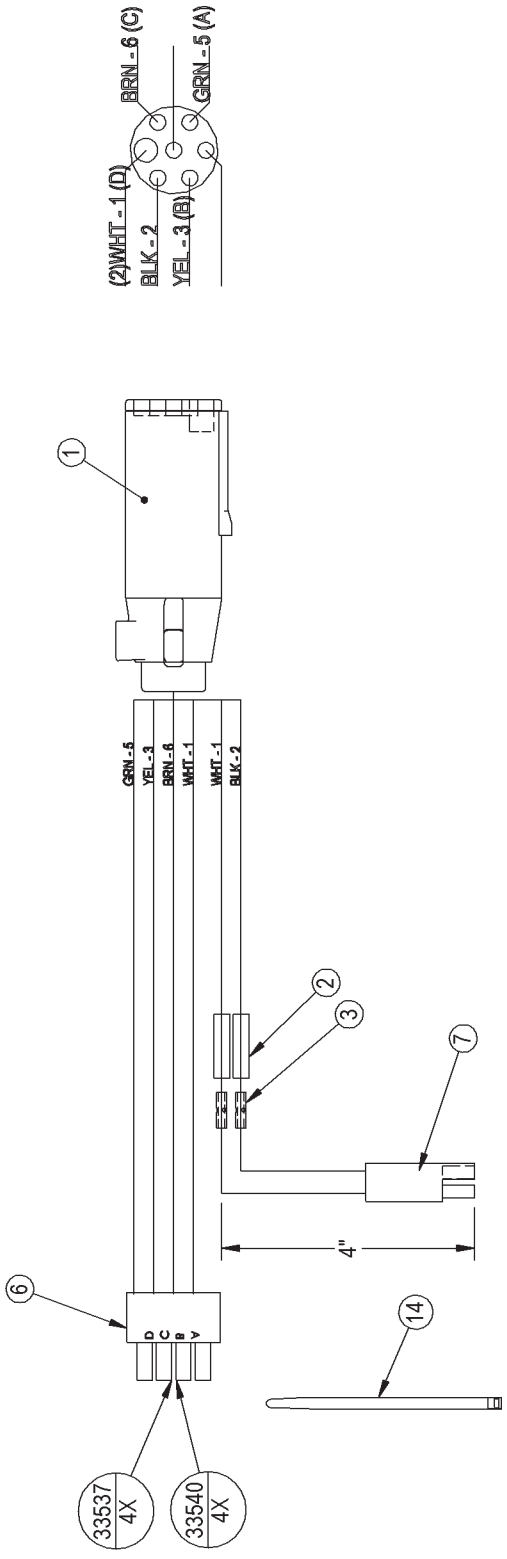
4.2.1 Harness Schematic for Clearance Light Option (Part No. 49888)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31853	ELEC,PLUG,STOP/TURN,RIGHT ANGL	4
2	31976	ELEC,HEAT_SHRINK,DUAL_WALL,TUBE,1/4X48	9
3	31977	ELEC,CONN,BUTT,16-14GA,NON_INSULATED	6
4	31978	ELEC,CONN,BUTT,12-10GA,NON_INSULATED	3
5	33537	ELEC_SEAL,WP,CABLE	6
6	33541	ELEC_PIN,WP,M,14/16	6
7	33933	ELEC,CONN,6,W/P,SHROUD,K01	1
8	92170	TIE,CABLE,4",BLACK	8
9	37981(19.2)	ELEC,WIRE,14GA,STRAND,WHITE	1
10	92149(18.5)	ELEC,WIRE,16GA,STRAND,BLACK	1
11	92151(11)	ELEC,WIRE,16GA,STRAND,RED	1
12	92153(11.7)	ELEC,WIRE,16GA,STRAND,GREEN	1
13	92155(18.5)	ELEC,WIRE,16GA,STRAND,BROWN	1
14	92154(18.5)	ELEC,WIRE,16GA,STRAND,YELLOW	1
15	92143(18.5)	ELEC,LOOM,1/2,SPLIT,CORRIGATED	1


HEAT SHRINK(31976) UNITS ARE INCHES
33541
6 X
33537
6 X
F
E
D
C
B
A
RED
GRN
YEL
BRN
WHT
BLK
11"
8"
7' 6"
WHITE
BROWN
WHITE
FULL LENGTH
LEADS
RHS
FULL LENGTH
LEADS, TAPE
UNUSED LEAD
LHS
CUT LEADS TO
10-1/2", TAPE
UNUSED LEAD
CUT LEADS
TO 3"
USE LOOM AS REQUIRED TO COVER
ALL WIRE, SNAP TIES TO FIX LOOM.

4.2.2 Harness Schematic for Clearance Light Option (Part No. 49889)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30556	ELEC,CONN,7 WIRE,FEMALE	1
2	31976	ELEC,HEAT_SHRINK,DUAL_WALL,TUBE,1/4X48	2
3	31977	ELEC,CONN,BUTT,16-14GA,NON_INSULATED	2
4	33537	ELEC_SEAL,WP,CABLE	1
5	33540	ELEC_SLEEVE,WP,F,14/16	1
6	33934	ELEC,CONN,4,W/P,TOWER,K01	1
7	37686	ELEC,PLUG,2_POLE,10GA	1
8	37981(17.5)	ELEC,WIRE,14GA,STRAND,WHITE	1
9	92149(8.5)	ELEC,WIRE,16GA,STRAND,BLACK	1
10	92153(9)	ELEC,WIRE,16GA,STRAND,GREEN	1
11	92154(9)	ELEC,WIRE,16GA,STRAND,YELLOW	1
12	92155(9)	ELEC,WIRE,16GA,STRAND,BROWN	1
13	92143(9)	ELEC,LOOM,1/2,SPLIT,CORRIGATED	1
14	92170	TIE,CABLE,4",BLACK	4


BRN - 6 (C)
GRN - 5 (A)
(2)WHT - 1 (D)
BLK - 2
YEL - 3 (B)
1
GRN - 5
YEL - 3
BRN - 6
WHT - 1
WHT - 1
BLK - 2
2
3
7
4"
6
D
C
B
A
14
33537
4X
33540
4X

4.2.3 Mounting Clearance Light Option

Please refer to Clearance Light Option on the previous page.

The clearance light kit you have purchased has the grommets (Item 11), lights (Item 9 & 10), and clips (Item 6) already installed in the light brackets (Item 4).

Plug wiring harness pin connectors into lights making sure that red lights are connected to the inside connector on each branch. The branches of the harness will be fastened to the rear wall of the tub after you mount the light brackets.

The wiring harness is designed in the shape of a “Y”. The branches of the wiring harness mount on the tub wall in different positions depending on the discharge model you have purchased. The longer branch of the harness has excess wire for the EZ Feed Option. If you do not have this option, wrap the excess harness inside the light bracket. (To determine amount of excess harness position light in its mount location; it should be approx 16”).

Fasten the light brackets to the rear wall with the fasteners provided. Bolt (Item13), washer (Item 16) and nut (item 6). See Figure B

As shown in Figure C, fasten the wiring harness to the tub using the fasteners and holes provided, keeping the bolt heads to the inside of the tub. Leave the fasteners loose so you can adjust the harness later. Bolt (Item 14), clamp (Item 8), and nut (Item 15)

After connecting the wire harness to the rear wall locate the hydraulic lines running under the tub. See Figure C, there are extra positions available in the hydraulic line clamps to run the harness to the front of the Bale Pro. Loosen the hydraulic line clamp (30210) and install the wire harness as shown. Install item 3 in the opposing clamp hole as a spacer to keep the clamp vertical.

Plug wire harness into the tractor plug and check that the lights are operating correctly.

Tighten all fasteners down securely after adjusting harness for proper slack.

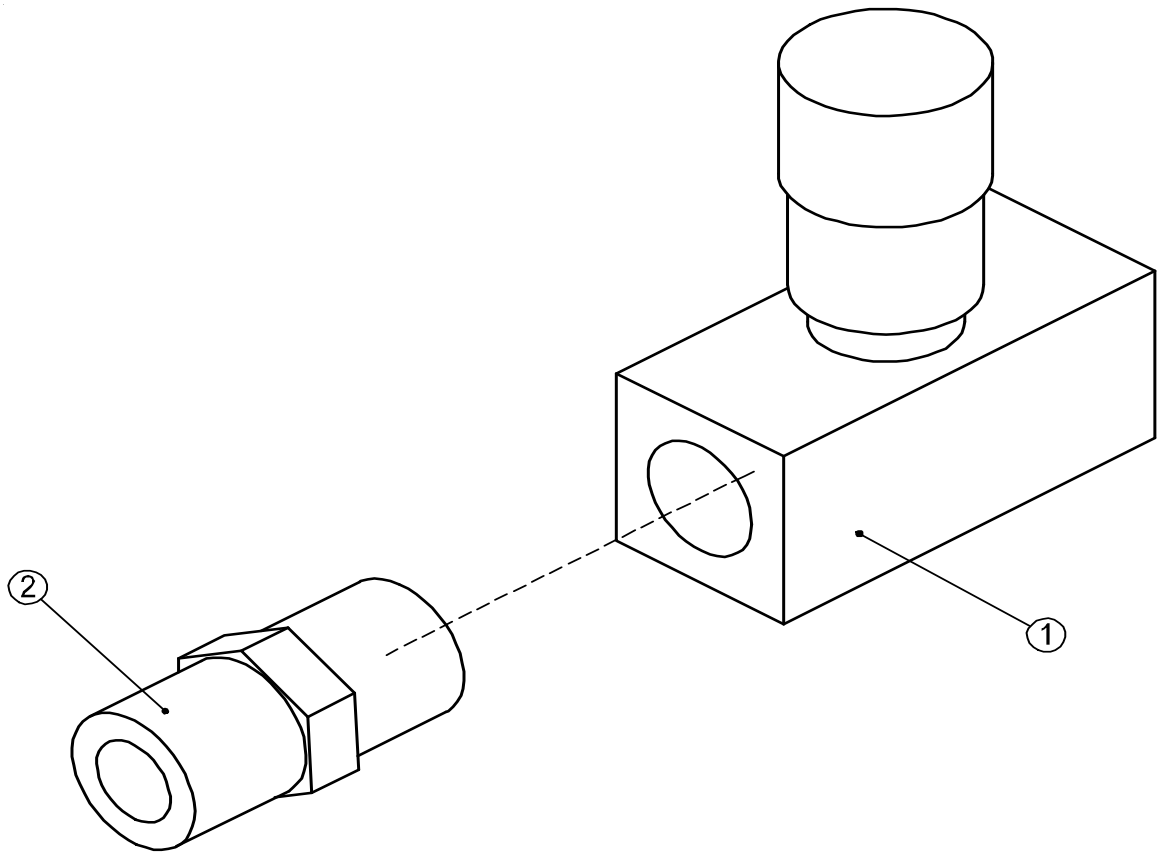
Figure A

Figure B

Figure C

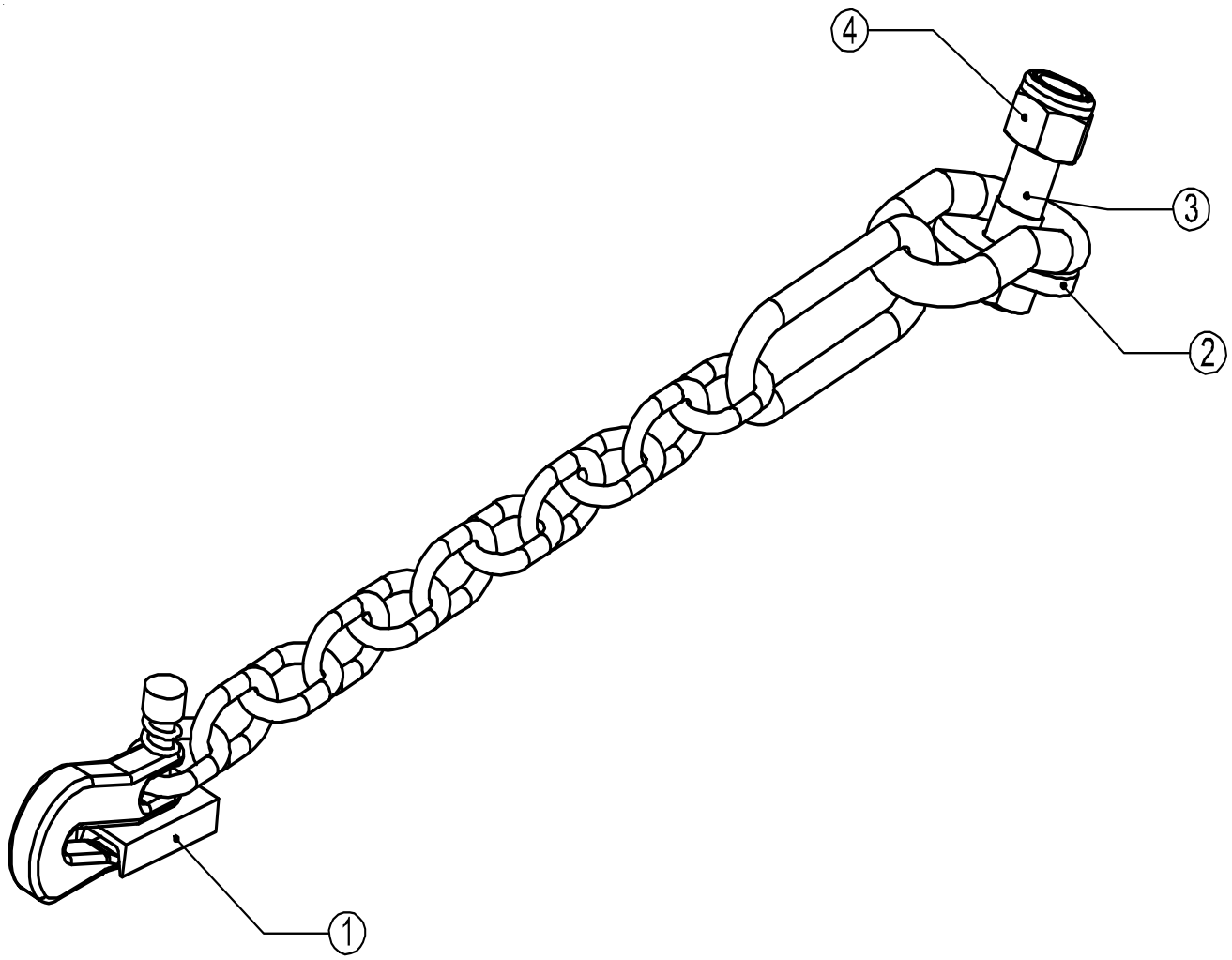
4.4 Flow Control Option (Part No. BPOFC (89005))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	32975	HYD,VALVE,CONTROL,FLOW,8FP	1
2	32082	HYD,FIT,ADAPTOR,8MP-8MP	1


2
1

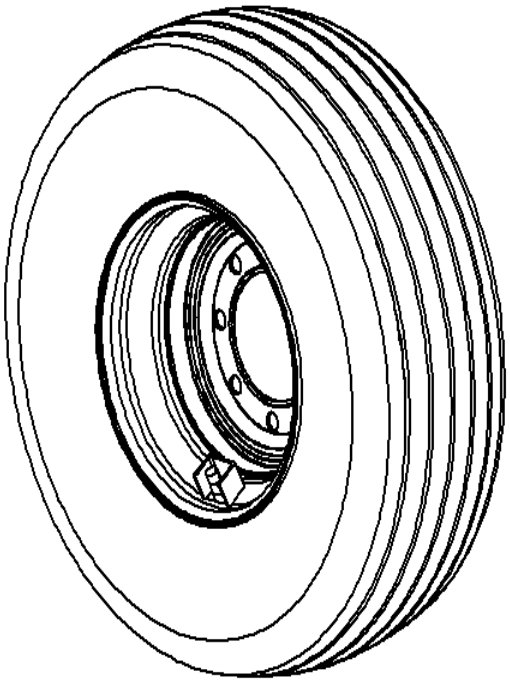
4.5 Safety Chain Option (Part No. BPOSC (89006))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31590	CHAIN,SAFETY,ASAE,10100LB,5'4"	1
2	E6150	PLT,C,1/4x13/16x2-1/4	1
3	31315	BOLT,HEX,3/4X2-1/2,GR8,ZP	1
4	31175	NUT,NYLOCK,3/4,UNC,ZP	1


4
3
2
1

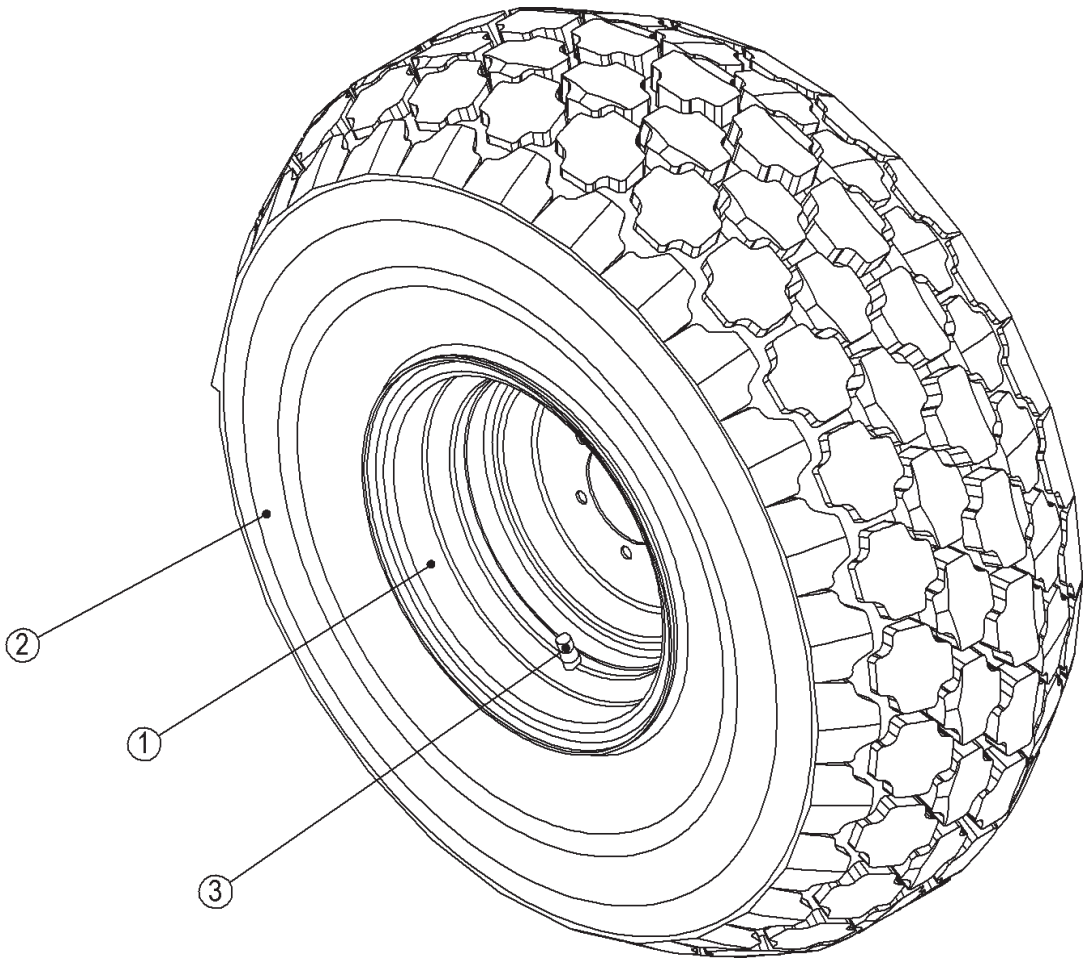
4.6 Standard Tire (Part No. BPOST (31794))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	31793	RIM,15X8,-1.5,8,YELLOW	1
2	30100	SUSP,TIRE,11LX15FI,12PLY	1
3	91048	SUSP,STEM,VALVE,TR801HP	1



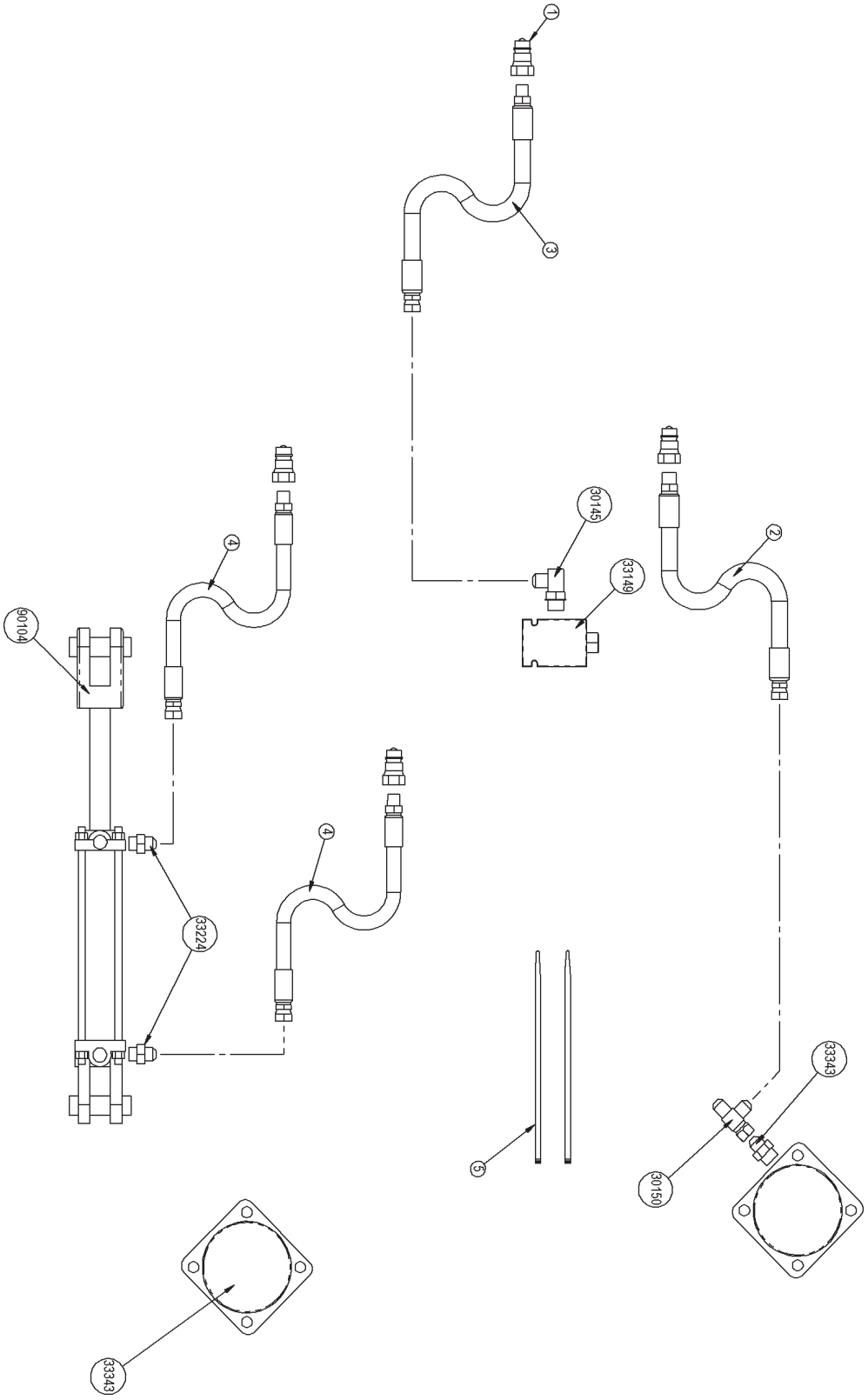
4.7 Large Tire Option (Part No. BPOLT (31881))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	32993	SUSP,RIM,W14CX16.1,-1.5,8,YL	1
2	33880	SUSP,TIRE,16.5LX16.1,ANS,6PLY	1
3	91048	SUSP,STEM,VALVE,TR801HP	1

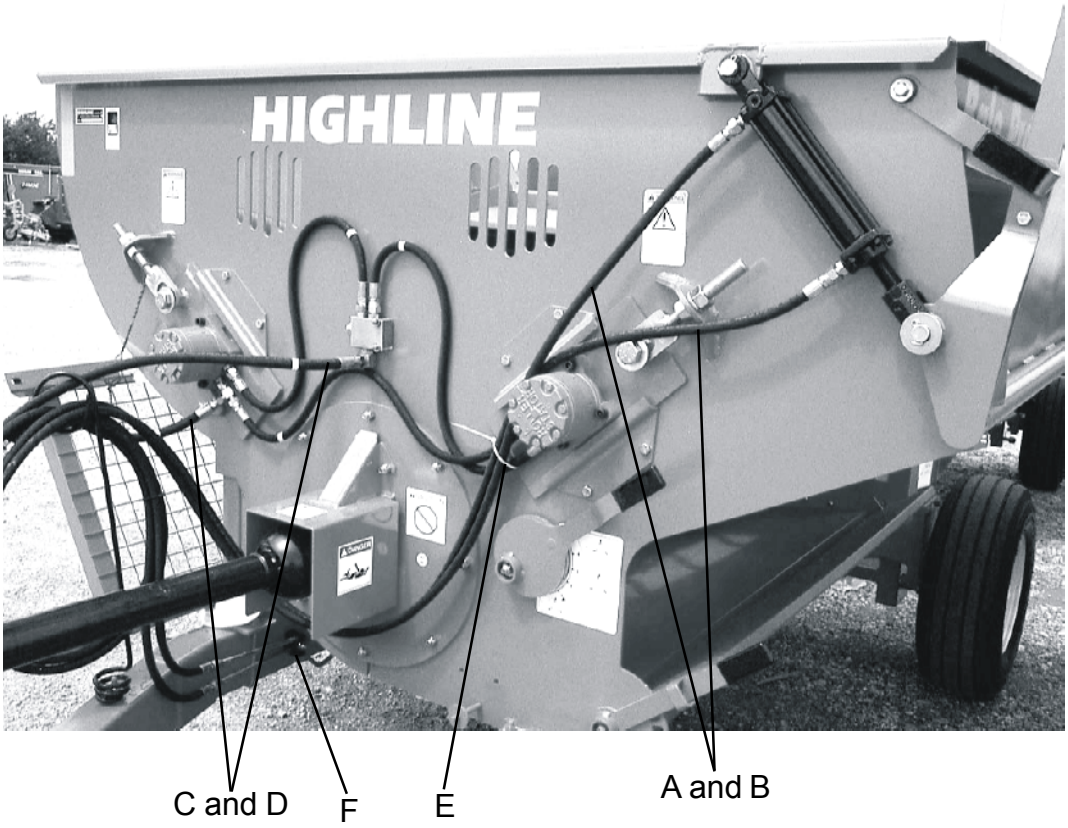

2
1
3

4.8 Three Remote Hydraulic Option (Part No. BPO3RH (89009))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30209	HYD,FIT,PIONEER,MALE,8FP	4
2	30281	HYD,HOSE,1/2X96,8MP-8FJX,2W	1
3	33147	HYD,HOSE,1/2X108,8MP-8FJX,2W	1
4	33148	HYD,HOSE,3/8X180,8MP-8FJX,2W	2
5	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	2


1
3
30145
33149
2
4
90104
4
3224
5
33343
30150
33343

HOSE ROUTING INSTRUCTIONS
(Three Remote Hydraulic)



- Route the hoses (A and B) from door cylinder as shown.

- They should run above the hydraulic motor and then underneath the PTO guard; keeping the hoses as close to the front wall as possible.

- Cable tie the hoses near the motor (E) and to the hydraulic lines (F). Leave some slack near motor so when feed roll floats the hoses do not interfere.

- Route the hoses (C and D) through the hose holder at the front of the machine.

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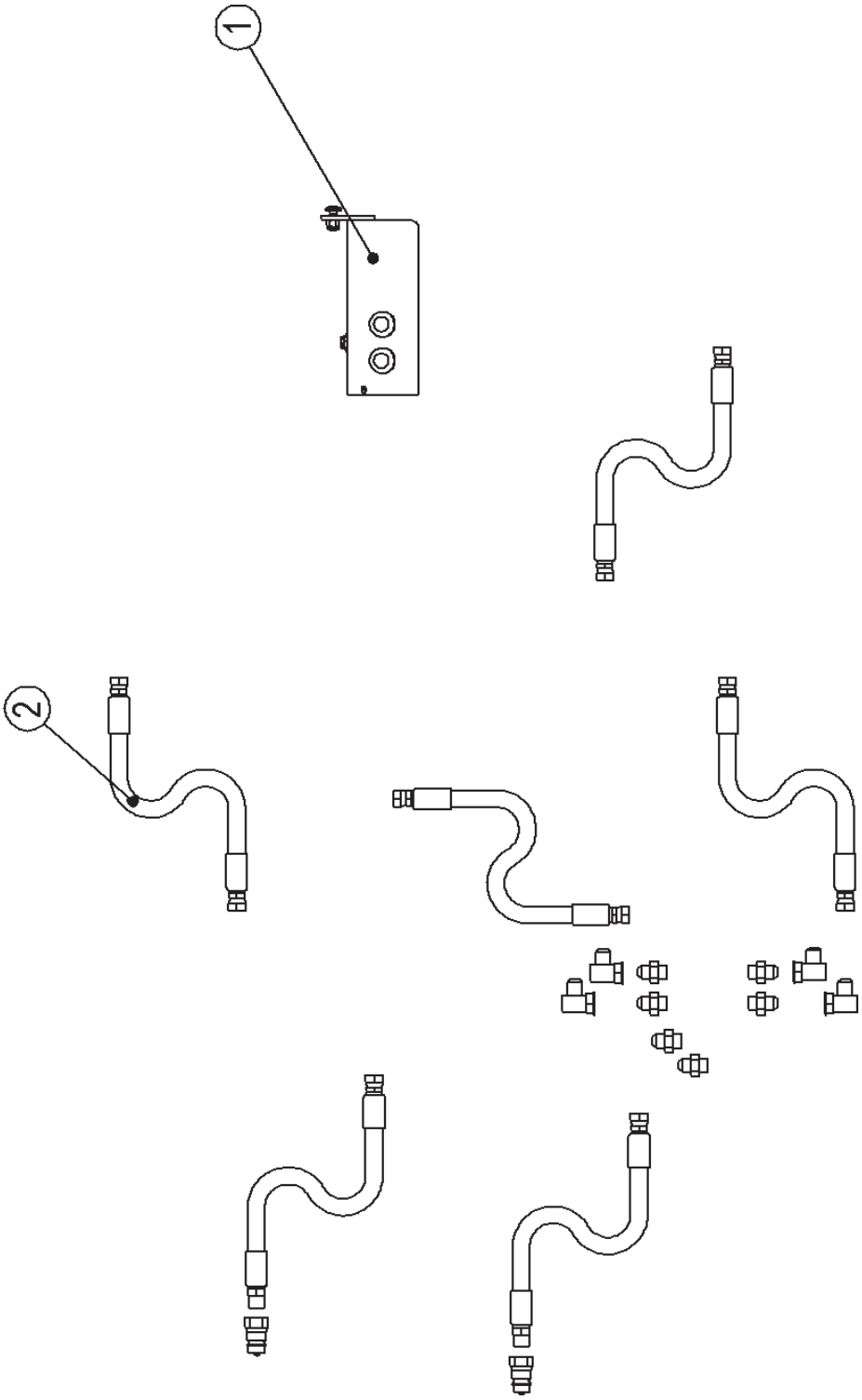
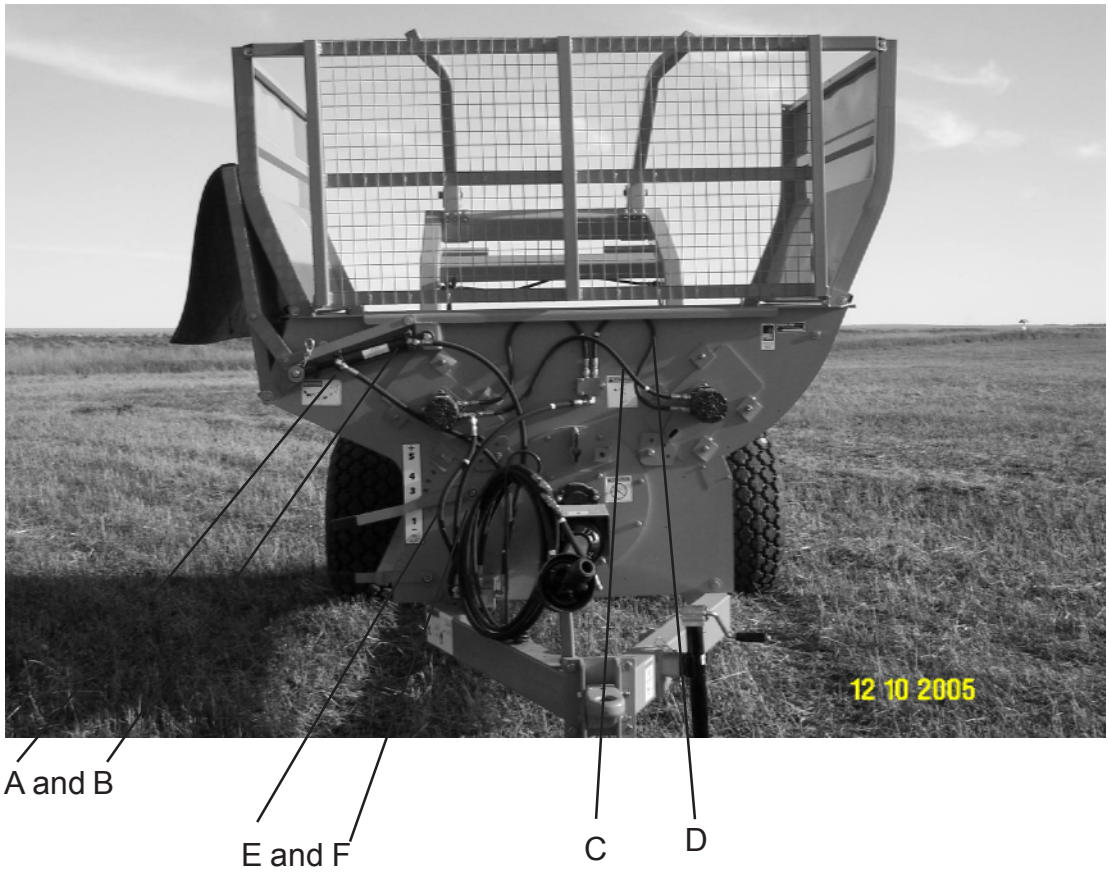
4.9 Mechanical Valve Option Part No. BPOMAV 89082

1	42189	ASSY,ROD,SELECTOR	1
2	49864	ASSY,HYD,SELECTOR	1


1
2

HOSE ROUTING INSTRUCTIONS
(Mechanical Valve)



- Route the hoses (A and B) from door cylinder as shown.

- Feed roller hoses should be routed as shown (C and D)

- Supply and return lines should be routed as shown on right hand discharge machines above (E and F) or on a left hand discharge machines hydraulic lines should be above the PTO guard (not shown).

- Route all hoses through the hose holder at the front of the machine.

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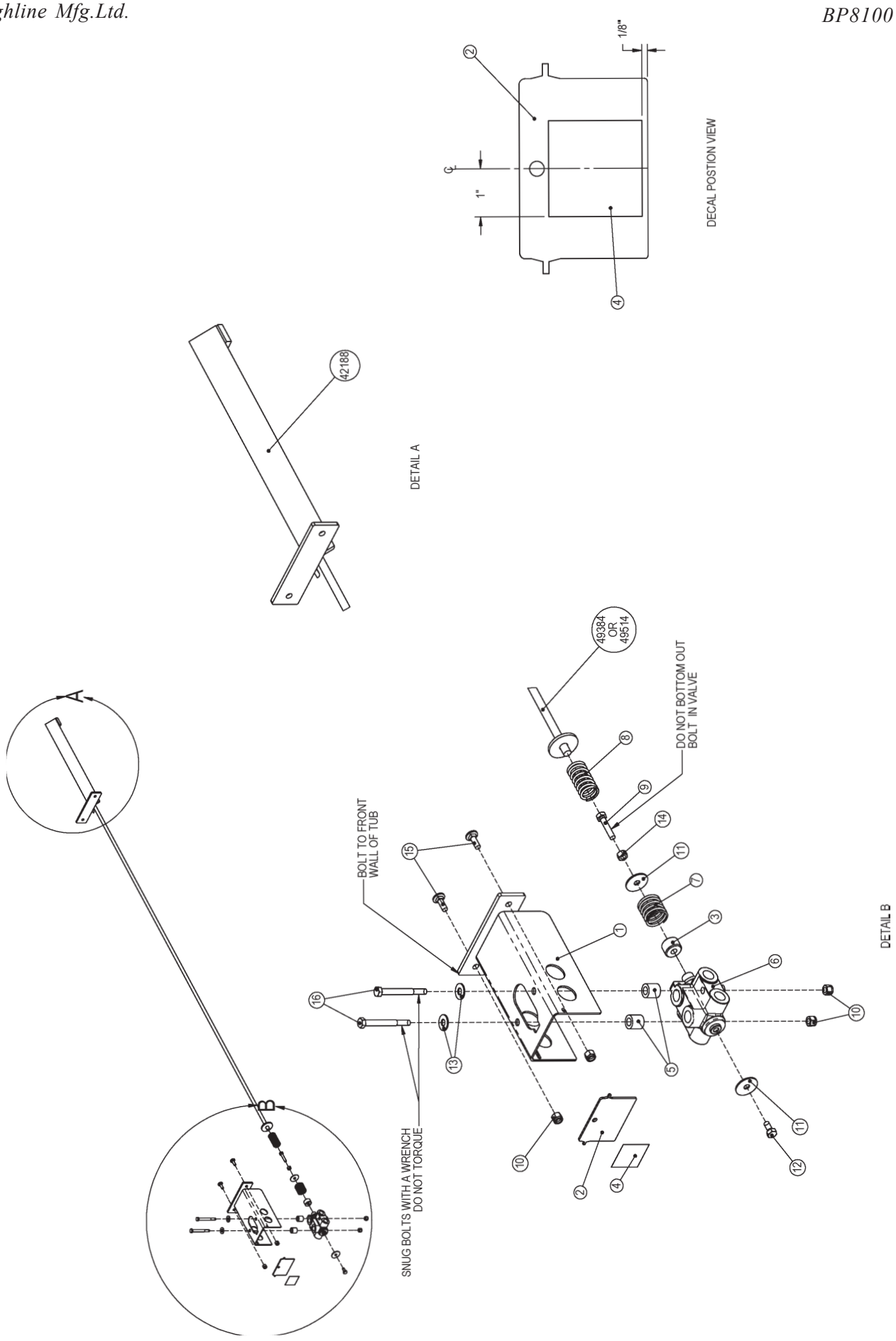
4.9.1 Selector Rod Assembly (Part No. 42189)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	42185	WLDT,SELECTOR,SHIELD	1
2	E6264	PLT,INDICATOR,SELECTOR	1
3	E6327	BUSHING,SELECTOR	1
4	E6328	REFLECTIVE,TAPE,SELECTOR	1
5	E7504	PIPE,SMLS,7/8X.188X7/8L	2
6	31965	HYD,VALVE,DOUBLE_SELECTOR	1
7	32998	SPRING,1.5X2.50X0.135	1
8	32999	SPRING,1.25X2.31X0.148	1
9	30669	BOLT,HEX,3/8X1-3/4,UNC,GR5,ZP,FT	1
10	31176	NUT,NYLOCK,3/8,UNC,ZP	4
11	31234	WASHER,SP,FLAT,25/64IDX1-1/2OD	2
12	31345	BOLT,HEX,3/8X3/4,UNC,GR5,ZP	1
13	31351	WASHER,FLAT,3/8,ZP	2
14	31485	NUT,HEX,3/8,UNC,GR5,ZP	1
15	31573	BOLT,CARR,3/8X1,UNC,GR5,ZP	2
16	31781	BOLT,HEX,3/8X3-1/2,UNC,GR5,ZP	2

4.9.1A Mechanical Valve Parts(Part No. 31965)

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	33686	SEAL KIT	1


1/8"
1"
DECAL POSTION VIEW
42188
DETAIL A
49384 OR 49514
DO NOT BOTTOM OUT BOLT IN VALVE
BOLT TO FRONT WALL OF TUB
SNUG BOLTS WITH A WRENCH DO NOT TORQUE
DETAIL B

4.9.2 Mechanical Valve Installation Instructions

1. Hook the processor to a tractor and connect the bale lift hoses to the tractor. Raise the bale lift and install the cylinder lock.

2. Install item 11 and 12 on the on end of selector valve (item 6). Be sure not to bottom out item 12 inside the spool. Bottoming out the bolt could result in spool not shifting properly

3. Install item 3,7,11 and 14 into the valve (item 6). Fasten in place with item 9 keeping in mind again not to bottom bolt out in valve spool.

4. Take cover (item 1) and install indicator door (item 2) then fasten bushings (item 5), and valve (item 6) to the cover using the fasteners provided (items 10,16,13). Snug the bolts holding the valve to the cover. If these bolts are over torqued valve will no shift properly.

5. Refer to diagram 4.9.2. Connect all the adapter fittings to the valve and tighten them ¼ turn past snug. Connect all elbows to appropriate adapters on the valve. Attach the hoses to the valve as shown in the diagram and tighten securely.

6. Refer to 4.9.1 Install selector rod through the front and rear wall of tub using the holes provided. They can be found toward the discharge side of the machine close to the frame member.

7. Refer to 4.9.1 diagram. Install the valve/cover/hose combination to the front of the tub wall at the location provided. Install spring (item 8) between valve washer (item 11) and selector rod. Fasten cover to front wall with fasteners provided (item 10, 15).

8. Refer to 4.9.1 diagram. Install rear cover to back tub wall using the fasteners provided (items 10,15).

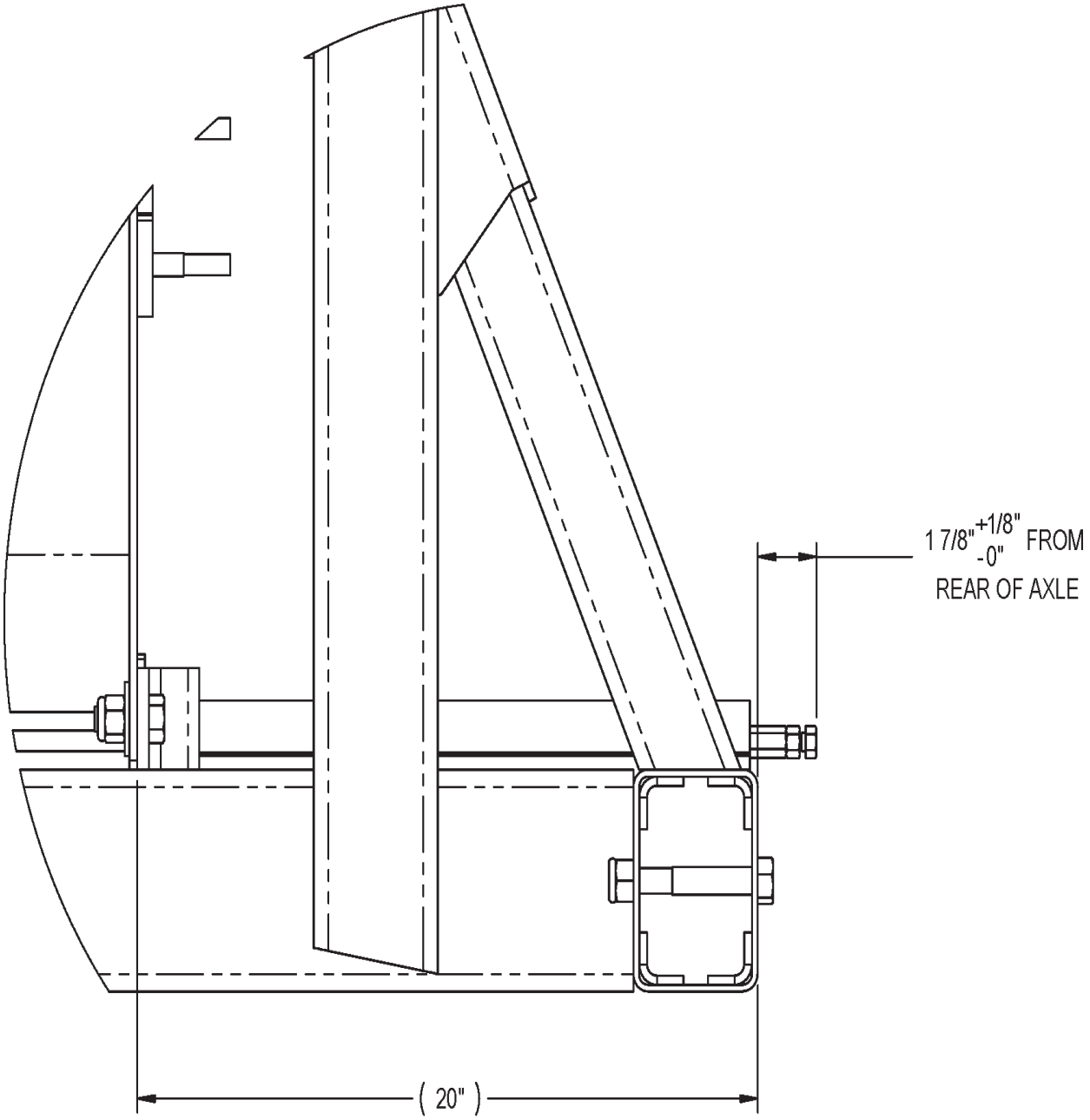
9. Connect opposite hose ends as shown in figure 4.9.3.

10. Install coupler nut and 1/2" regular nut on the end of the selector rod.

11. The selector rod assembly should be set at approx. 2" from the end of the coupling nut to the edge of the selector rod cover at the point of engagement on the small spring. This should shift the valve fully to the door circuit, and allow, while the forks are completely lowered, for discharge door operation without any feed-roller movement. As well, you should not be able to "pull" the selector valve forward at all (see following diagram).

12. If the above conditions are not met then the selector rod may need adjusting. In most cases the selector rod will need to be lengthened. This is done by raising the forks, loosening the jam nut and threading the coupling nut out (making the rod longer). The coupling nut should be adjusted in small increments, one full turn or 1/16" at a time. The jam nut should be retightened, and then the forks lowered and the circuit rechecked for proper operation. If the circuit is still not operating properly repeat the above steps until proper operation is achieved.

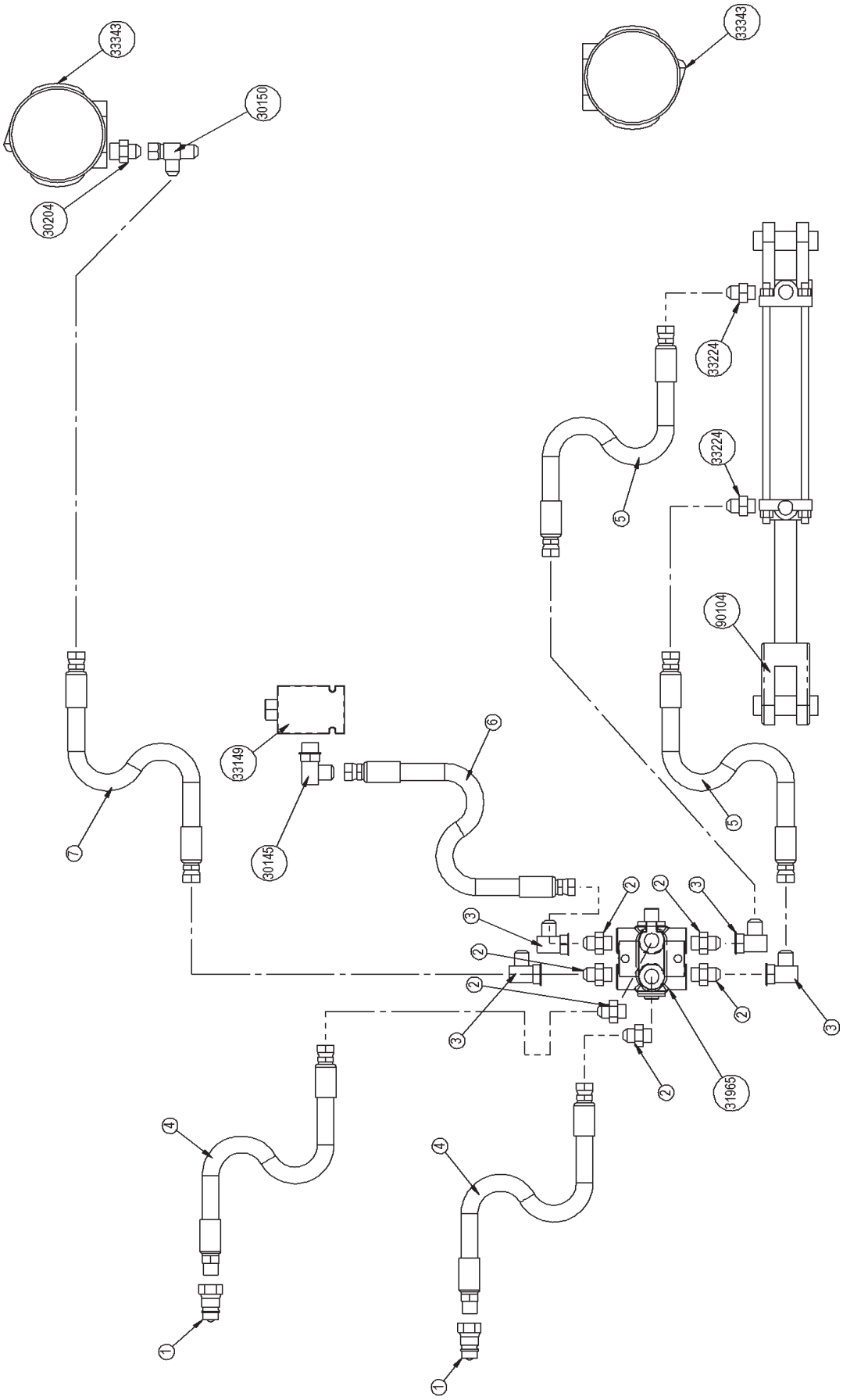
13. Large adjustments made to the selector rod without checking circuit operation may result in damage to the selector rod, valve, and springs.



COUPLER NUT SETTING

4.9.3 Selector Hydraulics Schematic (Part No. 49864)

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30209	HYD,FIT,PIONEER,MALE,8FP	2
2	30215	HYD,FIT,ADAPTER,8MB-8MJ	6
3	30436	HYD, FIT, ELBOW,8FJX-8MJ90	4
4	31954	HYD,HOSE,1/2X120,8MP-8FJX,2W	2
5	33791	HYD,HOSE,1/2X48,8FJX-8FJX,2W	2
6	30437	HYD,HOSE,1/2X42,8FJX-8FJX,2W	1
7	33923	HYD,HOSE,1/2X30,8FJX-8FJX,2W	1


33343
30150
30204
33343
33224
33224
5
90104
33149
6
7
30145
5
2
2
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3
2
2
3
2
3
31965
4
4
1
1

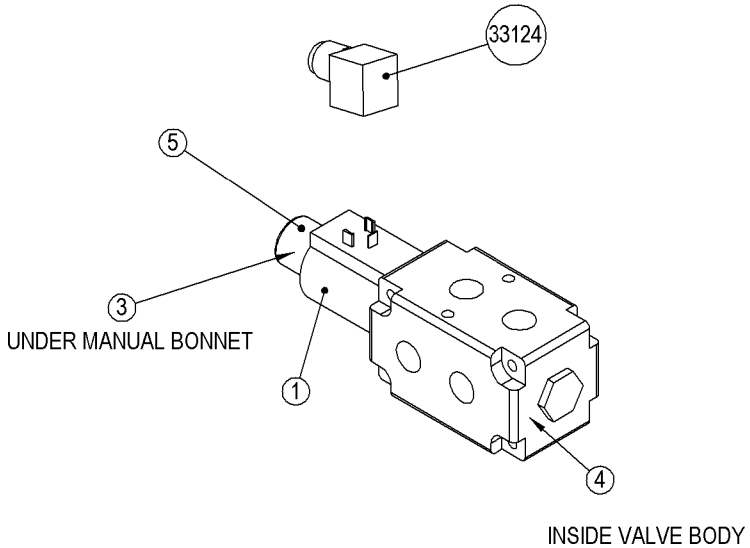
4.10 Electric/Hydraulic Selector Valve Option (Part No. BPOEH (89045))

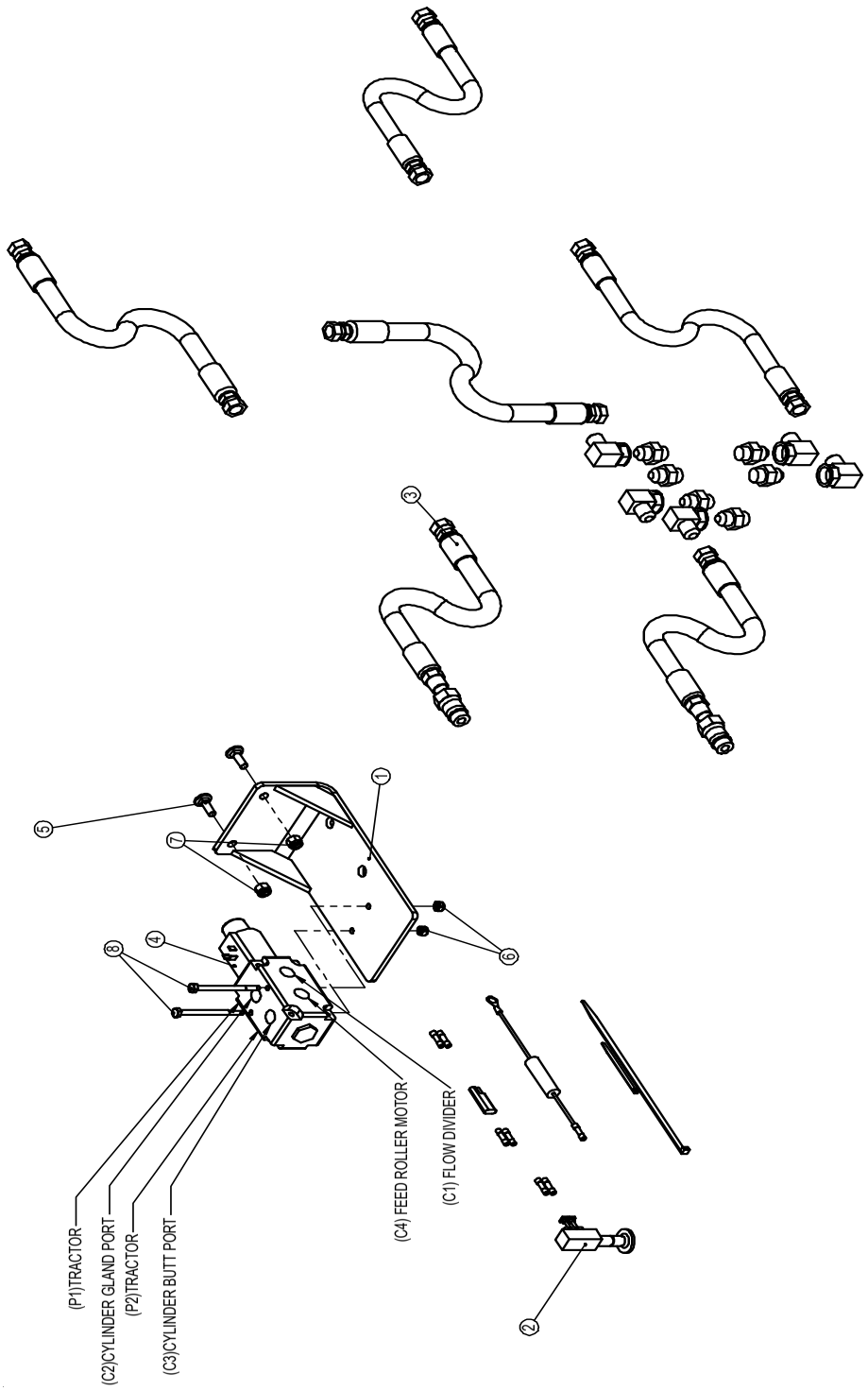
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49419	WLDT,MOUNT,ELEC_HYD,7010	1
2	49421	ELEC,HARNESS,SELECTOR VALVE	1
3	49599	ASSY,HYD,SELECTOR	1
4	33201	HYD,VALVE,ELEC_DOUBLE_SELECTOR	1
5	31573	BOLT,CARR,3/8X1,UNC,GR5,ZP	2
6	31174	NUT,NYLOCK,1/4,UNC,ZP	2
7	31176	NUT,NYLOCK,3/8,UNC,ZP	2
8	33200	BOLT,HEX,1/4X3-1/2,UNC,GR5,ZP	2

SEE NEXT PAGE FOR DRAWING

4.10.A Electric/Hydraulic Valve Parts (Part No.33201))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33126	COIL,C4801-V12-DCGM5050/5051	1
2	33128	NUT GM 5043	1
3	33129	SPRING,RETURN	1
4	33138	BOOT,OVERIDE	1




(P1)TRACTOR
(C2)CYLINDER GLAND PORT
(P2)TRACTOR
(C3)CYLINDER BUTT PORT
(C4) FEED ROLLER MOTOR
(C1) FLOW DIVIDER
1
2
3
4
5
6
7
8

4.10.1 Electric/Hydraulic Selector Valve Option Installation Instructions

1. Unbolt mechanical valve with cover from the front wall. Disconnect hoses from the mechanical vavle and allow any oil in them to drain into a clean pail.

2. Remove the hex and coupling nut from the end of the selector rod. Remove the rod by grabbing it at the front wall and pulling it toward the front of the machine.

3. Install the hydraulic valve/mount combination in place of the mechanical valve/mount.

4. Hook up the hoses referring to the port orientations in the figure on the previous page.

5. Connect the wire harness to the actuator connector. Route the wire harness through the hose holder to the front of the processor.

6.. Run the harness to the tractor and mount the switch in a suitable location inside the cab.

7.. Route the red wire to the tractors accessory power and the white wire to ground. You may need to adjust the length of the red or white wire that is inside the loom for easier routing.

8. When unhooking from the processor use the quick disconnect on the harness.

9. Attach the shaft collar on the rod at the distance shown on the next page.

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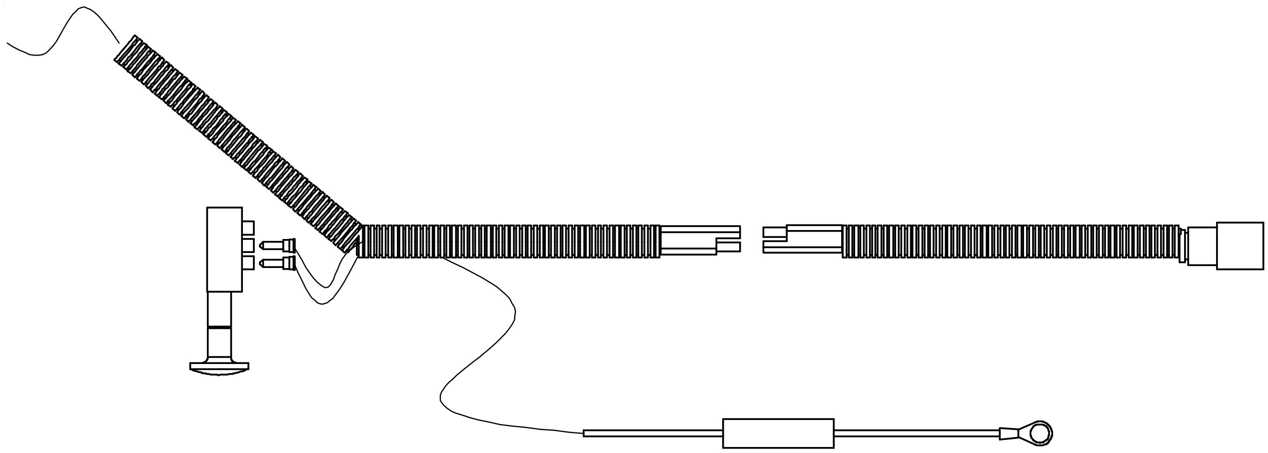
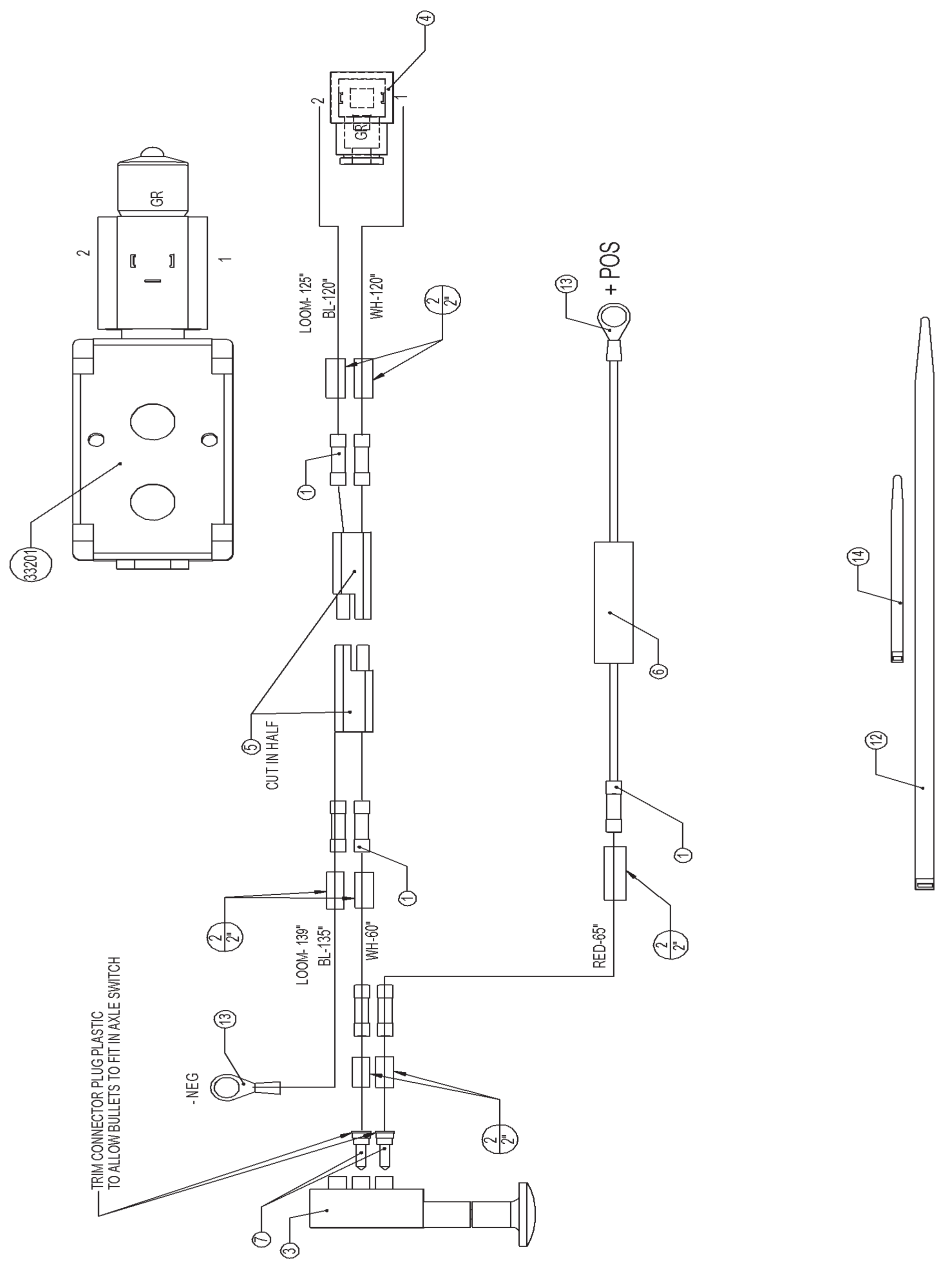
4.10.2 Harness Schematic for Elec/Hyd Selector Valve Option (Part No. 49421)

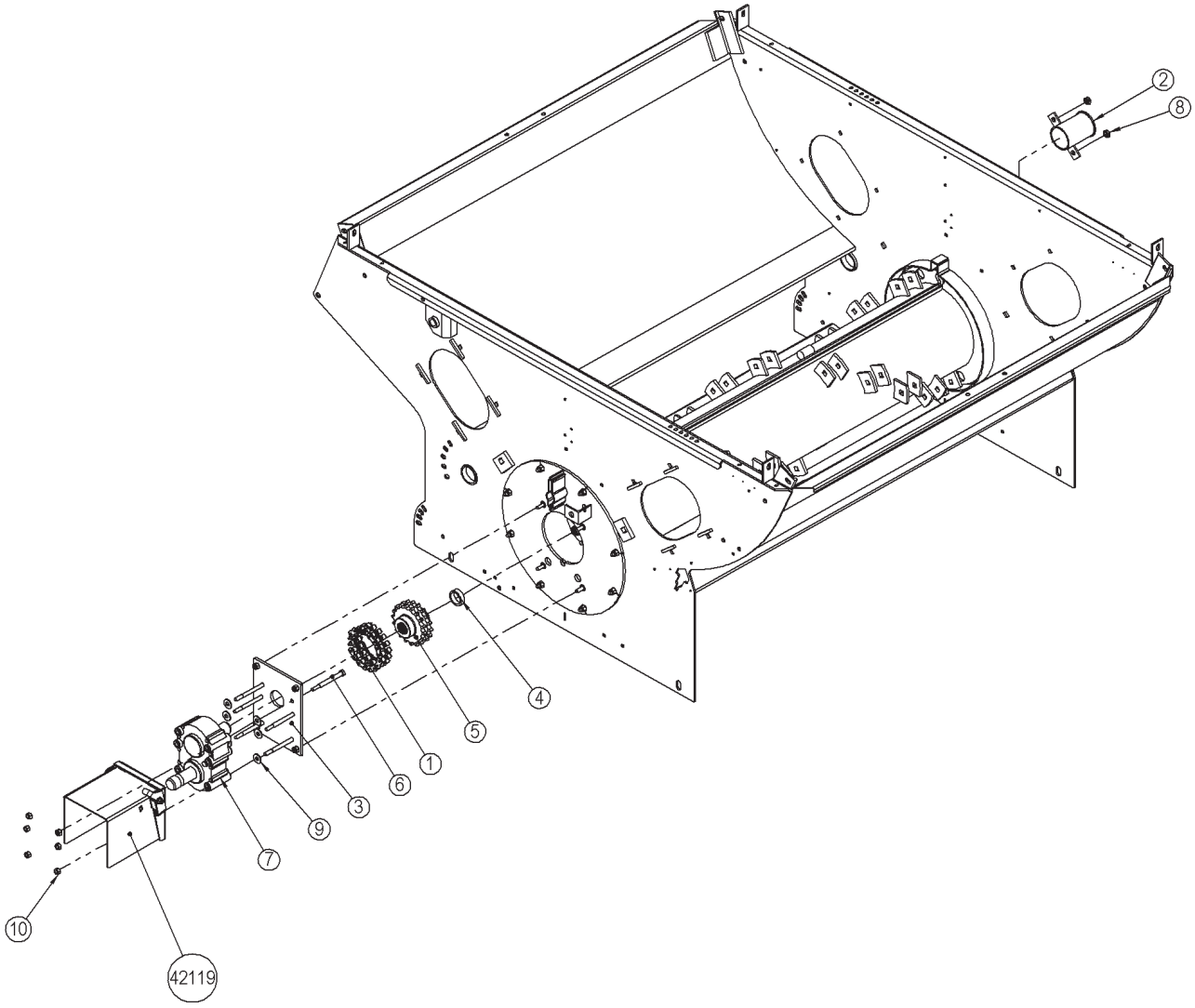
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	30408	ELEC,CONN,BUTT,16-14	7
2	31976(1.17)	ELEC,HEAT_SHRINK,DUAL_WALL,1/4	1
3	33123	ELEC,SWITCH,AXLE	1
4	33124	ELEC,CONNECTOR,DIN,MPM 182-09	1
5	33125	ELEC,CONN,2_POLE,FLAT,16GA	1
6	33127	ELEC,HOLDER,FUSE,15AMP	1
7	33130	ELEC,PLUG,BUL .156,90 DEG	2
8	37980(21.25)	ELEC,WIRE,14GA,STRAND,BLACK	1
9	37981(15)	ELEC,WIRE,14GA,STRAND,WHITE	1
10	92151(5.5)	ELEC,WIRE,16GA,STRAND,RED	1
11	92143(22)	ELEC,LOOM,1/2,SPLIT,CORRUGATED	1
12	31613	TIE,CABLE,NYLON,BLACK,11 1/2"	3
13	92166	ELEC_CONNECTOR,RING,3/8,16-14,ST,INS	2
14	92170	TIE,CABLE,4",BLACK	6




LOOM- 125"
BL-120"
WH-120"
GR
33201
+ POS
CUT IN HALF
RED-65"
LOOM- 139"
BL-135"
WH-60"
- NEG
TRIM CONNECTOR PLUG PLASTIC
TO ALLOW BULLETS TO FIT IN AXLE SWITCH

4.11.0 Right Hand Discharge Option (BPORHD (89066))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	49652	DRV,COUPLER,CHAIN,COMPLETE	1
2	49676	WLDT,GUARD,SHAFT,1-3/4	1
3	E7738	PLT,MOUNT,GEARBOX,RHD	1
4	E8822	PIPE,SMLS,2-1/4X.240X5/8L	1
5	30070	DRV,COUPLE,80B18,1 3/4 SPL	2
6	33903	BOLT,HEX,1/2X5-1/2,UNC,GR5.BLK	6
7	33905	DRV,GBOX,PRL,1:1,1-3/4-20SPL	1
8	31168	NUT,NYLOCK,JAM,5/8,UNC,ZP	2
9	31236	WASHER,FLAT,1/2,ZP	6
10	31612	NUT,STOVER,1/2,UNC,ZP	6
11	33730(.3)	OIL,EP80W90	1


2
8
4
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1
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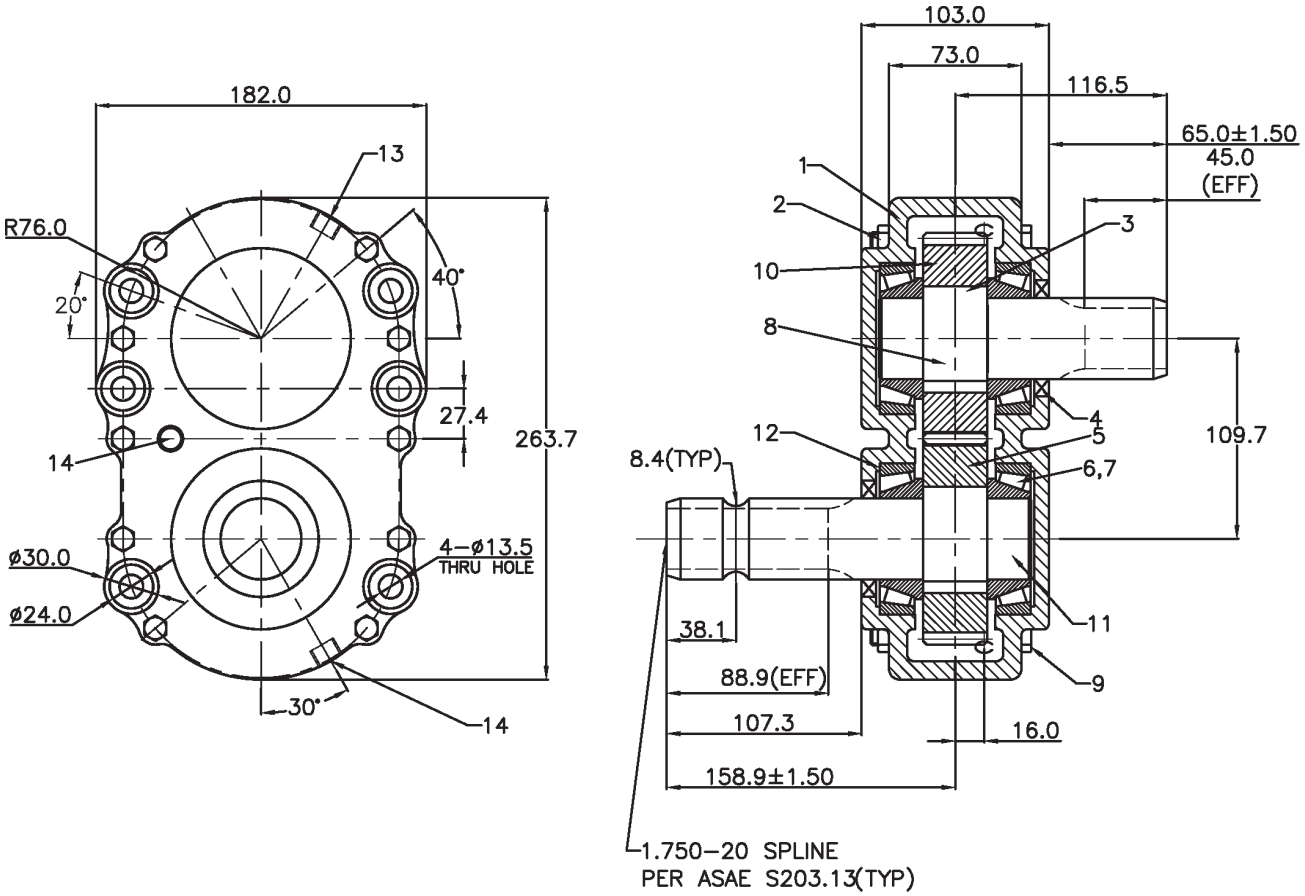
10
42119

4.11.1 Right Hand Gearbox parts (BPORHD (33904))

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	33906	HOUSING	1
2	33909	OIL SEAL (44.45X69X8)	2
3	33911	BEARING CONE 25580	4
4	33912	BEARING CUP 25520	4
5	33916	INPUT SHAFT/HELICL GEAR (LH) ASM	1
6	33913	OUTPUT SHAFT/HELICAL GEAR (RH) ASM	1
7	33907	CAP SCREW M8X85	8
8	33914	NUT	8
9	34050	LOCK WASHER	8
10	34051	SHIM	A/R
11	33918	9/16" RELIEF PLUG WITH O-RING	1
12	33919	9/16" PIPE PLUG WITH O-RING	2



NOTE
1. RATIO 1:1
2. HELICAL GEARSET: MODULE 4 TEETH 27 & 27
   TOOTH WIDTH 35MM
   HELICAL ANGLE 10°
3. INPUT 1000 RPM
4. PAINT BLACK, NO PAINT ON SHAFTS
5. ADD 300ML. OF SAE 80W–90 OIL TO GEARBOX

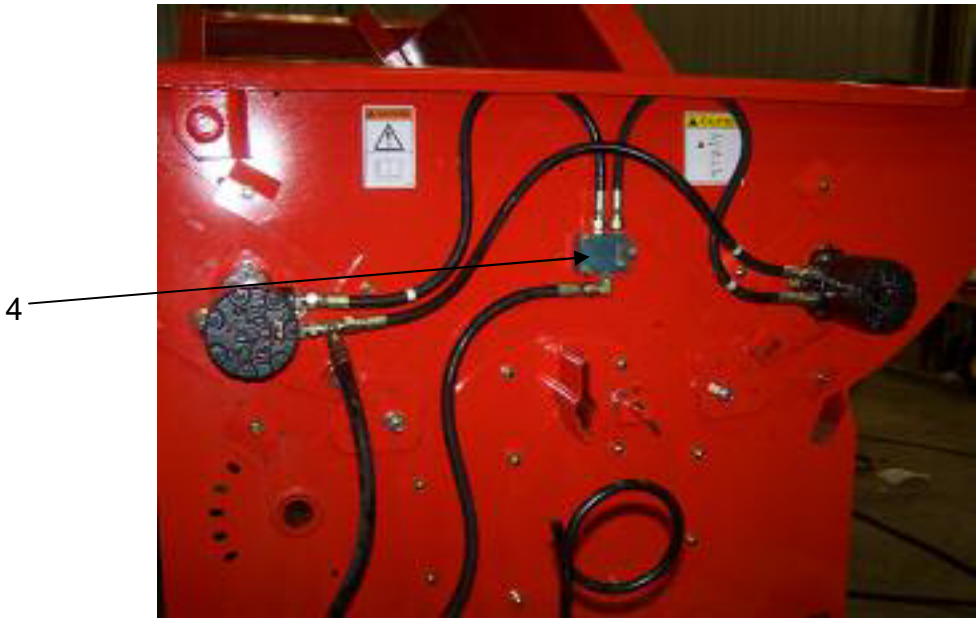
4.11.2 Right Hand Discharge Option (BPORHD (89066)) -Installation Instructions

1. Ensure the forks are in the fully raised position. Lock the forks in the raised position with the cylinder lock (1).

2. Remove the rear cover plate (2) and flail drum lock pin (3).

3. Remove the hex nut and washer from the feed roller drive motors at the front of the machine.

4. Remove the splitter valve (4) from the front tub wall.



5. Slide the feed roller motors back and lay the entire hydraulic assembly onto the frame. The hydraulic motors will need to be disconnected from the hoses and the hoses will need to mirrored to the opposite side to

accommodate the repositioning of the mechanically activated valve (if so equipped). Move the plastic caps from the opposite end of the machine and place in the location the hydraulic motors were removed from.

6. Remove the hydraulic cylinder and deflector door lock assembly from the front of the tub.

7. Remove the selector rod cover (5) at the rear of the machine. Measure the length that adjustment nuts (6) stick out the rear for installation in the final step. Remove the adjustment nuts.

8. Remove the mechanically activated valve (7) from the front of the machine and slide the rod (8) out the front of the tub.

9. Remove twine cutter.

10. Remove P.T.O. cover from front of machine.

11. Install flail drum shaft cap that is supplied with kit in place of the P.T.O. cover.

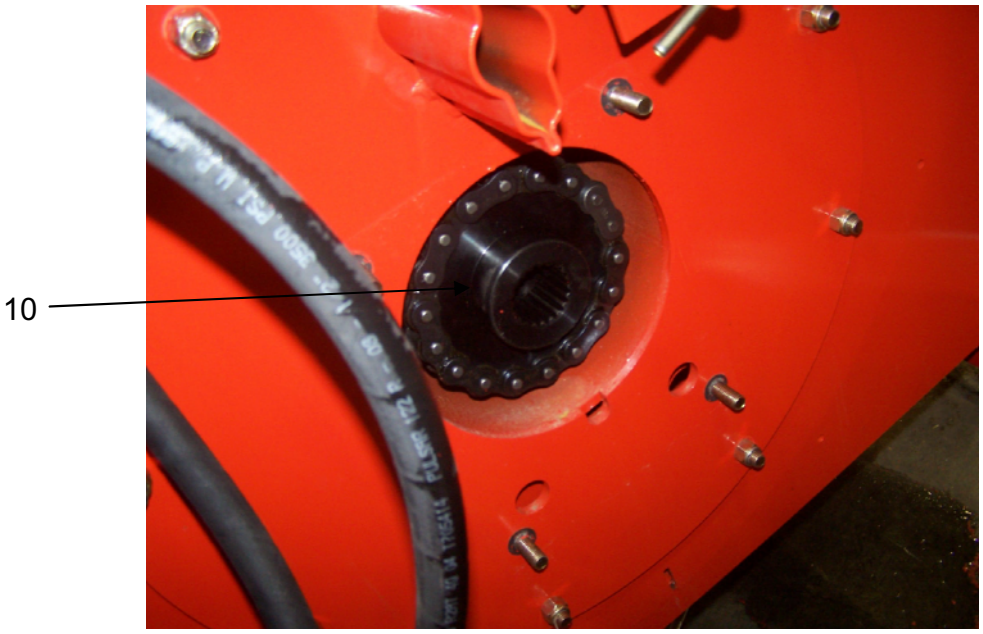
12. Remove flail guard rod insert at the front of the machine.

13. Remove the four main tub anchor bolts at the four corners of the tub.

14. Rotate tub using an appropriate lifting device. Reinstall four main anchor bolts. Swapping axles side to side will be necessary to allow installation of an EZ-Feed tank.

15. Install 5/8” thick spacer that came with you RHD kit (9) onto front side of flail drum drive shaft.

16. Install supplied drive chain coupler (10).



17. Install supplied gearbox. Reinstall existing P.T.O. cover onto bottom four bolts of gearbox.

18. Reinstall selector rod. Reposition mechanical valve to opposite side of machine. Leave mount loose until spring is inserted, then tighten to tub wall.

19. Swap hydraulic hoses from feed roller drive motors. The motors will stay on the same side that they were previously on. Remove existing nylock nuts, add supplied regular hex nuts (2 per bolt), reinstall feed roller motors and secure with existing nylock nuts and washers.

20. Remove twine cutter cover plate (11) from rear of machine and move it to the front. Use existing self tapping screws.

21. Reinstall lower deflector door (12) and flail guard rod adjustment arm (13), tightening bolt in end just enough to allow easy movement. Install aggression setting decal (14) and move hyd hose clip (15) from back to front. Place supplied CV Angle decal visible on front of tub, close to P.T.O. driveline.

22. Reinstall material deflector door lock assembly and 2x8 cylinder.

23. Reinstall twine cutter, flail drum lock and rod guard (16) on rear of machine. Adjust nuts on the end of the selector rod so that they pertrude out the same amount from the rod guard as previously measured (17).

5.0 Specifications

Minimum Horse Power:	85 HP
Maximum Horse Power allowed	160 HP
Capacity:	2 bales - 6' long x 6' diameter - max. 2000 lbs each
Flail Drum Length:	71"
Flail Drum Diameter:	26 - 3/8" Balanced
Flails:	26 - 2" x 5 1/2" Tempered Spring Steel
Tires:	2 - 11L X 15 Highway Service (Inflate to 45 psi)
Floatation Tires (Optional):	2 - 16.5LX 16.1 ANS (Inflate to 24 psi)
Height:	104 - 1/2" (Fully Assembled)
Width:	101-3/4" w/deflector door in transport position
Length:	205 - 1/4" w/ forks lowered
	176 - 3/4" w forks fully raised
Weight:	4086 lbs
Hitch Weight (Empty):	1300 lbs
Drawbar Weight (with bale in chamber):	2560 lbs
PTO Requirements:	1000 RPM PTO
Dual Hydraulics:	Dual remote, 2000 psi
Cylinders:	2 - 3 1/2" x 10", 1 3/4" Rod Diameter

Dealer Information

Dealer: _____

Address: _____

City: _____

Province / State: _____

Postal Code / Zip Code: _____

Phone: _____

Identification Numbers

Model Number: _____

Serial Number: _____

Dealer Checklist

Options: **BPOLT _____ BPORFL _____ BPORHD _____ BPOEH _____ BPOFC _____ BPOHC _____**
BPOMAV _____ BPOST _____ BPOSC _____ BPO3RH _____

N/A	✓	Assembly Procedure
		Rotate front bale deflector screen up and rest it toward the front of the machine.
		Remove shipping blocks from the bale deflector screen and tub edges.
		Rotate the right and left bale deflector panels up and into position. Secure into position using hardware referenced in assembly #49335
		Remove driveline, bale forks, discharge belting, discharge door angle bracket and hardware from the tub.
		Secure the driveline assembly to the splined shaft. On left hand discharge machines, install E7831 spacer prior to driveline installation
		Install bale forks on the bale lift assembly as per assembly #49352.
		On units equipped with the large tire option remove the axle on the side of discharge to allow for the set up of the top discharge door.
		Rotate the top discharge door up - install the cylinder pin and lock mechanism as per assembly #49337
		Install discharge belting and the angle mounting bracket using the supplied hardware shown in the top discharge door assembly #49337
		Reinstall the axle assembly removed in the previous step.

N/A	✓	Check List Item
		Flail guard rod adjustment handle moves freely and will hit all 5 adjustment holes.
		Bottom deflector door moves freely and will hit all 4 adjustment holes.
		Free and proper movement of selector rod. Refer to Assembly #49596 and related manual information
		Transport lock for deflector door is installed and functional. Ensure cylinder clevis adjustment bolt is positioned down.
		Feed rollers positioned in the middle hole of lug adjust plate. Refer to step 7 in the general operating instructions.
		All grease points are lubricated.
		Bale lift assembly is against frame when cylinders are retracted.
		Safety decals & reflective stripes installed per specifications and drawings.
		Tire pressure is as specified on tire.
		Flail drum lock pin engages the flail drum in both positions and disengages freely.
		Twine cutter can be passed through the full length of tub.
		Twine cutter is secured in storage position.
		Operators and parts manuals present with machine
		Check oil level in gear box. (right hand discharge machines only)

N/A	✓	OPERATIONAL CHECK
		Ensure feed rollers activate (when bale lift is up)
		Ensure discharge door activates (when bale lift is down)
		Ensure feed Rollers turn clockwise and counterclockwise - but both turn in the same direction.
		Ensure free movement of bale lift through full range of operation.
		Ensure cylinder transport lock fits with bale forks in transport position.
		Operate hydraulic motors and and check for leaks and free movement.
		Cycle bale lift cylinders a minimum of 3 times, check for leaks and clearance problems.
		Test Clearance Lights - if equipped

Signature: _____ Date: _____