

HYDRAULIC GROUND WHEEL DRIVE for 8", 10", 12" & 13" SWING AWAY HOPPER

OWNER'S & OPERATOR'S MANUAL

Effective September 14, 2009

Publication No. 1032025

MODEL NO'S.

8" - 800440G
10" - 100440G
12" - 120440G*
12" - 120450G**
13" - 130440G

* Use with single auger hopper.

** Use with low profile hopper.



Hutchinson/Mayrath

A Division of **GLOBAL Industries Inc.**

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Hutchinson/Mayrath

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POLICIES AND PROCEDURES

Prices: Prices in effect at time of shipment will apply. Prices are subject to change without notice. All prices are F.O.B. Clay Center, Kansas. Orders shipped from locations other than Clay Center, Kansas will be subject to additional charges, such as back freight and/or additional freight.

Service Charge: A service charge will be assessed for all past due balances as permitted by state law not to exceed 1-1/2% per month.

Minimum Order: Processing and handling costs necessitate a minimum charge of \$15.00 net on all orders.

Back Orders: Back orders will be shipped as they become available. Contact Hutchinson/Mayrath Customer Service for alternative shipping options or if cancellation is desired.

Damaged Goods: It is the consignee's responsibility to check all shipments thoroughly upon receipt of goods. If any damage is discovered, it must be noted on the freight bill of lading before signing. The consignee must make necessary claims against the respective freight line. All damage claims must be submitted within 30 days of delivery receipt.

Shortages: All shortages must be noted at time of delivery. Shortages must be noted on the freight bill of lading before signing. Hutchinson/Mayrath must be advised of all concealed shortages upon discovery. Once notified of concealed shortages Hutchinson/Mayrath will advise corrective action to be taken.

Return of Goods: All returns must be approved by Hutchinson/Mayrath prior to shipment. All return requests will be issued a return authorization number. NO RETURNS WILL BE ACCEPTED WITHOUT A RETURN AUTHORIZATION NUMBER AND PRIOR AUTHORIZATION FROM THE FACTORY. All returns must be shipped prepaid. A 15% restocking charge will be applied to all returned merchandise. Custom Products may not be returned for credit. Only current products in new and salable condition may be returned. No safety devices may be returned for credit.

Modifications: It is the policy of Hutchinson/Mayrath to improve its product whenever possible and practical to do so. We reserve the right to make changes, improvements and modifications at any time without incurring the obligation to make such changes, improvements and modifications on any equipment sold previously.

Limited Warranty: (a) For a period of (1) year after receipt of goods by the original consumer buyer, Hutchinson/Mayrath will supply free of charge replacement parts for parts that prove defective in workmanship or material. Defective parts must be returned freight prepaid to a specified Hutchinson/Mayrath location. Only Hutchinson/Mayrath original repair parts may be used for warranty repairs.
(b) This limited warranty does not extend to parts designed to wear in normal operation and be replaced periodically; or to damage caused by negligence, accident, abuse or improper installation or operation.
(c) GOODS NOT MANUFACTURED BY HUTCHINSON/MAYRATH CARRY ONLY THE MANUFACTURER'S WARRANTY.
(d) THIS UNDERTAKING IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

FAILURE TO FOLLOW THE INSTRUCTIONS CONTAINED IN THE OWNER'S & OPERATOR'S MANUALS AND THE ITEMS LISTED BELOW WILL RESULT IN THE VOIDING OF THIS LIMITED WARRANTY.

- (1) Improper assembly, including failure to properly install all safety equipment.
- (2) Improper installation.
- (3) Unauthorized alternations of goods.
- (4) Goods operated when obviously in need of repair.
- (5) Use of unauthorized repair parts.
- (6) Irresponsible operation.
- (7) Used to handle materials other than free flowing, nonabrasive and dry materials, as intended.
- (8) Damaged through abusive use or accident.

Limitation of Liability: BUYER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH HAVE LIABILITY FOR DIRECT DAMAGES THE EXCESS OF THE CONTRACT PRICE OF THE GOODS IN RESPECT OF WHICH CLAIM IS MADE. BUYER FURTHER AGREES THAT IN NO EVENT SHALL HUTCHINSON/MAYRATH ON ANY CLAIM OF ANY KIND HAVE LIABILITY FOR LOSS OF USE, LOSS OF PROFITS, OR FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

GENERAL SAFETY STATEMENT

This manual was written with the safety of the operator and others who work with the equipment as our prime concern. The instructions presented will help the reader learn **SAFE** day to day work practices. We want you as our partner in safety.

It is your responsibility as an owner, operator or supervisor to know what specific safety requirements and precautions exist and to make these known to all other personnel working with the equipment or in the area, so that they too may safely perform their duties and avoid any potentially hazardous situations.

Please remember safety equipment provides important protection for persons around a grain handling system that is in operation. Be sure **ALL** safety shields and protection devices are installed and properly maintained. If any shields or guards are damaged or missing, contact your dealer to obtain the correct items.

Avoid any alterations of the equipment. Such alterations may create a dangerous situation where serious injury or death may occur.

SAFETY ALERT SYMBOL

The symbol shown below is used to call your attention to instructions concerning your personal safety.

Watch this symbol - it points out important safety precautions. It means - **ATTENTION! Become alert! Your personal safety is involved!** Read the message that follows the symbol when a warning is given, be alert to the possibility of personal injury or death.



SAFETY DECALS

Check to ensure all Safety Decals are present and in good condition on all equipment being used.

If a decal cannot easily be read for any reason, or has been painted over, replace the decal immediately.

Safety decals are offered free of charge, and can be ordered through your Hutchinson/Mayrath dealer.

TABLE OF CONTENTS

POLICIES AND PROCEDURES	(Inside Front Cover)
SAFETY	1
General Safety Statement	1
Safety Alert Symbol	1
TABLE OF CONTENTS	2
GENERAL INFORMATION	3 - 4
Operator Qualifications	3
Sign-Off Sheet	3
Designated Work Area	4
Pre-Operating Procedures	5
Maintenance	5
Operating Procedures	6
ASSEMBLY INSTRUCTIONS	7 - 12
Clamp Band, Valve Mount Band, Hose Mount Band	7
Drive Frame	8-11
Directional Control Valve, Hydraulic Hoses	12
PARTS LIST	P-1 to P-5
Bolt Kit	P-1
Clamp Bands, Half Bands, Hose Clamps	P-2
Drive Motor Frame, Wheel Hubs	P-3
Chain, Chain Guard, Jack, Wheel & Tires	P-4
Directional Control Valve, Hydraulic Hoses	P-5
Hydraulic Diagram	P-5

OPERATOR QUALIFICATIONS



WARNING

Anyone who will operate or work around this machine shall first read this manual! This manual must be delivered with the equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

Operation of this auger shall be limited to competent and experienced persons. In addition, anyone who will operate or work around an auger must use good common sense. In order to be qualified, the operator must also know and meet all other requirements, such as:

1. Some regulations specify that no one under the age of 16 may operate power machinery. This includes this auger. It is your responsibility to know what these regulations are in your area or situation.
2. Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in safe operation and servicing of all equipment which the employee is, or will be involved with."^{*}
3. Unqualified persons are to stay out of the work area. See page 4.
4. A person who has not read and understood all operating and safety instructions is not qualified to operate the machine.

***Federal Occupational Safety & Health Standards for Agriculture Subpart D, Section 1928.57 (a) (6).**

SIGN-OFF SHEET

As a requirement of OSHA, it is necessary for the employer to train the employee in the safe operation and safety procedures with this auger. We include this sign off sheet for your convenience and personal record keeping.

DATE	EMPLOYER SIGNATURE	EMPLOYEE SIGNATURE

GENERAL INFORMATION

DESIGNATED WORK AREA

A designated work area should always be established for auger operation. The following diagram will show the manufacturers designated work areas. These areas shall be marked off with colored nylon or plastic rope hung as portable barriers to define the designated work areas.



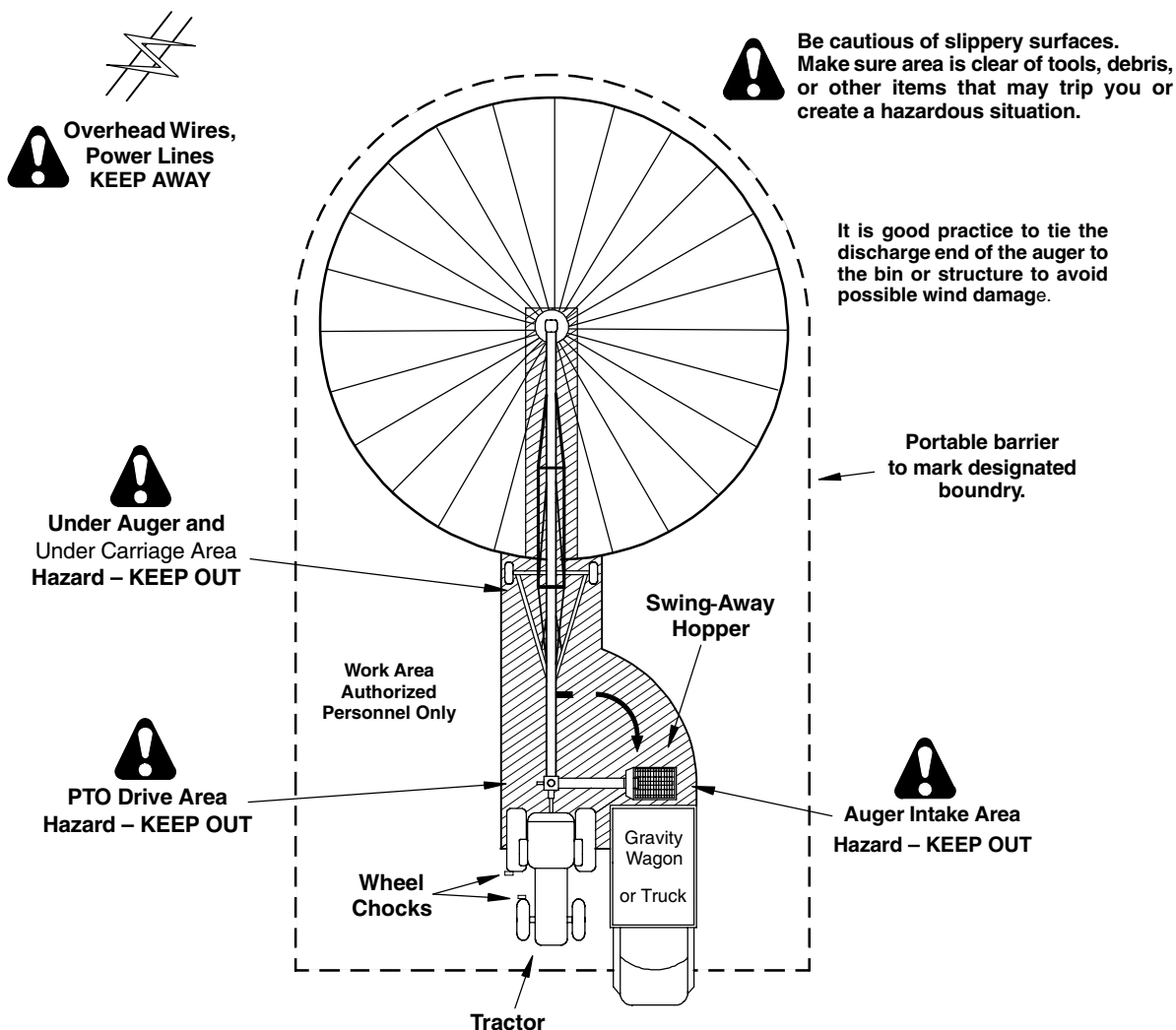
Under no circumstances should persons not involved in the operation be allowed to enter into the work area.



It shall be the duty of all operators to see that children and/or other persons stay out of the work areas! Entering the work area by anyone not involved in the actual operation, or trespass into a hazardous area by anyone, shall result in an immediate shut down by the operator.

It shall be the responsibility of all operators to see that the work area has secure footing, is clean and free of all debris, and tools which might cause accidental tripping and/or falling.

Designated Work Area When Loading Grain Bin



PRE-OPERATING PROCEDURES

Our augers are well made and we are proud of our line of equipment. We would like you, as our customer, to do your part in using caution and good judgement when using our equipment, as well as any other machinery.

It is important to be familiar with the following routine operating procedures before attempting start-up.

During the operation of your auger, one person shall be in a position to monitor the operation at all times.



During initial start-up and operation, the operator shall be aware of any unusual vibrations or noises that would indicate a need for service or repair.



Keep all safety shields and devices in place.



Keep hands, feet, and clothing away from moving parts.



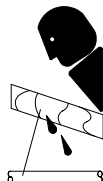
The operator should have a full view of the auger work area and check that all personnel are clear from designated work areas before adding power.

Before adding power:

1. Check that all fasteners and hardware are tight.
2. Check the hydraulic connections making sure they are properly connected and secured.
3. Make sure the hydraulic hoses are clamped to the auger tube and are held off the ground and kept away from moving parts.
4. Check your tractor manual or contact your dealer regarding what type of hydraulic hose coupler to use for attachment to the tractor (the hydraulic hoses in the kit are not furnished with this coupler).
5. The directional control valve operates independently of the tractor hydraulic control. The tractor control must be engaged before the hopper ground wheel can be operated from the directional valve.



DO NOT connect or disconnect hydraulic components when there is pressure within the system. Hydraulic systems are highly pressurized.



If a leak is suspected, use a piece of cardboard or similar material to check for the leak. NEVER use your hands or fingers to search for a leak.



Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin causing serious injury. If injured by escaping fluid, see a doctor at once, serious infection or reaction can develop if medical treatment is not administered immediately.



Hydraulic oil, while flowing through the system becomes very hot during unit operation. To avoid serious burns, allow ample time for the hydraulic system to cool before attempting to perform any maintenance or repairs to the system or its components.



MAINTENANCE

Due to the small number of moving parts, very little maintenance is required on the ground wheel drive unit. However, the following items should be monitored:

1. **Hydraulic Components.** Check all hydraulic hoses, connectors and components. Make sure connections are tight and not leaking hydraulic oil. Check hoses for cuts or damage. Replace as necessary.
Some of the hydraulic fittings require teflon tape or some type of thread sealer. When replacing or assembling these fittings, make sure not to get the tape or sealant below the threaded portion of the fitting. Bits of tape or sealant entering the system can block orifices and create potential problems within the hydraulic system.
2. **Tire Pressure.** Check tire pressure periodically. Maintain tire pressure at 24 to 28 psi (165 - 193 kPa).
3. **Drive Chain.** The drive chain should periodically be sprayed with a chain lubricant. Remove the chain guard from the dual wheel assembly to gain access to the drive chain. Spray a liberal amount of lubricant on the entire length of chain.
4. **Jack Assembly.** The jack assembly is equipped with a grease fitting on the upper portion of the jack. Use a lithium based grease periodically to keep the jack in good working condition.

GENERAL INFORMATION

OPERATING PROCEDURES

For best results, the swing-away hopper and ground wheel drive should be operated on a level, well drained and relatively solid surface, with the area cleared of tall ground cover.

The following procedures are used after the ground wheel drive unit has already been assembled and installed onto the hopper.



Make certain the path of the swing-away hopper is clear. The operator should not be between the hopper and any non-moveable objects.

Before operation, make sure all fasteners and hardware are tight. Check hydraulic hose connections for tightness and make sure the hoses are secured properly to avoid being damage.

1. Turn the jack handle to lower the jack and drive wheels. As the jack is being lowered the swing-away hopper will begin to rise. Continue lowering the jack until the front swing-away hopper wheel is raised slightly above the ground (this will provide the traction needed for the drive wheels).
2. Make certain the area in the path of the swing-away hopper is clear. Make certain that the operating position along side the hopper, next to the control valve, remains clear. **The operator should never stand between the hopper and any non-moveable objects.**

3. Engage the tractor hydraulic control and lock it open.
4. Slowly engage the directional control handle and see that the hopper is traveling away from the main auger. If it moves towards the main auger, move the handle in the opposite direction.

NOTE: The control handle only needs to be moved slightly to provide operation. Although the restrictor in Port "A" of the control valve limits the speed of operation, moving the handle too far, or too fast, will cause the drive wheels to turn faster than desired or recommended. If this occurs, a pressure relief valve will bypass oil, causing a loud squeal to be heard. If this should happen, release the control handle and move the handle slightly as intended.

5. Check drive wheel operation. If the ground drive wheels need more traction, lower the jack to allow more weight to be transferred to the drive wheels.
6. When moving the swing-away hopper back along side the main auger, stop hopper travel before it contacts the main auger.
7. When transporting the auger, be sure to use the saddle pin or safety chain to lock the swing-away hopper to the lift arm. The ground wheel drive unit adds extra weight to the hopper in the transport position, so use extra caution when transporting your auger. **Always transport the main auger in the full down position.**

ASSEMBLY PROCEDURES



Some items in this kit are heavy. To avoid personal injury, use assistance when lifting and assembling these parts.



Use the proper personal safety gear such as eye, ear and hand protection when working with power tools and metal materials.

Before beginning assembly, it is suggested to read through these instructions and lay out all items from the kit to ensure all parts are accounted for. This not only helps you become familiar with the parts and assembly procedures, but also makes you aware of what tools, equipment or materials you may need to complete the installation process.

1. Attach auger to tractor, lower main auger to its full down position and park auger on level ground.
2. Lower swing-away hopper to the ground and swing it out onto a level surface.
3. Shut down and lockout tractor power.

CLAMP BAND, VALVE MOUNT BAND and HOSE MOUNT BAND

1. Locate the clamp band, hose clamp band and the valve mount band from the kit.
Using the chart below, measure from the lower end of the swing-away hopper incline tube to the center of the jack mount hole located on the clamp band. Using four 3/8" x 1-1/2" bolts, lock washers and non-lock nuts, loosely attach the clamp band at this location (See Fig. 1).
2. Measure up 48" (1.2 m) from the lower end of the incline tube and install the hose mount band at this location (See Fig. 1). DO NOT install the bolt. It will be installed when the hydraulic hoses and hose clamps are assembled.
3. From the hose mount band, measure 34" (864 mm) towards the discharge end of the incline tube. Install the valve mount band onto the tube (position the valve mounting plate to the side of the incline tube as shown in Fig. 1). Secure the band using two 5/16" x 1-1/2" bolts, lock washers and non-lock nuts.

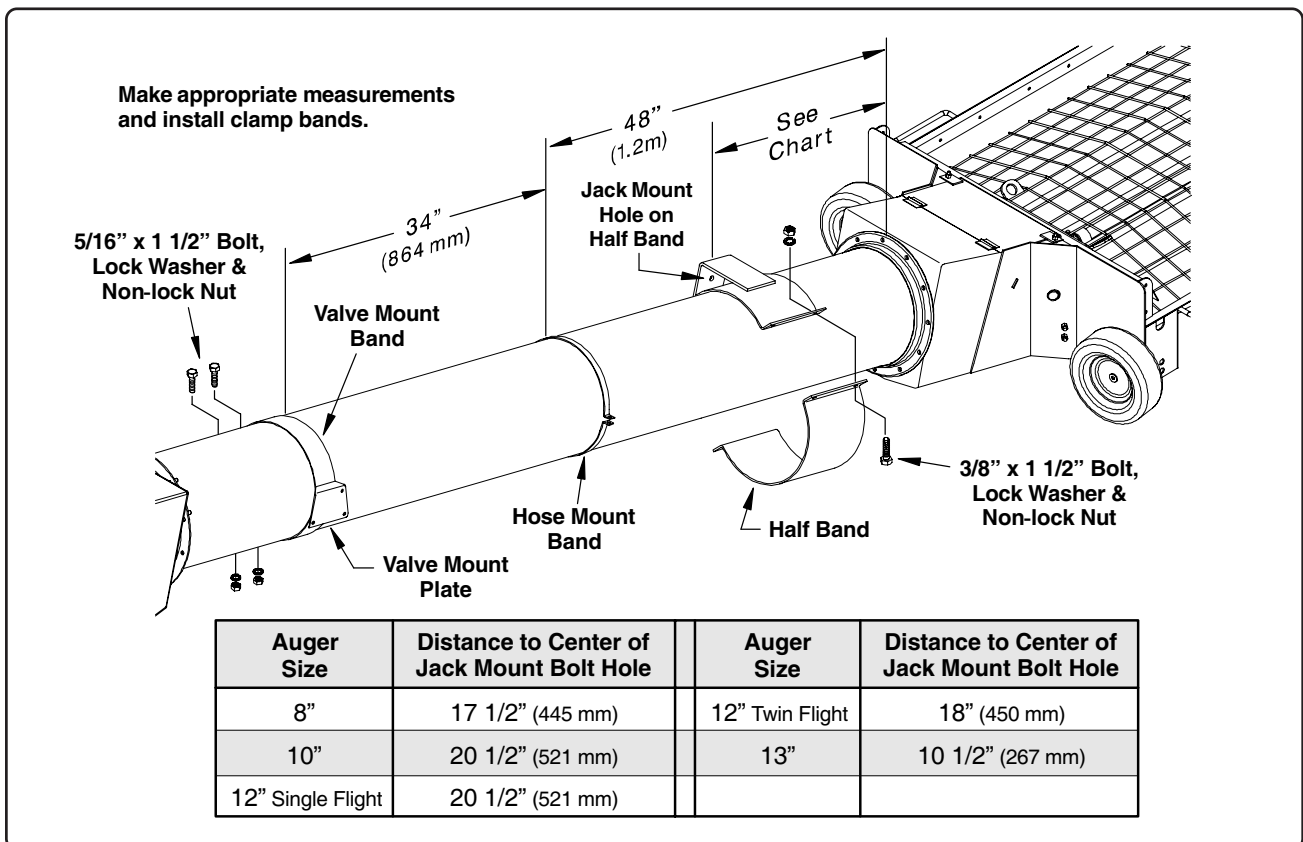


Fig. 1

ASSEMBLY INSTRUCTIONS

DRIVE FRAME ASSEMBLY

1. Attach the front and rear channels together as shown in Fig. 2. Secure using two 1/2" x 1" carriage bolts, lock washers and non-lock nuts, the bolts need to be installed from the inside, out.
The front channel mounting holes are slotted to allow movement to tighten the chain when it is installed, you only need to snug up the hardware at this time.
2. Attach a bearing with flanges to the bearing mount plate on front of the channel. Secure the flanged bearing using three 5/16" x 3/4" carriage bolts, lock washers and non-lock nuts (the carriage bolt heads will be on the inside of the channel, do not tighten).
3. Insert the drive shaft w/coupler through the motor mount plate and into the channel. Install a sprocket onto the shaft and continue pushing the shaft through the bearing previously installed (the hub on the sprocket will face towards the bearing).
4. The drive shaft has a hole near the coupler end, align this hole with the hole in the hub on the sprocket and install a 5/16" x 1-3/4" roll pin.
5. Insert the woodruff key into the slot on the motor shaft. Position the port holes on the hydraulic motor so they are facing up. Slide the motor shaft into the coupler on the end of the drive shaft.
Secure the motor to the mount plate using four 3/8" x 3/4" bolts and lock washers.
Tighten the hardware on the flanged bearing and install the lock collar.
6. Attach the wheel hub to the end of the drive shaft and secure using one 3/8" x 2" bolt and nylon lock nut.

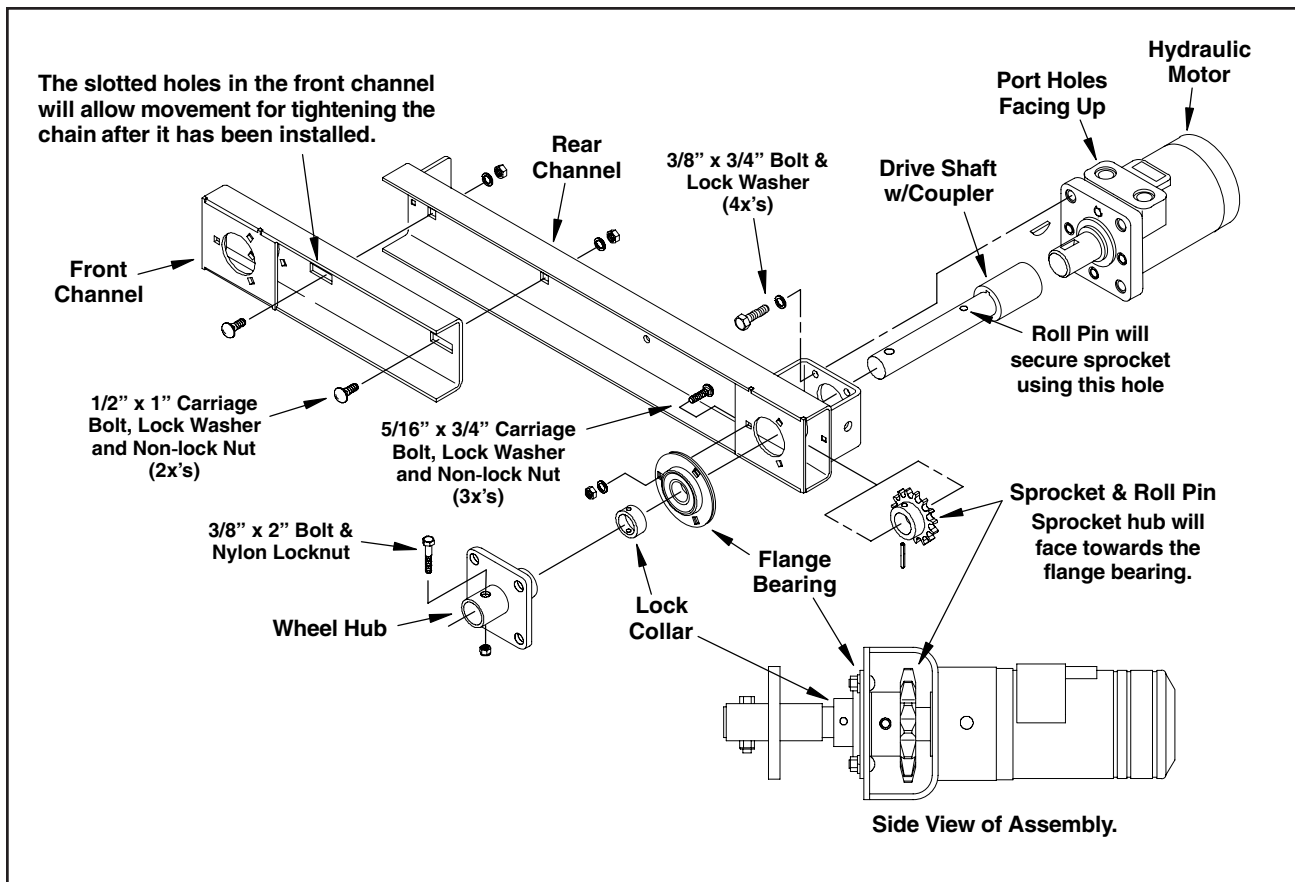


Fig. 2

DRIVE FRAME ASSEMBLY (CON'T.)

7. Assemble the opposite end of the drive frame by attaching two flanged bearings to the front and rear side of the channel as shown in Fig. 3. Secure each flanged bearing using three 5/16" x 3/4" carriage bolts, lock washers and non-lock nuts. Do not tighten completely at this time.
8. Insert the drive shaft through one of the bearings (the hole closest to the end on the shaft will be toward the wheel hub side).
As the shaft passes through the first bearing and into the channel, install three spacer washers and the sprocket (the spacers will be positioned at the rear of the drive shaft (See Fig. 3). Continue inserting the shaft through the second bearing.
9. Align the smaller hole on the drive shaft with the hole on the sprocket hub secure the sprocket using one (1) 5/16" x 1 3/4" roll pin (See Fig. 3). Tighten the hardware securing the flanged bearings.
10. Install and secure the lock collars.
11. Position a wheel hub onto the end of the drive shaft. Align the holes in the hub with the mounting holes in the shaft and secure using one 3/8" x 2" bolt and nylon lock nut.
12. Install the chain around the sprockets and secure with the chain link. Tighten the chain by sliding the front channel until chain is tight, then tighten the two carriage bolts holding the front and rear channels together.

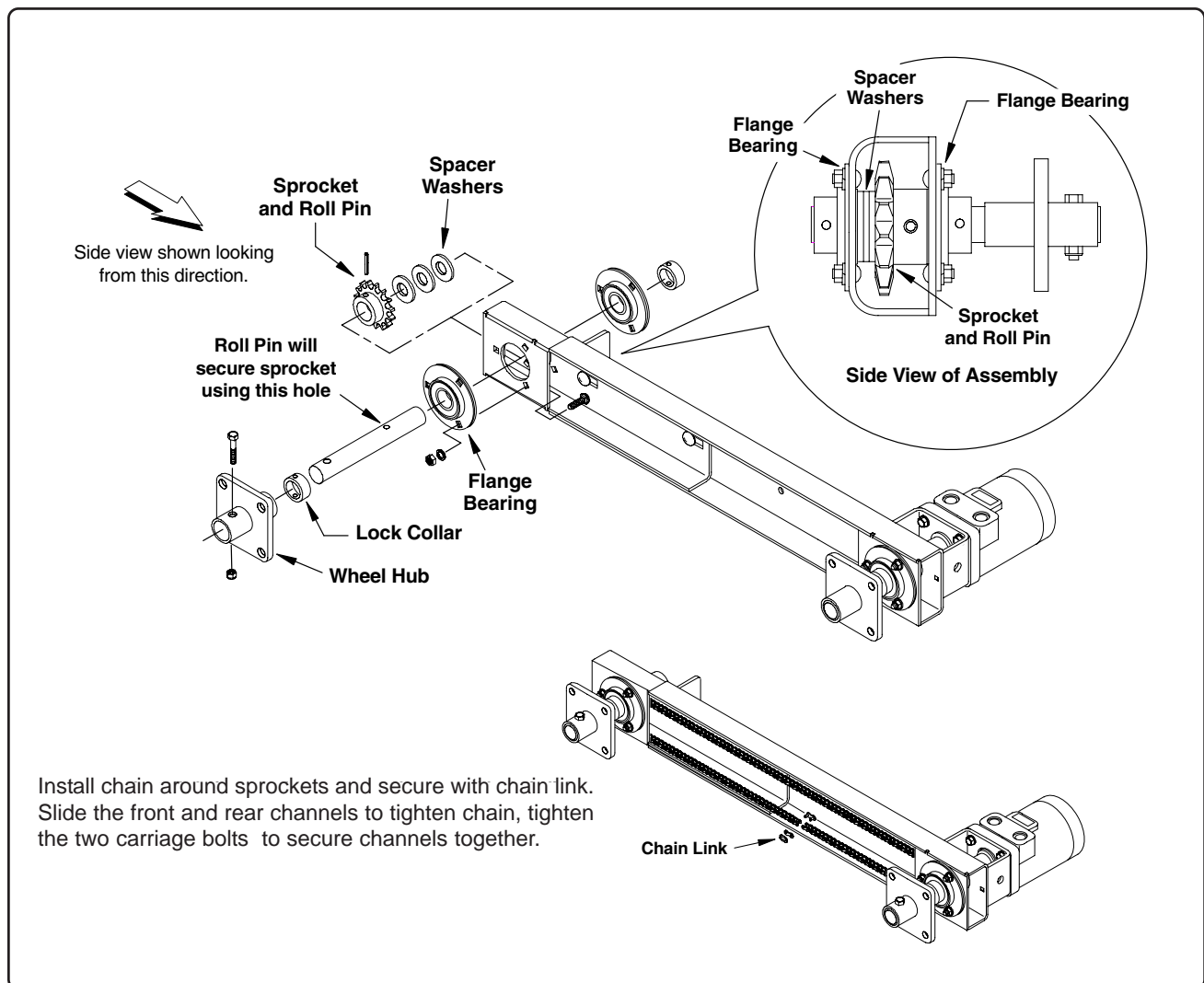


Fig. 3

DRIVE FRAME ASSEMBLY - CON'T.

13. Locate the chain guard, tinnerman nut and chain guard spacer from the kit. Slide the tinnerman nut onto the end of the chain guard as shown in Fig. 4. Insert a $3/8" \times 3"$ bolt through the hole in the rear channel and slide the chain guard spacer and one $3/8"$ flat washer onto the bolt. Position the chain guard with the slotted hole over the bolt and secure using one $3/8"$ flat washer, lock washer and non-lock nut, do not tighten at this time.

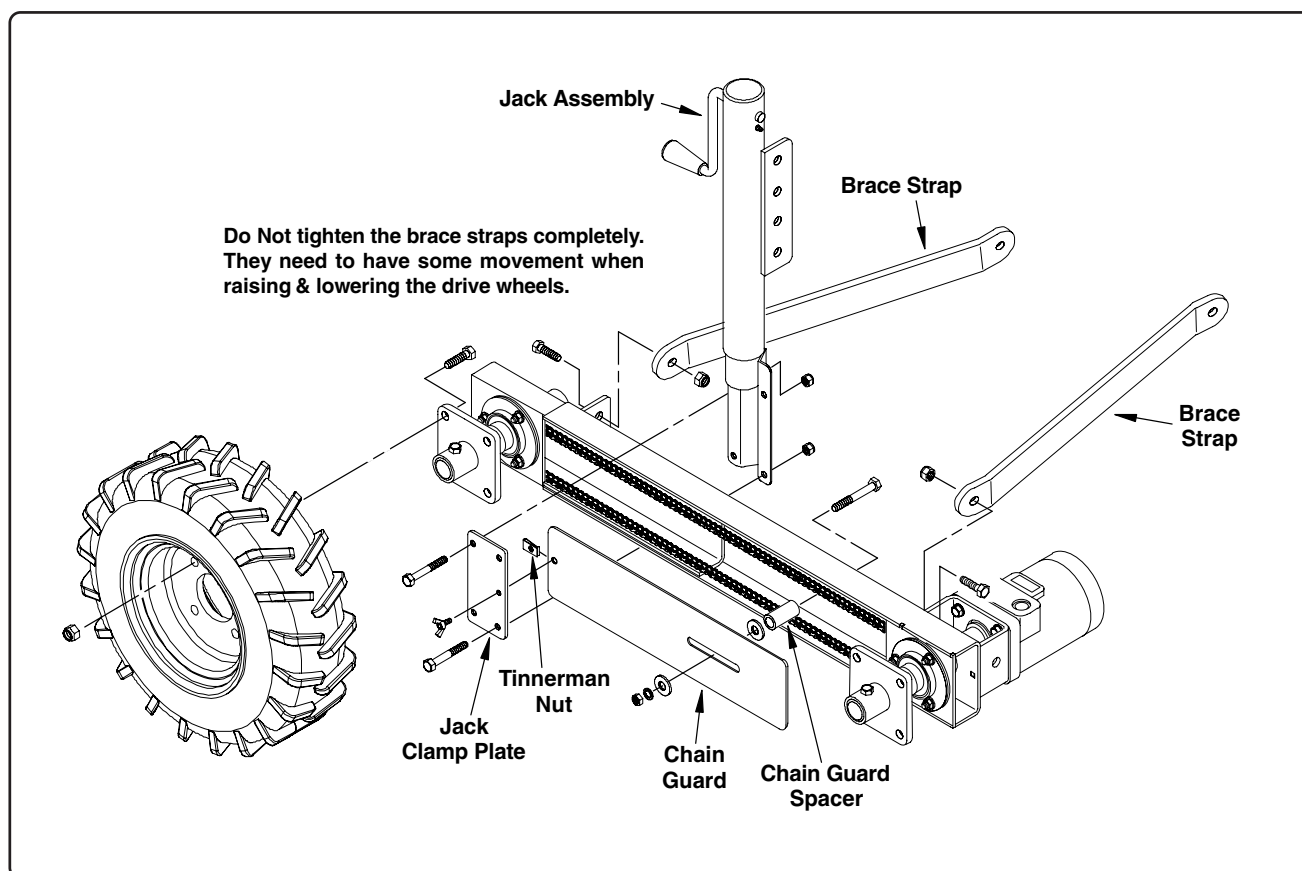
14. Position the jack on the back side of the rear channel and using the jack clamp plate, attach the jack to the channels using four $3/8" \times 3"$ bolts, lock washers and non-lock nuts (See Fig. 4). The hardware only needs to be snug, the jack will be repositioned when attaching the assembly to the incline tube.

Align the small hole in the clamp plate over the tinnerman nut on the chain guard and secure using one $1/4"$ wing bolt (the wing bolt can be tightened, but do not tighten the bolt securing the chain guard at the slotted hole, the guard will move with the jack when it is positioned).

15. Attach a brace strap to the inside of the mounting tab on the rear channel (the mounting tab is on the same end of the channel as the jack).

On the motor end of the channel, attach a brace strap to the motor mount plate as shown in Fig. 4. Secure each strap using one $1/2" \times 1-1/4"$ bolt and lock nut, **do not tighten the hardware completely, the straps need to be able to pivot as the drive wheels are raised and lowered.**

16. Attach the wheels to the wheel hubs using four $1/2" \times 1-1/4"$ bolts and nylon lock nuts per wheel. The drive frame assembly is now ready to be mounted to the incline tube.

**Fig. 4**

DRIVE FRAME ASSEMBLY (CON'T.)

17. Position the drive wheel assembly beneath the incline tube as shown in Fig. 5. Align the jack mounting plate with the clamp band and secure using one 1/2" x 1" bolt and lock nut (the jack mount plate has mounting holes at different heights, all units except 8" use the second hole from the bottom, 8" units will use the bottom hole). Don't tighten the clamp band at this time, you may need some movement when attaching the brace straps.
18. Open the access door on top of the coupler box located on the front section of the hopper. The coupler box is attached to the hopper with two bolts (one on each side of box). These bolts will be removed and replaced with a longer bolt.
Remove one of the existing bolts and its hardware (to help keep the mounting holes aligned, remove and replace the bolt on one side first, then the other).
Replace the existing bolt with a 1/2" x 2" bolt and flat washer (the bolt and washer will be on the inside of the coupler box). 12" single flight augers will use a 5/8" x 2-1/2" bolt.
19. From the outside of the coupler box, install a flat washer and non-lock nut onto the bolt, threading the nut on until finger tight, you will want the bolt to be able to pivot, but not be too loose where it wobbles in the hole (for 12" single flight augers add three washers, then the nut).
Attach the brace strap onto the bolt and add another non-lock nut. Tighten the nuts against the strap (make sure the bolt still has movement in the hopper side).
Attach the brace strap on the opposite side of the coupler box in the same manner.
After the brace straps have been secured it may be necessary to reposition the clamp band, so it forms around the incline tube properly. Once properly positioned, tighten the clamp band.

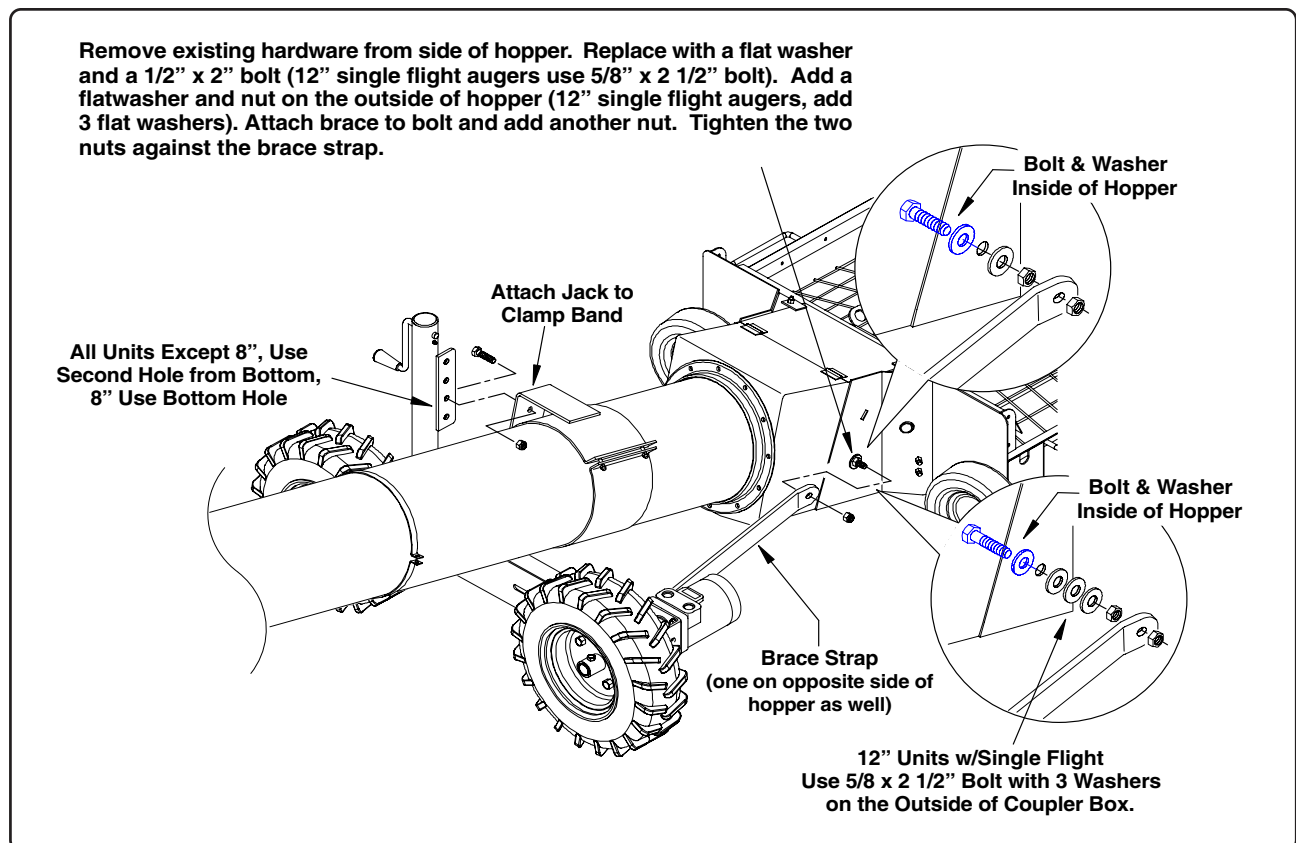


Fig. 5

INSTALL DIRECTIONAL CONTROL VALVE AND HYDRAULIC HOSES

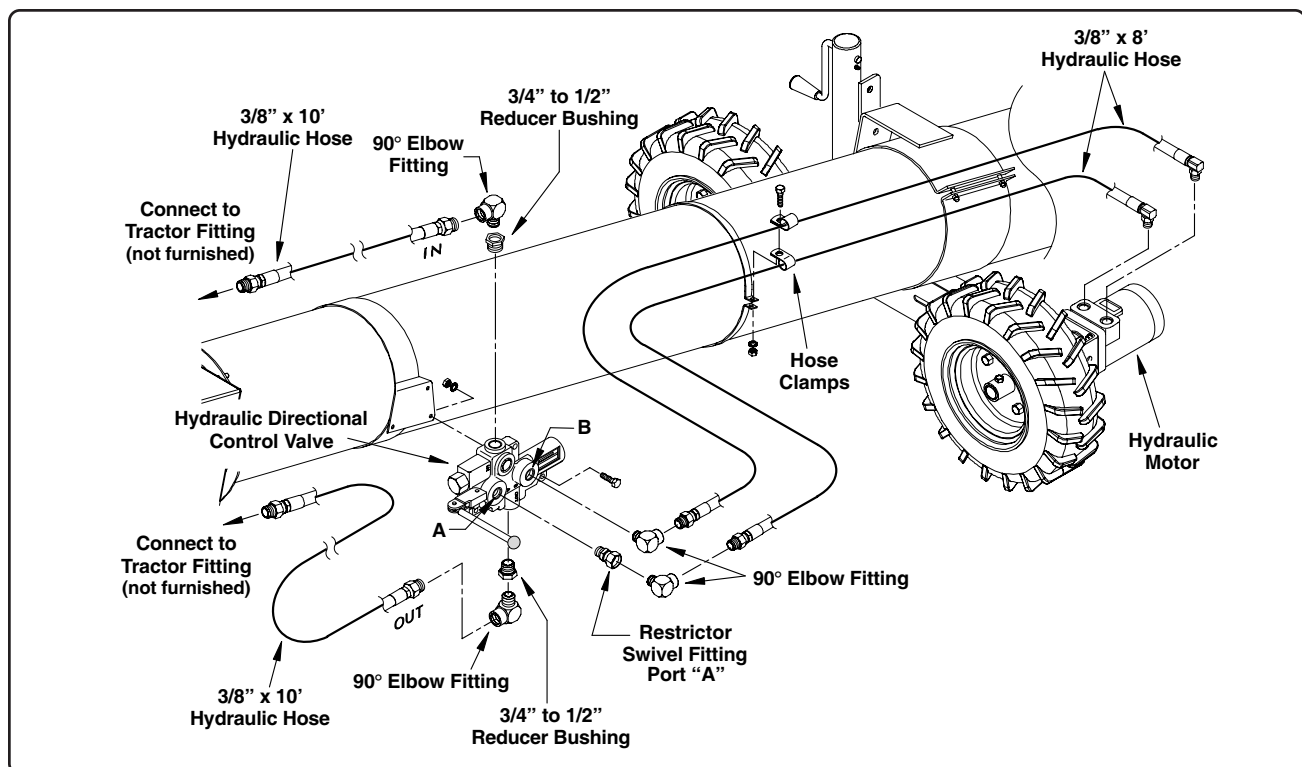
1. Attach the Directional Control Valve to the valve clamp band using three 5/16 x 1-3/4" bolts, lock washers and non-lock nuts (See Fig. 6).
2. Apply Teflon tape or equivalent to the threads on a 90° elbow. Install the elbow into the "B" port on front of the control valve (when tight, the elbow should face towards the hydraulic motor).
3. Apply Teflon tape or equivalent to the threads on the restrictor swivel fitting. Install the fitting into the "A" port on front of the control valve.

Apply Teflon tape or equivalent to the threads on a 90° elbow and install the elbow onto the restrictor fitting (when tight, the elbow should face towards the hydraulic motor).

4. Locate the two 3/4" to 1/2" reducer bushings from the kit. Apply Teflon tape to the threads and install the bushings into the top "IN" and bottom "OUT" ports of the control valve.

Install a 90° elbow into each of the reducers (the elbows should face towards the discharge end of the incline tube). Apply Teflon tape or equivalent to the threads of the elbows before installation.

5. Apply Teflon tape to the ends of the two 10' hoses and connect the hoses to the elbows of the In and Out ports on the top and bottom of the control valve. The other end of these hoses will connect to the tractor's hydraulic system (the fittings are not furnished for tractor hook-up).
6. Apply Teflon tape or equivalent to the threads on the straight ends of the two 8' long hydraulic hoses and connect the hoses to the elbows in ports A and B on front of the control valve.
7. Route the hoses along the incline tube, towards the hydraulic motor. Attach a hose clamp to the hoses and secure them to the hose clamp band using one 5/16 x 1-1/2" bolt, lock washer and non-lock nut.
8. Continue routing the hoses behind the drive wheel and connect them to the top of the hydraulic motor. The hose from port "B" will connect to the outside motor port, the hose from port "A" will connect to the inside motor port (apply a light coat of clean hydraulic oil to the o-rings on the elbows before connecting them to the motor).
9. Check unit operation. See Page 6 for information on proper operating procedures.

**Fig. 6**

PARTS LIST

Page P-1

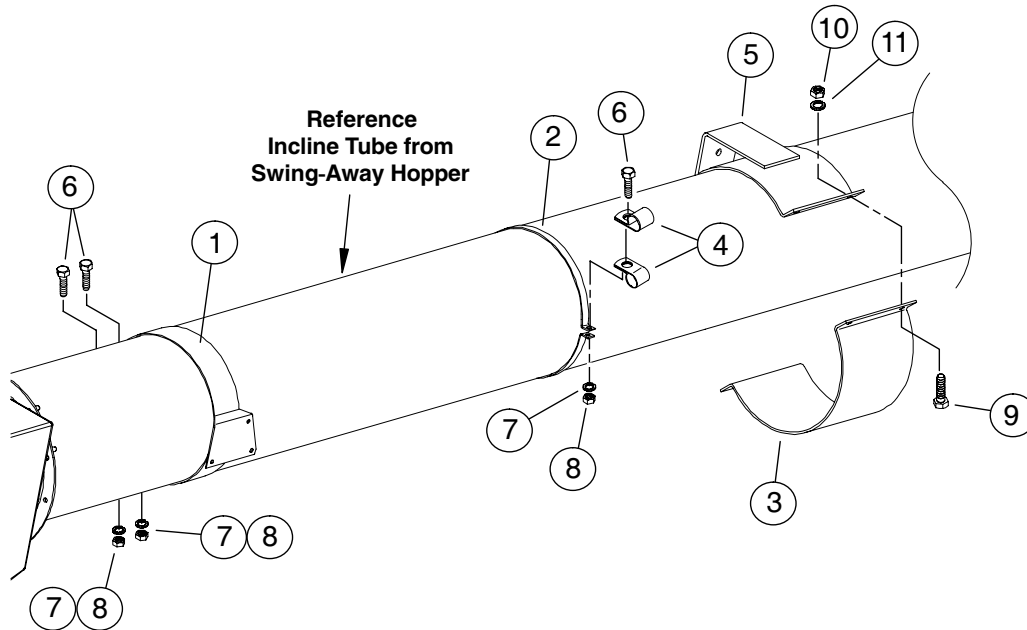
BOLT KIT FOR 8", 10" 12" & 13" DUAL WHEEL HOPPER DRIVE

PART NO.	DESCRIPTION	QTY.	WHERE USED
1002199	Bolt, 3/8 - 16 x 2" (grade 5) plated	2	Wheel Hub to Drive Shaft (Axle)
33136	Nut, nylon lock, 3/8" - 16 plated	2	
33082	Bolt, 1/2" - 13 x 1-1/4" (grade 5) plated	8	Wheel to Wheel Hub
33138	Nut, nylon lock 1/2" - 13 plated	8	
33309	Bolt, 3/8" - 16 x 3/4" (grade 5) plated	4	Hydraulic Motor to Frame
D1150	Washer, lock 3/8" plated	4	
4736	Bolt, 5/16" - 18 x 1-1/2" (grade 5) plated	2	Hydraulic Valve Clamp to Auger Incline Tube
33144	Washer, lock, 5/16" plated	2	
33151	Nut, non-lock, 5/16" - 18 plated	2	
1002215	Bolt, 5/16" - 18 x 1-3/4" (grade 5) plated	3	Hydraulic Control Valve to Valve Clamp
33144	Washer, lock, 5/16" plated	3	
33151	Nut, non-lock, 5/16" - 18 plated	3	
4736	Bolt, 5/16" - 18 x 1-1/2" (grade 5) plated	1	Hose Clamps to Clamp Band
33144	Washer lock, 5/16" plated	1	
33151	Nut, non-lock, 5/16" - 18 plated	1	
1006324	Hose Clamp 5/8"	2	Connects Hoses to Clamp Band
33310	Bolt, 3/8" - 16 x 1-1/2" (grade 5) plated	4	Bolts Half Bands Together
D1149	Nut, non-lock, 3/8" - 16 plated	4	
D1150	Washer, lock, 3/8" plated	4	
1002228	Bolt, 1/2" - 13 x 2" (grade 5) plated	2	Bracket Strap to Incline Tube Coupler Box
33025	Washer, flat, 1/2" plated	4	
D1169	Nut, non-lock, 1/2" plated	4	
1002234	Bolt, 5/8" - 10 x 2-1/2" (grade 5) plated	2	Bracket Strap to Incline Tube Coupler Box for 12" Single Auger
33026	Washer, flat, 5/8" plated	8	
D1170	Nut, non-lock, 5/8" plated	8	
33082	Bolt, 1/2" - 13 x 1-1/4" (grade 5) plated	2	Brace Straps to Drive Frame
1005127	Nut, lock 1/2" - 13 plated	2	
33294	Bolt, 1/2" - 13 x 1" (grade 5) plated	1	Jack to Clamp Band
1005127	Nut, lock 1/2" - 13 plated	1	
4842	Bolt, 3/8" - 16 x 3" (grade 8) plated	4	Jack Clamp Plate to Jack
D1150	Washer, lock, 3/8" plated	4	
D1149	Nut, non-lock, 3/8" - 16 plated	4	
4842	Bolt, 3/8" - 16 x 3" (grade 8) plated	1	Chain Guard to Channel
1013133	Nut, tinnerman, 1/4" - 20 plated	1	
1013131	Wing bolt, 1/4" - 20 plated	1	
33024	Washer, flat, 3/8" plated	2	
D1150	Washer, lock, 3/8" plated	1	
D1149	Nut, non-lock, 3/8" - 16 plated	1	
1002238	Bolt, carriage 5/16" - 18 x 3/4" (gr. 5) plt.	9	Flange Bearings to Channel
33144	Washer, lock, 5/16" plated	9	
33151	Nut, non-lock, 5/16" - 18 plated	9	
33243	Pin, roll, 5/16" x 1-3/4"	2	Sprocket to Drive Shaft
035594	Washer, flat, 1-1/2" O.D x 1" I.D.	4	Spacing Behind Sprocket
1002251	Bolt, carriage 1/2" - 13 x 1" (gr. 5) pltd.	2	Fastens Channels Together
D1143	Washer, lock, 1/2" plated	2	
D1169	Nut, non-lock, 1/2" - 13 plated	2	
1031968	Spacer, 5/8" O.D. x 1-3/4" long	1	Spacer for Chain Guard

PARTS LIST

CLAMP BANDS, HALF BANDS, HOSE CLAMPS

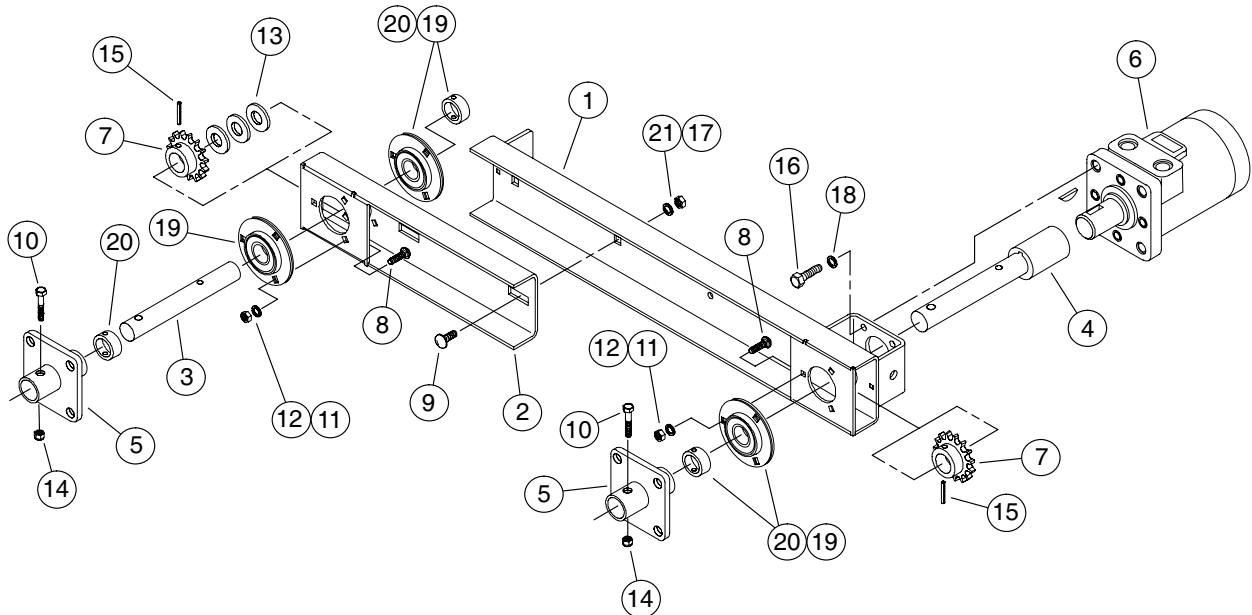
8", 10" 12" & 13" DUAL WHEEL HOPPER DRIVE



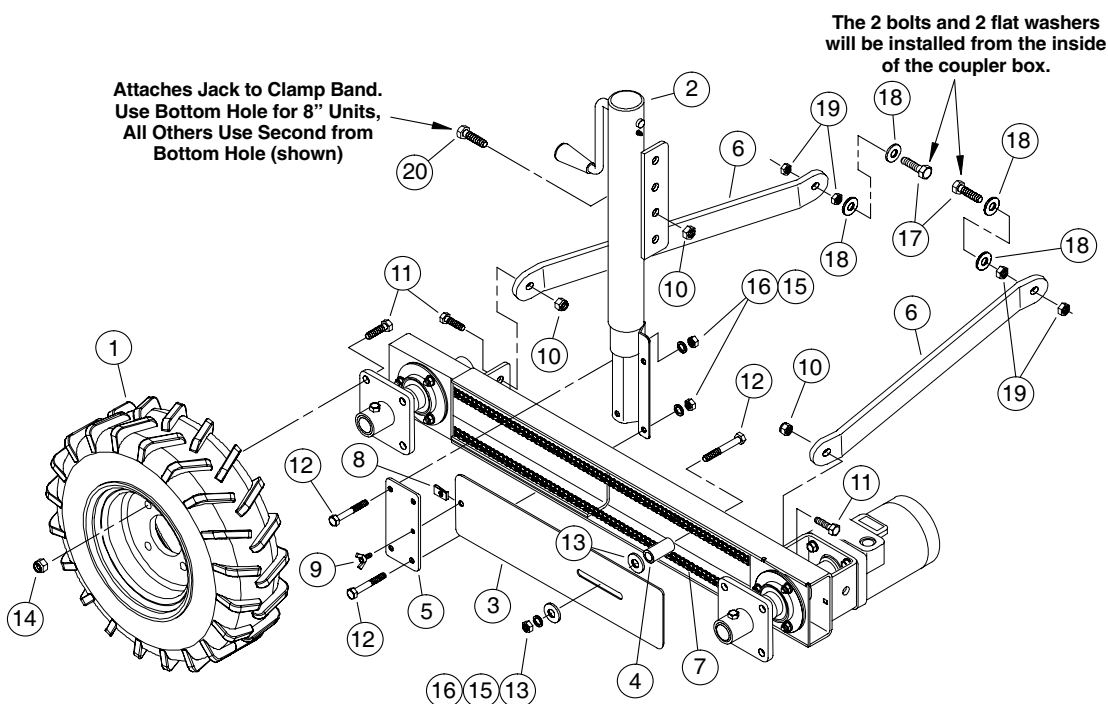
REF. NO.	PART NO.	QTY.	DESCRIPTION
1	1022923	1	Clamp band, hydraulic valve, 8"
1	1022924	1	Clamp band, hydraulic valve, 10"
1	1022925	1	Clamp band, hydraulic valve, 12"
1	1022794	1	Clamp band, hydraulic valve, 13"
2	1023035	1	Clamp band, hydraulic hose support, 8"
2	1023036	1	Clamp band, hydraulic hose support, 10"
2	1023037	1	Clamp band, hydraulic hose support, 12"
2	1023038	1	Clamp band, hydraulic hose support, 13"
3	508109	1	Clamp, half band, 8"
3	5930A1	1	Clamp, half band, 10"
3	5931A1	1	Clamp, half band, 12"
3	1022808	1	Clamp, half band, 13"
4	1006324	2	Clamp, hydraulic hose
5	1032024	1	Half band weldment, 8"
5	1032069	1	Half band weldment, 10"
5	1032070	1	Half band weldment, 12"
5	1032071	1	Half band weldment, 13"
6	4736	3	Bolt, 5/16" - 18 x 1-1/2" (grade 5) plated
7	33144	3	Lock washer, 5/16" plated
8	33151	3	Nut, 5/16" - 18 non-lock plated
9	33310	4	Bolt, 3/8" - 16 x 1-1/2" (grade 5) plated
10	D1149	4	Nut, 3/8" - 16 non-lock plated
11	D1150	4	Lock Washer, 3/8" plated

DRIVE MOTOR FRAME, WHEEL HUBS

8", 10" 12" & 13" DUAL WHEEL HOPPER DRIVE



REF. NO.	PART NO.	QTY.	DESCRIPTION
1	1031975	1	Back channel weldment
2	1031976	1	Front channel weldment
3	1031850	1	Shaft, drive
4	1031979	1	Shaft, drive (with coupler)
5	1022799	2	Wheel hub
6	1022805	1	Motor, hydraulic
7	420080	2	Sprocket, 50B 13 tooth, 1" bore
8	1002238	9	Bolt, carriage, 5/16" - 18 x 3/4" (grade 5) plated
9	1002251	2	Bolt, carriage, 1/2" - 13 x 1" (grade 5) plated
10	1002199	2	Bolt, 3/8" - 16 x 2" (grade 5) plated
11	33144	9	Lock washer, 5/16" plated
12	33151	9	Nut, non-lock, 5/16" plated
13	035594	As req'd.	Washer, flat, 1.50" O.D. x 1" I.D.
14	33136	2	Nut, nylon lock, 3/8" - 16 plated
15	33243	2	Pin, roll, 5/16" x 1-3/4"
16	33309	4	Bolt, 3/8" - 16 x 3/4" (grade 5) plated
17	D1143	2	Lock washer, 1/2" plated
18	D1150	4	Lock washer, 3/8" plated
19	6383C	6	Flangette bearing
20	6390D	3	Bearing and lock collar, 1" spher.
21	D1169	2	Nut, 1/2" non-lock

CHAIN, CHAIN GUARD, JACK, WHEEL & TIRES**8", 10" 12" & 13" DUAL WHEEL HOPPER DRIVE**

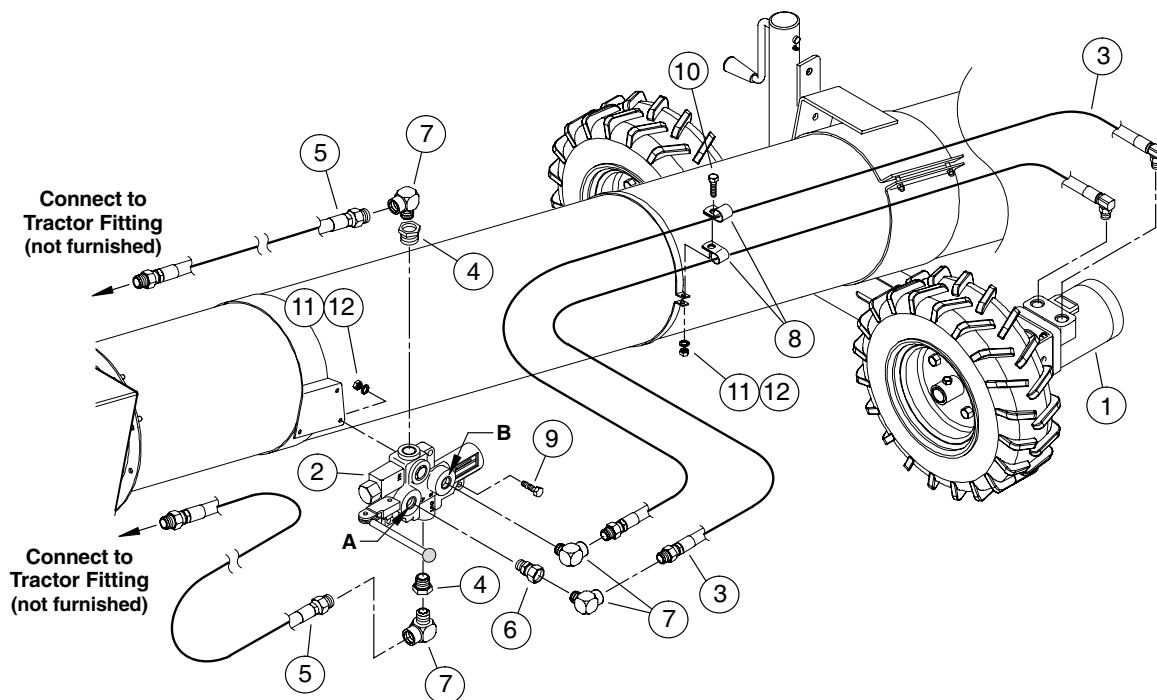
REF. PART
NO. NO. QTY. DESCRIPTION

1	1024650	2	Wheel and tire, 4.8/4.0-8, 2-ply
2	1032052	1	Jack assembly
3	1031843	1	Guard, chain
4	1031968	1	Spacer, chain guard
5	1031841	1	Clamp, jack
6	1031842	2	Brace, strap, 8" units
6	1032062	2	Brace, strap, 10" units
6	1032249	2	Brace, strap, 12" units
6	1032063	2	Brace, strap, for 12" units w/twin screw hopper
6	1032064	2	Brace, strap, 13" units
7	1032448	1	Chain, RC-50, 110 pitch w/connecting link
8	1013133	1	Nut, tinnerman, 1/4-20
9	1013131	1	Bolt, wing, 1/4-20 x 1/2" plated
10	1005127	1	Nut, 1/2" - 13 lock

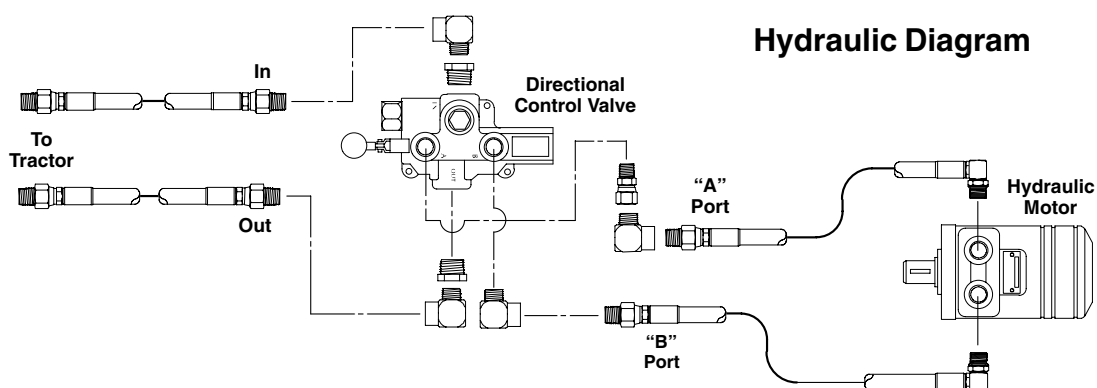
REF. PART	QTY. DESCRIPTION
NO. NO.	
11	33082 10 Bolt, 1/2" - 13 x 1-1/4" (grade 5) plt.
12	4842 5 Bolt, 3/8" - 16 x 3" (grade 5) plt.
13	33024 2 Washer, flat, 3/8" plt.
14	33138 8 Nut, nylon lock, 1/2" - 13 plt.
15	D1150 5 Lock washer, 3/8" plt.
16	D1149 5 Nut, 3/8" - 16 plt.
17	1002228 2 Bolt, 1/2" - 13 x 2" (grade 5) plt.
17	1002234 2 Bolt, 5/8" - 11 x 2-1/2" (grade 5) plt. for 12" single auger
18	33025 4 Washer, flat, 1/2" plt.
18	33026 8 Washer, flat 5/8" plt. for 12" single auger
19	D1169 4 Nut, 1/2" - 13 non-lock plt.
19	D1170 4 Nut, 5/8" - 11 non-lock plt. for 12" single auger
20	33294 1 Bolt, 1/2" - 13 x 1" (grade 5) plt.

DIRECTIONAL CONTROL VALVE, HYDRAULIC HOSES

8", 10" 12" & 13" DUAL WHEEL HOPPER DRIVE



REF. NO.	PART NO.	QTY.	DESCRIPTION
1	1022805	1	Motor, hydraulic
2	1022806	1	Valve, hydraulic directional control
3	1022807	2	Hose, hydraulic, 3/8" x 8' long
4	1022809	2	Bushing, reducer, 3/4" to 1/2"
5	1022812	2	Hose, hydraulic, 3/8" x 10' long
6	1032084	1	Restrictor, hydraulic, 1/2" ML-FM swivel
7	106413	4	Elbow, hydraulic, 90° .5M-.5F pipe
8	1006324	2	Clamp, hydraulic hose
9	1002215	3	Bolt, 5/16" - 18 x 1-3/4" (grade 5) plated
10	4736	1	Bolt, 5/16" - 18 x 1-1/2" (grade 5) plated
11	33144	4	Lock Washer, 5/16" plated
12	33151	4	Nut, 5/16" - 18 non-lock plated





Hutchinson/Mayrath

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