

## **396-6396Y1** Hydraulic Seed Drive Kit, 1 Section, Installation Instructions

### Kit Number: 815-00-100100 Kit Description: Hydraulic Seed Drive Kit, 1 Section



<u>Kit Number:</u> 815-00-100100: Hydraulic Seed Drive Kit, 1 Section

Note: Hydraulic hoses and #40 Chain Not Included



### Parts List

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	361-6540Y1	Mount Bracket, Hydraulic Motor, Encoder, Idler Sprocket to 7" Bar	1
2	164-FTA1769	4.9 CID Hydraulic Motor with PWM Hydraulic Valve with Bypass	1
3	204-04- 464360178S1	Dickey John 360 pulses/rev shaft sensor w/ 1' of Cable and 3-pin WP Tower Flow Connector	1
4	229-03-467092221	Dickey John 360 pulse/rev encoder coupler - adapts from encoder to 1/4" male bolt thread	1
5	321-04-F	1/4" Nylon Flange Nut	1
6	323-08	1/2" Flange Nut (Included with 380-1001)	2
7	361-6546Y1	Bracket, Encoder Mount	1
8	380-1001	1/2" U-bolt Kit - fits 7" x 7" tube - (7" opening ) includes flange nuts	1
9	361-6556Y1	Drive Sprocket, Size 40, 12 Tooth, 1" Bore, Keyed	1
10	400-6559Y1	Spacer Bushing, Steel, 1/2" ID x 15/16" OD x 3/8" L	2
11	361-6558Y1	Idler Sprocket, Size 40, 14 Tooth, 1/2" Bore	1
12	300-080300-5	1/2" x 3" Hex Head Bolt - G5	1
13	300-080200-5	1/2" x 2" Hex Head Bolt - G5	2
14	300-040100-5	1/4" x 1" Hex Head Bolt - G5	1
15	321-08	1/2" Nylock Nut	3
16	330-08	1/2" Flat Washer	1
17	341-080008	Self Drilling Screw - Size 8 x 1/2" (16 Thread)	3
18	361-17388	Split Sprocket - Size 40 - 32 Tooth For7/8" Hex Shaft	1
19	305-S080008-SS	Socket Head Bolt, Size 8-32 x 1/2", SS	2



### Installation Instructions



#### **Bracket Mounting**

1. Attach Bracket to implement frame Perpendicular to Shaft being driven using included U-bolt and check for clearance.

Note: For Great Plains Drill, bracket mounts on the front of the Tool bar. On Landoll Drills, the bracket is mounted on top of the tool bar as shown Below



#### Hydraulic Motor Mounting

1. Attach Hydraulic motor to the Right side of the Bracket using included 1/2" x 2" Bolts and nuts.

Note: No matter the Bracket orientation the motor will be attached with the hydraulic Block facing up.



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### Step by Step Instructions



#### **Sprockets and Encoder Installation**

- Attach Idler Sprocket using 1/2" x 3" Bolt, spacers, washers, and 1/2" Nut as shown. Note: Depending on bracket orientation the idler sprocket will always be in the vertical slot
- 2. Install 12 Tooth Drive sprocket to hydraulic motor shaft making sure to line it up with the idler sprocket. Then tighten set screw.
- 3. Attach Encoder Bracket to the encoder using Self tapping screws making sure not to over tighten them.
- 4. Thread Encoder adapter into the hydraulic motor shaft until it is hand tight.
- 5. To mount the encoder Insert the encoder shaft into the adapter. Then using 1/4" x 1" Bolt and nut attach encoder Bracket to the main bracket. Then tighten the set screw on the encoder adapter to engage the flat portion of the encoder er with the set screw.





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#### For each Great Plains Drill Section

#### (not required on a Landoll installation)

#### Idler Extension Bracket Installation [Kit 815-00-100150]

- Depending on bracket orientation Install Idler Extension Bracket [400-6595Y1] as shown below. Use two 1/2" bolts [300-080200-5 – 1/2" x 2" Hex Head Bolt - G5] and two 1/2" nuts [321-08-F -- 1/2" Nylon Flange Nut]. Bottom Bolt should be at the bottom of the slot.
- 2. Install idler sprocket into the top horizontal slot using 1/2" x 2-1/2" bolt (supplied in this extension kit), washer, a <u>single</u> spacer bushing, and nut as shown below.





### Installation Instructions (Great Plains 3S-4000)

#### **Installation**

- 1. Clutch jaws, and ground drive chains need to be removed from the Drill. So all sections spin independently from each other and the ground drive.
- 2. Install 32 Tooth split sprockets to main driven shaft
- 3. Attach brackets to tool Bar.
- 4. Install chains, using the idler sprocket in the slot to adjust the chain tightness, then install hydraulic hoses and harnessing.





### Installation Instructions (Landoll 5531)

#### Installation

- 1. Clutch jaws, and ground drive chains need to be removed from the Drill. So all sections spin independently from each other and the ground drive.
- 2. Install 32 Tooth split sprockets to main driven shaft
- 3. Attach brackets to tool Bar.
- 4. Install chains, using the idler sprocket in the slot to adjust the chain tightness, then install hydraulic hoses and harnessing.



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### Installation Instructions (Chain Layout)





### Installation Instructions (Hydraulic Schematic)

#### Hydraulic Hose Installation

- 1. Pressure from the tractor will be routed and inserted into the inlet port (Inlet port is labeled P on the hydraulic block)
- 2. From the outlet on the hydraulic block (labeled T) Attach hose and run to inlet (P port) of next section. Repeat for all sections.
- 3. On the last section motor the oulet (labled T) will be ran back to return on the tractor.
- 4. On a 2 hydraulic drive or more system fully open the bypass valve on each hydraulic block to allow hydraulic oil to pass through all motors.



# PumpRight Hydraulic ConnectionsPWM ValveLoad Sense Port—For power

Load Sense Port—For powe beyond hydraulic use only.



Bypass Valve—Remove the cap to access a bypass needle valve. This valve is shipped from the factory closed. The only case when valve should be open is when running in series with other hydraulic motors.

Depending on your tractor and exact hydraulic plumbing scenario your pump may turn very slowly when it should stop. To stop the pump completely, open the bypass valve slightly.

To adjust the Bypass Needle Valve, first loosen the lock nut. Do not overtighten the needle valve.

### included on return port

#### Pump Rotation Check Valve

A check valve is included on the outlet port of the hydraulic valve. This prevents the pump from running in the wrong direction. If ran in the wrong direction, liquid will be pumped, however the hydraulic valve will not be able to control the flow. The check valve can be identified by the Part Number 1108R stamped on it and a flow direction arrow.

#### How it Works with Power Beyond Hydraulics

This valve is designed to work with power beyond hydraulics. This configuration will not require a standard tractor remote hydraulic valve. First, remove the load sense plug and install a #6 male boss x #6 JIC adapter fitting, SurePoint PN 161-01-6MB-6MJ. Then run a 3/8" or 1/4" hydraulic hose back to the tractor. This hose will connect to the load sense port on the tractor. **The bypass valve must be closed to use power beyond hydraulics.** The load sense line will signal the tractor hydraulic system to supply the flow needed by the pump to meet your application rate. The SurePoint valve has an internal load sense check valve, which is required for power beyond hydraulics.