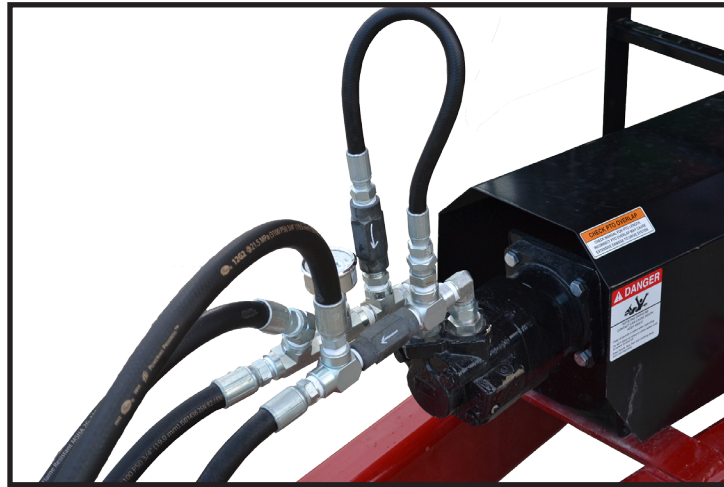


OPERATOR'S MANUAL

AND SET UP INSTRUCTIONS FOR GRAIN CART HYDRAULIC DRIVE KIT



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IMPORTANT - Before installation and operation of the hydraulic drive, make sure to read this and all owner's manuals on the machine.

IMPORTANT - MAKE SURE THAT ALL POWER IS SHUT OFF BEFORE INSTALLING THE HYDRAULIC DRIVE. Installation work to be performed by qualified servicemen only. Please refer to your operator's manual for additional safety information.

Be sure to use SAE 10W40 or SAE 5W30 oil or tractor hydraulic fluid with high levels of zinc anti-wear additives (see your tractor owner's manual). Type A, F or Dextron transmission fluid must *Not* be used. Hydraulic oil must never exceed 180 Degrees Fahrenheit. For optimum performance use 5 to 25 micron filtration on system.

CAUTION - Hydraulic oil leaking under pressure can penetrate the skin and cause infection or other injury.

To prevent personal injury:

Never use your hand to check for suspected leaks under pressure. Use a piece of cardboard or wood for this purpose. Before applying pressure, make sure all connections are tight and components are in good condition. Relieve all pressure, before disconnecting fluid lines. If injured by leaking fluid see your doctor immediately.

Before operating the hydraulic drive, make sure that your tractor hydraulic system delivers between 25 and 35 gallons per minute. **CAUTION** - The maximum pressure on the hydraulic motor is 2800 PSI and the maximum flow is 35 gallons per minute (Intermittent Use). AT NO TIME during this operation of this motor should the maximum pressure and the maximum flow occur simultaneously. (If the hydraulic drive is used continuous, the maximum GPM is 33)

Break In Period - Before placing the hydraulic motor into service, be certain to run the system at 1/2 speed under no load for 15 minutes. **CAUTION** - Before operating the hydraulic drive, make sure that everyone is clear of the equipment before applying power. Operate the hydraulic drive from a safe distance. Always keep hands, feet, and clothing away from moving parts while the unit is in operation.

Before filling the grain cart, make certain that the gate indicator is in the closed position. Fill the grain cart with grain. After the cart is filled and ready for unload, position the auger to the upright position (follow the instructions in the grain cart owner's manual) and engage the hydraulic drive (start at idle speed and increase to operating speed). Slowly open the inner gate while checking the pressure gauge on the hydraulic motor. Once the pressure gauge reading is between 1800 and 1900 PSI, discontinue opening the gate (pressure is low under no load). **NOTE** - The size of the gate opening allowed and the unloading time will vary as to the type of grain, moisture content, quality of the grain and the GPM delivery of the tractor. Follow your owner's manual for details on complete cleanout. Once the grain has been unloaded from the tank of the grain cart, disengage the hydraulic drive and return the auger to the lowered position.

Note: If only one outlet is available, remove two 3/4" x 66" hydraulic hoses and plug the two tee fittings. (Performance of hydraulic drive will be reduced.)

Hydraulic Drive Selection

30 GPM

12 Cubic Inch Motor (1-1/4" Drive)

19 Cubic Inch Motor (1-3/4" Drive)

70 GPM

17 Cubic Inch Motor (1-3/4" Drive)

Visit the following website for a Quick Reference Guide.

[HTTP://WWW.ACEPUMPS.COM/_ASSETS/LITERATURE/HSG-2011.PDF](http://www.acepumps.com/_ASSETS/LITERATURE/HSG-2011.PDF)

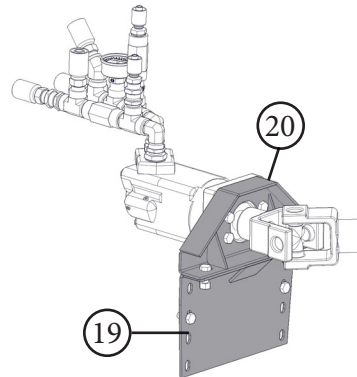
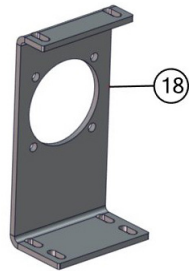
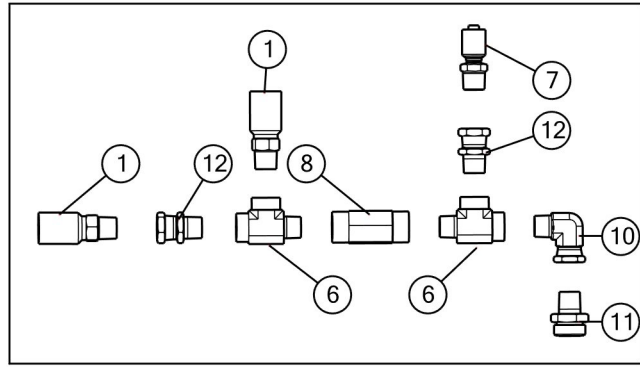
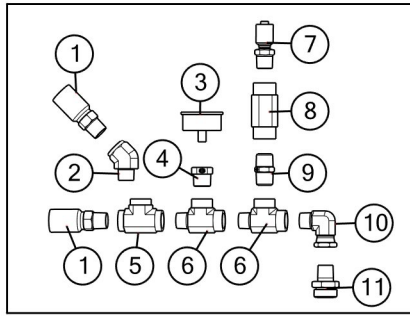
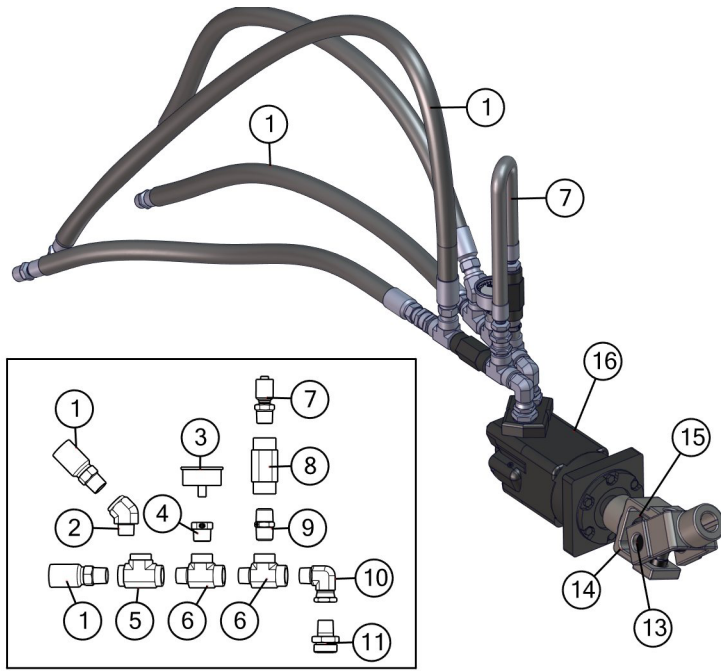
Hydraulic Drive Kit Parts List

#	Description	Part. No.	Qty.
1	3/4" x 66" Hydraulic Hose	JM0020521	4
2	3/4" Male NPT x 3/4" Female NPT 45 Degree Elbow	JM0010139	1
3	PSI Gauge (4000PSI)	JM0010158	1
4	3/4" Male NPT x 1/4" Female NPT Reducer	JM0010136	1
5	3/4" Female NPT Tee	JM0010138	1
6	3/4" Male NPT x 3/4" Female NPT x 3/4" Female NPT	JM0010140	4
7	1/2" x 24" Hydraulic Hose	JM0031188	1
8	Check Valve 3/4" 5PSI	JM0010153	2
9	3/4" Male NPT x 3/4" Male NPT Nipple	JM0010137	1
10	3/4" Male NPT x #12 Female JIC x 90 Deg	JM0010135	2
11	#12 Male JIC x #16 Male O-Ring Straight	JM0010144	2
12	3/4" Male NPT x 3/4" Female NPT Swivel	JM0010152	2
13	U-Joint Cross Member (14R) (12 Cubic Inch Motor)	JM0024310	1
13	U-Joint Cross Member (44R) (19, 20, 21 Cubic Inch Motor)	JM0017958	1
14	U-Joint 1-1/4" to 1-1/4" (12 Cubic Inch Motor)	JM0026844	1
14	U-Joint 1-1/2" to 1-3/4" (19 & 20 Cubic Inch Motor)	JM0026841	1
14	U-Joint 2-1/4" to 1-3/4" (21 Cubic Inch Motor)	JM0026840	1
15	3/8" x 1/2" Set Screw	JM0019044	1
16	12 Cubic Inch Hydraulic Motor, 1-1/4" shaft (DRF-12)	JM0026847	1
16	19 Cubic Inch Hydraulic Motor, 1-1/4" shaft (DR19)	JM0026849	1
16	20 Cubic Inch Hydraulic Motor, 50 gpm	JM0010184	1
16	21 Cubic Inch Hydraulic Motor, 70 gpm, 2-1/4" shaft	JM0020637	1
17	Seal Kit for 12 Cubic Inch Motor (2 Speed Hydraulic Drive)	JM0026833	1
17	Seal Kit for 12 & 19 Cubic Inch Motor (Single Speed Hydraulic Drive)	JM0026834	1
17	Seal Kit for 21 Cubic Inch Motor (Rear)	JM0031191	1
17	Seal Kit for 21 Cubic Inch Motor (Shaft)	JM0031192	1
18	Universal Mount	JM0029820	1
19	Lower Mount	JM0010209	1
20	Upper Mount	JM0010211	1

*Not Shown



Hydraulic Drive Kit



MOUNTING BRACKETS

1. Remove the Driveline Shield

2. Remove the PTO.

3. Decide which motor mounts will be needed.

-Use the combination of motor mounts that will give the Hydraulic Motor driveshaft, and the grain cart's driveline a less than 6 degree difference. (Keep unused mounts for future cart model change.)

4. Attach the motor mounts to the grain cart. (For all of the motor mounts the bend needs to go to the inside.)

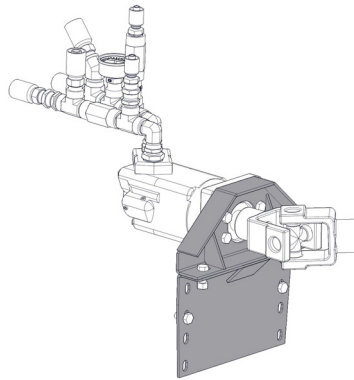
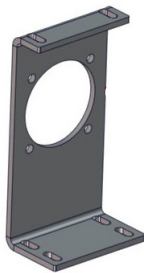
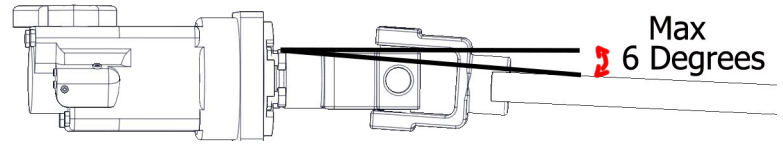
-Use (2) 1/2" x 1" hex bolts and (2) 1/2" lock nuts.

5. Attach the motor to the driveline. Tighten the two set screws on the u joint.

6. Attach the motor to the motor mounts. Use (2) 1/2" x 1" hex bolts and (2) 1/2" lock nuts.

7. Double check all of the hardware used to install the hydraulic motor. Make sure all the hardware is tightened

8. Reinstall the driveline shield.





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