

GX5



GX5 LFP120



GX5 LFP160

PUMP MODEL	DIAPHRAGMS	MAX FLOW (GPM)	MAX GPA ON 40' @ 5 MPH	MAX GPA ON 60' @ 5 MPH
GX5 LFP80	3	18	45	30
GX5 LFP120	3	28	70	47
GX5 LFP160	4	35	87	58
GX5 D250	6	55	135	90

S/N STICKER



NOTE: This is only a guide! Please consult your OEM dealer for detailed instructions or troubleshooting!



LFP SPECIALTY PUMP FEATURES:

- Low Maintenance
- Long lasting BlueFlex diaphragms for resistance to applying chemicals and aggressive liquid fertilizers.
- Minimal Hydraulic Oil Usage
- High Pressure Capabilities
- Stainless Steel Components
- All parts in contact with fertilizers are polypropylene & stainless steel for high flow and better corrosion resistance.
- The 3+ cylinder design will allow the pump to prime faster with less vibration during use.
- Range of 0.5 - 18 GPM low rate BlueFlex Technology for long life diaphragms, resistance to applying chemicals and aggressive fertilizers.

GX5



AGXCEL'S PWM

Utilizing AgXcel's proprietary PWM Hyd Valve for unmatched Hydraulic management & system performance.

- Our GX5 Hydraulic systems use low pressure diaphragm pumps that can apply a wide variety of chemicals with different viscosities, from .5 GPM to 55 GPM.
- Our GX5 low pressure diaphragm hydraulic pump systems are simultaneously exquisitely sophisticated in terms of precision application of liquid fertilizer, perfectly in line with the need to protect the environment of today and tomorrow.
- Designed for a wide range of professional agricultural application environments:
 - **Planting**
 - **Drilling**
 - **Side Dressing**
 - **Strip-Tilling**
 - **Pre-Bedding for Potatoes**
 - **Custom Applications**



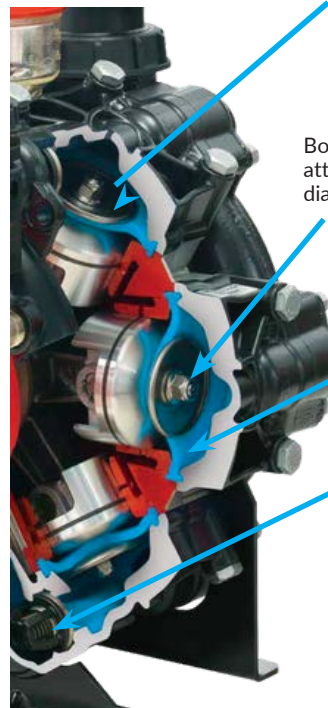
Nº2 High Quality needle bearings under the connecting rods to reduce friction



Pump head in Nylon for aggressive chemicals.



For all those especially demanding jobs go with the BLUEFLEX diaphragms that are a step ahead. Go beyond your expectations!



Large valves in AISI 316 for best hydraulic efficiency and better resistance to chemical agents.

Bolts and nuts for attaching the diaphragm in AISI 316.



BlueFlex Diaphragm

Long-life BlueFlex® diaphragms for resistance to spraying chemicals and aggressive liquid fertilizers.

Seals in Viton on our LFP Pumps.



GX5 LFP 80

The GX5 LFP45 is a great pump to use with vApplyHD. Minimal to Zero pulsation for steady, consistent flow. Low maintenance enhanced with Blueflex Technology.



QUICK REFERENCE GX5 KITS



DIAPHRAGM KITS	PN#	DESCRIPTION
	55564	LFP45/BP45 BLUE FLEX DIAPHRAGM KIT
	55568	LFP 45 VITON DIAPHRAGM KIT
	55570	LFP 80 BLUE FLEX DIAPHRAGM KIT
	55569	LFP 80 VITON DIAPHRAGM KIT
	37703	D70 BLUE FLEX DIAPHRAGM KIT
	37708	D115 BLUE FLEX DIAPHRAGM KIT
	55572	LFP120 BLUE FLEX DIAPHRAGM KIT
	55574	LFP120 VITON DIAPHRAGM KIT
	37730	D160 BLUE FLEX DIAPHRAGM KIT
	37732	D250 BLUE FLEX DIAPHRAGM KIT



VALVE KITS	PN#	DESCRIPTION
	55565	BP45 VALVE KIT
	55566	LFP 45 VITON VALVE KIT
	55576	BP 80 VALVE KIT
	55575	LFP 80 VITON VALVE KIT
	29934	D70 VALVE KIT
	29936	D115 VALVE KIT
	55575	LFP120 VITON VALVE KIT
	29937	D160 VALVE KIT
	29930	D250 VALVE KIT



O'RING KITS	PN#	DESCRIPTION
	37760	BP45 O'RING KIT
	37735	LFP 45 VITON O'RING KIT
	37772	BP 80 O'RING KIT
	37761	LFP 80 VITON O'RING KIT
	29935	D70 O'RING KIT
	29922	D115 O'RING KIT
	34739	LFP120 VITON O'RING KIT
	29905	D160 O'RING KIT
	29903	D250 O'RING KIT

37720	D70 DAMPER DIAPHRAGM
55197	D70 DAMPER DIAPHRAGM CLAMP

57489	OIL QUART
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AgXcel Fertilizer Application System Overview

Thank you for purchasing an AgXcel Precision Liquid Fertilizer Application System (FAS) for your liquid placement requirements. The AgXcel FAS system can be integrated into the following OEM controllers:

- AgLeader
- Case
- John Deere
- Trimble
- Raven
- Top Con
- Outback

This integration into these displays will require each of the OEM's Liquid Control Module which will need to be purchased from your local OEM dealer. The rate controller will provide the data required to manage the speed of the AgXcel electric or hydraulic pumps based on the flow response of the flow meter and the vehicle speed. The FAS system is also capable of managing section controls, also referred to as swath control, to minimize overlap areas with optional section control valves.

INITIAL INSTALLATION STEPS

- Install the OEM display and Liquid Control Module per OEM instructions.
- Open the AgXcel GX packages. Layout and familiarize yourself with the components.
- Mount the GX5 system on your equipment.
- Plumb the tank to the GX5. Pump kit includes a 30 mesh filter.
- Install the manifold system. This is a GX1 chassis base bracket that have floating ball indicators. These will mount on the tool bar. Check valves should be mounted according to the mounting instructions provided and plumbing to each row unit delivery point from the floating ball indicators.
- Attach the flow meter outlet to section valve or manifold inlet. If using section valves, attach section valve outlets to the corresponding floating ball indicator inlets.
- Attach harnesses to the appropriate OEM liquid rate controller.
- Setup OEM controller to manage. An AgXcel quick start is provided according to integration provided.
- Fill system with water and conduct initial operation and tests to ensure all setting and calibrations are correct.
- Winterize system with RV antifreeze if freezing temperatures are expected.

AGXCEL MAGNETIC FLOWMETER OPTION

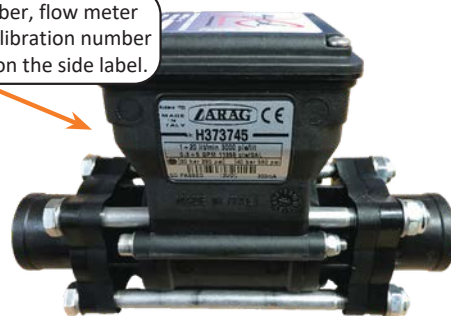
(Read Instructions Completely before Beginning Installation)

AGXCEL ORION 2+ FLOWMETERS

The AgXcel Mag Flowmeter is a magnetic flowmeter, also known as an electromagnetic flowmeter. A magnetic field is applied to the metering tube, which results in a potential difference proportional to the flow velocity perpendicular to the flux lines. The physical principle at work is electromagnetic induction. The Mag Meter is superior to other flowmeters since there are no moving parts to replace or maintain when dirty or fertilizer with particles is present. Also given that the Mag Meter detects the flow of ions in the liquid, it can therefore accommodate for viscosity or liquid density changes. Given the superior features of the Magnetic Flowmeter, a quick catch test is always recommended to ensure precision application.

GX5

Serial number, flow meter range and calibration number are all listed on the side label.



The new style Magnetic Flow Meters have a black body casing with an integrated AMP Super seal connector.



When using a magnetic flow meter one of the harnesses below must be used for the OEM controller to be able to calculate the flow. See chart below.

Orion 2+ Magnetic Flowmeters:

- 0.053 - 5.3 GPM.....11355
- 0.53 - 53 GPM.....1135
- 2.11 - 211 GPM.....284

A controller that requires a DB8 harness is due to the fact that when inputting the flow meter cal number, some controllers can only input 4 digits. A DB8 harness will take the pulses per gallon and divide it by 8. Giving you a 4 digit cal number.

NOTE: To get the cal numbers for Micro-Trak controllers the formula is - Divide by 8, multiply by 2.

STANDARD ADAPTER HARNESS.
P/N - 53671



DIVIDE BY 8 HARNESS
P/N - 38228

AGXCEL TURBINE FLOW METERS

FM750 Reg
Micro-Trak Cal Number - 145 (SprayMate, Auto-X)
Pulses Per Gallon - 72.50 (JD, AGL, Trimble)
Pulses Per 10 Gallon - 725 (Raven)

FM750 LF
Micro-Trak Cal Number - 466 (Spraymate, Auto-X)
Pulses Per Gallon - 233 (JD, AGL, Trimble)
Pulses Per 10 Gallon - 2330 (Raven)



AGXCEL TURBINE FLOWMETER OPTION

(Read Instructions Completely before Beginning Installation)

AGXCEL TURBINE FLOWMETER

AgXcel flowmeterkits consist of the flowmeter, sensor, mounting bracket and hose barb fittings. The FM750 GFN turbine flowmeter requires a minimum of 24" of hose, with a gentle curve, should be used after the flowmeter outlet before any fittings are inserted. The FM750 GFN is bidirectional so it works with flow in either direction. The FM750 calibration number is stamped on a metal tag attached to the flowmeter.

The FM750 GFN may need to be disassembled for cleaning or to remove an obstruction.

**** WARNING!!** If disassembled for cleaning be extremely careful not to damage or alter the turbine or casing for this will VOID your warranty**

The diagram below shows the components and proper location of each. If necessary use a mild detergent and brush to clean the flowmeter. The turbine should spin freely in the housing. After disassembly, re-calibration of the flowmeter is recommended as it's flow characteristics may change.

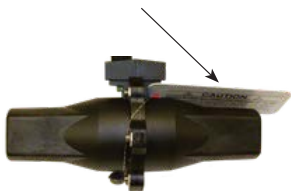
**** The FM750 LF (low flow) flowmeter is identical externally, however, its maximum flow is 12 GPM and it is not recommended with the GX5. it can be identified by: an orange Zip Tie and a Flowmeter Calibration number on metal tag between 400-550.**

GX5



NOTE: Flowmeter calibration number may vary. Please check tag on flowmeter for correct calibration.

Calibration/serial number Tag



FM SENSOR CABLE -ONLY-
PN#53552

TURBINE FLOW METER		FLOW METER ONLY
KIT PN#	DESCRIPTION	PN#
54870	AGXCEL LF FLOW METER, FM SENSOR CABLE WITH BRACKETING. GFN FLOW METER KIT .5-12 GPM (1.9-45LPM) 150 PSI, 3/4 FLOW METER	20309
54871	AGXCEL REG FLOW METER, FM SENSOR CABLE WITH BRACKETING. 2-40 GPM (6-150 LPM) 150 PSI, 3/4 FLOW METER	38310

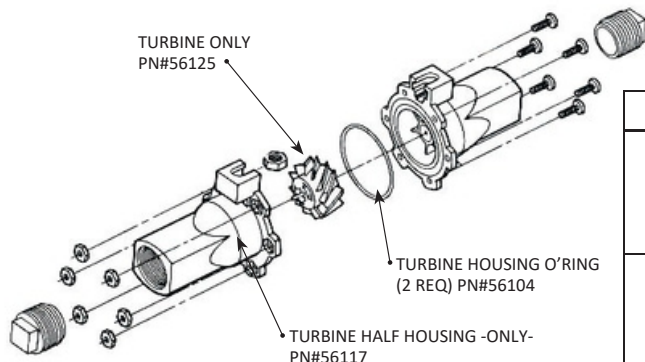
TURBINE HALF HOUSING -ONLY-
PN#56117 (SPECIAL ORDER)

TURBINE HOUSING O'RING (2 REQ)
PN#56104 (SPECIAL ORDER)

TURBINE ONLY PN#56125
(SPECIAL ORDER)



Removing metal tag from Turbine flow meters or altering casing or turbine will void warranty. Any returns or warranty issues will require original documentation (flow meter serial number/calibration tag).



AGXCEL TURBINE FLOW METERS

FM750 Reg
Micro-Trak Cal Number - 145 (SprayMate, Auto-X)
Pulses Per Gallon - 72.50 (JD, AGL, Trimble)
Pulses Per 10 Gallon - 725 (Raven)

FM750 LF
Micro-Trak Cal Number - 466 (Spraymate, Auto-X)
Pulses Per Gallon - 233 (JD, AGL, Trimble)
Pulses Per 10 Gallon - 2330 (Raven)

**** WARNING!!** If you disassemble the Turbine flow meter for cleaning be EXTREMELY CAREFUL not to damage or alter the turbine or casing for this will VOID your warranty**

AGXCEL MAGNETIC CALIBRATION CHART

FLOW RANGE (GPM) DIVIDE BY 8 REQUIRED	PULSES PER GAL-LON	JOHN DEERE GS2/GS3		AG LEADER		TRIMBLE		MICROTRAK	
		DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#
0.08 - 1.6	22710	YES	2839	NO	22710	NO	22710	NO	45420
0.13 - 2.6	22710	YES	2839	NO	22710	NO	22710	NO	45420
0.3 - 5	11355	YES	1419	NO	11355	NO	11355	NO	22710
0.6 - 13	4542	NO	4542	NO	4542	NO	4542	NO	9084
1.3 - 26	2271	NO	2271	NO	2271	NO	2271	NO	4542
2.6 - 53	1135	NO	1135	NO	1135	NO	1135	NO	2270

GX ORION MAGNETIC FLOW METER KITS		FLOW METER ONLY
KIT PN#	DESCRIPTION	PN#
54877	GXORION KIT - (0.08 TO 1.6 GPM) W/BACKET & MOUNTING HARDWARE	54250
54876	GXORION KIT - (0.13 TO 2.6 GPM) W/BACKET & MOUNTING HARDWARE	34412
54875	GXORION KIT - (0.3 TO 5 GPM) W/BACKET & MOUNTING HARDWARE	34415
54872	GXORION KIT - (0.6 TO 13 GPM) W/BACKET & MOUNTING HARDWARE	53615
54874	GXORION KIT - (1.3 TO 26 GPM) W/BACKET & MOUNTING HARDWARE	53636
54873	GXORION KIT - (2.6 TO 53 GPM) W/BACKET & MOUNTING HARDWARE (1" FPT)	37613
55647	GXORION KIT - (2.6 TO 53 GPM) T5M W/BACKET. MOUNTING HARDWARE & T5 FITTINGS (1 1/2" BARBS)	55689
** Check graph above to see if magnetic flow meter requires standard or Divide by 8 Harness (DB8).**		

WOLF LOW FLOW	
INTEGRATION	CAL #
Micro-Trak (SprayMate, AutoX)	7680
Pulses Per Gallon (JD/AGL/Trimble)	3840
Pulses Per Gallon (Raven)	38400

WOLF REG FLOW	
INTEGRATION	CAL #
Micro-Trak (SprayMate, AutoX)	1890
Pulses Per Gallon (JD/AGL/Trimble)	945
Pulses Per Gallon (Raven)	9450



NEW WOLF TURBINE FLOW METER		FLOW METER ONLY
KIT PN#	DESCRIPTION	PN#
55909	WOLF FLOW METER 2.5/50 LT FL. (.7-13GPM) T5 F/M ENDS, WOLF HARNESS ADAPTER, BRACKETING AND 3/4" BARB T5 FITTINGS)	55864
55911	WOLF FLOW METER 10/200 LT FL. (2.6 - 53 GPM) T5 F/M ENDS, WOLF HARNESS ADAPTER BRACKETING AND T5 FITTINGS (OPTIONS OF 3/4" OR 1" BARB)	55910

GXORION3 FLOWMETERS

Diagnostic LED allows for quick identification of flow and signal issues



See parts catalog layout of kit fittings with options for inlet and outlet. Only the DN17 will need a T3 fitting for direct adaption.

	OFF	The flowmeter is not powered.
	GREEN FLASHER	The flowmeter is waiting to acquire an address on the CAN line to which it is connected.
	GREEN STEADY ON	Presence of STILL liquid inside the flowmeter.
	BLUE STEADY ON	The flowmeter is reading the passage of the liquid inside.
	VIOLET STEADY ON	No liquid has been detected inside the flowmeter.
	WHITE STEADY ON	Cleaning of the reading electrodes in progress.
	RED FLASHER	The error codes are indicated through blinks, which are described in the table on page 10.
	RED STEADY ON	SEVERE ERROR: contact a service center.
	ORANGE BLINKING	Device in bootloader mode for firmware upgrade.
	ORANGE STEADY ON	Device in bootloader mode.

The status indicates the operating status of the device. At startup, during the first 5 seconds, Orion 3 displays its configuration regardless of the presence of an alarm (Green LED Flashing). Each type of blinking (flashing) corresponds to signal as indicated in the table above.

Serial number, flow meter range (DN#) and calibration number are all listed on the side label.

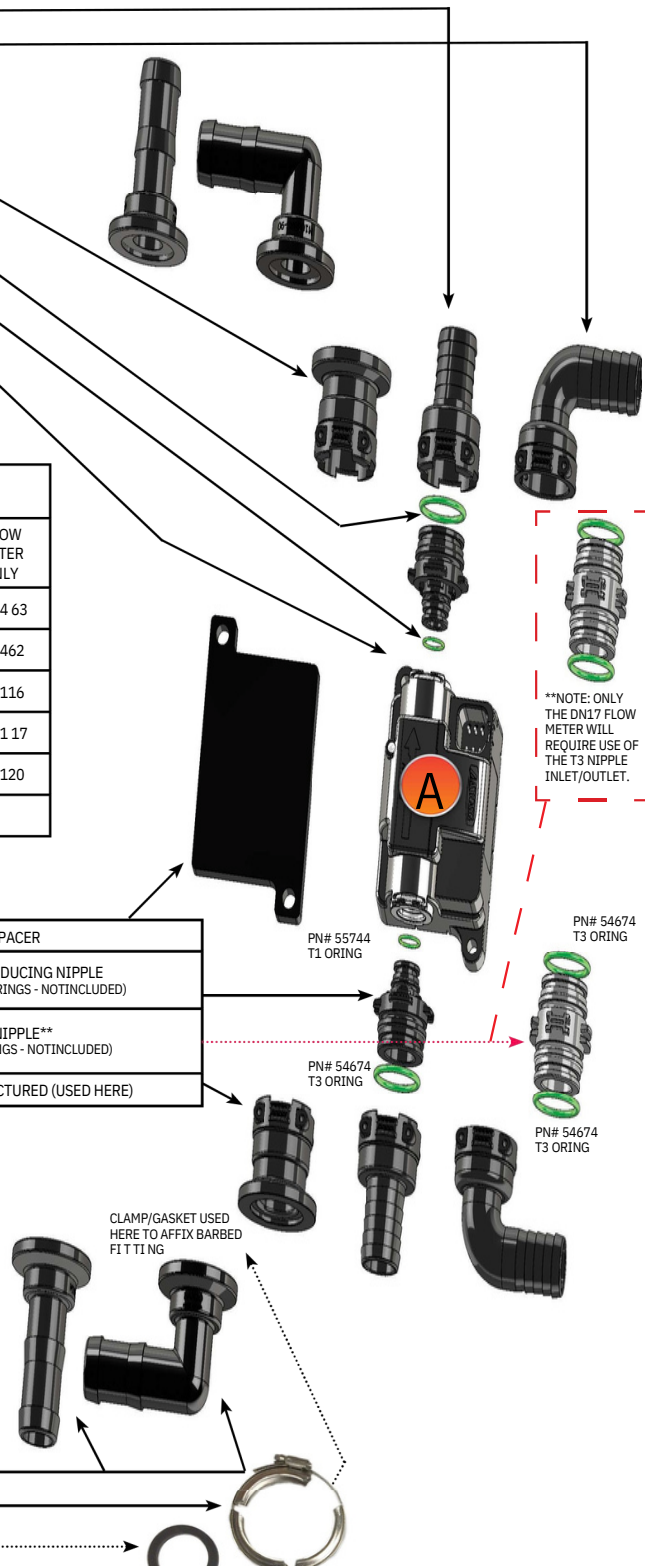
GXORION3 FLOW CHART									
FLOW RANGE (GPM)	PULSES PER GALLON	JOHN DEERE GS2/GS3 2K LRCM		AG LEADER L1		TRIMBLE		AUTOX SPRAYMATE PLUS	
		DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#
.04 - 1.6 (DN3)	75708	YES	9464	YES	9464	NO	75708	YES	9464
.08 - 3.17 (DN4)	37854		4731		4731		37854		4731
.26 - 10.5 (DN7)	11356		1419		11356		11356		22710
.52 - 21 (DN10)	4542	NO	4542	NO	4542	NO	4542	NO	9084
1.45 - 58 (DN	2063		2063		2063		2063		4126
FLOW RANGE (GPM)	PULSES PER GALLON	RAVEN RCM		AG LEADER L2		MUELLER		GX8	
		DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#	DB8 CABLE	CAL#
.04 - 1.6 (DN3)	75708	YES	9464	YES	9464	NO	75708	YES	9464
.08 - 3.17 (DN4)	37854		4731		4731		37854		4731
.26 - 10.5 (DN7)	11356		1419		11356		11356		22710
.52 - 21 (DN10)	4542	NO	4542	NO	4542	NO	4542	NO	9084
1.45 - 58 (DN17)	2063		2063		2063		2063		4126
WHEN USING A ORION3 FLOW METER ONE OF THE HARNESSES BELOW MUST BE USED FOR THE OEM CONTROLLER TO BE ABLE TO CALCULATE FLOW. SEE CHART ABOVE									
GXORION3 ADAPTER HARNESS PN#13135					GXORION3 DIVIDE BY 8 (DB8) PN#13134				

PN#	DESCRIPTION
5 46 57	T3 3/4" HOSE BARB
5 46 62	T3 3/4" HOSE BARB ELBOW
5 46 58	T3 1" HOSE BARB
5 46 61	T3 1" HOSE BARB ELBOW
1 31 19	1" FLANGE TO T3F FITTING (SEE CHART FOR FLANGE FITTINGS)
5 46 74 574	T3 GASKET VITON T3 GASKET BUNA
5 57 44 571	T1 GASKET VITON T3 GASKET BUNA
5 57 52	T1 FORK - NOT PICTURED

GXORION FLOW METERS		
KIT PN#	DESCRIPTION	FLOW METER ONLY
1 31 21	GXORION3 0.04 - 1.6 GPM DN3	5 74 63
1 31 22	GXORION3 0.08 - 3.17 GPM DN4	5 74 62
1 31 23	GXORION3 0.26 - 10.5 GPM DN7	1 31 16
1 31 24	GXORION3 0.52 - 21 GPM DN10	1 31 17
1 31 25	GXORION3 1.45 - 58 GPM DN17**	1 31 20
KIT INCLUDES THE INLET/OUTLET ADAPTER FITTINGS AND MOUNTING SPACER.		

1 31 26	SPACER
1 31 18	T1 TO T3 REDUCING NIPPLE (NEED 1EA OF T1 & T3 ORINGS - NOT INCLUDED)
5 52 14	T3 NIPPLE** (NEED 2 - T3 ORINGS - NOT INCLUDED)
5 46 77	T3 FORK - NOT PICTURED (USED HERE)

PN#	DESCRIPTION	REQUIRES CLAMP & GASKET
5 13 12	1" FLANGE TO 3/4" HOSE BARB	CLAMP = PN#33132 GASKET = PN#50016
3 82 54	1" FLANGE TO 3/4" HOSE BARB ELBOW	
5 13 26	1" FLANGE TO 1" HOSE BARB	
5 13 28	1" FLANGE TO 1" HOSE BARB ELBOW	
5 13 20	1" FLANGE TO 1 1/4" HOSE BARB	
5 13 21	1" FLANGE TO 1 1/4" HOSE BARB ELBOW	
5 13 24	1" FLANGE TO 1 1/2" HOSE BARB ELBOW (NOT AVAILABLE IN A STRAIGHT HB)	



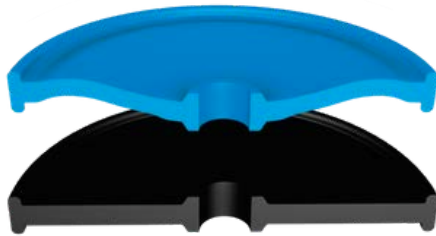
NEW

GX5

HEAVY DUTY & LONGER LIFE DIAPHRAGM

SPECIAL SHAPE

The special shape and thickness of the diaphragms has been carefully optimized to reduce mechanical stresses during the working cycle of the pump even under the most difficult working conditions.



BLUEFLEX SYSTEM

The combination of the new BlueFlex diaphragms when used with the new patented diaphragm plate is known as the “BlueFlex System”. This translates into heavy duty and long diaphragm life.

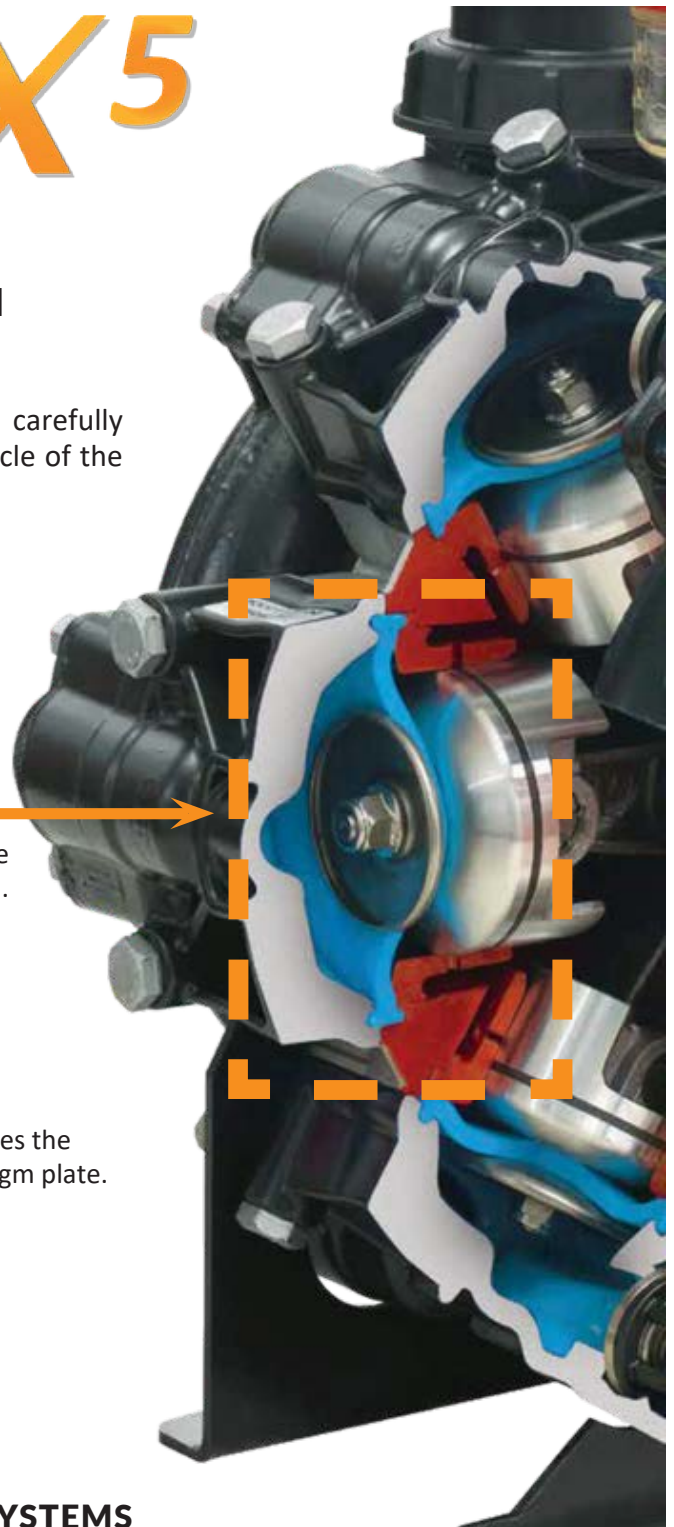
PATENTED DIAPHRAGM PLATE FOR BLUEFLEX DIAPHRAGMS

The new patented diaphragm retaining plate has a shape that minimizes the possibility that the diaphragm can get caught or nicked by the diaphragm plate.



STANDARD FEATURE ON ALL GX5 HYDRAULIC SYSTEMS

Give us a call to find out which GX5 with BlueFlex is best suited for your needs!



GX5 ACCESSORY - PRESSURE SENSOR AND GAUGE

MOUNT ON SECTION VALVES

The AgXcel OEM integration harness is capable of implementing a pressure transducer into the system so that system pressure may be displayed on the console in the cab of the tractor. Now even though the in-cab pressure is for informational purposes only, it can be very useful for managing the system.

MOUNT ON GX5 OUTLET - LFP 45/ LFP 80 & LFP120



Install the section valve with a 2" end cap and a 1/4" FPT port on the end. This is where the pressure transducer will be installed. The pressure transducer harness will connect to the AgXcel integration harness.

MOUNT ON GX5 OUTLET - LFP160 AND D250



PRESSURE
TRANSDUCER
KIT PN# 53491

AgXcel has many different pressure gauge mounts and most all AgXcel systems have a visual pressure gauge mounted on the GX5 system



160 PSI - HYDRAULIC PUMP
GAUGE KIT PN# 53770

AGXCEL GXTANKTOPUMPKIT

(Read Instructions Completely before Beginning Installation)

PN# 53845 (GX5 TANK TO PUMP KIT)



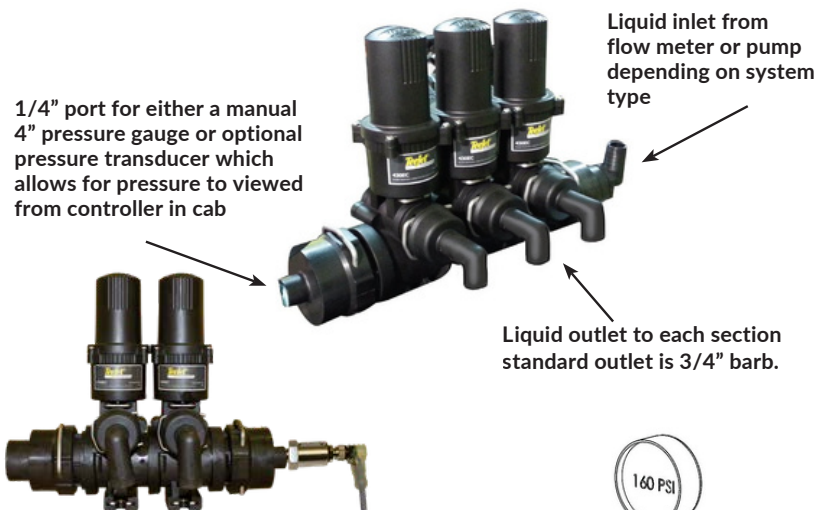
GX5 TANK TO PUMP KIT PN# 53845

PN#	ITEM	QTY
51381	BARB	2
38269	GASKET	3
51766	STRAINER 30 MESH	1
51383	90-BARB	1
38267	CLAMP	3

**** TANK KIT ****

SECTION VALVES - HOW THEY WORK

Section valves can be assembled into groups with a common inlet to control flow to each section. Common assemblies use up to 5-6 valves, however, more can be used where practical. Many alternate fittings can be used to accommodate different hose sizes and configurations. The valves have a 3 pin weather pack electrical connector. This has a power, ground, and switched wire. The power measured to ground should have 12 volts when the controller is on. The switched wire will have 12 volts to turn the valve on, and 0 volts to turn the valve off.



PRESSURE TRANSDUCER KIT
PN# 53491

****OPTIONAL PRESSURE TRANSDUCER KIT
(PN#53491) AVAILABLE FOR PURCHASE
IN PLACE OF THE GAUGE ****



AgXcel has many different pressure gauge mounts and most all AgXcel systems have a visual pressure gauge mounted on the GX5 system

160 PSI - HYDRAULIC PUMP
GAUGE KIT PN# 53770

PLUMBING	
17614	3/8 BLK HOSE
17649	SST #6 CLAMPS
37619	1/2 BLK HOSE
308	3/4 BLK HOSE (PRECUT IN 50FT)
19646	SST #12 CLAMPS

MISC HARNESS	
53594	6 SECTION BOOM HARNESS
53800	12 SECTION BOOM HARNESS
20031	TRANSDUCER/SECTION EXTENSION (SOLD BY THE FT)

GX SECTION KITS		VALVES ONLY
KIT PN#	DESCRIPTION	PN#
54833	1 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 50' OF 3/4 HOSE	54002
54834	2 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 50' OF 3/4 HOSE	40406
54835	3 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 100' OF 3/4 HOSE	40412
54836	4 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 150' OF 3/4 HOSE	40418
54837	5 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 150' OF 3/4 HOSE	40421
54838	6 SECTION VALVE SWATH KIT - INCLUDES MOUNTING BRACKET, POLY FITTINGS, HARDWARE, STAINLESS HOSE CLAMPS AND 200' OF 3/4 HOSE	40427
** Depending on section mounting location, extensions not included in kits above may be necessary. **		



**Optional ways to mount the sections.



MISC HARNESS	
53594	6 SECTION BOOM HARNESS
53800	12 SECTION BOOM HARNESS
20031	TRANSDUCER/SECTION EXTENSION (SOLD BY THE FT)



** OPTIONAL PRESSURE TRANSDUCER KIT (PN#53491) AVAILABLE FOR PURCHASE IN PLACE OF THE GAUGE **



GX5 Hydraulic Fertilizer System Manual

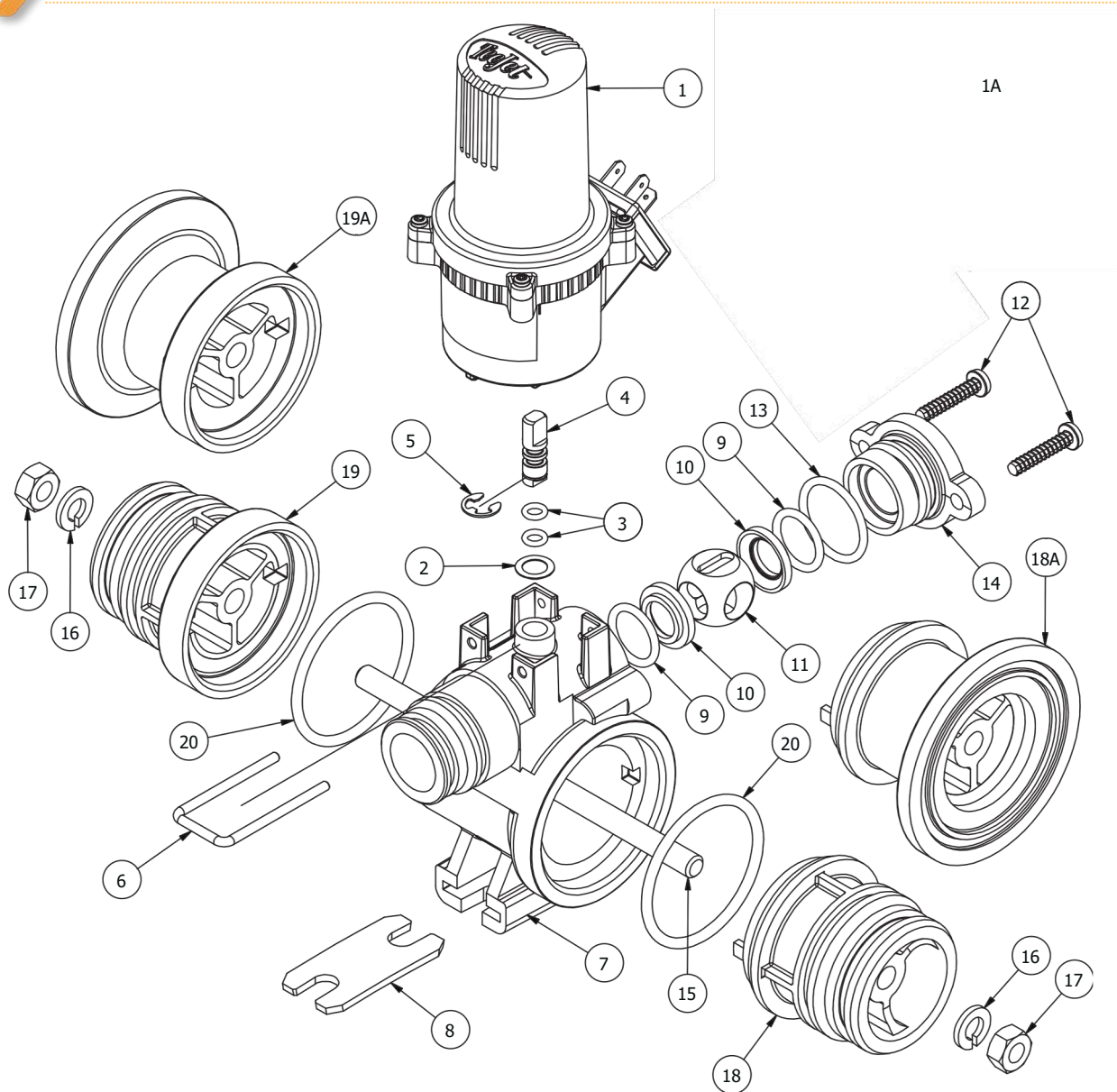
Extended Version

2106 F Avenue / Kearney, NE 68847

GX SECTION BREAK OUT

PN#	DESCRIPTION	ITEM#
41722	430 EC REPLACEMENT MOTOR	1
46087	FLAT WASHER, 302SS	2
46562	O RING, VITON (2 REQ'D)	3
47843	STEM, 303 STAINLESS STEEL	4
46114	E-CLIP RETAINING RING, 17PH STAINLESS STEEL	5
46091	430 MOTOR RETAINING CLIP, 302 STAINLESS STEEL	6
46083	430 VALVE BODY, PP, FOR 430 POLY (BLACK)	7
45826	MOUNTING PLATE, FOR USE ON 430 EC MOTORS	8
46491	"O" RING VITON (2 REQ'D)	9
46086	SEAL, TEFLON(2 REQ'D)	10
46085	2-WAY BALL, 303SS, FOR USE ON 430EC VALVES	11
51313	SCREW, 302 STAINLESS STEEL (2 REQ'D)	12
46498	O-RING,VITON	13
46084	430 2WAY END CAP POLY (BLACK)	14
46105	1 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	15
46106	2 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	
46107	3 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	
46108	4 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	
46109	5 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	
46110	6 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL	
CALL	** SPECIAL ORDER ITEMS -- 7 UP TO 15 SECTION MANIFOLD CONNECTING ROD, 303 STAINLESS STEEL M8 SPLIT LOCK WASHER	
46123	M8X1.25 HEX NUT	16
45589	430 MALE INLET ADAPTER FOR SECTION VALVE POLY (BLACK)	17
46088	75 FLANGE MALE INLET NYLON (BLACK)	18
46782	430 FEMALE INLET ADAPTER	18A
46089	75 FLANGE FEMALE INLET NYLON (BLACK)	19
46781	O-RING, VITON (2 REQ'D)	19A
46542	TWO WAY SUB ASSEMBLY	20
41735	430 2-WAY SUB ASSY, TEE JET SECTION VALVE BODY SUB ASSEMBLY, INCLUDES ITEMS 2-5, 7-14 ON EXPLODED VIEW.	2-5 7-14
41761	3WR 1.5M MINI-DIN	NOT SHOWN

** For section kits or valves only see chart on pg. 11 **



SECTION MISC		
	PN#	DESCRIPTION
A	40869	3/4" X 90 HOSE BARB OUTLET
B	32305	1" X 3/4 POLY ELBOW
C	41725	1" X LQC END CAP KIT
D	41729	1/4 X LQC END CAP KIT
E*	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW (FOR GAUGE)
NOT SHOWN	53463	SECTION MOUNTING BRACKET

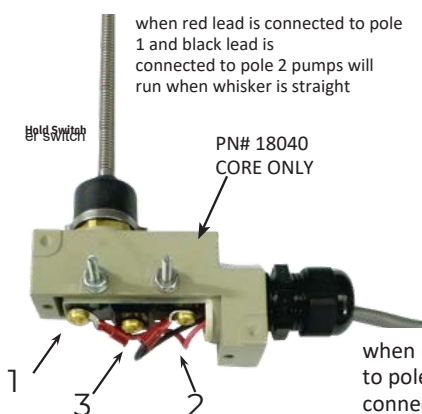
RUN/HOLD KIT (PN#53824)

(JD DEERE2-PINPN#53982)

KIT INCLUDES:

- 1-15FT Extension (John Deere or 3pin connector)
- 1-Implement Switch with 15FT Lead (PN# 17921)
- 1-Magnet Mount (PN# 17960)

1. Run/Hold optional connection (If not using be sure to use provided loop to close circuit)
 - For use with a N.O. (normally open) whisker switch, cut the looped wire in the dummy plug and connect to your switch wires. A smaller gauge wire (18 AWG minimum) may be used for this low current circuit.
 - For use with a hall-effect sensor, remove the dummy plug and attach the plug from your sensor.



when red lead is connected to pole 1 and black lead is connected to pole 2 pumps will run when whisker is straight

HOW IT WORKS:

Place the whisker switch on a 3 point arm or wheel frame that changes angle as the implement is raised and lowered. When the whisker arm is bent up (against the tool bar), the switch is open placing the MANX in HOLD, not applying fertilizer.

When the whisker arm is straight (not touching the toolbar), the switch will be closed. The MANX will be in RUN, applying fertilizer.

when red lead is connected to pole 1 and black lead is connected to pole 3 pumps will run when whisker is bent

*The Whisker switch will work with many other controllers. However, the polarity might be reversed from the positions described above.

MERCURY SWITCH KIT (PN#54066)

(JD DEERE2-PINPN#54112)

Run/Hold optional connection (If not using be sure to use provided loop to close circuit)

KIT INCLUDES:

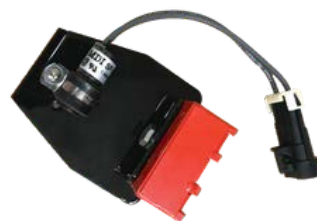
- 2-15FT Extension(s) (John Deere or 3pin connector)
- 1-Mercury Switch (PN# 54024 - Switch only)
- 1-Magnet Mount (PN# 17960)

HOW TO ADJUST:

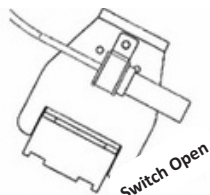
If your controller is turning off product application before or after you want, tilt the switch. If it turns off after you want when lifting the implement, tip more to the HOLD position. If product application should begin sooner when you lower the implement, tip more to the RUN position.

HOW TO TEST:

To test the run/hold mercury switch you will need a volt meter. Set the meter to test continuity (or ohms). With the wires down, you should have continuity between the two pins in the connector. With the wires up, the switch should be open (no continuity).



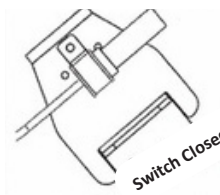
EXTENSIONS AVAILABLE		
3PIN	2PIN	DESCRIPTION
17924	55917	GXH_EXT 15FT
54073	55415	GXH_EXT 30FT
Custom extension lengths can be special ordered - contact SALES for a price quote		



HOLD Position with Wires UP

MOUNT THE SWITCH ON:

- 3point arm in use
- Planter wheel frame that changes angle
- Drill opener frame if openers are pivoted to raise out of ground.



RUN Position with Wires DOWN

GX5 INSTALLATION MOUNTING

Shown below is the AgXcel GX5 LFP80 3 diaphragm pump system. AgXcel carries 5 different pump sizes to meet various rate requirements and will have a slightly different mounting setup. However, all functions of the AgXcel PWM valve remain the same despite the pump system or size.

Mount pump in your preferred location. The GX5 pump has excellent suction and priming ability, so it can be mounted away from or above fertilizer tanks.

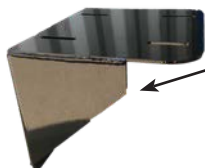
For JD1770NT 12, 16 & 24 row planters, AgXcel offers an over the tire pump mount that fits all GX5 models. This mounts the pump over the center tires.

OPTIONAL MOUNTING GX5 MOUNTING BRACKETS



PN#53678 GX5 BRACKET FOR JD PLANTER
FRONT FOLD FOR 12 & 16 ROW PLANTERS
*WILL NOT FIT DB MODELS

For JD1720 CCS planters, AgXcel offers a mounting bracket to the large circular plate on the CCS support arms.

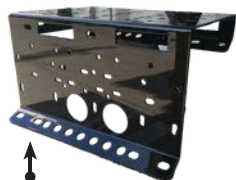


PN#54397 GX5 BRACKET FOR JD 1720 CCS
(MOUNTED TO CIRCULAR PLATE ON LIFT
ASSIST FRAME)

AgXcel has U-bolts and universal mounting brackets that allow for the mounting of the GX5 system on various bar setups.



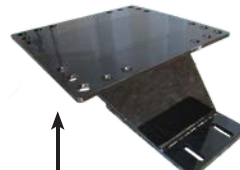
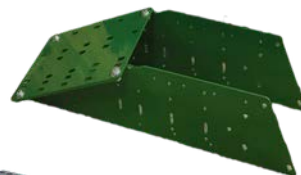
PN#53957 GX5 BRACKET ASSEMBLY FOR
JD 1770 NT FRONT FOLD PLANTER FOR
24 ROW PLANTERS *WILL NOT FIT DB
MODELS



PN#53968 GX5
BRACKET FOR ON
THE REAR LIFT ASSIST
WHEELS ON JD 1790
PLANTER



PN#54898 UNIVERSAL MOUNTING BRACKET



PN#54586 CASE IH DRAW BAR
BRACKET TO MOUNT GX5 ON
THE DRAW BAR (CAN FIT
ANYWHERE FROM 8" TO 10"
WIDE DRAW BAR) GX5
BRACKET

GX5 RE-CIRCULATION FEATURE - LFP45 / LFP 80 & LFP 120

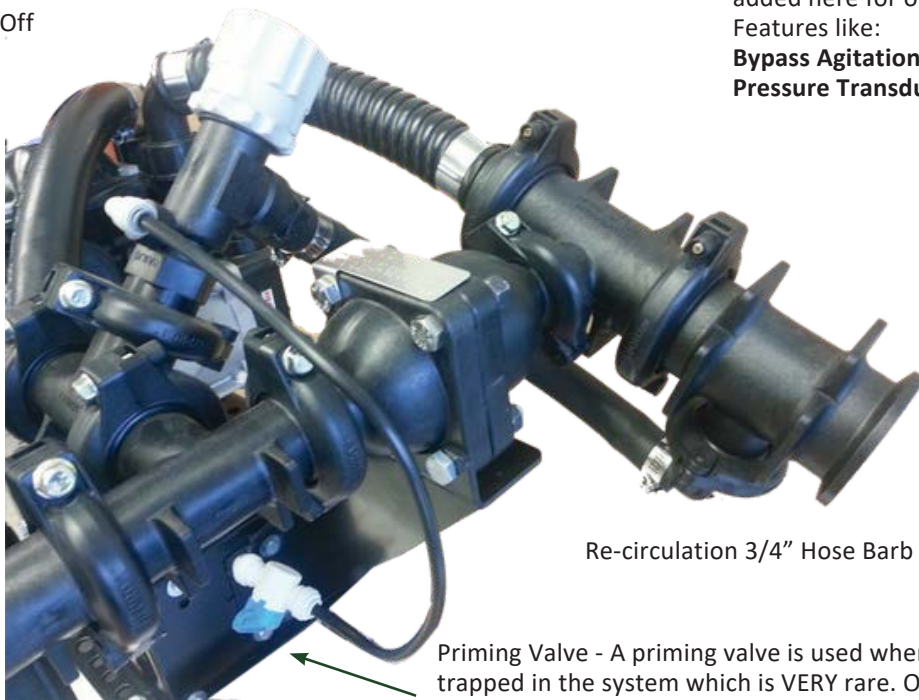
Re-circulation Regulation valve

Re-circulation On/Off

An optional CROSS fitting may be added here for other AgXcel Optional Features like:

Bypass Agitation Kit - PN#335

Pressure Transducer Kit - PN# 53491



Re-circulation 3/4" Hose Barb

Priming Valve - A priming valve is used when the GX5 has air trapped in the system which is VERY rare. Open the valve to allow the air to release and then ensure that it is closed when GX5 is in operational mode.

APPLICATIONS

1. Recirculation flow is required for product agitation.
2. IF a low flow rate is required, that would require pump to run less than 10-20% of maximum capacity. This kit will allow the pump to turn faster, while only applying a low rate of product. This makes the pump performance more stable under these circumstances. Make sure the flowmeter minimum flow is capable of metering the flow rate you wish to apply to the ground.

HOW IT WORKS

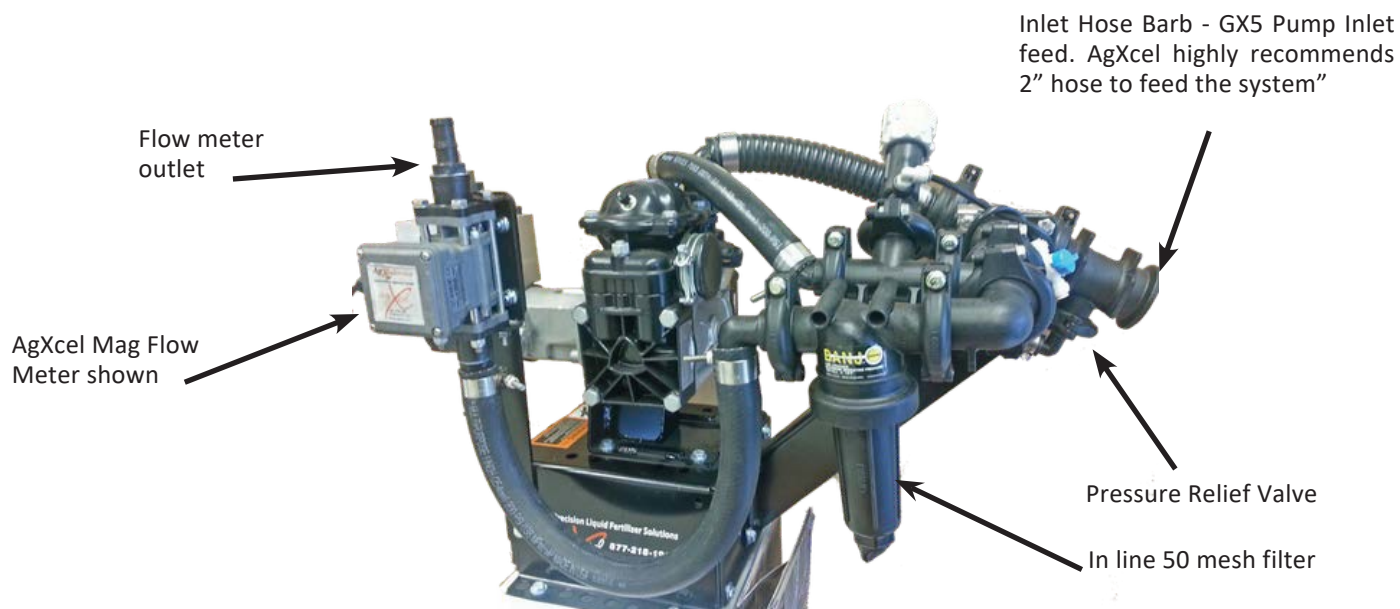
The recirculation valve diverts some pump flow before the flowmeter. The application rate is still measured by the flowmeter and everything that passes through the flowmeter is applied to the ground. Adjust the regulation valve to set the required recirculation.

USE OF THIS KIT LOWERS THE MAXIMUM RATE THAT CAN BE APPLIED

GX5 ACCESSORY - RECIRCULATION KIT - LFP160 & D250

Same function as above, slightly different attachment to pump.

GX5 LIQUID PLUMBING CONNECTIONS



INLET: All GX5's are shipped with 2" inlet flange feed. Attach this to the hose from your supply tank. A tank to pump kit can be purchased for extra filtration with a 30 mesh strainer placed between supply tank and pump entry. Our complete system kits is plumbed with a 50 mesh strainer, situated before pump,

OUTLET: The outlet is plumbed directly to the flow meter. As shown above, the flow meter will be mounted directly to the GX5 pump. The flow meter outlet hose should be a minimum of 24" long with a gentle curve prior to any fittings for optimum flow meter performance. The flow meter outlet will attach to your manifold(s) or section valves. LFP45, LFP80 , D115 and LFP120 have 3/4" flow meter outlet. LFP160 & D250 have 1 1/2" flowmeter outlet.

PRESSURE RELIEF VALVE (PRV): The PRV is a 100 psi relief. If there is a restriction that creates over 100 psi in the system, the PRV will open allowing the excess flow to pass back to the inlet side of the pump. This protects the pump and fertilizer system from damage. The PRV will sound like an impact wrench in use if it is activating. DO NOT operate the system with PRV continually activating. The vibrations will cause damage. Possibly switch to larger orifices to lower system pressure.



GX5 HYDRAULIC VALVE AND MOTOR - 4.9 CID MOTOR WITH PWM VALVE HOW IT WORKS:

4.9 CID MOTOR WITH PWM VALVE - HOW IT WORKS:

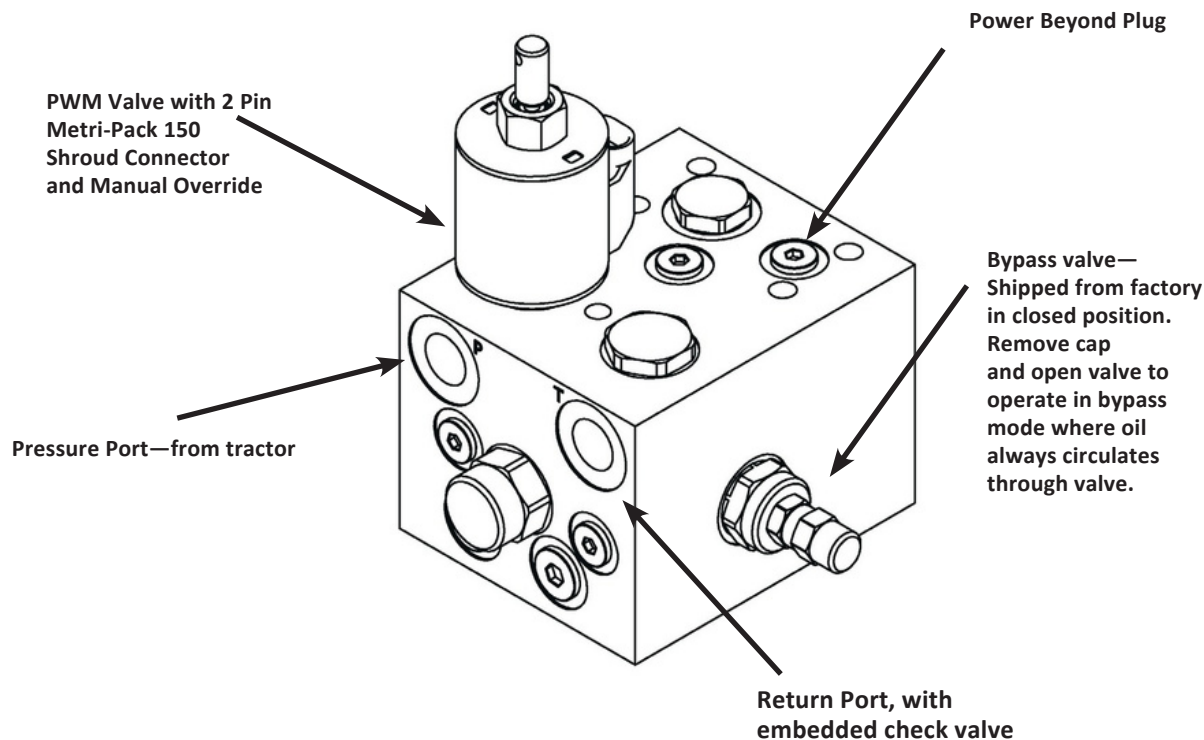
The AgXcel proprietary PWM valve has a solenoid that receives a variable signal from the OEM liquid rate controller. This signal is used to open the pressure compensating valve to allow the correct amount of hydraulic fluid through the valve to rotate the diaphragm pump appropriately to apply the correct GPM. When 0 volts are present then the valve closes and the motor stops.

With the bypass closed only the oil that passes through the PWM valve itself will flow to and from the valve. When the PWM valve is closed, no oil will flow. With the bypass open, the total oil flow from the tractor will always flow through the valve. The PWM valve will divert the oil it needs to rotate the motor at the proper speed.

This valve can be used with Power Beyond hydraulics instead of using a standard tractor hydraulic valve. Uncap the LS port and plumb this back to the tractor load sense connector. The LS port has an internal check valve necessary in power beyond installations.

Port Sizes on valve:
Hydraulic Hose Fittings:
Motor Mounting Hardware:
Shaft Size:

-8 SAE O-Ring (LS is -6 SAE O-Ring)
-8 SAE O-Ring
Two 1/2" diameter bolts
1" with Woodruff Key

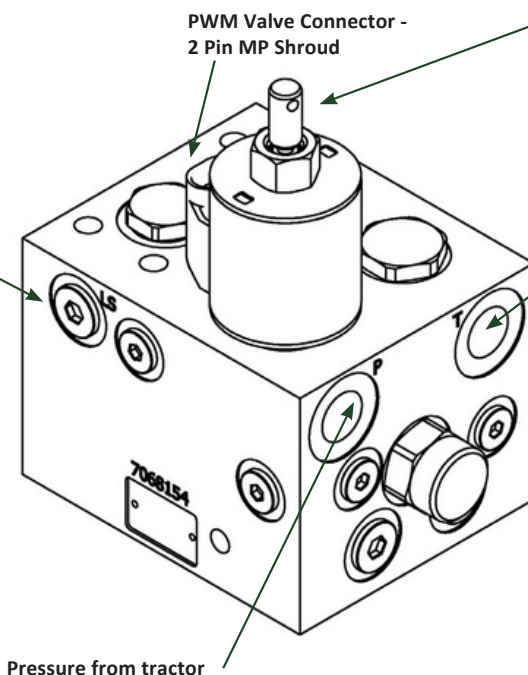


GX5 HYDRAULIC CONNECTIONS

(Read Instructions Completely before Beginning Installation)

HYDRAULIC CONNECTIONS

Load Sense Port —For power beyond hydraulic use only.



Manual Override - Turn and lift the manual override to check for proper hydraulic connections. Override will completely open valve, so limit tractor hydraulic flow to valve.

Embedded Check valve included on return to tractor port.

Pressure from tractor

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. 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 AgXcel valve has an internal load sense check valve, which is required for power beyond hydraulics.

- **Pressure compensated tractor hook-up**

The P port on the manifold connects to pressure on the power beyond
The T port on the manifold connects to the return on the power beyond
Fully close NV on manifold

- **Pressure flow compensated tractor hook-up**

The P port on the manifold connects to pressure on the power beyond
The T port on the manifold connects to the return on the power beyond
The LS port on the manifold connects to the load sense on the power beyond
The LS port on the power beyond may need a bleed off orifice (check with tractor dealer for details)
Fully close NV on manifold

- **Open center tractor hook-up**

The P port on the manifold connects to pressure on the power beyond
The T port on the manifold connects to the return on the power beyond
Fully open NV on manifold



GX5 HYDRAULIC CONNECTIONS - HYDRAULIC HOSE

(Read Instructions Completely before Beginning Installation)

HYDRAULIC HOSE

The pump inlet and outlet hydraulic hose must be purchased by the end user.

Recommends using 1/2" hydraulic hose with #8 swivel fittings.

BEST OPTION - DEDICATED CIRCUIT (PREFERRED METHOD)

If you have a tractor remote available, attach the tractor remote valve directly to the pressure and return ports. DO NOT try to avoid this method simply to save another set of hydraulic hoses running to the tractor. Operating the hydraulic pump system on it's own circuit is the simplest for installation and operation. It guarantees the system won't negatively affect any other hydraulic components on your equipment.

ALTERNATE OPTION - PARALLEL BEFORE CCS BLOWER FAN

If you do not have a tractor remote valve available, this may be your best method. You can plumb AgXcel's GX5 hydraulic pump by "T"ing off the pressure line and return line before the CCS blower fan. If using this method, the PWM valve will remain closed (default position). AgXcel's GX5 LFP series will only use very minimal amount of hydraulic oil that will not affect the CCS fan (Averaging 2-4 GPM, 10 GPM oil necessary for maximum flow). AgXcel DOES NOT recommend plumbing the hydraulic pump system in series with a vacuum fan. The vacuum fan uses just a few GPM of oil. Also, problems will be caused by excessive pressure at the vacuum fan motor.

Example of hydraulic plumbing "T" style with CCS fans



TWO HYDRAULIC PUMP SYSTEMS

The preferred method is to plumb the two pumps in parallel. DO NOT plumb two pumps after the CCS fan. Excessive pressures may damage the CCS fan motor. If you connect the two pumps in series, then run the pressure line from the tractor to first pump inlet. Plumb from the outlet of Pump 1 to the inlet of Pump 2, then from Pump 2 outlet back to the tractor. Open the bypass needle valve on both pumps so each valve controls motor speed independently. Run the flow setting procedure on the next page to minimize the hydraulic flow based on the pump that requires more hydraulic motor flow.

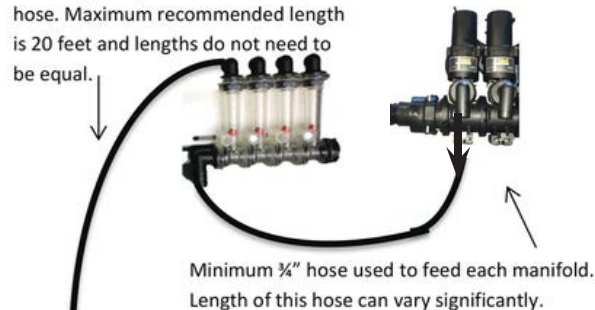
FLEXIBLE CONFIGURATIONS

(Read Instructions Completely before Beginning Installation)

Floating ball manifolds are extremely flexible and can be mounted in many different configurations on various types of liquid implements. The following illustrations will provide some general concepts on how to configure your implement.

Plumbing Overview

This is typically 1/4" OD tubing or 3/8" hose. Maximum recommended length is 20 feet and lengths do not need to be equal.



Check valve is mounted near each row. 1/4" turn cap is always check valve outlet. Colored disc orifice can be placed under cap.

Fertilizer Opener, Seed Firmer, SS Tube, etc.

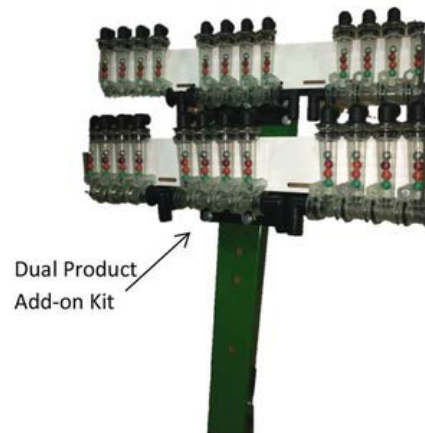
This is usually 1/4" OD tubing or 3/8" hose. Typical length is 1-4' with check valves placed on each row that distance from ground.

12 Row Dual Product

Product 1 Split 4--4--4/Product 2 Split 4--4--4

Shown here is a 12 row with four 3 row sections controlled by four section valves. Note each 6 row T-Bracket can hold two separate 3 row manifolds. A 4 section 24 row could be similar with four 6 row manifolds on two large T-Brackets.

Product 1
on Top



12 Row

Split 3--3--3--3

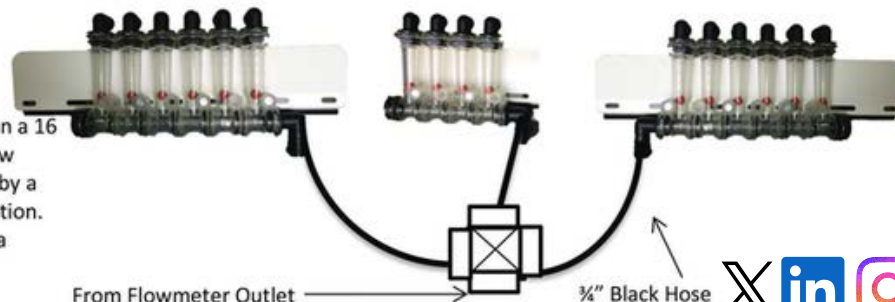
Shown here is a 12 row with four 3 row sections controlled by four section valves. Note each 6 row T-Bracket can hold two separate 3 row manifolds. A 4 section 24 row could be similar with four 6 row manifolds on two large T-Brackets.



16 Row

Split 6--4--6

This configuration works well on a 16 row front fold planter. Each flow indicator manifold is shown fed by a cross in a single section installation. Each manifold could be fed by a section valve if desired.



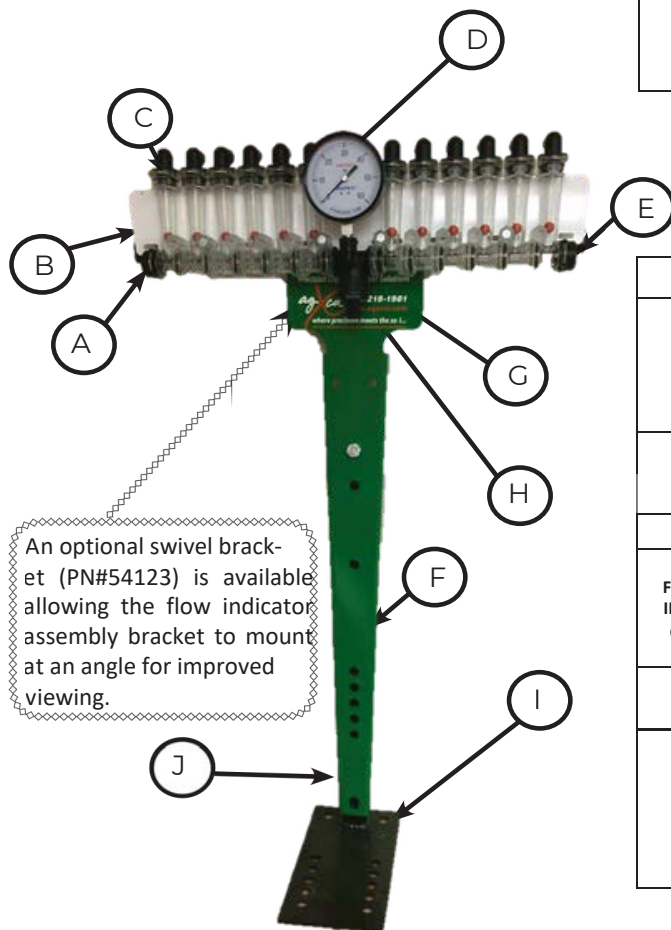
SIGHT COLUMN BRACKETS		
PN#	DESCRIPTION	
A	406	UP TO 6R WHT BACKDROP
	414	UP TO 8R WHT BACKDROP
	20106	UP TO 12R WHT BACKDROP
B	18082	MOUNTING BRACKET FOR PN#406
	18088	MOUNTING BRACKET FOR PN#414
	18083	MOUNTING BRACKET FOR PN#20106
SIGHT COLUMN HARDWARE KIT - PN#38324 ONE KIT USED FOR MOUNTING UP TO 12R ONTO GX1 CHASSIS BRACKET		

NEW

O-ring Upgrade: FKM

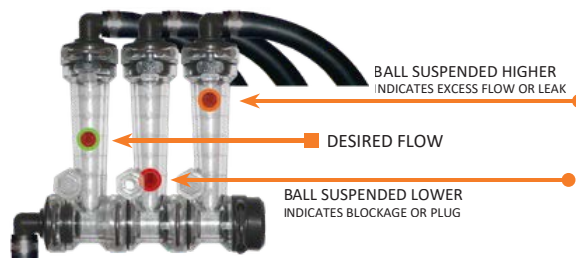
All Wilger parts are transitioning to being manufactured with FKM O-rings & seals. The fluoroelastomer (FKM) o-ring provides superior chemical resistance and durability over Buna o-rings.
** Premium Viton o-rings, seals and assemblies will continue to be available **

C	25709	1/4" PTC TOPS
	18033	3/8" BARB TOPS
	17655	3/8" PTC TOPS
D	33812	160 PSI GAUGE
	33816	60 PSI GAUGE
	53769	60 PSI REMOTE GAUGE KIT
	53770	160 PSI REMOTE GAUGE KIT
	*ONLY ONE GAUGE OPTION INCLUDED IN KIT	



E	18039	COLUMN END CAP & CLIP
F	38260	GX1 CHASSIS (TOMAHAWK ONLY)
	54123	GXSWIVEL KIT (NO TOMAHAWK)
	428	GXCHASSIS SWIVEL KIT (COMPLETE)
G	18037	CENTER FEED
	32239	3/4" HOSE SHANK INLET
H	52142	1/4" GAUGE ELBOW
FEED OPTIONS IF NOT USING CENTER TEE	18034	3/4" HOSE SHANK - ELBOW
	18032	3/4" HOSE SHANK
	25682	LOCK U-CLIP
I	53961	GX1 MOUNT AVAILABLE TO RAISE OR MANOEUVRE A CROWDED TOOLBAR
COMMON UBOLT(S)	53578	GXUBOLT 7 X 8 1/2" (CASE/JD)
	20329	GXUBOLT 5 X 7 X 1/2"
	17585	GXUBOLT 5 X 8 X 1/2" (KINZIE)
	38446	GXUBOLT 7 X 5 X 1/2"

The recommended check valve for most GX5 Installations is the 10 lb check valves with 3/8" hose barbs. This works with 3/8" rubber hose which Agxcel recommends for most applications over 10 GPA on 30" rows. The recommended minimum system operating pressure for this check is 20 psi, to ensure all checks open fully. For available check valves see pg.25



SIGHT COLUMNS		
PN#	DESCRIPTION	
STANDARD FLOW	55153	Wilger Standard Flow Column Only
	20985	Wilger Standard Flow Column W/balls, clip, retainer (No Top)
	37637	Wilger Std Flow Complete Column(s) 4 pack w/ End cap, clips & 3/8 barb Tops
	37724	Wilger Std Flow Complete Column(s) - 4 pack w/End cap, clips & 3/8QC Tops
BALL SELECTION FOR 30" ROWS - STD FLOW		
3-6 GPA	18077	Green Plastic* Ball
3-10 GPA	18078	Red Plastic* Ball
10-20 GPA	18079	Maroon Glass Ball
13-70 GPA	18080	Stainless Steel Ball
*These balls may float to the top with heavier fertilizers, such as 10-34-0. Use Maroon glass in this case.		

MISC COMPONENTS	
PN#	DESCRIPTION
25682	LOCK U-CLIP
428	GXCHASSIS SWIVEL KIT (Complete)
54123	GXSWIVEL KIT (No Tomahawk)
54839	GXEXTENDER BRACKET
PLUMBING	
308	3/4" BLACK HOSE (Use #12 CLAMPS - PN#19646)
19920	1/4" BLACK TUBING
54121	3/8" BLACK TUBING
17614	3/8" BLACK HOSE (Use #6 CLAMPS - PN#17649)

SIGHT COLUMNS		
PN#	DESCRIPTION	
LOW FLOW	25689	Wilger Low Flow Column Only
	25687	Wilger Low Flow Column W/balls, clip, retainer (No Top)
	37617	Wilger Low Flow Complete Column(s) - 4 pack w/ End cap, clips & 1/4QC Tops
	37723	Wilger Low Flow Complete Column(s) - 4 pack w/End cap, clips & 3/8QC Tops
BALL SELECTION FOR 30" ROWS		
1-3 GPA	18077	Green Plastic* Ball
2-4 GPA	18078	Red Plastic* Ball
3-6 GPA	18079	Maroon Glass Ball
5-10 GPA	18080	Stainless Steel Ball
*These balls may float to the top with heavier fertilizers, such as 10-34-0. Use Maroon glass in this case.		

AgXcel

CALCULATOR

Our easy to use, orifice and metering tube calculator is available FREE now on the App Store.



This is a reference guide of our most common components and replacement parts for ease of ordering. If you do not see the component used in your kit, please contact our office for assistance.

OLD

Two piece Diaphragm & pressure pad o-ring

PN# 25803
Viton Only

PN# 25686
Viton Only



NEW

One piece Integrated Diaphragm/o-ring

PN# 26410
FKM Only



NOTE: Old style will be available until current stock is exhausted.

** Premium Viton o-rings, seals and assemblies will continue to be available **

CAP ASSEMBLY:

Snap in Strainer & Seal adapter (PN# 25953)

O-ring seal - FKM (PN# 25951)
O-ring seal - Viton (PN# 25952)

3/8 Hose barb cap (SHOWN)



ORIFICES		
PN#	DESCRIPTION	
SPECIAL ORDER	17975	DC-BLANK
	18203	30-DC010 GREY LF
	19967	30-DC014 - ROYAL BLUE LF
	17591	30-DC018 TERRACOTA
	54523	30-DC020 BLACK LF
	17964	30 DC 023 PINK
	17965	30-DC028 GREY
	17966	30-DC015 - BLACK
	17967	30-DC-02 BROWN
	17968	30-DC-03 ORANGE
	53501	30-DC-035 MAROON
	17969	30-DC-04 RED
	17970	30-DC-05 BLUE
	17971	30-DC-06 YELLOW
	17972	30-DC-07 EMERALD GREEN
	17973	30-DC-08 WHITE
	17974	30-DC-10 LIME (IMPERIAL) GREEN
	19962	30-DC-12 ROYAL BLUE

CHECK VALVE COMPONENTS	
PN#	DESCRIPTION
26321	CR DIAPH MOD ASY 10 PSI BLK CAP
41716	CR DIAPH MOD ASY 4 PSI BLUE CAP
54538	O'RING VITON - PRESSURE PAD
25712	WILGER 1/4" COLLET
25718	WILGER 3/8" COLLET
25803	VITON DIAPHRAGM
25799	BUNA DIAPHRAGM (OLD STYLE)
25951	RADIAL LOCK CAP OUTER O-RING
26410	NEW STYLE FKM DIAPHRAGM
25953	COMBO-JET SEAL/STRAINER ADAPTER

METERING TUBES	
PN#	DESCRIPTION
38233	GX6MT - PINK
38241	GX6MT - YELLOW
38237	GX6MT - GREY
38242	GX6MT - NAVY BLUE
38243	GX6MT - BROWN
38250	GX6MT - SKY BLUE
38251	GX6MT - GREEN
38245	GX6MT - PURPLE
38246	GX6MT - ORANGE
38247	GX6MT - RED
38248	GX6MT - BLACK

NEW

O-ring Upgrade: FKM

All Wilger parts are transitioning to being manufactured with FKM O-rings & seals. The fluoroelastomer (FKM) o-ring provides superior chemical resistance and durability over Buna o-rings.

** Premium Viton o-rings, seals and assemblies will continue to be available **

OLD

PN# 25803
Viton Only



PN# 54538
Viton Only



NEW

One piece Integrated
Diaphragm/o-ring



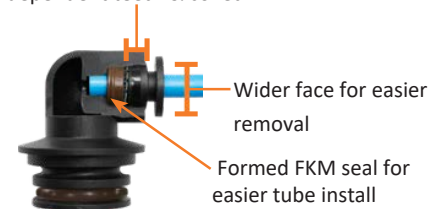
PN# 26410
FKM Only

** Premium Viton o-rings, seals and assemblies will continue to be available **

NEW

Independent teeth & collet

The 1/4" & 3/8"
Push-in tube outlets
have received a full
redesign for heavier
duty sealing and
easier release.



** This redesign also applies to the ptc radial lock caps on check valves **

AgXcel

CALCULATOR

Our easy to use, orifice and metering
tube calculator is available FREE now
on the App Store.



CHECK VALVES			
	KIT#	ASSEMBLED PN#	DESCRIPTION
4#	310	38169 = BODY 38171 = 1/4 PTC CAP	4# CHECK VALVE WITH 1/4" PTC INLET/OUTLET 
	305	28549 = BODY 54260 = 3/8 PTC CAP 19884 = 3/8 PTC INLET	4# CHECK VALVE WITH 3/8" PTC INLET/OUTLET 
	316	28549 = BODY 32253 = 3/8 BARB INLET 53465 = 3/8 BARB CAP	4# CHECK VALVE WITH 3/8" HOSE BARB INLET/OUTLET 
10#	313	26315 = BODY 32253 = 3/8 BARB INLET 53465 = 3/8 BARB CAP	10# CHECK VALVE WITH 3/8" HOSE BARB INLET/OUTLET 
	307	26315 = BODY 54260 = 3/8 PTC CAP 19884 = 3/8 PTC INLET	10# CHECK VALVE WITH 3/8" PTC INLET/OUTLET 

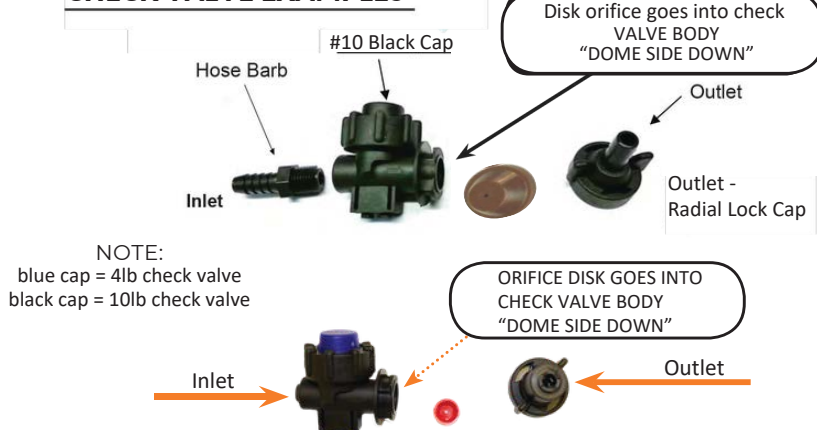


The preferred placement of the Agxcel check valve is as close to the row unit as possible, without sacrificing the security of the check valve. Approximately 30" from the bottom of the furrow (on every row, equal lengths) where liquid is being placed is ideal.

Follow these steps for successful placement:

- Find a secure location, on top of the row unit where debris (like in no-till conditions) will not catch the check valve or tubing and rip it out of place.
- Ensure that the install location allows for a tie strap to securely mount the check valve in place.
- The check valve works best when approximately 30" from where liquid is being placed.
- Ensure that the mounting location allows for ease of access to the orifice, in case the orifice size needs to be changed.

CHECK VALVE EXAMPLES



NOTE:
blue cap = 4lb check valve
black cap = 10lb check valve

CAP ASSEMBLY

Snap in Strainer & Seal adapter (PN# 25953)

O-ring seal - FKM (PN# 25951)
O-ring seal - Viton (PN# 25952)

3/8 Hose barb cap (SHOWN)



** Be sure orifices are placed inside check valve body facing the correct way. The dome shape allows for debris to be pushed aside, regulating flow and producing a straight stream. They are precision molded in polyacetal for reliable performance.

VISUAL PARTS INDEX

SIGHT COLUMN COMPONENTS		
	PN#	DESCRIPTION
	25709	Wilger Top cap 1/4" QC
	25712	Tube guide for 1/4" QC
	18033	3/8" Hose Shank Inlet - 90 degree
	17655	Wilger Top Cap 3/8" QC
	25718	Collet for 3/8" QC (not pictured)
	38260	GX Chassis (Tomahawk) Approx. 32.5" Tall
	19992	FKM "O" ring for use between flow columns & on wilger tops
	25686	Viton "O" ring for use between flow columns & on wilger tops
	32239	3/4" Hose Shank Inlet (used with center fed tee PN# 18037)
	52142	1/4" Poly Elbow (used with center fed tee PN# 18037 tee for gauge)
	262	QC3 - 1/4" QC TO 1/4" QC
	20407	QC15 - 3/8" QC TO 3/8" QC (not pictured)
	38240	QC7 - 1/4" QC TO 3/8" QC

OLD

Two piece Diaphragm & pressure pad o-ring

PN# 25803
Viton Only

PN# 25686
Viton Only



NEW

One piece Integrated Diaphragm/o-ring

PN# 26410
FKM Only



** Premium Viton o-rings, seals and assemblies will continue to be available **

VISUAL PARTS INDEX

NOTE: For our check valves, please see pg.27 for the fully assembled PN#'s as well as the component parts within the assembled kits.

SIGHT COLUMN COMPONENTS		
	PN#	DESCRIPTION
	18032	3/4" Hose Shank Inlet
	18034	3/4" Hose Shank Inlet - 90 degree
	18039	Column End cap & Clip
	25682	Clip Only
	18082	Mounting Bracket for PN#406
	18088	Mounting Bracket for PN#414
	18083	Mounting Bracket for PN#20106
	406	up to 6R Flow Column Backdrop (white)
	414	up to 8R Flow Column Backdrop (white)
	20106	7-12R Flow Column Backdrop (white)
	25687	Wilger Low Flow Column w/balls,clip, retainer (no top)
	20985	Wilger Standard Column w/balls,clip, retainer (no top)
	37617	Wilger Low Flow Column Complete - 4 pack w/end cap
	37637	Wilger Standard Column Complete - 4 pack w/end cap
	18037	Wilger center fed tee (will need PN# 32239 1" MNPT X 3/4"HB to connect inlet hose - see pg. 26)
	25681	Flow column ball retainer

GX5 LFP45/BP45 COMPONENTS		
PN#	DESCRIPTION	
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE (2 REQ'D)
	18169	GX5SPIKEVALVEEXTDBKT
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWMHYD VALVE W/ STD MOTOR KIT
C	38380	GX5 LFP 45 PUMP ONLY .5 - 11 GPM
	55559	GX5 BP 45 PUMP ONLY .5 - 11 GPM
D	55586	HYD FLANGE KIT FOR BOTH LFP45/BP45
E	51842	1"IN LINE T-STRAINER-50 MESH
F	33132	1" WORM SCREW CLAMP (10 REQ'D)
	50016	3/4" EPDM GASKET (10 REQ'D)
G	51328	1" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW FOR GAUGE
J	51334	1" FLANGED CROSS
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

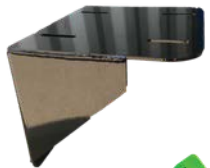
PN#	DESCRIPTION	
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	52195	1-1/2 T-BOLT CLAMP (2 REQ'D)
	53580	1-1/4 SPIRAL HOSE (@ 1 FT)
O	53502	1" BLACK HOSE
	52194	1-1/4 T-BOLT CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	55771	1" ELBOW
	55770	RING NUT
	55920	O RING VITON FOR LFP45
	55919	O RING FOR BP 45
S "IN"	55577	1 1/4" ELBOW
	55761	RING NUT
	55915	O RING VITON FOR LFP45
	29232	O RING FOR BP 45



In order to prevent debris and chemical deposits from clogging or logging into your hydraulic system, Agxcel recommends a minimum of 30 mesh filter in line between tank and system inlet. Even the smallest debris can block diaphragms from closing properly affecting rates and pump performance.



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

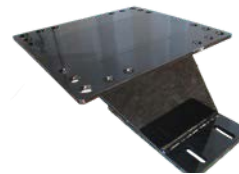
PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS



OPTIONAL MOUNTING GX5 MOUNTING BRACKETS

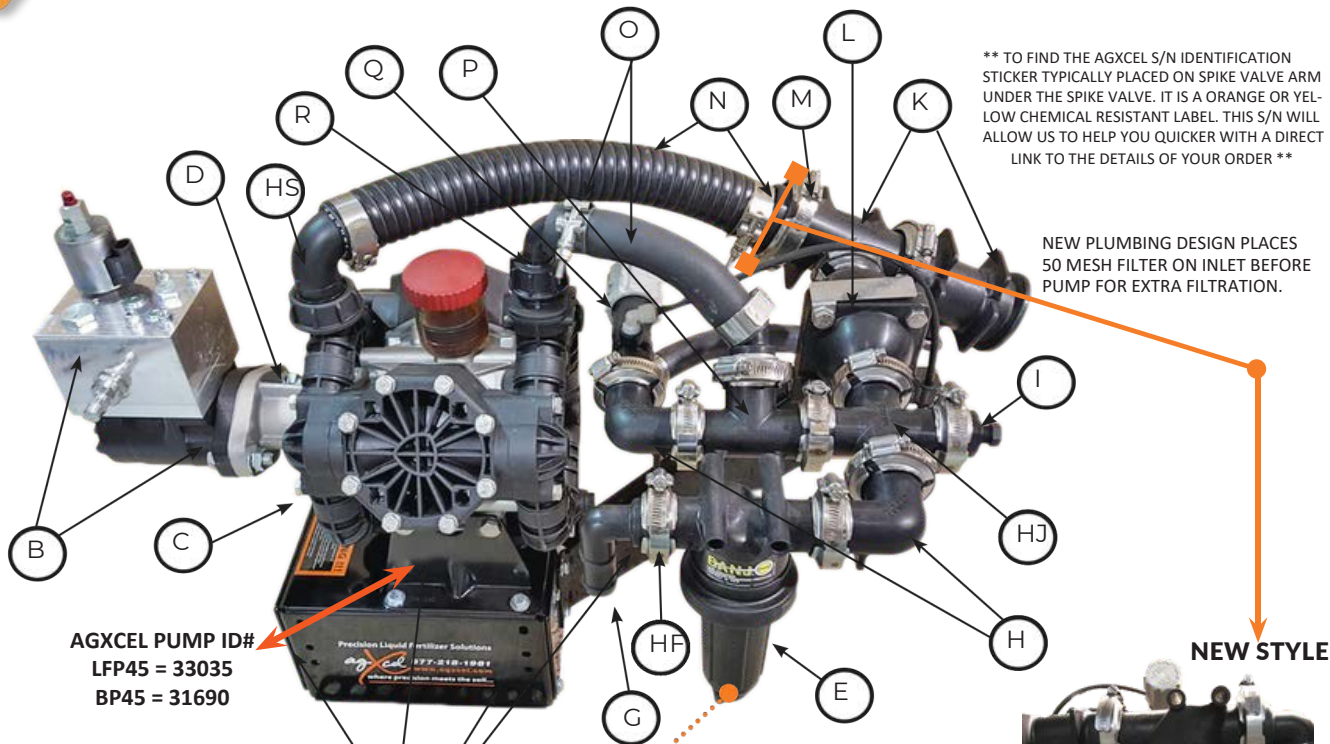
PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER



PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET





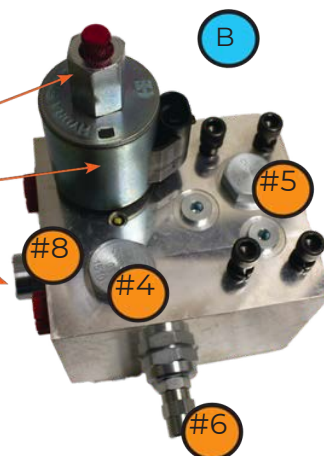
PUMP INLET FILTER OPTION

51365	1 1/4" COUPLER 1" FLANGE
38269	2" FLANGE GASKET (1 REQ'D)
38267	2" FLANGE CLAMP (1 REQ'D)
50016	GASKET
33132	1" FLANGE CLAMP
51321	1" FLANGE 1 1/4" BARB
51842	T-STRAINER FILTER 50 MESH
19920	1/4" TUBING
19848	1/4" SHUT OFF

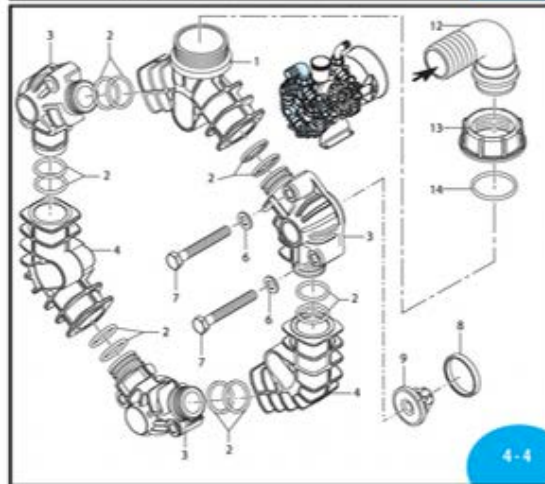
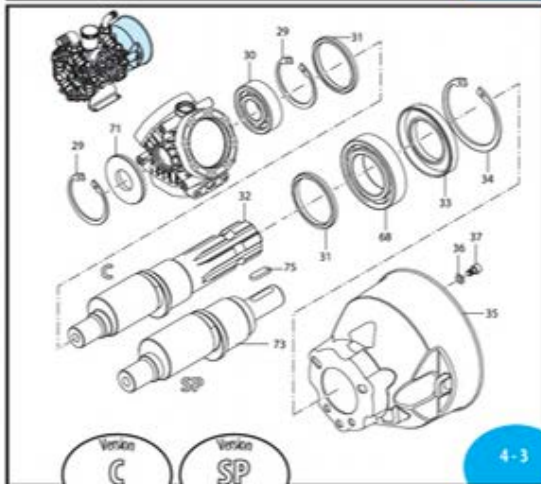
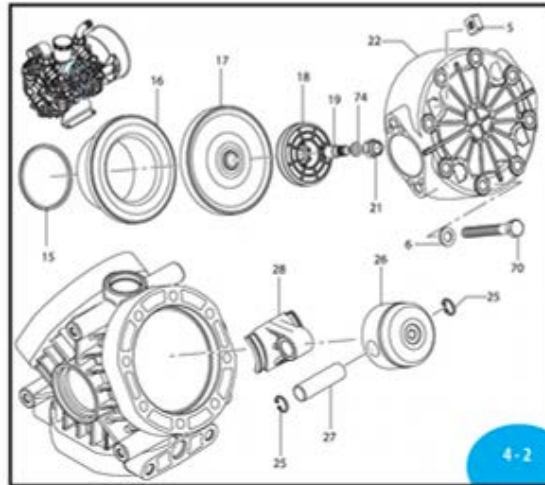
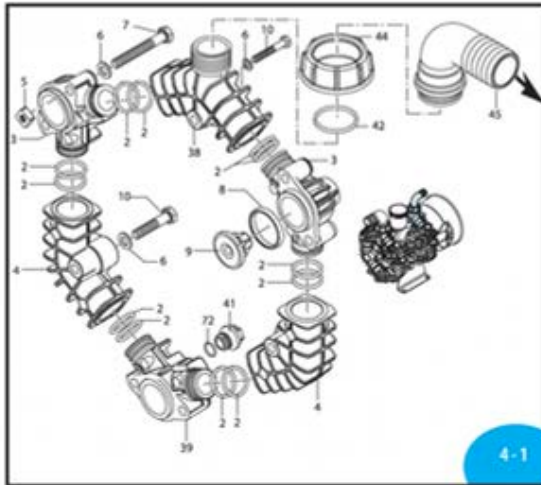
BOTTOM OF FILTER

32426	1/2" REDUCER 1/4"
263	1/4" QC TO 1/4 M NPT

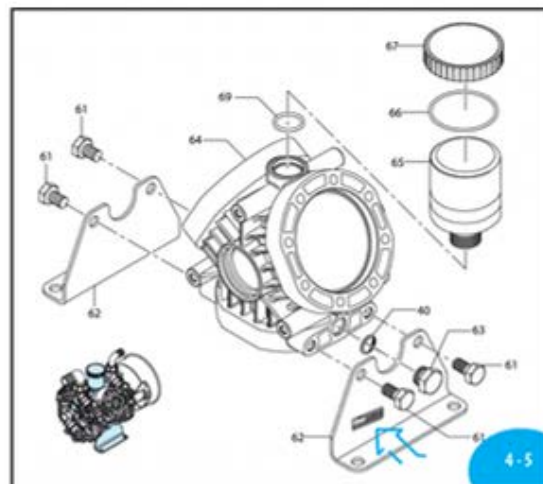
PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT



GX5 LFP45 & BP45 PUMP BREAK DOWN



LFP 45/BP45 - 3 DIAPHRAGMS	
FERTILIZER FLOW (GPM)	HYDRAULIC OIL FLOW (GPM)
3	.9
7	2.0
10	2.8
BASED ON A 30FT TOOL BAR.	



AR 45LFP / AR 45 bp

Pos	Code	Description	Qty	Note
1	3120410	Manifold suction	1	
2	720030	O-ring Ø 22.22x2.62	24	AR45bp
3	720011	O-ring Ø 22.22x2.62	24	Viton AR45LFP
4	3120050	Manifold	5	
5	3120060	Manifold	4	
6	3120510	Nut M8	12	SS
7	3120761	Washer	42	Z/B AR45bp
8	3120760	Washer	42	SS AR45LFP
9	3120251	Screw TE M8x60	12	T90° AR45bp
10	3120250	Screw TE M8x60	12	SS T90° AR45LFP
11	3120230	Gasket	6	AR45bp
12	3120680	Gasket	6	Viton AR45LFP
13	3120951	Complete valve	6	AR45LFP
14	3120950	Complete valve	6	AR45bp
15	621782	Screw TE M8x40	6	SS T90° AR45LFP
16	621780	Screw TE M8x40	6	T90° AR45bp
17	7512000	Elbow 1 1/4"	1	
18	750670	Ring nut 1 1/2" G	1	
19	1880460	O-ring Ø 29x3	1	Viton AR45LFP
20	390290	O-ring Ø 29x3	1	AR45bp
21	3120130	Piston ring	3	
22	3120090	Sleeve	3	
23	3120080	Diaphragm	3	NBR AR45bp
24	3120082	Diaphragm	3	BlueFlex™ AR45LFP
25	3120081	Diaphragm	3	Viton
26	3120085	Diaphragm	3	Desmopan
27	3120120	Plate	3	
28	3120101	Hub pin AISI 316L	3	T220° (a) AR45LFP
29	3120100	Hub pin AISI 316L	3	T220° (a) AR45bp
30	3120790	Nut M8 AISI 304	3	T180° (a) AR45LFP
31	3120110	Nut M8 AISI 304	3	SS T180° AR45bp
32	3120020	Head	3	
33	1880450	Ring circlip Ø 14	6	
34	3120070	Piston Ø 54	3	
35	380300	Pin	3	
36	3120180	Connecting rod	3	
37	1460490	Ring circlip Ø 47	2	
38	380230	Bearing	1	
39	1300120	connecting rod	2	
40	3120500	Shaft marked D0	1	AR45bp/LFP C
41	3120160	Ring seal	1	
42	961790	Ring circlip Ø 68	1	
43	3240290	Shield	1	
44	320620	Washer	4	AR45bp
45	820670	Screw TCEI M10x16	4	T90° AR45bp
46	3120380	Manifold	1	
47	3120330	Manifold for GS25 Controller	1	Not Shown
48	3120051	Line	1	

Pos	Code	Description	Qty	Note
40	740290	O-ring Ø 14x1.78	1	
41	3120090	Plug	1	T15°
42	1140450	O-ring Ø 20.24x2.62	1	AR45bp
43	1140451	O-ring Ø 20.24x2.62	1	Viton AR45LFP
44	3120440	Ring nut 1" G	1	
45	3120460	Elbow 1"	1	
46	620342	Screw TE M10x20	4	SS T265° AR45LFP
47	620340	Screw TE M10x20	4	T265° AR45bp
48	3120140	Foot	2	
49	880530	Plug 3/8" G	1	T180°
50	3120010	Pump body	1	
51	3120140	Tank	1	T180°
52	650920	O-ring Ø 53.65x2.62	1	
53	1040320	Plug red	1	
54	961780	Bearing	1	
55	720030	O-ring Ø 22.22x2.62	1	
56	3120271	Screw TE M8x65	24	SS T90° AR45LFP
57	3120270	Screw TE M8x65	24	T90° AR45bp
58	3120640	Ring seal	1	
59	2840891	O-ring Ø 14x2	1	Viton AR45LFP
60	2840890	O-ring Ø 14x2	1	AR45bp
61	3120170	Shaft marked DL	1	AR45bp/LFP SP
62	3120760	Washer	3	SS
63	2280950	Key	1	(d)
64	3129013	Complete Discharge manifold	1	AR45bp-SP
65	3129015	Complete inlet manifold	1	AR45bp
66	3129000	Piston ConRod assembly	3	Not shown
67	43883	Complete Discharge manifold	1	AR45LFP-GC Not shown
68	43821	Controller Assembly	1	AR45LFP-GC Not shown

(a) Screw with Loctite 83-21 thread lock STRONG
(d) Supplied in kit applications.

* Torque: in-lbs +/- 10%



55564	LFP45/BP45 BLUE FLEX DIAPHRAGM KIT
55568	LFP 45 VITON DIAPHRAGM KIT

55566	LFP 45 VITON VALVE KIT
55565	BP 45 VALVE KIT



37735	LFP 45 O-RING KIT
37760	BP 45 O-RING KIT

31326	OIL QUART
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CRANKCASE OIL CAPACITY 13 OZ.

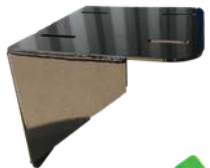
GX5 LFP80/BP80 COMPONENTS		
PN#		DESCRIPTION
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE (2 REQ'D)
	18169	GX5SPIKEVALVEEXTDBKT
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWM HYD VALVE W/ MOTOR KIT
C	38461	GX5 LFP 80 PUMP ONLY .5 - 20 GPM
	55560	GX5 BP 80 PUMP ONLY .5 - 20 GPM
D	55586	HYD FLANGE KIT
E	51842	1"IN LINE T-STRAINER-50 MESH
F	33132	1" WORM SCREW CLAMP (10 REQ'D)
	50016	3/4" EPDM GASKET (10 REQ'D)
G	51328	1" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW FOR GAUGE
J	51334	1" FLANGED CROSS
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

PN#		DESCRIPTION
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	52195	1-1/2 T-BOLT CLAMP (2 REQ'D)
	53480	1-1/2 SPIRAL HOSE (@ 1 FT)
O	53502	1" BLACK HOSE
	52194	1-1/4 T-BOLT CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	55771	1" ELBOW
	55770	RING NUT
	55920	O RING VITON FOR LFP80
	55919	O RING FOR BP 80
S "IN"	55559	1 1/2" ELBOW
	55761	RING NUT
	55915	O RING VITON FOR LFP80
	29232	O RING FOR BP 80

LFP80/BP80 - 3 DIAPHRAGMS	
FERTILIZER FLOW (GPM)	HYDRAULIC OIL FLOW (GPM)
5	1.4
10	2.8
15	4.3
20	5.7
BASED ON A 30FT TOOL BAR	



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

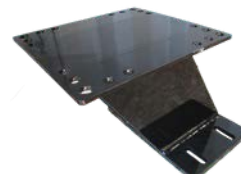
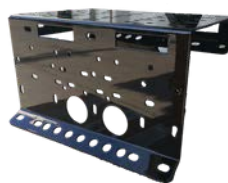
PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS



PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

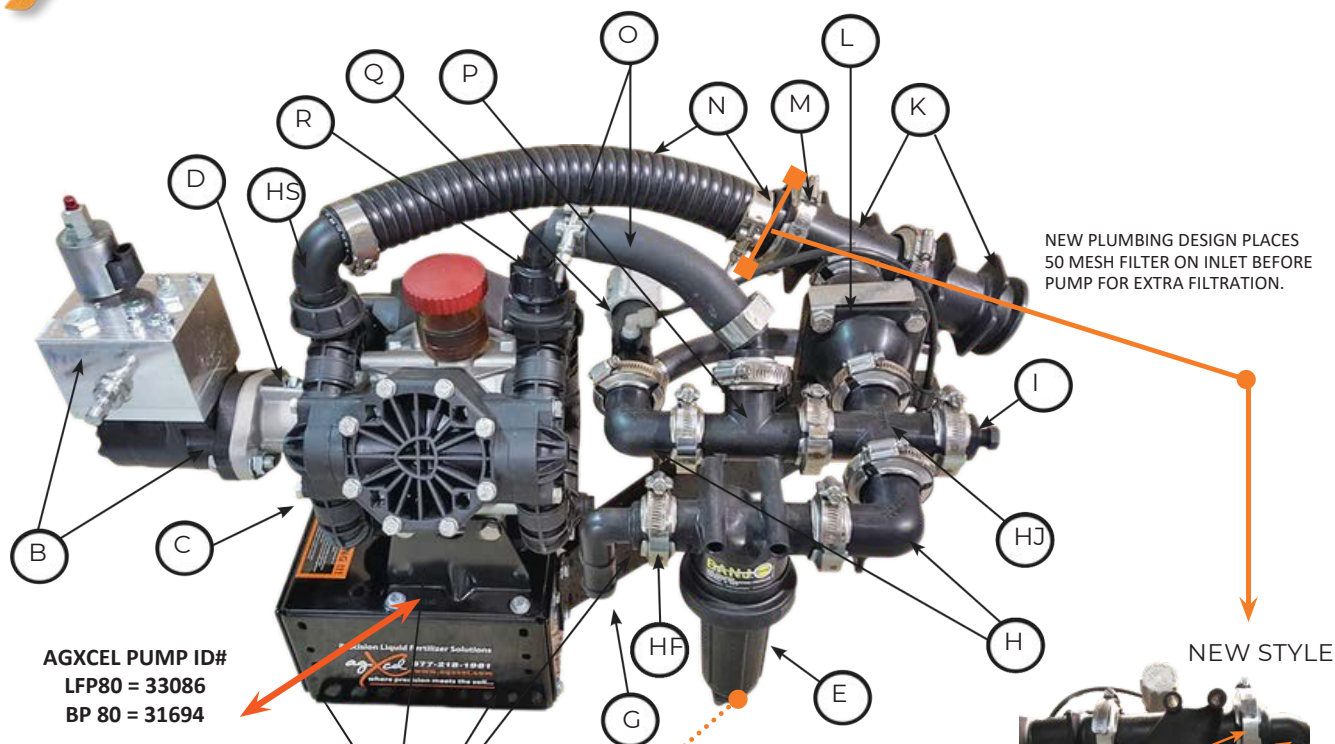
OPTIONAL MOUNTING GX5 MOUNTING BRACKETS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER



PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET





AGXCEL PUMP ID#
LFP80 = 33086
BP 80 = 31694

OLDER STYLE REQUIRED PROPER USE OF THE TANK TO PUMP KIT THAT WAS INCLUDED IN EVERY SYSTEM SOLD, TO FILTER BETWEEN TANK AND COMPLETE SYSTEM INLET.

PROPER APPLICATION OF PRIMARY TANK TO PUMP KIT ADDED EXTRA FILTRATION BETWEEN TANK AND SYSTEM PUMP.

OLDER STYLE ALSO HAD A 50 MESH FILTER PLACED BEFORE FLOW METER FOR SECONDARY FILTRATION.

PUMP INLET FILTER OPTION

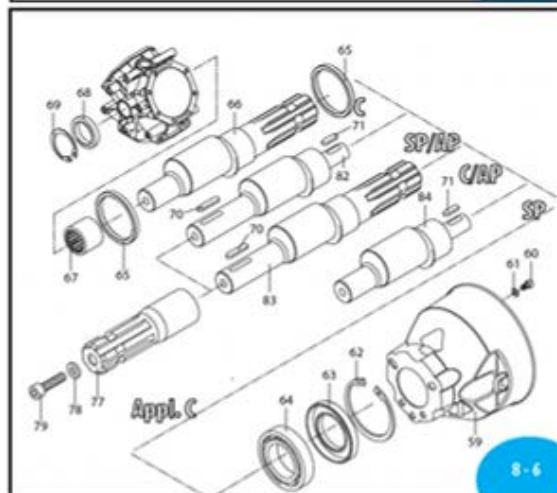
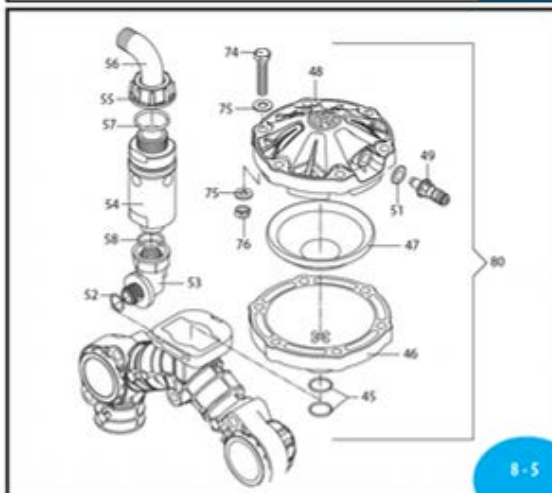
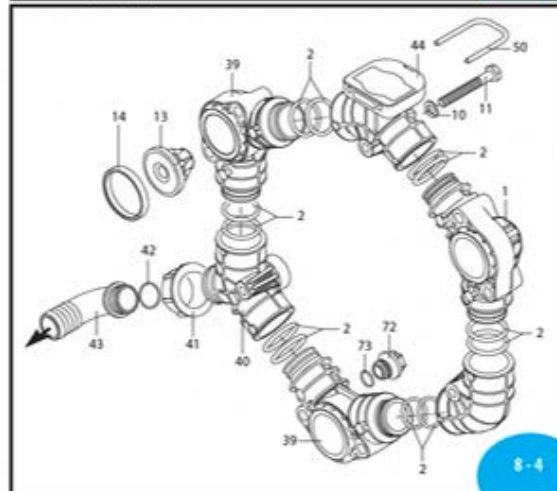
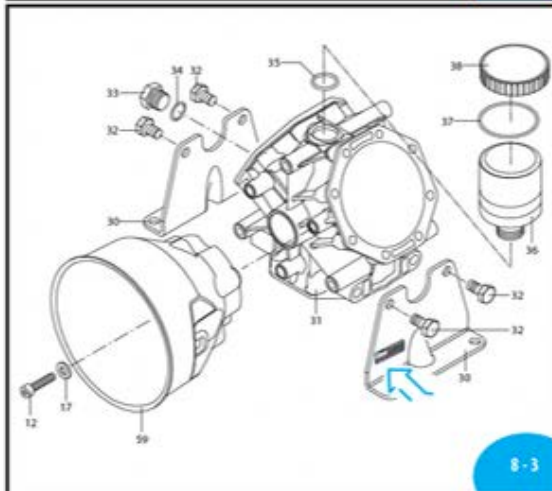
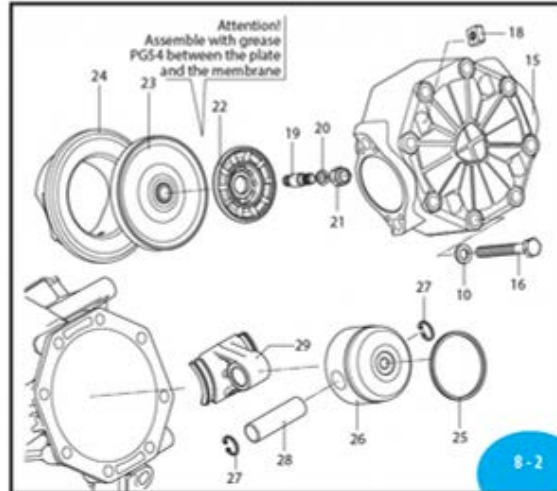
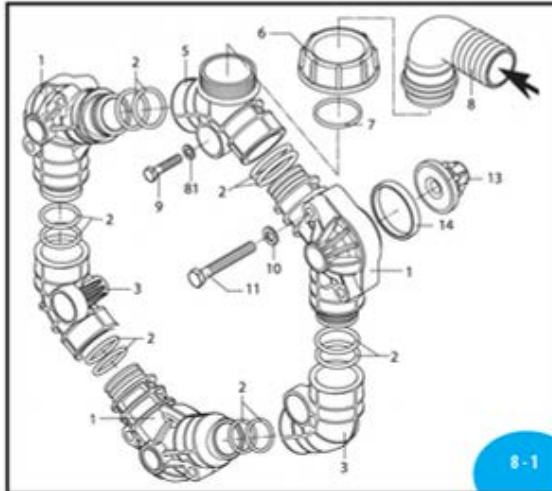
38269	2" FLANGE GASKET (2 REQ'D)
38267	2" FLANGE CLAMP (2 REQ'D)
51374	1 1/2 BARB ELBOW
51850	T-STRAINER FILTER 50 MESH
19920	1/4" TUBING
19848	1/4" SHUT OFF

BOTTOM OF FILTER

32423	1" REDUCER 1/2"
32426	1/2" REDUCER 1/4"
263	1/4" QC TO 1/4 M NPT

PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT

GX5 LFP80/BP80 PUMP BREAK DOWN



Pos	Code	Discription	Qty	Note
1	3240030	Line valve closed	4	
2	390291	O-ring Ø 28.25x2.62	24	
	390292	O-ring Ø 28.25x2.62	24	Viton LFP
3	3240040	Manifold	3	
5	3240050	Line asp. threaded	1	
6	750670	Ring nut 1 1/2" G	1	
7	390290	O-ring Ø 29x3	1	
	1880460	O-ring Ø 29x3	1	Viton LFP
8	50267	Elbow 1 1/2"	1	
9	3240280	Screw TE M8x55	6	SST105*
10	3120760	Washer	36	SS
11	380211	Screw TE M8x75	12	SST90*
12	820672	Screw TCEI M10x16	4	SS
13	2429050	Valve	6	
	2429051	Valve AISI 316L	6	LFP
14	3460240	Gasket	6	
	3460380	Gasket	6	Viton LFP
15	3240020	Head	3	
16	621771	Screw TE M8x80	24	SST125*
17	395870	Washer	4	SS
18	3120510	Nut M8	12	SS
19	3240100	Hub pin AISI 303	3	T265* (a)
	3240101	Hub pin AISI 316L	3	LFP T265* (a)
20	320622	Washer	3	SS
21	2240110	Nut M10 AISI 304	3	T220*
	2240670	Nut M10 AISI 316L	3	LFP T220*
22	3240110	Plate	3	
	1040081	Diaphragm	3	NBR
	1040083	Diaphragm	3	BlueFlex™
	1040080	Diaphragm	3	Desmopan
	1040082	Diaphragm	3	Viton
24	3240130	Sleeve	3	
25	650190	Piston ring	1	
26	1040120	Piston Ø 63	3	
27	1040270	Ring circlip Ø 15	2	
28	1040070	Pin	3	
29	3240120	Connecting-rod	3	
30	3240090	Foot	2	
31	3240010	Pump body	1	
32	620342	Screw TE M10x20	4	SST265*
33	880530	Plug 3/8" G	1	T180*
34	740290	O-ring Ø 14x1.78	1	
35	720030	O-ring Ø 22.22x2.62	1	
36	3120240	Tank	1	T180*
37	650920	O-ring Ø 53.65x2.62	1	
38	1040324	Plug rosso	1	
39	3240031	Line	2	
40	3240060	Line	1	
41	3120440	Ring nut 1" G	1	
42	1140450	O-ring Ø 20.24x2.62	1	
	1140451	O-ring Ø 20.24x2.62	1	Viton
43	3120460	Elbow 1"	1	
44	3240070	Line	1	

Pos	Code	Discription	Qty	Note
45	550040	O-ring Ø 26.65x2.62	2	
	880311	O-ring Ø 26.65x2.62	2	Viton LFP
46	3460180	Semi air chamber lower	1	Nylon
	800190	Diaphragm air chamber	1	NBR
47	800192	Diaphragm air chamber	1	BlueFlex™
48	3460190	Semi air chamber upper	1	Nylon
49	180020	Air valve	1	T15*.5
50	3460210	Fork	1	
51	650542	Gasket	1	
52	2440230	O-ring	1	
53	3460330	Fitting 3/8"(M) - 1/2"(F)	1	activator
54	1609000	Safety valve	1	290 PSI + activator
55	550450	Ring nut 3/4" G	1	
56	550460	Elbow Ø 18	1	
57	880831	O-ring Ø 15.54x2.62	1	Viton
58	180101	O-ring Ø 17.5x2	1	
59	180102	O-ring Ø 17.5x2	1	Viton
59	3240290	Shield	2	
60	820672	Screw TCEI M10x16	4	SST90*
61	395870	Washer	4	SS
62	961790	Ring circlip Ø 68	1	
63	3120160	Ring seal	1	
64	961780	Bearing	1	
65	3240320	Ring connecting rod	2	
66	3240150	Shaft C marked EE	1	
67	3460110	Bearing	1	
68	1300230	Ring seal	1	
69	480900	Ring circlip Ø 35	1	
70	650250	Key	1	(d)
71	2280950	Key	1	(d)
72	3120690	Plug 3/8" G	1	
73	2840890	O-ring Ø 14x2	1	
	2840591	O-ring Ø 14x2	1	Viton LFP
74	621782	Screw TE M8x40	6	SST180*
75	390315	Washer	12	SS
76	3120260	Nut M8	6	SST180*
77	650300	Coupling	1	
78	961340	Washer	1	
79	680350	Screw TCEI M8x35	1	T180*
80	1506	Air chamber NBR	1	
	43065	Air chamber BlueFlex™	1	
	43067	Air chamber BlueFlex™	1	LFP
81	390315	Washer	6	SS
82	3240170	Shaft SP/AP marked DM	1	AR80
83	3240160	Shaft C/AP marked EF	1	AR80
84	3240190	Shaft SP marked EB	1	AR80
85	3249001	Complete Discharge assembly	1	AR80bp
86	3240180	Shaft SP	1	AR60
87	3249006	Complete Controller	1	Not shown

(a) Screw with Loxal 83-21 thread lock STRONG.

(d) Supplied in kit applications.

* Torque: in-lbs +/- 10%



55570	LFP 80 BLUE FLEX DIAPHRAGM KIT
55569	LFP 80 VITON DIAPHRAGM KIT

55575	LFP 80 VALVE KIT (VITON ONLY)
55576	BP 80 VALVE KIT



37761	LFP 80 O-RING KIT (VITON ONLY)
37772	BP 80 O-RING KIT

31326	OIL QUART
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CRANKCASE OIL CAPACITY 24 OZ.

GX5 D115 COMPONENTS		
PN#	DESCRIPTION	
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE (2 REQ'D)
	38386	GX5SPIKEVALVEBKT (D115 ONLY)
	37632	PUMP MOUNT BRACKET (D115 ONLY)
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWM HYD VALVE W/ MOTOR KIT
C	27479	GX5 D115 PUMP ONLY 1 - 25 GPM
	38465	HYD FLANGE KIT FOR D115
E	51842	1" IN LINE T-STRAINER-50 MESH
F	33132	1" WORM SCREW CLAMP (10 REQ'D)
	50016	3/4" EPDM GASKET (10 REQ'D)
G	51328	1" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW FOR GAUGE
J	51334	1" FLANGED CROSS
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

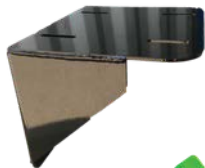
PN#	DESCRIPTION	
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	52195	1-1/2 T-BOLT CLAMP (2 REQ'D)
	53580	1-1/4 SPIRAL HOSE (@ 1 FT)
O	53502	1" BLACK HOSE
	52194	1-1/4 T-BOLT CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	29416	1" ELBOW
	29404	RING NUT
	29415	O RING FOR D115
S "IN"	29376	1 1/2" ELBOW
	29375	RING NUT
	29124	O RING FOR D115



In order to prevent debris and chemical deposits from clogging or logging into your hydraulic system, Agxcel recommends a minimum of 30 mesh filter in line between tank and system inlet. Even the smallest debris can block diaphragms from closing properly affecting rates and pump performance.



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS

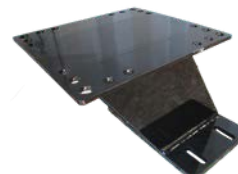


OPTIONAL MOUNTING GX5 MOUNTING BRACKETS



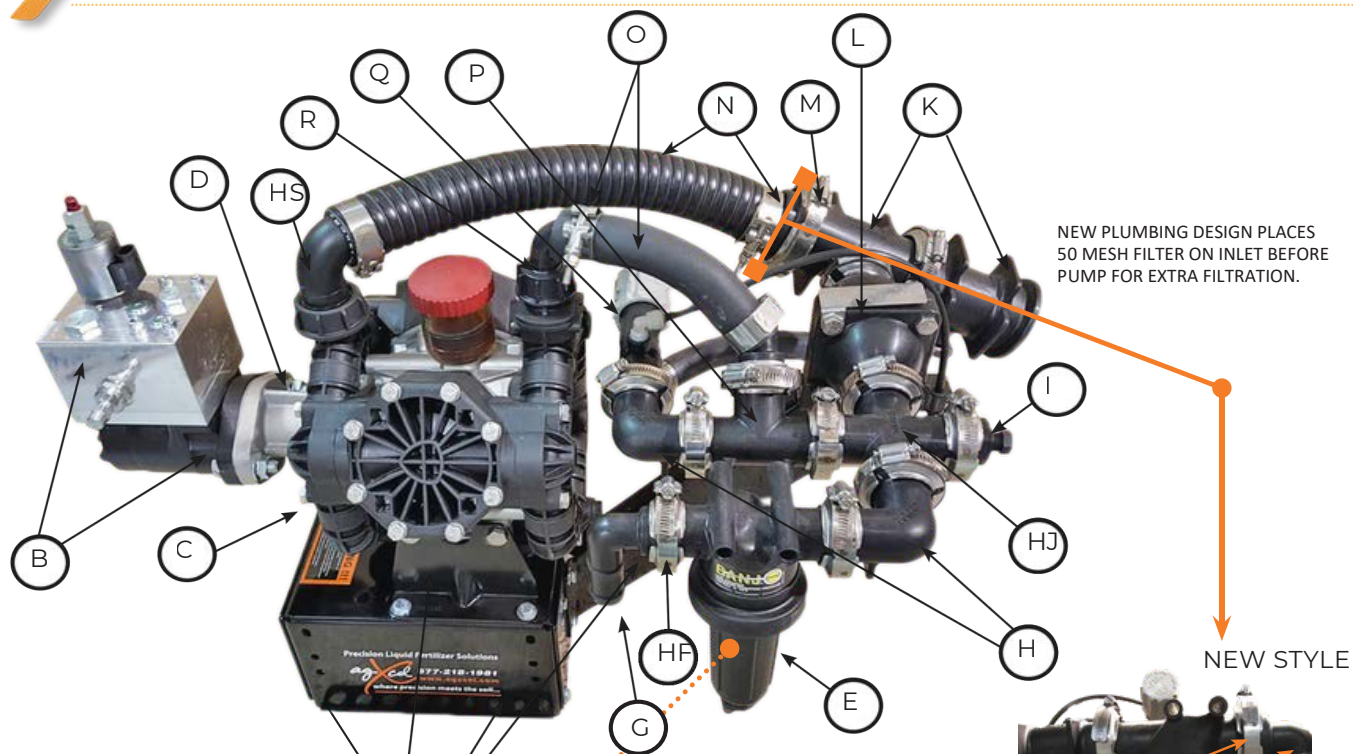
PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER



PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET





OLDER STYLE REQUIRED PROPER USE OF THE TANK TO PUMP KIT THAT WAS INCLUDED IN EVERY SYSTEM SOLD, TO FILTER BETWEEN TANK AND COMPLETE SYSTEM INLET.

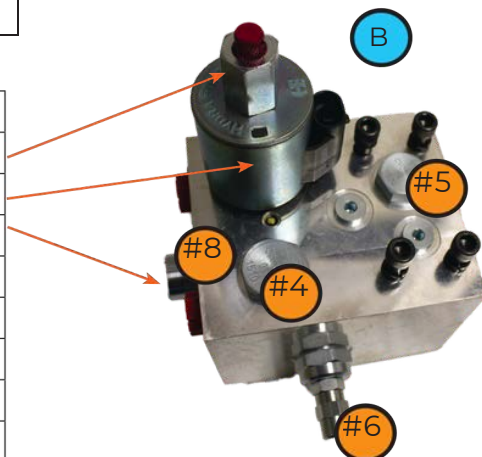
PROPER APPLICATION OF PRIMARY TANK TO PUMP KIT ADDED EXTRA FILTRATION BETWEEN TANK AND SYSTEM PUMP.

OLDER STYLE ALSO HAD A 50 MESH FILTER PLACED BEFORE FLOW METER FOR SECONDARY FILTRATION.

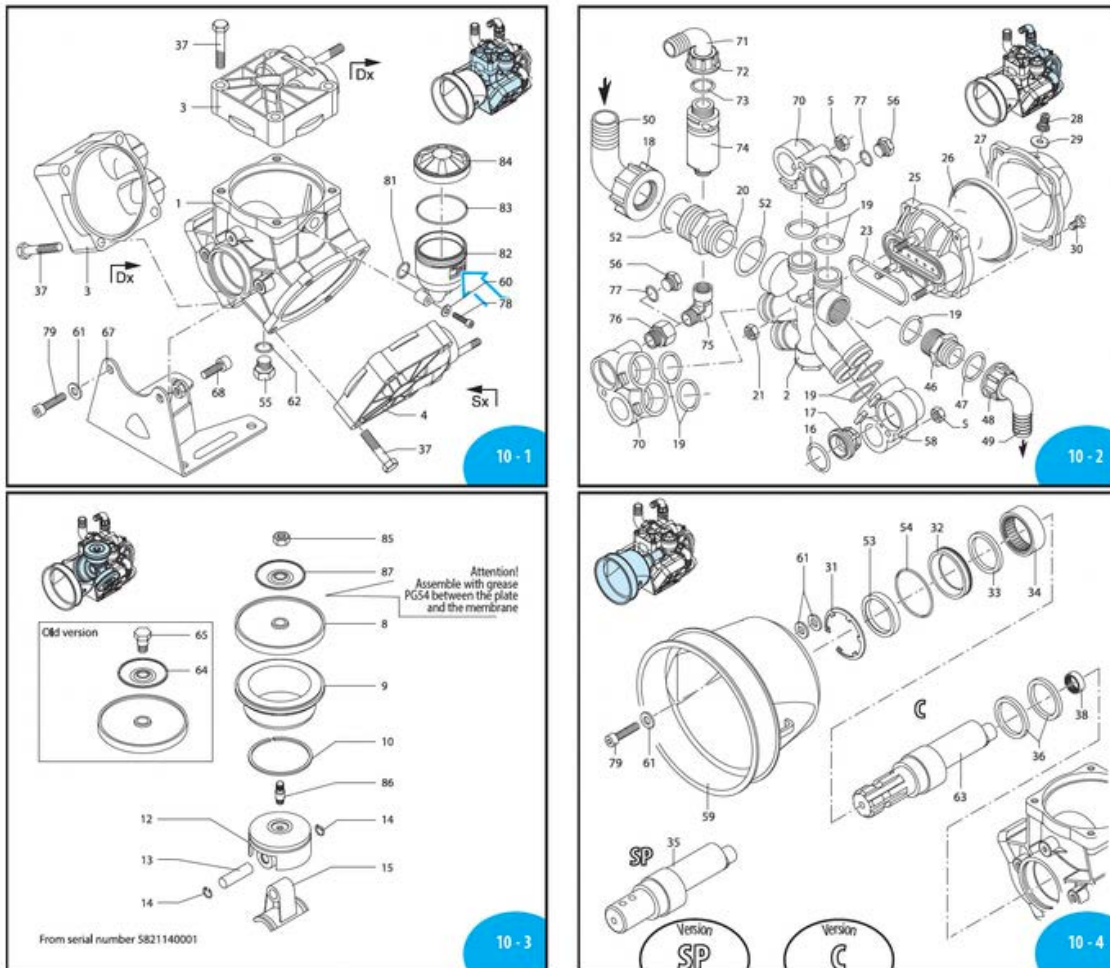
PUMP INLET FILTER OPTION	
38269	2" FLANGE GASKET (2 REQ'D)
38267	2" FLANGE CLAMP (2 REQ'D)
51374	1 1/2 BARB ELBOW
51850	T-STRAINER FILTER 50 MESH
19920	1/4" TUBING
19848	1/4" SHUT OFF

BOTTOM OF FILTER	
32423	1" REDUCER 1/2"
32426	1/2" REDUCER 1/4"
263	1/4" QC TO 1/4 M NPT

PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT



GX5 D115 PUMP BREAK DOWN



37708 D115 BLUE FLEX DIAPHRAGM KIT



29936 D115 VALVE KIT

29922 D115 O RING KIT

31326 OIL QUART



CRANKCASE OIL CAPACITY 32 OZ.

Pos	Code	Discription	Qty	Note
1	580013	Pump body	1	
2	580150	Manifold	1	
3	550101	Head marked dx	2	
4	550102	Head marked sx	1	
5	180152	Nut M10	3	Geomet T355*
	550081	Diaphragm	3	BlueFlex™
	550080	Diaphragm	3	NBR
	550084	Diaphragm	3	Viton
	550086	Diaphragm	3	HPDS
	580110	Sleeve	3	AR115bp
	580350	Sleeve	3	AR135bp
	580112	Sleeve	3	AR115bp/1000
10	500260	Piston ring	3	
12	580120	Piston Ø 80	3	
13	380300	Pin	3	
14	380080	Ring circlip Øi 14	6	
15	580140	Connecting-rod	3	
16	320030	O-ring Ø 31.5x4.5	6	90Sh
	759051	Valve	6	AR115bp AR135bp
	589050	Valve	6	AR115bp/1000
18	540541	Ring nut 1" 3/4 G	1	
19	390291	O-ring Ø 28.25x2.62	7	
20	540530	Fitting 1"1/4G-1"3/4GM-M	1	
21	390271	Nut M8	3	Geomet T180*
23	580050	Gasket	1	
	580180	Semi air chamber lower	1	Black
	550194	Diaphragm air chamber	1	Blueflex™
	550190	Diaphragm air chamber	1	NBR
	550192	Diaphragm air chamber	1	Viton
	550193	Diaphragm air chamber	1	HPDS
27	550233	Semi air chamber upper	1	Black
28	550300	Air valve	1	T25*
29	650542	Gasket	1	
30	550680	Screw TE M8x20	4	Geomet T180*
31	200391	Ring circlip Øi 62	1	
32	550470	Bushing seal ring	1	
33	550070	Washer	1	
34	550060	Bushing	1	
	550170	Shaft marked AL	1	AR115bp SP
	580380	Shaft marked AT	1	AR135bp SP
36	580470	Ring connecting rod	2	
37	551040	Screw TE M10x55	12	Geomet
38	550310	Bushing	1	
46	550340	Fitting 1" G M-M	1	
47	550350	O-ring Ø 23.81x2.62	1	
48	550242	Ring nut 1" G	1	
49	550370	Elbow 1"	1	
50	540550	Elbow 1 1/2"	1	
52	250310	O-ring Ø 36.14x2.62	2	

Pos	Code	Discription	Qty	Note
53	550491	Ring seal	1	
54	650920	O-ring Ø 53.65x2.62	1	
55	880530	Plug 3/8" G	1	T180*
56	330173	Plug 1/2" G	1	Geomet T180*
58	580072	Fitting	1	
59	1500350	Shield	1	
60	550332	Washer	2	Geomet
61	320621	Washer	5	Geomet
62	740290	O-ring Ø 14x1.78	1	
	550173	Shaft marked AM	1	AR115bp C
	580330	Shaft marked AS	1	AR135bp C
	550176	Shaft marked AP	1	AR115bp/1000
	580370	Retaining washer hole Ø 14	3	(b)
64	580360	Hub pin	3	(b) T180*
	580080	Foot	1	AR115bp AR135bp
	580082	Foot	1	AR115bp/1000
68	540301	Screw TCEI M10x30	1	Geomet T355*
70	580400	Fitting	2	
71	550460	Elbow Ø 18	1	
72	550450	Ring nut 3/4" G	1	
73	880831	O-ring Ø 15.54x2.62	1	Viton
74	1609000	Safety valve	1	290 PSI
75	881560	Fitting 1/2" G M-F	1	
76	580421	Fitting M-F 1/2"	1	T180*
77	180101	O-ring Ø 17.5x2	1	
78	850851	Screw TCEI M6x30	2	Geomet T90*
79	620472	Screw TCEI M10x20	3	Geomet T90*
81	390180	O-ring Ø 18.72x2.62	1	
82	1040310	Tank	1	
83	650920	O-ring Ø 53.65x2.62	1	
	1040326	Plug black	1	AR115bp
	1040324	Plug red	1	AR135bp
	1040325	Plug green	1	AR115bp/1000
85	2240110	Nut M10	3	(a) T265*
86	2240100	Hub pin	3	(a) T265*
87	580371	Retaining washer hole Ø 10	3	(a)

(a) From serial number 5821140001.
(b) Up to serial number 5820149999.

* Torque: in-lbs +/- 10%

D115 - 3 DIAPHRAGMS	
FERTILIZER FLOW (GPM)	HYDRAULIC OIL FLOW (GPM)
5	2.1
10	4.2
15	6.3
20	8.4
25	10.5
BASED ON A 30FT TOOL BAR	

GX5 LFP120 COMPONENTS		
PN#		DESCRIPTION
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE (2 REQ'D)
	38386	GX5SPIKEVALVEBKT (D115 ONLY)
	37632	PUMP MOUNT BRACKET (D115 ONLY)
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWM HYD VALVE W/ MOTOR KIT
C	55530	GX5 LFP120
D	55585	HYD FLANGE KIT FOR LFP120
E	51842	1" IN LINE T-STRAINER 50 MESH
F	33123	1" WORM SCREW CLAMP
	50016	3/4" EPDM GASKET
G	51328	1" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW FOR GAUGE
J	51334	1" FLANGED CROSS
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

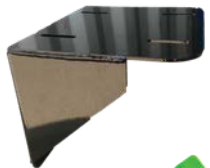
PN#		DESCRIPTION
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	52195	1-1/2 T-BOLT CLAMP (2 REQ'D)
	53580	1-1/4 SPIRAL HOSE (@ 1 FT)
O	53502	1" BLACK HOSE
	52194	1-1/4 T-BOLT CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	56141	1" ELBOW
	56142	RING NUT
	56140	O RING FOR LFP120
S "IN"	56139	1 1/2" ELBOW
	55761	RING NUT
	55915	O RING FOR LFP120



In order to prevent debris and chemical deposits from clogging or logging into your hydraulic system, Agxcel recommends a minimum of 30 mesh filter in line between tank and system inlet. Even the smallest debris can block diaphragms from closing properly affecting rates and pump performance.



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS

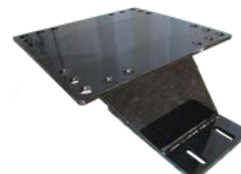
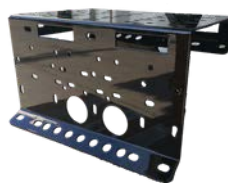


OPTIONAL MOUNTING GX5 MOUNTING BRACKETS



PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER



PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET



GX5 LFP120 COMPONENTS		
PN#		DESCRIPTION
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE (2 REQ'D)
	38386	GX5SPIKEVALVEBKT (D115 ONLY)
	37632	PUMP MOUNT BRACKET (D115 ONLY)
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWM HYD VALVE W/ MOTOR KIT
C	55530	GX5 LFP120
D	55585	HYD FLANGE KIT FOR LFP120
E	51842	1" IN LINE T-STRAINER 50 MESH
F	33123	1" WORM SCREW CLAMP
	50016	3/4" EPDM GASKET
G	51328	1" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
	52142	1/4" POLY ELBOW FOR GAUGE
J	51334	1" FLANGED CROSS
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

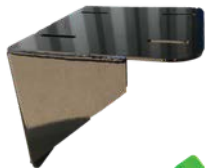
PN#		DESCRIPTION
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	52195	1-1/2 T-BOLT CLAMP (2 REQ'D)
	53580	1-1/4 SPIRAL HOSE (@ 1 FT)
O	53502	1" BLACK HOSE
	52194	1-1/4 T-BOLT CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	56141	1" ELBOW
	56142	RING NUT
	56140	O RING FOR LFP120
S "IN"	56139	1 1/2" ELBOW
	55761	RING NUT
	55915	O RING FOR LFP120



In order to prevent debris and chemical deposits from clogging or logging into your hydraulic system, Agxcel recommends a minimum of 30 mesh filter in line between tank and system inlet. Even the smallest debris can block diaphragms from closing properly affecting rates and pump performance.



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS

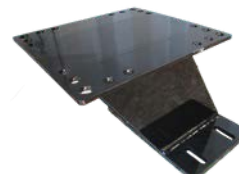
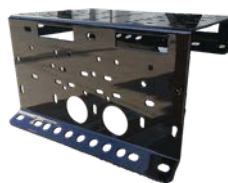


OPTIONAL MOUNTING GX5 MOUNTING BRACKETS



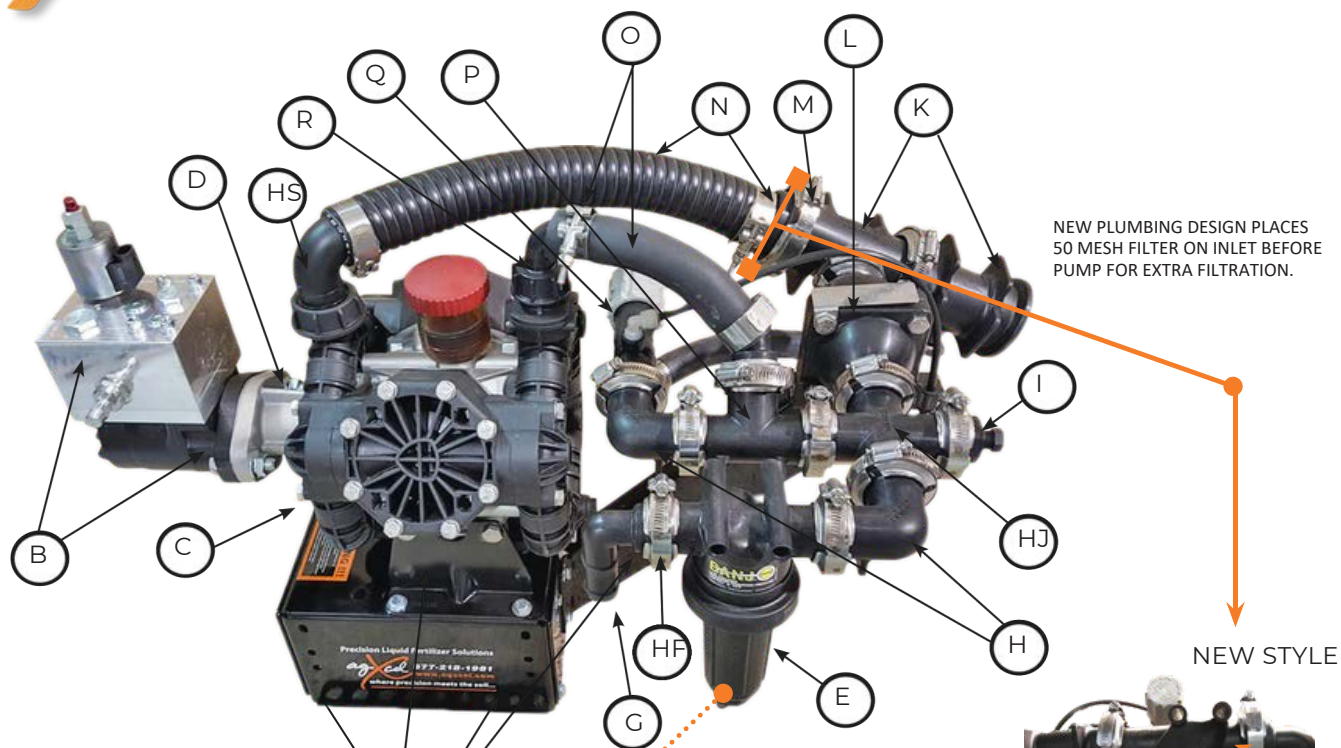
PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER



PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET





OLDER STYLE REQUIRED PROPER USE OF THE TANK TO PUMP KIT THAT WAS INCLUDED IN EVERY SYSTEM SOLD, TO FILTER BETWEEN TANK AND COMPLETE SYSTEM INLET.

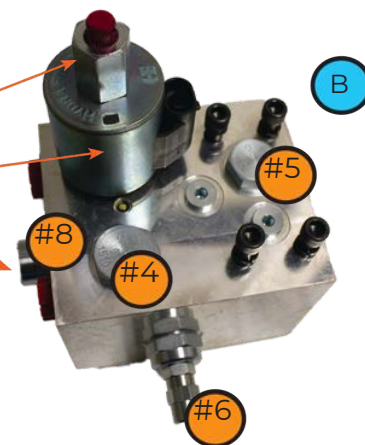
PROPER APPLICATION OF PRIMARY TANK TO PUMP KIT ADDED EXTRA FILTRATION BETWEEN TANK AND SYSTEM PUMP.

OLDER STYLE ALSO HAD A 50 MESH FILTER PLACED BEFORE FLOW METER FOR SECONDARY FILTRATION.

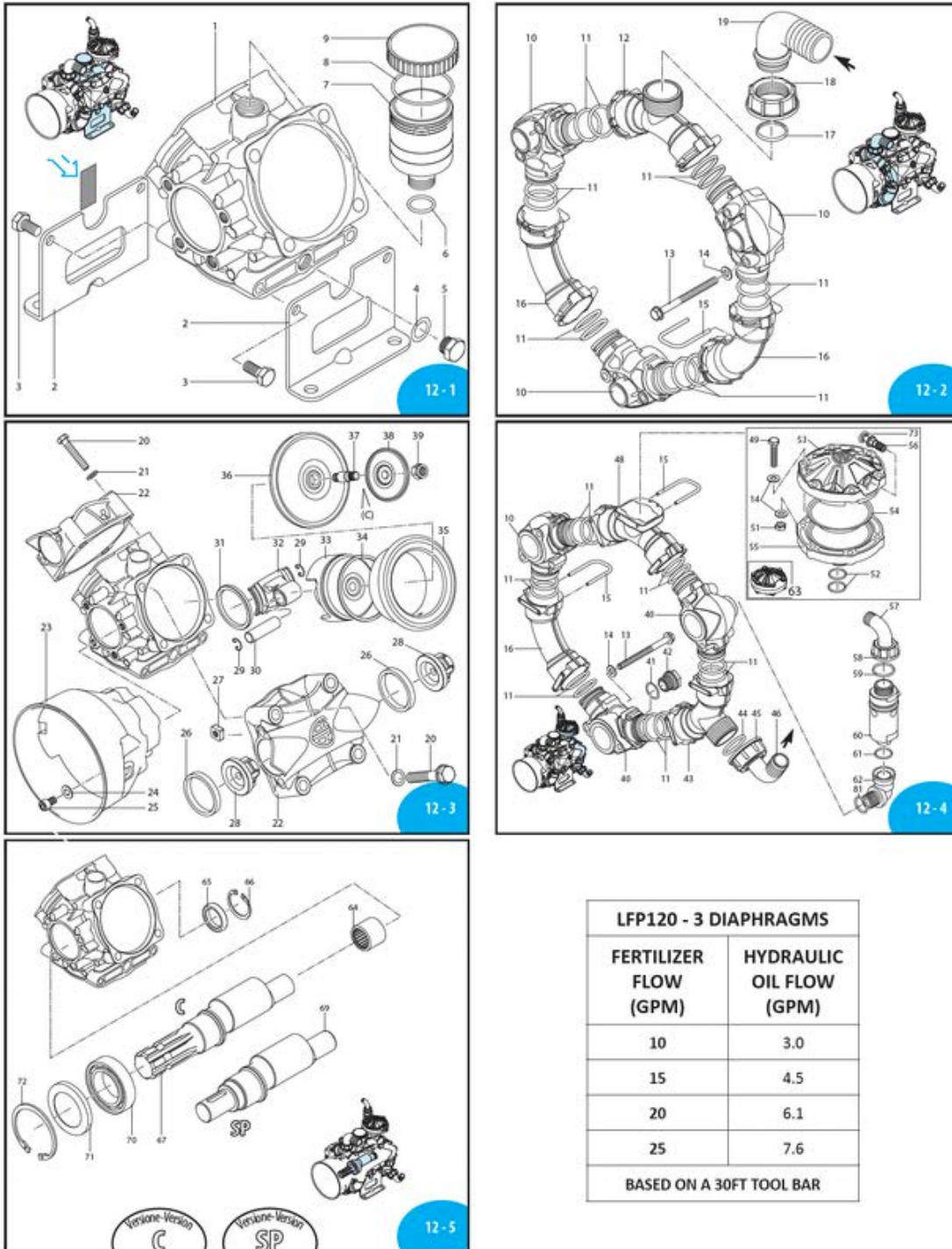
PUMP INLET FILTER OPTION	
38269	2" FLANGE GASKET (2 REQ'D)
38267	2" FLANGE CLAMP (2 REQ'D)
51374	1 1/2 BARB ELBOW
51850	T-STRAINER FILTER 50 MESH
19920	1/4" TUBING
19848	1/4" SHUT OFF

BOTTOM OF FILTER	
32423	1" REDUCER 1/2"
32426	1/2" REDUCER 1/4"
263	1/4" QC TO 1/4 M NPT

PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT



GX5 LFP120 PUMP BREAK DOWN



Pos	Code	Description	Qty	Note
1	3460010	Pump body	1	
2	3460100	Foot	2	Cataphoresis
3	360672	Screw	4	Geomet T265*
3	360673	Screw	4	SS T265* LFP
4	280290	O-ring	1	Ø 14x1.78
5	880530	Plug	1	1/8" G
6	720010	O-ring	1	Ø 22.22x2.62
7	3120240	Tank	1	T180*
8	650920	O-ring	1	Ø 53.65x2.62
9	1040126	Plug	1	AR 120bp
9	1040124	Plug	1	red
10	3460030	Line	4	
11	2680140	O-ring	24	Ø 32.93x3.53
11	2680141	O-ring	24	Ø 32.93x3.53
12	3460050	Line	1	section
13	3460200	Screw	12	Geomet T305*
13	3460201	Screw	12	SS T305* LFP
14	390314	Washer	24	Geomet
14	390315	Washer	24	SS LFP
15	3460270	Fork	13	
16	3460040	Line	3	
17	390290	O-ring	1	Ø 29x3
17	1880460	O-ring	1	Ø 29x3
18	750670	Ring nut	1	1 1/2" G
19	50267	Elbow	1	1 1/2"
20	750071	Screw	12	Geomet T330*
20	750072	Screw	12	SS T330* LFP
21	390090	Washer	12	Geomet
21	390092	Washer	12	SS LFP
22	3460020	Head	3	
23	3240290	Shield	2	
24	320621	Washer	4	Geomet
24	320622	Washer	4	SS LFP
25	820673	Screw	4	Geomet T90*
25	820672	Screw	4	SS T90* LFP
26	3460240	Gasket	6	Viton LFP
27	3120511	Nut	12	MB
27	3120510	Nut	12	SS LFP
28	2429050	Valve	6	
28	2429051	Valve	6	AR 120bp
29	380080	Ring	6	circclip Ø 14
30	380300	Pin	3	
31	3460090	Ring	2	connecting rod
32	3460080	Connecting rod	3	
33	580120	Piston	3	Ø 80
34	500260	Piston ring	3	
35	750117	Sleeve	3	AR 120bp
35	750110	Sleeve	3	AR 140bp
36	550080	Diaphragm	3	NBR
36	550081	Diaphragm	3	BlueFlex
36	550084	Diaphragm	3	Viton
36	550085	Diaphragm	3	Desmopan
36	550086	Diaphragm	3	HDOS
37	2240100	Hub pin	3	T265* Gail
37	2240101	Hub pin	3	T265* LFP
38	580090	Wobble plate	3	
39	2240110	Nut	3	M10 SS
39	2240670	Nut	3	T220* LFP
40	3460031	Line	2	
41	1140450	O-ring	1	Ø 20.24x2.62
41	1140451	O-ring	1	Ø 20.24x2.62
42	3460220	Plug	1	1/2" G
43	3460060	Line	1	manifold
44	550040	O-ring	1	Ø 26.62x2.62
44	880311	O-ring	1	Ø 26.62x2.62
45	651700	Ring nut	1	1" 1/4 G
46	651440	Elbow	1	1"
48	3460070	Line	1	
49	621781	Screw	6	Geomet T180*
49	621782	Screw	6	SS T180* LFP
51	380242	Nut	6	Geomet T180*
51	3120260	Nut	6	SS T180* LFP
52	550040	O-ring	2	Ø 26.62x2.62
52	880311	O-ring	2	Ø 26.62x2.62
53	3460190	Semi air chamber	1	upper
54	800190	Diaphragm	1	air chamber
54	800192	Diaphragm	1	air chamber
55	3460180	Semi air chamber	1	lower
56	180020	Air valve	1	T220*
57	550460	Elbow	1	Ø 18
58	550450	Ring nut	1	3/4" G
59	880831	O-ring	1	Ø 15.54x2.62
60	1609000	Safety valve	1	290 PSI (b)
61	180101	O-ring	1	Ø 17.5x2
61	180102	O-ring	1	Ø 17.5x2
62	3460120	Fitting	1	1/2" G M-F
63	1505	Air chamber	1	NBR
63	43067	Air chamber	1	BlueFlex
64	3460110	Bearing	1	
65	1306230	Ring	1	seal
66	480900	Ring	1	circclip Ø 35
67	3460160	Shaft	1	marked D1
67	3460170	Shaft	1	marked DQ
67	3460250	Shaft	1	marked DU
67	3460260	Shaft	1	marked DV
70	961781	Bearing	1	
71	3120160	Ring	1	seal
72	961790	Ring	1	circclip Ø 68
73	650542	Gasket	1	
74	650250	Key	1	
75	650100	Coupling	1	
76	961340	Washer	1	
77	680350	Screw	1	TCEI M8x35
78	1200521	Spacer	3	
79	380241	Washer	3	
79	392110	Washer	3	SS LFP
80	680350	Screw	3	TCEI M8x35
80	680351	Screw	3	SS T90* LFP
81	651350	Gasket	1	
82	3469002	Complete Inlet assembly	1	AR 120bp

(a) Screw Shank piston side with Loctite 82-21 Strong Threadlock (Green) and lubricate the shank side plate with Molykote grease 1000.
(b) Screw the valve until it bottoms on the elbow.
(c) Attention! Assemble with grease PG4 between the plate and the membrane.
* Torque in lbs +/- 10%



55572	LFP120 BLUE FLEX DIAPHRAGM KIT
55574	LFP120 VITON DIAPHRAGM KIT

55575	LFP120 VALVE KIT
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34739	LFP120 O RING KIT
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31326	OIL QUART
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CRANKCASE OIL CAPACITY 28 OZ.

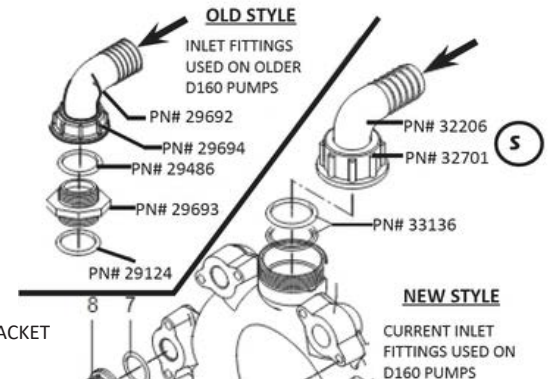
GX5 D160/ LFP160 COMPONENTS

PN#	DESCRIPTION
A	53692 GX5BASEMOUNT
	53693 GX5BASEBOXPLATE
	56181 GX5BASEBOX SLOTTED PLATE
	56299 GX5SPIKEVALVEEXTDBKT
B	38387 GX5 EATON ORBIT (MOTOR ONLY)
	53930 GX5PWMHYDVALVE 10 (PWM ONLY)
	53931 GX5 PWM HYD VALVE W/ MOTOR KIT
C	37707 LFP160 PUMP ONLY (5 -35 GPM)
	27486 D160 PUMP ONLY (5 -35 GPM)
D	31287 HYD FLANGE KIT FOR D160/D250
E	19848 1/4 BLEEDER VALVE
F	33132 1" WORM SCREW CLAMP (7 REQ'D)
	50016 3/4" EPDM GASKET (7 REQ'D)
G	51383 2" MANIFOLD X 90 DEGREE BARB
H	51333 1" FLANGED ELBOW
I	51344 1" PLUG WITH 1/4" FPT
	32361 1/4" HEX PLUG
J	51347 1" FLANGED TEE
K	51366 2" PORT x 1" FLANGED TEE
L	53629 100 PSI PRESSURE RELIEF VALVE

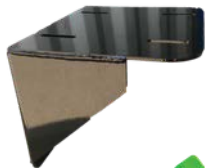
PN#	DESCRIPTION
M	38267 2" WORM SCREW CLAMP
	38269 2" FLANGE GASKET
N	30230 2" T-BOLT CLAMP (2 REQ'D)
	38424 2" SPIRAL HOSE (@ 1 FT)
O	55730 1 1/2" HIGH PRESSURE HOSE
	52198 1 1/2" PRESSURE SEAL CLAMP
P	51347 1" MANIFOLD FLANGED TEE
Q	39456 3/4" RELIEF VALVE
R "OUT"	55795 ELBOW 1 1/2"
	55761 RING NUT
	29232 O RING FOR D160
S "IN"	32206 ELBOW 2"
	32701 RING NUT
	33136 O RING FOR D160 (2 REQ'D)



INLET STYLE ONLY: MANUFACTURER HAD CHANGED THE INLET STYLE A FEW YEARS AGO. PLEASE TAKE NOTE WHICH STYLE YOU HAVE WHEN ORDERING REPLACEMENT PARTS.



PN#54898 UNIVERSAL MT BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)

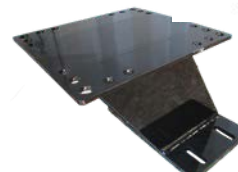
PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS



PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

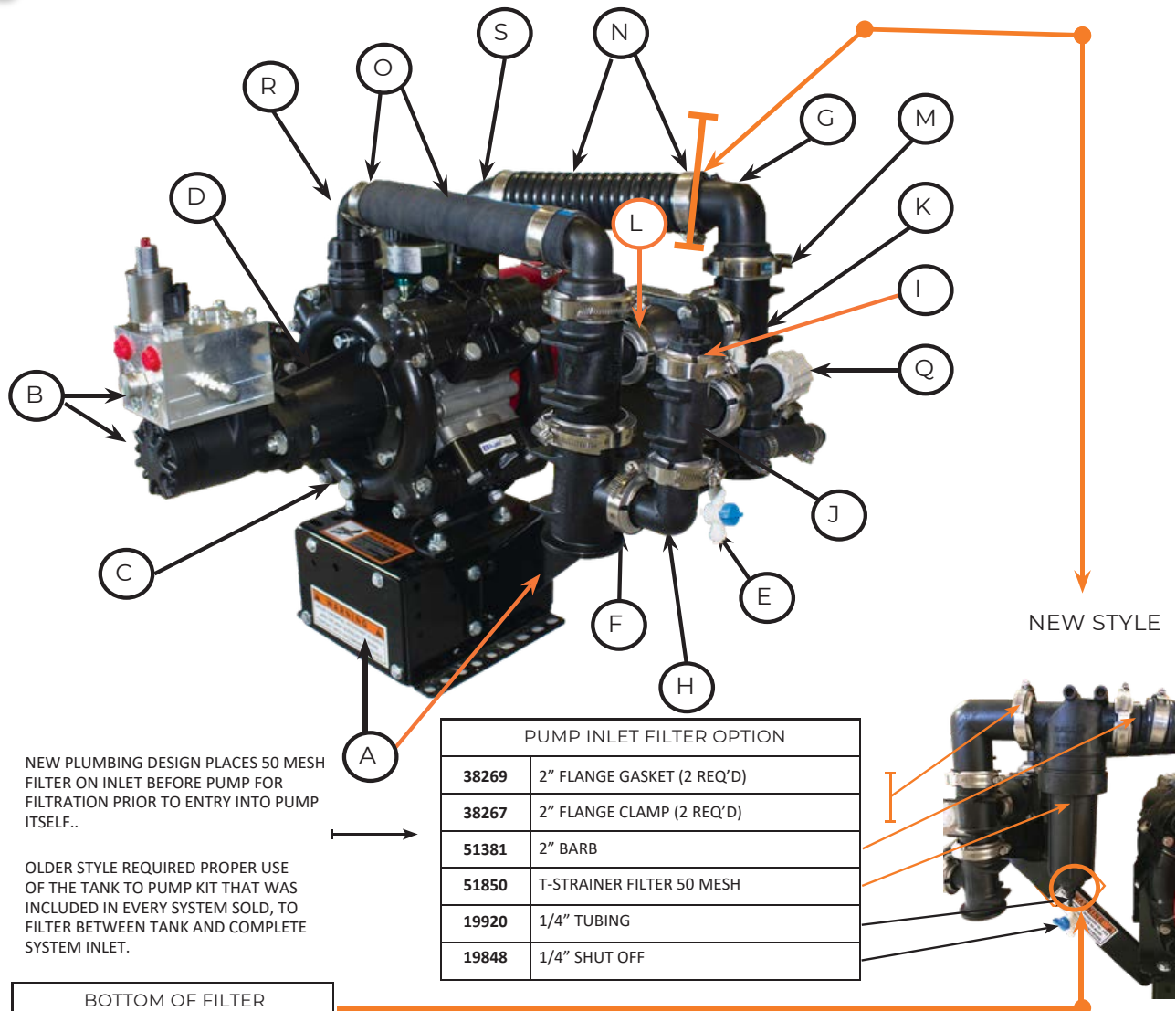
OPTIONAL MOUNTING GX5 MOUNTING BRACKETS

PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER

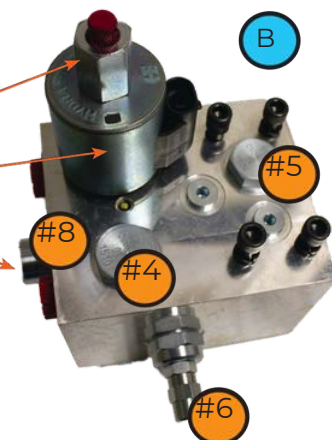


PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET

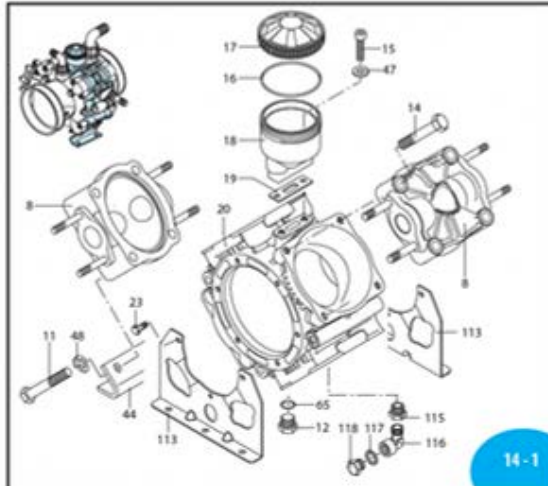




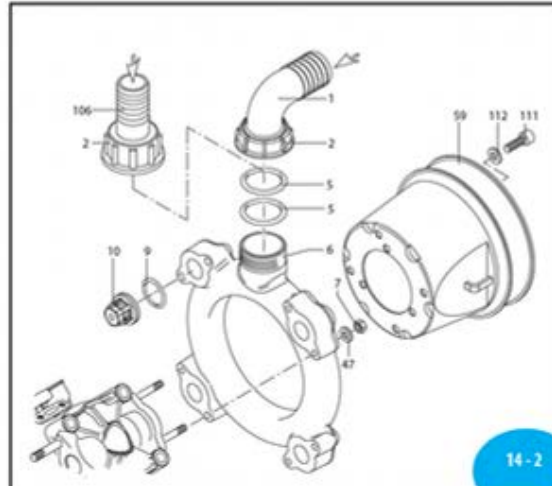
PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT



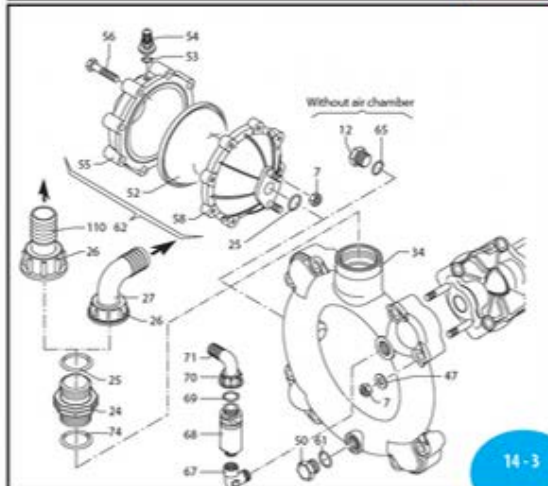
GX5 LFP160 PUMP BREAK DOWN



14 - 1



14 - 2



Pos	Code	Description	Qty	Note
1	3040430	Elbow 1 1/2"	1	AR 160 bp
	3040440	Elbow 2"	1	AR 185 bp
2	3040450	Ring nut 2" G	1	
5	3040470	O-ring Ø 39.3x2.6	2	
6	760750	Line suction	1	
7	380242	Nut M8	18	Geomet T180*
8	751350	Head black plasticized	4	
9	680070	O-ring Ø 31.5x4.25	8	
10	750051	Valve	8	
11	750071	Screw TE M12x70	4	Geomet T445*
12	880530	Plug 3/8" G	2	T180*
13	750110	Sleeve	4	AR 160 bp
	750115	Sleeve	4	AR 185 bp
14	750061	Screw TE M12x65	16	Geomet T445*
15	680150	Screw TCEI M8x35	2	T90*
16	1040060	O-ring Ø 72.69x2.62	1	
17	1800060	Plug black	1	AR 160 bp
	750050	Plug red	1	AR 185 bp
18	750030	Tank	1	
19	750040	Gasket	1	
20	761010	Pump body	1	
21	851360	O-ring Ø 120.32x2.62	1	
22	680020	Support	1	
23	160672	Screw TE M10x25	6	Geomet T310*
24	751130	Fitting 1" 1/2 G M-M	1	
25	390290	O-ring Ø 29x3	2	
26	750670	Ring nut 1 1/2" G	1	
27	760930	Elbow 1"	1	AR 160 bp
	751200	Elbow 1 1/4"	1	AR 185 bp
28	2420181	Support	1	
29	650640	Screw TCEI M10x25	6	Geomet T310*
	550081	Diaphragm BlueFlex	4	
	550080	Diaphragm NBR	4	
	550084	Diaphragm Viton	4	
	550085	Diaphragm Desmopan	4	
	550086	Diaphragm HPDS	4	
32	500260	Piston ring	4	
33	750122	Piston Ø 80	4	
34	760760	Line manifold	1	
35	160700	Pin	4	
36	160691	Ring circlip Ø 18	8	
37	760140	Connecting rod	4	
38	750090	Bearing	2	
39	750130	Ring connecting rod	2	
40	540040	Plate	2	
41	230350	Bearing	2	
42	160740	Ring seal	2	
43	200390	Ring circlip Ø 62	2	
44	760201	Foot	2	
45	750170	Shaft marked AII	1	AR 160 bp C/C
	750174	Shaft marked AIV	1	AR 185 bp C/C
47	380243	Washer	18	Geomet

Pos	Code	Description	Qty	Note
48	250143	Washer	4	Geomet
50	330173	Plug 1/2" G	1	Geomet T180*
	550194	Diaphragm air chamber	1	Blueflex
	550190	Diaphragm air chamber	1	NBR
	550191	Diaphragm air chamber	1	Saturflon
	550192	Diaphragm air chamber	1	Viton
	550193	Diaphragm air chamber	1	HPDS
53	650542	Gasket	1	
54	180020	Air valve	1	T25*
55	620232	Semi air chamber upper	1	Black
56	621781	Screw TE M8x40	8	Geomet T180*
58	680180	Semi air chamber lower	1	
59	1500470	Shield	2	
60	850251	Screw TCEI M8x12	3	Geomet T180*
61	180101	O-ring Ø 17.5x2	1	
62	629230	Air chamber Blueflex™	1	
	629216	Air chamber NBR	1	
65	740290	O-ring Ø 14x1.78	2	
67	881560	Fitting 1/2" G M-F	1	
68	1609000	Safety valve	1	290 PSI
69	880831	O-ring Ø 15.54x2.62	1	Viton
70	550450	Ring nut 3/4" G	1	
71	550460	Elbow Ø 18	1	
72	390314	Washer	3	Geomet
74	751140	O-ring Ø 47.22x3.53	1	
78	620330	Ring circlip Ø 65	1	
79	1800090	Ring seal	1	
80	230310	Bearing	1	
81	760510	Plate	1	
103	2240100	Hub pin	4	T265*
104	2240110	Nut M10 SS	4	T220*
105	751250	Wobble plate	4	
106	760950	Hose tail Ø 40	1	Optional AR 160 bp
	760570	Hose tail Ø 50	1	Optional AR 185 bp
110	760920	Hose tail Ø 25	1	Optional AR 160 bp
	760940	Hose tail Ø 35	1	Optional AR 185 bp
111	820673	Screw TCEI M10x16	3	Geomet
112	320621	Washer	3	Geomet
113	761031	Foot	2	
115	1040491	Fitting 3/8" G M-F	1	
116	900210	Fitting 3/8" G M-F	1	
117	2260200	Washer	1	
118	2281270	Plug 3/8" G	1	T180*
119	1300280	Spacer	3	
120	760360	Guard	1	
121	320621	Washer	3	Geomet
122	650640	Screw TCEI M10x25	3	Geomet T90*

* Torque: in-lbs +/- 10%



37730 LFP/D160 BLUE FLEX DIAPHRAGM KIT

29937 D160 VALVE KIT

56154 LFP160 VALVE KIT



29905 D160 O RING KIT

56155 LFP160 O RING KIT

31326 OIL QUART

CRANKCASE OIL CAPACITY 56 OZ.

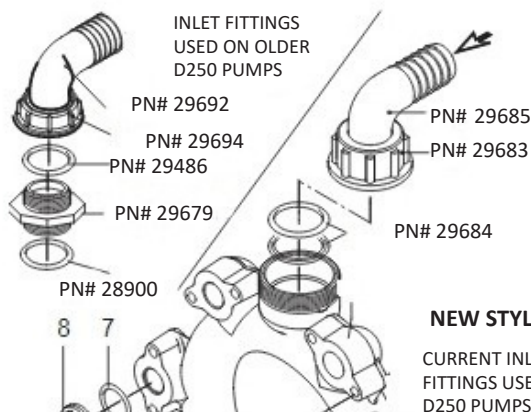
GX5 D250 COMPONENTS		
PN#		DESCRIPTION
A	53692	GX5BASEMOUNT
	53693	GX5BASEBOXPLATE
	56181	GX5BASEBOX SLOTTED PLATE
	56299	GX5SPIKEVALVEEXTDBKT
B	38387	GX5 EATON ORBIT (MOTOR ONLY)
	53930	GX5PWMHYDVALVE 10 (PWM ONLY)
	53931	GX5 PWM HYD VALVE W/ MOTOR KIT
C	27487	D250 PUMP ONLY (5 -55 GPM)
D	31287	HYD FLANGE KIT FOR D160/D250
E	19848	1/4 BLEEDER VALVE
F	33132	1" WORM SCREW CLAMP (7 REQ'D)
	50016	3/4" EPDM GASKET (7 REQ'D)
G	51383	2" MANIFOLD X 90 DEGREE BARB
H	51333	1" FLANGED ELBOW
I	51344	1" PLUG WITH 1/4" FPT
	32361	1/4" HEX PLUG
J	51347	1" FLANGED TEE
K	51366	2" PORT x 1" FLANGED TEE
L	53629	100 PSI PRESSURE RELIEF VALVE

PN#		DESCRIPTION
M	38267	2" WORM SCREW CLAMP
	38269	2" FLANGE GASKET
N	30230	2" T-BOLT CLAMP (2 REQ'D)
	38424	2" SPIRAL HOSE (@ 1 FT)
O	55730	1 1/2" HIGH PRESSURE HOSE
	52198	1 1/2 PRESSURE SEAL CLAMP
P	51347	1" MANIFOLD FLANGED TEE
Q	39456	3/4" RELIEF VALVE
R "OUT"	55795	ELBOW 1 1/2
	55761	RING NUT
	29232	O RING FOR D250
S "IN"	29685	ELBOW 2"
	29683	RING NUT
	29684	O RING FOR D250 (2 REQ'D)



INLET STYLE ONLY: MANUFACTURER HAD CHANGED THE INLET STYLE A FEW YEARS AGO. PLEASE TAKE NOTE WHICH STYLE YOU HAVE WHEN ORDERING REPLACEMENT PARTS.

OLD STYLE



NEW STYLE

CURRENT INLET FITTINGS USED ON D250 PUMPS

PN#54586 CASE IH DRAW BAR BRACKET TO MOUNT GX5 ON THE DRAW BAR (CAN FIT ANYWHERE FROM 8" TO 10" WIDE DRAW BAR) GX5 BRACKET



PN#54397 GX5 BRACKET FOR JD 1720 CCS (MOUNTED TO CIRCULAR PLATE ON LIFT ASSIST FRAME)



PN#54898U nUivNerIsValE mRoSunAtiLn gM brOacUkeNt TING BRACKET

PN#53678 GX5 BRACKET FOR JD PLANTER FRONT FOLD FOR 12 & 16 ROW PLANTERS - WILL NOT FIT DB MODELS



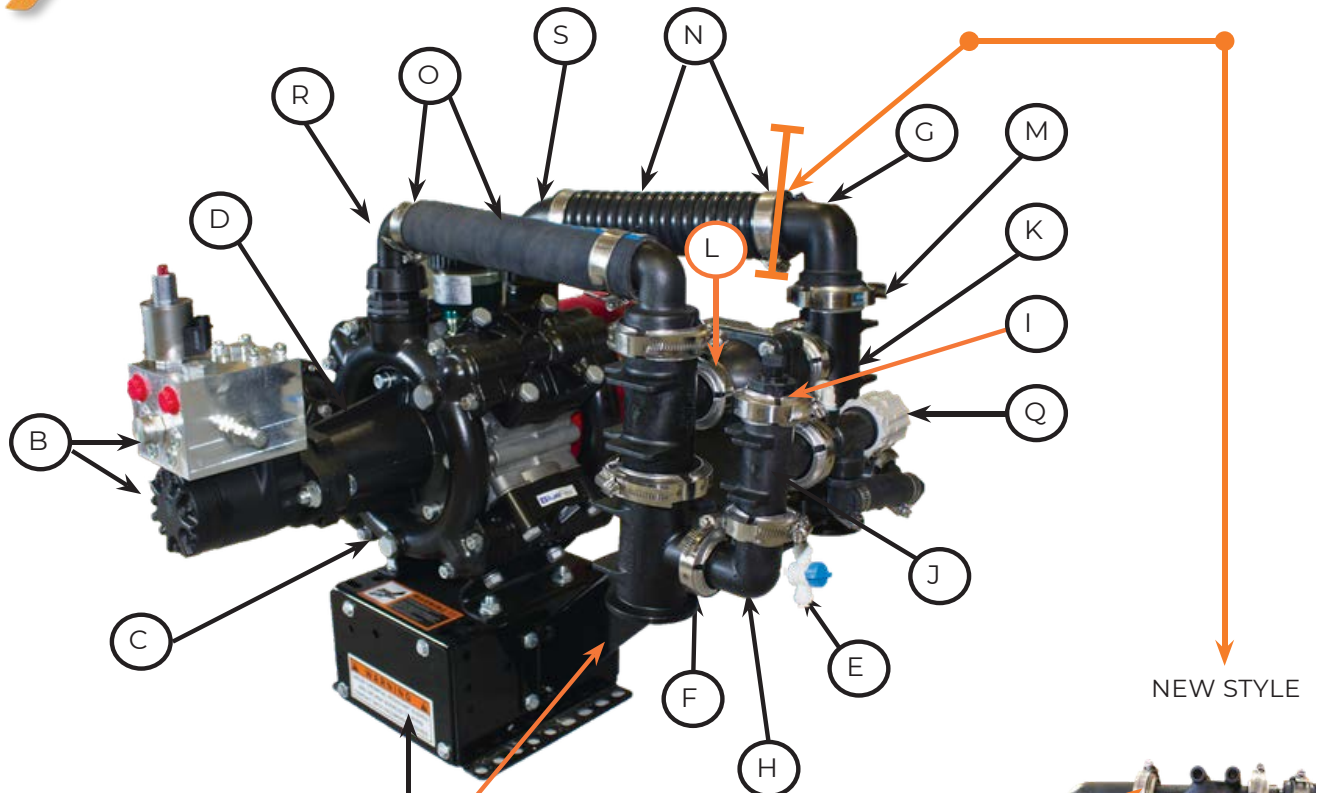
PN#53957 GX5 BRACKET ASSEMBLY FOR JD 1770 NT FRONT FOLD PLANTER FOR 24 ROW PLANTERS - WILL NOT FIT DB MODELS

OPTIONAL MOUNTING GX5 MOUNTING BRACKETS



PN#53968 GX5 BRACKET FOR ON THE REAR LIFT ASSIST WHEELS ON JD 1790 PLANTER





NEW PLUMBING DESIGN PLACES 50 MESH FILTER ON INLET BEFORE PUMP FOR FILTRATION PRIOR TO ENTRY INTO PUMP ITSELF..

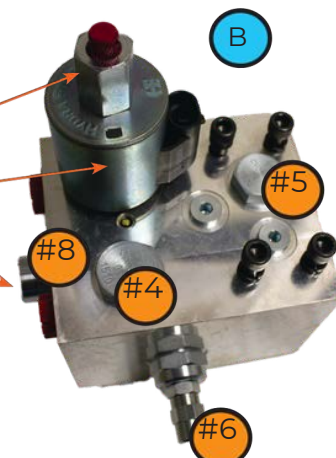
OLDER STYLE REQUIRED PROPER USE OF THE TANK TO PUMP KIT THAT WAS INCLUDED IN EVERY SYSTEM SOLD, TO FILTER BETWEEN TANK AND COMPLETE SYSTEM INLET.

PUMP INLET FILTER OPTION

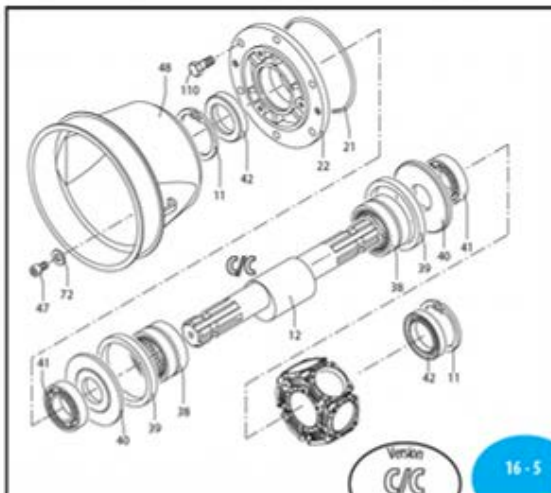
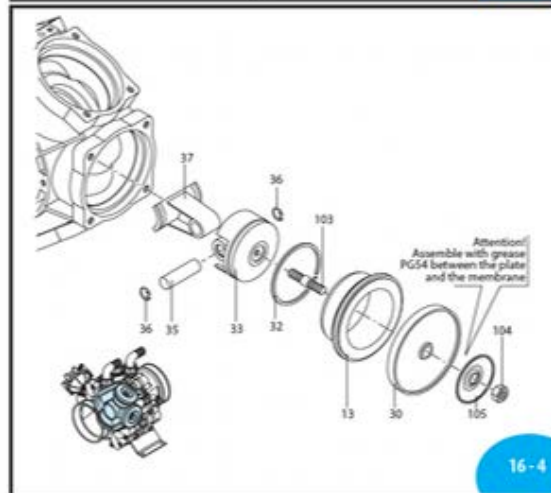
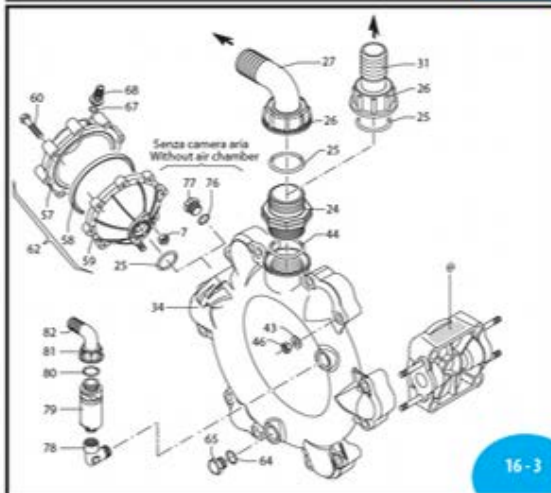
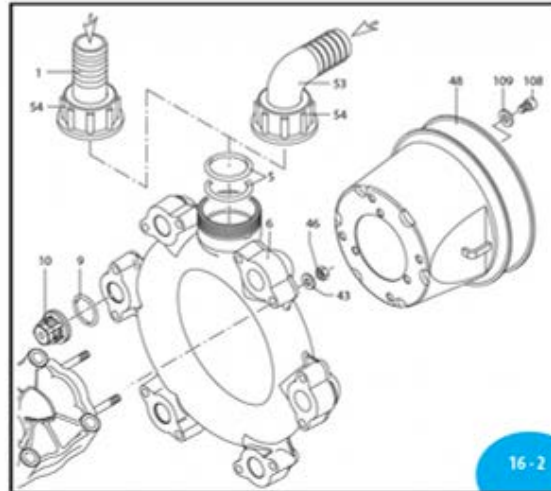
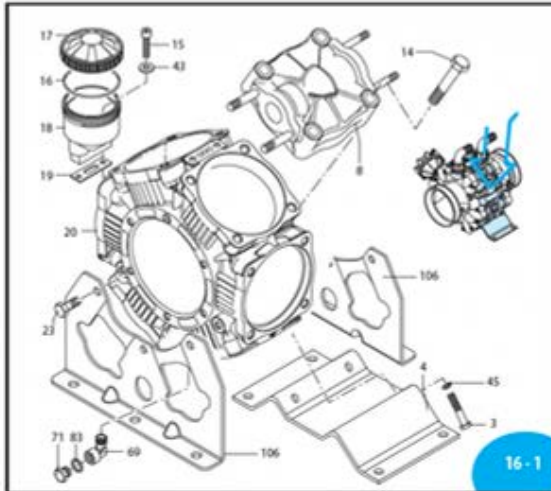
38269	2" FLANGE GASKET (2 REQ'D)
38267	2" FLANGE CLAMP (2 REQ'D)
51381	2" BARB
51850	T-STRAINER FILTER 50 MESH
19920	1/4" TUBING
19848	1/4" SHUT OFF

BOTTOM OF FILTER	
32423	1" REDUCER 1/2"
32426	1/2" REDUCER 1/4"
263	1/4" QC TO 1/4 M NPT

PN#	DESCRIPTION
55493	GX5MANUALOVERRIDEVALVE
55165	GX5PWMSOLENOID
54472	160 PSI HYD CARTRIDGE
54490	CARTRIDGE SEAL KIT FOR GX5 PWM #8
54488	CARTRIDGE SEAL KIT FOR GX5 PWM #5
54487	CARTRIDGE SEAL KIT FOR GX5 PWM #4
54489	CARTRIDGE SEAL KIT FOR GX5 PWM #6
55095	MOTOR SEAL KIT



GX5 D250 PUMP BREAK DOWN



D250 - 6 DIAPHRAGMS	
FERTILIZER FLOW (GPM)	HYDRAULIC OIL FLOW (GPM)
20	3.8
30	5.7
40	7.7
50	9.6
55	10.5
BASED ON A 30FT TOOL BAR	

Pos	Code	Description	Qty	Note
1	750870	Hose tail 2"	1	Optional
	750730	Hose tail Ø 60	1	Optional
3	750071	Screw TE M12x70	4	Geomet T445*
4	750200	Foot	1	
5	750740	O-ring Ø 56.74x3.53	2	
6	751070	Line suction	1	
7	380242	Nut M8	2	Geomet T220*
8	751350	Head black plasticized	6	
9	680070	O-ring Ø 31.5x4.25	12	
10	759051	Valve	12	
11	200390	Ring circlip Ø 62	2	
	750176	Shaft marked AZ	1	AR 215 bp C/C
	750170	Shaft marked AU	1	AR 250 bp C/C
	750174	Shaft marked AV	1	AR 280 bp C/C
	750117	Sleeve	6	AR 215 bp C/C
	750110	Sleeve	6	AR 250 bp C/C
	750115	Sleeve	6	AR 280 bp C/C
14	750061	Screw TE M12x65	24	Geomet T445*
15	680350	Screw TCEI M8x35	2	T90*
16	1040060	O-ring Ø 72.69x2.62	1	
	750051	Plug green	1	AR 215 bp
	1800060	Plug black	1	AR 250 bp
	750050	Plug red	1	AR 280 bp
18	750030	Tank	1	
19	750040	Gasket	1	
20	751300	Pump body	1	
21	851360	O-ring Ø 120.32x2.62	1	
22	680020	Support	1	
23	160672	Screw TE M10x25	6	Geomet T355*
24	751130	Fitting 1" 1/2 G M-M	1	T90*
25	390290	O-ring Ø 29x3	2	
26	750670	Ring nut 1 1/2" G	1	
27	750660	Elbow 1 1/2"	1	
28	2420181	Support	1	
29	650640	Screw TCEI M10x25	6	Geomet T310*
	550081	Diaphragm	6	Blueflex
	550080	Diaphragm	6	NBR
	550084	Diaphragm	6	Viton
	550085	Diaphragm	6	Desmopan
	550086	Diaphragm	6	HPDS
31	760940	Hose tail Ø 35	1	
32	500260	Piston ring	6	
33	750122	Piston Ø 80	6	
34	751080	Line manifold	1	
35	160700	Pin	6	
36	160691	Ring circlip Ø 18	12	
37	750140	Connecting rod	6	
38	750090	Bearing	2	
39	750130	Ring connecting rod	2	
40	540040	Plate	2	
41	751280	Bearing	2	
42	160740	Ring seal	2	

Pos	Code	Description	Qty	Note
43	380243	Washer	26	Geomet
44	751140	O-ring Ø 47.22x3.53	1	
45	250143	Washer	4	Geomet
46	380242	Nut M8	24	Geomet T180*
47	850251	Screw TCEI M8x12	3	Geomet T90*
48	1500470	Shield	1	
	750850	Elbow 2"	1	AR 215 bp-AR 250 bp
	750720	Elbow Ø 60	1	AR 280 bp
54	750710	Ring nut 2" 1/2 G	1	
57	620232	Semi air chamber upper	1	Black
	550194	Diaphragm air chamber	1	Blueflex
	550190	Diaphragm air chamber	1	NBR
	550192	Diaphragm air chamber	1	Viton
	550193	Diaphragm air chamber	1	HPDS
59	680180	Semi air chamber lower	1	
60	621781	Screw TE M8x40	8	Geomet T220*
	629230	Air chamber Blueflex*	1	
	629216	Air chamber NBR	1	
64	180101	O-ring Ø 17.5x2	1	
65	330173	Plug 1/2" G	1	Geomet T180*
67	650542	Gasket	1	
68	180020	Air valve	1	T25*
69	750370	Fitting 1/4" G M-F	1	
71	880581	Plug 1/4" G	1	T180*
72	390314	Washer	3	Geomet
76	740290	O-ring Ø 14x1.78	1	
77	880530	Plug 3/8" G	1	T180*
78	881560	Fitting 1/2" G M-F	1	
79	1609090	Safety valve	1	290 PSI
80	880831	O-ring Ø 15.54x2.62	1	Viton
81	550450	Ring nut 3/4" G	1	
82	550460	Elbow Ø 18	1	
83	880820	Washer	1	
84	620330	Ring circlip Ø 65	1	
85	1800090	Ring seal	1	
86	230310	Bearing	1	
87	760510	Plate	1	
103	2240100	Hub pin	6	T265*
104	2240110	Nut M10 SS	6	SS T220*
105	751250	Wobble plate	6	
106	751291	Foot	2	
108	820673	Screw TCEI M10x16	3	Geomet T90*
109	320621	Washer	3	Geomet
110	160672	Screw TE M10x25	6	Geomet T310*
111	1300280	Spacer	3	
112	760360	Guard	1	
113	320621	Washer	3	Geomet
114	650640	Screw TCEI M10x25	3	Geomet T90*

* Torque: in-lbs +/- 10%



37732 D250 BLUE FLEX DIAPHRAGM KIT



29903 D250 O RING KIT



29930 D250 VALVE KIT

31326 OIL QUART

RECOMMENDED CARE AND MAINTENANCE

(Read Instructions Completely before Beginning Installation)

WINTERIZATION

AgXcel recommends flushing your fertilizer pump and complete system with adequate amounts of water first. Next, use RV anti-freeze to winterize your system by pumping an adequate amount through all components.

CHANGE PUMP OIL ANNUALLY (GX5 HYDRAULIC SYSTEMS ONLY)

GX5 pumps use an internal oil lubricated crankshaft and connecting rod design. The oil is held in an external reservoir with level indicators. Hypro oil is recommended for the pump. This is a non-detergent SAE30 weight oil. If not available, hydraulic jack oils are a similar non-detergent formulation. Annual oil changes are recommended. To fill or drain the pump completely, the pump shaft must be turned slowly by hand. The hydraulic motor will have to be removed to do this. On some pump models, the pump will have to be removed from the mounting bracket and lifted slightly to allow access to the oil plug. When refilling the pump with oil, the shaft will again have to be rotated to fill the pump to its required oil volume.

DIAPHRAGM & VALVE REPLACEMENT

GX5 pumps are designed to allow very simple replacement of the two main pumping components; the diaphragms and the inlet & outlet valves. It is a good practice to replace these annually. It is a small job that helps ensure reliable operation during the busy season.

TESTING THE SYSTEM

Agxcel recommends testing your system with water first. Water testing will help determine if the plumbing and hardware is secure.

CALLING FOR TECH SUPPORT

Before calling for tech support, please check our troubleshooting section. Also check the Integration Quick start guide for further troubleshooting involving integration. If system was ordered through an Agxcel Authorized Dealer, please contact them for initial troubleshooting. If your problem remains un-resolved please have your serial number handy so our technicians can easily look up your order. Serial numbers can be located on the chassis of the pump systems, or on the front page on the installation guide.

TROUBLESHOOTING

(Read Instructions Completely before Beginning Installation)

HYDRAULICS PROBLEM

- Leave the manual override open on the valve.
- Check hose routing. The "P" port on the valve should hook to pressure. The "T" port is the return that should flow back to the tractor.
- Try hoses in a different hydraulic remote. Inspect hydraulic connectors for damage or restrictions.



TROUBLESHOOTING

APPLICATION RATE FLUCTUATES

First you will need to determine if the fluctuation is caused by the controller sending sporadic signals to the valve or because of something else.

- inspect and clean pump filters. Also check the plumbing from the supply tank to the pump. Strange flow rate fluctuating are often due to an obstruction to the pump inlet.

OR

- Go to Section Test as shown in Initial Operation.
- Turn the system to watch the flow in GPM on the 1,2,3 screen.
- Is the flow steady within a very small range? For example, a fluctuation from 2.3 to 2.5 GPM would be considered normal.
- A fluctuation from 2 to 3 GPM is a problem. If only a small fluctuation is seen, skip to steps 4-7 and proceed to "Application Rate fluctuates in field" pg.55.
- If there is a large fluctuation observe the system flow. Is the discharge a steady stream? Are the flow indicators floating steady?
- If visually the flow is steady but the display reports a fluctuation in GPM, inspect the flow meter.
- If visually the flow is unsteady the flowmeter is working correctly reporting a flow problem. Is the pump turning steady or surging?
- Look for any type of obstruction in the pump inlet. Clean the strainer. If continually plugging the strainer investigate fertilizer quality and necessary strainer size.

ELECTRIC/ELECTRONIC PROBLEM

PWM SIGNAL DIAGNOSTIC TEST

- Confirm that your manual override button is set to close (push the red button on GX5 PWM hydraulic block down and turn clock- wise)
- Verify your hydraulics to the GX5 hydraulic pump is on
- On your controller, run a simulated nozzle flow test.
- While doing the nozzle flow check, your controller should be sending out voltage to the PWM solenoid.
- Take a metal object (like a screwdriver) and hold it next to the solenoid coil. If the controller was properly sending out this signal voltage, the PWM solenoid should create a magnetic pull which you would be able to feel by putting the metal object close to it.
- If no magnetic force is felt, disconnect the 2 pin PWM connection and check for voltage. You will need 6-12 volts to get the hydraulic valve to open.
- If 6-12 volts is not present, check harnesses and review control valve type set up.
- Go back to the OEM connector at the Liquid Rate Control Module (LRCM). Check for voltage. Refer to owner's manual for pinouts of the harnesses to test.
- If you do not get a voltage reading, ensure all connections for power and communication to the LRCM are properly connected and not damaged.
- If the problem still occurs, contact your OEM dealer for further assistance.

HYDRAULIC SYSTEM WON'T TURN ON..:

Make sure that your planter is DOWN

•Make sure that you have enough Hydraulic Fluid going to the Silver PWM Cylinder. Our PWM will only use as much Hydraulic Fluid as it needs.

•While you are running a NOZZLE FLOW CHECK, you can push down and turn the red knob on the PWM block counter clockwise. This will put the pump into MANUAL MODE. If your Hydraulic Pump kicks on, then you might not be getting enough hydraulic flow to your pump system.

Turn hydraulics off, go to the AgXcel PWM valve and use the manual override on top of the electric coil to manually open the valve (Manual Override UP = valve fully open, see image on bottom of page). Turn hydraulics on at a LOW FLOW ONLY as the valve is 100% open. Try hydraulic lever in opposite direction. Does the pump turn? If it turns the problem is electric/electronics. If the pump does not turn then the problem is hydraulics.



When the RED knob is pushed down, your pump system will be controlled by your controller.



When the RED knob is up, your pump system is in manual mode.

TROUBLESHOOTING

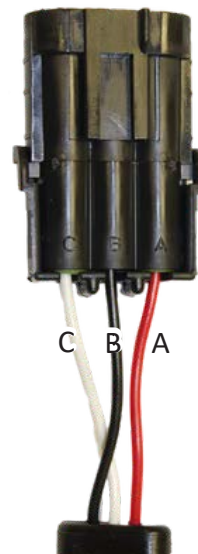
SECTION VALVE(S) WILL NOT MOVE

1. **Go to Diagnostics**, Section Test to investigate this issue.
2. **In Section Test**, check and un-check the boxes. With the box checked the valve should turn on. The valve should be off with the box not checked.
3. **Do you have a problem** with 1 valve or all valves.
4. **If working with the 7-12 section harness**, identify if section 1-6 or section 7-12-

PIN	FUNCTION
A	+12 V Constant
B	GND
c	+12 V Signal

ONE VALVE DOESN'T WORK

- **Check the harness connection** to that valve. It is a 3 Pin Weather Pack connector. See image to the right.
- Check voltage pin A to Pin B. Must be 12 volts, if not, go back to OEM connector and check voltage. See quick start guides for wiring diagrams, based on integration purchased.
- If no voltage, contact your OEM dealer for assistance.
- If voltage is present on pins A&B of 3 pin connection to valve, then check pin C to Pin B. This should be 12 volts when the valve is commanded on or open, this should be zero volts when valve is off or closed.
- If signal voltage is not present to open valve, use diagrams in quick start to check pins.
- If constant voltage (Pins A&B) and switched voltage (Pins C&B) are present, inspect, repair or replace the valve.



ALL OR MULTIPLE VALVE(S) DON'T WORK

1. Generally, follow the same steps as for a single valve. However, concentrate on checking for constant voltage.
2. This problem could also be related to controller configuration. Review Implement Setup to make sure sections are correct in controller.



TROUBLESHOOTING

HYDRAULIC SYSTEM IS SURGING...

- Try raising and/or lowering your GPA/MPH
- Double check that your PWM SETTINGS are correct
- Check to see how many sections you have open/closed. You may not be able to close as many sections as you desire with the rates you are running at.
- Make sure that your filters are completely clean.
- If problem appears after a tank refill, debris from tank may have gotten into pump not allowing diaphragms to close properly.

HYDRAULIC SYSTEM IS LEAKING...

- Check for hydraulic flow overload. Be sure the hydraulic flow to motor is not more than necessary. Once you achieve your highest rate slowly throttle down hydraulic flow to pump slightly lower than highest rate then slowly increase to lock in high-est rate with least amount of hydraulic flow to pump. see pg. 19 for further details.
- If your Hydraulic Pump is 3 years old or older, you may need to put in new diaphragms
 - If your diaphragms are cracked, oil or fertilizer may escape through that crack causing leaks and lower performances.
 - You can also tell if fertilizer is out of your system by looking at your oil sight glass on the top of your pump system and seeing if it looks milky.

Your Hydraulic Pump System does come with a spare diaphragm kit. If you cannot find, AgXcel stocks a variety of diaphragm kits, o'ring kits and replacement oil. The diaphragms are under the black caps on your hydraulic system. Before calling count the number of diaphragms so the correct kit needed can be determined.



55564	LFP45/BP45 BLUE FLEX DIAPHRAGM KIT
55568	LFP 45 VITON DIAPHRAGM KIT
37703	D70 BLUE FLEX DIAPHRAGM KIT
37720	D70 DAMPER DIAPHRAGM BLUE FLEX
55570	LFP 80/BP80 BLUE FLEX DIAPHRAGM KIT
55569	LFP 80 VITON DIAPHRAGM KIT
37708	D115 BLUE FLEX DIAPHRAGM KIT
55572	LFP120 BLUE FLEX DIAPHRAGM KIT
55574	LFP120 VITON DIAPHRAGM KIT
37730	LFP160 BLUE FLEX DIAPHRAGM KIT
37732	D250 BLUE FLEX DIAPHRAGM KIT
31326	OIL QUART

APPLICATION RATES FLUCTUATES IN THE FIELD BUT FLOW IN SECTION TEST

This problem indicates the valve calibration needs changed. The system is surging

1. **Go to Setup** - System - PWM Setup.
2. **Change the Valve Calibration** by reducing the valve speed (first two digits). For ex-ample reduce the number for 4012 to 3012, which changes valve speed from 40 to 30.



Limited Warranty on AgXcel Agricultural Pumps & Accessories

AgXcel agricultural products are warranted to be free of defects in material and workmanship under normal use for the time periods listed below, with proof of purchase.

- Pumps: one (1) year to the original purchaser from the date of manufacture, or one (1) year of use. This limited warranty will not exceed two (2) years, in any event.
- Accessories: ninety (90) days of use.

This limited warranty covers manufacturing defects or workmanship; that may develop under normal use and service in a manner up to the directions and usage recommended by the manufacturer.

Warranty does not apply to misuse or when pump or accessory is altered or used in excess of recommended speeds, pressures, temperatures, or handling fluids not suitable for pump or accessory material construction. Warranty does not apply to normal wear (such as but not limited to: seals/packings, valves, plungers and sealing o-rings), freight damage, freezing damage or damage caused by parts or accessories not supplied by AgXcel. All warranty considerations are governed by AgXcel's written return policy.

Liability of manufacturer for warranty is limited to repair or replacement of parts only at the option of the manufacturer when such products are found to be of original defect or workmanship at the time it was shipped from factory. This warranty is in lieu of all other warranties, expressed or implied, including any warranty of merchantability and of any and all other obligations or liabilities on the part of the manufacturers or equipment.

AgXcel's obligation under this limited warranty policy is limited to the repair or replacement of the product. All returns will be tested per AgXcel's factory criteria. Products found not defective (under the terms of this limited warranty) are subject to charges paid by the returnee for the testing and packaging of "tested good" non-warranty returns. No credit or labor allowances will be given for products returned as defective. Warranty replacement will be shipped on a freight allowed basis. AgXcel reserves the right to choose the method of transportation.

This limited warranty is in lieu of all other warranties, expressed or implied, and no other person is authorized to give any other warranty or assume obligation or liability on AgXcel's behalf. AgXcel shall not be liable for any labor, damage or other expense, nor shall AgXcel be liable for any indirect, incidental or consequential damages of any kind incurred by the reason of the use or sale of any defective product. This limited warranty covers agricultural products distributed within the United States of America. Other world market areas should consult with the actual distributor for any deviation from this document.



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