

# OMNI-SYSTEM<sup>®</sup>

SNOW & ICE DIVISION



## INSTALLATION AND PARTS MANUAL

# TABLE OF CONTENTS

Valve Features and Specifications .....	3
Hydraulic Components and Assemblies.....	4
Electrical Components and Modules.....	7
Hydraulic Installation – Filtration Requirements.....	10
Hydraulic Installation – Plumbing Connections .....	11
Cartridge Valve Manifold – Designation, Part Numbers, and Descriptions .....	15
Cartridge Valve Manifold – Hydraulic Schematic.....	17
Primary Manifold – Manual Override Operation.....	18
Control Console Installation .....	19
Valve Enclosure Wiring .....	21
Interfacing to AVL Systems.....	22
External GPS Installation.....	23
Module Pin-outs.....	25
Harness Drawings .....	29
Hydraulic Pressure Explained .....	32
System Installation Checklist .....	33

# INSTALLATION MANUAL FOREWORD

The following installation manual is intended to provide technical information and guidance for a typical Omni-System® and Omni-System® Plus. As systems can be configured with certain features and applied to a wide range of applications, technical details can vary including: wiring diagrams, plumbing installation, cartridge valve configurations, and electrical module I/O configuration. For additional technical information and guidance for a specific system, please contact Muncie Power Products.

## VALVE FEATURES AND SPECIFICATIONS

### FUNCTIONS, FLOW RATES, AND PRESSURE SETTINGS

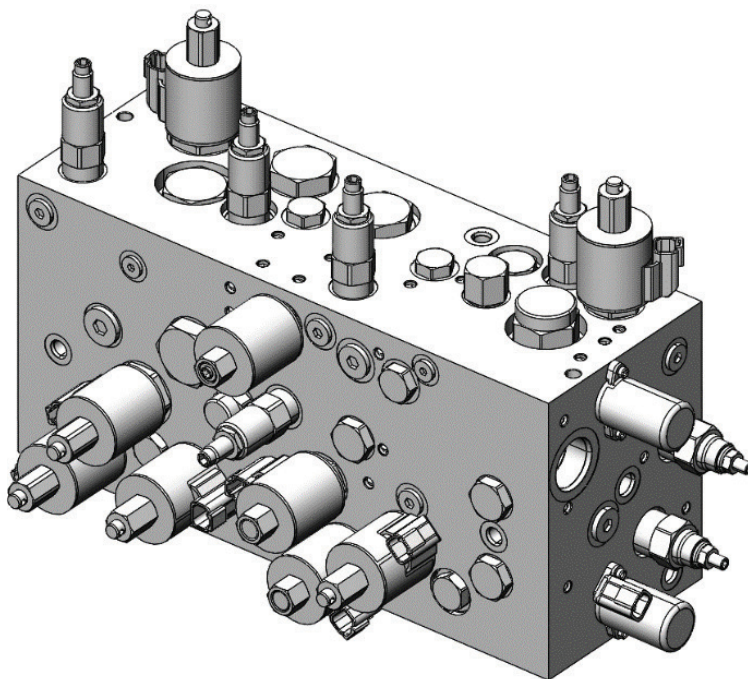
- Modular cartridge valve manifold system configured for open or closed center operation.
- Post compensated load sense design allows valve network to flow share among functions.
- Main relief embedded in circuit for system protection.
- Maximum system pressure = 3,600 PSI.
- All valve coils are configured for 12 V continuous duty operation. Valve coils are of proportional (pulse width modulated) design where appropriate.
- Manual override functionality equipped on flow controls.

FUNCTION	MAX FLOW	DEFAULT SETTING	MAX SETTING
PLOW LIFT	10 GPM	1,800 PSI	3,500 PSI
PLOW ANGLE	20 GPM	2,500 PSI	3,500 PSI
DUMP	35 GPM	1,800 PSI	3,500 PSI
PRE-WET	10 GPM	2,000 PSI	3,500 PSI
AUGER	10 GPM	2,000 PSI	3,500 PSI
SPINNER	10 GPM	2,000 PSI	3,500 PSI

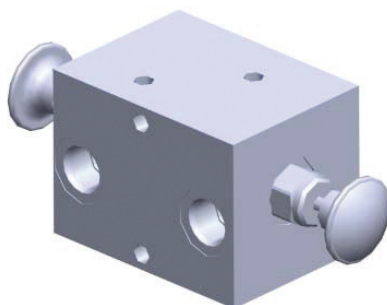
\*Flow Rates are estimates based upon 250 PSI Pump Differential Setting.

# COMPONENTS AND ASSEMBLIES

## HYDRAULIC COMPONENTS



Primary Manifold Assembly  
P/N: HF114517-17

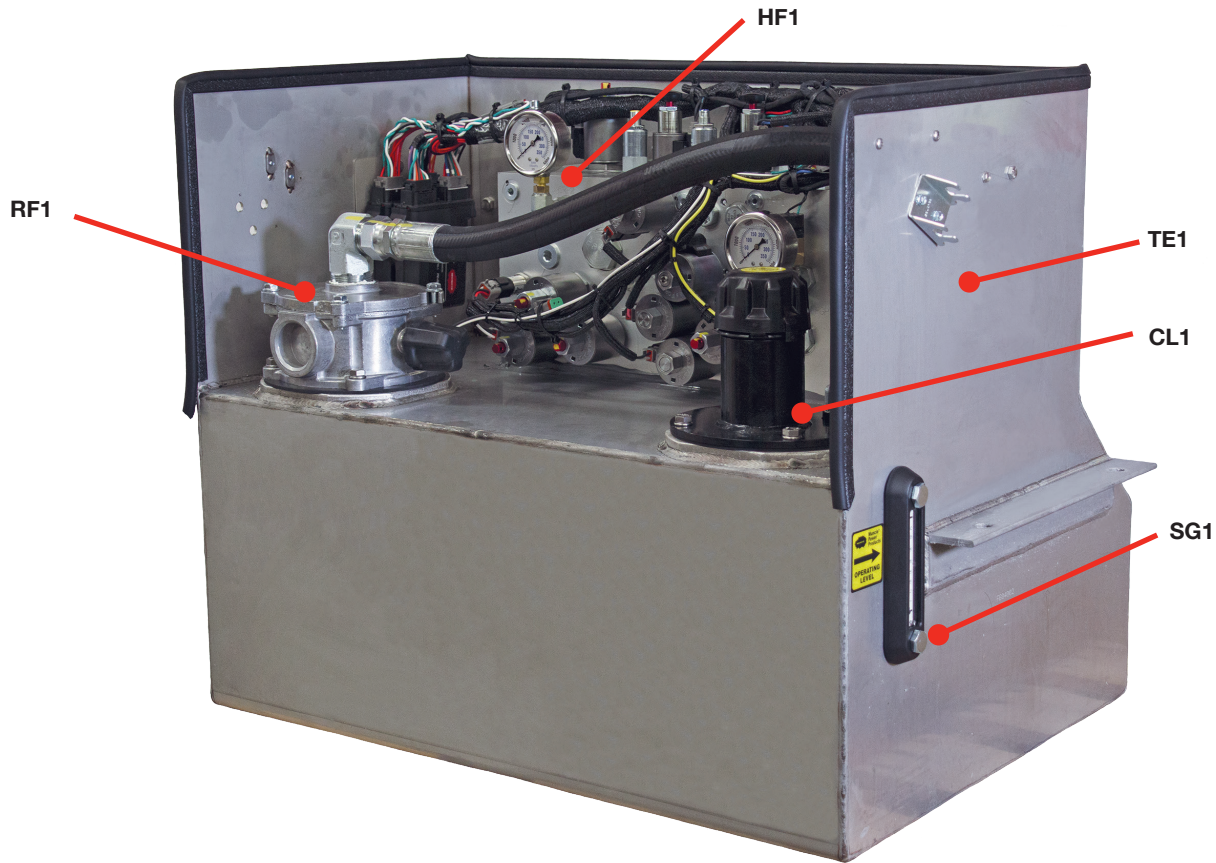


Plow Angle Release Manifold  
P/N: HF81718-13V



# COMPONENTS AND ASSEMBLIES

## DESIGNATION, PART NUMBERS, AND DESCRIPTION



DESIGNATION	PART NUMBER	DESCRIPTION
HF1	HF114517-17	PRIMARY MANIFOLD ASSEMBLY
RF1	TRLF525G10	RETURN LINE FILTER ASSEMBLY
TE1	5543700SS	*STAINLESS TANK ENCLOSURE
TE2	55T41690SS	*STAINLESS LID (NOT SHOWN)
SG1	31T36377	SIGHT GAUGE
CL1	16T43697	CLEAN OUT ASSEMBLY

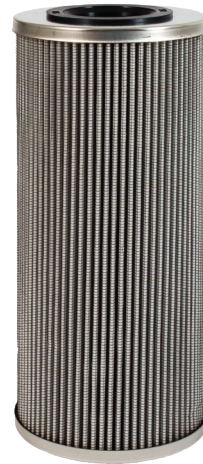
\*Powder coated steel optional.

# HYDRAULIC COMPONENTS AND ASSEMBLIES

## DESIGNATION, PART NUMBERS, AND DESCRIPTION



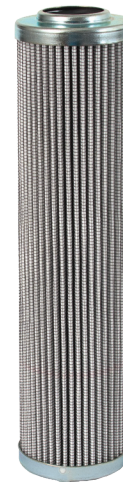
Return Line Filter Assembly  
P/N: TRLF52SG10



Return Line Filter Element  
P/N: TRE501G10



High Pressure Filter Assembly  
P/N: PLFV5010G501612



High Pressure Filter Element  
P/N: PLFV10GRE



Filter Gauge 1  
P/N: FG4



Pressure Gauge  
P/N: 31T43393B

# ELECTRICAL COMPONENTS AND MODULES

## OPERATOR CONTROL OPTIONS



Omni-System® Plus Spreader Controller  
P/N: APEMSC7TA1



Omni-System® Spreader Controller  
P/N: APEMSCNT1



2 Axis, 3 Function Joystick  
P/N: EJK2P3DCAN



3 Axis, 3 Function Joystick  
P/N: EJK2P3DCAN2



Cylinder Panel  
P/N: APCP20170



2 Axis Fingertip Joystick  
P/N: EJK2P0DTG



1 Axis, Mini Joystick  
P/N: EJK2P0DTG5



2 Axis Mini Joystick  
P/N: EJK2P0DTG4



3 Axis Mini Joystick  
P/N: EJK2P0DTG3



# ELECTRICAL COMPONENTS AND MODULES

## INPUT/OUTPUT MODULE OPTIONS



Primary Module  
P/N: APEMPRI1



Secondary Module  
P/N: APEMSEC1



Video Module  
P/N: APEMCAM1



Gen 2 Liquid/Anti Ice Module  
P/N: APLM20353



Gen 2 Auxiliary Spreader Module  
P/N: APXM20262



Gen 1 Multi Function Module  
P/N: EMMF1



Gen 3 Liquid/Anti-Ice Module  
P/N: APEMLIQ1



Gen 3 Auxiliary Spreader Module  
P/N: APEMAUX1



Gen 2 Multi Function Module  
P/N: APEMMFA2

# ELECTRICAL COMPONENTS AND MODULES

## OPTIONAL SENSOR AND SWITCH OPTIONS



Air/Road Temperature Sensor  
P/N: 38T39461



Pressure/Temperature Sensor  
P/N: NXPT5000TB



Filter Bypass Switch  
P/N: PM515A



Hot, Cold, Low Oil Switch  
P/N: 30T35899D



Hot, Low Oil Switch  
P/N: 30T35889



Feedback Sensor  
P/N: 38M3663T



Body Up Switch  
P/N: 30T43684



# HYDRAULIC INSTALLATION

## FILTRATION REQUIREMENTS

1. Clean all hose assemblies before installation.
2. The system should be flushed with a remote filter cart, where possible.
3. High-pressure elements with condition indicators are recommended to minimize valve inlet-side contamination.
4. Upon initial startup, it is recommended to engage the pump and allow the system to cycle oil for 20 minutes before actuating any functions. Contamination frequently occurs during system installation.
5. It is recommended to cycle each of the cylinder functions 10–15 times to ensure that all contamination is dislodged from actuators.
6. Failure to provide and maintain required **minimum filtration** levels may result in premature malfunction or failure.

**Recommended Minimum Filtration**  
**ISO 4406:1999**

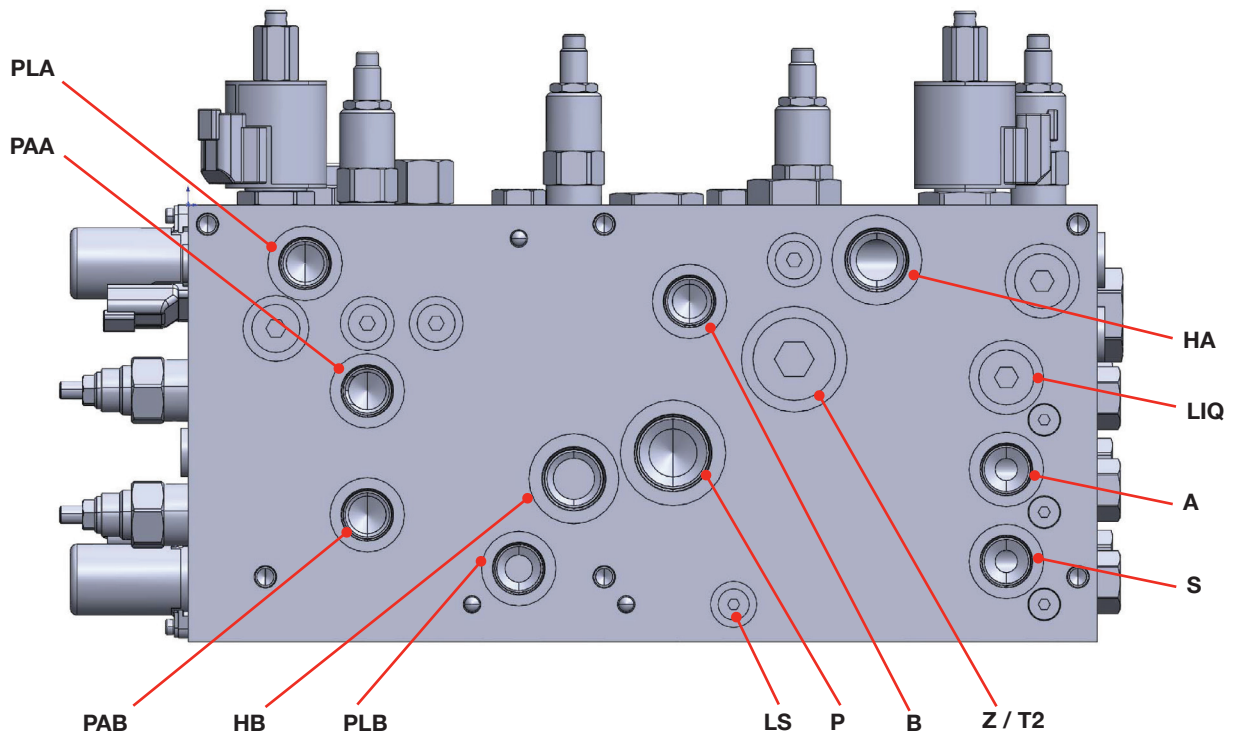
**SAE J1165**

**4µm / 6µm / 14µm**

**18 / 16 / 13**

# HYDRAULIC PLUMBING INSTALLATION

## DESIGNATION, FUNCTION, AND SIZING



PRIMARY MANIFOLD PORT DESIGNATIONS		
PORT	FUNCTION	SIZE (SAE)
PLA	PLOW UP	10
PLB	PLOW DOWN	10
PAB	PLOW RIGHT	10
PAA	PLOW LEFT	10
HA	DUMP RAISE	12
HB	DUMP LOWER	12
LIQ	PRE-WET	10
A	AUGER	10
B	RETURN	10
S	SPINNER	10
P	PUMP	16
Z/T2	TANK	16
LS2	LOAD SENSE	04

\*Workport designations etched into backing plate of enclosure.

# HYDRAULIC INSTALLATION

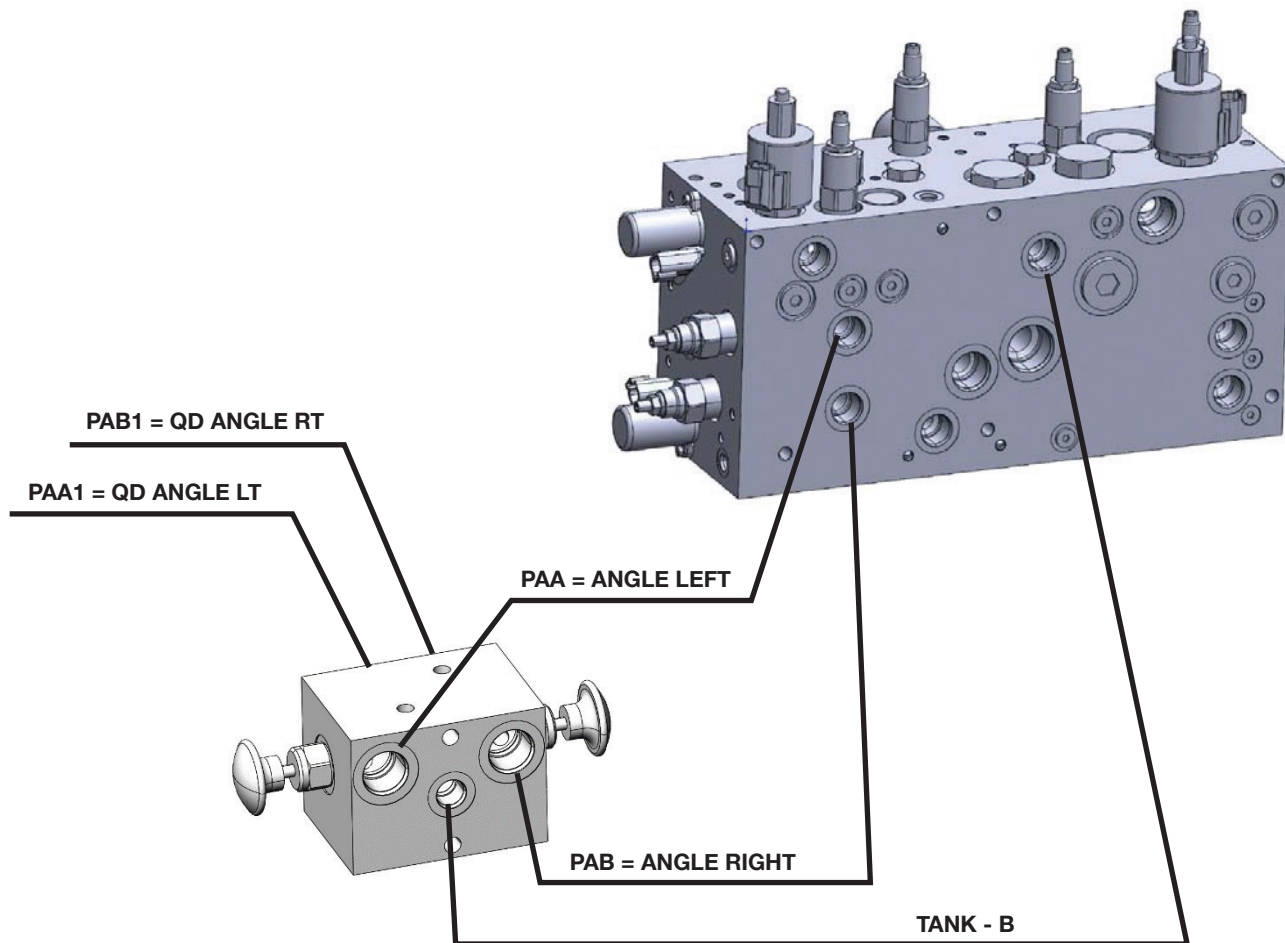
## PLOW ANGLE – QD RELEASE MANIFOLD

**Purpose:** This manifold is intended to relieve pressure within the plow angle lines. It allows easier connection between quick disconnect fittings.

**Operation Instruction:** Pull actuators to relieve pressure within the plow angle circuit

**Installation Instructions:**

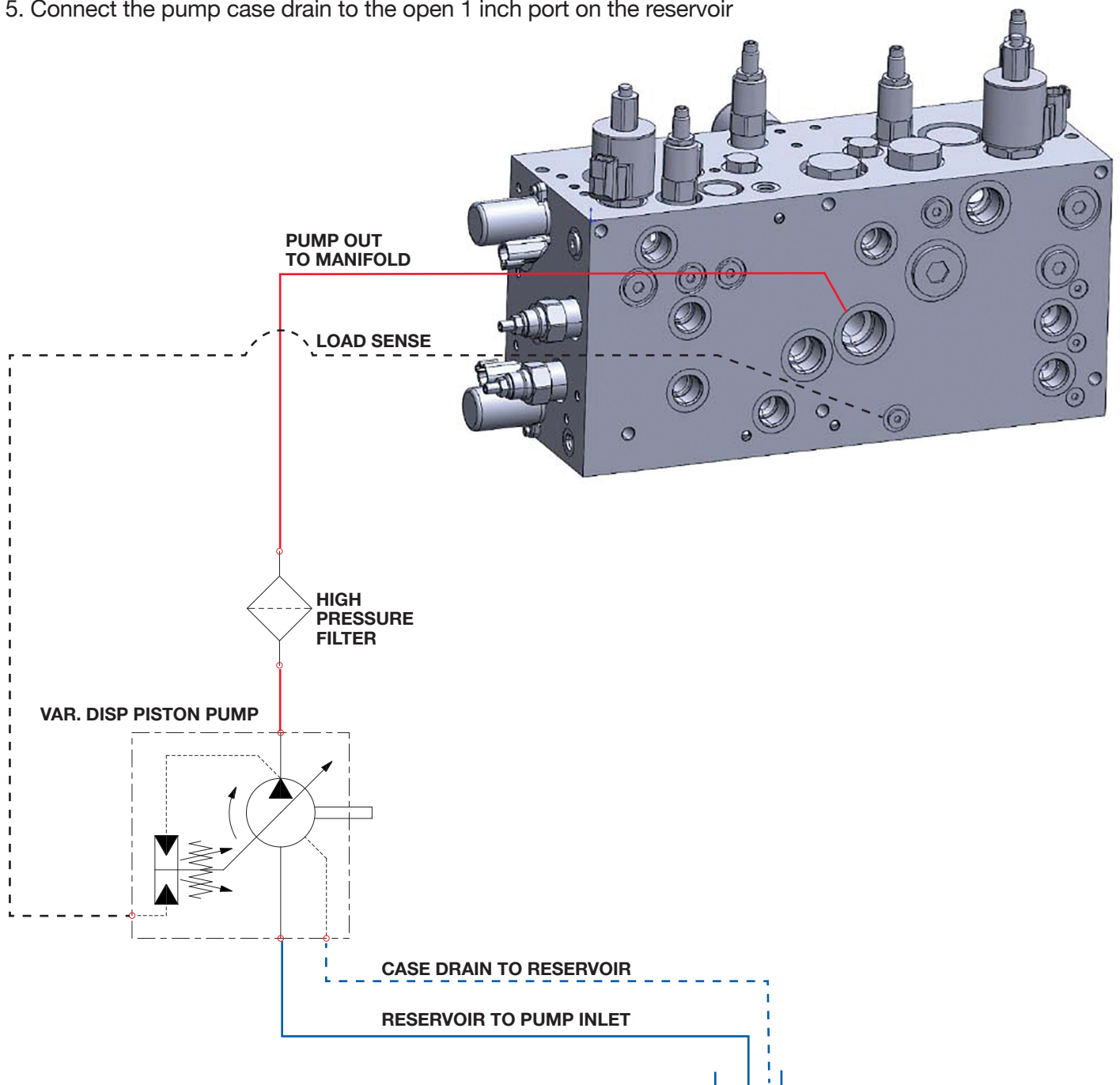
1. Locate the T Port on QD release manifold– Route to B port on manifold
2. Locate the PAA Port – Route to the PAA port on the primary hydraulic manifold
3. Locate the PAB Port – Route to the PAB port on the primary hydraulic manifold
4. Locate the PAA1 Port – Route to the plow left cylinder
5. Locate the PAB1 Port – Route to the plow right cylinder



# HYDRAULIC INSTALLATION

## PISTON PUMP PLUMBING

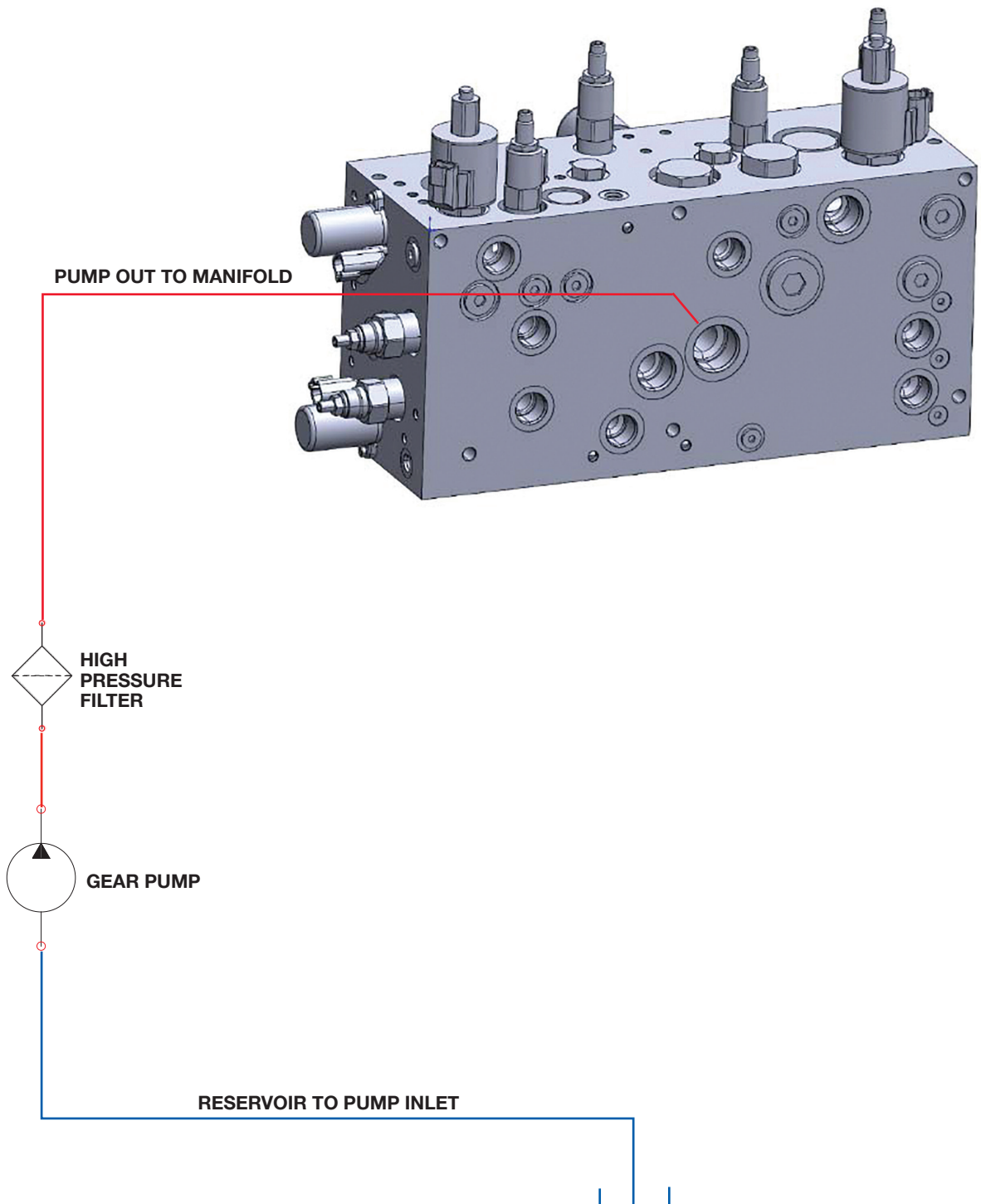
1. Connect the pump inlet to the reservoir
2. Connect the pump outlet to the high pressure filter inlet
3. Connect the high pressure filter outlet to the P port on the manifold
4. Connect the pump load sense to the LS port on the manifold
5. Connect the pump case drain to the open 1 inch port on the reservoir



# HYDRAULIC INSTALLATION

## GEAR PUMP PLUMBING

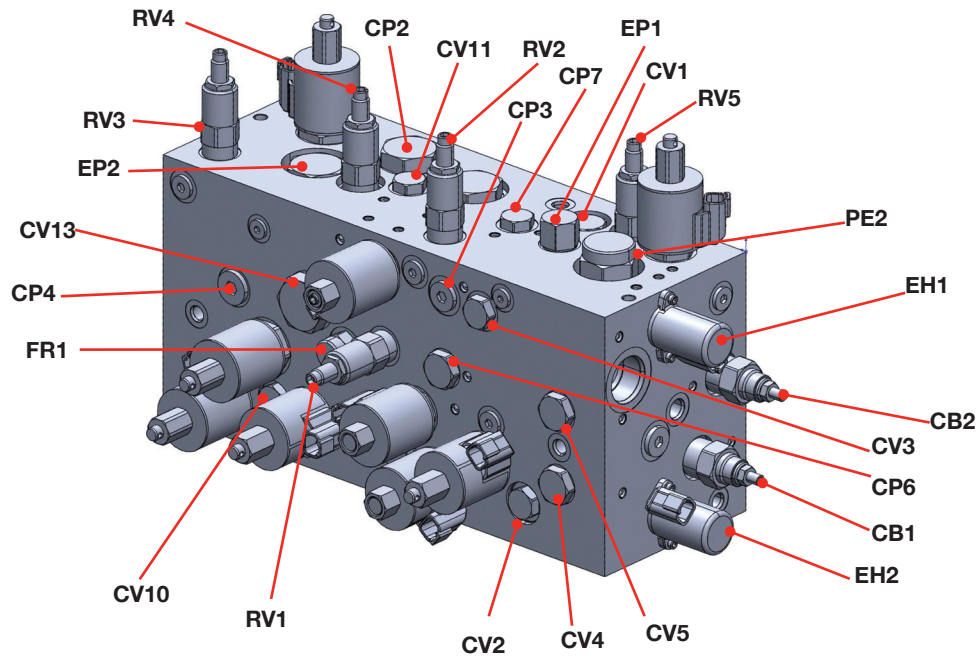
1. Connect the reservoir to the pump inlet
2. Connect the pump outlet to the high pressure filter inlet
3. Connect the high pressure filter outlet to the P port on the manifold





# PRIMARY MANIFOLD - HF114417-17

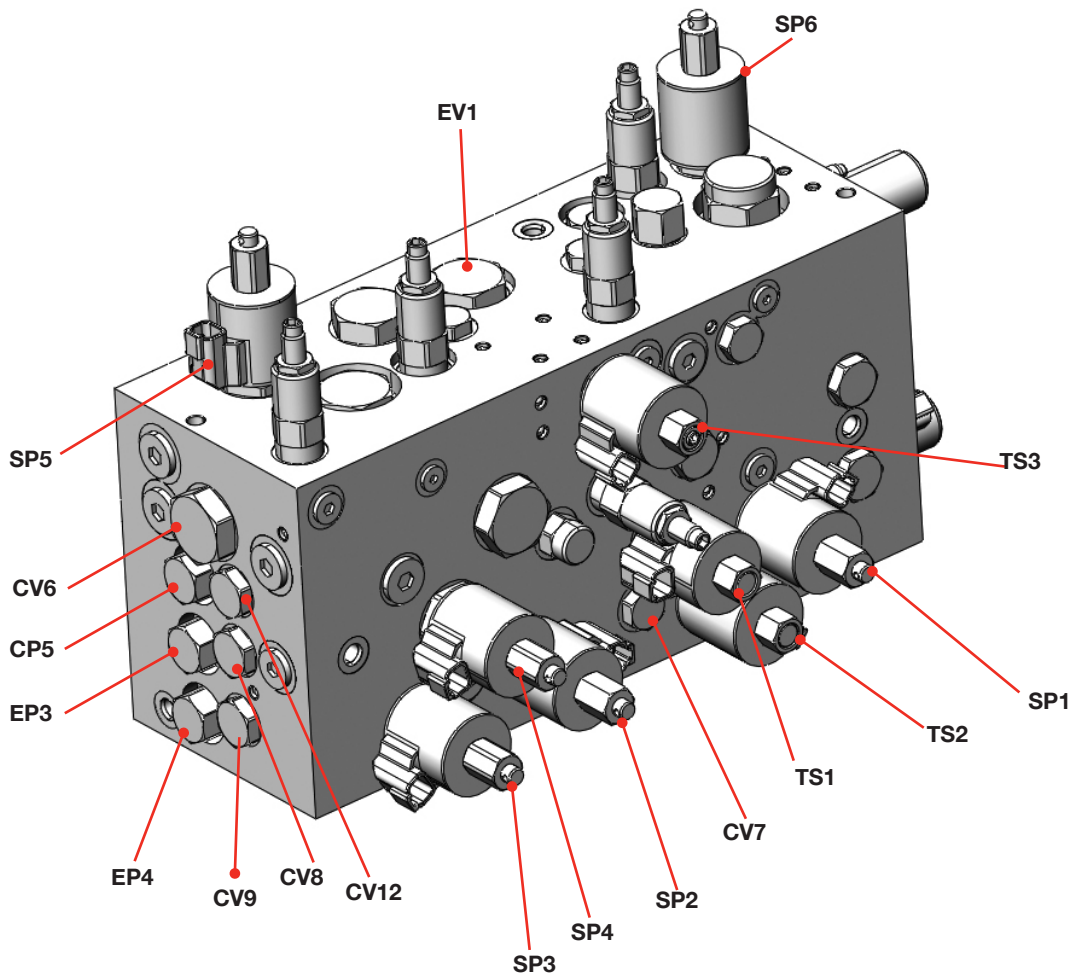
## DESIGNATION, PART NUMBERS, AND DESCRIPTIONS



DESIGNATION	PART NUMBER	FUNCTION	DESIGNATION	PART NUMBER	FUNCTION
CB1	NXCBEALAN	ANGLE COUNTERBALANCE	CV13	CV1620N05	HOIST ISOLATOR CHECK
CB2	NXCBEALAN	ANGLE COUNTERBALANCE	EH1	EHPR98T330N12ER	PLOW RIGHT PILOT CTRL
CP2	CP1620N	PROV HOIST CTRL CAVITY	EH2	EHPR98T330N12ER	PLOW LEFT PILOT CTRL
CP3	HHBP08	PROV PWR FLOAT CHECK	EP1	EP10S350N10	PLOW LIFT POST COMP
CP4	HHBP10	PROV LIQ FLOW CTRL CAV	EP2	EP16S350N40	HOIST POST COMP
CP6	CP1030N	PWR FLOAT PSI CTRL	FR1	FR0820F0N/.02	LOAD SENSE DRAIN
CP7	CP0820N	PROV PWR FLOAT ON-OFF	PE2	PE16S67K0N	PLOW ANGLE SPOOL
CV1	CV10200N05	PLOW LOAD CHECK	RV1	RV0820N0502	BOOST RELIEF
CV2	CV08200N04	PLOW DN LS CHECK	RV2	RV1022A0N3528	CLIPPER RELIEF
CV3	CV08200N04	PLOW LIFT LS CHECK	RV3	RV1022A0N3520	SPREADER RELIEF
CV4, CV5	CV08200N04	PLOW ANGLE LS CHECK	RV4	RV1022A0N3525	HOIST UP RELIEF
CV10	CV08200N04	SPREADER LS CHECK	RV5	RV1022A0N3520	PLOW UP RELIEF
CV11	CV08200N04	HOIST LS CHECK			

# PRIMARY MANIFOLD - HF114077-17

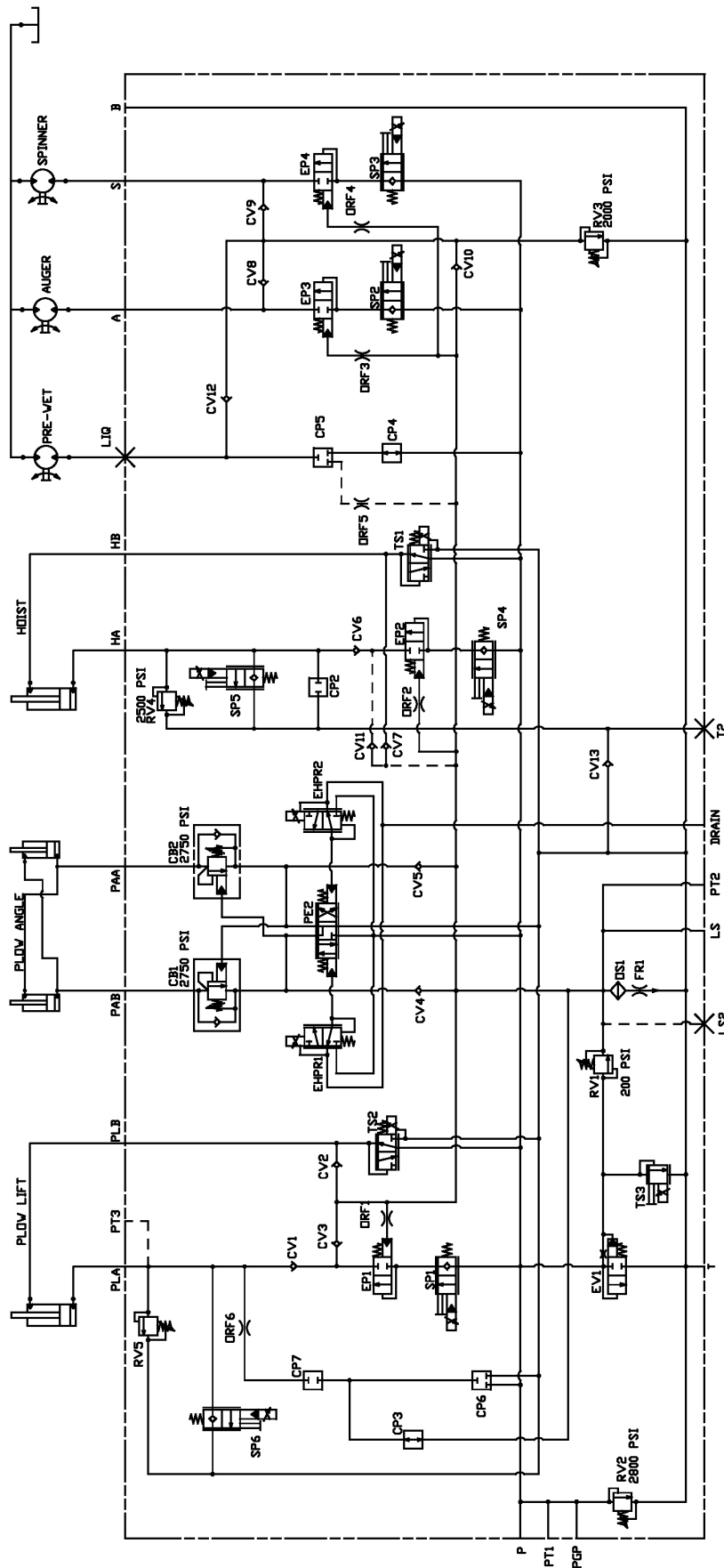
## DESIGNATION, PART NUMBERS, AND DESCRIPTIONS



DESIGNATION	PART NUMBER	FUNCTION	DESIGNATION	PART NUMBER	FUNCTION
CP5	CP10S30N	PRO LIQ COMP CAVITY	SP2	SP1020M0N12ER	AUGER FLOW CTRL
CV7	CV08200N04	HOIST DOWN LS CHECK	SP3	SP1020M0N12ER	SPINNER FLOW CTRL
CV8	CV1020N15	AUGER LS CHECK	SP4	SP1620M0N12ER	HOIST UP FLOW CTRL
CV9	CV1020N15	SPINNER LS CHECK	SP5	SP1620M0N12ER	HOIST DOWN FLOW CTRL
CV12	CV1020N15	LIQUID LS CHECK	SP6	SP1220M0N12ER	PLOW LOWER FLOW CTRL
EP3	EP10S350N10	AUGER POST COMP	TS1	TS1236C0N12ER	HOIST PSI CTRL
EP4	EP10S350N10	SPINNER POST COMP	TS2	TS1036C0N12ER	PLOW PSI CTRL
EV1	EP16S340N10	UNLOADING COMP	TS3	TS3820AM0N12ER	MAIN RELIEF
SP1	SP1020M0N12ER	PLOW RAISE FLOW CTRL			

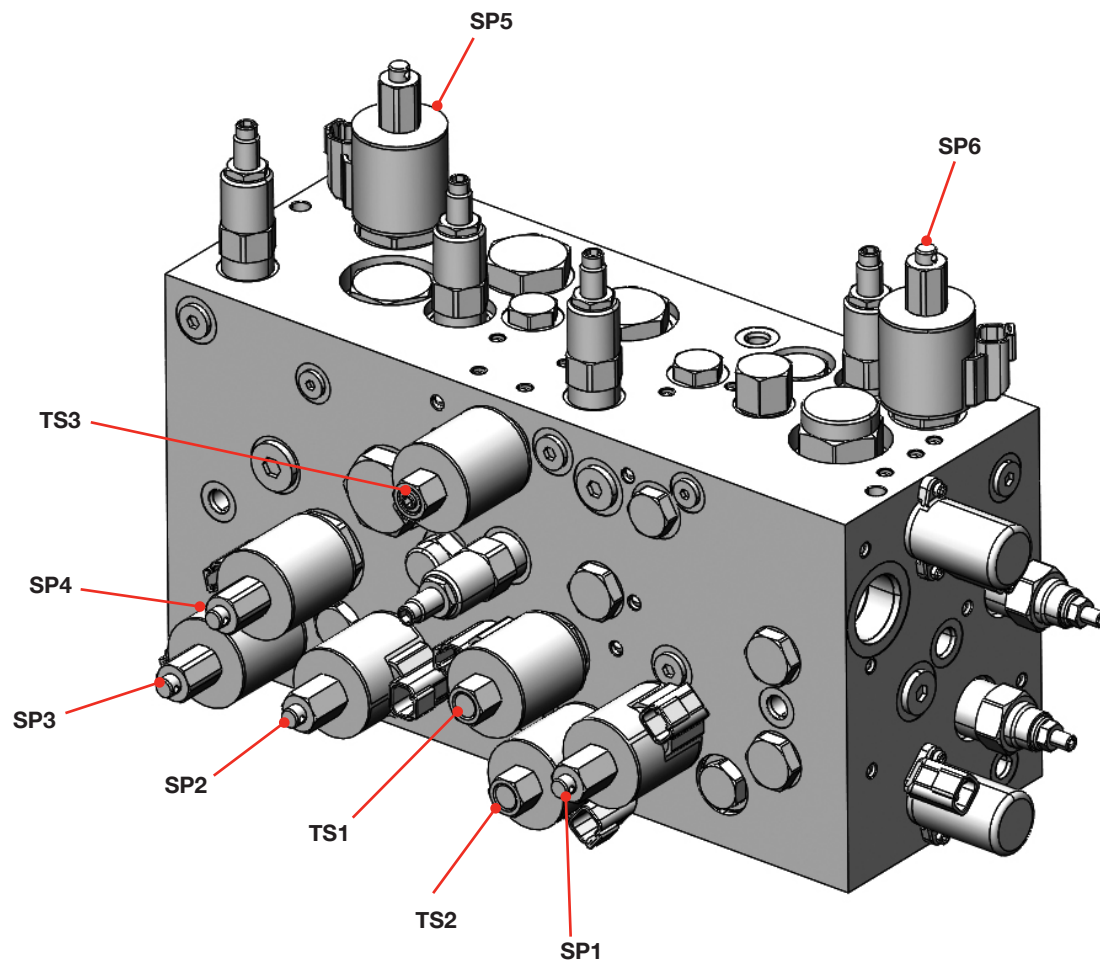
# PRIMARY MANIFOLD - HF114077-17

## DESIGNATION, PART NUMBERS, AND DESCRIPTIONS



# PRIMARY MANIFOLD - HF114077-17

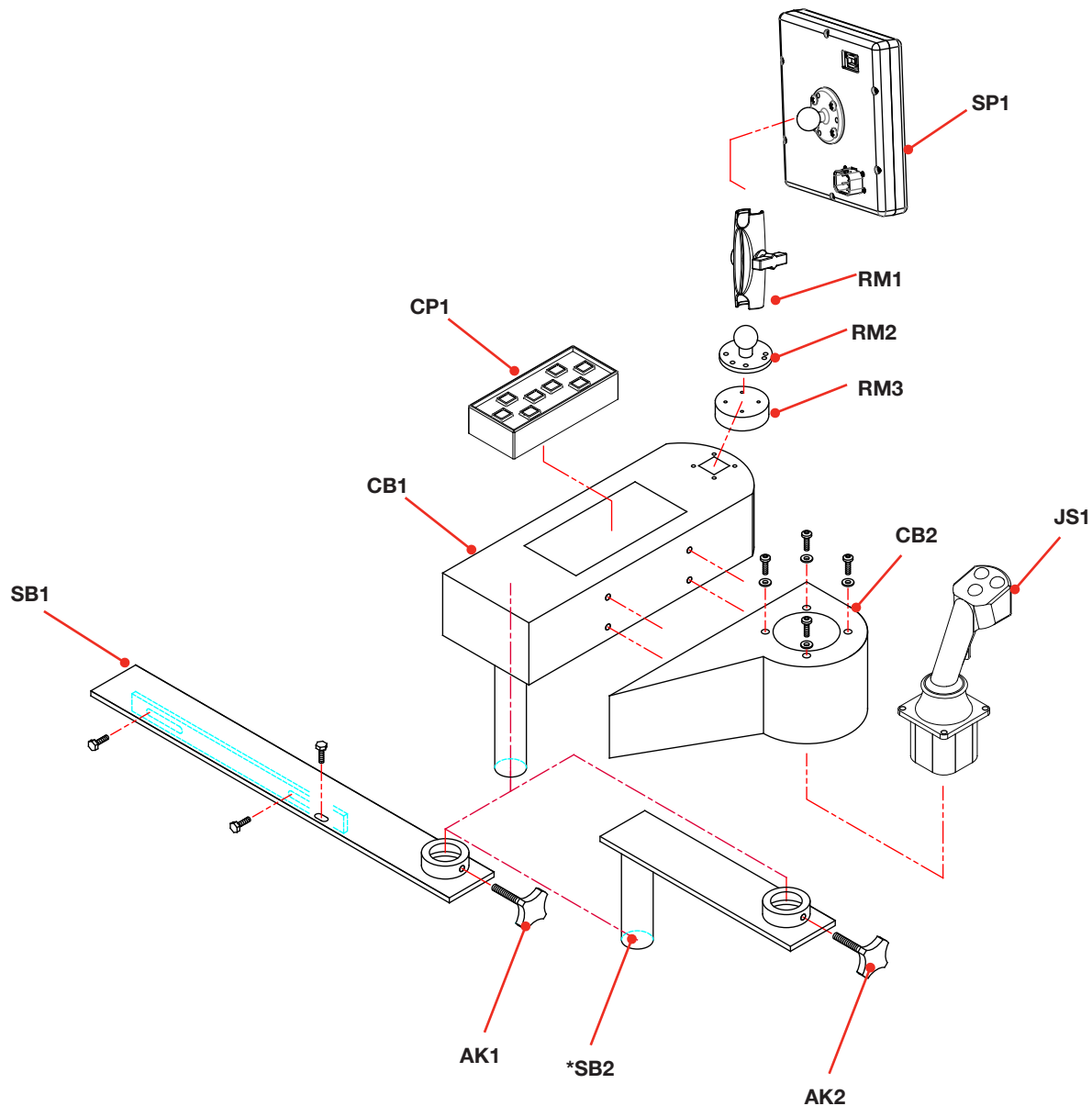
## MANUAL OVERRIDE OPERATION



FUNCTION	DESIGNATION	OVERRIDE POSITION
PLOW LIFT	ENGAGE TS3, SP1	PUSH DOWN AND CCW
PLOW LOWER	ENGAGE SP6	PUSH DOWN AND CCW
DUMP LIFT	ENGAGE TS3, SP4	PUSH DOWN AND CCW
DUMP LOWER	ENGAGE SP5	PUSH DOWN AND CCW
AUGER	ENGAGE TS3, SP2	PUSH DOWN AND CCW
SPINNER	ENGAGE TS3, SP3	PUSH DOWN AND CCW

# CONTROL CONSOLE - EXPLODED VIEW

## DESIGNATION, PART NUMBERS, AND DESCRIPTION



DESIGNATION	PART NUMBER	DESCRIPTION	DESIGNATION	PART NUMBER	DESCRIPTION
AK1	28M40672	ADJUSTMENT KNOB	RM1	NXCP1ADBB	RAM DOG BONE
AK2	28M40672	ADJUSTMENT KNOB	RM2	NXCP1AMBB	RAM BALL
CB1	57T65318	SPREADER CONSOLE	RM3	NXCP1ARP	RAM EXT. BASE
CB2	57T65316	JOYSTICK CONSOLE	SP1	APEMSC7TA1	SPREADER PANEL
CP1	APCP20170	CYLINDER PANEL	SB1	58T40644KW	SEAT BRACKET
JS1	EJK2P3DCAN	JOYSTICK	SB2	58T40863KW	*EXT. BRACKET

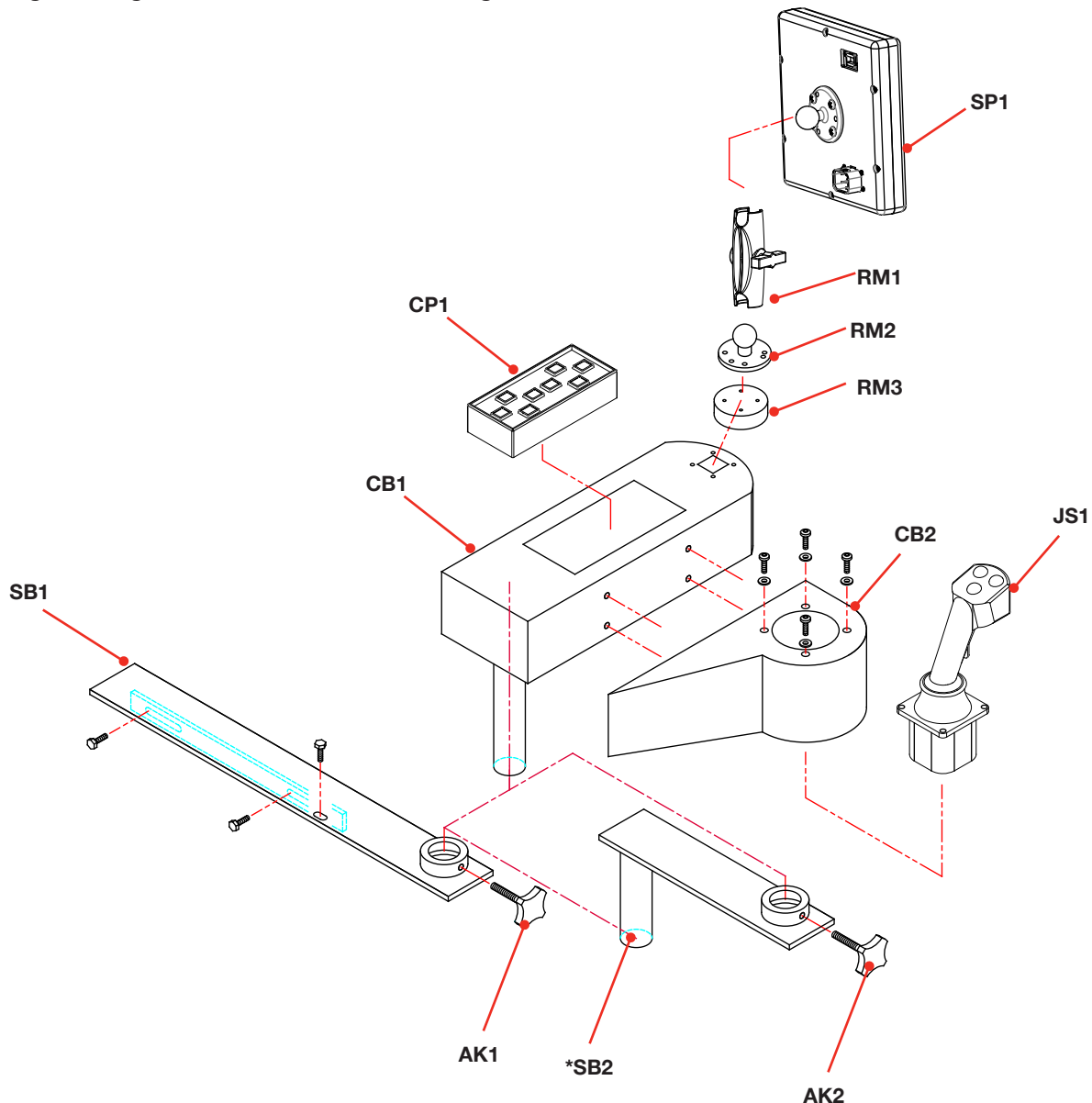
\*Optional component.



# CONTROL CONSOLE - EXPLODED VIEW

## INSTALLATION INSTRUCTIONS

1. Lean the driver's seat, seat cushion forward
2. Lay the seat bracket across the seat sub-frame with the collet up and pointed toward the center of the truck. The slots in the lower flange of the seat bracket will line up with the bolt holes in the seat sub-frame located toward the front of the seat. Tighten the 3 hex head cap screws provided.
3. Slide and fasten the console into the collet of the seat bracket. Install the (optional) extension arm for more lateral clearance.
4. Attach the console mounting base to the spreader controller
5. Using the dog bone, connect the mounting base to the console.



# VALVE ENCLOSURE WIRING INSTALLATION

## TANK ENCLOSURE WIRING INSTRUCTIONS

**Gray Jacketed Cable** – Route jacketed cable from the enclosure to the cab. This is the power, ground, CAN connection of the controller.

**Red Wire** – Connect to 12 V (Battery) with a 20A fused connection.

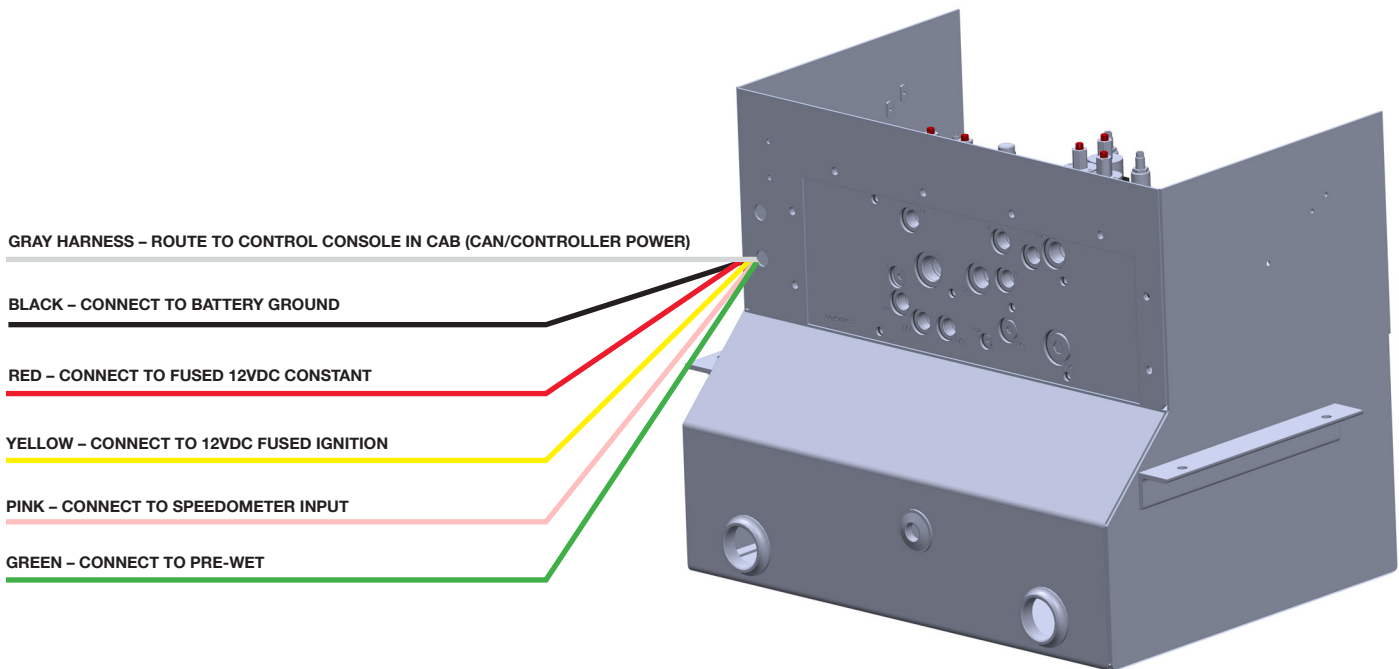
**Yellow Wire** – Ignition Power: Connect to a fused ignition power source.

**Black Wire** – Connect to Battery Ground

**Pink Wire** – Connect to Speedometer Input

**Green Wire (when applicable)** – Connect to pre-wet valve or pump (Source Current)

\*If the controller is connected correctly, it will stay powered for an additional 10 seconds for proper shutdown sequence.



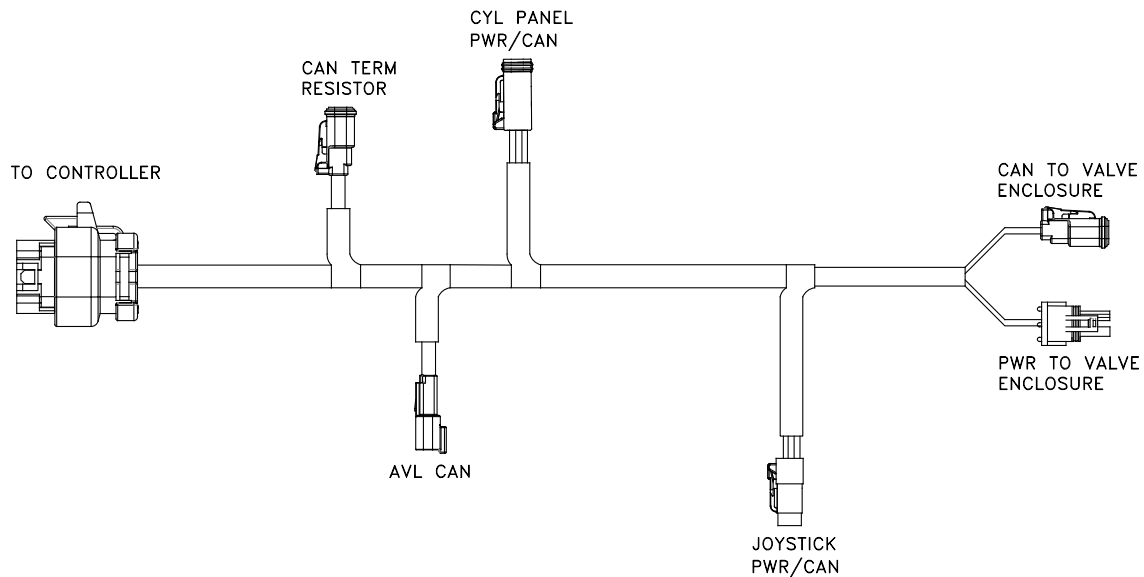
# INTERFACING TO AVL SYSTEMS

## AVL CONNECTIONS

**CAN Connection** – The recommended location to interface into the Omni-System CAN bus is through the dedicated AVL connector of harness P/N: APWH67A. The mating connector is a DT06-2S, which can plug directly into receptacle AVL connector typically located directly under the control console.

Note: This will require a 120ohm terminating resistor to be installed by your equipment for the new Omni-System/ Omni-System Plus control panel.

- Pin 1 = CAN Hi (Lt. Green Wire)
- Pin 2 = CAN Lo (Blue Wire)



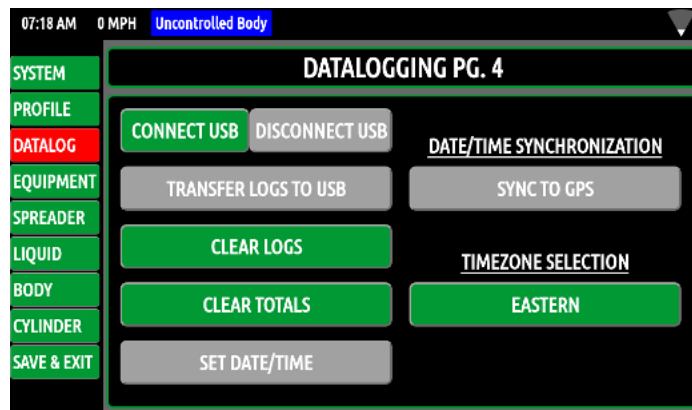
# INTERFACING TO AVL SYSTEMS

## DATALOGGING SETTINGS

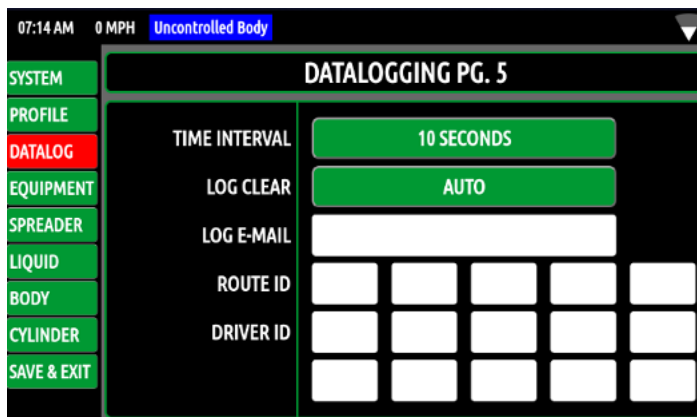
**I. Datalogging Overview:** The Omni-System™ Plus is designed to capture a snapshot of the system parameters every second and then report this information out via CAN at a configurable interval of 10, 30, 60, 90, or 120 seconds. Typically, the system will report out operator setpoints and sensor status taken within a second of the interval, historic average setpoints, totals since last cleared by the operator, and point-to-point output totals for the spreader and liquid.

**II. Enable Datalogging:** The datalogging system is enabled by default and cannot be disabled. There are several configuration operations that can be associated with the datalogging system. These items can be accessed through the controller's configuration menu.

**A. Clearing Totals** – The Clear Totals button may be used to clear the system datalogging totals.



**B. Time Interval** – On page 4 of the configuration menu the time interval parameter determines how frequently the system will log and transmit data. The options are 10, 30, 60, 90, and 120 seconds.



# EXTERNAL GPS INSTALLATION

## OPTIONAL OMNI-SYSTEM PLUS GPS

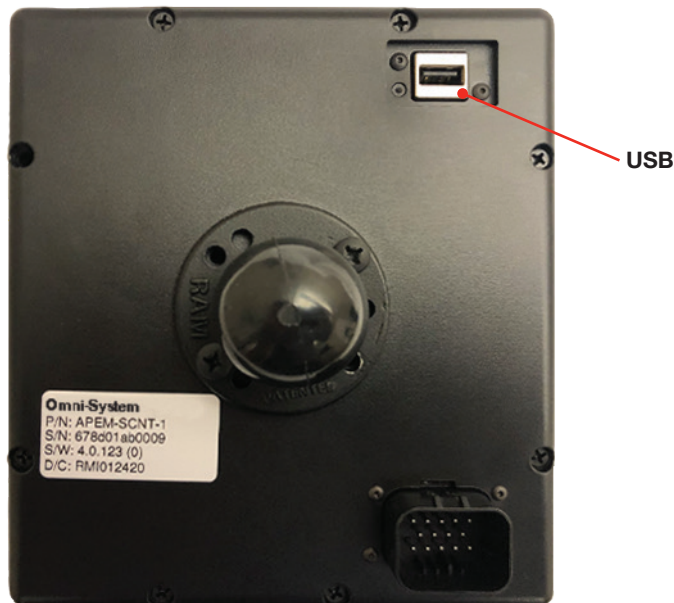
### GPS Sensor Installation

In the unlikely event the internal GPS within the Omni-System Plus is unable to lock onto a signal within the cab, an external antenna can be utilized.

**A. Locate** – Locate the GPS antennae (P/N: NXGPS) in the cab within close proximity to the spreader panel using the integrated magnet or provided suction cup. We recommend placing the antenna so that it has clear signal reception.



**B. Connect** – Plug the GPS USB connector into the USB port located on the back of the spreader controller.





# MODULE PIN-OUTS

## PRIMARY MODULE – LOCATED IN TANK ENCLOSURE

PIN	IDENTITY	PRIMARY MODULE		INPUT TRIGGER STATE
		FUNCTION	COLOR	
A.1	+Vin	12V Nom. Pwr	Red	-
A.2	+Vin SW	12V Switched Pwr	Red	-
A.3	Relay	Relay Drive	Red	-
A.4	CAN L	CANbus	White	-
A.5	CAN H	CANbus	Blue	-
A.6	GND	-12 V Nom. Pwr	Black	-
A.7	Output 1 (Freq #1)	Spinner	White	-
A.8	Output 2 (Freq #1)	Auger	Orange	-
A.9	Output 3 (Freq #1)			-
A.10	Output 4 (Freq #1)			-
A.11	Output 5 (Freq #2)	TS3 or SV1	Brown	-
A.12	Output 6 (Freq #2)			-
B.1	Dig Input 1	Hot Oil	White	GND
B.2	Dig Input 2	Cold Oil	Green	GND
B.3	Dig Input 3	Low Oil	Red	GND
B.4	Dig Input 4	Filter Bypass	Brown	GND
B.5	+5 V	Sensor Supply	Red	-
B.6	Analog Input 1	Pump Pressure	Gray	-
B.7	Analog Input 2	Load Pressure	Green	-
B.8	Analog Input 3		Unused	-
B.9	Analog Input 4		Unused	-
B.10	PWM Input 1	Groundspeed	Pink	-
B.11	PWM Input 2	Temperature Sensor	Green	-
B.12	Ignition Signal	Ignition	Yellow	-



# MODULE PIN-OUTS

## SECONDARY MODULE – LOCATED IN VALVE ENCLOSURE

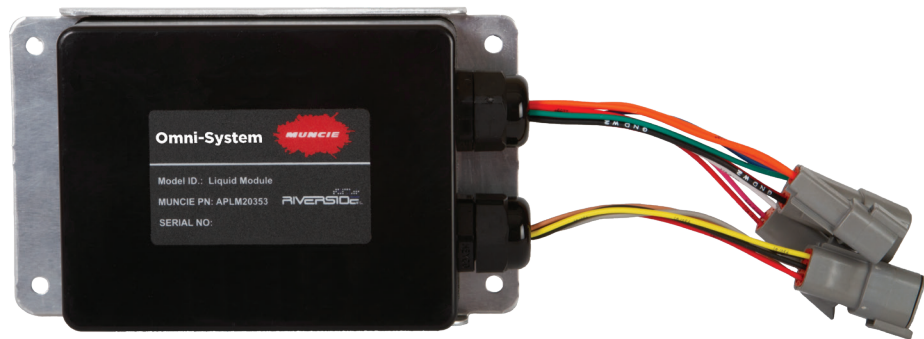
PRIMARY MODULE			
PIN	IDENTITY	FUNCTION	COLOR
A.1	+Vin	12V Nom. Pwr	Red
A.2	+Vin	12V Nom. Pwr	Red
A.3	+Vin	12V Nom. Pwr	Red
A.4	CAN L	CANbus	White
A.5	CAN H	CANbus	Blue
A.6	GND	-12 V Nom. Pwr	Black
A.7	+Vin	12 V Nom. Pwr	Red
A.8	CAN L	CANbus	Green
A.9	CAN H	CANbus	White
A.10	Address 1	Module Address	Unused
A.11	Address 2	Module Address	Unused
A.12	+5 V	Input Voltage	Unused
B.1	Output 1 (Freq #1)	Plow Up	Brown
B.2	Output 2 (Freq #1)	Plow Down	White
B.3	Output 3 (Freq #1)	Plow Down Relief	Gray
B.4	Output 4 (Freq #1)	Plow Left	Blue
B.5	Output 5 (Freq #1)	Plow Right	Purple
B.6	Output 6 (Freq #1)	Dump Up	Yellow
B.7	Output 7 (Freq #1)	Dump Down (#1)	Orange
B.8	Output 8 (Freq #1)	Dump Down Relief	Pink/Green
B.9	Output 9 (Freq #2)		
B.10	Output 10 (Freq #2)		
B.11	Output 11 (Freq #2)		
B.12	Output 12 (Freq #2)		



# MODULE PIN-OUTS

## MOTOR MODULE – LOCATED IN VALVE ENCLOSURE

PRIMARY MODULE				
Pin	Identity	Function	Color	Connector
	+12 V		Red	DT04-4P Pin 1
W2	Ground		Black	DT04-4P Pin 2
W4	CAN High		Green	DT04-4P Pin 3
W5	CAN Low		Blue	DT04-4P Pin 4
W16	Output #1	Liquid Output	Orange	DT04-4P Pin 1&2
W17	Output #2	Boom #1	Red/Orange	DT04-3P Pin 1
W18	Output #3	Boom #2	Pink	DT04-3P Pin 2
W19	Output #4	Boom #3	White	DT04-3P Pin 3
	+12 V		Red	DTM04-6P Pin 1
W3	Ground		Black	DTM04-6P Pin 2
W1	+5 V Supply		Yellow	DTM04-6P Pin 3
W6	PWM Input #1	Flow Turbine Input	Brown	DTM04-6P Pin 4
W7	PWM Input #2	Aux PWM Input	Gray	DTM04-6P Pin 5
W10	Digital Input 1 (Dig 5)		Tan	DTM04-6P Pin 6



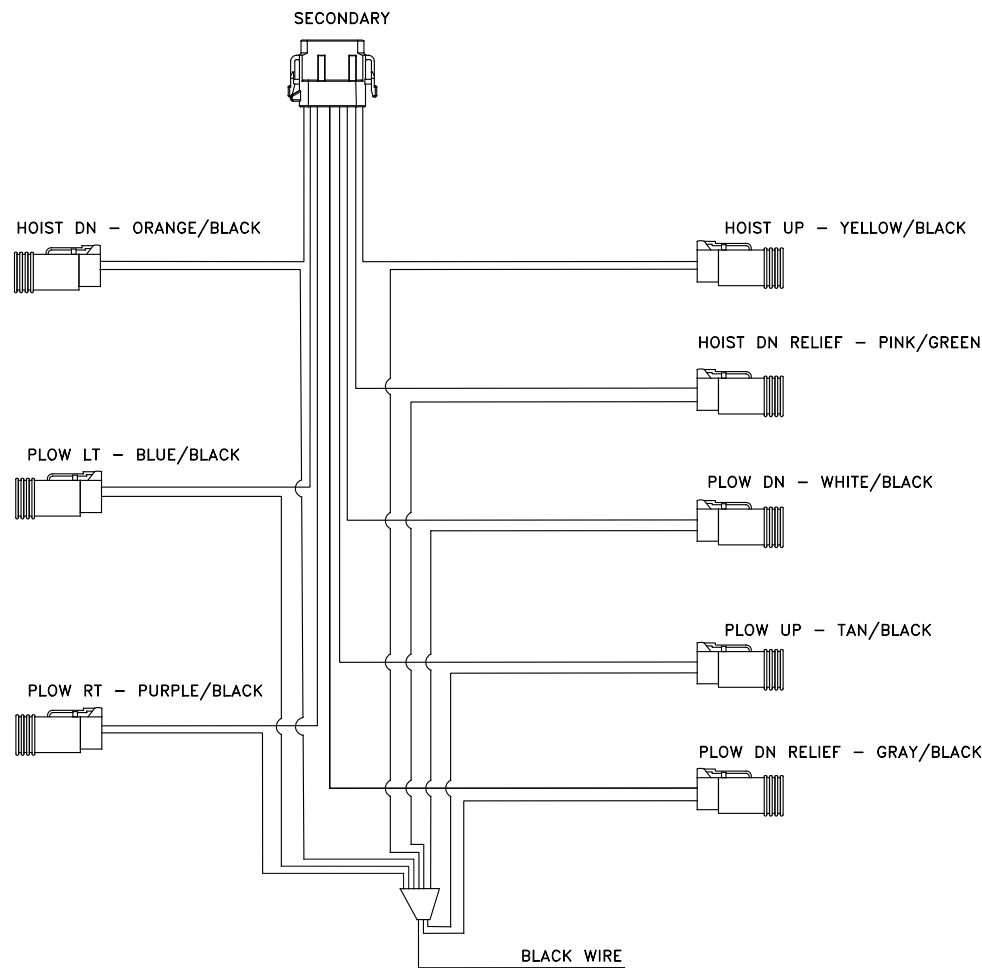
# WIRE HARNESSES LOCATION/ASSIGNMENT

## PART NUMBER, LOCATION, AND FUNCTIONS

STANDARD HARNESSES	
HARNESS NUMBER	DESCRIPTION
APWH4A	Adv + Secondary Output Harness
APWH5A	Adv + Primary/Secondary Harness
APWH7A	Adv + OMNI-System® Plus Controller Harness
APWH67A	OMNI-System® Plus Controller Harness

# WIRE HARNESSES LOCATION/ASSIGNMENT

P/N: APWH4A



SECONDARY 12 POS. PLUG		
PIN	FUNCTION	WIRE COLOR
B1	PLOW UP	TAN
B2	PLOW DOWN	WHITE
B3	PLOW DOWN RELIEF	GRAY
B4	PLOW LEFT	BLUE
B5	PLOW RIGHT	PURPLE
B6	HOIST UP	YELLOW
B7	HOIST DOWN	ORANGE
B8	HOIST DOWN RELIEF	PINK/GREEN
B9	-	PLUG
B10	-	PLUG
B11	-	PLUG
B12	-	PLUG

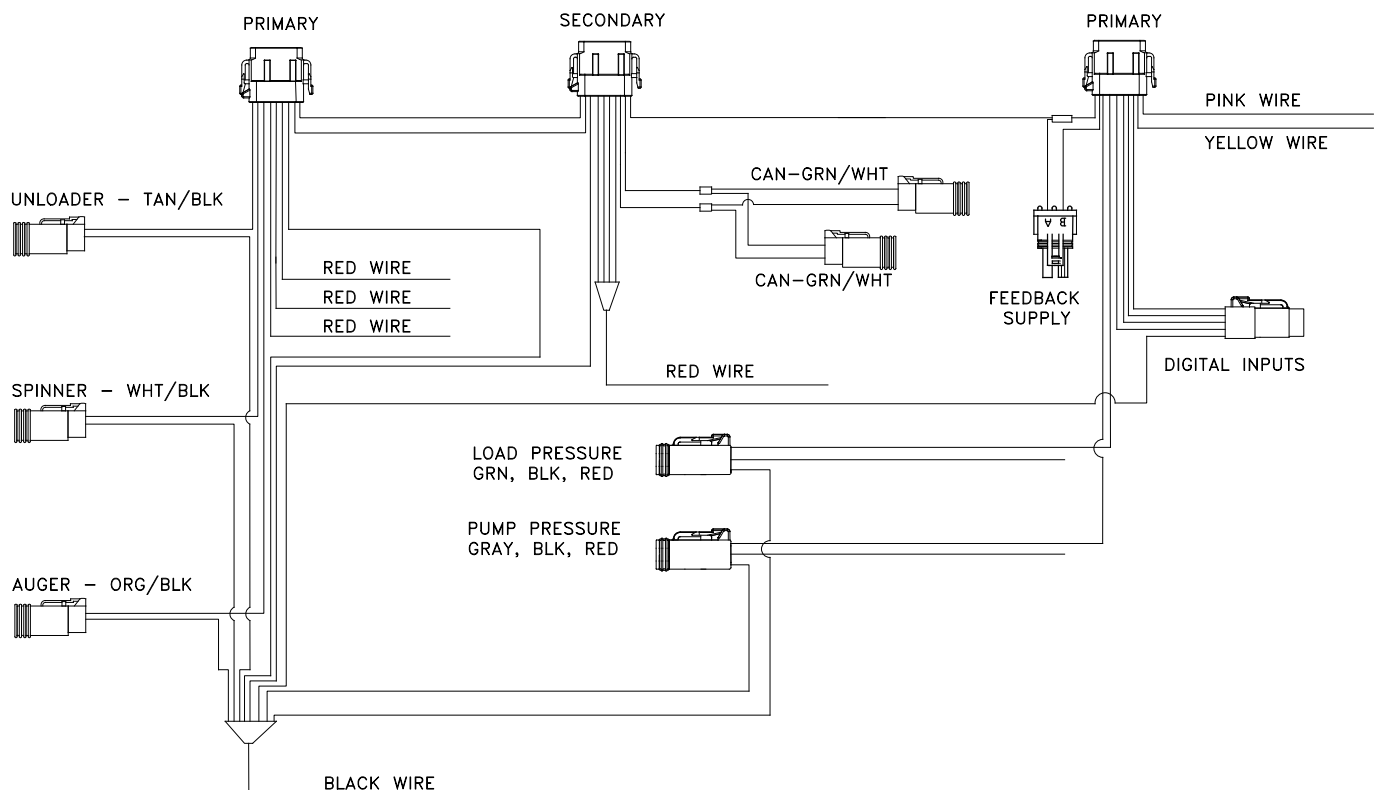
# WIRE HARNESSES LOCATION/ASSIGNMENT

P/N: APWH5A

PRIMARY 12 POS. PLUG		
PIN	FUNCTION	WIRE COLOR
A1	BATTERY PWR	RED
A2	TO PWR STUD	RED
A3	RELAY CTRL	RED
A4	CAN HIGH	WHITE
A5	CAN LOW	BLUE
A6	GROUND	BLACK
A7	SPINNER	WHITE
A8	AUGER	ORANGE
A9	–	PLUG
A10	–	PLUG
ALL	UNLOADER	TAN
A12	–	PLUG

SECONDARY 12 POS. PLUG		
PIN	FUNCTION	WIRE COLOR
A1	PWR	RED
A2	PWR	RED
A3	PWR	RED
A4	CAN HIGH	WHITE
A5	CAN LOW	BLUE
A6	GROUND	BLACK
A7	POWER	RED
A8	CAN HIGH	GREEN
A9	CAN LOW	WHITE
A10	–	PLUG
ALL	–	PLUG
A12	5 VOLT INPUT	RED

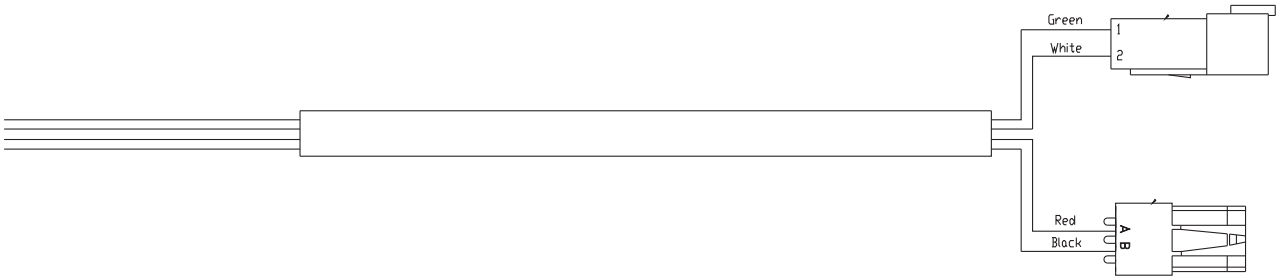
PRIMARY 12 POS. PLUG		
PIN	FUNCTION	WIRE COLOR
B1	HOT OIL	WHITE
B2	COLD OIL	GREEN
B3	LOW OIL	RED
B4	BODY SENSOR	BROWN
B5	5 VOLT OUTPUT	RED
B6	PUMP PSI	GRAY
B7	LOAD PSI	GREED
B8	–	–
B9	–	–
B10	GRD SPEED	PINK
B11	TEMP SENS	GREEN
B12	IGNITION	YELLOW





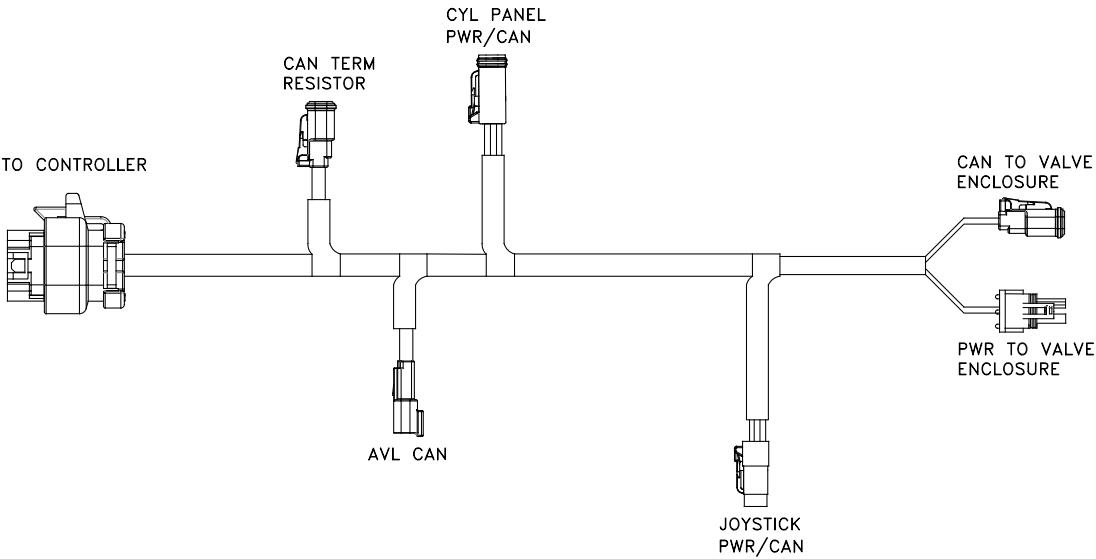
# WIRE HARNESSES LOCATION/ASSIGNMENT

P/N: APWH7A

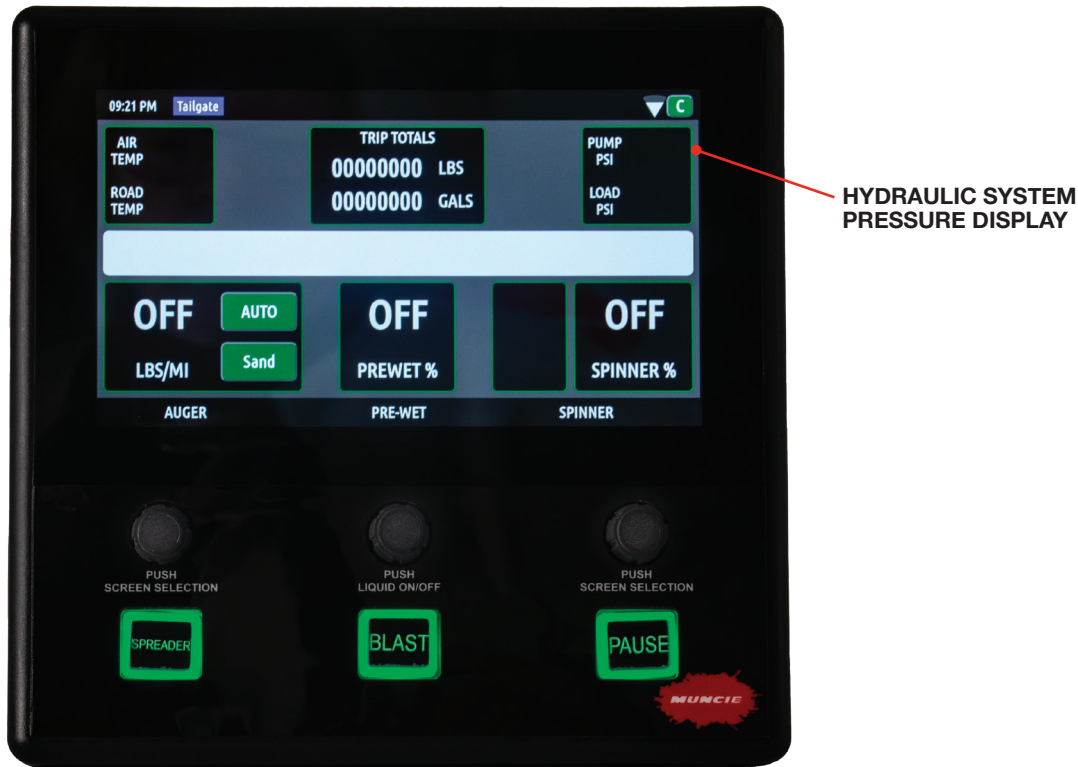


CONTROLLER 14 POS. PLUG	
PIN	FUNCTION
A1	CAN0 L
A2	CAN0 H
A3	CAN 1 L
A4	CAN 1 H
A5	5 V OUT
A6	N/A
A7	N/A
A8	J1708 A
A9	J1708 B
A10	12 V
ALL	GND
A12	DIG 1
A13	DIG 2
A14	DIG 3

P/N: APWH67A



# PRESSURES EXPLAINED



**Pump PSI** – The pump pressure indicates the inlet pressure from the pump. This pressure will always be approximately 200–300 PSI higher than the load sense pressure. This pressure will never exceed the main relief setting.

**Load PSI** – The load sense PSI indicates the pressure of the hydraulic load. Without any functions operating, the LS pressure will display approximately 0 PSI (readings of 50–100 PSI are typical).

**Boots/Differential Pressure** – The boost or differential pressure is the difference between the pump and the load sense pressures. When equipped with a gear pump, this setting can be adjusted at the boost pressure relief located in the primary valve assembly. When equipped with a piston pump, this setting is adjusted on the pump control module. Muncie Power Products' valve network requires an approximate differential pressure of 200–300 PSI.

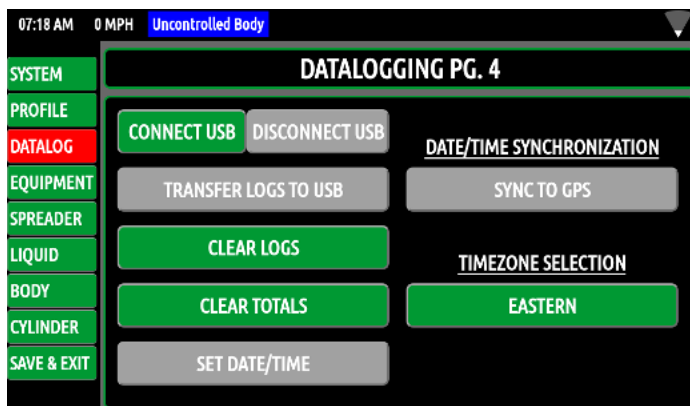
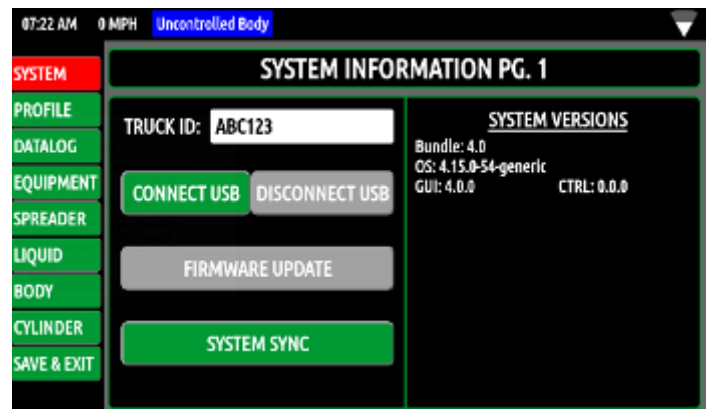
# SYSTEM CHECKLIST

## HYDRAULIC INFORMATION:

1. **Hoses and Fittings Secured** – Check that all hoses and fittings are secure, away from moving parts, and heat sources.
2. **Leaks** – Check all seals, hoses, and filter for leaks.
3. **Quick Couplers** – Check that all quick couplers are fully seated.
4. **Manual Overrides** – Check that all manual overrides are disengaged and pressures are normal.
5. **Foaming Oil** – Check tank for foaming oil.

## WIRING INFORMATION

6. **Controller Power** – Verify controller stays on for 10 seconds after the ignition is disengaged.
7. **Speedometer Input** – Check that pink groundspeed wire is connected to the trucks speedometer output.
8. **Sensor Functionality** – Check that all sensors are properly connected and functional.
9. **Wiring Connections** – Check that all wiring connectors are properly connected and functional.
10. **Set Truck ID** – Click on the truck ID and input the appropriate # for the Omni-System Plus®.
11. **Set time and date for Omni-System Plus®** –  
Click on the date and time box.  
Input the month, day, year, time, and time zone.



12. **System Calibrations** – Reference the controller configuration manuals to calibrate the speedometer, weighed dump calibration, and actuator trim settings.

# NOTES

# NOTES



**Muncie®  
Power  
Products**

*A Member of the Interpump Group*

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