

# Fluid Level Sensor Kit (Plastic Reservoir) • Installation instructions



Always read and understand the Owner's/User's Manual and become thoroughly familiar with the equipment and its controls before installing, maintaining or operating equipment. **Failure to read and understand owner's/user's manual may result in voiding of warranty, damage to equipment, death or serious injury!**

## **DANGER**

Unless the dock leveler is equipped with a tethered remote, two people are required to engage the maintenance prop: one person to operate the unit, the other person to engage the maintenance prop.

In addition, it is recommended and good safety practice to use an additional means to support the dock platform and lip anytime when physically working in front of or under the dock leveler. This additional means may include, but is not limited to a boom truck, fork truck, stabilizing bar or equivalent.

## **DANGER**

Make sure that the power source has been locked out and tagged according to OSHA regulations and approved local electrical codes.

### 7155-0001 - Installation Instructions

- Determine the model of leveler requiring the sensor installation. Reference the drawing on page 2 to verify the correct mounting location for the bracket and sensor.
- Properly clean the plastic surface before adhering the mounting bracket (A) to the reservoir.
- Make sure mounting bracket is oriented correctly to allow sufficient cable length to reach a local junction box.
  - For frame mounted reservoirs, the junction box is to be located in the dock leveler pit. Junction box is supplied by others unless using a factory installed junction box on the platform.
  - For EH, DH, H, HP, OR LH models: the sensor and bracket may be placed on either side of the reservoir, using the dimensions shown on page 2.
  - For CentraPower reservoirs, route the sensor wire (C) to the iDock control box located near the pump station.

- Sensor (B) must be oriented with the cross hairs facing toward the reservoir and with the red LED facing away from the reservoir. See Figure 1.

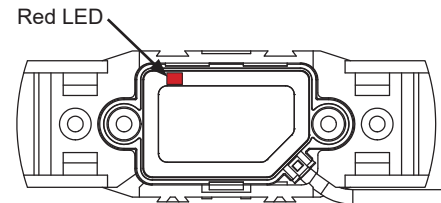


Figure 1

### Electrical Connections

- Secure the sensor cable (C) from the reservoir to the junction box using cable ties (not included).
- Field wiring from the junction box to the control box requires 3 conductors at 18 gauge minimum (supplied by installer).
- Connect the 3 conductors to the sensor cable in the pit junction box. Reference diagram below for connections and field wiring numbers. See Figure 2.

WIRE # & COLOR	FLUID LEVEL SENSOR
20 — BRN	12 VDC
21 — BLU	0 VDC
34 — BLK	NC SIGNAL

Figure 2

- Connections to the iDock are as follows:
  - Wire #20 connects to terminal block #20.
  - Wire #21 connects to terminal block #21.
  - Wire #34 is the signal wire from the sensor. This connects to the iDock expansion board at terminal #24. This is DC Input 1.

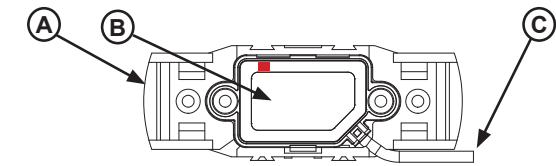
### Testing Operation

- (7155-0001 only) Verify the fluid level in the reservoir using the steps below:
  - Reference the equipment owner's/ user's manual for fluid inspection instructions.
  - After the fluid level is correct, remove the lock out tag outs and energize the equipment.
- Test the function of the Fluid Level Sensor by following the steps below:
  - If the sensor was installed as a retrofit, and not with the original loading dock equipment installation, make sure the iDock System Configuration and Firmware have been updated.
  - With the correct fluid level in the reservoir, the sensor LED should be illuminated. DC Input #1 should be illuminated on the expansion board. See Figure 4.
  - If the fluid level is low, DC Input #1 should *not* be illuminated. See Figure 4. The message display (A) will show:

31 LOW LEVELER  
HYD FLUID LEVEL  
PRESS ENTER TO  
ACKNOWLEDGE

(Alternating Messages)

- If the fluid level is correct, verify the electrical connections and that the sensor is mounted correctly, according to the kit instructions.
  - After DC Input #1 is illuminated, the Enter Button (C) must be pressed before the communication light and display will reset. Press Enter and verify that Fault code 31 does not appear on the message display .
- If the equipment is operating correctly, based on the steps above, then the installation is complete. If you require further assistance with the installation, contact Systems Technical Services.



A—Mounting Bracket      B— Sensor      C—Sensor Cable (6' long)

Figure 3

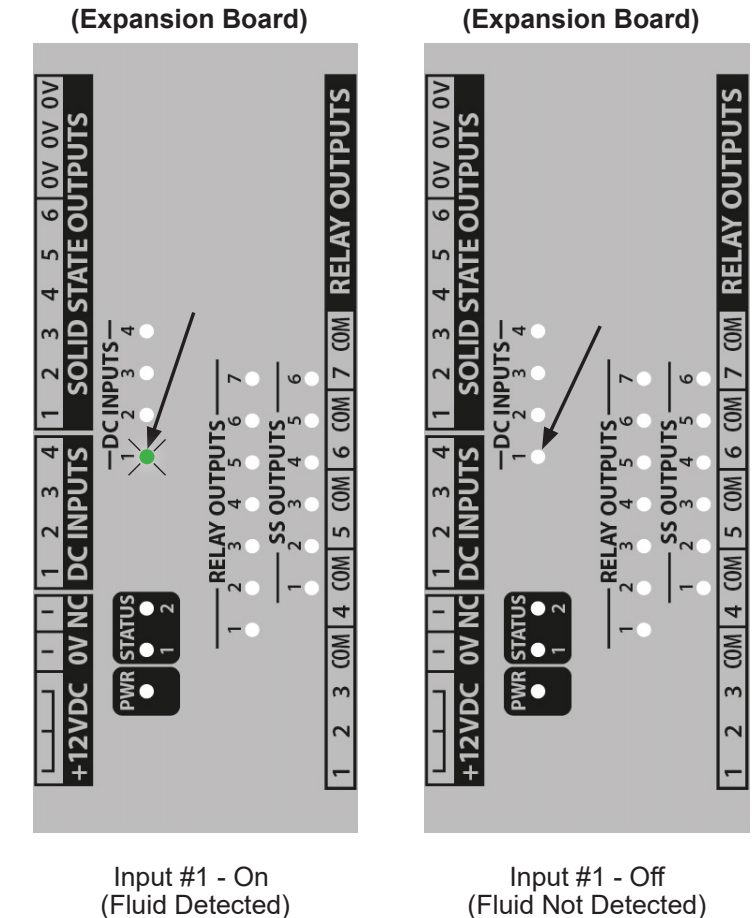
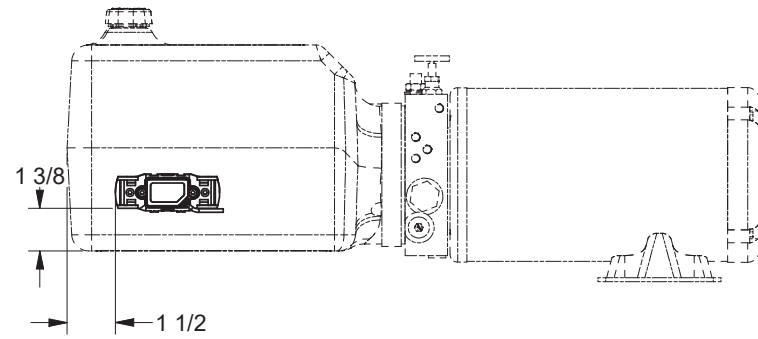
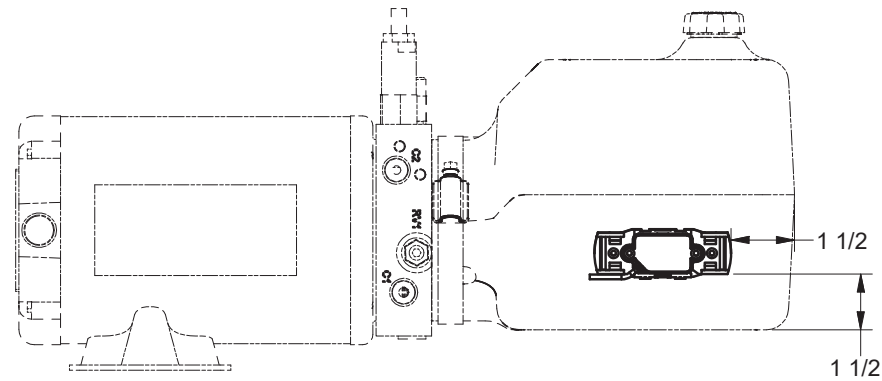


Figure 4

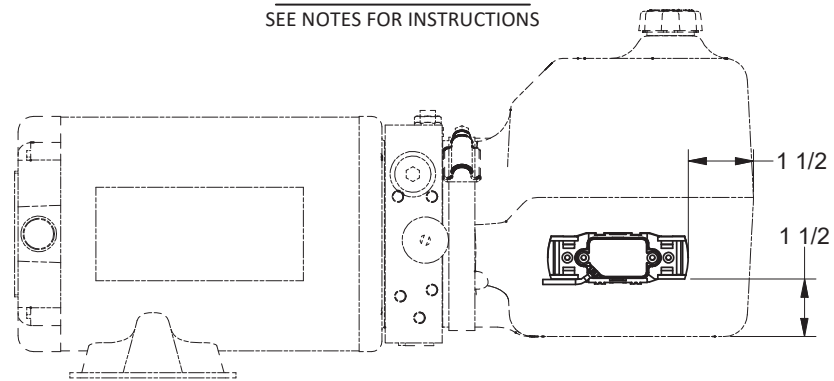
**EH3/DH3 LOCATION**  
SEE NOTES FOR INSTRUCTIONS



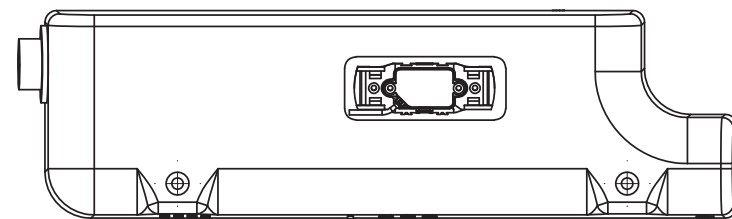
**LH LOCATION**  
SEE NOTES FOR INSTRUCTIONS



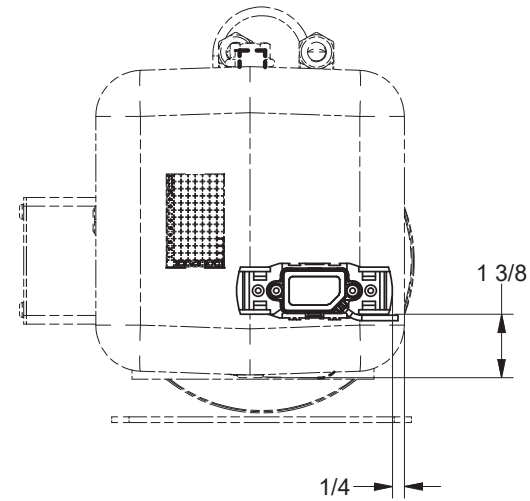
**H/HP LOCATION**  
SEE NOTES FOR INSTRUCTIONS



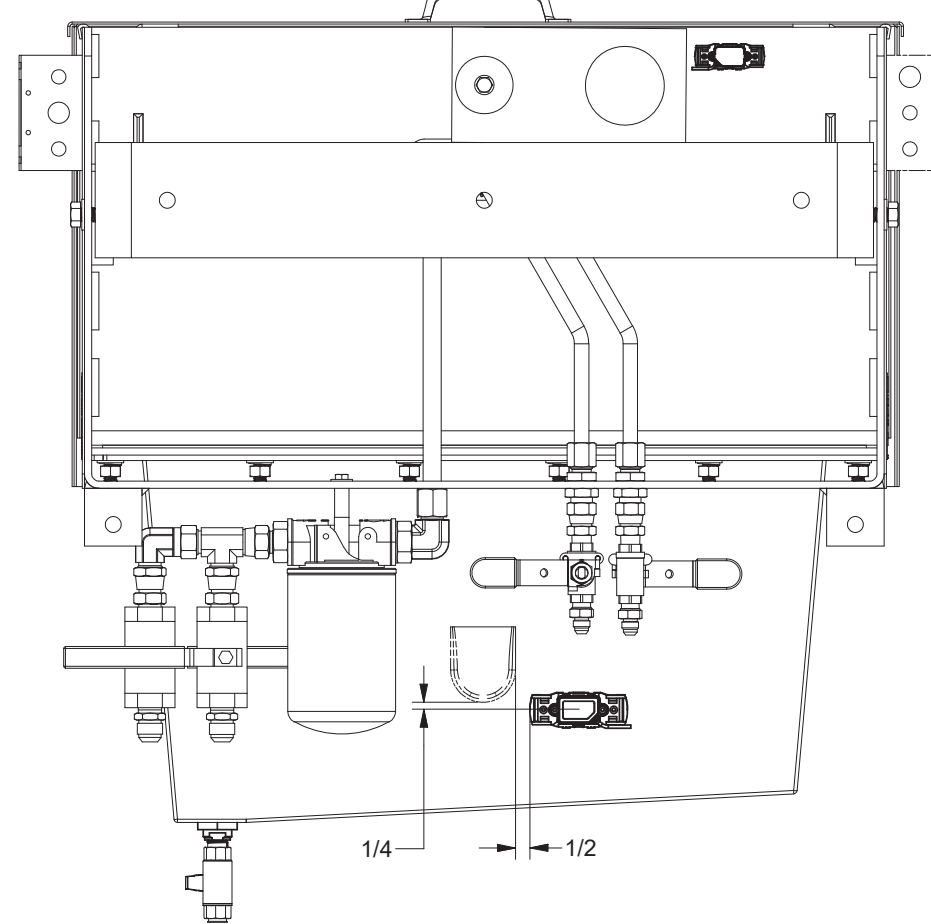
**VS20 LOCATION**  
SEE NOTES FOR INSTRUCTIONS



**PR3/VH3 LOCATION**  
SEE NOTES FOR INSTRUCTIONS

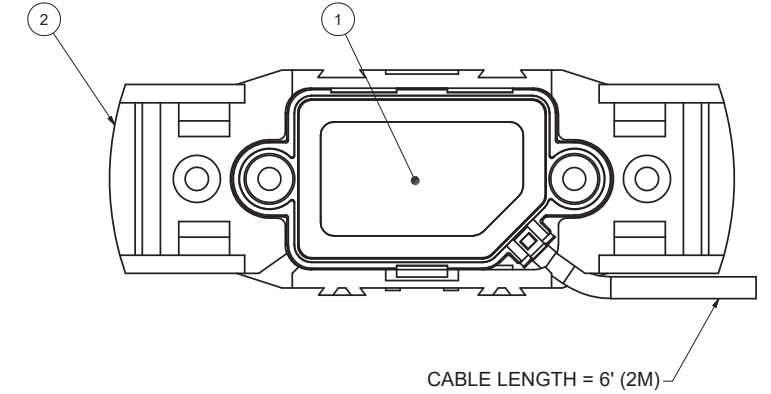


**CENTRAPOWER-18 LOCATION**  
SEE NOTES FOR INSTRUCTIONS



BILL OF MATERIAL				
ITEM	QTY	PART NO.	DESCRIPTION	SIZE
1	1	0961-0641	SENSOR,FLUID,PLASTIC TANK	12VDC, NON-INTRUSIVE
2	1	0961-0647	BRACKET,SENSOR,PLASTIC TANK	FOR 0961-0641
3	1	1026-0005	INSTALLATION INSTRUCTIONS	IDOCK SENSOR KITS
4	2	3051-0001	CABLE TIE	0.1x4,0.75
5	2	3051-0031	MTG BASE,CABLE TIE	4 WAY,ADHESIVE

\* NOT SHOWN



C	21-051	6/1/21	ADD NOTE 9 FOR IDOCK LINK - CONSOLIDATED TO 1 SHEET
B	20-022	1/29/21	ADDED SHEET 2
A	19-112	10/16/19	ADD ELECTRICAL NOTES & SCHEMATIC
-	18-051	10/17/18	RELEASED

POWERAMP  
MCGUIRE  
DLM

**SYSTEMS**  
Loading Dock Equipment

KIT,FLUID SENSOR ASSY  
10-30VDC,PLASTIC RESERVOIR

MATERIAL	STOCK NO.	
DRAWN BY	CHECKED BY	DATE
BDK		6/1/2018
TOLERANCES (UNLESS OTHERWISE NOTED)		DRAWING NO.
FRACTIONAL: $\pm 1/32"$		<b>7155-0001</b>
DECIMAL: .00 = $\pm .01"$		
.000 = $\pm .005"$		
ANGULAR: $\pm 1'$		

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