



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!**

7155-0002 Installation Instructions

- Factory installed 7155-0002 kits will only require field wiring to the pit junction box and iDock controller. See Electrical Connections section.
- For aftermarket installations, see installation steps below:

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.

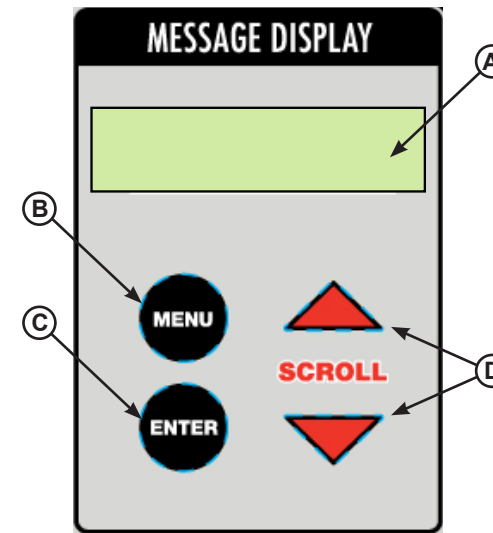
1. The 7155-0002 requires a factory drilled and tapped reservoir to mount the sensor. An aftermarket installation will require reservoir replacement.
2. Raise the dock leveler and engage the maintenance prop. Then Lock Out Tag Out the maintenance prop and local disconnect or circuit breaker.
3. With the leveler safely supported and the equipment locked out, proceed to swap out the reservoir using the following steps.
4. Drain hydraulic fluid from the powerpack (A). See **Figure 1** on page 2.
 - With a pan (or similar) to catch hydraulic oil positioned under the return fitting (B), remove the hose connected to the return fitting.
 - Allow fluid to drain into catch pan from fitting and hose.

1. When fluid is drained, remove reservoir (E) by removing lock nuts (C) and thread seals (D).
 - Verify that the old reservoir O-ring (F) is removed with the reservoir. See **Figure 2** on page 2. A new O-ring and thread seals are included with the 7155-0002 kit.
 2. Install the 7155-0002 kit using the steps below:
 - Apply thread seal tape to threads on sensor (J).
 - Insert sensor (J) into tapped hole in new reservoir. **Do not over-tighten sensor.** Tighten until snug.
 3. Place new O-ring (F) into depression on drive plate (G). See **Figure 2**.
 4. With the new o-ring and sensor in place, mount the reservoir (E) on the drive plate (G). Align the mounting holes on the reservoir with the tie rods (H).
- Note:** Make sure the breather hole is facing up and the sensor is near the bottom. See **Figure 3** on page 2.
5. With the tie rods (H) exposed through the reservoir, position the thread seals (D) on the tie rods.
 6. Verify the reservoir (E) is evenly seated on the o-ring (F). Then install the lock nuts (C) on the tie rods. Tighten the lock nuts to 35-40 in/ lbs. **Do not over-tighten.**
 7. Add **1 gallon** of hydraulic fluid to the reservoir and verify that there are no leaks. With residual fluid in the hydraulic system, 1 gallon will allow the unit to raise off the maintenance prop and lower to the stored position. Install Breather Cap (M).

Note: Do not raise the leveler at this time. Continue with electrical connections before running the dock leveler.

Electrical Connections

1. Attach cable (K) to sensor (J). See **Figure 3**.
2. The 5M cable (K) should be long enough to reach the iDock controller in most applications. Pull the cable through the existing pit junction box/ conduit to the iDock controller.
3. The connections to the iDock are as follows:
 - Brown wire connects to terminal block #20.
 - Blue wire connects to terminal block #21.
 - White wire connects to PLC expansion board, terminal #24. This is DC Input #1.
4. Reference **Figure 4** on page 2 for connection diagram.



System Control Buttons/Displays
A - Message Display
B - MENU button
C - ENTER button
D - SCROLL UP/DOWN buttons

7155-0001 or 7155-0002 — Testing Operation

1. **(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.
 - Continue to **Step 3**.
2. **(7155-0002 only)** Verify the fluid level in the reservoir using the steps below:
 - After the sensor has been installed and the electrical connections have been made, remove the lock out tag outs and energize the equipment
 - Position the dock leveler in the below dock/ end loading position. See **Figure 5** on page 2.
 - Remove the access cover (C) from the top of the leveler platform (D). This will provide access to the reservoir fill port.
 - Remove breather cap from top of reservoir and inspect the fluid level.
 - The fluid level should be approximately 2 in. (51mm) from the top of the reservoir with the platform in the below dock position. Add fluid if necessary.
 - Re-install breather plug and access cover and return the leveler to the stored position.
 - Continue to **Step 3**.

3. 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 6** on page 2.
- If the fluid level is low, DC Input #1 should *not* be illuminated. See **Figure 6**. 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 .
4. If the equipment is operating correctly, based on steps 1-3 above, then the installation is complete. If you require further assistance with the installation, contact Systems Technical Services.

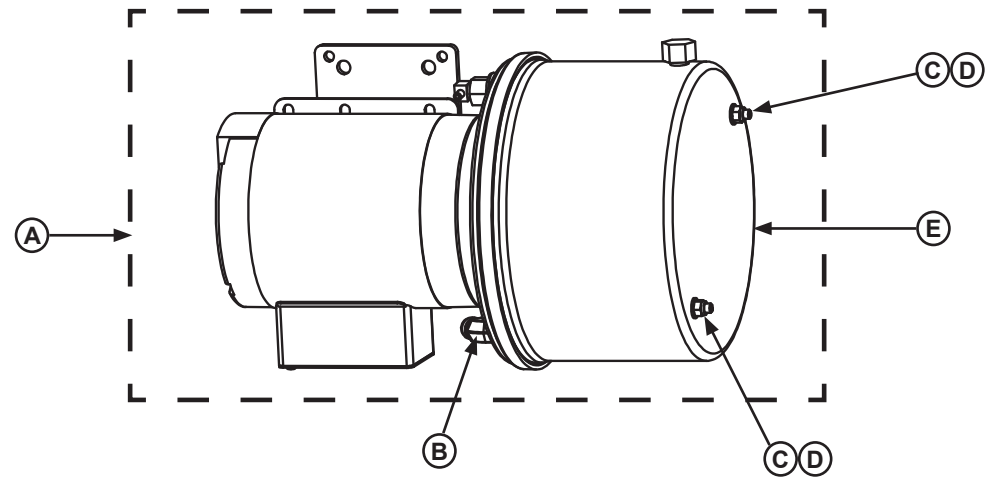


Figure 1

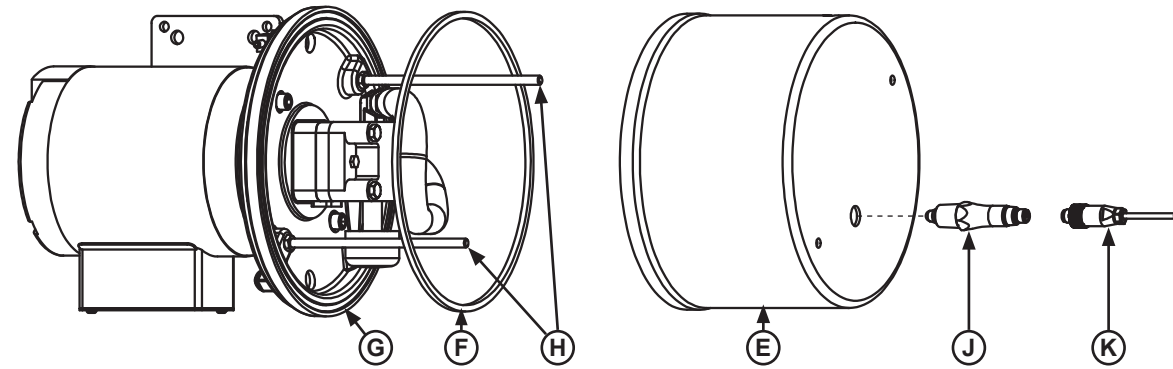


Figure 2

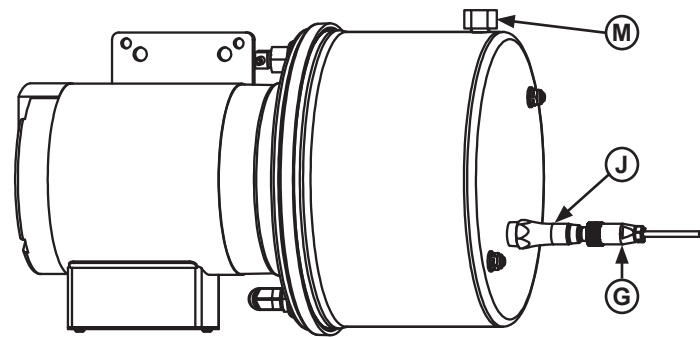
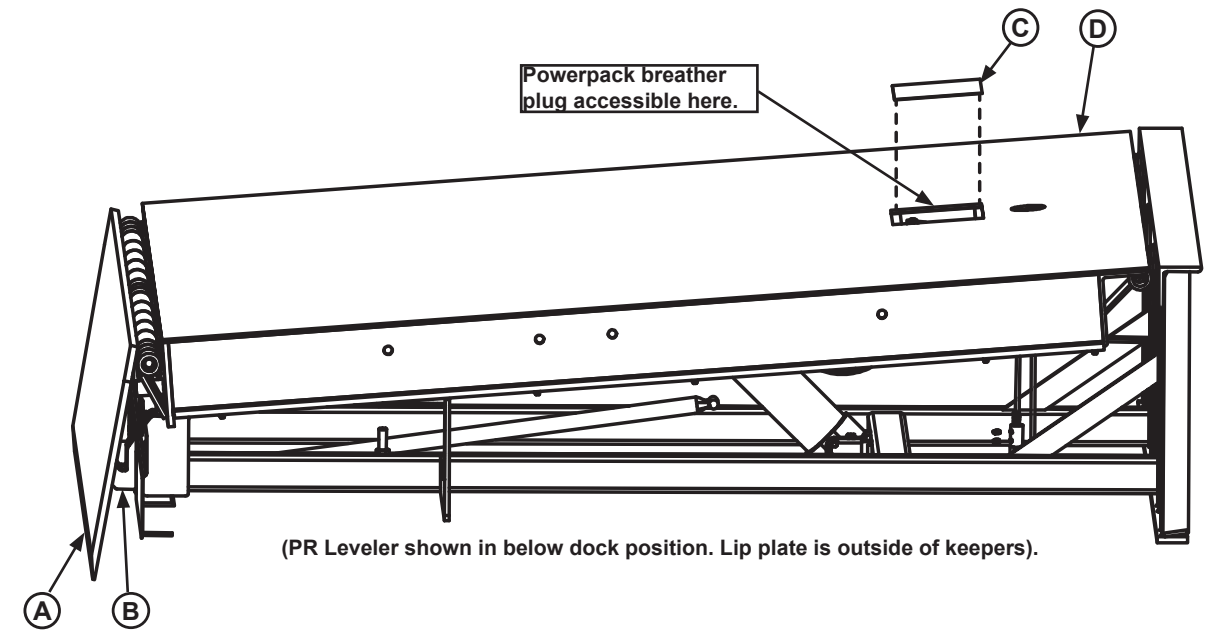


Figure 3

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

Figure 4

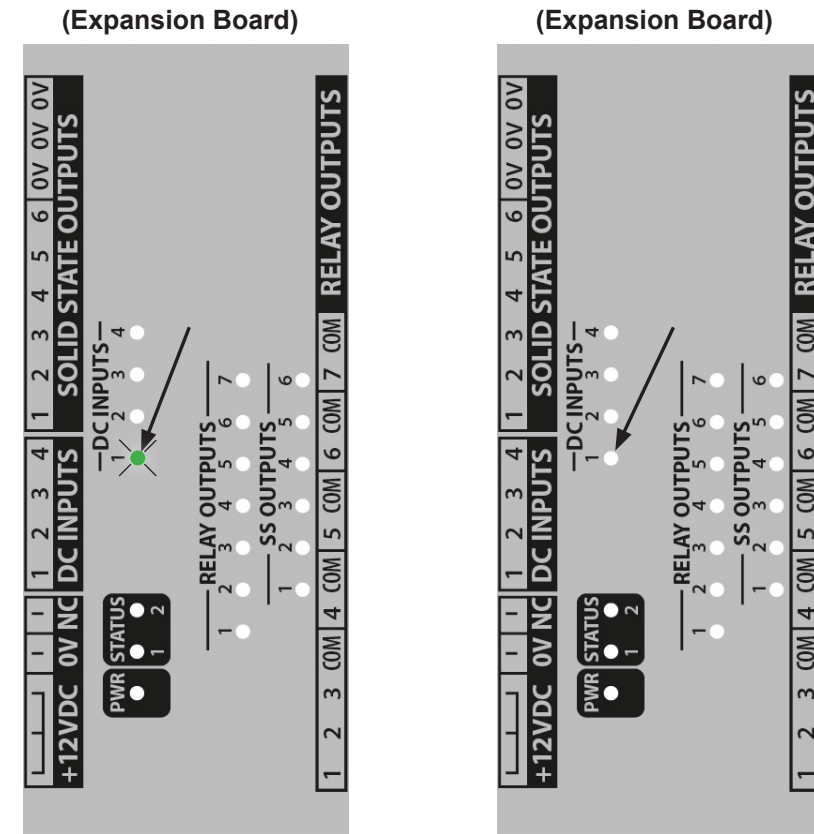
- A—Powerpack Assembly
- B—Return Fitting
- C—Lock Nut
- D—Thread Seal
- E—Reservoir
- F—O-Ring
- G—Drive Plate
- H—Tie Rod
- J—Sensor
- K—Sensor Cable
- M—Breather Cap



(PR Leveler shown in below dock position. Lip plate is outside of keepers).

- A—Lip Plate
- B—Lip Keepers
- C—Access Cover
- D—Platform

Figure 5



Input #1 - On
(Fluid Detected)

Input #1 - Off
(Fluid Not Detected)

Figure 6