



## Installation and Owner's Manual

(For Aftermarket Applications)

Lippert™ Liquid Propane Sensor Kit	
Kit#	Description
<u>2021130655</u>	Lippert Liquid Propane Sensor

### **Table of Contents**

Introduction	2	Maintenance	8
Safety	2	Alerts	
Parts List		Checking LP Tank LevelCleaning	
Resources Required	3	Unpairing Sensor from OneControl	8
Installation	3	Battery Information	9
Install OneControl Application		Resources Required	9
Operation		Troubleshooting	10
Pairing OneControl with LP Sensor Setting Up Paired LP Sensor in OneControl App Physical Installation of LP Sensor on LP Tank Adjusting Settings in the OneControl App Physical Installation of LP Sensor on LP Tank	4 5 5 6	Notes	10

lippert.com 432-LIPPERT (432-547-7378) CCD-0004544 Rev: 06.02.22



Installation and Owner's Manual (For Aftermarket Applications)

#### Introduction

Nobody wants to get to the campsite only to realize they're low on liquid propane (LP). This easy-to-install Liquid Propane Sensor (LP Sensor) lets you monitor propane levels right from your phone or smart device before you leave the house.

Integrated with Lippert's OneControl® technology, our sensors send real-time updates via Bluetooth® (BT) so you can stay in-the-know on your RV's tanks 24x7.

Installation and set-up is effortless: Simply activate the LP Sensor with the OneControl app then attach the LP Sensor to a vertical steel LP tank with magnets and enjoy the ease of having real-time updates. Monitor up to four LP Sensors simultaneously from a smart device.

Additional information about this product can be obtained from <a href="lci1.com/support">lci1.com/support</a> or by using the LippertNOW app. Replacement kits can be ordered from <a href="https://store.lci1.com/">https://store.lci1.com/</a> or by using the LippertNOW app.

The myLCl app is available for free on Apple App Store<sup>®</sup> for iPhone<sup>®</sup> and iPad<sup>®</sup> and also on Google Play<sup>™</sup> for Android<sup>™</sup> users.

App Store® and iPad® are registered trademarks of Apple Inc.

Google Play<sup>™</sup> and Android<sup>™</sup> are trademarks of Google Inc.

## Safety

Read and fully understand all instructions before installing or operating this product.

Adhere to all safety labels.

## **AWARNING**

THE "WARNING" SYMBOL ABOVE IS A SIGN THAT A PROCEDURE HAS A SAFETY RISK INVOLVED AND MAY CAUSE DEATH, SERIOUS PERSONAL INJURY OR SEVERE PRODUCT AND/OR PROPERTY DAMAGE IF NOT PERFORMED SAFELY WITHIN PARAMETERS SET FORTH IN THIS MANUAL.

## **AWARNING**

FOLLOW ALL LP TANK SAFETY INSTRUCTIONS AND INSTRUCTIONS FOR DISCONNECTING THE LP TANK FROM SERVICE. INSPECT THE LP TANK AND GAS APPLIANCES FOR LEAKS.

## **AWARNING**

BATTERIES MUST ONLY BE CHANGED IN AN AREA FREE OF IGNITABLE CONCENTRATIONS DUE TO EXPLOSION HAZARD.

## **AWARNING**

LIQUID PROPANE GAS (LPG) IS EXTREMELY FLAMMABLE. ADHERE TO ALL LP TANK SAFETY WARNINGS. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) WHEN HANDLING LPG. INSPECT LP TANK FOR LEAKS PRIOR TO USE OR SERVICE. DO NOT SMOKE OR HAVE ANY IGNITION SOURCES SUCH AS FLAMES OR SPARK-PRODUCING ELECTRICAL TOOLS IN THE AREA WHILE HANDLING OR TRANSPORTING LP TANKS. FAILURE TO FOLLOW ALL LPG SAFETY WARNINGS COULD RESULT IN SEVERE PRODUCT AND PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY OR DEATH TO PEOPLE AND PETS.

## **AWARNING**

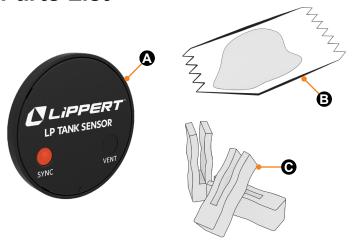
ALWAYS TRANSPORT AND STORE LP TANK IN A SECURE AND UPRIGHT POSITION SO THE CYLINDER DOES NOT FALL, SHIFT OR ROLL TO PREVENT DAMAGE TO THE LP TANK. DAMAGE TO LP TANK COULD RESULT IN AN EXPLOSION AND/OR FIRE, CAUSING SEVERE PRODUCT AND PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY OR DEATH TO PEOPLE AND PETS.

lippert.com 432-LIPPERT (432-547-7378) **2** CCD-0004544 Rev: 06.02.22



Installation and Owner's Manual (For Aftermarket Applications)

#### **Parts List**



#### **Lippert Liquid Propane Sensor Kit PN (2021130655)**

Letter	PN	Description	Qty
Α	2021122742	Lippert Liquid Propane Sensor	1
В	2021026924	Sonic Grease	1
С	2021026926	Spacer Kit	1

**NOTE:** Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.

#### **Resources Required**

OneControl App

• Cloth to wipe tank

#### Installation

**NOTE**: Do this prior to using or servicing the LP tank and/ or gas appliances for the first time each season and on a regular basis.

**NOTE:** The LP sensor is optimally designed for vertical steel LP tanks. The LP sensor is not designed to support nor can it as accurately measure horizontal tanks.

#### **AWARNING**

FOLLOW ALL LP TANK SAFETY INSTRUCTIONS AND INSTRUCTIONS FOR DISCONNECTING THE LP TANK FROM SERVICE. INSPECT THE LP TANK AND GAS APPLIANCES FOR LEAKS.

## **AWARNING**

PREVENT LP LEAKS BY ALWAYS CLOSING THE LP TANK VALVE, EVEN IF THE LP TANK IS EMPTY.

NEVER STORE OR PLACE A LP TANK IN AN AREA OF EXCESSIVE HEAT (120 DEGREES OR HIGHER)

OR NEAR A STOVE, FIREPLACE, OR OTHER HEAT SOURCE. FLASH FIRES OR EXPLOSIONS CAN RESULT FROM EXPOSING LP TANKS TO HEAT.

#### **Install OneControl Application**

The LP Sensor requires the OneControl app (Fig.1) from Lippert.



#### Fig.1

- For iOS users, visit the Apple App Store (<u>link</u>)
- For Android users, visit the Google Play store (link)

**NOTE:** The OneControl app is not the same as BottleCheck, myLCI, or LippertNOW applications. The LP Sensor must be paired with OneControl.

- **1.** Make sure the smart device is connected to the Internet and BT is on.
- **2.** Search for "OneControl" in the app store supported by the smart device.

**NOTE:** The sensor requires OneControl V5.0 or higher. Sensors will also work with Compass Connect, Lippert Connect or OCBT apps provided the versions are V5.0 or higher. To use it on an Apple phone, you will need an iPhone 8 or higher running iOS Version 13 or higher. If you have an Android phone, it will need software version 8 or higher."

**3.** Download the OneControl app to the smart device and follow the prompts for setting up a new account or logging in to an existing account.

lippert.com 432-LIPPERT (432-547-7378) **3** CCD-0004544 Rev: 06.02.22



Installation and Owner's Manual (For Aftermarket Applications)

## **Operation**

Pairing OneControl with LP Sensor

**1.** Turn on the LP Sensor by pressing the SYNC button (Fig.2A) five times in a row.



2. Open the OneControl app and look for the "+" on the top of the screen. (Fig.3A).

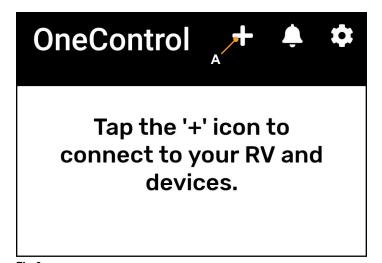


Fig.3

- 3. Tap the "+" and navigate to Add and Manage page.
- **4.** Find and select LP Sensor and follow the directions queued in the app.

**NOTE:** Keep the smart device near the LP Sensor during pairing procedure. The LP Sensor communicates via Bluetooth. BT range can vary and be limited by obstructions, like an RV's walls or frame.

**5.** The app will ask permission to look for Bluetooth devices such as the LP Sensor (Fig.4). Press "OK" to grant permission for OneControl and the LP Sensor to communicate.

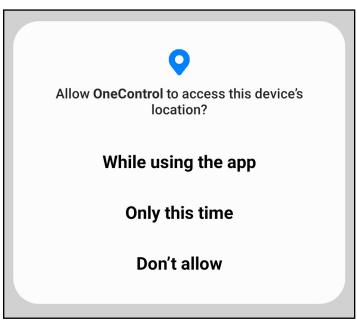


Fig.4

lippert.com 432-LIPPERT (432-547-7378) **4** CCD-0004544 Rev: 06.02.22



Installation and Owner's Manual (For Aftermarket Applications)

**6.** Press and hold the SYNC button. When the OneControl app finds the LP Sensor, it will pair automatically (Fig.5).

# Connect Your Liquid Propane Sensor LIQUID PROPANE SENSOR CONNECTED SUCCESSFULLY OneControl is now able to communicate with your sensor.

Fig.5

**NOTE:** To ensure success during the pairing process, make sure the smart device is ON, its BT setting is ON and its location permissions are ON. In the app, make sure permission has been granted and the sensor and phone are next to one another.

#### Setting Up Paired LP Sensor in OneControl App Once OneControl and the LP Sensor are paired and communicating via BT, select tank and name size.

- **1.** Choose a name for the tank to distinguish it from others being measured (**Fig.6A**).
- **2.** Select a LP tank size (Fig.6B). The system will automatically configure itself to measure these standard LP tank sizes.

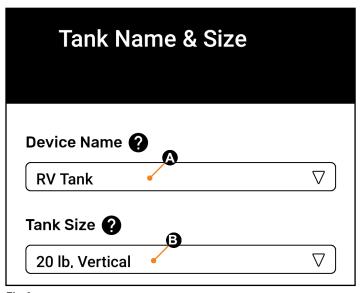


Fig.6

**NOTE:** Selecting Arbitrary allows specific LP tank height to be input.

- 3. Press Confirm to save selections.
- **4.** Pairing is now complete (Fig.7). Press "continue to app" to set alerts.

Physical Installation of LP Sensor on LP Tank
The LP Sensor can now be magnetically mounted to the
LP tank.

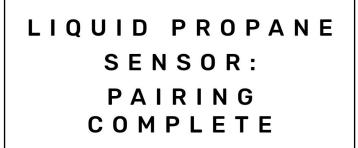


Fig.7



Installation and Owner's Manual (For Aftermarket Applications)

#### Adjusting Settings in the OneControl App

Once the LP sensor appears in the OneControl app, adjust the settings.

**1.** Locate the LP Sensor cell in the device library (**Fig.8**). Open the cell from the arrow.

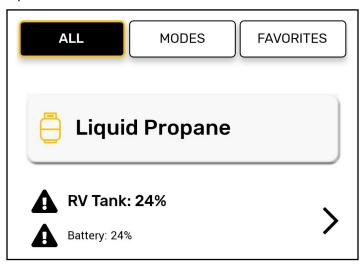


Fig.8

2. On the LP Sensor's homepage, press "Settings" (Fig.9A).

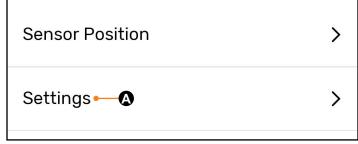


Fig.9

**3.** In Settings, use the slider to select the level to receive an alert (Fig.10A).

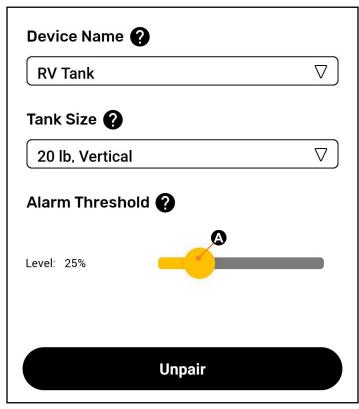


Fig.10

**4.** When complete, press Apply to return to the home screen.

**NOTE:** If an LP Sensor is lost or damaged beyond repair, it can be unpaired in the Settings section.



**Installation and Owner's Manual** 

(For Aftermarket Applications)

#### Physical Installation of LP Sensor on LP Tank

The LP Sensor can now be magnetically mounted to the LP tank.

**NOTE:** The LP Sensor is designed for vertical steel LP tanks only.

1. Make sure LP tank is off and carefully access the bottom of the LP tank where the LP Sensor will be mounted.

**NOTE:** LP tank removal may or may not be necessary depending on accessibility to the bottom of the LP tank.

2. Wipe off the bottom of the LP tank (Fig.11A) with a cloth where the LP Sensor will be magnetically mounted. Remove any debris, excess paint or rust.

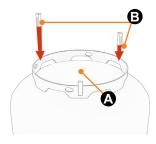


Fig.11

**NOTE:** Spacers (Fig. 11B) are recommended. They provide clearance for the LP Sensor to fit in applications where the bottom of the LP tank is close to the ground. They also improve BT range. BT range is affected by obstructions like the ring around the bottom of an LP tank.

**3.** Apply a pea-sized amount of sonic grease (**Fig.12**) to the rubber pad on the LP Sensor before placement. The rubber pad sits between the two magnets on the bottom of the LP Sensor.



Fig.12

**4.** Place the LP Sensor on bottom of the LP tank in the center (Fig.13).

**NOTE:** If the LP Sensor is removed or repositioned multiple times, it may be necessary to apply more sonic grease.



**5.** The app will display a reading when the fluid has settled in the LP tank (and paired).

**NOTE:** If the LP tank was flipped during the application of the LP Sensor, the LPG fluid will be sloshing around in the tank for a few minutes and the quality of the measurements will be reduced until this has stabilized.

**6.** Safely return LP tank back to its original location.

lippert.com 432-LIPPERT (432-547-7378) **7** CCD-0004544 Rev: 06.02.22



Installation and Owner's Manual

#### (For Aftermarket Applications)

#### **Maintenance**

#### **Alerts**

**NOTE:** The smart device must be within BT range to receive alerts.

Low LP level: OneControl will push an alert when liquid propane level drops below the threshold level assigned during setup.

#### **Checking LP Tank Level**

Open the OneControl app and go to the LP Sensor's home page.

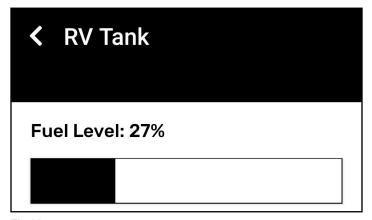


Fig.14

If readings shift, allow more time for the contents to settle.

To pair another LP Sensor, return to the OneControl home page, press the "+" and repeat the process.

#### Cleaning

Cleaning the LP Sensor should be minimal. Make sure as the LP Sensor is used that the area and sensor are routinely wiped off and free of debris caused by travel, weather, and general use. Obstructions could cause issues with BT connectivity.

#### **Unpairing Sensor from OneControl**

If the LP Sensor is lost or damaged beyond repair, open the OneControl app and look for the "Unpair" button on the sensor's homepage. Unpair the device and dispose safely like other electronic equipment.

**NOTE:** If lost and recovered, the sensor can be paired again with the smart device.

lippert.com 432-LIPPERT (432-547-7378) **8** CCD-0004544 Rev: 06.02.22



**Installation and Owner's Manual** 

(For Aftermarket Applications)

## **Battery Information**

The LP Sensor comes with a CR-2032 coin cell battery. If it becomes necessary to replace the battery, follow these steps:

## **AWARNING**

BATTERIES MUST ONLY BE CHANGED IN AN AREA FREE OF IGNITABLE CONCENTRATIONS DUE TO EXPLOSION HAZARD.

#### **Resources Required**

- CR-2032 battery
- Small, flat-head screwdriver
- **1.** Remove LP Sensor from the LP tank and move a safe distance away from the LP tank.



Fig.15

**2.** Insert a small flat head screwdriver into one of the alignment marks (**Fig.15**) between the lid and the base (**Fig.16**).



Fig.16

**3.** Pry outward to begin releasing the lid from the base. Continue prying at each alignment mark location until the two halves separate (Fig.17).



Fig.17

4. Remove the old battery and dispose of properly (Fig.18).



Fig.18

5. Insert the new battery with the positive side up (Fig.19).



Fig.19



Installation and Owner's Manual

(For Aftermarket Applications)

**6.** Place the two halves back together so that the alignment marks meet (**Fig.20**).

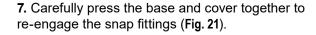




Fig.20



Fig.21

**8.** Refer back to the installation procedures to refit the LP Sensor to the LP tank.

## **Troubleshooting**

What is happening?	Why?	What should be done?
The LP Sensor won't pair with smart device.	The LP Sensor and smart device can't find each other.	Make sure BT connection is good and ensure device has been synced following the procedure.
OneControl app is incorrectly reporting fuel levels.	There is interference between LP tank and smart device.	Spacers may be added to the bottom of the tank to lift the tank off of the ground for better connectivity between the sensor and the smart device.
	Fuel has not settled in LP tank.	If LP tank has been moved, wait for fuel to settle.
	Sensor improperly placed on LP tank.	Be sure LP Sensor is properly installed on LP tank (see Installation section).
	Poor connection to LP tank.	Make sure the sensor has a clean and solid connection to the LP tank. Excessive build-up of paint, rust or debris will impair readings. Apply sonic grease only to the rubber pad on the back of the sensor.



Installation and Owner's Manual (For Aftermarket Applications)

Notes	



Installation and Owner's Manual (For Aftermarket Applications)

Notes	
	<i>Lippert</i>
	Manual information may be distributed as a complete document only, unless Lippert provides explicit consent
	to distribute individual parts.
	All manual information is subject to change without notice. Revised editions will be available for free
	download at lippert.com. Manual information is
	considered factual until made obsolete by a revised version.
	Please recycle all obsolete materials and contact
	Lippert with concerns or questions.

CCD-0004544