

Installation Procedure

Home Heat Monitor



IMPORTANT ⓘ It is critical in all installations to ensure monitors' antenna is positioned vertically. This will achieve optimal signal strength, ensuring that you receive data in a timely manner and prolong the battery life of the monitor.

PLEASE TAKE A MOMENT TO CAREFULLY READ THE INSTALLATION INSTRUCTIONS INCLUDED WITH YOUR MONITORS, AND ENSURE YOU UNDERSTAND AND RESPECT LOCAL REGULATIONS.

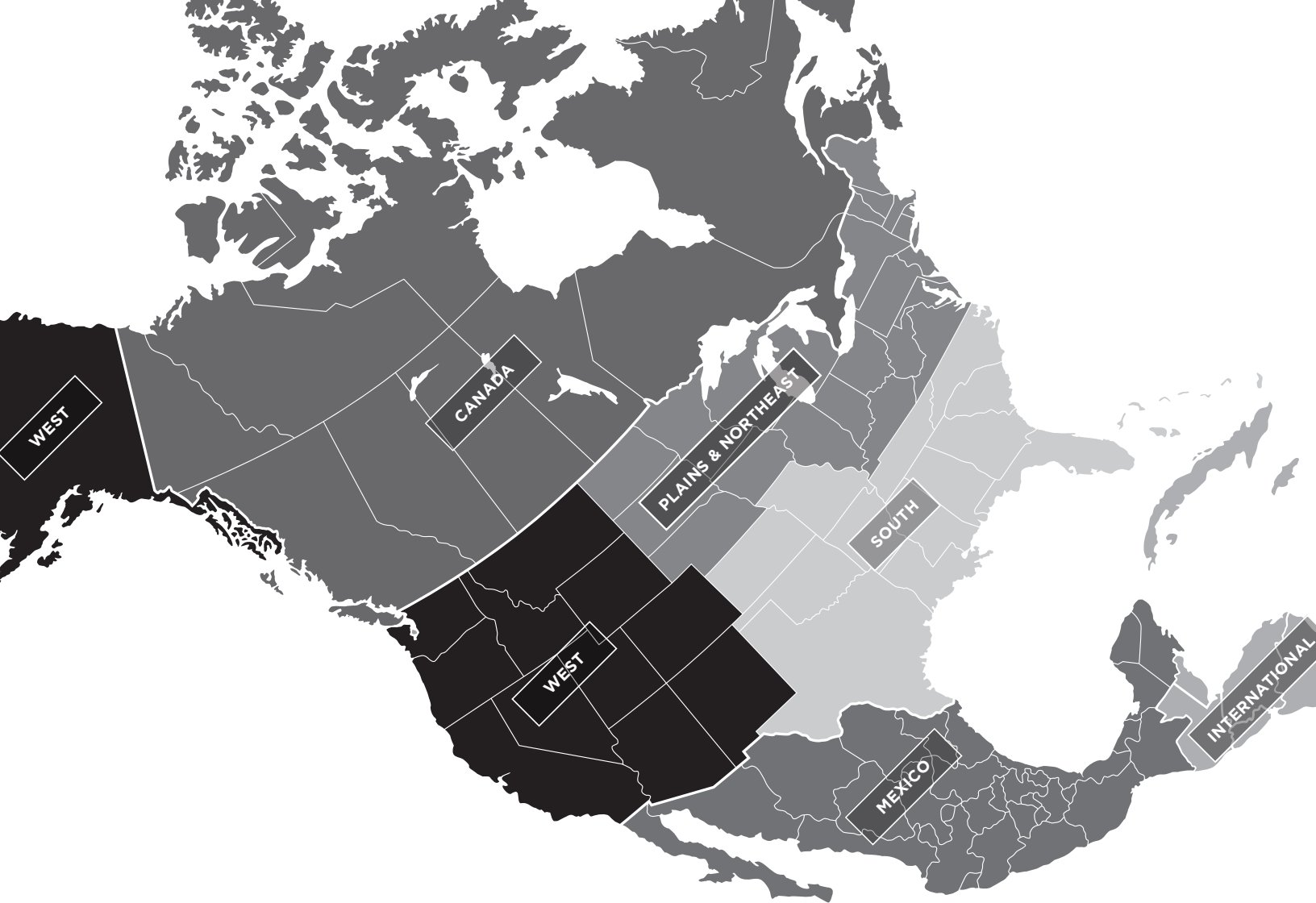


Do not
pressure wash

WARNING Changes or modifications to the unit must only be performed by an authorized technician. For outdoor use only. Explosion Hazard
- Do not open when an explosive atmosphere is present. Potential electrostatic charging hazard - wipe only with a damp cloth.

INSTALLATION Always follow your local regulations and standards. Consult with certified personnel to ensure your installation is compliant.

BATTERY REPLACEMENT Please contact Otodata Support or your representative for battery replacement programs.



SUPPORT

1-514-673-0244 | 1-844-763-3344 (Toll-free)
support@otodatatankmonitors.com

EMERGENCY SUPPORT

1-833-529-9499
Available 24 hours, 7 days a week.

Specifications

A home heat monitor to suit your corporate needs.

Input

Hall Effect Module

Reporting & Outputs

Reporting	Tank level (5% variation)
	Low battery
	High/excessive draw
	Fill detection
	Temperature
Data Interface	API
	Email (to supplier and/or consumer)
	Raw data
	Online dashboard
	Client mobile app
Automated Testing	Network status
	Lead sensor status
	Battery status

Electrical Specifications

Battery Pack	3.0V 1.6Ah
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Radio Specifications

Technologies	Tank Monitor: LTE-M (NB-IoT coming soon)
	Sensor: Bluetooth LE
Frequency range	2400 -2483.5 MHz
Measured output power	4 mW

Environmental Specifications

Operating & storage temp. range	-40 °C to 60 °C	-40 °F to 140 °F
Relative humidity range	0% to 100%	
Enclosure rating	IP68	
Warranty	5+ years	

Certifications

FCC ID: 2ADQFBEDHT

IC Registration number: 12649A-BEDHT

Dimensions

Height	5.12 cm	2 in
Width	5.36 cm	2.11 in
Depth	4.81 cm	1.9 in

Option	GPS (mobile tank)
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Ordering

Otodata Wireless Bluetooth Monitor and Granby Home Heating Oil Adapter (order float and magnet separately if required) (Change CNEE for client's branding code if available).

TM5030BG-VA00-CNEE-GA3020

Float 24" height **ACGF24**
Float 28" height **ACGF28**
Float 44" height **ACGF44**
Float 46" height **ACGF46**

Combo float 24" and alarm **ACGCAG24**
Combo float 28" and alarm **ACGCAG28**
Combo float 44" and alarm **ACGCAG44**

Magnet indicator for float gauge
ACOTGBM01

FCC Warning Statement

This device complies with part 15 of the FCC rules of operation is subject to the following two conditions:

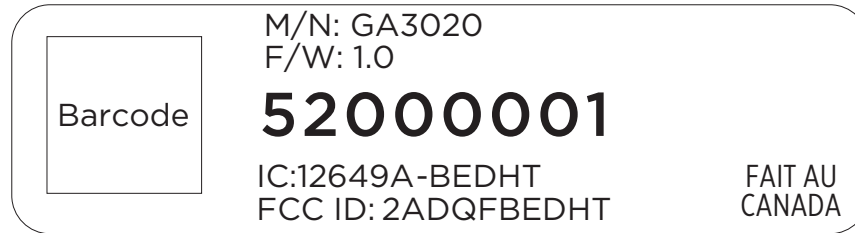
- 1) This device may not cause harmful interference and
- 2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to

Label on the device



ISED non-interference disclaimer

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF Exposure statement for ISED

This equipment complies with ISED RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm (7.6 inches) between the radiator and any part of your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Our se conformer aux exigences de conformité ISED RSS-102 RF exposition, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil et toutes les personnes. Lanceurs ou ne peuvent pas coexister cette antenne ou capteurs avec d'autres.

RF Exposure statement for FCC

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, this equipment should be installed and operated with minimum distance 20 cm (7.8 inches) between the antenna and your body during normal operation. Users must follow the specific operating instructions for satisfying RF exposure compliance.

Preparation

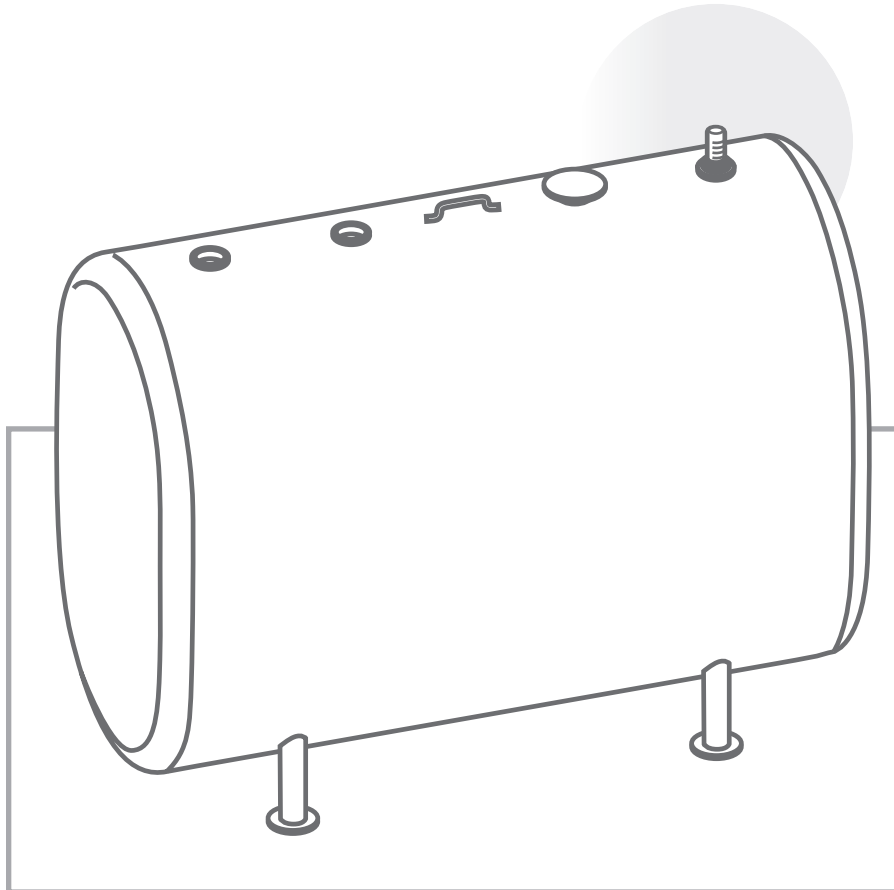
If you are installing the Otodata Home Heat Adaptor on an existing Granby float gauge (a float that is already installed on a tank), it is essential that you verify it's compatibility before proceeding:



Compatible Granby tank gauge models:

E024N-999U, E028N-999U, E032N-999U, E036N-999U, E044N-999, E124N-999U, E128N-999U, E132N-999U, E136N-999U, E144N-999U, E224N-999U, E228N-999U, E232N-999U, E236N-999U, E244N-999U.

IMPORTANT ⓘ Always follow local regulations and make sure the product is suitable for the application before installing. In some territories a qualified technician may be required to perform the installation.



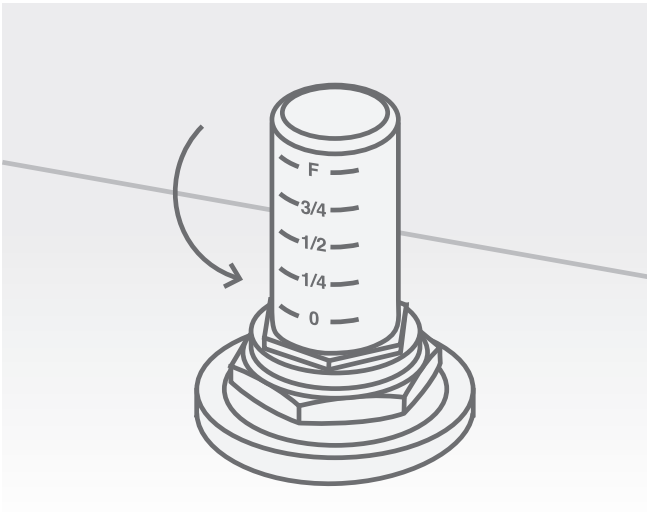
Locate the gauge on the tank

If your tank's gauge is not one of the compatible models listed above, you will need to replace it.

Contact Otodata or Granby Industries for more information.

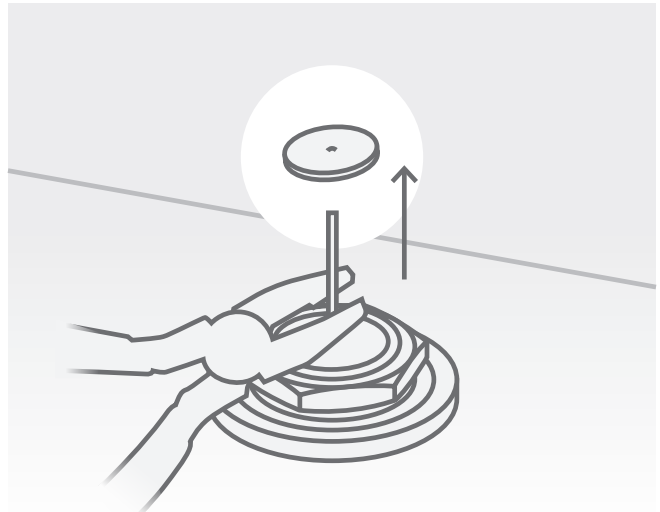
Part 1.1 Installing on an Existing Compatible Granby Float Gauge

Skip to Part 1.2 (page 4) if your Otodata Home Heat Kit included a new float.



Step 1 Remove the Sight Glass

- a. Remove the sight glass from the fitting by holding it firmly and unscrewing it counter-clockwise.



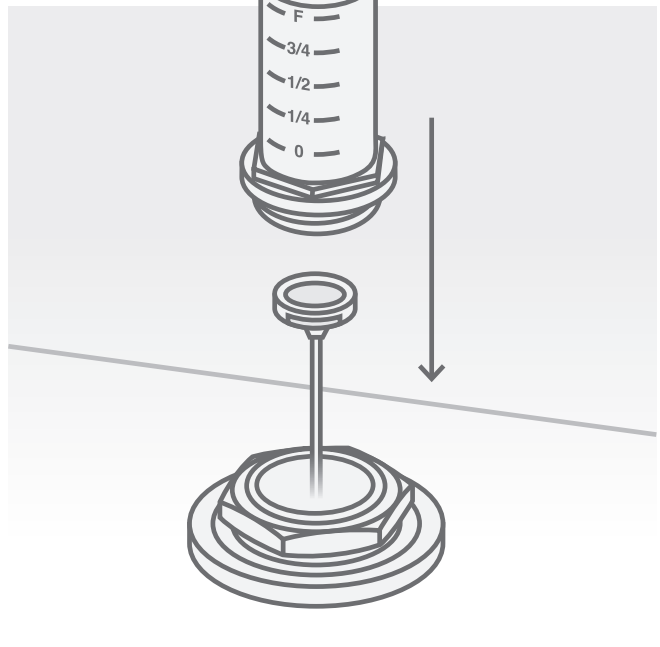
Step 2 Remove Plastic Disc

- b. Hold the metal rod firmly with pliers or other suitable tool;
- c. Gently pull the plastic disc upwards and remove it completely.



Step 3 Install Magnetic Disc

- d. Continue to hold the metal rod firmly with pliers or other suitable tool and slip on the magnetic disc. You may need to push downward with some force and rotate the disc gently to help thread the disc onto the rod.
- NOTE: You may need to file the tip of the metal rod to make it rounded to facilitate the insertion of the new disc.*



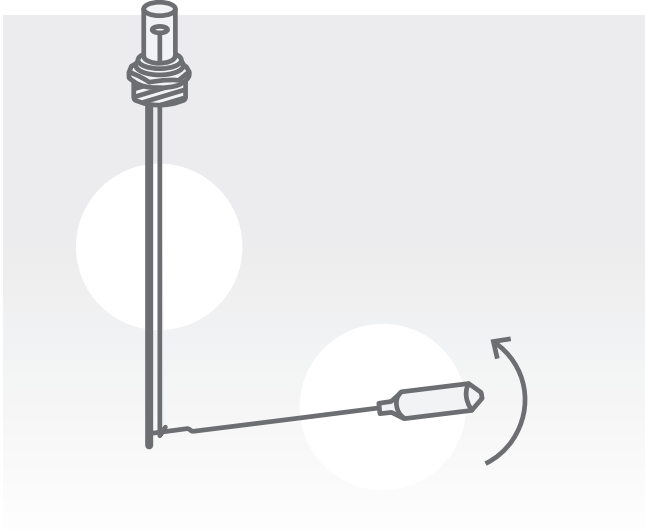
Step 4 Re-install Sight Glass

- e. Re-Install the sight glass by carefully placing it on the fitting and tightening it by hand.

Skip to [page 6](#).

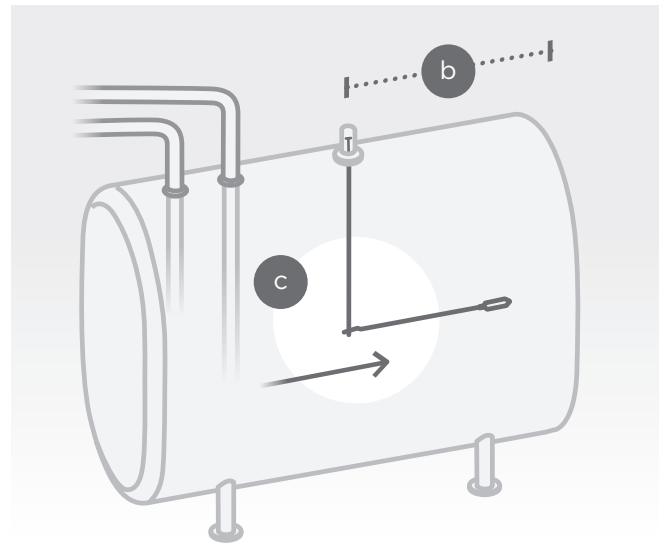
Part 1.2 Installing a New Compatible Granby Float Gauge

Skip to Part 2 (page 6) if a compatible float is already installed.



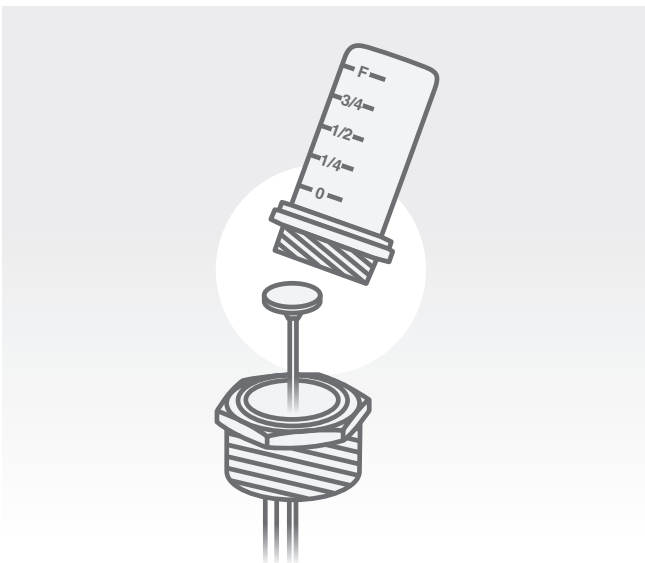
Step 1 Inspect for Defects

- a.** Prior to installation, verify that the gauge is free of any defects that may affect performance such as bent metal wires, or the arm of the gauge does not rotate freely...etc. If a defect is found, do not install. Please contact your distributor for a replacement.



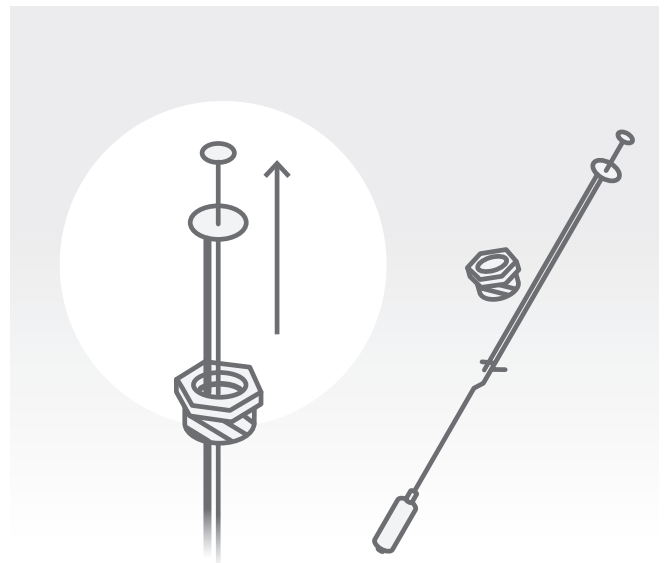
Step 2 Install Away from Obstacles

- b.** The gauge must be installed with ample distance from the tank wall so the gauge's rotating arm does not hit the sides of the tank from within.
- c.** Likewise, the gauge must rotate away from the fill openings. It should never rotate directly under as the pipes within the tank may hinder the movement of the gauge's rotating arm.

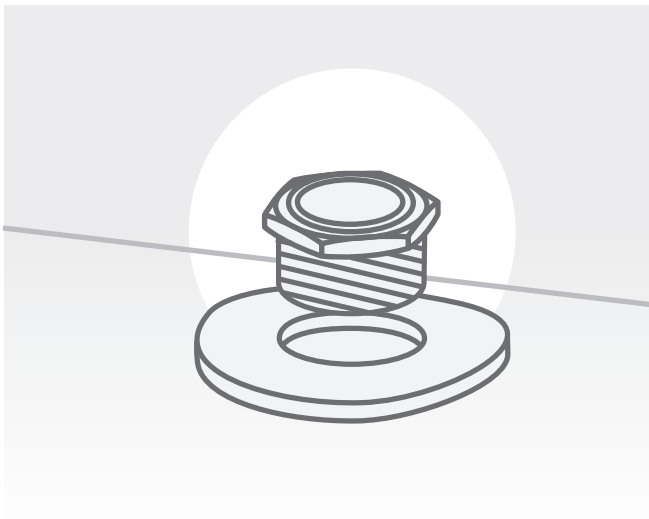


Step 3 Dissassemble Gauge

- d.** Unscrew and remove the sight glass from the gauge.

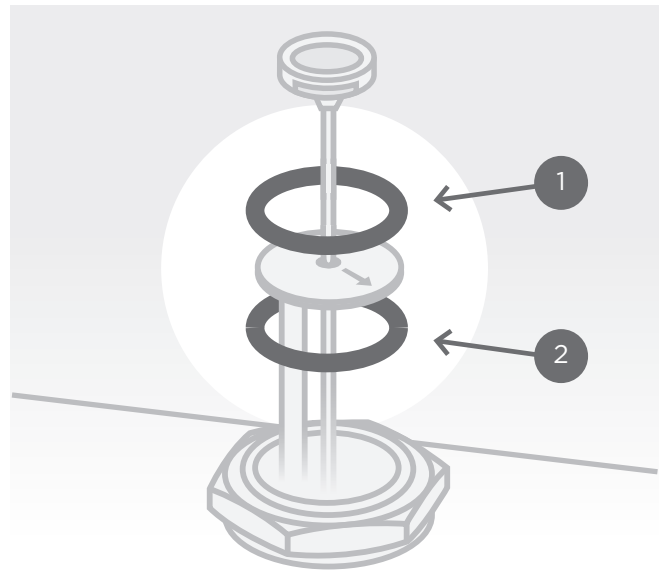


- e.** Remove the steel wire assembly from the bushing by gently pulling it upward while holding the bushing.



Step 4 Install Bushing

f. Install the threaded bushing into the tank opening. Use a pipe wrench or similar tool when tightening to ensure the seal is liquid tight.



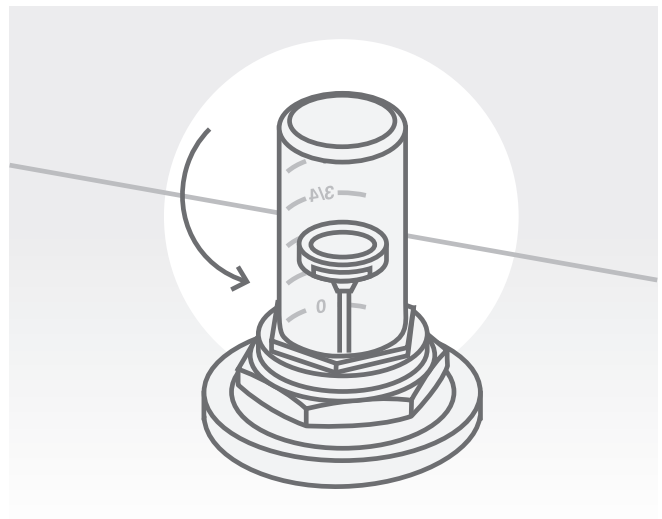
Step 5 Install Gaskets

g. Thread the steel wire assembly into the bushing. Make sure that one gasket is installed above the circular disk and another below the circular disk.



Step 6 Adjust Direction of Gauge's Rotating Arm

h. The arrow on the circular disk of the metal wire assembly indicates the direction that the gauge's rotating arm will point. Adjust the steel wire assembly so that it will rotate in the correct direction. Consult [Step 2](#).

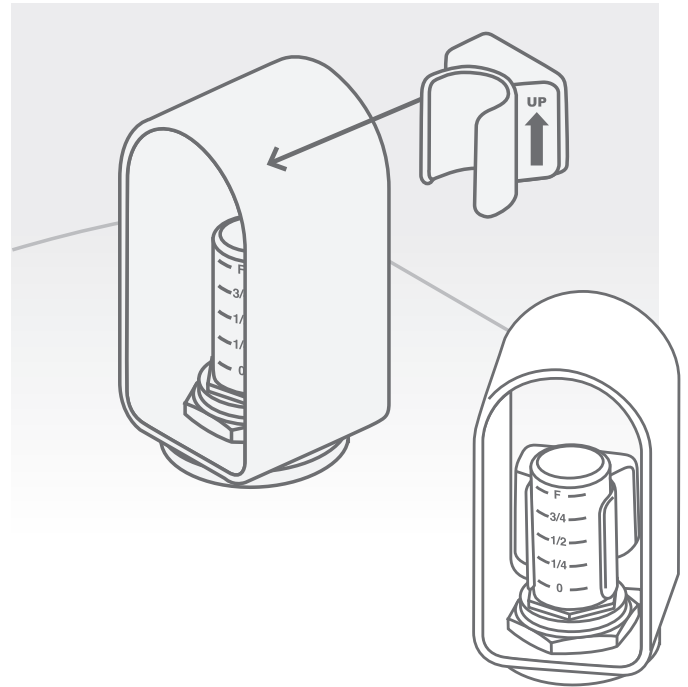
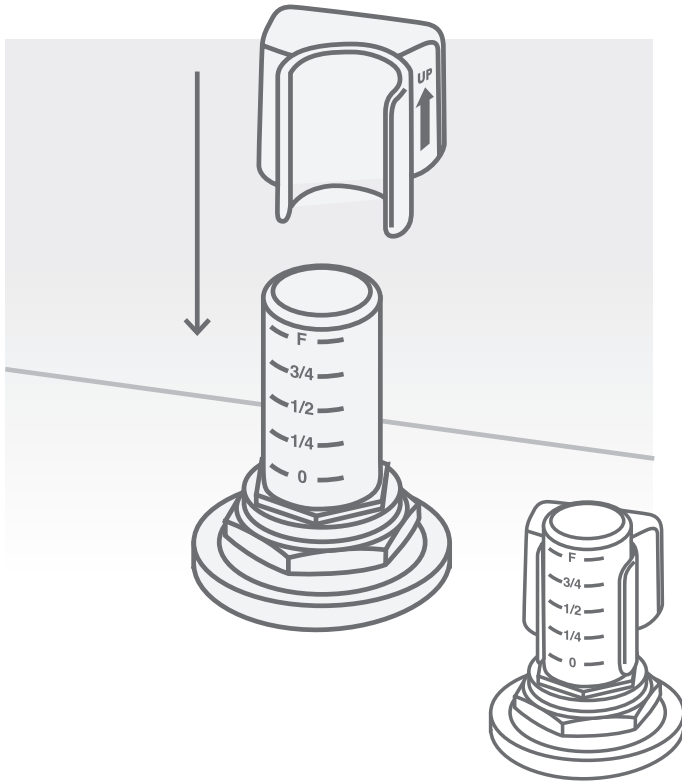


Step 7 Replace Sight Glass

i. Screw the sight glass back into the gauge and tighten by hand.

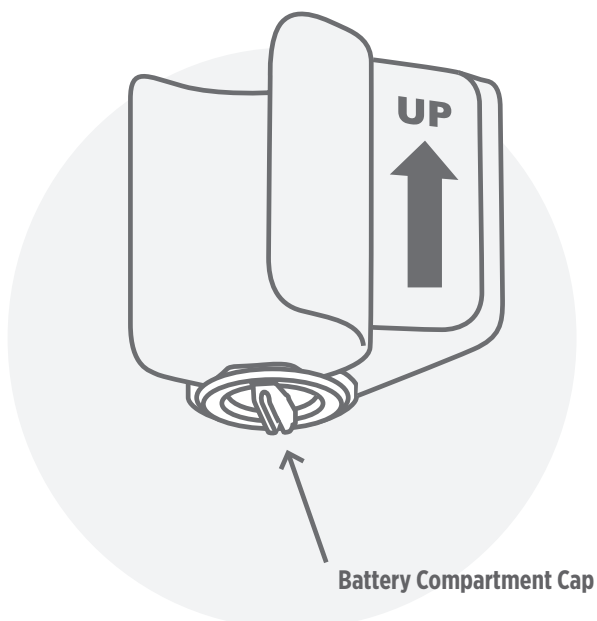
Part 2 Installing the Otodata Home Heat Adaptor

IMPORTANT ⓘ Always install the monitor with the opening facing you and the label facing the wall.



Step 1 Install Adaptor

Ensuring the battery compartment cap is facing downward (see example below) carefully slide on the Otodata Home Heat adaptor. Gently push down until it is touching the bottom.



Alternative Method

Install Adaptor Under Plastic Cover

If your tank has a fiberglass/plastic cover, you can install the Otodata Adaptor from the back by clipping it on and then sliding it down into position. Gently push down until it is touching bottom.

IMPORTANT Metallic protections such as the Granby E050-999 are NOT COMPATIBLE with this Otodata adaptor as the metal will interfere with the Bluetooth signal. Only fiberglass/plastic covers will allow the monitor to communicate correctly.

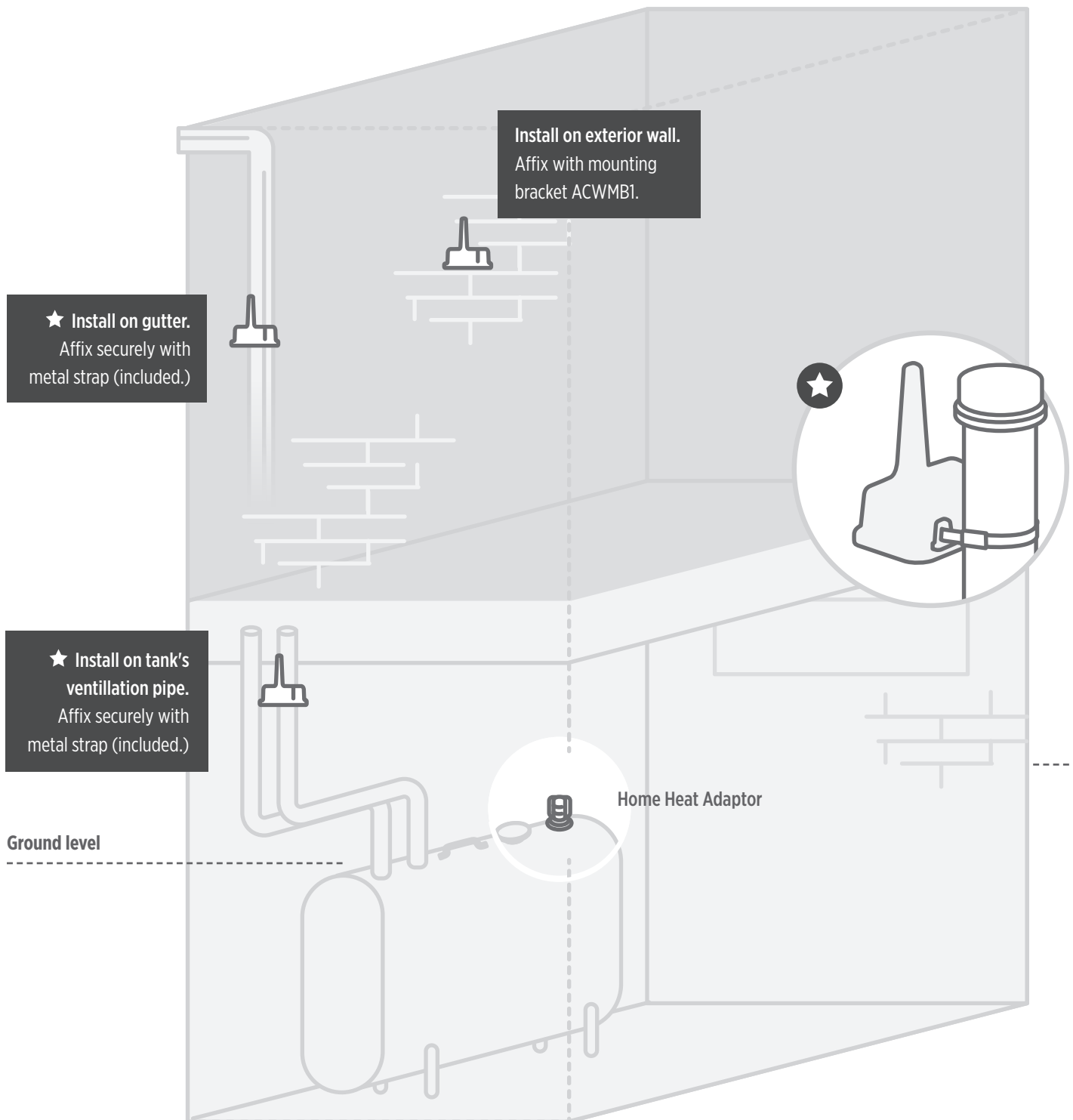
Part 3 Installing the Otodata Wireless Bluetooth Monitor

Step 1 Install Wireless Bluetooth Monitor Within 25ft of Home Heat Adaptor

Once your Home Heat adaptor is installed on the tank, it is time to install the Otodata Wireless Bluetooth Monitor.

This monitor has a powerful antenna which will intercept the signal from the Home Heat adaptor and transmit the tank data to the cloud.

IMPORTANT For correct operation, the Otodata Wireless Bluetooth Monitor should be installed as high up as possible in an area clear of major obstructions, and should be no more than 25 feet (7.5m) from the Home Heat adaptor.



INSTALLATION GUIDELINES FOR COMBUSTIBLE LIQUID-LEVEL GAUGES

Manufactured by:

Granby Industries L.P.

1020 André-Liné Granby, Québec, Canada, J2J 1J9.

Telephone: 450-378-2334

Fax: 450-378-5202

E-mail: service@granbyindustries.com

Website: <http://www.granbyindustries.com>

1. SCOPE

This guide applies only to the installation of combustible liquid-level gauges manufactured by Granby Industries to ULC/ORD-C180, Liquid Level Gauges and Indicators for Fuel Oil and Lubricating Oil Tanks.

These gauges must be installed in accordance with CAN/CSA-B139, Installation Code for Oil-Burning Equipment and in compliance with any applicable local codes or regulations.

These guidelines cover float-operated liquid-level gauges for use with aboveground tanks used for the storage of fuel and lubricating oil; Model Nos. E024N, E028N, E032N, E036N, E044N, E124N, E128N, E132N, E136N, E144N, E224N, E228N, E232N, E236N and E244N.

2. GAUGE INSPECTION

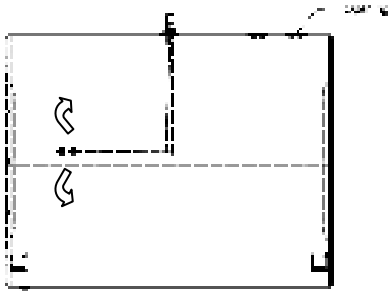
Inspect the gauge prior to installation. If the metal wires are bent, if the float doesn't rotate freely or if other damages that are thought to affect the integrity and performance of the gauge are found, do not install it; please contact your distributor.

3. GAUGE INSTALLATION

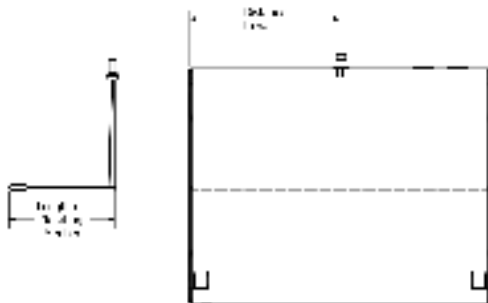
Only labelled gauges bearing the ULC listing mark are eligible for warranty and installation.

3.1. Before beginning the gauge's installation, choose an appropriate tank opening to install the gauge into:

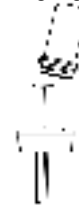
3.1.1. The gauge should rotate away from the fill opening. It should never rotate directly under the fill opening.



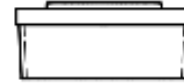
3.1.2. The gauge opening's "distance to wall" **must be greater** than the gauge's "length of rotating member".



3.2. Unscrew and remove the sight glass from gauge



3.3. Remove the steel wire assembly from the bushing

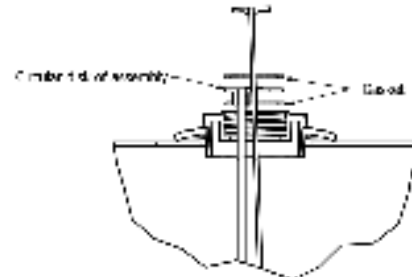


3.4. Apply thread sealant to the threads of the bushing. The sealant must be UL listed for applications compatible with liquid contained within the tank.

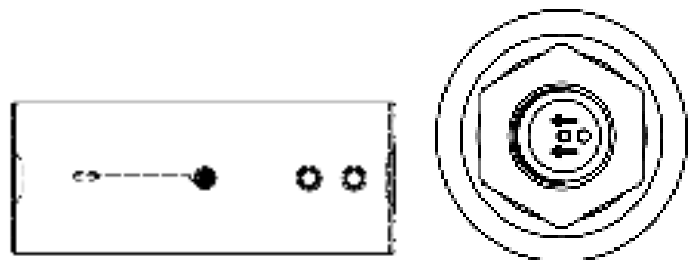
3.5. Install the threaded bushing into the tank opening and tighten. Use a pipe wrench or equivalent tool to tighten to insure the threads are liquid tight.



3.6. Replace the steel wire assembly into the bushing. Make sure that (1) gasket is installed below the circular disk and that (1) gasket is installed above the circular disk.



3.7. Adjust the steel wire assembly so that it will rotate in the desired direction. The arrows on the circular disk of the metal wire assembly points to the direction where the float will rotate



3.8. Screw the sight glass back into the gauge and tighten by hand.



**Members can watch
step-by-step installation
videos and shop online**



Sign up free today

otodatatankmonitors.com/membership

Members can purchase monitors and accessories like gauges, leads, mounting equipment and more via our online store.

IMPORTANT

Please take a moment to carefully read the installation instructions included with your monitors, and ensure you understand and respect local regulations.

ABOVE-GROUND TANKS

**Do not install monitors
under lids.**

UNDERGROUND TANKS

**Plastic lid suggested.
Metal lids will obstruct signal.**

Reading installation instructions will ensure maximum monitoring performance on all your tanks and installations.