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Instructions for Installing Door sensor

Tools Required:

- | | |
|------------------------|----------------|
| 1) Standard hand tools | 4) Marker |
| 2) Clean cloth | 5) Hot air Gun |
| 3) Scotch tape | |

This instruction should be read through completely before proceeding.

Procedure:


DOOR SENSOR PAIRING

NOTE:


- **Telematics device and door sensor are paired and must be installed together. Ensure that the door sensor is installed in the same container as the reefer which it was stored.**

Door Sensor App Instructions

Note – The Carrier Door Sensor App is only compatible with Android operating system.

1. Download and install the Carrier Door Sensor App from Google Play Store
2. Once Installed, open the Carrier Door Sensor App 
3. To read the current container ID: Ensure NFC (near field communication) is active (refer to your phone Connection/sharing settings). Tap the phone's NFC to the area shown in Figure 2.

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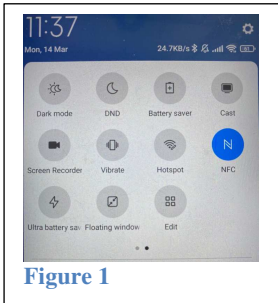


Figure 1



Figure 2

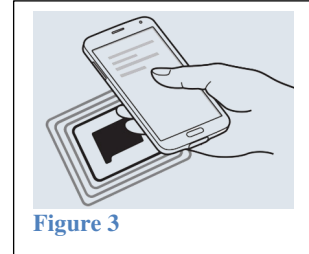


Figure 3

4. The current container ID, if any, will appear at the top. If no container ID is present dashes will be displayed. Figure 4

5. To change or set a new ID before installation:

- a. Enter the new ID in the “New Reefer ID” field (format XXXX1234567).
- b. Press set ID button (Figure 5).
- c. **Tap the phone to the NFC area to get confirmation.**

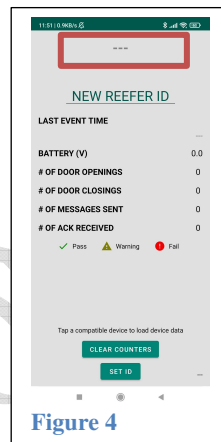


Figure 4

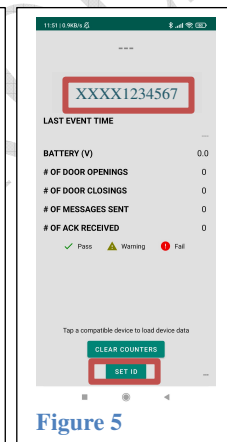


Figure 5

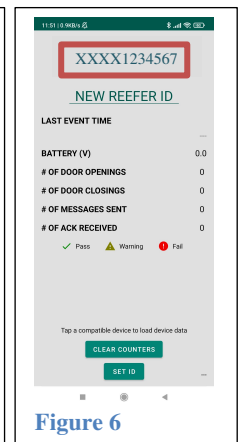



Figure 6

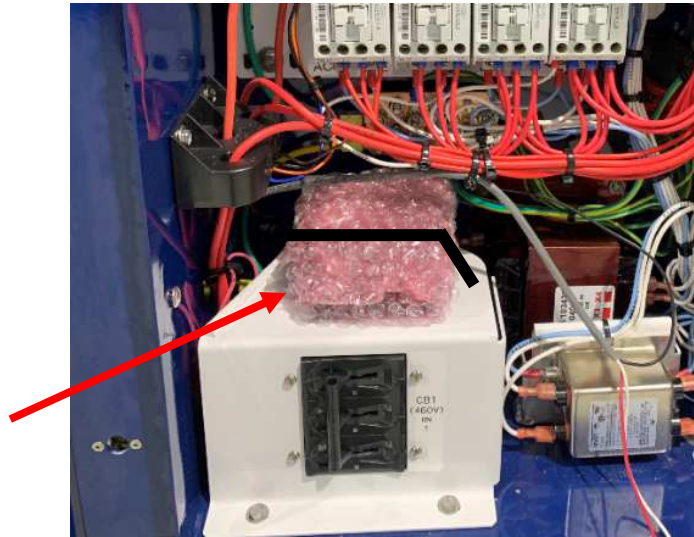
6. If the app is not responding when trying to connect to door sensor, restart app and try again.

7. After setting the ID, tap the NFC area again to read the ID and confirm it was set. The new container ID will appear in the top field as in figure 6.

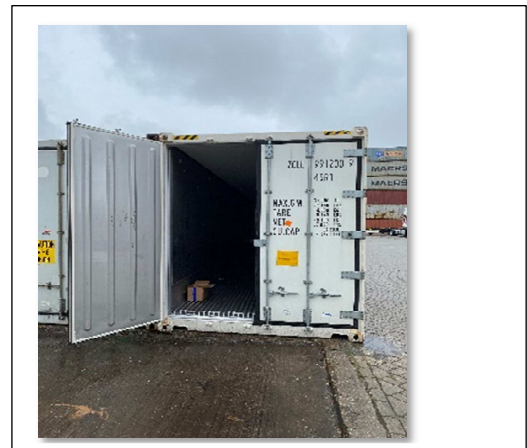
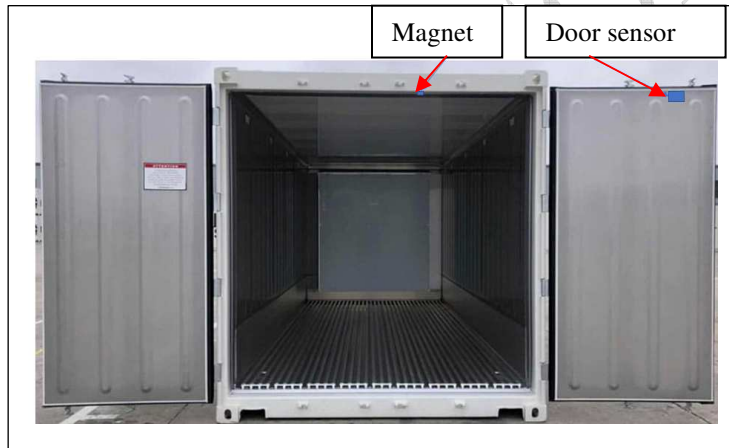
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DOOR SENSOR INSTALLATION




1. Collect the door sensor and magnet from the control box storage location.



2. Clean and dry area where sensor and magnet are to be located using a locally approved IPA (Isopropyl Alcohol cleaner) and mark the center position of the door sensor as follows:



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Between first and second corrugation from right to left, or in case flat panel measure ~11 inches (~28 cm) from door edge as high as possible without overlapping the PVC/rubber rim.

Some container models might have a PVC profile on the door edge – do not remove/cut or overlap this. Place the sensor immediately below the profile as shown in figure 7/8.

- Close right hand side door and leave left hand side door open.
- Remove red protective backing from the door sensor; ensure the label arrow is facing upwards on the door sensor. Align arrow to the mark on the door and press sensor firmly (around 30 lb.) onto dry marked location for at least 5 seconds.

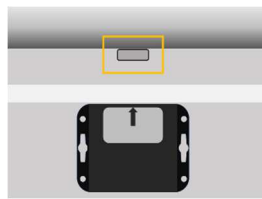


Figure 7



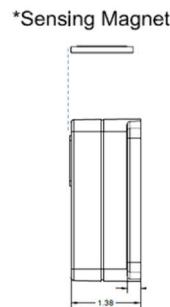
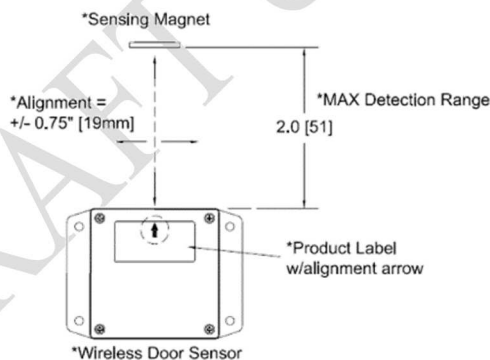
Figure 8

Ambient and surface temperature of door and door sensor to be above 50°F (10°C) for better adhesion. For colder ambient temperature below 50°F (10°C) recommended use of hot air gun. Surface temperature should not exceed 122°F (50°C).

Always place the door sensor at the top edge to assure the distance between the sensor and the magnet is no more than 2 inches (5.1 cm).


- Magnet location: With the container right door closed and using the arrow on the door sensor label as a guidance mark the position on the door header (top rail) for positioning of the magnet.

Use this line as a reference to place the magnet as per below:



Distance between door sensor and magnet cannot be greater than 2.0" (5.1 cm)

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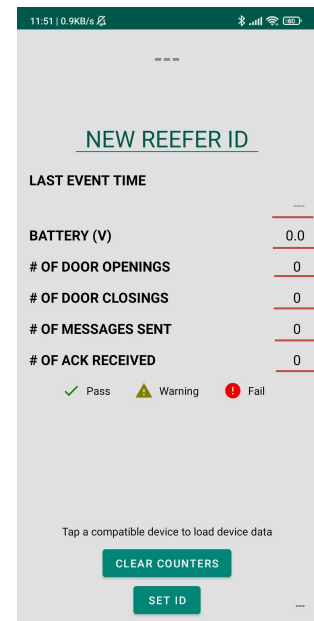
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6. Remove red protective backing from the magnet.
Ensure area has been cleaned in step 1 using the IPA.
7. Position the magnet on the door sill, with the mark on door sill (step 5), aligned horizontally with arrow on door sensor label so that its center is above the center of the door sensor.
8. Press magnet firmly (around 30 lb.) for at least 5 seconds
9. Apply silicone caulking or approved mastic carefully around perimeter of sensor and magnet.
10. After installation and pairing, open and close the door to generate initial events.




Check this using Carrier Door Sensor App.

- a. Last event event time is correct
- b. Appropriate battery voltage. Should be between 3.4V and 3.6V.
If battery voltage low replace battery (p/n 76-00978-00)
- c. Check for open-close events and messages sent.
- d. Check for ACKs (acknowledgement) received.
If none were received, verify the following:
 1. Reefer unit/telematics power supply
 2. Correct container ID is set on the reefer unit controller (Cd40).
 3. Telematics device firmware 2.16 or higher (might require access to User Interface).
Check with equipment owner.
 4. If door sensor is enabled on telematics device (might require access to User Interface).
Check with equipment owner.



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FCC Regulatory:

§15.19 FCC Required Labelling Statement placed in User Manual

This device complies with part 15 of the FCC Rules. 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.

§15.21 Information to user.

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.


§15.105 Information to the user.

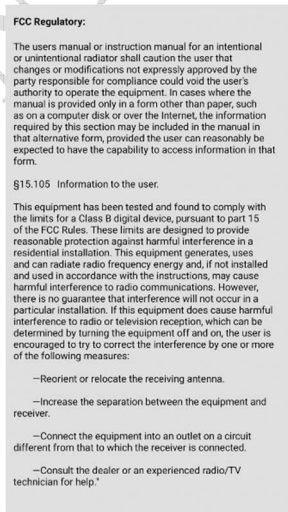
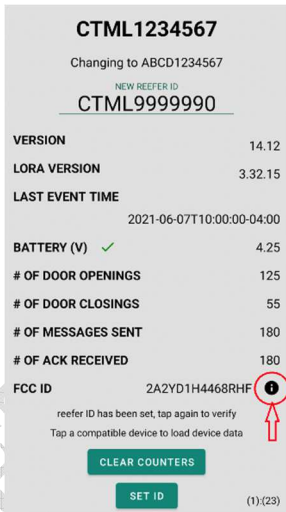
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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 which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC e-label:

The FCC ID# can be found by using the wireless door sensor application and scanning the wireless door sensor. Refer to above details in this manual on scanning the wireless door sensor with a remote device.

To access the FCC regulatory statement in the wireless door sensor application, click on the  next to the FCC ID# in the application. See below for more details.



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