INTEGRATED SENSOR TROUBLESHOOTING GUIDE FOR AWNING, CASEMENT AND DOUBLE-HUNG

Table Of Contents

Pella Insynctive® Bridge 2
- About the Bridge 2
- Setting Up Sensors with the Bridge 2
- Operation 2
- Troubleshooting 3
- App Troubleshooting 4

Alula® Universal Translator - Model RE524XP 5
- About the Translator 5
- Configuring Translator, Sensors and Security Panel 5
- Translator Operation 6
- Repeater Operation 6
- Troubleshooting 7

Casement and Awning Sensor 8
- Learn Sensor to Casement 8
- Learn Sensor to Bridge 8
- Learn Sensor to Translator 8
- Troubleshooting 9

Double-Hung Sensor 11
- Getting Started 11
- Learn Sensor to Bridge 11
- Learn Sensor to Translator 11
- Operation 12
- Troubleshooting 12

© 2021 Pella Corporation

Pella Insynctive® Bridge:

For additional help with the Pella Insynctive Bridge, call Pella Customer Service at 855-473-5524. Additional information on bridge and sensor operation can be found in the Bridge and Sensors Product Guide on ConnectPella.com as well as the the Insynctive App Overview.

About the Bridge:

The Pella Bridge can be used to interface between Pella Insynctive products and either a home automation system or the Pella Insynctive App.

Setting Up Sensors with the Bridge:

Power up bridge with accompanying 12V wall adaptor and use the accompanying ethernet cord to connect bridge to either a local network switch or router. Upon powering up, the LED on bridge will turn green and stay green for 45-60 seconds, then the LED will go through a color wheel (a series of different colors) while it looks for any updates on the internet. When the LED then turns off the bridge is now ready to be used.





Learning sensors to the bridge can be done either through the Insynctive app, or manually. To add them in the app, just follow the directions given in the app, it should be straight forward. For help with the Insynctive app, call 855-473-5524 or see the App product guide on Pella.com.

To add them manually, the bridge must first be put into learn mode. This is done by pressing the bottom button on the bridge and holding for a second or so. An orange light should start blinking, which indicates the bridge is now in learn mode and ready to learn in sensors. See **Product Sensor** sections on how to learn specific sensors to the bridge.

When a sensor has been learned to the bridge, the bridge will make a long beep, and the LED will turn green. A sensor can also be unlearned from the bridge using the same process for learning the sensor. Upon unlearning a sensor, the bridge will give three short beeps, and the LED will flash red three times.

NOTE: Bridge will not beep if Chimes are turned off, see Troubleshooting section for more details.

Operation:

Once sensor(s) have been learned to the bridge, the bridge should make a beep whenever a unit becomes unlocked or opened (it won't for locked or closed) unless chimes are turned off.

The product status in the Insynctive app or home automation system should reflect the actual state of the product, and update within a few seconds of a state change.

© 2021 Pella Corporation

Troubleshooting:

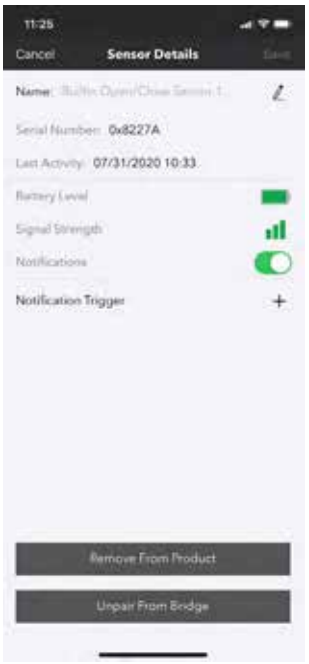
- Bridge will not beep nor does green LED come on to indicate the bridge has learned in the sensor.
    - Check **Product Sensor** sections to troubleshoot sensor.
    - Check to see if the sensor shows up on either the app or home automation system. If the sensor does, ensure it is working and updating properly.
        - If sensor shows up but does not work properly, delete the sensor and relearn it following the **Setting Up Sensors with the Bridge** section.
    - Power cycle bridge and retry learning in the sensor following the **Setting Up Sensors with the Bridge** section.
    - Contact Pella Customer Service at 855-473-5524.

- Bridge won't beep upon opening/unlocking of any products.
    - Check to see if the chimes are turned on. Chime settings can be checked in app. (See Chime Settings photo.)
    - Manual Method: Press and hold bottom button, orange light should come on, keep holding button until purple light turns on.
        - Let go of button and scroll through chime settings by pressing bottom button. Levels are high, low, off.
        - When desired setting found, stop pressing bottom button and the chime setting will time out.
        - Try opening/unlocking product again.
    - Ensure sensors are learned to the bridge by checking the app or home automation system.
        - Try relearning sensors to bridge following the **Setting Up Sensors with the Bridge** section.
    - Power cycle bridge then try opening/unlocking products again.
    - Contact Pella Customer Service at 855-473-5524.



Chime Settings

- Bridge will beep upon opening/unlocking of some products, not with others.
    - Can check signal strength in app.
    - Check **Product Sensor** sections to troubleshoot sensor. Signal strength can be checked in app. (See Signal Strength photo.)
    - Check to see if range is an issue. Typical open air range is >100ft, but will vary depending on number of walls and materials between sensor and bridge.
        - Try moving bridge closer to sensor to see if bridge will pick up sensor status.
        - If range does seem like an issue, use the Alula Universal Translator model RE524XP as a repeater. See **Alula Universal Translator** section for details.
    - Power cycle bridge then try opening/unlocking unresponsive products again.
    - Contact Pella Customer Service at 855-473-5524.



Signal Strength

© 2021 Pella Corporation

Troubleshooting – Insynctive App Only:

- Trouble connecting to bridge in the app.
    - Make sure the phone or table is connected to the internet.
    - Close out the app, power cycle the bridge, and then open the app again.
    - Call Customer Service at 855-473-5524.

- Sensor won't seem to learn through the app.
    - Check **Product Sensor** sections to troubleshoot sensor.
    - Close out the app, power cycle the bridge, and then open the app again.
    - Try adding sensor manually following **Setting Up Sensors with the Bridge** section.
    - Call Customer Service at 855-473-5524.

- Sensor status wont update on the app.
    - Check **Product Sensor** sections to troubleshoot sensor.
    - Close out the app, power cycle the bridge, and then open the app again.
    - Check to see if range is an issue. Typical open air range is >100ft, but will vary depending on number of walls and materials between sensor and bridge.
        - Try moving bridge closer to sensor to see if bridge will pick up sensor status.
        - If range does seem like an issue, use the Alula Universal Translator model RE524XP as a repeater. See **Alula Universal Translator** section for details.
    - Call Customer Service at 855-473-5524.

- The bridge will beep upon opening/unlocking of product, but the status won't update in the app.
    - Close app, and then open back up again.
    - Check the local network internet speed, the internet connection is probably the reason, it will update.
    - Call Customer Service at 855-473-5524.

© 2021 Pella Corporation

Alula® Universal Translator – Model RE524XP

For additional help with the Alula Universal Translator, call Alula Technical Support at 888-882-5852.

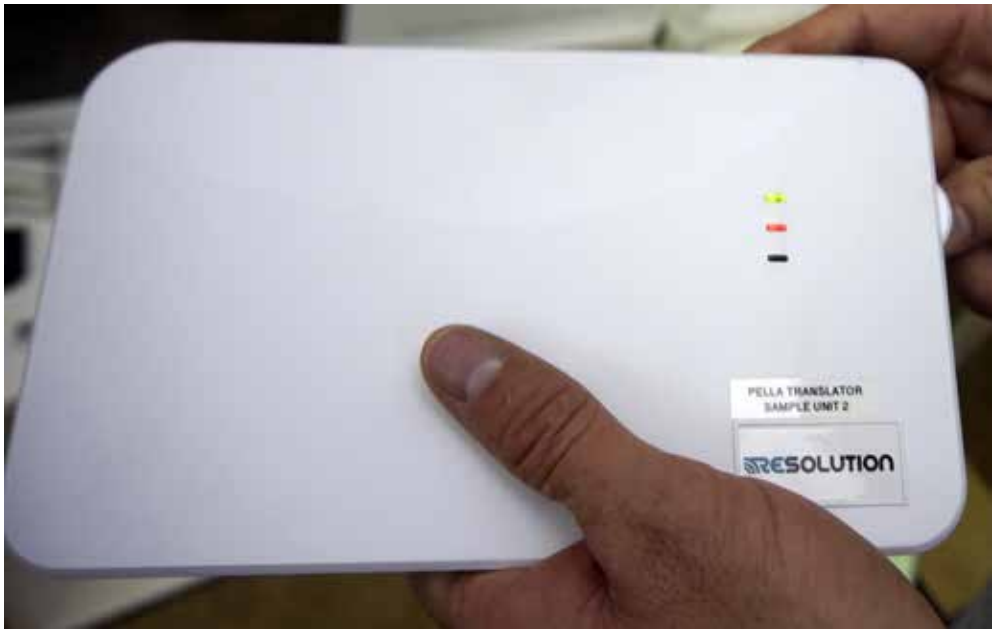
About the Translator:

The translator is used to translate Insynctive sensor signals to signals most major security panel manufacturers can understand.

The translator can also act as a signal repeater when sensor signal range may be an issue.

Configuring Translator, Sensors, and Security Panel:

Open translator front panel, and then power it up using the 12V wall adaptor supplied.



With translator powered on and open, place the **Panel Select** dial to the correct security panel manufacturer. For Pella Insynctive® sensors, place the **Sensor Select** dial to seven.



© 2021 Pella Corporation

Configuring Translator, Sensors, and Security Panel (Continued):

To configure sensors with translator and security panel, security panel must first be put into wireless learn mode (contact panel manufacturer if unsure how this is done.)

Next, the panel must learn in the translator. With the security panel still in wireless learn mode, close the front panel on the translator and after a few seconds open it back up again. Security panel should learn in translator.

The translator must also learn the sensor before it can translate and transmit the signal to the security panel. To do this, with front panel opened and translator powered up (security panel should still be in wireless learn mode too), press the configure button on the circuit board, an orange light should come on. With orange light on, trigger each sensor to be learned, one at a time (see **Product Sensor** sections for information on sensor operation). The translator will beep when it learns each sensor. The translator should now transmit the sensor signal to be learned into the security panel. Once all sensors are learned to translator, configuration is complete. Front panel can be closed now.

The security panel should now pick up the statuses of the sensors learned to it.

NOTE: Be sure the translator model number **IS RE524XP**, and **NOT RE524X**. The RE524X model number will **NOT** work with Insynctive sensors. The translator PCB (green board) label may say RE524X, which is ok. The Alula translator box should say RE524XP though and should only be ordered through Pella Corp to ensure the correct model is ordered.

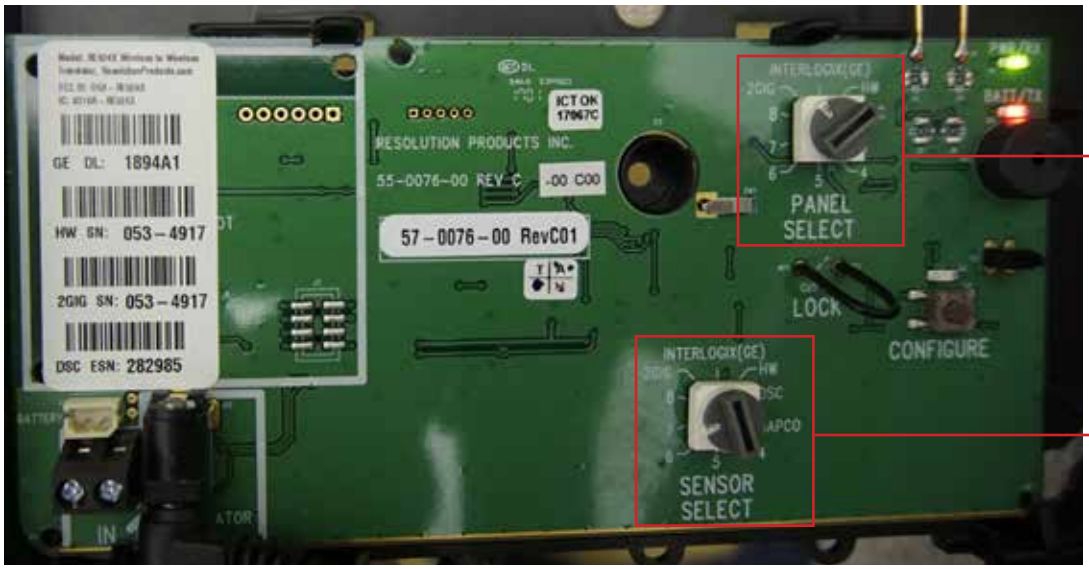
NOTE: For Honeywell, DSC systems, sensors must be tripped, not tampered to learn into security panel properly. For Interlogix systems, the sensors must be tampered, not tripped to learn into security panel properly.

Translator Operation:

Once sensors have been configured to the translator, the green and red lights on the translator should flash when a sensor is triggered. The green light flashing indicates the translator has received a signal, and the flashing red light indicates the translator is transmitting a signal.

Repeater Operation:

The translator can also be used as a signal repeater when needed. Set both Sensor and Panel dials to seven, and follow the same set up in **Configuring Translator, Sensors, and Security Panel**. Once sensors have been configured to the translator, the green and red lights on the translator should flash when a sensor is triggered. The green light flashing indicates the translator has received a signal, and the flashing red light indicates the translator is transmitting a signal.



© 2021 Pella Corporation

Troubleshooting:

- Translator won't configure or learn sensor in, no flashing green (receive) or flashing red lights (send).
    - Check to confirm the correct translator model. The translator model number **IS RE524XP**, and **NOT RE524X**. The RE524X model number will **NOT** work with Insynctive sensors.
    - Check to see if **Panel** and **Sensor Select** dials are correct.
    - Check specific **Product Sensor** sections to see if sensor has been prepped correctly or is working correctly.
    - Call Alula Technical Support at 888-882-5852.

- Translator configured sensor fine, and will receive signal (green flashing light), but will not send to panel (red flashing light).
    - Check to see if sensor has been configured to the translator by following the **Configuring Translator, Sensors, and Security Panel** section.
    - Sensor may have initially been learned in as wrong sensor type, call Alula Technical Support for further help on resetting translator at 888-882-5852 and relearning sensor in as the correct type.

- Translator shows it is sending (red flashing light) and receiving (green flashing light) sensor signals, but the security panel is not responding.
    - Check to see if **Panel** and **Sensor Select** dials are correct.
    - Check to see if translator has been configured to the security panel by following the **Configuring Translator and Sensors and Security Panel** section.
    - Check to see the security panel is in wireless learn mode.
    - Contact Alula Technical Support at 888-882-5852 or contact security panel manufacturer for further assistance.

- Security panel intermittently responds to sensor status changes.
    - Check specific Product Sensor sections to see if sensor has been prepped correctly or is working correctly.
    - Check to see if range is an issue. Typical open air range is >100ft, but will vary depending on number of walls and materials between sensor and translator.
        - Try using another translator as a repeater if range might be an issue.
    - Contact Alula Technical Support at 888-882-5852 or contact security panel manufacturer for further assistance.

© 2021 Pella Corporation

Casement/Awning Sensor

For additional help with Pella Insynctive® sensors, call Pella Customer Service at 855-473-5524. Additional information on bridge and sensor operation can be found in Bridge and Sensor Product Guide on ConnectPella.com.

Learn Sensor to Casement:

For the sensor to work with the casement window, the sensor must first learn the product type it is in.

Open the casement window and remove the sensor, remove the battery (or plastic cover from the battery) and place it back in. Within two minutes of placing battery back in, place the sensor back into the casement, then close and latch the window. Leave the casement closed and latched for 15 seconds. The sensor should now have learned the product and be working properly.



Remove battery or tab



Remove sensor from Casement (Note: sensor faces the exterior)

Learn Sensor to Bridge:

See **Pella Insynctive Bridge** section on how to prepare bridge for learning sensors.

Before the casement/awning sensor can be learned to the bridge, it must first learn the product it is in, see **Learn Sensor to Casement** section.

Once the sensor has learned the product it is in, make sure the bridge is in learn mode. Within two minutes of placing the battery back into the sensor, latch and unlatch the casement (while it is closed) twice within a few seconds, then wait. After 5-10 seconds the bridge should beep and then the LED should turn green. The bridge has learned in the sensor.

The bridge will beep upon unlatching the closed casement unit, and the product status in the app or home automation should show actual product status and update with any state change.

Learn Sensor to Translator:

See **Alula Universal Translator** section on how to prepare translator and security panel for learning sensors.

Before the casement/awning sensor can be learned to the bridge, it must first learn the product it is in, see **Learn Sensor to Casement** section.

With the security panel and translator in learn mode, latch or unlatch the closed casement unit, and sensor should learn into security panel.

The security system should show actual product status, and update with any state change.

© 2021 Pella Corporation

Casement/Awning Sensor (continued)

For casement sensor to read closed, window must be closed and latched. Sensor will read open upon unlatching of window.

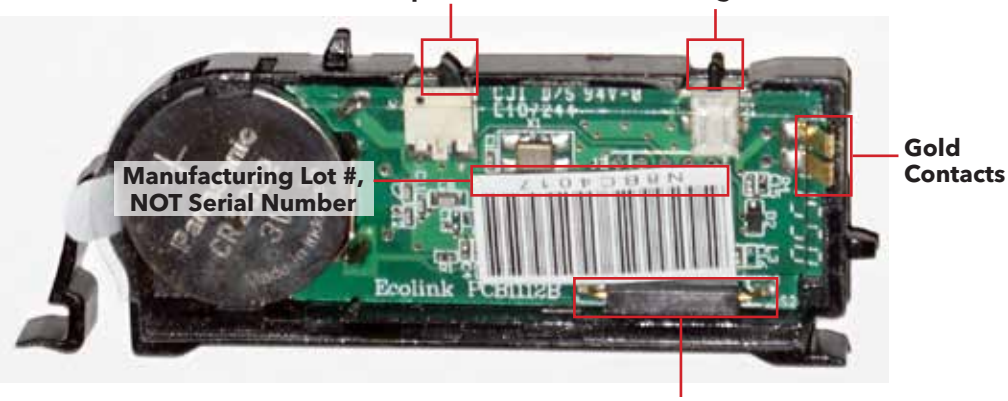
Troubleshooting:

If sensor status does not update correctly, or there sensor shows tampered, here are some steps to try:

- Take sensor out and ensure the plastic tab has been pulled out from the battery.
    - If not, pull out tab and then follow **Learn Sensor to Casement** and **Operation** sections to see if sensor is working properly.

- If plastic tab has been pulled, check battery voltage or replace battery with a new CR-2032 coin cell.
    - With new battery, follow **Learn Sensor to Casement** and **Operation** sections to see if sensor is working properly.

- With sensor pulled out, inspect to confirm the sensor has all the correct connectors and tabs
    - If any missing or damaged, replace with new sensor. Follow **Learn Sensor to Casement** and **Operation** sections to see if sensor is working properly.



Sensor shown is in good condition

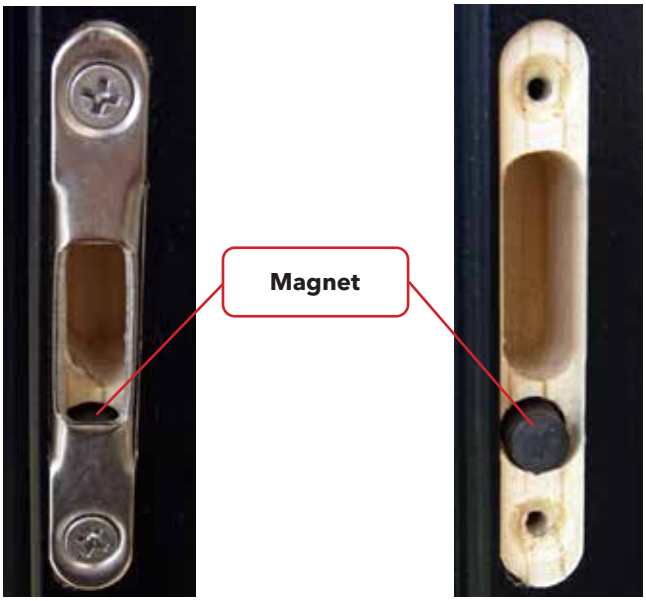
- Sensor updates state, but reads tamper
    - Make sure sensor is fully pushed into unit.
    - Check to confirm tamper switch is in good condition.

- Try replacing sensor with either a new one or a working one from another unit. Follow the **Learn Sensor to Casement** and **Operation** sections to see the casement unit is working properly.
    - If new sensor works, the issue was with the sensor. Keep/get new sensor for unit, properly dispose of non-working sensor.

© 2021 Pella Corporation

Troubleshooting (continued):

- If plastic tab has been pulled, battery voltage is good, and sensor has all correct connectors and tabs with none damaged, and another sensor will not work in the casement either, the issue may be with the casement unit itself.
    - Open window so the strike plate on the sash can be accessed.
    - Remove strike plate and ensure a magnet is locating in a hole behind the strike plate.
        - If the magnet is missing order part number 05380002.



Magnet behind strike

Strike removed to show magnet

- **To check lock mechanism in door use Sensor Field Testing Device (057R0000), and user manual on PERL (81WR0000).**

- See **Alula Universal Translator** and **Pella Insynctive® Bridge** sections for further troubleshooting as well.

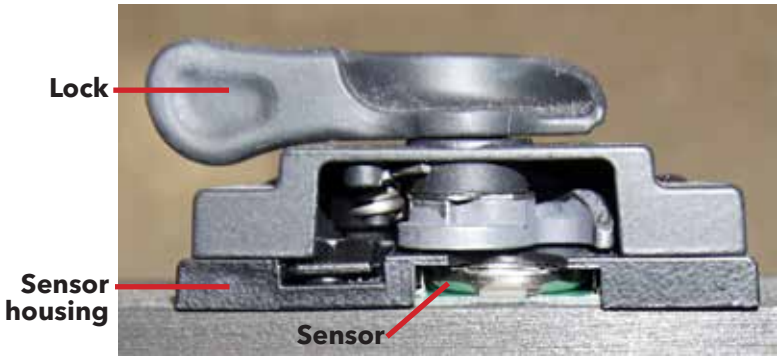
© 2021 Pella Corporation

Double-Hung Sensor

For additional help with Pella Insynctive® sensors, call Pella Customer Service at 855-473-5524. Additional information on bridge and sensor operation can be found in Bridge and Sensor Product Guide on ConnectPella.com.

Getting Started:

Unlock window and remove screws on the latch. Take top part of the lock off and look at the bottom plate of the lock. Remove plastic tab from battery located on the bottom plate. Replace the bottom plate and the top part of the lock on lower sash as were previously. Sensor is now ready.



Lock assembly on top of sensor



Sensor strike is taller than standard strike

Learn Sensor to Bridge:

See **Pella Insynctive Bridge** section on how to prepare bridge for learning sensors.

After removing plastic tab from battery or taking the battery out and putting it back in, and properly replacing sensor, make sure the bridge is in learn mode. Within two minutes of placing the battery back into the sensor, latch and unlatch the double hung (while it is closed) twice within a few seconds, then wait. After 5-10 seconds the bridge should beep and then the LED should turn green. The bridge has learned in the sensor.

The bridge will beep upon unlatching the closed double hung unit, and the product status in the app or home automation should show actual product status and update with any state change.



Remove battery tab

Learn Sensor to Translator:

See **Alula Universal Translator** section on how to prepare translator and security panel for learning sensors.

With the security panel and translator in learn mode, latch or unlatch the closed double hung unit, and sensor should learn into security panel.

The security system should show actual product status, and update with any state change.

Operation:

For double hung sensor to read closed, window must be closed with upper sash in the top position and lower sash in the bottom position and the latch and strike must be in the fully locked position. Sensor will read open upon unlocking of the latch.

© 2021 Pella Corporation

Double-Hung Sensor (Continued)

Troubleshooting:

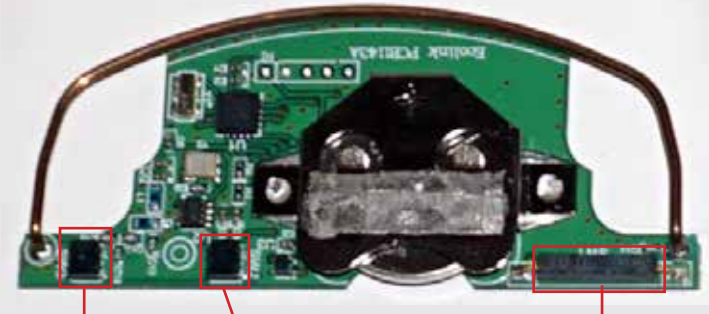
If sensor status does not update correctly, or the sensor shows tampered, here are some steps to try:

- Take sensor out and ensure the plastic tab has been pulled out from the battery.
    - If not, pull out tab and then follow **Getting Started** and **Operation** section to see if sensor is working properly.

- If plastic tab has been pulled, check battery voltage or replace battery with a new CR-2032 coin cell.
    - With new battery, follow **Getting Started** and **Operation** sections to see if sensor is working properly.

- With sensor pulled out, inspect to confirm the sensor has all the correct connectors and tabs.
    - If any missing or damaged, replace with new sensor. Follow **Getting Started** and **Operation** section to see if sensor is working properly.

- Check for spring between housing and sensor and make sure plunger springs back to fully open position.
    - If missing or not returning to open position, order new DH sensor in PQM configurator. (DH > sensor service item)



Sensor shown is in good condition

- Try replacing sensor with either a new one, or a working one from another unit. Follow the **Getting Started** and **Operation** section to see the double hung unit is working properly.
    - If new sensor works, the issue was with the sensor. Keep/get new sensor for unit, properly dispose of non-working sensor.

- If plastic tab has been pulled, battery voltage is good, and sensor has all correct connectors and tabs with none damaged, and another sensor will not work in the double hung unit either, the issue is likely with the strike.
    - Unlock latch and tilt lower sash open.
    - Unscrew and remove strike. A small magnet should be located on the bottom of the strike on the left side (interior view). If magnet is missing, contact your local Pella branch for a replacement.
    - If magnet missing from bottom of strike, order new DH sensor kit in PQM configurator. DH > sensor service kit.



Strike removed to show magnet under strike

- Sensor updates state, but reads tamper
    - Make sure lock and sensor are fully installed on sash.
    - Check to confirm tamper switch is in good condition.

- See **Alula Universal Translator and Pella Insynctive® Bridge** sections for further troubleshooting as well.

© 2021 Pella Corporation