

# Installing IQ Combiner 4/4C Hold Down Kit

This is the Hold down kit for IQ8 PV breakers in IQ Combiner 4/4C. The hold down kit includes one retainer and 2 screws. Each hold down kit supports two breakers to be installed on the same side of the busbar.

Follow these steps to install the Enphase Hold Down Kit in the IQ Combiner 4/4C:



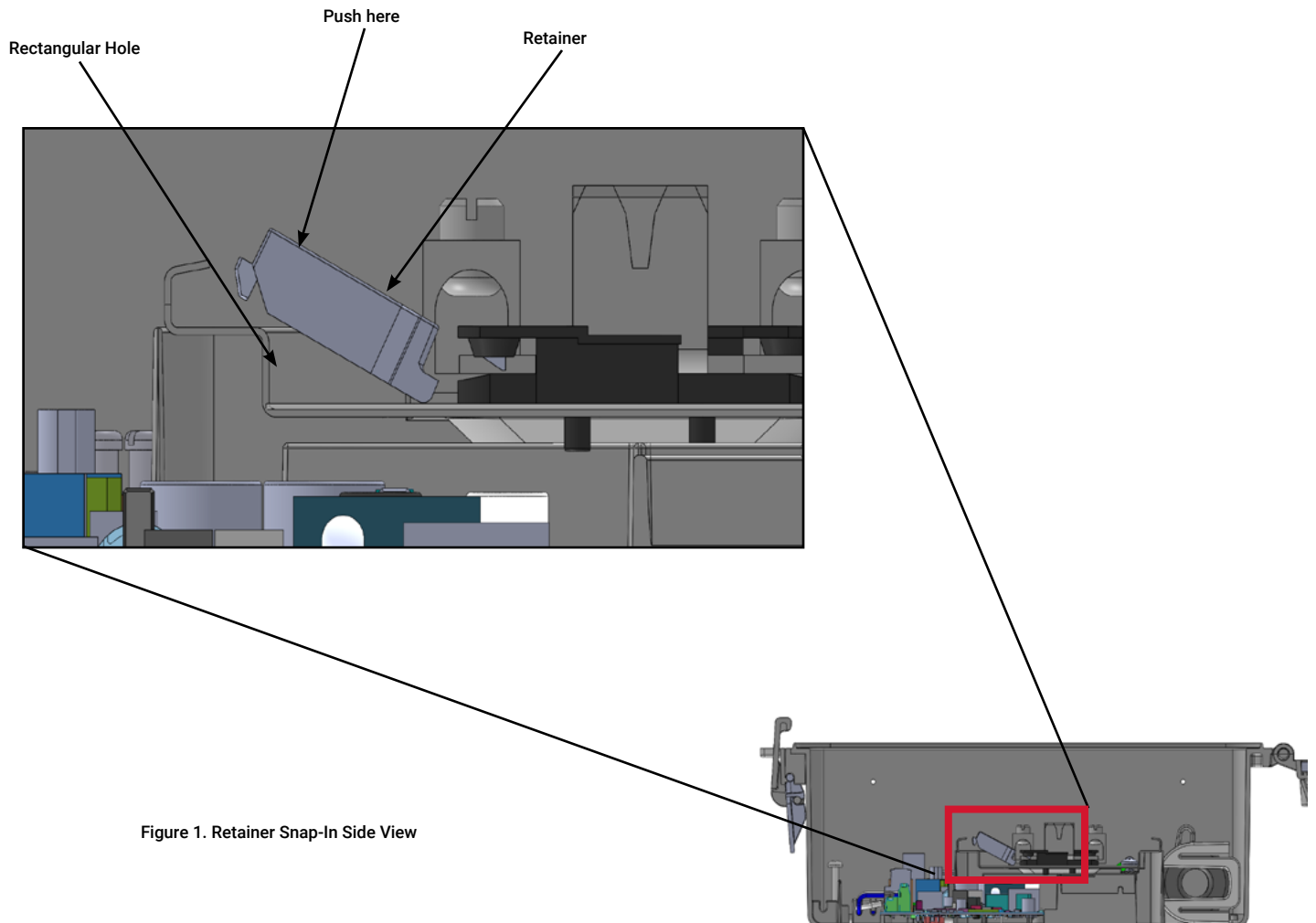
**DANGER: Risk of electric shock. Always de-energize the load center before beginning wiring.**

- A) Turn off power ahead of the IQ Combiner 4/4C before installing the Hold Down Kit.
- B) Refer to Figure 1 and align the retainer over rectangular hole in interior backpan and outside of main bus (Locate the two bus stab locations as shown in Figure 2)
- C) Snap-in end of retainer at interior backpan by pushing downward. The retainer should fit into the available space in the backpan with part of the plastic in the rectangular hole and the other side of the retainer under the busbar.
- D) Install the circuit breakers onto the bus.



**WARNING: Risk of equipment damage. Do not scratch, nick, bend or otherwise damage bus.**

- E) Assemble #5-20 screw into hole in the breakers. Thread into retainer and tighten. Torque screws to 13 lb in (1.5Nm).



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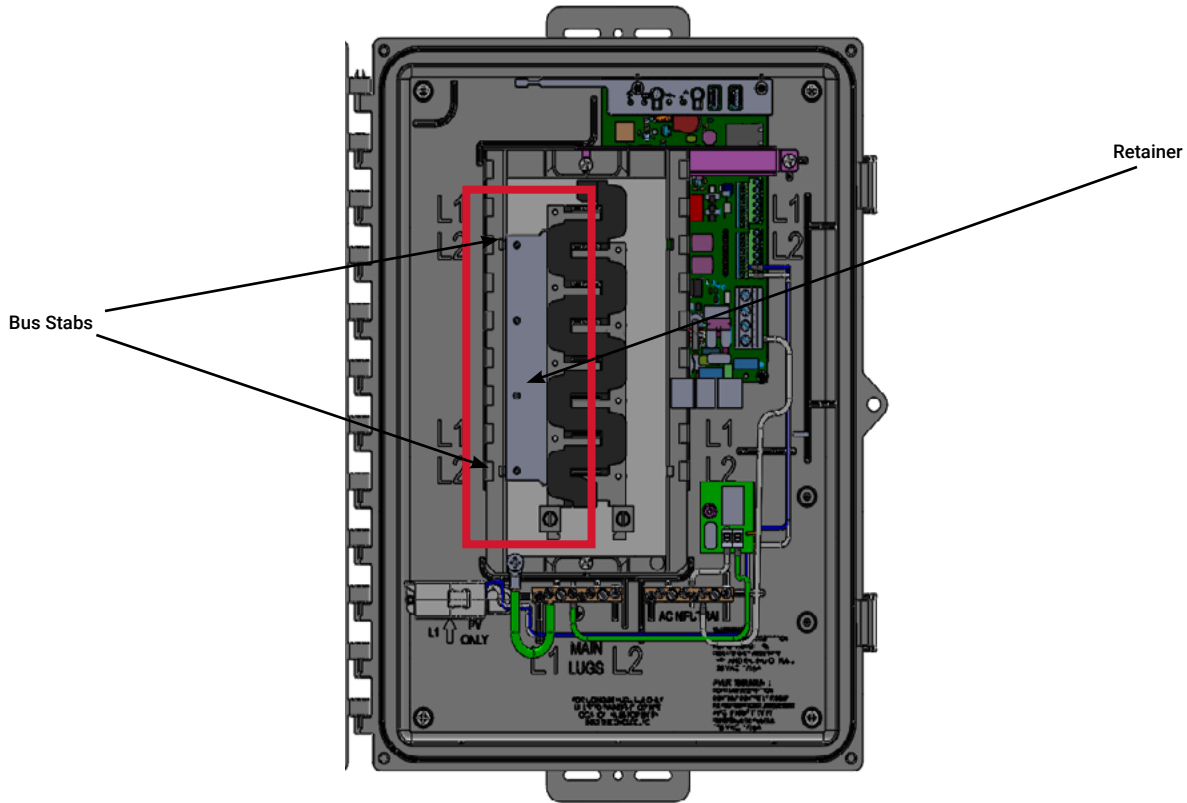


Figure 2. Hold Down Kit Installed on IQ Combiner 4/4C

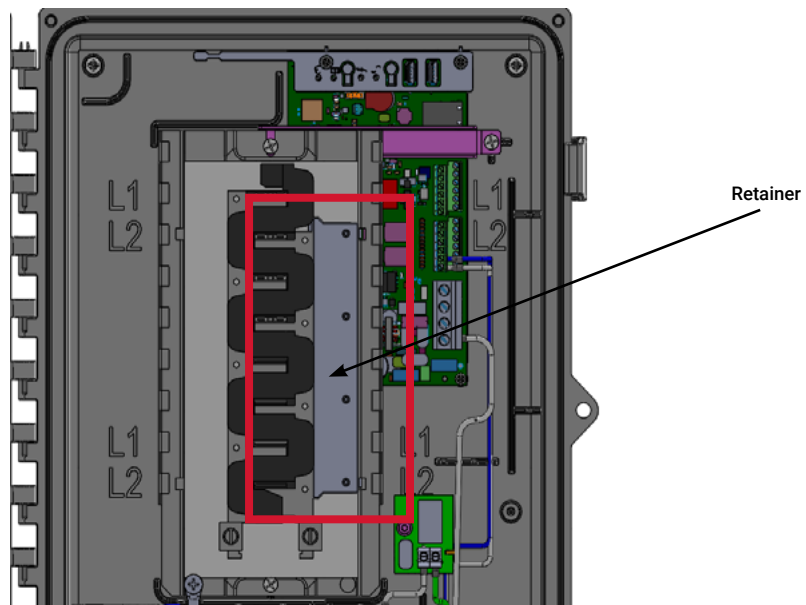


Figure 3. Hold Down Kit Installed on the right-hand side of the busbar

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## SAFETY

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS. This guide contains important instructions that you must follow during installation and maintenance of the Enphase IQ System Controller. Failing to follow any of these instructions may void the warranty ([enphase.com/warranty](http://enphase.com/warranty)).

### In Case of Fire or Other Emergency

- If safe to do so, switch off the AC breaker for the IQ System Controller circuit, and if an isolator switch is present, switch off the AC isolator for the IQ System Controller circuit.
- Contact the fire department or other required emergency response team.
- Evacuate the area.

### In case of fire:

- When safe, use a fire extinguisher. Suitable types are A, B, and C dry chemical fire extinguishers. Additional extinguishing media include carbon dioxide, or alcohol-resistant foams.

### In case of flooding:

- Stay out of water if any part of the IQ System Controller or wiring is submerged.
- If possible, protect the system by finding and stopping the source of the water, and pumping it away.
- If water has contacted the UNIT, call your installer to arrange a inspection. If you are sure that water has never contacted the battery, let the area dry completely before use.

### In case of unusual noise, smell or smoke:

- Ensure nothing is in contact with the IQ System Controller or in the venting area on top of the IQ System Controller.

### Safety and Advisory Symbols

	<b>DANGER:</b> This indicates a hazardous situation, which if not avoided, will result in death or serious injury.
	<b>WARNING:</b> This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.
	<b>NOTE:</b> This indicates information particularly important for optimal system operation. Follow instructions carefully.

### Safety Instructions

	<b>DANGER:</b> Risk of electric shock. Risk of fire. Do not attempt to repair the IQ Gateway; it contains no user-serviceable parts. Tampering with the IQ Gateway will void the warranty. If the IQ Gateway fails, contact Enphase Customer Support for assistance ( <a href="http://enphase.com/en-us/support/contact">enphase.com/en-us/support/contact</a> ).
	<b>DANGER:</b> Risk of electrocution! Do not install CTs when current flowing in the sensed circuit. Always install CT wires in the terminal blocks before energizing the sensed circuit.
	<b>DANGER:</b> Risk of electric shock. Do not use Enphase equipment in a manner not specified by the manufacturer. Doing so may cause death or injury to persons, or damage to equipment.
	<b>DANGER:</b> Risk of electric shock. Be aware that installation of this equipment includes risk of electric shock. Do not install the IQ Combiner4/4C without first removing AC power from the Enphase System. Ensure the power coming from the microinverters is de-energized before servicing or installing.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Only qualified personnel should troubleshoot, install, or replace the IQ Combiner 4C or IQ Combiner 4.
	<b>DANGER:</b> Risk of electric shock. Improper servicing of the IQ Combiner 4C or IQ Combiner 4 or its components may result in a risk of shock, fire or explosion. To reduce these risks, disconnect all wiring before attempting any maintenance or cleaning.
	<b>DANGER:</b> Risk of electric shock. Always de-energize the AC branch circuit before servicing. While connectors are rated for disconnect under load, it is a best practice to de-energize before disconnecting.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Only use electrical system components approved for wet locations.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Ensure that all wiring is correct and that none of the wires are pinched or damaged.

### Safety Instructions continued

	<b>DANGER:</b> Risk of electric shock. Risk of fire. Do not work alone. Someone should be in the range of your voice or close enough to come to your aid when you work with or near electrical equipment. Remove rings, bracelets, necklaces, watches etc. when working with batteries, photovoltaic modules or other electrical equipment.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Before making any connections verify that the circuit breaker(s) are in the off position. Double check all wiring before applying power.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Do not wire unused terminals or terminal blocks on the IQ Gateway.
	<b>WARNING:</b> Risk of electric shock. To maintain the warranty, do not modify the dead-front other than to remove filler plates, as needed.
	<b>WARNING:</b> Before installing or using the IQ Combiner 4C or IQ Combiner 4, read all instructions and cautionary markings in the technical description and on the equipment.
	<b>WARNING:</b> Use the circuit breakers in the Enphase IQ Combiner 4C or IQ Combiner 4 only for serving Enphase equipment. No other loads are allowed.
	<b>WARNING:</b> This unit is not provided with a GFDI device. This inverter or charge controller must be used with an external GFDI device as required by the Article 690 of the National Electrical Code for the installation location.
	<b>WARNING:</b> The IQ Combiner 4C and IQ Combiner 4 have a pre-installed heat shield attached to the enclosure door. Do not remove the heat shield.
	<b>WARNING:</b> This product is intended for operation in an environment having a maximum ambient temperature of 46°C (115°F).
	<b>WARNING:</b> BONDING BETWEEN CONDUIT CONNECTIONS IS NOT AUTOMATIC AND MUST BE PROVIDED AS PART OF THE INSTALLATION.
	<b>NOTE:</b> Perform all wiring in accordance with all applicable local electrical codes, with the Canadian Electrical Code, Part I, and with the National Electrical Code (NEC), ANSI/NFPA 70.
	<b>NOTE:</b> Protection against lightning and resulting voltage surge must be in accordance with local standards.
	<b>NOTE:</b> Using unapproved attachments or accessories could result in damage or injury.
	<b>NOTE:</b> Install the IQ Combiner 4C or IQ Combiner 4 in the field with 75°C or higher copper conductors sized per local code requirements and voltage drop/rise considerations.
	<b>NOTE:</b> Use Class 1 wiring methods for field wiring connections to terminals of a Class 2 circuit. Use 14 to 6 AWG wire for branch circuits and 14 to 3 AWG for output circuits. Select the wire gauge used based on the protection provided by the circuit breaker(s)/fuses. Overcurrent protection must be installed as part of the system installation.
	<b>NOTE:</b> To ensure optimal reliability and to meet warranty requirements, the Enphase IQ Combiner 4C and/or IQ Combiner 4 must be installed according to the instructions in this guide.

### Environmental Protection



**ELECTRONIC DEVICE: DO NOT THROW AWAY.** Waste electrical products should not be disposed of with household waste. Refer to your local codes for disposal requirements.