

****SQUARE-D – QO SERIES ¾” BREAKERS**

This manual provides instructions for safe installation of the *InterLock* Kit onto a Square D- QO Series feed through or main lug type panel with ¾ inch breaker style. The back plate sits securely on the face of the panel cover while allowing the front plate to slide between the main and generator breaker positions. The *InterLock* Kit will only allow one of these breakers to be in the “ON” position meeting the requirements of Article 702 of the National Electric Code ANSI/NFPA 70. The installation of the breaker retaining strap meets Article 408.36 (NEC 2008).

SAFETY PRECAUTIONS – IMPORTANT SAFETY INSTRUCTIONS**WARNING: HAZARD OF ELECTRIC SHOCK OR EXPLOSION**

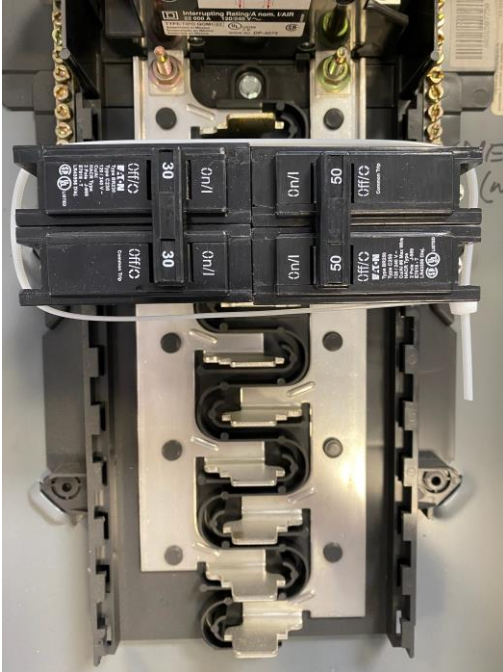
- This kit must be installed and serviced only by qualified electrical personnel
- Turn off all power supplying the equipment where this kit will be installed before working on or inside the equipment
- Always use a properly rated voltage sensing device to confirm that all power is off
- Replace all devices, doors, and covers after installing this kit before turning on power to the equipment
- Always wear safety eyewear while drilling or working around electrical equipment

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SERIOUS INJURY OR DEATH**SAVE THESE INSTRUCTIONS****INSTALLATION INSTRUCTIONS**

- 1) Disconnect power to the panel
- 2) Separate plates. Remove backing from double stick tape. Align back plate (BP-9110) with the top of the opening for the main breaker on front of panel cover. (Do not drill holes at this time)
- 3) Remove panel cover
- 4) Relocate breakers from slots 2 and 4 to allow for Main Breaker to take these positions (top 2 spaces of the right breaker column) utilizing piggyback breakers as necessary to create the needed spaces
- 5) Install generator breaker in the 6, 8 slot.
- 6) Temporarily remove breakers from the 9, 10 slots. Loop the breaker retaining strap (S-2002) around breakers 5, 6, 7, 8 - ½” from the front face of the breakers. Align the head of the retaining strap at the top right of the number 2 breaker and tighten the strap. **See Figure I.** Cut the tail of the retaining strap approximately 2

inches long and install Notice Label (S-2003) around tail. Reinstall the breakers in the 9, 10 slots. Verify that the retaining strap keeps the 6, 8 breaker in place by attempting to remove the breaker.

Figure I



- 7) On suitable surface use included 11/64 drill bit (D-1004) to drill out holes in the panel cover through the predrilled holes in the back plate (BP-9110)
- 8) Use file to smooth surface around holes and remove the burrs on back of panel cover. **On the back of the panel cover file away paint to allow entire screw head to sit with metal to metal contact.** The binder screws (B-1003) must sit flush with the back of the panel cover
- 9) Insert binder screws (B-1003) through the back of the panel cover, back plate (BP-9110), and front plate (FP-9110). Use the binder post (B-1002) to attach to front of binder screws (B-1003). Handhold binder post (B-1002) while using screwdriver to tighten the binder screws (B-1003). The front plate should slide easily and the back plate should sit firmly. Be careful not to over-tighten.
- 10) Set generator and main breakers in the “OFF” position and reattach panel cover
- 11) With the panel cover firmly in place test the *InterLock* to make sure that it transfers easily between positions. **BOTH BREAKERS SHOULD NOT BE ABLE TO BE IN THE “ON” POSITION AT THE SAME TIME.** Even with moderate pressure you should not be able to engage both breakers at once.
- 12) Apply thread lock (T-1005) to all four binder post (B-1002) as per instructions included with the thread lock
- 13) Attach labels like in Figure II (L-1006, L-1007, L-1008, L-1009)**
- 14) Reconnect power to the panel
- 15) **See Figure III** to view the action of the Interlock Kit as it slides between the main breaker and generator breaker to prevent dangerous back-feeding scenarios

Figure II

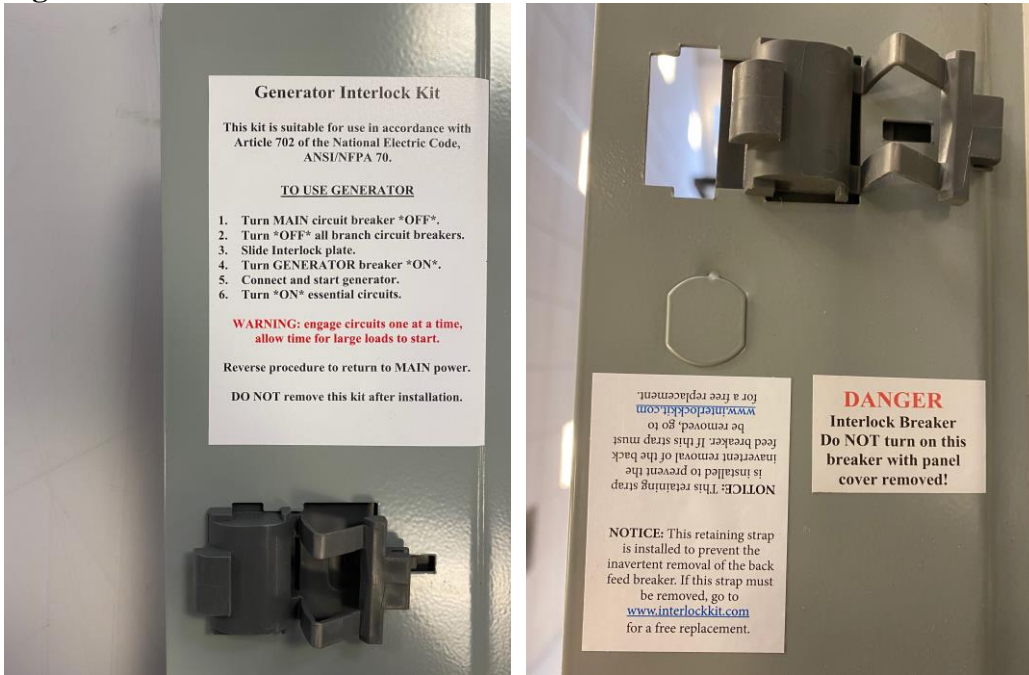
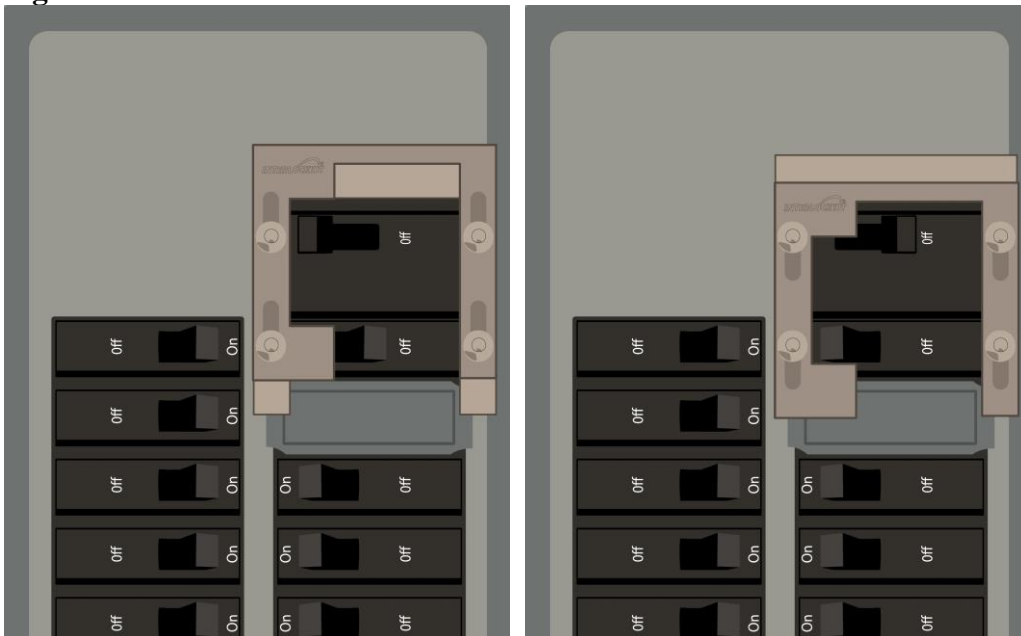


Figure III



Main Breaker ON

Generator Breaker ON

<u>KIT CONTENTS</u>			<u>TOOLS NEEDED TO INSTALL</u>
Description	Quantity	Part #	<ul style="list-style-type: none"> - Drill or cordless drill - Flathead screwdriver - Metal file - Accurate voltage sensor <p><u>CONTACTING US</u></p> <p>You can contact us by phone at (804) 726-2448 or by fax at (804) 231-1984</p> <p>Questions or comments: questions@interlockkit.com</p>
Back plate	1	BP-9110	
Front plate	1	FP-9110	
Binder post	4	B-1002	
Binder screw	4	B-1003	
Drill bit 11/64	1	D-1004	
Thread lock pipette	1	T-1005	
Instruction booklet	1	IB-9110	
Main label	1	L-1006	
DANGER label	1	L-1007	
Generator label	1	L-1008	
Instructions label	1	L-1009	
Retaining Strap	1	S-2002	
Retaining Strap Label	1	S-2003	

<u>OPERATION INSTRUCTIONS</u>	<u>STATEMENT OF LIABILITY</u>
<p>TO SWITCH OPERATION FROM MAIN TO GENERATOR</p> <ol style="list-style-type: none"> 1) Turn main breaker to the “OFF” position 2) Turn all branch circuits to the “OFF” position 3) Slide <i>InterLock</i> plate up 4) Connect and start generator 5) Turn generator breaker to the “ON” position 6) Turn on essential circuits one at a time 7) WARNING: Allow appliances to start before engaging next circuit <p>TO RETURN TO MAIN POWER REVERSE PROCEDURE</p>	<p>Electrical equipment should be installed, operated, serviced, and maintained by qualified personnel. No responsibility is assumed by Generator InterLock Technologies, LLC for any consequences arising out of the misuse of this material.</p> <div style="border: 1px solid black; padding: 10px; text-align: center; margin-top: 20px;"> <p>Tested for use with UL 67 Listed Panelboards Ref. Wyle Laboratories Test Report T52431-01</p> </div>