3M™ PanelSafe™ Lockout System

3M Innovation

Lock in Safety with 3M™ PanelSafe™ Lockout System

3M's PanelSafe Lockout System mechanically prevents the movement of breaker handles from the "off" position to the "on" position with energy isolating lockout pins. With PanelSafe, 3M is dedicated to helping you meet applicable OSHA regulations, which require all electrical circuits to be "locked out" prior to the servicing and maintenance of machines, lighting and equipment. 3M PanelSafe Lockout System complies with OSHA Standard 1910.147.

The unit, supplied with pre-drilled mounting holes, fastens directly to the service panel dead-front using self-tapping screws. The energy isolating lockout pins are stored in a holding device also attached to the dead-front by means of self-tapping screws, making the entire assembly and its accessories completely contained behind the panel door. Those authorized to perform a lockout function need only carry their lock and tag.

In your business, power, technology and reliability are essential. 3M delivers that and more.

We have the power of a diversified, global manufacturer with more than 60,000 products in our line; a reputation for technical excellence and innovation; and employees committed to delivering quality products and service to you, our valued customer.

Our capability doesn't stop with electrical products, it starts there.

To explore the many ways we can serve you, contact your 3M representative today!

A permanently installed circuit breaker lockout system, 3M PanelSafe is designed with pre-spaced slots that correspond to the center point of the service panel breaker handles. The unit is properly positioned when the center of each pin slot is aligned with the center of each breaker handle. Once installed, 3M PanelSafe, which fits all brands and models, completely eliminates the need for employees to constantly carry numerous lockout devices each designed to fit a specific manufacturers panel and breaker type.

For the ultimate flexibility, a standard pin package includes both single-sided and dual-sided pins for simultaneously locking off multiple circuits. Additionally, the package contains a hook pin designed for use in situations where protecting against a nuisance turn-off of dedicated or passive circuits is critical. Such applications may include fire suppression systems, emergency lighting and computer systems.

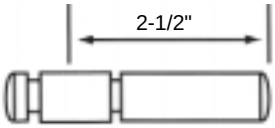
The use of 3M PanelSafe will increase safety as well as help reduce costs.

3M™ PanelSafe™ Lockout System Accessories

3M™ offers various pins, shims and brackets, so that the PanelSafe Lockout System can be used, even if the panel front is not flat.

One Way Pin

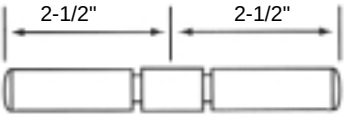
A one way pin is used to lockout an individual circuit located on either the left or right side of the panel. Available 5 per package or bulk, 15 per package.



PS-1P

Two Way Pin

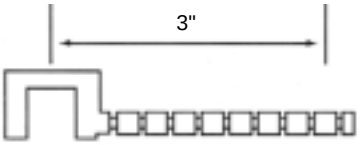
A two way pin is used to lockout two circuits directly opposite each other. Available 5 per package or bulk, 15 per package.



PS-2P

Hook Pin

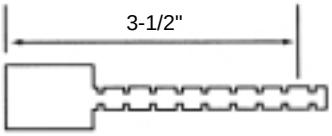
The hook pin can be used to secure “on” individual circuits (i.e. dedicated passive circuits), or to lockout individual circuits from either the left or right side of the panel. Available 5 per package or bulk, 15 per package.



PS-HP

PS-SP Spade Pin

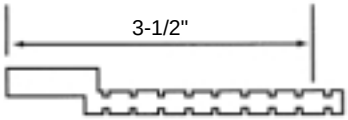
A spade pin is used to lockout on either the left or right side of the panel when the measured distance from the center line of the dead front to the max position on the breaker handle in the off position is greater than 2 1/2". Available 5 per package or bulk, 15 per package.



PS-SP

PS-SP05 Half-size Spade Pin

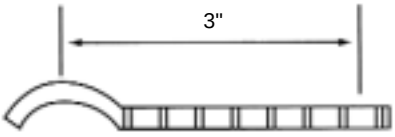
The half size spade pin is used to lockout half-size (twin or piggyback) breakers. This pin can lockout an individual circuit by simply rotating the pin 180° for either the top or the bottom breaker. Available 5 per package or bulk, 15 per package.



PS-SP05

Cup Pin

The cup pin is used to secure “on” individual circuits (i.e., dedicated circuits) located on either the left or right side of the panel. Available 5 per package or bulk, 15 per package.



PS-CP

Pin Holder

Stores all pins, (except main breaker pin) at each panel location for easy access when lockout functions are required.

PS-PH

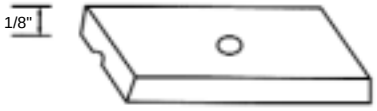
Standard Shim

On distribution panels where the body of each breaker extends out beyond the level of the dead front, the standard shim is used to raise the surface, where a 3M™ PanelSafe unit is mounted, level with the body of each breaker. Available only in pairs.

PS-SH1

Slotted Shim

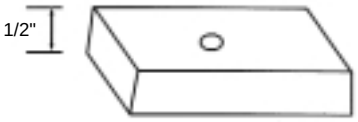
On distribution panels where a raised, rounded bead runs down the center of the dead front; the slotted shim mounts over this bead; primarily GE panels. Provides a flat surface to mount PanelSafe unit. Available only in pairs.



PS-SH2

1/2" Shim

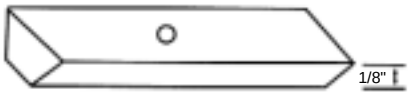
On distribution panels where the body of each breaker extends out beyond the level of the dead front. The 1/2" shim is used to raise the surface where a PanelSafe unit is mounted, level with the body of each breaker. Available only in pairs.



PS-SH3

V-Notch Shim

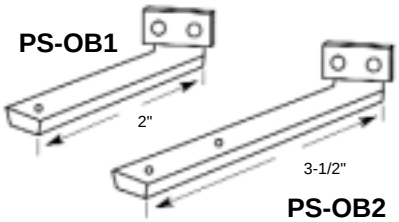
Used on distribution panels that have a V-Notch extending down the length of the dead front; primarily ITE panels. Available only in pairs.



PS-SH4

Offset Brackets

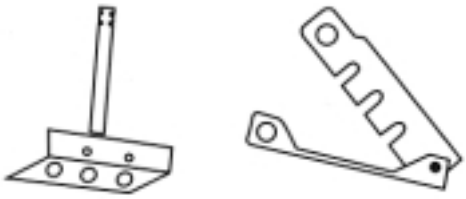
Used in conjunction with a PanelSafe™ unit when breakers are recessed below the dead front and no area is available to mount a PanelSafe unit by standard means. Available only in pairs.



PS-OB2

Main Breaker/Large Frame Lockout Set

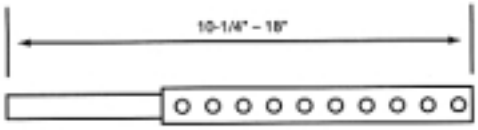
On large frame breakers where the handle thickness (size) and the ability to mount a standard PanelSafe™ unit is not applicable, a main breaker lockout is used either separately, as shown at right, or in conjunction with the main breaker brackets as shown below. Includes one each: PS-MB, PS-BS, PS-MP.



PS-MB

Main Breaker Bracket

When a main breaker lockout cannot be directly attached to the dead front because of extended breaker casing, a pair of main breaker brackets must be used. The main breaker lockout is attached to the bracket which is expanded and attached to the insides of both sides of the panel. A brace (see below) and main breaker pin (see below) must also be used. Main breaker brackets are sold in pairs only.



PS-BK

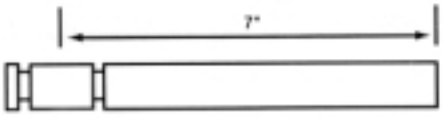
Main Breaker Brace

Used in conjunction with the main breaker bracket (shown above) this brace is attached to the bracket which is then expanded and attached to the insides of both sides of the panel. The assembly is positioned below the breaker handle acting as a receptacle for the main breaker pin (shown below).

PS-BS

Main Breaker Pin

A main breaker pin is used only with the main breaker lockout to lockout a large frame breaker.



PS-MP

3M™ PanelSafe™ Lockout System Frequently Asked Questions

What is PanelSafe?

PanelSafe is a device, which is permanently mounted to the dead front of a circuit breaker panel that allows individual or multiple circuits to be locked off simultaneously.

Why is it important to lock off circuits?

OSHA, in its standard 1910.147, requires power to be locked off at the power source any time routine maintenance of equipment, lighting or machinery is being performed. The procedure is called lockout/tagout.

How is PanelSafe attached to the dead front?

It should be attached using the self-tapping screws that are provided (no shavings will fall into the panel). It is a good practice to always turn off the power.

Will it fit all my panels or just the Square D load center that I see in your literature?

It will fit any manufactured panel.

How can PanelSafe work on any panel?

It works based on the distance of the centers from breaker handle to breaker handle. You start by measuring the distance from the center of the top breaker to the center of the breaker handle directly beneath it. Then you count the number of breakers on one side of the panel. Using these two measurements you are ready to order the proper unit.

Suppose the panel has a bead running down the center keeping the PanelSafe unit from laying flat?

On distribution panels (usually GE) where a raised, round bead runs down the center of the dead front the slotted shim (PS-SH2) must be used. It fits over the bead and provides a flat surface on which to mount the PanelSafe unit. These are available only in pairs.

I have ITE panels and they have a V notch extending down the length of the dead front. Can PanelSafe work on these units?

Yes, you would use the V-notch shim, PS-SH4 to make the installation.

I have a destruction panel where the body of each breaker extends out beyond the level of the dead front. How do I remedy that?

By using either PS-SH1, which is an 1/8" shim, or PS-SH3, which is an 1/2" shim. This shim is used primarily on Square D and some GE panels where the breaker is exposed 1/2" above the dead front. If either of these doesn't work then you may have to make a shim that will fit correctly. Maintenance people should have no trouble figuring this out.

When are offset brackets used?

They are used with a PanelSafe unit when breakers are recessed below the dead front and no area is available to mount a PanelSafe unit by standard means. Theses are only available in pairs and are either 2" long (PS-OB1) or 3 1/2" long (PS-OB2).

Suppose I can't mount a PanelSafe unit down the center of a panel.

This would probably occur because there is no center (only the plastic breaker casing) or because the pins used to secure the breaker in the off position will not reach the breaker handle in the off position. These panels require multiple PanelSafe units and in many, if not most cases, offset brackets. The offset brackets, PS-OB1 or PS-OB2, may be mounted to the rise on the outside of the panel. The PanelSafe is then attached to the offset brackets. Remember, if you are mounting the PanelSafe on offset brackets, you will now need to Pull the breaker to the off position because the unit is positioned to the outside of the breaker handle. This requires that a hook pin (PS-HP) be used. It would probably be wise to order an extra package of hook pins when this situation occurs.

Can I lockout twin, half-size or piggyback breakers?

Yes. Where twin or piggyback breakers are being used, you should order PS-SP05. This pin allows you to lockout either twin alone by simply rotating the pin 180° for either the top or bottom breaker.

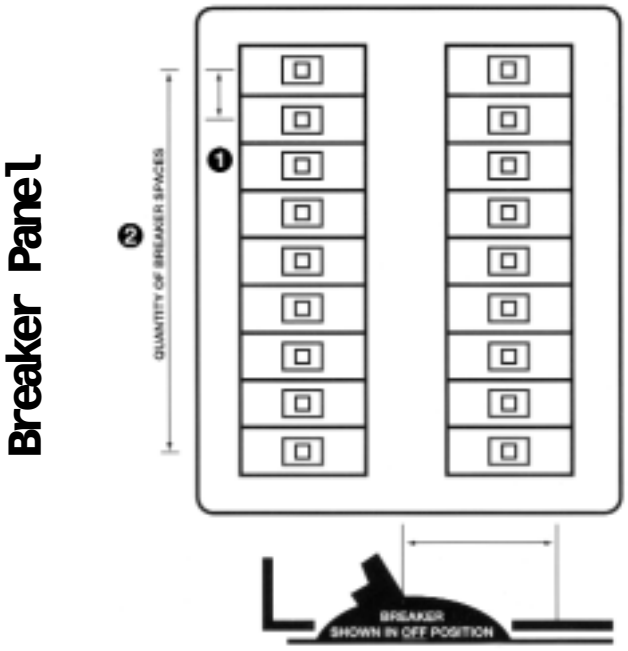
You mention in the literature that a circuit can be secured "on". Where would it make sense to do that?

A circuit can be secured "on" when it is powering something that you don't want inadvertently turned off. Examples would be fire alarm systems, computer systems, runway lights at airports, etc. Drug companies particularly like this feature since they often have experiments running that would be rendered useless if the power would be turned off.

If the circuit is secured "on", will it trip?

Yes, it will still trip because the breakers trip internally.

Determining the Correct 3M PanelSafe Unit



Step 1: Measure the distance between breaker space center lines (❶on diagram). Reference chart 1 for first two digits of product numbers.

Step 2: Count the number of breaker spaces on one side of the load center (❷on diagram). These are the last two digits of your product number.

Examples of various load centers:

3/4" spacing between breakers and 42 circuits = 07 (designation for 3/4") 21 (number of circuits down one side of the load center). In this case, the part number for the required unit is PS-0721.

1" spacing between breakers and 18 circuits = 10 (designation for 1") 09 (number of circuits down one side of the load center). In this case, the part number for the required unit is PS-1009.

Step 3: Visually check the configuration of the breakers and the surface that the PanelSafe is to be mounted upon. If the surface has any irregular shapes or the breakers use a non-traditional setup (traditional 2 rows with a metal center strip as shown on cover), please order the correct shims or accessories shown in this brochure.

How to Read 3M Panel Safe Product Numbers

PanelSafe — PS - 07 03

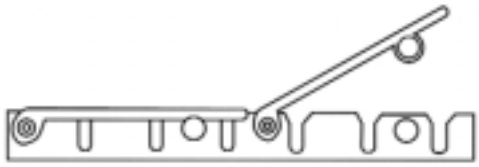
Breaker Spacing (measurement ❶)	Number of Breaker Slots on one side (measurement ❷)
07 = 3/4"	03 = 3 slots
10 = 1"	04 = 4 slots
12 = 1 1/4"	05 = 5 slots
13 = 1 3/8"	↓
15 = 1 1/2"	21 = 21 slots

The first two digits correspond to the breaker spacing and the last two digits correspond to the number of breaker slots.

Chart 1

Standard 3M™ PanelSafe™ Unit

A standard 3M PanelSafe unit varies in length, number of slots, and covers according to part number required. Each 3M PanelSafe unit is packaged to include: 1 pin holder; 2 one way pins; 1 two way pin; 1 hook pin; assembly screws and instruction sheet.



3M™ PanelSafe™ Lockout System Ordering Information

Product Number	UPC	Description	Unit of Measure	Stock
PS-0703	0054007-44539-5	3/4" spacing; 3 slots	ea.	✔
PS-0704	0054007-44540-1	3/4" spacing; 4 slots	ea.	
PS-0705	0054007-44541-8	3/4" spacing; 5 slots	ea.	
PS-0706	0054007-44542-5	3/4" spacing; 6 slots	ea.	✔
PS-0707	0054007-44543-2	3/4" spacing; 7 slots	ea.	
PS-0708	0054007-44544-9	3/4" spacing; 8 slots	ea.	
PS-0709	0054007-44545-6	3/4" spacing; 9 slots	ea.	
PS-0710	0054007-44546-3	3/4" spacing; 10 slots	ea.	✔
PS-0711	0054007-44547-0	3/4" spacing; 11 slots	ea.	
PS-0712	0054007-44548-7	3/4" spacing; 12 slots	ea.	✔
PS-0713	0054007-44549-4	3/4" spacing; 13 slots	ea.	
PS-0714	0054007-44550-0	3/4" spacing; 14 slots	ea.	
PS-0715	0054007-44551-7	3/4" spacing; 15 slots	ea.	✔
PS-0716	0054007-44552-4	3/4" spacing; 16 slots	ea.	

3M™ PanelSafe™ Lockout System Ordering Information cont.

Product Number	UPC	Description	Unit of Measure	Stock
PS-0717	0054007-44553-1	3/4" spacing; 17 slots	ea.	
PS-0718	0054007-44554-8	3/4" spacing; 18 slots	ea.	
PS-0719	0054007-44555-5	3/4" spacing; 19 slots	ea.	
PS-0720	0054007-44556-2	3/4" spacing; 20 slots	ea.	✔
PS-0721	0054007-44557-9	3/4" spacing; 21 slots	ea.	✔
PS-1003	0054007-44558-6	1" spacing; 3 slots	ea.	
PS-1004	0054007-44559-3	1" spacing; 4 slots	ea.	
PS-1005	0054007-44560-9	1" spacing; 5 slots	ea.	
PS-1006	0054007-44561-6	1" spacing; 6 slots	ea.	✔
PS-1007	0054007-44562-3	1" spacing; 7 slots	ea.	
PS-1008	0054007-44563-0	1" spacing; 8 slots	ea.	
PS-1009	0054007-44564-7	1" spacing; 9 slots	ea.	✔
PS-1010	0054007-44566-1	1" spacing; 10 slots	ea.	
PS-1011	0054007-44567-8	1" spacing; 11 slots	ea.	
PS-1012	0054007-44568-5	1" spacing; 12 slots	ea.	
PS-1013	0054007-44569-2	1" spacing; 13 slots	ea.	
PS-1014	0054007-44570-8	1" spacing; 14 slots	ea.	
PS-1015	0054007-44571-5	1" spacing; 15 slots	ea.	✔
PS-1016	0054007-44572-2	1" spacing; 16 slots	ea.	
PS-1017	0054007-44573-9	1" spacing; 17 slots	ea.	
PS-1018	0054007-44574-6	1" spacing; 18 slots	ea.	✔
PS-1019	0054007-44575-3	1" spacing; 19 slots	ea.	
PS-1020	0054007-44576-0	1" spacing; 20 slots	ea.	
PS-1021	0054007-44577-7	1" spacing; 21 slots	ea.	✔
PS-1203	0054007-44578-4	1-1/4" spacing; 3 slots	ea.	
PS-1204	0054007-44579-1	1-1/4" spacing; 4 slots	ea.	
PS-1205	0054007-44580-7	1-1/4" spacing; 5 slots	ea.	
PS-1206	0054007-44581-4	1-1/4" spacing; 6 slots	ea.	
PS-1207	0054007-44582-1	1-1/4" spacing; 7 slots	ea.	
PS-1208	0054007-44583-8	1-1/4" spacing; 8 slots	ea.	
PS-1209	0054007-44584-5	1-1/4" spacing; 9 slots	ea.	
PS-1210	0054007-44585-2	1-1/4" spacing; 10 slots	ea.	
PS-1211	0054007-44586-9	1-1/4" spacing; 11 slots	ea.	
PS-1212	0054007-44587-6	1-1/4" spacing; 12 slots	ea.	
PS-1213	0054007-44588-3	1-1/4" spacing; 13 slots	ea.	
PS-1214	0054007-44589-0	1-1/4" spacing; 14 slots	ea.	
PS-1215	0054007-44590-6	1-1/4" spacing; 15 slots	ea.	
PS-1216	0054007-44591-3	1-1/4" spacing; 16 slots	ea.	
PS-1217	0054007-44592-0	1-1/4" spacing; 17 slots	ea.	
PS-1218	0054007-44593-7	1-1/4" spacing; 18 slots	ea.	
PS-1219	0054007-44594-4	1-1/4" spacing; 19 slots	ea.	
PS-1303	0054007-44595-1	1-3/8" spacing; 3 slots	ea.	✔
PS-1304	0054007-44596-8	1-3/8" spacing; 4 slots	ea.	
PS-1305	0054007-44597-5	1-3/8" spacing; 5 slots	ea.	
PS-1306	0054007-44598-2	1-3/8" spacing; 6 slots	ea.	
PS-1307	0054007-44599-9	1-3/8" spacing; 7 slots	ea.	
PS-1308	0054007-44600-2	1-3/8" spacing; 8 slots	ea.	
PS-1309	0054007-44601-9	1-3/8" spacing; 9 slots	ea.	
PS-1310	0054007-44602-6	1-3/8" spacing; 10 slots	ea.	✔
PS-1311	0054007-44603-3	1-3/8" spacing; 11 slots	ea.	✔
PS-1312	0054007-44604-0	1-3/8" spacing; 12 slots	ea.	
PS-1313	0054007-44605-7	1-3/8" spacing; 13 slots	ea.	
PS-1314	0054007-44606-4	1-3/8" spacing; 14 slots	ea.	
PS-1315	0054007-44607-1	1-3/8" spacing; 15 slots	ea.	
PS-1316	0054007-44608-8	1-3/8" spacing; 16 slots	ea.	
PS-1317	0054007-44609-5	1-3/8" spacing; 17 slots	ea.	
PS-1318	0054007-44610-1	1-3/8" spacing; 18 slots	ea.	
PS-1503	0054007-44611-8	1-1/2" spacing; 3 slots	ea.	
PS-1504	0054007-44612-5	1-1/2" spacing; 4 slots	ea.	
PS-1505	0054007-44613-2	1-1/2" spacing; 5 slots	ea.	