

# Installation and Operating Instructions for: 6860, 6870, 6880, 6890 Key Operated Safe Lock

For S&G  
Double-Bitted Key Locks

• Für Anweisungen auf Deutsch besuchen Sie bitte die folgende Website:

• Pour obtenir les instructions en français, veuillez consulter le site ci-dessous: [www.sargentgreenleaf.com/OPinstr.php](http://www.sargentgreenleaf.com/OPinstr.php)

*This Sargent & Greenleaf key operated safe lock combines ease of key changing with a very high level of security. Its advanced design makes it easy to operate and easy to change keys. Follow these instructions carefully to get the best possible service from your lock.*

## Precautions:

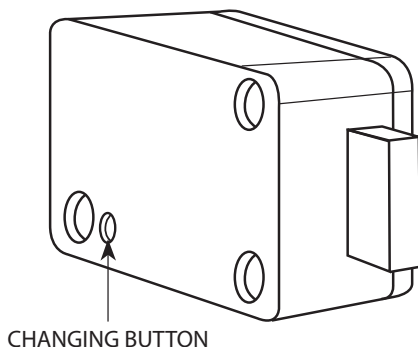
- Read this entire page before you begin to change the keys.
- Keep the safe door open until the lock has been successfully changed to new keys and checked.
- Never force the lock or key.
- Always keep your key(s) in a safe place.
- If a key is lost or misplaced, change the lock to a new key as soon as possible, even if the original key is recovered.

## Key Changing Procedure:

The key changing procedure is very simple. Follow these basic precautions to prevent problems:

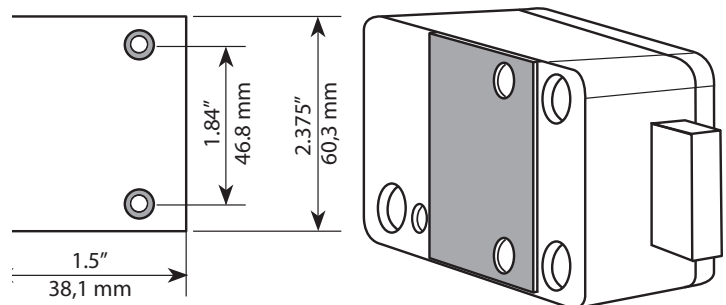
- STEP 1. Open the safe door. If the door incorporates boltwork, turn the safe handle to extend the bolts fully.
- STEP 2. With the door open, turn the key counterclockwise to its stop, and remove it from the lock.
- STEP 3. Locate the changing button on the back of the lock. Use a probe (such as the tip of a ball point pen) to depress the button. Keep the button depressed for Step 4.
- STEP 4. Insert the old key and turn it clockwise 180° until it reaches its stop. Release the changing button and remove the old key.
- STEP 5. Insert the new key, ensuring that it is fully seated into the lock. Turn the key counterclockwise 180° in a slow, deliberate motion (about 4-5 seconds) to its stop. Remove the new key. Your lock is now set to the new key, and the old key is no longer operable.

**Note:** The key is always to be removed after the opening and locking procedure so that no unauthorized person has access to the key. Always keep your key(s) in a safe place.



## Follow These Basic Considerations and Precautions:

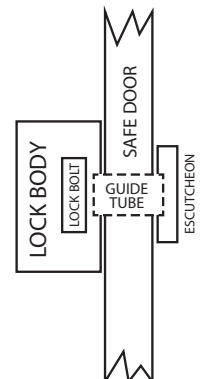
- The bolt of the Key Lock can withstand an end load up to 1.8 lbs. (8 N). Forces greater than this amount may prevent the lock from working properly.
- The key requires a minimum keyhole diameter of 1/2 inch (12,7 mm). If a guide tube is used with the lock, the minimum diameter increases to 11/16 inch (17,5 mm).
- Installer modifications to the Key Lock are not covered by the manufacturer's warranty.
- Take precautions to prevent metal shavings, safe insulation, paint, weld spatter, or other foreign material from entering the lock.
- Make sure the lock is not installed in a manner that will allow objects to come in contact with the changing button.
- The lock can be mounted right-hand (RH), left-hand (LH), vertical-up (VU), or vertical-down (VD).
- It is recommended the safe incorporate a relock device, or have a plate of at least 12-gauge steel attached to the back of the lock. Plate dimensions are given in the drawing at right. Attaching screws must be inserted into the blind holes on the lock's back.
- The lock should only be serviced and lubricated by trained service personnel. Improper service or lubrication will damage the lock and void the manufacturer's warranty.



ATTACH PLATE TO LOCK USING (2) 8-32X  
3/8" THREAD FORMING SCREWS

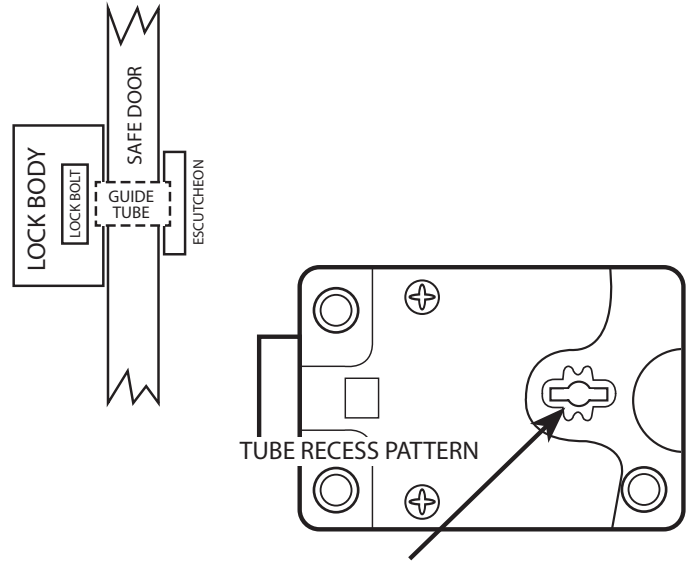
## Installation Procedure

- STEP 1. Insure that the mounting surface for the lock is smooth and flat, and that the keyhole is perpendicular to the mounting surface.
- STEP 2. Attach the lock to the mounting surface using three 1/4-20 or three M6 machine screws, depending on the dimensions of the screw threads in the mounting surface. An Option or Recommendation: Attach the safe relock device or recommended 12-gauge back plate. (see illustration above).



## Installation Procedure (Cont.)

- STEP 3. A guide tube should be used on insulated and composite safes. The tube must be cut to a length equal to the safe door thickness plus 3/16 inch (4,76 mm). This will cause the tube to mate with the pattern surrounding the keyhole and the pattern in the underside of the escutcheon. Remove all sharp edges, burrs, and metal shavings created when the tube is cut.
- STEP 4. Attach the escutcheon to the outside surface of the safe door over the keyhole.
- STEP 5. Check the operation of the key in the lock. There should be no binding or scraping of the key against the tube or the sides of the keyhole. It should turn easily and smoothly.
- STEP 6. Check the operation of the new key(s) in your lock at least three times before closing the safe door.
- STEP 7. Make sure the lock bolt does not drag or bind against the safe's bolt work or door frame (rebate).



### Sargent & Greenleaf Key Operated Safe Lock EN1300 Specifications

**Attaching Screws:** Use only the screws provided with the Lock. They must engage the mounting plate by at least four full threads. Do not use lock washers or thread sealing compounds.

**Recommended Attaching Screw Torque:** 30 to 40 inch-pounds [33.9 to 45.2 dNm]

**Minimum/Maximum Spindle Hole Diameter:** The key requires a minimum keyhole of 1/2 inch (12,7 mm) and a maximum keyhole of 0.56 inch (14,2 mm). If a guide tube is used with the lock, the minimum diameter increases to 11/16 inch (17,5 mm) and the maximum diameter to 0.72 inch (18,3 mm).

**Lock is Designed to Move:** 0 lbs. (0 Newtons) continuous or maximum.

**Lock Bolt Maximum Free Movement:** 0.445 inch (11,3 mm). At least 0.106 inch (2,70 mm) of the lock bolt remains outside the edge of the lock case when bolt is fully retracted.

**Maximum Bolt End Pressure:** The bolt of the Key Lock can withstand an end load up to 1.8 lbs. (8 Newtons). Forces greater than this amount may prevent the lock from working properly.

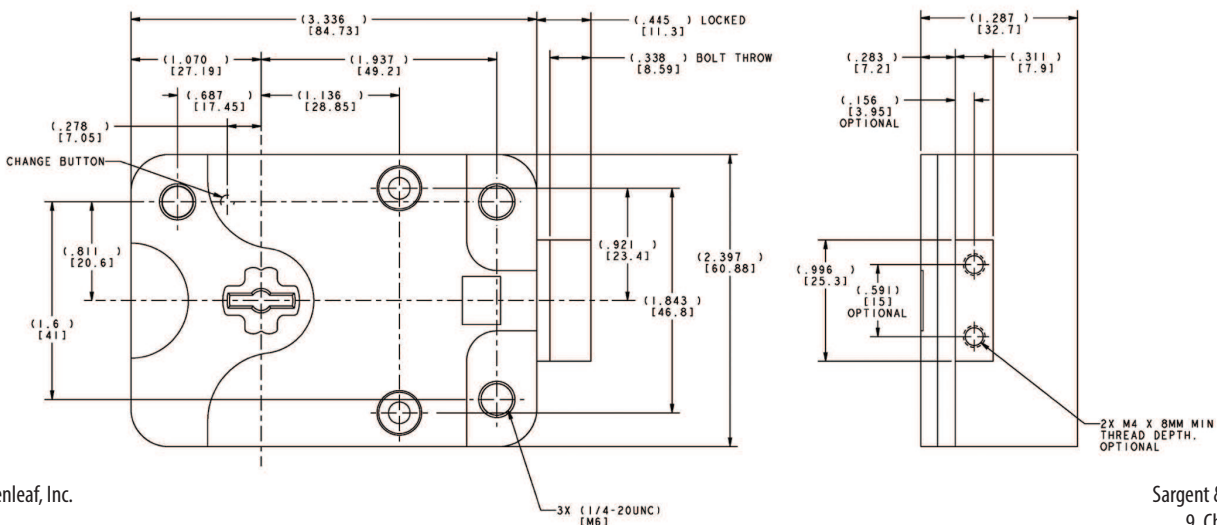
**Maximum Bolt Side Pressure:** The safe and container boltwork or locking cam designs must never apply any side pressure on the lock bolt.

**Mounting Environment:** The lock body is designed to be mounted inside a secure container. Precautions must be made to prevent metal shavings, safe insulation, paint, weld spatter, or other foreign material from entering the lock. The container must be constructed to offer protection against physical attack directed at the lock. The amount of protection is dependent on the desired level of security for the system as a whole. Lock protection may include barrier materials, relock devices, thermal barriers, thermal relock components, or any combination of these. Relock device attaching screws must NOT be longer than the depth of the tapped attaching screw hole provided in the lock case. A minimum distance of 0.150 inch (3,8 mm) is recommended between the end of the lock case and the closest approach of the safe's blocking bar or cam plate (which is normally blocked by the extended lock bolt). Maintaining this clearance will allow the lock to deliver optimum performance. The container should be constructed to prevent access to the key lock without the use of tools when the container door or drawer is left open. Make sure the lock is not installed in a manner that will allow objects to come in contact with the changing button.

**Handing:** The lock is designed to be mounted right-hand, left-hand, vertical-up, and vertical-down only.

*Note: Every installation of this product must comply with these requirements and those in the product installation instructions to qualify for the manufacturer's warranty and to comply with EN1300 requirements.*

Dimensions: Sargent & Greenleaf 6860, 6870, 6880, 6890  
(inches)  
[millimeters]



Sargent & Greenleaf, Inc.  
PO Box 930  
Nicholasville, KY 40356  
Phone: (800)-826-7652 Fax: (800)-634-4843  
Phone: (859)-885-9411 Fax: (859)-887-2057

[www.sargentgreenleaf.com](http://www.sargentgreenleaf.com)

Sargent & Greenleaf S.A.  
9, Chemin du Croset  
1024 Ecublens, Switzerland  
Phone: +41-21 694 34 00  
Fax: +41-21 694 34 09