

## Installation and Operating Instructions

# 6860, 6870, 6880, 6890, 6980, 6990



SARGENT AND GREENLEAF®

## Key Operated Safe Lock For S&G/FAS Double-Bitted Key Locks

*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.*

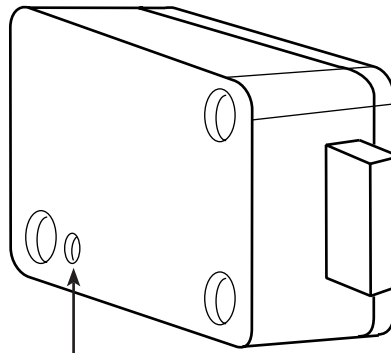
### INTRODUCTION

The key changing procedure is very simple. Follow these basic 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

- 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 key.
- Step 5. Insert the new key and turn it counterclockwise 180° to its stop. Remove the new key. Your lock is now set to the new key, and the old key is no longer operable.
- Step 6. Check the operation of the new key(s) in your lock at least three times before closing the safe door.



**CHANGING BUTTON**

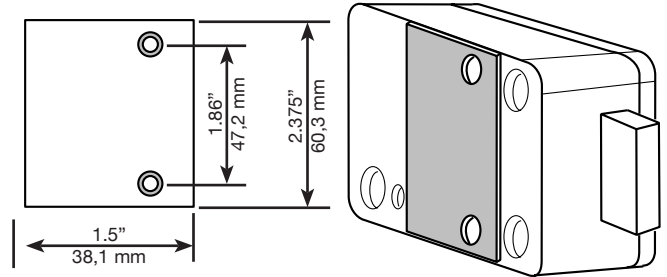
Sargent & Greenleaf, Inc.  
PO Box 930  
Nicholasville, KY 40340-0930  
Phone: (800)-826-7652 Fax: (800)-634-4843  
Phone: (859)-885-9411 Fax: (859)-887-2057

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

## GENERAL CONSIDERATIONS

### Follow these basic precautions:

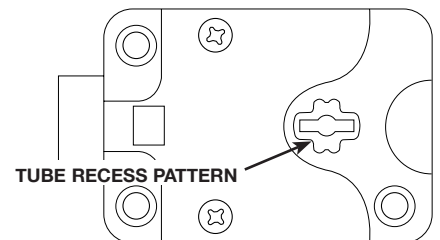
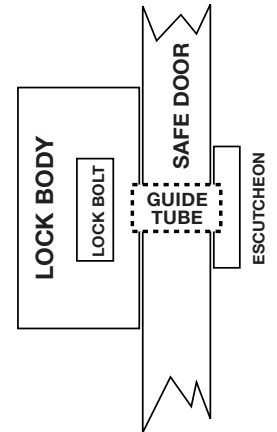
- The bolt of the Key Lock can withstand an end load up to 1.8 lbs. (8 N). Forces greater than this amount may prevent the lock from working properly.
- The key requires a minimum keyhole diameter of 1/2 inch (12,7 mm). If a guide tube is used with the lock, the minimum diameter increases to 11/16 inch (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).
- The safe must 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) 8-32 X 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. Attach the safe relock device or recommended back plate (see illustration above).
- 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 boltwork or door frame (rebate).



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

**Minimum/Maximum Spindle Hole Diameter:** The key requires a minimum keyhole of  $\frac{1}{2}$  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  $\frac{11}{16}$  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.

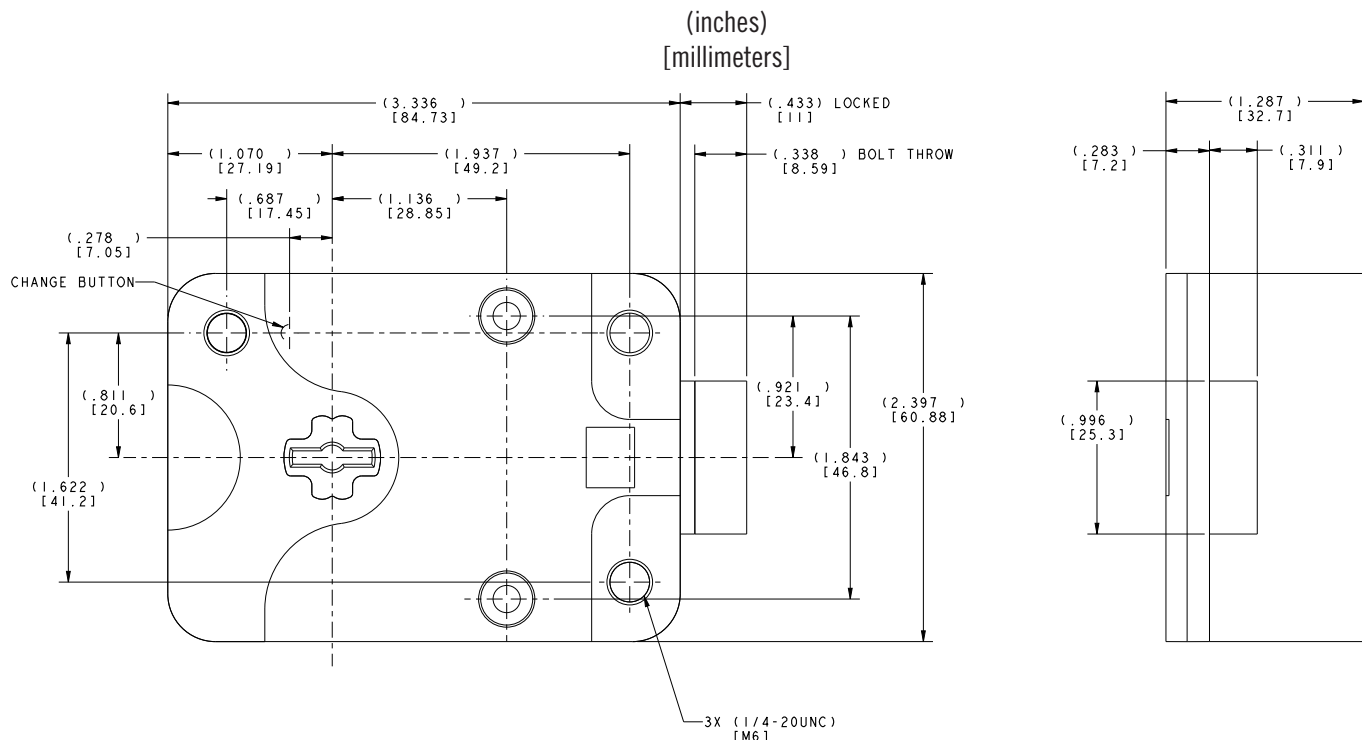
**Mounting Environment:** The lock body is designed to be mounted inside a secure container. Precautions must be made to prevent metal shavings, safe insulation, paint, weld spatter, or other foreign material from entering the lock. The container must be constructed to offer protection against physical 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.



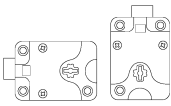
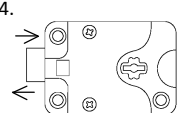
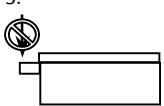


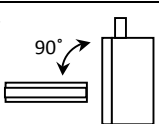

**Handing:** The lock is designed to be mounted right-hand, left-hand, vertical-up, and vertical-down only.

*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 / FAS 6860, 6870, 6880, 6890, 6980, 6990



|   | S – Monteringsanvisning<br>SF – Asennusohje  | N – Monteringsanvisning<br>DK - Monteringsanvisning  | D – Installationsanweisung  |
|---|--|--|---|
| 1.<br>   | Min håldiameter för nyckel:<br>Ø12.7mm (Ø17.5mm med rör)<br>Max håldiameter: Ø14.2mm<br>(Ø18.3mm med rör)<br><br>Min reiän halkaisija: Ø12,7 mm<br>(Ø17.5mm kanssa putki)<br>Max reiän halkaisija: Ø14.2mm<br>(Ø18.3mm kanssa putki) | Min hull diameter nøkkel:<br>Ø12.7mm (Ø17.5mm med rør)<br>Maks hull diameter: Ø14.2mm<br>(Ø18.3mm med rør)<br><br>Min hul diameter nøgle: Ø12.7mm<br>(Ø17.5mm med rør)<br>Max hul diameter: Ø14.2mm<br>(Ø18.3mm med rør) | Min Lochdurchmesser der Schlüssel:<br>Ø12,7 mm (Ø17,5 mm mit hülsen)<br>Max Lochdurchmesser: Ø14,2 mm<br>(Ø18,3 mm mit hülsen)    |
| 2.<br>   | Låset monteras med 3 skruvar,<br>M6 x 30 eller motsvarande<br><br>Lukko asennetaan kolmella<br>ruuvilla, M3 x 30 mm tai<br>vastaavilla   | Låset monteres med 3 skrue, M6 x<br>30 mm eller tilvarande.<br><br>Låsen monteres med 3 skrue, M6 x<br>30mm eller tilsvarende.   | Das Schloß ist mit 3 Schrauben M6 x<br>30 mm oder ähnlichen montiert.   |
| 3.<br>   | Låset kan monteras antingen<br>horisontellt eller vertikalt.<br><br>Lukko voidaan asentaa joko<br>vaakasuoraan tai pystysuoraan.   | Låset kan monteres enten<br>horisontalt eller vertikalt.<br><br>Låset kan monteres enten<br>horisontalt eller vertikalt.   | Das Schloß kann in alle 4<br>Einbaurichtungen montiert werden.  |
| 4.<br>   | Regeln får belastas med max 8N i<br>rörelseriktningen.<br><br>Telkkiä voidaan kuormittaa<br>enintään 8N liikesuuntaan.   | Reilen tillates belastes med maks<br>8N i bevegelsesretningen.<br><br>Riglen må belastes med max 8N i<br>bevægelsesretning.  | Der Riegel darf mit maximal 8 N von<br>vorne belastet werden.   |
| 5.<br> | Regeln får ej belastas från<br>ovansidan<br><br>Telkkiä ei saa rasittaa yläpuolelta.   | Reilen må ikke belastes fra<br>oversiden.<br><br>Riglen må ikke belastes på<br>oversiden.  | Der Riegel darf nicht von oben<br>belastet werden.  |
| 6.<br> | Vid behov av smörjning tillförs<br>Assa låsspray 807718 100 000<br>eller motsvarande på nyckelaxet.<br>Låskistan får ej smörjas om ej<br>annat meddelas.<br><br>Lukkoa ei saa rasittaa yläpuolelta.                                  | Låsen må ikke smøres om ikke<br>annat meddeles.<br><br>Låsen må kun smøres med<br>anbefalet smøremiddel.   | Das Schloß muß und sollte nicht<br>geschmiert/geölt werden, sofern auf<br>dem schloß selbst nichts<br>gegenteiliges vermerkt ist. |
| 7.<br> | Låset måste skyddas mot<br>svetsstänk, färg, etc.<br><br>Lukko on suojattava<br>hitauroiskielta, maalilta ym.  | Låsen må beskyttes mot<br>svelsegnister, maling, etc.<br><br>Låsen skal beskyttes mod<br>svejestænk, farve, etc.   | Das Schloß muß vor staub,<br>metallspäne, farben und lacken, etc.<br>geschützt sein.  |
|   | <b>Nyckelrör<br/>Avainputki</b>  | <b>Nøkkelerør<br/>Nøglerør</b>   | <b>Schlüsselführungshülse</b>   |
| 1.<br> | Röret måste monteras vinkelrätt<br>mot låset. Röret kapas 5mm<br>längre än dörrtjockleken.<br><br>Putki on asennettava<br>kohtisuoraan lukkoa vastaan.<br>Putki on leikattu 5mm pidempi<br>kuin oven paksuus.                        | Røret må monteres vinkelrett på<br>låsen. Røret er kuttet 5mm lengre<br>enn døra tykkelse<br><br>Røret skal monteres vinkelret mod<br>låsen. Røret skæres 5mm længere<br>end døren tykkelse.                             | Die Führungshülse muß senkrecht<br>zum schloß montiert werden. Die<br>Röhre ist 5mm länger als die Tür<br>Dicke.                  |
| 2.<br> | Eventuella grader efter<br>kappingen måste noggrant<br>avlägsnas.<br><br>Mahdolliset katkaisussa<br>syntyneet jäysteet on tarkoin<br>poistettava.  | Eventuelle grader etter kappingen<br>må fjernes nøye.<br><br>Eventuella ujevnheder/grader skal<br>fjernes omhyggeligt.   | Die Enden/Kanten der führungshülse<br>dürfen keine scharfen ecken haben.  |