# **S&G® 6300 Electronic Safe Lock**Multiple Compartment Lock Control

# **Installation Instructions**



# **Mounting Considerations:**

- Sargent & Greenleaf 6300 Multiple Compartment Electronic Safe Lock has been designed to use the same mounting screw locations and occupy the same space as the S&G 6730 mechanical lock, long recognized as an industry standard. The 6300 uses standard mounting dimensions to simplify retrofit in existing safes.
- The keypad is larger than standard S&G dial rings for mechanical locks. The 6300 keypad will cover any scratches or paint blemishes left by the old dial and ring.
- Modifications to the lock (including lock bolt attachments) are not recommended, and will void the manufacturer's warranty.
- You should connect all cables (control unit, keypad, lock, and power) to check the functions of the lock prior to installation. Follow the procedures given in the Operating Instructions. Avoid pressure to the end of the lock bolt during these checks.
- Do not allow the safe's blocking bar or cam plate to depress the electronic lock's bolt farther than it retracts during normal motor operation. This can lead to inconsistent lock operation.
- A minimum distance of .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.
- Personal data that can be directly related to a code holder, such as a birth date, street number, or phone number, should not be used in creating a lock code. Avoid codes that can be easily guessed.



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# **Installation Notes**

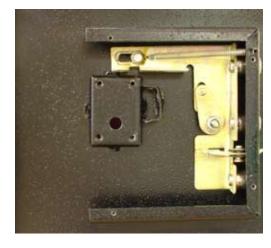
Although the S&G® 6300 is normally easy to install, we recommend the following procedures be performed only by an experienced locksmith or safe technician. Your safe may incorporate relocking devices that are attached to the lock body. Misalignment or detachment of these devices can result in a lockout; a condition where the safe probably cannot be opened without damage.

The S&G® 6300 requires AC power via an included plug-in transformer. Batteries are not required. However, two 9-volt alkaline batteries can be connected to wired connectors that are normally concealed in a compartment in the bottom of the keypad in the event of a power failure. We strongly recommend Duracel® brand batteries for this purpose.

# Installation . . . Step 1

Remove the existing lock (if one is present). The mounting plate should be smooth and flat, with either 1/4–20 or M6 mounting screw holes. The wire channel (spindle hole) must have a minimum diameter of 3/8 inch (9.5 mm). Use a reamer or round file to remove any sharp edges from the wire channel that might damage the cable insulation. The mounting surfaces for both the lock and the keypad should be smooth and flat, free of weld spatter and significant paint lumps.

The 6300 lock bodies can be mounted right-hand, left-hand, vertical-up, or vertical-down without any modifications or adjustments.



# Step 2

Using a medium phillips screwdriver, remove the single screw near the bottom of the keypad's front surface. Lift the bottom of the keypad away from the base first. The top of the keypad has an extension that fits into a recess in the base. After the bottom is separated, the top can be slid downward slightly for complete keypad removal. You can then attach the base to the front of the safe. The mounting holes match those of dial rings used with mechanical combination locks.

You can use the old ring's mounting screws or the appropriate ones provided in the 6300 accessory package. Use two screws.



## Step 3

Use a file or reamer to remove any burrs or sharp edges around the safe's spindle hole. Then route the cable assembly from inside the safe through the spindle hole.

The connector requires a minimum spindle hole diameter of 3/8" (9,5 mm). Do not attempt to force the connector through a smaller opening.



# Step 4

The connector is shaped so that it will fit into the keypad's circuit board receptacle only when aligned correctly. Insert the connector into its receptacle. If it does not slide easily into place, do not force it. This means you need to turn it 180° before attempting to insert it again.



Place the keypad cover over its mounting base. Hook the tab at the top of the cover into the matching slot in the mounting base, then fix the cover to the base with the single attaching screw.







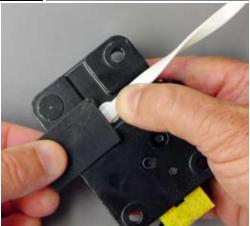


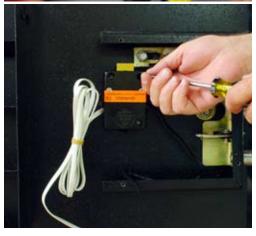
# Step 6

The cable coming from the lock body stays inside the safe and is not routed through the door's spindle hole, which already contains a cable. Route the e.c.u. cable in the channel cast into the underside of the lock case as you position the lock on the mounting surface. It is strongly recommended that you cover the cable in the lock body channel with the self-stick foam cushion shipped with the lock. Make sure the cable is not pinched or crimped.

# Step 7

Use three 1/4-20 (or metric M6) screws to securely attach the lock to the mounting plate. The lock uses a bolt-through cover that allows mounting with the cover in place. Removing the cover will void the product warranty.





## Step 8

Make sure that the lock bolt does not bind against the safe's boltwork. 6300 series locks are sensitive to bolt end and side pressure. The safe's blocking bar or cam must not depress the lock's bolt farther than it retracts under normal motor operation. Check to make sure this doesn't happen when the safe handle is moved to retract the door bolts (unlocking the safe).

This photograph shows boltwork in the locked position. Note that there is a small gap between the end of the safe's locking bar and the side of the lock bolt. This clearance, no matter how small, is important to achieve in your installation.

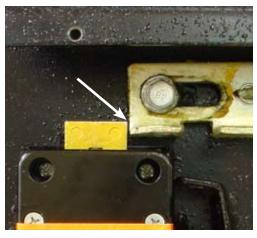
If necessary, you can remove a small amount of material from the safe's blocking bar so that when the safe's boltwork is fully thrown to the locked position, there is a gap, no matter how small, on all sides of the lock's bolt.

# Step 9

A minimum distance of .150" (3,8 mm) must be maintained between the end of the lock case and the closest approach of the safe's blocking bar or cam plate.

The photo directly to the right shows an installation where this gap is not present. Lock operation will likely be intermittent at best and lock damage may result over time.

The next photo shows a proper installation where a **minimum** .150" (3,8 mm) gap between the end of the lock body and the closest approach of the blocking bar is maintained.







#### Step 10

The electronic control unit (e.c.u.) should be mounted on the inside of the safe door if there is sufficient space (5.3" W x 6.4" H x 1.55" D—or 13,5 cm x 16,3 cm x 4 cm). Otherwise, it can be mounted on an inner safe wall. The e.c.u. should be mounted as close to the lock as possible to minimize cable length. If the e.c.u. is mounted inside the safe (rather than on the door), protect cables using flexible sleeving (not included), and provide service loops across the door hinge area to avoid cable stress.

Use the holes in the e.c.u. base plate to mark the four mounting screw holes. Use a #23 bit to drill the holes. Then attach the e.c.u. using four #8-32 thread-cutting screws provided.

Drill a maximum 1/4" hole through the back of the safe for power wires. Use a reamer or file to smooth rough edges. The hole cannot be in a location that allows direct viewing or manipulation of any lock parts.



# Step 11

Special features requiring e.c.u. connections are "Unlocked Relay," "Silent Alarm Relay," "Remote Control," and "Door Switch Input." Here are the specifications for these connections, which are made using a small slotted screwdriver to clamp wires in the appropriate terminal.

#### **Unlocked Relay Contacts**

1 amp @ 24 volts DC

# **Silent Alarm Relay Contacts**

1 amp @ 24 volts DC

## **Remote Control Input**

9 to 15 volts DC @ less than 30 mA

#### **Door Switch Input**

SPST switch only (no voltage or current input)

## Step 12

Connect the cable from the keypad to the e.c.u. jack marked "To Panel." Connect the cable from the lock to the e.c.u. jack marked "To Lock #1." If an additional lock is used, it is connected to the jack marked "To Lock #2."

Run the power supply leads from the plug-in transformer through the hole you drilled in the back of the safe to the e.c.u., and plug it into the receptacle marked "Power Supply."

#### **AC Power Supply Specifications**

input 120 to 240 volts AC 60 Hz 65 mA output 9 volts DC 2.2 A

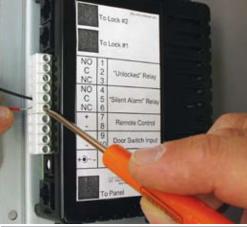
# Step 13

It is recommended that you check lock functions before installing the logo button that covers the keypad screw.

Remove the protective backing from the logo button, and press it into place in the recess provided over the keypad screw.

The installation is complete. Refer to your lock's operating instructions.

CHECK TO MAKE SURE YOUR LOCK OPENS AT LEAST THREE TIMES BEFORE CLOSING THE SAFE DOOR.

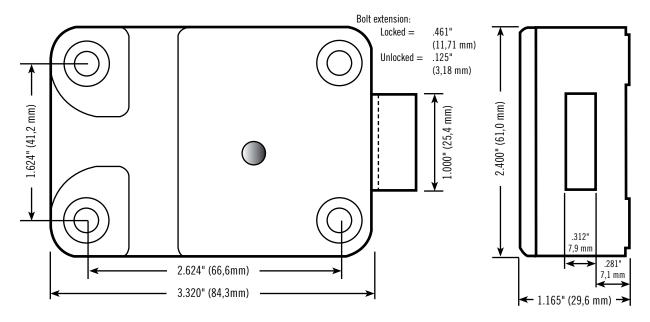








# IMPORTANT DIMENSIONS . . .



#### WARRANTY

Seller warrants that for one year\* from the date of shipment from Seller's point of manufacture, the goods shall be free from defects in material and workmanship, provided the goods are normally and properly used according to the Seller's written instructions.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. S&G DOES NOT WARRANT THAT THE GOODS ARE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE EXCEPT AS EXPRESSLY PROVIDED HEREIN.

Seller's entire liability and Buyer's exclusive remedy in the event that the goods do not conform to the foregoing warranty shall be Seller's repair or replacement of the goods (including payment of freight costs to and from point of Manufacture).

UNAUTHORIZED USE OF COMPONENTS NOT MANUFACTURED BY THE SELLER IN CONJUNCTION WITH SELLER'S PRODUCTS INVALIDATES THE WARRANTY. ANY MODIFICATIONS TO PRODUCTS NOT PERFORMED BY S&G INVALIDATES THE WARRANTY. SELLER SHALL HAVE NO LIABILITY FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT OR SPECIAL DAMAGES. SELLER DOES NOT WARRANT ITS LOCK PRODUCTS TO BE IMPERVIOUS TO FORCIBLE OR SURREPTITIOUS ENTRY, AND SELLER SHALL HAVE NO LIABILITY FOR DAMAGE TO OR LOSS OF PROPERTY SOUGHT TO BE PROTECTED BY ANY SUCH LOCK.

\*6100 series electronic locks, 6150/6300 series electronic locks, 2002/2003/2004/2005 series electronic locks, 6730 series mechanical combination locks, and Environmental Padlocks carry a two year warranty. Arm-A-Dor® devices carry a five year warranty on mechanical components and a one year warranty on alarm components.



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