

6126 Audit Lock and 6128 ASERIES Motorized Electronic Lock Installation Instructions



This Sargent & Greenleaf electronic lock combines ease of operation with a high level of security. Advanced electronic circuit design makes it easy to operate. Follow these instructions carefully to get the best possible performance from your lock. Read these instructions completely before beginning installation.

Mounting Considerations

- This lock is designed to use the same mounting screw locations and occupy nearly the same space as a standard S&G 6730 mechanical lock. The 6100 series uses standard mounting dimensions to simplify retrofit in existing safes.
- The keypad diameter is 4 inches (101,6 mm). This is slightly greater than the diameter of standard S&G dial rings for mechanical locks. The 61KP keypad will cover any scratches or paint blemishes left by a previously mounted mechanical lock.
- Modifications to the lock (including lock bolt attachments) are not recommended, and will void the manufacturer's warranty.
- A minimum distance of .150 inch (3,8 mm) is required between the end of the lock case containing the bolt and the closest approach of the safe's blocking bar or cam plate which is normally blocked by the lock bolt.
- Do not allow the safe's blocking bar or cam plate to depress the electronic lock's bolt farther into the lock case than it retracts on its own during normal motor operation. This can lead to inconsistent lock operation and eventual failure.
- You should install fresh alkaline batteries in the keypad and connect the lock cables to the keypad and keypad extension to check the functions of the lock prior to installation. S&G strongly recommends Duracell® alkaline batteries.



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Installation Notes

Sargent & Greenleaf recommends that installation be performed only by an experienced locksmith or safe technician. Your safe may incorporate relock devices that are attached to the lock body. Misalignment or detachment of these devices can result in a lockout, a condition likely to require damaging the safe to open it.

Your lock cables may be connected to the keypad and extension base when you receive the lock kit. If this is the case, disconnect the cable from the keypad first, then disconnect the cable from the extension base. To disconnect, pull only on the connectors, not the cables.

Under no circumstances should the cover of the lock be removed.

Be careful to avoid damaging or crimping the wire cables when handling the assembly.

Installation

Step 1: Remove the existing lock if one is present. The mounting plate should be smooth and flat, with 1/4-20 (M6) mounting screw holes. The wire channel (spindle hole) must have a minimum diameter of 5/16 inch (8 mm).

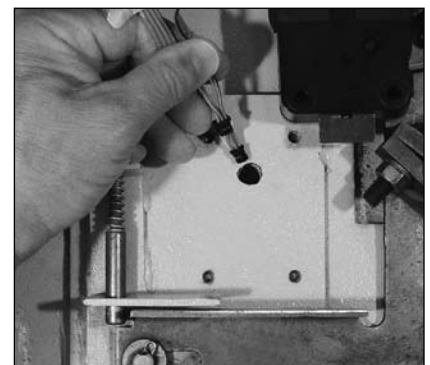
Use a reamer or round file to remove any sharp edges from the wire channel (spindle hole) that might damage the wire cables. Do this on both the inside and outside of the safe door.

The 6128 lock body can be mounted right-hand, left-hand, vertical-up, or vertical-down without any modifications or adjustments.



Step 2: Run both cable connectors through the wire channel. Gently pull the connectors to ease the cables through the safe door. Pull enough cable to allow connection to the keypad extension base and the keypad (6" to 8" of cable emerging from the front of the safe door). Later in the installation process, excess keypad extension cable will be pulled back inside the safe door.

Make sure cables are not crimped or stressed at any point.

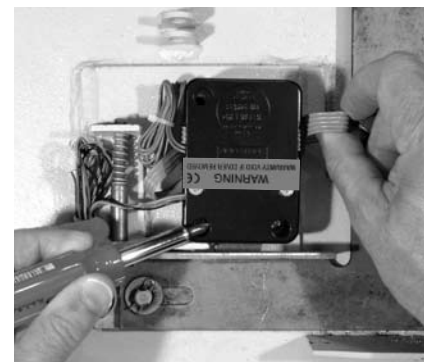


Step 3: Using two of the 1/4-20 (or M6) screws in the kit, loosely attach the lock body to the safe's mounting plate. This is just to hold it in place during cable attachments to the keypad and keypad extension. Be very careful to avoid crushing or crimping the cables.

Note the black/red/green wire bundle. This is for the *bolt position indicator*.

Note the blue wire loop. This is the *secure loop*. This is a closed circuit that may be used in applications requiring switches or other devices to signal the lock that boltwork is thrown, the door is closed, or some other action has taken place.

Both sets of wires should be bundled and placed where they will not interfere with moving boltwork components for the time being.



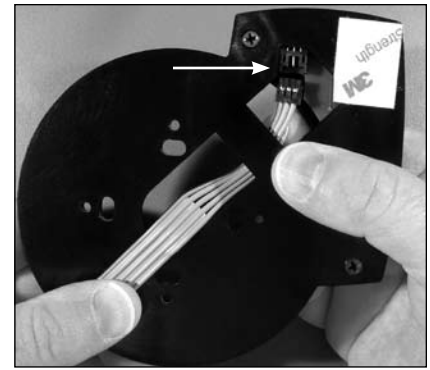
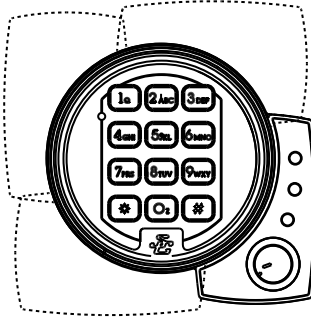
Step 4: Skip this step if there is no serial number plate in your kit. Otherwise, clean the front surface of the safe door. It needs to be clean to allow the number plate to adhere. Locate the aluminum serial number plate in the kit. Remove the clear protective film from the front of the plate, and affix the included serial number label as shown in the photograph.

Remove the protective paper backing on the underside of the plate, then run both cables through the center hole of the plate. Place the plate on the front of the safe, carefully lining up the mounting screw holes in the plate with the mounting screw holes in the safe door. The plate will stick in place when pressed against the door.



Step 5: From the front of the safe, connect the 5-conductor cable (the larger one) to the keypad extension base. The connector has two raised ribs that mate with slots in the extension's receptacle, allowing the connector to seat only when oriented correctly. Route the cable as shown here, and make sure the connector is fully seated in the keypad extension receptacle.

Note the self-adhesive pad to the right of the cable receptacle. Once the connector is plugged in, remove the protective backing from this pad. Pull all excess cable through the center opening to the front of the extension base. Then line up the base's mounting screw holes with those in the door, and press the extension against the door. The extension can be mounted in four different orientations. Pick the one that best suits your particular application.



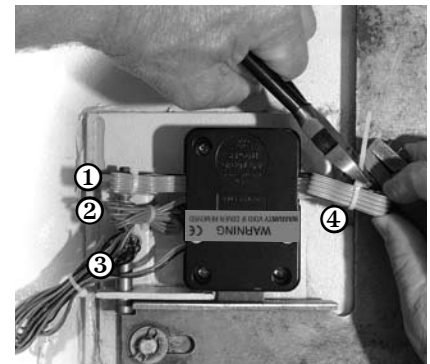
Step 6: Place the keypad base over the keypad extension, pull all excess cable through the center hole (as shown), line up the keypad base mounting screw holes with those in the door, and use the included 8-32 (M4) machine screws to securely fasten the mounting base to the door. It will also hold the keypad extension and number plate (if used) firmly in place. The keypad will only fit into the base one way. The raised, circular post near the edge of the base will be very near the bottom of the keypad. Use this feature as a reference to help you orient the base correctly before you fasten it into place.



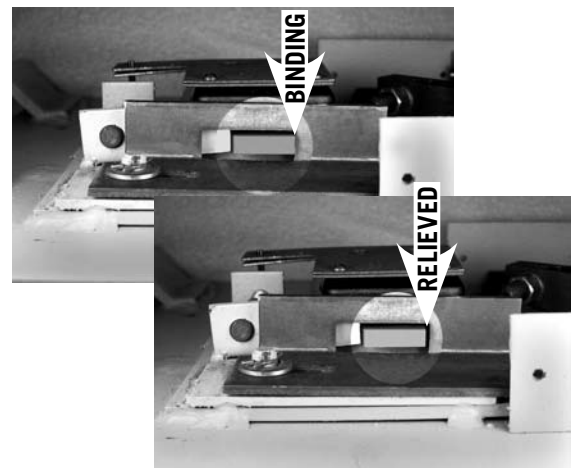
Step 7: Inside the safe, remove the lock mounting screws so that you can carefully pull the excess extension base cable inside. It is important to make sure the keypad and extension cables are in recessed channels underneath the lock case before the case is securely attached by the three mounting screws. Once placed in the most convenient channel, each cable should be protected underneath the case by a self-adhesive foam pad (included in the lock kit). It is very important that cables not be folded, crimped, or crushed beneath the lock case.

There are four sets of wires that must be carefully placed where they will not interfere with or be damaged by moving boltwork. These are:

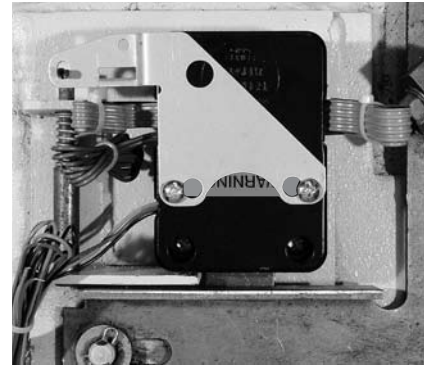
1. excess keypad cable (4-conductor cable)
2. secure loop
3. bolt position indicator wires (may or may not be present in your lock)
4. excess keypad extension cable (5-conductor cable)



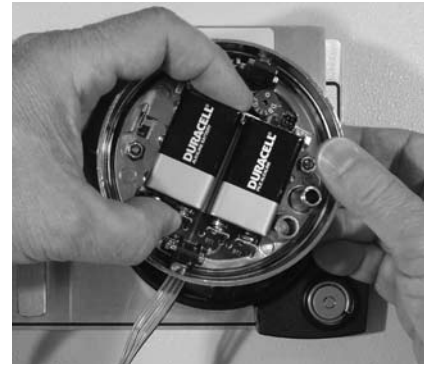
Step 8: Make sure the lock bolt doesn't bind against the safe's boltwork. The top photo shows binding of the edge of the cutout in the safe's blocking bar, even though the boltwork is fully thrown to the locked position. In the bottom photo, the binding has been relieved by removing a small amount of material from the side of the blocking bar cutout. It is important that there is clearance on all sides of the lock's bolt when the boltwork is in the fully locked position. Binding will impair the lock's performance. Any necessary modifications should be made to the boltwork, not the lock body.



Step 9: If your safe incorporates a relock device, you will need to attach the plate that normally holds it in check to the lock body. This is usually done at the lock's cover screw locations. Remove the cover screws. Typically, they will be replaced with longer 8-32 machine screws. Your replacement screws must engage the threaded holes in the lock body by at least four threads. Relock device designs vary from safe to safe. No matter what style is used, you must make sure the replacement cover screws hold the lock cover firmly against the lock body, and that the relock device plate holds the device securely in check. Otherwise, there is risk of a lockout. After the plate is installed, once again check to make sure wires and cables are secured so that they will not come into contact with moving boltwork or anything else that can damage them.



Step 10: At the front of the safe, install a new 9-volt battery in each of the keypad's two battery holders. Duracell® brand batteries are recommended. **Support the top of each holder with a thumb or finger as each battery is inserted. This will prevent bending or breaking the holder.**



Step 11: The keypad cable connector is shaped so that it will fit into the keypad receptacle only when aligned correctly. Insert the connector into the receptacle in the underside of the keypad. If it does not seat easily, do not force it. This means you need to turn it 180° before attempting to insert it again.



Step 12: Place the keypad over the base. Make sure the keypad cable is clear of the pad's two spring clips as you push the keypad firmly onto the base. It should snap into place. If you need to remove the keypad, pull the bottom (area nearest the S&G logo) away from the mounting base first. Never allow the keypad to hang by the attached cable.



Step 13: The installation is complete. Follow the instructions on the next page to make sure the lock system is fully operational before you close the safe door for the first time.



Step 14: If the lock you just installed is a model 6126 Audit Lock, refer to the operating instructions to check for proper operation using the factory default code(s).

If the lock you just installed is a model 6128 A-Series, and if an iButton Touchkey was provided to you, perform the following test of the system. All these steps should be followed two times with the door remaining OPEN. It may be closed at Step 5 on the third trial. You will need to contact your System Administrator for three operation codes to complete the three trials. A different operation code is used for each trial.



Note: The red LED on the keypad lights whenever a button is pressed and during some other operations. However, your attention should be on the three LEDs located on the keypad extension during this series of procedures.

1. Snap the Touchkey into the blue receptacle as shown.
2. Enter the PIN followed by # (example 1234#).
3. Enter the operation code followed by # (example 12345678#).
4. Lock will BEEP three times and its bolt will retract. Turn the safe handle to verify that the lock is unlocked.
5. Turn the safe handle to the locked position. The safe door should remain open for the first and second operational trials. You can close the safe door at this step during the third operational trial. The lock bolt will extend, and the lock will BEEP three times. In addition, the green STATUS 1 LED on the keypad extension will light momentarily.
6. Remove the Touchkey.
7. Test the safe's handle to make sure it is securely locked.

Note: The Touchkey will be disabled if removed from the keypad extension before the lock operation is complete. Be sure to wait for the three beeps after the lock is locked before removing the Touchkey. The beeps occur approximately three seconds after the lock bolt extends.

When a lock code or Touchkey are not valid, or when the procedure given above is not followed properly, the lock will emit a long error tone and the red LED on the keypad extension (STATUS 2) will light momentarily. If the lock indicates an error two times in a row, STOP and contact your System Administrator for further instructions.

IMPORTANT DIMENSIONS . . .

