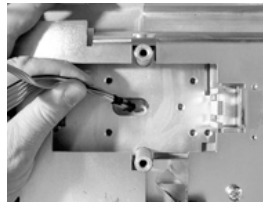
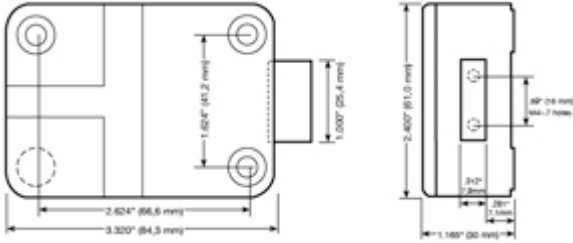


Installation Instructions for the S&G 6127 Audit Lock and 6129 ASERIES

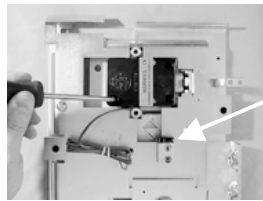
Modifications to the lock are not recommended and will void the manufacturer's warranty. When the lock bolt is not attached directly to the safe's boltwork, a minimum distance of .150 inch (3,8 mm) is required between the end of the lock case containing the bolt and the closest approach of the safe's blocking bar or cam plate that is normally blocked by the lock bolt. Do not allow the safe's blocking bar or cam plate to rub or bind against the end of the lock bolt when the lock bolt is retracted as far as the lock motor will pull it. This can lead to inconsistent lock operation or failure. The lock is designed to have boltwork attached to the end of the lock bolt. It's designed to move a 2.25 (10 newton) load. The maximum intermittent load must not exceed 5.5 lbs. (25 newtons). The direction of movement of the device attached to the end of the lock bolt must be in line with the direction of movement of the lock bolt. The lock requires installation of a micro switch (not included) to activate extension of the lock bolt. If your lock does not have cables already connected to the keypad and keypad extension, temporarily connect them now as indicated in these instructions. Also connect the ends of the blue wires together. You should install fresh alkaline batteries in the keypad and check the function of the lock prior to installation by pressing 10101010# and observing the lock bolt retract, then extend 15 seconds later. S&G recommends Duracell® alkaline batteries. After this check, disconnect the cables from the extension base and keypad by pulling on the connectors (NOT on the cables themselves). The installer should wear a properly grounded ESD wrist strap while handling the lock to avoid ESD damage.



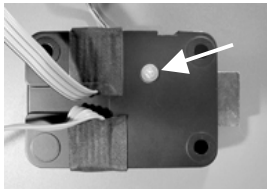
3. Run both cable connectors through the wire channel. Gently pull the connectors to ease the cables through the hole. Pull 6" to 8" of cable to the front of the safe door. Later in the installation, excess keypad extension cable will be pulled back inside the safe door. **Make sure cables are not crimped or stressed at any point.**



1. The mounting surface for the lock should be smooth and flat, with 1/4-20 (or M6) mounting screw holes. The wire channel (spindle hole) must have a minimum diameter of 5/16 inch (8 mm). Use a reamer or file to remove any sharp edges from the wire channel (spindle hole) that might damage the wire cables. Do this on the inside and outside of the safe door.



4. 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*

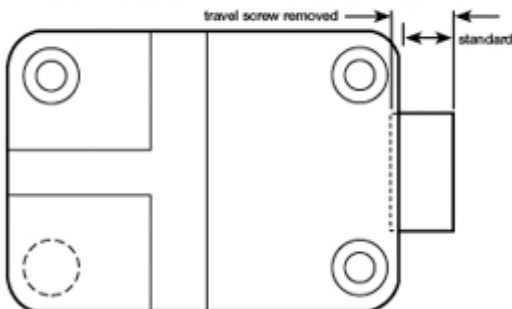


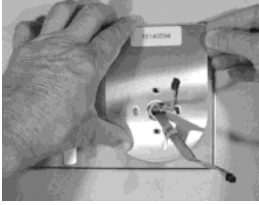
2. Determine the bolt throw required for your application. If it's more than 0.46" (11,7 mm), remove the bolt travel adjustment screw and add a 0.075" (2 mm) spacer (not included) to the end of the lock bolt when attaching the safe's boltwork to the lock bolt.

indicator, a dry contact switch (200VDC, 0.5 amp max.) The black wire is common, the green wire completes a circuit to the black wire when the lock bolt is retracted, and the red wire completes a circuit to the black wire when the lock bolt is extended. The *BPI* can trigger any switch-activated device.

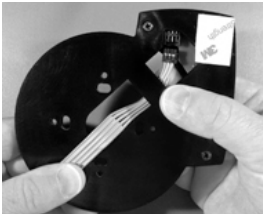
Note the two blue wires with spade connectors at the ends. These must be connected to a boltwork position switch (not included) that closes a circuit formed by the two blue wires whenever the safe's boltwork is positioned so the lock's bolt can extend to lock the container. The lock bolt will NOT extend if the circuit formed by the blue wire loop is open. An example of a boltwork position sensing switch is indicated by a white arrow in the photo above.

Standard bolt extension:	Travel screw removed:
Locked = .461" (11,71 mm)	Locked = .461" (11,71 mm)
Unlocked = 0 (flush with case)	Unlocked = -.08" (-2 mm) (recessed)
Throw = .461 (11,71 mm)	Throw = .54" (13,71 mm)





5. Skip this step if there is no serial number plate in your kit. Otherwise, clean the front surface of the safe door so the number plate will adhere. Remove the clear protective film from the front of the plate, and affix the included serial number label as shown. Next, 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.

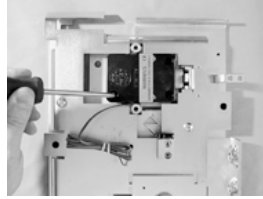


VIEW FROM BACK OF
KEYPAD EXTENSION BASE

6. From the front of the safe, connect the five-conductor cable (the larger one) to the keypad extension base. The connector and receptacle are "keyed," so the connector will only seat when oriented correctly. Route the cable as shown here. 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.



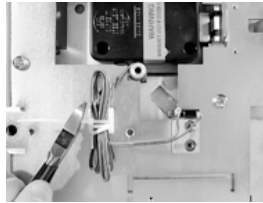
7. Place the keypad base over the keypad extension, pull all excess cable through the center hole (as shown), line up the keypad base mounting screw holes with those in the door, and use the included 8-32 (or M4) machine screws to securely fasten the mounting base to the door. It will also hold the keypad extension and number plate (if used) firmly in place. The 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.



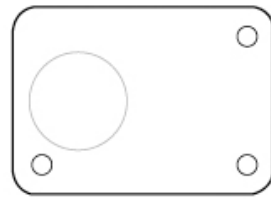
8. Remove the lock mounting screws so you can carefully pull the excess extension base cable inside. It is important to make sure the keypad and extension cables are within the recessed channels underneath the lock case before the case is securely attached by the three mounting screws. Once placed in the

most convenient channel, each cable should be protected underneath the case by a self-adhesive foam or vinyl pad. **It is very important that cables are not 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:

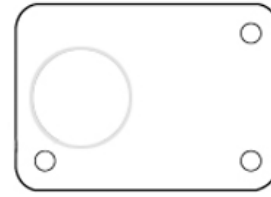
1. excess keypad cable (4-conductor)
2. bolt position sensor switch wires (2-conductors blue wire)
3. bolt position indicator wires (may or may not be present in your lock)
4. excess keypad extension cable (5-conductor)

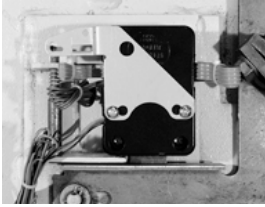


9. Reinstall the lock mounting screws, tightening them securely. Bundle all excess lock cable, and use wire ties and wire tie blocks to fasten the cable bundles where they will not be contacted by moving safe parts or where they will be prone to damage.



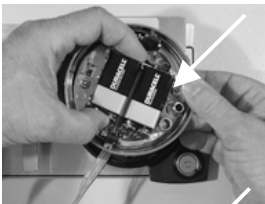
10. Skip this step if your lock is not used to directly block movement of the safe's boltwork. If it does, make sure the lock bolt doesn't bind against the safe's blocking bar or cam plate. The top drawing shows binding of the edge of the safe's blocking bar, even though the boltwork is fully thrown to the locked position. In the bottom photo, the binding has been relieved by removing a small amount of material from the end 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.





11. 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.



12. 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 help prevent bending or breaking the holder posts.**



13. 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.



14. 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. The installation is complete, but do not close the safe door until successfully completing the following lock test.



15. If the lock you just installed is a model 6127 Audit Lock, refer to the operating instructions to check for proper operation using the factory default code(s). If your lock is a model 6129 A-Series, and if an iButton Touchkey was provided to you, perform the following test. 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 needed 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 above.
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 is 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.