KABA MAS®

LC SERIES

MODELS LCLX, LCMX

INSTALLATION GUIDE

LCLX

LCMX

Introduction

Read all instructions before installing your LC Series electronic lock. This will help avoid unnecessary costs and concerns resulting from improper installation.

Basic Tools & Materials Needed

- Medium Phillips head screwdriver (#2)
  (magnetized tip recommended)
- 9-Volt Alkaline Battery, available separately
  (Duracell or Energizer brand recommended. Be sure to use a NEW battery.)

Table 1- Recomended Torques for Lock Screws

Assembly	Screw Size	Torque (lbs)	Torque (N-M)
Base	8-32	14 to 20	1.9 to 2.25
Lock Case	1/4-20	25 to 30	2.8 to 3.4

Lock Parts for Installation

1. Keypad Assembly
2. Keypad Decal (included only with Lexan housing)
3. Mounting Bracket
4. Mounting Bracket Screws (2)
5. Cable
6. Lock Case Assembly
7. Lock Case screws (3)

Design Parameters for LC Series Locks

1. Bolt dimensions (nominal): .312 inches X 1.000 inches / 8 X 25.4 mm
2. Bolt movement (nominal) : .465 inches /11.8 mm
3. Maximum load movable by the bolt: 0 N
4. Maximum load against bolt when thrown (all directions): 1kN (maximum)

   Note: *The lock will not open if any force is applied to the end or side of the bolt.*
5. The lock can be fitted to safes or vault doors of any material.

PREPARATION FOR INSTALLATION *(IF REQUIRED)*

Using the Lock Parts as a template, establish the exact location required for the following:

1. The lock case mounting screws (1/4-20) require drilled and tapped holes to 3/8” depth if possible (minimum 1/4” depth required).
2. The cable routing hole diameter must be a minimum of 3/8” (9.525mm).
3. The Mounting Bracket mounting screws (8-32) require drilled and tapped holes to 3/8” depth if possible (minimum 1/4” depth required).

Note: *As is the case with all mechanical and electronic locking devices, the container and bolt works must be designed to protect the lock.*

WARNING: Kaba Mas locks are well protected from Electrostatic Discharge (ESD) damage once they are installed, but can be damaged during the installation process if proper precautions are not observed. Follow these precautions to avoid ESD damage when installing the lock:

- **Do Not Touch the end of the lock cable.**
- **Handle the keypad assembly by the outer edge only.**
- **For the best protection, use an ESD wrist band grounded to the lock case or metal container during installation.**

INSTALLATION

Warning: ***Do not take the lock case assembly apart. This will void the product warranty. There are no field serviceable parts inside.***

1. While holding the lock case, route the end of the lock cable with the black connector from the back of the container door through the cable routing hole, leaving approx. 3 in. of the cable extended out the front of the container door.
2. Attach lock case to the container using the 1/4-20 screws, allowing 1/16” (.062) clearance between the lock bolt and the container locking bar. (See Figure 1 for proper clearances and positioning when installing a square nose slide bolt. See Figure 2 for proper clearances, strike types and contact points when installing a roller slide bolt.)

   Note: *Use of Loctite® 262 (Red) sealant is recommended for use on the mounting screw threads.*

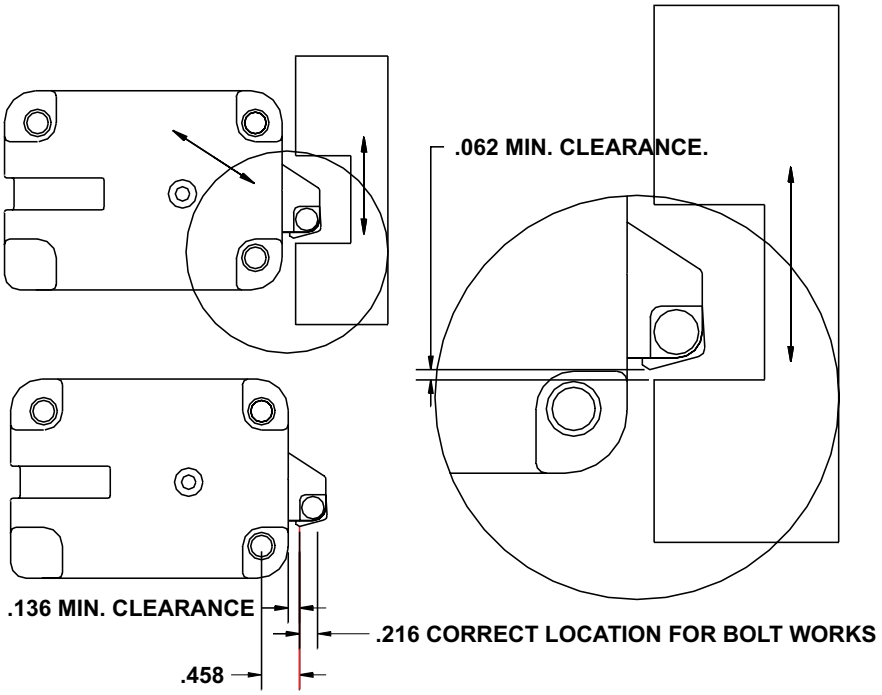


Figure 1 - Square Nose Slide Bolt Clearances and Positioning

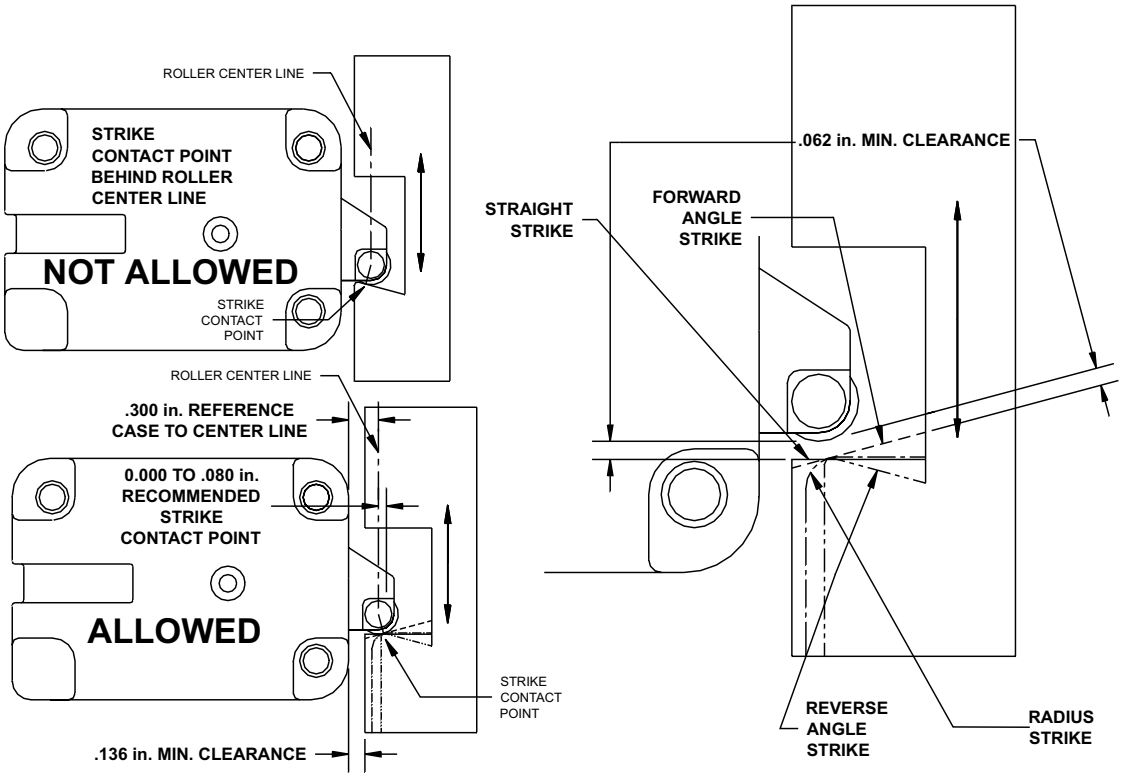


Figure 2 - Roller Slide Bolt Clearances, Strike Types & Contact Points

3. Vertically position the mounting bracket over the cable routing hole on the front of the container, routing the cable to the left of the bracket as you face the container. Attach the bracket using the two small (8-32) screws.

   Note: *For a lock with metal keypad housing, the bracket must be mounted with the arrow pointing up (i.e., toward the top of the keypad housing.) See Figure 3.*

4. Plug the black connector end of the lock cable into the 8-pin black connector located on the back of the keypad assembly (Figure 3).

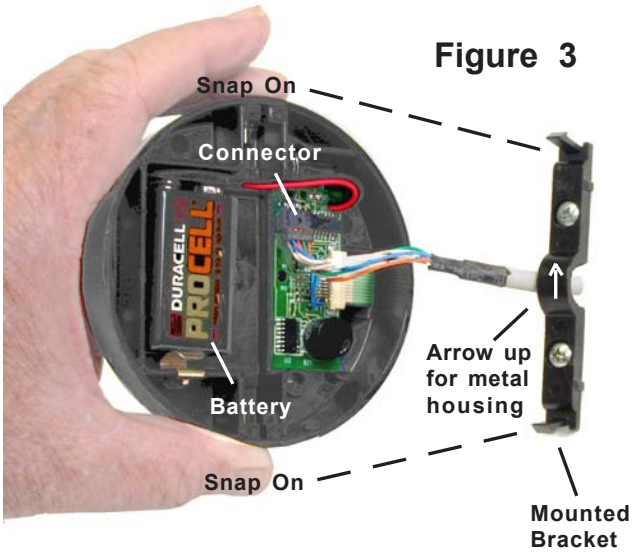
   Note: *This is a keyed connection.*

5. Plug the phone type connector cable end into the lock case, being careful to route the cable so it will not get caught in the bolt works of the container.

   Note: *For some locks this connection will already be made.*

6. Connect a 9-Volt Alkaline battery to the battery connector extending from the keypad assembly. The lock should beep twice to indicate that it is powered. Place the battery in the battery compartment on the back of the keypad assembly with the connectors at the end opposite of the spring clip (Figure 3).

Figure 3



7. Center the keypad assembly over the mounting bracket so that it will seat properly, **being careful not to pinch the battery cable between the keypad housing and the mounting bracket**. Snap into place (Figure 3).

8. Apply the decal to the front of the keypad assembly, being careful to align it properly. (Not required for metal keypad housing.)

9. **Test the operation of the lock before closing the container** by entering the factory default combination "**50 25 50**". If the combination is entered successfully, one green flash displays to indicate the lock is ready to open. Immediately rotate the container handle to retract the bolt works before green lights flash again. If the test is successful, the lock and container are now ready for use.

10. If the lock does not operate successfully, carefully remove the keypad, check the cable connection, and verify that all mounting screws are securely tightened. (See Battery Replacement section of Operating Instructions to remove keypad.)

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Kaba Mas Corporation
749 W. Short Street, Lexington, KY 40508 USA
Phone: (859) 253-4744 FAX: (859) 255-2655
Customer Service: (800) 950-4744
www.kaba-mas.com