XO Drill Template Instructions

For Opening the X-07, X-08 and X-09 Locks
What Is Included:

A. 1- Aluminum Template Base
B. 1- Threaded Drill Guide
C. 4- 10-24 x 1” Pan head Phillips head leveling screws
D. 2- 8-32 x 1/2” Socket Head cap screws

A. Template: The aluminum part that is affixed to the container is used as a base for your drill rig.

B. Threaded Drill Guide: A hollowed bolt that is screwed into the drill (attack) locations that compensates for shift or play in the drill rig as well as any machining irregularities. The included bolt has a 1/4” through bore.

C. Four 10-24 x 1” Phillips head screws used in each corner of the template used to stabilize and level the template when drilling a container that has a raised dial ring surface.

D. Two 8-32 x ½” Socket head cap screws used to affix the template to the dial ring mounting screw holes or the cross bar from the drill rig to the template.
This template is designed to open the Kaba Mas X-07, X-08, and the X-09 utilizing the same hole for all three locks. The template also includes a drill point for the internal relock device on all three locks.

**Features of the template include the following:**
- Stabilizing screws at each corner
- Built in compression fittings for the Lockmasters’ Magnum 457 and 557 drill rigs
- Threaded holes for the Strong Arm Mini Rig through bore bolt
- Threaded holes for each of the manufacturer’s cross bars
- Directional arrow to orient the template in the direction of the lock bolt
- Threaded drill guide

The four leveling screws are used when the dial ring surface is raised beyond the face of the rest of the drawer head or to offset the thickness of a combination deadbolt dial ring mounting plate from the face of the door.

The built-in compression fittings allow for quicker set up time.

The threaded holes for the actual drill points allow for the industry’s two leading drill rigs to be used on one template; The Lockmasters’ Magnum Bullet Drill Rig and the Strong Arm Drill Rig.

The threaded holes for the cross bars allow for redundancy should a compression fitting get damaged or a through bore bolt is stripped.

Bolt position marking makes for quick alignment when mounting the template to the drawer head or combination deadbolt mounting plate.
Instructions – Preparation:

Take the time to read through the directions and familiarize yourself with the parts and the proper orientation of the Universal X-0 Drill Template. The pictures will help you as you follow the written procedures.

1. Remove the dial and dial ring as you would normally. Make sure to leave enough of the spindle exposed in order to turn and retract the lock bolt.

*Shown using X0 Series Dial Puller - Lockmasters’ part number: LKM117*

2. Determine the handing of the combination lock.

3. The Bolt Direction Arrow of the X-0 Drill Template points in the direction of the combination lock bolt.

For a vertical down hand, the arrow points down.

For a vertical up hand, the arrow points up.

For a right hand mounted lock, the arrow points to the left.

For a left hand mounted lock, the arrow points to the right.
4. Attach the template to the container using the existing threaded dial ring mounting screw holes. The X-0 Drill Template comes with 2 dial ring mounting screws. Make sure the template is snug, but do not over torque the mounting screws.

5. If the drawer head has a raised dial ring mounting area or you are drilling a combination deadbolt model, use the four stabilizing screws provided. Simply turn the screws until they touch the surface under them. This will help prevent flexing when pressure is applied to the cutting bit.

**Attaching The Drill Rig**

A. Lockmasters’ Rigs  
(Lockmasters’ Magnum and High Velocity rigs)

1. Thread the Drill Guide into the target hole.

2. Simply attach the quill tower to the compression fittings appropriate for the drill point required.

B. If using the Strong Arm Mini Rig, simply attach the cross bar utilizing the through bore bolt that comes with the Mini Rig to the threaded hole in the X-0 Drill Template.

**Note: Older Models (Without quick disconnect couplings)**
Thread the included Drill Guide into the drill hole. Attach the cross bar to the drilled holes in the template and secure. At this point, the tower and quill can be snapped onto the compression fittings that are installed on the cross bar supplied with the original drill rig.
Instructions – Drilling the Motor Gear:

This motor drill point will work on the X-07, X-08, and the X-09.

Drill the container as you normally would. Once you are through the hard plate and can see the lock case then use a sharp high speed steel drill bit or an end mill drill bit to partially cut away the side of the lock body which will bring you to the outside of the stepper motor (X-07 and X-08) or the combination motor (X-09). Be careful as you drill. You do not want to damage the motor gear.

Note: Once you are at the lock case, you only need to drill approximately 5/16”-1/2” deeper to view the motor and gear.

If you are having trouble seeing the motor gear, you may need to take a strong probe and remove a burr or two that would be residual from drilling. A sharp end mill cutter stabilized in the fixed drill rig is recommended.

Lockmasters’ part number: BRUTE1/4X4EM

When you are finished drilling, remove the drill rig and template from the container. Attach an emergency dial or a dial hub, if available, to the spindle to make bolt retraction easier.
Instructions- Opening the lock

For the X-07 and X-08:
Once the motor gear is in sight, use a long thin pointed probe or ice pick to rotate the motor’s gear approximately ten degrees counter clockwise while turning the spindle clockwise at the same time. The bolt will then retract.

For the X-09:
Once the motor gear is in sight, use a long thin pointed probe or ice pick to push the motor gear and rotate the motor gear approximately ten degrees. Hold and turn the spindle counter clockwise, listen or feel for 14 consecutive clicks and immediately turn the spindle clockwise. When the spindle stops, remove the probe or pick and turn the spindle clockwise to completely retract the bolt.

Instructions – Drilling the Internal Relock Device:

This motor drill point will work on the X-07, X-08, and the X-09.

Attach the template and drill rig per the instructions found in the previous section. Drill the container as you normally would. When you have broken through the hard plate and come to the lock case, stop drilling. Remove the drill rig and template. Insert a small probe through drilled hole and depress the foot of the internal relock device.

Log on to www.lockmasters.com for an Instructional Video Demonstration.