Decode Master Lock Combination Locks - Models 175 and 176
Your objective is to get this pin out. It’s easier than you think...
Use a brass or hard plastic hammer. Don’t use steel because it will seriously mar the lock. Give the lock 20-30 whacks as close to the “X” as you can. The pin will begin to work itself out. In the photo my pin is already backing itself out. Plastic hammers will take more whacks but do almost no damage at all.
Keep whacking until it works itself out about this much.
When it works itself out enough you can grab it with a pair of pliers and pull it out.
Usually the guts just fall out of the brass body. If not, put it in your vise with the jaws lined up with the brass body. Gently tap the hasp and the guts will fall out. You can see mine coming out.
This is what you’ll end up with. Hasp, body, locking pawls, and guts.
Gently pry off the brass bottom plate. Work your way around the perimeter and lever it off – it is pretty easy.
This is what you’ll end up with. Be careful and not lose that little spring. It doesn’t fly out or anything, it just falls out. Just don’t lose it. Now the fun part begins.
Each wheel has a flat spot. I have these aligned so you can see them clearly. Notice the locking pawl activator is in the “up” position.

Turn your wheels until they are under the locking pawl activators and it moves down. Read your combination. Write it down. In this case it is 6101.
Put your little spring back in and put the brass cover back on.
On the top, put your locking pawls back in. Leave the lock sitting upright with the pawls on top – it’ll be easier to reassemble that way.
Slide the brass body back on. This is what you’ll end up with. The hole should align without any special effort.
Make sure your combination is still set correctly and slide in your hasp.
IMPORTANT: Once the hasp is in, change the combination so it stays locked.
Now, to prevent some smarty pants from doing what you just did, mix up a little epoxy or JB Weld. Spread it on the pin and pack a little into the hole.
Tap the pin into the hole and use a punch to set it. Wipe off any excess epoxy.
Dial in your combination and open the lock. Put in your key and it will turn. Dial in your new combination. I always set mine to 0000 until I deploy to use the lock, then I change it to something new.

DONE.