



## How-Do-We-Do-That?

### Chicago Steelcase locks

Removable cylinder plugs for Steelcase type of locks. We found for this sample of lock, after disassembling this lock, the FR codes Master key. The cuts are 050503 from shoulder to tip, on K100M blank.

The change key blank for this lock is K101

The spacing's for this series of locks are:

1	.140
2	.232
3	.325
4	.417
5	.512
6	.604

The depths are

1	.250
2	.235
3	.220
4	.205
5	.190
6	.175

The length of this key from shoulder to tip (straight from the factory) .820.

Prepare another K100M and cut the shoulder back to get a measurement of .900 from shoulder to tip.

Use the Master key and duplicate the cuts to this modified blank. Cut a cut on the #7 position at .969 and to a depth .200. You have created a removal key. This removal key can only be used in the "open" position. Insert the removal key in the plug turn a slightly to the left and at the same time pull on the key and the plug will be removed.

There is another way, when no removal key is available, use a bended lock pick to reach for the retainer wafer and remove the cylinder plug. In our sample lock, see pictures page 45, the dimples in the lock are not lined up they are a quarter turn away from each other.



In they above picture you see lock body with plug and driver. You also see a slot where you can insert a broken pick or very small screwdrivers and push down the retainer wafer to remove the plug out of the lock body.

In picture below you see the part removed. Plug with Removal key, Driver and Lock Body.



You can see in this picture that the cuts are the same in the two bottom keys except for the shoulders, which are farther away from the tip.



**The following are factory recommendations**

#### Front removal of Lock Plug

1. Turn lock plug to unlocked position with original key or Master key.
2. Insert removal tool into lock assembly.
3. Rotate lock plug assembly in a counter clock-wise direction while at the same time pulling on removal tool, thus removing lock plug from lock assembly.
4. At this time the mechanism inside the lock assembly may rotate back to the lock position preventing the installation of a new lock plug. If this

occurs, insert flat-bladed screwdriver into the back of lock assembly and turn clock-wise unlocking the lock assembly. Insert Removal tool into new plug assembly into lock assembly. It may be necessary to hold new plug assembly with finger while removing Removal tool.



