

destructive opening method for the new or old model locks. It is fast and leaves a neat finish with very little effort.

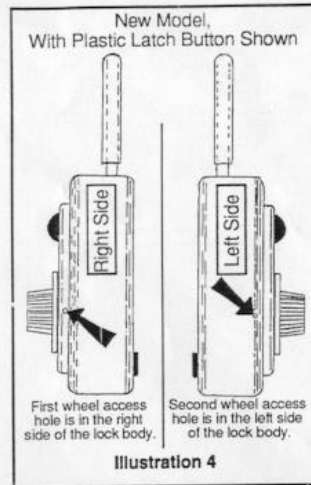
Supra's two shackle mounted combination key boxes can be opened quickly and with little or no repair needed by drilling two #60 holes, as you see in illustration four.

The older style box has two gates in each wheel, located three letters either side of the actual code letter. The newer plastic button model (1992 +) has a deadbolt, and wheels with single gates that correspond in location to the true code letters for the wheels.

The first wheel access hole can be drilled through the *right* side of the lock lid, about half way between the lid's face and the front of the box, and in line with the center of the dial. (See *illustration 4*.) The first hole will be "looking" at the edge of wheel number one.

Insert a wire and feel for the gate notch as you rotate the dial. When the wire goes into the gate, record the dial letter nearest the wire hole for the first combination code letter. (Use the clockwise gate and advance three alphabet letters for the old style.)

The second wheel access hole can



be drilled on the *left* side of the lock box, as you see in the illustration, about 0.1 inch back from the box front, and at the edge of the corner radius, in line with the dial center. This hole will be "looking" at the edge of the second wheel. This second drilling must continue beyond the box wall and on to barely penetrate the lock lid to access the second plastic

wheel to repeat the gate search procedure for the second combination letter.

The third letter is found by sequential trial of the dial button. This will be the gate in the drive cam. The combination is made up of two numbers and a drop-in.

Walter D. Newton
Ohio

Supra Products Inc. modified their mechanical combination real estate lock box to a dead bolting model, distinguishable by a rounded plastic (vs. Flat metal) operating button.

This Technitip is for a non

This is an interesting lock that houses a hollow compartment for holding keys that is accessed with a combination. This Supra is made with a large clearance shackle to lock onto the neck of an outside key-in-knob, so when the second party arrives, they may dial in the combination, remove the key and open the door.

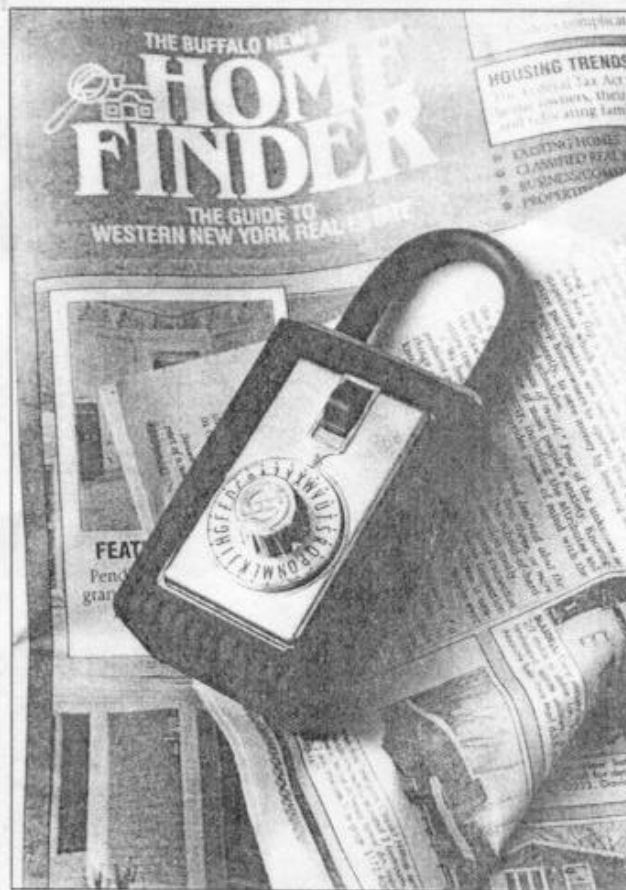
The Supra is used a lot by real estate agents and the dialing sequence is the same as a combination Master padlock, but it uses letters instead of numbers for dialing. At the top of the door is a button that is pushed down when the combination is dialed. The fence or lever is actually connected to this button. When the button is pushed down, the fence is being pushed into the wheel pack.

Unlike the combination Master padlock, which has false gates only around its third wheel, this lock has false gates around every wheel. This has no effect on our manipulation attempt, however.

The factory combination for this lock is S-P-I, (Supra Industries). For a lost combination, try these three letters first. If it doesn't open, then begin manipulating. The average time to manipulate the Supra is five to ten minutes.

Procedure for finding a letter in the combination

Begin by pushing down on the button as if you were going to open the lock. Now, hold that pressure down on the button as you try to turn the dial. If the dial won't turn, then you're in a gate, true or false. That's not a question by the way.



Manipulating Supra Key Box

by Mark Swetland

If the dial turns with slight resistance, then you're on top of the wheel and the dial will come to a stop within a couple of letters when the fence falls into a true or false gate. If you're in a gate, you must release the button before you can turn the dial.

Maintaining that medium pressure down on the button, oscillate the dial and you will feel it hitting the edge of the gate. If you get a slight span on the dial, about a half letter, then you're in a false gate. Continue around the dial. At some

point the dial will have a very wide span, about two full letters. You can't miss it. This will be a true gate.

Once you find the true gate, take the letter closest to the center of oscillation. This will be your THIRD or last letter of the combination.

Notes: In the photo, the pointer shows the very wide gate. Also, you can see the small V notches that act as false gates.

The third letter of the combination is the only letter which is this easy to find, and the direction of turn for this letter doesn't matter. It will be the same both left or right. At this point in the manipulation, the button will only be able to be pushed down about a quarter of the way to its full travel.

Procedure for finding another letter in the combination

Dial all wheels right at least three times to get all wheels moving together; then stop on your third letter of the combination.

Now push down on the button with medium pressure and scratch a mark with a pencil or sharp tool at the bottom of the button where it stops. This is your measuring line.

Now, release the button and advance the dial, continuing to turn to the right, two letters. Then, return to your known letter by turning the dial back to the left. (You will barely be moving the dial at this time.) Now, push down on the button and measure the mark. The button should come down to the same mark. Release the button and advance the dial two more letters. Go back to your known letter and

push down on the button and measure.

Continue working around the dial, measuring each time. At some letter around the dial the button will drop down past your mark just a hair (literally). About the thickness of a piece of paper is all you will see.

When your button drops below the mark you made, this will be your first letter of the combination. All the locks I have done always indicated on the first letter after the third was found. The reason the button will drop is the lever fell into the gate of another wheel.

Notes: Your maximum number of tries moving the dial in two increments is only 13. You can find a gate by moving the dial two letters at a time. The gates are two letters wide. The known letter just found must be dialed in the same direction in which you found it. Only the third letter can be dialed in either direction.

Opening the Supra and finding the last unknown letter

At this point in the manipulation, your combination should look like this:

Three turns right to Known Letter

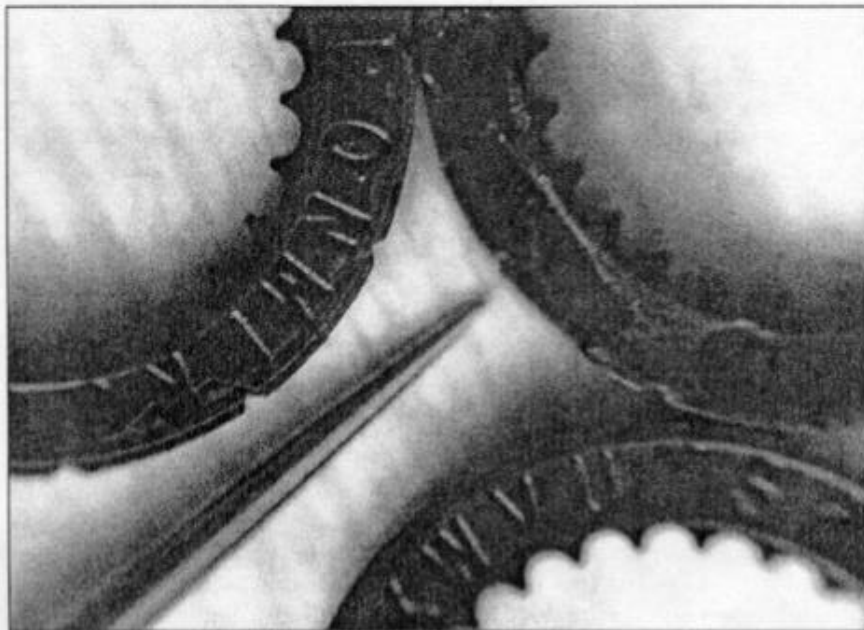
Two turns left to Unknown Letter

One turn right to Known Letter

To open this little critter, we're going to walk the unknown letter (wheel two) in two increments at a time.

Start by dialing all wheels at least three times right and stopping on your known first letter. Now, dial two turns left to the letter next to your first known letter. For example: If your first known letter is A, then dial two times left to Z. Now, turn the dial right and stop on your third known letter. Try the button to open.

What we're doing here is parking wheel one on its correct letter, then we're walking wheel two around the dial as we're returning wheel



The pointer in the photo shows the very wide gate. Also, you can see the small V notches that act as false gates.

three to it's correct letter and testing the button. If the lock doesn't open, we turn the dial right only two letters past where we stopped before. As in our example, we would turn the dial left to X, then return to our third letter and try the button, then turn the dial left to V, then return right to our third letter and try the button.

At some point you will find the last letter on wheel two and the Supra will open!

Notes: If by chance the lock doesn't open after you walk wheel two all

around, then the letter you found previously could be on wheel two, try walking wheel one around and put your known letter on wheel two.

Make sure your dialing sequence is correct and you're dialing the letter you found in the same direction, except wheel three. The direction of turn doesn't matter on it.

As you're pushing the button down and checking it against your mark, make all 13 test's before determining a letter. With a little practice, this lock is really a breeze to open.

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