

The DETERMINATOR™

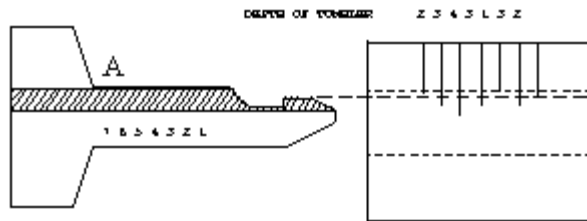
Thank you for purchasing the **DETERMINATOR™**. You will find that it is a very simple and reliable tool to use. You will develop your own feel and techniques for the tool the more you use it.

No liabilities for any use of this tool or information are assumed whatsoever for any costs, claims, or damages filed for or caused by correct or incorrect use of the tool or the information contained with it. Techniques used are solely the responsibility of the user.

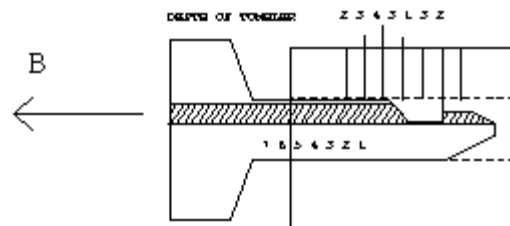
HOW DOES IT WORK?

The **DETERMINATOR™** works by trapping larger tumblers and by passing smaller ones. A 4 depth cut in a key has a tumbler that is much larger than a 1 depth cut. The **DETERMINATOR™** is designed to trap the larger tumblers in the specially designed cut tip on the key. A small length of spring steel with a sloped end is inserted in the cut out portion of the **DETERMINATOR™** to release any trapped tumbler.

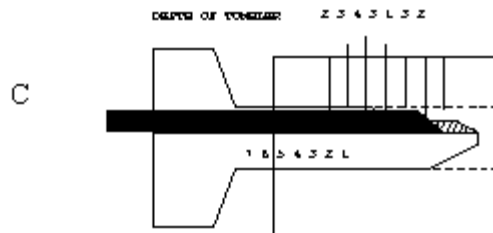
A Shown at the right is a lock with various sized tumblers and a **DETERMINATOR™**. As you can see the **DETERMINATOR™** will trap the tumblers with a 3 or 4 depth, but will allow the tumblers with a 1 or 2 depth to pass.



B When the **DETERMINATOR™** traps a tumbler, look at the space number closest to the face of the lock. Here you can see space 6 is trapped, you know it is a 3 or 4 depth.



C Use the release tool to raise the trapped tumbler and pull the **DETERMINATOR™** out until the next number is visible.



Record the depths and spaces and you will be ready to cut a key.

When cutting your first key you have two choices. The spaces that trapped you can cut as 3's and the spaces that passed you can cut as 1's. Since only a few cuts will be off only 1 depth, you can quickly impression them down. Your other choice is to cut a try-out key using ½ cuts. The spaces that trapped you will cut as 3 ½ depths and the spaces that passed you will cut as 1 ½ depths. Use this key as you would any other try-out key. Try both methods and see which works the best for you.

The **DETERMINATOR™** is custom designed for each particular lock so be sure to thoroughly read and understand the instructions for the type of car you are working on.

You will find that by using the **DETERMINATOR™** you will save time. No more pulling door panels and fighting lock clips. One **DETERMINATOR™** set will replace hundreds of try-out keys. The **DETERMINATOR™** is reliable and simple to use.

IMPORTANT NOTES ABOUT RELEASE TOOLS

When using any release tool, if you have trouble releasing a trapped tumbler, simply push the **DETERMINATOR™** fully into the lock then insert the release tool. Also, using a slight up and down rocking motion while inserting the release tool will help.

QUESTIONS AND ANSWERS

Q. Should I degrease the lock before using the **DETERMINATOR™**?

A. YES!! Always degrease the door lock well before using the **DETERMINATOR™**. This will allow the tumblers to seat themselves properly so you can decode them. DO NOT use spray like WD 40 or AMS oil.

Q. Can I use the **DETERMINATOR™** in the ignition or the trunk lock?

A. Yes and no. The **DETERMINATOR™** was designed to work in the door locks. IF you try to use it in the ignition or the trunk it may get stuck on a buzzer actuator, or the release tool may not be able to enter the key way properly. The tool was designed to work on the original lock systems. I have used it in the double sided trunk locks on Chryslers from 1994 up. I have used it on NISSAN ignitions where the lock had been changed. (The space numbers don't line up exact but you can figure it out) DO NOT use the JAPANESE or the JAPANESE 2 tool in the ignition lock. It WILL get stuck! Play it safe and stick to the door locks.

Q. Sometimes the **DETERMINATOR™** feels like it wants to trap a tumbler but it "slips" off. Should I consider this as a trapped tumbler or one that has passed?

A. Good question. If a tumbler is not seated properly it may not catch in the trap of the **DETERMINATOR™** like it should. Any obstruction in the lock like dirt or dried grease will also bind the tool. When this happens to me I make sure that I degrease the lock well, and I take note of the space in question. I cut that particular space shallow. If my key doesn't work I definitely check that space for an impression mark.

Q. Sometimes my release tool doesn't want to go into the lock all the way. What should I do?

A. I push the **DETERMINATOR™** back fully into the lock, then I reinsert the release tool. This will usually do the trick.

Q. For example, I am working on a Double sided Chrysler. Should I use ½ cuts or can I make my cuts 1's and 3's?

A. Do what works best for you. At first I used the ½ cuts, making my first cuts 1½'s and 3½'s. But now I make my first cuts 1's and 3's. I then impression down on the spaces that mark. They usually mark very well since only a few spaces may be 1 depth off. I file those cuts down and I have a working key. So try both ways and see which one works best for you. I do not use ½ cuts on the Ford 8 or the GM 10 cut lock systems.(except when I use the 3-4-5 space progression)

Q. I sometimes get a key to work in the Ford 8 cut door, but then I can't seem to get it to work the ignition. Why is that?

A. You have to make sure that you have the exact cuts in first 6 spaces from the door lock. If you are off even 1 depth it won't work the ignition. When I decode the Ford 8 cut door, I cut my "A" cuts as 1 depths, my "3" cuts as 3 depths and my "B" cuts as 4 depths. I then insert this key into the door lock and turn. It will leave good impression marks on the spaces that need to be lowered. Then I look up my 6 cuts on the Ford 8 cut code chart to find the missing 2 cuts in the ignition.

Q. Will my Double sided Chrysler **DETERMINATOR™** work on the new 8 cut Chryslers?

A. Yes. Simply decode the door lock to get spaces 2-8. Those spaces are cut exactly the same as the 1-7 door locks used from 1995 up. Then you simply progress the 8th cut which is .092" closer to the head of the key, from the ignition.

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TIPS

- Make sure you are using the correct spacing and depths. Most cuts are ½ depths when first cut.
- Understand and follow the instructions. The **DETERMINATOR™** is much easier to use when you fully understand how it works.
- Do not tilt the tool. It needs to be pulled straight out perpendicular to the face of the lock.
- Worn locks. Since the **DETERMINATOR™** is catching certain size tumblers, a worn lock with worn tumblers may not read correctly. For example, on a worn lock a tumbler for 3 depth cut may pass instead of being trapped by the **DETERMINATOR™**. If you are having trouble with this, just take your known readings and impression down. You will be closer to the correct depths even with your initial readings.
- When you are decoding the lock, double check yourself by taking a second reading of the lock. If you are not careful you can pass a space easily. Take your time.
- Get a "feel" for the tool. Try it a few times on locks that you know the cuts for prior to using it in the field.
- Keep a chart of your readings. It will help prevent careless errors.
- Degrease the lock. This will clean the lock and help to ensure that the tumblers are fully seated.
- If you suspect a damaged or worn lock, try another lock.
- Try different methods. Some locksmiths like to use ½ cuts, 1 ½ and 3 ½. Others like to use full cuts, 1 and 3, and then impression.