

The Canadian Locksmith



The SKT Wafer Reading Tool

Lockmaster's Guide to quickly make keys for many domestic and import automobiles without removing or disassembling locks!

Generate Keys!

- Fast**
- Easy**
- Without Disassembly**

Before your Begin

This device is manufactured for professional locksmiths and security technicians only.

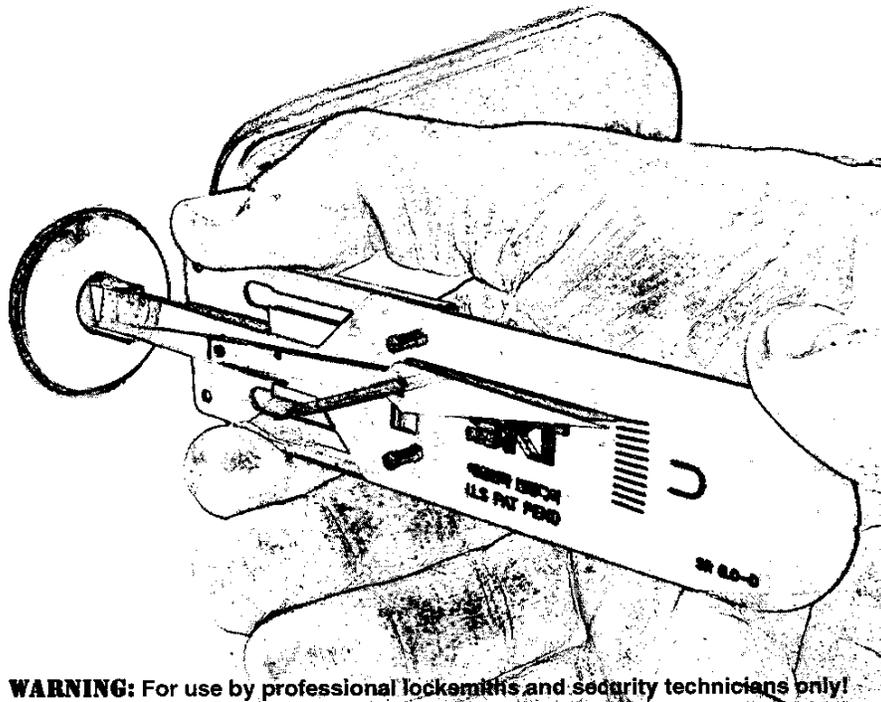
Correctly applied, the SKT Wafer Reader Tool quickly and efficiently allows you to generate new keys for many domestic and import automobiles without removing the locks.

NOTICE: While serving as an aid for generating automotive keys, this tool is not recommended for novice locksmiths or locksmiths in training.

Like many locksmith tools, a degree of locksmith proficiency is required to properly understand and use this tool with success. An understanding of progression, impressioning, picking

and other locksmith techniques is critical. It is not recommended that this tool be

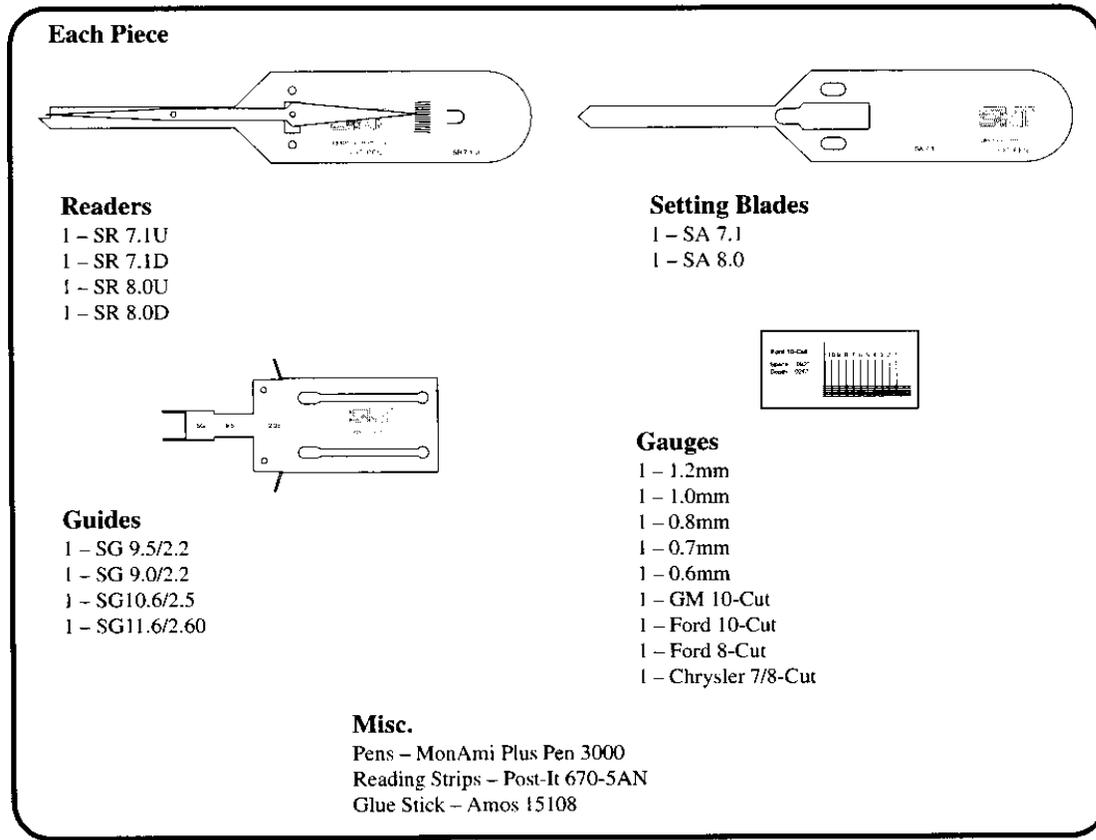
used without first fully reading und understanding this manual, and practicing on locks with known key



WARNING: For use by professional locksmiths and security technicians only!

present.

For more information about hands-on training using this tool, take your web browser to Lockmaster's web site at www.lockmasters.com



5 Cases

For your convenience and to protect the tools, the SKT Wafer Reading Tool is organized in a handy carrying case. The case includes a small supply of extra pens, Reader Strips, a glue stick, plus five smaller plastic cases that contain and protect the reading tools. Following are the smaller cases and their contents.

SR 7.1U

- 1 – SR 7.1U Reader
- 1 -- SA 7.1 Setting Blade
- 1 – Pen
- 1 – set of Reading Strips

SR 8.0U

- 1 – SR 8.0U Reader
- 1 – SA 8.0 Setting Blade
- 1 – Pen
- 1 – set of Reading Strips

Unmarked

- Guides
- 1 – SG 9.5/2.2
 - 1 – SG 9.0/2.2
 - 1 – SG10.6/2.5
 - 1 – SG11.6/2.6

SR 7.1D

- 1 – SR 7.1D Reader
- 1 – SA 7.1 Setting Blade
- 1 – Pen
- 1 – set of Reading Strips

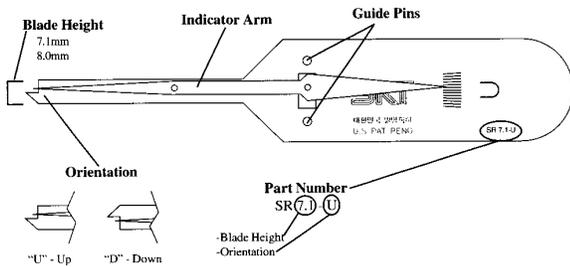
SR 8.0D

- 1 – SR 8.0D Reader
- 1 – SA 8.0 Setting Blade
- 1 – Pen
- 1 – set of Reading Strips

Gauges

- 1 – 1.2 mm
- 1 – 1.0 mm
- 1 – 0.8 mm
- 1 – 0.7mm
- 1 – 0.6mm
- 1 – GM 10-Cut
- 1 – Ford 10-Cut
- 1 – Ford 8-Cut
- 1 – Chrysler 7/8-Cut

Part Description:



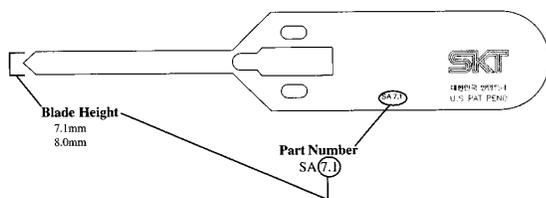
Readers

The Kit includes four Readers that are differentiated by the part number stamped on the face of each Reader. The part number indicates the blade height and reading orientation of that particular Reader.

There are two blade heights – 7.1 mm and 8.0 mm. Each height is available in two reading orientations – “U” and “D”, indicating an Up or Down orientation.

The SR 7.1U Reader, for example, has a blade height of 7.1 mm and is oriented to read the Up or top portion of the lock. A reading Indicator Arm is attached to the face of the Reader, and is used to indicate or display the depth of the tumbler being read.

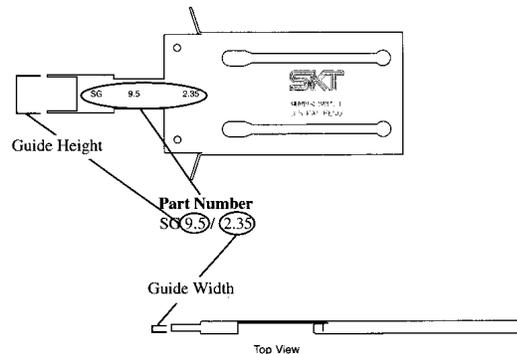
Guide pins are found on both front and back of the Reader. The front pins limit the Indicator Arm movement. The back pins are used to mate with the Guide tracks of the working Guide during lock reading.



Setting Blades

The part number for the Setting Blade is stamped on the face of each Setting Blade, and indicates the blade height for that particular Setting Blade. Two blade heights are available, 7.1 mm and 8.0 mm, and are matched to Readers of the same or corresponding blade height.

The Setting Blades are inserted into the lock, clearing the keyway for inserting of the Reader, and making the final setting of the Reader before it is used to read the lock.



Guides

The Guides are used to hold the Reader perpendicular and center to the keyway of the lock being read. Choosing the correct Guide is critical for accurate reading of the lock. The part number of the Guide is stamped on the back of the Guide, and includes two distinct numbers.

Example – SG 9.5/2.32

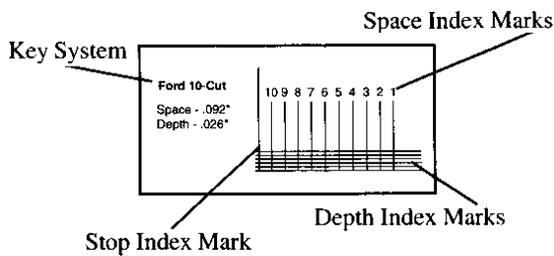
All Guides are designed to work with both the 7.1 mm and 8.0 mm Readers.

The first number on the Guide indicates the height in millimeters of the end of the Guide that is inserted into the lock. This measurement should be as close to the height of the lock’s dust shutter door.

The second number indicates the width in millimeters of the end of the Guide that is inserted into the lock. This measurement should be equal to or less than the width of the lock’s shutter door.



Tom Seroogy explaining the SKT



Gauges

Once a lock has been read, the correct Gauge is used to determine the depths of each tumbler that was indicated on the Reader Strip. Guides are available for the key system of the vehicle being worked on, and include the Stop Index Mark (for shoulder or tip stopped key systems), and Space and Depth Index Marks. A micrometer (e.g. Mitutoyo Digimatic etc..) may be used instead. With enough practice and experience, the Reader Strip can be read without the aid of a measuring device.

Choosing the Correct Tools:

Choose the Correct Reader

The Reader is selected based on its height (7.1 mm or 8.0 mm) and its orientation (Up or Down).

Height – For a lock whose key blank height is equal to or greater than 8.0 mm, use the Readers with the 8.0 mm blade (SR 8.0U or SR 8.0D), for locks whose key blank height is less than 8.0 mm, use the Readers with the 7.1 mm blade (SR 7.1U or SR 7.1D). (See Figure 1.)

Because the actual key blank width is not always known, simply take the key blank in question and match it up to an SR 8.0 mm Setting Blade. If the key blank is equal to or greater than the Setting Blade, use one of the 8.0 mm Readers. If the key blank is narrower than the 8.0 mm Setting Blade use one of the 7.1 mm Readers.

Orientation – Refer to the drawings in Figure 2. Facing the keyway, if the top portion of the blade is offset to the left,

using a Reader with the Up orientation typically works best.

Likewise, facing the keyway, if the top portion of the blade is offset right, then using a Reader with the Down orientation typically works best.

Many exceptions exist when deciding on whether to use the Reader with an Up or Down orientation. Use the orientation that results in the best readings.

It is also recommended that where a Master/Valet key system exists, that the lock using the Master keyway (those operating on both Master and Valet key) be used for doing the reading. Many locks made with the Valet groove (usually the deck/trunk lock and glove box lock) are made with a narrower keyway than those made with the Master groove, inhibiting the ability of the tool to read correctly.

Finally, on a double-sided key system, where both sides of the lock need to be read, used the same Reader to read both sides of the lock.

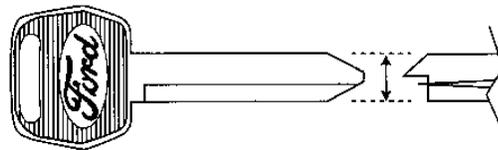


Figure 1. Select the reader whose blade height is equal to or less than the height of the key blade.

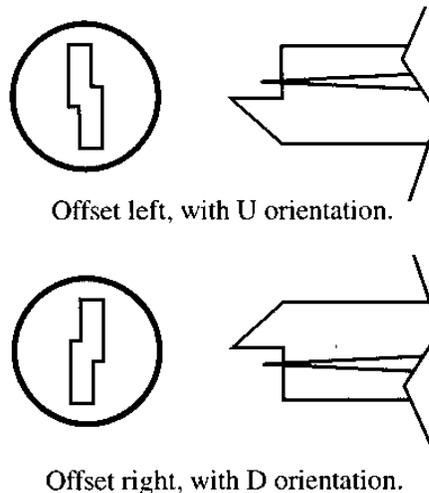


Figure 2. Select the orientation based on the offset of the keyway.

Choose the Correct Guide

The Guide is selected based on two criteria: The height of the lock's dust shutter door and the width of the dust shutter door.

Choose the Guide that meets the following criteria from the lock being read:

-- whose end height best fits the height of the lock's dust shutter door. Do not use a Guide whose height is less than the shutter door height. If necessary, use a Guide with a slightly larger end, and depress the ends to fit.

(See Figure 3.)

-- whose end width is equal to or less than the width of the dust cover shutter door. This dimension is less critical than the end height, but should be as close as possible.

(See Figure 4.)

Choosing the Correct Gauge

This kit includes several gauges for reading the lock's key bitting from the final Reader Strip. Check, the Lockmasters, Inc. web site, www.lockmasters.com for more information or to download new and additional gauges.

Choosing the correct Gauge either by the gauge's assigned Make and Key System – i.e. Ford 10-Cut System, GM 10-Cut System, etc. – or by the spacing and depth specifications for that Guide. (See Figure 5.)

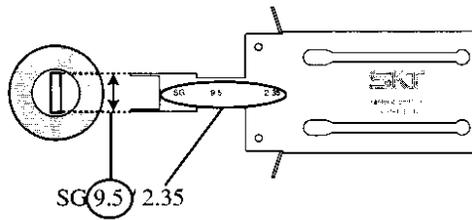


Figure 3. The Guide height must be equal to the height of the dust shutter.

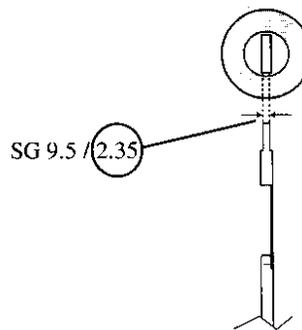


Figure 4. The Guide width must be equal to or less than the width of the shutter door.

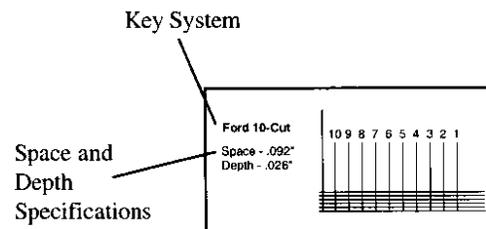


Figure 5. Match the Gauge to the vehicle.



Reading Procedures:

Preparation

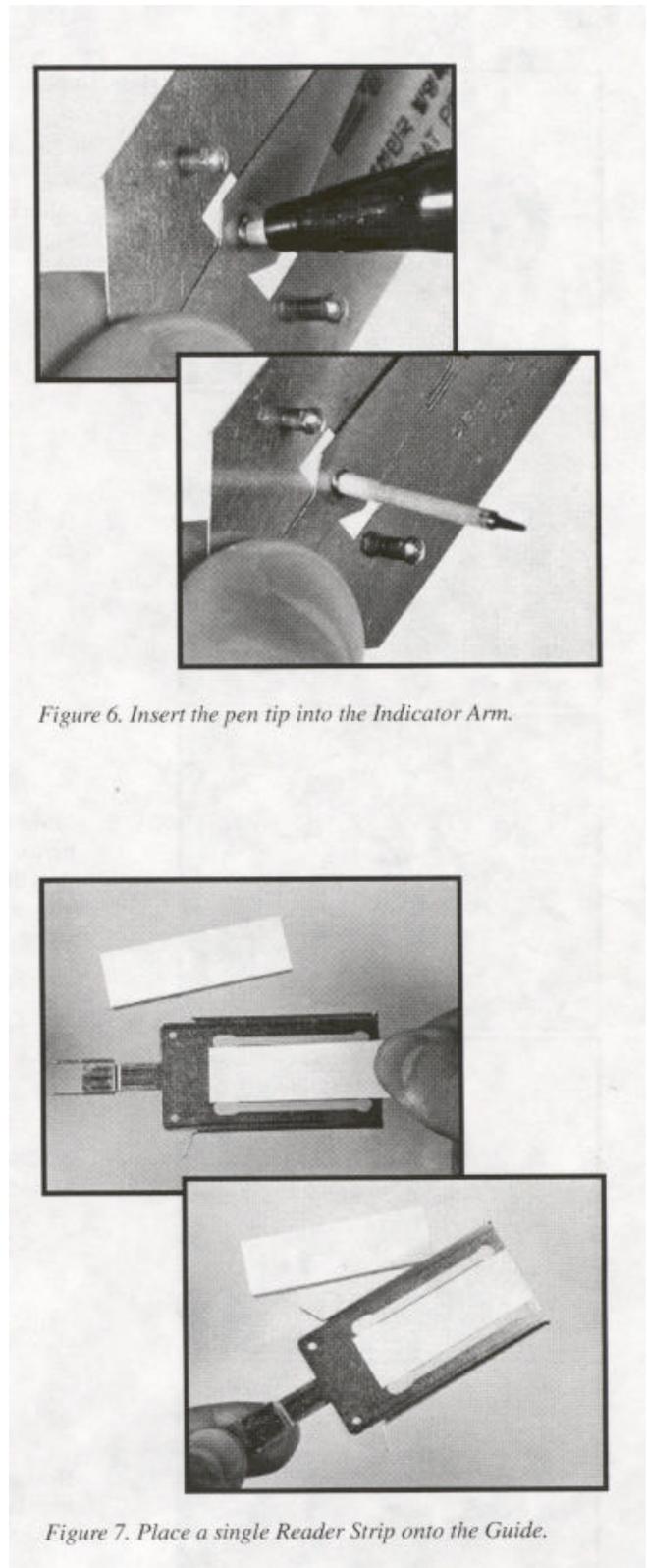
After selecting the correct Reader and Guide, it is necessary to prepare the tools for reading the lock.

Reader Preparation

Gently insert the tip of the MonAmi Plus Pen 3000 into the hole of the Reader's Indicator Arm. Applying light pressure, turn the pen in a clockwise rotation. Once the tip is locked into the Indicator Arm, continue to rotate the pen, while gently pulling the pen's body off the tip. When complete, the tip of the pen should be attached to the Reader's Indicator Arm. (See Figure 6.)

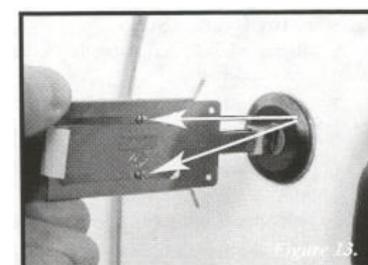
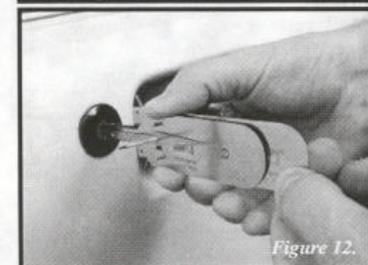
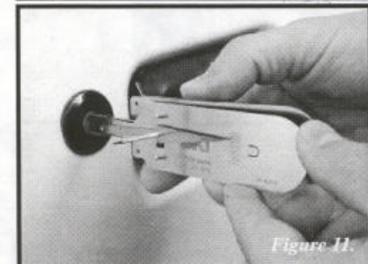
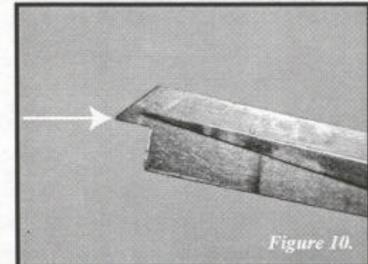
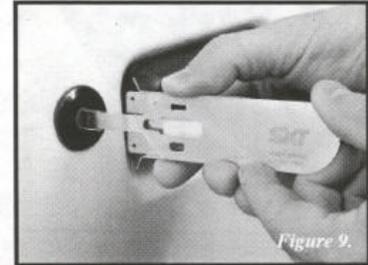
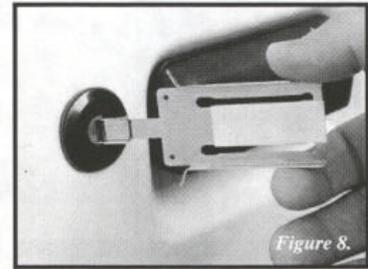
Guide Preparation

Place a Reader Strip (Post-It 670-5AN) onto the center of the Guide. Position the strip with the sticky end towards the lock end of the Guide. Fold the back edge of the strip over the back of the Guide. Once the Reader Strip is in place, do not remove until the reading of the lock is completely finished. (See Figure 7.)

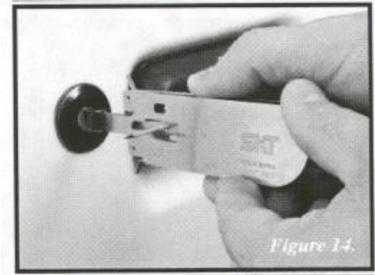


Reading

1. Insert the Guide Reader into the shutter unit of the lock being read.
(See Figure 8.)
2. Gently insert the Setting Blade into the lock. Make sure that the blade is fully inserted.
(See Figure 9.)
3. Move the Indicator arm on the reader so that the tip is below the end point of the Reader. This will protect the tip of the Indicator Arm from damage while inserting it into the lock's keyway.
(See Figure 10.)
4. Holding the Indicator Arm in place, fully insert the Reader into the lock, sliding it along side the Setting Blade.
(See Figure 11.)
5. Holding the Guide and Reader in place, remove the Setting Blade from between the Guide and the Reader.
(See Figure 12.)
6. With the Setting Blade removed, gently pull the Guide out of the lock, just far enough for the small guide pins found on the back of the Reader to seat into and fully engage with the guide tracks of the Guide. Once engaged, push the guide back into place.
(See Figure 12.)

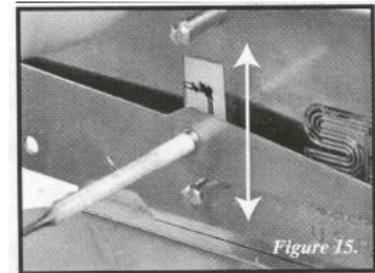


7. Make sure that the guide and Reader are perpendicular and square to the face of the lock. Reinsert the Setting Blade into the lock, over the top of the Reader. Make sure not to hit the pen tip fastened in the Indicator Arm. (See Figure 14.)
Note: The Setting Blade and Reader are extremely flexible. Do not be concerned with the slight bending necessary.



With the Setting Blade, reader and guide inserted in the lock, carefully rotate the lock back and forth. Align the lock so that there is no pressure being applied to the tumblers. Removing pressure on the tumblers allows them to drop completely and is critical for a correct reading of each tumbler.

8. Remove the Setting Blade. Be careful not to hit the pen fastened in the Indicator Arm.

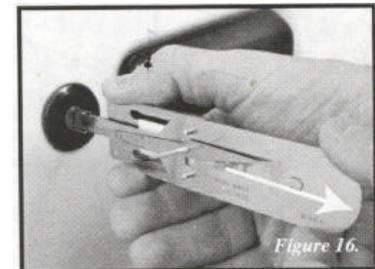


Gently tap the Indicator Arm to make sure that it is moving freely and to mark the starting point of the reading. This mark is later used as the index point for gauging the first cut on a tip stop key system.

(See Figure 15.)

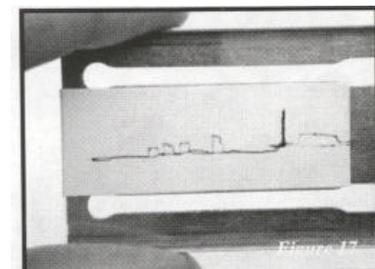
If the Indicator Arm does not move freely, repeat step 6 and 7, checking to make sure that the Guide is perpendicular and square to the face of the lock.

9. Now, with the Guide held perpendicular and square to the face of the lock, slowly pull out the reader. The slower the pulling, the more accurate the reading of the tumblers. Once the Reader has reached its full travel, remove the Reader and Guide from the lock.



(See figure 16.)

10. If the lock is true double-sided lock, turn the Guide and Reader over and repeat steps 1 through 9. (See Figure 17.)
Caution: Do not remove or reposition the Reader Strip!



Reading the Reader Strip

1. Remove Reader Strip from the Guide. Choose the correct Gauge for the lock system being read and place it over the Reader Strip.
2. Align the baseline of the Guide with the baseline on the Reader Strip.
3. Align the Stop Index with the Index Line on the Reader Strip.
 - On tip stop keys, use the index line made by the Indicator Arm after the Reader was first inserted into the lock and the Indicator arm was

checked for proper movement.

-- On shoulder stop keys, the last sharp drop of the Indicator Arm marks the shoulder.

4. Now use the spacing and depth indicator marks of the appropriate Gauge to determine the depth of each tumbler in the lock. Remember that not all tumblers may appear in each lock. Cut a key and try it in the lock. In some cases, impressioning may be necessary.
(See Figure 18.)

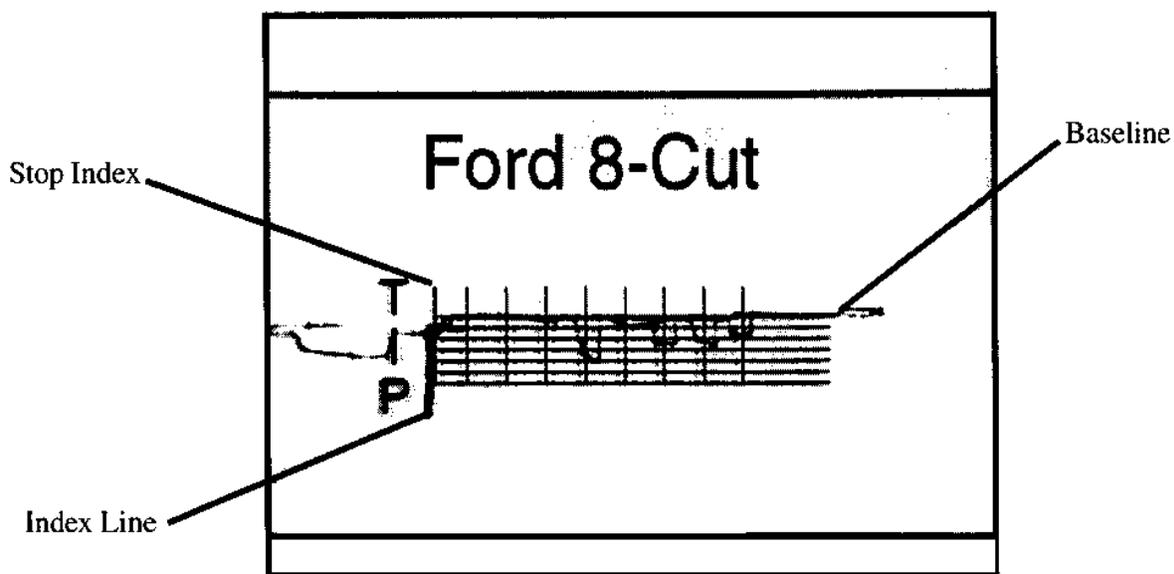


Figure 18.

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