

Excerpt from

Locksmithing: An Expanding Career Field

Program Preview

Welcome to the Education Direct Professional Locksmith program. Locksmithing is a growing field that can provide a fascinating career, a good income, job security, and self-fulfillment to anyone with a desire to work hard and succeed. The professional locksmith possesses highly specialized skills that few others have, so a skilled locksmith is always in demand. As a locksmith, you'll do interesting work while you're helping people. For this reason, a professional locksmith is always highly regarded in the community and commands the respect of friends and business associates.

The following is a sample excerpt from a study unit converted into the Adobe Acrobat format. A sample online exam is available for this excerpt.

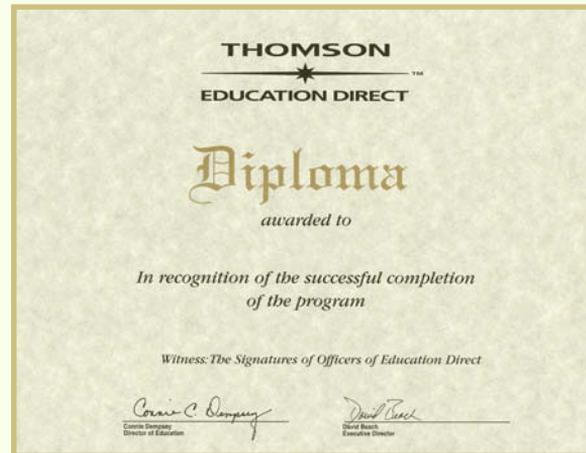
The study unit on which this excerpt is based comes from Professional Locksmith, a practical program designed to teach all the basic skills you need to start working as a professional locksmith. In this program, you learn at your own pace (as fast or slow as you wish) through step-by-step instruction. The lessons include hands-on exercises with real locks and professional-quality locksmithing tools. Thus, you'll get all the benefits of professional instruction and training with none of the hassles of the formal classroom. In addition, all the valuable tools that come with your program are yours to keep and to use when you start your professional career!

Just about everyone has thought about what it would be like to have his or her own business. When you own a business, you work for yourself—you're the boss. Your creativity and good ideas won't go to waste. You're the most important person in the company and no one can fire you. All of the profits of the business are yours; you can feel that your hard work is really paying off. This program teaches you how to start your own business and become self-employed, if you choose. At the same time, it teaches the professional locksmithing methods that will save you time and maximize your profits.

On the other hand, you may prefer to work for someone else. Perhaps you only want to work part-time, or even as a sub-contractor performing repairs only occasionally. Well, there are many excellent opportunities in locksmithing for you, too! You may choose to work for an established locksmith, a security installation company, or even part-time in your own home. You'll get plenty of information about where to look for jobs when you complete the program.

Upon completing all your program requirements, you'll receive a professional diploma from the school recording your achievement. You'll be proud to display your well-earned diploma in your home or in your business.

Your Program Diploma



Home study provides millions of people with the opportunity to learn new skills, earn diplomas, and start new careers. These achievements represent dreams come true for people of all ages. Anyone who has the desire to succeed can find personal satisfaction through home study programs.

Each and every skill you'll learn in this program has a real-life, hands-on application that can help you earn money and improve your job outlook.

After reading through the following material, feel free to take the [sample exam](#) based on this excerpt from the Professional Locksmith program.

In conclusion, remember that we want you to succeed. *Your success is our success.*

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Locksmithing: An Expanding Career Field

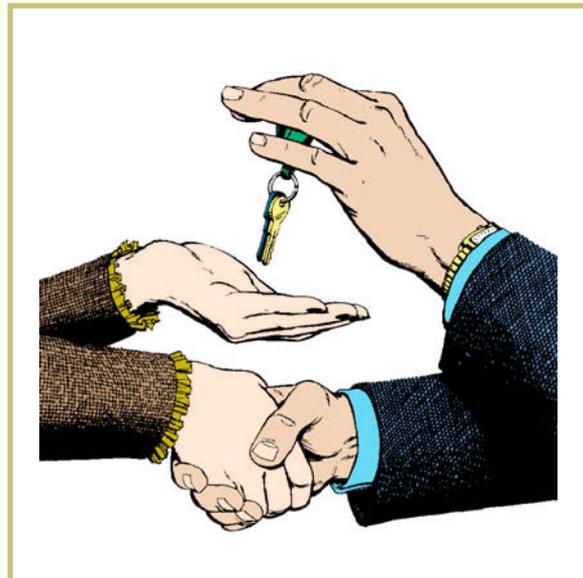
LOCKSMITHING: AN INTRODUCTION

What Is a Locksmith?

Locksmithing is an ancient skill that has been around for thousands of years. From the earliest days of humankind, people have needed some way to protect their valuables. Today, we use locks to protect our cars and cash; thousands of years ago, our ancestors protected their food supplies and farm animals in the same way. Ancient paintings on Egyptian walls show a lock being used to protect a king's treasure. The early locksmith who made that lock was as important and highly respected as modern locksmiths are today.

The locksmithing profession is an honorable one, and locksmiths have held a position of trust in the community for hundreds of years (Figure 1). Professional locksmiths are guardians of security. For this reason, locksmiths must be exceptionally honest, trustworthy, and of good character. A good reputation is essential to maintain the confidence of your customers.

FIGURE 1—*The professional locksmith holds a position of trust in the community.*



In the past, a typical locksmith installed, repaired, and replaced locks and keys (Figure 2). In more recent years, however, the development of new security devices has expanded the locksmithing field. A typical locksmith may now install and service a variety of electric and electronic security devices in homes, businesses, and cars, as well as traditional mechanical locks. As populations grow and crime rates continue to rise, we expect the need for residential and commercial security to increase.



FIGURE 2—Locks and security devices come in many shapes and sizes.

Locksmiths Are Needed

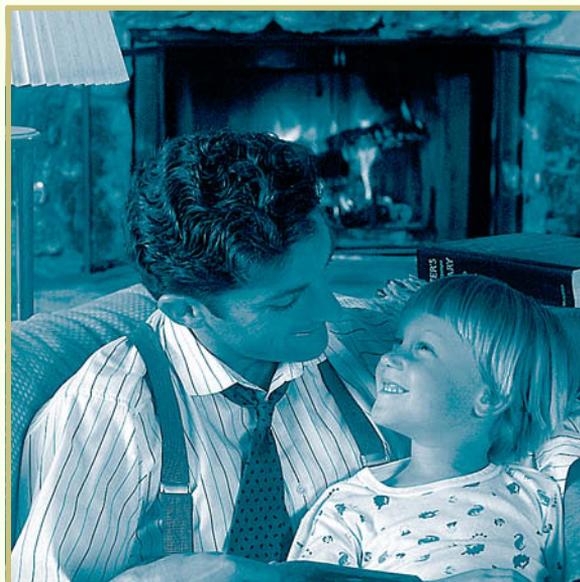
Everyone needs a locksmith sooner or later! Our world is filled with locks (Figure 2). We protect our homes, our cars, our property, and our loved ones with them. Think about all the uses for locks — in cars, in homes, in hotels, and in schools, just to name a few. Now think about how many new homes and cars people purchase each year. Your front door probably has at least two locks on it (maybe more if you live in a large city). The average car may have as many as eight locks on it—ignition, doors, trunk, glove compartment, and gas cap. Offices, factories, retail stores, and other businesses have locks on file cabinets, desks, toolboxes, cash registers, employee lockers, and safes. Most commercial buildings (and many homes) have state-of-the-art electronic security systems, burglar alarms, motion detectors, and security lighting. You may even have a lock on your bike, firearm, briefcase, or mailbox.

Locks give us a wonderful feeling of security—when they’re working efficiently. But what if a lock breaks? What if you lose your keys, or lock them inside your car with the engine running? What if a burglar violates your home? Who can help you?

The answer is the *professional locksmith*. The locksmith gets you back on schedule when you lock yourself out of your car. The locksmith protects your family and property from burglars and intruders. The locksmith protects millions of dollars’ worth of cash, documents, equipment, and merchandise in banks, factories, offices, and retail stores from theft and vandalism.

In a sense, therefore, locksmiths sell security and peace of mind to their customers (Figure 3). A skilled professional locksmith can build a successful career and earn a comfortable living from keeping customers, their families, and their property safe.

FIGURE 3—A locksmith helps people feel safe at home.



The Jobs Locksmiths Do

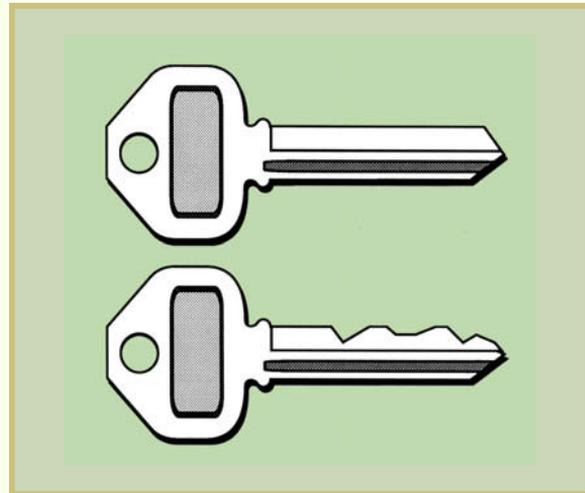
The average locksmith performs a variety of skilled jobs, depending on the needs and requests of their customers. Some locksmiths specialize in working on just one type of lock (such as auto locks or safes). Others work on all kinds of locks. Let’s take a closer look at the typical jobs that most locksmiths do. (*Note: As you read through the following section, pay special attention to the words in italics. We’ll use italic type throughout your program to help you notice important terms*

you'll want to remember. These terms are everyday words you'll hear often in the locksmith business, so it's important to learn them well.)

Duplicating keys. One of the most common locksmithing tasks is key duplication. Customers will frequently bring in a key and ask you to make copies. This simple service can make up a large part of a locksmith's income. In fact, a medium-sized shop may sell as many as six hundred duplicate keys per week! It's important for a locksmith to be able to provide fast service and a copy that works as well as the original key.

When you make a new copy of an old key, the new key must have the same basic shape and characteristics as the old key. For this reason, a locksmith keeps a large selection of different *key blanks*, or uncut keys, on hand to match up with the key the customer has (Figure 4). One of the most important skills a locksmith acquires is the ability to quickly recognize and identify the key blanks used by different manufacturers.

FIGURE 4—This figure shows a customer's original key and a matching blank.



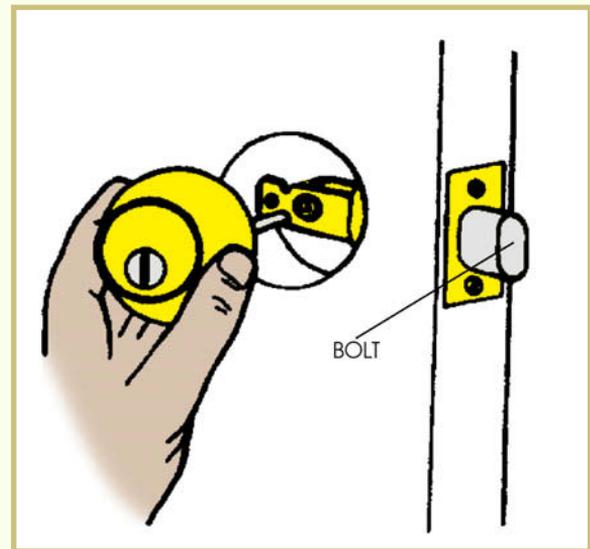
While many hardware stores and drugstores offer key duplicating, few stores keep a wide variety of key blanks in stock, so they'll usually only be able to copy the simplest and most common key types. Also, a professional locksmith is much more skilled at making copies that fit and work perfectly.

Occasionally, a locksmith may need to make a special key *by hand* for an old-fashioned or obsolete lock. For example, a customer may have lost the key to an antique desk or cabinet. In this situation, it may be impossible to replace the old lock without damaging the piece of furniture. So, the locksmith

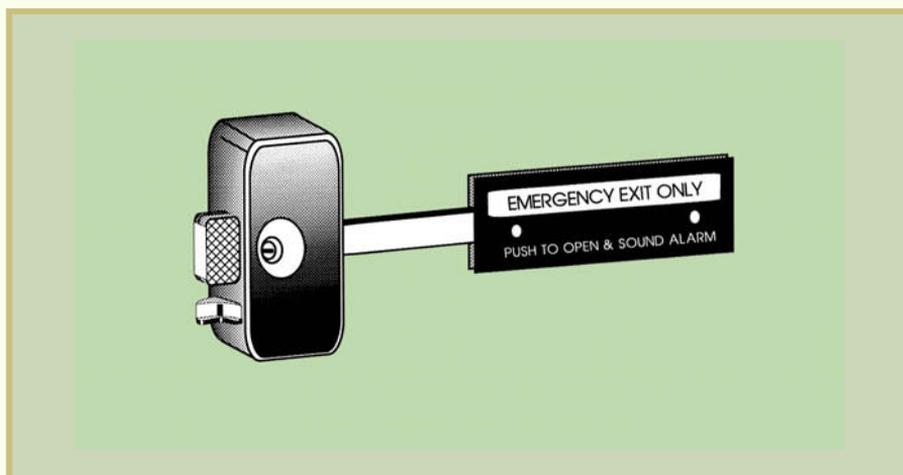
may custom-make a key by hand-filing a key blank. The locksmith performs this kind of work only when there's no alternative.

Installing locks. A locksmith may receive a call to install a lock on a front door, an inside door, a window, a toolbox, or just about anywhere else a customer requests. However, the largest portion of a locksmith's business comes from ordinary front door lock installations, replacements, or security upgrades (Figure 5).

FIGURE 5—Installing a Door Lock



Many locksmiths expand into installing commercial locks. Any facility or business that the public frequents has the potential of buying security merchandise from a locksmith. For example, the Life Safety Codes mandate the installation of *panic hardware* and *fire exit latches* in most public buildings, or special door locks that anyone can open in an emergency by leaning on or pushing a bar (Figure 6). Panic hardware differs from fire exit hardware, so be sure to purchase the correct one.

FIGURE 6—A Panic Bar

Stores install security systems to discourage pilferage and theft. Then, too, there are office security devices to install and service, like desk locks and filing cabinet locks. Finally, schools, hotels, and office buildings may contract a locksmith to install locks.

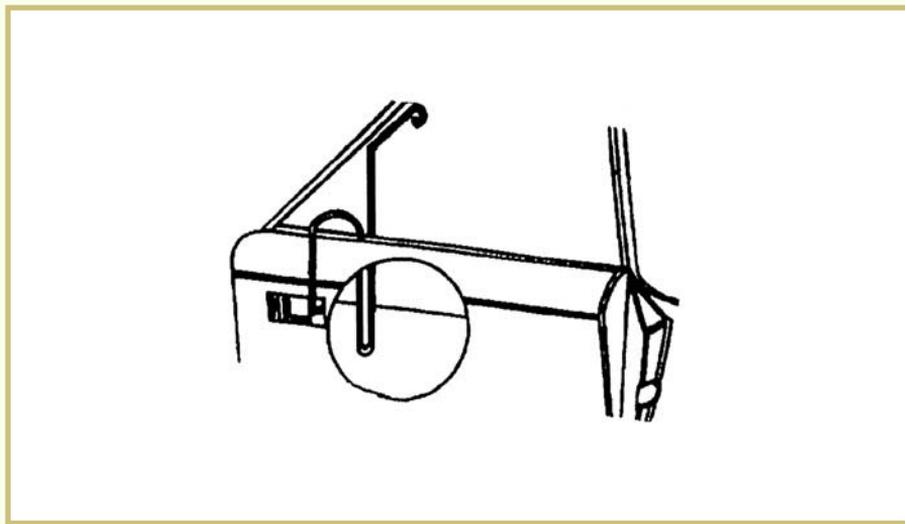
Repairing damaged locks. You wouldn't automatically replace all damaged locks with new ones. Any type of lock can need occasional repair, or a cleaning to remove dirt, oil, and rust from its delicate inner mechanism (Figure 7). A locksmith may replace a damaged part, lubricate a rusted lock, remove a broken key from a lock, or thaw out a frozen car lock in the winter-time. In addition, locks damaged by attempted forced entry will need repair.

FIGURE 7—Lubricating a Lock

Lock opening. Another important locksmithing skill is emergency lock opening, which involves the use of a number of specialized tools and techniques. For example, a locksmith can pick open a lock, but this technique is time-consuming. In emergency situations, a locksmith may have to force a lock open using a hammer, a wrench, an electric drill, or bolt cutters.

Auto work. It's normal duty for a locksmith to travel out to help locked-out drivers get back into their cars. It may be necessary to use specialized tools to unlock the door or trunk (Figure 8). It's even possible for the locksmith to make a new key at the scene, using the tools carried in the mobile workshop.

FIGURE 8—Opening a Locked Car

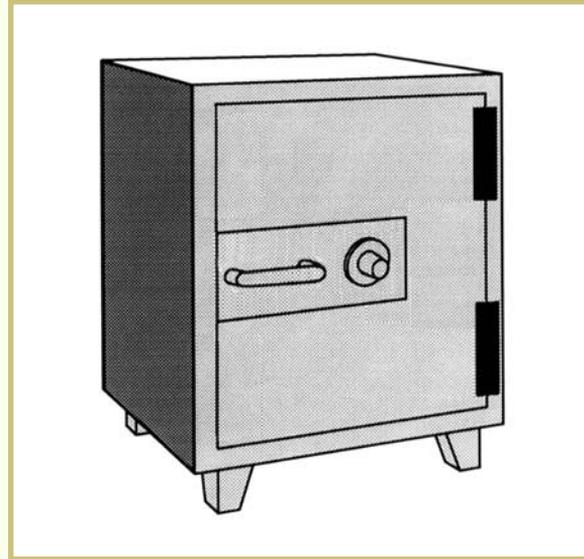


Evaluating home and business security. A locksmith employee who knows enough about security alarm systems might be asked to inspect a commercial establishment and give suggestions for putting in electronic devices to protect the business. The proposed security system can focus on areas of primary concern to the owner, such as employee pilferage, shoplifting, break-ins, or other risks.

Safe work. Servicing of safes involves repair, cleaning, changing combinations, and opening without a combination (Figure 9). One of the most common tasks is changing the combination, or *recombinating*. Businesses often require this service when employees leave. The locksmith changes the combination to prevent anyone who knew the old combination from gaining access to the safe. Locksmiths either remove the safe mechanism to the shop or do the work on-site. Repair work may involve something as simple as replacing a broken handle. It's not uncommon for a locksmith to demonstrate how to properly dial a combination.

Also, banks call upon locksmiths to service and repair safe-deposit boxes.

FIGURE 9—A Floor Safe



Installing burglar alarms. The increasing demand for security products has made burglar alarm installation a growing area of specialization for many locksmiths. Burglar alarms, both residential and commercial, are an excellent source of specialized business.

Here we conclude our brief overview of what locksmiths do. We'll review all this information in detail later. For now, though, note that this section is only an introduction to locksmithing skills and terms. All the professional skills are discussed in greater detail in later study units. For now, however, you should keep an important fact in mind. Most locksmiths specialize in just one or two important locksmithing skills. This is because the locksmithing field varies widely, and it's virtually impossible for every locksmith to know how to do everything. For example, the field of safe opening is a specialized profession that not all locksmiths enter into. Installing electronic devices is another example of a specialized field.

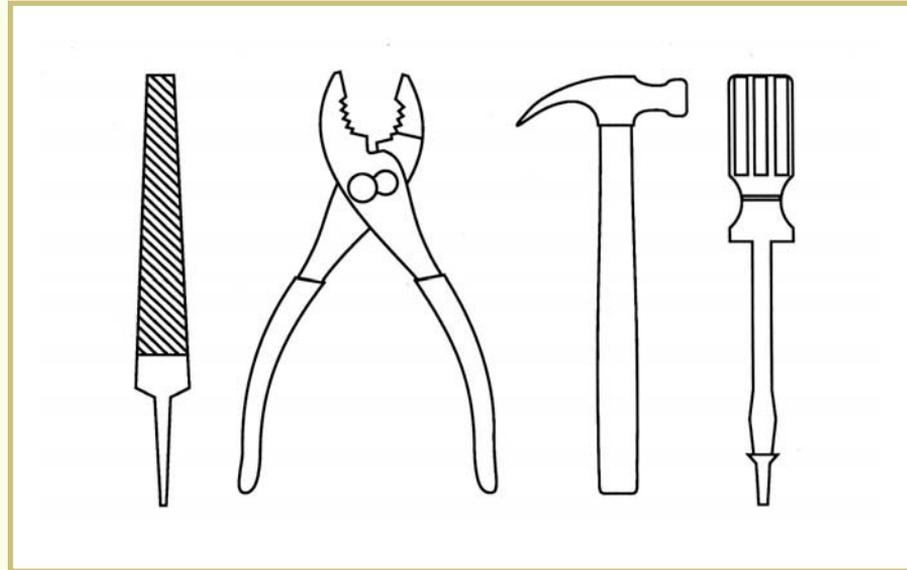
There are hundreds of lock manufacturers and locking devices in existence, and manufacturers are constantly updating and improving their products. It's impossible to know everything about every kind of lock made in the world! Also, you would need a wide variety of expensive tools to offer every possible service for every lock made. Many locksmiths run very successful businesses offering only simple repairs, key cutting, and lock sales.

A beginning locksmith should concentrate on learning about the most modern and popular locks, and the most commonly used types of locks. *If you thoroughly understand the basics of how different types of locks work, you'll be able to work on just about any device a customer brings you.* Once you've mastered the basics of the field, you'll then be able to move on to specialize.

Tools a Locksmith Needs

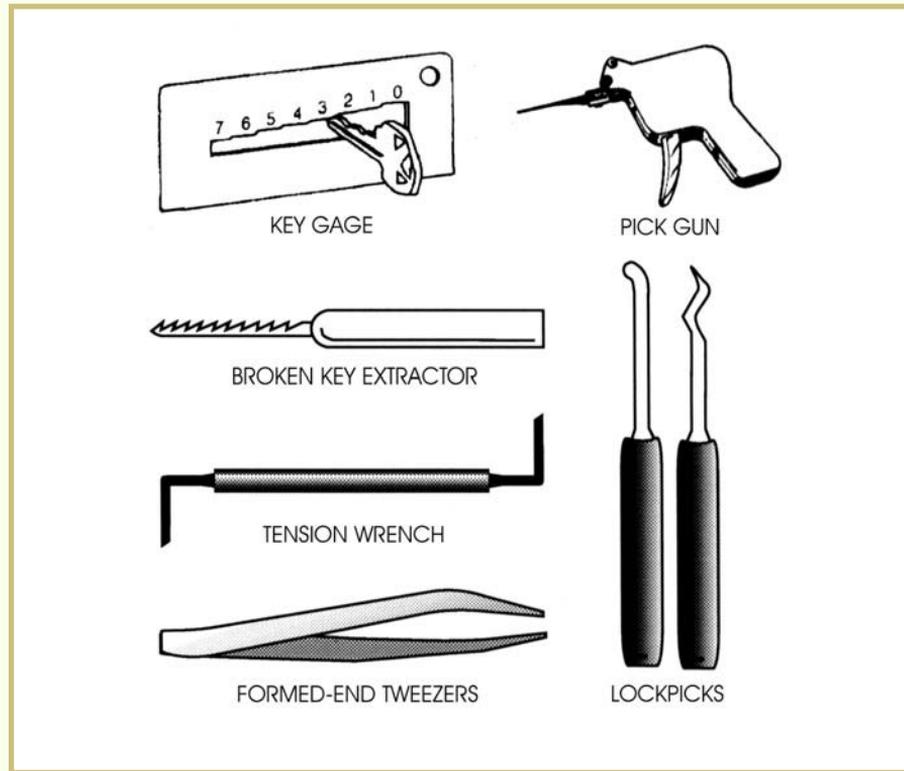
A locksmith uses many ordinary tools found in any workshop, such as screwdrivers, hammers, pliers, small vises, and metal files (Figure 10).

FIGURE 10—Standard Tools Used by Locksmiths



In addition, a locksmith needs specialized tools for work with different types of locks. Some examples of specialized locksmithing tools are lock picks, key gages, pick guns, and broken-key extractors (Figure 11).

FIGURE 11—Specialized Locksmithing Tools



A locksmith also needs lock parts and supplies. A typical locksmithing shop will always keep a large assortment of key blanks on hand, plus a selection of commonly used lock parts, like pins and springs. In addition, most locksmiths sell locks and locking devices to customers in their shops.

Reference books and publications, like tools, are essential to the locksmith. Most locksmiths keep a variety of reference books on hand, and their collections keep growing all the time. One of the most important resources is a key blank directory. A *key blank directory* identifies the manufacturer's name and number on a given key blank. The locksmith needs to know this information before duplicating a key.

Another important source of locksmithing information are *key code books*. These reference books decode the numbers and define the cuts in a given key (particularly auto keys) so that the locksmith can generate a key. We'll discuss how to use locksmithing reference materials later in the program.

You can order all of the tools, supplies, and reference books mentioned here from hardware and locksmithing supply catalogs.