

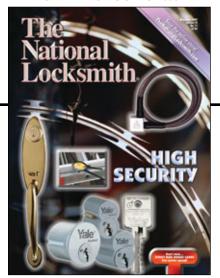
KeyMark'

Yale

Don't miss...
DIRECT MAIL BONUS CARDS
See center spead!

# TheNationalLocksmith.com CLICK HERE

### On The Cover...



The new Yale Keymark cylinders, Master Cobra cable lock, W-Lok padlocks and Medeco security systems offer unique security solutions.

Publisher Marc Goldberg

**Editor** Greg Mango

Art Director Jim Darow

Technical Editor Jake Jakubuwski

Senior Writers

Sal Dulcamaro CML, Michael Hyde, Dale Libby CMS, Dave McOmie, Sara Probasco, Robert Sieveking

Contributing Writers John Blankenship, Tony Blass, Carl Cloud, Ron & Chris Curry, Mark Daniel, Richard Allen Dickey, William C. Deutsch, Giles Kalvelage, Tom Lynch, Tom Mazzone, Randy Mize, Tom Seroogy, Don Shiles, Jeffery M. Trepanier

**Director of Sales & Marketing** Jeffrey Adair

Advertising Account Manager Debbie Schertzing

Accounting Manager Sheila Campo **Production Assistants Dave Krofel** 

Joseph Bonus

Administrative Assistants LaVerne Schertzing

Shipping Manager Allan Galvez

National Publishing Co.
The National Locksmith® ISSN #0364-3719 is published monthly by the National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. Periodicals postage paid at Bartlett, Illinois 60107 and additional mailing offices USPS 040110. Subscriptions \$46.00 per year in the USA: \$58.00 per year in Canada; \$72.00 in all other countries. Single copies \$7.00 each. Postmaster, please send change of address to National Publishing Co., 1533 Burgundy Parkway, Streamwood, Illinois 60107-1861. ©2002 by the National Publishing Company. All rights reserved. Printed in the U.S.A.







(630) 837-2044 • Fax: (630) 837-1210 E-Mail: natllock@aol.com See us on the World-Wide Web: www.TheNationalLocksmith.com

The National Locksmith November 2002 • Vol. 73, No. 11

### FEATURES

FEATURE! 16

**Get Key Control With Yale** Keymark

An ideal solution when re-keying an existing system.

COVER ATURE! 24

**High Security Locks** 

The first line of defense.

32

**Quick Entry Update** 

1998-2003 Lincoln Town Car.

36

2002 Isuzu Axiom, Part 1

This vehicle has no transponder system.

42

**HPC's Blue Shark** 

A revolution in key cutting.

48

**Experinetix QU-I.C.-MARK System** 

An easy, reusable way to mark interchangeable core locks.

**52** 

**Specialty Locks** 

Locking products for those unique requirements.

56

**CSS QL3 Remote Access Safe,** Part 1

Controlling a safe from 2000 miles away.

68

**Tran Positional Dialing And Riding The Wild Rivets** 

Dale takes us through opening and Allied Gary TL-30.

84

You Can't Lose With The U1!

AABLE's new Ford Focus tool.

108

2002 Harley-Davidson Ultra Classic Electra Glide, Part 2

Covering the saddlebag lock and alarm.

Master 900001-907353, Part 1

Combination lock codes.

137

TheNationalLocksmith.com

Visit us online for technical forums, chat, online store plus visit our sponsors.

# DEPARTMENTS

**5** Commentary

Mango's Message

10 Letters

12 SECURITY CAFÉ

BEGINNER'S CORNER

**66** The Lighter Side

82 ROAD RALLY

THE CASH STATION

**TECHNITIPS** 94

132 Business Briefs

138 Test Drive

# COMMENTARY

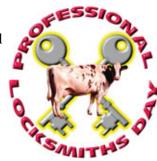


# Did you have a Happy Professional Locksmiths Day?

**B**elated Happy Professional Locksmiths Day! I'm sorry I forgot to wish you peace and joy on this day last month when the holiday occurred. What? You didn't know there was a Pro

Locksmiths Day?

Well there is! You may not find a Hallmark card for this day, and in fact, unless you live in the state of Wisconsin, the date isn't even official. But in the Dairy State, there is an actual day, once per year, set aside to honor the modest locksmith.



Below is the text of the resolution honoring locksmiths with our own holiday!

Happy Holiday!

Whereas, October is National Crime Prevention Month; and

Whereas, by observing a Professional Locksmiths Day, greater awareness of the indispensable duties performed by these artisans will be furthered; and

Whereas, locksmiths design and implement costeffective locking systems for churches, schools, industry and institutions, as well as commercial businesses of all kinds and private homes; and

Whereas, locksmiths provide access to those hard-tofind unique items, out-of-date parts, and special applications; and

Whereas, locksmiths work wonders with antique locks, restore abused door hardware and create function where disaster had existed; and

Whereas, locksmiths make available, open, repair, and offer advice on, the multitude of safes for protection from burglary, fire and theft of

electronic data and deposits, as well as protecting family treasures and heirlooms; and

Whereas, locksmiths respond at all times of the day, evenings, weekends, special events and holidays, facing the worst weather and conditions, to help stranded people that have keys locked in their homes, businesses and automobiles;

and

Whereas, by observing a Professional Locksmiths Day, these artisans, who serve the citizens of Wisconsin, are recognized as professionals for their endeavors;

Now, therefore, be it Resolved by the assembly, That the members of the Wisconsin assembly, on behalf of professional locksmiths across the state, hereby

proclaim the first Monday of October, 2000, and each first Monday of October in each year thereafter, as "Professional Locksmiths Day"; and, be it further Resolved,

That the assembly chief clerk shall provide copies of this resolution to the Wisconsin Indianhead Chapter of the Associated Locksmiths of America.

Man Goldburg

Have questions? Want free technical help? Free Locksmith Forums!

www.TheNationalLocksmith.com

Marc Goldberg
Publisher





suspected something was up when my wife was waiting at the door for me after work one night. The only time Rachel waits at the door is when she is expecting the UPS truck to arrive and deliver her order from Macy's, Marshall Fields, Saks Fifth Ave., Lord & Taylor, or Tiffany Co...







# A Weekend to Remember

Next came a wonderful dinner and the kind of undivided attention you show each other on your second date. (Something was definitely up!)

No sooner had the dishes been done and food put away, then a scrumptious dessert was served. (Yum, Yum.)

Then came the real kicker, Rachel offered me a fun filled weekend guaranteed to blow my mind. (*I can hardly wait. This is going to be gooood!*) She went on to describe a weekend filled with scrumptious food, great company, a first class hotel, and a show to boot! There was so much enthusiasm in her voice, and her big brown eyes reminded me of my favorite dog, "Bruiser," so I patiently listened as she continued.

She had agreed to co-teach two mechanical lock — Combination and Safe Deposit Box — service classes at the Doyle Security Conference in Minnesota with Rich Belev (from Doyle), and she wanted me to go with her. The only catch was she wanted me to

not just tag along for the ride, but assist in the class as well! (*Ah*, the plot thickens.)

After looking into Bruiser's eyes, oops, I mean Rachel's eyes, I agreed to volunteer my time and assist her.

Continued on page 8.

DreyManzo

Greg Mango Editor



# TheNationalLocksmith.com • CLICK HERE •



### Continued from page 6









No sooner had I said yes, she whipped out my e-ticket itinerary, and presented my suitcase fully packed. (I wonder what she would have done had I said No?)

We both had taught a Kaba Mas (formerly Mas-Hamilton) Auditcon class three years earlier at the Doyle Conference and the class had gone reasonably well... when she let me talk.

I do not often write about trade shows or conferences I attend each year, but just as the world stops for a minute to recognize an act of heroism, kindness, or honesty, I thought I would also take a minute to recognize a conference that deserved to be in the spotlight.

It is evident from the start that the Doyle conference is first and foremost for the security professional. The show is well organized and I was impressed by the presentation and details. The conference site is on grounds that are beautiful, uncluttered, had affordable rates, and the food provided was first class. Every breakfast, lunch and dinner included multiple selections of entries and desserts.

The educational classes were a good mix for the beginner and the experienced technician. The convention held on Saturday afternoon, had a small, but enthusiastic group of vendors from our industry displaying their wares. Every year Paul Justen, president of Doyle, and the employees choose a theme for their show. This years theme was NASCAR, and the door prizes consisted of bonafide NASCAR leather jackets, a trip to a NASCAR race, and leather NASCAR hats, just to name a few. In fact, everyone in attendance had the opportunity to spin a prize wheel and walked away with something. Nobody left empty handed. I even came home with a tee shirt... and Bruiser.

This show takes me back to the good old days when trade shows catered to the security professional, who on a modest budget could get educated, meet fellow locksmiths, see new products, get a good meal and have a genuine good time. I know I had a great time.

Teaching is a two way street, and I learned from the class just as much, if not more, than the attendees did from me. Most of all, I enjoyed the camaraderie. I love to be in the company of my peers. It made me smile as I listened to these professionals whose dedication to their trade was manifested by their attitude, class participation, and willingness to learn.

The Doyle Security Conference is just one of countless industry events that I have attended, and or participated in over the years. For overall satisfaction, it ranks near the top. There are other association and distributor conventions that I also enjoy and are well worth your time. There is no better way of expressing your appreciation, or support for your distributor, than by participating in their respective events.

November

2002

# Letters

The National Locksmith is interested in your view. We do reserve the right to edit for clarity and length.

# Just Staying Busy Ain't Enough

Your September Mango's Message inspired me to respond with a personal friendly "opposing view" regarding your statement, "The Locksmith Businesses that are flourishing are the ones that will and can do almost any job that comes their way. It may not be all lock work but it pays the bills."

The majority of the locksmith businesses that "do it all" are mired in a low profit yielding, more intensely competitive business than ever before, with competitors from many channels. In my opinion, it is not the lack of goods or services offerings alone that is making for slower days, less profits and creating agitated or depressed locksmith business owners.

My belief is the reactive nature of most locksmith business owners, is the culprit. Typical locksmith businesses wait for the phone to ring. They do not know who will call next or what the caller will want. Most locksmiths do not promote themselves, their

The National Locksmith
1533 Burgundy Parkway
Streamwood, IL 60107
Attn: Editor

businesses or products and services. They hope a customer will call, they hope they ask for the "good stuff." Hope is not a strategy! Reactive behavior is a predominant reason for any slowdown in my opinion.

The fact a business can "do anything" is not an indicator of success in today's environment. Busy work is trading hours for dollars and does not necessarily produce profit sufficient to sustain or grow a business. Since profit is the desired outcome of all American business owners, just staying busy, just "ain't" enough these days.

A locksmith business could flourish by "just changing locks" if the business proactively pursued consumers. Why not, oil change specialists dot the successful business landscape without tires, brakes, mufflers and engine repair! Some locksmith businesses flourish by focusing on automotive only, or safes only, or residential only, or electronic security, narrowing their focus, consolidating resources, centralizing training and operations and standardizing their work for greater productivity.

The market leaders flourish by limiting what they do to only the more profitable work and diversifying their offering. How many of the top 100 locksmiths repair luggage locks, do automotive work, or claim a majority of their work is residential?

While we are in agreement that the more broad the security solutions offered, the more likely opportunity for success. Today proactive marketing and sales efforts is a critical element to success.

There is no doubt the market leaders are growing rapidly adding electronic access control, electrified



hardware, closed circuit television, and in several cases alarms, to their repertoire. The successful "locksmith" businesses would argue they are security companies with a deep-rooted history in locksmithing, but represent a far more "total security scope" to their target clients.

I do agree with your advice to analyze the weaknesses and improve those as a method to get on the road to success. But, I also believe possessing the skill and knowledge and standing by waiting for a call could be a lonely and less productive position.

Let's help the industry understand the *proactive nature of going out for business* will prevent many businesses from going out of business in the years ahead. Publishers, editors, columnists, manufacturers, distributors and retail dealers must make the effort to engage in proactive marketing and selling tactics, targeting desired consumers, to keep the channel vibrant and on the grow.

Warmest regards,

Joey Dalessio Business Solutions Florida



# Security Café

# DROP IN FOR TOOLS, TECHNOLOGY & EQUIPMENT

### 940 Series Strike

The Folger Adam 940 Series strike adds a new universal strike to the company's product line. Installed with the appropriate faceplate, the series can be used with mortise and cylindrical locks. Available



with monitoring and multiple face plate options, the 940 Series is easy to install and will open with up to 20 lbs. of pressure on the keeper.

### **Gun Lockboxes**

Heavy gauge steel and Medeco cylinders highlight gun lockboxes by Tufloc.



The boxes store handguns and valuables safely and conveniently. Boxes can be mounted in many areas, including in vehicles and buildings.

### Simplex® 5000 Lockset

Kaba IIco unveils the newest addition to its lineup of pushbutton combination locks, the fully mechanical Simplex® 5000. With its new clutch-free design and cast stainless steel internal drive parts, the Simplex® 5000



offers greater strength and durability than ever before. In addition, the new lockset is easier to install with its non-handed design, while end-users will appreciate the lock's one-handed operation, thousands of easy combination changes, and a two-year warranty.

The Simplex® 5000 is an all-purpose pushbutton lock well suited to meet growing demands for security in a simple straightforward manner. Entry is easy; with one hand the user depresses his combination, presses. "ENTER" and turns the ADAcompliant lever. To familiarize users, the lock comes with a helpful surround card offering operating instructions. When employees, tenants or guests leave, combination changes take seconds without removing the lock from the door. The key override feature provides convenient access for emergency, security or maintenance personnel. Plus the lock accepts fifteen major industry standard key-in-knob cylinders allowing facility managers to maintain a master-keyed security system.

### SecuraKey Reader Meets ISO Standards

Secura Key introduces a new generation of high frequency 13.56 MHz readers for use with access control

# Klassy Keys At Half The Cost

The new designer key blanks that have been introduced in the market place, are attracting much attention. However, many are apprehensive to make the initial investment. Klassy Keys presents its American classic collection of precision calibrated key

blanks, at about half the cost of other designer key blanks in 19 of the most popular designs, chosen from a survey of 500 people different age groups. The goal is to give the "little guy" a chance to buy at more affordable prices and enable him to show a better return for his investment. Starter packages and dealer packages are available to fit the small business owner's budget.



systems. These new e\*Tag™ proximity readers work with a variety of contactless smart cards and key fobs that meet ISO 15693 and ISO 14443 A/B standards.



13.56 MHz is emerging as the RFID technology of the future. Communicating 100 times faster than traditional 125 KHz proximity readers, e\*Tag™ offers multiple card reads, read/write applications, custom

card encoding and many other benefits. In addition, 13.56 MHz transponders are appearing as smart labels on packages and luggage; smart wristbands on hospital patients and amusement park visitors and smart tags on garments and other merchandise.

Two of the new e\*Tag™ readers are available as complete, fully potted, weather-resistant units with integral antennas. In addition, where an external antenna is needed, e\*Tag™ readers are available with a 50 ohm SMA connector.

E\*Tag™ readers come with an industry-standard Wiegand output compatible with most access control systems. In addition, a second communications port is provided supporting either RS-485 or TTL protocols. This port enables two-way communication for

# SECURITY CAFÉ

### Continued from page 12

read/write applications and permits a wide range of customization of the reader functions. Readers may also be ordered with RS-232 communications.

### Comstar's Charge Anywhere™

CHARGE ANYwhere™ is a wireless credit card processing solution, a feature-laden yet affordable end-to-end, scalable point-of-sale (POS) service that allows businesses to securely make transactions in the field and also to manage them on-line, in real-time.



CHARGE ANYwhere™ combines a compact card swipe device with an innovative, customizable Web-based transaction database and reporting system and other features in one low-cost package. It gives businesses a robust and economical way to securely execute, authorize and manage wireless credit card payments in real-time.

CHARGE ANYwhere™ also includes check authorization and two-way messaging as standard features, and is compatible with certain dispatching applications to create a truly multi-functional solution for any business that conducts transactions in a mobile environment. The monthly CHARGE

ANYwhere™ service charge is extremely affordable, as well. Since all aspects of the solution are provided by Comstar, customers only have to deal with a single point of contact for all of their support needs."

CHARGE ANYwhere™ employs the highest level of end-to-end security available today in the wireless POS industry with 256-bit randomized encryption overthe-air and 1024-bit for Transaction Manager.

### Detex Exit Device Impervious to Water and Weather

Detex Corporation has introduced an alarmed exit device that is "weatherized" and designed to operate in all types of climatic conditions including rain, snow, ice, humidity and intense heat.



The new Value Series, model V40 x EB x W, addresses many problems that loss prevention and security managers face when trying to secure gates and doors located outside, or in areas with high humidity and wetness. These areas must be locked and alarmed, but still provide for instant egress in case of a fire or panic situation.

Ideal applications for the V40 x EB x W include garden center gates found in large retail stores, gates in waterfront resort properties or aquatic facilities, and gates in child care facilities and playgrounds. Another common application is for exit doors in the kitchens of restaurants. These types of doors endure high humidity and grease, and are frequently washed down with water.

The V40 x EB x W alarmed exit device exceeds military test standards for salt fog, which tests the effects of corrosive environments in coastal regions. The unit also surpasses testing standards for a driving rain test, which simulates 4 inches of rain per hour under 40 mile per hour winds. The electronics are impervious to water and weather, thanks to Detex's All Climate Electronics. or A.C.E.

# Jensen New Specialty Tool

Many of the tools offered in Jensen catalogs have been designed to meet special needs of the electronics industry. A recent addition is the line of Crescent® insulated nut drivers with each unit individually tested for 1000 volts. These hollow shaft tools are precision machined with casehardened sockets and rubber cushion grips.



They feature double insulation, red over yellow, to visually detect faulty insulation. Seven sizes from  $^{5}/_{10}$ " to  $^{9}/_{16}$ " are available individually or in a set. The insulated nut drivers comply with IEC900/ASTMF1505-94.

### Marks USA Grade One Tubular Deadlatch

Marks USA has now developed an ANSI grade one tubular deadlatch. This product was created by modifying its grade one tubular deadbolt components to accommodate a new heavy duty, grade one tubular latchbolt. The



latchbolt features a stainless steel deadlocking latch nose with  $\frac{9}{16}$ " latch throw. The result is an easy to install tubular deadlatch, which is available in both conventional as well as IC core cylinder models.

# Tool-Vu A Solution For Tight Spots

Tool-Vu from Nature Vision, Inc. is a portable, self-contained video inspection system for completing difficult job, home, and hobby tasks in tight-squeeze, hard to see and low-light situations.



Most trades experience "can't see" problems in tight places where one's head doesn't fit. Mirrors might help, but only with adequate lighting. Tool-Vu saves work time and sanity by solving the problem of being unable to see in tight and dark spaces.

Tool-Vu provides the eyes and neck for more

# Shop the online store TheNationalLocksmith.com

CLICK HERE

# S E C U R I T Y C A F É

thorough pre-job inspections and close scrutiny of completed work in crammed quarters. Tool-Vu's miniature CCD camera has a built in on\off infrared light source.

Its 30-inch flexible gooseneck can snake in and around where you can't otherwise see. An adjustable-focus lens allows for 10x magnification and small-parts inspection. Tool-Vu comes as a complete turnkey system.

# MDPS-4 Punch & Die Set

Major Manufacturing's new punch and die set punches a double "D" hole in sheet metal cabinet drawers and doors. A must have tool for the locksmith working on vending machines, lockers, metal cabinets or any type of sheet metal door made with 18 gauge (.048) or

lighter steel. To use, simply drill a  $^3/8$ " hole centered where the cam lock is to be installed, slide the punch through the hole and



tighten down the hex nut with an <sup>11</sup>/<sub>16</sub>" wrench or socket set. Punches a double "D" hole size .645 wide by .770 high.

# Aiphone Intercom System for Corporate Security

Aiphone Corporation's new AI-900 Corporate Security Intercom System was designed for corporate security offices looking to enhance their existing access control system. The AI-900 integrates flawlessly with access control and video surveillance equipment and can be easily customized to fit application needs, giving users a more effective system with a higher level of security.F

The Al-900 allows users to program and monitor software from an off site PC, via a simple RS-232 interface. The system can support one single-line telephone, with Caller ID



and gives users the ability to forward calls to system operators who carry cell phones or pagers, so a call will never go unanswered. The system also has timebased forwarding, real time audio monitoring, data and voice recording and paging.

From a single exchange the system can support up to 4 master stations and 64 sub-stations or up to 16 exchanges with 64 master stations and 1,024 substations. The master stations can be a single line telephone with Caller ID or the Aiphone AI-900 MS Master Station. The four sub-stations are the Al-180 economy model, AI-170 vandal resistant model, AI-160 vandal/weather resistant model and Al-150 emergency call model. Each sub-station faceplate is made of brushed stainless steel and has a vandal-resistant call button (except the AI-150), with optional LED/relay control.

ΤΙL

# Japanese High Security Auto Servicing Lexus, Millenia, Q45 For Professional Locksmith Use Only by, Michael Hyde

# Japanese High Security

Some of the most profitable cars are also the trickiest to work on.

CLICK HERE TO LEARN MORE





ecurity awareness has greatly increased due to events of recent years. As a result, facilities have become increasingly aware of the importance of key control and what can result from a lack of it.



1. Yale KeyMark.

of keys and key records æ any method or procedure which limits unauthorized acquisition of a key and/or controls distribution of authorized keys (Fundamentals of Master Keying by Jerome Andrews). Simply put, key control manages and monitors who can get keys and who has keys, and to which locks they have access.

### **A Compromising Situation**

Unfortunately, many existing facilities are realizing that their master key systems have been compromised, due to inadequate key control practices in the past. In many instances, keys have been issued without record to employees, vendors and customers. Keys have been lost or stolen and not reported. Multiple master keys have been issued with no accountability. Employees have left the organization and not returned keys.

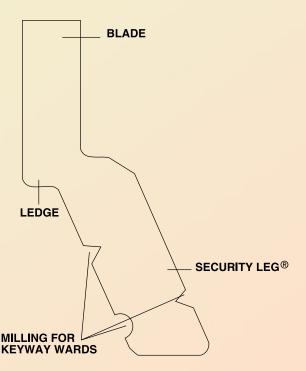
Not surprisingly, keys for many commercial buildings have been easily duplicated by local locksmith shops, hardware stores or discount retailers. The most secure way to assure that keys will not be duplicated is to have them protected by US Patent laws. With patent protection, keys must be obtained directly from the manufacturer, and it is illegal for anyone else to duplicate them.

Businesses that once purchased locks for their buildings are now looking to invest in something more – safety, security and general peace of mind. But most keyways offered by hardware manufacturers have been around for years, and the majority do not offer a system of key control to meet today's stringent security requirements. Since these "veteran" keyways are easily available, unauthorized duplication remains an issue.

### **Key Solutions**

Yale KeyMark offers an ideal solution for the facility looking to re-key an existing system, or start over with a new system that provides protection against unauthorized duplication. (See photograph 1.) The new line of cylinders available from Yale Commercial Locks and Hardware, offers patented protection without the added costs of high

# TheNationalLocksmith.com • CLICK HERE •



A. A unique Security Leg® keyway angle.

security. These patented cylinders, protected by US Utility Patent No. 5,176,015 until 2011, have a unique Security Leg® keyway angle, with keyways that are proprietary to Yale. (See illustration A.)

The Yale KeyMark system works well for environments where key usage is high and key control is critical, including educational and healthcare facilities, industrial and commercial buildings, offices, storefronts and government facilities.

By approaching security from a slightly different angle, Yale KeyMark provides an exceptional lock system that security-savvy customers are finding easy to choose - but hard to pick. In addition, Yale KeyMark allows fixed core (see photograph 2), large (LFIC) (see photograph 3) and small (SFIC) format interchangeable core cylinders (see photograph 4) all to be keyed to the same master key system. Very few other keying systems can accommodate one key for both small and large interchangeable cores. Yale KeyMark also provides options and special cylinders that retrofit other manufacturers' locksets, from specially designed cylinders to mortise cylinder cams. (See photograph 5.) This allows buildings that have been outfitted with several different manufacturer products within the facility to be changed to one Yale KeyMark system without changing the entire lockset.

### Yale KeyMark Allows Greater Keying Expansion

How does Yale KeyMark keying systems operate? Yale KeyMark cylinders/keys are completely separate keying systems from conventional Yale systems. The Yale KeyMark system uses the A2 format for generating bittings. This method system allows greater keying expansion of the system, because of the minimal changes lost due to maximum adjacent cut specifications.

SFIC cylinders are keyed to a "23" pin stack height: i.e., the sum of the pins in a chamber must equal 23. All other cylinders (Non-SFIC) use a "19" pin stack height;





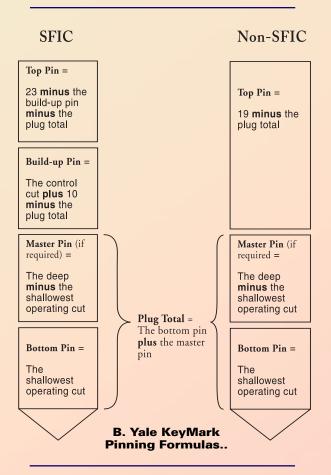
3. KeyMark in large LFIC.



# TheNationalLocksmith.com • CLICK HERE •



5. Mortise cylinder cams.



i.e. the sum of the pins in a chamber must equal 19. (See illustration B.) The following rules should be followed when pinning cylinders:

### Rules for Top Loading Yale KeyMark SFIC (23)

For best results, pin the cylinder one chamber at a time.

Pin the cylinder to the operating keys – change key(s) and master keys(s) – using bottom and master pins.

Pin the cylinder to the control key by inserting a "build-up pin" in each chamber. To determine the build-up pin numbers:

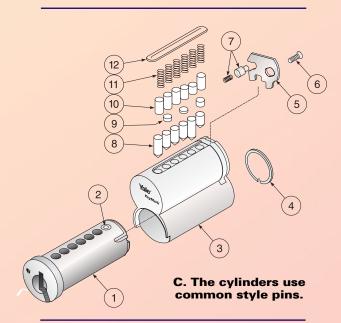
Add 10 to each of the control key cuts. This is called the "control total".

For each chamber, subtract the bottom pin and master pin total (plug total) from the control total.

Use the resulting number as your build-up pin number.

Load the top pin. To determine the top pin number, subtract the control total from 23. The total stack height (the sum of all the pins) must equal 23.

6. Keys can't be duplicated without end user approval.



When all chambers have been pinned, insert the core into the capping block, load springs, and cap.

### Rules for Top Loading Yale KeyMark Non-SFIC (19)

For best results, pin the cylinder one chamber at a time.

Pin the cylinder to the operating keys – change key(s) and master keys(s) – using bottom and master pins.

Load the top pin. To determine the top pin number, subtract the bottom pin and master pin total (plug total) from 19.

The total stack height (the sum of all the pins) must equal 19.

After all chambers have been pinned, insert the core/cylinder into the capping block, load springs, and cap.

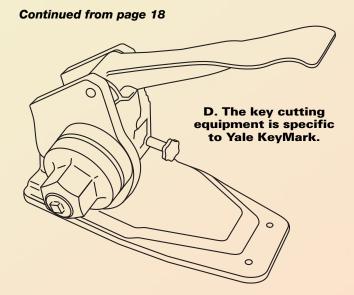
### **Sometimes It Just Pays To Be Different**

Even the most unsophisticated lock user can recognize the uniqueness of Yale KeyMark. The Security Leg" unique angle of the Yale KeyMark keyway is the basis for the utility patent.

Yale KeyMark cylinders comply with BHMA A156.5 testing, and all cylinder types have met Grade 1

Continued on page 23

# TheNationalLocksmith.com • CLICK HERE •



operational and security qualifications. The product ships quickly, and is easily installed and serviced. Yale KeyMark cylinders do not contain any extra internal moving parts, such as sidebars. The cylinders use common style pins, rather than angle-tip or interlocking pins, which can be difficult to work with and also result in a loss of keying capacity. (See illustration C.) Yale Keymark also uses selected spool-type pins for added resistance to picking, which are provided in the dedicated Yale KeyMark pin kit.

Keys simply can't be duplicated without approval of the end user. (See photograph 6.) Yale is maintaining strict procedures relating to key and keyblank distribution

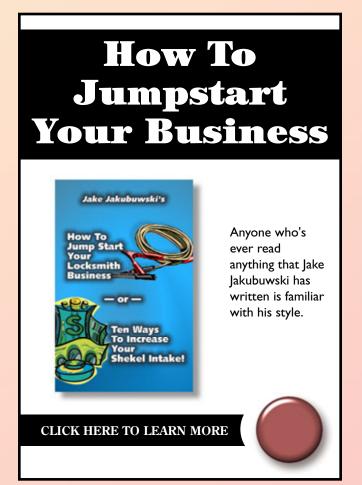
through the company's existing security policy. All keys issued from the factory will be related to a specific master key system, created by Yale Security Group (YSG) Key Systems Administration. Keyblanks can be ordered, with proper authorizations, to a specific system for field cutting. The key cutting equipment is specific to Yale KeyMark, and special vise jaws are required to cut the unique angle of the keyblanks. (See illustration D.) And Yale KeyMark keys are covered by a lifetime warranty against breakage under normal usage conditions.

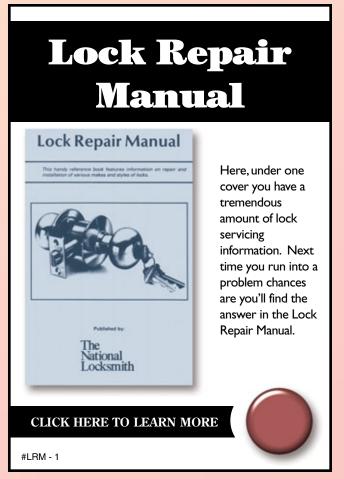
"We see Yale KeyMark becoming the preferred standard in new commercial and institutional construction," said Product Manager Lee Garver, AHC. "Key control is critical for new construction projects, and this system is able to uniquely deliver this objective."

For more information about the benefits of patented key control, contact Yale Commercial Locks and Hardware at: (866) 469-7867, or visit the website at www.yalelocks.com. Circle 300 on Rapid Reply.

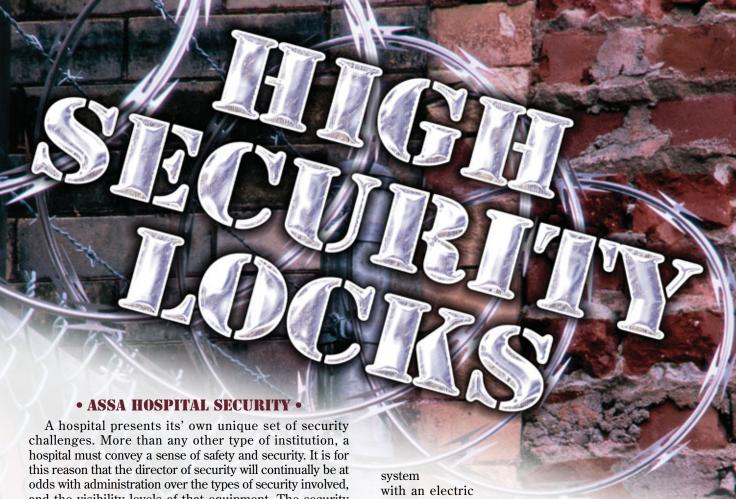
Lee Garver, AHC, is Product Marketing Manager, Keys and Cylinders, and Lori Robb is Marketing Manager, Keys and Cylinders for YSG Door Security Consultants.

YSG Door Security Consultants, an ASSA ABLOY group company, provides sales, marketing and support for seven of the most recognized brands in architectural hardware and door security: Ceco Door Products, Corbin Russwin Architectural Hardware, Folger Adam Electric Door Controls, McKinney Products Company, Norton Door Controls, Rixson Specialty Door Controls, and Yale Commercial Locks & Hardware.





# heNationalLocksmith.com CLICK HERE



and the visibility levels of that equipment. The security department will inevitably argue in favor of maximum exposure, i.e., security guards, CCTV, card access, etc. Administration will vote in favor of a more discreet security system, reasoning that extreme measures will raise the fears of both the staff and patients. A compromise must be reached between the two departments, one that ensures the security of the hospital without barbed wire fences, guards at every door, or metal detectors at the front door.

This article will focus on the simplest and most economical method of upgrading security: ASSA high security retrofit cylinders, combined with a comprehensive key control program. An ideal solution to this problem is a high security master key system, incorporating both physical protection and key control. When combined with proper surveillance equipment, and a security department fully aware of potential problem areas, the high security solution provides an economical means of securing the facility.

Mechanical door control is more than physically securing each opening. Visiting hours, outside physicians and lucrative items such as computers, expensive medical equipment and high concentrations of drugs make hospitals a prime target for theft. Some of the priority areas to be focused on are: perimeters, psychiatric units, administration offices, human resources, pharmacies, drug carts, tool rooms and nurseries.

Perimeter - In most cases, perimeter doors are left open during visiting hours, generally falling somewhere between 8 am and 10 pm. After hours, however, perimeter doors are locked with the main entrance monitored by the registration desk and/or a security guard. A door release

lock and remote control device is a common method of controlling access. Perimeter keys should be limited to security and maintenance personnel. Every access control system door needs an ASSA patented high security cylinder. (See illustration A.)

Cashier: For obvious reasons, any room where cash is counted and stored should be locked at all times, with extremely tight controls on operating keys. A patented high security cylinder and key gives you the maximum protection.

Administration/Human Resource: All personnel and patient files are stored here. Computers and other office equipment are also prevalent. Only authorized management and security personnel should have keys accessing these areas.

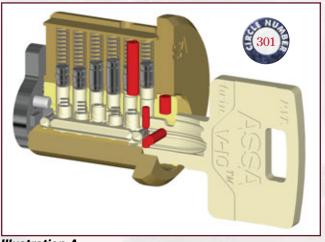


Illustration A.

# TheNationalLocksmith.com • CLICK HERE •

**Pharmacy:** Another obvious security area. Some of the more notable drug abusers in the past few years have been doctors and nurses, so strict key control in these areas is essential. Also, all carts and cabinets outside of the pharmacy, which contain pharmaceuticals, need to be on the same key system. Even the new electronic access controlled drug carts have a key over-ride.

<u>Psychiatric Unit:</u> This area combines the needs of administration and pharmacy. Extremely sensitive patient records, many times pertaining to criminal cases, as well as prescription drugs are kept here. Keys restricted to department and security personnel.

<u>Nursery:</u> One of the worst fears of any hospital is the kidnapping of a newborn from the nursery. While an extremely rare occurrence, the resulting publicity and liability from such a situation would be an absolute nightmare for the institution.

<u>Tool Room:</u> This is an area which often gets overlooked, but contains many items which can easily be stolen and just as easily resold. If padlocks are required, they should have the capabilities of being keyed into the existing master key system. No personnel outside of maintenance and security should possess operating keys.

Liability: A subject briefly mentioned, but which is of ever increasing concern to institutions today, is liability. Among the many considerations that go into the development of a strategic framework for today's businesses are a marketing strategy, a sales plan, goals for manufacturing and/or services, and a solid contingency plan for any deviations from original intentions. Within the contingency plan are programs designed to limit those factors, which put the company at risk of losses, both large and small, and especially situations which involve liability and the potential losses associated with litigation.

More and more institutions are implementing programs which minimize risks and exposure to liability. The most economical method of accomplishing this is to control the doors at their facilities, along with the people who access them. Security risks and liability can be reduced with the installation of high security cylinders and a sound key control program.

Key Control: Unauthorized key duplication remains as the single most violated security policy in today's business. Most keys stamped "Do Not Duplicate" or Restricted" mean little or nothing to the non-professional key cutter who regards this as a challenge, not a threat. It is therefore essential that the keying system be unique to its owner and that the key blanks for that system are protected by patent from unauthorized manufacture. (See illustration B.)

In addition, if the key blank or keyway is issued to more than one end-user there is always a possibility that the system could be compromised by careless control of blanks or like key blanks cut to like combinations resulting in duplicate master keys or even duplicate great grand masters. Like key sections issued to end-users, especially within the same geographical boundaries, are a blueprint for disaster and a resulting liability risk for the institution.

Institutional locksmiths face yet another problem: The issuing of keys. In an ideal master key system, various levels of access are assigned according to the amount of authority of the key holder. In the real world, everyone and their brother want a great-grand master key. This



Illustration B.

usually places the locksmith in the uncomfortable position of arbitrator between administration and security. As a locksmith, you will be doing yourself a big favor if you can explain key control in layman's terms.

Set guidelines for the issuance of original and duplicate keys. Fines for lost keys are recommended, generally in the \$10 and \$20 range. Explain what is involved in the repinning of a cylinder. Remind them of the risks involved with unauthorized door entry. If there is a theft, and everyone in the department had a key to the storage room, it makes it extremely difficult to trace the crime.

Two sets of records should be kept. First, personnel cards with name, address, employee identification number, and number of keys issued. Second, these key cards have key set number (e.g. AA1) and all personnel who have been issued keys under that key set number. This type of mechanical system is still used in institutions today. At ASSA we offer the most advanced electronic key control system ever developed, "Key Wizard". Call your ASSA representative to have a free demo copy installed on your computer today.

The locksmith shop is the most important area in maintaining the integrity of any master key and/or key control system. Therefore, strict control of the key blanks and key cutting is mandatory. All key blanks must be kept under lock and key at all times. Under no circumstances should an uncut key blank leave the locksmith shop. No keys should be cut on site until the proper forms have been filled out and signed by the authorized employee. At any given point in time an inventory can be taken to ensure that all key blanks can be accounted for. Blanks Ordered = blanks on hand minus cut key forms plus lost key forms plus miss-cut keys.

Locksmiths should have access to the highest-level master key; however, this key should not be taken away from the hospital. Keys should be kept in the shop and signed in and out as necessary. No restricted keys are to be cut without authorization.

While the restrictions on the key control policy may seem very strict, if followed properly, it will provide the quickest, surest and most cost effective method of upgrading the total security of the hospital. If costs allow, the addition of an electronic security system provides the best of both worlds. Along with physical security, the addition of computerized electronics generates the added benefits of audit trails and instantaneous combination changes.

Common sense must prevail in the detailing of a security system in any institution. Communication among all groups involved with administration security and the

Continued on page 28

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 25

locksmith department must be ongoing. Without support and cooperation among all these groups, any security program will die a slow, lingering death.

The institutions should insist on intensive training for all employees and regular bulletins and meetings regarding security policies. New employees should of course be educated upon hiring. While normally falling under the responsibility of security, both administration and the locksmith staff should be encouraged to provide constant input. The underlying theme of all information provided should be one of commitment and participation.

Another point that needs to be made to all hospital personnel is that security and convenience are at opposite ends of the scale. As security increases, convenience decreases. Conversely, as the convenience level of a system goes up, security goes down.

Hospital security is a combination of many factors. The proper ASSA system, carefully chosen, installed and implemented, combined with employee awareness and education, insure that risks are kept to minimum and protection and safety are the rule rather than the exception.

### ABLOY PROTEC KEY SYSTEM

The Abloy Protec key system is patent protected in over 40 countries worldwide and represent almost 90 years of continuous development.

Abloy's unique and patented UL listed rotating disc cylinder does not rely on springs or pins to form the combination, there is no resistance when the key is inserted so no worn or broken keys. The turning of the all-metal key with its angled cuts acts directly on the 11 rotating discs to form the combination. Abloy Protec offers the maximum in pick resistance being virtually impossible to neither manipulate nor bypass the cylinder mechanism.

A completely hardened steel cylinder housing that resists all force attack. Key blanks are highly restricted patent protected and require a dedicated key machine to cut the unique angled keyways.

There are almost 2 billion combination possibilities per keyway available making some of the largest Master Key systems in the world.

A new one piece sealed disc controller that does not need to be prepped, makes the new cylinder very smooth in operation along with eliminating any wear on both the key and cylinder.



Abloy, the master of Master Keying... we can create some of the most complex Grand Master key systems in the world as well as custom cross key systems, all designed, built in our Montreal plant

Some examples of Master Keying capabilities are: 125 unique master keys under a grand master key along with 15,625 change keys under each master.

25 unique master keys under a grand master key along with 78,125 under each master key.

The above are just some examples of the power of Abloy master keying ability.

The examples above are also on one single keyway; also a full range of products can be combined into the same MK system. This range includes, Deadbolts, Retrofit key in knob type, mortise and rim cylinders, padlocks, switch locks, cabinet locks, key deposit locks and rim locks.

### • SCHLAGE PRIMUS •

In today's key control market there are two important factors that should influence your decision of which products to sell or use: flexibility and patent life. Schlage offers both with the Primus high security cylinder. Cylinders are available with a variety of geographical exclusivity and in configurations for Schlage locks as well as retrofit cylinders most other popular brands.

Primus allows the end user to tie high security and conventional cylinders together under one key to save cost on the overall job. Primus keys operate conventional cylinders but not vice-versa.

Classic Primus (Levels 1-4) is ideal for upgrading existing systems on the older Classic keyways such as C, E, etc. This product's patent protection extends into 2007. For new key systems on the Everest keyways, Everest Primus (Levels 7-9) is the clear choice with thicker, stronger keys and patent protection well into 2014.

The secondary bitting on the side of Primus keys provides geographical exclusivity for locksmiths and contract hardware dealers, as well as higher levels where the side bitting is exclusive to the end user.

The main locksmith levels are Level One Plus (Classic) and Level 7 (Everest). Here, the side bitting is exclusive to the wholesaler who in turn signs up locksmiths. Each locksmith's key blanks are drop shipped from Schlage with a locksmith ID number. By contract, locksmiths in these programs are only permitted to duplicate keys with their own ID number. There is a modest buy-in of inventory for these levels. Contact your Schlage wholesaler for details.



# TheNationalLocksmith.com • CLICK HERE •

### • KABA PEAKS® •

Kaba PEAKS® provides a patented cylinder system that will retrofit practically all grade 1 and 2 commercial hardware on the market today and into the future. No matter what hardware is used by an end user facility they can use one Kaba PEAKS® key to operate all the locks. PEAKS® retrofitability is very cost effective as you only replace the cylinder, not the hardware. The PEAKS family of cylinders come in two versions of ICore, five different RCores and a complete line of conventional and universal cylinders. PEAKS® is the least expensive way to upgrade a facility to high security access control.



Of utmost importance is that PEAKS® has strong utility patents on both the key and cylinder to prevent unauthorized manufacture of the keys. Kaba PEAKS® products are more secure than many electronic key card systems being sold currently.

Kaba PEAKS® uses reliable industry standard pin tumbler technology, providing the locksmith with a durable, easy to service product. No special knowledge, tools or machinery are needed. The RCores are pinned in the same method as ICore and have a complete 6-pin sleeve and locking lug, making them more secure than OEM cores. This selection of cylinder formats pin to your choice of A2 or A4 standard pinning specifications.

Kaba PEAKS® provides patented key control products and retrofits more manufacturers locks than any other system. The one key concept allows for master key flexibility within a patented key control product. Kaba PEAKS® is the most secure, convenient and economical patented key control system available today.

There are a variety of keyways and programs designed to fit specific markets both dealer and end user. PEAKS® has programs that allow for local control of keying and product to those that are controlled at the factory level.

# • MEDECO® HIGH SECURITY • RESIDENTIAL PRODUCTS

Now, Beauty is the beast! Medeco® announces its new line of residential products designed to offer world-renowned security to the most discriminating homeowner. Available exclusively through the locksmith channel, this line offers the beauty and elegance of well-built, solid brass hardware combined with the legendary security offered by an integrated Medeco® Maxum deadbolt. These high security residential locks meet or exceed BHMA Grade 1 specifications and carry the UL 437 rating for security.



The product line offers two styles of residential handle sets, an entrance function knob and a stand-alone deadbolt that is a striking redesign of the popular Maxum deadbolt. The entire line comes standard with the new PVD Anti-Tarnish Brass finish and is also available in Satin Nickel and Oil-Rubbed Bronze finishes.

In addition to the uncompromising security and timeless beauty, the Medeco Residential product line offers dealers a residential brand that does not compete with similar products offered by large home centers.

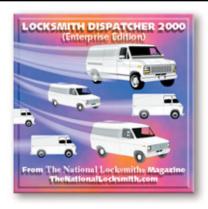
ΠL

# Locksmith Dispatcher 2000

Controlled Service dispatching software specifically for the locksmith!



CLICK HERE TO LEARN MORE



# Quick Entry by Steve Young



**TECH TRAIN PRODUCTIONS** 

# 1998-2003 LINCOLN TOWN CAR

utomotive transponder technology changes so fast that it's almost impossible to stay current unless you deal with it every day. One reason there is so little information in print about these systems is that by the time a book, or even a magazine, gets into print it often already needs revision. For that reason, most of the up to date information on these systems is usually found on the Internet where it can be revised quickly and easily as the systems change. If you are serious about working with transponders, you need to keep track of the many good resources that are available on the Internet. One place to start is at www.techtrainproductions.com/tran sponders.htm. There you will find a listing of links to various sources of information, both on this site and on many others.

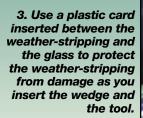
The 2003 Lincoln Town Car is a perfect example of why it's so important to have the latest information available. (See photograph 1.) The body design of this vehicle has not changed since 1998, yet the 2003 version of the Town Car, which went on sale in July of 2002, uses a totally different key blank and transponder system than the 1998–2002 versions. The 2003 Town Car uses the relatively new E-PATS system that was first used on the 2000 Ford Taurus and Mercury Sable.

The E-PATS system is the second of two different Ford transponder systems that encrypt the data transferred between the key and the car. The data is encrypted by a system that is directly descended from military transponder systems that are used to identify "friendly"





2. The Strattec 691259 E-PATS key that is used on the 2003 Lincoln Town Car.





# TheNationalLocksmith.com • CLICK HERE •

forces in combat. Texas Instruments, the company that manufacturers these transponders, made the decision in 1999 to supply the E-PATS transponders exclusively to Strattec Security Corporation, the original equipment manufacturer. For that reason, other key blank manufacturers often list the E-PATS keys as being available only through the "Dealer." In fact, the E-PATS keys are easily available through any Strattec dealer, but there is no "aftermarket" equivalent blank.

Currently there are four E-PATS key blanks available. (See photograph 2.) Three of these blanks differ only in head shape and the logo that appears on the head. Mechanically and electronically these three blanks are interchangeable. The fourth E-PATS key is a valet key, used originally on the 2003 Lincoln LS. The part numbers for these blanks are listed in the Quick Reference Guide at the end of this article.

The Town Cars made from 1998 to 2003 all use a vertical linkage system on the front doors that can be attacked easily with the Tech-Train 1017 tool. Extra care should be taken with the weather-stripping because all of these vehicles use a multi-layer system that can be damaged if it is not treated properly. To protect the weatherstripping, I insert a small plastic card between the glass and the weatherstripping. Next, I insert the wedge between the plastic card and the glass, pulling the card out after the tip of the wedge is below the level of the deepest lip of the weather-stripping. (See photograph 3.) If you do not take steps to protect the lower layer of weather-stripping, it will roll under your wedge. This will restrict the movement of your tool and possibly damage the weather-stripping. I use this technique as I insert the tool into the door to prevent the tool from rolling the weather-stripping as well.

To unlock the Town Car, begin by wedging open the base of the window on the front door above the forward end of the outside door handle. (See photograph 4.) Carefully insert the hooked end of the TT-1017 tool that will allow you to grasp the vertical linkage rod from the outboard side. (See photograph 5.) Once the hooked end of the tool is as deep in the door as it will go, carefully rotate the tool so that you can insert the shaft of the tool into the door. (See photograph 6.) At this

### **Quick Reference Guide**

### Vehicles:

1998-2003 Lincoln Town Car

### Direction of Turn :

Counter Clockwise (passenger side)

### Tool:

TT-1017

### Lock System:

8-Cut Ford, Sidebar Ignition and Plate-Tumbler (wafer) Style Door Locks

**Security System (1998 - 2002):** *PATS-II* 

### Security System (2003):

E-PATS (Encrypted Transponder)

**Lock Manufacturer:** Strattec **Code Series:** 0001X-1706X

Transponder Blanks (1998–2002):

Strattec 598333, Ilco H72-PT, Jet H72-PHT

Transponder Key Blank (2003):

Strattec 691259 - Lincoln Logo

### Note:

E-PATS key blanks that can be used as a substitute on the 2003 model are only manufactured by Strattec: 599114—Ford Logo, 599179—Mercury Logo

### E-Pats Valet Blank:

Strattec 691255-No Logo, gray plastic head stamped "Valet"

point, the hooked end of the tool will be horizontal inside of the door so that you can grasp and lift the vertical linkage rod.

The linkage can be located easily by feel while watching the inside lock button for movement. An inspection light can be used to locate the linkage visually, but the weather-stripping fits so tightly that I feel that using an inspection light is more trouble than it's worth on the Town Car. Once the tool is hooked onto the

linkage rod, pull up and forward on the tool to lift the vertical linkage and unlock the door. (See photograph 7.)

The Jiffy-Jak Vehicle Entry System can also be used to unlock the Town Car. The door is so massive however, that it requires the use of two inflatable wedges, one on the rear vertical portion of the door and one on the top horizontal portion of the door, to open a sufficient gap. In my opinion, the TT-1017 tool is much easier to use on the Lincoln Town car.



4. Wedge open the door above the forward end of the outside door handle.



5. Carefully insert the hooked end of the tool into the door using the plastic card to protect the weather-stripping.



6. Rotate the tool and lower the hooked end of the tool into the door to grasp the vertical linkage rod.



7. Pull up and forward at the same time in order to unlock the door.

# This vehicle has no transponder system.

# Part 1





by Michael Hyde



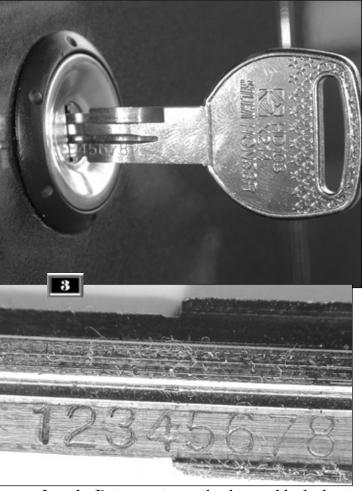
This SUV looking vehicle from Isuzu is a new model and I think it looks pretty good in and out. This Isuzu is like most late model Isuzu models that use the Honda style keyway and codes. This vehicle has no transponder system.



Opening this vehicle can be a nightmare without the right tools or the right knowledge. The doors have some tough looking cable linkage. I couldn't get a "caddy-killer" under the window either.

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 36



I used a Determinator on the door and had a key to unlock the door in less than 2 minutes.



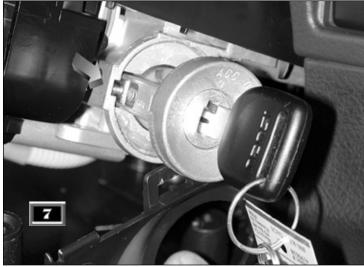
I really like the Honda 6-cut Determinator because if the key traps you cut that position to a 5 depth and positions that don't trap you cut a 2 depth. You can also pick the hatch lock; it does pick pretty good with a double-ball pick and clockwise torque.



The ignition lock cylinder can be easily removed with a working key. The ignition lock cylinder is mounted directly on the steering column.



To get the lock cylinder out you will have to remove the 5 screws that you can see, that hold most of the 2-piece plastic steering column shroud.



There is another screw holding the shroud but it is in the rear and you can still get the cylinder out without dropping the whole lower panel just to get to the one screw. Separate the shroud, depress the active retainer with a working key in the lock cylinder turned to the "ACC" position and pull the cylinder out.

# TheNationalLocksmith.com • CLICK HERE •



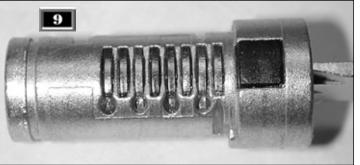
You will need to remove the snap ring on the back of the cylinder plug.



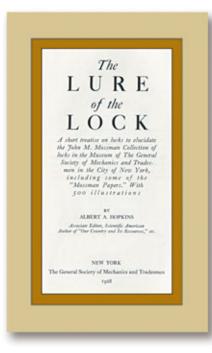
The rear hatch is pretty simple to work on. The lock cylinder is part of the outside handle assembly.



To service the lock cylinder you will need to remove the large plastic trim panel on the rear hatch.



Slide the cylinder out and you will see it has all eight tumblers for a complete key.



# The Lure of the Lock

This hardcover book, compiled in 1928, features dozens and dozens of beautiful photographs on ancient through modern locks.

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com • CLICK HERE •



There are 2 plastic push-in fasteners on the driver's side edge of the hatch and 1 fastener on the other side. You will also need to remove the hatch pull cup.



The rest of the hatch trim panel is just held on with push-in clips, some are plastic and some are metal. Take your time and work your way around starting at the bottom of the hatch door to unsnap the clips.



The hatch cylinder is easy to get to and is held with a metal wire clip.

The hatch cylinder looks like many other Honda locks, even though this is an Isuzu.





The tailpiece is held on with a common "C" clip. There are no codes on any locks.



The hatch cylinder lock plug contains 7 tumblers in positions 1 through 7.

# HPC/S Blue SHARK

SHARK

he goal that HPC set forth to achieve in creating the Blue SHARK<sup>TM</sup> was to reinvent the key machine. This meant more than the look of the machine. (See photograph 1.) The changes had to be much more than cosmetic, they had to change the way in which locksmiths interacted with the machine. It had to be easy to use, intuitive, friendly, and like a fine automobile, it had to seem to anticipate the next move.

Early on in the development process, the developers and engineers at HPC realized that for this to happen the new machine would have to truly communicate with the locksmith. Research lead them to touch screen technology. The Blue SHARK<sup>TM</sup> is the first touch screen key machine ever made. Touch screen technology is widely used in medical and scientific equipment because of its ability to guide users

through very long and complicated processes while requiring the user to input minimal information.

Taking a cue from the best medical equipment, the Blue SHARK™ has a large easy to read touch screen display. This display is large enough to give the user multiple options on one screen to save the headache of constantly flipping back and forth between screens. It has sophisticated controls so that one can view the screen in virtually any lighting condition. The Blue SHARK's touch screen is so remarkable, it will revolutionize the way keys are cut today.

Touch screen technology is just the beginning. The Blue SHARK's internal software comes fully loaded with

### 1. The HPC Blue SHARK™

HPC's complete CodeSource™ database, including vehicle, padlock and lock shop codes (no computer is necessary). Users can search for codes by manufacturer (with or without a code), code alone, or by key blank. A built-in decoder reads depths of a cut key and displays the information on-screen. From there, a new blank can be inserted and cut to the same, or an adjusted bitting. An electronic touch-off allows users to cut double-sided automotive keys accurately by code.

The Blue SHARK™ accepts downloads from MasterKing®, CodeSource™, and KeyTrail® on a standard PC. Users can add their own Custom DSDs (Depth and Spacing Data) to this already extensive database. Users can search DSD information by DSD number or manufacturer name. From the opening screen the user can access the three most popular DSD numbers from the user-

selected presets. Universal or DSD specific adjustments can be made on this machine. The user has the ability to adjust the depth and spacing of all operations on the machine or make manufacturer specific adjustments from the touch screen. The amount of control and customization is vast; machine adjustments can be made to the overall depths, tip spacing, shoulder spacing, and tip to bow difference.

The Blue SHARK™ has the ability to accommodate up to 18 spaces. This allows for the creation of 18-space keys (two cuts per space) used in Medeco® master key

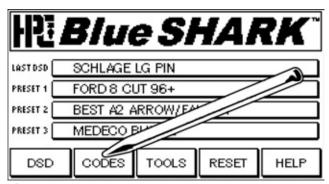
systems. The Blue SHARK™ is the first key machine with on-screen help. This feature is a complete manual and "how to" guide that takes the user step-by-step through all aspects of the machine.

In addition to all of the intelligent features built into the brains of this machine, you will find that an equal amount of attention was paid to the physical features of this machine. For example, all future programming updates will be accomplished via a multi-media card that plugs into a port in the back of the Blue SHARK™. There is no reason to open up the machine or to hook-up to a computer, just press a button to update the system and that's it.

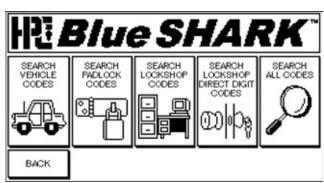
The specially designed 4-way jaws enables the Blue SHARK $^{\text{\tiny IM}}$  to hold the greatest number of different blanks. The electronic safety switch on the tip and shoulder gauge prevents the cutting of keys if the gauge is up. The Blue SHARK $^{\text{\tiny IM}}$  is based on an X-Y table that allows for an expansive range of depths and spaces. A burr collection system sweeps burrs into the center of the machine, they exit through to the bottom where they are easily collected and discarded without a great mess. An emergency stop button halts the machine operation at whim, and easily allows the user to continue where the operation left off.

The best way to show the simplicity and intuitive nature of this machine is by example. This example will use a Chrysler key. First select CODES from the main Menu Screen. (*See figure A.*) NOTE: The screen will record and display the name of the last DSD previously cut next to LAST DSD.

Next, select the type of Codes to use. For demonstration purposes here, select Vehicle Codes. (*See figure B.*) Use the on-screen keyboard to type in the code and/or manufacturer. (*See figure C.*) The Blue SHARK<sup>TM</sup> can also search by blank by pressing the SEARCH BY key

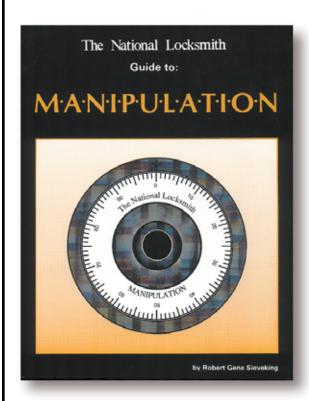


▲ A. The main screen.



**▲** B. Search Vehicle Codes.

# Manipulation Home Study Course



Our home study course guides you on step-by-step process, teaching you everything there is to know about manipulation.

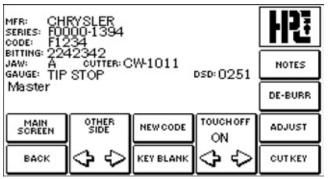
**CLICK HERE TO LEARN MORE** 

#MAN - 1





▲ C. The on-screen keyboard.



▲ E. The cut screen.

in the upper left. This will alternate between CODE or KEY BLANK. Once the information has been input, press ENTER and the Blue SHARK<sup>TM</sup> lists a selection of series that meet the parameters. (See figure D.)

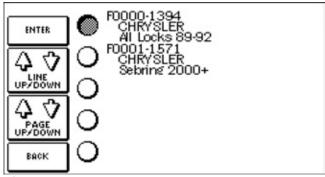
From here, scroll to the selection desired, in this case it is Chrysler All Locks 89-92, and touch its button to select it. This will go to the CUT SCREEN. (*See figure E.*) Once there, note that the screen provides all the information necessary to set up the key machine and begin cutting. The display indicates the cutter and jaw to use, the gauge point, as well as the bitting. From here, the user can also access the key blank screen. Once the set up is complete, simply press CUT KEY and the Blue SHARK™ will cut the key to the exact specification.

After cutting a key push DE-BURR from the CUT SCREEN to activate the Brush. Just insert the key in the de-burr slot on the side of the machine and the key is finished.

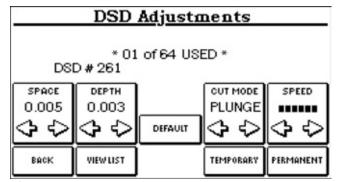
This is a straight forward example of cutting a key. However one may have noted from looking at the screen illustrations that numerous other options are available. Here are a few of these to give you an idea of the flexibility and ease of use in handling more complex issues in key cutting.

There will be occasions that call for adjustments outside of manufactures specifications. The key cutting screen has an adjust button. This button enters a DSD Adjustment screen. (See figure F.)

Here one has the option to change the spacing, depth, the speed at which the cuts take place, and the cut mode. The cut mode scrolls through 9 different types of key cuts, more than any other key machine on the market. Plunge Cut is a standard plunge cut that has been used successfully by locksmiths for years. Contour Cut



▲ D. A selection of series that meet the parameters.



F. A DSD Adjustment screen.

removes the peaks for smoother lock insertion, while allowing you to duplicate factory angle specifications. Contour Cut with Barb is just like the Contour Cut, but the tip is left intact. This additional operation stops keys from prematurely sliding out of the lock cylinder. Smooth Cut makes the smoothest possible working key by creating new angles from cut root to cut root. The angles are automatically calculated by the Blue SHARK  $^{\scriptscriptstyle{\text{TM}}}$  . This type of key is ideal for automotive, master key systems, or simply to avoid easy bitting identification. Smooth Cut with Barb is just like the Smooth Cut, but the tip is left in tact. Angle Cut allows the cutter head to move on the 3rd axis allowing the machine to automatically make highsecurity angle cuts. Radial Flats mills the cut root to an almost perfect radius, meeting specific manufacturer specifications. With optional equipment Tubular Keys and Tibbe keys can be cut. After all the DSD Adjustments have been made they can be saved on either a temporary or permanent basis.

Choosing KEY BLANK from the CUT SCREEN will display compatible key blanks for the code which has been chosen. (*See figure G.*) After a key blank selection has been made, simply use the BACK key to return to the CUT SCREEN.

When cutting double-sided-different keys, choosing OTHER SIDE from the CUT SCREEN will display the code for the other side of the key. It will also display the code for a Valet Key. (See figure H.) A new code can be entered by pressing the NEW CODE button on the CUT SCREEN. This will enter the CODE SERIES SCREEN where a new code can be entered. (See figure I.)

The ELECTRONIC TOUCHOFF feature is a special process for use with double-sided keys. When ELECTRONIC TOUCHOFF is ON, the Blue SHARK™ will

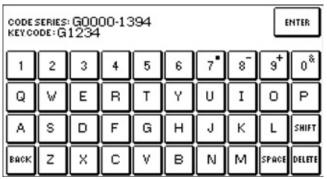
Continued on page 46

# TheNationalLocksmith.com • CLICK HERE •

Continued from page 46

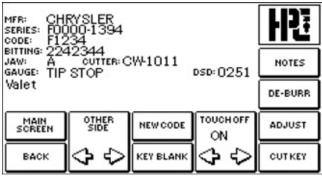


▲ G. Compatible key blanks listed.



I. The CODE SERIES SCREEN where a new code can be entered.

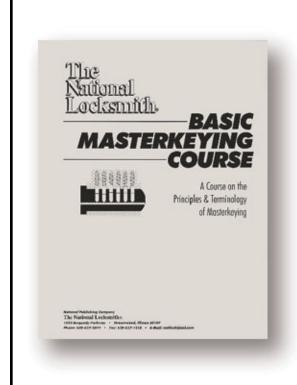
use its sensor capability to automatically detect the edge of the key blade and then compute the distance from the edge of the key blade to the center and execute the cuts



H. Choosing OTHER SIDE will display the code for the other side of the key.

accordingly. Therefore when the ELECTRONIC TOUCHOFF is ON, the location of the key in the jaw becomes less crucial. It is important to note, because the ELECTRONIC TOUCHOFF feature utilizes an electrical contact, when cutting non-conductive key blanks (aluminum, designer keys, etc.) this feature needs to be turned off.

The true beauty of Blue SHARK<sup>TM</sup> is the simplicity of the Touch Screen as it guides the user through the key cutting process. If there are any questions, the answer is usually found at the push of a button. There is no need to search for manuals, tools, or other resources, it is all right at your fingertips. The major benefit of this machine is that it provides a solution to the age-old problem of the workflow bottlenecks in your lock shop that cost you time and money. Simply put. HPC's Blue SHARK<sup>TM</sup> blows its competition out of the water!



# Basic Masterkeying Course

13 Lesson450 page course

The Basic Masterkeying course is designed for the locksmith who wishes to become proficient in Basic Masterkeying.

CLICK HERE TO LEARN MORE



#MK - 1



Sal Dulcamaro, CML

mong the various benefits of interchangeable core locks is the ability of a non-technician to quickly swap out a core with another one that works with a different key. That benefit would be minimized if it wasn't possible to recode and reuse the swapped I-Cores. It is a fairly easy task to eject all the tumblers from the pin chambers and to code and re-cap the chambers to work with new change, master and control keys.

I-Cores are commonly labeled so as to identify where they will be used. One example of a labeled I-Core is in photograph 1. The identifying marks are stamped into the side with metal marking stamps. The label is easy enough to read, but the impact of marking will often times cause internal damage to the I-Core. In some cases that will cause rough operation and in other cases possibly a major malfunction. Since many I-Cores are reused, a previously stamped example in photograph 2



1. One example of a labeled

the old mark is stamped over with X's, and then a new number is stamped in to replace the old one. Photograph 3, shows a more drastic way to obliterate the previous markings. Obviously metal marking stamps have very little in common with a pencil and eraser. The ground away side surface in photograph 4 has been struck again with a new label, and it appears that this I-Core won't handle too many more re-label experiences with metal marking stamps.

John Ulaszek of Xperinetix Locking Systems saw that problem and created the QU-I.C.-MARK system as a possible solution. There are basically two critical parts to the QU-I.C.-MARK system. The first part of the system is the "Ultra Core" that includes a QU-I.C.-MARK groove. Photograph 5, shows an example of an Ultra Core.



2. A previously stamped example.



3. A more drastic way to obliterate the previous markings.

The machined groove is designed for specially sized printed labels.

Photograph 6, shows an Ultra Core with a QU-I.C.-MARK label applied. The label is very clear and easy to read. It contains much more information than could be reasonably fit with metal marking stamps, plus no damage is incurred. The labels are easily applied and just as easily removed when you need to re-label. They are stick-on and obviously not permanent. You don't need to place label over label. Just peel off the old sticky back label, and replace with a brand new printed label. With the capability of two lines of print, photograph 7 shows that you can include both the I-Core identity label and the name of your company on the same printed label. Ultra Cores are available in 5, 6 and 7 pin I-Core lengths as shown in photograph 8. You also have the

Continued on page 50



The ground away side surface has been struck again with a new label.



5. An example of an Ultra Core.

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 48

option for single line labels with larger type for greater legibility.

Xperinetix makes a wide variety of I.C. related tools and products. The recently introduced QU-I.C.-MARK system is just one of them.



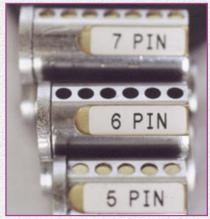
6. An Ultra Core with a QU-I.C.-MARK label.

Photograph 9, shows one of their high capacity core trays filled with Ultra Cores that have been labeled. A close-up view of some of those I-Cores in photograph 10, shows them to be sequentially labeled.



7. You can include both the I-Core identity label and the name of your company.

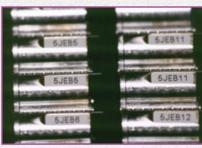
The labels are printed with a QU-I.C.-MARK printer. The desktop version of the printer is shown in *photograph 11*. It is AC powered and comes with a dust cover. This printer can be used to create QU-I.C.-MARK



8. Cores are available in 5, 6 and 7 pin I-Core lengths.



9. Capacity core trays filled with Ultra Cores.

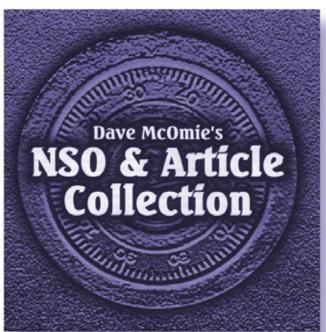


10. Sequentially labeled cores.



11. The desktop version of the printer.

# Dave McOmie NSO & Article Collection on CD



This CD contains every NSO newsletter and McOmie File Dave has ever published.

CLICK HERE TO LEARN MORE



#DMCD - 2

# Shop the online store TheNationalLocksmith.com

### • CLICK HERE •

labels, with a choice of font sizes. The labels have a two line limit with a maximum of 17 characters per line. As indicated, you can label the cores in any manner you see fit. You can even reserve one of the two lines to advertise your company name. Most users would probably use it as a desktop unit, but there is also the option of the portability package. The portability package allows you to take the QU-I.C.-MARK printer to the job site with you or wherever you need it without being tethered to an electrical outlet.

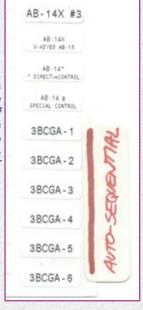
12. The Basic portability package.



13. The Deluxe package includes a battery, charger and protective case.

SD-2002

14. A
sample
strip of
labels
from the
QU-I.C.MARK
printer.



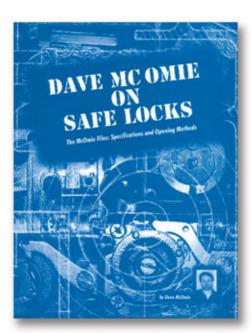
Xperinetix offers the portability package in two versions. *Photograph 12*, shows the QU-I.C.-MARK Deluxe Printer Portability Package. The Deluxe package includes a battery, charger and protective case. The printer is shown in the case just to show how it fits inside, but it is not part of the portability package. The portability package is the add-on to the printer. The Basic portability package is shown in *photograph 13*. The Basic package only includes the battery and charger.

Photograph 14, is a sample strip of labels from the QU-I.C.-MARK

printer. You can print them individually to hold whatever message you wish, or you can print a group of labels in order. The labels in the group identified as autosequential are labeled in sequence one number after another.

For more information about the QU-I.C.-MARK system or other products from Xperinetix, contact Renee at Ultra Security. Phone: 800/698-7477. Find them online at www.ultrasecurityusa.com. Circle 306 on Rapid Reply.

# Dave McOmie on Safe Locks



Almost 300 pages of information, photographs and illustrations give you every scrap of information about a huge variety of safe locks.

CLICK HERE TO LEARN MORE



#DMSL - 1



### ABUS Motorcycle BrakeBlocks<sup>TM</sup>

Chrome, chrome - when it comes to motorcycle security and locking down that Harley Davidson®, nothings beats the look of chrome. ABUS manufacturers the largest selection of motorcycle locks and lock-down systems in the world. The ABUS #300 and #305 offers affordable theft deterrence featuring a convenient tubular keyway and builtin dust cover. The simple push button locking mechanism allows key-free easy locking on the brake disk. Available in 2 sizes with inside clearance of 2-?" on the #300 and 1 3/8" on the #305, pick your color of bright yellow or super chrome plating.



ABUS offers a wide security range of motorcycle chains, Steel-O-Flex® cables, Freon® resistant brake disk locks, U-Locks, and lock down anchors for the garage, trailer, or shed. ABUS motorcycle locks are available direct to all dealers.

For a full catalog call: 800-352-2287; Web: www.abus.com; Fax: (763) 509-9939.

### W-LOK Corporation's Clad LoopLok

W-LOK Corporation introduces the new Clad LoopLok (SK-9770), a heavy-duty cable style padlock. The Clad LoopLok is the most recent padlock to be introduced by W-LOK, a manufacturer of 100% stainless steel specialty locks and padlocks.

The W-LOK line has worldwidepatented key and cylinders, offering locks that can be keyed alike, different or master keyed across their entire lock series.

The W-LOK Clad LoopLok has a 316 stainless steel cast body. The stainless steel lock body measures approximately 2" by 2" by 1". The cable is constructed using 7/19-braided stainless steel wire cladded with hardened stainless steel shells,



and then encapsulated in a PE cover to protect against scratching and cutting. The cable is completely removable and interchangeable in 30, 60, 90, 120 or 150-inch lengths. The cable end fittings are crimped shut using 300 metric tons of compression.

The new Clad LoopLok is the perfect security device for locking bicycles, scooters, motorcycles, snowmobiles and personal watercraft. This lock is adaptable for either short or long applications. By ordering two or more of the Clad LoopLok, the user can link them end-to-end for greater versatility.

For more information call: (877) 355-WLOK (9565) or (616) 355-4015; Fax: (616) 355-4295. E-mail: office@wlokcorp.com; Web: www.wlokcorp.com.

### Master Lock Fully Adjustable Locking Cable

Master Lock offers the Python<sup>™</sup> adjustable cable lock which protects many "difficut-to-lock" items. The unique adjustability of the Python<sup>™</sup> cable lock (No. 8413) makes it ideal to protect ladders, power tools, gas grills, cargo racks, bikes, skies and other outdoor equipment. The Python<sup>™</sup> features:

Continued on page 54



# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 54

High strength cable – 6' by 10mm, vinyl coated, braided steel.

Patented cinch-locking body – engineered to provide infinite locking positions along the length of the attaced six-foot cable.

Cinchable – unique locking cam allows for easy cinching, reaching that desired tight fit.

Tighter fit – the cable may be pulled tight as well as locked into place attaining a higher level of security.

Corrosion-resistance – aluminum die-cast body withstands all types of weather.

Molder bumper / grip – protects against scratching and provides easy gripping.

Rekeyable cylinder – a removable patented modified wafer cylinder permits keyed alike applications.

For more information call: (414) 444-2800; Fax: (414) 449-3162.

### **Multi-Lock Security Bar**

The original swing-open security bar that incorporates a lock point at every file drawer has been re-tooled based upon customers input to become even more user friendly. Multi-Lock continues to be the most convenient
way to ensure
the security of
your documents, while
meeting every
security requirement of
the D.O.D.Is
Industrial
Secrutiy
Manual for
safegurading
classified
documents.

For more information call: 800-474-2220 or 208-777-8400; Fax: 208-777-6402.



### **American Lock**

American Lock Com-

pany has developed the Defender, a heavy-duty, high security trailer locking device, which can lock down a semi trailer and help prevent its theft when the trailer is not hitched to the tractor. The device's best application is for

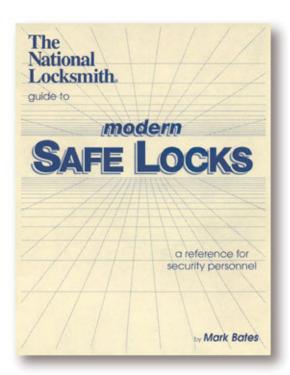
loaded trailers which need to be parked outside of a protected marshalling yard or truck terminal. The locking device is a metal cap, which fits over the trailer's

crank handle. A notch on the unit fits directly over the crank handle. Once the Defender is placed over the handle, a Model 784 American Lock padlock can be placed through receiving holes on the back side of the cap. After making sure the shackle is behind the crank shaft, the padlock can be closed and locked, securing the shackle from intrusion.

Locks such as the Model 784 can be keyed alike for multiple applications across a trucking fleet, or can be master keyed to allow access to only certain operators. The Model 784 is created from a solid bar of case hardened steel and a cylinder milled from solid brass with either a 5- or 6-pin tumbler.

For more information call: 800-323-4568 or (708) 534-2000; Fax: (708) 534-0531; Web: www.americanlock.com.

# Modern Safe Locks



You always wanted to make money servicing safes?

**CLICK HERE TO LEARN MORE** 



#MSL - 1

# TheNationalLocksmith.com CLICK HERE



oes opening a safe from 2000 miles away sound like a story from the Twilight Zone? Well it is true and it can happen today thanks to Corporate Safe Specialists.

Corporate Safe Specialists has done something unique. They listened to their customers. I had a long discussion with Edward McGunn, president of Corporate Safe Specialists. We spent a lot of our time talking about how a large company can access every function of their chain stores from the comfort of a corporate office, except their safes.

Companies can look at the current sales activity at any of their chain stores. They can monitor inventory and generate orders. They can activate a remote video camera to monitor an emergency situation. They can even have a store across the country e-mail them if a preset condition occurs. They can monitor everything, except that large chunk of metal called a safe. Why can't they monitor their safe from the home office?

This is the question that was presented to Corporate Safe Specialists (CSS) by some of their customers. This is why they decided to take on a cutting edge project like remote opening and monitoring of a safe. But does it really work? Yes it does! How do I know? Because I did it!

Using the computer access codes, user information and user pin number that was provided to me by the staff at CSS, I was able to access the front office safe at CSS in Posen Illinois. I was able to



1. As you can see, the only thing on the door is a handle.

look at a complete audit trail, add and change user information, including access codes. I was even able to open the safe. I did all of this from my office in Oregon. I'm impressed, are you?

Let me give you a little background about what a company typically does to control losses and how this new system from CSS can help. If you pay attention, you can the same time. For some time now, companies

have been hiring Loss Prevention Managers (LPM's). What's a LPM? An LPM is a person hired specifically to reduce the risk of loss, from internal and external causes.

help them do their job and profit at

For example, let's say a shoplifter comes into a store to try on a new pair of shoes, then leaves without paying. This would be an external cause. Loss prevention for this example can consist of video surveillance, under cover employees etc... This is the kind of loss that is expected and openly acknowledged. Now lets put a slight twist on this example.

What if the person pays for the shoes and the clerk takes the money to the back of the store to toss it in the safe? Did he open the safe or just spend a minute in the back room? What if the clerk said he tossed the money in the safe, but really didn't. What if someone saw the clerk open the safe, place the money inside, but not lock the door. What if the clerk

> did put the money in the safe, but someone else removes it? If several clerks use the same access code for the safe, how could you ever know who took the money? I think you get the idea.

> This is considered an internal loss, the kind of loss that many managers hate to admit happens. Some think it is only happening to them. Few realize that it is as widespread as it really is.

> Here is where the loss prevention manager comes into play. With the right tools,



2. A wiring harness connects everything inside the safe to an electronic circuit card.

# TheNationalLocksmith.com • CLICK HERE •



3. Because this is a cash control system and not a high security system, you will not find a relocker inside the door.

an LPM is like a detective, investigating the who, what, when and where of a loss. For an internal loss, an audit trail can be worth its weight in gold. So can keeping access codes up to date. But what does it take to keep up with changes in employees and audit trails. It used to take a trip to each and every store.

Many times the LPM is in charge of a lot of stores. In some cases there will be a director of LPM and regional LPM managers that cover a group of stores within their regional area.

If a regional manager has 100 stores to cover, how much time does it take to go to each store and retrieve audit information from the store safe? Let's not forget adding and removing user codes. It can take days, even if the

stores are in a hundred mile radius of the manager's location. How often is it actually done? Take a guess! The truth is that some stores are never visited by an LPM until there is an actual loss.

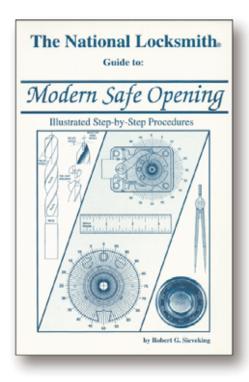
Wouldn't it be nice to get all of this information from the comfort of



4. The locks are of the electronic variety and use a spring latch.

an office? No travel time means greatly reduced cost. Remote access means instant access to information. Users can be added or removed in minutes instead of days. This is the real meaning of "real time" information.

Some will ask, "What will this audit information tell you anyway?" Well, the audit information can tell an LPM a lot. Is the safe accessed more than once a day or do the employees just leave the safe door open on a regular basis? Of the people that have access to the safe,



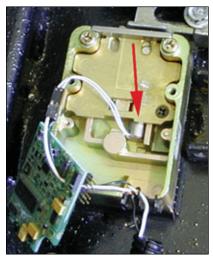
# Modern Safe Opening

This book is a step-by-step How-To course in safe penetration. Opening safes is one of the most profitable aspects of the locksmithing business.

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com • CLICK HERE •



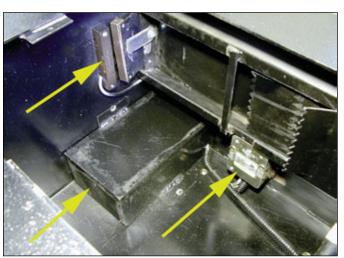
5. A solenoid receives voltage from the electronic circuit card and in return allows the spring latch to retract.

If you say that there are other products on the market that can keep an audit trail and even require secondary identification like a Dallas chip, you would be right. But can these other products be accessed from a remote location safely and securely? Can you open the safe remotely? Can you keep tens of thousands of events in the audit trail? No! Nothing else on the market can do what the QL3 system from CSS is capable of doing. This is truly an innovative product. Let me give you a rundown of the capabilities of this exciting new system.

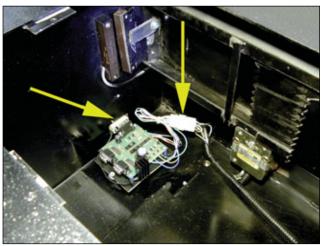
The QL3 system consists of a safe with a modified lock installed, an electronic circuit board inside the safe and some very special computer the safe, to the lock. (See photograph 2.) When the door cover is removed, the first thing you may notice is the lack of a relocker. (See photograph 3.) Keep in mind that this is not a high security system, it is designed for access control.

Because the safe lock is of the electronic variety, it has a spring latch instead of a bolt. (See photograph 4.) Inside the lock is a solenoid that is connected to the electronic circuit card through the wiring harness. (See photograph 5.) When the computer tells the circuit card to open the door, voltage is sent to the solenoid and the spring latch can be depressed.

Inside the safe you are able to see a second lock, a set of magnetic



6. Inside the safe is a cover for the electronic circuit board, a magnetic contact and another lock that controls a cash drop drawer.



8. With the protective cover removed you can see the electronic circuit card and its two connections.



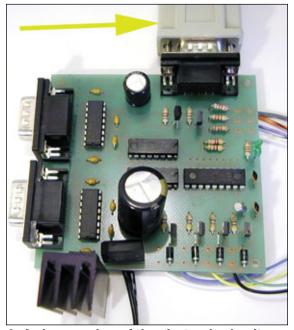
7. The cash drop door fully open.

do they use their own access code, or does it appear that each person accessing the safe use the same access code? Have access codes been removed for store managers that have been transferred or left the company?

software. I will cover the software next month because it has so many capabilities. That leaves the safe and electronic circuit card for the rest of this article.

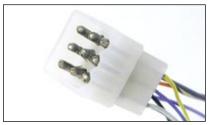
Just to make things clear, you won't find a dial or keypad located on the safe door, only a handle. (See photograph 1.) The safe can only be opened by a computer.

With the safe door opened, you can see that it looks like any other door with the exception of the wiring harness that goes from the electronic circuit card in the rear of



9. A close up view of the electronic circuit card that controls all of the functions of the safe.

# TheNationalLocksmith.com



10. The circuit card is connected to the wiring harness through a molex style connector.

contacts and a cover for the electronic circuit card. (See photograph 6.) This second lock is for a cash drop door. (See photograph 7.) Each door in the safe is supplied with a magnetic contact that is used to detect if the door is open or closed. The wires for the contacts also go through the wiring harness.

When the cover is removed for the electronic circuit card, you can

> see that there are two connections. (See photograph 8.) One connection (the 9 pin D connector) through the rear of the safe and goes to the computer. The second connection is the one that connects the circuit card to the locks and magnetic contacts inside the safe.

The electronic circuit card can control up to four different doors.

(See photograph 9.) The card is connected to the wiring harness through a molex style connector. (See photograph 10.) These connectors have been in use for many years and have proven reliability. The circuit card is powered by a plug in, 9 Volt, AC power supply.

Now that we have taken a quick look at all of the neat stuff inside the safe, I bet you are wondering how I opened one from 2000 miles away! The power of remote access. (See photograph 11.) That is the secret of the whole system and I will let you in on the secret next month! Until then, have a nice day.

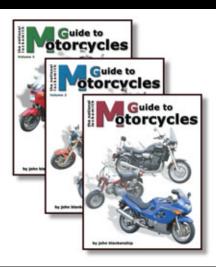
For more information about the QL3 or any other products from Corporate Safe Specialists call: 800-342-3033, or visit their web site at: www. corporatesafe.com. Circle number 313 on Rapid Reply.





11. Here is the log-on screen that is the key to the power of this system.

# Guide to Motorcycles Volumes 1, 2 & 3



For years locksmiths have begged for a comprehensive service manual on motorcycles and its finally here!

CLICK HERE TO LEARN MORE



# Beginner's Corner

# Installing the New Adams Rite 4591 Deadlatch Paddle

By
Mike Phillips,
Adams Rite Technical
Support Manager

s part of a long tradition of improving and expanding their line of door hardware, Adams Rite recently introduced the new 4591 Deadlatch Paddle. In combination with a 4700 Series Deadlatch, this newly designed paddle gives an ergonomic look to an ADA-friendly egress device. It is ideal for new or retrofit installations on aluminum stile doors.

This article will cover the step-bystep procedure for installing the 4591 Paddle. It will demonstrate a retrofit of an existing deadlock with a thumb-turn and exit indicator.

# Prepping the Stile



1. In this retrofit example, you will need to remove the existing hardware to prep the stile. This deadbolt/thumbturn/exit indicator is typical of what you may encounter when retrofitting the 4591 Deadlatch Paddle.



2. Remove the faceplate to access the setscrews that secure the cylinder and thumb-turn and remove both.

Note: You can reuse the mortise cylinder when installing the deadlatch.



3. Remove the two exit indicator mounting screws and indicator.



4. Remove the two screws that release the lock and remove.



Now you're ready to prep the stile, which is as simple as drilling two holes: one above the cylinder centerline, for installing a binder post for the paddle, and one hole for a #10-32 screw, below the cylinder centerline, for mounting the adapter plate.

# TheNationalLocksmith.com • CLICK HERE •

# Installing the Deadlatch



**6.** Before you install the deadlatch, you will need to first install one of the two binder posts that come with the paddle. Note: If you were performing a new installation, you would use both posts.

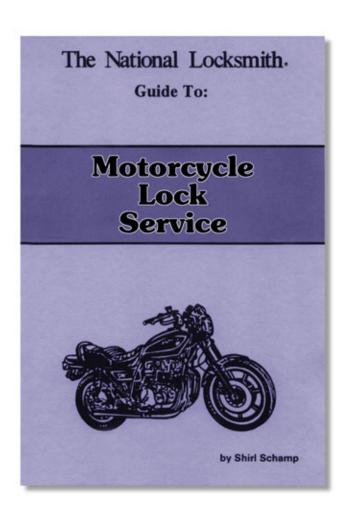


7. Secure the deadlatch in the stile with two screws, in the same mounting holes that held the lock. Make sure the spacers are set properly so that the faceplate will be flush when you finally mount it.



**8.** Install the mortise cylinder that you removed from the lock.

# Motorcycle Lock Service



This book contains full details on everything the locksmith needs to know about motorcycle locks.

CLICK HERE TO LEARN MORE



#MLS-1

# TheNationalLocksmith.com • CLICK HERE •



**?.** Install the cam plug supplied with the paddle in the deadlatch.

# Installing the Paddle



10. For this retrofit, you will need to install the 91-0912 adapter plate first. This new product covers the previous cutout for the exit indicator and gives a clean, finished look to the installation. Fit the adaptor plate over the binder post on top and secure it with one flat head screw on the bottom.



**11.** Secure the paddle escutcheon to the adapter plate with the supplied #10- $32 \times 1$ " screw in the top binder post and the #10- $32 \times 1$ -1/2" screw in the lower mounting hole of the escutcheon.



12. With the paddle positioned in the escutcheon, insert the pivot pin.



13. Tighten a setscrew on the bottom of the paddle to retain the pivot pin with an Allen wrench.

A handy new feature of the 4591 Deadlatch Paddle is the easy way you can dog the paddle. A simple turn of the hex key supplied will secure the paddle in



**14.** After checking the operation of the paddle, install the deadlatch faceplate.



15. Attach the supplied "PUSH" or "PULL" sticker to the outside end of the paddle. Paddles are ordered handed, but can be switched in the field. The installation instructions show how this can be simply achieved.



the active position, keeping the door open for business hour traffic.

This completes the installation of the paddle and deadlatch.

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 62



17. The finished installation shows the clean, ergonomic lines of the new 4591 Deadlatch Paddle. Now, you'll need to add a 4501 Strike in the jamb section.



19. Drill and countersink the two holes required and make the cutout, filing down any rough edges.



**21.** Finally, attach the backing on the strike with the dust box on the top before mounting the strike to the jamb.

# Installing the Strike



18. To prep the strike cutout, you can measure the dimensions or simply use the strike itself as a template.



20. Install the mounting plate supplied with the strike with two screws.



22. The finished installation of the strike.

That's all there is to it. Your customer now has an attractive, ADA-friendly way to access their door, with the reliable operation of all Adams Rite hardware. You have an easy retrofit installation that can be accomplished in as little as 30 minutes. It's a win-win situation for any aluminum door application.

For more information on the Adams Rite products call: 800-872-3267, (909) 632-2300; Fax: (909) 632-2369; Web: www.adamsrite.com.

# TheNationalLocksmith.com CLICK HERE

# The Lighter The Lura of the Lock Side



rs. Martin called, wanting to know what time you'd be coming out. What do you have lined up to do for her?" I asked Don one morning at the shop.

She wants a couple of dead-bolt on doors and lock on a metal gate," he replied.

"What sort of metal gate?"

"She bought one of those heavy iron security gates from Mexico to go outside the front door of her house, and she wants me to put a lock on it."

"Be sure she knows the hazard," I replied with a giggle.

"What?" Don asked.

"Oh, nothing. I was just thinking about what one of the locksmiths was telling us at ALOA last summer. Remember the tale about the woman who was trapped by her security door?"

"I don't think I heard that one."

"Sure you did. Don't you remember? She had a front door and a security door that were set a couple of feet apart. One morning when her husband was leaving for work, she thought of something she had forgotten to tell him and came running out the door in just her nightgown to catch him before he drove away. The wind blew the front door shut behind her, and it locked. Then she discovered the security door was also locked. Naturally she had no keys with her and her husband had driven off without seeing her, so she had to stay there in her cage until someone saw her and called her husband to come home and let her out."

Don snickered at the mental image and said, "I don't think there will be enough space between Mrs. Martin's doors to create a problem like that, but I'll warn her of the possibilities." He laughed again. "I don't know how I missed hearing about that."

"As I remember, it came up right after the one about the guy who trapped himself in his car trunk, remember?"

"Refresh my memory."

"Two burglars were working together burglarizing a series of stores. One was a big guy and the other one was little. The big guy would break out a high window and boost the little guy in. Then the little guy would toss out the loot to the big guy who would stow it in the trunk of their car. They did this sort of thing night after night."

"One night somebody heard them breaking into a store and called the cops. When the big guy say the police coming, he ran for the car. He realized he wouldn't have time to get away, so he dove into the trunk of the car and slammed it shut. The little guy was still tossing stuff out the window when the police arrived, unaware that his buddy was no longer on the receiving end."

"Finally, somebody finally figured out where the big guy was. He wasn't about to open the trunk from the inside even if he could and nobody on the outside had a key, so they had to call a locksmith to get him out."

"Was he armed?" Don asked.

"Nobody was sure at the time, but as it turned out, no."

"Not a very comfortable spot for the locksmith to be in."

"I understand he used very long picks to open it, and he leaped out of the way in anticipation a couple times before he got it open."

"Can't say that I blame him." Don said.

"You know, it's funny what people will get themselves locked into. Somebody was telling me about a woman who brought a teenage kid into their locksmith store with a handcuff around on ankle.'

Was that the one where the father had rigged up a makeshift ball-and-chain with a dog lead, a bowling ball, and the handcuffs to keep the kid from going out with his buddies at night?" "Right." The father thought the kid was hanging out with some guys who were up to no good, and he was determined to keep his boy at home. The problem was, once he decided to release the boy, nobody could find a key."

"Handcuffs must be the 'in' thing these days. I've been hearing a lot of tales about them lately."

"Me too." Don said.

"You mean like the locksmith who was called to a house to open some cuffs. After notifying the police, he then went over there and had to elbow his way through the crowd to the bedroom?" I asked.

"He found a nude woman locked up, hands and feet suspended a couple of feet above the bed with only a blanket someone had tossed across her for modesty."

That's one I hadn't heard. Where do you get these stories?"

"Well, that one came from Tim Hopkins of Advanced Security in Lincoln, Nebraska. He was the locksmith. I met him at ALOA. He said he had a hard time getting the cuffs off her. He finally cut through the chains to free her from the bed and proceeded from there."

"Reminds me of something a locksmith was telling me about a friend of theirs, an older man, who was waiting at the front door of their shop early one morning. His hands secured behind his back in a pair of fur-lined cuffs."

"Oh really!" ILL

# Shop the online store TheNationalLocksmith.com CLICK HERE

# Tran positional Dialin and Riding the Wild Rivets Dale W. Libby, CMS

recently came into a large supply of locked Allied-Gary TL-30 money chests used in now defunct chain stores. I had my own "penetration party" and got real good at opening these units.

This safe is small and formidable, and I got a rhythm at opening them quickly. Even though they were rated TL-30, it took about 20 minutes apiece to get them open. I thought I would pass on my method of working on these units. Along the way I developed another shortcut to transferring my readings that will confuse the sometimes almost too observant customers. In addition, I will impart my method of reading S&G and related wheels through the change key hole on the back cover of the combination lock.

Photograph 1, is the outside of the TL-30 Allied-Gary safe. The combination lock incorporates a keylocking dial above the "L" shaped opening handle located directly below the dial and ring. On several of these units, the dial was locked with no keys available. I tried some of my keys on these dials, and was quite disappointed when none of them worked.

It is quite easy to unlock these dials by picking the lock. You can also drill the lock, but it destroys the key locking function of the dial. Drill a 1/4 back. Modified car-opening tool shown. inch hole at the 2:30 position with the keyway being the center of the clock. Drill about 1" out and this effectively destroys and removes the stump that

keeps the slide up and locking the dial. It takes about one minute to achieve this minor miracle.

When I go on jobs now, if I have to. I will move a safe out of a cabinet or from under a counter. It is much



1. Allied Gary TL-30 Money Chest with locking dial.



2. Access hole drilled in top of unit between 3 to 3-1/2"

easier to drill one of these monsters through the top or side, than through the front. This is true on all high security containers!

Measurements for drilling this and similar units in not as critical as drilling through the front of the safe. In photograph 2, I laid my ruler and bolthole size guide on top of the safe. For the first unit I drilled at 3-1/2" back

from the front of the safe body, not the door. On subsequent units, I drilled closer to 3" back. The back measurement is not critical here for most of the work will be done by your scope.

The critical measurement is to the right of the centerline of the dial. You want the scope to line up with the change key hole for viewing. The measurement I use is 1/2" to the right of dial center. This is for a combination lock mounted Vertical Down (VD). If the lock were mounted VU. then I would have measured 1/2" to the left. How do I remember this? I have a lock body I take with me and hold up to the front of the safe as if it were installed and I had xray vision. This lets me see where the change keyhole is located. (Visual Aids are important for the elderly.)

Also shown in photograph 2, is the bent and sharpened tool I use to remove the metal "button" that covers the lock body. This plug is about 1" in diameter and is held in place through the tension of the spring tabs around the circumference of the button. The button tool is made from an extra car-opening tool and

the total length is 15". Once you get the feel of the tool, it is easy to work. Usual time for popping the plug out is about 1 minute.

# TheNationalLocksmith.com • CLICK HERE •



3. Key cover button removed. Scratch marks above hole.

In *photograph 3*, you can see the plug resting on the top of the safe door back cover. Also note the many scratch marks around the hole over the back of the combination lock. Once you hook an edge of the tool behind or underneath the button, you must pry and turn the tool to pop the button off. Also shown is a wire going into the back of the door cover from a magnetic type contact.

Once the back door lock cover is removed, you can see the actual configuration of the door in the open position. This is shown in *photograph 4*. In this shot, the lock bolt is raised,

allowing the handle to turn and pull back the middle bolt bar which is attached to a plate that pulls in the top and bottom bolt when it is moved. Note the position of the relocking device to the right of the lock in this picture. It is towards the opening side of the door, or to

the left of the lock when viewed when the door is open. If you do not have a special tool to reset this relocker through the dial spindle hole, it is best accomplished from the top of the safe.

The interesting additions to this safe door are the plastic units that are attached. The circular component on top is a 'stat' or more properly a thermostat. This will cause an alarm situation if the safe door temperature goes above 130 degrees or so. The small rectangular wired box below the stat is a shaker/vibrator alarm. This will set off the alarm if the door

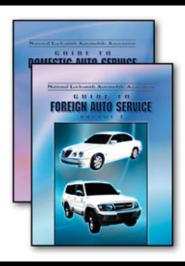
is shaken, pounded, vibrated, pulsated, throbbed, or beaten. The alarm wires were also attached to magnetic contacts, so the alarm would go off if the chest was opened at the wrong time. In addition, the safe was on plastic isolators that meant the unit was protected with a proximity (prox) alarm.



4. Door and Lock configuration with 'stat' and shaker alarm. Note the position of the relock trigger.

# **NLAA Guide to Domestic Auto Service**

# **NLAA Guide to Foreign Auto Service**



You get car opening, lock removal and service, column service, key and code series information, and many views of the doors, panels and locks.

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com • CLICK HERE •

In *photograph 5*, you see the main bolt bar and the door detent mechanism. When the safe door is opened, it allows a spring bolt to pop open and keep the bolts in the retracted position while the door is open. Also shown is how the center bolt attaches to a large vertical bar that the other two bolts are attached to.

# The Transpositional Dialing Technique

These safes were small and I opted to drill from the top of the unit. Instead of getting up and down each time I needed to see a number on the dial at the changing index, (which is the regular index mark to use) I just used the number that came up to the dialing index. I could stay seated and hold my scope in position while reading the top number on the spy-proof dial.

There are three ways to use these numbers and they are all the same. Just like in Windows on computers, there are several ways to do the same thing. Keeping it simple, let us assume that I scoped out the wheels and they were all set on number 33 on the dialing index. In this case the number below the changing index mark would be 25. To open the safe you would just dial all wheels to 25, and then right till



the dial stopped and the safe would be open.

The next way to open this one number safe would be to make a mark on the dial ring 8 numbers to the right of the opening index. Then you would dial all the wheels left to 33 at this special index, turn the dial to the right

to open the safe. The third way is the simplest. Just subtract 8 numbers from the found number of 33 and get 25, and dial 25 to the opening index and open. These same methods work when you are looking through the scope and then at the dial. Use the opening index and just subtract 8 numbers from your viewed combination.

When scooping for dollars, I use the gate edge of the wheels to find my almost combination. (About 50 numbers off). It is easy to scope for the wheel gates and still leave room to see beneath the gates for the unknown wheel. Plus, by lining up the gates to one or the other edge, it is possible to get great alignment on all the wheels before correcting and dialing open the safe. There is so much to see on an S&G type wheel that I almost prefer it to the more simple LaGard type see through wheel.

The first thing to do is to determine the direction of the wheels as you turn the dial. Sometimes if you use a good scope, when you turn the dial to the left, the wheels in the scope will appear to turn left. This is perfect. If the wheels seem to turn right when you turn the dial left (counter-clockwise) you will have to take that into consideration. This is important when scooping out the rivets. Sometimes you will want to move the wheels a little to the left or right to align the gate edge. Better to logic it out rather than to trial and error it. Also, by dialing for the wheel edges, you have to keep track of only one set of numbers.

To keep this simple, you will dial to the changing index. When you have determined the combination at the changing index, then you will dial the combination to the opening index and the lock will open.

First, determine the last number on the combination using the scope. This is the easiest. Just turn the dial left



5. Detail of bolt detent on the edge of the door.

three times and look in the change keyhole through your scope. You will see the hub and the gate of this wheel easiest. When you have aligned to edge of the wheel (either to the left or right) look at the number under the changing index and mark it down with the direction of 4 times left to whatever number is there.

Looking for the numbers on the next two wheels can be time consuming unless you know a little trick. You should always have a single wheel in your scope kit. It is another visual aid. This takes a lot of the guesswork out of scooping. This is true for all different safe locks too, not just S&G.

Here is where we ride the rivets. S&G uses three pair of rivets to hold their wheels together. In *photograph 6*, I have marked the rivets next to the change key hub. These rivets are about 5 or 6 numbers from the center of the hub and right next to the balance holes. They are high on the edge of the wheel. If you see the rivet and the balance hole, the rivet is always on the side of the hole next to the hub. Depending on the angle of your scope, you will see the balance hole and the

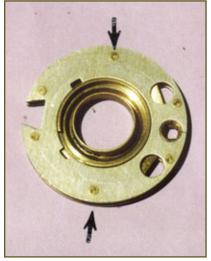


6. Position of the pre-change key hub rivets.

# TheNationalLocksmith.com • CLICK HERE •

rivet. If the rivet is to the right of the hole, then the hub is further to the right. The same is true in reverse. Find a rivet next to a hole, and you have found the hub. Add about 50 numbers to this reading (at the changing index) and a gate will magically appear when you redial to the new number.

The next set of rivets is shown in *photograph 7*. These are located in the center of the wheel. They are the "25" rivets. Exactly 25 numbers from either



7. Mid range rivets means 25 numbers to either hub or gate.

of these rivets is either a gate or the change key hub. These are located a little closer to the center of the wheel. The rivets in *photograph 8* are next to the gate. These are the lowest on the wheel. If you see these, then turn the wheel about 4 or 5 numbers and you will be in the middle of the gate. So, let us look at the S&G type wheel and we will see 6 rivets, a gate, a hub, and two balance holes in the wheel. This gives us 10 different things to look for when dialing and scooping for dollars and looking for wheel gates.

Now, fine-tune the gate edge alignments so they are perfectly straight on all three wheels. Try the combination again and align all the gate edges. Now for the fine-tuning. Turn the last wheel until the hub is correctly aligned exactly under the change keyhole and centered. Let us use some hypothetical numbers. If the last wheel of the combination (the last number of the combination) shows the gate at 87, then the hub should appear at 37. Just add or subtract 50 from 87 to get 37 (if added, 137. Just drop the 1)

This should get the hub almost in perfect position. The corrected number on this lock was 35. When the hub was centered in the keyhole, it



8. Gate position rivets. About 5 numbers to the center of the gate.

read 35 on the changing index. Now, take the first two numbers, convert then to the correct hub position numbers by adding (or subtracting) 50, and then subtract 2 numbers to true center the combination.

Now, try the combination at the opening index and it will open. It's easy. Once you get good at this, you will wonder why you might have had trouble at first. It does take practice, so Drill, Scope, Read the Rivets, and Prosper!

# **NSO One Year Membership**



To make big profits in safe work with no hassles...you need information!

CLICK HERE TO LEARN MORE

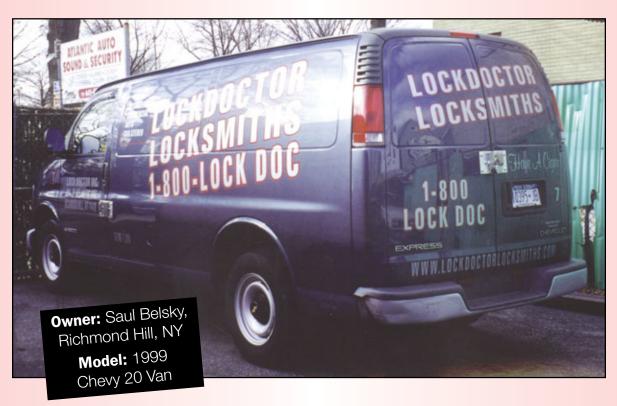


# Shop the online store TheNationalLocksmith.com • CLICK HERE •



Woods
LOCKSMITH
SERVICE
Auto, Commercial, Residential

435-7086
1-800-614-1223
PHOME
Owner: Ladell Wood,
Aicolu, SC



# You Can't Lose With the Patented by Frank Markisello & Tom Lynch

n 2000 Ford Motor Company introduced the Focus. It was a compact vehicle that also featured a new 8-cut sidebar style ignition cylinder by HUF manufacturing. It was based upon the 1998 principles and design of the Ford 10-cut used on the Contour and the Mystic. This cylinder was plagued with a common problem, when the wafer tumblers would jam or hang-up. This resulted in a tumbler redesign. The original HUF ignition lock is identified by the texture and color of the facecap. It is a matted silver finish with a keyway that is off center. (See photograph 1.)

In response to these problems with the HUF ignition lock, Strattec introduced their own ignition lock #706229 around mid 2000. This

FOCUS HAMMERED FINISH KEYWAY OFF CENTER (HUFF) (SIDE BAR)

1. The HUF Ford Focus 8-cut sidebar ignition lock.

ignition differed in the position of the keyway, which was centered and has a chrome facecap on the plug. (See photograph 2.) It also had bi-directional wafers with a sidebar and only 7 wafers. You will see this ignition on the, Explorer and Mountaineer.

The retainer on this ignition in a hot environment would often cause the plastic retainer to fail and allow the cylinder plug to pop out when the key was turned to the "ON" position. Later Strattec introduced another ignition lock #707592, which is void of a sidebar. This was for future replacements making the Strattec #706229 ignition outdated.

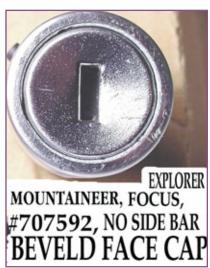
The Strattec #707592 lock is a completely different style than those previously mention. Unlike the cylinders before, this ignition cylinder plug is not a one piece casting with the cylinder face attached. (See photograph 3.) The plug is removed from the rear of the cylinder housing, while the facecap is removed from the front.



2. The Strattec #706229 ignition lock.

In 2001 Auto Security Products (ASP) also joined in this ignition market and introduced their own lock, service package C-42-188. This lock is identified by the smooth silver finish, an offset keyway and no facecap. (See photograph 4.) It has a sidebar, but only utilizes 6 wafers. This lock cylinder is capable of retrofitting all past vehicles as well as the Ford Escape and Mazda Tribute.

As a result of all the troubles experienced with this lock, Frank Markisello of AABLE Locksmiths created the new Ford Flush Mounted Ignition Cylinder Removal Kit, the Patented U1. (See photograph 5.) This complete kit provides the locksmith with the ability to quickly resolve any past or current lock problems with positive



3. The Strattec #707592 lock is a completely different style than those previously mention.

# TheNationalLocksmith.com • CLICK HERE •

results. It is also capable of removing the Ford Thunderbird, Lincoln LS and Mark VIII ignition cylinders, Strattec #703596. (See photograph 6.)

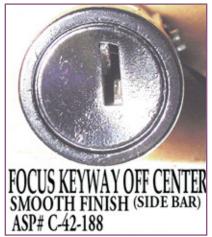
This particular ignition is larger than the Strattec #707592 and has a sidebar. It also incorporates the same design of the two-piece plug. So as you see, these locks are very similar, yet very different from each other. The AABLE U1 kit provides a specific removal device for all these cylinders. It comes with a drill block and arbor with a drill bit for all Focus locks with sidebars. It also includes a multi-purpose force tool/drill guide that has two different drill-out locations. An additional two arbors and drills are included and all are numbered for proper application. There is also a sidebar pressure tool made of hardened tool steel for long life. Finally, there is a plug turning tool and a tumbler holing tool to aide in the assembly and disassembly of the cylinder plug.

In *photograph 7*, you will see the drill guide block inserted in the keyway of a Focus sidebar style ignition. In *photograph 8*, arbor #3 is used to drill an access hole to the sidebar. You must drill into the plug so that the arbor comes in contact with the drill block. This allows the sidebar tension tool to enter the hole and apply pressure while raking with any standard pick. You must pick the wafers from front to back.

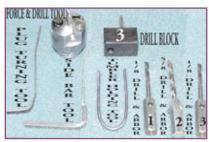
Once picked, maintain turning pressure with the plug turning tool and hold, while slowly removing the sidebar tension tool. You then must push the plug inward while turning the lock to place in the "ON" position for removal. Press the retainer and remove the lock cylinder.

In *photograph 9*, you can see the drill-out force tool being inserted on the Strattec #707592 style cylinder. The following method is for use on all vehicles utilizing this cylinder.

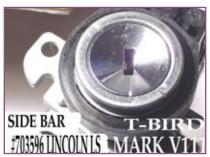
With a 7/8" or adjustable wrench, apply a firm and steady "clockwise" turning pressure. (See photograph 10.) After about a 1/4" of movement, remove the force tool and use the thick key blade guide to remove the face of the plug. (See photograph 11.) After you remove the face of the plug, ensure the dust cover and any additional pieces of material are removed.



4. The Auto Security Products (ASP) service package C-42-188.



5. AABLE Locksmiths Ford Flush Mounted Ignition Cylinder Removal Kit, the #U1.

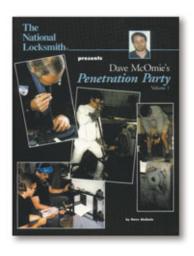


6. The Strattec #703596 used on the Ford Thunderbird, Lincoln LS and Mark VIII.



7. The drill guide block inserted in the keyway.

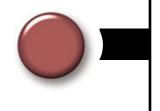
# Penetration Party



Uncensored! • The Safes!

- The Tools!
- The Action! The Perfect Openings!
- The Bloopers and Blunders!
- The Slick Tricks!

CLICK HERE TO LEARN MORE



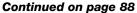
# TheNationalLocksmith.com

CLICK HERE

You will see a small ward on the left and a large ward on the right of the cylinder housing. (See photograph 12.) This is important to recognize for the proper positioning of the force tool/drill guide. In photograph 13, the force tool/drill guide is inserted into the cavity. Drill through the 3/16" guide hole with arbor #2, until the arbor hits the block. (See photograph 14.) After this easy method is accomplished,

you simply depress the lock retainer through the ignition housing and remove the cylinder housing. (See photograph 15.) This action will leave the plug intact within the ignition housing itself. (See photograph 16.) To remove the plug, you must insert a screwdriver into the keyway and push inward as you turn the lock to the "ON" position. The plug will now slide out.

Frank Markisello has once again proven to be innovative and provides solutions for the locksmith. His creative approach continues with the additional application of the #U1 with the ignitions using the Strattec #703596 ignition locks, seen on Ford T-Birds, Lincolns and similar models. As in the last example you will need to insert your force tool/drill guide and turn "Counter-Clockwise" about 1/4". It is important to recognize the





8. Arbor #3 is used to drill an access hole.



9. The drill-out force tool being inserted.



10. With a 7/8" or adjustable wrench, apply a firm and steady "clockwise" turning pressure.



11. Use the thick key blade guide to remove the face of the plug.



12. You will see a small ward on the left and a large ward on the right.



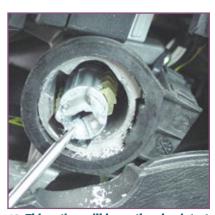
13. The force tool/drill guide is inserted into the cavity.



14. Drill through the 3/16" guide hole with arbor #2, until the arbor hits the block.



15. Depress the lock retainer through the ignition housing and remove the cylinder.



16. This action will leave the plug intact within the ignition housing itself.

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 86

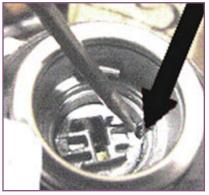
different rotations between the Strattec #703596 lock cylinder and the #707592.

Remove the face of the plug as before and also remove any debris and loose components. You will then insert the force tool/drill guide, recognizing the wards I spoke of earlier. However, the wards of this lock are different. They are two wards of equal size in this lock. When inserting the drill guide, the 1/8" drill hole MUST be facing you, away from the dash. This is critical alignment. Drill with arbor #1, in the

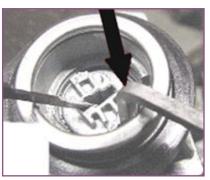
1/8" drill hole until the arbor hits the block. By drilling at this location you will be providing an access hole for the sidebar pressure tool. (See photograph 17.) The tip of the sidebar pressure tool is inserted just behind the sidebar. As you rake the wafers from front to back, you will need to gently insert the remaining portion of the pressure tool as you feel the sidebar drop in. (See photograph 18.) Once picked, apply the same turning tension as on the other examples and slowly remove the sidebar pressure tool. (See

photograph 19.) Turn to the "ON" position and depress the retainer. (See photograph 20.)

Now that we have learned how to remove all these cylinders, it becomes necessary to service them. In the #U1 kit you will find a "Tumbler Pressure Tool" made from sturdy tool steel. This "U" shaped device is inserted from the rear of the cylinder housing to hold the wafers into the plug so that you may remove the plug without obstruction. The plugs are removed from the rear. Use of a key to remove this



17. By drilling at this location you will be providing an access hole for the sidebar pressure tool.



18. As you rake the wafers gently insert the remaining portion of the pressure tool as you feel the sidebar drop in.



19. Once picked, apply the same turning tension as on the other examples and slowly remove the sidebar pressure tool.

**Pocket** 

**InstaCode** 

# Picking & Impressioning



Here is the most complete book ever published on picking and impressioning locks! You will have everything you need to know about how to open almost every kind of lock that can be picked.

CLICK HERE TO LEARN MORE

CLICK HERE TO LEARN MORE



Pocket InstaCode

has all the

important

InstaCode

PC.

features of the

program, packed

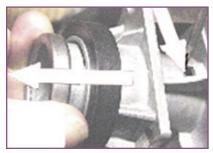
into a program

small enough to

run on a Pocket

#PCODE-03

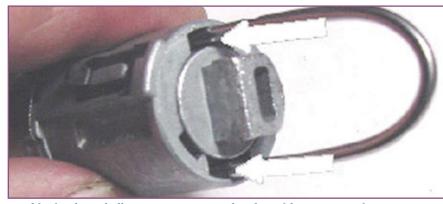
# TheNationalLocksmith.com • CLICK HERE •



20. Turn to the "ON" position and depress the retainer.



**22. Frank Markisello next to a Ford Focus.** 



21. This simple tool allows you to remove the plug without aggravation.

plug will not work as in older style locks. This simple tool allows you to remove the plug without aggravation. (See photograph 21.)

Very often when we as locksmiths encounter new locking systems, we tend to get a bit rattled and often feel defeated when we cannot correct a problem or provide a solution. This feeling of defeat sparks many locksmiths to seek out innovative ways to conquer the setbacks. Frank Markisello is such a person and credits many others with his success. (See photograph 22.) His personal achievements and

cooperative relationships with companies like Strattec and Fred Kosloske only help our industry move forward.

You no longer have to feel as if you are lost with the U1!

For more information on any of AABLE Locksmith tools contact:

Frank Markisello AABLE Locksmiths 8619 97th Ave. Ozone Park, NY

Phone: (718) 848-8000 Web: www.aablelocksmiths.com Circle 312 on Rapid Reply.



# ProMaster 5

ProMaster 5 is without a doubt, the most comprehensive and easy to use master-key system management tool available anywhere in the world.

**CLICK HERE TO LEARN MORE** 



CLICK HERE

# THE CASH STATION

by Mark Daniel

# Meilink Safe Co.

Safe Manufactured by:

Meilink Safe Co.

Safe Model #:

Fire Safe

Safe Size:

41" wide, 68" high without wheels. 73" from ground to top, including wheels.

Door Size:

Doors are 18" wide, and 64" high, each.

Handle Type:

L-Style





# **Handle Location:**

19-1/2" down, and 6-1/4" right of opening edge of right door.

### Handle Rotation:

Counter clockwise to open right door. Clockwise to open left door.

### Dial Location:

19-1/2" down, and 10-3/4" right of opening edge of right door.

Number of Door Locking Bolts:

### **Door Locking Bolt Locations:**

7-1/4"-32"-56-3/4" down from top edge of door.

**Door Locking Bolt Diameter:** 

**Door Thickness to Bolt Center:** 

**Door Thickness to Lock Case:** 3-1/4"

**Door Thickness to Back of Lock:** 4-3/8"

CLICK HERE



# Meilink Safe Co.



**Combination Lock Type:** S&G 6700 series.

Combination Lock UL Rating:

Combination Lock Case Thickness: 1-1/8"

**Combination Lock Description:** 3 wheel, key change

**Forbidden Zone:** 0-20

Number of Wheels:

3

**Driver Location:** Rear.

**Combination Lock Handing:** Right hand, (RH)

**Drop-In Location:** 

**Combination Lock Opening Procedures:** 4xL to first number 3xR to second number

92 • Visit www.TheNationalLocksmith.com



2xL to third number 1xR until dial stops.

# **Combination Lock Changing Procedures:**

- 1. Dial the existing combination to the changing index.
- 2. Insert the proper change key and turn it left 1/4 turn.
- 3. Dial the new combination to changing index.
- 4. Turn the change key right 1/4 turn and remove it.
- 5. Test the new combination at the opening index.

### **Combination Lock Drill Point:**

7/8" out from dial center @ 97, align wheel gates at drop-in.

**Combination Lock Relock Trigger Type:** Lever style.

Combination Lock Relock Trigger Drill

1/2" Left of dial center and 7/8" down.

**External Relock Device Type:** Spring loaded plunger.

External Relock Device Drill Point: 2-1/4" down from dial center, and 3-1/4" left.

Time Lock Manufacturer: N/A III

# TheNationalLocksmith.com

# TECHNITIPS

# YEAR-END PRIZES



**Grand Prize**Silca Bravo Duplicator



1st Prize

HPC's 1200PCH
Punch Machine



**2nd Prize**Mas Hamilton's
PowerLever 2000



3rd Prize
Curtis 2200 Duplicator



4th Prize

SDC Magnetic Lock,
Keypad and Exit Switch



5th Prize
Securitron 12-Volt Unlatch Plug in
Trans & Touchpad Retail Value \$650



6th Prize
LaGard "SmartGard"



7th Prize
Detex Advantex



8th Prize
Arrow 400 Series Alarmed
Exit Device & S-75 Mounting
Plate Kit for Narrow Stile
Aluminum Doors



9th Prize \$500 in BWD Products



10th Prize \$500 in ASP Auto Locks



11th Prize \$500 in Strattec Auto Products



12th Prize
Tech-Train "Jiffy Jack"



Sargent & Greenleaf 6120 Electronic Safe Lock



14th Prize
High Tech Tools
2000 Pro Set



<u>15th Prize</u> Slide Lock's Master "Z" Tool Set

# TheNationalLocksmith.com CLICK HERE





16th Prize

ESP Products Sampler



17th Prize

Major Manufacturing's HIT-111 Drill Guide



18th Prize

Abus Padlock's Marine Padlock Display (\$120 Retail)



19th Prize

MBA USA, Inc. Falle Pick Set



20th Prize

Baxter JV-1 & JV-5 Code Books



21st Prize

Sieveking Products Squeeze Play

24th Prize

Keedex Sampler

# **These Prizes Awarded Each Month!**

• Wedgeco™ **Key Extractor** Kit

• Strattec Racing Jacket

• HPC Air Wedge<sup>TM</sup>

 Sargent And Greenleaf 4400 Series Safe Deposit Box Lock

 A-1 Security **Products** 

• ILCO Key Blanks (100 Blanks)

• Keedex "SPIN OUT" Screwdriver

• Tech Train Training Video

 Sieveking Products Gm E-Z Wheel Puller

• Major Manufacturing **Products** 

• Slide Lock's "Z" Tool **Opening Set** 

• The Sieveking Auto Key Guide

• Jet Key Blanks (100 Blanks)

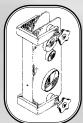
• High Tech Tools

 LaGard Combo Guard

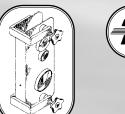


22nd Prize

Rodann's RV500 Wireless Door Annunciator System



Installation Jig



23rd Prize

A-1 Security Manufacturing



### 25th Prize

Framon **Impressioning** Handle



26th Prize

Gator Tool Multi-Purpose Facecap Tool

Tips Start on Next Page



### Send in your tips, and win!

### **How To Enter**

Send a tip on how to do any aspect of locksmithing. Certainly, you have a favorite way of doing something that you would like to share with other locksmiths. Write your tip down and send it to:

Jake Jakubuwski, Technitips Editor, The National Locksmith

1533 Burgundy Parkway Streamwood, IL 60107-1861

Or send your tips via E-mail to: Natllock@aol.com

### **Rules & Regulations**

Each tip submitted must include your full name, street address (no P.O. Box numbers), city, state, zip code, phone number, fax number and e-mail address When sending tips via e-mail make sure to include complete address and phone.

### **Every Tip Published Wins**

If your tip is published you will win one of the monthly prizes listed. At the end of the year, we choose winners from all the monthly tips published, that will be awarded one of the fabulous year end prizes. All you have to do to win is enter.

Prizes are arranged according to suggested retail price value.

# TheNationalLocksmith.com • CLICK HERE •



JET KEY BLANKS WINNER: Weiser Picking/Opening Tip:

I ran across an old Weiser knob that when picked would not open. I hadn't seen one of these in a while, so it took me a couple of minutes to remember this trick.

After you pick the lock—it only turns clockwise—you have to turn the cylinder almost back to the locked position and slide a straight pick or wire into the center of the keyway until you feel the spring loaded rod. Then you push it in as you turn the cylinder clockwise to open.

This doesn't actually unlock the knob, it only retracts the deadlatch, so you have to push (or pull) the door as you depress the rod. These locks are designed so that the key tip pushes the rod back.

If you pick the lock, the rod does not get pushed back and it won't retract the deadlatch. You also have to be careful when picking, my rake pick kept getting trapped in the back of the cylinder and I had to push the rod in with a straight pick to release it.

> William Kimbley California



WEDGECO KEY EXTRATOR WINNER: **Key Blank Storage Tip** 

After starting my own

mobile company nine months ago, I quickly discovered I needed to carry a large

quantity of different key blanks. In the past every van I have worked in had a pegboard and hooks for key storage, which made a lot of noise when driving down the road.

I used small plastic bins made by Arko to store keys. Each "nest" has 36 bins per cabinet. That works great for me, but I had a problem locating key blanks due to the number of drawers I had to search through.

To solve this problem I bought a \$15.00 pocket organizer at Wal-Mart that has an electronic address book. Under the name section I enter the blank's ID number—for instance O1122A. Under the address location I enter the key blank location—for instance 2-2. That tells me that blank 0112A is in; Section 2. Row 2.

By entering in all my key blanks and their locations into the organizer, I can search for a specific key blank

### A Few Words From Jake...

I want to tell you that if time starts going any faster than it already is: I'm going to meet myself either coming or going!

I mean here it is November, and it seems like sometime yesterday morning I was grousing about how hot and dry it was; and how this had to be the hottest summer since Christie and I moved to North Carolina.

Now it's November, the year's almost over, and I'm trying to figure out who that guy, that bears an uncanny resemblance to my granddaddy, is that is staring back at me in the mirror every morning!



by Jake Jakubuwski

Well, like one ol' frog said to another: "Time sure is fun when you're havin' flies!"

Don't get the wrong idea, I'm not complaining about getting older, just wondering where the time went.

This past year I've traveled around giving Tips, Tricks and Stuff Seminars, and have had the opportunity to meet many of the tipsters that have contributed to this column. I've also met many, many locksmiths that never cease to amaze me when it comes to the ingenious ways they have of overcoming various problems they encounter when trying to install, repair, repin or replace a lock, open a safe, unlock a car of do any of the hundreds of things that we all do on an almost daily basis.

Speaking of Tips, Tricks and Stuff seminars, on November 8, we're having one in Raleigh, NC at the Crabtree Valley. The seminar will begin at 9:00 am and go until noon then resume at 1:00 and go until 4:00. I'll be doing tips and tricks on general locksmithing in the morning (with the help of Tom Lynch and Randy Mize). In the afternoon session, Randy, Tom and—if we get real lucky other special guests will be doing a really great automotive program. So, if at all possible—be there.

Tom Lynch and Randy Mize came down to Eureka Springs back in September to help me with my program there—the town will never be the same! Last I spoke to Bill Reves, he said OPLA was still buzzing about what we accomplished there. I do believe everybody had a great time. I know I did.

Mark November  $8^{\rm th}$  on your calendar and come on down to Raleigh. The NCLA is a great bunch of folks and they'll make you welcome.

If I don't see some of you there or we don't have a chance to talk in the meantime, y'all have a great Thanksgiving.

See y'all next month.

by entering any key ID name and hitting the search button. Presently, in my van, I have 12 cabinets consisting of 6 rows of 6 drawers. This allows me to store over 400 boxes of key blanks (over 2,0000 blanks) and know exactly where each one is with the stroke of a few keys on my pocket-sized organizer.

Greg Dunn Indiana



STRATTEC WINNER: Audi S80 Trunk Opening

To open an Audi S80 trunk, first remove the right light over the

license tag. (See photograph 1.) Then insert a tool similar to the Tech Train TT1007 and hold it horizontally. Keep the working end of the tool to the left side of the automobile.



Photograph 1.

Next, rotate the tool counterclockwise, then move the tool downward and to the right until it comes in contact with the actuator of the locking mechanism. (See photograph 2.) Apply slight pressure with the tool to the actuator and open the trunk.

> Andrey Kondratiev Russia

# TheNationalLocksmith.com • CLICK HERE •



Photograph 2.

Editor's Note: Andrey, Thank you for your tip. Look forward to hearing from you again. To the best of my knowledge, this is the first time that we have ever printed a tip from Russia.



HPC WINNER:

### Get A Grip On ACE® Locks

The longer I'm in this business, the more

difficult it seems to do certain things. Like hold on to an ACE lock and service or pick it without my hands protesting too much.

I decided that I needed a third hand that would take a little of the strain off my fingers and make my job a little easier.

Photograph 3, shows how I used some garden-variety clamps to do what I needed to do. These clamps are available almost anywhere, have good heavy-duty springs in them and are easy to hold while working on an ACE cylinder.



### Photograph 3.

Also, the vinyl ends grip the cylinder without damaging the threads and keep it form turning while servicing. The vinyl sleeves on the other end of the clamps make them more comfortable in the hand.

I've also found other uses for these clamps. Like holding push plates in place. Keeping a kick plate from moving with I secure it to the door. Or, clamping things to my workbench while I drill them.

> Lyle Hensley California



SARGENT AND GREENLEAF WINNER:

### Using A Tap To Remove Safe Dial

If you're working on a safe and find that you do not have the proper dial puller—or no dial puller at all—try this.

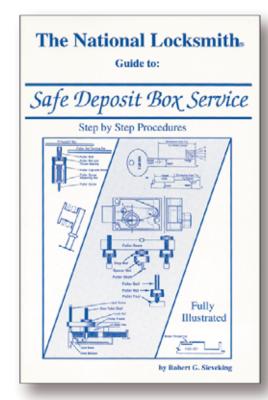
Remove the emblem, center punch the dial and drill an \$^{11}/64"\$ hole in the center of the dial. Once you reached the spindle stop drilling and inserted a \$^{1}/3-20\$ tap. Carefully turn the tap into the hole until you feel it bottom out

against the spindle. Now carefully and slowly turn the tap inwards. As the tap continues to thread the hole in the dial, it will pull the dial off of the spindle.

I found this works very well on S&G dials and am sure it will work on others. The main thing is not to get in a hurry and put too much torque on the dial since you might strip out the threads that are being cut.

Eric Bowser Maryland

# Safe Deposit Box Service



There is gold in safe deposit boxes!

CLICK HERE TO LEARN MORE



#SDBS - 1

# TheNationalLocksmith.com • CLICK HERE •



A-1 SECURITY PRODUCTS WINNER: **Air Wedge Trick** 

I feel that this tip is so obvious and has

probably already been submitted, but I just discovered it myself tonight.

Wedging doors with windows that are curved are more prone to breaking, and caution against wedging them is usually advised. Especially during extreme cold or heat.

I reason that glass on vehicles like this might break when wedged because we tend to use small wedges that put a lot of pressure on a small surface of the window. Almost like using an automatic center punch to break glass. You put a lot of pressure on a small area of the glass rather than spreading the pressure over a wide area.

Since my wife owns a 2001 Chevrolet Z-24, I decided to put into practice the idea I stumbled on.

I inserted an Air Wedge between the glass and the weather-stripping of the car. Then I carefully inflated my Air Wedge. What I found was that I had better control over the width of the opening to access the cavity of the door, without creating a severe pressure point that might cause the glass to shatter. Of course, I still proceed with caution, but think that I've found a way to avoid a potential problem while making it easier to access door cavities.

Paul C. Noll Wisconsin



ILCO KEYBLANKS WINNER:

Camper/Mobile Home Dead Bolt Installation

I have found that most of the time when you install a deadbolt on a motor home or camping trailer, there is a problem with the location of the thumb turn or inside cylinder. It is often in the way of the inner screen door and interferes with the closing of the screen door or the inside cylinder cannot be accessed from the inside without modifying the screen door.

To rectify this problem, I install the deadbolt in the wall of the camper or motor home—on the latch side of the door—and only have to mortise in my strike hole on the door.

This arrangement offers just as much security without creating a need to modify or change any of the doors or hardware.

To increase the security of the door, I always use a thimble strike in the door.

Michael Roberson Nevada



KEEDEX WINNER: Ford Lock Fix

A common problem of the Ford 10-cut ignitions is that the ears become loose. This often results in

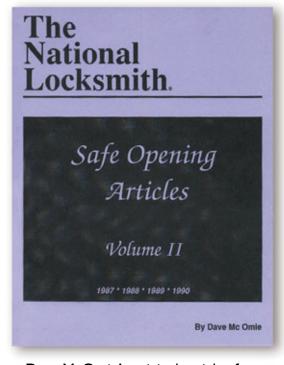
difficulty in inserting or removing the key. Normally the only cure is to replace the lock and advising the customer that if they put much torque on the ears of the new lock, the problem will reoccur.

I discovered a repair that would make it almost impossible for the ears to ever come loose, no matter how much pressure was put on them.

Remove the lock from the vehicle and remove the plug from the cylinder. Insert a blank into the plug to keep the ears lined up with the keyway. Locate the groove that originally peen-ed the ears to the plug. Drill a ½" hole perpendicular to the keyhole—90 degrees to the right of the buzzer activator (where the metal is the thickest). Make the hole about ½" deep, being careful not to penetrate the keyhole.

Place some steel epoxy or something similar, in the hole and drive a roll pin into it. When the epoxy dries, grind the pin flush with the plug

# Safe Opening Articles



Dave McOmie's original articles from when he first started writing for The National Locksmith are reprinted in this book.

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 98

and the ears will be permanently and rigidly attached to the plug.

Jim Troeller California



TECH TRAIN TRAINING VIDEO WINNER:

### Ford Trunk Lock Tip

I don't know whether it's a design problem or just the environment in my area, but I service a lot of Fords that exhibit trunk lock problems. In the last few weeks I've had three Taurus trunk lock cylinders that were seized so tightly that the key in one broke off.

I've found a way to circumvent the problem. Before I drill I use Houdini lubricant. First I liberally spray the plug and let it set for about five minutes. Then I spray it again and work an uncut blank in and out of the plug.

Then I use the customer's key, or one I've generated, and try the lock. So far this little trick has worked every time for me.

Houdini is my personal favorite. I'm sure you will get the same results with whatever your favorite lubricant is.

> Frank Kitchen Indiana



SIEVEKING PRODUCTS GM E-Z WHEEL PULLER WINNER:

### Roll Pin Removal Tool

Over the years I've found that getting those pesky roll pins out of automotive ignition locks has often been a chore. Well, no longer!

I used an ice pick, ground off the end to a 90° angle with a fine grinding wheel, so that the edge of the flat is very sharp. (See Illustration A.) This tool works great for driving the solid roll pins out of the lock housing.



### Illustration A.

The hollow roll pins are a little more difficult, but the sharp edges of the flat of the ground off portion, bite well into the edges of the roll pin to grip it when driving it out of the housing. A fine whetstone keeps the edge on the tool.

I carry three of these roll pin removal tools in my van. Each one is broken off at a different thickness along the blade so that I have a tool that will extract virtually any size roll pin.

J. W. Ritchie Texas



MAJOR MANUFACTURING PRODUCTS WINNER:

### **KD-22 Conversion**

Here's how to convert the Keedex KD-22 under the door tool for leversets, so it can be used to open doors with knobs.

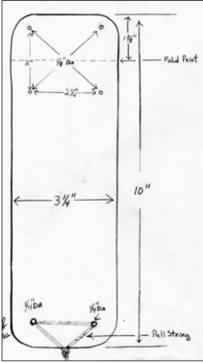


Illustration B.

Using the thin flexible plastic cover from and old three ring binder, I cut a 10" by 3-1/4 template and added several strategically placed holes. (See illustration B.) After the holes were in, I folded one end over the top of the tool and pop rivet it in place. (See photograph 4.)



Photograph 4.

To finish it up I then tied the pull string to the other end of the plastic, and added a 6" by 1-1/2" piece of double sided carpet tape to one side of the plastic.

As with the lever tool, you just slide it up under the door, wrap the taped side of the plastic around the doorknob and then pull the string. (See photograph 5.) I have used it many times with great success.

Jan Szalai Wisconsin



Photograph 5.

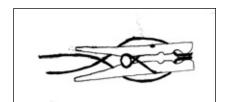


### LAGARD WINNER: Clothes Pin VATS Reader

Being a beginning locksmith, I need to find the least expensive way to do a professional

job. Reading VATS keys with an ohm meter can be frustrating to someone with not-so-steady hands. I have made a simple device that greatly eases that frustration.

I use a spring-type clothes pin. Just behind the front of the clip and the spring pivot I drilled a ½" hole at a 45° angle. (See illustration C.) After removing the probes from my multimeter, I fed the wires though those holes and attached a male spade connector, which I bend at a 45° angle.



### Illustration C.

I then pulled the connectors back to meet the front of the clip. After some fine-tuning, I glue these in place.

Now I can clip this device to my unknown VATS key, turn on my multimeter and determine the resistance.

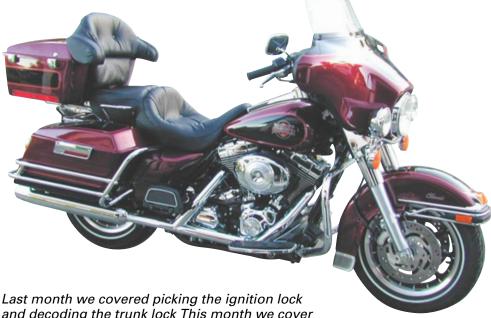
If you make one of these for yourself, always keep some sort of non-conductive material between the jaws.

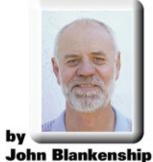
Grant Marcelain Wisconsin

TNL



# 2002 \_\_\_\_ Harley-Davidson ULTRA CLASSIC ELECTRA GLIDE





and decoding the trunk lock This month we cover the saddlebag lock and how to disarm the alarm.



The right saddlebag is shown and the left saddlebag is a mirror image of it.



The saddlebag lock is shown in the unlocked position. When it is locked it prevents the lever it is mounted on from being raised.

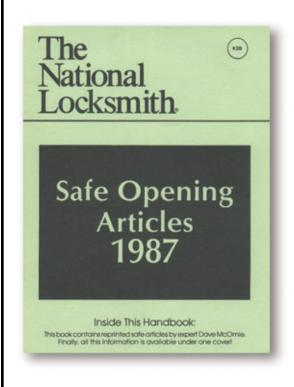
# TheNationalLocksmith.com • CLICK HERE •



The lever has been raised to allow the saddlebag lid to open from the opposite side.



The saddlebag lid has been opened and is held in position by a piece of fabric.



# Safe Opening Articles 1987

Now under one cover—all the information safe opening articles by expert safeman, Dave McOmie.

CLICK HERE TO LEARN MORE



# TheNationalLocksmith.com CLICK HERE



Use a T-20 Torx driver to remove the two screws that hold the fabric to the lid.



Use a T-15 Torx driver to remove the two lock mounting bolts. You can then pull the lock off of the lever.



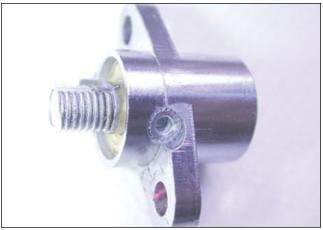
Use a 7/16 wrench to remove the nut, tailpiece, and tension spring from the back of the lock.



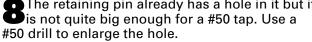
Tap the retaining pin and leave the tap in the pin. Use a pair of wire cutters and a fulcrum for leverage to pull the retaining pin out as shown.



Use a follower to remove the rotor and barrel from the rear of the shell without spilling any pins. The same type of combinating pins are used in the saddlebag locks as are used in the trunk lock so the decoding process is the same.



The retaining pin already has a hole in it but it is not quite big enough for a #50 tap. Use a





If you are unable to pick any of the locks and the luggage locks are locked, you will find out how badly the customer wants to get back on the road right away. That is because your last resort is to use the A-1 tubular lock saw. It has a 3/8" shank.

110 • Visit www.TheNationalLocksmith.com

# TheNationalLocksmith.com • CLICK HERE •

### Continued from page 110



The lock saw fits onto the nose of the rotor and cuts away the lock case while leaving the pins intact for decoding. Instructions are included when you purchase it. Decode the combinating pins by measuring their lengths and compare them to the measurements in Table 1. You will then be able to code cut a key that will work the other locks on the bike. Use the saw on the least expensive lock to replace; on this bike it is the trunk lock. A Harley-Davidson dealer orders the lock(s) by VIN (vehicle identification number) or code so it is keyed like the other locks on the bike. The part numbers and prices are:

**Ignition/steering:** 71536-93 \$92.00 **Saddlebags - set of 2:** 53710-93 \$54.50

**Trunk:** 53848-00 \$21.50



The customer has another option if he has the time. He can order new keys from a Harley-Davidson dealer. The dealer can order them by VIN or by code. The code is on the bow of the original key. Pull the plastic cover off and you can see it stamped into the metal.



A closer look shows that the code is 3934. This is an HD series code so the complete code number is HD3934.

alarm system is available as an option and this motorcycle is equipped with it. The fob in the photo is used to arm and disarm the alarm. The system is armed by holding down the button on the fob until the turn



signals flash twice and the siren chirps twice. The system can also be set up to automatically go into alarm mode when the motorcycle is parked. A security light on the speedometer face will show that the system is armed. When the system is armed, the alarm will activate if the bike is moved, tampered with, or if the ignition is turned on. The activated alarm will flash the turn signals, sound the siren and disable the starter, ignition, or EFI (fuel system). Pushing the button on the fob 2 times within 1.5 seconds disarms the system and the turn signals will flash once. If the fob is lost, the rider can disarm the alarm if they know their personal 5-digit code that they have previously entered. The procedure is as follows:

### **To Disarm the Alarm:**

- **1.** Turn ignition to accessory.
- **2.** Hold down both turn signal switches until the security light blinks at a fast rate.
- **3.** Enter the 1st digit of the code by pressing the left turn signal switch x times (x = the unknown digit).
- **4.** Press the right turn signal switch 1 time.
- **5.** Enter the 2nd digit of the code by pressing the left turn signal switch x times.
- 6. Press the right turn signal switch 1 time.
- **7.** Enter the 3rd digit of the code by pressing the left turn signal switch x times.
- **8.** Press the right turn signal switch 1 time.
- **9.** Enter the 4th digit of the code by pressing the left turn signal switch x times.
- **10.** Press the right turn signal switch 1 time.
- **11.** Enter the 5th digit of the code by pressing the left turn signal switch x times.
- **12.** The security light will stop blinking and the alarm is disarmed.

A new fob can be purchased at a Harley-Davidson dealer. The part number is 68926-00 and the price is \$34.95. The instructions for programming the fob into the security system are in the owners' manual.

Codes: HD series - not available

Blank: Ilco 1137B, Jet 37B, Silca CH9T

**Spacing in Degrees:** 1 = 45, 2 = 90, 3 = 135, 4 =

180, 5 = 225, 6 = 270, 7 = 315

Depths:

**Standard**: 1 = .015, 2 = .031, 3 = .046, 4 = .062, 5 =

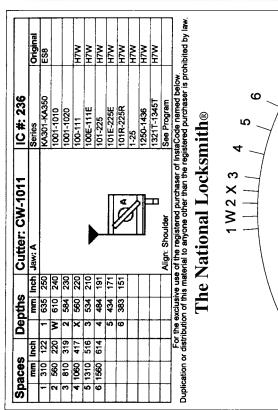
.077, 6 = .093, 7 = .109

**Fort:** 0 = .015, 1 = .031, 2 = .046, 3 = .062, 4 = .077, 5 = .093, 6 = .109

# FREE Code Cards!



from The National Locksmith®



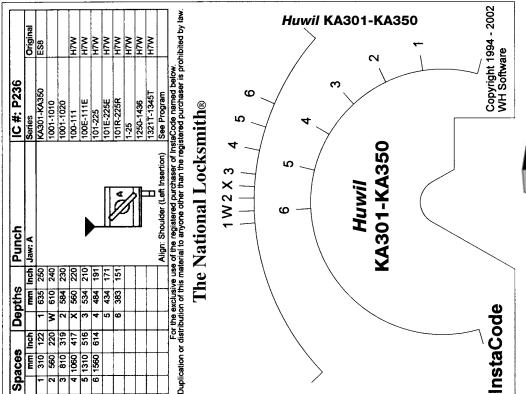


# **BONUS** Code Card

For the 1200CMB™

Flip 'em
over for
Silca,
Curtis,
Framon,
A-1
and
ITL specs!

**%** 



**Cut Along Outside of Card and Laminate To Use** 



# Code Card For the 1200PCH™

Courtesy of INSTA-CODE 2002™ from The National Locksmith

# Shop the online store TheNationalLocksmith.com • CLICK HERE •

# Huwil KA301-KA350

ITL Manufacturer ID: 224  ECM 200 N/A	A-1 Pak-A-Punch <sup>TM</sup> — Quick Change Kit: Punch And Die: ITL 9000 & 950	Framon — 199	Carriage: N/A Clipper: N/A	Cam Set: N/A	Jaw: A Cutter: CW-1011	DSD: 40	UnoCode Card No.: N/A	HPC Code Card: CX32  Jaw: A
224 N/A	N/A	Cuttor: ECONAS			<b>1</b>			Cutter: CW-1011 Gauge: Shoulder

ECM SOO TIL Ma	<b>A-1 Pak-A-Pun</b> Quic P <b>P11 9000 &amp; 95</b> 0	Key Clam	Cuts Sta		Can	Can	Curtis No. 15 C	0		<b>HPC Codemax</b>	UnoCode Carc		HPC PCH	HDC 1200BCHTM
anufac	K Cha	ping:	rind At:	pper:	iage:	Set:	ode	utter:	DSD:	<b>₹</b>	No.:	Jaw:	Card:	<b>₹</b>
turer ID:	ange Kit: And Die:	ω ; (	.122	N/A	N/A	N/A	Cutter-	CW-10-	A 40		N/A	⊳	PX32	KA3
224	N/A	Depth Increment:	Cutter:					1					Punch: N/A	Huwii KA301-KA350
		.010	FC9045											
	TL Manufacturer ID:	-Punch <sup>TM</sup> Quick Change Kit: Punch And Die: <b>Q 950</b> TL Manufacturer ID:	Block #: 3 Depth Increment: Clamping:  Punch <sup>TM</sup> — Quick Change Kit: N/A Punch And Die: N/A	ts Start At: .122 Cutter: Spacing: .098 Block #: 3 Depth Increment: Clamping:  Punch IM Quick Change Kit: N/A Punch And Die: N/A	Clipper: N/A  ts Start At: .122 Spacing: .098 Block #: 3 Clamping:  -Punch IM Quick Change Kit: N/A Punch And Die: N/A  \$ 950 L Manufacturer ID: 224	Carriage: N/A Clipper: N/A  ts Start At: .122 Spacing: .098 Block #: 3 Clamping:  -Punch Im Quick Change Kit: N/A Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A	Cam Set: N/A Carriage: N/A Clipper: N/A  ts Start At: .122 Spacing: .098 Block #: 3 Clamping:  Punch™ Quick Change Kit: N/A Punch And Die: N/A Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A	15 Code Cutter  Cam Set: N/A Carriage: N/A Carriage: N/A Clipper: N/A  ts Start At: .122 Spacing: .098 Block #: 3 Clamping:  -Punch IM Punch And Die: N/A Punch And Die: N/A Punch And Die: N/A Punch And Die: N/A	Cutter: CW-1011  15 Code Cutter  Cam Set: N/A Carriage: N/A Clipper: N/A  Spacing: .098 Block #: 3 Clamping:  Punch™  Quick Change Kit: N/A Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A	DSD: 40 Jaw: A Cutter: CW-1011  15 Code Cutter Cam Set: N/A Carriage: N/A Clipper: N/A  Its Start At: .122 Spacing: .098 Block #: 3 Clamping:  Punch Incr Quick Change Kit: N/A Punch And Die: N/A  § 950  R 950  L Manufacturer ID: 224	DSD: 40 Jaw: A Cutter: CW-1011  15 Code Cutter Cam Set: N/A Carriage: N/A Cilipper: N/A Spacing: .098 Block #: 3 Clamping:  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A  Poso —	Card No.: N/A  max <sup>TM</sup> Jaw: A  Cutter: CW-1011  15 Code Cutter  Cam Set: N/A  Carriage: N/A  Carriage: N/A  Clipper: N/A  Spacing: .098  Block #: 3  Clamping:  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A  Punch And Die: N/A	Jaw: A  card No.: N/A  max <sup>TM</sup> DSD: 40  Jaw: A  Cutter: CW-1011  15 Code Cutter  Cam Set: N/A Carriage: N/A Carriage: N/A Clipper: N/A  ts Start At: .122 ts Start At: .122 ts Spacing: .098 Block #: 3 Clamping:  Punch TM  Quick Change Kit: N/A Punch And Die: N/A  \$ 950  R 950  Card N/A  Punch And Die: N/A	HPC PCH Card: PX32 Punch:  Jaw: A  Unocode  DSD: 40  Jaw: A  Cutter: CW-1011  S No. 15 Code Cutter  Cam Set: N/A Carriage: N/A C

# KEY CODES

# Master, Part 1 (Combination Lock) 900001-907353

900001	02-24-10	900056	05-15-05	900111	06-20-34	900166	30-16-30	900221	14-24-38	900276	12-26-08
900002	07-29-35	900057	10-28-34	900112	36-06-12	900167	38-28-34	900222	16-26-36	900277	00-02-36
900003	06-08-30	900058	23-05-35	900113	20-38-32	900168	02-28-10	900223	06-24-02	900278	18-36-10
900004	30-20-34	900059	09-35-05	900114	26-12-38	900169	34-36-26	900224	07-21-35	900279	14-00-06
900005	08-22-16	900060	00-06-24	900115	10-20-14	900170	15-29-35	900225	20-30-12	900280	30-16-10
900006	05-23-05	900061	02-16-38	900116	00-18-24	900171	38-20-30	900226	08-38-24	900281	12-18-28
900007	06-24-18	900062	34-04-18	900117	03-25-35	900172	16-30-36	900227	34-04-10	900282	10-28-14
900008	28-18-12	900063	16-30-00	900118	12-14-32	900173	06-28-34	900228	02-16-34	900283	38-04-22
900009	30-04-38	900064	06-20-10	900119	00-26-12	900174	28-06-32	900229	34-36-14	900284	13-27-05
900010	14-24-06	900065	32-10-28	900120	37-11-25	900175	29-07-25	900230	36-02-28	900285	24-30-00
900011	34-20-26	900066	10-12-06	900121	16-22-08	900176	32-14-28	900231	22-32-10	900286	28-18-32
900012	18-36-02	900067	32-34-20	900122	28-06-20	900177	19-09-15	900232	34-08-14	900287	39-01-35
900013	26-28-18	900068	24-02-32	900123	14-04-10	900178	00-22-36	900233	16-06-12	900288	20-22-04
900014	02-08-26	900069	34-20-14	900124	34-20-34	900179	04-22-12	900234	28-14-32	900289	20-34-04
900015	16-38-28	900070	08-38-12	900125	37-39-05	900180	35-05-15	900235	06-28-06	900290	22-08-14
900016	22-00-30	900071	19-05-15	900126	04-18-04	900181	34-20-30	900236	24-34-08	900291	10-32-26
900017	36-14-20	900072	26-08-18	900127	18-08-34	900182	00-30-04	900237	32-34-12	900292	18-04-18
900018	34-24-06	900073	34-16-30	900128	20-02-08	900183	24-38-28	900238	08-26-20	900293	26-04-22
900019	00-02-08	900074	02-20-06	900129	05-07-25	900184	30-16-06	900239	18-24-02	900294	16-34-04
900020	34-12-22	900075	16-22-32	900130	10-36-30	900185	26-32-02	900240	12-18-24	900295	08-38-20
900021	20-30-04	900076	10-24-02	900131	23-29-15	900186	18-20-30	900241	16-18-28	900296	05-27-05
900022	24-26-00	900077	26-16-30	900132	26-36-10	900187	04-10-04	900242	14-04-18	900297	20-26-08
900023	18-20-10	900078	12-22-36	900133	06-16-06	900188	09-19-25	900243	22-32-18	900298	12-22-32
900024	22-36-30	900079	35-09-15	900134	33-35-25	900189	23-33-15	900244	26-08-14	900299	18-08-38
900025	09-31-05	900080	06-16-34	900135	36-18-00	900190	29-15-25	900245	22-28-22	900300	26-36-18
900026	11-29-35	900081	22-00-18	900136	12-30-12	900191	02-16-10	900246	32-02-20	900301	12-38-24
900027	10-24-10	900082	24-34-16	900137	18-32-22	900192	36-06-32	900247	10-12-34	900302	26-00-34
900028	15-01-15	900083	20-02-32 24-34-12	900138	27-29-35	900193	38-24-06	900248	13-39-05	900303	36-06-20
900029 900030	18-36-22 04-22-04	900084 900085	30-08-18	900139 900140	20-30-00 16-30-04	900194 900195	26-04-14 18-28-10	900249 900250	04-06-32 30-00-34	900304 900305	30-04-34 36-26-16
900030	35-17-35	900086	37-15-25	900140	16-30-04	900193	28-38-08	900250	18-04-30	900303	06-12-38
900031	23-09-15	900087	10-12-26	900141	14-20-34	900190	15-29-15	900251	00-02-12	900300	14-36-14
900032	06-36-22	900088	20-26-20	900142	04-06-12	900197	32-22-32	900252	19-21-15	900307	16-02-20
900033	26-00-06	900089	10-16-22	900143	19-21-35	900199	34-24-34	900254	28-02-24	900309	12-34-16
900035	04-22-28	900090	36-22-00	900145	20-06-28	900200	14-16-10	900255	36-18-04	900310	24-10-36
900036	34-36-06	900091	05-19-05	900146	08-38-04	900201	17-39-25	900256	19-29-35	900311	34-08-18
900037	04-30-24	900092	13-35-25	900147	00-26-08	900202	09-23-05	900257	21-03-25	900312	01-23-05
900038	36-02-20	900093	20-06-24	900148	04-18-28	900203	10-32-14	900258	24-02-24	900313	16-02-32
900039	16-26-32	900094	04-26-04	900149	33-15-05	900204	24-06-32	900259	30-36-30	900314	16-34-12
900040	34-20-38	900095	12-26-36	900150	27-05-15	900205	04-30-00	900260	14-16-06	900315	09-11-05
900041	11-13-35	900096	30-32-38	900151	04-10-16	900206	19-29-15	900261	07-37-15	900316	04-14-00
900042	10-32-22	900097	26-04-38	900152	32-18-36	900207	32-18-04	900262	38-16-34	900317	06-12-26
900043	28-06-24	900098	04-06-20	900153	06-08-02	900208	28-02-12	900263	23-05-15	900318	00-30-24
900044	00-22-16	900099	14-36-06	900154	16-34-00	900209	08-34-16	900264	32-10-04	900319	22-04-34
900045	03-05-35	900100	37-27-05	900155	32-14-08	900210	10-16-38	900265	15-25-35	900320	24-10-00
900046	08-10-16	900101	22-00-14	900156	18-00-10	900211	08-38-16	900266	34-08-22	900321	34-36-22
900047	18-32-38	900102	10-36-22	900157	24-06-12	900212	20-10-36	900267	36-14-32	900322	10-16-02
900048	37-19-05	900103	24-02-16	900158	38-00-06	900213	14-00-18	900268	36-18-36	900323	16-38-04
900049	24-06-16	900104	14-00-22	900159	28-10-16	900214	28-18-04	900269	38-24-10	900324	36-38-12
900050	34-08-30	900105	36-38-24	900160	36-22-04	900215	12-30-20	900270	18-32-02	900325	00-14-20
900051	24-34-04	900106	06-32-38	900161	26-00-26	900216	02-24-34	900271	20-10-16	900326	12-22-12
900052	06-20-38	900107	26-28-06	900162	16-06-20	900217	38-16-38	900272	28-14-00	900327	24-10-32
900053	20-30-16	900108	02-16-22	900163	30-11-30	900218	12-26-00	900273	21-31-05	900328	36-10-24
900054	16-30-24	900109	36-22-28	900164	22-08-38	900219	34-24-30	900274	28-34-00	900329	38-12-06
900055	18-28-18	900110	30-08-14	900165	22-28-06	900220	10-20-06	900275	00-30-20	900330	11-21-35
		1		1							

# Master, Part 1 (Combination Lock) 900001-907353

900331	10-12-02	900343	14-36-18	900355	22-12-30	900367	30-36-06
900332	09-19-05	900344	11-37-15	900356	17-35-25	900368	28-34-20
900333	02-12-22	900345	14-20-02	900357	08-22-00	900369	08-22-28
900334	38-28-14	900346	34-16-10	900358	16-18-12	900370	24-06-00
900335	12-22-00	900347	18-36-26	900359	38-28-10	900371	30-04-10
900336	22-28-02	900348	36-26-20	900360	24-26-20	900372	32-06-00
900337	22-24-06	900349	10-00-18	900361	00-18-36	900373	17-23-05
900338	18-04-26	900350	35-21-35	900362	16-02-08	900374	38-00-18
900339	02-08-22	900351	18-08-30	900363	38-28-18	900375	20-38-28
900340	18-04-38	900352	10-32-02	900364	38-16-10	900376	16-06-24
900341	14-28-06	900353	07-17-35	900365	28-34-04	900377	22-04-30
900342	34-12-26	900354	06-08-18	900366	38-28-38	900378	16-22-12
				1			

08-34-20 900445

30-20-14

18-00-06

06-12-02

14-16-26

900442

900443

900444

900380

900381

900382

900383

34-24-02

23-09-35

07-09-15

38-08-14

20-22-28

# Safe Opening Volumes 1-5



These are the classic safe books you will need to open most any safe easily and professionally.

- Volume I Modern Safes
- Volume 2 Modern Safes
- Volume 3 Antique Safes
- Volume 4 Antique Safes
- Volume 5 Very Recent Safes

CLICK HERE TO LEARN MORE



900440

26-36-14

900502

02-32-22

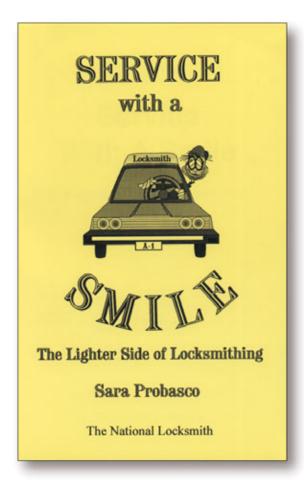
#SO - 1	, SO - 2	, SO - 3,	SO - 4,	SO - 5
---------	----------	-----------	---------	--------

900383	08-34-20	900445	20-22-28
900384	19-37-15	900446	27-01-35
900385	32-14-20	900447	17-31-25
900386	36-38-04	900448	26-16-26
900387	34-04-38	900449	12-34-00
900388	03-29-15	900450	31-21-35
900389	00-18-32	900451	06-12-30
900390	29-15-05	900452	12-14-24
900391	18-36-18	900453	14-36-02
	01-11-05	900453	06-36-26
900392			
900393	24-30-24	900455	30-32-06
900394	08-14-00	900456	11-01-15
900395	34-12-30	900457	00-14-00
900396	19-25-15	900458	05-19-25
900397	16-06-00	900459	03-21-35
900398	20-30-20	900460	10-16-26
900399	30-20-26	900461	32-06-28
900400	06-12-22	900462	28-30-04
900401	36-22-16	900463	22-08-26
900402	34-04-14	900464	08-22-32
900403	26-32-06	900465	16-34-24
	08-10-28		35-01-35
900404		900466	
900405	34-00-06	900467	38-24-18
900406	14-16-22	900468	20-34-00
900407	36-18-28	900469	38-20-14
900408	30-36-02	900470	22-32-26
900409	33-23-05	900471	36-14-24
900410	36-02-12	900472	20-06-12
900411	38-16-02	900473	29-11-05
900412	18-00-30	900474	30-36-18
900413	20-02-24	900475	38-12-34
900414	16-38-32	900476	34-20-02
900415	06-28-02	900477	06-20-26
900416	24-34-28	900478	31-01-15
900410	19-05-35	900470	39-29-35
			22-24-14
900418	12-02-12	900480	
900419	31-13-35	900481	36-10-32
900420	16-30-20	900482	38-12-18
900421	38-00-34	900483	18-24-30
900422	34-36-10	900484	00-22-32
900423	16-26-04	900485	25-35-25
900424	20-22-16	900486	30-32-10
900425	14-28-02	900487	06-36-18
900426	08-34-12	900488	12-38-20
900427	06-08-22	900489	39-13-35
900428	18-24-18	900490	20-10-00
900429	24-10-28	900491	10-12-18
900430	02-24-18	900492	32-06-24
900431	12-30-00	900493	30-12-22
900431	04-30-16	900493	21-27-05
900433	20-38-04	900495	39-09-35
900434	08-30-00	900496	08-10-04
900435	30-00-30	900497	22-24-30
900436	02-32-26	900498	00-14-32
900437	36-10-36	900499	20-02-12
900438	10-16-34	900500	10-20-10
900439	28-10-20	900501	34-00-14

# Master, Part 1 900001-907353

	900503	31-33-15	900565	07-21-15
	900504	04-30-36	900566	38-08-34
	900505	24-26-14	900567	12-38-08
		-		
	900506	02-12-02	900568	16-02-12
	900507	12-18-08	900569	18-28-38
	900508	02-12-30	900570	24-14-00
	900509	00-14-08	900571	12-02-08
	900510	20-22-12	900572	32-22-00
		-		
	900511	00-26-32	900573	04-30-04
	900512	18-24-14	900574	36-06-28
	900513	30-08-34	900575	16-30-08
	900514	34-04-22	900576	34-24-14
	900515	18-20-26	900577	12-22-16
	900516	22-28-14	900578	36-26-00
		-		
	900517	29-35-05	900579	32-06-20
	900518	08-22-08	900580	14-20-06
	900519	03-21-15	900581	06-24-10
	900520	16-18-32	900582	36-26-36
	900521	26-28-38	900583	10-28-02
	900522	08-18-36	900584	28-10-32
	900523	22-28-18	900585	18-28-22
	900524	36-10-00	900586	16-38-16
	900525	12-22-08	900587	30-12-34
	900526	36-06-16	900588	04-34-00
	900527	02-24-06	900589	22-12-34
	900528	05-35-05	900590	04-34-20
	900529	05-15-25	900591	08-30-24
	900530	00-18-28	900592	24-38-16
	900531	29-39-05	900593	22-12-22
	900532	03-17-35	900594	04-22-08
	900533	21-31-25	900595	24-06-24
	900534	30-12-06	900596	36-38-16
	900535	13-19-25	900597	01-15-25
	900536	16-06-36	900598	17-07-25
	900537	12-14-08	900599	04-26-36
	900538	16-22-00	900600	14-00-30
	900539	24-38-12	900601	28-34-08
			900602	26-12-06
	900540	02-28-18		
	900541	26-00-30	900603	10-28-10
	900542	13-15-25	900604	16-02-16
	900543		900605	20-26-12
		23-25-35		
	900544	22-12-02	900606	16-26-08
	900545	28-06-16	900607	39-01-15
	900546	08-34-00	900608	28-38-12
	900547	02-12-38	900609	32-38-04
	900548	00-06-20	900610	38-12-30
	900549	20-22-36	900611	17-03-25
	900550	18-28-06	900612	02-24-30
	900551	07-29-15	900613	18-28-02
	900552	17-19-25	900614	24-14-04
	900553	36-14-04	900615	34-16-38
	900554	18-32-14	900616	01-27-05
	900555	13-19-05	900617	08-10-20
	900556	22-28-10	900618	18-36-14
	900557	14-32-18	900619	37-39-25
	900558	34-24-10	900620	20-06-36
		-		
	900559	14-00-10	900621	22-24-34
)	900560	20-30-24	900622	32-14-00
	900561	02-08-14	900623	35-25-15
	900562	04-10-28	900624	30-08-22
	900563	06-16-30	900625	10-36-18
	900564	26-28-22	900626	00-10-28
	JUUUUT	20 20 22	300020	30 10 20

# Service with a Smile



To tickle the funnybone of anyone in a service oriented business.

CLICK HERE TO LEARN MORE



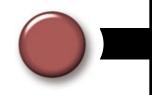
#SWS

# Sieveking Auto Key Guide



The Sieveking Auto Key Guide lists over 2,600 automotive and motorcycle keyways, covering makes from Acura to Zundapp, and listing fourteen popular key manufacturer numbers.

### CLICK HERE TO LEARN MORE



#AK - 1

# Master, Part 1 900001-907353

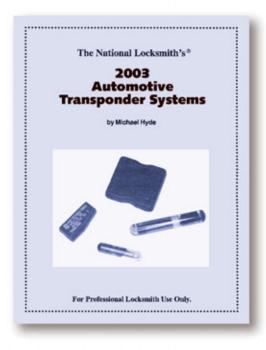
					_	
900627 38-00-14	900689	26-16-10	900751	23-29-35	900813	05-11-25
900628 29-31-25	900690	28-02-32	900752	08-38-28	900814	33-11-05
900629 08-10-32	900691	32-22-36	900753	36-26-08	900815	14-36-26
900630 02-04-38	900692	06-32-18	900754	06-12-18	900816	10-00-06
900631 14-28-34	900693	00-02-24	900755	00-10-24	900817	30-16-34
900632 38-24-38	900694	06-36-02	900756	30-04-22	900818	04-34-24
			1			
900633 08-30-36	900695	18-00-14	900757	22-00-06	900819	10-00-34
900634 24-10-20	900696	18-36-30	900758	36-06-00	900820	07-25-15
900635 33-39-05	900697	22-08-22	900759	14-28-10	900821	24-26-12
900636 20-06-20	900698	25-15-25	900760	08-34-28	900822	36-22-32
900637 30-12-38	900699	26-16-02	900761	10-36-26	900823	28-38-25
900638 32-02-12	900700	20-34-28	1	04-34-08	900824	10-20-30
			900762			
900639 16-34-20	900701	22-32-22	900763	08-22-12	900825	18-08-18
900640 28-30-08	900702	34-04-26	900764	03-13-35	900826	00-14-28
900641 22-32-02	900703	22-24-10	900765	30-16-26	900827	38-04-30
900642 06-28-10	900704	38-24-30	900766	09-39-05	900828	20-10-28
900643 38-12-02	900705	04-18-36	900767	29-19-25	900829	27-09-35
900644 16-26-00	900706	05-31-05	900768	32-06-36		01-31-25
					900830	
900645 26-12-22	900707	08-14-08	900769	10-28-38	900831	28-38-28
900646 02-32-10	900708	18-00-22	900770	14-32-02	900832	26-32-18
900647 00-10-20	900709	08-10-24	900771	36-26-32	900833	20-26-36
900648 04-14-28	900710	10-16-30	900772	09-35-25	900834	32-06-32
900649 32-02-36	900711	32-10-36	900773	32-38-12	900835	34-00-10
			1			
900650 25-03-25	900712	06-28-22	900774	37-23-05	900836	24-14-36
900651 20-26-16	900713	02-12-26	900775	20-34-24	900837	02-16-26
900652 28-02-08	900714	30-04-14	900776	34-08-26	900838	28-30-16
900653 06-36-06	900715	27-05-35	900777	08-14-36	900839	18-00-34
900654 08-26-08	900716	34-20-10	900778	12-26-32	900840	02-24-14
900655 14-20-14	900717	00-10-16	900779	18-04-34	900841	21-39-25
			l			
900656 13-31-05	900718	34-24-18	900780	12-02-16	900842	18-04-10
900657 36-14-00	900719	20-34-08	900781	11-29-15	900843	09-11-25
900658 37-03-25	900720	04-14-36	900782	21-35-25	900844	00-30-08
900659 39-29-15	900721	04-26-20	900783	12-26-16	900845	01-19-05
900660 20-34-12	900722	34-16-02	900784	36-14-36	900846	22-08-30
900661 28-10-00	900723	26-08-30	900785	28-02-16	900847	02-32-18
900662 04-30-12	900724	30-32-14	900786	26-12-30	900848	32-38-08
900663 04-34-28			1			
	900725	32-34-24	900787	15-01-35	900849	08-10-36
900664 36-18-32	900726	16-34-16	900788	04-30-08	900850	26-36-30
900665 30-00-26	900727	06-08-26	900789	31-09-15	900851	30-00-18
900666 28-14-28	900728	10-28-18	900790	04-34-04	900852	29-19-05
900667 05-11-05	900729	14-04-30	900791	36-18-12	900853	28-30-00
900668 22-04-22	900730	07-09-35	900792	30-12-02	900854	12-18-32
900669 04-10-24	900731	35-37-15	900793	24-30-04	900855	24-34-24
	900731					
		32-10-16	900794	19-01-35	900856	26-04-26
900671 28-14-24	900733	38-08-02	900795	34-08-38	900857	36-22-36
900672 36-02-32	900734	24-02-36	900796	16-06-16	900858	12-34-04
900673 16-18-36	900735	25-27-05	900797	34-36-18	900859	34-36-30
900674 26-08-34	900736	06-16-26	900798	11-25-35	900860	06-08-14
900675 24-38-20	900737	16-34-08	900799	02-28-22	900861	35-01-15
900676 33-03-25	900738	24-26-04	900800	28-30-12	900862	00-06-12
	900739	18-32-10	1			24-02-28
900677 08-26-32			900801	16-02-28	900863	
900678 22-36-02	900740	22-28-34	900802	10-36-14	900864	08-14-28
900679 16-26-16	900741	11-33-15	900803	30-00-22	900865	30-00-14
900680 14-24-02	900742	10-16-10	900804	12-26-20	900866	32-02-24
900681 38-04-14	900743	16-38-20	900805	09-15-25	900867	06-24-34
900682 02-32-02	900744	10-20-34	900806	38-08-38	900868	26-32-22
900683 32-18-24	900745	34-08-34	900807	04-14-20	900869	05-35-25
900684 28-10-36	900746	22-08-18	900808	20-02-16	900870	15-21-15
900685 24-26-32	900747	32-18-12	900809	02-32-14	900871	36-14-28
900686 28-18-08	900748	18-00-18	900810	22-36-10	900872	16-22-16
900687 26-36-26	900749	28-34-16	900811	16-18-08	900873	09-31-25
900688 34-00-34	900750	38-08-22	900812	18-00-26	900874	24-26-08
			1			

# Shop the online store TheNationalLocksmith.com • CLICK HERE •

Continued from page 120

# Master, Part 1 (Combination Lock) 900001-907353

900875	32-10-24	900904	20-26-04	900933	26-16-38	900962	26-00-14	900991	12-38-28	901020	10-00-30
900876	26-08-22	900905	06-28-18	900934	38-08-30	900963	02-24-02	900992	32-18-32	901021	06-24-14
900877	31-05-15	900906	15-25-15	900935	14-04-38	900964	06-08-34	900993	25-39-05	901022	31-37-15
900878	14-24-14	900907	22-08-34	900936	36-10-04	900965	00-18-08	900994	14-04-26	901023	22-04-38
900879	30-20-38	900908	28-34-24	900937	22-04-10	900966	36-06-24	900995	32-22-04	901024	02-08-34
900880	26-16-34	900909	06-16-38	900938	36-02-08	900967	18-08-22	900996	12-38-16	901025	07-25-35
900881	28-18-00	900910	10-12-22	900939	34-16-34	900968	24-10-16	900997	28-02-28	901026	08-34-24
900882	30-04-30	900911	00-02-28	900940	22-32-06	900969	22-12-26	900998	18-20-06	901027	36-06-36
900883	32-02-32	900912	14-16-02	900941	32-38-20	900970	10-20-38	900999	36-14-08	901028	20-30-08
900884	02-28-06	900913	36-22-08	900942	00-14-04	900971	12-38-32	901000	17-27-05	901029	14-32-22
900885	05-31-25	900914	11-01-35	900943	06-24-06	900972	24-38-04	901001	14-28-18	901030	20-38-24
900886	04-18-32	900915	18-24-10	900944	26-00-18	900973	38-16-06	901002	22-12-06	901031	00-10-36
900887	00-22-04	900916	04-06-00	900945	20-02-20	900974	12-18-36	901003	32-14-04	901032	14-36-22
900888	18-08-26	900917	06-20-30	900946	38-28-22	900975	19-33-15	901004	30-04-26	901033	00-06-28
900889	38-04-34	900918	32-14-36	900947	26-04-34	900976	20-38-20	901005	24-30-16	901034	04-06-24
900890	32-06-12	900919	12-38-12	900948	30-16-02	900977	27-13-35	901006	34-04-30	901035	02-08-38
900891	02-20-38	900920	28-14-04	900949	32-34-28	900978	25-35-05	901007	08-14-04	901036	30-32-26
900892	18-32-18	900921	32-18-00	900950	18-24-38	900979	36-26-04	901008	06-28-38	901037	00-06-32
900893	08-18-08	900922	22-36-18	900951	38-24-34	900980	15-05-15	901009	18-28-34	901038	36-38-20
900894	02-16-30	900923	00-02-16	900952	06-32-14	900981	30-00-10	901010	22-00-26	901039	20-10-24
900895	30-32-02	900924	26-00-22	900953	00-30-12	900982	39-17-35	901011	14-04-22	901040	30-36-22
900896	34-12-06	900925	02-04-34	900954	12-30-36	900983	16-22-04	901012	02-20-10	901041	14-24-30
900897	02-04-22	900926	06-24-30	900955	24-10-04	900984	25-11-05	901013	00-14-24	901042	24-38-08
900898	22-24-02	900927	09-39-25	900956	04-22-36	900985	28-38-24	901014	10-24-14	901043	32-38-32
900899	31-21-15	900928	26-00-10	900957	12-02-28	900986	08-14-32	901015	02-12-18	901044	25-39-25
900900	24-14-20	900929	02-20-34	900958	06-24-38	900987	24-06-36	901016	23-13-35	901045	00-26-04
900901	20-38-12	900930	18-20-38	900959	12-14-20	900988	26-04-30	901017	36-38-08	901046	36-02-16
900902	26-12-02	900931	39-21-35	900960	34-00-30	900989	38-24-14	901018	02-04-10	901047	38-20-38
900903	34-00-22	900932	00-30-36	900961	24-30-12	900990	14-20-10	901019	00-22-12	901048	34-12-02



# 2003 Automotive Transponder Systems

600 pages covering all the latest automotive transponder systems.

CLICK HERE TO LEARN MORE

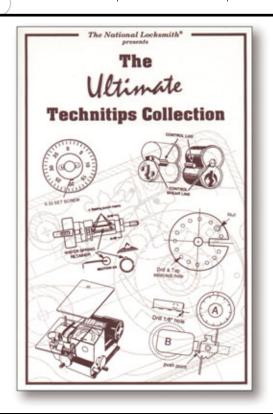


#TS - 2003

# Shop the online store TheNationalLocksmith.com • CLICK HERE •

# Master, Part 1 (Combination Lock) 900001-907353

					_						
901049	18-08-14	901078	08-34-08	901107	14-16-30	901136	28-30-20	901165	39-09-15	901194	02-28-38
901050	26-08-26	901079	11-17-35	901108	13-03-25	901137	00-06-36	901166	10-24-30	901195	04-06-28
901051	10-20-02	901080	30-20-10	901109	10-32-38	901138	34-00-26	901167	26-36-22	901196	22-24-18
901052	01-19-25	901081	20-10-20	901110	28-02-36	901139	06-32-10	901168	24-30-36	901197	32-22-12
901053	03-33-15	901082	35-05-35	901111	10-00-10	901140	33-35-05	901169	14-24-18	901198	26-12-34
901054	28-06-12	901083	04-22-00	901112	06-32-02	901141	14-00-26	901170	00-30-16	901199	08-30-16
901055	06-12-06	901084	10-28-22	901113	36-10-28	901142	30-16-38	901171	06-36-30	901200	10-32-06
901056	32-22-16	901085	24-26-36	901114	29-35-25	901143	00-22-08	901172	28-14-20	901201	16-34-28
901057	25-07-25	901086	18-32-26	901115	31-01-35	901144	14-20-26	901173	26-36-06	901202	13-39-25
901058	04-06-16	901087	34-12-38	901116	36-38-28	901145	34-08-02	901174	04-22-32	901203	18-36-06
901059	02-32-06	901088	02-04-14	901117	02-04-18	901146	10-12-30	901175	04-26-12	901204	02-04-26
901060	22-36-06	901089	10-00-26	901118	24-10-24	901147	29-11-25	901176	02-20-14	901205	22-32-38
901061	11-25-15	901090	18-20-02	901119	20-30-36	901148	12-34-22	901177	12-26-12	901206	04-22-16
901062	00-30-00	901091	25-31-25	901120	22-00-10	901149	22-36-22	901178	06-16-02	901207	06-36-14
901063	32-38-16	901092	04-10-32	901121	12-02-20	901150	30-18-30	901179	14-00-14	901208	21-23-05
901064	26-28-34	901093	14-24-10	901122	02-04-30	901151	07-13-35	901180	08-26-04	901209	22-12-38
901065	16-02-36	901094	36-10-20	901123	10-32-10	901152	32-10-00	901181	32-10-32	901210	12-26-04
901066	04-14-32	901095	22-04-26	901124	30-32-22	901153	04-10-20	901182	08-14-24	901211	07-33-15
901067	20-26-00	901096	19-09-35	901125	34-12-18	901154	26-32-38	901183	18-24-06	901212	02-20-30
901068	08-26-16	901097	30-08-26	901126	10-36-06	901155	28-02-20	901184	04-34-22	901213	17-31-05
901069	24-14-24	901098	00-22-28	901127	22-36-14	901156	30-36-14	901185	01-03-25	901214	32-38-28
901070	06-16-22	901099	13-23-05	901128	39-05-35	901157	04-26-00	901186	24-38-24	901215	35-13-35
901071	10-32-18	901100	10-16-06	901129	06-32-22	901158	26-12-26	901187	26-12-18	901216	24-34-20
901072	12-02-24	901101	08-18-00	901130	12-14-00	901159	38-24-02	901188	23-01-35	901217	14-32-26
901073	13-31-25	901102	04-26-32	901131	17-19-15	901160	20-22-00	901189	08-22-04	901218	04-26-08
901074	08-18-32	901103	24-06-20	901132	32-18-28	901161	38-20-26	901190	26-04-10	901219	10-24-38
901075	11-21-15	901104	38-20-34	901133	00-10-04	901162	18-04-22	901191	12-30-24	901220	34-20-06
901076	14-20-30	901105	10-24-18	901134	37-15-05	901163	24-02-20	901192	04-10-36	901221	04-26-16
901077	38-12-26	901106	38-08-26	901135	14-04-14	901164	14-36-10	901193	12-34-12	901222	12-14-28



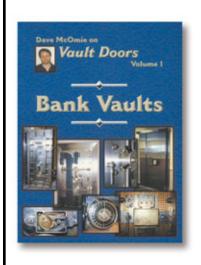
# The Ultimate Technitips Collection

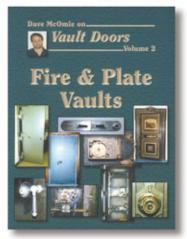
Here's one of the most useful books ever available to the locksmith!

CLICK HERE TO LEARN MORE



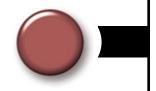
# Dave McOmie on Vault Doors Vol. 1 & 2





These openings can be a nightmare, but not when you bring Dave McOmie along with you on the job.

## CLICK HERE TO LEARN MORE



# Master, Part 1 900001-907353

901223	20-22-08	901285	15-37-15	901347	16-38-24	901409	26-36-02
901224	01-11-25	901286	38-12-38	901348	14-00-34	901410	24-30-20
	-						
901225	27-09-15	901287	28-30-36	901349	20-06-00	901411	27-17-35
901226	14-36-30	901288	32-14-32	901350	32-38-24	901412	02-28-02
901227	06-20-02	901289	26-08-38	901351	00-26-20	901413	30-33-18
901228	30-00-06	901290	10-24-06	901352	02-20-02	901414	22-32-14
901229	37-19-25	901291	32-02-08	901353	08-18-04	901415	13-15-05
901230	18-08-02	901292	00-26-00	901354	00-02-20	901416	06-16-10
901231	15-33-15	901293	24-38-32	901355	27-33-15	901417	28-38-04
901232	17-39-05	901294	02-32-38	901356	34-16-22	901418	38-08-18
901233	06-20-14	901295	08-30-04	901357	00-18-00	901419	30-20-06
901234	17-35-05	901296	09-15-05	901358	34-00-18	901420	08-18-12
901235	38-16-22	901297	22-24-38	901359	16-18-04	901421	14-32-14
901236	12-30-08	901298	04-18-12	901360	04-06-36	901422	27-37-15
901237	08-26-00	901299	38-04-10	901361	26-08-02	901423	20-06-32
901238	06-12-34	901300	10-20-26	901362	04-18-00	901424	26-14-22
901239	23-01-15	901301	00-26-36	901363	12-34-20	901425	33-15-25
901240	20-38-16	901302	36-18-08	901364	16-06-32	901426	08-18-24
901241	32-34-04	901303	06-08-38	901365	01-15-05	901427	36-10-16
901242	02-08-18	901304	31-09-35	901366	19-25-35	901428	34-36-02
901243	04-14-04	901305	27-29-15	901367	14-16-34	901429	00-18-12
901244	04-14-24	901306	22-36-26	901368	20-02-36	901430	12-22-04
901245	16-18-00	901307	12-18-00	901369	14-32-06	901431	36-22-12
901246	33-19-05	901308	20-38-08	901370	30-04-18	901432	26-28-10
901247	02-12-34	901309	18-24-34	901371	24-14-28	901433	00-06-16
901248	00-10-00	901310	32-02-28	901372	14-32-10	901434	28-18-28
901249	35-09-35	901311	16-38-12	901373	15-05-35	901435	38-04-38
901250	08-18-28	901312	02-28-34	901374	04-14-08	901436	09-27-05
901251	02-28-14	901313	32-18-08	901375	24-06-28	901437	30-08-30
901252	00-26-16	901314	30-08-38	901376	04-30-20	901438	28-06-28
901253	03-29-35	901315	00-10-32	901377	32-34-08	901439	30-36-26
901254	00-14-36	901316	12-34-28	901378	21-11-05	901440	02-24-38
901255	25-31-05	901317	00-22-00	901379	22-28-38	901441	28-14-08
901256	12-30-16	901318	29-39-25	901380	00-06-00	901442	28-30-24
901257	28-06-36	901319	04-18-08	901381	30-12-18	901443	14-32-38
901258	24-14-32	901320	08-22-36	901382	35-21-15	901444	24-14-08
901259	32-34-16	901321	34-24-38	901383	31-05-35	901445	26-28-02
901260	14-04-34	901322	22-04-18	901384	16-26-20	901446	39-25-15
901261	38-20-02	901323	30-20-02	901385	12-34-08	901447	16-30-16
901262	12-14-36	901324	37-11-05	901386	10-36-02	901448	01-31-05
901263	32-02-16	901325	16-18-24	901387	06-32-26	901449	12-02-32
901264	16-02-24	901326	24-30-08	901388	22-12-18	901450	30-20-30
901265	38-04-18	901327	21-39-05	901389	04-18-24	901451	14-16-38
901266	10-12-38	901328	22-00-34	901390	06-32-06	901452	15-21-35
901267	29-31-05	901329	10-00-22	901391	04-34-16	901453	38-12-22
901268	36-02-24	901330	03-09-35	901392	16-06-28	901454	03-09-15
901269	38-20-10	901331	12-18-04	901393	32-34-00	901455	38-00-26
901270	25-11-25	901332	08-38-32	901394	39-05-15	901456	19-01-15
901271	27-01-15	901333	34-12-34	901395	08-10-00	901457	12-14-04
901272	33-39-25	901334	00-02-32	901396	22-00-22	901458	26-32-14
901273	25-15-05	901335	26-28-14	901397	32-22-08	901459	34-16-26
901274	28-10-04	901336	20-22-32	901398	38-16-26	901460	18-20-14
901275	06-28-14	901337	36-26-12	901399	06-20-06	901461	38-00-10
901276	21-07-25	901338	28-34-28	901400	30-36-10	901462	36-38-32
901277	14-28-14	901339	26-32-26	901401	18-32-06	901463	30-16-22
901278	12-30-04	901340	02-16-06	901402	12-02-36	901464	24-02-08
901279	08-30-08	901341	08-26-36	901403	20-34-16	901465	28-38-32
901280	26-04-18	901342	06-36-10	901404	02-20-26	901466	10-24-34
901281	02-08-02	901343	35-25-35	901405	20-06-16	901467	16-38-08
901282	38-00-22	901344	12-38-04	901406	01-07-25	901468	21-11-25
				901400			
901283	36-18-24	901345	28-34-12		08-38-08	901469	39-21-15
901284	10-28-06	901346	34-16-06	901408	38-28-06	901470	30-12-26

# Master, Part 1 (Combination Lock) 900001-907353

12-18-04

08-38-32

34-12-34

00-02-32

26-28-14

20-22-32

36-26-12

28-34-28

26-32-26

02-16-06

08-26-36

06-36-10 | 901618

901607

901608

901609

901610

901611

901613

901614

901615

901616

901617

35-25-35

12-38-04

36-10-32

38-12-18

18-24-30

25-35-25

30-32-10

06-36-18

12-38-20

39-13-35

20-10-00 901630

901612 00-22-32

901620

901621

901622

901623

901624

901625

901626

901627

901628

901629

10-12-18

32-06-24

30-12-22

21-27-05

39-09-35

08-10-04

22-24-30

00-14-32

20-02-12

10-20-10

34-00-14

02-32-22 | 901642

901632

901633

901634

901635

901636

901637

901638

901639

901640

901641

31-33-15

04-30-36

12-22-16

36-26-00

32-06-20

14-20-06

06-24-10

36-26-36

10-28-02

28-10-32

18-28-22

16-38-16

901595

901596

901597

901598

901599

901600

901601

901602

901603

901604

901605

901606

				4
	901471	16-22-36	901533	00-18-04
)	901472			
		39-25-35	901534	12-18-12
	901473	20-10-04	901535	04-10-00
	901474	26-32-10	901536	21-35-05
	901475	18-04-14	901537	06-32-22
	901476	14-20-38	901538	12-14-00
	901477	13-35-05	901539	17-19-15
	901478	32-10-20	901540	32-18-28
	901479	38-16-30	901541	00-10-04
	901480	18-20-34	901542	37-15-05
	901481	02-12-06	901543	14-04-14
			901544	
	901482	20-02-28		28-30-20
	901483	28-14-36	901545	00-06-36
	901484	38-20-06	901546	34-00-26
	901485	33-19-25	901547	06-32-10
	901486	10-00-14	901548	33-35-05
	901487	28-10-28	901549	14-00-26
	901488	23-25-15	901550	30-16-38
	901489	32-06-16	901551	00-22-08
	901490	08-14-20	901552	14-16-24
	901491	23-37-15	901553	34-08-02
	901492	24-34-00	901554	10-12-30
	901493	15-17-35	901555	29-11-25
	901494	20-34-20	901556	12-34-20
	901495	14-24-34	901557	22-36-22
	901496	12-22-28	901558	29-17-25
	901497	20-10-32	901559	07-13-35
	901498	30-08-02	901560	32-10-00
	901499	32-14-24	901561	21-39-25
	901500	26-16-06	901562	18-04-10
	901501	08-34-04	901563	09-11-25
	901502	28-10-24	901564	00-30-08
	901503	08-30-20	901565	01-19-05
	901504	38-04-26	901566	22-08-30
	901505	24-02-12	901567	02-32-18
	901506	14-28-38	901568	32-38-08
	901507	38-28-02	901569	08-10-36
	901508	38-00-30	901570	26-36-30
	901509	29-03-25	901571	30-00-18
	901510	16-30-12	901572	29-19-05
	901511	10-36-10	901573	28-30-00
	901512	22-04-14	901574	12-18-32
	901513	36-02-36	901575	24-34-24
	901514	28-38-16	901576	26-04-26
	901515	31-17-35	901577	36-22-36
	901516	14-28-22	901578	12-34-04
		-		
	901517	37-07-25	901579	34-36-30
	901518	03-25-15	901580	06-08-14
	901519	32-22-28	901581	35-01-15
	901520	08-30-12	901582	00-06-12
	901521	33-11-25	901583	24-02-28
	901522	02-16-02	901584	08-14-28
	901523	20-26-32	901585	34-24-38
	901524	16-26-12	901586	22-04-18
	901525	28-06-00	901587	30-20-02
	901526	08-26-12	901588	37-11-05
	901527	33-07-25	901589	16-18-24
)	901528	34-04-34	901590	24-30-08
	901529	03-05-15	901591	21-39-05
	901530	22-08-02	901592	22-00-34
	901531	28-18-36	901593	10-00-22
	301001	20-10-30	301033	10-00-22

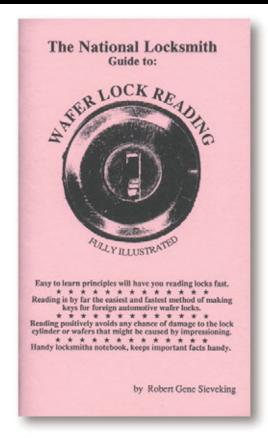
901532

18-28-14

901594

03-09-35

# Wafer Lock Reading



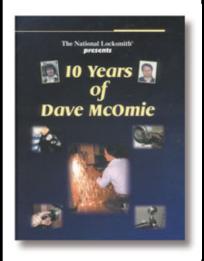
Easy to learn. No Codes needed.

**CLICK HERE TO LEARN MORE** 



#WLR - 1

# 10 Years of Dave McOmie



Every single National Locksmith article by Dave McOmie from August 1986 through August 1996 under one cover!

### CLICK HERE TO LEARN MORE



#DM - 10 901704 08-2

128 • Visit www.TheNationalLocksmith.com

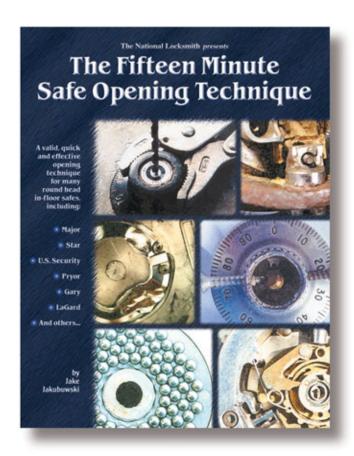
# Master, Part 1 900001-907353

						_	
901643	30-12-34	901705	28-34-08	901767	36-18-00	901829	00-14-08
901644	04-34-00	901706	26-12-06	901768	12-30-12	901830	20-22-12
901645	22-12-34	901707	10-28-10	901769	18-32-22	901831	00-26-32
901646	04-34-20	901708	16-02-16	901770	27-29-35	901832	18-24-14
901647	08-30-24	901709	20-26-12	901771	20-30-00	901833	30-08-34
901648	24-38-16	901710	16-26-08	901772	16-30-04	901834	34-04-22
901649	22-12-22	901711	39-01-15	901773	16-22-28	901835	18-20-26
901650	04-22-08	901712	28-38-12	901774	14-20-34	901836	22-28-14
901651	24-06-24	901713	32-38-04	901775	04-06-12	901837	29-35-05
901652	36-38-16	901714	38-12-30	901776	19-21-35	901838	08-22-08
901653	01-15-25	901715	17-03-25	901777	22-08-22	901839	03-21-15
901654	17-07-25	901716	02-24-30	901778	25-15-25	901840	16-18-32
901655	04-26-36	901717	18-28-02	901779	26-16-02	901841	26-28-38
901656	14-00-30	901718	24-14-04	901780	20-34-28	901842	08-18-36
901657	18-28-34	901719	34-16-38	901781	22-32-22	901843	22-28-18
901658	22-00-26	901720	01-29-05	901782	34-04-26	901844	36-10-00
901659	14-04-22	901721	08-10-20	901783	22-24-10	901845	12-22-08
901660	02-20-10	901722	18-36-14	901784	38-24-30	901846	36-06-16
901661	00-14-24	901723	37-39-25	901785	04-18-36	901847	02-24-06
901662	10-24-14	901724	20-06-36	901786	05-31-05	901848	05-35-05
901663	02-12-18	901725	22-24-34	901787	08-14-08	901849	28-38-04
901664	23-13-35	901726	32-14-00	901788	18-00-22	901850	38-08-18
901665	36-38-08	901727	35-25-15	901789	08-10-24	901851	30-20-06
901666	02-04-10	901728	30-08-22	901790	10-16-30	901852	08-18-12
901667	00-22-12	901729	28-34-12	901791	32-10-36	901853	14-32-14
901668	10-00-30	901730	34-16-06	901792	06-28-22	901854	27-37-15
901669	06-24-14	901731	16-38-24	901793	02-12-26	901855	20-06-32
901670	31-37-15	901732	14-00-34	901794	30-04-14	901856	26-14-22
901671	22-04-38	901733	20-06-00	901795	27-05-35	901857	33-15-25 /
901672	02-08-34	901734	32-38-24	901796	34-20-10	901858	08-18-24
901673	07-25-35	901735	00-26-20	901797	00-10-16	901859	36-10-16
901674	08-34-24	901736	02-20-02	901798	34-24-18	901860	34-36-02
901675	36-06-36	901737	08-18-04	901799	20-34-08	901861	00-18-12
901676	20-30-08	901738	00-02-20	901800	04-14-36	901862	12-22-04
901677	14-32-22	901739	27-33-15	901801	04-26-20	901863	36-22-12
901678	20-38-24	901740	34-16-22	901802	34-16-02	901864	26-28-10
901679	00-10-36	901741	00-18-00	901803	26-08-30	901865	00-06-16
901680	14-36-22	901741	34-00-18	901804	30-32-14	901866	28-18-28
901681	22-24-38	901742	16-18-04	901804	32-34-24	901867	38-04-38
		901743		901806			
901682	04-18-12		04-06-36		16-34-16	901868	09-27-05
901683	38-04-10	901745	26-08-02	901807	06-08-26	901869	30-08-30
901684	10-20-26	901746	04-18-00	901808	10-28-18	901870	28-06-28
901685	00-26-36	901747	12-34-20	901809	14-04-30	901871	30-36-26
901686	36-18-08	901748	16-06-32	901810	07-09-35	901872	02-24-38
901687	06-08-38	901749	01-15-05	901811	35-37-15	901873	34-16-30
901688	31-09-35	901750	19-25-35	901812	32-10-16	901874	02-20-06
901689	27-29-15	901751	14-16-34	901813	38-08-02	901875	16-22-32
901690	22-36-26	901752	20-02-36	901814	24-02-36	901876	10-24-02
901691	12-18-00	901753	16-22-08	901815	25-27-05	901877	26-16-30
901692	20-38-08	901754	28-06-20	901816	06-16-26	901878	12-22-36
901693	18-24-34	901755	14-04-10	901817	16-34-08	901879	35-09-15
901694	32-02-28	901756	34-20-34	901818	24-26-04	901880	06-16-34
901695	16-38-12	901757	37-39-05	901819	18-32-10	901881	22-00-18
901696	02-28-34	901758	04-18-04	901820	22-28-34	901882	24-34-16
901697	32-18-08	901758	18-08-34	l	11-33-15		20-02-32
				901821		901883	
901698	30-08-38	901760	20-02-08	901822	10-16-10	901884	24-34-12
901699	00-10-32	901761	05-07-25	901823	16-38-20	901885	30-08-18
901700	12-34-28	901762	10-36-30	901824	10-20-34	901886	37-15-25
901701	00-22-00	901763	23-29-15	901825	24-26-16	901887	10-12-26
901702	29-39-25	901764	26-36-10	901826	02-12-02	901888	20-26-20
901703	04-18-08	901765	06-16-06	901827	12-18-08	901889	10-16-22
901704	08-22-36	901766	33-35-25	901828	02-12-30	901890	36-22-00

# Master, Part 1 900001-907353

	001001	05 40 05	004050	47.00.05
	901891	05-19-05	901953	17-39-25
	901892	13-35-25	901954	09-23-05
	901893	20-06-24	901955	10-32-14
	901894	04-26-04	901956	24-06-32
	901895	12-26-36	901957	04-30-00
	901896	30-32-38	901958	19-29-15
	901897	12-26-12	901959	32-18-04
	901898	06-16-02	901960	28-02-12
	901899	14-00-14	901961	08-34-16
	901900	08-26-04	901962	10-16-38
	901901	32-10-32	901963	08-38-16
	901902	08-14-24	901964	20-10-36
	901903	18-24-06	901965	14-00-18
	901904	04-34-12	901966	28-18-04
	901905	01-03-25	901967	12-30-20
	901906	24-38-24	901968	02-24-34
	901907	26-12-18	901969	22-24-06
	901908	23-01-35	901970	18-04-26
	901909	08-22-04	901971	02-08-22
	901910	26-04-10	901972	18-04-38
	901911	12-30-24	901973	14-28-06
	901912	04-10-36	901974	34-12-26
	901913	12-34-12	901975	14-36-18
	901914	02-28-38	901976	11-37-15
	901915	04-06-28	901977	14-20-02
	901916	22-24-18	901978	34-16-10
	901917	32-22-12	901979	18-36-26
	901918	26-12-34	901980	36-26-20
)	901919	08-30-16	901981	10-00-18
ノ	901920	10-32-06	901982	35-21-35
	901921	38-16-38	901983	18-08-30
	901922	12-26-00	901984	10-32-02
	901923	34-24-30	901985	07-17-35
	901924	10-20-06	901986	06-08-18
	901925	14-24-38	901987	22-12-30
	901926	16-26-36	901988	17-35-25
	901927	06-24-02	901989	08-22-00
	901928	07-21-35	901990	16-18-12
	901929	20-30-12	901991	38-28-10
	901930	08-38-24	901992	24-26-20
	901931	34-04-10	901993	00-14-00
	901932	02-16-34	901994	05-19-25
	901933	34-36-14	901995	03-21-35
	901934	36-02-28	901996	10-16-26
	901935	22-32-10	901997	32-06-28
	901936	34-08-14	901998	28-30-04
	901937	16-06-12	901999	22-08-26
	901938	28-14-32	902000	08-22-32
	901939	06-28-06	902001	16-34-24
	901940	24-34-08	902002	35-01-35
	901941	32-34-12	902003	38-24-18
	901942	08-26-20	902004	20-34-00
	901943	18-24-02	902005	38-20-14
	901944	12-18-24	902006	22-32-26
	901945	38-24-06	902007	36-14-24
	901946	26-04-14	902008	20-06-12
	901947	18-28-10	902009	29-11-05
)	901948	28-38-08	902010	30-36-18
ノ				
	901949	15-29-15	902011	38-12-34
	901950	32-22-32	902012	34-20-02
	901951	34-24-34	902013	06-20-26
	901952	14-16-10	902014	31-01-15
	JU 1 JUZ	14-10-10	902014	31-01-13
			1	

# 15 Minute Safe Opening



This book deals exclusively with round head lift out doors. Shows five ways to open a Major; three ways to find the Dog Pin on a Major; four ways to open a Star; four ways to open a LaGard style round head.

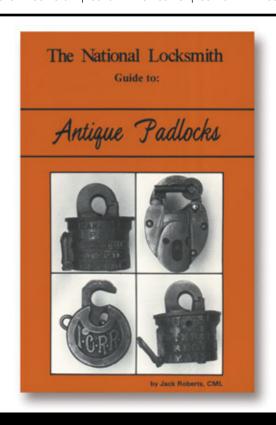
CLICK HERE TO LEARN MORE



# Shop the online store TheNationalLocksmith.com • CLICK HERE •

# Master, Part 1 (Combination Lock) 900001-907353

902015	39-29-35	902044	18-00-30	902073	08-14-36	902102	26-00-34	902131	04-14-04	902160	14-04-34
902016	22-24-14	902045	20-02-24	902074	12-26-32	902103	36-06-20	902132	17-39-05	902161	30-16-34
902017	24-30-04	902046	16-38-32	902075	18-04-34	902104	30-04-34	902133	16-18-00	902162	04-34-24
902018	19-01-35	902047	06-28-02	902076	12-02-16	902105	36-26-16	902134	17-35-05	902163	10-00-34
902019	34-08-38	902048	24-34-28	902077	11-29-15	902106	06-12-38	902135	02-12-34	902164	07-25-15
902020	16-06-16	902049	19-05-35	902078	21-35-25	902107	14-36-14	902136	12-30-08	902165	24-26-12
902021	34-36-18	902050	12-02-12	902079	12-26-16	902108	16-02-20	902137	08-26-00	902166	36-22-32
902022	11-25-35	902051	31-13-35	902080	36-14-36	902109	12-34-16	902138	06-12-34	902167	28-38-20
902023	02-28-22	902052	16-30-20	902081	28-02-16	902110	24-10-36	902139	23-01-15	902168	10-20-30
902024	28-30-12	902053	38-00-34	902082	26-12-30	902111	34-08-18	902140	20-38-16	902169	18-08-18
902025	16-02-28	902054	34-36-10	902083	15-01-35	902112	01-23-05	902141	32-34-04	902170	00-14-28
902026	10-36-14	902055	16-26-04	902084	04-30-08	902113	27-09-15	902142	02-08-18	902171	38-04-30
902027	30-00-22	902056	20-22-16	902085	31-09-15	902114	14-36-30	902143	04-14-04	902172	20-10-28
902028	12-26-20	902057	14-28-02	902086	04-34-04	902115	06-20-02	902144	38-24-38	902173	27-09-35
902029	09-15-25	902058	08-34-12	902087	36-18-12	902116	30-00-06	902145	16-18-00	902174	01-31-25
902030	38-08-38	902059	06-08-22	902088	30-12-02	902117	37-19-25	902146	33-19-05	902175	28-38-28
902031	04-14-20	902060	18-24-18	902089	20-34-04	902118	18-08-02	902147	33-39-05	902176	26-32-18
902032	20-02-16	902061	24-10-28	902090	22-08-14	902119	15-33-15	902148	00-10-00	902177	20-26-36
902033	02-32-14	902062	02-24-18	902091	10-32-26	902120	17-39-05	902149	35-09-35	902178	32-06-32
902034	22-36-10	902063	12-30-00	902092	18-04-18	902121	06-20-14	902150	08-18-28	902179	34-00-10
902035	16-18-08	902064	04-30-16	902093	26-04-22	902122	17-35-05	902151	02-28-14	902180	24-14-36
902036	18-00-26	902065	10-28-38	902094	16-34-04	902123	38-16-22	902152	00-26-16	902181	02-16-26
902037	05-11-25	902066	14-32-02	902095	08-38-20	902124	12-30-08	902153	03-29-35	902182	28-30-16
902038	33-11-05	902067	36-26-32	902096	05-27-05	902125	08-26-00	902154	00-14-36	902183	18-00-34
902039	14-36-26	902068	09-35-25	902097	20-26-08	902126	06-12-34	902155	25-31-05	902184	02-24-14
902040	10-00-06	902069	32-38-12	902098	12-22-32	902127	23-01-15	902156	12-30-16	902185	28-38-24
902041	33-23-05	902070	37-23-05	902099	18-08-38	902128	20-38-16	902157	28-06-36	902186	08-14-32
902042	36-02-12	902071	20-34-24	902100	26-36-18	902129	32-34-04	902158	03-34-10	902187	24-06-36
902043	38-16-02	902072	34-08-26	902101	12-38-24	902130	02-08-18	902159	32-34-16	902188	26-04-30



# Antique Padlocks

Finally there is a book to give you all the information you need about old interesting locks.

CLICK HERE TO LEARN MORE

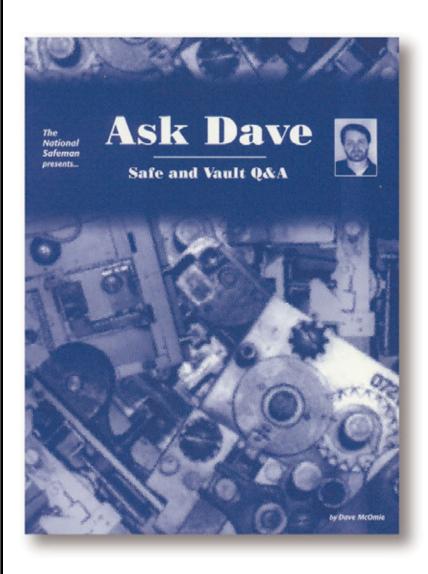


#PAD - 1

# Master, Part 1 900001-907353

902189	38-24-14	902251	29-31-05
902190	14-20-10	902252	36-02-24
902191	12-38-28	902253	38-20-10
902192	32-18-32	902254	25-11-25
902193	25-39-05	902255	27-01-15
	14-04-26		
902194		902256	33-39-25
902195	32-22-04	902257	16-02-32
902196	12-38-16	902258	16-34-12
902197	28-02-28	902259	09-11-05
902198	18-20-06	902260	04-14-00
902199	36-14-08	902261	06-12-26
902200	17-27-05	902262	00-30-24
902201	14-28-18	902263	22-04-34
902202	22-12-06	902264	24-10-00
902203	32-14-04	902265	34-36-22
902204	30-04-26	902266	10-16-02
902205	24-30-16	902267	16-38-04
902206	34-04-30	902268	36-38-12
902207	08-14-04	902269	00-14-20
902208	06-28-38	902270	12-22-12
902209	38-04-34	902271	24-10-32
902210	32-06-12	902272	36-10-24
902211	02-20-38	902273	38-12-06
902212	18-32-18	902274	11-21-35
902213	08-18-08	902275	10-12-02
902214	02-16-30	902276	09-19-05
902215	30-32-02	902277	02-12-22
902216	34-12-06	902278	38-28-14
902217	02-04-22	902279	12-22-00
902218	22-24-02	902280	22-28-02
902219	31-21-15	902281	14-32-06
902220	24-14-20	902282	30-04-18
902221	20-38-12	902283	24-14-28
902222	26-12-02	902284	14-32-10
902223	34-00-22	902285	15-05-35
902224	20-26-04	902286	04-14-08
902225	06-28-18	902287	24-06-28
902226	15-25-15	902288	04-30-20
902227	22-08-34	902289	32-34-08
902228	28-34-24	902290	21-11-05
902229	06-16-38	902291	22-28-38
902230	10-12-22	902292	00-06-00
902231	00-02-28	902293	30-12-18
902232	14-16-02	902294	35-21-15
902233	35-09-35	902295	31-05-35
902234	08-18-28	902296	16-26-20
902235	02-28-14	902297	12-34-08
902236	00-26-16	902298	10-36-02
902237	03-29-35	902299	06-32-26
902238	00-14-36	902300	22-12-18
902239	25-31-05	902301	04-18-24
902240	12-30-16	902302	06-32-06
902241	28-06-36	902303	04-34-16
902242	24-14-32	902304	16-06-28
902243	32-34-16	902305	34-36-26
902244	14-04-34	902306	15-29-35
902245	38-20-02	902307	38-20-30
902246	12-14-36	902308	16-30-36
902247	32-02-16	902309	06-28-34
902248	16-02-24	902310	28-06-32
902249	38-04-18		
902250	10-12-38		_
302200	10-12-00		TNL

# Ask Dave



You asked. He answered. This is safe and vault Q&A with an attitude.

CLICK HERE TO LEARN MORE



#AD - 1

# BUSINESS BRIEFS

# Desktop Dispatcher Expands

The Desktop Dispatcher has added two new features to its product. The first feature allows the business to email calls to technicians in the field, the second is an invoicing module. The benefit of the e-mail feature is that it allows technicians to get the information the same time they may be doing something else, such as driving or talking on the phone. The email module allows the technician to get the information at any time rather than attempting to write the information down while they are driving. The invoicing module allows users of Quick Books Pro to build invoices and even add new customers to their Quick Books customer list with as few as four mouse clicks without having to retype any information.

### SLD Adds Medeco

Security Lock Distributors has added the entire Medeco product line and programs to its offerings. The Medeco assortment includes the Medeco and KeyMark patent protected key control lines. Key control programs available with the Medeco locks are GLD, DBK, Patriot and Sky. Security Lock Distributors will stock and service cylinders and other locking devices for each of the programs.

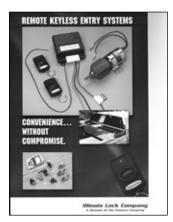
# TekTone Earns ISO Registration

TekTone has earned the ISO 9001:2000 Registration from Underwriters Laboratories. The ISO 9000 series standards cover design, manufacturing, installation and servicing systems. "Our commitment to earn IS) 9001:2000 registration ensures that we

will consistently deliver the quality products our customers expect," said Carlos Mira, president of TekTone. To determine continued compliance with ISO 9001:2000, UL will periodically conduct routine surveillance audits of TekTone's operations. ISO 9001:2000 is accepted by more than 90 countries around the world as a quality assurance benchmark.

# Illinois Lock Unveils Brochure

A new full-color brochure, providing d\engineering details on the new Remote Keyless Entry Systems, is available from Illinois Lock Company. The new systems integrate remote keyless entry systems and locking hardware in a complete, cost-effective package. The brochure highlights electronic security features and provides details on standard product options, as well as the company's extensive customizing capabilities.



Application information is also included linking appropriate options to specific applications. Application-specific details include lock styles, weather resistant hardware, independent power options, and security features.

# Bobby Leek Joins Lockmasters, Inc.

Bobby Leek, former civilian employee of the U.S. Navy, and past Chairman of the Interagency Advisory Committee on Security Equipment (IACSE), Security Equipment & Locking Systems subcommittee has joined Lockmasters, Inc. as Director of Special Projects. Leek's government and military experience measure over 35 years and include his role as the Project Leader for the Department of Defense Locks, Safes, Vaults, Seals and Containers Program. Leek will represent both the Tool & Equipment and Education divisions of Lockmasters and will be based in the Washington, D.C. area.

### Aiphone Appoints Regional Sales and Support Manager

Aiphone Corporation has appointed Alex Salter as Regional Sales and Support Manager Southwest Region. Salter is responsible for developing the existing customer base in southern California, Nevada and Arizona.

Salter comes to Aiphone from Pinkerton Systems
Integration where he served as Enterprise Account
Executive for 2-1/2 years.
His main responsibility was developing new business partnerships as well as maintaining an existing account base. Salter has 8 years of experience in the security industry covering residential to large-scale commercial systems.

For more information contact: Rachel Dooley. Phone: (425) 455-0510; Fax: (425) 455-0071 E-mail: Rachel@aiphone.com; Web: www.aiphone.com

### Mayflower Announces They Are Now Schlage Distributors

Mayflower Sales Company, Inc. of Brooklyn, NY is now a distributor of Schlage Locks. The addition of the Schlage line complements our distribution of other Ingersoll Rand products such as: Von Duprin, Locknetics, LCN, Monarch Ives, and Dor-O-Matic.

Mayflower is in its 86<sup>th</sup> year of business and is managed by Paul Swetow, the grandson of the founder of the company.

### Steve Morris RFID Safes Manager for Secura Key

Steve Morris has been named RFID Sales Manager for Secura Key. Steve will continue to operate out of the Chicago area and will be responsible for the fast growing automatic identification and data collection market.



Steve has an MBA from West Coast University and has been a Field Sales Engineer and Account Manager for Texas Instruments for the past 14 years.

Contact Steve at: smorris@securakey.com.

TNL

# The National Locksmith.com

Technical forums, chat, online store, plus visit our sponsors...



**International Locking** 

International Locking Devices, Ltd.

Jet Hardware Mfg. Co.

For Fun... Cool Color Groovy Ke

Devices, Ltd.

www.gatelock.com

www.jetkeys.com

www.iccore.com

### A-1 Security Mfg. Corp.







www.demanda1.com

### **A&B Safe Corporation**



SAFE CORPORATION

www.a-bsafecorp.com

### Abloy® DiskLock Pro



ABLOY® DISKLOCK PRO

inf0@abloy.ca

### **Adrian Steel**



www.adriansteel.com

### **Desktop Dispatcher**



www.desktopdispatcher.com

### **DiMark International**



**Dynalock Corp.** 



www.dynalock.com

### Framon Mfg. Co.

www.framon.com

### Herbert L. Flake Co.



www.hlflake.com

### **Gator Tool Co.**



www.aduxpond.com

### HPC, Inc.



www.hpcworld.com

# Indiana Cash Drawer Co.

CASH DALMER CO. www.icdpos.com

# Securitron Magnalock Corp.

http://www.securitron.com/wizardtnl.html

On this component of their site, Securitron promotes their Door Control Wizard CD. The program easily allows you to determine exactly what access control components you'll need for any door, and print out a list for specifications and ordering.

Simple to use screens allow you to select not only the correct electric lock for your opening, but also the other items necessary to complete the opening, including exit and entry devices, power supplies and any necessary brackets.

On the home page for the company's site, you can subscribe to an online publication called, the MagnaZine. Typically, you'll receive MagnaZine about once a month, with an occasional Special Edition. This way you can stay up on the company's products, introductions, and news about electronic security.



### **McDonald DASH Locksmith Supply**



www.mcdonalddash.com

### MDS, Inc.



www.mdsincorporated.com

### **Monaco Lock**



www.monacolock.com

### **National Auto Lock** Service, Inc.



www.laserkey.com

### **Omaha Wholesale Hardware**



### **SecuraKey**



www.securakey.com

### **Select Products Ltd.**



www.select-hinges.com

# Sieveking Products Co.



www.sievekingprodco.com

### **Tech-Train Productions**



www.techtrainproductions.com

### **MAG Security**



www.magsecurity.com

www.kustomkey.com

**KustomKey** 

### **Major Manufacturing**



www.majormfg.com



www.tektone.net

### **Yale Security Group**



www.yalesecurity.com

Manufacturers and distributors... join the high profile locksmith web site and you'll be featured here! Call Jeff Adair (ext. 15) or Debbie Schertzing (ext. 16) for details. (630) 837-2044

# TheNationalLocksmith.com CLICK HERE



### **INTRODUCTION:**

It has happened to us all. We get to the car and find that the tool the book says to use just doesn't work this time. The customer is in a hurry and we are getting nervous just listening to their comments. What do we do? Well, fellow practitioners of the art of car opening, there is help. Enter the Super Air Jack by High Tech Tools.

### **DESCRIPTION:**

Designed as an upgrade to the original UltraJack and intended for emergency openings of larger trucks and SUVs, the Super Air Jack is made from ballistic nylon with a special stiffener inside the bag for easier insertion. It has an uninflated size of 9" wide and 7" high with a 1/2" tube 3" long leading to the inflating bulb. In the line to the bulb there is a valve for easy air removal. By pumping the bulb, the Super Air Jack easily inflates to 3" in thickness, plenty to get the tools past any doorpost.

### **TOOL USE:**

The Super Air Jack works well with any vehicle that allows access to the frame, or where the edge of the window is not hidden behind a frame. This allows for the opening of most vehicles on the road today.

Simply insert the super jack tool into the edge of the door and spread the door enough to allow for insertion of the bag between the door and the frame. Be sure to get enough of the bag inside the car or it will pop out when you place pressure on the bag.

Now just inflate the bag by pumping the bulb. Only create enough of an opening to allow for



the rod to be slipped into the car. From there it is a simple matter of hitting the door-opening button or manipulating the button to unlock the vehicle. Some maneuvering may be necessary and bending the rod is easily accomplished if needed.

Once the vehicle is unlocked, turn the valve open and allow the air to escape before opening the door. Collect your fee and be on your way, secure in the knowledge that you have helped another stranded motorist have a better day and you have not taken any chances on disconnecting a linkage or setting off an air bag.

### FIELD TESTING:

I have used the Super Air Jack several times and have been very pleased with the results. Twice I have opened vehicles where the recommended procedure is to use an air bag to spread the door. No other method was suggested so I assume none was available. You can bet I was happy I purchased the Super Air Jack when those came my way. Using the jargon of my area, the Super Air Jack is a bacon saver.

The one concern I had before purchasing the tool was if the spreading of the door would cause an air leak, and the resulting whistle as the vehicle goes down the road. It has been my experience that this does not happen. No damage is done to the weather seal on the door either.

As with all tools, care and concern should be used with The Super Air Jack. Getting too careless can result in unhappy results and a less than satisfied customer.

You can purchase the Super Air Jack Wedge by itself for \$34.95, but I recommend the purchase of a system that includes the door jack tool, rubber pivots, a two-piece rod and the Super Size Air Wedge for \$89.95. With the system you will have everything you need to fully utilize the Air Jack and will find it much more practical.

### **CONCLUSION:**

No locksmith's vehicle should be without at least one form of car opening apparatus beyond the customary rods, and I highly recommend that additional tool be the Super Air Jack. I believe you will find it money well invested, because it will save you time and cut the frustration we have all felt when the tools just don't work. Give one a try and I believe you will soon buy one for every vehicle you use for car openings.

For more information contact: High Tech Tools 1400 SW 1 ST Miami, Florida 33135 Phone: 800-323-8324 Web: www.hightechtools.com

TNL

### **IN SUMMARY:**

**DESCRIPTION:** An inflatable ballistic nylon air jack.

**PRICE:** \$34.95-\$89.95

**COMMENTS:** The Super Air Jack allows access through the

door frame.

TEST DRIVE RESULTS: This tool is money well invested.

**138** • The National Locksmith