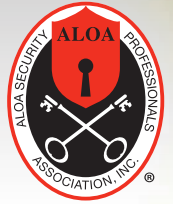


KEYNOTES

SECURING YOUR SUCCESS



NEW PRODUCT SHOWCASE

An in-depth look at the
2019 Security Expo's new products

Working With the Ford 8-Cut Key

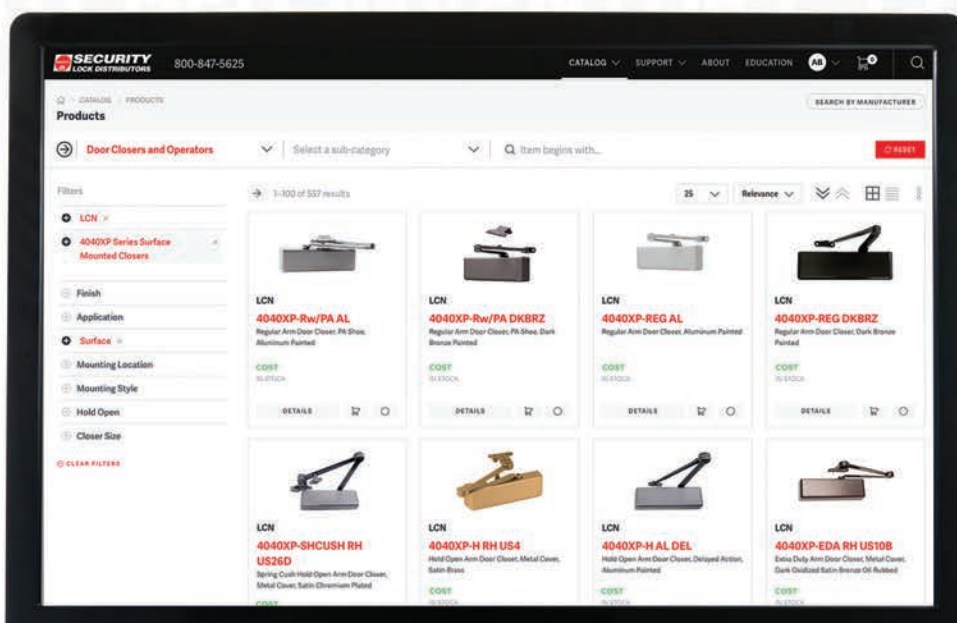
How to sight read the
wafers and originate a key

PLUS

A Look at the Lishi KW1 Pick Decoder

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Drive Your Career Forward With ALOA Education

NASCAR SEASON MAY be wrapping up, but it's still automotive time here at ALOA. You'll see in this issue that we have automotive feature articles. I've said it before, but the automotive sector has become incredibly specialized in recent years. There has been so much advancement in technology, from transponders to EEPROM and more. Gone are the days when locksmiths have dealt with "just" keys and locks on cars. Today's automotive locksmith has to have in-depth knowledge of all the electronic components in modern vehicles' anti-theft and locking systems.

This makes professional education so important. If you're going to work in the automotive sector, taking classes regularly to stay up to date on technology is essential. Even if you've worked as an automotive locksmith for years, there is always new technology entering the market, and we need to stay on top of it.

ALOA has continuously updated its automotive courses and added new ones to ensure you are well prepared for what you encounter in the field. For example, at this year's ALOA Convention, we held the initial offering of the Transponders and Microprocessors class. We want our education to stay relevant to our members, so please let us know what automotive classes you'd like to take. If you're a security professional who would like to take the first step into the automotive area, what would help you succeed? Talk to our Education

"If you're going to work in the automotive sector, taking classes regularly to stay up to date on technology is essential."

Department and let them know. And if you attend ALOA classes and go to your local chapter meetings, you can connect with folks who can help mentor you.

Investigative Training

Speaking of professional advancement, we're holding the IAIL Forensic Conference in November at ALOA's Aaron M. Fish Security Training Center in Dallas. There are classes for everyone, from those who have served as expert witnesses for years to those who are looking to dip their toes into this exciting line of work.

The conference is a great deal, too, as it includes lunch, three days of classes, breaks, complimentary breakfast, early evening snacks (Monday through Thursday) and transportation to and from the training center each day. With free breakfast too, really all you need to do is get yourself to the hotel initially, and you're all set!



If you haven't thought about becoming an expert witness, maybe now is the time to really consider it and get yourself some training. This is the kind of work that can provide you with retirement earnings or supplement your usual commercial or residential business income. On top of that, there can be some really interesting cases to work on.

Earning your CFL credential is a good start to getting into this line of work. When you can prove your level of knowledge, it's more likely that an attorney and/or insurance company will select you to provide your expertise. For more information on the Forensic Conference, email education@aloea.org or IAILPresident@aloea.org. You still have time to register. If you can't make it this time, do consider taking some classes and working toward your CFL. You won't regret it.

Respectfully,

Jim Wiedman, CML
President
ALOA Security Professionals
Association, Inc.
president@aloea.org

Open Enrollment Time at ALOA

I HOPE EVERYONE IS ENJOYING THE beautiful fall weather. It's finally cooling off here in Texas, and I hope it's just as lovely where you are. The season isn't the only thing that's changing; here at ALOA, we have some changes too — in the form of an exciting new member benefit.

Earlier this year, we told you that ALOA SPAI was working on adding a health insurance program to our stable of member benefits. Open enrollment season is now upon us for 2020, and we're excited to be rolling out this benefit. ALOA has partnered with Light-house Insurance Group, LLC (LIG) to offer members the option to enroll in health insurance and related coverage options, including major medical, short-term health plans, vision and dental plans, critical care coverage, life insurance and several supplemental health options. What's even better is that not only can you be covered, your family can too, and your business can craft a turnkey program for employees.

We have heard from members for years that access to affordable health insurance for themselves and their employees has been a challenge. ALOA has been looking into offering an insurance benefit for a long time, and we are so excited to have found the right fit for the association and our members. We hope that you take advantage of this wonderful benefit and that it helps your families and employees.

In the What's New section of this issue of *Keynotes*, there are a few more details about the insurance. You should have received an email about the new insurance program as well as an insert

"As an association member, you not only get professional networking, but you also get the camaraderie that comes with being a part of this group."

in your membership renewal notice, but we are happy to answer any questions you have (as is LIG). Please contact us at membership@aloa.org with your questions. You can also call LIG directly at 888-582-9813.

Membership Renewals

By now, you should have received your membership renewal notice from ALOA. This is a great time to remind yourself about all the benefits ALOA offers you. You, of course, receive the magazine you're reading, but you also get professional bonding, a free listing on FindALocksmith.com, local customer referrals, access to industry-leading education and discounts on everything from books to convention registrations. And don't forget about the incredible new health insurance program mentioned above!

But, more than that, as an ALOA SPAI



member, you are a part of a worldwide network of esteemed security professionals. As an association member, you not only get professional networking, but you also get the camaraderie that comes with being a part of this group.

You get to talk shop, swap stories and help solve problems with each other. When you get together at the conventions, you see old friends and make new ones. And, together, we help push the industry forward in so many ways.

If you want to remind yourself of these and all of the other wonderful benefits you receive with your membership, please visit ALOAMembers.org. There, you can also log in to renew your membership.

Thank you for being members, and let us know if you have any questions about your renewal or if you have requests for future potential benefits. We are here and listening.

Mary A. May

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Executive Director
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New Health Insurance Benefits for Members

ALOA SPAI HAS PARTNERED WITH LIGHTHOUSE Insurance Group, LLC (LIG) offer members health insurance and related coverage options, including major medical, short-term health plans, vision and dental plans. Critical care coverage, life insurance and several supplemental health options are also available.

Policies are offered for individuals, families and small groups, such as covering employees in a small business. Plans are individualized, so you can tailor them to your own unique health and financial needs.

For business owners, there's a cost-effective turnkey program that uses pre-tax money to fund new Health Reimbursement Arrangements (HRAs) accounts to help pay for your health insurance benefits. This allows part-time, seasonal and other employee classes to be covered.

To discuss coverage options or get additional information, call LIG at 888-582-9813 to speak with a licensed advisor or visit www.ligmembers.com/ALOA to schedule an appointment. Open enrollment for 2020 began October 15 for California residents and will begin November 1 for the rest of the United States.

Hurry! Register for the IAIL Forensic Conference

THE IAIL FORENSIC CONFERENCE IS BEING HELD NOVEMBER 14-16 AT ALOA's Aaron M. Fish Training Center in Dallas, and you can take CFL exams each day. The conference fee of \$895 covers classes, lunch, coffee breaks and transportation to and from the hotel each day. For Thursday and Friday, choose from Investigative Locksmithing I & II, Basic & Advanced Tool Marks or Automotive Forensic Case Management Procedures. For Saturday, take either Expert Witness Training or Photography for Investigative Locksmiths.

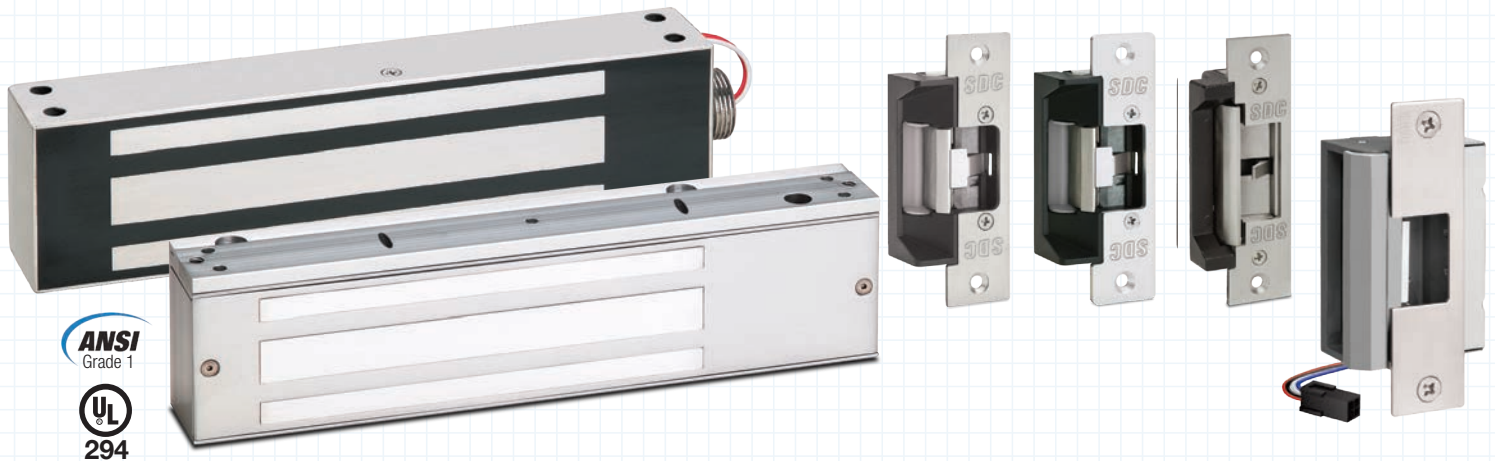
For more information, contact Tom Demont at IAILPresident@aloe.org.

IN MEMORIAM



» **Thomas Peloso, CML, 76,** has passed away. He was an accomplished locksmith and safe tech and was very active in the Locksmith Security Association of Michigan (LSA). He supported locksmith education and the overall industry in many ways, including as an LSA board member.

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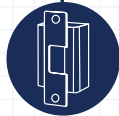


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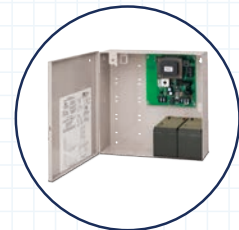


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ASSOCIATION/CHAPTER NEWS

ALOA Members Recognized at GPLA

THE GPLA CONVENTION WAS HELD SEPTEMBER 25-28 IN PHILADELPHIA, and various ALOA and SAVTA representatives attended. This was the 70-year anniversary of the convention's founding, and ALOA President Jim Wiedman presented GPLA with a plaque to commemorate the occasion.

During the annual awards night, GPLA recognized a few ALOA and SAVTA members. Past ALOA President Tom Demont was presented with the Lee Rognon Award, which honors the recipient for fostering cooperation among associations. Past SAVTA President Joe Cortie was recognized with the prestigious Philadelphia Award, GPLA's highest honor. This annual award, founded in 1953, was given in recognition of his leadership in the security industry through service and education.

Other awards included the Hermann C. Henssler, Jr. Memorial Award, which was presented to Martin Arnold for his involvement in GPLA, and the Gerald J. Connelly,

Jr. Pioneer Award, given jointly to AIL President John Truempy and Vernon Kelley in recognition of their leadership and educational efforts. Rounding out the awards were the Industry Award Lock, presented to Lock Labs Inc., and the Distinguished Distributor Award, which was given to Midwest Keyless.

ALOA held a drawing for attendees as well. Sara Escano won a full-week registration package to ALOA 2020 in Kansas City. Congratulations!



Martin Arnold presented Tom Demont with the Lee Rognon Award.



Cliff Shafer presented the Philadelphia Award to Joe Cortie



Ed Fitzgerald presented the Gerald J. Connelly, Jr. Pioneer Award to John Truempy and Vernon Kelley.



ALOA President Jim Wiedman presented GPLA with a plaque commemorating the 70th anniversary of the GPLA Convention.

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CALENDARFor a complete calendar of events,
visit www.aloa.org.**NOVEMBER****November 4-9****Auto Lock Week**ALOA Training Center, Dallas, TX
education@aloa.org or
(800) 532- 2562, ext. 101**November 14-16****IAIL Forensic Conference 2019**ALOA Training Center, Dallas, TX
education@aloa.org or
(800) 532- 2562, ext. 101**DECEMBER****December 9-14****Six-Day Fundamentals of
Locksmithing**ALOA Training Center, Dallas, TX
education@aloa.org or (800) 532-
2562, ext. 101**December 10****Fox Valley Chapter Meeting**LaSure's, 3125 S. Washburn St.,
Oshkosh, WI6:15 p.m. dinner, 7 p.m. presentation
waunakey@yahoo.com**APRIL 2020****April 27-May 2****SAFETECH 2020**

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JULY 2020**July 19-25****ALOA Convention & Security Expo**

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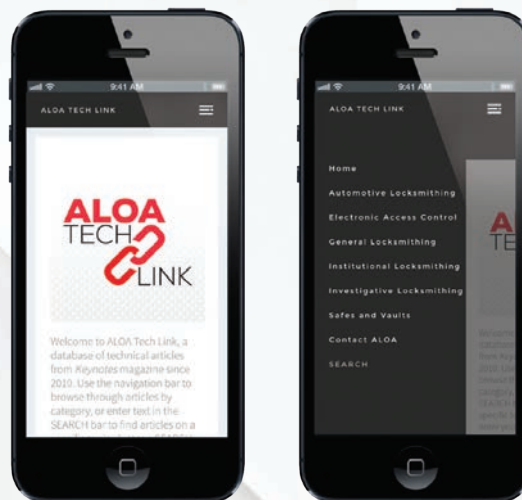
conventions@aloa.org or

(800) 532-2562, ext. 101

We Need Your Help

Attention, ALOA Members: Help us eliminate the industry scammer problem by screening these applicants, who are scheduled for clearance as ALOA members, to ensure they meet the standards of ALOA's Code of Ethics. Protests, if any, must be made within 30 days of this *Keynotes* issue date, addressed to the ALOA membership department, signed and submitted via e-mail to membership@aloa.org or via fax to 214-819-9736. For questions, contact Kevin Wesley, membership manager, at Kevin@aloa.org or (214) 819-9733, ext. 219.

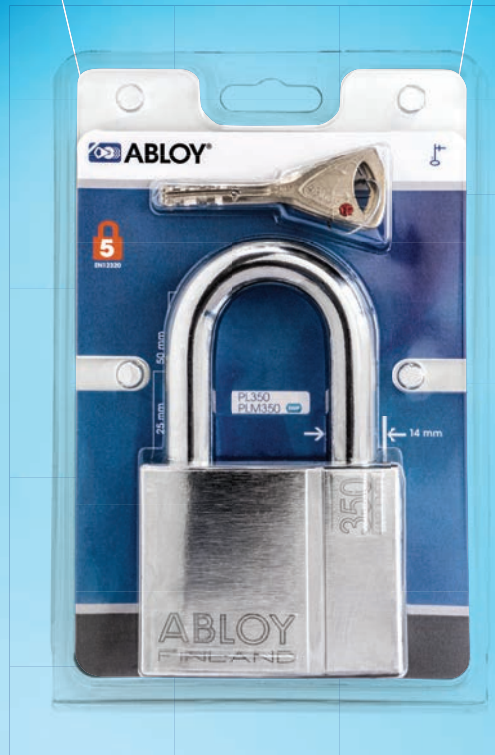
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Get Case Referrals: Send in Your CVs!

IF YOU ARE READING THIS PAGE, YOU ARE PROBABLY PACKING TO ATTEND the 2019 IAIL Forensic Conference at ALOA's Aaron M. Fish Security Training Center in Dallas, TX, on November 14-16 for three full days of intense forensic training. We expect the classes to fill up early, so don't put off registering until the last minute, or you may not get the class you want.

We also have two exciting days of tool mark identification by world-renowned tool mark specialist Beta Tam, FCSCS, CFL, RL. Beta will offer two eight-hour classes on tool marks, starting with a basic class that is a prerequisite for the second day of the advanced tool mark class. Because these classes are new and they will sell out quickly, don't hesitate — act fast. By the time you receive this magazine, you won't have much time left to register.

This conference is an opportunity for you to take a big chunk out of your training to sit for your CFL examination. There are more and more cases coming to us because the word is spreading throughout the legal profession that IAIL has the experts to cover all lock cases. Be one of the recommended investigators, and you will never regret your decision.

IAIL will allow you to test for your CFL credential once you start your coursework. If you pass the exam, you have one year to complete any missing coursework and submit a forensic evaluation case (white paper) before you are issued your CFL credential, certificate and photo ID card. Once you achieve this goal, you must maintain membership in IAIL and your division. You will be required to recertify every three years by submitting an updated curriculum vita (CV), recertification application, fee and forensic evaluation report.

Achieving your CFL is a commitment to excellence in all you do as a forensic investigator. Whether you do a couple cases a year or 25, you are expected to treat each one with the same level of detail no matter the substance of investigation. Ongoing education is a must for the forensic investigator. Staying on top of industry-changing material and regulations governing this material is vital to your worth as an expert witness.

Case Referrals This Month

- A TL-30 case required a fire damage expert in the L.A. area. This was given to the only member we have in that area who had the background and credentials for this case.

- A door cylinder unauthorized opening case in Florida was given to a CFL in Florida.
- A key machine patent infringement case was given to a CFL with key machine and manufacturing experience.

CFLs are required to keep their most current CV on file so that we can match up attorneys with the expert who will do the best job for them. I also have a file of expert witnesses with no CVs in it. I have asked in publications many times for locksmith experts to send me their CV for referrals.

If you have any comments, suggestions or questions, please contact me at ialpresident@aloe.org.



Tom Resciniti Demont,
AHC, CAI, CFDI, CFL, CMIL,
CML, CMST, ICML, IFDI,
LSFDI, ARL. President, In-
ternational Association of
Investigative Locksmiths.

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Rem Unlocker

The easy-to-use RemUnlocker can unlock keys in as little as 10 seconds. This device can unlock a wide range of supported automotive keys with free constant updates. By saving you time and money on purchasing new fobs, this device will turn your locked keys into reusable merchandise. Locked smart or RHK mistakenly, you can unlock them back and use them again. RemUnlocker is available

exclusively

at Transponderisland.com, the official USA distributor.

www.Transponderisland.com



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A CLOSER LOOK: NEW PRODUCT SHOWCASE FROM **ALOA2019**

Read on for details about items from the New Product Showcase at this year's Security Expo.

THIS YEAR'S SECURITY EXPO IN LAS VEGAS WAS BIGGER THAN ever, and hopefully you were able to attend for the full two days. If you weren't, following is a closer look at the products in the New Product Showcase on the show floor, with more in-depth information straight from the manufacturers themselves.

Alfred International Inc.**Smart deadbolts DB2**

Launched at CES 2019, the DB2 is Alfred's first step toward marrying beauty and exciting design language with industry-leading functionality and adoptability. Our patented front panel design is one of the thinnest on the market ($< \frac{1}{2}$ " thin), and with its gentle curves, satin black brushed metallic face and fully hidden backlit pin pad, the design is both striking and technologically subtle. Not just a pretty face, all Alfred locks embody our "butler meets bouncer" principle. Fully weather and temperature tested, along with all critical mechanical and electrical components tested to meet or exceed the highest durability tests, at Alfred we unequivocally believe that safety, security and durability must always be the first and last points of focus for any lock. With pin codes, Bluetooth keys, free Alfred Home app and optional Z-Wave Plus or Wi-Fi connectivity options for smart hub, Google Assistant or Alexa integration, the DB2 makes it easy for anyone to add safety, security, smarts and style to their home.

"Alfred's founding principle is to create smart locks that reflect the perfect balance between beautiful design, security and convenience. The DB1 and DB2 are the first of many products to come that embody this focus. We believe that smart locks should be exciting and offer homeowners as many options for adoption as possible. Key, keyless, Bluetooth, Z-wave, Wi-Fi or just simple pin codes, with Alfred the choice is yours."— Alfred International Inc.

**Alfred International Inc.****Smart deadbolts DB1**

Following the success of the DB2 Series, DB1 Series launched August 2019. Staying true to Alfred's focus on style, the DB1 brings a more compact form factor and focused feature set than the DB2 Series without sacrificing style, convenience, connectivity or adoptability. Less than $\frac{1}{2}$ " thin, we drew inspiration from the design language of one of the most premium and recognizable pieces of modern advanced technology: the smartphone. In kind, the DB1 has some of the cleanest lines in the world of smart locks while maintaining a durable and feature rich engineering pedigree. The DB1 uses tonal notifications instead of spoken language notifications like the DB2 and comes in two connectivity versions: Bluetooth only or Bluetooth + Zwave Plus (built in). The DB1 Series is also fully compatible with our Alfred Connect Wi-Fi bridge, allowing the same remote control and voice assistant integrations as the DB2 Series. Sleek, simple, smart and secure.





ASSA ABLOY

Yale nexTouch Keypad Exit Trim

A perfect upgrade to mechanical exit device trim in a variety of applications, the new Yale nexTouch Keypad Exit Trim offers key-free convenience to any commercial facility. Compatible with many different exit devices, including competitor models, it has a choice of touchscreen or ADA-compliant pushbutton keypad, support of up to 500 unique user codes, privacy mode with door position switch, voice-guided programming and more great features.

“From small business office spaces to commercial facilities to multi-family residences, the move to keyless devices can improve security and simplify access control. The Yale nexTouch Keypad Exit Trim makes this transition easier, being specifically designed to meet customer demand for a keypad door lock that is compatible with exit devices such as push or panic bars.” — Bill Grambo, president of the Access & Egress Hardware Group



ASSA ABLOY

Corbin Russwin/Sargent Mortise Lock with Status Indicator Option

“The newly designed occupancy/status indicator options for ASSA ABLOY Group brand mortise locks provide optimum clarity on the locked/unlocked status of a door. With the largest viewing window in the industry, a 180° visibility profile, reflective indicator materials and more color and text/graphic combinations to offer, the new status indicator options are versatile for any application, and provide assurance when you need it most.” — ASSA ABLOY



ASSA ABLOY

HES 9800/Adams Rite 7800 Electric Strike

This product is designed specifically to work with Adams Rite Starwheel and Interlocking Rim Exit Devices (Adams Rite 8800, 8700 and EX88 Series). The unique bolt design interlocks the door to frame for enhanced strength and durability. Ideal applications: Aluminum storefronts, perimeter and high occupancy doors in commercial buildings, aluminum, hollow metal and wood openings. It has easy installation with no need for door modification, a dedicated power supply or wire transfers and quick alignment with the 9000-MTK Metal Template Kit.

“The HES 9800 and Adams Rite 7800 Electric Strike extend ASSA ABLOY’s commitment to provide electric strikes for more applications. Customers loyal to either HES or Adams Rite can use the HES 9800 or Adams Rite 7800 as a cost-effective way to upgrade an opening from mechanical to electrical. With no need for door modification, a dedicated power supply or wire transfers, there is less labor time spent installing the hardware.”

— Matt Branson, product manager

ASSA ABLOY**Medeco CLIQ Go**

This is an electronic locking solution designed especially for locksmiths, allowing management of access control via an app. It is the ideal security solution for the small-to-medium-sized business customer.

How can a locksmith provide cost-effective access control to smaller commercial customers? “Medeco makes it easy with CLIQ Go. Simply replace existing mechanical cylinders with CLIQ electronic cylinders — no hard wiring needed! Power to operate the cylinder comes from the key. Owners can then use the CLIQ Go app on a mobile device to manage access. It’s smart security for smaller businesses.” — Ashok Acharya, Medeco CLIQ product manager.

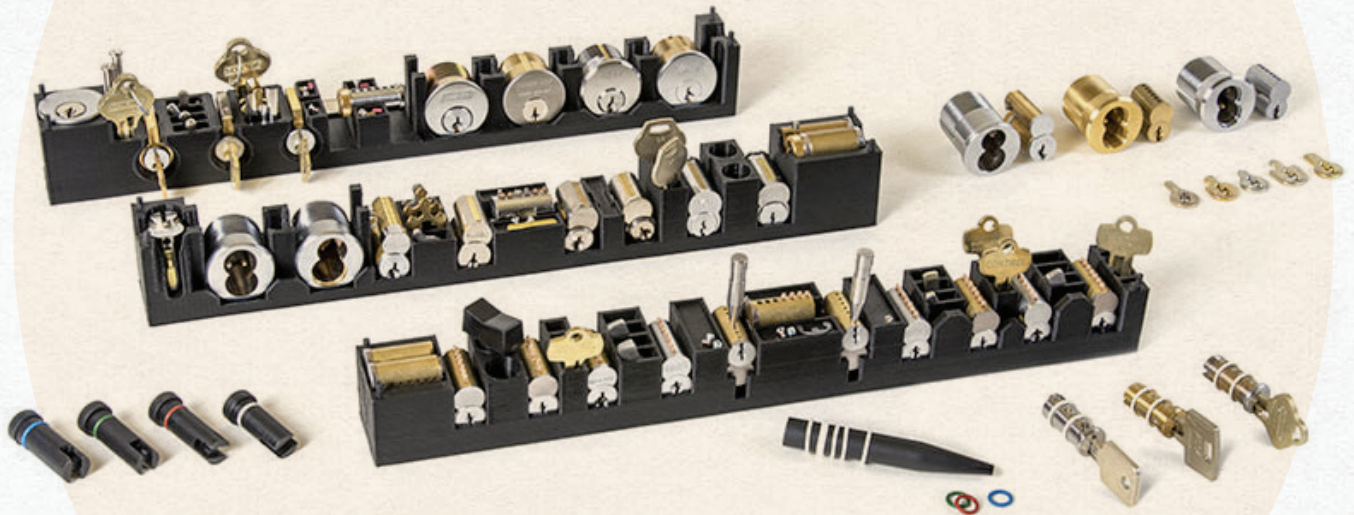
**Digipas Technologies, Inc.****eGeeTouch 3rd Generation Outdoor Weatherproof Smartlock**

The patented eGeeTouch 3rd Generation Smart Padlock is a robust and rugged design for outdoor and commercial use. It has waterproof and freeze-proof features, has shackle cutting strength and is corrosion-resistant, as it passes the highest-grade 6 ASTM salt-test.

It is embedded with dual intelligent proximity and historical access tracing (NFC, Bluetooth and cloud-based) technologies that delivers an unprecedented high level of security, traceability and new functions unmatched by any regular keyed or combination padlocks.

“The world’s-first eGeeTouch NFC smart electronic lock is embedded with state-of-the-art intelligent access security and identification technologies. Resolve the disadvantages associated with using conventional mechanical locks. It requires no key to misplace, no tiny digit-wheel to dial and no combination code to memorize, thus no fuss for asset owners to secure their belongings in luggage, lockers, gates, containers, storage room or cabinets. These important features are vital differentiating factors, enabling hassle-free and high access security unmatched by any conventional key/dial locks. With eGeeTouch smart locks, accessing secured assets and belongings is like a breeze and peace of mind in an increasingly flexible and mobile society.” — Digipas Technologies, Inc.





HPC A Hudson Lock Company Lockcaddy Products

LockCaddy is patent pending and American-made for professional security technicians. LockCaddy is made of tough ABS material with the highest quality and durability in mind. Designed by a locksmith for locksmiths, these tools will improve quality and productivity. They will manage cores, cylinders and keys from shop to job site. The LockCaddy

System makes rekeying easy by keeping all of your components compartmentalized in these specially designed caddies.

"Perfect for pinning, the LockCaddy keeps cores, cylinder housings, pins and more together to get the job done quicker. They are stackable to carry with you or mountable to help create the ultimate keying station in your shop or vehicle." — HPC



ILCO Look-Alike Remotes

Ilco Look-Alike Remotes offer an economical alternative to pricy OEM product while maintaining the OEM look. All Ilco remotes are engineered and tested extensively to bring you the same OEM quality that you have grown to expect from Ilco. Each Look-Alike remote is FCC certified and is brand new, unlike the refurbished product from other sources. The current Ilco Look-Alike offering covers most major vehicle manufacturers and will continue to grow over the coming months and years as new Ilco Look-Alike remotes are introduced.

"The line of Look-Alike remotes is an economical option to OEM keys. With OEM remotes, you could be stocking the same remote with four different logos, but the Ilco Look-Alike line has no logos, which will minimize your inventory. Each remote is engineered and produced to provide the highest quality, like you have come to expect from Ilco". — Todd Adams, automotive product line manager, North America

ILCO**Futura Auto - Electronic Key Cutting for sidewinder and edge cut keys**

The Futura Auto is an electronic key cutting machine with one cutting station and two interchangeable clamps for duplicating and originating laser/sidewinder and edge cut style keys for duplicating and originating all types of automotive keys, including heavy trucks and motorcycles. Within the Futura Series, this model is dedicated to duplicating and originating all types of vehicle keys.

With the removable 10" (254mm) touch-screen tablet, the Futura Auto guides the user step-by-step in all key-cutting operations, making it the perfect machine for those just getting into the automotive locksmith business or the seasoned professional offering roadside services.

"While trying to reduce the expense of the machine, we did not want to sacrifice quality. That is why we decided on two separate clamp systems and four cutters with built-in cutter storage, instead of a one-size-fits-all approach. This system allows the user to securely clamp all keys with minimal vibration. The 12L cutter is for all edge-cut keys while the 01LW does the vast majority of laser cut keys. The 02LW is for Fiat/Chrysler applications, and the 06LW is for the Toyota/Lexus 80000 code series."

— Allen French, key machine product line manager, North America

**Lucky Line Products****Signal Blocking Key Hider**

Lucky Line's Signal-Blocking Key Hider, the next generation of key hiders, features RFID-blocking fabric to prevent transmissions of wireless signals from hi-tech key fobs. Perfect for hiding a spare key, unintentional unlocking of vehicle or opening of trunk, multiuser business vehicles, preserving the battery life on a smart key fob and preventing car theft. Simply place your smart key or smart key fob into the pouch to block the signal and protect your car.

"The Signal Blocking Key Hider is Lucky Line's newest pouch key hider that has been upgraded to work for today's smart key fobs by adding RFID-blocking technology. This new product hides the key fob radio signal and allows users to stow their spare key fobs inside or on the vehicle. The Signal Blocking Key Hider is a great way to keep your car safe." — Bill Fleming, president of Lucky Line





Nexkey Nexkey Core

A smart access device will dramatically change the access control industry by eliminating outdated access control panels and cluttered wiring. Any mechanical lock transforms into a smart lock within minutes, and battery life is measured in years, not months. Every business can secure and track spaces they couldn't before with a phone: a gate, utility closet, server room, private offices or any lock they have. The future is here: All you need is Nexkey Core, the cloud and a smartphone.

"Nexkey Core allows businesses to enjoy enterprise-level access control in minutes throughout their space, not just the front door. With this one standalone device, any mechanical lock becomes smart and able to be managed and unlocked with a phone. Access is tracked where it wasn't possible before — private offices, gates, supply closets, anything — and the battery life lasts for years. It forever eliminates readers, wiring and panels." — Nexkey



PDO

pdqSMART-STP Stand-Alone Smart Touch Pin Lock

Life is about choices, and locks should be too. With pdqSMART-STP, users aren't limited to yesterday's PIN code technology. They can have it "their way" with multi-credential options that deliver the choice and convenience that today's users demand, including operating with a smart phone. STP offers scheduling for up to 100 unique users, audit trail of 25 events on the app (one year on cloud), and five variations; Grade 1 and Grade 2 Cylindrical, Grade 1 Mortise, Heavy-Duty Deadbolt and Heavy-Duty Exit Device Trim. Easy to use and administer, it's perfect for new and retrofit applications (utilizes standard door preps). Popular

applications include offices, coworking spaces, retail, hospitality, clinics, vacation homes, Airbnb, schools, daycare and many more.

"No other stand-alone pushbutton lock on the market today can offer as many features and benefits for your business and customers as pdqSMART. Operate with a smartphone, PIN code, smart watch or key. Want to lock remotely? STP can operate from anywhere in the world with an internet bridge. Have your business needs changed? STP can be upgraded to full access control using the same hardware device. And we're just getting started!"

— Kim Wanamaker, VP marketing

RemoteLock

RemoteLock OpenEdge CG

The RemoteLock OpenEdge CG is a commercial-grade smart lock designed for large enterprises, offices and commercial properties. Connect directly to your existing Wi-Fi signal and manage your property's access from anywhere. Know who has access to any property and when, with notifications and complete usage reporting. Easily provide temporary access codes to guests or support staff.

"RemoteLock offers rentals, commercial enterprise or multi-family property management organizations the ability to remotely control and manage any connected lock, on any property from the cloud. What makes our software unique is the ability to manage hundreds of locks on the same dashboard. Plus, you can use locks from other companies as well." — John Cargile, director of marketing, RemoteLock



SECURAM Systems, Inc.

SECURAM Touch

This is the world's first fingerprint smart deadbolt for your front door. It replaces your existing keyed deadbolt, giving you keyless, fingerprint entry plus smartphone control. Manage and control your front door lock remotely. Get alerts and notifications on your iPhone or Android.

"As part of its entry into the smart home market, SECURAM is launching a smart deadbolt with fingerprint access. SECURAM Touch connects to the SECURAM app and can be managed and controlled remotely. Open the door for visitors as they arrive right from your smartphone. The app also allows you to view history on the app as well as add/manage users. At the front door, you can simply place your finger on the sensor to open the lock, or enter your access code. The Touch also has a security key and external battery port for backup. SECURAM Touch a secure smart deadbolt solution for your front door." — SECURAM Systems, Inc.

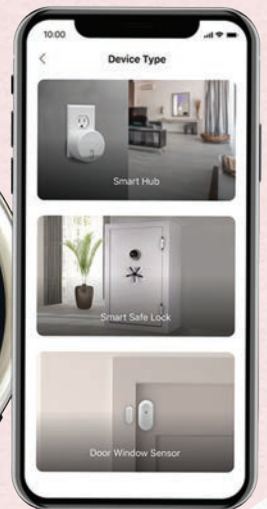


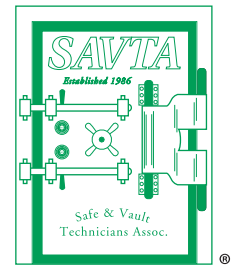
SECURAM Systems, Inc.

Smart Safe Locks

Combine the robust security of a traditional SECURAM safe lock with smartphone connectivity and remote operability. SECURAM Smart Home Solutions are an exceptional way to bring real security and convenience to your home.

"SECURAM is proud to introduce our smart safe lock series. The world's first smart safe lock can be managed and controlled from your smartphone from anywhere in the connected world using our smart app. The app is available for Android and iPhone smartphones. From the app, you can open the safe lock, receive notifications such as open/close activity, add/manage users, view audit trail and even receive alerts from the built-in vibration sensor. If someone is trying to access or break into your safe, you will know it immediately. The Smart Safe lock is available in a fingerprint version also. Stay connected with SECURAM Smart Safe Locks — part of the SECURAM Smart Home product line." — SECURAM Systems, Inc.





Rare Find

Jeremy Moncrief uses minimal holes to open an antique double-door Herring Hall and Marvin safe in a historic department store.

I RECEIVED A PHONE CALL FROM A GUY WHO HAD AN ANTIQUE SAFE THAT needed to be opened as soon as possible. He told me he had purchased an old building that he had just started to renovate in a nearby city. While they were removing a wall on the sixth floor, he found a huge double-door safe. The customer wanted me to come take a look at the safe and give him a price to open it. I agreed to stop by the next morning to give him a quote.

Power Struggle

I arrived to find a very old six-story building in downtown Birmingham, AL. The customer told me there was one small problem: from the fourth floor up, there was no power due to a wiring issue in the building. He asked me if that would be a problem when it came to opening the safe. I told him that it should not be and that I could bring my small 900-watt harbor freight generator to run lights and my drill.

We then went up to the sixth floor to take a look at the safe (see *Figure 1*). It was a double-door Herring Hall and Marvin safe. I noticed it said “The Parisian Company Inc.” on the top. That name made me curious. I remember, when I was a kid, a few department stores around Birmingham with that name. Later on, I did a little research and found out Parisians opened their first store in Birmingham around 1877. We also found out later that this old six-story building was once a Parisians store and their main office.

Narrowing It Down

Now back to the safe. The customer wanted the safe opened as soon as possible. I told him to give me a few days to do a little research to see how we should go about opening it with the least amount of damage. He agreed and we set up the opening for two days later.

When I got home that night, I searched my database and could not find anything on this type of safe. I did know that if you put handle pressure and tried to turn the dial, the dial would get difficult to turn. Knowing that, I was sure we were dealing with either a Yale OB or OBB lock or an HE lock. I sent the picture of the safe to a few people. After a lot of emails and phone calls, we were all in agreement that the safe had a Yale OB or OBB lock (*Figure 2*).

The Yale OBB lock is a 3-wheel lock with a drive wheel, and the OB lock is a 4-wheel lock with a drive wheel. The drill point I was going to use for the OB lock is angled slightly in just outside the dial ring between 46 and 47. This will put you right next to the fence so you can use a scope to line the wheels up through a small opening in the lock case.

I arrived at the job site ready to go. After a few trips to the van to haul up all the tools and the small generator, it was time to get cracking! I set up the generator to run the lights and drill. I made my mark just outside the dial ring between 46 and 47 and started to drill. The door was only around 3 inches thick with no hardplate.

I pulled out my 90-degree wolf scope to take a look. When I inserted it, I could see I was in the right spot, but something was not right. I could see the fence, but there was no gap to see through so I could view the wheels. The lock also looked different than a Yale OB lock.

I pulled out my *McOmie Files* book and started comparing pictures of other locks with what I could see using the scope. I realized I was not dealing with a Yale OB lock. This lock was, in fact, a Yale HE lock used exclusively on Herring Hall and Marvin safes. The Yale HE lock requires a totally different drill



Figure 1. The double-door Herring Hall and Marvin safe was on top floor of an old department store building in Birmingham, AL.

point, but I did not want to drill another hole in this safe.

No More Holes

I decided to try an idea: Using the same hole I had drilled, I angled way over to the left to enter the case — right where the fence and drive cam meet at drop in. I angled over, and when I carefully broke through, I was right on the money! *Figure 3* shows where the drill bit came into the lock.

To get the safe open, you have to walk each wheel around to find the number that wheel is set to. The only problem is that where I came into the lock case, the drive cam will block you from seeing the wheels in front of it. You will have to use the gate in the drive cam to view the wheel in front of it. The process is like scoping the change keyhole on a modern safe lock.

Using my scope, I dialed all the wheels left until the drive cam was lined up at



Figure 2. After many emails and phone calls, it was determined that the safe should have either a Yale OB or OBB lock, as pictured here.

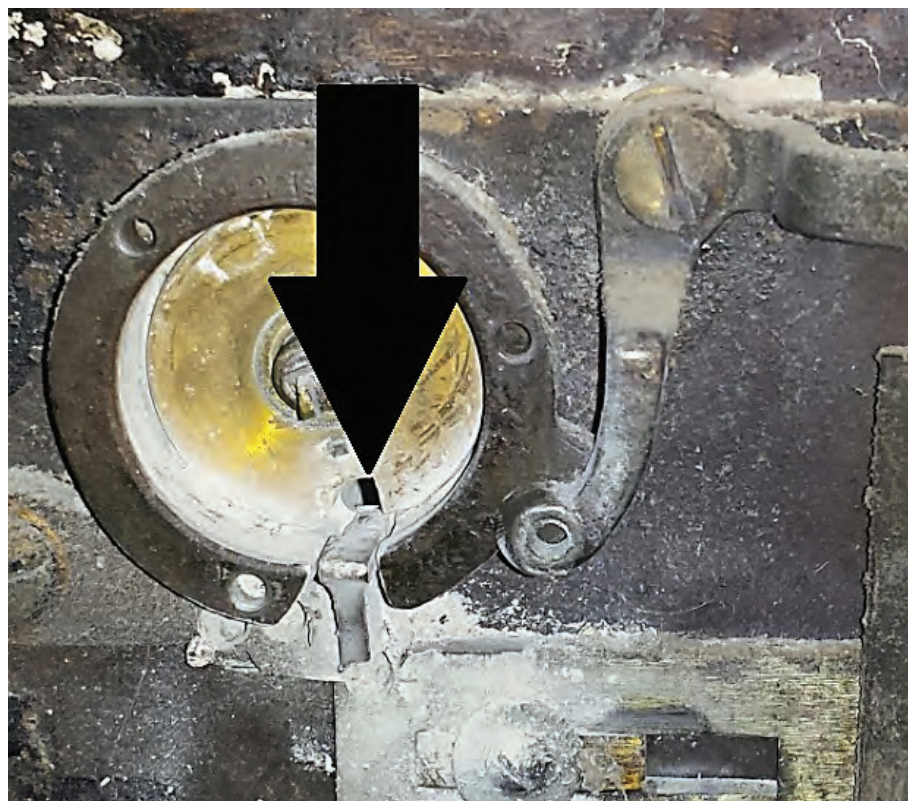


Figure 3. This image shows where the drill bit came into the lock.

“Using the same hole I had drilled, I angled way over, to the left to enter the case — right where the fence and drive cam meet at drop in. I angled over and when I carefully broke through, I was right on the money!”

drop in. I noted what number was at the opening index on the dial (Figure 4). Let's say it was 49. Now that I know the drive cam drop in, I can start to decipher the combination.

With all the wheels left, I reverse and rotate the dial right until I feel the drive cam pick up the wheel in front of it, and I move that wheel five numbers right, then reverse dial left to 49 to set the drive cam at drop in. With the drive cam at drop in, I can see the wheel in front of it and I am looking for the gate on that wheel. I continue to advance the wheel in front of the drive cam until I find the gate on that wheel. Once the gate is found, you will want to note what number that gate is at and refine it so the gate lines up right where it should. You will do this with each wheel in the wheel pack. But remember: You will have to set each



Figure 4. The author noted what number was at the opening index on the dial.



Figure 5. The inside of the door with the back panel removed is shown.

wheel to its known number so you can see through the wheel gate.

After around five minutes, I had the safe unlocked. It was time for the moment of truth. Was the safe empty? Yes. The only things inside were a few old pages left over from when Parisians had used the safe back in the '40s and '50s. Figure 5 shows a photo of the inside of the door with the back panel removed. Figure 6 shows the decorative lock curb for the HE lock.

After all the work was done and the safe



Figure 6. This image shows the decorative lock curb for the HE lock.

was opened, I was extremely happy to be part of this opening. It is always nice to get to see a piece of history firsthand. 🧐



Based in Birmingham, Alabama, **Jeremy Moncrief** has been opening and servicing safes since 2006. He specializes in high-security safes and vaults.

His service calls cover central and northern Alabama.



The Largest In-Stock Door Hardware Inventory

SECURITY LOCK DISTRIBUTORS IS THE COUNTRY'S LARGEST WHOLESALE-ONLY distributor of mechanical and electrical door hardware and security products. Our vast, unmatched inventory of more than 1.5 million products is stocked in distribution centers spanning the U.S. — if you need it, we stock it.

Best-In-Class Technical Service

Security Lock Distributors' best-in-class services include field-experienced and factory-trained reps who leverage years of firsthand knowledge to understand customer needs. Through strong product know-how, our technical sales representatives are there to guide you, identify products, parts and components that are essential for your specific job.

Fast, Same-Day Shipping

Our strategically located warehouses span the U.S. — which means your order will be out the door the same day and on its way for just-in-time delivery. The large majority of orders are one- to two-day ground delivery throughout the U.S., and we have expedited Canadian shipping.

Security Lock Distributors Is There for You

- Our quotes department will manage the quoting process start to finish and can spec out a project in its entirety to get you the most competitive pricing available. No matter how complex the project, we'll work to help you win jobs.
- Our in-house keying department can help you get the job done. From creating master key systems or adding to existing systems, to keying all major brands of interchangeable core, our lock shop team offers custom services that can support any requirement — large or small.
- We offer the industry's most complete parts department, with parts and components from all premium door hardware lines to additional items and accessories. We always stock what you need to get the job done.

- Take advantage of our blind label drop ship program. We'll ship orders with just your branding on the shipping label and packing slip — which means our warehouse is essentially yours as well!

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- Product filtering capabilities by any specification or attribute
- Massive library of manufacturer resources
- Robust education portal with new product information, industry trends, price updates and tutorials
- Installation videos, price lists, catalogs and product specs

We Stock All Premium Brands

In today's fast-paced environment, it's important to work with an industry leader to get what you need, when you need it. Our unmatched in-depth, in-stock inventory includes all functions, finishes, designs, lengths, voltages and options — if you need it, we have it.

True Partnership Is Key

As a true partner, we operate a strict wholesale-only policy. We always work with you, never against you. We're big enough to have everything you need, but pride ourselves on the personalized partnerships we form with businesses like yours.

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Pricing For Profitability

A business's pricing model can be its key to success. **By Noel Flynn**

THIS IS THE FIFTH ARTICLE IN THE “TOOLS FOR MANAGING YOUR Business” series. Here, we’ll discuss various strategies and approaches to pricing. This will also include tips for what we will call “increasing your odds of getting up at bat,” meaning how to present pricing and positioning yourself for future work.

The Importance of Pricing

The art of pricing is probably one of the more important factors that will determine the longer-term profitability of your business. *Get this one wrong too often and your business can become trapped in a downward spiral where you crash and burn.*

Pricing as an Attitude

One of the cornerstones of pricing should be the realization that *we deserve to be paid a fair price for the service rendered.* Too often, small business owners and managers undervalue the full worth of what they are providing. At the risk of sounding

obvious, you are selling more than just a product and/or an installation/repair. You are providing expertise that is a result of years of training and experience, including the cost incurred when learning from our mistakes.

Reminding Customers of Your Value and Full Cost of Service

The intrinsic expense of providing a service includes many costs that are not readily apparent or top of mind to the customer or buyer. Some examples include:

- Cost of employee training
- Office equipment and supplies
- Employee payroll and business taxes
- Business overhead
- Insurance
- Licensure
- Service vehicles
- Advertising
- ...and much more

While you're at it, be sure to remind yourself regularly!

What's a Fair Price?

In the world of professional appraisal, you will typically find reference to a standard statement that essentially says “something is worth what a buyer is willing to pay for it and what a seller is willing to sell it for, without duress or undue pressure to transact.” OK, so that sounds logical, but how does it help me to establish my pricing? Let's begin by examining the various approaches to pricing.

Pricing Strategies

Fundamentally, there are four ways to approach pricing:

- Marketplace perspective
- Competitive perspective
- Cost perspective
- Some combination thereof

Let's take a closer look at these alternatives.

Pricing From a Marketplace Perspective

Chances are, we are not the first player in our industry, and it is likely that some structural norms have already been established and may be well entrenched. As an example, in the security door hardware arena, manufacturers have traditionally established a manufacturer's suggested list price (list price) and then applied various discount levels (to their customers) that were driven by two factors: class of customer and purchase volume.

This approach has its foundation back in the 1970s when the Federal Trade Commission (FTC) began dropping the hammer on companies for unfair and predatory pricing practices. Producers were required to establish a published list price (aka manufacturer's suggested retail price - MSRP) and — more importantly — assign customers into groups or classes based on specific characteristics. The concept was intended to treat “similarly situated” customers in a nondiscriminatory manner. As time marched on, the FTC took a more relaxed enforcement posture.

When I first entered the security door hardware industry (required by the work-release provision of my parole... just kidding), I was truly perplexed by the prevailing, mind-boggling discount structure. An extreme example would be: list price less 50, 10, 5, 4, 2 percent. To someone experienced in many industries and a security door hardware industry newcomer, this discount system seemed to have been created by a deranged mathematical sadist.

So, as one who was never going to win any math contests, one of my first steps was to generate a table of decimal equivalents for all of the prevalent discount levels. I simply refused to deal with application of these crazy discounts, and one simple decimal was easier for me. But, many people were not willing to change.

All of this means that you can't ignore the usual and customary pricing schemes that are already established in your marketplace. However, this does not prevent us from introducing creative approaches, if they actually offer or are perceived by the customer, to offer value. Try to avoid being a salmon — swim *with* the current!

Cost-Based Pricing

It's not uncommon for various channel players to employ “cost plus” pricing schemes. Many business owners are inherently more comfortable using this approach, primarily because they feel a greater degree of control and can apply logical mathematical formulas to generate their pricing. This is especially true at retail where we can purchase a product at \$xxx and simply double or triple the price we pay. It is also common to find application of formulas that multiply our cost by xxx percent. Of course, with the availability of internet technology, comparison price shopping has become so easy that we need to be realistic.

Competitor-Based Pricing

Most business owners would likely agree that we couldn't afford to simply ignore our competition. But let's also recognize that most likely, there will always be someone cheaper. The point here is that if your *only* (or even primary) strategy is to be the cheapest, you have inadvertently entered a race to the bottom. As we used to say (back in the day) about the hotel access control marketplace, “It's a contest to see who can lose the most money.” Too often, people would say, “The good news is that we got the order.” So what's the bad news? “That we got the order.”

We should do our research homework and identify what our competitors are charging (this is an ongoing effort) but, remember, it's unlikely that they only have a structured price sheet and never depart from it. Use of the old “mystery shopper” technique is still employed by even large companies today.

A Combination of Approaches

Whether we admit or even realize it, most small business owners employ a combination of approaches. But the important thing is to have a pricing mechanism with a solid foundation, coupled with some degree of *justified* flexibility!

Two Classic Mistakes

There is an old saying that business managers should avoid two classic mistakes:

1. Never listening to our customers
2. Always listening to our customers

Let's add a third one: *Never, ever let your sales force set price or pricing!* Input from your sales force is essential, but the owner or manager should establish price, pricing and discounting policy and approve any sanctioned departures.

A Differentiation Strategy

In today's technology environment, it's just too easy to shop for price. And once a product becomes a commodity, the truth is that nobody wins. So, what are business owners to do?

One of the most successful, yet underused, approaches is a differentiation strategy, although this won't apply to every situation. Yes, you can frustrate comparative price shopping by changing what is being offered. This takes us from "price" only into the realm of "pricing." A "delivered" price is different than a price plus shipping cost. An "installed" price is different than an "uninstalled" price, and so on. In some instances, a solution may be to employ a bundling strategy. This is where we leverage some opportunity to combine products and perhaps services as well.

Ways to Differentiate (Just a Few)

- *Warranty* - stronger and/or longer
- *Credit* - longer time to pay (try to avoid this one)
- *Delivered Price* - includes freight cost or free delivery
- *Installed Price* - price includes installation and possibly set-up
- *Service Plan* - some sort of preventative maintenance and discount for work
- *Bundle products and/or services* - combine xxx plus yyy
- *Priority response program* - for preferred customers
- *Latent service* - e.g., add more keys after purchase
- *Upgrade program* - possibly including trade-in allowance for old units
- *Immediate discount* - "and if you order right now" or "and wait, there's more"

Offer to Perform a Site Survey (Needs Assessment)

One of the most common mistakes made by small business (and larger firms too) owners and managers is to not know enough about the circumstance and context of the situation at hand. *Find out more about this customer and their needs.* If practicable, offer to perform a "site survey", rather than just tender a quotation. Not only will you get to know the potential customer (relationships still matter in business), but you will also most likely discover additional needs and confirm why you should be selected as the provider! You are now also better positioned to acquire future work/sales, or

at least to be a contender.

"What has this got to do with pricing?" you ask? Obviously, if you are not in the game, you can't possibly score or win!

Leverage and Exploit That Needs Assessment

It's pointless to offer extras when they are meaningless to the customer. But once you get to know this buyer's pain points, you can develop a more relevant and possibly customized offering or solution. For instance, if this purchase is occasioned by a security breach or assault incident, you need to know that! Customers do **not** buy *products*. They buy *solutions*! Thus, offering a more complete solution can have very appealing value. Even if you don't win the battle this time, position yourself to play the long game and win the war.

Your Dispatcher Can/Should Be One of Your Top Salespeople

If you never get up at bat, you'll never have a chance to get on base! This is why your dispatcher should be much more than just an order taker. Of course, in a smaller firm, this individual may wear several hats. The point here is that whoever takes incoming calls needs to be more than a robot. Selecting the right personality to represent the potential customer's all-important first contact with your company, plus a bit of training, can generate very positive results.

So, don't be cheap here. Yes, Ebenezer Scrooge, this means you! Your dispatcher can be your "silent salesperson!" No, this person does not necessarily need to be the super technician who knows every product, yet may have a lousy attitude and/or demeanor. Remember, the objectives are to: 1) Establish rapport and 2) Gather information. As someone once said, "You don't get a second chance to make a first impression."

When necessary, the receptionist/dispatcher can skillfully hand off the caller to the technical guru after establishing a good rapport, or remain on the call. Law firms do this. There is a correct way to hand off a call! With today's digital phone systems, record your calls and listen in, during or after. Use these recordings as teachable moments. Of course, advise callers that calls may be recorded for training purposes.

It's the same with handling incensed customers. Yes, some of them may seem to need a Dr. Phil intervention, psychiatric help and/or medications (has this ever been said about us?), but knowing how to defuse them quickly can make a world of difference. Don't permit customers or prospects to bully, intimidate or abuse your employees. Remember, many a good relationship has its genesis in an irate call.

Research About Price/Pricing

There are probably rooms full of studies about the art (and perhaps some science) about pricing. What we can take away from this stuff includes several observations:

1. There aren't any price or pricing formulas that can serve as generic applications for us. There are just too many variables within and among industries.
2. A strong indicator of whether, and to what extent, our overall pricing may be adequate is found by looking at a firm's gross margin. A 40% gross margin or better suggests that overall pricing is adequate, significantly improving chances of success.
3. Tight control of overhead expenses is a key ingredient in the recipe for success.
4. A "lowest price in town" strategy is a sure death wish for your business.

Although we can't offer specific price formulas, we can indirectly evaluate the adequacy of our overall pricing by looking at our gross margin. This is where the game will likely be won or lost. The second most important area after gross margin is managing our overhead and running lean.

Your Pricing Compass

Having a target to shoot for can be like having a pricing compass. Let's stipulate that, for some firms, achieving a 40% gross margin will be a challenge — especially for start-ups. OK, so now you have a target to shoot for, and for now you can try to make up the gross margin shortfall by keeping overhead extremely low. But rather than challenge (as unachievable) what the research suggests, remember that security/locksmith firms are notorious for underpricing their services.

Too often, it's because they simply don't have the confidence to charge a reasonable and compensatory price! Once their price is challenged, they tend to fold immediately instead of educating the customer with intelligent pushback. At the end of the day, it's all about value (whether real or perceived), not price. Otherwise, all customers would always go for the lowest price and truth be told, not everyone followed your sage lead in purchasing a brand new fully loaded Yugo chick magnet! Perhaps you were just ahead of your time?

Educating the Customer

When studying marketing, we learn that there are two primary factors required for a sale: The customer must be willing to buy and also *able* to buy.

More often than not, the customer is *not* the expert. That's why he/she contacted us. So before you just respond to what the customer says they want, try to determine if what they *want* is actually what they really *need*. How many times have we set out to buy a car and, in the end, went home with something different?

Although it might seem to be a bit off topic for pricing, the moral of this story is that we need to train our staff (and ourselves) to skillfully inquire and make a needs assessment rather than simply provide a price quotation. You may be able to offer — and ultimately provide — a better or more complete solution. We should never initially accept that the customer only has a budget of \$xxx. So why did that Realtor show you the more expensive house even though you told her you had a maximum budget of \$xxx? Admit it, how many of us have spent more than intended or budgeted when purchasing a house?


There once was a TV commercial for an expensive motorcycle helmet. The

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“One of the cornerstones of pricing should be the realization that we deserve to be paid a fair price for the service rendered.”

message was “If you have a \$10 head, then buy a \$10 helmet.” It’s all about the value!

Technicians as Salespersons

Technicians often cringe when asked to upsell and will say, “I’m not a salesperson.” Sometimes it helps to explain, “You are not being asked to sell. You are being asked to use your technical knowledge and experience to help the customer to buy intelligently. You might be saving a life by preventing a burglary or home invasion!” So, don’t hesitate to ask questions about the customers’ situation and intended use.

Usually, the customer does not know what he/she does not know! This is where you get to be the genius (it’s temporary, so don’t let it go to your head), but don’t talk technical mumbo jumbo unless it’s appropriate. Remember, customers buy solutions, and that means benefits rather than features! “I really don’t care that this widget has a red button. Tell me how that red button helps me.”

The Art of Discounting

Whether we admit it or not, everyone loves a deal. Since forever, con artists have swindled ordinary and even exceptionally smart and savvy folks with deals that were simply too good to be true. Every day, we witness or hear about scams, whether delivered by phone, email or otherwise. Should we have known that the IRS does not request immediate payment in gift cards?

So the point here is that, generally speaking, we should establish our standard sticker price at a level that facilitates discounting. Then we can offer 10% off, but never lead with the discounted price, and always try to get something in exchange — a larger order, etc.

Rebutting the Challenge

It’s a good practice to deliver the price last, after we have established how our proposed solution will solve the customer’s problem or issue and why we are the right provider. But we should also be prepared for a challenge.

This is where many people run scared when they should be defending their price. “Yes, there is probably somebody who can provide a cheaper price, but will they provide a high-quality service and stand behind their work?” Do you always look for the cheapest doctor when needing surgery? Often, customers just want to know where the bottom is. Develop canned best practice responses to typical objections and make sure your extended team (including technicians) is properly prepared when — not if — the price is challenged.

Handling Price Increases

In the security industry (and others), annual price increases have become common and are usually initiated by the major manufacturers, although all players don’t necessarily share the same effective increase date or even fiscal year. The good news is that annual increases can add an element of stability to the marketplace because everyone believes prices will remain locked-in for 12 months.

Unfortunately, these general price increases are not always announced far enough in advance to permit channel partners and others to make adjustments necessary to try to pass them on to their customers. Moreover, these general price increases tend to *not* be across-the-board percentage changes, thus leaving smaller players scrambling to update their internal pricing. Some manufacturers do provide assistance with various tools intended to facilitate updating of the channel partners’ price files. Such general price increases represent a major disruption to all those on the receiving end, but this is also a time of opportunity!

When and How to Increase Pricing

If you use manufacturer’s list price as your base, it’s much easier to update your base prices to reflect the manufacturer’s price increases, possibly using electronic tools provided by the manufacturer. Perhaps, more importantly, you are likely to be better positioned to pass on those increases. If you don’t pass them on (by one method or another), you will absorb the hit and ultimately suffer margin erosion.

“But I hold onto my customers by not increasing my prices regularly.” I have heard this precarious logic far too many times over the years. My experience has been that far too many customers who have benefitted from no price increases

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for years tend to develop “selective amnesia” when you eventually announce a price increase, even when supported and accompanied by compelling justification. Even worse, then you develop a sense of betrayal when the loyalty (that you thought you had earned) vanishes with your audacious request for a price increase after many years. You are better off taking smaller annual (or at least periodic) increases rather than introducing a larger increase after many years of fixed prices. Avoid across-the-board percentage increases and instead find creative ways to apply your increases in a manner that masks what you are doing — or at least frustrates attempts to decode what you have done.

Recounting Some Dos and Don'ts

- Recognize the importance of pricing for profitability
- Develop your pricing strategy pragmatically, not emotionally
- Have a standard pricing list, including hourly rates
- Establish your standard pricing high enough to support sensible discounting
- Create a formal approval process for discounts beyond a specified range
- Know and respect your competition, but don't be intimidated by them
- Never try to be the lowest price in town
- Understand your complete or “fully loaded” cost
- Sell value rather than price
- Educate the buyer to help make an informed decision. Help them to buy.
- Frustrate price shopping via a differentiation strategy
- Conduct a site survey and needs assessment whenever practicable
- Develop canned responses to common challenges, especially price related

- Use the 40% gross margin as your pricing benchmark
- Use the new car dealers' window sticker approach to list added-value items
- Make a very positive first impression and ask relevant questions

In conclusion, although you may have to just “take what you can get” in the beginning as a start-up, you need to have some longer-term targets to shoot for. When your business is strong enough, begin to plan an orchestrated purge of the least-appealing 10 percent of your customers.

You know who they are: those who complain the most, are slow to pay and demand exceptional service at non-compensatory prices. Yes, you can do it. Convert them to meet your profit target, or purge! Clearly, the intention here is to gradually replace these losers (sorry, I meant to say, “cherished and beloved customers”), with ones who appreciate the value of the services that you provide.

Our next article in this series will be “Employee Acquisition, Retention and Motivation.” There, we'll discuss how to deal with some of the fundamental challenges related to having a workforce. ☺



Noel Flynn is a degreed business management consultant with global senior leadership experience, including more than 20 years in manufacturing, wholesale distribution and consulting sectors of the security industry. Noel has been a senior executive, officer, board director and advisor to not-for-profit and for profit companies in numerous industries worldwide. This includes being an ALOA board member since 2011, and he is also an ACE instructor, developing and teaching business management.

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Preparing to End the Year Strongly

Assess your 2019 goals and strengths so you can start 2020 with confidence. **By Katelyn Lucas**

AS THE FOURTH AND FINAL QUARTER OF 2019 IS WELL UNDERWAY, we are tasked with the responsibility to reflect and respond to our progress in our year thus far. As we take this time to review our goals and any progress we have made, we also may be able to identify any remaining growth opportunities that we have yet to pursue. With the holidays on the horizon, it is easier to let time simply fly by. Before you know it, a new year will have arrived, and we may not be ready for it. Instead, we should think of the fourth quarter as a springboard: the place to get sure footed, stretch, bend at the knees and to get ready to launch ourselves into the next year!

By taking the time to pause and reassess, we are encouraged to remain diligent in our progress. Goals are useless if not tracked, maintained and nurtured. It is easy to wash our hands of the year as it falls behind us and write it off as already ending. But a lot can be done in a couple months' time. Imagine if you were faced with a 60-day vacation — that is suddenly an impressive amount of time. If we can create a shift in how we perceive the time remaining in the year, we may be able to really improve our efficacy in our goals.

We often think of success as very linear. We set a goal and expect that one day we will have reached it. In business and in our personal lives, a one-year goal is a popular notion. It is not a rare experience to review the year when it's over and realize we have fallen short. Then we repeat the cycle. In actuality, success requires a series of small actions that eventually create that more prominent result. Some of our small actions will merit immediate progress, and others will be tiny failures that cause us to plateau or even fall behind a bit in our momentum. The maintenance of our goals is more difficult than setting them in the first place. This is where the hard work is done: analyzing what's working and what's not, reassessing and rerouting how we

assign our time and energy throughout our days. Most success stories are not laced with good luck and karma. They are filled with sleepless nights and calloused hands. They are filled with shortcomings and failures plenty.

Make the Time

Security professionals are well versed in hard work and the demands of maintaining a work-life balance. Many owners are skilled in the trade, a duality that begs of them to be even more organized, intentional and committed to managing the business itself. However, when the owners and managers find their days flowing at the mercy of their customers, time is an unpredictable commodity. A busy day turns into a busy month, and the first things willing to be sacrificed are timelines that do not directly impact the customer. Time management creates a multitude of challenges. The deliberate and intentional growth of our business suffers when we look away from managing our business

and find ourselves stuck on the jobsite. It can be difficult to create the time to be intentional, but this is the only way we can shape our ambition into more specific and attainable goals.

I know a financial planner who is self-employed and handles his business's tax filing almost wholly independently. It takes a lot of time, patience and energy. He noticed that a lot of colleagues in the industry dread tax time and would wallow in quality jokes and negative talk around the season and the responsibilities it brings. However, he identified this time as a critical time for his business and how he frames his progress. He decided that, every year, he would celebrate his responsibility by renting a cabin and focusing exclusively on his paperwork for two to three days. He spends this weekend setting his goals for the next year and completing much of the reflection mentioned here in this article. It has become a time he looks forward to annually and is able to recharge and reflect in a distraction-free environment.

We have all heard the phrase “work harder, not smarter,” but what does this mean when it comes to planning? It means taking the time to make our efforts count. When reflecting on your business goals — old and new, accomplished and prospective — it is critical to be sure that the goals you are setting are worth their weight. While we may desire to increase the sale of a certain product, we need to be sure that the product is profitable, our pricing and margin of error is satisfactory and there is a need and perceived value from our customers. Otherwise, we will be fighting an uphill battle, and when we reach a milestone we set, we still may not have the actual desired outcome. A vision sounds like “I want to increase sales.” A goal sounds like, “We will grow our business by 10%.” A goal allows for the planning of tangible action steps that are crafted once you know your business and its strengths well.

Identifying Your Goals for 2020

Here are four points to consider that may guide and refresh your vision for 2020:

1. What has been the biggest challenge you/your business has faced this year?
2. Name your top 10 customers. Identify any common trends.
3. Identify your top service and top service area.
4. Identify your most profitable service and products.
5. Compare the above information to your goals set at the beginning of this year.

By clearly identifying significant areas of accomplished growth, it allows us to identify trends and think critically about them. It is not necessarily a bad thing to follow the natural

trends that arise within your business — or, at the very least, to know them well. Depending on your location, local crime trends, the skill set of your staff and unanticipated challenges, your business can change a lot in a year's time. Reflecting on the above-named five things can lead to some solid epiphanies or at least help shape the way you consider your goals moving forward.

I have a friend who is a successful published poet: a fellow, professor and recipient of a slew of accolades. Years ago, in response to another friend's awe of his success, he shared how many times his work was rejected versus published. He scrolled through a long list of rejection notifications on his computer screen, and few and very far between a small green “accepted” shone through the sea of red “rejected” responses. Discoveries like this shift our perceptions of success. Perhaps the person you perceive as more successful than you is simply working 10 times as hard. Maybe the traits and abilities you admire actually do not come easy to them at all. What if the strengths you see are their biggest areas of anxiety and where they put in the most work?

As we reflect and reroute our ambitions as the year comes to an end, it's important to begin laying out the foundation for a strong 2020. If we approach our goal setting with good energy, rather than seeing it as laborious and filled with drudgery, we will be able to better manage our progress throughout the year. Build excitement, rekindle your passion and push yourself and your employees out of their comfort zones and into new territories.

My biggest advice is to surround yourself with positivity. Read motivating books, meet others who are on similar paths and take time to nurture yourself, your family and your passions beyond business ownership. Keep reading trade magazines and following relevant conversations on ClearStar, NextDoor and ALOA forums. Find your local chamber of commerce or a Business Networking International group, and align yourself with other entrepreneurs who are refining their approaches every day. As the old phrase goes, “If you're the smartest person in the room, you are in the wrong room.” By challenging yourself, you may just find yourself encouraged and motivated more than ever before. ☺



Katelyn Lucas is based in the Bay Area of California, where she manages her family's fourth generation locksmith company. She is the co-founder of If Only You Knew Inc., a 501(c)3 non-profit uplifting foster youth and their caregiving families. To learn more and support their efforts, visit fb.com/IfOnlyYouKnewInc.



Working with the **FORD 8-CUT KEY**

Robert Sieveking, RL, ACE, explains how to sight read the wafers and originate a key for this key system.

THE FORD 8-WAFER KEY SYSTEM IS COMMON TO MANY Ford and Lincoln vehicles and was used in the 2013 Explorer. This article will illustrate the easiest method for originating a mechanical first key for Ford vehicles that use this configuration. We will be sight reading the wafers in the keyway. This method requires the least amount of service labor and uses universal locksmith tools, methods and skills. The wafer arrangements and bitting positions in the keyway may change from one model to the next, but the methods illustrated here will remain the same. We will be using a Universal Wafer Lock Reader and an otoscope (lighted magnifier).

The 2013 Ford Explorer has three lock cylinders. There is a cylinder in the driver's door, glove box and ignition. This model is also available with the Ford Keyless start system. The ignition will contain tumblers in positions 1 and 3-8. Position number 2 is not found in any cylinder. The door cylinder contains six tumblers in positions 3-8. Other Ford models and years will find tumblers in positions 1-6 and 2-7.

The door and ignition cylinders are keyed-alike from the factory. The H-75 key (ILCO #1196FD or H86 Service Key) has eight positions and uses five depths. The fastest and most satisfactory method of making these keys has been to read the door cylinder to make a working door key, then progress or read the ignition to complete the key. Sight reading the door cylinder is to be preferred, but using a reader tool will also work. Picking to decode (using a Lishi 2-in-1 pick decoder) plus a code search is also viable. Codes were found on this ignition cylinder. The code is stamped on the side of the ignition by a dot matrix method, but the numbers were not readable on this vehicle. The ignition cylinder is dash mounted. The door cylinder can be easily removed from the outside of the door. It is not necessary to remove the door trim panel to free the door cylinder.

Getting Started

The first step in any service procedure is to determine the model year of the vehicle. The tenth digit of the VIN number will reveal the model year. The VIN number will be found on the sticker in the door channel of the driver's door and on the metal label at the bottom left corner of the front window. The date of manufacture is also found on this sticker. This may be useful on vehicles that have a variant upgrade/update during the model year.

The tenth digit of the VIN number for this vehicle is "D," showing this to be a 2013 model auto.

From the Fast Facts index, we find Key Plate FO071 for the 2011-15 Ford Explorer (see *Figure 1*).

The Key Plate shows tumbler locations, depth and space information, code series and the correct key (IKT and non-IKT key blades) for this vehicle. The key shown in this key plate is the four-button integrated head remote key. The remote head is the suggested replacement, but a Strattec #5913441 (ILCO H85-PT) non-IKT key is also applicable.

Code Series: 0001X-1706X

Keys: Strattec: 5913441 (plain non-IKT), 5912512 (Ford 4-btn IKT), H92-PT (ILCO), J92-PHT (Jet).

All of the above are 80-bit transponders. Blade marks "HA" and "SA" on OEM keys indicate the manufacturer. Huf keys are marked "HA," and Strattec keys are marked SA.

This vehicle will also be found equipped with 5912560 (3-btn IKT), 5912561 (4-btn IKT, with rem. start) and 5921467 (5-btn IKT).

Passive Entry Passive Start (PEPS) 2012+ vehicles will use the 5921285 (4-btn PEPS, less key), 5921286 (5-btn PEPS, less key), 5912345 (PEPS emergency key, non-Xpndr).

Ford		Explorer 2dr/4dr (U502)		2011-15		FO071		
Face caps	ASP,AL,B&S	codes	0001X-1706X					
ign	708556 easy off	valet	-					
dr	7012354 easy off	Baxter	BK 37 pg 1					
tnk	no cyl.	NL:HPC	InstaCode					
Keying kit	ASP,AL,B&S	Reed	13-FJ-032					
ign	703373 Strat	Curt	C21244	1200	CX101	Ilco	H92-PT (non IKT)	
dr+	703373 Strat	FORD-5	FORD-5	ctr	CW-1011	EZ		
Xpndr ID	TI (80bit) Encr	cutr	15W-45	space-•-depth		Tay	5921295 Linc	
ITL	#522 -flt 3-ins 1A	tumbler locations				Strt	5912512 Ford	
PAP		ign	1•2345678	.844	1	.354	Bör	5915218 Linc
MAX	DSD#261	dr	••345678	.752	2	.329	Curt	IKT4C 80
TO	N/A	tnk	no tnk cyl	.660	3	.304	SIL	
XpndrP	T-Code	gb	•••••678	.568	4	.279	Jet	J92-PHT
Framon: FC-S-B-I	.405 TL		.092 3 .025	.476	5	.254	A1	
G-Keys	FOR-6, AGK620		ALL Locks	.384	6		Ilco	
82 Grv. IPATS 80 Bit, 4btn, 315MHZ, IKT note:				.292	7		EZ	
some mdl's may option 3 or 4 button remotes, ±				.200	8		SIL	
Rem-Start. *= no Rem-Start. new 80 Bit Xpndr for					9		Curt	work key: H-75
2011. 2012+=PEPS option					10		Sub.	non-IKT subs
RW4? clones 6F IKT Keys, not 8C (80 Bit).					11			5913441,591343
read door, prog. ign. many button/logo variants				8w IKTPTS4+				

Figure 1. The Key Plate for this vehicle provides useful information for key-making.

Xpndr ID: TI (80bit) Encr
(Texas Instruments 80-bit Encrypted)

Work Key: H-75

Key Is Gauged: Tip Gauged
Space Depth

1- .844	1- .354
2- .752	2- .329
3- .660	3- .304
4- .568	4- .279
5- .476	5- .254
6- .384	
7- .292	
8- .200	

1200CM Code Card: CX101

1200CM Cutter: CW-1011

Framon FC-S-B-I:

FC (First Cut)	.405 TL (Tip Left)
S (Space)	.092
B (Spacing Block)	#3
I (Increment)	.025

Tumbler Locations

Ignition:	1 and 3-8
Door:	3-8
Trunk:	no cylinder
GB (Glove Box):	6-8

Five Methods for Making This Key

1. Sight read the door for a working key (positions 3-8), then progress the ignition to find the cut depth in position #1. (Easy method)
2. Sight read the ignition to find all seven cuts of a working key. (Difficult)
3. Remove and disassemble the door cylinder to find cuts in positions 3-8.
 - a. Progress cut #1 to find the ignition bitting.
 - b. Use the Find Bitting code utility to find cuts #1 and #2.
4. Pick and decode the door cylinder using a keyway-specific Lishi pick-decoder tool. Progress the ignition.
5. Decode the door cylinder using a keyway-specific reader tool. Progress the ignition for cut #1.



Figure 2. A locksmith is sight reading the door cylinder.

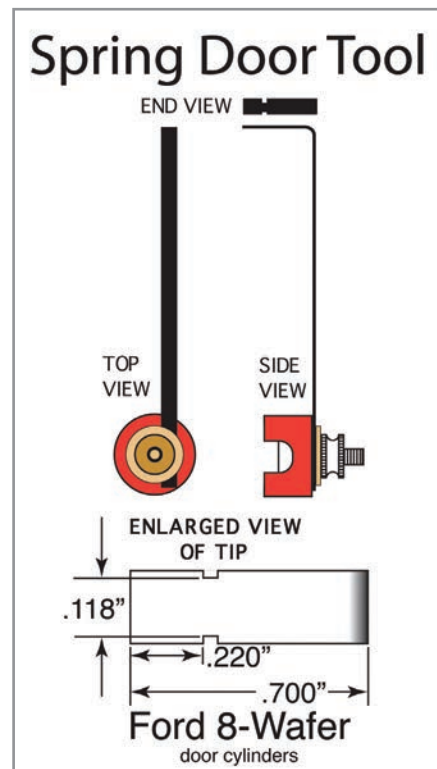


Figure 3. A dimensioned detail of the shutter tool is shown.

The Chosen Method

We have chosen method number one. It does not require a keyway-specific tool, and it does not require that the cylinder be manipulated or picked.

Figure 2 shows a locksmith sight reading the door cylinder. A spring door tool is used to hold the spring door or dust shutter clear of the keyway for easier viewing. He is reading the wafer bittings at the bottom of the keyway. The light is positioned at the top of the keyway. His line of sight is straight (in line) with the center of the keyway. He is reading the cylinder in the key-pull position. The cylinder is not picked. He is reading the wafers from front to back.

To make the cylinder easier to read, a spring door tool is used to hold the spring door or dust shutter open. Figure 3 shows a dimensioned detail of the shutter tool. This design works best on the Ford 8-wafer door cylinders. It is made from a piece of spring steel. This material is available in assorted widths and thicknesses from most locksmith supply houses. The steel is bent to a 90-degree angle at the tip. It is filed with a small warding file to create the notches. The tool is inserted into the dust shutter and rotated 90 degrees to open and hold the dust shutter clear of the keyway. A small magnet has been added to hold the tool in position.

The Cardinal Rules

As the locksmith reads the heights of the wafers in the keyway, he is observing the four “cardinal rules” of wafer lock reading. They are:

1. Light the keyway from the opposite side of the keyway as the wafers being read.

He is holding the otoscope (lighted magnifier) with the light source at the top of the keyway. In Figure 4, he is reading the wafers at the bottom of the keyway.

2. Read the cylinder with your eye centered on the keyway.

He is reading the wafer heights with his eye centered on the keyway. This allows him to more accurately judge the wafer biting heights using the wafer-reading tool.

3. Read the cylinder in the key-pull position.

He has not picked the cylinder. He is reading it in the key-pull position. If the cylinder were picked, it would be impossible to pull down the front wafers to read the wafers deeper in the keyway. The cylinder must be read in the key-pull position.

4. Read the wafers from front to back.

He is reading the heights of the wafers, starting at the front of the keyway and working to the rear. If he were starting at the rear of the keyway, to read the tip wafers first, one of the



Figure 4. The locksmith is reading the wafers at the bottom of the keyway.

wafers might hang at the shear line (be picked) accidentally. This would change the height of the bitting in the keyway for that wafer, and it would be misread as a shallower-depth cut.

Other things we may glean from the locksmith in *Figure 4* are:

1. He has positioned the shutter tool on the opposite side of the keyway as the wafers being read.
2. He is holding the reader tool like a tiny pistol. This allows him to sight down the top edge of the tool as he judges and compares the relative heights of the wafer bittings.

Reading the Wafer Bittings

What does he see in the keyway that allows him to read the wafer bittings? How can he tell if he is looking at a #5 depth or a #1 depth wafer?

Figure 5 is the reader's key for this Ford 8-wafer lock cylinder configuration. The illustration shows the key profile and a representation of the keyway. The grey blocks at the upper left and lower right side of the keyway are the major wards in the keyway. These are the benchmarks in the keyway, which will not change, from one cylinder to the next. We will use them to measure the bitting heights by comparing their heights to the heights of the various wafer bittings in the keyway. Note in the illustration that the #3 wafer bitting is slightly below the height of the major ward. A #4 depth wafer bitting will be above the height of the major ward by about .0012". A #5 wafer bitting will rise to a height noticeably higher than the major ward. The #1 and #2 bittings are below the height of the major ward. Study the illustration to become familiar with the relative heights of

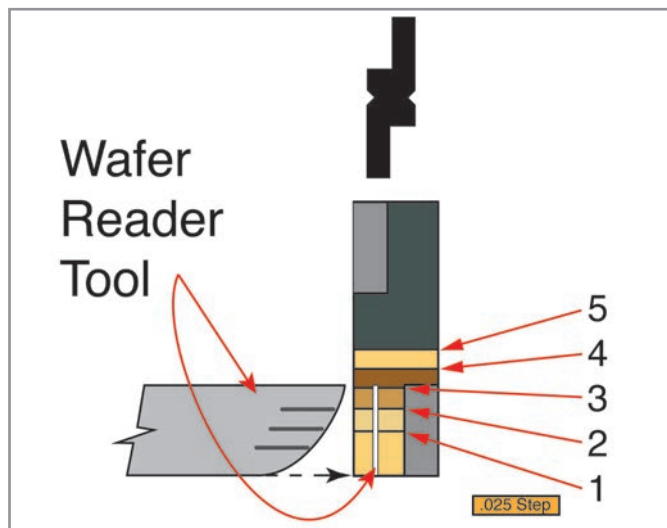


Figure 5. This illustration shows the key profile and a representation of the keyway for the Ford 8-wafer lock cylinder configuration.



Figure 6. The locksmith is reading the top wafers in the keyway.

the wafer bittings in the keyway. Use the Universal Wafer Lock Reader tip height and the height of the major wards to judge the heights of the bittings. With a little practice, these cylinders can be sight read with complete confidence.

In *Figure 6*, we see that the locksmith is reading the top wafers in the keyway. He has reversed the position of the otoscope to place the light source on the opposite side of the keyway as the wafers being read. He has also repositioned the spring door tool to the bottom of the keyway. There will be three wafer bittings at the top of the keyway and three wafer bittings at the bottom of the keyway. They represent the cuts in our key for positions 3-8. The wafers at the bottom of the keyway will be in positions

Ford 8w Door Cyl. Reading

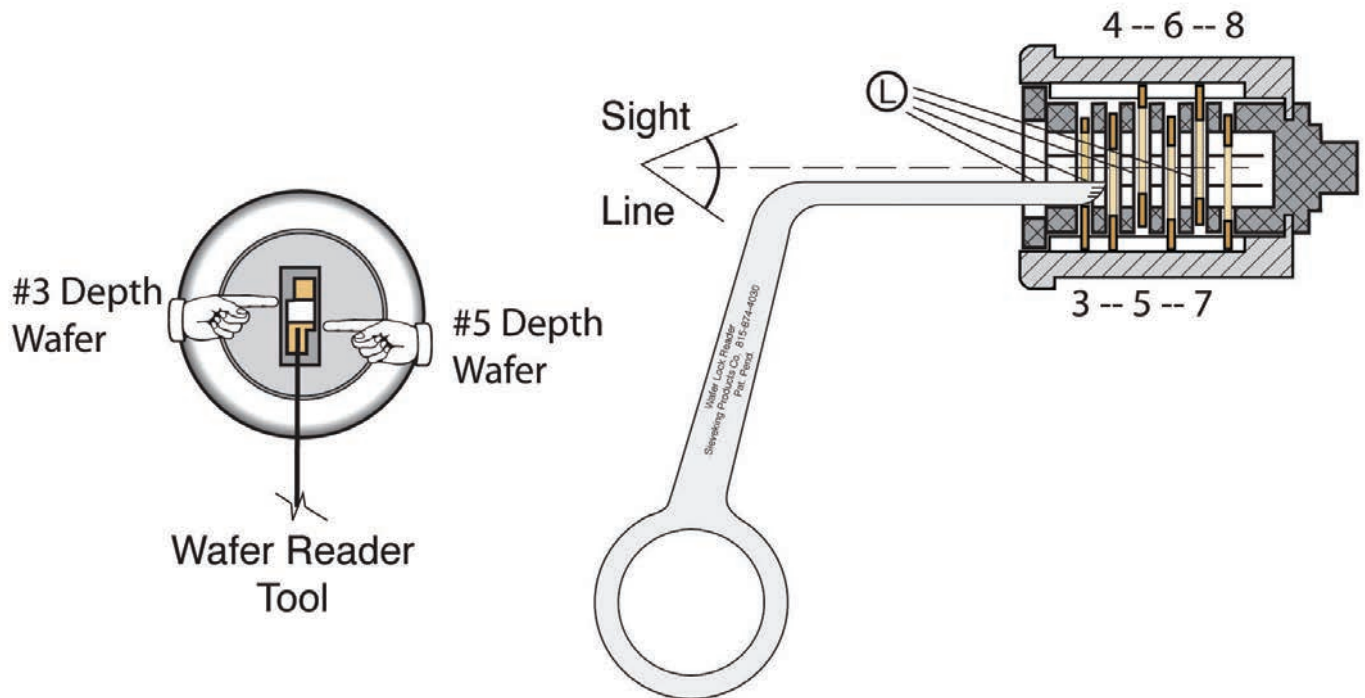


Figure 7. This illustration shows the wafers at the bottom of the keyway being read following the four cardinal rules.

3 – 5 – 7. The wafer bittings at the top of the keyway will be in positions 4 – 6 – 8. The frontmost wafer is position #3 at the bottom of the keyway.

Figure 7 shows an illustration of the wafers at the bottom of the keyway being read following the four cardinal rules:

1. The light source is above (on the opposite side as) the wafers being read. This allows us to illuminate and more easily see the wafers deeper in the keyway.
2. The sight line is centered on the keyway.
3. The cylinder is in the key-pull position. This allows us to pull down each wafer to view the wafers deeper in the keyway.
4. The wafers will be read from front to back. This prevents us from accidentally picking a wafer and causing it to be misread.

As we look into the keyway, we can easily see the wafers in positions three and four. A #5 depth wafer is in position three. A #3 depth wafer is in position four.

The wafer in position four, at the top of the keyway, is slightly below the height of the major ward. It is a #3 depth wafer. We are unable to see the wafer bittings of positions six and eight because

the #3 depth bitting in position four is higher than the others.

The wafer in position three is a #5 depth wafer. It is higher in the keyway than the wafers deeper in the keyway. It prevents us from viewing the wafers in positions five and seven.

The wafer reader tool is used to pull down the wafers, from front to back, so that we can view the wafers deeper in the keyway. The process of pulling down the wafers from front to back is repeated until all wafer bittings have been read at the bottom of the keyway. Reverse the light and reader tool to read the wafers at the top of the keyway.

The Bitting and Work Key

Reading the door cylinder has allowed us to find the bitting for a working door key. The door cylinder is bitted 5 – 3 – 2 – 2 – 1 – 2. Cut and test a work key to confirm the readings. If the key operates the cylinder and does not bind or catch, we have correctly read and made a door key.

The ignition cylinder will have an additional tumbler in position one. It is a simple process to progress the cut in the ignition to find a working bitting for position one. Position number

two is not used, so we really don't need to progress the cut in position two. The working ignition key was: 3 – “something” – 5 – 3 – 2 – 2 – 1 – 2 (Figure 8).

An alternate method of determining the unknown cuts (bitting) for positions one and two would be to use the Find Bitting function of a code program. Enter the known bittings in the appropriate boxes of the screen and click “next” to find all of the bitting combinations that have the known bittings in positions 3-8. The matching bittings from the code series will be displayed with the correct key code. Our bittings returned only one possibility. The correct bittings for positions one and two are 3 – 5. The corresponding key code is 0043X.

This method is a little less time consuming than progressing the key in the ignition. It can also be used to justify (confirm) our readings from the door cylinder. If the bittings we have read are not found in the code series, go back and reread the door cylinder. Correct the key before continuing.

The completed work key is shown in Figure 9. This key was made and tested for proper operation. The code was recorded on a Lock Doctor sticker and placed on the rear of the glove box. Drop down the glove box and place the sticker on the

Door

? ? 5³ 2² 1²

Ignition

1-	?	?	5	3	2	2	1	2		
2-	1	2	3	/	5	3	2	2	1	2
	3	4	5							
3-	3	?	5	3	2	2	1	2		

Figure 8. The ignition cylinder will have an additional tumbler in position one, and position number two is not used.



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The Ford 8-wafer Key

Code Series: 0001X - 1706X

Ignition 1 • 3 4 5 6 7 8

Door • • 3 4 5 6 7 8

Glove • • • • 6 7 8



There are:
8 Positions (Bow to Tip)
5 Depths (#5 = deepest)

Depths 3 5 5 3 2 2 1 2

Rules:

1. MACS is "2"
2. Tip Cut is always a #2 or greater depth.

Positions 1 2 3 4 5 6 7 8 (Bow - Tip)

Figure 9. The completed work key is shown.

unseen backside of the box. If you see this vehicle again, it will be like money from home. The code will lead you to the mechanical key, and you can cut and program the transponder in a few minutes.

Study the cut key in Figure 9. If you can see the differences in depths of the cuts on this key, you can certainly see these same mechanical differences in the heights of the wafer bittings in the keyway. No lock cylinders were removed to make this key. No cylinders were picked to decode the bittings. We sight read the bittings in the keyway and cut the key.

Introducing the Transponder Key

The Ford Explorer uses a transponder system that is serviced by Auto Diagnostics software ADS-175.

Follow the suggested programming sequence to introduce the transponder key into the security BCM/ECM register. This vehicle will require a 10-minute wait, as the 10-minute bypass is not perfected for this vehicle.

1. If you have one working key or no working key:

Use the T-Code Pro or MVP Pro Diagnostic Programmer. Use AD software #ADS-175 to program the key. Follow programmer instructions to complete the programming.

2. If you have two working keys:

- A. Insert the first working (programmed) key into the ignition and rotate to the ON_RUN position.
- B. Observe the Security indicator. It should be on as the key is rotated to the ON_RUN position, and extinguish after five seconds.
- C. Remove the first key and insert the second working (programmed) key.
- D. Observe the Security indicator. It should be on as the key is rotated to the ON_RUN position, and extinguish after five seconds.
- E. Within 60 seconds, remove the second working key and insert an un-programmed

duplicate transponder key. Rotate the key to the ON-RUN position.

F. After ten seconds, the Security indicator will extinguish. Wait three seconds, then turn the key to the OFF position. Start the vehicle to test the newly programmed key. The new key should be programmed.

Repeat the above procedure to add more keys.

This vehicle was a pleasure to service and should pose no special problems for the professional locksmith. If the sight-reading procedure is interesting to you, order a copy of *The Locksmith Guide to Advanced Wafer Lock Reading*. It will lead you to a more complete understanding of the art of reading wafer lock cylinders in most automotive and motorcycle locks. Wafer lock reading is a skill that requires practice. It is a valuable asset to the master locksmith.

"With the right tools and the right training, they're all easy." ☺



Robert Sieveking is an RL and ACE instructor. But he prefers the very simple title "locksmith." Formerly senior technical writer, technical editor and then

contributing editor of *The National Locksmith*, Robert has authored many instructional books in the locksmith industry. He is the author of "Fast Facts," the encyclopedic reference to auto and motorcycle key making. "Fast Facts" was named the Best New Product in Print by ALOA in 1998. He began locksmithing in 1974 and continues to operate a full-time licensed professional locksmith business in Rockford, IL. He has invented many tools for the locksmith trade and continues to manufacture tools and books under the trade name Sieveking Products Company. You can reach him at bob@sievekingprodco.com or (815) 985-5663.

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DISSECTING

A SUBARU

IGNITION LOCK

Andrew Taylor takes you through the process for the 2008-2014 generation.



Figure 1. The ignition is fully assembled and has the antenna ring attached.

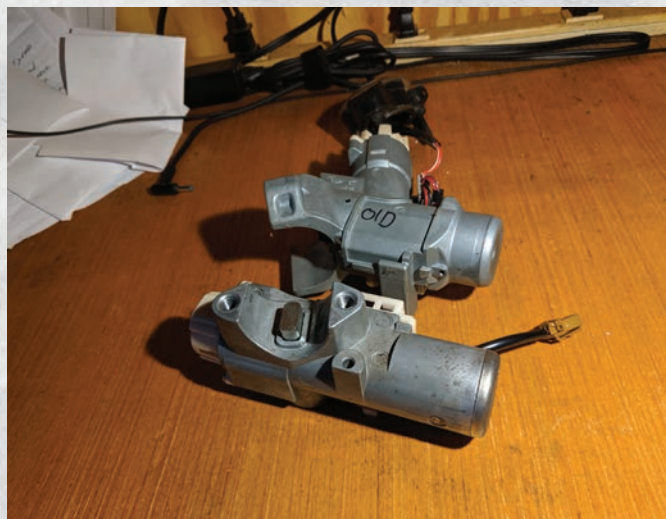


Figure 2. The ignition is shown with the Nissan cousin (bottom), with the relocated switch visible.



WHILE THE MANUFACTURING origins are easy to see as similar to previous designs,

there are a few changes on the 2008 to 2014 generation of Subarus as they step away from their cousins, the Nissans.

Rather than strapping straight across the column either above or below — with the switch directly across from the cylinder — this lock mounts only on the side, with the switch at a right angle toward the base of the column. This required a few extra parts to make work, with a differential-style gear and a different cam location to pull the steering wheel bolt back. But, while interesting, this doesn't concern us as locksmiths.

The cylinder is still held in the housing by a face cap, which is in turn held



Figure 3. One of the two roll pins holding the cylinder face cap is shown.



Figure 4. Drill next to the pins and pry them up so they can be reused for re-assembly.

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Figure 5. Pictured are the face cap and cylinders for the Subaru (left) and Nissan (right) once removed from the housing.



Figure 6. The author is working the tumblers with a pick to clear the ridge so the cylinder can slide out.



Figure 7. The four sizes of tumbler are marked to correspond to their needed depths.

“You’ll note the split tumblers bear a close resemblance to what Toyota used in the 1990s.”

by two pins. Drilling on an angle next to each pin allows you to pry them out and reuse them for reassembly. As with the previous version, popping off the buzzer is necessary to slide it out.

At this point, to get the plug out, if you have a working key, you can simply turn it a small amount and push in the retainer in the rear. If you don’t have a working key, you will have to reach in through the front or back to line each pair of tumblers with the shear line as you gently press from the rear. It would also help to have the right Lishi pick for this step. Once you have the plug out, you can then service or rekey.

You’ll note the split tumblers bear a close resemblance to what Toyota used in the 1990s — and not what Honda designed — so you won’t see quite as many failure issues since the key is also much narrower. Tumblers are well marked with 1 through 4, so rekeying is a simple matter at this point. ☺



Andrew Taylor, 57, has been locksmithing since 1983 and self employed since 1989. He originally apprenticed under Tom Sprouse in New Jersey and

is currently owner of Taylor Locksmith in Virginia Beach. He does commercial, residential and automotive work but prefers automotive for the variety.



A LOOK AT THE LISHI KW1 PICK DECODER

Wayne Winton reviews what he calls
a “game-changing” product.

THE RELEASE OF THE LISHI KW1 PICK DECODER TOOL IS JUST THE FIRST spark in what will soon be one of the biggest advancements in the commercial and residential locksmith industry, just as it completely changed the automotive segment. Now, I know what you’re likely saying: “It’s just a Kwikset, one of the easiest locks to pick in the world.”

My response to that is: Yes, it’s a tool designed for one of the easiest locks to pick, but this is just the beginning (see *Figures 1 and 2*). Schlage and other pin tumbler keyways have recently been released.

There are two things that set this pick apart from current picking tools. First is the ability to isolate and map out each pin precisely where you’re setting it (*Figure 3*). This eliminates the randomness of conventional lock picking to where you 100% know what you’re doing in the lock. The second is the ability to decide the exact cuts of the lock once picked. That means you do not need to disassemble the lock to make a key for it. Time is money! The first time I used this to pick the lock and make an additional key for the customer, it paid for itself. It’s all profit after that.

The Testing

I have spent extensive time and research testing and practicing with this tool in a variety of different locks and pins. They all had different tolerances, from precision-made GSM solid brass cylinders and Arrow to the sloppy Kwikset locks, both new and used (*Figure 4*).

I custom fit cutaway cylinders and loaded spool and security top pins to see how the pick handled them. It is a different feel, as the tension lever of the tool is fairly rigid and doesn’t flex well. It takes a bit of practice, and there is a different feel to picking security pins. But, once the technique was mastered, the tool quickly defeated them (*Figure 5*).

I must have picked 30-plus locks of all types and redesigned my cutaway several times from simple mild bitting to the maximum 616161 bitting to test the full range of the tool. It passed with flying colors. The flag on the arm that engages the pins was able to work with the maximum bitting with no problems and without interfering with other pins in the lock. The targeted pin is the only one that gets contacted, and after picking it, the tool decodes it as well with no issues. It is

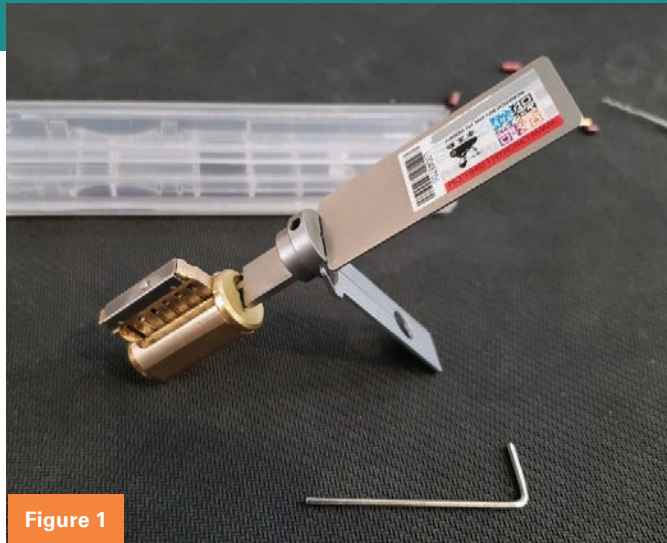


Figure 1



Figure 2

Figures 1 and 2. The Lishi KW1 pick decoder is one of the latest tools on the market.

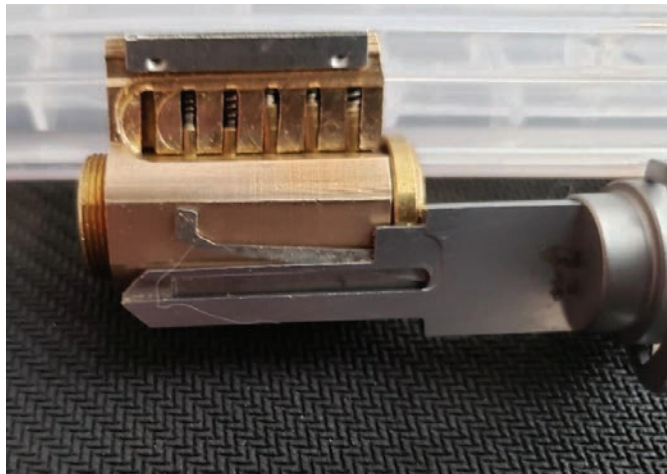


Figure 3. One aspect that sets this pick apart is the ability to isolate and map out each pin precisely.



Figure 4. The author tested the Lishi tool on a variety of different locks and pins, including GSM solid brass cylinders, Arrow and Kwikset locks, new and used.



Figure 5. The Lishi tool quickly defeated security pins.

easy to use and precise every time, even going one step further and adding spool and barrel pins to the 61616 bitting. The lock still picked effortlessly every time (Figure 6).

The really scary part was that I was able to put the lock and tool in my son's hands, with no previous knowledge on his part of how it worked. In two minutes, he could pick any lock on the table in just a few seconds. This tool practically takes the skill out of lock picking and makes the process as simple as mapping out X and Y on an axis grid that systematically places each pin in its position every time. That means anyone — and I mean *anyone* — can use this tool and, in minutes, become a proficient lock picker.

I have put together a 20-minute demonstration video to show the tool in action: youtu.be/Oyi0JVn1HYk.



Figure 6. The lock picked effortlessly, even with spool and barrel pins added to the 61616 bitting.

Q&A

I came up with this Q&A to address questions about the tool.

Q: Will it pick smart key locks?

A: Yes, but it's a completely different process and not always successful, unlike the pin tumbler locks (*Figure 7*).

Q: What about locks loaded with non-factory pins, such as half cuts?

A: I could not find a combination of pinning that I could not pick. If a half cut is loaded, the pick will read it, and you just cut it accordingly when you are making a key.

Q: Will it leave marks and signs of picking or forensic evidence in the lock?

A: Yet another scary factor to this tool: I picked a brand-new lock and could not see any evidence of entry or picking on the pins. I would say it's not impossible to detect, but with a lock in the field, I would say that determining, after the fact, if this tool was used would be extremely difficult and as close to impossible as you could get (*Figure 8*). ☹



Figure 7. The author says that the Lishi tool will pick smart key locks, but it's a different process from the pin tumbler locks and not always successful.



Figure 8. The author says that the Lishi tool doesn't leave easily detectable marks and signs of picking or forensic evidence.



Wayne Winton is the owner of Tri County Locksmith Service in Glenwood Springs, CO. He specializes in safe and vault work along with commercial door and panic hardware. He is dedicated to learning every day, putting his skills to the test and sharing information with other industry professionals through vetted video education at wayneslockshop.com. Check it out to see him in action.

Mullions and Other Strangers

Tony Wiersielis, CPL, CFDI, goes over the basics of mullions and lintels.

BY THE TIME YOU READ THIS, IT'LL BE PAST THE SEASON IN WHICH I spend a lot of time retrofitting schools during the daytime. Now, most of it's going to happen after hours with that certain joy of getting home at midnight, tempered by sleeping late.

This month, I'm going to show you how to deal with several types of mullions I've been running into lately at these schools. I'm not certain what brand these are, but, with the pictures, you'll be able to recognize them and get the cylinders out.

Because I try to write these articles for the newer people, I'm going to explain what a mullion is, for our purposes. I say that because if you look it up, they talk mostly about windows, where they are used to separate and sometimes support large openings. Later, I also want to go over what a lintel is, what it does and how it relates to the mullion.

Mullion Basics

A mullion, as it applies to us, is usually used in a double-door opening. This is a vertical post in the center of the opening (see *Figure 1*, red arrow), often made of the same material as the rest of the frame. Typically, you'll find an aluminum mullion with an aluminum frame, a steel mullion in a steel frame and so on, but I have installed steel mullions on aluminum frames. The circle in *Figure 1* is around the cylinder.

Mullions tend to be heavy and solidly built, as they have to be to withstand the stress. The type I've been installing for years is a rectangular steel tube that's made of $\frac{3}{16}$ " steel. It weighs about 30 pounds, and you wouldn't want it to crack you on your head.

Mullions can be fixed as part of the frame or removable. I haven't been seeing a lot of fixed mullions lately except on older buildings, at least where I am in the New York metropolitan area. We're going to focus on removable mullions in this article.

A mullion does several things. Primarily, this is where the strikes are located for rim-mounted panic devices. It also acts as a stop on the lock edge of both doors, adding rigidity to the opening and reducing the amount of air flowing through it.

If there were no mullion, you'd need two vertical rod panic devices to hold both doors closed, or at least one vertical rod device on the "inactive" door and possibly a mortise panic device on the "active" door.

One of the drawbacks of using two vertical rod devices is that there is usually a gap between the doors. This allows air-flow on outside doors and the possibility of something being inserted between them to depress one of the bars to gain entry. I bought one of these tools at a recent ALOA convention, and it works. With a mullion, there's still a gap, but the mullion is behind it and the doors overlap it. This means there's a lot less chance of entry without noticeable damage.

Vertical rod devices are also more tedious to install than rim devices, sometimes requiring a ladder and usually some lying on the floor. They also tend to be prone to rod damage from being hit by carts and hand trucks.

A huge plus for vertical rods is in the path of egress, especially hospital corridors where beds have to be moved and the opening needs to be wide and clear. A mullion would be in the way there.

You might be wondering why you'd want to remove a mullion. The reason is to allow large objects such as pallets to fit through the door opening. A mullion will divide a six-foot opening into two three-foot openings. Being able to temporarily remove the mullion gives you back that six-foot opening when you need it.

In the schools I've been working in, every pair of outside doors had a removable mullion. The thing is, most of the mullions had never been removed because there was no need to; only a few pairs of doors were used for deliveries all the time. But because the school districts wanted every cylinder replaced and Best cores installed, we had to do every single mullion.

This became a challenge when we had to take down some mullions that had never been removed before. They were pretty much stuck in place. It took two of us to take them down: One guy turned the key to release the latch and keep the mullion from falling while the other guy smacked it



Figure 1. The circle is around the cylinder, and the red arrow points to the mullion.

repeatedly with a dead-blow hammer to get it loose. I'll go into that a little more later.

Lintels

So, why would the mullion be so difficult to remove? To explain that, let me tell you what a lintel is. A lintel is a structural horizontal, load-bearing support used to span an opening in a wall. It can also be part of "post and lintel" construction, something the ancients liked to use. Stonehenge is a perfect example.

For what we're doing, lintels are used over doors, windows and large openings such as garage doors. These openings are weak points in a building's structure. They can be made of timber, steel or concrete. The critical point with this is that a lintel bears the weight of the wall above the opening. *Figures 2-4* show examples of timber, steel and concrete/stone lintels.

You're probably not going to be installing lintels in your locksmith career unless you're also doing construction or carpentry or were doing it before you switched trades. You may see them from time to time, though. You sometimes see them on garage doors and above windows on older brick buildings.

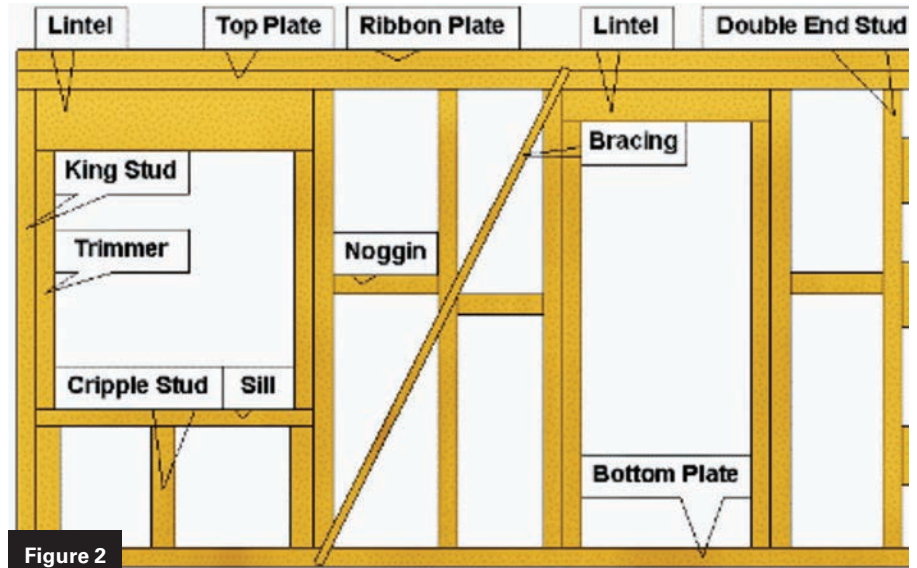


Figure 2



Figure 3



Figure 4

Figures 2-4. These images show examples of timber, steel and concrete/stone lintels.



Figure 5. The Stanley 55-122 30" Forcible Entry Tool is often carried by firefighters and can be useful in many situations.



Figure 6. The mullion held the cylinder in with a set screw.

I'm explaining this to you so you know they exist and what they do. When I told you earlier about having to use a dead-blow hammer to get one out, there's a good possibility that there was a settling or shift in the building over time, and the lintel dropped down slightly. This would transfer more weight into the top of the frame and then to the mullion.

Here's a bit of advice: Whether you work with mullions or not, get yourself a soft-head dead-blow hammer and a three-pound sledge to keep in your truck. Keep some cold chisels, pry bars and a crowbar on hand as well. You may not use these tools a lot, but when you need them, nothing else will do.

Figure 5 shows a Stanley 55-122 30" Forcible Entry Tool that's carried by firefighters in certain parts of the country. This is something you hope you'll never need, but I know I've been close to using it a few times. You might want to consider buying one.

Removing the Mullions

Just about all of the mullions I've worked with over the years operated in a similar way. There's a mounting plate on the floor or threshold and another one on the header. You place the bottom of the mullion into the floor plate at a slight angle. Then push the top of the mullion until it slides in and catches in the top plate.

Most mullions have some type of latch mechanism at the top of the tube; that's what "catches" against a projection within the top plate. There are a few key things to remember when putting them back in. One is to make sure it's all the way in with the doors open. Pull on it and make absolutely sure the latch caught; the last thing you need is one of these falling on a kid. Pulling on the mullion with the doors closed and the panic bar strikes engaged could make you think the mullion is secure when it might not be.

The second key thing to remember is



Figure 7. This images shows the cylinder slightly turned but unable to go any further. The red arrow points to the latch.



Figure 8. The author is depressing the latch with his finger while turning out the cylinder.

to realize that if you had to smack the mullion with a dead-blow hammer to get it out, you mostly likely are going to need to smack it to get it back in. The dicey part about this is that it's possible for the frame to drop a little more when you pull out the mullion, and then you'd have a tough time getting it back in.

Figure 6 shows a mullion that held the cylinder in with a set screw. This one was apparently repaired, as normally there would be a shorter screw under a pan-head high security screw so nobody could tamper with the set screw or the cylinder.

Figure 7 shows the cylinder slightly turned but unable to go any further. The red arrow points to the latch, which is fully extended. In Figure 8, I'm depressing the latch with my finger while I turn out the cylinder. I had to do this because the carriage that pulls the latch in interferes with cylinder removal.

Figure 9 shows a similar mullion with a different way of holding the cylinder in place. Before I go on, notice the three screws on the front of the mullion. These



Figure 9. This mullion has a different way of holding the cylinder in place.



Figure 10. The screw doesn't touch the cylinder. Instead, it forces a lever with a hooked end into the groove on the side of the cylinder.

hold the latch mechanism in place. If you remove the cylinder and loosen these screws, the whole thing slides out the top of the mullion.

Figure 10 shows the screw that tightens the cylinder in place in a unique way; the screw doesn't touch the cylinder. Instead, it forces a lever with a hooked end into the groove on the side of the cylinder. This is the same groove a set screw would bite into on a standard mortise lock cylinder. As the screw in *Figure 10* screws in, the circled hooked end in *Figure 11* pivots into the groove.

Once you've done whatever you're doing with the cylinder, it's a matter of seating the mullion into the bottom bracket, tilting it up and pushing the top into the top bracket, making sure the latch catches and holds. 🔒



Tony Wiersielis, CPL, CFDI, has more than 30 years of experience and has worked in most phases of the trade throughout the New York metropolitan area. He was named *Keynotes* Author of the Year for 2016.

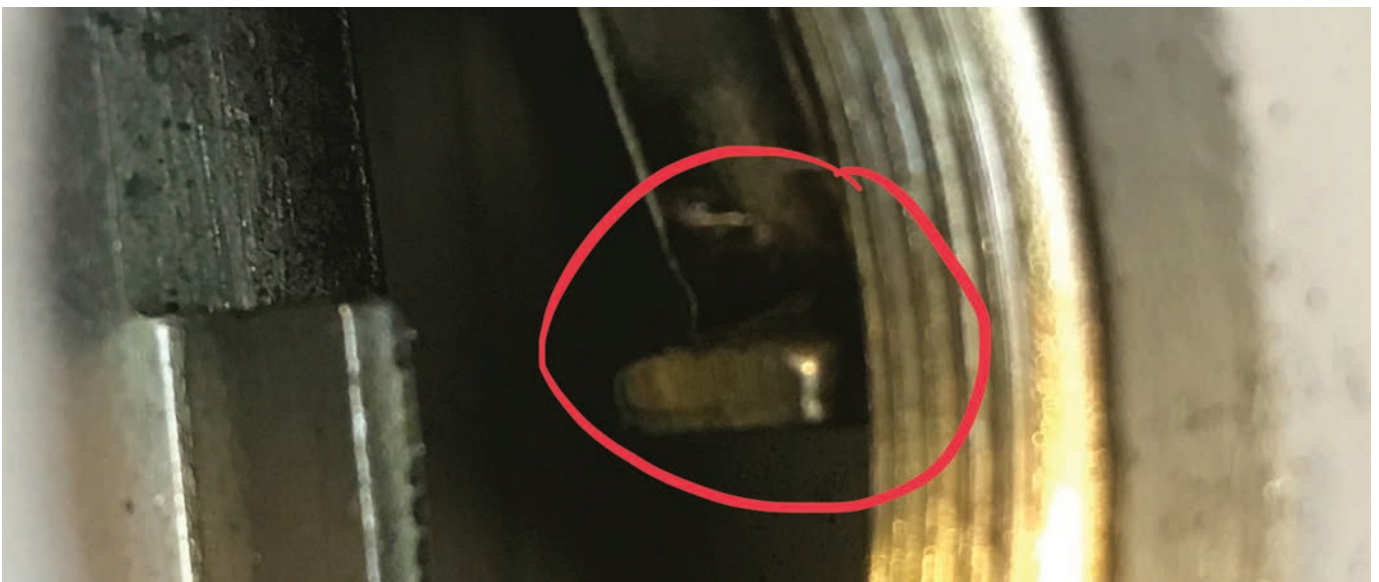


Figure 11. As the screw in *Figure 10* screws in, the circled hooked end pivots into the groove.



ALOA

ALOA Security Professionals Association, Inc.

Membership Application

CANDIDATE PLEASE TYPE OR PRINT

Name: ☐ Mr. ☐ Mrs. ☐ Ms. First _____ Last _____ MI _____ Designation _____

Business Name _____

Mailing Address _____

City _____ State _____ Zip Code _____ Country _____

Work Phone _____ Home Phone _____ Fax _____

Email Address _____ Website _____

Date of Birth (required) _____ Place of Birth _____ Social Security # (required) _____

US Citizen? ☐ Yes ☐ No If No, citizen of what country? _____

ALOA occasionally makes its members' addresses (excluding phone numbers and email addresses) available to vendors who provide products and services to the industry. If you prefer not to be included in these lists, please check here: ☐

PROFESSIONAL INFORMATION

Please check the description that best describes you (check all that apply)

- | | | |
|--|--|---|
| <input type="checkbox"/> Locksmith Owner | <input type="checkbox"/> Automotive | <input type="checkbox"/> Employee Technician |
| <input type="checkbox"/> Electronic Security | <input type="checkbox"/> Security Professional | <input type="checkbox"/> Mechanical Door Locks & Hardware |
| <input type="checkbox"/> Institutional | <input type="checkbox"/> Safes | <input type="checkbox"/> Investigative |
| <input type="checkbox"/> Other _____ | | |

Are you licensed to perform Locksmith/Access Control work in your state? ☐ Yes ☐ No If Yes, License # _____

Business License # _____ EIN # _____

Any other license held by applicant (Contractors Lic., Low Voltage) _____

Any other states you do business in and licenses held in those states _____

List all phone numbers used by your company/companies: _____

Number of Employees _____ ☐ Store Front Business ☐ Mobile Only

How did you learn locksmithing/access control? _____

How long have you worked in the locksmithing/security industry? _____

ALOA member Sponsor Name/Who introduced you to ALOA?

Sponsor Name (Required) _____ ALOA Number _____ Years known _____

Have you ever been a member of ALOA before? ☐ Yes ☐ No If Yes, when? _____ ID #, if known _____

Are you a member of any local locksmith association? ☐ Yes ☐ No If Yes, name of association: _____

Give the names and phone numbers of two industry-related references:

Name _____ Company _____ Phone Number _____

Name _____ Company _____ Phone Number _____

IMPORTANT: Have you ever been convicted of a felony? ☐ Yes ☐ No If yes, please give details on a separate sheet.

All convictions are reported to the Advisory Committee for review.

A routine background check is performed on all new applicants, unless you live in a State in which passing a background check is a part of the licensing requirements. Non-US citizen background checks are required. If you live in a country that does not allow third party background checks, you will be required to submit an authentic report upon request (no copies/duplicates allowed) before final membership approval can be granted. A copy of your business permit/license, license number, business card, company letterhead or suitable proof of employment in the locksmith/access control business must accompany application.

TYPES OF MEMBERSHIP AND REQUIREMENTS

Check only one box from the categories listed below:

Active Membership

Persons actively engaged in the locksmith/access control industry for a minimum of two years and have achieved one of ALOA's recognized program designations.

- | | | | |
|--|-------|--|-------|
| <input type="checkbox"/> US and US Territories | \$250 | <input type="checkbox"/> I elect to Go Green | \$225 |
| <input type="checkbox"/> International | \$265 | <input type="checkbox"/> I elect to Go Green | \$195 |

International Association of Investigative Locksmiths Membership

Must be an ALOA Member in order to join the IAIL.

- | | |
|--|------|
| <input type="checkbox"/> US and US Territories | \$50 |
|--|------|

Probationary Membership

Persons undergoing training to qualify as an Active member, who have not received one of ALOA's recognized program designations. No person shall be a probationary member for more than three years.

- | | | | |
|--|-------|--|-------|
| <input type="checkbox"/> US and US Territories | \$250 | <input type="checkbox"/> I elect to Go Green | \$225 |
| <input type="checkbox"/> International | \$265 | <input type="checkbox"/> I elect to Go Green | \$195 |

Probationary Membership – No Sponsorship Required

Persons undergoing training that are new to the industry and do not know any Active member for sponsorship. Probationary period extended from 90 days to one (1) year. Probationary status lifted if sponsor acquired within year. Must obtain license if residing in State requiring licensure. A second background check will be performed by ALOA after 2 years of the 3 year maximum term. Any violation of ALOA Code of Ethics during probationary period will result in immediate termination of membership.

- | | | | |
|--|-------|--|-------|
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| <input type="checkbox"/> International | \$265 | <input type="checkbox"/> I elect to Go Green | \$195 |

Allied Membership

Persons whose position in the locksmith/access control industry relates to locksmiths, and cannot qualify for any other class of membership.

- | | | | |
|--|-------|--|-------|
| <input type="checkbox"/> US and US Territories | \$250 | <input type="checkbox"/> I elect to Go Green | \$225 |
| <input type="checkbox"/> International | \$265 | <input type="checkbox"/> I elect to Go Green | \$195 |

Note: Your application will be processed with a 90 day waiting period.

Any institutional locksmith not using his/her work address must submit a letter from employer stating that you are an institutional locksmith.

DUES AND FEES

An application fee and the appropriate dues must accompany the application in order for processing to begin.

Application Fees Schedule:

US and US Territories	\$70
Canada, Denmark, Ecuador, New Zealand	\$160
Australia, Bahamas, Barbados, Belgium, Belize, Bermuda, China, France, Haiti, Philippines, UK	\$210
Israel, Korea, Papua New Guinea, Saudi Arabia, United Arab Emirates	\$360

Applicants from countries not listed must submit background check and report from local Law Enforcement with application.

FINAL CHECKLIST

- | | |
|---|-------|
| <input type="checkbox"/> Required Proof of Employment in Industry | _____ |
| <input type="checkbox"/> Annual Dues Amount | _____ |
| <input type="checkbox"/> Application Fee | _____ |
| Total Amount Due | _____ |

METHOD OF PAYMENT

- ☐ Check ☐ MasterCard ☐ Visa ☐ American Express ☐ Discover

Card Number _____ Expiration Date _____ SEC _____

Print Name on Card _____

Signature _____ Date _____

I understand and consent that in the course of reviewing this application ALOA may review publically available information for the purpose of verifying the information submitted and do a background check.

I certify that all statements are true and, if accepted as a member, I agree to abide by the rules, regulations, and Bylaws of ALOA, and further agree to adopt the Code of Ethics of ALOA as my own, and adhere to it to the best of my ability. Should my membership be discontinued, I agree to return my membership card and cease use of all ALOA insignia.

Signature _____ Date Signed _____

Dues, Contributions, Gifts are not deductible as charitable contributions for Federal income tax purposes. Dues payments are deductible as an ordinary and necessary business expense. However, donations made to the Legislative Action Network ARE NOT deductible as a charitable gift or business expense.

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3500 Easy Street, Dallas, TX 75247		Mary A. May
8. Complete Mailing Address of Headquarters or General Business Office of Publisher (Not printer)		Telephone (include area code)
		214-819-9753

9. Full Names and Complete Mailing Addresses of Publisher, Editor, and Managing Editor (Do not leave blank)

Publisher (Name and complete mailing address)

ALOHA Security Professionals Association, Inc., 3500 Easy Street, Dallas TX 75247

Editor (Name and complete mailing address)

Mary A. May, ALOHA Security Professionals Association, Inc., 3500 Easy Street, Dallas TX 75247

Managing Editor (Name and complete mailing address)

Same

10. Owner (Do not leave blank. If the publication is owned by a corporation, give the name and address of the corporation immediately followed by the names and addresses of all stockholders owning or holding 1 percent or more of the total amount of stock. If not owned by a corporation, give the names and addresses of the individual owners. If owned by a partnership or other unincorporated firm, give its name and address as well as those of each individual owner. If the publication is published by a nonprofit organization, give its name and address.)

Full Name	Complete Mailing Address
ALOHA Security Professionals Association, Inc.	3500 Easy Street, Dallas TX 75247

11. Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or Other Securities. If none, check box ☒ None

Full Name	Complete Mailing Address

12. Tax Status (For completion by nonprofit organizations authorized to mail at nonprofit rates) (Check one)

The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes:

☒ Has Not Changed During Preceding 12 Months

☐ Has Changed During Preceding 12 Months (Publisher must submit explanation of change with this statement)

PS Form 3526, July 2014 (Page 1 of 4) (see instructions page 4) PSN 7530-01-000-9931 PRIVACY NOTICE: See our privacy policy on www.usps.com

13. Publication Title		14. Issue Date for Circulation Data Below	
Keynotes		October 2019	
15. Extent and Nature of Circulation		Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Total Number of Copies (Net press run)		3361	3476
b. Paid Circulation (By Mail and Outside the Mail)			
(1)	Mailed Outside-County Paid Subscriptions Stated on PS Form 3541 (include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)	2784	2946
(2)	Mailed In-County Paid Subscriptions Stated on PS Form 3541 (include paid distribution above nominal rate, advertiser's proof copies, and exchange copies)	0	0
(3)	Paid Distribution Outside the Mails Including Sales Through Dealers and Carriers, Street Vendors, Counter Sales, and Other Paid Distribution Outside USPS®	220	223
(4)	Paid Distribution by Other Classes of Mail Through the USPS (e.g., First-Class Mail®)	0	0
c. Total Paid Distribution (Sum of 15b (1), (2), (3), and (4))		3004	3169
d. Free or Nominal Rate Distribution (By Mail and Outside the Mail)			
(1)	Free or Nominal Rate Outside-County Copies included on PS Form 3541	0	0
(2)	Free or Nominal Rate In-County Copies included on PS Form 3541	0	0
(3)	Free or Nominal Rate Copies Mailed at Other Classes Through the USPS (e.g., First-Class Mail®)	0	0
(4)	Free or Nominal Rate Distribution Outside the Mail (Carriers or other means)	0	0
e. Total Free or Nominal Rate Distribution (Sum of 15d (1), (2), (3), and (4))		0	0
f. Total Distribution (Sum of 15c and 15e)		3004	3169
g. Copies not Distributed (See Instructions to Publishers #4 (page R3))		357	307
h. Total (Sum of 15f and g)		3361	3476
i. Percent Paid (15c divided by 15f times 100)		100	100

* If you are claiming electronic copies, go to line 16 on page 3. If you are not claiming electronic copies, skip to line 17 on page 3.

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16. Electronic Copy Circulation	Average No. Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest to Filing Date
a. Paid Electronic Copies	1425	1360
b. Total Paid Print Copies (Line 15c) + Paid Electronic Copies (Line 16a)	4429	4529
c. Total Print Distribution (Line 15f) + Paid Electronic Copies (Line 16a)	4429	4529
d. Percent Paid (Both Print & Electronic Copies) (16b divided by 16c x 100)	100	100

☒ I certify that 95% of all my distributed copies (electronic and print) are paid above a nominal price.

17. Publication of Statement of Ownership

☒ If the publication is a general publication, publication of this statement is required. Will be printed in the _____ November 2019 _____ issue of this publication.

☐ Publication not required.

18. Signature and Title of Editor, Publisher, Business Manager, or Owner

Mario Medina, Creative Director

Date

9/26/2019

I certify that all information furnished on this form is true and complete. I understand that anyone who furnishes false or misleading information on this form or who omits material or information requested on the form may be subject to criminal sanctions (including fines and imprisonment) and/or civil sanctions (including civil penalties).

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Classified Advertising Policy

Classified advertising space is provided free of charge to ALOA members and for a fee of \$3 per word with a \$100 minimum for nonmembers. Classified ads may be used to advertise used merchandise and overstocked items for sale, "wanted to buy" items, business opportunities, employment opportunities/positions wanted and the like. Members or nonmembers wishing to advertise services or new merchandise for sale may purchase a "Commercial Classified Ad" for a fee of \$4 per word with a minimum of \$100.

Each ad will run for three consecutive issues. For blind boxes, there is a \$10 charge for members and nonmembers. All ads must be submitted in a word document format and emails to adsales@aloha.org by the 15th of the month two months prior to issue date. ALOA reserves the right to refuse any classified advertisement that it deems inappropriate according to the stated purpose of the classified advertising section.

Advertiser	Ad Location	Website	Phone Number
Able Locksmiths	page 33	www.ablelocksmiths.com	(203) 882-0600
ASSA ABLOY	page 11	www.abloyusa.com	(800) 367-4598
ASSA-Ruko/Technical Services	page 33	www.assatechnicalservicesinc.com	(724) 969-2595
Autel	page 43	www.autel.com	(855) 288-3587
Big Red	page 33	www.bigredsafelocks.com	(877) 423-8073
Bullseye S.D. Locks	page 33	www.bullseyesdlocks.com	(800) 364-4899
ClearStar Security Network	page 60	www.clearstar.com	(360) 379-2494
Framon	page 45	www.framon.com	(989) 354-5623
Hollon Safe	page 7	www.hollonsafe.com	(888) 455-2337
Jet Hardware Mfg. Co.	back cover	www.jetkeys.com	(718) 257-9600
John Koons Locksmiths	page 60	www.koonslocksmiths.com	(800) 282-8458
Lockey USA Inc.	page 29	www.lockeyusa.com	
Lockmasters	page 1	www.lockmasters.com	(800) 654-0637
PDQ	inside back cover	www.pdqsmart.com/stp	
Security Lock Distributors	inside front cover, pages 25, 33	www.seclock.com	(800) 847-5625
Southern Lock & Supply Co.	page 41	www.southernlock.com	(727) 541-5536
Transponder Island	page 13	www.transponderisland.com	(866) 757-7778
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