Associated Locksmiths of America (ALOA) Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What are the top pins in an Assa 6000 lock referred to as?

A. Driver pins

B. Spool drivers

C. Spring pins

D. Warded pins

2. What differentiates A2, A3, and A4 IC core systems?

A. The type of lock used

B. Pin size configurations

C. The locking mechanism

D. The material of the core

3. How can one determine the correct wire size for an electric strike system?

A. By guessing based on visible appearance

B. By obtaining the wire size factor, multiplying by the distance in feet

C. By using the largest wire gauge available

D. By consulting an electrician for advice

4. What is the finish of the US9 designation in the locksmith standards?

A. Polished brass

B. Polished bronze

C. Satin chrome

D. Flat black

5. Which of the following tumbler variations is NOT typically found in automotive locks?

A. Wafer

B. Pin

C. Disc

D. Side Bar Wafer

6. What type of cutter is used for cutting flat keys?

A. Filing cutter

B. Slotter cutter

C. Milling cutter

D. Side milling slotter

7. What should you do if you get distracted while changing the combination on a standard group 2, 3 wheel lock?

A. Just continue dialing to finish the process

B. Remove the change key and manually align the wheels

C. Leave it for later

D. Contact a professional

8. When using a flexible cable from the hinge side of a door, what is it typically used for?

A. Locking the door for safety

B. Connecting control loop wiring to locks

C. Providing a power source to the hinges

D. Reinforcing the door structure

9. Which finish category would you expect to have the highest level of shine?

A. Brass

B. Aged Bronze

C. Sprayed Dark Bronze

D. Sprayed Aluminum

10. Which of the following is a common keying rule for Ford automobiles?

A. MACS of 3

B. Last 3 digits of the code must be the same

C. First 3 digits of the code cannot be identical

D. Only two different cuts can be used

Answers

1. A
2. B
3. B
4. B
5. C
6. B
7. B
8. B
9. A
10. C

Explanations

1. What are the top pins in an Assa 6000 lock referred to as?

A. Driver pins

B. Spool drivers

C. Spring pins

D. Warded pins

In an Assa 6000 lock, the top pins are referred to as spool drivers. These pins are designed in a specific way to enhance the security of the lock. Spool drivers feature a narrowed center section that creates a false set when they are improperly aligned during the picking process. This characteristic makes them effective in deterring lock picking, as they can be more challenging to set properly compared to standard driver pins. The presence of spool drivers adds an additional layer of complexity to the lock mechanism, making it more resistant to unauthorized entry. Driver pins in general do not have this specific shape and functionality, while spring pins and warded pins serve different purposes in locking mechanisms. Spring pins, for instance, are typically part of the action mechanism that allows the pins to reset after being manipulated. Warded pins are used in older, simpler lock designs and are not found in modern, high-security locks like the Assa 6000. Understanding the role of spool drivers within the context of lock design is crucial for anyone preparing for the locksmith test.

2. What differentiates A2, A3, and A4 IC core systems?

A. The type of lock used

B. Pin size configurations

C. The locking mechanism

D. The material of the core

The correct choice highlights that pin size configurations are indeed a key differentiator among A2, A3, and A4 interchangeable core (IC) systems. Each of these systems utilizes specific pin sizes and arrangements that relate to varying security features and operational requirements. The A2 system typically employs shorter pins, while the A3 and A4 systems use longer pins and different configurations to enhance security and provide distinct key options. This variation in pin sizes affects how keys engage with the locking mechanism and ultimately contributes to the overall security features of each core system. Understanding these configurations is crucial for locksmiths who must service or install these systems, as the compatibility of keys and cores directly depends on these pin arrangements. This distinction aids locksmiths in selecting the appropriate core for specific applications or security needs, making it a fundamental aspect of interchangeable core systems.

3. How can one determine the correct wire size for an electric strike system?

A. By guessing based on visible appearance

B. By obtaining the wire size factor, multiplying by the distance in feet

C. By using the largest wire gauge available

D. By consulting an electrician for advice

Determining the correct wire size for an electric strike system is essential for ensuring optimal performance and safety. The correct approach involves understanding the electrical characteristics of the system, including the voltage drop over the distance the wire must run. Obtaining the wire size factor and multiplying it by the distance in feet is a systematic method that allows for calculating the appropriate wire gauge needed, based on the current load and distance from the power source to the device. This calculation takes into account the wire's resistance and helps to minimize voltage drop, which can adversely affect the system's functionality. Additionally, using a systematic method rather than relying on visible appearance, guessing, or simply choosing the largest wire gauge is crucial. The largest gauge may not be appropriate for the specific current requirement and may lead to unnecessary costs. Consulting an electrician is also a valid approach, but the self-calculation empowers the technician with a better understanding of the requirements for future installations.

4. What is the finish of the US9 designation in the locksmith standards?

A. Polished brass

B. Polished bronze

C. Satin chrome

D. Flat black

The US9 designation in locksmith standards refers specifically to a finish that is recognized as polished bronze. This finish is characterized by its shiny, reflective surface that enhances the aesthetic appeal of door hardware and locksets. The polished bronze finish is commonly used in decorative applications and is known for its durability and resistance to tarnishing over time. In contrast, the other options represent different finishes that have their own unique appearances and applications. Polished brass, for instance, has a yellowish hue and is often used in more traditional settings. Satin chrome presents a more modern look with a muted, brushed finish, while flat black is used primarily for a contemporary or industrial aesthetic. Understanding these designations and their corresponding finishes helps locksmiths and tradespeople choose the right hardware for specific applications based on both functional and decorative needs.

5. Which of the following tumbler variations is NOT typically found in automotive locks?

A. Wafer

B. Pin

C. Disc

D. Side Bar Wafer

The correct choice is the disc tumbler variation. Automotive locks predominantly utilize pin tumblers and wafer tumblers due to their effectiveness in providing security and ease of manufacturing. Pin tumblers are commonly found in various locks and provide a secure and reliable mechanism through the use of pins that must be aligned at a specific height for the lock to turn. Wafer tumblers are also frequently used in automotive locks because they work well in compact spaces and are straightforward in design, allowing for quick and cost-effective production. This technique provides a level of security suitable for vehicle applications where durability and functionality are essential. On the other hand, disc tumblers are primarily used in other types of locking mechanisms, such as some high-security locks or safes, rather than in typical automotive applications. Though they offer certain advantages like resistance against picking, they are not the standard choice for vehicles, which tend to favor pin and wafer designs for their balance of security, reliability, and ease of use. Side bar wafers are a more specialized component often integrated into advanced locking systems. While they might be found in some automotive locks embellished with additional security features, they do not typically represent the main tumbler types used across the industry. Thus, disc tumblers stand out as the variation least

6. What type of cutter is used for cutting flat keys?

A. Filing cutter

B. Slotter cutter

C. Milling cutter

D. Side milling slotter

The correct choice for cutting flat keys is the slotter cutter. This type of cutter is specifically designed to create the grooves and slots necessary for flat key profiles. The slotter cutter features a thin blade that allows for precise cuts, which is essential when producing the notches required by the key's design. Flat keys typically have one or more slots that need to be expertly machined to ensure they fit into the corresponding lock mechanism. The slotter cutter excels in achieving these detailed patterns with accuracy, making it the ideal tool for this application. In contrast, the other options are less suited for flat key cutting. A filing cutter is generally used for finishing and smoothing surfaces quickly, rather than creating defined cuts or slots. A milling cutter, while versatile, is primarily used for cutting and shaping solid materials and might not be optimal for the specific task of making flat key cuts. The side milling slotter, which is designed for different milling operations, may not provide the precision needed for the unique profiles of flat keys either. Thus, for cutting flat keys effectively, the slotter cutter stands out as the most appropriate tool.

7. What should you do if you get distracted while changing the combination on a standard group 2, 3 wheel lock?

A. Just continue dialing to finish the process

B. Remove the change key and manually align the wheels

C. Leave it for later

D. Contact a professional

When changing the combination on a standard group 2, 3 wheel lock, if you get distracted, the most appropriate action is to remove the change key and manually align the wheels. This method ensures that you maintain control over the internal mechanisms of the lock, thus preventing any potential mistakes that could arise from simply continuing the process without focus. Aligning the wheels manually allows you to reset the process at a known point, making it easier to avoid an incorrect combination or misalignment that could lock you out or create complications in the lock's functionality. By taking this deliberate step, you assert better control over the process and ensure accuracy, which is vital for the security and effectiveness of the lock. The other options, such as continuing to dial or leaving it for later, might lead to errors or complications that can compromise the combination change. Contacting a professional, while a safe option, is often unnecessary for simple distractions. The best practice is to ensure the lock is returned to a state of readiness before moving forward with the combination change.

8. When using a flexible cable from the hinge side of a door, what is it typically used for?

A. Locking the door for safety

B. Connecting control loop wiring to locks

C. Providing a power source to the hinges

D. Reinforcing the door structure

The use of a flexible cable from the hinge side of a door is predominantly for connecting control loop wiring to locks. This is crucial in systems like electronic locks or access control systems, where wires need to run from the door frame to the locking mechanism in the door. The flexibility of the cable allows for smooth operation as the door opens and closes, ensuring that the connections do not break and that the locking mechanism functions reliably. This arrangement is essential in maintaining the integrity of the control loop, which is often used for monitoring the status of the door, triggering alarms, or operating electronic access devices. The cable must be capable of accommodating the movement of the door without compromising functionality or safety, making its role vital in the overall operation of electronic locking systems.

9. Which finish category would you expect to have the highest level of shine?

A. Brass

B. Aged Bronze

C. Sprayed Dark Bronze

D. Sprayed Aluminum

The finish category with the highest level of shine is typically brass. This is because brass, particularly when polished, has a bright, reflective surface that can produce a high luster. The inherent properties of brass allow it to achieve a shine that is both visually striking and characteristic of the metal itself. In contrast, the other finishes listed, such as aged bronze, have a more muted and darker appearance due to the patina developed over time, which does not reflect light as effectively as polished brass. Sprayed finishes like dark bronze and aluminum may offer a smoother appearance, but they generally do not possess the same level of brilliance and reflective quality as a polished brass finish. Thus, for those seeking a high shine, brass remains the superior choice.

10. Which of the following is a common keying rule for Ford automobiles?

A. MACS of 3

B. Last 3 digits of the code must be the same

C. First 3 digits of the code cannot be identical

D. Only two different cuts can be used

The common keying rule for Ford automobiles is that the first three digits of the code cannot be identical. This guideline helps in ensuring that the keys have sufficient variation to differentiate between different vehicles, which enhances security and reduces the chances of unauthorized duplication. By preventing the use of identical numbers in the initial segment of the key code, Ford maintains a systematic approach to key design, allowing locksmiths and technicians to create keys that are less likely to be confused or mistakenly used for the wrong vehicle. The keying system is essential for the proper functioning of locks and keys, ensuring that each car has a unique key while following specific patterns for organization and simplicity in manufacturing. In this particular case, the rule serves to provide a distinct identification for each key, improving the safety and integrity of the lock systems in Ford vehicles.