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

Study Guide

Everything you need from our exam experts!

Questions

1. What key type is designated as DE6?

A. Schlage

B. Ilco

C. Dexter

D. Weslock

2. What is the required height of the pin stack in an IC Cylinder?

A. 23

B. 25

C. 30

D. 20

3. What defines an operating shearline in a lock?

A. Shearline created by using only bottom pins

B. Shearline where the plug rotates in the sleeve, created by CK and bottom pins, created by MK and master pins

C. Shearline that is static and not affected by the key

D. The point where the key makes contact with the cylinder

4. Which of the following key types features a cylindrical shape?

A. Flat key

B. Tubular key

C. Dimple key

D. Barrel key

5. What key designation is called SE1?

A. Weiser

B. Segal

C. Arrow

D. Dexter

6. Which of the following is not a BHMA finish listed?

A. Sprayed Aluminum

B. Sprayed Gold

C. Aged Bronze

D. Sprayed Dark Bronze

7. What type of finish would typically be chosen for high-traffic areas due to its durability?

A. Aged Bronze

B. Sprayed Dark Bronze

C. Brass

D. Sprayed Aluminum

8. What precaution should be taken when checking resistance in a loop?

A. Ensure all devices are powered on

B. Check connections for loose wires

C. Shut off the power before measuring

D. Adjust the settings on the controller

9. How many different cuts are required at minimum for keying Ford automobiles?

A. 2 different cuts

B. 3 different cuts

C. 4 different cuts

D. At least 5 different cuts

10. What type of resistance measurement does an alarm technician perform on alarm loops?

A. Current resistance measurement

B. Voltage resistance measurement

C. Signal resistance measurement

D. Standard resistance measurement

Answers

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

Explanations

1. What key type is designated as DE6?

A. Schlage

B. Ilco

C. Dexter

D. Weslock

The designation DE6 refers specifically to a key type that belongs to the Dexter brand. Dexter has its own unique keyway specifications and profiles that differentiate it from other manufacturers. Key designations like DE6 are typically utilized to indicate both the specific cuts and the blank type that should be used for creating keys for compatible locks. By understanding this type designation, locksmiths can effectively identify the correct key for a given lock, ensuring they provide the right service to their clients. In contrast, brands like Schlage, Ilco, and Weslock have their own distinct key profiles and designations. Each brand employs different manufacturing standards and specifications for their locks and keys, which is why understanding these designations is crucial for accurately categorizing and working with various key types in the locksmithing field.

2. What is the required height of the pin stack in an IC Cylinder?

A. 23

B. 25

C. 30

D. 20

The required height of the pin stack in an IC (Interchangeable Core) cylinder is critical for ensuring the proper operation of the locking mechanism. The correct height of 23, when measured in thousandths of an inch, is standardized to accommodate the varying lengths of pins that can be used within the cylinder. This height ensures there is adequate space for all pins to function effectively, allowing for smooth operation of the lock and compatibility with the keying system. When the pin stack is set to this specified dimension, it allows for the most efficient engagement of the key with the pins, facilitating the smooth pulling of the core from the cylinder when the correct key is inserted. Any deviation from this required height can lead to malfunctions, such as the inability to turn the key or the core sticking, which can compromise security. The other height measurements listed do not align with industry standards for IC cylinders, leading to potential operational issues within the locking mechanism.

3. What defines an operating shearline in a lock?

A. Shearline created by using only bottom pins

B. Shearline where the plug rotates in the sleeve, created by CK and bottom pins, created by MK and master pins

C. Shearline that is static and not affected by the key

D. The point where the key makes contact with the cylinder

The concept of an operating shearline is crucial in understanding how locks function, particularly in pin tumbler locks. The operating shearline is defined as the exact position where the plug can rotate freely within the lock body, allowing the mechanism to function as designed. In the context provided, the correct definition involves the interaction of the plug with both bottom pins and master pins, which is characteristic of a master keying system. This shearline is created when the bottom pins are set to the correct heights as dictated by the key, and the use of master pins enables additional keys to access the same lock while maintaining the primary operation of the lock. Thus, the plug rotates in the sleeve without obstruction at this shearline due to the alignment of the pins, facilitated by the inclusion of both key types. This definition emphasizes the importance of both the standard and master keying processes in creating an operating shearline, making it a dynamic part of the locking mechanism rather than a static feature.

4. Which of the following key types features a cylindrical shape?

A. Flat key

B. Tubular key

C. Dimple key

D. Barrel key

The correct answer is tubular key, as this type of key is designed with a cylindrical shape that allows it to fit into a matching tubular lock. Tubular keys have a round cross-section and generally feature a series of small notches cut into the outer circumference, which interact with corresponding pins in the lock. This design offers a unique mechanism that enhances the security and resistance against picking compared to traditional flat keys. In contrast, flat keys are typically characterized by their flat, rectangular form with grooves along one edge, and dimple keys feature a flat shape with indentations or 'dimples' that interact with specialized locks. Barrel keys, while sometimes used in a cylindrical context, do not maintain the same standardized cylindrical shape as tubular keys and are generally associated with a different locking mechanism and design approach.

5. What key designation is called SE1?

A. Weiser

B. Segal

C. Arrow

D. Dexter

The key designation SE1 refers specifically to Segal keys. Segal is a prominent manufacturer of lock products, and the SE1 key is well-known in the locksmithing industry. Recognizing key designations is essential for locksmiths as it helps in identifying the appropriate keys and locks for various applications. Understanding the specific characteristics of Segal keys, including their unique cuts and profiles, allows locksmiths to effectively service locks that utilize these key types. Familiarity with different key systems, such as the Segal SE1, enhances a locksmith's ability to provide accurate and efficient service, catering to the needs of customers with specific locking mechanisms. In contrast, the other mentioned brands, such as Weiser, Arrow, and Dexter, have their own unique key designations and systems, which differ from that of Segal. Knowing each manufacturer's designations is crucial for proper identification and effectiveness in locksmithing.

6. Which of the following is not a BHMA finish listed?

A. Sprayed Aluminum

B. Sprayed Gold

C. Aged Bronze

D. Sprayed Dark Bronze

The reason "Sprayed Gold" is the correct response is that it is not a recognized finish by the Builders Hardware Manufacturers Association (BHMA). The BHMA has established standardized finishes for various hardware products, promoting consistency and quality within the industry. Sprayed Aluminum, Aged Bronze, and Sprayed Dark Bronze are among the finishes classified by the BHMA. These finishes have specific protocols for application and durability, ensuring that they meet industry standards for appearance and wear resistance. In contrast, "Sprayed Gold" does not have a defined standard or widespread acceptance within the BHMA framework, making it an outlier when compared to the other options.

7. What type of finish would typically be chosen for high-traffic areas due to its durability?

A. Aged Bronze

B. Sprayed Dark Bronze

C. Brass

D. Sprayed Aluminum

A sprayed dark bronze finish is often selected for high-traffic areas due to its remarkable durability and resistance to wear and tear. This finish not only provides a visually appealing aesthetic, helping it blend well with various architectural styles but also offers superior protection against scratching, tarnishing, and corrosion that can occur in environments with significant foot traffic. In high-traffic settings, such as commercial buildings, schools, and hospitals, durability is crucial to maintaining both appearance and function over time. Sprayed dark bronze also effectively hides fingerprints and smudges, which helps maintain a clean look even in busy areas. In contrast, other finishes such as aged bronze, brass, or sprayed aluminum may not offer the same level of durability or resistance to the rigors of heavy use, making them less ideal choices in these specific environments.

8. What precaution should be taken when checking resistance in a loop?

A. Ensure all devices are powered on

B. Check connections for loose wires

C. Shut off the power before measuring

D. Adjust the settings on the controller

When checking resistance in a loop, shutting off the power before measuring is crucial to ensure safety and accuracy. Measuring resistance requires a multimeter to send a small amount of current through the circuit to determine the resistance. If the power remains on during this process, it could pose a risk of electric shock to the technician and may damage the multimeter or the circuit being tested. Additionally, the presence of voltage can lead to misleading readings; the multimeter may show erroneous values due to the interference from the powered components. By turning off the power, you not only protect yourself and your equipment but also ensure that the measurement reflects the true resistance of the components without any external influence.

9. How many different cuts are required at minimum for keying Ford automobiles?

A. 2 different cuts

B. 3 different cuts

C. 4 different cuts

D. At least 5 different cuts

Ford automobiles typically require a minimum of three different cuts for keying. This is due to the design of their key systems, which incorporate a series of grooves or cuts that determine the alignment of the pins in the ignition cylinder. The presence of three distinct cuts provides a range of combinations that enhance the vehicle's security. With three different cuts, locksmiths can create multiple key variations that fit the same lock cylinder, thus allowing for a basic level of key duplication while offering enough complexity to discourage unauthorized access. This design is significant because it balances ease of manufacturing with security considerations, making it a common standard in the automotive industry. Understanding this aspect is crucial for those preparing for the ALOA Locksmith Test, as it underscores the importance of recognizing different key systems and their specifications. Having this knowledge ensures that locksmiths can effectively service a wide range of vehicles without compromising on security or functionality.

10. What type of resistance measurement does an alarm technician perform on alarm loops?

A. Current resistance measurement

B. Voltage resistance measurement

C. Signal resistance measurement

D. Standard resistance measurement

Standard resistance measurement is the correct approach used by alarm technicians when assessing alarm loops. This type of measurement involves checking the resistance of the loop to ensure that it operates properly within the parameters set by the manufacturer. A standard resistance measurement typically helps diagnose issues like short circuits or open circuits and ensures that the components within the alarm loop are functioning correctly. By measuring the resistance in ohms, technicians can determine if there are any faults in the wiring or components, which could affect the performance of the alarm system. Proper resistance levels are crucial for reliable system operation, as they affect the current flow and overall functionality of the alarm. Other types of resistance measurements, such as current or voltage resistance measurements, are not specifically relevant for assessing alarm loops directly, as they focus more on different aspects of electrical measurements rather than the straightforward resistance verification needed in alarm systems.