

[INCH-POUND]  
FED-STD-809D  
April 4, 2018  
SUPERSEDING  
FED-STD-809C  
January 17, 2017

FEDERAL STANDARD

INSPECTION, MAINTENANCE,  
NEUTRALIZATION AND REPAIR  
OF GSA APPROVED CONTAINERS  
AND VAULT DOORS

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: General Services Administration, Federal Supply Service, Plan, Policy, and Program Integration (P3I) Division, Engineering Division (QSD), Washington, DC 20406.

FSC 7110

## FOREWORD

The following standard establishes uniform inspection, maintenance neutralization and repair procedures for security containers and vault doors to ensure the integrity of the security equipment during these procedures for the continued protection of classified material. The Information Security Oversight Office established by Executive Order 13526 (Sec. 5.2) commissions the General Services Administrations (GSA) with the establishment of schedules and standards for security equipment specifically designed and tested for the protection of classified information (32 CFR 1001.42). The General Services Administration, Interagency Committee on Security Equipment coordinates with other Agencies that originate classified information to establish and publish uniform standards and specifications for security equipment designed to provide secure storage for classified information.

The inspection and maintenance procedures herein are designed to ensure the continuous, secure and safe operation of GSA approved security equipment. The neutralization and repair procedures provide the US Government with a secure and economical alternative to replacing containers or vault doors that have been damaged from opening techniques used as a result of combination lock and bolt linkage failures. The opening and repair methods described in this standard have been designed specifically to balance the cost-effectiveness of repair versus replacement while maintaining the security integrity of the container or vault door. To meet the goal of this standard, only properly trained and equipped personnel are authorized to perform inspections, maintenance procedures or attempt to perform the opening and repair methods described in this standard. To ensure the protection of classified information, all personnel in training or performing the procedures contained within this federal standard shall be US Citizens (required OCONUS) or US Persons (per 22 CFR 120.15) subject to US law.

GSA authorizes commercial training facilities specifically approved by GSA to provide hands-on training in these opening and repair methods. Upon successful completion of this course, the GSA authorized technician shall be capable of performing routine inspection, maintenance and opening locked-out containers or vault doors using one of the approved methods contained herein without compromising the security integrity. The security integrity is only restored if a GSA or other USG authorized technician strictly adheres to the methods contained within this standard. Any deviation to the opening and repair methods outlined in this standard will require GSA approval before a recertification can be authorized.

The opening and repair methods described in this federal standard can be hazardous to the technician and the office environment, requiring full knowledge of safety equipment and procedures. In some cases it may be necessary to move the security container to a safe and secure area before attempting the opening and repair methods described in this standard.

## PREAMBLE

The General Services Administration has authorized the use of this federal standard by all federal agencies.

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## 1. SCOPE

This standard establishes procedures for the inspection, maintenance, neutralization and repair of GSA approved containers and vault doors.

## 2. REFERENCED DOCUMENTS

2.1 Government Documents. The issues of the following documents in effect on the date of invitation for bids or request for proposal form a part of this standard to the extent specified herein.

### Federal Specifications:

AA-F-358	Filing Cabinet, Legal and Letter Size, Uninsulated, Security
AA-F-363	Filing Cabinet, Security, Maps and Plans, General Filing, and Storage
AA-D-600	Door, Vault, Security
FF-L-2740	Locks, Combination, Electromechanical
AA-C-2786	Cabinet, Security, Information Processing System Storage, Class 5
AA-C-2859	Cabinet, Security, Weapons Storage
FF-L-2937	Combination Lock, Mechanical
FF-L-2890	Lock Extensions

### General Services Administration:

SF 700	Security Container Information
Optional Form 89-	Security Container Records Form

(Copies of the federal specifications and optional form 89 are available on the Department of Defense Lock Program website, see paragraph 7.2.)

### National Policy Documents:

32 CFR 2001 (ISOO Directive 1)  
 32 CFR 2004 (NISPOM)  
 ICD 705 Technical Specifications

## 3. DEFINITIONS

The terms used in this standard are commonly understood by the technical community to which they apply and are not used here in such a way to introduce new or limited meanings.

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## 4. INSPECTION AND MAINTENANCE

4.1 Periodic inspection. Each approved container and vault door (including locking mechanism) will be thoroughly inspected for cleanliness and serviceability prior to being placed in use and periodically during its serviceable life as specified by local policy. Any unusual operational problems or evidence of tampering should be reported to appropriate facility security authorities and the General Services Administration, Quality Assurance and Testing Authority (DOD Lock Program).

4.1.1 Inspection records. Container/vault door custodians will make a record of each inspection (Operational Visual Inspection Checklist, Table 2) and/or type of maintenance (OF89) afforded each container in use. All forms and inspection records should be stored in the container control drawer or in the Facility Security Office for the life of the container as local policy dictates.

4.2 Maintenance. All GSA approved security containers, vault doors and combination locks must be properly maintained as recommended by the manufacturer to retain security integrity and safe operability. In addition, the US Government may require upgrades or modifications to specific security equipment be completed to sustain the GSA approval status for the protection of classified information as required in national policy documents (32 CFR 2001.42).

4.2.1 Routine repairs. A repaired GSA approved container or vault door is considered to have been restored to its original state of security integrity if it meets the conditions specified in this federal standard. Only alterations/ modifications authorized by GSA will be accomplished. Authorized changes include:

- (a) Changing locks, to replace outdated or defective models.
- (b) Repairing with new or used original parts, such as drawer handles and drawer linkage components.
- (c) Replacing damaged drawer heads (if the replacement drawer head either is new or has been neutralized and repaired) according to the Neutralization and Repair sections (5 & 6) of this federal standard.
- (d) Painting the container in the container's original color.

4.2.2 Insulation. Insulated security containers (black label class 1 and 2) will be handled very carefully to prevent damage to the insulation during opening and repair procedures.

4.2.3 Debris. All foreign matter (dust, dirt, staples, etc.) should be removed by use of a vacuum cleaner or other suitable means.



4.3 **Forms.** Use all forms required for the protection of classified information and secure operation of GSA approved security containers (see 32 CFR, Part 2001, and NISPOM):

(a) Use Standard Form 700 (SF 700) Security Container Information Part 2 to record the combination and store as local and national policy security regulations dictate (see 32 CFR part 2001).

(b) Use Standard Form 702 (SF 702) Security Container Check Sheet to record the opening and closing of all security containers and vault doors (see 32 CFR, part 2001).

(c) Use the Operational Visual Inspection Checklist to record all periodic inspections accomplished.

(d) Use Optional Form 89, Maintenance Record for Security Containers / Vault Doors to record all maintenance procedures accomplished.

4.4 **Specific inspection and maintenance activities.** The inspection and preventive maintenance of security equipment will be conducted by qualified personnel as previously specified in this federal standard. The extent of repair or replacement of security containers/vault doors will be in accordance with local and/or national policy applicable to this type of security equipment. Operational functionality and preventive maintenance inspections performed by the container/vault door custodians or other qualified personnel will include the following:

4.4.1 **Inspection of combination locks.** All combination locks should be fully operated and inspected to ensure the appropriate use (classified information/weapons protection) and continued proper operation as follows:

- (a) Check alignment of dial ring with lock case; correct if necessary.
- (b) Look for corrosion or presence of any foreign matter that will in any manner affect the lock's proper operation.
- (c) Look for any signs of malfunctioning or impending failure.
- (d) Look for any signs of tampering, forced, or covert entry; report this to the Facility Security Officer.

4.4.2 **Maintenance of combination locks.** All combination locks should be periodically maintained to ensure continued proper operation.

4.4.2.1 **Mechanical combination locks (FF-L-2937).** Periodic maintenance of mechanical combination locks should include the following:

- (a) Clean bearing surfaces of dial, dial ring, wheelpost, drive cam; replace lubricant.
- (b) Adjust torque on wheel pack in the range of not less than 16 inch-ounce-force (ozf.in) and not more than 24 ozf.in of force.

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4.4.2.2 Electromechanical combination locks (FF-L-2740). Periodic maintenance of electromechanical combination locks should include the following:

- (a) Operate the lock to include changing the combination as appropriate under local and national policy requirements.
- (b) Check the dial and dial ring for proper alignment and smooth operation.
- (c) Check for loose dial ring, spindle or mount screws.
- (d) Replace all damaged parts. Lubricate according to manufacturer's instructions using only the recommended lubricant.
- (e) Style 1: Check LCD for missing segments, cracks in the display lens or error codes displayed.
- (f) Style 2: Perform the battery check procedure, replace batteries if appropriate. Replace batteries every 5 years or as recommended by the manufacturer.

4.4.3 Inspection of containers and vault doors. Each container or vault door should be periodically inspected for signs of tampering, forced or covert entry on all surfaces, internally and externally; report any anomalies to the Facility Security Officer. Each container and/or vault door should be inspected for the following;

- (a) Inspect for broken or cracked welds, loose or misaligned panels, and camouflaged repairs.
- (b) Inspect the boltwork linkage connections and lubrication of boltwork and hinges.
- (c) Inspect the boltwork detent mechanism for proper function.
- (d) Ensure secure attachment of all bolts, nuts etc.

4.4.4 Maintenance of containers. Periodic maintenance of containers should include the following:

- (a) Ensure proper function and alignment of drawer suspensions and follower blocks.
- (b) Ensure proper function of latching mechanism.
- (c) Check for difficulty in opening or closing the door or any drawer.
- (d) Check for difficulty in locking the control drawer.

4.4.5 Maintenance of vault doors. Periodic maintenance of vault doors should include the following:

- (a) Ensure the vault door is properly aligned with the frame.
- (b) Check for difficulty in opening, closing or locking the door.
- (c) Check the operation of the escape mechanism.
- (d) Ensure escape mechanism operation instructions are posted.

All defective hardware will be replaced with manufacturer's replacement parts when any defect is noted that will prevent it performing its intended function.

**4.4.6 Inspection of combination lock extensions.** Each combination lock extension approved under Federal Specification FF-L-2890 should be periodically inspected for signs of tampering, forced or covert entry on all surfaces, internally and externally; report any anomalies to the Facility Security Officer. Each lock extension should be inspected for the following:

- (a) Proper installation and operation of the lock extension.
- (b) Damaged or missing parts, modifications, and camouflaged repairs.
- (c) The operation/vibration of the access control mechanism does not override the combination lock function.
- (d) Secure attachment of all bolts, nuts, etc.

**4.4.7 Maintenance of combination lock extensions.** Periodic maintenance of combination lock extensions should include the following:

- (a) Ensure proper function and alignment of the lock extension and the strike plate.
- (b) Ensure proper function of extension detent mechanism; lubricate as appropriate.
- (c) Check to ensure the door is properly aligned within its frame.
- (d) Check for proper operation of the exit mechanisms; lubricate as appropriate.

## 5. WARRANTY, NEUTRALIZATION AND REPAIR

**5.1 Warranty.** Before attempting neutralization procedures on containers or vault doors, determine if the products are under warranty. Only products with red or blue labels may be under warranty. Contact the DoD Lock Program (7.2) concerning warranty provisions (provide the serial number and description of container). GSA contracts require manufacturers to provide warranties.

**5.1.1 Container Original Equipment Manufacturer.** During the period of the warranty if a lockout occurs due to failure of the preinstalled locking system, the Government has the right to require the container manufacturer to provide access to the container contents within 24 hours. This provision applies in CONUS only.

**5.1.2 Combination Lock Original Equipment Manufacturer.** For issues pertaining to individually purchased locks during the period of warranty, the lock manufacturer is responsible for replacing malfunctioned lock.

**5.2 Neutralization.** Neutralization of lockouts or repairs of any damage that affects the integrity of a security container approved for storage of classified material shall be done only by authorized appropriately-cleared US persons or continuously escorted US persons (per 22 CFR 120.15) specifically trained in the approved methods.

**5.2.1 Opening Techniques.** In order to maintain the GSA label on a container or vault door, one of the following procedures must be used for opening and repair. Table 1 identifies appropriate methods for use on various GSA approved security equipment.

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5.2.1.1 Opening Method 1: Drilling inside dial ring. This procedure involves drilling into the combination lock to manipulate lock components to allow retraction of the lock bolt.

5.2.1.2 Opening Method 2: Hole Saw. This procedure involves using a drill and hole saw to cut the drawer face and drawer bolts.

5.2.1.3 Opening Method 3: Cut-off Saw. This procedure involves using a circular saw and abrasive metal cut-off blades to cut the drawer face and drawer bolts.

5.2.1.4 Opening Method 4: Drilling outside dial ring. This procedure involves drilling into the door of an IPS container, map and plan container, weapons container, or vault door to gain access to disconnected linkages to allow retraction of the boltwork.

5.3 Container Service Record. Whenever a security container is serviced or repaired, the work must be documented using Optional Form 89, Security Container Records Form.

#### 5.4 Repairs.

5.4.1 Repairs, Unauthorized. GSA approved containers and vault doors that have been opened, repaired, or modified in a manner other than as described herein are not considered to have been restored to their original state of security integrity. The "Test Certification" label on the inside of the locking drawer or door, and the "General Services Administration Approved Container/Vault Door" label on the outside of the container/door shall be removed.

#### NOTE

*Contact the Technical Support Hotline (See 7.2 for contact information) before attempting any unauthorized opening or repair procedures.*

5.4.2 Repairs, Authorized. GSA approved containers that have been opened as described herein may be repaired by the following methods, as appropriate. See Table 1 for repair methods appropriate for the opening method used. See 6.1.5, 6.2.5, 6.3.5 and 6.4.5 for a detailed description of these repair methods.

5.4.2.1 Repair Method 1A: Approved for operational vault doors only. Drive a tapered, hardened, tool-steel pin, steel dowel, drill bit or bearing, or a carbide-center mild steel pin into the hole. Weld the repair both on the inside and outside surfaces.

5.4.2.2 Repair Method 1B: Drive a carbide-center mild steel pin into the hole. Weld the repair both on the inside and outside surfaces.

5.4.2.3 Repair Method 2: Replace the control drawer head.

5.4.2.4 Repair Method 3: Repair of a bolt linkage lockout opening procedure.

**5.4.3 Product Integrity.** With the exception of frames bent through application of extraordinary stress, a GSA approved container or vault door is considered to have been restored to its original state of security integrity if it meets any of the following conditions:

(a) All damaged or altered parts (e.g., locking drawer, drawer head, etc.) are replaced with new or cannibalized parts:

(b) Vault doors (only) have been drilled through the area covered by the dial ring (hole no larger than 3/8" diameter) using opening Method 1; the drilled hole is repaired with either repair Method 1A or repair Method 1B; and a replacement lock meeting FF-L-2740 is used (armory vault doors shall use a lock meeting FF-L-2937);

(c) It has had the bolts cut using a hole saw (opening Method 2) or cut-off saw (opening Method 3). The lock is replaced with one meeting FF-L-2740 (field safes shall use a lock meeting FF-L-2937), and the drawer head is replaced (repair Method 2).

(d) It has been opened in accordance with Method 4 and repaired in accordance with Method 3. The lock is replaced with one meeting FF-L-2740 (weapons containers and armory vault doors shall use a lock meeting FF-L-2937).

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Table 1. Opening and Repair Procedures

GSA Class	Label Color	Door/Container Type	Opening Method	Repair Method
1, 2, 3, 4, 5, 6	Black	Filing Cabinet & M&P	1	<b>DO NOT REPAIR<sup>1</sup></b>
5	Red	Filing Cabinet	1, 3	1B, 2
6	Red	Filing Cabinet	1, 2, 3 <sup>2</sup>	1B, 2
7	Green	Filing Cabinet – Hamilton Products Group	1, 2, 3	1B, 2
7	Green	Filing Cabinet – Mosler	1	1B
5 & 6	Red	Map & Plan / General Purpose Container	1,4	1B, 3 <sup>3</sup>
5	Red	Weapons Container	1,4	1B, 3 <sup>3</sup>
5	Blue	Information Processing System Container	1,4	1B, 3 <sup>3</sup>
5	Black/Red	Vault Door	1,4 *	1A, 1B, 3 <sup>3</sup>

\* NOTICE – Before attempting to neutralize the vault door, consider gaining entrance by penetrating the wall of the vault. It is often faster and less expensive to repair. When containers or doors are repainted, they shall be painted one of the original approved colors (gray, black, or parchment); weapons containers and vault doors are only approved in gray. The paint and processes used to repaint the containers or doors shall result in a textured finish. The exterior of the container or vault door shall be one uniform color. The interior of a container may be a different color.

<sup>1</sup> Do not repair a black label file or map & plan cabinet and put it back in service once it has been neutralized. Once a black label file or Map & Plan cabinet has been neutralized using any method it is no longer authorized for the storage of classified information.

<sup>2</sup> The USG prefers methods 2 or 3 for neutralization of red label file type containers for cost effectiveness and potential failure analysis of the combination lock.

<sup>3</sup> For repair Methods 1A, 1B, and 3, the outside of the container or vault door must be puttied, sanded and repainted in such a way that no evidence of the hole or its repair remains on the outer surface.

**5.5 Exemption Request.** If any other neutralization/repair method is used, a detailed description of the procedure (photographs included) must be supplied in addition to an explanation and/or justification for the unusual opening and/or repair. GSA will review the description of the opening and repair procedures and notify the sender if the repair method maintains the equipment's GSA approval. All requests for approval will be adjudicated by the GSA IACSE/SEALS Subcommittee. Submit request through DoD Lock Program (7.2).

## 6. DETAILED REQUIREMENTS

**6.1 Method 1: Drilling--Neutralizing Black Label or Red Label Containers.** This method is approved for neutralization of lockouts on GSA door-type containers and GSA vault doors and allows for an authorized repair of the drilled door. It may also be used on drawer-type containers, especially those for which replacement parts are not available. For warranty coverage information, see paragraph 5.1.

**6.1.1 Containers.** This procedure is recommended for opening black label containers and vault doors, and those red label products for which opening Methods 2 and 3 are not appropriate. Some black label containers and all red, green, and blue label containers have hardplates which are difficult to drill.

**6.1.2 Tools and Equipment.** Tools and equipment recommended to perform this procedure include:

1. Tape measure
2. Hammer
3. Assorted punches
4. Heavy-duty drill motor
5. Assorted drill bits, no larger than 3/8" diameter
6. Lever-type or fixed drill rig (fixed drill rig required if using diamond-tipped core drills)
7. Borescope; must fit within the hole drilled and must be appropriate for the approach to opening the lock
8. Ice pick or similar sharp probe
9. Safety equipment

**6.1.3 Layout and Marking Procedures.** The hole must be within the area covered by the dial ring. Removal of the dial and dial ring facilitates accurate measurement and marking of the drill point, and drilling of the hole.

The precise location of the drill point will depend on the container, the lock being neutralized and the approach used (drilling off the fence, scoping the wheels, etc.). For information on where to drill, or any other specifics of this method, call the Technical Support Hotline (see 7.2).



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6.1.4 Drilling Procedure. Attach the drill rig to the container according to the drill rig manufacturer's instructions. Drill through the outer skin of the drawer or door with a high-speed steel or cobalt drill bit. Use a pressure rig, either fixed or lever-type, with a

carbide-tipped drill bit to penetrate the hardplate. If carbide-tipped drill bits cannot penetrate the hardplate, use a diamond-tipped core drill with a fixed drill rig. After drilling through the hardplate, use a high-speed steel or cobalt drill bit to complete the drilling into the lock case. Manipulate internal components of the lock to retract its bolt, and then use the container's handle to retract the boltwork.

6.1.5 Repair Procedure. Repair the drilled hole with either: repair Method 1A for all black label vault doors (only); or repair Method 1B for all red, blue, or green label containers/doors.

- a) Method 1A: A tapered, hardened, tool-steel pin, steel dowel, drill bit or bearing, or a carbide-center mild steel pin, shall be driven into the hole. There shall remain at each end of the pin a shallow recess not less than 1/8" nor more than 3/16" deep to permit the acceptance of substantial welds (recommend MIG or TIG). Do not repair a black label security file or Map & Plan cabinet. The repair shall be welded both on the inside and outside surfaces. The outside of the drawer head or door must then be puttied, sanded, and repainted in such a way that no visible evidence of the hole or its repair remains on the outer surface.
- b) Method 1B: A carbide-center mild steel pin with a diameter slightly larger than the hole, shall be driven into the hole. There shall remain at each end of the pin a shallow recess not less than 1/8" nor more than 3/16" deep to permit the acceptance of substantial welds (recommend MIG or TIG). The pin is welded both on the inside and outside surfaces. The outside of the drawer head or door must then be puttied, sanded, and repainted in such a way that no visible evidence of the hole or its repair remains on the outer surface

6.1.6 Safety Precautions. All safety precautions should be taken to prevent injury during this procedure. Possible hazards include, but are not limited to:

1. Hot or sharp surfaces or edges.
2. Hot drill bits and metal chips.
3. Drill bit binding in hole.
4. Pressure rig becoming detached from container.

6.1.7 Security Precautions. The classified material custodian (or alternate) for the container being neutralized should be present during this procedure.

6.2 Method 2: Hole saw--Neutralizing Red Label Class 6 and Hamilton Green Label Class 7 Containers. This procedure attacks the drawer head boltwork. It may be used in conjunction with repair Method 2 to restore the security integrity of the container.



**6.2.1 Containers.** GSA approved Class 6 security filing containers manufactured after October 1, 1990 meets the requirements of Federal Specification AA-F-358G (or later version). GSA approved Class 7 security filing containers meet the requirements of Federal Specification AA-F-2815. Due to the increased covert entry resistance of these containers, traditional lockout neutralization techniques may not be cost-effective. Containers manufactured under AA-F-358G (or later version) are differentiated from earlier models by inspecting the GSA label attached to the face of the container. GSA approval labels on containers manufactured before October 1, 1990 are silver with BLACK lettering (or BLACK with silver lettering). GSA approval labels on containers manufactured after that date are silver with RED lettering. Containers manufactured under AA-F-2815 (Class 7 containers) are differentiated from all other containers by having GSA labels that are silver with GREEN lettering (see Figure 1). The procedures to neutralize lockouts on Class 6 GSA security containers manufactured under AA-F-358G (or later version), and Hamilton Class 7 GSA security containers, are presented here.

This procedure is presented as an alternative to opening Method 3. Opening Method 3 creates dust and debris and may not be appropriate for some situations.

**6.2.2 Tools and Equipment.** Tools and equipment recommended to perform this procedure include:

1. Hammer
2. Assorted punches
3. Heavy duty drill motor
4. 1-1/4" or 1-1/2" carbide tipped hole saws (may not be readily available)
5. Safety equipment

**6.2.3 Layout and Marking Procedures.**

- 1 Identify the container as a Class 6 red label or Hamilton Class 7 green label GSA approved security filing container (see Figure 1). The face of a Class 6 or Class 7 container will be approximately 1/8" thick or less.
2. Determine, from the external label, whether it was made by Alpha, Mosler, Diebold Mosler, Will-Burt, Millennium Metals (A&H), or Hamilton Products Group. Refer to Figure 1.
3. Figure 3 is not actual size. It provides guidance on how to measure and mark the drilling or cutting locations for each make of Class 6 or Class 7 container. Using the measurements from an authorized source (see paragraph 7.2 or 7.2.2), locate and center punch for the hole saw's pilot drill. Contact the Technical Support Hotline for questions or problems (see 7.2).
4. Spread a drop cloth in front of the safe to catch chips from cutting hole in drawer face (if necessary).

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6.2.4 Cutting Procedure. The technician will cut through the face of the drawer head and continue through the locking bolts. Each hole saw cut will remove a section of a locking bolt. This will allow the drawer handle to be rotated to retract the bolt ends. This also allows the locking drawer to be opened without damaging the lock or the rest of the container.

1. At one of the center punched locations, use the hole saw with a pilot drill and cut through the face of the drawer head.
2. Inspect the hole to verify that it is aligned with the locking bolt to be cut.
3. Using the hole in the drawer face for support, cut through the locking bolt. Do not engage the trigger lock on the drill motor. Move the drill slightly horizontally and vertically to create a slightly larger hole. This reduces the chance that the hole saw will bind.
4. Repeat these steps on the other side to cut the other bolt. Turn the handle to retract the boltwork.

Note: If the bolt linkage is severed during the cutting procedure, retract the bolts with a screwdriver or similar tool.

6.2.5 Repair Procedure. Replace the drawer head. Replacement drawer heads may be cannibalized or are available from the container manufacturers (see phone numbers in 7.2.1). To replace the drawer head:

1. Remove the control drawer from the container if necessary.
2. Remove the damaged drawer head from the drawer assembly.
3. Install a new or cannibalized drawer head on drawer assembly.
4. Install a GSA approved combination lock on the new drawer-head (use original lock if appropriate).
5. Reinstall control drawer in container if removed.

6.2.6 Safety Precautions. All safety precautions should be taken to prevent injury during this procedure. Possible hazards include, but are not limited to:

1. Hot or sharp surfaces or edges.
2. Hot drill bits and hole saws.
3. Hot metal chips.
4. Hole saw binding in hole.

Recommended that the following safety and protective gear be used:

1. Eye protection, such as safety goggles
2. Leather gloves
3. Drop cloth

6.2.7 Security Precautions. The classified material custodian (or alternate) for the container being neutralized should be present during this procedure.

**6.3 Method 3: Cut-off saw--Neutralizing Red Label Class 5 and 6 and Hamilton Green Label Class 7 Security Containers.** All containers discussed here have one or more drawers with a mounted combination lock. The drawer with the combination lock is referred to as the control drawer. Control drawers are locked in place by hardened steel bolts that extend from each side of the drawer to engage the body of the container. The drawer head of the control drawer is removable from the drawer itself. This procedure attacks the drawer head boltwork. It may be used in conjunction with repair Method 2 to restore the security integrity of the container.

**6.3.1 Containers.** GSA approved Class 5 and Class 6 security file containers manufactured after October 1, 1990 meet the requirements of Federal Specification AA-F-358G (or later version). GSA approved Class 7 security filing containers meet the requirements of Fed spec AA-F-2815. Due to the increased covert entry resistance of these containers, traditional lockout neutralization techniques may not be cost-effective. Containers manufactured under AA-F-358G (or later version) are differentiated from earlier models by inspecting the GSA approval label attached to the face of the container. GSA approval labels on containers purchased before October 1, 1990 are silver with BLACK lettering (or BLACK with silver lettering).

GSA approval labels on containers manufactured after that date are silver with RED lettering (see Figure 1). Procedures to neutralize lockouts on Class 5 and 6 GSA security containers manufactured under AA-F-358G (or later version) and Hamilton Class 7 containers are presented here.

This method, opening Method 3, creates dust and debris and may not be appropriate for some situations. Opening Method 2 may also be used on Class 6 red label and Hamilton Class 7 green label containers.

**6.3.2 Tools and Equipment.** Tools and equipment recommended to perform this procedure include:

Safety equipment

Alpha, Hamilton, Mosler & Diebold Mosler, Will-Burt, and Millennium (A&H) Metals Class 6 Containers, Letter and Legal Size, and Hamilton Class 7 Containers:

1. Heavy duty 7-1/4" builders circular saw.
2. 7" x 1/8" abrasive metal cutoff blades.

Hamilton Class 5 Container, Legal Size\*:

1. Heavy duty 7-1/4" builders circular saw
2. 7" x 1/8" abrasive metal cutoff blades.

Mosler, Diebold - Mosler or Will-Burt Class 5 Containers, Legal Size:

1. Heavy-duty 10-1/4" builder's circular saw (requires minor modification, as shown in Figure 2).

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## 2. 10" abrasive metal cutoff blades.

\* Hamilton Products Group Class 5 drawer heads require only one cut per bolt.

Number of blades listed for the various containers is approximate and will vary with specific tools used and operator experience.

6.3.3 Layout and Marking Procedures.

1. Using the measurements from an authorized source (see Paragraphs 7.2 and 7.2.2) and guidance from Figure 3, measure up from the bottom of the drawer head and mark the drawer. Make at least three equally spaced marks across the drawer.
2. Using a straight edge, draw a horizontal line using the marks made in Step 1 as a guide. This is the centerline of the locking bolt.
3. Using the appropriate measurements and Figure 3 as a guide, measure from the right side of the drawer and mark. Repeat this same measurement on the left side of the drawer.
4. Using a builder's square or a straight edge, draw the vertical lines at the marks on both the right and left sides of the drawer face. These are the saw cut locations.

6.3.4 Cutting Procedure. The technician will make four \* vertical cuts through the face of the drawer-head. Each pair of cuts will remove a section of a locking bolt. This will allow the drawer handle to be rotated to retract the bolt ends. This allows the locking drawer to be opened without damaging the lock or the rest of the container.

1. Determine the type, class and manufacturer of the file container. Contact the Technical Support Hotline if identification assistance is needed.
2. Remove the label holder from the face of the container before beginning layout.
3. Lay out and mark cutting locations on the face of the control drawer (see Figure 3)
4. Set the cutting depth of the circular saw to maximum.
5. Using the circular saw, cut through the drawer face and through the locking bolt at each marked location.
6. When the cutting is complete, rotate the handle and open the drawer.

\* Hamilton Products Group Class 5 drawer heads require only one cut per bolt.

## Notes:

- a. Make the inboard cuts first to prevent the locking bolt from rolling during cutting.
- b. Depth setting may need to be reset during cutting procedure.

- c. Maintain the cut centered at the horizontal line.
- d. Cutting too high will damage the container frame.
- e. Cutting too low will sever the bolt carrier rods on a Hamilton container.
- f. Always maintain a firm grip on the saw.

If the bolt linkage is severed during the cutting procedure, enlarge the outer cut on each side of the drawer (if necessary) and retract the bolts with a screwdriver or similar tool.

**6.3.5 Repair Procedure.** Replace the drawer head. Replacement drawer heads may be cannibalized or are available from the container manufacturers (see phone numbers in 7.2.1). To replace the drawer head:

1. Remove the control drawer from the container.
2. Remove the damaged drawer head from the drawer assembly.
3. Install a new or cannibalized drawer head on drawer assembly.
4. Install a GSA approved combination lock on the new drawer-head (use original lock if appropriate).
5. Reinstall control drawer in container.

**6.3.6 Safety Precautions.** All safety precautions should be taken to prevent injury during this procedure. Use extreme caution when using the modified 10-1/4-inch circular saw. Possible hazards include, but are not limited to:

1. Hot or sharp surfaces and edges
2. Hot saw blades
3. Hot flying sparks

Use the safety and protective gear recommended:

1. Eye protection, such as a full face shield
2. Hearing protection
3. Leather gloves
4. Fire extinguisher

It is also recommended that a second person be present, to see that sparks do not cause a fire.

**6.3.7 Security Precautions.** The classified material custodian (or alternate) for the container being neutralized should be present during this procedure.

**6.4 Method 4: Drilling outside of the dial ring--Neutralizing Black Label or Red Label door type containers and vault doors.** This method is approved for neutralization of lockouts on GSA door-type containers and GSA vault doors and allows for an authorized repair of the drilled door. For warranty coverage information, see paragraph 5.1.

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6.4.1 Containers/Doors. This procedure is recommended for opening IPS containers, map and plan containers, weapons containers, or vault doors to gain access to disconnected linkages and allow retraction of the lock bolt(s).

6.4.2 Tools and Equipment. Tools and equipment recommended to perform this procedure include:

1. Tape measure
2. Hammer
3. Assorted punches
4. Heavy-duty drill motor
5. Assorted drill bits, no larger than 1/2" diameter
6. Lever-type or fixed drill rig (fixed drill rig required if using diamond-tipped core drills)
7. Borescope; must fit within the hole drilled and must be appropriate for the approach to opening the lock
8. Ice pick or similar sharp probe
9. Safety equipment

6.4.3 Layout and Marking Procedures. The hole must be 1/2" diameter or less. No more than 2 holes per door are allowed. The precise location of the drill point will depend on the container, and the approach used. For information on where to drill, or any other specifics of this method, call the Technical Support Hotline (see 7.2).

6.4.4 Drilling Procedure. Attach the drill rig to the container according to the drill rig manufacturer's instructions. Drill through the outer skin of the door with a high-speed steel or cobalt drill bit. Manipulate internal components to retract the boltwork.

6.4.5 Repair Procedure. Continuously weld a 2"x 2" x 3/8" steel plate to the inside of the vault door, or door of an IPS container, weapons container or map & plan container. (If a vault door was drilled to reach the escape mechanism, repair the hole using repair Method 1B to include filling the drilled hole in the door plate with a weld from the outside the door). The outside of the door must then be puttied, sanded, and repainted in such a way that no visible evidence of the hole or its repair remains on the outer surface. No more than 2 holes per container are authorized and the holes must be no larger than 1/2" in diameter.

6.4.6 Safety Precautions. All safety precautions should be taken to prevent injury during this procedure. Possible hazards include, but are not limited to:

1. Hot or sharp surfaces or edges.
2. Hot drill bits and metal chips.
3. Drill bit binding in hole.
4. Pressure rig becoming detached from door.

6.4.7 Security Precautions. The classified material custodian (or alternate) for the container being neutralized should be present during this procedure.



## 7. NOTES

7.1 **Background Information.** This document details unclassified procedures to neutralize and repair lockouts on GSA-approved security containers and vault doors in a manner that will allow retention of the GSA approval.

7.1.1 **GSA Containers.** GSA tests containers, combination locks, and vault doors to ensure that they provide the levels of performance required in federal specifications. Products that meet the specification requirements are approved for listing on Qualified Products Lists and are authorized to bear a GSA approval label.

Current federal specifications for security products include AA-F-358 for security filing cabinets, AA-F-363 for map and plan and general purpose cabinets, AA-C-2859 for weapons containers, AA-C-2786 for information processing system storage containers, and AA-D-600 for vault doors. The federal specification for combination locks that secure classified material is FF-L-2740. The federal specification for combination locks that secure classified material in field safes, and arms, ammunition, and explosives in weapons containers and behind armory vault doors, is FF-L-2937. Federal specifications which have been canceled, but which were used for other products, include AA-F-357 for insulated security filing cabinets, AA-F-2815 for Class 7 security filing cabinets, AA-S-1518 for tool-resistant security containers, and AA-D-2757 for Class 8 security vault doors.

7.1.2 **GSA Label.** When locked-out containers or doors are opened in a manner that causes damage to the product or reduces the security of the product, the GSA approval label must be removed.

*Proper opening and repair of containers and vault doors allow the GSA label to be retained and will not require recertification of the container or vault door.*

7.1.3 **GSA Upgraded Container Requirements.** In 1990, GSA revised the container and door specifications to increase the level of protection they provide. The label color was changed to differentiate new equipment from earlier models. On products manufactured prior to October 1, 1990, the GSA label is black and silver. Beginning October 1, 1990, labels are red and silver, although some specialized containers have labels with other colors. In 1992, changes were made in the requirements for the combination locks installed on containers at the time of manufacture.

7.1.4 **New Container Neutralization Techniques.** The changes in container and door construction provide covert entry resistance. New neutralization techniques have been developed to provide cost-effective means of entry and to prevent damage to the combination locks.

Traditional techniques are not appropriate, considering the difficulty of drilling the hardplate, the increased cost of combination locks, and the removable drawer heads.

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**7.1.5 Storage of FF-L-2740B Combination locks.** All GSA "limited use" electronic security equipment (FF-L-2740B combination locks) must be protected against tampering while being warehoused or shipped to the end user. All manufacturing, distribution, storage and locksmith facilities shall store FF-L-2740B locks in facilities that have security-in-depth (as defined in 32 CFR 2001.92 (a)) or in a padlocked 16 gauge steel cabinet. The GSA must be contacted immediately if a burglary or intrusion into the facility has been discovered or any other incident resulting in the loss of control over the security equipment. All GSA limited use security equipment in stock at the time must be considered compromised and returned to GSA.

**7.1.6 Shipping of FF-L-2740B Combination locks.** Any shipping companies used to transport the GSA limited use security equipment must have a tracking capability (for example: Fed Ex, UPS & USPS) and require a signature upon receipt.

The serial numbers from each of the GSA limited use security equipment must be sent under separate cover for verification upon receipt by the end user.

**7.1.7 Movement of GSA Containers.** The movement of GSA containers should be accomplished by professionals trained and equipped for the movement of heavy equipment. Special "safe" moving equipment designed to move heavy GSA approved containers safely without damaging them are readily available and should be used. The GSA approved container should be attached to the moving equipment with straps from the sides or the rear. At no time should the front of the container come in contact with the moving equipment. The combination lock, dial, dial ring and container handles should never be used in any way to aid in the movement of the container.

### **7.2 Additional Information and Points of Contact.**

Department of Defense Lock Program:

Technical Support Hotline

Phone: (805) 982-1212, toll-free (800) 290-7607, or DSN 551-1212

Website: <https://www.navfac.navy.mil/go/locks/>

Quality Assurance Information:

General Services Administration

National Furniture Center

Phone: (703) 605-9256

#### **7.2.1 Drawer Heads.** For information on drawer head replacement or warranty provisions, contact:

Hamilton Products Group Inc. Government Sales

Phone: (800) 876-6066

[www.hamiltonproductsgroup.com](http://www.hamiltonproductsgroup.com)

Will-Burt Government Sales

(also for Mosler and Diebold-Mosler parts)

Phone: (800) 568-7233

[www.willburt.com](http://www.willburt.com)



Alphasafe INC  
Phone: (703) 281-7233  
[www.alphasafeinc.com](http://www.alphasafeinc.com)

A&H Security Cabinets (also for Millennium Metals)  
Phone: (877) 510-3799  
[www.aandhsecuritycabinets.com](http://www.aandhsecuritycabinets.com)

**7.2.2 GSA Approved Training Organizations:**

MBA USA INC  
Phone: (859) 885-7193  
[www.mbausa.com](http://www.mbausa.com)

Lockmasters Security Institute (LSI)  
Phone: (866) 574-8724  
[www.lsieducation.com](http://www.lsieducation.com)

**MILITARY INTERESTS:**

Military Coordinating Activity:  
Navy-YD  
Custodians:  
DLA-IS  
AF-99  
Army-AR

**Preparing Activity:**  
GSA-FAS

FED-STD-809D

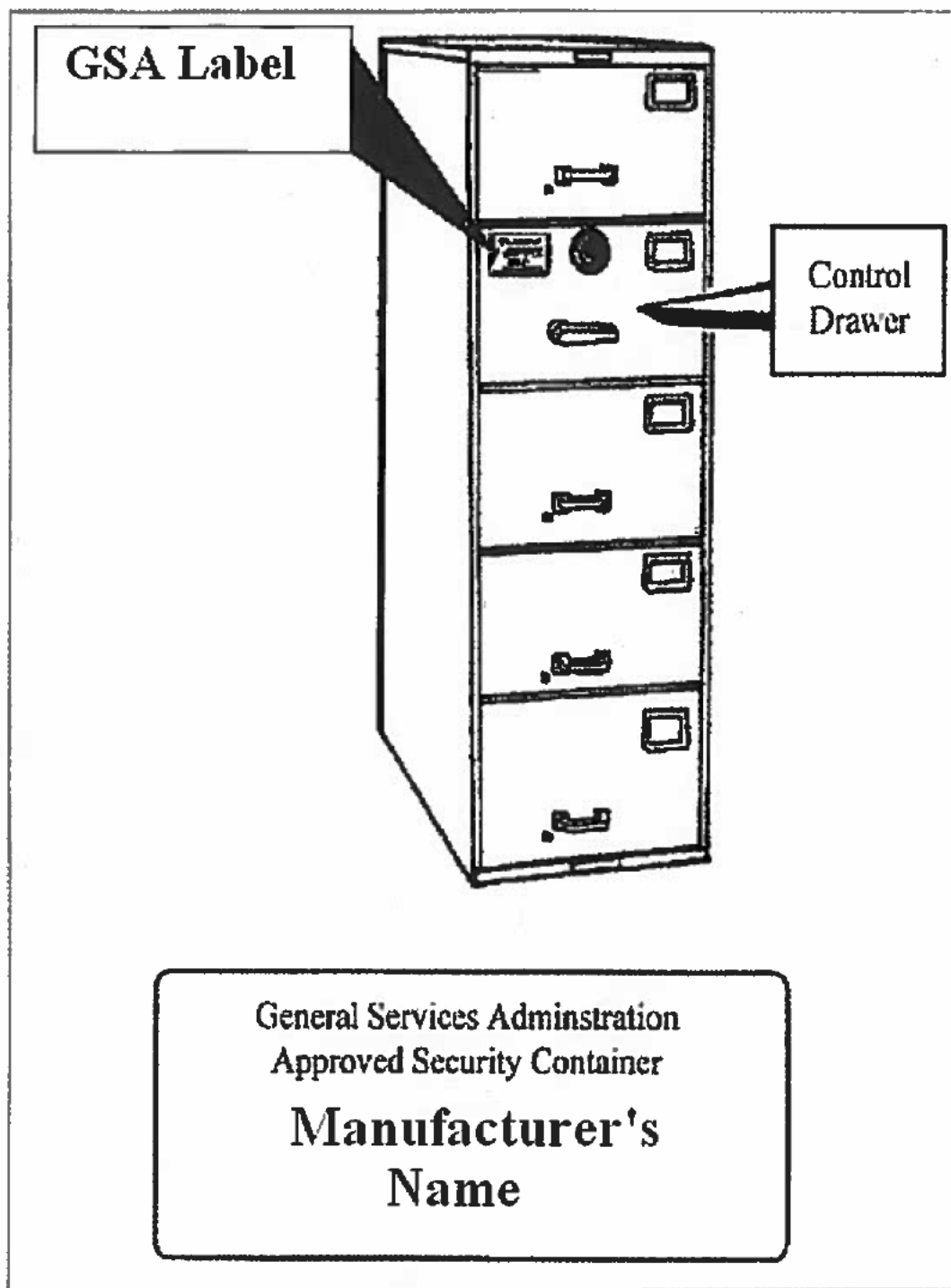


Figure 1. Security container and label

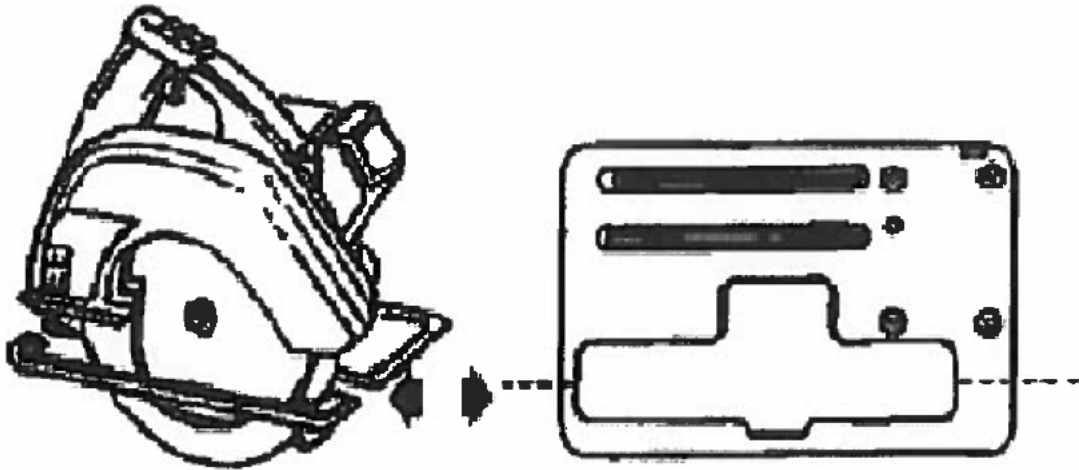
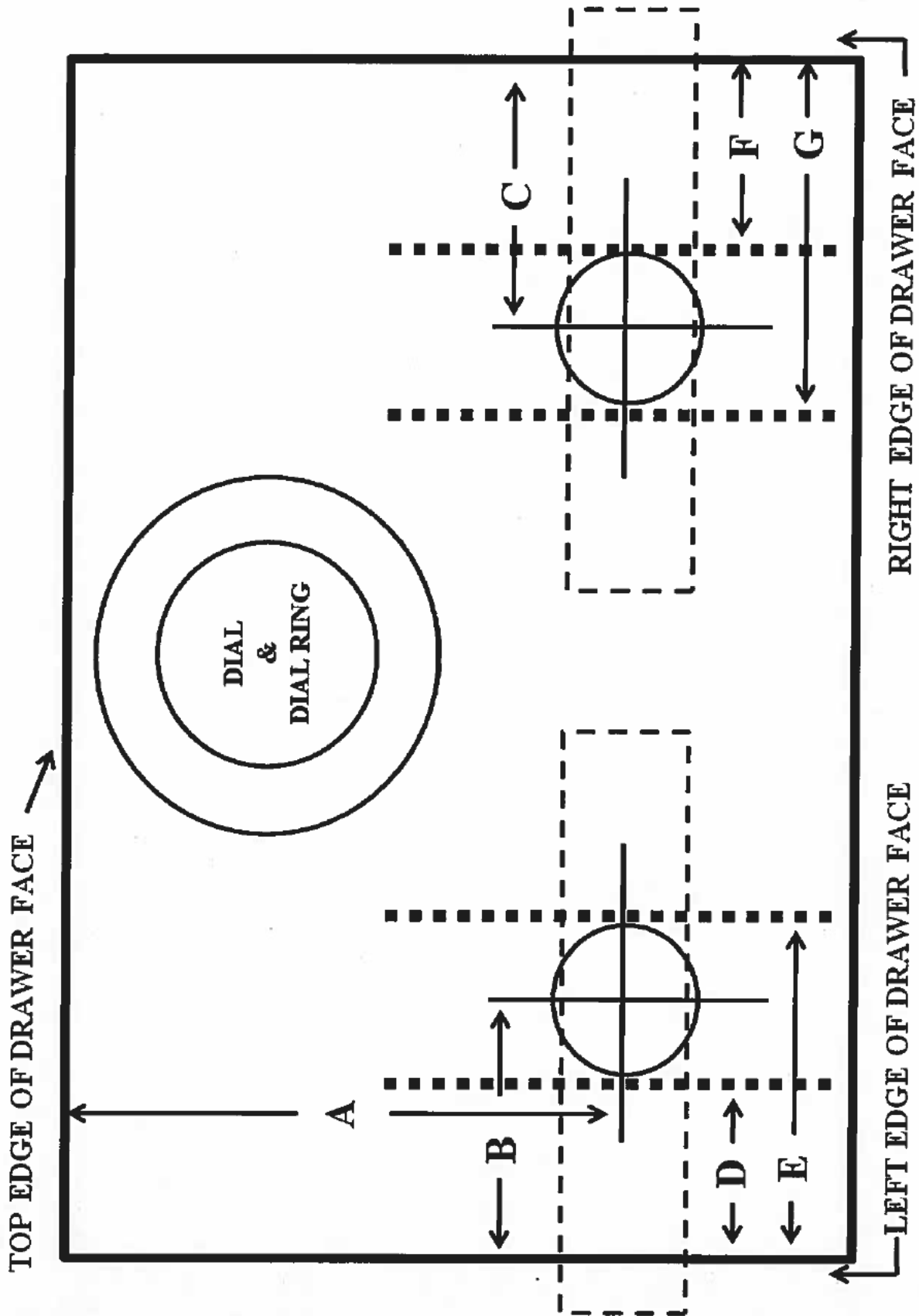


Figure 2. Builder's circular saw. Cut the foot assembly of the 10 ¼" circular saw as shown. File or grind the cut edges of the foot assembly to remove sharp edges. This size saw is necessary on Mosler or Diebold-Mosler Class 5 security files. A 7 ¼" builders circular saw is adequate for other files and does not require the modification shown above.

Figure 3 Container neutralization measurements



**FOR NEUTRALIZATION MEASUREMENTS:**

Contact the DOD Lock Program (7.2), or your GSA Approved Training Organization (paragraph 7.2.2).

Identify the safe and obtain the appropriate measurements for the neutralization method desired. Measure from the top of the drawer face to dimension A and mark a horizontal reference line for both bolts.

For Method 2 (hole saw) measure from the left edge of the drawer face and mark dimension B then measure from the right edge of the drawer face and mark dimension C.

For method 3 (Builders Circular Saw) measure from the left edge of the drawer face and mark dimensions D & E then measure from the right edge of the drawer face and mark dimension F & G.

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Table 2. Operational Visual Inspection Checklist

<b>OPERATIONAL VISUAL INSPECTION CHECKLIST FOR SECURITY CONTAINERS AND VAULT DOORS</b>					
Note: If necessary, move classified material to another security container, secure room, or vault until repairs are completed.					
No.	Item	Yes	No	N/A	
1.0	SF700 completed and stored as local and national policy security regulations dictate				
2.0	Exterior of security container:				
2.1	Check for cracks, broken welds, tampering, and environment effects (rust, moisture, mold, corrosion).				
2.2	Check for modifications (repainting, alterations, unauthorized marking, camouflaged repairs or engraving).				
2.3	Check affixed GSA Certification Label.				
3.0	Lock:				
3.1	Federal Specification FF-L-2740/2937 combination lock in place.				
3.2	Check front/back of lock for alignment and looseness.				
3.3	Check dial for ease of spinning and "power up" procedures.				
3.4	Check digital number display for digit visibility.				
3.5	Check behind the lock for a drill plate and/or punch plate. (The drill plate is a thick piece of hardened metal usually found behind the lock between the lock and punch plate. The punch plate is a thinner piece of hardened metal which slides into the groves behind the lock housing and is between the lock housing and the cover plate.)				
4.0	Release and opening drawer mechanism:				
4.1	Check for ease of operation.				
4.2	Check the handle (should "spring back" when the bolt release is engaged).				
5.0	Drawers:				
5.1	Check for alignment.				
5.2	Check for ease of opening or closing operations (drawers should slide with no resistance).				
5.3	Check for debris on, or dryness or excessive lubrication of, sliding rails.				
5.4	Check for missing screws.				
5.5	Check for metal shavings on the ledge of the container where the drawer closes.				
6.0	Vault doors:				
6.1	Check for cracks, broken welds, tampering, and environment effects (rust, moisture, mold, corrosion).				

No.	Item	Yes	No	N/A
6.2	Check for modifications (repainting, alterations, unauthorized marking, camouflaged repairs or engraving).			
6.3	Check affixed GSA Certification Label.			
6.4	Check bolt work linkage connections and lubrication of bolt work and hinges.			
6.5	Check bolt work detent mechanism for proper function.			
6.6	Check for ease of opening and closing operations.			
6.7	Check alignment of door frame (door should swing open smoothly without dragging or sagging).			
6.8	Check operation of the emergency escape mechanism.			
6.9	Vault door sag or drag on the floor.			
6.10	Cracked or broken welds, tampering, excessive rust, unauthorized modifications.			
6.11	Missing GSA Certification Label.			
6.12	Bolt links falling apart, missing, or broken.			
6.13	Lock: Federal Specification FF-L-2740/2937 combination lock in place.			
6.14	Check front of lock for alignment and looseness.			
6.15	Check dial for ease of spinning and "power up" procedures.			
7.0	Lock operation for security containers or vaults:			
7.1	Locks are loose.			
7.2	Lock abruptly stops while spinning the dial to open the container.			
7.3	Lock dial starts to pull away from the lock.			
7.4	Display on the lock shows partial numbers or numbers start skipping.			
7.5	For X-08 and X-09 locks, the lock is missing the round pin head located about the back center of the lock.			