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PADLOCKS

Exerpts from FDNY Forcible Entry Manual

Padlocks are detachable locking devices having a sliding and pivoting shackle that pass through fixed or removable hardware and then made secure.

This chapter provides information and recommended procedures and tools used for forcible entry of padlocks. Like any fire or emergency, operational procedures and conditions on arrival will dictate the course of action. Is it a **tactical response** - Fire and/or life threatening emergency or is it a **routine response** - Non-life threatening emergency.

Padlocks are used in all types of occupancies, e.g. multiple dwellings, commercial, private dwellings, vacant buildings and even subways and railroads.

Padlocks are used on both the exterior and interior of occupancies. They are found in the places you least expect and you may have to force one with only the tools you carry. Therefore, members should be able to identify the various types of padlocks and their attachment hardware and means of installation.

For the purpose of this manual, the names of the locks used by the author are “street” names and not the manufacturer’s product name.

CATEGORIES OF PADLOCKS

For the purpose of size-up and understanding of padlocks, they are placed in three (3) categories:

- Light duty.
- Heavy duty.
- Special purpose.

PADLOCK SIZE UP:

- Type of padlock.
- Hardware and installation (attachment device).
- How many padlocks and their location.
- Accessibility.

PARTS OF A PADLOCK

- Shackle or bow.
- Body, solid or laminated.
- Keyway.




Keyway



Laminated

Solid

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LIGHT DUTY PADLOCK

- Shackle or bow is usually **1/4 inch or less**.
- Shackle or bow **usually not case-hardened**.
- Body of lock, solid or laminated.
- Keyway (type may vary).



HEAVY DUTY PADLOCK

- Shackle or Bow, **1/4 inch and larger**.
- Body of lock, solid or laminated.
- **Case-hardened steel**.
- Toe and heel locking.
- Guarded keyway.




SPECIAL PADLOCKS

Hockey Puck / American 2000 Series

Round padlock, American 2000 is the most common. May also be called a “doughnut” lock.

- No exposed shackle.
- Locking device fits over the staple.
- Removable pin.
- May be case-hardened.



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GATE LOCKS

These are devices made specifically for securing roll-down security gates. There are a few varieties of gate locks that are becoming very popular in urban areas. Here are a few of the most common the authors have encountered.

Bolt Lock (Medeco)

This case-hardened, tubular steel device goes through the gate and rail securing the occupancy. When secured properly it is very effective.



Mushroom Lock


This device is secured into the bottom rail of the security gate.



Tank Lock

An extreme method of protecting the padlock. This is manufactured on the site. It is steel welded to the frame protecting the padlock.



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ASSOCIATED HARDWARE USED WITH PADLOCKS:

Hasps

Manufactured in many different sizes and strengths. They may be in-stalled with screws or bolts, which may be guarded by the hinge while in the locked position.




Slide Bolts

A device that travels in a track, which locks into a recessed hole or hardware. Padlocks pass through rear of bolt and are made secure. These slide bolts may be made of case-hardened steel. They are installed with screws or carriage bolts which may be exposed or guarded.



Note: An alternate means of forcing a slide bolt is to place the **FORK** or **PIKE** end of the Halligan Tool inside the shackle and twist the entire lock to break the hardware (slide bolt) holding the lock.



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FORCING PADLOCKS – Using The Forcible Entry Saw

Use the aluminum oxide blade. This should be the **primary tool** to remove padlocks, hardware and attachment devices. It offers speed and is relatively safer than striking tools.

Padlock with *Exposed* Shackle:

- Rotate the padlock to get a cutting position.
- Cut through **BOTH SHACKLES AT THE SAME TIME.**



Padlock with *Shielded* Shackle

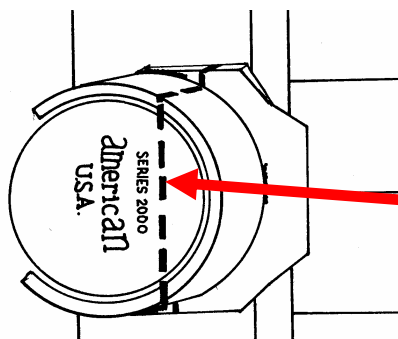
This could be the American 747 series or a wrapped lock.

- Rotate the padlock; confirm that the shield covers both front and rear of the lock.
- Cut through both shields at same time.
- Apply two vertical cuts through the shackle if accessible.

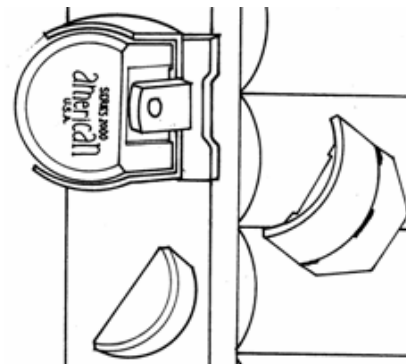



Hockey Puck Lock (American 2000 Series)

Cut through the body of the padlock **3/4 up from the keyway**. If lock remains engaged after being cut through, strike the side of the padlock with a sharp blow. This will usually remove the lock. Some of the newer 2000 series have a shielded keyway which must be cut to open the lock.



**Cut Lock
(Dotted Line)
to Force.**



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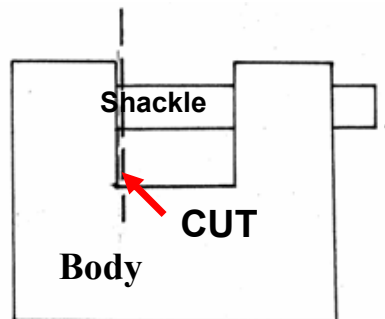
FORCING PADLOCKS – Using the Power Saw



Note: THIS IS A CHANGE FROM TRADITIONAL CUTS OF 2/3's UP THE KEYWAY. YOU MUST CUT 3/4's UP FROM THE KEYWAY TO CLEAR THE INTERNAL HASP.

Horseshoe Padlock

- Cut through the body of the lock and the shackle.
- At times it may be necessary to make two cuts, one at each end of the shackle.



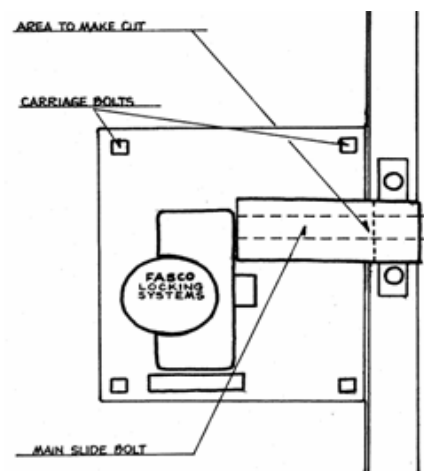
Fasco Lock


METHOD I - Cutting the Slide Bolt

- Cut through the slide bolt.
- Hold saw at an angle to cut a wedge out of the guard.

METHOD II - Cutting the Lock

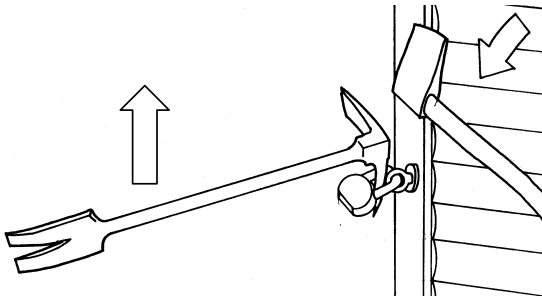
- The lock can be forced by cutting the body of the lock 3/4 up from the key cylinder.
- Cut the lock until the key cylinder slides out of the body of the lock.
- Remove the lock, slide the bolt.
- If the key cylinder does not slide out, cut until the lock is in two pieces. Push the pin out and remove.



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PIKE OF THE HALLIGAN TOOL

- The **PIKE** of the Halligan Tool may be more effective on padlocks with short shackles.
- Place the pike into the shackle opening, keeping the Halligan Tool as horizontal as possible.
- Maintain pressure on the lock body.
- Deliver sharp blows with a maul or axe.



Technique Tip: When striking either tool with the axe, the eight pound axe is preferred.

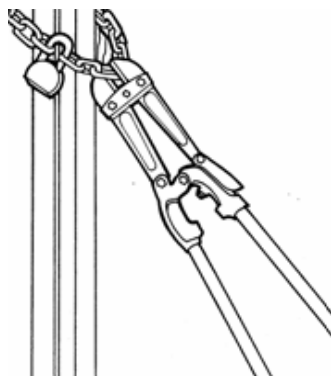
BOLT CUTTERS

Bolt cutters are excellent for cutting light duty pad locks, light duty chains, cable and hardware. As a last resort they can also be used to cut heavy-duty padlocks, but when used this way, they may damage the jaws of the bolt cutter.

If they must be used for a heavy-duty padlock:

- Open the bolt cutter to the maximum.
- Position the bolt cutter so one handle is securely against a substantial object (wall, ground, etc.).
- Push with both hands on handle to cut the hardware.

Note: Most heavy-duty padlocks have toe and heel locking. Both sides of the shackle may have to be cut, or twisted to remove the lock.



Cutting the Chain



Cutting the Lock