

Bicycle Security

It is estimated that approximately one million bicycles are stolen in the United States each year. Approximately 3,000 bicycles are stolen in the U.S. each day, valued at an average of \$265. The total value of approximately 1,000,000 bikes stolen annually is \$265 million.

Most bicycles are stolen from the home (yard, garage, porch, etc.) For every motor vehicle stolen in the U.S., three bicycles are stolen. While 66% of stolen motor vehicles are recovered, less than 20% of stolen bicycles are returned.

Reasons Bicycles Are Stolen

Bicycles are normally stolen for one of four basic reasons:

- For the thief's personal use;
- As a temporary means of transportation;
- So the thief can sell the bicycle or its parts as a source of money; and
- For some personal reason to deny the owner of its use.

Top 10 Worst Cities for Bike Theft

Kryptonite, the leading bike lock manufacturer, uses its anti-lock guarantee registration program and claims paid to identify the worst cities in the U.S. for bicycle theft:

- New York, NY
- Phoenix, AZ
- San Francisco, CA
- Chicago, IL
- Philadelphia, PA
- Washington, DC
- Boston, MA
- Austin, TX
- Portland, OR
- Miami, FL

Bicycle Locks

For the vast majority of bicycle thefts, the bicycles were either unlocked, improperly locked, or locked with grossly inadequate locking devices.

- The bicycle owner should purchase and *use* a good bicycle locking device.
 - ✓ A recommended bicycle locking device consists of a three foot length of 1/4 inch hardened chain together with a keyed type padlock of high quality having at least a 1/4 inch hardened shackle.
 - ✓ Although there is no bicycle lock or chain that cannot be defeated; the "U" shape locks have proven to be reasonably effective.

- ✓ A good padlock should have at least a 7/16 inch hardened alloy steel shackle. If the steel is hardened, the word “hardened” will be stamped on the shackle.
- ✓ The lock shackle should be secured at both “heel and toe” and the locking mechanism should be of “pin-tumbler” construction.

**Bicycle Locks Tested by *Bicycling Magazine*
August 1994 Issue**

Type of Lock	Estimated Cost	Reliability (Seconds to Break)
1/4 inch cable	\$17	5 seconds
3/8 inch cable w/hardened padlock	\$27	11 seconds
Giant U-Lock	Unknown	57 seconds
Kryptolock with Bad Bones	\$28-335	1 minute, 27 seconds
Reon Alarm Lock	\$50	1 minute, 55 seconds
Kryptonite Evolution U-Lock	\$49-\$55	Couldn't Break
ICS U-Lock with Bad Bones	\$35	Couldn't Break
Quadrachain	\$100	Couldn't Break
Kryptonite New York Lock	\$70-\$75	Couldn't Break

Defeating Bicycle Locks

Bicycle locking devices can be broken in a number of ways:

- A bolt cutter or hacksaw can be used to cut a lock, chain or cable.
- For some “U”-Locks, leveraging devices can be inserted into the excess space, and the lock can be snapped open.
- Another method involves a long pipe being placed over the locking mechanism to pry the lock open.
- Car jacks can also be used to snap the shackle of a U-Lock.
- Freon and other super-cold substances have been blamed for some bike thefts, but in reality this probably occurs infrequently.

Bicycle Locking Do's and Don'ts

- **Do's**
 - ✓ When unattended, bicycles should *always* be locked. More bicycles are stolen from homes than from any other location.
 - ✓ The bicycle should be locked to an immovable object in a conspicuous, open, and well-lighted place. When locking the bicycle, at a minimum both wheels and the frame should be secured.

- ✓ Lock the bicycle to a fixed, immovable object, like a parking meter or a permanent bike rack that is cemented or anchored into the ground.
 - ✓ If a “U” - Lock is used, position the bicycle frame and wheels so that as much open space as possible within the U-portion of the lock is filled or taken up. This makes it more difficult for a thief to use tools to attack the lock.
 - ✓ If a “U” - Lock is used, and it has a keyway on the end of the crossbar, position the lock with its keyway towards the ground. This makes it harder for the thief to access the lock.
 - ✓ Record all vital information for a bicycle: make, model, color, identifying marks, serial number, etc. Have this information readily available for the police in the event of a theft. This will increase the chance of recovery.
 - ✓ Accessories that can be easily removed, like quick release wheels and seats, should also be secured by a locking mechanism.
- **Don'ts**
 - ✓ Don't lock bicycles to a small tree, aluminum or wooden posts, or chain link fences. These items can be easily broken or cut.
 - ✓ Don't lock a bicycles to disability accessible ramp.
 - ✓ Don't lock a bicycle to itself (the front wheel locked to the frame). A thief can simply carry it away.
 - ✓ Don't position a lock low to the ground. A thief can attack the lock more easily and less obviously in that position.

Register the Bicycle

If the local law enforcement agency, school or other organization has a bicycle registration program, it is strongly recommended the bike should be registered. Doing so may help deter a thief, and can assist in the possible return of the bicycles if it is stolen. Some law enforcement agencies (Madison, Wisconsin and Palatine, Illinois are examples) will allow bicycles to be registered via the Internet.

Engrave the Bicycle

The bicycle should be engraved with the owner's social security number preceded by the state's abbreviation. The engraving should be on the underside of the frame's diagonal bar near the crank housing. The owner may also wish to engrave each wheel near the valve stem, the crank, derailleur, front forks, etc. Doing so may discourage the thief who would strip it for parts. The markings should be placed where they can be seen when standing on the right side of the bicycle. This makes the markings more easily seen by the thief, by the owner, by the police and all concerned. Cover the engraving with clear fingernail polish can help prevent resting or deterioration.

Easily removable bicycle accessories should also be engraved to further discourage theft of these items. A laundry marker can be used on nylon bags.

Personalize the Bicycle

Some types of bicycles are more likely to be stolen because of the value or brand name. Mountain bikes are very popular items of theft. To give them a special identity, owners of bicycles are encouraged to personalize them.

An effective technique for doing so is to remove all special names and stripes that were placed on it by the manufacturer. The owner could then paint their last name or initials on each side of the bicycle where the manufacturer's name would normally be located. To personalize their bicycle, the owner should use a weather-resistant paint. They should not use spray paint because it can be easily removed.

The owner should take photographs of the bicycle, date the back of it and keep them with the bicycle receipts.

Bicycle Racks and Lockers

- One style frequently used is the "Sidewinder." This rack is constructed of 2 3/8" structural steel tubing. They have both galvanized steel or powder coat finish. They are available in 3, 5, 7,9,11 and 13-bike capacity models for either below ground or surface installation.
- Another preferred bike rack is the Cora Bike Rack. This bike rack allows for the locking of the wheels and frame while supporting the bicycle frame.