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Bullet Catcher

TECHNICAL NOTES

Background

Developed in Russia, the Bullet Catcher provides the firearms examiner a non-destructive, in-laboratory projectile capturing system. Constructed of rolled steel and a Level III backing plate, the Bullet Catcher can contain a fired projectile with a velocity of up to 1100 mps (3300 fps). The Bullet Catcher can capture pistol and rifle rounds, including hollow point ammunition, without the need for down loading the powder in the cartridges.

Safety

CAUTION: The use of this product requires the discharge of a firearm. All and necessary safety precautions must be followed to prevent serious injury or death.

Equipment

When your Bullet Catcher arrives, it will be strapped to a pallet. Carefully remove the strapping, taking care that the Bullet Catcher does not slip off the pallet.
Remove the Bullet Catcher from the pallet and place it on a counter, table or sturdy cart. It is recommended that the Bullet Catcher be attached to the surface where it will be permanently used. This will prevent accidental tipping of the Bullet Catcher.
The Bullet Catcher also has a piece of paper in the open end to prevent the Kevlar fibers from falling out during transit. Remove this paper before use.

The Bullet Catcher is packed with 16 pounds of shredded ballistic fiber that wraps the projectile in a protective cocoon as it slows to a stop. The Bullet Catcher has three access doors for projectile retrieval. This allows the examiner to recover fired rounds without having to completely unpack the ballistic fiber from the tube. The access doors are secured with a rubber ball and metal socket latching system to prevent the doors from opening under the forces generated during bullet deceleration or from nearby muzzle pressure from the discharge of the firearm. The front has a removable grate for insertion of a paper barrier or ballistic gelatin.

The Bullet Catcher is supplied with ballistic fiber tightly packed as one continuous bundle. Tracking markers can be used to determine the distance a fired projectile travels in the tube for quick recovery. The user can insert markers in the ballistic fiber by using cut cardboard, paper plates or sheets of paper. The user can also divide the ballistic fiber and place it in large zip top plastic bags for distance determination.

Method

Prior to firing into the Bullet Catcher, all necessary precautions should be taken in regards to the discharge of a firearm. Keep all extra personnel behind the firearm and away from the Bullet Catcher when firing.

When firing into the Bullet Catcher the barrel of the firearm should be parallel to the tube. It is recommended that the firearm be bench mounted, but can be handheld, if necessary. If the gun is held at an angle to the long axis of the Bullet Catcher, the fired bullet could contact the sidewalls of the tube and damage the bullet or cause injury to the examiner. The muzzle of the firearm should be near the center hole of the open end. The perimeter holes are for the gases to escape and for expansion of the ballistic fibers. Only one projectile should be fired into the Bullet Catcher at a time. Recover each projectile before proceeding to the next.

When firing low velocity, small caliber ammunition into the Bullet Catcher, it is suggested that some of the ballistic fiber packing be removed from the front of the chamber to make the packing looser to allow the projectile to decelerate more slowly that if it was shot into a tightly packed chamber. This should prevent the small caliber projectile from disintegrating or suffering substantial deformation from quick deceleration.

Recovery of a Projectile

After firing into the Bullet Catcher, a cone of travel will develop as the projectile gathers the ballistic fiber into a cocoon. This cone of travel will help locate the cocoon in the ballistic fiber. With a gloved hand and protected arms, open the first access door and search the Ballistic fiber for the cone. When located, follow the cone towards the back end of the Bullet Catcher until the cocoon is located. With higher velocity projectiles, starting in the second access door may be warranted. Remove small bundles of ballistic fiber until the cocoon is located. The shredded ballistic fiber is messy and will readily adhere to clothing. Care should be taken to contain the removed ballistic fiber in a box or plastic bag.

After recovery, the ballistic fiber will need to be redistributed in the Bullet Catcher. This redistribution will remove the travel cone and provide the same stopping power shot after shot. If the ballistic fiber is not redistributed, the chance of projectile damage increases as the ballistic fiber will not be able to stop the projectile from striking the back wall of the chamber.

Ballistic Fiber Maintenance

The ballistic fiber will retain its stopping ability for about 10,000 firings. At a time where it is noted that fired projectiles travel farther down the chamber than normal, consideration should be given to the replacement of the ballistic fiber packing. Routine maintenance of the ballistic fiber is necessary to maintain the life of the fibers. Depending on the daily or weekly use of the Bullet Catcher, the ballistic fibers should be removed from the chamber and tumbled at least once per month. Remove the fibers and place them in a large cardboard box or plastic garbage bag. The fibers should be mixed thoroughly by

hand to redistribute the fibers and air them up. Care should be taken when doing this maintenance as the fibers will pose a direct exposure to lead and gunshot residues to the examiner. Proper clothing and skin protection should be utilized. After tumbling the fibers, repack them in the Bullet Catcher, starting in the back end and moving toward the front.

As the Bullet Catcher is used, the ballistic fibers will collect lead and propellant residues and will start to discolor. As the fibers slowly turn grey to black, consideration should be given to the replacement of the fibers. Additionally, as the fibers wear from use, their effectiveness in stopping projectiles will be diminished. The used material should be treated as normal lead waste residue from a firing range and should be disposed of in a similar manner. Please consult your local regulations regarding the disposal of lead waste residues. Replace with new ballistic fibers following the instructions above.

Properly maintained, the Bullet Catcher will last for years and provide a safe and effective way to recover fired projectiles for comparative purposes.

Ordering Information

Catalog No. 4-2000 ..... Bullet Catcher
Catalog No. 4-2001 ..... Replacement Ballistic Fiber (long chamber)
Catalog No. 4-2002……. Handgun Bullet Catcher
Catalog No. 4-2003……. Replacement Ballistic Fiber (short chamber)