

A. Purpose:

Due to limitations of the Firearm and Toolmark Unit's bullet recovery devices and to collect test fired bullets suitable for comparison, it may be necessary to reduce the powder load of a cartridge.

B. Responsibility:

Analysts assigned to the Firearm and Toolmark Unit.

C. Safety:

1. Proper caution must be exercised and the use of personal protective equipment must be considered.
2. Appropriate hearing and eye protection must be used.

D. Procedure:

1. Pull the bullet out of the cartridge using an inertia bullet puller or a reloading press.
2. Remove the gun powder and weigh it.
3. Remove 1/3 to 1/2 of the gun powder, and replace the remaining 1/2 to 2/3 of the gun powder back into the empty cartridge case. Dispose of the removed gun powder.
4. It may be necessary to loosely pack a small piece of tissue or similar material into the cartridge to fill the gap between the bullet and the powder.
5. Seat the bullet back into the cartridge case using a rubber or leather mallet, or a reloading press.
6. When using downloaded ammunition, it is imperative that the analyst checks the barrel for obstructions between each firing.
7. Indicate in the notes that downloaded cartridges were fired.

E. Equipment:

1. Inertia bullet puller
2. Reloading press
3. Balance
4. Weigh boat
5. Rubber or leather mallet