

A. Purpose:

To describe the techniques that can be utilized to recover hidden, QR code or dot-matrix serial numbers.

B. Responsibility:

Forensic Science Examiners or other employees assigned to the Unit.

C. Safety:

1. The analyst shall use appropriate PPE (eye protection, gloves, lab coat).

D. Procedure:

Operability testing, if requested, shall be conducted prior to any serial number restoration attempts.

Determine, if possible, the location, size, style (font), hidden numbers and the number of characters typically found in the serial number of the item in question. Record the source(s) of this information if used, such as the Firearms Reference Collection, the Firearms Reference Table (Royal Canadian Mounted Police), or the ATF Firearm Serial Number Structure Guide.

1. Hidden Serial Number

- a. In the event that a serial number is not able to be restored, the analyst should research if the weapon contains a hidden serial number.
- b. There are several resources that can be used: ATF Serial Number Structure Guide, as the Firearms Reference Collection, the Firearms Reference Table (Royal Canadian Mounted Police), and the Smith & Wesson Hidden Serial Number Guide.
- c. On firearms with hidden serial numbers, disassembly of the firearm and/or removal of material may be necessary to reveal this number. Record in the case notes any action taken to reveal a hidden serial number.
- d. In this case, the analysis will be conducted under the request type titled "SN – Hidden/QR code".

2. QR or Dot Matrix Codes

- a. In some cases, the firearm may have a QR code or a dot matrix code as the serial number record. These codes will be recorded digitally and then scanned using a QR reader to determine the alphanumeric information.
- b. In some cases, the manufacturer needs to be contacted with the alphanumeric value to determine if this is a serial number.
- c. In this case, the analysis will be conducted under the request type titled “SN – Hidden/QR code”.

E. Reporting Results**Hidden/Secondary**

Item XXX-XXX was submitted for serial number restoration. Item XXX-XXX was examined and found to have an obliterated serial number. A portion of the frame was removed to reveal a hidden, replicate serial number that reads _____. A hidden serial number placed by the manufacturer on the frame was located and reads _____.

QR/Dot Matrix

Item XXX-XXX was submitted for serial number restoration. Item XXX-XXX was examined and found to have an obliterated serial number. A QR (or Dot Matrix) code was located on the weapon and determined to be the following serial number that reads that reads _____.

F. Serial Number Restoration - CAS

Beginning July 2025, Serial Number Restorations will be conducted by the CAS Unit using premade chemicals.

1. Operability Prior to CAS Serial Number Restoration

- a. Operability testing (if needed) will be conducted on the weapons prior to serial number restoration.
- b. At the completion of the operability testing, the weapon will have a zip-tie placed through the barrel and chamber to indicate that the weapon has been rendered safe. The weapon is then zip-tied back into the box.
- c. The blue zip-tie with the lab case number will be placed in the trigger guard and should not be removed.
- d. Once the weapon is sealed back in the box, the evidence will be transferred to the storage location CAS - Serial Number Incoming in B-28.
- e. At the completion of the Serial Number Restoration by the CAS Unit, a copy of the report containing the recovered serial number will be provided to the Deputy Director/Assistant Director.

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- i. If the NIBIN Entry was conducted by DSS staff, the analyst will be provided the report to update the Serial Number information in NIBIN.
 - ii. If the NIBIN Entry was conducted at a DSS kiosk, the Deputy Director/Assistant Director will email the report to the officer that made the acquisition for the Serial Number information to be updated in NIBIN.
- 2. QR/Dot Matrix/Hidden Serial Number
 - a. In the event that the serial number is not able to be restored, the Firearms Unit will be contacted to determine if a QR/Dot Matrix or Hidden Serial Number may be present.
 - b. If there is a QR/Dot Matrix or Hidden Serial Number, the weapon will be transferred to the Firearms Unit for processing. The evidence will be stored in FA B-28 Operability/Gun Storage or in the analyst's possession. A "SN – Hidden/QR code" LIMS request will be added for this process.
 - c. Refer to Section E for Reporting of Results.

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1) References:

- a. GL 2 Safety Manual
- b. FA SOP-02 General Firearms Safety
- c. ATF Serial Number Structure Guide
- d. Treptow, Richard S., Handbook of Methods for Restoration of Obliterated Serial Numbers, NASA, January 1977.