



ATF-LS-QD10 Physical Match of Paper Cuts, Tears and Perforations	Published Online: March 2018
Authority: Technical Leader	
Unofficial Copy; May Not Be Most Current Version	Page: 1 of 2

PRINCIPLE:

To determine, if possible, if two or more paper fragments were, at some time, joined or were perforated while one was on top of the other.

SPECIAL HANDLING:

1. Evidence containing body fluids that is received in the Document Section should be dried under a hood and then repackaged in a paper box or envelope. Items should be handled in order to prevent examiner exposure and preserve DNA, if requested by the submitter. Contents should be documented on the front of the packaging.
2. When handling a contaminated document, the examiner must have on a lab coat and rubber gloves. The evidence should be opened and examined only under a biohazard safety hood. After examination the document should be heat sealed. The work area should be disinfected and the lab coat placed in a biohazard bag and sent to the laundry. The gloves must be placed in a properly labeled biohazard disposal after the examination is concluded.
3. Evidence submitted requesting a latent print examination should be placed in a plastic or mylar sheet protector covering the evidence. In this case, item and examiner identifying marks should be placed on the protective sheet.

SPECIMEN(S):

Two or more unknown/questioned items

APPARATUS REQUIRED:

Stereo microscope, hand magnifier, VSC or other UV/IR illumination source, and other sufficient light sources

PROCEDURES:

The method for conducting a physical match examination will generally include the following:

1. The evidence is marked with the appropriate item number as it appears on the Laboratory transmittal sheet, the case number, and the examiner's initials or other mark. Items on the transmittal sheet may be amended by adding "Q" and "K" identifiers. Such amendments should be notated on a copy of the transmittal placed in the case jacket and the contributor should be notified via phone or email.
2. All procedures shall be performed when applicable and noted when appropriate and all examinations performed, relevant observations, and results shall be documented.

3. Procedures should be discontinued or limited should there be a determination that a particular feature is not present or that an item is lacking in quality or comparability and the reasons for such should be documented. A report should then be produced.
4. Determine whether the specimens are broken or separated.
5. Determine whether the specimens are suitable to be physically realigned.
6. Evaluate the specimens for individualizing characteristics.
7. Conduct a side-by-side comparison of the specimens using the following steps: Visual inspection, Ultraviolet and Infrared examination, manual alignment, edge-to-edge alignment, surface markings, and measurements and pattern count.
8. Evaluate similarities, differences, and limitations and determine their significance individually and in combination.
9. Reach a conclusion and report accordingly.
10. The bases and reasons for the conclusion(s), opinion(s), or finding(s) should be included either on the examiner's worksheet or on photocopies and may be also included in the report.

REFERENCES

ASTM E2288 (current edition) Standard Guide for Physical Match of Paper Cuts, Tears and Perforation in Forensic Document Examinations