Accurate-ID and Livescan Operation:

FINGERPRINT QUALITY GUIDE

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Fingerprint Quality Guide

Overview

Numerous biometric and operator variables influence a fingerprint's quality during the livescan process. For example, size, moistness, or definition can all affect how a fingerprint is re-produced. The process of fingerprinting is an art that requires both time and practice. Keep the following tips and factors in mind to reduce printing errors and to improve submission quality for your agency.

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Condition of Subject's Prints

Notice the condition of a subject's fingers and skin. Are they dry, moist, cracked, or otherwise damaged?

- ✓ Genetic factors or an applicant's occupation may cause the obstruction of or wearing down of fingerprint detail.

a) Use a spray bottle of distilled water, alcohol wipes to lightly moisten, or a ridge enhancer to augment dry and faint prints.

b) Distribute moisture or enhancer applications evenly over an applicant's finger and apply consistent pressure to scanner surface.

c) Use paper towels to dry the fingers of an applicant who has overly moist skin.

Fingerprint Quality Guide

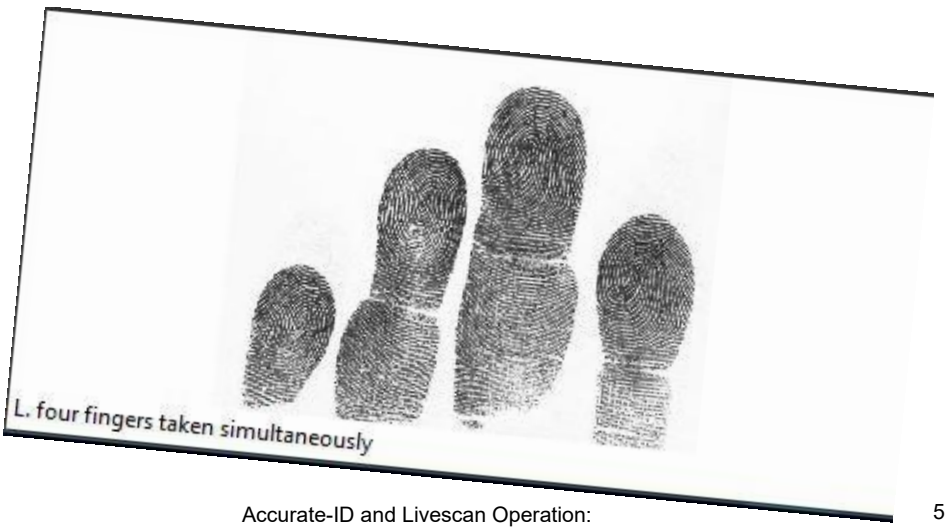
Obtaining Quality Prints

Fingerprints are the combination of ridges and valleys found on the hand of every individual. These ridges and valleys are comprised of loops, whorls, and arches. A good fingerprint image will be composed of the entirety of loops, whorls, and arches.

The printing process is composed of two types of prints. "Plain, Slap, or Flat Impressions" and "Rolled Impressions."

a) Flat Impressions are the four left or right fingers which are taken together simultaneously at a 45-degree angle.

b) Take your time to obtain the best possible flat impressions. These impressions are compared to the rest of a subject's prints for sequence checking. Sequence checks verify that the operator is printing the appropriate fingers and that all prints are obtained from the same individual.



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Obtaining Quality Prints

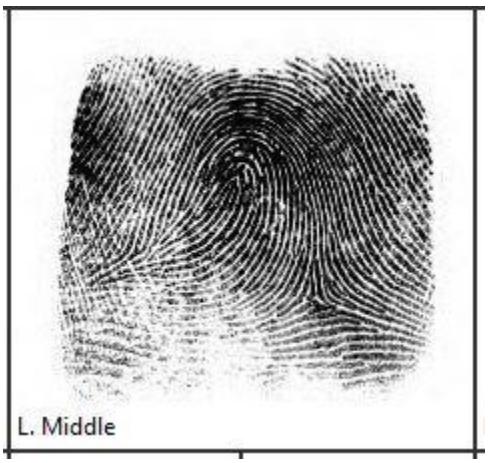
Rolled Impressions are the rolling of each individual finger from nail to nail.

a) Roll complete prints from nail to nail. You may want to confirm if your scanner is set to capture using the "Rock and Roll" method or the "Edge to Edge" method.

b) Rolled prints should be captured from the first joint to the tip of the finger.

c) Apply consistent and even pressure. This will ensure that the fingers do not shift during the printing process and that detail is not obstructed.

d) Hold the base of the applicant's finger. Rotate fingers in toward the subject. Use two of your own fingers to apply even and consistent pressure on the applicant's finger while rolling. Roll subject's finger away from the center of their body. This process relieves strain and leaves the fingers more relaxed for improved print quality.



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Examples of Prints

CORRECT

Complete surface area of slaps is obtained. Hand is at slight 45 degree angle and contains finger joints, whorls, and other detail.

INCORRECT

Surface area of fingers and joints are missing. Fingers should not be "bridged." Fingers and joints should be flat against scanner surface.

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Examples of Prints

CORRECT

Good quality prints contain as much whorl and ridge detail as possible. The shape of these prints should almost be square or box-like in shape.



INCORRECT

Poor prints show markings, abnormalities, or inadequate ridge detail. Use enhancement methods to improve the condition of an applicant's skin or verify that prints are rolled from nail to nail.



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Examples of Prints

Enhancement Examples

Use various techniques in order to improve the following prints:

This applicant has rough, dry, or worn fingers. Use wipes, enhancement solutions, or distilled water to improve their ridge detail.

This applicant's fingers are too moist or have been printed with too much pressure. Dry the applicants fingers or use less pressure to reveal finer ridge detail.

The applicant's rolls are too narrow. Roll a comprehensive print from nail to nail in order to reduce the likelihood of rejection. Rolled prints should almost be square in shape.

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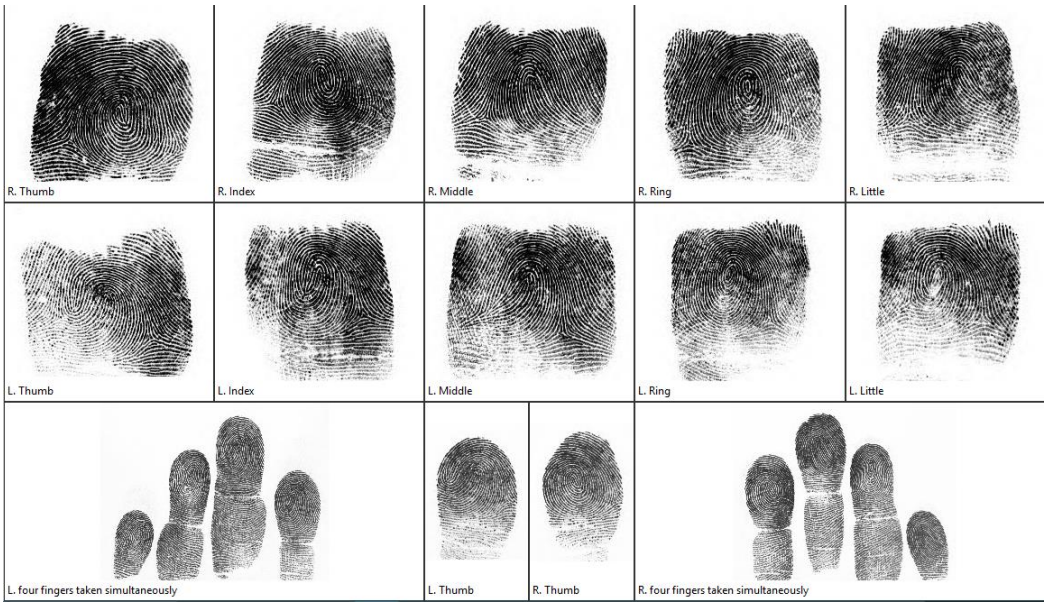
Examples of Prints

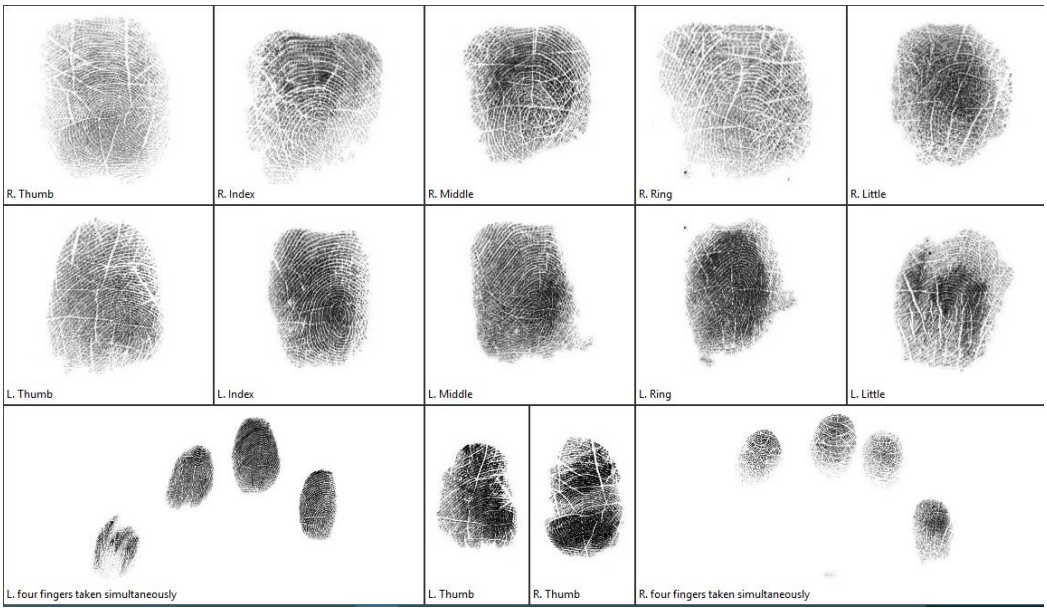
CORRECT

A set of good prints.



INCORRECT

A set of poor prints.



Thank you for choosing…

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