
TECHNICAL INFORMATION

PRINTMATIC™ Horizontal Roller Catalog No. PIP100H

BACKGROUND

It has long been known that the leading cause of poor impressions is too little or too much ink on the fingers. Those of you who have worked with ink and slab setups know that their greatest drawback is that they require a skilled technician to consistently develop the thin ink coating required for good impressions.

The traditional alternative to slabs are the Porelon® pads, valued for the thin layer of ink they carry on their surface. Porelon® is a microporous plastic that acts both as an ink reservoir and an ink delivery system. Ink is held in thousands of interconnected pores within the pad. Larger interior pores provide high ink capacity and permit the use of highly pigmented inks for excellent contrast. Ink is gradually and evenly delivered to the surface through a particu-



larly fine-pored outer layer by capillary action. Porelon®'s drawback lies in the fact that applying pressure to the pad causes additional ink to be released. Uncooperative subjects or incorrect personal technique can lead to over-inking and poor impressions.

Aside from their great expense, other alternatives, such as the *disposable* slab ink strip, are often of uneven quality: Peeling the protective layer off may expose a perfect surface one time and a patterned surface which will transfer to the rolled print the next.

CAUTIONS

- Consult the appropriate Material Safety Data Sheets (MSDS) found on our website at www.sirchie.com/support.
- Do not clean the roller with a solvent-based cleaner as permanent damage may result.
- Do not use this roller with standard fingerprint ink as permanent damage will result.
- This roller's ink supply cannot be replenished (*order No. PIP100R replacement roller*).
- Always wipe the slab with a *dry*, clean, lint-free cloth before inking the surface.

THE PRINTMATIC™ ADVANTAGE

The roller and slab has survived first because the quality of the inked area of the slab can be seen and judged prior to transferring the impression to the card, and second because when a proper layer of ink is present, the rigid backing acts to prevent over-inking of the fingers.

Because it is ink-impregnated Porelon®, the PRINTMATIC™ rolls out a thin, uniform layer of ink in a quick series of passes. Because the ink is on a slab, the surface is easy to inspect. Any mottling in the surface coating can easily be corrected by making an additional roller pass or two over the surface. Rolling prints over an area previously used is easy to avoid as “used” areas are clearly visible. Because an area of ink sufficient for a full set of impressions is generated at once, regeneration times (the time for a

Porelon® pad to regenerate a thin, uniform layer of ink on its surface) are eliminated as a concern. The PRINTMATIC™ advantage is the ability for anyone to generate a thin, extremely even full slab of non-drying ink every time.

PREPARATION FOR INKING

No advance preparation of the roller is necessary unless the roller has either been exposed to dust, oil or lint, or has been sitting for an extended period of time. In the latter instance, it may be found that some ink has concentrated on the lower surface of the roller. The surface can be restored by wiping with a clean, lint-free towelette, such as a Super Cleaner Towelette (FPT1C1). Allow the roller 10 to 20 seconds to regenerate ink on the surface before proceeding.

INKING THE SLAB

Roll the ink roller several times over the front portion of the slab, lifting the roller at the end of each stroke and returning to the starting point. Do not use a back and forth motion with the roller as, should there be any slight inconsistency in the roller, the effect will be amplified. The quality and evenness of the deposited ink layer can be affected by any tilt of the roller relative to the ink slab.

Unlike the standard roller, the H version does not automatically adjust for even pressure. The natural tendency is to apply more pressure at the front edge of the slab. Watch the pattern of ink being deposited and adjust tilt accordingly.



FIG. 1—Roll ink onto the slab.

INKING AND ROLLING THE FINGERS

Note: The following recommended procedure is practiced by the FBI. To avoid possible smearing, always begin the fingerprint taking procedure by inking and rolling the fingers on the right hand.

It is recommended that each finger be inked and rolled individually (i.e., ink the thumb then roll it immediately, ink the forefinger, then immediately roll it, etc.). If all the fingers are first inked and then rolled, there is the chance some ink may be transferred from a finger as it is curled out of the way prior to rolling, thus causing that finger to print lightly when rolled. After the fingerprints on the right hand are recorded, ink and roll the fingers on the left hand. When that is accomplished, record the plain impressions of both hands. An examination of the fingerprint record card reveals that these steps follow the order of the space allotted for each set of impressions.

1. The subject stands to the right and rear of the operator (Fig. 2). The operator grasps the subject's right hand with his right hand, cupping his fingers over the subject's fingers and tucking under those fingers not being inked. He uses his left hand to guide the finger being inked. The right thumb is inked and rolled first. The thumb is inked by rolling it from right to left, toward the subject's body. The thumb is inked from nail to nail to a point just below the first joint. Apply ink one time only.



FIG. 2—*Positioned subject so forearm is parallel to the floor.*



FIG. 3—*Roll the subject's right forefinger on the ink slab.*

2. Once the thumb is inked, immediately transfer the ink to the record card in the space numbered 1 (Right Thumb). Roll the thumb from the right side to the left side (toward the subject's body).
3. Next, ink the right forefinger by rolling the finger from left to right (away from the subject's body, Fig. 3). Ink from nail to nail and just below the first joint. Transfer the ink to the record card by rolling from left to right in space No. 2 (Forefinger). Repeat this process for the remaining fingers by inking and rolling each finger individually (Fig. 4).
4. Reposition the record card to permit adding impressions from the left hand. Ink the left thumb by rolling it from left to right (toward the subject's body), and then transferring the ink to the record card, Finger No. 6 space, by rolling from left to right.
5. Ink the left forefinger by rolling it from right to left (away from the subject's body). Transfer the ink to the record card by rolling it from right to left. Ink and roll the remaining fingers individually.

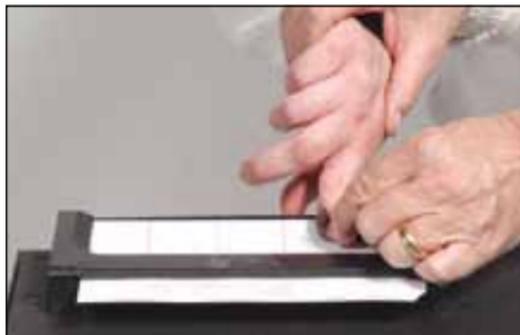


FIG. 4—Record the print in the space provided on the record card.



FIG. 5—Ink the four remaining fingers for a plain impression after the thumb has been printed.

6. Plain (Slap) impressions are taken last. Reposition the record card to permit entry to the bottom area of the record card. Ink the left thumb by pressing it straight down onto the ink pad. Transfer the ink to the Left Thumb box in the plain impression area.
7. Ink the remaining four fingers of the left hand simultaneously by pressing them straight down onto the pad (Fig. 5). Press all four fingers onto the plain impression area for the left hand of the record. Position the fingers at a slight angle to permit all four finger impressions to be recorded (Fig. 6).
8. Repeat this procedure for the thumb and remaining fingers of the right hand.



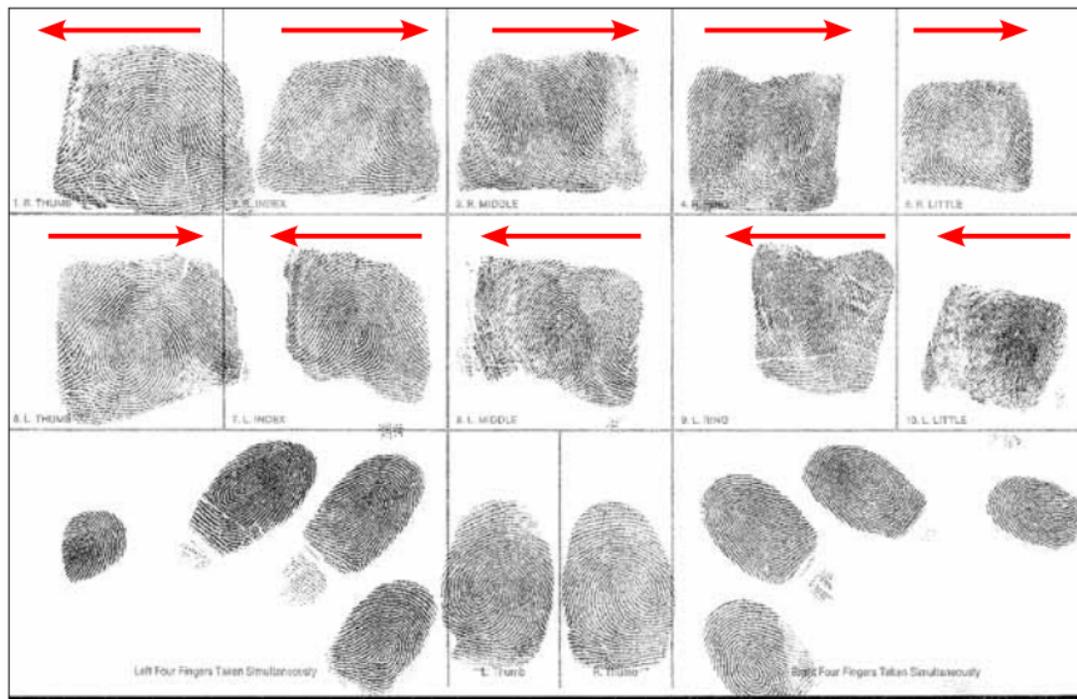
FIG. 6—Position all four fingers at a slight angle and press them onto the record card.

CLEANUP

Cleanup of the slab can easily be accomplished using a FTP1C1 Super Cleaner Towelette. Because of the controlled amount of ink placed on the slab initially, a single towelette will usually suffice. Wipe the surface of the slab with a dry towel before re-inking.

CAUTION: Do not attempt to clean the roller with a solvent-based cleaner as permanent damage may result.

No. PIP100RReplacement PRINTMATIC™ Porelon® Roller



Completed Record Card with directional notations.