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## TECHNICAL INFORMATION

### PRINTMATIC™ Porelon® Ink Roller System

Catalog Nos. PIP100, PIP200, PIP300

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#### 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 particularly 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.

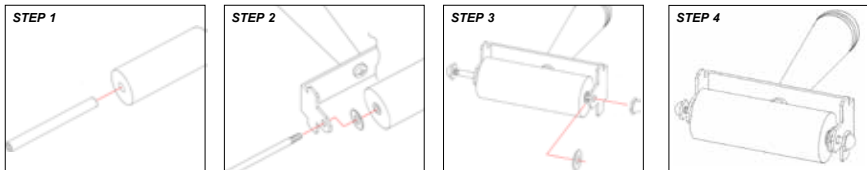
## CAUTIONS

- Consult the appropriate Material Safety Data Sheets (MSDS) found on our website at [www.sirchie.com/support](http://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 on 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.



### ROLLER ASSEMBLY INSTRUCTIONS

1. Donning a pair of disposable gloves, open the Porelon® roller container and slide roller out, onto a plastic bag or paper towel.
2. Insert the mandrel into the axial hole in roller (STEP 1). The mandrel should fit approximately flush with both ends of the roller.
3. Attach an acorn nut to one end of the roller axle and finger-tighten.
4. Slip the free end of the axle through one of the handle bracket assembly arms until it protrudes about 1/2" (STEP 2). Slip a washer over the axle end.
5. Slide the roller onto the axle far enough so the threaded end is visible.
6. Slip the remaining washer over the end of the axle. Note that the washer goes between the roller and the handle bracket assembly arm (STEP 3).
7. Slide the axle through the second handle bracket assembly arm and attach the remaining acorn nut to the end of the axle.
8. Tighten both acorn nuts (STEP 4) and place a plastic cap over each.
9. Prepare the roller for use by gently wiping the roller surface with one of the towelettes provided to remove areas of excess ink.

## MOUNTING THE PIP100

Two mounting holes in the bottom of the PIP100 metal case makes it easy to attach to a desktop or counter. Consider mounting the case to the left of (or above) the slab, so the roller handle will extend to the right. If mounting the case to the left of the slab, allow sufficient separation between the slab and case so the roller handle doesn't overlap the slab when its in the case.

1. With the roller in its case, place the case in the desired mounting location.
2. Remove the roller from the case.
3. Mark the location of the two mounting holes with a pencil or other marker.
4. Drill 1/16" pilot holes.
5. Mount the case using two #6 x 1/2" wood screws.

## PREPARING THE INK SLAB

PRINTMATIC™ Method:

Like the Slab and Roller method, the PRINTMATIC™ method requires that the operator roll ink onto an inking slab. The difference is that with the PRINTMATIC™ pre-inked roller, coating the slab requires only a few passes of the roller in the same direction to apply a thin, even layer of ink (Fig. 1).

## INKING AND ROLLING THE FINGERS

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.



FIG. 1—The operator rolls ink onto the slab.

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.
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).



**FIG. 2—The subject is positioned so that his/her forearm is parallel to the floor.**



**FIG. 3—Next, the operator rolls the subject's right forefinger on the ink slab.**



**FIG. 4—Then, the operator records the print onto the record card in the space provided.**



**FIG. 5—The four remaining fingers are inked for a plain impression after the thumb has been printed.**



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

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.
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.



No. PIP200

## PRINTMATIC™ FINGERPRINT TAKING OUTFITS

No. PIP200 (single cardholder) and No. PIP300 (double cardholder)

These fingerprint taking outfits feature SIRCHIE's superb PRINTMATIC™ pre-inked roller system. Outfits are supplied with a PRINTMATIC™ roller system, a glass inking slab, and a choice of one or two fingerprint record cardholder(s). The double cardholder unit is ideal for multiple fingerprint records. Integral mounting brackets on each outfit allow for easy mounting to a desk or tabletop. The PRINTMATIC™ ink roller is supplied in a rugged metal housing designed to protect the roller and prevent environmental contamination. Each outfit features our No. FPT263 space-age injection molded cardholder(s).

## CLEANUP

Cleanup of the slab can easily be accomplished using a FPT1C1 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.

### PIP100 COMPONENTS:

- 1- PIP100R PRINTMATIC™ Porelon® Roller
- 1- SF0075 Disposable Gloves, pair
- 2- FPT1C1 Super Cleaner Towelettes
- 1- SLF9160 Mandrel
- 1- SFL9159 Axle, Threaded
- 2- SFL9157 Washer, #10
- 2- SLF9158 Acorn Nuts (10-32)
- 1- SLF9205 Handle Bracket Assembly

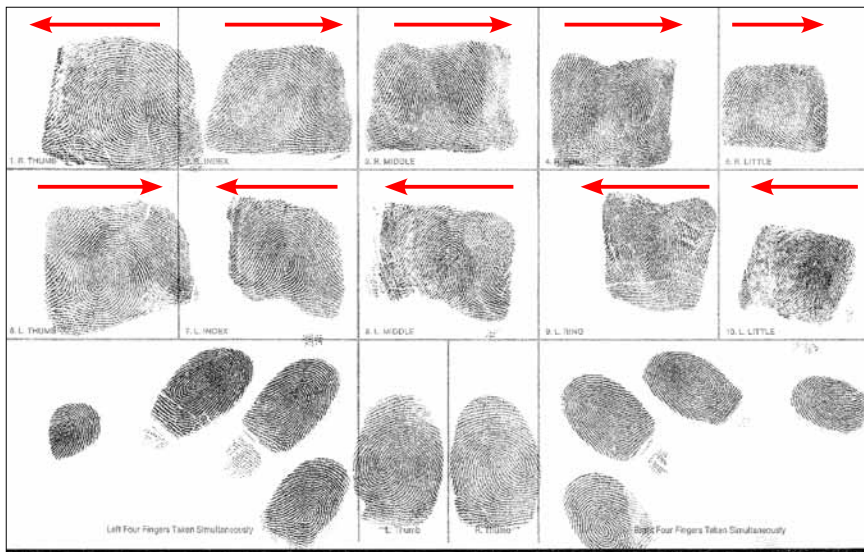
### REPLACEMENTS:

- 1- PIP100R Porelon® Roller
- 1- SF0075 Disposable Gloves
- 2- FPT1C1 Super Cleaner Towelettes

### PIP200/PIP300 CONTENTS:

(PIP300 not pictured)

- 1- FPT205 4" x 10" Glass Inking Slab
- 1- FPT263 Injection Molded Fingerprint Cardholder (PIP200 only)
- 2- FPT263 Injection Molded Fingerprint Cardholders (PIP300 only)
- 1- PIP100 PRINTMATIC™ Porelon® Fingerprint Ink Roller System



*Completed Record Card with directional notations.*