# TECHNICAL INFORMATION 

Autopalm ${ }^{\circledR}$ Printer Outfits

## Catalog Nos. AP100, AP200, APC200, APC200PF, APC200CM, APC300, APC300PIP,

 CFPS 100, CFPS 100PF, CFPS100CM, CFPS200, CFPS200PIP
## INTRODUCTION

The Autopalm ${ }^{\circledR}$ Printer utilizes a Porelon ${ }^{\circledR}$ roller (impregnated with a two-year supply of ink) that applies a thin, even layer of ink along the contour of the entire palm in one simple motion. A clear impression of the palm, from fingerprints to the wrist, is then recorded on a palm print record card by rolling both over the card roller.

## AP200 Autopalm ${ }^{\text {® }}$ Printer

The AP200 is lightweight and portable, making it ideal for field use. The kit includes a Porelon ${ }^{8}$ Palm Roller, image transfer roller, and protective cover. The AP200 may also be used for postmortem cases.

## AP100 Autopalm ${ }^{\circledR}$ Print Outfit

The AP100 is self-contained, designed for portable, desktop use. No external ink supply is needed. The kit includes No. FPT1C Super Cleaner Towelettes.

Portable Desktop Combination Fingerprint-Autopalm ${ }^{\circledR}$ Stations: APC300 and APC300PIP—Designed for portability, these desktop combination stations are very durable and built to provide years of dependable service. Each fingerprint Autopalm ${ }^{\text {® }}$ station features a sliding top. When slid forward and locked,



No. AP100

## TI02-94ENG-REV5

an operator may roll and record fingerprints. When the top is unlocked and pushed to the rear, the operator has access to the palm printing supplies. The station is available with a PRINTMATIC ${ }^{\text {TM }}$ pre-inked Porelon ${ }^{\text {® }}$ roller system.

## APC200, APC200PF and

 APC200CM-The APC200 series, like the APC300 and ACP300PIP, is designed for portability and built to provide years of dependable service. It is available with any of the following PrintMatic ${ }^{\text {TM }}$ fingerprint pads:
PORELON INK PAD-Introduced by SIRCHIE more than 20 years ago, the Porelon ${ }^{8}$ pad is the accepted STANDARD by law enforcement worldwide and may be used to record thousands of fingerprints. The two-year supply of thermal-impregnated ink is non-fading and dries on-contact in seconds.
FLAWLESS INK PAD (PF)-This revolutionary new concept for recording fingerprints features a specially designed microporous membrane that features a pore size of 7 to 10 microns affording a higher degree of detail in the fingerprint impression. Less pressure is required when rolling fingers on pad's surface so the resulting impression has less distortion. It produces thousands of rolled and plain impressions.
CERAMIC INK PAD (CM)—This extraordinary pad offers an approximate pore size of 4 microns, allowing for extraordinary detail in resultant prints. One pad produces thousands and thousands of rolled and plain impressions. The ink impregnated into this pad is specially formulated for use with ceramic material.

## Combination Fingerprint-Autopalm ${ }^{\circledR}$ Print Stations:

CFPS100, CFPS100PF, CFPS100CM, CFPS200 and CFPS200PIP—These freestanding pedestal-mounted fingerprint and palm print stations feature a sliding top which may be locked into position for fingerprint recording and unlocked and slid back for access to the palm printing supplies. The stations are available with a regular Porelon ${ }^{\sqrt{8}}$ pad, our series of PrintMatic ${ }^{\text {Tm }}$ fingerprint pads (see PrintMatic ${ }^{\text {TM }}$ pads description), an ink slab and roller or a PrintMatic ${ }^{\text {TM }}$ pre-inked Porelon ${ }^{81}$ roller. Each is equipped with a Porelon ${ }^{\circledR}$ palm roller and palm card roller.


## PRECAUTIONS

- Before use, 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.


## AP200 ROLLER ASSEMBLY INSTRUCTIONS

## Mounting The Autopalm ${ }^{\circledR}$ Printer Outfits

AP100-Place the Autopalm ${ }^{\circledR}$ Printer Outfit on a flat surface allowing a floor-to-ink roller height of approximately $39^{\prime \prime}(1 \mathrm{~m})$.

AP200-Place the Porelon ${ }^{\circledR}$ Ink Roller and Foam Card Roller on a flat surface approximately $39^{\prime \prime}(1 \mathrm{~m})$ from the floor. Predrilled $1 / 8^{\prime \prime}$ diameter holes may be found at the base of both units to facilitate permanent mounting. If permanent mounting is not desired, attach 4 rubber feet provided to each of the roller brackets.


## Installing The Rollers

Both the Porelon ${ }^{(8)}$ and Card Rollers must be installed. A pair of disposable gloves and 2 Super Cleaner Towelettes are provided to aid in setup.
Install the card roller by locating it over the slots in the roller bracket and pressing downward.
Install the Porelon ${ }^{\circledR}$ roller as follows: Put on the disposable gloves. Remove the roller from its shipping box and bag, leaving the plastic cover in place. Slide the roller down into the slots in the roller bracket, fitting the bracket into the notches in the roller bearings. Press downward to fully seat the roller. Grasp the tape holding the plastic roller cover in place and pull the cover off, allowing the roller to spin. Use the towelettes to wipe the surface of the roller clean. Dispose of the gloves and used towelettes.

## FINGERPRINT BENCH PEDESTAL ASSEMBLY

NOTE: Check for damage upon receipt of Fingerprint Bench Pedestal and report any to delivering carrier. Open all boxes and carefully remove contents. Check against list on Page 8 for all necessary parts to construct the base. If any parts are missing,
contact the factory for prompt service.

1. Carefully unwrap all parts and hardware. Be sure to work on a piece of carpet, cloth or other nonabrasive surface.
2. Place the base face-up on the work surface. Screw the two (2) threaded rods into the base so that they protrude through the bottom about $1 / 2^{\prime \prime}(13 \mathrm{~mm})$. Place the column over the threaded rods (Fig. A).


FIGURE A


FIGURE B


FIGURE C
3. Place the mounting plate on top of the column so the threaded rods protrude through the two (2) holes in the plate. Insert a lock washer and acorn nut on each rod, tighten. Continue to tighten the acorn nuts which tightens the rods into the base until entire assembly is sturdy (Fig. B).
4. Turn the column assembly upside down. Place a lock washer and hex nut on the threaded rods and tighten (Fig. C). Return the assembly upright. Your base is ready for the fingerprint bench.

## PREPARATION FOR INKING

## Autopalm ${ }^{\circledR}$ Method:

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 No. FPT1C Super Cleaner Towelette. Allow the roller 10 to 20 seconds to regenerate ink on the surface before proceeding.

## Inking and Rolling The Impressions

1. Have the subject wash and thoroughly dry his hands prior to inking. Some subjects may require that individual fingers be dried with a towel just before inking.
2. Stand the subject directly in front of the ink roller. A right-handed technician should then place himself so that the subject is to his right and rear, a left-handed technician to his left and rear. Grip the subject's right hand and wrist with your writing hand using firm pressure. The technician should use his writing hand to control the pressure and the rotation of the subject's
hand: Do not let the hand twist or wobble, or let the subject slide or draw his hand during the inking or rolling process. Use the free hand to apply contact pressure to the back of the hand being printed.
3. You will start by inking and rolling the right hand, then ink and roll the left hand. The area to be inked and rolled is from the tips of the fingers to the beginning of the wrist (the fingers, palm and heel of the hand).
4. To ink the hand, hold it at right angles to the ink roller (Fig. 1), place the subject's fingertips on the center of the ink roller slightly forward of the peak and roll the hand forward. To roll the print, place a card on the foam roller, press the fingertips to the card and roll the hand forward.
5. Move the inked hand over to the foam roller. Place a print record card onto the roller with the correct side up. If the card is a diagonal card such as the No. AP112, position the card diagonally on the roller.


FIGURE 1
6. Place the subject's fingertips onto the leading edge of the card with this same part of the card positioned on top of the roller. Move the subject's hand forward across the roller, applying a slight downward pressure to the back of their hand to obtain a clear, readable print (Fig. 2).
7. Allow the subject to thoroughly clean his hand using FPT249 SEARCH Waterless Magic Cleaner, No. 236T16 SEARCH Spray Magic Cleaner or FPT1C Super Cleaner Towelette.
8. Repeat the procedure for the left hand.

## General Maintenance



FIGURE 2

From time to time it will be necessary to clean the surface of the Porelon ${ }^{\circledR}$ roller of dust and other contaminants clogging the pores and preventing free ink flow. The surface can be restored by wiping the surface with a clean, lint-free dry towel, paper towel, or with a Super Cleaner Towelette.

## Slab and Roller Method:

STEP 1—First, ink the roller. Apply a small amount (about a $1 / 4^{\prime \prime}$ stream) of fingerprint ink on the right side of the slab, toward the back. Roll a two- to three-inch-wide layer of ink on the back portion of the slab-lifting the roller off the slab after each stoke and returning to the starting point (do not use a back-and-forth motion with the roller). Repeat several times until a thin film of ink forms on roller.

STEP 2-Next, using the same roller motion (without rolling back and forth), spread the layer toward the front edge of the slab, until a smooth, uniform coating of ink forms. The front edge is where the fingerprints are rolled. When the ink on the front edge becomes too thin, replenish the ink roller on the back edge of the slab and repeat STEP 2.

## PrintMatic ${ }^{\text {TM }}$ Method:

Like the Slab and Roller method, the PrintMatic ${ }^{\text {TM }}$ method requires that the operator roll ink onto an inking slab. The difference is that with the PrintMatic ${ }^{\text {TM }}$ 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).

## Pre-inked Pad Method:

No advance preparation is needed to use pre-inked pads. However, the pad surface should be cleaned occasionally to remove oil and dirt deposits by wiping the surface lightly with a soft, dry, lint-free cloth.


FIG. I-The operator rolls ink onto the slab.

## 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.
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).


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.
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.
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.

| BENCH PEDESTAL CONTENTS: | 1-FPT263 Injection Molded Fingerprint |
| :---: | :---: |
| 36 | Ide |
| 828 Colum | 1-AP1001 Porelon ${ }^{\text {® Palm }}$ Ink Roller |
| SFL2160 Column Moun | (APC200, APC200PF, APC200CM) |
| SFL829 Threaded Rods | APC300 |
| 2-SFL174 3/8"-16 Hex Nut | 1-230T Fingerprint Ink, Tube, 2 oz . |
| 2-SFL173 3/8"-16 Acorn N | 1-233T Slab and Roller Cleaner, 6 oz. |
| 4-SFL1001 6-32 x 3/8 Pan Head Phillips Machine Screws (black) | 1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol |
| AP100 CONTEN | 1-FPR300 Unified Fingerprint Ink Roller, $3^{*}$ |
| 1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol | 1-FPT258 Ink Slab, Mounted, 4" x $10^{\prime \prime}$ 1-FPIIC Super Cleaner Towelettes, 100 |
| 1-AP 1001 Porelon ${ }^{\oplus}$ Palm Ink Roller (No. AP100) | 1-FPT263 Injection Molded Fingerprint Cardholder |
| 1-AP1002 Image Transfer Roller | 1-AP1001 Porelon ${ }^{\text {® Palm }}$ Ink Roller |
| 1-FPTIC Super Cleaner Towelettes, | 1-AP1002 Image Transfer Roller |
|  | APC300PIP CONTENTS: |
| AP200 CONTENTS: <br> 1-AP2003 Porelon® Palm Roller (for AP200) | 1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol |
| 1-AP2004 Image Transfer Roller | 1-FPT205 Inking Slab, Glass, 4" $\times 10{ }^{\text {" }}$ |
| 1-AP200CH Palm Roller Recording Moun | 1-PIP100 PriniMatic ${ }^{\text {TM }}$ Porelon ${ }^{\text {® }}$ Fingerpri |
| 1-AP200PH Palm Roller Inking Mount with Cover | Ink Roller System 1-FPTIC Super Cleaner Towelettes, |
| 8-SFL288 Rubber Feet, Adhesive Mount | 100 ea. |
| 1-AP200C Carrying Case | 1-FPT263 Injection Molded Fingerprint |
| APC200 CONTEN | Cardholder <br> 1-AP1001 Porelon ${ }^{\oplus}$ Palm Ink Roll |
| 1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol | 1-AP1002 Image Transfer Roller |
| 1-FPT265 Porelon ${ }^{\oplus}$ Fingerprint Pad (APC200 only) | CFPS 100 CONTENTS: <br> 1-236T16 Spray Magic Hand Cleaner, 16 |
| 1-PFP700 PriniMatic ${ }^{\text {TM }}$ Flawless Fingerprint | oz. aerosol |
| Pad (APC200PF) | 1-FPT265 Porelon ${ }^{\oplus}$ Fingerprint Pad |
| 1-PFP800 PriniMatic ${ }^{\text {TM }}$ Ceramic Fingerprint | (CFPS 100 only) |
| Pad (APC200CM) | 1-PFP700 PrintMatic ${ }^{\text {TM }}$ Flawless Fingerprint |
| 1-FPTIC Super Cleaner Towelettes, 100 ea . | Pad (CFPS 100PF) |

BENCH PEDESTAL CONTENTS:
1-SFL136 Base
1-SFL2 160 Column Mount
2-SFL829 Threaded Rods
4-SFL176 3/8" Lock Washer
SFL173 3/8"-16 Acorn Nut
4-SFL1001 6-32 $\times 3 / 8$ Pan Head Phillips
Machine Screws (black)
AP 100 CONTENTS:
-236T16 Spray Magic Hand Cleaner, 16
-AP 1001 Porelon ${ }^{\circledR}$ Palm Ink Roller (No.
AP100)
1-AP 1002 Image Transfer Roller
1-FPIIC Super Cleaner Towelettes,
AP200 CONTENTS:
1-AP2003 Porelon® Palm Roller (for AP200)
1-AP2004 Image Transfer Roller
1-AP200PH Palm Roller Inking Mount
with Cover
8-SFL288 Rubber Feet, Adhesive Mount
1-AP200C Carrying Case
APC200 CONTENTS:
1-236T16 Spray Magic Hand Cleaner, 16
oz. aerosol
(APC200 only)
1-PFP700 PrintMatic ${ }^{\text {TMM }}$ Flawless Fingerprint
Pad (APC200PF)
Pad (APC200CM)
1-FPIIC Super Cleaner Towelettes, 100 ea.

1-FPT263 Injection Molded Fingerprint Cardholder
AP1001 Porelon ${ }^{\ominus}$ Palm Ink Roller

APC300 CONTENTS:
1-230T Fingerprint Ink, Tube, 2 oz. aerosol
1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol

FPI20 Unied Fingerprint nk Roller,
1-FPIIC Super Cleaner Towelettes, 100 ea.
1-FPT263 Injection Molded Fingerprint Cardholder
-AP1001 Porelon ${ }^{\text {® }}$ Palm Ink Roller

APC300PIP CONTENTS:
1-236T16 Spray Magic Hand Cleaner, 16
oz.
-TPI205 Inking Slab, Glass, $4^{\prime \prime} \times 10$ Ink Roller System
1-FPTIC Super Cleaner Towelettes,
100 ea.
1-FPT263 Injection Molded Fingerprint
1-AP 1001 Porelon ${ }^{\text {® }}$ Palm Ink Roller
1-AP 1002 Image Transfer Roller
CFPS100 CONTENTS:
Spray Magic Hand Cleaner, 16 oz. aerosol
(CFPS 100 only)
Pad (CFPS 100PF)

1-PFP800 PRINTMATIC ${ }^{\text {TM }}$ Ceramic Fingerprint Pad (CFPS 100CM only)
1-FPTIC Super Cleaner Towelettes, 100 ea.
1-FPT263 Injection Molded Fingerprint Cardholder
1-AP1001 Porelon ${ }^{\oplus}$ Palm Ink Roller (CFPS 100, CFPS 100 PF, CFPS 100 CM )
1-AP1002 Image Transfer Roller
CFPS200 CONTENTS:
1-230T Fingerprint Ink, Tube, 2 oz.
1-233T Slab and Roller Cleaner, 6 oz. aerosol
1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol
1-AP 1001 Porelon ${ }^{\circledR}$ Palm Ink Roller 1-AP 1002 Image Transfer Roller 1-FPR300 Unified Fingerprint Ink Roller, $3^{\circ}$ 1-FPTIC Super Cleaner Towelettes, 100 ea.
1-FPT263 Injection Molded Fingerprint Cardholder
1-FPT258 Ink Slab, Mounted, 4" x 10"
CFPS200PIP CONTENTS:
1-236T16 Spray Magic Hand Cleaner, 16 oz. aerosol
1-AP 1001 Porelon ${ }^{\circledR}$ Palm Ink Roller 1-AP 1002 Image Transfer Roller 1-FPT205 Inking Slab, Glass, 4" x 10" 1-FPIIC Super Cleaner Towelettes, 100 ea.
1-FPT263 Injection Molded Fingerprint Cardholder
1-PIP100 PrintMatic ${ }^{\text {TM }}$ Porelon ${ }^{\text {® }}$ Fingerprint Ink Roller System

