

LIMITED WARRANTY
UNISONIC PRINTING CALCULATORS

UNISONIC PRODUCTS CORPORATION of 1115 BROADWAY, NEW YORK, NEW YORK 10010, warrants to the purchaser of the UNISONIC PRINTING CALCULATOR, that in the unlikely event of any failure due to defects in material or workmanship, occurring within ninety (90) days of date of purchase, the printing calculator will be repaired or replaced, (UNISONIC'S OPTION), without any charge for parts or labor, provided that the calculator is returned WITH YOUR WARRANTY CARD.

THIS WARRANTY DOES NOT APPLY TO BATTERIES, CARRYING CASE, OR ACCESSORIES.

After ninety (90) days, and within one (1) year from the date of purchase, any defective printing calculator, which has not been abused or mistreated by the customer, will be repaired or replaced (UNISONIC'S OPTION), for a Service Charge of \$19.90, (check or money order).

Defective printing calculators should be returned prepaid, (without gift box), securely packaged, to the below listed address:

UNISONIC PRODUCTS SERVICE DEPT.
36 WEST 25th STREET
NEW YORK, N. Y. 10010

This warranty gives you specified legal rights, and you may have other rights which vary from state to state.

Printed in Japan

Unisonic®
XL-115
Operating
Instructions



10 Digits 1 Memory Electronic
Handheld Printing Calculator

XL-115

INTRODUCTION

CONGRATULATIONS You have just purchased the finest 10 digits 1 memory electronic handheld printing calculator on the market.

This calculator is designed to afford the most efficient, simplest methods of performing the broadest range of computations.

This instruction note was devised to enable you to gain complete command and control of your machine in the least amount of time possible with minimum effort. We recommend that you carefully read the information contained herein, so as to take full advantage of the capabilities of this calculator.

We hope that you must derive benefit and satisfaction from your Unisonic XL-115.

FEATURES AND SPECIFICATIONS

1. Printing system: Print-wheel selection type.
 - 1) 0, 2, 3, 4 fixed decimal places.
 - 2) Full floating decimal mode (F.)
 - 3) Add-mode placement (A)
 - 4) Selectable round off (5/4) on A, 0, 2; 3, 4 decimal places.
 - 5) Selectable item count print.

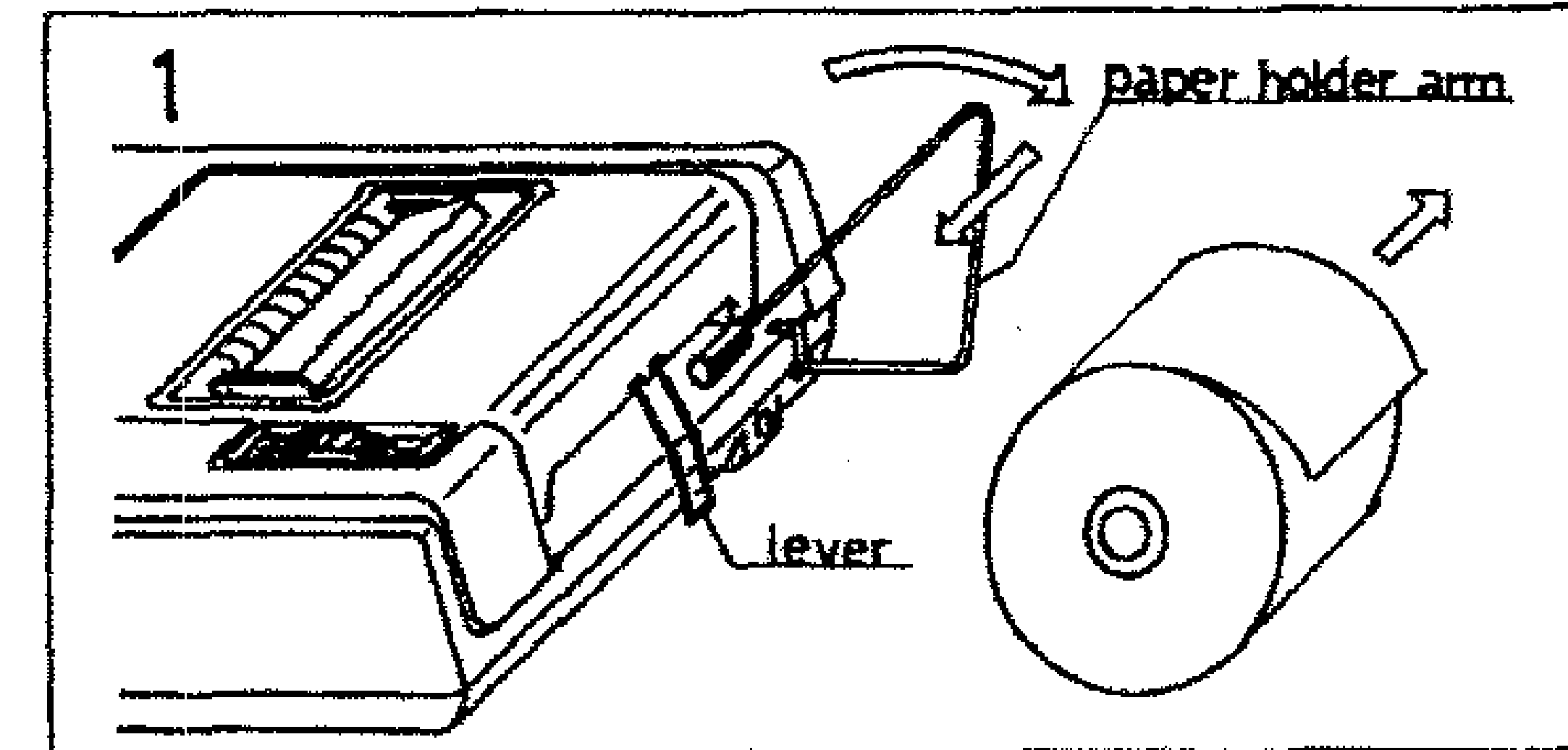
The following symbols are printed to show what kind of calculation is being performed.

Symbol	Key	
+	+	Addition
-	-	Subtraction
x	×	Multiplication
÷	÷	Division
=	=	Equal
◇	◇	Sub-total
*	* =	Total or Result
%	%	Percentage
#	#/0	Non-add Printing
D	#/0	Date Printing
G	M ₀	Mark up, Mark down
E		Error & Overflow
M ₊	M+	Memory Plus
M ₋	M-	Memory Minus
S	M ₀	Memory Sub-total
T	M*	Memory Total
C	C	Clear

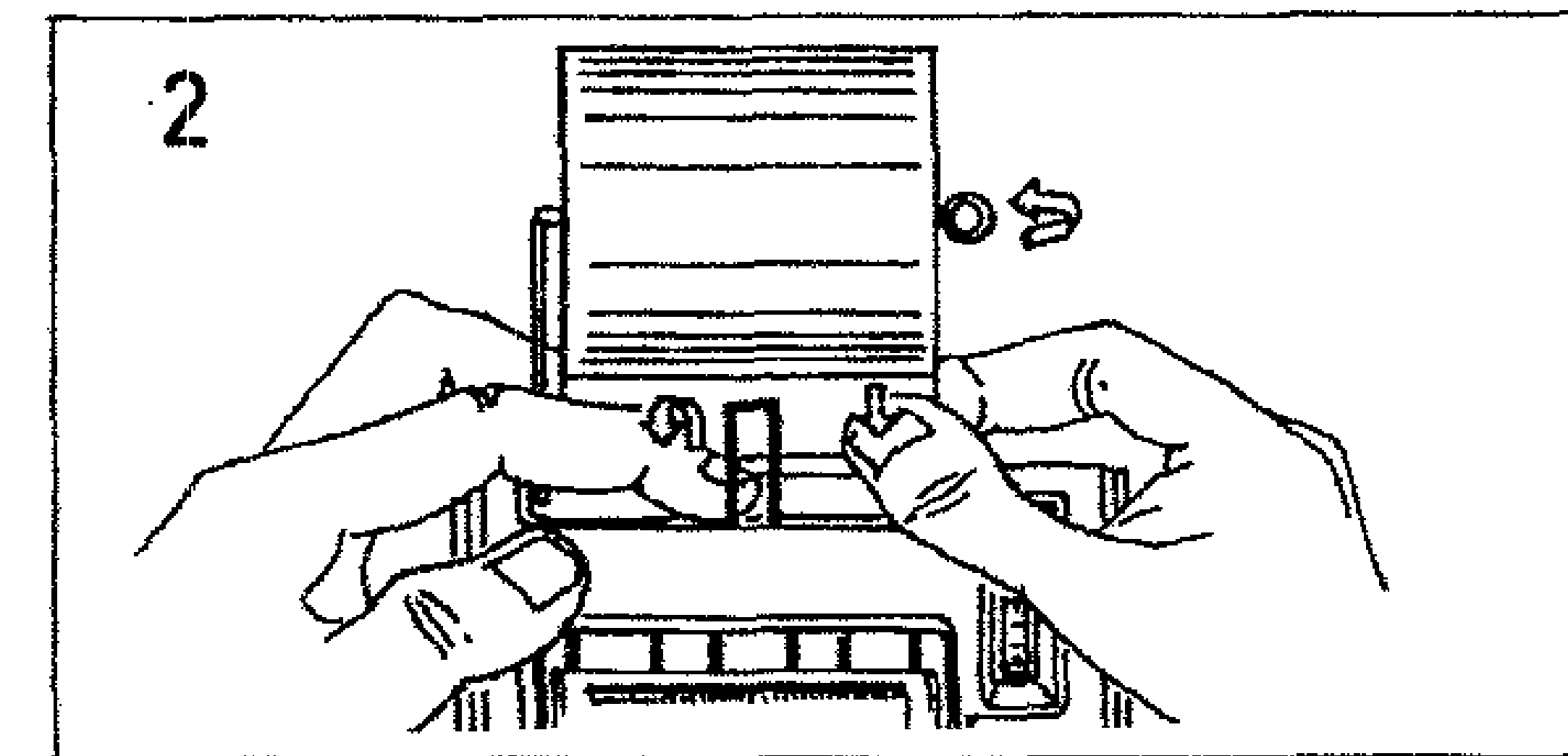
2. Display System: Fluorescent green display 11 digits capacity, 10 digits for number, 1 digit indicates symbol. Zero suppression, floating negative sign.
3. Power on Clear: The power switch "ON" position the electronic circuit will initiate a clear all condition and print out the symbol "O.C" and "0" will be perform on the display.
4. Functions: Addition, Subtraction, Multiplication, Division, Repeating add/sub, Chain Mult/Div, Constant Mult/Div, Mixed calculation, percentage, Add-on and discount calculations, Fully independent memory, Non-add printing, Non-print control, Arithmetic operation or Add/sub, algebraic on Mult/Div, Selectable item count print for sub-total or total calculation. Mark up, mark down calculation.
5. Dimensions: 126 mm (W) x 227.5 mm (L) x 45 mm (H)
6. Weight: 0.66 Kg
7. Power Supply: 4 "AA" size Ni-Cd Rechargeable Batteries, & AC Adapter.
8. AC Adapter: Input: AC120V, 60Hz
Output: DC6V, 300 mA
9. Power Consumption: DC 4.8V, 1.6W (Average)
10. Operating temperature: 0° to 40°C
11. Paper roll: 57-58 mm (2-1/4" width) regular paper
12. Ink roll: ϕ 8 mm x 54 mm
13. Ink roll life: Approximately 150,000 lines.

TO SET THE ROLL PAPER

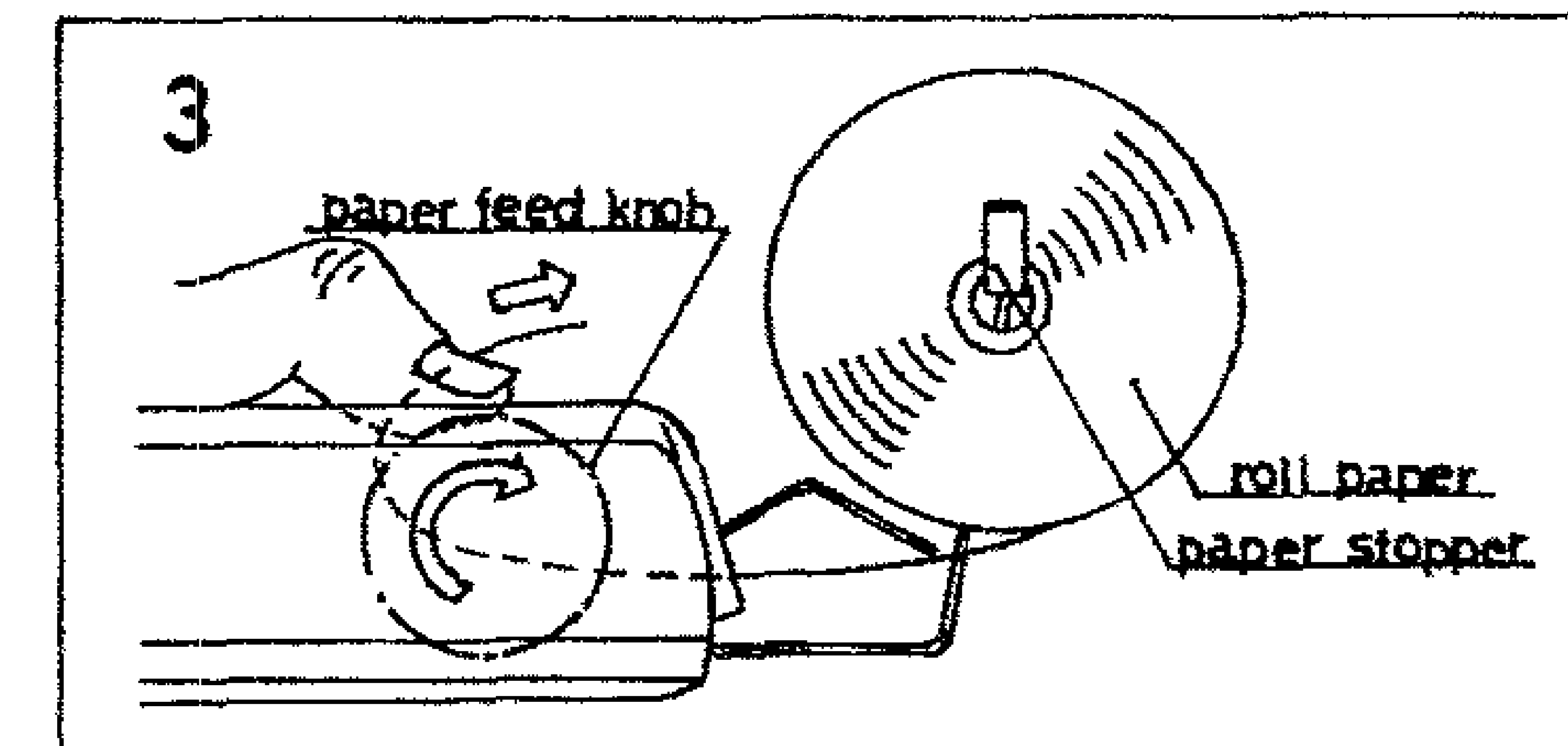
Pull out the paper holder arm outwards, place roll paper on the holder arm and set the paper stopper upright position.



Pull up the lever and proceed the paper edge to the paper entrance.



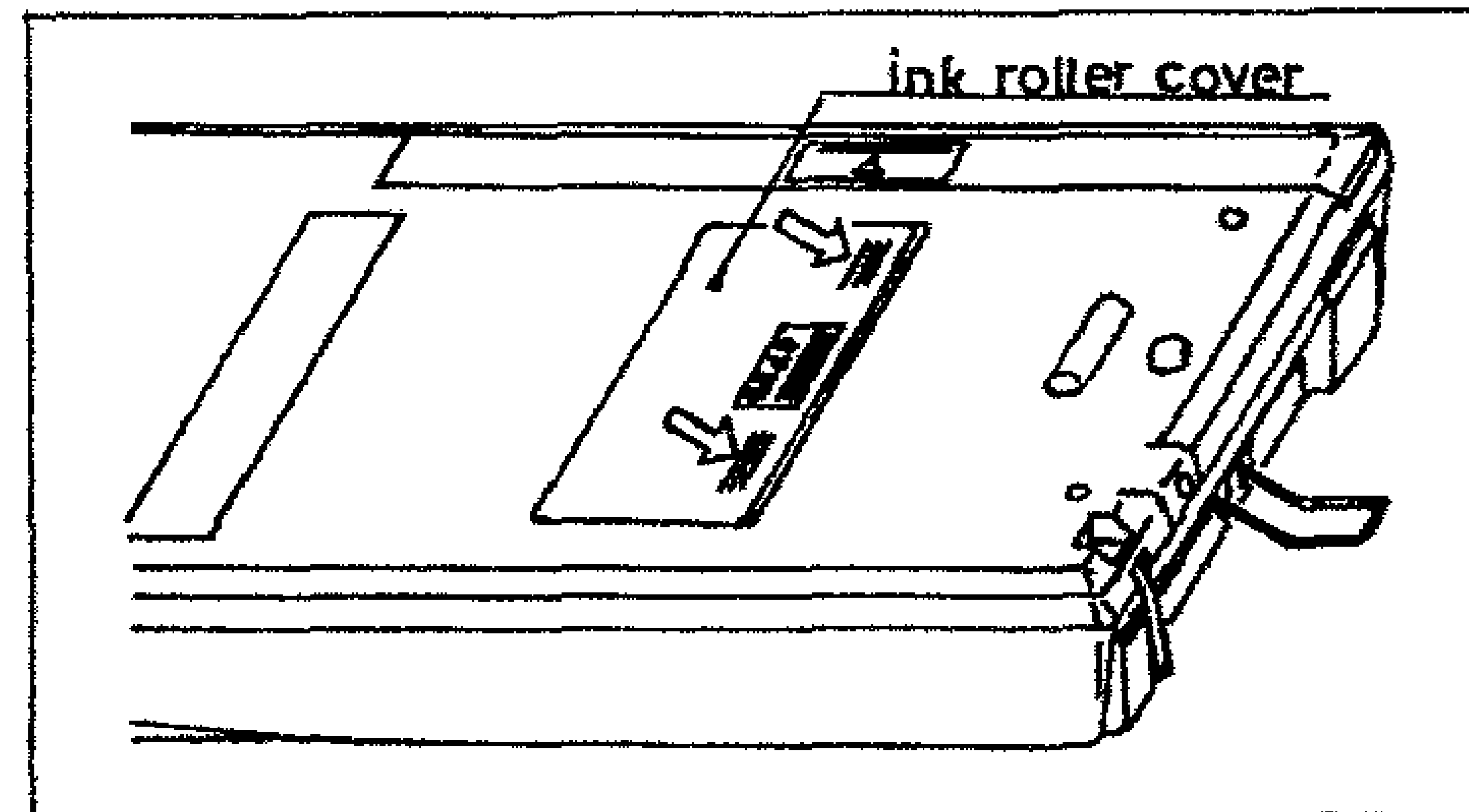
Roll up the paper feed knob till the paper comes over the cutter.



TO CHANGE THE INK ROLLER

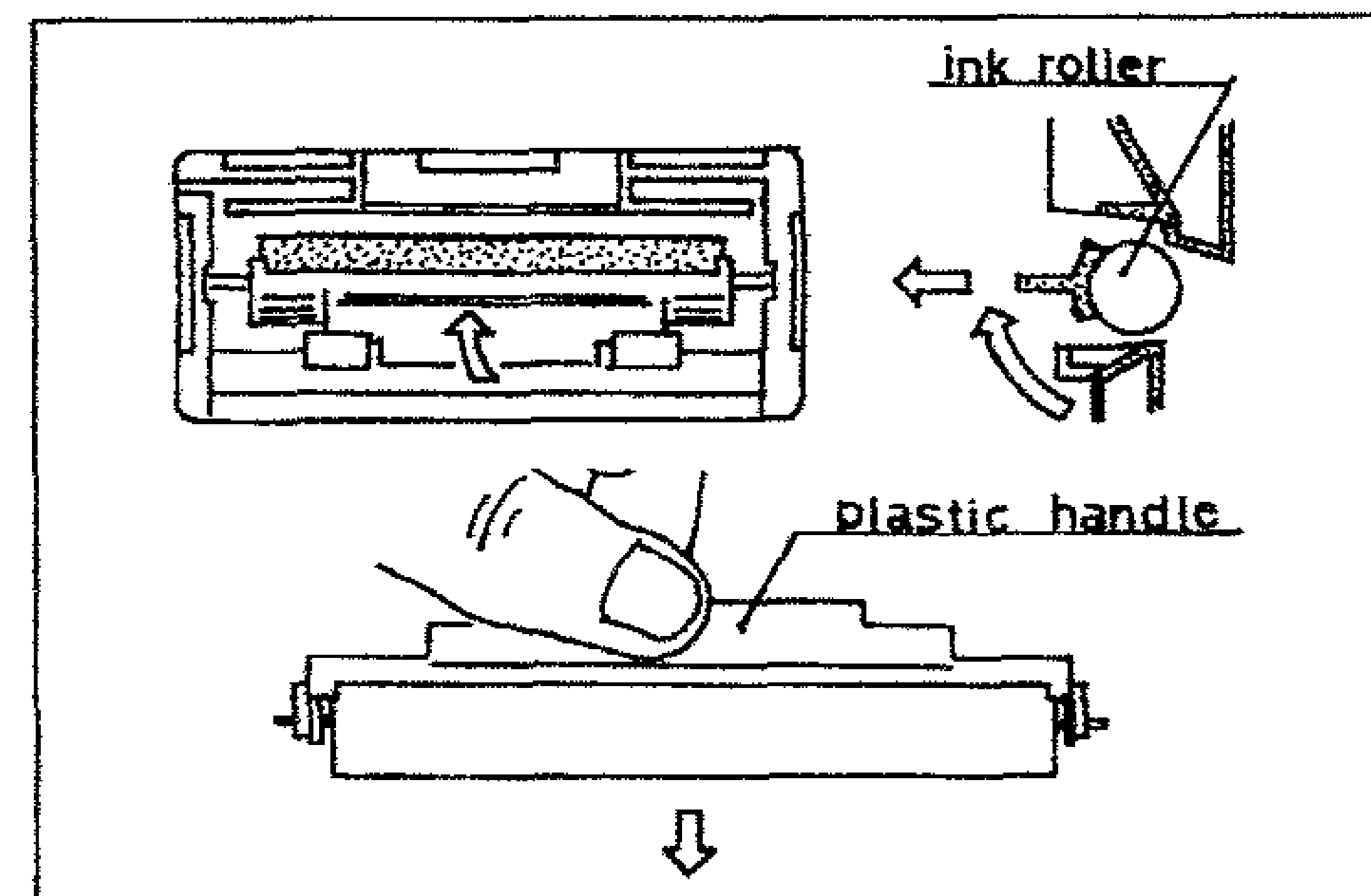
Lay the calculator upside down on a soft material after power switch off.

Open the ink roller cover and insert the thumbs behind the plastic handle of the ink roller.



Unlatch the handle by rotating and remove the old roller.

Insert a new roller and ensure that the handle is latched. The ink roller cover close.



CHARGING THE BATTERIES

Your calculator uses 4 nickel-cadmium rechargeable batteries, normal charging times are:

Power	OFF	12-14 hours
Power	ON	Not charged

Please note that should your calculator not be in use for an extended period of time, then even if it was charged and not used since the charge, the charge may have dissipated because of the long period of non use.

CAUTION

1. Your calculator might be damaged if it uses any AC adapter other than the attached AC adapter supplied with your calculator.
2. The ambient temperature is 32°F—104°F (0°C—40°C) while charging, please keep the calculator away from places of high temperature.

BUFFERED KEYBOARD

Please note that your unit has a buffered keyboard. This means that you can input numbers into the machine faster than the machine can print them out or display input numbers into the machine faster than the machine can print them out or display them. Therefore, even after you have finished using the keyboard, the unit may continue to operate for a few seconds. This is so that the machine can catch up with the information put into it.

KEYS AND SWITCHES DESCRIPTION

$\boxed{0} - \boxed{9}$	NUMERICAL KEYS
$\boxed{\cdot}$	DECIMAL POINT KEY
$\boxed{+/-}$	CHANGE SIGN KEY
\boxed{CE}	CLEAR ENTRY KEY Depression immediately following a numerical entry clears.
\boxed{C}	CLEAR KEY Clear all registers, except memory register.
$\boxed{+}$	ADDITION KEY
$\boxed{-}$	SUBTRACTION KEY
$\boxed{\times}$	MULTIPLICATION KEY
$\boxed{\div}$	DIVISION KEY
$\boxed{=}$	EQUAL KEY Obtains the result of Mult/Div.
$\boxed{\diamond}$	SUB-TOTAL KEY Recalls and prints contents of accumulator.
$\boxed{*}$	TOTAL KEY Recalls, prints and clears accumulator.

- NON-ADD DATE KEY**
Operatable regardless of the print-on switches. And date print.
- PERCENTAGE KEY**
- PAPER FEED KEY**
- MEMORY PLUS KEY**
- MEMORY MINUS KEY**
- MEMORY SUB-TOTAL KEY**
Recalls and prints the contents of memory.
- MEMORY TOTAL KEY**
Recalls, prints and clears the memory.
- MARK UP, MARK DOWN CALCULATION KEY**
- NON-PRINT SWITCH**
NP · Turning on "NP" position set the display mode only, except key.
- ROUND OFF SELECTOR**
5/4 ↓
- ITEM COUNT PRINT SWITCH**
IC ·
- DECIMAL POINT SELECTOR**
A0234F Controls selection of number of decimal places to be expressed in calculation result. ADD mode (A) is available in ADD/SUB only.

BASIC OPERATIONS AND TECHNIQUES FOR SPECIFIC CALCULATIONS

1. ADDITION

$$123 + 456 = 579.00$$

Decimal point selector fixed at 2, Item count print switch on.

Entry	Function key	Paper print-out
	<input type="checkbox"/>	0 · C
123	<input type="checkbox"/>	123 · 00 +
456	<input type="checkbox"/>	456 · 00 +
	<input type="checkbox"/>	002
		579 · 00 *

$$1.23 + 456.00 = 457.23$$

Decimal point selector fixed at (A), Item count print switch on.

Entry	Function key	Paper print-out
	<input type="checkbox"/>	0 · C
123	<input type="checkbox"/>	1 · 23 +
45600	<input type="checkbox"/>	456 · 00 +
	<input type="checkbox"/>	002
		457 · 23 *

2. SUBTRACTION

$$9876 - 5432 = 4444.0000$$

Decimal point selector fixed at 4, Item count print switch on.

Entry	Function key	Paper print-out
	<input type="checkbox"/>	0 · C
9876	<input type="checkbox"/>	9876 · 0000 +
5432	<input type="checkbox"/>	5432 · 0000 -
	<input type="checkbox"/>	002
		4444 · 0000 *

3. ADDITION SUBTRACTION

$$10.0123 + 1.3210 - 150.4567 = -139.1234$$

Decimal point selector fixed at 4.

Entry Function key Paper print-out

Entry	Function key	Paper print-out
	C	0 · C
10.0123	$+$	10 · 0123 +
1.3210	$+$	1 · 3210 +
150.4567	$-$	150 · 4567 -
	$*$	-139 · 1234 *

4. MULTIPLICATION

$$1.23 \times 0.1 \times 123 = 15.1290$$

Decimal point selector fixed at 4.

Entry Function key Paper Print-out

Entry	Function key	Paper Print-out
	C	0 · C
1.23	\times	1 · 23 x
.1	\times	0 · 1 x
123	$=$	123 · =
		15 · 1290 *

5. DIVISION

$$123 \div 4 \div 6.2 = 4.9597$$

Decimal point selector fixed at 4, Round off selector at 5/4.

Entry Function key Paper print-out

Entry	Function key	Paper print-out
	C	0 · C
123	\div	123 · \div
4	\div	4 · \div
6.2	$=$	6 · 2 =
		4 · 9597 *

6. CONSTANT CALCULATION

$$\begin{aligned} 123 \times 2 &= 246.0000 \\ 123 \times 5 &= 615.0000 \\ 123 \times 10.5 &= 1291.5000 \end{aligned}$$

Decimal point selector fixed at 4.

Entry Function key Paper print-out

Entry	Function key	Paper print-out
	C	0 · C
123	\times	123 · x
2	$=$	2 · =
		246 · 0000 *
5	$=$	5 · =
		615 · 0000 *
10.5	$=$	10 · 5 =
		1291 · 5000 *

$$\begin{aligned} 123 \div 3 &= 41 \\ 333 \div 3 &= 111 \\ 200 \div 3 &= 66.66666666 \end{aligned}$$

Decimal point selector set at F.

Entry Function key Paper print-out

Entry	Function key	Paper print-out
	C	0 · C
123	\div	123 · \div
3	$=$	3 · =
		41 · *
333	$=$	333 · =
		111 · *
200	$=$	200 · =
		66 · 66666666 *

7. REPEAT AND/SUB AND SUB-TOTAL

$4.50 + 4.50 \text{ Sub-total} - 1.25 - 1.25 = 6.50$

Decimal point selector set at A, Item count print switch on.

Entry	Function Key	Paper print-out
	(C)	0·C
450	(+)	4·50 +
	(+)	4·50 +
	(◊)	002
		9·00 ◊
125	(-)	1·25 -
	(-)	1·25 -
	(*)	004
		6·50 *

8. MIXED CALCULATION

$(35 + 5 - 30) \times 3 \div 5 = 6$

Decimal point selector set at F, Item count print switch on.

Entry	Function key	Paper print-out
	(C)	0·C
35	(+)	35· +
5	(+)	5· +
30	(-)	30· -
	(*)	003
		10· *
	(x)	10· x
3	(÷)	3· ÷
5	(=)	5· =
		6· *

9. PERCENT CALCULATION

$10\% \text{ of } 123 = 12.3000$

Decimal point selector fixed at 4.

Entry	Function key	Paper print-out
	(C)	0·C
123	(x)	123· x
10	(%)	10· %
		12·3000 *

$123 \text{ is } 10\% \text{ of } 1230$

Entry	Function key	Paper print-out
	(C)	0·C
123	(÷)	123· ÷
10	(%)	10· %
		1230·0000 *

10. NON-ADD PRINTING

$\#1000$
 $120 + 450 = 570.00$

Decimal point selector fixed at 2.

Entry	Function key	Paper print-out
	(C)	0·C
1000	(%b)	#1000·
120	(+)	120·00 +
450	(+)	450·00 +
	(*)	570·00 *

11. DATE PRINTING

$10/05/78$

Entry	Function key	Paper print-out
10·05·78	(%b)	10·05·78 D

12. ADD ON, DISCOUNT

$$200 \times (1 + 20\%) = 240.00$$

$$200 \times (1 - 20\%) = 160.00$$

Decimal point selector fixed at 2.

Entry	Function key	Paper print-out
	C	0 · C
200	\times	200 · x
20	$\%$	20 · %
		40 · 00 *
	$+$	+
		240 · 00 *
200	\times	200 x
20	$\%$	20 %
		40 · 00 *
	$-$	-
		160 · 00 *

13. MARK UP, MARK DOWN

$$20\% \text{ mark down of } 240 \rightarrow 200.$$

$$20\% \text{ mark up of } 160 \rightarrow 200.$$

Decimal point selector set at F.

Entry	Function key	Paper print-out
	C	0 · C
240	\div	240 · \div
20	$\%$	
	M_B	-20 · G
		200 · *
	C	0 · C
160	\div	160 \div
20	$\%$	20 · G
		200 · *

14. ERROR/OVERFLOW PRINTING

$$123456 \times 9876543 = \text{Overflow}$$

$$1 \div 0 = \text{error}$$

Decimal point selector fixed at 2.

Entry	Function key	Paper print-out
	C	0 · C
123456	\times	123456 · x
9876543	$=$	9876543 · =
		121 · 9318492 *
		E
	C	0 · C
1	\div	1 · \div
0	$=$	0 · =
		0 · *
		E

15. MEMORY CALCULATION

$$(15 - 4 + 8) \times (7 - 4) = 57.000$$

Decimal point selector fixed at 2.

Entry	Function key	Paper print-out
	C	0 · C
7	M_+	7 · 00 M_+
4	M_-	4 · 00 M_-
15	$+$	15 · 00 +
4	$-$	4 · 00 -
8	$+$	8 · 00 +
	$*$	19 · 00 *
	C	0 · C
	\times	19 · 00 x
	M_B	3 · 00 M_B
	$=$	3 · 00 =
		57 · 00 *

16. ACCUMULATOR CALCULATION

$12 + 3 - (4 \times 5) + (6 \div 7) = -4.1429$

Decimal point selector fixed at 4.

Entry Function key Paper print-out

	C	0. C
12	$+$	12.0000 +
3	$+$	3.0000 +
4	\times	4. x
5	$=$	5. =
		20.0000 *
	$-$	20.0000 -
6	\div	6. \div
7	$=$	7. =
		0.8571 *
	$+$	0.8571 +
	$*$	-4.1429 *

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