TEXAS INSTRUMENTS

PRINTER DISPLAY

TI-5340

GUIDEBOOK

Important

Record the serial number from the bottom of the calculator and the purchase date in the space below. The serial number is identified by the words "SERIAL NO." on the bottom case. Always refer to this information in correspondence.

TI-5340		
Model No.	Serial No.	Purchase Date

The TI-5340 printer/display calculator has many functions and capabilities. This manual explains how to use it most efficiently. You can use the Table of Contents to find descriptions of how to set up and use your calculator.

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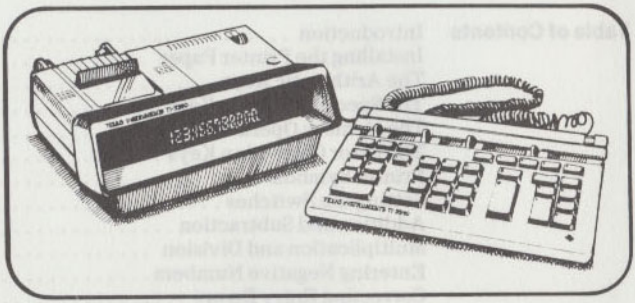
The TI-5340 printer/display calculator is composed of two modules: the keyboard unit and the printer/display unit. A flexible cable connects the keyboard to the printer/display unit so that the two units can be positioned on your desk for your convenience. You can operate the calculator from any standard electrical outlet.



Easy-to-Read Display

The easy-to-read, non-glare display shows entries and results with up to 12 digits and convenient comma punctuation. Negative numbers are displayed with a minus sign to the left of the number. An **M** appears at the left of the display when any value other than zero is stored in the calculator's memory. An ← appears when an error, overflow, or lock-out condition occurs.

Impact Printer

The heavy-duty impact printer prints up to 12 digits with commas and an audit trail. The printer uses a two-color ribbon and a standard 2-1/4 inch roll of paper. Negative numbers, dates, ledger printing, and error messages are printed in red.

The Paper Advance key ⏏ is conveniently positioned to the right of the printer window. Pressing this key advances the printing paper without affecting your calculation.

Keyboard

The adjustable keyboard is designed with large, contoured keys that minimize missed keystrokes and fatigue. Two features allow you to perform calculations more efficiently:

- **Eight-level keyboard buffering**—Allows you to enter up to 8 additional digits and functions while the printer is operating.
- **Two-key rollover**—Increases entry speed by allowing you to press a second key before the previously pressed key is released.

Special Features

This calculator includes several special features:

- Independent add register
- Automatic constant
- Four memory functions
- First-factor accumulator
- Ledger printing
- Programmable tax key
- Grand total key
- Averaging key
- Date key
- Gross profit margin key
- 8-position decimal switch
- 2 optional item counters

Installing the Printer Paper

Before you operate the calculator, you should remove any shipping materials, connect the keyboard, and install the 2-1/4 inch roll of paper included with your calculator. You may operate the calculator without paper, but place the PRINTER switch in the OFF position to avoid possible damage to the printing mechanism (which may void the calculator's warranty).

Setting up the Calculator

If you have just unpacked the calculator, you need to follow the procedure below to set up your calculator.

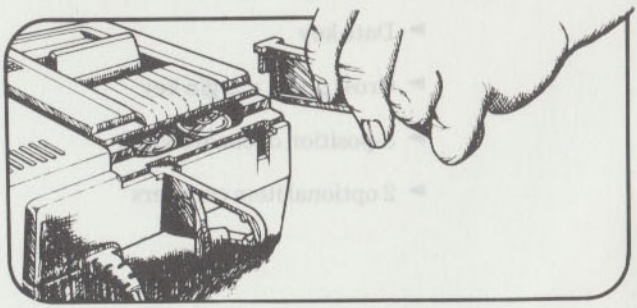
1. Connect the flexible cable to the printer/display unit.

2. Adjust the height of the keyboard by pressing in on the knobs at the top of the unit and tilting the keyboard to the most comfortable angle for you. Release the knobs to lock the keyboard in the position you choose.
3. Route the cord in the channels along the underside of the keyboard so that the cord comes out of the keyboard unit at a convenient place.

Paper Installation

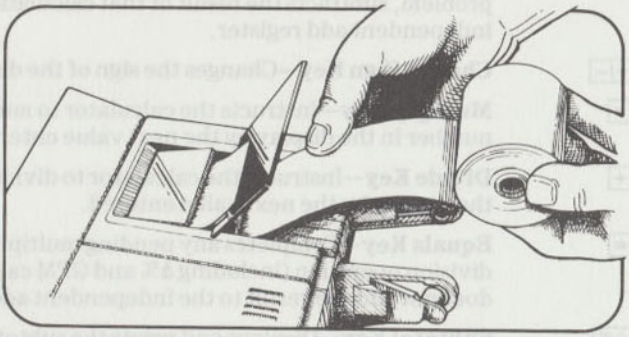
To install the 2-1/4 inch roll of printing paper, use the following procedure.

1. Open the printer compartment by pressing down on the compartment cover and sliding it toward the back of the calculator.
2. If you have just unpacked the calculator, remove any packing material that is in the printer compartment.
3. Install the paper holder by sliding the prongs of each arm into the slots at the back of the calculator.

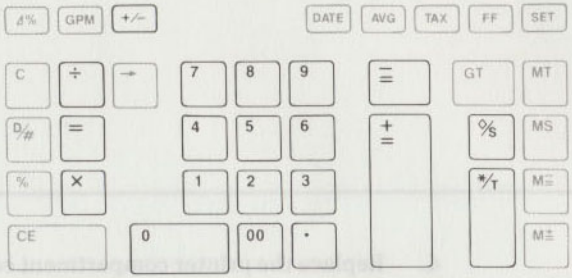


Paper Installation (Continued)

4. Replace the printer compartment cover.
5. Plug the power cord into any convenient 110 volt electrical outlet.
6. Set the PRINTER switch at the upper-left side of the keyboard to the OFF position.
7. Locate the POWER switch at the **back** of the printer/display unit and press down on the ON (|) side of the switch.
8. Press down on the | side of the ON/OFF switch at the upper-right side of the printer/display unit. This turns the calculator on.
9. Cut the end of the paper squarely. Then hold the roll of paper so that it unrolls from the bottom, lift the clear plastic paper guard, and insert the paper firmly into the printer slot located at the top of the printer/display unit.



10. Press the ⏏ key until the paper is in printing position.
11. Open the hinged portion of the right arm of the paper holder and place the roll of printing paper in the paper holder. Close the paper holder.
12. Set the PRINTER switch to the ON position.



[0]–[9], [00] **Number Keys**—Enter numbers containing up to twelve digits. For numbers between one and negative one, a zero automatically precedes the decimal, allowing a maximum of eleven digits to the right of the decimal.

[·] **Decimal Point Key**—Enters a decimal point. If you do not enter a decimal point, the calculator automatically places a decimal point to the right of an entered number in floating- and fixed-decimal modes. In the add mode, the calculator places the decimal point to the left of the last two digits entered.

[+=] **Plus Equals Key**—Adds a number to the independent add register. When used to complete a multiplication or division problem, adds the result of that calculation to the independent add register.

[−=] **Minus Equals Key**—Subtracts a number from the independent add register. When used to complete a multiplication or division problem, subtracts the result of that calculation from the independent add register.

[+/−] **Change Sign Key**—Changes the sign of the displayed number.

[×] **Multiply Key**—Instructs the calculator to multiply the number in the display by the next value entered.

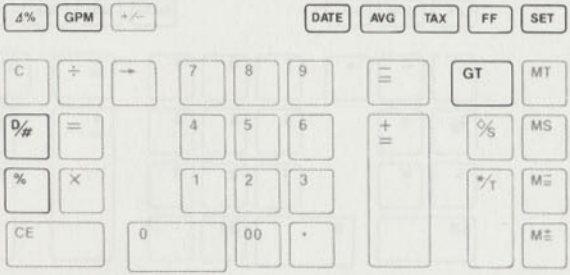
[÷] **Divide Key**—Instructs the calculator to divide the number in the display by the next value entered.

[=] **Equals Key**—Completes any pending multiplication or division operation (including Δ% and GPM calculations) but does not add the result to the independent add register.

[◇/S] **Subtotal Key**—Displays and prints the subtotal in the independent add register. An **S** is printed to the right of the subtotal. Pressing [◇/S] does not affect the contents of the register.

[*/T] **Total Key**—Displays and prints the total in the independent add register, and then clears the register. A **T** is printed to the right of the total.

The Special Function Keys



GT **Grand Total Key**—Displays and prints the grand total of all calculations previously performed and then clears this memory. A **GT** is printed to the right of the total.

% **Percent Key**—Completes multiplication and division operations and shows the result as a percent.

Δ% **Percent Change Key**—Computes the percentage change between two values and shows the result as a delta percent.

GPM **Gross Profit Margin Key**—Calculates the selling price of an item when its cost and gross profit (or loss) margin are known.

D/# **Date/Number Key**—Prints a reference number without affecting calculations in progress. When used immediately following a number entry, # and the entered number are printed at the left of the paper. You can enter decimal points within the number to create spaces in the printout.

DATE **Date Key**—Prints a number for reference purposes without affecting calculations in progress. When used immediately following a number entry, the entered number is printed in red at the left of the paper. That number is then stored in the date register and can be recalled and printed again by pressing the **DATE** key.

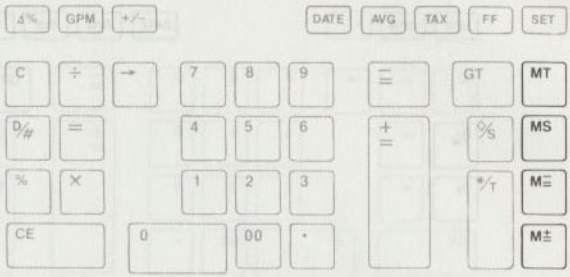
AVG **Average Key**—Prints the total in the independent add register, divides it by the number of entries, and displays and prints the average.

TAX **Tax Key**—Calculates tax on the displayed number, then prints and displays the total.

FF **First Factor Key**—Displays and prints the number in the first-factor register when in the FF mode.

SET **Set Tax Key**—Stores the tax rate.

The Memory Operation Keys



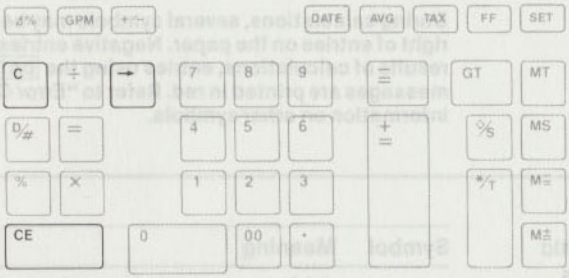
M± **Add to Memory Key**—Adds the displayed number into the memory and prints the number summed to memory with **M+** to the right of the number. The **M±** completes a pending multiplication or division operation and sums the result into memory.

M= **Subtract from Memory Key**—Subtracts the number in the display from the memory and prints the number subtracted from memory with **M−** to the right of the number. The **M=** completes a pending multiplication or division operation and subtracts the result from memory.

MS **Memory Subtotal Key**—Displays and prints the number in memory. An **MS** is printed to the right of the subtotal. Pressing **MS** does not affect the contents of the memory.

MT **Memory Total Key**—Displays and prints the number in memory, then clears the memory. An **MT** is printed to the right of the total.

The Error Correction Keys



CE **Clear Entry Key**—Clears an entry, enabling you to enter another number in its place. Note that this key does not clear the independent add register.

C **Clear Key**—Clears the independent add register, any pending operations, and the display. 0.C is printed.

→ **Right Shift Key**—Removes the last digit entered in the display and shifts the remaining digits one space to the right. This enables you to make corrections without clearing the entire number.

Printer Symbols

During calculations, several symbols may be printed to the right of entries on the paper. Negative entries, negative results of calculations, entries using the [DATE] key, and error messages are printed in red. Refer to "Error Conditions" for information on other symbols.

Arithmetic Symbols

Symbol	Meaning
+	Addition to the independent add register
–	Subtraction from the independent add register
S	Subtotal of additions and subtractions in the independent add register
*	Total after [=], [%], or [TAX] are pressed
T	Total after [*/T] is pressed
GT	Grand total
×	Multiplicand
÷	Dividend
=	Completion of a multiplication or division operation
M	Item cost in a gross profit margin calculation
R	Average of the entries in the independent add register

Memory Operation Symbols

Symbol	Meaning
M+	Addition to memory
M–	Subtraction from memory
MS	Memory subtotal
MT	Memory total

Percentage Symbols

Symbol	Meaning
%	Percentage
+ %	Percentage add-on
− %	Percentage discount
Δ	Original value in a percentage change calculation
Δ%	Percentage change (if in red with a bar above the Δ, it is a negative amount)
Δ*	Numeric difference between original value and new value in a percentage change calculation (if in red with a bar above the Δ, it is a negative amount)

Additional Symbols

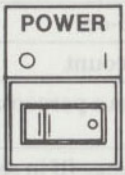
Symbol	Meaning
M ×	First factor
‡	Total of first factors
K +	Percentage tax constant
T_+	Amount of tax
C	Clear
E	Error in entry. The word **ERROR** is printed in red on the line below this entry. **ERROR GT** is printed in red if the grand total register has overflowed its capacity.

Setting the Switches

The calculator has two power switches and four function switches. These switches enable you to vary the operation of the calculator to suit the needs of your various applications. Each switch is described below.

Setting the POWER Switch

The POWER switch is located on the back of the printer/display unit.



This switch must be in the ON position for electricity to power the calculator.

When this switch is in the OFF position, all power to the calculator is cut off.

Note: This switch should remain in the ON position. With it in the ON position, values are maintained in the DATE and TAX registers even when the printer/display unit of the calculator is turned off.

Setting the ON/OFF Switch

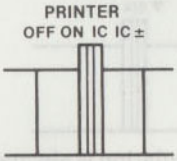
Use this switch to turn the calculator on and off as you use the calculator on a daily basis. The ON/OFF switch, located on the upper-right side of the printer/display unit, controls power to the keyboard, printer, and display.

When you turn the calculator on, 0. appears in the display.

When the calculator is turned off, the memory and all entered values are cleared (except those in the DATE and TAX registers).

Setting the PRINTER Switch

The PRINTER switch turns the printer ON or OFF and selects IC or IC ± without affecting operations in progress.



You can operate the calculator with the printer in the OFF position to save printer paper.

When the PRINTER switch is in the ON position, the calculator prints an audit trail of your calculations as the entries are made but does not keep track of the item count.

If you select one of the item counter settings (IC or IC ±), the calculator keeps track of the number of entries to the independent add register. The way the item count is determined depends on which setting you select:

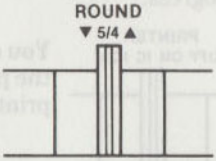
- **IC**—The item count is determined by the total number of additions to and subtractions from the register.
- **IC ±**—The item count is determined by the number of additions minus the number of subtractions from the register.

The calculator prints the item count for the independent add register when you press [◇/S] or [*/T]; the item counter is cleared when you press [*/T].

Note: To prevent damage to the printing mechanism, the PRINTER switch should always be in the OFF position when you operate the calculator without paper.

Setting the ROUND Switch

The ROUND switch rounds the result of a calculation to the number of decimal places selected by the DECIMAL switch.



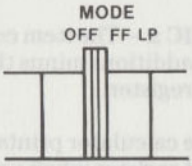
▼—The result of a calculation is always truncated to the selected number of decimal places.

5/4—Rounds the result up or down according to its value. For example, with the DECIMAL switch set for two decimal places, the result is rounded up if the third decimal position is 5 or more and rounded down if it is 4 or less.

▲—The result of a calculation is always rounded up to the selected number of decimal places.

Setting the MODE Switch

The MODE switch enables you to select one of three printing modes.



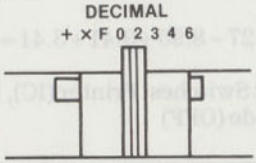
OFF—When you select the OFF position, the calculator prints an audit trail of your calculations along the right side of the printer paper as the entries are made.

FF—When you select the first factor mode, the calculator stores the first factor in multiplication and division calculations in the first factor register and prints the total in that register when you press the FF key.

LP—When you select ledger printing, the accumulated total of your additions and subtractions is printed to the left of the printer paper after each entry.

Setting the DECIMAL Switch

With this switch, you can select the number of decimal places to be displayed and printed in the result of a calculation.



Add mode (+)—In addition and subtraction, automatically enters a decimal point to the left of the last two digits entered unless you enter a decimal point. In multiplication and division, you must enter the decimal point where you wish it to be. All results are then displayed and printed with two decimal places.

Extended add mode (×)—Extends the automatic decimal entry feature to include multiplication calculations. In multiplication, a decimal point is automatically entered to the left of the last two digits of the second entry, unless you enter a decimal point. In division, you must enter the decimal point where you wish it to be.

Floating-decimal mode (F)—Allows the number of decimal places to vary, depending on the result of the calculation.

Fixed-decimal mode (0, 2, 3, 4, 6)—Sets the number of decimal places displayed and printed to 0, 2, 3, 4, or 6.

Results of calculations are rounded to the number of decimal places you select.

- If the result of the calculation contains **more** than the selected number of decimal places, the result is rounded.
- If the result of the calculation contains **fewer** than the selection number of decimal places, trailing zeros are added.

Addition and Subtraction

You can make addition and subtraction entries with the same rapid-entry style of most business machines. If the PRINTER switch is in the IC or IC ± position, the number of entries in the independent add register is printed when you press [◇/S] or [*/T].

Example: Adding and Subtracting

This example illustrates how you can consecutively add or subtract a number several times, without re-entering the number, by pressing the [±] or [−] key.

$10.27 - 8.95 + 3.41 + 3.41 = 8.14$

Set Switches: Printer (IC), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print	
[C]	0.	0. C	
10.27 [±]	10.27	10.27	+
8.95 [−]	1.32	8.95	−
3.41 [±]	4.73	3.41	+
[±]	8.14	3.41	+
[*/T]	004		
	8.14	8.14	T

Notice that the number of entries in the item counter was determined by the total number of additions to and subtractions from the independent add register.

Example: Calculating a Subtotal

When you calculate a subtotal using the [◇/S] key, the number in the item counter is printed. The item counter is not cleared until you press the [•/T] key.

$12.41 - 3.95 + 5.40 = 13.85$

Set Switches: Printer (IC), Decimal (F), Round (5/4), Mode (OFF)

Press	Display		Print	
[C]	0.		0. C	
12.41 [+]	12.41		12.41	+
3.95 [−]	8.46		3.95	−
[◇/S]		002		
	8.46		8.46	S
5.4 [+]	13.86		5.4	+
[•/T]		003		
	13.86		13.86	T

There are two ways to complete a multiplication or division problem. Use the [±=] key to complete the calculation when you want the result stored in the independent add register. Use the [=] key to complete the calculation if you do not want the result stored in the independent add register. Refer to "Using the Independent Add Register" for more information.

Example 1: Using the [=] Key

When you use the [=] key to complete a calculation, the result is not stored in the independent add register. This is indicated by an * beside the result in the audit trail.

$120 \times 50 \div 30 = 200$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
120 [×]	120.	120. ×
50 [÷]	6,000.	50. ÷
30 [=]		30. =
	200.	200. *

Example 2: Using the [±=] Key

When the same problem is calculated using the [±=] key to complete a calculation, the result is stored in the independent add register. This is indicated by a + beside the result in the audit trail.

Press	Display	Print
[C]	0.	0. C
120 [×]	120.	120. ×
50 [÷]	6,000.	50. ÷
30 [±=]		30. =
	200.	200. +

Entering Negative Numbers

The [=] key is used in subtraction problems to enter the negative number and complete the subtraction operation. This key can also be used in completing multiplication and division problems when the last entry is negative. The [+/−] key is used to change the sign of any displayed number. If the result of a calculation is negative, it is printed in red.

Keys Used to Enter Negative Numbers

There are two ways to enter a negative number. The method you choose depends on the location of the number in the calculation and on your personal preference.

- You can use the [+/−] key to change the sign of the number in the display and then select the appropriate operations key.
- If the negative number is the last entry in the calculation, you can use the [=] key to change the sign of the number and complete the operation.

Example 1: Using the [+/−] Key

$(-125)\times 5 = -625$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
125 [+/−] [×]	− 125.	125. − ×
5 [=]		5. =
	− 625.	625. − +

Example 2: Using the [=] Key

$16.25\times(-6) = -97.5$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
16.25 [×]	16.25	16.25 ×
6 [=]		6. =
	− 97.5	97.5 −

Correcting Entry Errors

You can always correct an entry error by pressing [C] to clear the calculator and begin again. Many times, however, you can use one of the techniques discussed below to correct an entry error without clearing the calculation. Notice that the item counter keeps track of all entries to the independent add register, including unintentional ones.

Clearing an Incorrect Entry

If you notice an incorrect numerical entry **before** you press an operation key, there are two ways to correct the error.

- Pressing [CE] clears the entry without affecting your calculation.
- Pressing [→] deletes the right-most digit.

Cancelling an Incorrect Entry

If you notice the incorrect entry **after** pressing an operation key, you can cancel the entry by pressing the opposite operation key.

Example

The following example illustrates the correcting techniques discussed above.

$49.01 + 16.55 + 25.45 = 91.01$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
49.01 [+]	49.01	49.01 +
15.55†	15.55	
[CE]	0.	
16.555‡	16.555	
[→]	16.55	
[+]	65.56	16.55 +

† An incorrect entry, but the operation key was not pressed.

‡ An extra 5 was entered, but the operation key was not pressed.

Example (Continued)

Press	Display	Print
24.55 [+] §	90.11	24.55 +
[−]	65.56	24.55 −
25.45 [+]	91.01	25.45 +
[*/T]	91.01	91.01 T

§ An incorrect entry was made and the operation key was pressed.

Re-entering a Result

If you accidentally press [*/T] when you intend to press [◇/S], you can use the [+] key to re-enter the total into the independent add register.

156 + 65 + 320 = 541

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
156 [+]	156.00	156.00 +
65 [+]	221.00	65.00 +
[*/T] †	221.00	221.00 T
[+]	221.00	221.00 +
320 [+]	541.00	320.00 +
[*/T]	541.00	541.00 T

† [*/T] is accidentally pressed.

Using the Add and Extended Add Modes

The add mode automatically enters a decimal point to the left of the last two digits entered in addition and subtraction calculations. The extended add mode "extends" this feature to include the automatic entry of a decimal point to the left of the last two digits of the second entry in multiplication calculations.

The Add Mode

The add mode is selected by moving the DECIMAL switch to the + position. It is convenient for adding and subtracting numbers that require two decimal places because you do not have to enter a decimal point. The calculator automatically enters a decimal to the left of the last two digits entered. All results are displayed and printed with two decimal places.

The following example is an illustration of how the add mode works. Notice that although no decimal point is entered, a decimal point is displayed and printed to the left of the last two digits entered.

3.13 + .05 + 4.56 + 6.00 = 13.74

Set Switches: Printer (ON), Decimal (+), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
313 ±	3.13	3.13 +
5 ±	3.18	0.05 +
456 ±	7.74	4.56 +
600 ±	13.74	6.00 +
*/T	13.74	13.74 T

Note: When you perform multiplication and division in the add mode, the calculator does not automatically enter a decimal point.

The Extended Add Mode

The extended add mode is selected by moving the DECIMAL switch to the × position. It saves you time and keystrokes when multiplying the quantity times the price of an item. This is particularly useful when you are doing invoice extension calculations. If you use the [±/=] key to complete the calculation, the result is stored in the independent add register.

The following example is an illustration of how the extended add mode works. Notice that although no decimal point is entered, a decimal point is displayed and printed to the left of the last two digits in each multiplication calculation.

$(34 \times .55) + (26 \times .45) = 30.40$

Set Switches: Printer (ON), Decimal (x), Round (5/4), Mode (OFF)

Press	Display	Print	
[C]	0.	0. C	
34 [×]	34.00	34.00	×
55 [±/=]		0.55	=
	18.70	18.70	+
26 [×]	26.00	26.00	×
45 [±/=]		0.45	=
	30.40	11.70	+
[*/T]	30.40	30.40	T

Overriding the Add and Extended Add Modes

You can override the add mode and extended add mode for individual entries by entering a decimal point. However, if you enter more than two digits after the decimal point, the calculator rounds the result to two digits after the decimal when you press the [*/T] or [MT] key.

Using the Independent Add Register

The independent add register stores results of problems with combinations of addition, subtraction, multiplication, and division. In mixed calculations, the calculator adds or subtracts the results of multiplication and division calculations to the independent add register when the [±] or [−] key is used to complete the calculation.

Example: Sum of Quotients

$$\frac{1.98}{4}+\frac{4.98}{8}=1.12$$

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
1.98 [÷]	1.98	1.98 ÷
4 [±]		4.00 =
	0.50	0.50 +
4.98 [÷]	4.98	4.98 ÷
8 [±]		8.00 =
	1.12	0.62 +
[*/T]	1.12	1.12 T

Example: Sum of Products

This example illustrates how you can use the independent add register to calculate an inventory problem.

You are taking an inventory. A partial list, which includes the part number, quantity, and price of each item, is given below. Find the value of the items on this list.

Part	Quantity	Price
1	1,000	$.05 each
2	3,200	$.14 each
3	10,000	$.01 each

Set Switches: Printer (ON), Decimal (x), Round (5/4), Mode (OFF)

Press	Display	Print	
C	0.	0. C	
1000 ×	1,000.00	1,000.00	×
05 M+		0.05	=
	50.00	50.00	+
3200 ×	3,200.00	3,200.00	×
14 M+		0.14	=
	498.00	448.00	+
10000 ×	10,000.00	10,000.00	×
01 M+		0.01	=
	598.00	100.00	+
*/T	598.00	598.00	T

Using the Grand Total Register

The grand total key [GT] and the grand total register enable you to obtain a sum of all the totals you have calculated. The grand total register has a maximum capacity of twelve digits. If the value in the grand total register exceeds this limit, an error message appears.

Example

You operate a small business. You need to calculate your expenses for each of the first 3 months and the total expense for the first quarter of the year.

January		February		March	
Rent:	$500.	Rent:	$500.	Rent:	$500.
Utilities:	$103.	Utilities:	$ 96.	Utilities:	$ 84.
Telephone:	$ 32.	Telephone:	$ 44.	Telephone:	$ 38.
Materials:	$535.	Materials:	$614.	Materials:	$587.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[GT]†	0.	0. G T
[C]	0.	0. C

January:

Press	Display	Print
500 [+]	500.	500. +
103 [+]	603.	103. +
32 [+]	635.	32. +
535 [+]	1,170.	535. +
[*/T]	1,170.	1,170. T

† Pressing [GT] prints the current register total (which may not be 0. as shown) and clears the register.

Example (Continued)

February:

Press	Display	Print
500 [+]	500.	500. +
96 [+]	596.	96. +
44 [+]	640.	44. +
614 [+]	1,254.	614. +
[*/T]	1,254.	1,254. T

March:

Press	Display	Print
500 [+]	500.	500. +
84 [+]	584.	84. +
38 [+]	622.	38. +
587 [+]	1,209.	587. +
[*/T]	1,209.	1,209. T

First Quarter:

Press	Display	Print
[GT]	3,633.	3,633. G T

Using the TAX Key

The tax percentage rate is stored in the tax register using the SET key. As long as the POWER switch on the back of the printer/display unit remains in the ON position, this tax rate is retained in the tax register. When you press the TAX key, the number in the display is multiplied by the tax rate.

Setting the Tax Rate

To store the tax rate, enter the tax rate and press the SET key.

Leave the POWER switch at the back of the printer/display unit in the ON position so that the TAX and DATE constants are held in their respective registers even when the calculator is turned off.

Example

The following example illustrates how you store a tax rate of 6.25%. Notice that the percent key is **not** used.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
6.25 SET	6.25	6.25 K +

Changing the Tax Constant

As long as the POWER switch remains in the ON position, the tax rate you have entered remains in the tax register.

To change the value of the tax constant, enter a new value and press SET.

To clear the tax constant, enter a **0** and press SET.

Using the TAX key

When you enter a number and press the TAX key, the number in the display is multiplied by the tax rate stored in the tax register.

The following examples illustrate the use of the tax key using the tax rate set in the previous example.

Example 1: Calculating Single Item Tax

When you want to calculate the tax on a single item, enter the value of the item and press the TAX key. The appropriate amount of tax is calculated and added to the value of the item.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
100 TAX		100. +
		6.25 T_+
	106.25	106.25 *

Example 2: Calculating Tax on Several Items

When adding several taxable items, total the items and then press the TAX key. The appropriate amount of tax is automatically added to the total value of the items.

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
12.45 ± =	12.45	12.45 +
19.95 ± =	32.40	19.95 +
*/T	32.40	32.40 +
TAX		2.03 T_+
	34.43	34.43 *

Example 3: Calculating Totals on Taxable and Non-Taxable Items

When adding a combination of taxable and non-taxable items, enter the taxable items first, subtotal and tax those items, then enter the non-taxable items and total the result.

Set Switches: Printer (IC), Decimal (2), Round (5/4), Mode (OFF)

Press	Display		Print	
[C]	0.		0.	C
1.89 [+]	1.89		1.89	+
2.49 [+]	4.38		2.49	+
[◇/S]		002		
	4.38		4.38	S
[TAX]			0.27	T+
	4.65		4.65	*
3.25 [+]	7.90		3.25	+
[*/T]		003		
	7.90		7.90	T

Note: If you attempt to use the key sequence [×] [TAX] or [%] [TAX] to calculate tax on a value, a lock-out condition occurs. Press the [→] key or the [CE] key to clear the last entry and restore the calculator to operating condition.

The AVG key calculates the average of the entries in the independent add register. When you press the AVG key, the total of the entries in the independent add register is divided by the number of entries as determined by the item count.

Selecting the Item Counter

The PRINTER switch must be in either the IC or IC ± position for the AVG key to work. The position you select depends on the type of calculation you are doing.

- **Averaging only positive numbers**—Use the IC ± position. Because the item count is determined by the number of additions minus the number of subtractions, this position is useful if you make an incorrect entry and need to remove it by subtracting the same amount.
- **Averaging both positive and negative numbers**—Use the IC position. Both addition and subtraction entries are included in the item count.

Example: Using the AVG Key

Determine the average of 89, 95, and 68.

Set Switches: Printer (IC ±), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
89 +	89.	89. +
95 +	184.	95. +
68 +	252.	68. +
AVG	003	
		252. T
	84.	84. R

Note: If you press ◇/S and then AVG, the entries are not cleared from the independent add register. Use this method to calculate a running average.

Using the First Factor Mode

The first factor mode is particularly useful when doing inventories, invoices, and other related types of calculations. When you select the first factor mode, the calculator stores the first entry of a multiplication calculation in the first factor register. The calculator prints the total in that register when you press the [FF] key.

Using First Factor

To select the first factor mode, move the MODE switch to the FF position.

Example

Your inventory includes three groups of items. You need to calculate the total amount for each group, the total amount of all three groups, and the total number of all items.

Group 1: 25 items @ $1.45
Group 2: 44 items @ $2.75
Group 3: 38 items @ $1.95

Set Switches: Printer (ON), Decimal (x), Round (5/4), Mode (FF)

Press	Display	Print
[C]	0.	0. C
25 [×]	25.00	25.00 M ×
145 [+]		1.45 =
	36.25	36.25 +
44 [×]	44.00	44.00 M ×
275 [+]		2.75 =
	157.25	121.00 +
38 [×]	38.00	38.00 M ×
195 [+]		1.95 =
	231.35	74.10 +
[FF]	107.00	107.00 ‡
[*/T]	231.35	231.35 T

107 is the total number of items.

$231.35 is the total amount of all three groups.

Using the Ledger Printing Mode

The ledger printing mode is particularly useful when you need to keep a running total of your entries. When you select the ledger printing mode, the calculator prints the accumulated total of your entries in red along the left side of the printer paper and prints the individual entries along the right side of the paper.

Using Ledger Printing

To select the ledger printing mode, move the MODE switch to the LP position.

Example

You are in charge of the cash box for a charity booth. Keep a running total of the amount of cash in the box during the following entries and withdrawals.

24.45 + 12.95 − 4.55 + 31.35

Set Switches: Printer (ON), Decimal (+), Round (5/4), Mode (LP)

Press	Display	Print	
[C]	0.	0. C	
2445 [+]	24.45	24.45	+
		24.45	
1295 [+]	37.40	12.95	+
		37.40	
455 [−]	32.85	4.55	−
		32.85	
3135 [+]	64.20	31.35	+
		64.20	
[*/T]	64.20	64.20	T

Printing Reference Numbers and Dates

The [D/#] key enables you to print numbers for reference purposes. The number, preceded by a # sign, is printed on the left side of the printer paper. The [DATE] key enables you to print the date or another reference number. Numbers printed using the [DATE] key are retained in a date register and can be reprinted just by pressing the [DATE] key again.

Using the [D/#] Key

Using the [D/#] key, you can label your calculations with a part number or other appropriate information for easy identification when reviewing the printout. Use the [•] key to separate groups of digits. No more than 12 digits including spaces can be printed on a line.

Example: Printing Reference Numbers

You are taking an inventory. Your list, which includes stock number, quantity, and the price of each item, begins as illustrated below. Find the value of the first two items on this list.

Stock Number	Quantity	Price
61039	1,000	$.05 ea.
62148	3,200	$.14 ea.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
61039 [D/#]	61039	#61039
1000 [×]	1000.	1,000. ×
.05 [+]		0.05 =
	50.	50. +
62148 [D/#]	62148	#62148
3200 [×]	3200.	3,200. ×
.14 [+]		0.14 =
	498.	448. +
[•/T]	498.	498. T

Using the DATE Key

The DATE key is particularly useful when you frequently need to print the date on the calculator's printer paper.

When you use the DATE key to print a number on the printer paper, the date is retained in the date register. This date can be printed again just by pressing the DATE key. With the POWER switch in the ON position, this number is retained in the date register even when the calculator is turned off.

Example: Dating the Printer Paper

When you press the DATE key, the number in the display is printed in red on the left side of the printer paper. The . key can be used to separate groups of digits, but the decimal point is not displayed or printed.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
12.31.86 DATE	12 31 86	12 31 86

This date remains in the date register so that you can print the date in a subsequent calculation just by pressing the DATE key again.

Using the DATE Key as a Constant

Because the DATE key retains a value in the date register, that value can also be used as a constant. As long as the POWER switch on the back of the printer/display unit remains in the ON position, this constant is retained in the date register.

Storing the Constant

To store the constant in the date register, enter the number in the display and press DATE. The constant can be used in calculations by pressing the DATE key and the operation you want to perform.

Note: If you want to store a decimal number in the date register, press the • key twice. The first decimal point is considered a space; the second is considered a decimal point. Neither decimal point is printed.

Example: Using the DATE Key

Your store sells several items. Some of these items are subject to the 6.25 tax rate you have stored in the tax register. Other items are subject to a 4.5 tax rate. You can use the DATE key as a constant to store this tax rate **in decimal form** so that it can be retrieved and applied with a minimum of key strokes.

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Storing the Constant

Press	Display	Print
C	0.	0. C
• • 045 DATE	045	045

Applying the Constant

To apply this tax, determine the total item value and press [×]. Then press [DATE] to retrieve the constant, and press [=] or [±=] to complete the calculation.

Press	Display		Print	
[C]	0.		0.	C
45 [±=]	45.		45.	+
55 [±=]	100.		55.	+
[×]	100.		100.	×
[DATE]	045	045		
[±=]			0.045	=
	104.5		4.5	+
[%/T]	104.5		104.5	T

Margin Calculations

The gross profit margin key [GPM] calculates the selling price of an item when the cost and the profit or loss margin (based on the selling price) are known.

Formulas Used

The selling price is calculated according to the following formulas.

Margin Up:

$$\text{Selling Price} = \frac{A}{1-(B \div 100)}$$

Margin Down:

$$\text{Selling Price} = \frac{A}{1+(B \div 100)}$$

where A = the original cost
B = the profit or loss margin

Procedure Used

To calculate margin problems:

1. Enter the cost.
2. Press [GPM].
3. Enter the profit or loss margin. (Be sure to enter the loss margin as a negative number.)
4. Press [=] or [±=].

Example 1 An item costs you $65.00, and you would like to earn a 40% profit. Calculate the selling price of the item.

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
65 GPM	65.00	65.00 M
40 =		40.00 %
		43.33 Δ *
	108.33	108.33 *

$43.33 is the amount of profit.

$108.33 is the selling price.

Example 2 An item costs you $35,000. You must sell it but can only afford to lose 33% profit. Calculate the selling price.

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
35000 GPM	35,000.00	35,000.00 M
33.3 +/- =		33.30 – %
		8,743.44 Δ *
	26,256.56	26,256.56 *

$8,743.44 is the amount of loss.

$26,256.56 is the selling price.

Percentage Calculations

The [%] key enables you to calculate percentages and percentage ratios. If you follow a percentage calculation with the [+] or [−] key, you can calculate percentage add-ons and discounts. Percentage ratios are calculated by using the percent key to complete a division problem.

Key Sequences

You can use these key sequences to calculate percentages, add-ons, discounts, and ratios. The principal amount is the number that appears in the display immediately after you press the [×] or [÷] key.

Key Sequence	Function
[×] n [%]	Percentages—Multiplies the principal amount by n%.
[×] n [%] [+]	Add-ons—Adds n% to the principal amount.
[×] n [%] [−]	Discounts—Subtracts n% from the principal amount.
[÷] n [%]	Percentage Ratios—Divides the principal amount by n%.

Example: Calculating a Percentage

The percent [%] key can help you calculate the percentage of a number quickly and easily.

$\$49.00 \times 15\% = \$7.35$

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
49 [×]	49.00	49.00 ×
15 [%]		15.00 %
	7.35	7.35 *

Percentage Add-Ons and Discounts

Following a percentage calculation with the [+] or [−] key automatically adds or subtracts the percentage from the principal amount.

Example: Calculating an Add-On

1,450 + 15% add-on = 1,667.5

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
1450 [×]	1,450.	1,450. ×
15 [%]		15. %
	217.5	217.5 *
[+]	1,667.5	1,667.5 + %

Example: Calculating a Discount

69.95 − 10% discount = 62.955

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
69.95 [×]	69.95	69.95 ×
10 [%]		10. %
	6.995	6.995 *
[−]	62.955	62.955 − %

Example: Calculating a Percentage Ratio

When you use the percent key to complete a division problem, the calculator automatically multiplies the result by 100 and displays and prints the result as a percentage value.

29.5 is what percent of 25?

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
29.5 ÷	29.5	29.5 ÷
25 %	25.	25. %
	118.	118. *

29.5 is 118% of 25.

Percentage Change Calculations

The [Δ%] key enables you to calculate the percentage change between two values. This key is very useful for calculating price increase/decrease problems and percentage changes in periodic financial reports.

Example: Calculating Percent Change

When you use the percentage change key to compute the percentage change between two values, the calculator uses the following formula. (n1 is the original value and n2 is the new value)

$$\Delta\% = \frac{n2 - n1}{n1} \times 100$$

To find the percentage change between two values, enter the original value, press [Δ%], enter the new value, and press [=].

If a price has gone from $9.75 to $11.25, calculate the percentage increase in the price.

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
9.75 [Δ%]	9.75	9.75 Δ
11.25 [=]		11.25 =
		1.50 Δ *
	15.38	15.38 Δ %

$1.50 is the amount of the price increase.

15.38% is the percentage change in the price.

Note: When the percentage change is a negative amount, the percent decrease is printed in red.

Calculations with Constants

The automatic constant feature enables you to multiply or divide a series of numbers by a constant. The constant is set when you perform the first calculation in a series. When you enter another number and press [=], the calculator automatically completes the problem using the operation (multiplication and division) and the constant.

Key Sequences

These key sequences can help you perform calculations using a constant. The constant (c) is the number that appears in the display before you press the [×] key or after you press the [÷] key.

Key Sequence	Function
c [×] n Repeat with n [=]	Multiplies the constant by n.
n [÷] c Repeat with n [=]	Divides n by the constant.
c [×] n [%] Repeat with n [%]	Multiplies the constant by n percent.
c [×] [=]	Squares the constant.
c [÷] [=] [=]	Divides 1 by the constant (calculates a reciprocal).

Note: When doing calculations using a constant, you must use the [=] key (rather than the [±] key).

Clearing a Constant

You can clear a constant from the calculator by starting a new calculation or by pressing [C] to clear the calculator.

Example: Multiplying a Constant

The first number that you enter in a multiplication problem is used as the constant multiplier.

$5 \times 3 = 15, \quad 5 \times 4 = 20$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
5 ×	5.	5. ×
3 =		3. =
	15.	15. *
4 =		4. =
	20.	20. *

Example: Dividing by a Constant

The second number that you enter in a division problem is used as the constant divisor.

$66 \div 3 = 22, \quad 90 \div 3 = 30$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
C	0.	0. C
66 ÷	66.	66. ÷
3 =		3. =
	22.	22. *
90 =		90. =
	30.	30. *

Example: Multiplying a Constant by a Percent

As in the previous multiplication example, the first number you enter is used as the constant multiplier. Calculations involving mulitplication of a constant by a percent are completed by pressing the [%] key.

$75 \times 4\% = 3$, $75 \times 6\% = 4.5$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
75 [×]	75.	75. ×
4 [%]	3.	4. % 3. *
6 [%]	4.5	6. % 4.5 *

Example: Squaring a Number

The automatic constant register enables you to calculate the square of a number (the number multiplied by itself: x^2).

$125 \times 125 = 15{,}625$

Set Switches: Printer (ON), Decimal (F), Round (5/4), Mode (OFF)

Press	Display	Print
[C]	0.	0. C
125 [×]	125.	125. ×
[=]	15,625.	125. = 15,625. *

Example: Calculating a Reciprocal

Dividing a number by itself always equals 1. If you divide by that number again, you are calculating the reciprocal of the number.

$$\frac{1}{5+10}=0.07$$

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Press	Display	Print	
C	0.	0. C	
5 +	5.00	5.00	+
10 +	15.00	10.00	+
%T	15.00	15.00	T
÷	15.00	15.00	÷
=		15.00	=
	1.00	1.00	*
=		1.00	=
	0.07	0.07	*

You can use the memory register to perform one set of calculations and use the independent add register for other calculations. You can also use the memory operation keys to solve more complex problems that require storing the result of one calculation while obtaining another. To clear the memory and the M indicator from the display, press [MT].

Example: You operate a small art gallery. At the end of a day you want to tally the sales of an individual salesperson while leaving the independent add register free to generate current customer's receipts.

The salesperson made sales of $450, $75, $145, $47, and $19. You are in the middle of this calculation when a customer decides to purchase a painting for $85 and have it framed for an additional $57. (Use the 6.25 tax constant set on page 28 for this example.)

Set Switches: Printer (ON), Decimal (2), Round (5/4), Mode (OFF)

Begin Sales Tally

Press		Display	Print
[MT]†		0.00	0.00 M T
[C]		0.	0. C
450 [M+]	M	450.00	450.00 M +
75 [M+]	M	75.00	75.00 M +
145 [M+]	M	145.00	145.00 M +

† Pressing [MT] prints the current memory total (which may not be 0. as shown) and clears the memory.

Obtain Sales Receipt

Press		Display	Print	
85 [M+]	M	85.00	85.00	+
57 [M+]	M	142.00	57.00	+
[*/T]	M	142.00	142.00	T
[TAX]			8.88	T_+
	M	150.88	150.88	*

Complete Sales Tally

Press		Display	Print
47 [M+]	M	47.00	47.00 M +
19 [M+]	M	19.00	19.00 M +
[MT]		736.00	736.00 M T

The customer's purchase was $150.88 including tax.

The total sales completed by the salesperson were $736.00.

Because you used the memory registers to tally the sales, you were able to calculate the customer's purchase without disturbing your other calculations.

Error Conditions

Occasionally you may encounter an error condition. You may have incorrectly entered a calculation, overflowed the capacity of the calculator's registers, or pressed an improper key sequence. Indicators appear in the display and are printed to indicate these conditions.

Error Causing Conditions

During calculations, several things can cause an error condition.

- Attempting to divide by zero.
- Calculating a result with more than twelve digits to the left of the decimal.
- Performing a memory operation that results in a value with more than twelve digits to the left of the decimal.
- Using an improper key sequence such as [×] [TAX], [÷] [TAX], or [%] [TAX].

Error Indicators

An error condition occurs if you attempt to divide by zero. The error indicators are:

- **ERROR** and then **0.*** are printed.
- The ← indicator and **0.** are displayed.

Overflow Indicators

When addition or subtraction calculations cause an overflow condition, the calculator:

- Prints an **E** after the entry that is in error, then prints **ERROR** and the first 13 digits of the answer without a decimal.
- Displays the ← indicator and the first 12 digits of the answer, with a decimal point 12 places to the left of its correct position.

Overflow Indicators (Continued)

When additions or subtractions to the grand total register cause an overflow condition, the calculator:

- Prints **ERROR** followed by a **GT**.
- Displays the ← indicator and the first 12 digits of the answer, with a decimal point 12 places to the left of its correct position.

When multiplication or division calculations cause an overflow condition, the calculator:

- Prints **ERROR** and then the first 12 digits of the answer, with a decimal point 12 places to the left of its correct position.
- Displays the ← indicator and the first 12 digits of the answer, with a decimal point 12 places to the left of its correct position.

Lock-out Indicator

When an incorrect key sequence causes a lock-out condition, the calculator displays the ← indicator and a **0**.

Clearing an Error Condition

When an error condition occurs, you can use one of several keys to clear the condition. Which key you use depends on what caused the condition and on personal preference.

- Pressing [C] clears the calculator and therefore clears the error condition. But pressing [C] also clears the independent add register.
- Pressing [CE] or [→] clears only the last entry.
- Pressing [MT] clears the memory register.
- Pressing [GT] clears the grand total register.

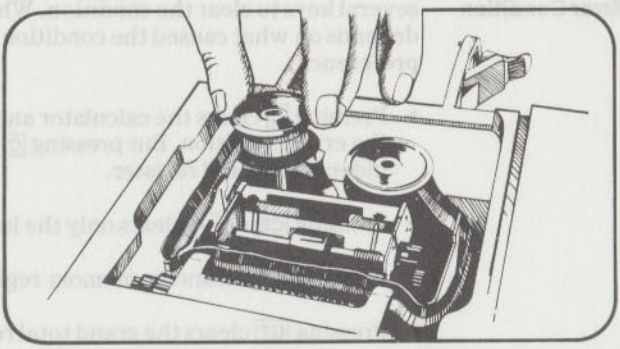
Replacing Calculator Accessories

You may obtain additional accessories for your calculator—ink ribbons and standard 2-1/4 inch rolls of plain paper—at the store where you purchased your calculator. Instructions for replacing these accessories are given below.

Replacing the Ink Ribbon

If the printing becomes faint, the ink ribbon may need to be replaced. Move the power switch on top of the printer/display unit to the OFF position and use the following procedure to install a new ink ribbon.

1. Tear the paper off between the printer and the paper roll.
2. Remove the printer cover by pressing down on the cover and sliding it back and away from the calculator.
3. Remove any paper that remains in the printing mechanism by pulling the paper out.
4. Carefully lift up each ribbon spool until the ribbon is clear of the printer. The spools are held only by friction snaps.
5. Install the new ribbon spools by making sure that the red side of the ribbon is on the bottom. Place the ribbon around the guides and in front of the print drum as shown in the illustration below. The ribbon should wind in the shape of a "C."



Note: Ribbon cartridges are available at most office supply stores and can be used in place of the spools of ribbon.

Replacing the Paper

When a continuous stripe appears on the paper, only a few feet of paper remain on the roll. Use the following procedure to replace the roll of printing paper.

1. Set the PRINTER switch to the OFF position.

2. Remove the old roll of paper from the paper holder; then cut or tear the paper to separate the end of the roll from the paper that remains in the printing mechanism. Press the ⏏ key to run out the remaining piece of paper.

3. Position a 2-1/4 inch roll of paper behind the printer/display unit so that it unrolls from the bottom, with the loose end toward the calculator.

4. Cut the end of the paper evenly and insert it firmly into the printer slot located at the top of the printer/display unit. Press the ⏏ key until the paper is in printing position.

5. Place the roll of paper in the paper holder and roll up the slack.

6. Set the PRINTER switch to the ON position.

In many cases, the following procedures can help resolve difficulties you may experience in operating the calculator.

Procedures

1. Be sure that the power cord is properly connected and the POWER switch is in the ON position. An inoperative outlet is sometimes the reason why the calculator does not work.

2. If the difficulty involves calculation errors or the calculator does not respond to keyboard entries:

   - Press [C] to clear the calculator. The calculator should display **0.** and print **0.C**. Check the switch settings and repeat your calculation.

   - Turn the power switch (on top of the printer/display unit) OFF for ten seconds and then back on again. Repeat the calculations.

   - Review the instructions in this manual to be certain that you have performed the calculations correctly. Improper key sequences and improper switch positioning may result in incorrect answers.

3. If no printing shows on the tape:

   - Check that the PRINTER switch is in the ON position.

   - Check that the ink ribbon is installed correctly and that it has not run out of ink.

If these procedures do not correct the difficulty, refer to "Service Information" in this manual.

If the solutions suggested by "In Case of Difficulty" do not correct a problem you may have with your calculator, please call or write Consumer Relations to discuss the problem.

For Service and General Information

If you have questions about service or the general use of your calculator, please call Consumer Relations **toll-free** within the United States at:

1-800-TI CARES (842-2737).

From outside the United States, call 1-806-741-4800. (We cannot accept collect calls at this number.)

You may also write to the following address:

Texas Instruments Incorporated
Consumer Relations
P.O. Box 53
Lubbock, Texas 79408

Please contact Consumer Relations:

- Before returning the calculator for service
- For general information about using the calculator

For Technical Information

If you have technical questions about the operation of the calculator or it's applications, call 1-806-741-2663. We regret that we cannot accept collect calls at this number. As an alternative, you can write Consumer Relations at the address given above.

Express Service

Texas Instruments offers an express service option for fast return delivery. Please call Consumer Relations at 1-800-TI CARES (842-2737) for information.

Returning Your Calculator for Service

A defective calculator will be either repaired or replaced with the same or comparable reconditioned model (at TI's option) when it is returned, postage prepaid, to a Texas Instruments Service Facility.

Texas Instruments cannot assume responsibility for loss or damage during incoming shipment. For your protection, carefully package the calculator for shipment and insure it with the carrier. Be sure to enclose the following items with your calculator:

- Your full return address
- Any accessories related to the problem
- A note describing the problem you experienced
- A copy of your sales receipt or other proof of purchase to determine warranty status

Please ship the calculator postage prepaid; COD shipments cannot be accepted.

In-Warranty Repair

For a calculator covered under the warranty period, no charge is made for service.

Out-of-Warranty Repair

For an out-of-warranty calculator, a flat-rate fee by model is charged for service. Estimates are not provided prior to repair; to obtain the service charge for a particular model, please call Consumer Relations before returning the calculator to the Service Facility.

Texas Instruments Service Facilities

U.S. Residents (U.S. Postal Service)
Texas Instruments
P.O. Box 2500
Lubbock, Texas 79408

U.S. Residents (other carriers)
Texas Instruments
2305 N. University
Lubbock, Texas 79415

Canadian Residents Only
Texas Instruments
41 Shelley Road
Richmond Hill, Ontario, Canada L4C 5G4

One-Year Limited Warranty

This Texas Instruments electronic calculator warranty extends to the original consumer purchaser of the product.

Warranty Duration

This calculator is warranted to the original consumer purchaser for a period of one (1) year from the original purchase date.

Warranty Coverage

This calculator is warranted against defective materials or workmanship. **This warranty is void if the product has been damaged by accident, unreasonable use, neglect, improper service, or other causes not arising out of defects in material or workmanship.**

Warranty Disclaimers

Any implied warranties arising out of this sale, including but not limited to the implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the above one-year period. Texas Instruments shall not be liable for loss of use of the calculator or other incidental or consequential costs, expenses, or damages incurred by the consumer or any other user.

Some states do not allow the exclusion or limitations of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you.

Legal Remedies

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Warranty Performance

During the above one-year warranty period, your TI calculator will either be repaired or replaced with a reconditioned comparable model (at TI's option) when the product is returned, postage prepaid, to a Texas Instruments Service Facility.

The repaired or replacement calculator will be in warranty for the remainder of the original warranty period or for six months, whichever is longer. Other than the postage requirement, no charge will be made for such repair or replacement.

Texas Instruments strongly recommends that you insure the product for value prior to mailing.

TEXAS INSTRUMENTS

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