

CAUTION:
Read Rules for Safe Operation
and Instructions Carefully. Use only
the Charger Supplied.

**Sears Service is at Your Service
Wherever You Live or Move in the
U.S.A.**

The Model Number will be found
stamped on the bottom of the Calculator.
Always mention the Model Number when
requesting service or repair for
your Calculator.

All parts may be ordered through
SEARS, ROEBUCK AND CO.

Your Sears merchandise takes on added
value when you discover that Sears has
over 2000 Service Units throughout the
country. Each is staffed by Sears-
trained, professional technicians using
Sears approved parts and methods.

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**SEARS, ROEBUCK AND CO.,
CHICAGO, ILL. 60607 U.S.A.**

PRINTED IN U.S.A.

2520-D-23-7305CR 100M

YOU
Sears

**INSTRUCTION
MANUAL**

**SEARS M8
MICROELECTRONIC
CALCULATOR
WITH
MEMORY**

YOUR SEARS M8 IS A HAND-FULL OF POWER

Compare the features of your powerful Sears M8 calculator with machines costing much more. Your Sears M8 is the winner because it has:

- Algebraic Logic — Solves problems the way you think
- Fully Addressable, Separate Memory
- 99,999,999 Display Capacity
- AC/DC Operation — Rechargeable Batteries
- Percentage Key
- Automatic Mark-Up and Discount
- Automatic Constant
- Chain Operations
- Full-Floating or Two Position Decimal Selection
- Entry Correction
- Negative Number Indicator
- Overflow Indicator

SEARS MICROELECTRONIC CALCULATOR GUARANTEE

We guarantee this calculator to work properly. If it does not, simply return it to our nearest store, wherever you live in the United States, and we will:

During the first year, repair it free of charge.

SEARS, ROEBUCK AND CO.

BEFORE OPERATING YOUR CALCULATOR:

Your calculator operates from 4 AA type nickel-cadmium (NiCad) rechargeable batteries or from regular household current (110-120 volt 60 Hertz). Do not operate your calculator on batteries until you have fully charged them for the first time. Attach the battery charger from your calculator to a conventional 110V AC outlet. With the calculator turned off, allow approximately 5 hours for the batteries to become fully charged. The calculator **can** be used during charging, but the time required for the batteries to become fully charged will increase.

BATTERY RECHARGING:

Your calculator can be operated from batteries for a minimum of 3 hours before recharging is required. When recharging is required, simply connect the battery charger from your calculator to a 110V AC outlet.

When the batteries become discharged, the calculator will become inoperative.

CAUTION!! To avoid permanent damage to the batteries, do not leave the calculator power switch in the "on" position after the calculator becomes inoperative.

A preliminary signal to battery discharge is a dimming of the display. To prolong battery life, it is recommended that the batteries be recharged when the dimming is first noticed. **To avoid possible damage to the calculator, use only the charger furnished with the calculator.**

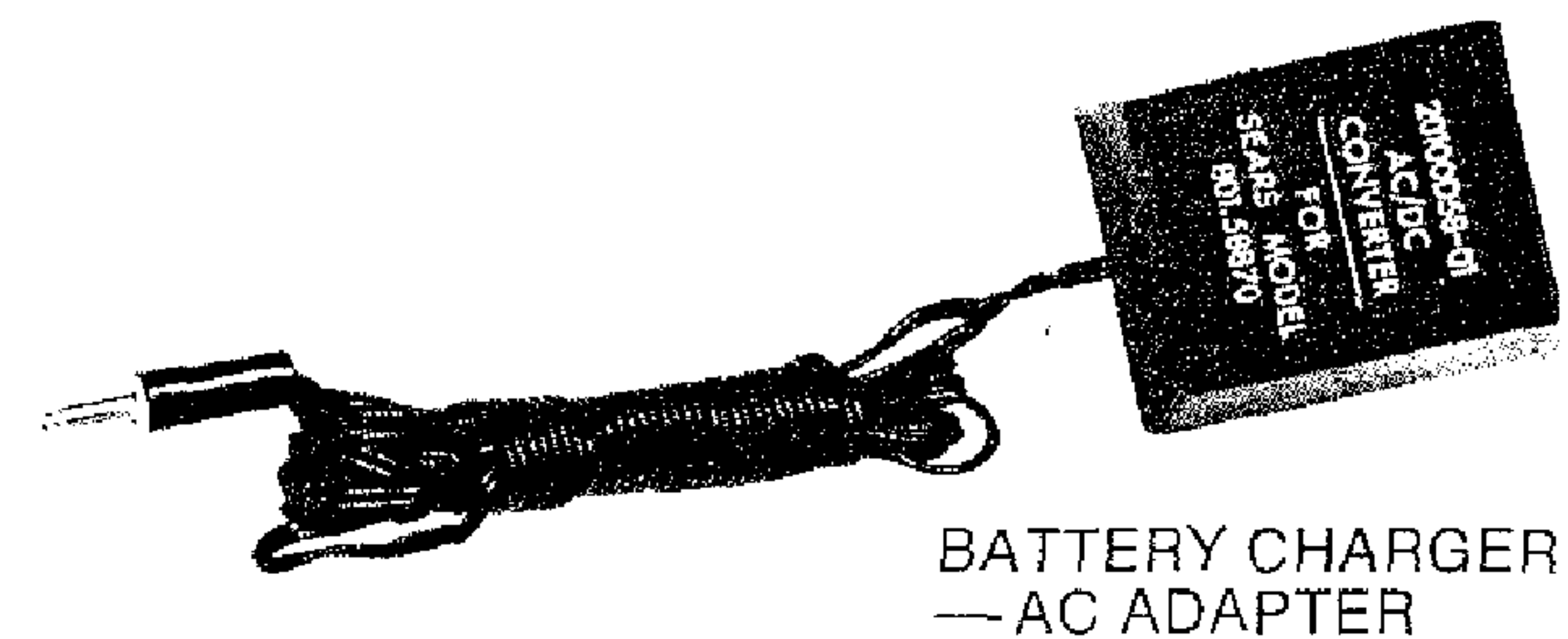
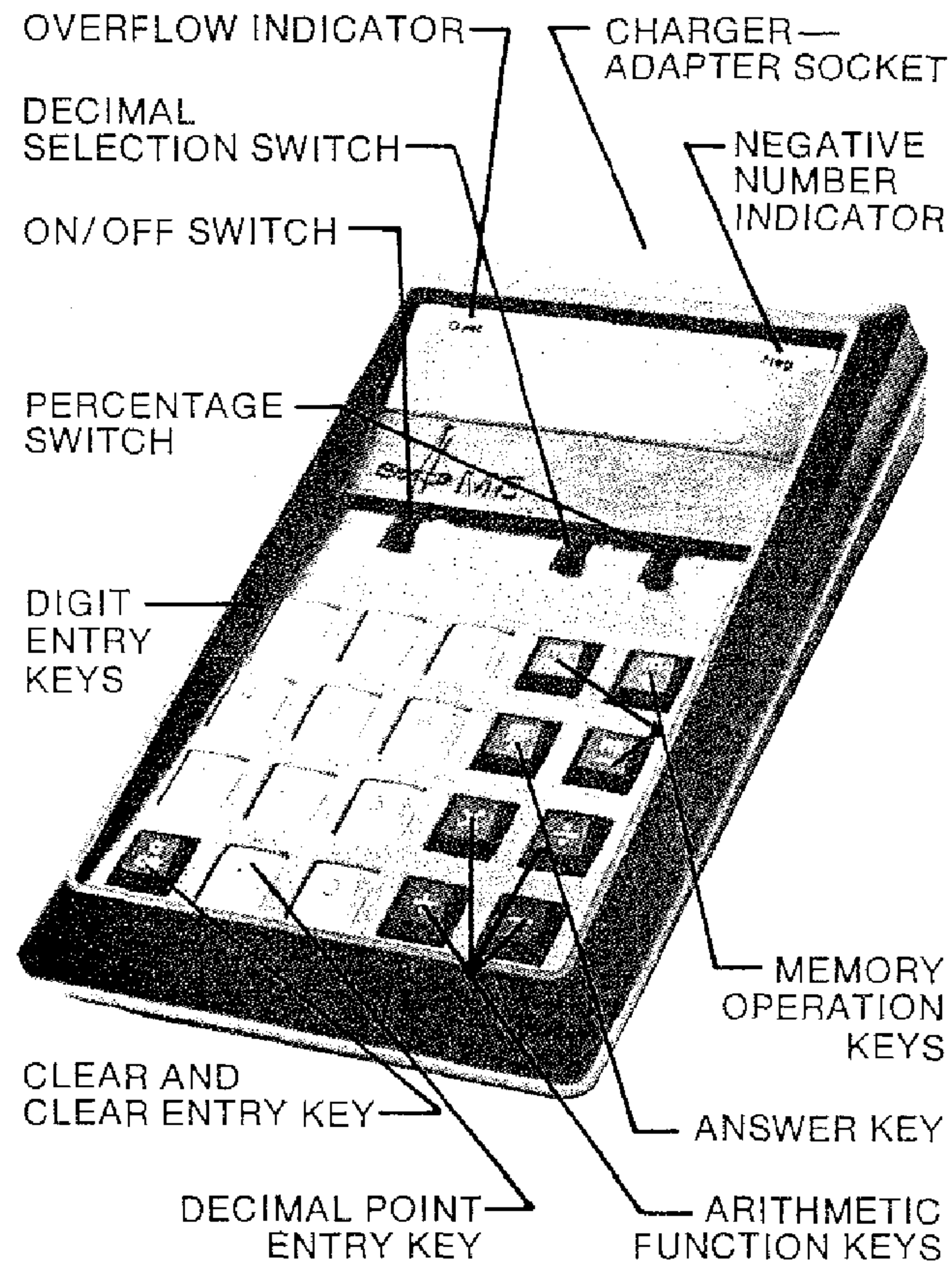
BATTERY REPLACEMENT:

To change batteries make sure the calculator power switch is in the "off" position. Remove the battery access cover from the back of the calculator by sliding it toward the bottom of the machine. Remove and discard the old batteries.

When inserting new batteries, observe the battery polarity. The (+) pole of the battery must correspond with the (+) indication in the battery compartment. **DAMAGE TO THE CALCULATOR CAN BE CAUSED BY INCORRECT PLACEMENT OF THE BATTERIES.** To insert the batteries, press the

(-) pole of the batteries against the spring, push and snap the battery in place.

NOTE: The NiCad batteries supplied with your calculator can be recharged a minimum of 500 times before replacement is required. Battery replacement is necessary when the batteries fail to recharge.



ON/OFF Switch
Overflow Indicator

ON clears machine for action

Indicator lights if displayed answer exceeds eight digits. Indicator also lights if number in **memory** exceeds eight digits.

Negative Number Indicator

Indicator lights if answer is a negative number.

Decimal Selection Switch

When in "F" position (Floating), the decimal point is **automatically** placed in your answers, up to 7 decimal places.

When in "2" position, answer will be automatically rounded-off to two decimal places, (i.e., An answer of 12.668432 will appear as 12.67 in the display).

Percentage Switch

This switch controls the Answer Key. It is used for the selection of either equal or percent mode when the dual answer key is used. For normal operation, place the switch in the "=" position. When in "%" position the last number entered is automatically divided by 100 and the answer is displayed as a percentage when the answer key is depressed.

NOTE: Be sure to leave the percentage switch in the "=" position when not working percentage problems. Otherwise, all answers will be incorrectly converted to percentage answers.

Memory Operation Keys

When **m+** key is depressed, the displayed number is added to the number in memory.

When **m-** key is depressed, the displayed number is subtracted from the number in memory.

When the dual function **mr/mc** key is depressed once, the number is recalled from memory and

displayed. This number can be used in the next operation and is still retained in the memory.

When the **MC** key is depressed two consecutive times, the number will still be displayed but has been erased from memory. To clear memory, depress the

MC key TWICE.

Answer Key

Depression of this key displays the answer of the previous operations, either as a whole number or as a percentage, depending on the position of the percentage switch.

Arithmetic Function Keys

+ PLUS, **-** MINUS, **x** TIMES, **÷** DIVIDE BY:

Depression of any one of these four keys tells the machine what operation to perform with the next number to be entered. During calculations, subtotals are also displayed when these keys are depressed.

Digit Entry Keys

Pressing any digit key will enter that digit and cause it to appear on the display. To make the number 24, press **2** first, then **4**.

Decimal Point Entry Key

Pressing **.** key correctly places the decimal point in your entries. Position of decimal point in entries is **not** affected by Decimal Selection Switch setting.

Clear and Clear Entry Key

This key performs the following functions:
1. Clears (erases) the calculator

completely after answer or

function keys. Press **C** key once.

2. Corrects wrong number entry. Previous entries are not

affected. Press **C** once

after wrong entry and enter new number.

3. Eliminate answer overflow condition. This **does not** clear the number displayed or the number in memory, and does not disrupt previous operations. It allows you to continue operation after reaching the overflow condition.

Press **C** key once.

4. Clears calculator. This erases everything from the calculator, **except** what is in memory.

Press **C** key twice.

MACHINE CAPACITY:

1. Your calculator displays whole numbers up to eight digits: **12345678.**

2. Your calculator displays numbers less than 1 up to seven digits: **0.1234567**

A zero always appears to the left of the decimal point if number is less than 1.

3. Your calculator displays decimal numbers up to eight digits: **123.45678**

4. Your calculator displays decimal answers up to eight digits, discarding the least significant numbers to the right of the decimal point, e.g.: **33.333333**

5. The capacity of the memory register of your calculator is eight whole numbers, e.g.: **99999999.**

IF YOU EXCEED MACHINE'S CAPACITY:

The only ways to exceed the capacity of your calculator are:

1. Obtain answers greater than eight whole numbers. The eight most significant digits will be displayed and the "OVER" indicator will light.
2. Accumulate a number in memory greater than eight whole numbers. The "OVER" indicator will light and the last entry made into memory will be displayed. Memory will contain the eight most significant digits of the accumulated number.
3. Attempting to divide by zero. The "OVER" indicator will light and a zero will be displayed.

Depress **C** **ce** ONCE to eliminate overflow condition and all keys are again operative. The number displayed is the first number of continued operation. If overflow was caused by exceeding memory capacity, the number in memory will be the eight most significant digits of the accumulated number.

● OVER

12345678.

C
ce

12345678.

Depress **C** **ce** TWICE to erase everything from the calculator, except what is in memory.

● OVER

12345678.

C
ce **C**
ce

0.

Clear overflow caused by exceeding memory capacity. Assume number in memory to be 99999992.

● OVER

27.

m+

27.

C
ce

27.

MR
MC **10000001.**

MR
MC **10000001.**

MR
MC **0.**

NOTE: When **MR** **MC** has been depressed two consecutive times, the number will still be displayed but has been erased from memory.

INSTRUCTIONS

It is recommended that the **C** **ce** key and the **MR** **MC** key be depressed twice before beginning a calculation to make certain that the calculator is cleared.

For the following examples, place the **Decimal Selection Switch** in the "F" position and the **Percentage Switch** in the "=" position.

ADDITION

EXAMPLE: $234.5 + 16.7 = ?$

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	16.7	16.7
234.5	234.5	=%	251.2
+	234.5		

SUBTRACTION

EXAMPLE: $106.7 - 43.2 = ?$

C ce C ce	0.	43.2	43.2
106.7	106.7	=%	63.5
-	106.7		

NEGATIVE BALANCE

EXAMPLE: $55.755 - 108.71 = ?$

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	108.71	108.71
55.755	55.755		NEG
-	55.755	=%	52.955

NOTE: The red "NEG" indicator lights up to tell you the answer is a negative number.

MIXED ADDITION, SUBTRACTION

EXAMPLE: $403.8 + 64.1 - 52.4 = ?$

C ce C ce	0.	-	467.9
403.8	403.8	52.4	52.4
+	403.8	=%	415.5
64.1	64.1		

MULTIPLICATION

EXAMPLE: $34.2 \times 16.1 = ?$

C ce C ce	0.	16.1	16.1
34.2	34.2	=%	550.62
x	34.2		

DIVISION

EXAMPLE: $394.7 \div 31.2 = ?$

C ce C ce	0.	31.2	31.2
394.7	394.7	=%	12.650641
÷	394.7		

ENTRY CORRECTION

EXAMPLE: $204 \times 16 = ?$

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	C ce	0.
204	204.	16	16.
x	204.	=%	3264.
12	12.		

Whoops! Wrong Entry.

CHAIN OPERATION

EXAMPLE: $[(7.1 + 3.2 - 6.1) \div 5.31] \times 4.2 = ?$
0.4

C ce C ce	0.	x	4.2
7.1	7.1	5.31	5.31
+	7.1	÷	22.302
3.2	3.2	.4	0.4
-	10.3	=%	55.755
6.1	6.1		

REPEATED ADDITION, SUBTRACTION

EXAMPLE: $3 + 3 + 3 + 3 - 3 - 3 - 3 = ?$

NOTE: Successive depression of the **+** or **-** keys will add or subtract the last entry continuously until a new number is entered.

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	-	12.
3	3.	-	9.
+	3.	-	6.
+	6.	=%	3.
+	9.		

REPEAT MULTIPLICATION (Or taking a number to any power)

EXAMPLE: $21^3 = ?$

C ce C ce	0.	x	441.
21	21.	x	9261.
x	21.		

CONSTANT MULTIPLICATION EXAMPLE: $3 \times 2 = ?$ $3 \times 4 = ?$ $3 \times 5 = ?$

NOTE: The first number entered is held as the constant. You need not re-enter this number.

C ce C ce	0.	4	4.
3	3.	=%	12.
x	3.	5	5.
2	2.	=%	15.
=%	6.		

CONSTANT DIVISION

EXAMPLE: $100 \div 4 = ?$ $38 \div 4 = ?$ $46 \div 4 = ?$

NOTE: The second number entered is held as the constant. You need not re-enter this number.

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	38	38.
100	100.	=%	9.5
÷	100.	46	46.
4	4.	=%	11.5
=%	25.		

PERCENTAGE EXAMPLE 1: 15% of 87 = ?

NOTE: Place the Percentage Switch in the "%" position whenever you want to work with percentages.

C ce C ce	0.	15	15.
87	87.	=%	13.05
x	87.		

EXAMPLE 2: 12, 16, 21 are what percentages of 37?

C ce C ce	0.	16	16.
12	12.	=%	43.24324
÷	12.	21	21.
37	37.	=%	56.75675
=%	32.43243		

AUTOMATIC MARK-UP AND DISCOUNT

EXAMPLE 1: Place a 50% mark-up on an item costing \$13.99.

NOTE: Place the Decimal Selection Switch in the "2" position to have the answer rounded off to dollars and cents.

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	50	50.
13.99	13.99	=%	20.99
+	13.99		

EXAMPLE 2: Discount a \$53.47 item 25%.

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	25	25.
53.47	53.47	=%	40.10
-	53.47		

NOTE: With the Decimal Selection Switch in the "F" position, the mark-up answer would have been \$20.985 and the discount answer would have been \$40.1025.

REMEMBER to take the Percentage Switch out of the "%" position when not working with percentages.

MEMORY OPERATION

Use of memory as an accumulator

The memory lets you avoid writing down any problem totals which you may want to use in later problems.

EXAMPLE: $10 \times 20 = ?$
 $30 \times 40 = ?$

What is the sum of the answers to these two problems?

NOTE: Place the decimal selection switch in the "F" (floating) position and the percentage switch in the "=" position.

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
C ce C ce	0.	30	30.
10	10.	×	30.
×	10.	40	40.
20	20.	=%	1200.
=%	200.	m+	1200.
m+	200.	mr mc	1400.

EXAMPLE:

$$[(12 \times 16) + 4] + [(14 \times 6) - 2] - [(20 \times 6) + 6] = ?$$

You Press These Keys	Calculator Displays	You Press These Keys	Calculator Displays
mr mc mr mc	Clear Memory		
C ce C ce	0.	-	84.
12	12.	2	2.
×	12.	=%	82.
16	16.	m+	82.
+	192.	20	20.
4	4.	×	20.
=%	196.	6	6.
m+	196.	+	120.
14	14.	6	6.
×	14.	=%	126.
6	6.	m-	126.



**YOU'VE BOUGHT THE BEST, SO WE SUGGEST
YOU GIVE YOUR SEARS CALCULATOR THE
BEST CARE ...**

You've bought a microelectronic calculator, a machine that's engineered in the same tradition of reliability and long life that produced aerospace vehicles like the moon-traveling Apollo.

But being microelectronic, it deserves the same care that you give your other prized possessions. Here are some practical tips:

1. Keep it away from moisture, water and other liquids.
2. Never use a dry or wet cleaner of any kind on its case; simply wipe it off with a clean dust cloth.
3. Do not expose your Sears microelectronic calculator to extremes of hot or cold. For example, avoid placing it on a radiator, or taking it out into rain or snow.
4. Do not subject it to heavy shocks or vibrations.
5. When not in use turn it off and place it in its case for maximum protection.
6. If your Sears calculator does not work properly, we suggest that you **DO NOT ATTEMPT TO REPAIR IT YOURSELF**. There's a roomful of ordinary electronics in your little microelectronic machine. Bring it or send it to your nearest Sears Service Center where specially trained experts will repair it for you. If you send it in, pack it carefully. It is suggested that you keep the original packaging material for eventual future use. If you write us about your calculator, be sure to state the model number located on the bottom of the calculator.