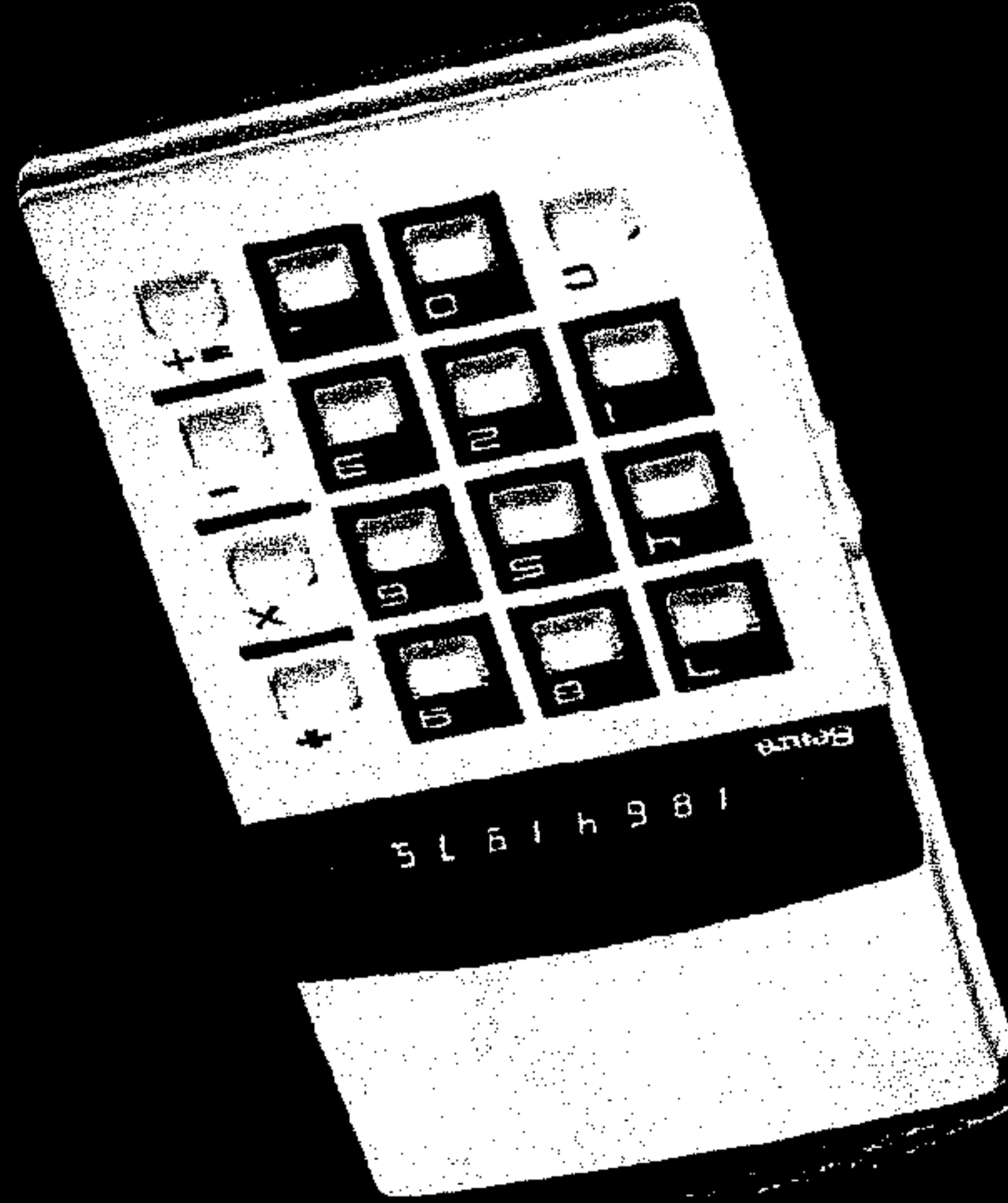


**BASIC  
8 DIGIT  
CALCULATOR**



**INSTRUCTION  
MANUAL**

**Sears**

**CAUTION**

READ RULES FOR SAFE OPERATION AND INSTRUCTIONS CAREFULLY. USE ONLY THE AC ADAPTER SPECIFIED FOR THIS CALCULATOR.

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.

MODEL NUMBER 801.58190  
Sears, Roebuck and Co.  
Sears Tower  
Chicago, Ill. 60684 U.S.A.

Printed in U.S.A.

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## FEATURES

The low price of your Sears calculator is possible because it uses the latest microelectronic technology, including a calculating "brain" contained on a single microelectronic silicon chip.

This is why you buy so much quality and so many features for so little money.

Here are the features of your Sears calculator.

- Algebraic Logic—Solves problems the way you think
- Floating Decimal—Decimal point is automatically positioned in answers and subtotals for greatest accuracy
- Chain and Mixed Operations
- Entry Correction
- Negative Number and Overflow Indicators
- Adaptable to AC current—Enables you to use your calculator on household current to prolong battery life

### SEARS ELECTRONIC 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 a 9-volt transistor battery (Eveready 216, Burgess 2U6, Panasonic 006P, Sears or equivalent) or from regular household current through an AC adapter available at your local Sears store. The battery is included with your calculator.

To install the battery, make sure the on/off switch is in the off position (towards display). Then remove the battery access cover from the back of the calculator by pressing lightly and sliding the cover in the direction of the arrow. Snap the battery clips onto the battery and place the battery inside the calculator battery compartment. Slide the battery cover back into place until it latches. Your calculator is now ready for use.

When the battery becomes discharged, your calculator display will get very dim; finally, the calculator will stop calculating. Simply install a new battery and the calculator will again be ready for use. With normal usage, a battery will last about ten hours of actual operating time.

When discarding a battery, **DO NOT BURN IT, FOR IT MAY EXPLODE.**

If you have the Sears AC adapter, you can use your calculator wherever a 110V-120V outlet is available. Plug the adapter into the calculator and then plug the AC adapter into a convenient 110V to 120V wall outlet. The AC adapter can be used with

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or without a battery installed. However, the calculator will not operate when connected to the AC adapter unless the adapter also is connected to a live power outlet. If the calculator is used with the AC adapter only for a long period of time, the battery should be removed to prevent possible damage from battery leakage.

**CAUTION:** Only the Sears AC adapter (No. 5821) should be used with your calculator. Use of other adapters may result in damage to your calculator.

## **CARE AND MAINTENANCE**

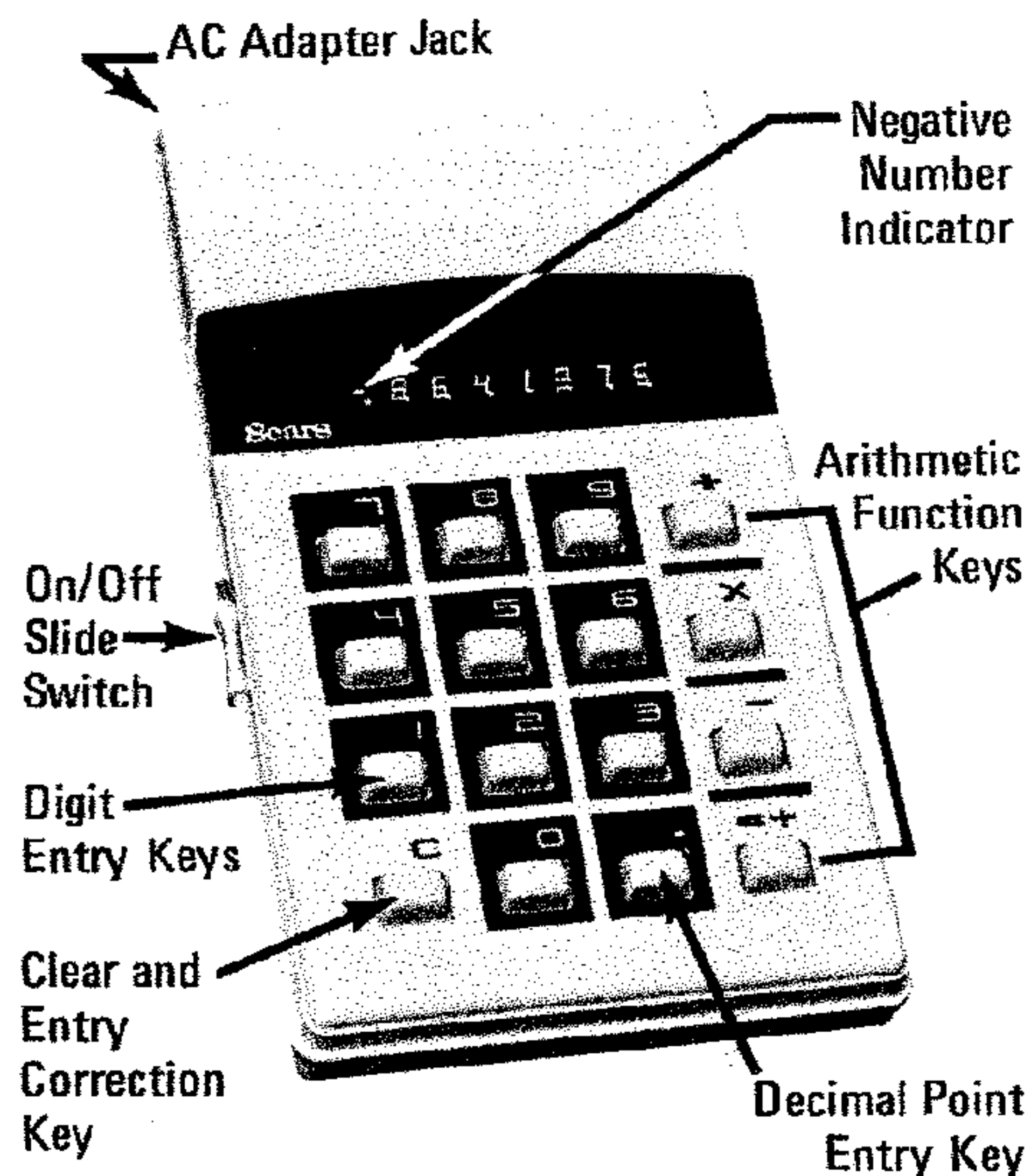
Your calculator is made up of precision parts, such as the microelectronic circuit that performs the various calculating functions. Therefore, it deserves the same care that you give your other prized possessions.

Here are some practical tips:

1. Keep it away from moisture and liquids.
2. Never use a dry or wet cleaner of any kind on the case. Simply wipe the case with a clean dust cloth.
3. Do not subject your calculator to heavy shocks or vibration.
4. Do not expose your calculator to extreme cold or heat. Keep it out of direct sunlight.
5. When not in use, turn the calculator off and place it in a safe place for maximum protection.
6. Do not use any AC adapter other than the one designed for your calculator or damage to the calculator may result.

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7. If the calculator will not be used for a long period of time (one month or longer), the battery should be removed to prevent damage from battery leakage.
8. Do not attempt to repair the calculator yourself. The parts are replaceable, but not repairable. If you mail your calculator for service, remove the battery and pack it with your calculator. To maintain your warranty, NEVER MAIL A CALCULATOR WITH BATTERY INSTALLED.



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#### EXPLANATION OF KEYS, SWITCHES, AND INDICATORS

- |   |   |
|---|---|
| <b>ON/OFF SWITCH</b>                          | The on position applies power to your calculator and clears it of all previously entered data.  |
| <b>JACK FOR AC ADAPTER</b>                    | An AC adapter (No. 5821) is available as an option at your Sears store.   |
| <b>OVERFLOW INDICATOR</b><br>1.8.7.6.5.4.3.2. | 8 digits, each followed by a decimal point indicate results in excess of 8 digits.  |
| <b>NEGATIVE NUMBER INDICATOR</b><br>-1.245    | - lights when negative numbers or credit balances are displayed.  |
| <b>DIGIT ENTRY KEYS</b>                       | <b>[0] THROUGH [9]:</b> Depressing any digit key enters that digit and causes it to appear in the display. To enter the number 24, depress [2] first, then [4]. |
| <b>DECIMAL POINT ENTRY KEY</b>                | <b>[.]</b> : Depressing [.] key places the decimal point in your entries.   |

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**ARITHMETIC  
FUNCTION  
KEYS**

**[=+]** ADD, **[−]** SUBTRACT, **[×** MULTIPLY, **[÷]** DIVIDE: Depressing any of these four keys selects the arithmetic operation to be performed by the calculator. The answer to such an operation is obtained by depressing the **[=+]** key. Because this calculator has a **FLOATING DECIMAL**, it automatically places the decimal point in the correct position in your answers.

**NOTE:** The plus and equals functions on your calculator are on the same key. In this manual, the **[+]** symbol signifies add, the **[=]** symbol signifies equals. In the following examples, the symbols are shown separately.

**CLEAR AND  
ENTRY  
CORRECTION  
KEY**

**[C]**: The **[C]** key performs the following functions:

1. Clears the calculator. Depress **[C]** twice before beginning a problem; e.g., **[C][C]** 2 **[+]** 3 **[=]** 5. Depress **[C]** once after function or answer keys **[=]**, **[+]**, **[−]**, **[×**, or **[÷]**; e.g., 2 **[+]** 3 **[+]** **[C]**.

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Depress **[C]** twice after number entry; e.g., 2 **[+]** 3 **[C][C]**.

2. Corrects wrong number entry. This clears only the last number(s) entered without clearing previous number(s) entered. Press **[C]** once and enter proper number; e.g., 2 **[+]** 4 **[C]** 3 **[=]** 5.
3. Cancels Overflow Condition. Press **[C]** twice, scale the numbers (see **COMPUTATIONS WITH LARGE OR SMALL NUMBERS**), and re-enter the problem.

**MACHINE CAPACITY**

1. Your calculator displays whole positive numbers up to eight digits: 12345678.
2. Your calculator displays whole negative numbers up to seven digits: −1234567.
3. Your calculator displays numbers less than 1 up to seven digits: 0.1234567 or −.1234567.
4. Your calculator displays decimal positive numbers up to eight digits: 123.45678, and negative numbers up to seven digits: −123.4567.
5. Your calculator displays decimal answers up to eight digits for positive numbers and seven digits for negative numbers, discarding the least significant numbers to the right of the decimal point, e.g.,: 33.33333.

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## OVERFLOW CONDITIONS

The following operations result in an overflow condition which causes the Overflow Indicator to light and all keys except  $\boxed{C}$  to become inoperative:

1. Any positive answer or subtotal exceeding 8 digits (greater than 99,999,999.) to the left of the decimal point. The 8 most significant digits are displayed.
2. Any negative answer or subtotal exceeding 7 digits (less than -9,999,999.) to the left of the decimal point. The 7 most significant digits are displayed.
3. Division by zero: 0.0.0.0.0.0.0. is displayed.

## OPERATING EXAMPLES

We recommend that you perform each of the following examples to familiarize yourself with your Sears calculator. For each example, the Key-in column shows which keys to depress in sequence and the Display column indicates the number displayed after each key depression.

### BASIC CALCULATIONS

#### Addition

Example:  $2 + 4 = 6$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
2	2.	
$\boxed{+}$	2.	
4	4.	
$\boxed{=}$	6.	

Example:  $16.39 + 9 + 4.1 = 29.49$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
16.39	16.39	
$\boxed{+}$	16.39	
9	9.	
$\boxed{+}$	25.39	NOTE: Each time you depress an arithmetic function key ( $\boxed{+}$ , $\boxed{-}$ , $\boxed{\times}$ , or $\boxed{\div}$ ), the result (sub-total) of the previous calculation is displayed.

**BASIC CALCULATIONS (CONTINUED)**

Key-in	Display	Comments
4.1	4.1	
$\square$	29.49	

**Subtraction**

Example:  $7 - 2 = 5$

$\square$	0.	
$\square$	0.	Calculator cleared
7	7.	
$\square$	7.	
2	2.	
$\square$	5.	

Example:  $12.81 - 3.6 - 15.77 = -6.56$

$\square$	0.	
$\square$	0.	Calculator cleared
12.81	12.81	
$\square$	12.81	
3.6	3.6	
$\square$	9.21	
15.77	15.77	
$\square$	- 6.56	Negative indicator displayed

**NOTE:** Your calculator enables you to perform mixed/chain calculations. This capability allows you to continue calculations after depression of the  $\square$  key. See page 24 for example.

**BASIC CALCULATIONS (CONTINUED)**

**Mixed Addition, Subtraction**

Example:  $6.3 + 5.65 - 21.879 - 5.0128 + 3.1 = -11.8418$

Key-in	Display	Comments
$\square$	0.	
$\square$	0.	Calculator cleared
6.3	6.3	
$\square$	6.3	
5.65	5.65	
$\square$	11.95	
21.879	21.879	
$\square$	- 9.929	Negative indicator displayed
5.0128	5.0128	
$\square$	-14.9418	
3.1	3.1	
$\square$	-11.8418	

**Multiplication**

Example:  $4 \times 5 = 20$

$\square$	0.	
$\square$	0.	Calculator cleared
4	4.	
$\square$	4.	
5	5.	
$\square$	20.	

## BASIC CALCULATIONS (CONTINUED)

### Division

Example:  $36 \div 3 = 12$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
36	36.	
$\boxed{\div}$	36.	
3	3.	
$\boxed{=}$	12.	

### Mixed Multiplication, Division

Example:  $8 \times 6 \div 5 = 9.6$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
8	8.	
$\boxed{\times}$	8.	
6	6.	
$\boxed{\div}$	48.	
5	5.	
$\boxed{=}$	9.6	

## RECOVERY TECHNIQUES

Occasionally you may unintentionally depress one of the arithmetic function keys. The following techniques allow easy correction without loss of the displayed number.

**Unintentional  $\boxed{\times}$  or  $\boxed{\div}$ :** Depress 1, then the correct arithmetic function key.

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## RECOVERY TECHNIQUES (CONTINUED)

Example:  $9 + 7 = 16$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
9	9.	
$\boxed{\times}$	9.	Error; intended to add
1	1.	
$\boxed{+}$	9.	Depress correct arithmetic function key, $\boxed{+}$ , and continue with problem
7	7.	
$\boxed{=}$	16.	

**Unintentional  $\boxed{+}$  or  $\boxed{-}$ :** Depress 0, then the correct arithmetic function key.

Example:  $8 - 5 = 3$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
8	8.	
$\boxed{+}$	8.	Error; intended to subtract
0	0.	
$\boxed{-}$	8.	Depress correct arithmetic function key, $\boxed{-}$ , and continue with problem
5	5.	
$\boxed{=}$	3.	

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## CLEAR OPERATIONS

### Entry Correction

Example:  $12 + 4.5 = 16.5$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
12	12.	
$\boxed{+}$	12.	
4.6	4.6	Error — wrong number
$\boxed{C}$	0.	Cleared
4.5	4.5	Correct entry
$\boxed{=}$	16.5	

### Clear Calculator

Example:  $2 + 3 = 5$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
2	2.	
$\boxed{+}$	2.	
3	3.	
$\boxed{=}$	5.	
$\boxed{C}$	0.	Calculator cleared with one depression of $\boxed{C}$ key because previous calculation completed

## CLEAR OPERATIONS (CONTINUED)

Example:  $2 + 3$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
2	2.	
$\boxed{+}$	2.	
3	3.	
$\boxed{C}$	0.	Entry cleared
$\boxed{C}$	0.	Calculator cleared with two depressions of $\boxed{C}$ key because previous calculation not completed

## COMPUTATIONS WITH LARGE OR SMALL NUMBERS

Computations can be made with numbers which are too large or too small for the capacity of the calculator by scaling (shifting the decimal point to the left, or to the right) before entering the number. The decimal point in the answer must then be shifted in the opposite direction. For example, to multiply  $0.000019 \times 0.00017$  you must first scale at least one of the numbers or your calculator will display an answer of zero because the first non-zero number in the answer (.00000000323) is beyond the 8-digit capacity of the calculator. However, if you shift the decimal point to the right of the number in each number (for maximum accuracy), you will obtain the correct number in the answer and you will only need to position the

**COMPUTATIONS WITH LARGE OR SMALL NUMBERS (CONTINUED)**

decimal point. In this instance, a shift of 7 decimal places to the right in one number and 5 decimal places to the right in the other would require a 12 (seven + five) decimal place shift to the left in the answer. For example:

Key-in	Display	Comments
<input type="checkbox"/> C	0.	
<input type="checkbox"/> C	0.	Calculator cleared
19	19.	Decimal point is shifted from 0.0000019
<input type="checkbox"/> X	19.	
17	17.	Decimal point is shifted from 0.00017
<input type="checkbox"/> =	323.	Correct answer is .000000000323

**REPEATED OPERATIONS**

**Repeated Addition**

Example:  $5 + 3 + 3 + 3 = 14$

<input type="checkbox"/> C	0.	
<input type="checkbox"/> C	0.	Calculator cleared
5	5.	
<input type="checkbox"/> +	5.	
3	3.	
<input type="checkbox"/> +	8.	No need to re-enter number 3
<input type="checkbox"/> +	11.	
<input type="checkbox"/> =	14.	

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**REPEATED OPERATIONS (CONTINUED)**

**Repeated Subtraction**

Example:  $8 - 4 - 4 - 4 = -4$

Key-in	Display	Comments
<input type="checkbox"/> C	0.	
<input type="checkbox"/> C	0.	Calculator cleared
8	8.	
<input type="checkbox"/> -	8.	
4	4.	
<input type="checkbox"/> -	4.	No need to re-enter number 4
<input type="checkbox"/> -	0.	
<input type="checkbox"/> =	-4.	Negative indicator displayed

**Repeated Multiplication**

Example:  $2 \times 3 \times 3 \times 3 = 54$

<input type="checkbox"/> C	0.	
<input type="checkbox"/> C	0.	Calculator cleared
2	2.	
<input type="checkbox"/> X	2.	
3	3.	
<input type="checkbox"/> X	6.	No need to re-enter number 3
<input type="checkbox"/> X	18.	
<input type="checkbox"/> =	54.	

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### REPEATED OPERATIONS (CONTINUED)

#### Repeated Division

Example:  $54 \div 3 \div 3 \div 3 = 2$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
54	54.	
$\boxed{\div}$	54.	
3	3.	
$\boxed{=}$	18.	No need to re-enter number 3
$\boxed{\div}$	6.	
$\boxed{=}$	2.	

### MIXED CALCULATIONS

Example:  $\frac{(4 + 5) 7 - 6}{8} = 7.125$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
4	4.	
$\boxed{+}$	4.	
5	5.	
$\boxed{\times}$	9.	
7	7.	
$\boxed{-}$	63.	
6	6.	
$\boxed{\div}$	57.	
8	8.	
$\boxed{=}$	7.125	

18

### RECIPROCAL

Example: What is the reciprocal of 25?

$$\frac{1}{25} = 0.04$$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	
25	25.	
$\boxed{\div}$	25.	
$\boxed{\div}$	1.	
$\boxed{=}$	0.04	

### RAISING NUMBERS TO POWERS

Example:  $13^2 = 169$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
13	13.	
$\boxed{\times}$	13.	No need to re-enter 13
$\boxed{=}$	169.	

Example:  $2^5 = 32$

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
2	2.	
$\boxed{\times}$	2.	No need to re-enter 2
$\boxed{\times}$	4.	
$\boxed{\times}$	8.	
$\boxed{\times}$	16.	
$\boxed{=}$	32.	

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### RAISING NUMBERS TO POWERS (CONTINUED)

Example:  $2^{-5} = \frac{1}{2^5} = 0.03125$

Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
1	1.	
$\boxed{\div}$	1.	
2	2.	
$\boxed{\div}$	0.5	No need to re-enter 2
$\boxed{\div}$	0.25	
$\boxed{\div}$	0.125	
$\boxed{\div}$	0.0625	
$\boxed{=}$	0.03125	

### SAMPLE PROBLEMS

#### BALANCING CHECKBOOKS

Example:	Balance Forward	\$349.72
	Check No. 1	67.46
	Check No. 2	8.67
	Deposit	61.72
	New Balance	335.31

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Key-in	Display	Comments
$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
349.72	349.72	Balance Forward
$\boxed{-}$	349.72	
67.46	67.46	Check No. 1
$\boxed{-}$	282.26	Subtotal
8.67	8.67	Check No. 2
$\boxed{+}$	273.59	Subtotal
61.72	61.72	Deposit
$\boxed{=}$	335.31	New Balance

#### CALCULATING THE BETTER BUY

Buy No. 1: A 64 oz. box 98¢

Buy No. 2: A 38 oz. box 57¢

$\boxed{C}$	0.	
$\boxed{C}$	0.	Calculator cleared
98	98.	Price of buy No. 1
$\boxed{\div}$	98.	
64	64.	Weight of buy No. 1
$\boxed{\times}$	1.53125	Price per oz. of buy No. 1
38	38.	Weight of buy No. 2
$\boxed{=}$	58.1875	Price of buy No. 1 for the same weight as buy No. 2; since price of buy No. 2 is less (57¢), it is a better buy.

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**SAMPLE PROBLEMS (CONTINUED)**

**CALCULATING SALES TAX**

What is the total price of a \$19.95 item plus 6% sales tax?

Key-in	Display	Comments
<input type="button" value="C"/>	0.	
<input type="button" value="C"/>	0.	Calculator cleared
19.95	19.95	
<input type="button" value="x"/>	19.95	
.06	0.06	6% entered as a decimal
<input type="button" value="+"/>	1.197	Sales tax = \$1.20
19.95	19.95	
<input type="button" value="="/>	21.147	Total price = \$21.15

or if you don't need to know the amount of the sales tax

<input type="button" value="C"/>	0.	
<input type="button" value="C"/>	0.	Calculator cleared
19.95	19.95	
<input type="button" value="x"/>	19.95	
1.06	1.06	(100 + 6)% entered as decimal
<input type="button" value="="/>	21.147	Total price = \$21.15

**CALCULATING DISCOUNT**

What is the total price of a \$19.95 item discounted 15% and with 6% sales tax added?

Key-in	Display	Comments
<input type="button" value="C"/>	0.	
<input type="button" value="C"/>	0.	Calculator cleared
1	1.	100% entered as decimal
<input type="button" value="-"/>	1.	
.15	0.15	15% entered as decimal
<input type="button" value="x"/>	0.85	(100 - 15)% as decimal
19.95	19.95	
<input type="button" value="x"/>	16.9575	
1.06	1.06	(100 + 6)% entered as decimal
<input type="button" value="="/>	17.97495	Total price = \$17.98

**CALCULATING AUTOMOBILE GASOLINE**

**MILEAGE:** Miles per Gallon =  $\frac{M_2 - M_1}{g}$

If you last filled your gasoline tank when the odometer reading was 39343, and 13.8 gallons of gasoline are required to refill the tank when the odometer reads 39582, how many miles have you driven per gallon of gas?

<input type="button" value="C"/>	0.	
<input type="button" value="C"/>	0.	Calculator cleared
39582	39582.	Present odometer reading ( $M_2$ )
<input type="button" value="-"/>	39582.	
39343	39343.	Previous odometer reading ( $M_1$ )
<input type="button" value="÷"/>	239.	Miles driven
13.8	13.8	Gallons required to fill tank (g)
<input type="button" value="="/>	17.31884	Miles per gallon

### MIXED/CHAIN CALCULATIONS

Example:  $2 + 6 = 8 - 3 = 5 \times 2 = 10 \div 5 = 2$

Key-in	Display	Comments
2	2.	
$\oplus$	2.	
6	6.	
$\equiv$	8.	
0	0.	Depressing 0 retains previous answer
$\ominus$	8.	Previous answer displayed
3	3.	
$\equiv$	5.	
0	0.	
$\otimes$	5.	Previous answer displayed
2	2.	
$\equiv$	10.	
0	0.	
$\div$	10.	Previous answer displayed
5	5.	
$\equiv$	2.	

### NOTES