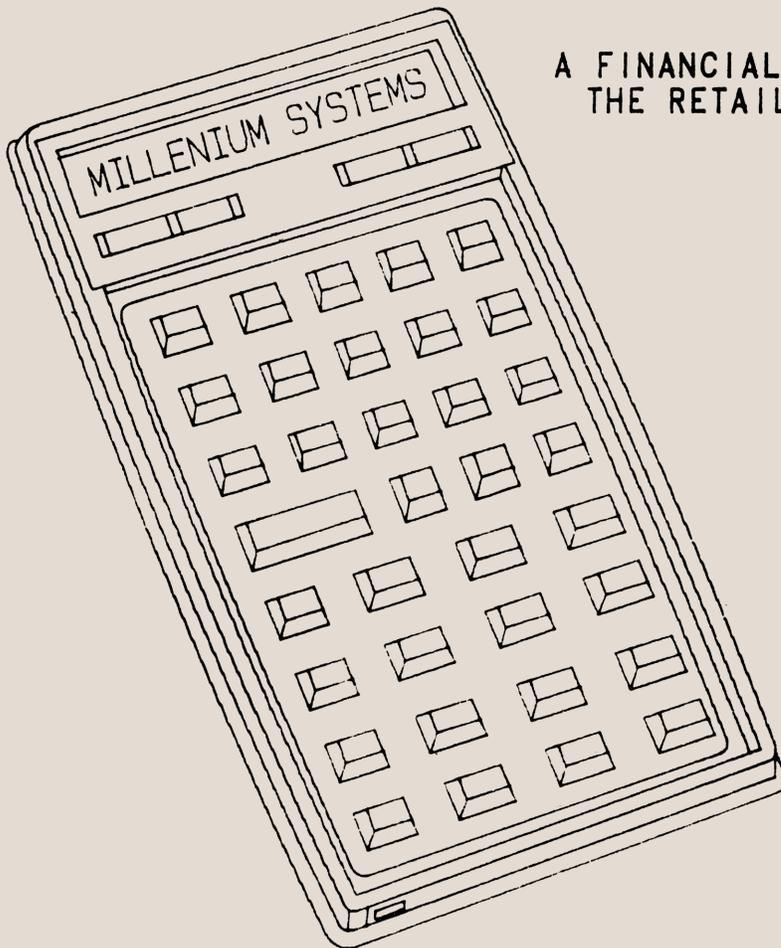


MILLENNIUM SYSTEMS

-- AF-1 --

INSTRUCTION MANUAL



A FINANCIAL COMPUTER DESIGNED FOR
THE RETAIL AUTO SALES INDUSTRY

© MILLENNIUM SYSTEMS - 1985

All rights reserved. No part of this publication may be reproduced, stored in any retrievable system or transmitted in any form or by any means electronical, mechanical, photocopying, recording or otherwise, without the prior written permission of Millennium Systems.

Printed in the U.S.A.

MILLENNIUM SYSTEMS
P.O. Box 728
San Marcos, CA 92069

TABLE OF CONTENTS

	<u>Page No</u>
Forward -----	1
I. INTRODUCTION TO THE AF-1 -----	2
Tour of the Keyboard -----	2
Program Modules and Printer Ports -----	3
Display -----	4
Keyboard -----	5
Primary Keys -----	5
Accept -----	5
Clear -----	6
Numeric Keys -----	6
II. BASIC OPERATION -----	7
Setting the Internal Clock -----	8
Basic Set-Up -----	8
Sample Auto Sale -----	11
III. ADVANCED TECHNIQUES -----	15
Tailoring the Sale to the Customer -----	15
Roll Back Keys -----	15
Gold Function Keys -----	18
Filling Out the Sales Contract -----	19
Insurance -----	20
Special Function Keys -----	22
Start -----	22
Profit -----	23
Rule of 78 -----	24
Alarm -----	25
Lease -----	25
Data Entry (Gold) Keys -----	25
Printer Operation -----	26

MILLENNIUM SYSTEMS

AF-1

A FINANCIAL COMPUTER DESIGNED SPECIFICALLY FOR THE RETAIL AUTO SALES INDUSTRY

The Millennium Systems AF-1 is a state of the art, hand-held computer which provides instant information to professionals involved in both auto sales and lending. The AF-1 allows a sales manager or lender to quickly examine all aspects of any sales contract including the total cost to the customer and profit for the dealer.

This system has been designed to allow the user to control all factors of a sale while maintaining a simple and straight forward approach. The following manual provides step-by-step instructions for operation of the AF-1, complete with examples.

This manual is divided into three sections: I - Introduction to the AF-1; II - Basic Operation; and III - Advanced Techniques and Special Features.

The introduction to the AF-1 provides a rapid tour of the keyboard and a brief description of each function.

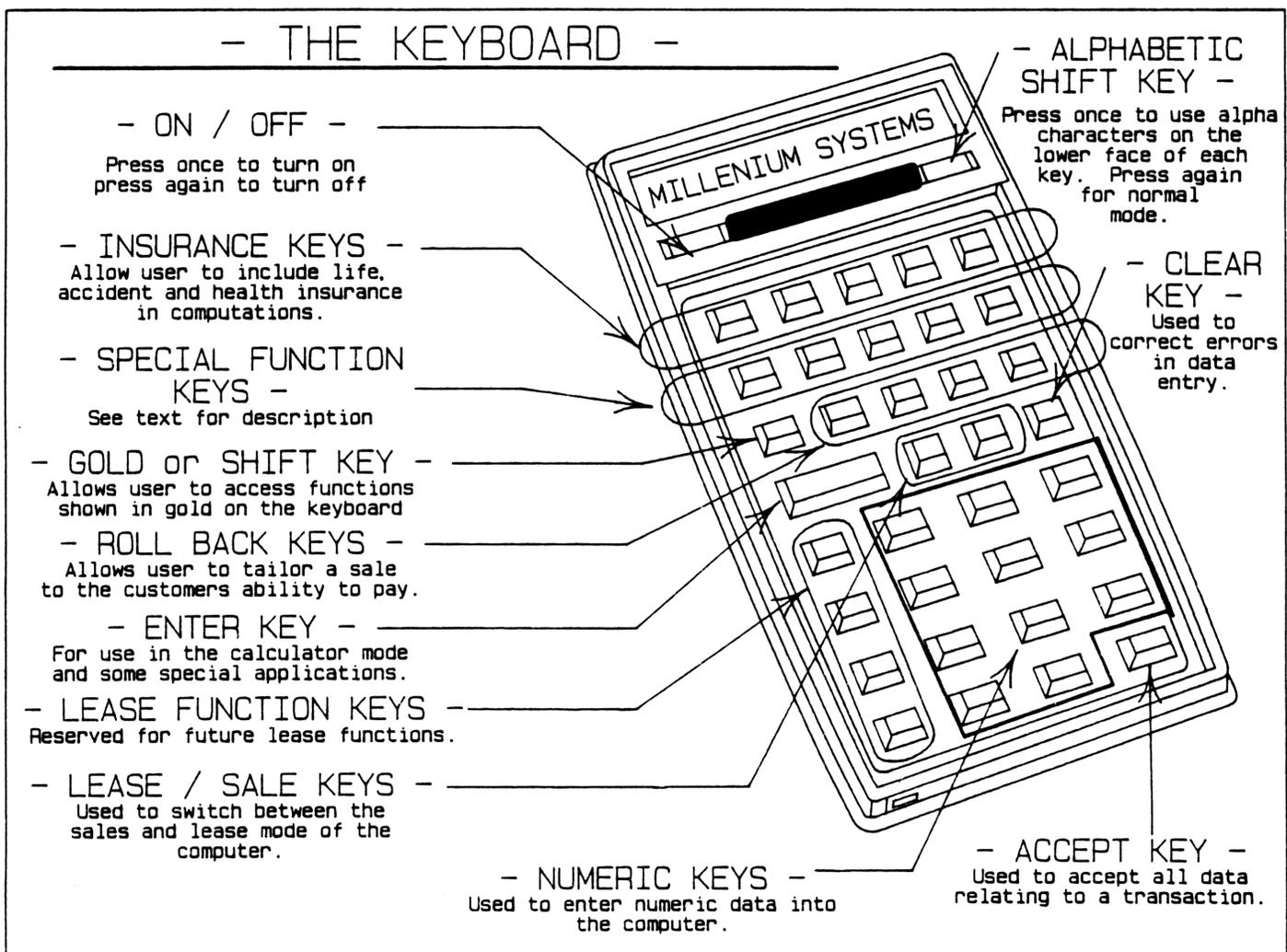
The basic operation section explains how the computer can be used in the typical retail auto sales environment. Each step is described in detail as a transaction is taken from the beginning through completion of a sales contract.

Advanced techniques and special features describe some of the additional capabilities of the AF-1 such as tailoring a contract to a customers ability to pay, analyzing the dealers profit on a particular sale, and use of the optional printer.

I. INTRODUCTION TO THE AF-1

TOUR OF THE KEYBOARD

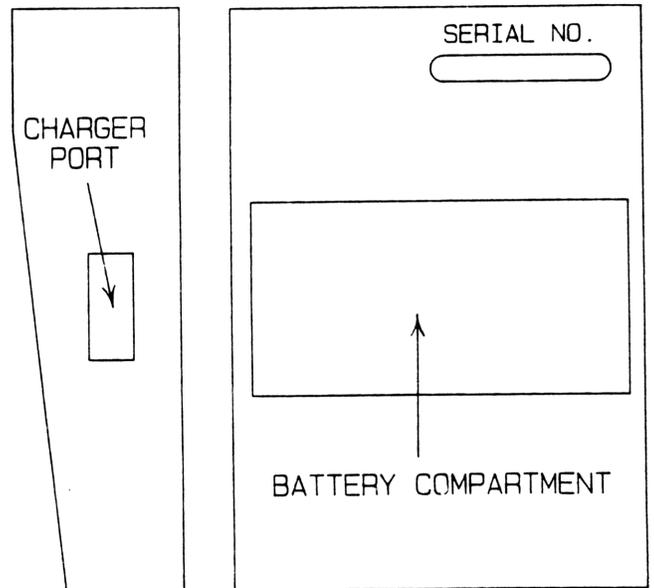
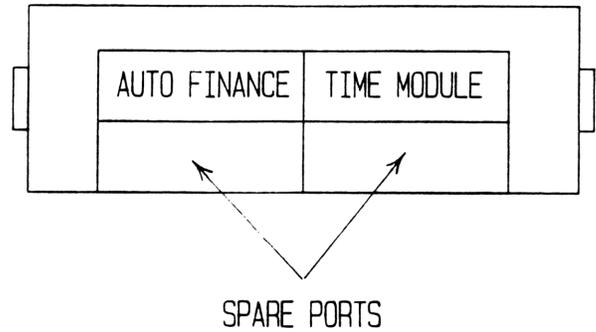
Before you begin learning the operation of your AF-1, take a moment to study the keyboard. The keys have been layed out in a logical manner, grouping keys with similar functions together as shown below. The keys fall into several major groups plus a few special control keys.



PROGRAM MODULES AND PRINTER PORTS

At one end of your AF-1, you will find the program modules and spare input/output ports. These modules should be removed or inserted ONLY when the computer is off. Do NOT remove these modules while the computer is turned on. If you have purchased the optional printer available for your AF-1, follow the instructions provided with the printer for installation. The advanced techniques section of this manual will cover the use of the printer with the AF-1.

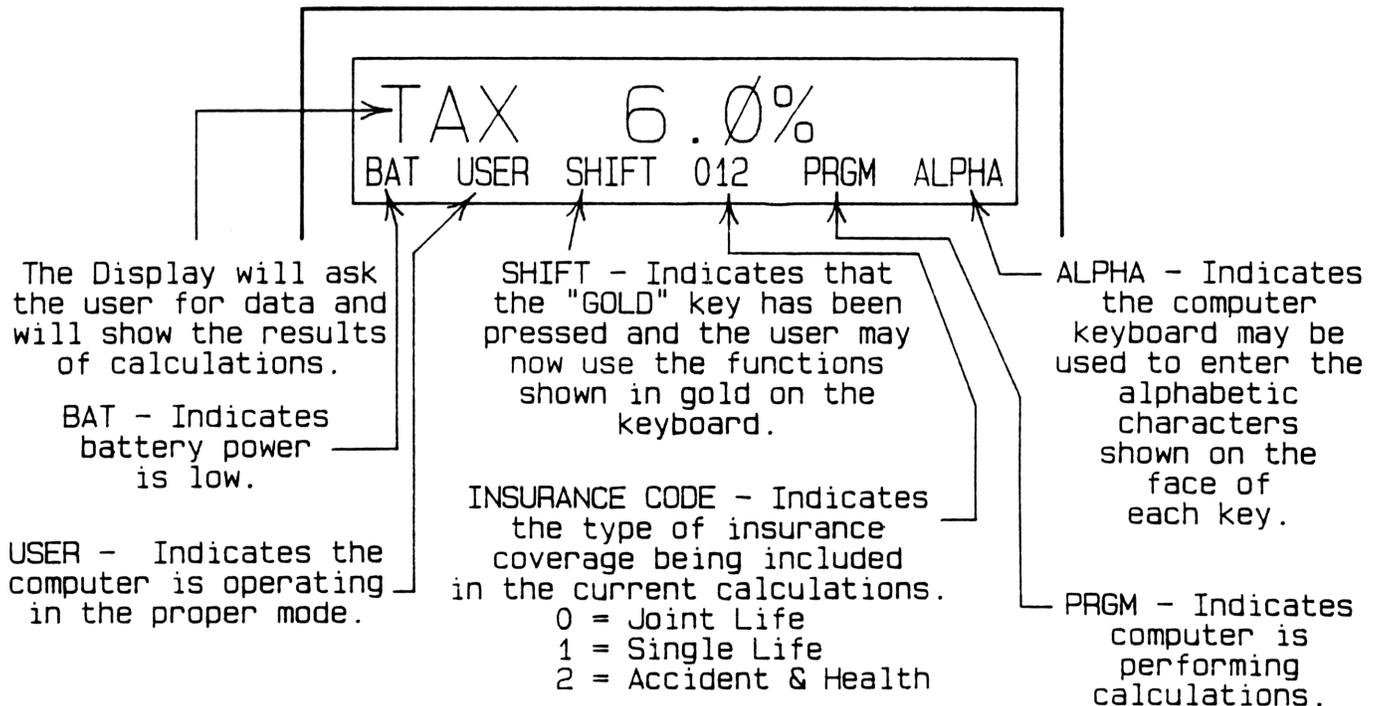
The battery pack is located in the back of the computer as shown. If your computer is equipped with rechargeable Nicad batteries, the charger port is located on the right side of the computer. To replace batteries, see the instructions found in the HP 41C Manual supplied with the computer.



DISPLAY

The display of the AF-1 is designed to provide both prompts (questions) and results of calculations. There are two basic parts to the display. The upper portion asks for data and provides results. The lower portion contains a status line which gives information about the condition of the battery, the mode of operation currently in use, and the type of insurance being included in the calculations. The figure below shows each part of the display and its function.

THE DISPLAY

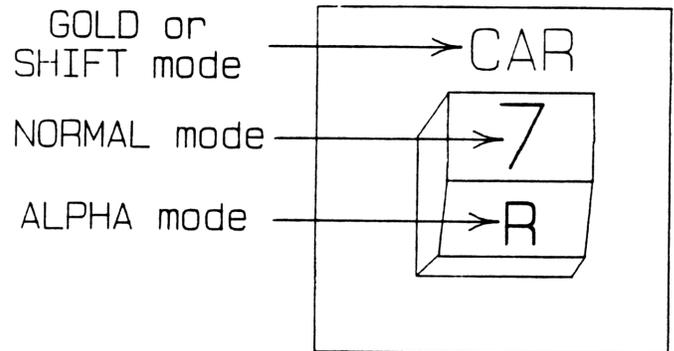


KEYBOARD

Each key on the keyboard can perform several different functions. The particular function a key will perform depends on the status of the computer.

There are usually three possible functions:

1) The NORMAL mode which uses the blue or white character above or on the face of the key; 2) the gold or SHIFT mode which allows you to use the functions printed in gold above the key and 3) the ALPHA mode which allows you to enter the letters printed in blue on the lower face of each key.



You can tell which mode you are in by looking at the status line of the display. If the word "SHIFT" appears, the GOLD key has been pressed. To return to the NORMAL mode, press the GOLD key again.

If the word "ALPHA" appears in the display, the ALPHA operating key has been pressed. You can return to the normal mode by pressing the ALPHA key again.

PRIMARY KEYS

ACCEPT
R/S

The ACCEPT key is one of the most important keys on the keyboard. Pressing this key tells the computer to accept the value displayed for the particular variable being entered. The function of this key will be demonstrated later.

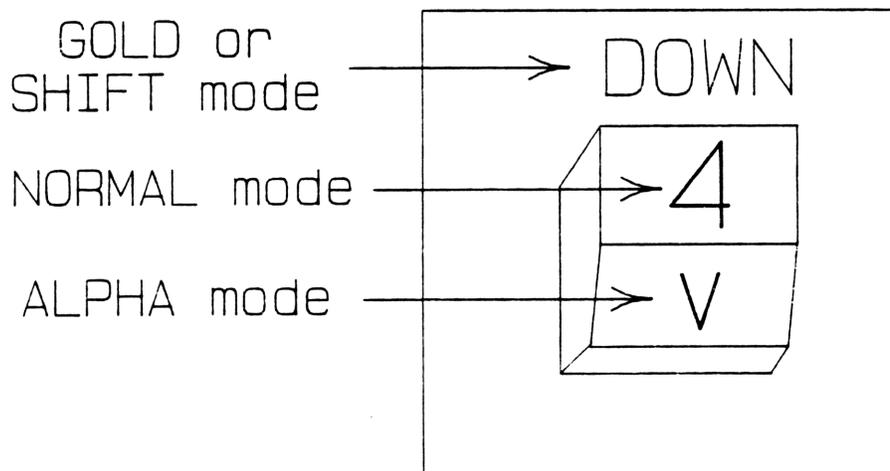
CLEAR

This key allows you to remove or correct data before it is entered (accepted). If a value has been incorrectly entered, each time the clear key is pressed one digit is removed from the display. If the display shows a figure that has been retained from a previous calculation, pressing the CLEAR key twice will remove the number and the display will show 0.00.

NUMERIC KEYS

0 through 9

The numeric keys function just like the keys of a regular calculator. The white numbering on these keys indicates the value of the key in the NORMAL mode of operation. Each numeric key has at least two other functions depending on the status of the GOLD or shift key and the ALPHA key. The GOLD key changes or shifts the function of the numeric keys from entering numbers to the function in gold above the key. For example, the number 4 numeric key can be used to enter a new or revised down payment by pressing the GOLD key, the 4 key and then the desired down payment amount followed by the ACCEPT key. An example is shown in the operations section.



II. BASIC OPERATION

Before beginning this section, the computer should be cleared of any data that may have been previously entered. The following method of clearing the computer is used to guarantee that all program variables are set to 0. During regular use, the computer will not require the user to use this method of clearing at any time.

Follow the steps below to clear all program modules:

1. If the computer is on, turn it off by pressing the ON key.
2. Remove both the AUTO FINANCE and TIME MODULE* program modules from the computer by pulling outward on the tabs on the top of each module.
3. With your right thumb press and hold the CLEAR key, then with your left hand press the ON key. Release both keys. The display should read MEMORY LOST.
4. Turn the computer off by pressing the ON key again.
5. Reinsert the program modules by pressing them back into the program module slots. (It makes no difference which module goes into which slot.)

The computer has now been totally cleared of any data that may have been previously entered.

In the following sections, there are examples of many different types of computations that can be done with the AF-1. All of the examples are written using the same methodology. The left column will show what key strokes to enter (which keys to press), the center column will show the display

* The time module is available as an option which enhances the power of your AF-1. It is not necessary to purchase the time module to use the basic functions of the AF-1.

immediately after entering the key strokes, and the right column will provide a short explanation of the operation.

SETTING THE INTERNAL CLOCK*

Whenever the time module has been removed or the computer power has been removed for an extended period of time, the internal clock must be reset. The following procedure describes the setting of the time and date functions:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>ON</u>	MM.DDYyyy	The computer will come on, beep several times, and display the request for the month followed by a decimal point, then the day and year. (In this example, February 20, 1985.)
02.201985	02.201985	
<u>ACCEPT</u>	HH.MMSS	Pressing the <u>ACCEPT</u> key tells the computer that the date entry has been completed. It then displays a request for the time: hours followed by a decimal point, minutes and seconds. (Using the 24 hour notation i.e. 2 PM = 14 hours, etc.)
14.1500	14.1500	In the example, the time is exactly 2:15 PM.

The AF-1 will go into the basic "set-up" mode upon completion of the clock setting routine. The first prompt will be the request for sales tax. The set-up process is described in the following section.

BASIC SET UP

The next four questions the computer will ask are called the "set up." These are factors that do not change from one sale to the next.

*More information on the use of the time module is available in the time module owners manual provided by Hewlett-Packard.

The system allows you to set the following four factors:

1. The sales tax rate.
2. The document processing fee, if any.
3. The insurance option. If this option is set "ON", the computer will prompt the user for the type of insurance to be included in the sale. If set "OFF", the computer assumes the insurance and status has been set and will not change. This function is discussed in more detail on page 20 of this manual.
4. The smog certificate requirement and whether the smog certificate fees are payable to the dealer or the State.

Items 3 and 4 can be set to "ON" or "OFF", and the smog certificate can be made payable to the dealer or the state by pressing the ENTER key as shown in the following example.

By pressing the ENTER key, each of these functions may be changed from its present status to the other. The table below shows the possible settings for the insurance and smog options.

<u>Factor</u>	<u>Possible Status</u>	
Insurance	ON	OFF
Smog Certificate	ON	OFF
If Smog Certificate is set "ON" it can be payable to	DEALER	STATE

When setting the insurance or smog options, the computer allows ten seconds for the operator to press the ENTER or ACCEPT key. If neither key is pressed, the computer assumes the present status of the option is correct and moves to the next option. Should an error be made in entry of the set-up parameters or the computer has been turned off for any reason, simply press the SET UP key to return to the beginning of the set-up process.

In this example we will use the following information:

<u>Factor</u>	<u>Value or Condition</u>
Sales Tax Rate	6%
Document Processing Fee	\$20.00
Life, Accident and Health Insurance offered by the dealer	No or "OFF"
Smog Certificate Required Payable to Dealer or State	No or "OFF" Dealer

The following steps describe the "set-up" procedure:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	TAX %	At the end of the clock setting exercise, the display was asking for the applicable sales tax rate.
6	6_	The sales tax rate for this example is 6%.
<u>ACCEPT</u>	DOC \$	Pressing the <u>ACCEPT</u> key enters the sales tax rate into the computer. The computer now asks for the document processing fee.
20	DOC \$20_	The sample document processing fee is \$20.00.
<u>ACCEPT</u>	L A+H --OFF--	Press the <u>ACCEPT</u> key to enter the document processing fee. The computer is now asking if your dealership offers life, accident and health insurance on a sale. OFF indicates no, ON indicates yes.
<u>ACCEPT</u>	SMOG --OFF--	For our example the dealership does not offer L A&H coverage. Pressing the <u>ACCEPT</u> key causes the computer to move to the next option - smog certificate leaving the insurance option in the "OFF" mode.
<u>ENTER</u>	TO DEALER	Pressing the <u>ENTER</u> key causes the computer to beep to acknowledge that the option has been changed from OFF (no certificate) to ON, meaning that a certificate is required.
<u>ACCEPT</u>	CAR \$0.00	The display now shows that payment for the smog certificate is to be made to the dealer. (The alternate option is to have payment made to the state.) Pressing the <u>ACCEPT</u> key tells the system to accept this option as it is, no change is required.

The display is now indicating that the computer is ready to accept data on an auto sales transaction. The basic factors of sales tax, document processing fees, insurance and smog requirements have been set and will not be set again unless there is a change in the rates charged or practices of the dealer. The computer will store this data in memory unless you return to SET UP to change these factors or the batteries are removed for an extended period.

SAMPLE AUTO SALE

Now that the AF-1 has been set up with the basic information, you are ready to run through a sample auto sale. The factors you will need for this example are shown below:

<u>FACTOR</u>	<u>VALUE</u>
Price of the car (selling price) (CAR)	\$12,500
Trade-in allowance (TRADE)	2,000
Pay off on trade (P/O)	500
Down payment (DOWN)	1,000
Pick-up fees (PCUP)	2,000
Smog certificate fees (SMOG)	25
Manufacturer's rebate (REBT)	500
Service contract (SV. CT.)	895
License fee (LICENSE)	220
Number of months financed (MONTHS)	60
Days to first payment (DAYS)	45
Add rate (ADD ON)	6.25%

The computer should be displaying the CAR \$0.00 prompt. If it is showing anything other than the request for the price of the car, turn the AF-1 off and back on again. If it still does not show the CAR \$0.00 prompt, return to the previous section on basic set up operations.

The example below describes how the AF-1 is used in an auto sales transaction using the above factors:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	CAR \$0.00	The computer is prompting for the selling price fo the car.
12,500	12,500_	The price of the car for this example is \$12,500.
ACCEPT	TRADE \$0.00	Pressing the ACCEPT key causes the computer to "accept" the selling price and move to the prompt for the trade-in value.
2,000	2,000_	The value of the customer's trade-in is \$2,000.00
ACCEPT	P/O \$0.00	Pressing the ACCEPT key causes the computer to "accept" the trade-in entered and move to the prompt for the pay off (if any) remaining on the trade.
500	500_	For this example, \$500 is owed on the trade in vehicle.
ACCEPT	DOWN \$0.00	Pressing ACCEPT causes the computer to accept the pay-off figure and move to the prompt for the customer's down payment.
1,000	1,000_	The down payment will be \$1,000.
ACCEPT	PCUP \$0.00	After ACCEPT is pressed, the computer will prompt for the pick up fees due (if any).
2,000	2,000_	In this example, the cost for the customer to pick up the vehicle is \$2,000.00
ACCEPT	SMOG \$0.00	The computer will now prompt for the cost of the smog certificate.
25	25_	The smog certificate will cost \$25.00 for our example.
ACCEPT	REBT \$0.00	Pressing the ACCEPT key causes the computer to accept the value entered and move to the prompt for the amount of the manufacturer's rebate.
500	500_	In this example, the rebate is \$500.
ACCEPT	SV. CT. \$0.00	The computer will now prompt for the service contract price.
895	895_	The service contract on this vehicle retails for \$895.00.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
ACCEPT	LICENSE 0	After accepting the service contract price, the computer prompts for the state motor vehicle license fee.
220	220_	The license fee on this car is \$220.00
ACCEPT	0 MONTHS	Again, the ACCEPT key is pressed and the computer moves to the prompt for the number of months over which the vehicle will be financed.
60	60_	The customer wants the vehicle financed over 60 months.
ACCEPT	0 DAYS	The computer then prompts for the number of days to the first payment.
45	45_	There will be 45 days to the first payment.
ACCEPT	0.00% ADD ON	This is the prompt for the add-on rate. In this example, the add-on rate is 6.25%. (If the user did not know the add rate for this sale, entering a "0" and pressing the ACCEPT key allows the computer to advance to the alternate annual percentage rate prompt (APR). At this point, the user may enter the APR.)
6.25	6.25_	
ACCEPT	PMNT \$206.27	After pressing the ACCEPT key, the computer will beep and calculate the monthly payment. For this sale the payment will be \$206.27.

If at this point the sale is completed, all you must do is press the | ACCEPT | key and the AF-1 will provide all the information necessary to fill out the standard sales contract.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	PMNT \$206.27	This is the display from the final step above.
ACCEPT	11.35% APR	The computer beeps and displays the annual percentage rate.
ACCEPT	FC \$2,965.00	Total finance charges.
ACCEPT	AF \$9,411.20	Amount financed.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
ACCEPT	TOP \$14,376.20	Total of all payments
ACCEPT	TDP \$5,000.00	Total down payment
ACCEPT	TSP \$17,376.20	Total sales price
ACCEPT	1 PAYMENT)	One payment of \$2,000.00
ACCEPT	OF \$2,000.00)	
ACCEPT	60 PAYMENTS)	And 60 payments of \$206.27
ACCEPT	of \$206.27)	
ACCEPT	ON: 04/06/85	With payments starting on April 6, 1985. This date will not be provided if the time module is not installed.
ACCEPT	CAR 12,500.00	Price of car
ACCEPT	DOC FEE 20.00	Document processing fee
ACCEPT	TAX 751.20	Total sales tax
ACCEPT	SV/CT 895.00	Service contract costs
ACCEPT	LIC. 220.00	Motor vehicle license fee
ACCEPT	INSUR 0.00	Life, accident and health insurance cost
ACCEPT	SMOG 25.00	Smog certificate cost
ACCEPT	TRADE 2,000.00	Trade in allowance
ACCEPT	P/O 500.00	Pay off on trade
ACCEPT	TOTAL 1,500.00	Total trade in
ACCEPT	PCUP 2,000.00	Pick up fees
ACCEPT	REBT 500.00	Manufacturer's rebate
ACCEPT	DOWN 1,000.00	Down payment
ACCEPT	END	At the end of this step, the computer beeps and turns itself off.

All data is stored in memory and can be used again if necessary. You have completed entering basic sales information into the computer, the AF-1 has helped you complete the standards sales contract, and the deal has been closed.

III. ADVANCED TECHNIQUES

TAILORING THE SALE TO THE CUSTOMER

Many sales are not as easy as the previous sample. The customer often wants to limit the size of the monthly payments, the down payment or the interest rate. There are two sets of keys that help the sales manager adjust the factors of the sale to help suit the customer's needs while maintaining a reasonably profitable position.

The Roll Back Keys

The roll back keys let you determine how the price of the car, the amount of the down payment, the price of the service contract or the interest rate would have to be modified to meet the customers desired payment figure. Using the sale entered previously as our starting point, the example below steps through the use of the roll back keys. If your computer is off, turn it on by pressing the ON key.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>ON</u>	CAR \$12,500.00	When turned on, the computer should display the CAR prompt. The value shown here is based on the sample sale in the basic operation section of this manual.

In this example, the customer has said that a payment of \$206.27 is about \$15.00 per month too high. He or she would like to have payments of about \$190.00 per month. To find out how this would effect the price of the car, press the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
(ROLL BACK) <u>CAR</u>	PAYMENT?	This is the prompt for the desired payment amount.
190	190_	The customer wants payments of \$190 per month.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>ACCEPT</u>	CAR \$11,799.70	The price of the car would have to be dropped from \$12,500 to \$11,799.70 to allow payments of \$190.

If at this point, the dealer and customer are in agreement on the sales price, simply press the | ACCEPT | key to begin listing the data required for the sales contract. If the dealer cannot drop the price of the car to \$11,799.70, the sales price may be reset to whatever price is desired. To reset the price, press the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
12,500	12,500 _	To set the price of the car back to \$12,500, enter 12,500 on the keyboard and press the <u>ACCEPT</u> key.
<u>ACCEPT</u>	PMNT \$206.27	The payment has been returned to the original amount.

To see how much more the customer would have to put down on this vehicle to achieve payments of \$190 per month, use the following procedure:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	PMNT 206.27	This is the payment amount shown above.
(ROLL BACK) <u>DOWN</u>	PAYMENT?	This is the prompt for the payment desired by the customer.
190	190 _	The desired payment is \$190.
<u>ACCEPT</u>	DOWN \$1,742.46	The customer would have to put \$1,742.46 down to achieve a payment of \$190. Since the customer is already putting \$1,000 down, an additional \$742.46 will bring the total monthly payment down to \$190.00.

If the customer agrees to the new down payment amount, press the | ACCEPT | key to begin listing the data required for the sales contract. If this new down payment proves to be too high for the customer, the down payment may be reset to whatever amount the customer can afford by pressing the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
1,000	1,000_	The original down payment in our example was \$1,000. (Any amount could be entered depending on the customer's available down payment.)
<u>ACCEPT</u>	PMNT \$206.27	The down payment has now been reset to \$1,000 and the payment has been returned to \$206.27.

This same exercise can be carried out for a review of the service contract roll back.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	PMNT \$206.27	(From the previous example.)
(ROLL BACK) <u>SRV. CT.</u>	PAYMENT?	The prompt for the desired payment amount.
190	190_	The customer has asked for a payment of \$190.
<u>ACCEPT</u>	S.C. \$152.69	In this case, the dealer will have to sell the service contract for \$152.69.

Again, if this is acceptable, press the ACCEPT key to begin listing the data for the sales contract.

The service contract may be set to any agreed upon value by pressing the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
895	895_	The original service contract was \$895.
<u>ACCEPT</u>	PMNT \$206.27	The service contract has been reset and the payment remains \$206.27.

One of the other factors that could be adjusted is the interest rate applied to the financing. To determine how much the interest rate would have to be dropped to allow payments of \$190, press the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	PMNT \$206.27	From previous example.
(ROLL BACK) <u>RATE</u>	PAYMENT?	This is the prompt for the desired payment.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
190	190_	The desired payment is \$190.
<u>ACCEPT</u>	ADD ON 4.19%	The necessary add-on rate would be 4.19%.

If this add-on rate is acceptable, press the | ACCEPT | key to begin listing the data used to complete the sales contract. If this add-on rate is not acceptable, you may reset the rate to any desired value of 6.25% by pressing the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
6.25	6.25_	This is the original add on rate.
<u>ACCEPT</u>	PMNT 206.27	The payment has been reset to 206.27.

GOLD FUNCTION KEYS

You may use the gold function keys above the number keys to change any value in the proposed sale. The payment amount can be easily recomputed at any time by pressing the | EXECUTE | key.

For example, should the customer wish to finance the proposed purchase over 48 months rather than 60 months, press the following keys:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	(Any value may be displayed depending on what function was last used.)	
<u>GOLD KEY</u>	SHIFT	The SHIFT status will be displayed in the bottom line of the display.
<u>MONTHS</u>	60 MONTHS	(The <u>MONTHS</u> key is located above the number <u>2</u> key.) In our example, the customer had originally desired 60 month financing.
48	48_	The customer now desires 48 month financing.
<u>ACCEPT</u>	45 DAYS	The new term has been accepted. The computer is now asking if it is still 45 days to the first payment. For this example we will assume this was not charged.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
EXECUTE	PMNT \$245.59	Pressing the EXECUTE key re-calculates the payment based on 48 month financing. The payment is now \$245.59

A similar sequence can be followed for the use of any of the gold function keys. By pressing the | GOLD | key and one of the numeric keys, you can adjust any component of the sale. Pressing the | EXECUTE | key will recalculate the payment amount at any time.

To return the number of months for this sale to 60 months, press the following:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
GOLD	SHIFT	The word shift will be displayed under whatever is already shown in the display.
MONTHS	48 MONTHS	This is the number of months currently stored in the computer
60	60_	The contract period is being reset to 60 months.
ACCEPT	45 DAYS	Pressing ACCEPT puts 60 months back into the month register with 45 days until the first payment.
EXECUTE	PMNT \$206.27	Pressing EXECUTE re-calculates the payment.

FILLING OUT THE SALES CONTRACT

When the sale has been made and you are ready to fill out the sales contract, simply press | EXECUTE | to recompute the payment based on any changes you may have entered, then press the | ACCEPT | key to step you through the sales contract format.

The following data will be displayed by the AF-1 as the | ACCEPT | key is pressed in the order shown below:

- Annual Percentage Rate (APR)
- Finance Charges (FC)
- Amount Financed (AF)
- Total of Payments (TOP)
- Total Down Payment (TDP)

- Total Sales Price (TSP)
- One Payment of $\$(\text{Pickup up Charge})$
- $(\text{Months}) \text{ Payments of } \(Payment Amount)
- On: $(\text{Date of First Payment})$. (If time module is installed)
- Price of the Vehicle (CAR)
- Document Processing Fee (DOC FEE)
- Sales TAX (TAX)
- Service Contract Charge (SV/CT)
- Vehicle License Fee (LIC)
- Life and Accident & Health Insurance (INSUR)
- Smog Certificate Fee (SMOG)
- Trade-in Allowance (TRADE)
- Pay-off Due on Trade (P/O)
- Total Trade-in Allowance (TOTAL)
- Pick-up Charges (PCUP)
- Manufacturer's Rebate (REBT)
- Down Payment (DOWN)
- END

INSURANCE

The AF-1 allows you to include or exclude accident, health and life insurance in your calculations depending upon the policy of your particular dealership. In the previous example, the dealership did not sell insurance as part of the regular sale.

To Include Insurance

If a dealer offers insurance, simply follow the example below to set the insurance options. (The use of the ENTER key to switch the status of set-up options is described on page 9 of this manual.)

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>ON</u>	CAR \$12,500.00	If the calculator is not already on, press the <u>ON</u> key. The prompt "CAR \$12,500.00" is displaying the price of the vehicle used in our previous example.
<u>SET UP</u>	TAX 6.0%	Pressing the <u>SET UP</u> key takes you back to the set up function which allows you to change the tax, document processing fee, insurance and smog options.
<u>ACCEPT</u>	DOC \$20.00	Pressing the <u>ACCEPT</u> key steps the AF-1 to the document processing fee prompt.
<u>ACCEPT</u>	L A+H - OFF -	The life, accident and health option was set to OFF in the example. (If the L A&H prompt reads ON, press the <u>ACCEPT</u> key to leave it on.)

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>ENTER</u>	SMOG --ON--	Pressing the <u>ENTER</u> key causes the AF-1 to beep and to move to the SMOG display. The "beep" indicates that the insurance option has been turned "ON" if it was previously in the off position. (The <u>ENTER</u> key is used to switch between "OFF" and "ON" for the insurance and smog functions."
<u>ACCEPT</u>	TO DEALER	Pressing the <u>ACCEPT</u> key moves the AF-1 to the second part of the smog option which indicates to whom the payment should be made, the dealer or the state.
<u>ACCEPT</u>	CAR \$12,500.00	Pressing the <u>ACCEPT</u> key again brings you back to the beginning of the computation by asking for the price of the car.

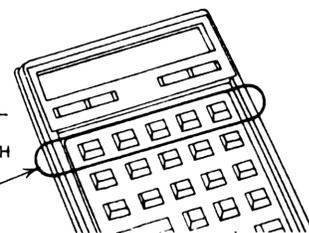
Now as you step through the program as shown in the Basic Operation section, the insurance prompt will appear after the add on rate prompt. This will ask you to enter the life, accident and health insurance rate.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	ENTER L A+H	When this prompt appears, press the appropriate insurance key.

The top row of keys on the AF-1 are the insurance keys. Pressing one of these keys will cause the computer to calculate the payment based on the type of coverage selected. It also causes a number or series of numbers to appear in the lower line of the display. For example, pressing the joint life accident and health JL A&H key causes the number 0 and 2 to appear

INSURANCE KEYS

JL A&H - JOINT LIFE ACCIDENT & HEALTH
 SL A&H - SINGLE LIFE ACCIDENT & HEALTH
 JL - JOINT LIFE
 SL - SINGLE LIFE
 NONE - NO INSURANCE



INSURANCE INDICATORS

0 = JOINT LIFE
 1 = SINGLE LIFE
 2 = ACCIDENT AND HEALTH

below the main portion of the display. These numbers indicate that the following option has been selected.

Joint Life - 0
Single Life - 1
Accident and Health - 2
Blank - No Insurance

For example, if single life, accident and health had been selected, the numbers 1 and 2 would be displayed.

The insurance keys may be pressed at any time after the initial data relating to the sale has been entered. Pressing one of the insurance keys will change the numbers shown in the status line of the display and will immediately recalculate the payment amount based on the insurance option selected. For example:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
(Insurance keys)		
<u>SL A+H</u>	PMNT \$229.52 1 2	Pressing the single life accident and health <u>SL A+H</u> key immediately recomputes the payment amount. (The payment shown in this example is based on the sale shown in the previous section.)
<u>NONE</u>	PMNT \$206.27	As a further example, pressing the <u>NONE</u> insurance key causes the computer to recalculate the payment without insurance.

SPECIAL FUNCTION KEYS

START |

The START key may be pressed at any time during the operation of the computer to return to the beginning of the calculation. Pressing START will return the computer to the "CAR \$0.00" prompt. You may begin the calculation sequence at this point and change any factors which may need to be adjusted.

PROFIT

The PROFIT key gives the Sales Manager the ability to quickly check the profitability of a particular deal. Pressing the PROFIT key will produce the ** PROFIT ** display and will ask for the dealer's cost for the vehicle being sold. (The values shown in this example are based on the sample sale shown in the previous section of this manual.)

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>PROFIT</u>	** PROFIT ** CAR \$	Press the <u>PROFIT</u> key to enter the profit calculation mode. The computer will then prompt for the dealer's cost for the vehicle being sold.
11,125	11,125_	For this example, our vehicle cost \$11,125.
<u>ACCEPT</u>	SV. CT. COST	The computer is now asking for the dealers cost for the service contract (if any) being included in the sale.
300	300_	For this example, the service contract cost the dealer \$300.
<u>ACCEPT</u>	BUY RATE ?	This prompt is asking for the interest rate at which the lender is purchasing the contract.
6.1	6.1_	The lender has agreed to purchase this contract at a 6.1% buy rate. (The add on rate in the sample was was 6.25%.)
<u>ACCEPT</u>	CAR \$1,375.00	The profit on the car is \$1,375.00
<u>ACCEPT</u>	S.C. \$595.00	The profit on the service contract is \$595.00
<u>ACCEPT</u>	FIN \$114.58	The profit on the financing is \$114.58.
<u>ACCEPT</u>	TOT \$2,084.58	The total profit on the sale is \$2,084.58.
<u>ACCEPT</u>	END	At this point, the computer will beep and turn itself off.

RULE OF 78

The RULE 78 key will allow you to compute the approximate pay-off on a trade-in should the pay-off figure not be readily available. This key may be used by itself or during a normal computation cycle.

In stand alone operation, the RULE 78 key may be pressed at any time. The following data will be necessary in order to use this function.

1. The term of the loan on the trade-in.
2. The number of the last payment made (for example, in a 60 month contract, the last payment may have been number 48, meaning 48 payments have been made).
3. The monthly payment amount.
4. The total finance charge on the contract.

To use this function, follow the example below:

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>RULE 78</u>	TERM	Pressing the <u>RULE 78</u> key places the computer into the Rule of 78 mode and displays the "TERM" prompt.
60	60_	The term of the original loan on the trade-in for this example is 60 months.
<u>ACCEPT</u>	LAST PAYMENT?	The number of the last payment for our example is 58.
58	58_	
<u>ACCEPT</u>	PAYMENT AMT \$	The payment amount for this example is \$250.00 per month.
250	250_	
<u>ACCEPT</u>	FIN. CHARGE \$	The total finance charges on the original purchase contract on the trade-in for this example is \$1,750.00.
1,750	1,750_	
<u>ACCEPT</u>	P/O \$497.13	The total pay off due on the trade in is approximately \$497.13.

If you want to use this pay off figure in further calculations, simply press the ACCEPT key and it will be entered into the computer.

ALARM

The function of the ALARM key is covered in detail in the Time Module Manual supplied with your time module. If the time module was not purchased with the AF-1, it may be acquired from Millennium Systems or any dealer supplying accessories for HP-41C calculators.

LEASE

The lease function currently provided with the computer was designed to meet the requirements of a standard leasing form. This form has recently been revised by the industry and the lease function no longer provides the standard information as required on the form.

Millennium Systems is preparing an up-dated version of the lease software which will serve the industry's needs. Upon release of the lease up-date, all registered owners of the AF-1 will be notified.

DATA ENTRY (GOLD) KEYS

Above each number key is a gold function. These functions allow the user to enter or change any factor in the sales calculation. For example, should there be a need to change the price of the car at some point in negotiations and all other factors remain the same, simply press the

CAR	SRV. CT.	ADD ON
7	8	9
DOWN	LICENSE	A P R
4	5	6
TRADE	MONTHS	DAYS
1	2	3
PAYOFF	.	
0		

GOLD key and the CAR key (number 7), enter a new price for the vehicle and press ACCEPT. To re-compute the payment press the EXECUTE key. The example below provides a sample calculation. (The numbers shown are based on the sample sale entered earlier in this manual. If you have entered other factors, the values displayed may differ from the ones shown.)

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>GOLD</u>	PMNT \$206.27 SHIFT	The display status line will show the word SHIFT in the center. The larger letters on the display may be <u>any</u> prompt. For this example, the computer was previously on the "PMNT" display.
<u>CAR</u>	CAR \$12,500.00	Pressing the <u>CAR</u> key (the <u>7</u> key has the word CAR above it in gold letters) displays the previous vehicle price entered.
12,350	12,350_	The price of the car is now \$12,350.00.
<u>ACCEPT</u>	TRADE \$2,000.00	Pressing the <u>ACCEPT</u> key enters the new vehicle price and moves the computer to the next prompt.

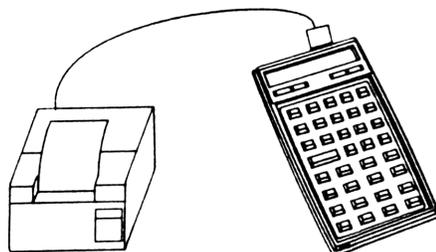
At this point, you may continue through the computation as shown in the Basic Operation section of this manual or press the EXECUTE key to immediately recalculate the payment amount based on the values now stored in the calculator.

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
<u>EXECUTE</u>	PMNT \$202.79	Pressing the <u>EXECUTE</u> key recalculates the payment amount based on the new price of the vehicle.

This same procedure may be used when changing any factor in the calculation, i.e. pressing the GOLD Key and the SRV. CT. key allows you to change the service contract price; pressing the GOLD key and then the ADD ON key allows you to change the add on rate, etc.

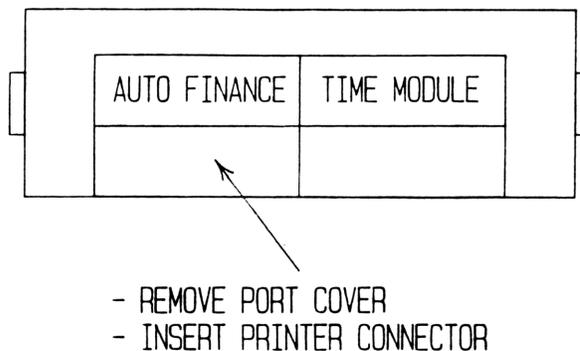
PRINTER OPERATION

If you have purchased the optional HP-82143A peripheral printer, you may use it with the AF-1 to obtain a printed copy of the detail of the sale. The figures from this printout can then be transferred directly to the sales contract.



To use the printer:

1. Remove one of the plastic covers protecting the unused ports the found in the end of the AF-1.
2. Insert the cable from the printer into the exposed slot.
3. Turn the printer on. (The red power ON indicator should glow.)
4. Set the mode switch to the "MAN" setting.
5. Use the AF-1 as you normally would to compute a sale.
6. When you reach the "PMNT \$" display, follow the instructions listed below.



- REMOVE PORT COVER
- INSERT PRINTER CONNECTOR

<u>Keystrokes</u>	<u>Display</u>	<u>Explanation</u>
	PMNT \$206.27	When you reach this display in your computations and are ready to fill out the sales contract, press the <u>ACCEPT</u> key. The prompt moves to the APR display. Press <u>ACCEPT</u> key again.
<u>ACCEPT</u>	11.35% APR	
<u>ACCEPT</u>	CUST. NAME? Alpha	The printer will print "customer name" and the display will be as shown. The ALPHA indicator will be on showing that the blue letters on the face of each key will be displayed as the key is pressed. (This prompt will be seen <u>ONLY</u> if the printer is connected to the computer.)
	JANE DOE JANE DOE Alpha	The sample customer is Jane Doe. (This prompt will be seen <u>ONLY</u> if the printer is connected to the computer.)
<u>ACCEPT</u>		Pressing the <u>ACCEPT</u> key causes the printer to create a listing of all factors associated with this sale.
	END	After the list is done, the AF-1 beeps and turns itself off.

Press the paper advance button on the printer to roll the paper up. The listing may now be used to fill out the final sales contract.

For further information on using the printer, refer to the manual supplied by Hewlett-Packard with the printer.

