

A good title for this section might be . . .

## ***The Territorial Imperatives Of The Trumpeter Swan***



This title may seem a little out of place in a computer manual, but there's a reason for the incongruity. Unless you were fascinated by birds, you probably wouldn't turn to this section of the manual first. If it had been entitled *Let's Get Started*, the cliché generally used to describe sections of this sort, you might have begun reading here, ignoring all the introductory information.

Assuming that you've read what precedes this, you probably realize that, contrary to the popular maxim, what you don't know can hurt you. To get the most out of your ACE, you have to have the right information and the right attitude. You could probably assemble the components of the computer itself without either, but there probably would be no end to the frustration you'd endure trying to put together the larger picture of personal computerdom.

If you've turned here out of curiosity, turn back. Establish your own territorial imperatives by starting at the beginning and getting a feel for the terrain.

## ***It's Out Of The Box! Now What?***

First, make sure you've got everything that you're supposed to have. Here's a list:

- \* the ACE 1000
- \* this manual
- \* an AC power cord (black, about six feet long)
- \* a video cable (thin, approximately three feet long, with a male plug on each end)
- \* a warranty card

And, if you bought a disk drive (or drives):

- \* the disk drive (or drives)
- \* the disk controller electronics card
- \* the disk cable (a broad ribbon about two feet long)
- \* a **DOS** diskette

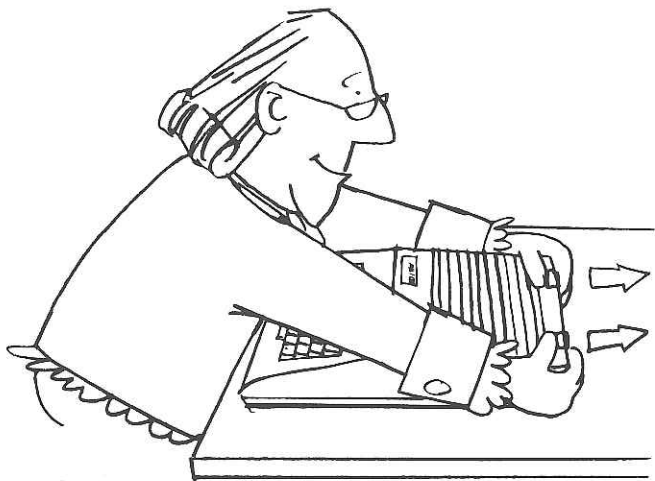
## ***Getting It Ready***

Make sure the power is off before you put anything together. If you haven't tried to connect the power cable yet, you should be OK. If you have connected it, disconnect it now.

## ***Getting The Lid On And Off***

The lid of the ACE 1000 is designed to pop off and snap back on. To get it off, stand in front of the unit facing the keyboard. Reach back and grasp the corners of the back of the lid, one corner in each hand. With your thumbs, push back the two latches that are about an inch and a half in from the corners, holding the lid in place. At the same time, lift the lid up. It should come right off.

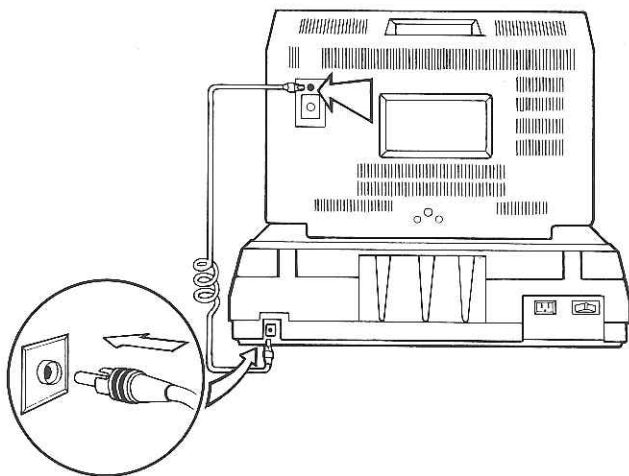
To get it back on, face the keyboard and look at the underside of the front of the lid. There's a piece of plastic screwed onto it,



forming a groove or slot at the front edge of the lid. Put the front of the lid down onto the main unit so that the lip of the case just above the keyboard slips into that groove or slot. Center the lid, lining it up with the bottom piece of the case, and then press the back of the lid down firmly. The two latches should snap into the indentations on the rear of the lid.

## ***Attaching The Cables — The Video Cable***

The video cable is the skinnier of the two round cables shipped with the ACE, the one with a little male jack on each end. Find the one inch square opening in the back right-hand side of the unit, near the bottom. In it is a small female connector. Plug either end of the cable into it.



The other end of the cable connects to your display device. If you're using a video monitor, the cable plugs right into a female connector similar to the one at the back of the ACE. If you're

using a TV with an RF modulator as a display device, things are slightly more complicated. To hook it up, follow the instructions provided with the modulator. Plug in the power cord of your display device before you go further.

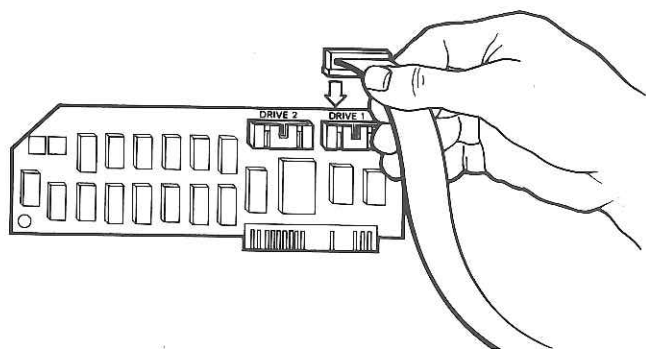
## ***The Disk Drives***

The disk drives are only slightly harder to connect than the video cable. Locate the disk controller card that came packaged with your disk drives. This is a rectangular piece of plastic eight inches by three inches, covered with electronic components. You have to plug this card into one of the connectors on the main electronics card inside the ACE, so pop the lid off.

Look inside, if you haven't already. On the floor of the main unit is a board strewn with electronic components. Toward the back, right up against the wall, you'll see eight black connectors. These are called slots. You'll see numbers printed in large white numerals on the main board behind the slots. These are the slot numbers, as you might have guessed. You're going to plug the disk controller card into slot 6. But not quite yet.

First, look at the disk drive cable, a wide, thin cable that looks like a ribbon. It may be partially covered with black plastic. One edge of the exposed section of the cable is colored black or red. Now take a look at the controller card and find the connectors marked DRIVE 1 and DRIVE 2.

With the colored (red or black) edge of the cable lined up underneath the "D" of the DRIVE 1 label, plug the cable into the two rows of pins on the connector. Be sure both these rows are plugged into the holes on the cable connector because if



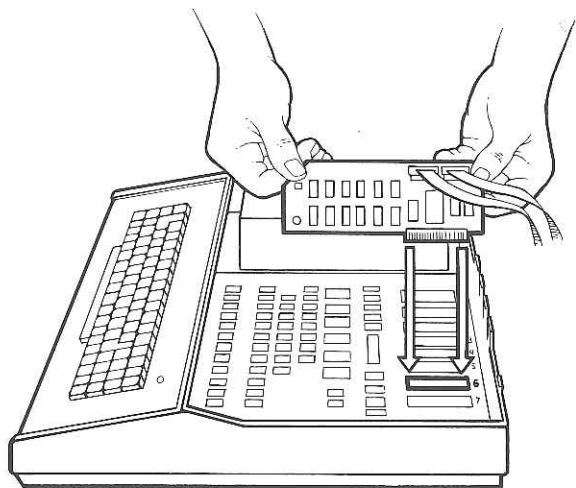
they're not, you may damage the ACE, the disk drive, or both. If you're at all uncertain about this procedure, ask someone who has done it before to help you.

If you have a second disk drive, attach its cable to the connector on the disk controller card labeled DRIVE 2, following the same procedure. If you have two drives, it doesn't particularly matter which drive is connected to which connector on the disk controller card, but you've got to remember which is drive 1 and which is drive 2 after you make the connection. The computer, the card, and the drive could care less about how you decide to number them as long as you make sure they're connected properly and remember which is which.

Now you're ready to plug the disk controller card into slot number 6. The card has a little plastic tab sticking out from one edge. This tab has many small gold-plated electrical contacts on it. They look something like tiny fingers.

Plug this tab into slot 6 so that the disk drive cable connectors are on the side of the card nearest the back of the main unit. Route the disk drive cables to the very back of the main

unit and out the back through one of the three vertical openings in the wall. Bending the cables won't hurt them but do make sure that the cables won't interfere with closing the lid.

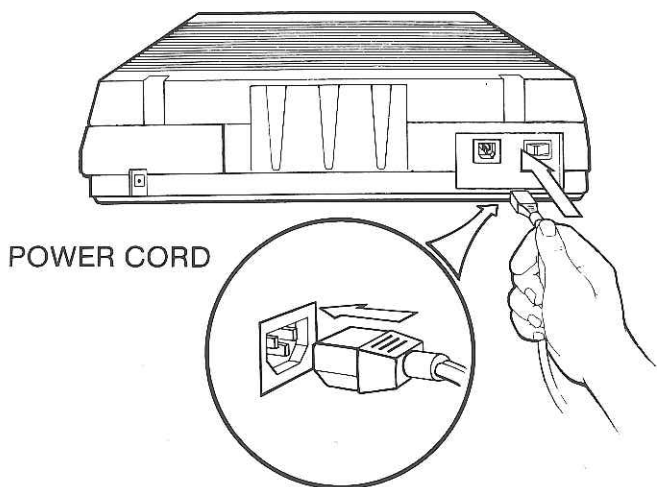


That's all there is to it. Your disk drives are now installed. They get their power through the cables plugged into your ACE.

## ***The Power Cord***

As soon as you make sure the ON/OFF switch is in the OFF position, you can plug in the AC power cord. It's the six-foot cord with a standard male plug for an electrical outlet on one end. In the back of the unit, on the left-hand side, there is a three-pronged connector. Plug the female end of the power cord into

the male connector on the ACE. Plug the other end into your wall socket and you're in business.



## ***Turning It On — What It Should Do***

Let's try the ACE without any diskettes first, just to see if it's working properly. Turn the unit on using the ON/OFF switch on the back. Here's what should happen:

1. The red light at the top right corner of the keyboard comes on.
2. The display screen clears.
3. On the screen you see:

ACE 1000 vX.X

(X.X is a version number which will change from time to time.)

4. You hear a beep.



5. The red light on the front of disk drive 1 lights up.
6. You hear strange noises from disk drive 1 for a few seconds and then a constant whirring sound that continues until the power is turned off.

At this point, the ACE is trying to read something from a diskette that isn't there. It will try to read the nonexistent diskette forever until it's told to stop. (The ACE can't tell if there's a diskette in a drive or not. It takes futility right in stride.) For the moment, just turn the machine back OFF.

If all this happens, the ACE is working fine. If it doesn't, don't despair.

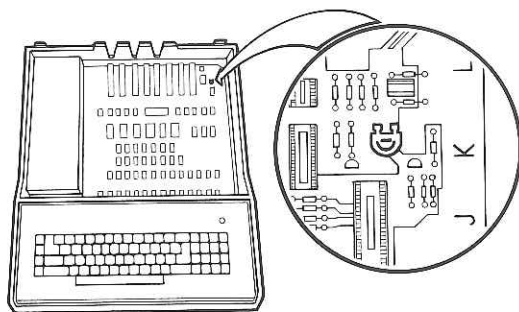
## ***Why It Might Not Be Working***

This checklist may help you find the problem.

1. Is the light in the upper right corner of the keyboard on? If it's not, then the machine isn't getting power. Check the power cord connection, both to the ACE and to your electrical outlet.
2. Is your display screen doing something strange? Check your video cable connection. If you're using a modulator to a TV, check your modulator connection. If the screen is "rolling" or "breaking up," then you might have to adjust your display device. Play with the horizontal and vertical hold adjustments on the screen. If the display screen does nothing, check to see if it's turned on and plugged in.
3. If the disk drive light didn't go on, check the disk drive cable connection. Also make sure that the disk controller card is firmly plugged into slot 6 on the main electronics

board inside the unit.

4. Is the display screen very dim? You can adjust it a bit inside the ACE. In the back right-hand corner of the main electronics board, there's a small half moon disk with a slot in it. It's near the video connector. To adjust video brightness, turn this disk using a small screwdriver, preferably a plastic one. Be careful not to let your screwdriver touch anything else on the electronics board because you can damage the components.



If none of these measures solve the problem, then there might be something wrong with the unit. Don't attempt to fix it yourself. Take it back to your dealer or to a company authorized repair shop and have it checked.



# ***The Communications Connection***

## ***Say Hello To Your Keyboard***

Since the keyboard is going to be your primary means of communicating with the ACE, an introduction is in order. You're going to spend a lot of time pounding away at it, so you should know what it can do.

### ***Lower Case and Alpha Lock***

In most ways, the ACE keyboard works exactly like a standard typewriter. If you type characters without depressing the **SHIFT** key, you'll get lower case. When you simultaneously depress the **SHIFT** key and a character key, you'll get an upper case character.

Unlike a standard typewriter, however, the ACE has no SHIFT LOCK function. Instead, it has an ALPHA (short for alphabet) LOCK, which is slightly different.

In a typewriter's SHIFT LOCK mode, all the characters on the keyboard shift to either an upper case letter or the top character on the punctuation keys. In the ACE's ALPHA LOCK mode, only the alphabetic characters shift to upper case; the punctuation keys don't shift to their top characters.

The tiny red light on the **LOCK** key indicates that you're in ALPHA LOCK mode. To get out of ALPHA LOCK, just hit the **LOCK** key and the red light will go out. Touch the **LOCK** key again, and you're back in ALPHA LOCK.

Although the ability to generate lower case is a distinct advantage, there are times that it causes some problems. Certain programs don't handle lower case characters properly.

The reason for this program weakness is that they were written for use on an APPLE, which normally can't generate lower case characters. Some programs will actually modify every signal sent by the keyboard so that all characters become upper case. The result is that, using some programs, you can't type lower case characters with your ACE.

There's no easy solution to this problem. You can enter ALPHA LOCK mode and only type upper case characters. Or, if you can lock in upper case with one of the commands that the program provides, you can sometimes type lower case characters, strange as that may seem. You see, when the program is locked into upper case mode, it thinks that the keyboard can generate only upper case characters, so it won't bother to modify the keyboard characters.

If you still can't type lower case characters, then contact the program's manufacturer and ask for either a revised version of the program or a "patch" that you can apply to your version to allow lower case.

## ***Numeric Pad/Editing Pad***

The group of twelve keys on the right of the keyboard is called the numeric pad. It consists of the ten digits, the "greater than" sign (>) , and the decimal point. If you do a lot of numerical calculations, you'll find using the numeric pad faster than using the numbers on the top row of keys.

Tapping the **[PAUSE]** key while pressing the **[CTRL]** key changes the numeric pad into an editing pad. Some word processing programs use this pad to let you place characters wherever you want them on the screen.

When you're using the editing pad, pressing the **[2]** key positions the next character you type one line down, while the **[8]** key places it one line up. The **[4]** and **[6]** keys move the character to be typed one space to the left or right, respectively. The **[7]** key places the next character at the beginning of the previous word. The **[9]** key places the character at the first letter of whatever would be the following word. You can move backwards and forwards one screen full of text at a time, using the **[1]** and **[3]** keys.

Pressing the **[ ]** key deletes characters one at a time. To reshape a paragraph after making changes in it, press the **[>]** key to align text within the margins you've set. The **[5]** key displays other command options open to you.

Typing **CTRL PAUSE** lets you switch back and forth between the numeric pad and the editing pad functions. You can also use the editing keys by touching the **CTRL** key and a numeric key at the same time. Release the **CTRL** key and you're back to numeric functions. Try experimenting with your word processing program to see if it uses these editing keys. If it doesn't, consult the installation section of the manual that came with your program to see what program modifications you can make in order to use the editing pad.

## ***Special Keys***

Tapping the **BREAK** key will perform a "break" function in many programs. This usually means that the program aborts whatever it's doing. Whenever a program requires that you type **CTRL C**, you can hit **BREAK** instead.

The **PAUSE** key normally makes a program "pause" in whatever it's doing. For example, hitting **PAUSE** will stop the display on the screen indefinitely. Typing **PAUSE** again will restart the program.

The minus sign, the plus sign, and the asterisk are located to the left of the numeric pad for easy access when you're using programs that process financial data. Some of these programs are so popular that this section of the keyboard was designed with them in mind.

## ***Keycode Differences***

If you're interested in using programs that were designed for the

APPLE, you'll want to know about the four keys that must be typed differently on the ACE. The following chart lists these keys and shows how they are typed on the APPLE and on the ACE. (The reference to Hex Code is for the benefit of those who are interested in programming.)

<u>APPLE KEYS</u>	<u>ACE KEYS</u>	<u>HEX CODE</u>
SHIFT M	]	DD
SHIFT N	^	DE
SHIFT P	@	C0
CTRL SHIFT P	CTRL @	80

Any manual or documentation for a program specifically written for the Apple will refer to those APPLE keys at times. To type them on the ACE, type the corresponding key from the ACE column of the chart.

## ***Just Where Is The Reset Switch?***

The **RESET** switch on the ACE 1000 is designed to be easy to reach if you really must, but difficult to bump accidentally. It's also designed to be out of sight and hopefully out of mind. You'll find it in the front of the unit, underneath the keyboard, on the left-hand side.

Turn your left hand palm up, reach under the left-hand side of the keyboard, and feel the little button. Press up to activate

the **RESET** , if you absolutely have to.

