## **USING THE 874X SOCKET ADAPTER**

The 874X socket adapter is capable of reading and programming all members of the 874X family of microcontroller devices. These include the 8741, 8742, 8748 and 8749. The adapter will program all compatible devices from any manufacturer except the "AH" series from INTEL. This device may only be read (see note below). The adapter also allows the system to read the data from a MASK ROM version of the part. A MASK ROM version is identified by part numbers 8041, 8042, 8048 and 8049. MASK ROM means that the program is applied directly to the chip during the manufacturing process. MASK ROM parts are not programmed using a programming instrument and cannot be erased and reused.

## INSTALLING THE ADAPTER INTO THE PROGRAMMING UNIT

Release the ZIF socket mechanism by moving the handle to a verticle or near vertical position. The 874X adapter has a 28 pin base and must be inserted fully left justified (viewed facing the unit with the lid up) into the 32 pin socket on the programming unit. The red dot on the adapter should face the same direction as the red dot on the 32 pin ZIF socket. Once the adapter is in place, release the locking handle (horizontal position) on the 32 pin socket to secure the adapter. **IMPORTANT:** Install the adapter before you select the device part number. Once you select the part number, the socket power led will light. This is normal and required for proper operation of the adapter. You may insert and remove parts from the adapter even though the socket power led is lit.

## READING A MASK ROM VERSION OF THE MICROCONTROLLER

The MASK ROM versions of this microcontroller family may be read using the socket adapter. A MASK ROM device may be identified by the ZERO (0) in the part number. **EXAMPLE:** A MASK ROM version of the 8748 device is the 8048. When reading an 804X part, select the part number with which you are working from the device selection table.

## INSTALL THE MASK ROM JUMPER

To set the adapter to read a MASK ROM microcontroller, place a jumper block over the two pins on the socket adapter (there is only a single set of two pins on the adapter located above the socket between two transistors). This jumper is only used when reading the internal ROM of a MASK ROM device. Remove the jumper block when you use the adapter with the EPROM versions (874X).

**IMPORTANT NOTE:** The socket adapter will not program the INTEL 874XAH series of microcontrollers. Do not attempt to program any INTEL microcontrollers with the "AH" suffix (EX:8742AH). The 8742AH or 8042AH microcontrollers can be read with the adapter as described in the paragraph above. The data read from the device may then be programmed into a standard 874X device which is not an "AH" suffix part.

**IMPORTANT NOTE:** The original IBM computer keyboard BIOS device is usually an 8042. If you are reading an existing 8042 device, the data may be programmed into a standard 8742 replacement part.