ET-1 Programmable Timer DayLight Savings Update Chip

Installation Details

Read these instructions completely before attempting to perform the modification.

Federal law has declared that beginning and ending dates for Daylight Savings Time (DST) will change in 2007. The ET-1 Time Controls determine DST using an algorithm (mathematical formula) established by the date and Astro Zone that is entered into the Time Control's memory during the Set Up portion of the programming process. As a result of the change in DST parameters, a new algorithm must be provided. Thishas accomplished this change by providing a new EEPROM with updated information. These instructions will guide you through the process of changing the EEPROM. It is strongly suggested that you save the old EEPROM in the anti-static protective carrier. At this time, the possibility exists that Congress will revert to the previous DST parameters in 2008 or 2009.

These instructions apply to ET-1 Time Controls that were manufactured after May 2002. These units can be identified by pressing the 'INTVL' key and the 'REV' key at the same time while the Time Control is in the 'RUN' mode. The screen will scroll a message starting with "Program version 0A, 02, 03 or 04. Other information will follow in the scroll but is not required to identify the Time Control. If the screen fails to scroll the 'Program version message or scrolls any other message, retry pressing 'INTVL' and 'REV' together a second time. Units can also be identified by the RJ11 type jack located on the rear of the logic module.

On the back of the logic panel there should be a 2 digit code and a 1 digit letter code.

Z=2004

A=2006

B=2007

C=2008

any code before 45A doesnot have the new chip for Daylight savings installedfor example a code of 41A will not have the new daylight savings chip installed thus the timer will perform daylight savings to the old Standard.

The procedure for changing the EEPROM is the same for each model. Carefully follow the instructions as presented here.

NOTE: MAKE SURE THAT YOU HAVE A COPY OF THE CURRENT PROGRAM AND SETTINGS BEFORE MAKING ANY ALTERATIONS.

Step 1: Open the Update Kit and make sure that the parts listed below are available. If a part is missing, contact ECP Time Equipment the phone number or e-mail address given at the end of these instructions.

a. EEPROM in anti-static carrier

> b. Anti-Static wrist strap
>
> c. IC Extractor tool
>
> d. IC Inserter tool
>
> e. battery

Step 2: Collect the following tools.

a. #2 Phillips screw driver

b. small straight blade screw driver (1/8" blade)

c. ¼" straight blade screw driver or TX15 Torx screw driver

d. ¼" hex driver or wrench

Step 3: Remove power from the ET-1 Time Control.

Step 4: Open the enclosure and remove the logic module from the black retaining clips. Unplug the ribbon cable and place the module on a bench or table to continue the modification.

Step 5: Secure the Anti-static strap to your wrist and snap the coil-cord to the strap. Attach the alligator clip end of the coil-cord to a good ground.
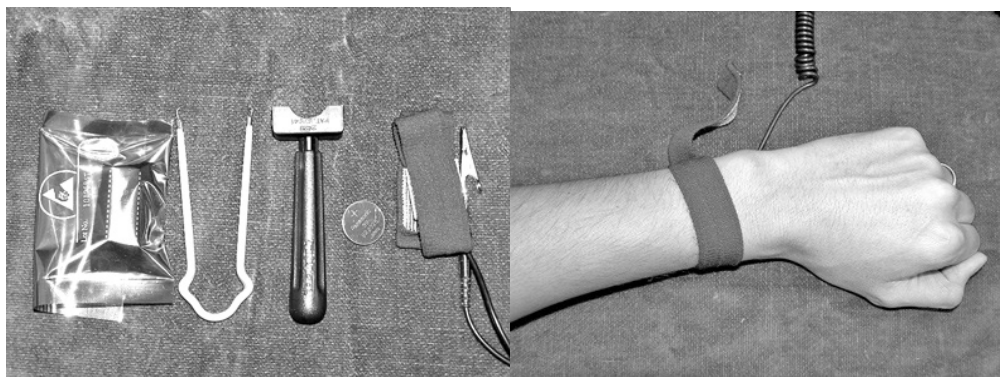
Step 6: Remove the four (4) Phillips head screws from the rear of the logic module. Remove the rear cover of the logic module.
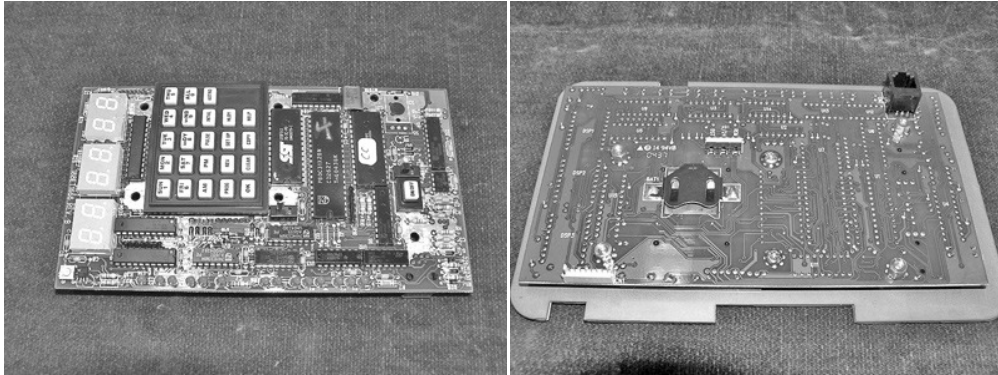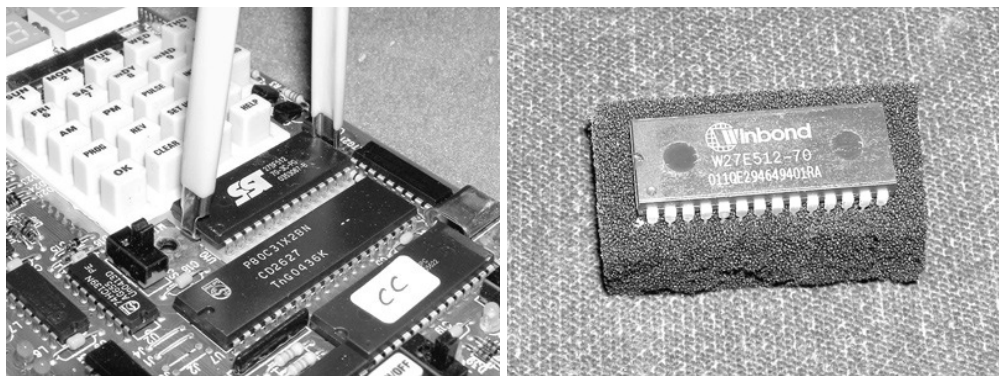
Pin 1 of IC, Notice Indentation on IC Body   Remove the screws and studs

Step 7: Remove the battery. Use a non-conductive tool such as a plastic screwdriver or small piece of wood like a toothpick to push the battery from the holder. Do not allow the battery to touch any metal surface. Discard the old battery properly.

Step 8: Remove the two (2) bolts from the middle of the PCB using either a Torx TX15 driver or a ¼" flat blade screw driver. Remove the four (4) ¼" studs from the PCB.

Step 9: Carefully lift the PCB from the front metal plate of the logic module and turn it over so that the keypad and components are facing upward.

Pin 1 of IC, Notice indentation on IC Body

Step 10: Remove the black plastic bezel from around the keypad. Note that the bezel will lift up from the keys. Do **not** remove the keypad or the keys.

Step 11: Remove any tape or restraining material that may be securing the EEPROM in the anti-static carrier. Position the carrier for easy access after the following steps.

Step 12: Place the extractor tool over the ends of EEPROM and engage the

lower lip of each side of the tool with the underside of the EEPROM. Pull up on the extractor tool to remove the EEPROM. If the EEPROM does not release easily, rock it gently end to end using the extractor tool. CAUTION: Excessive rocking motion may bend the contact pins of the EEPROM, rendering it unusable in the future.

Step 13: Remove the replacement EEPROM from the anti-static carrier and place the old EEPROM in the carrier. Place the replacement EEPROM in the inserter tool.

Step 14: Position the replacement EEPROM to align the Pin 1 indicator with the Pin position on the PCB socket. Align all of the pins of the EEPROM with the holes in the socket. Gently push the EEPROM pins into the socket, making sure that all pins are properly aligned and sliding into the appropriate holes. Seat the EEPROM completely. Approximately 1/32" of space will be visible between the face of the socket and the bottom of the EEPROM.
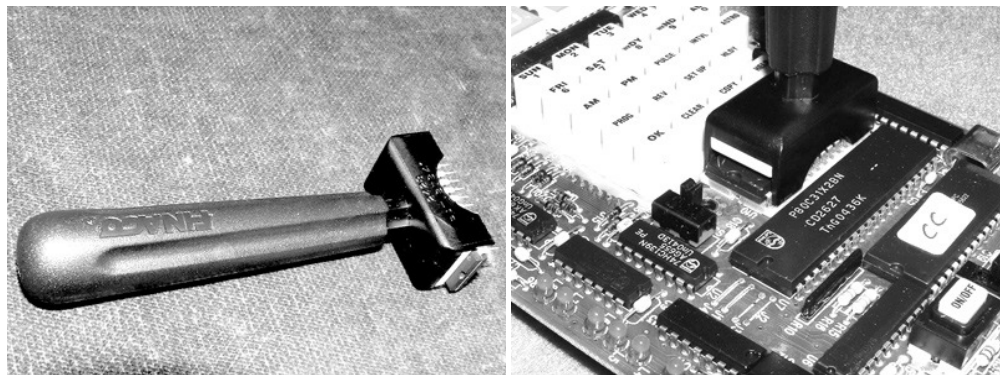
Pin 1 of IC, Notice Indentation on IC Body

Step 15: Replace the black plastic bezel over the keypad. Be sure that it is seated properly and completely.

Step 16: Position the front metal plate over the PCB, making sure that all of the switches, keys and keypad bezel are properly aligned.

Step 17: Carefully turn the PCB and front metal plate over. Replace the two (2) bolts in the middle of the PCB using either a Torx TX15 driver or a ¼" flat blade screw driver. Replace the four (4) ¼" studs in the PCB.

Step 18: Place the new battery in the holder making sure that the polarity is correct. Note the + sign on the battery and on the battery holder.

Step 19 Replace the rear cover of the logic module. Replace the four (4) Phillips head bolts in the rear of the logic module.

Step 20: Reinstall the Logic Module in the ET-1 Time Control, making sure that the ribbon cable is properly attached.

Step 21: Apply power to the ET-1 Time Control and reenter the setup and program information.

Addenda:

Congress has reserved the option of reverting to the old Daylight Savings Time schedule after reviewing a report on the impact of the new schedule. The report is due not later than 9 months after the March 1. 2007 effective date. This can mean that Congress can change back or not one or two years later. It is important to save the old EEPROM in case the schedule is reversed.

ENERGY POLICY ACT OF 2005

SEC. 110. DAYLIGHT SAVINGS.

(a) AMENDMENT.—Section 3(a) of the Uniform Time Act of 1966

(15 U.S.C. 260a(a)) is amended—

(1) by striking ''first Sunday of April'' and inserting ''second

Sunday of March''; and

(2) by striking ''last Sunday of October'' and inserting ''first

Sunday of November''.

(b) EFFECTIVE DATE.—Subsection (a) shall take effect 1 year

after the date of enactment of this Act or March 1, 2007, whichever

is later.

(c) REPORT TO CONGRESS.—Not later than 9 months after the

effective date stated in subsection (b), the Secretary shall report

to Congress on the impact of this section on energy consumption

in the United States.

(d) RIGHT TO REVERT.—Congress retains the right to revert

the Daylight Saving Time back to the 2005 time schedules once

the Department study is complete.