ABOUT THE CANON KITS AND COUNTER OPTION PACKAGES

CANON BOOT/FLASH ROM KITS (#KCC-1 and #KCC-2)
Each kit consists of the EPROM+ programming system (#AR-32A) and one (#ACDM72A) or two (#ACDM72A and AC8B72) custom adapters specifically designed to accomodate the boot/flash rom assemblies used in Canon ImageRunner machines. The KCC-1 kit supports the boot rom assemblies used in ImageRunner machines with four digit model numbers (IR4500, etc.). These machines were manufactured after 2002 and incorporate low voltage memory parts on the boot rom assemblies. The KCC-2 kit includes both the ACDM72A and the AC8B72 adapters. The AC8B72 adapter supports the ImageRunner machines with three digit model numbers (IR330, etc.) manufactured before 2002 which use 5 volt memory parts. The KCC-1/KCC-2 kits include custom EPROM+ software on a bootable CD in addition to the standard EPROM+ software. This custom CD can be used independently or installed for use under windows. The CD includes a test file called HOW2DOIT.TXT. This file provides step by step instructions for operation of the EPROM+ system when used with the Canon adapters. Review this information before using the system to work with boot roms or if you have any questions regarding system operation. In addition to the CD there are addendums included which illustrate the adapter configuration and describe insertion and use. Also provided are instructions for using the system software to perform basic operations and procedures.

COUNTER OPTION PACKAGES
The counter option packages provide the adapters, clips and probes which allow you to connect to the memory parts used on Canon counter or serial number assemblies. There are two types of memory parts used on these assemblies. One are 8 pin serial eeprom/fram parts. These parts are primarily found on the serial number assemblies although they may also be used on counter assemblies as well. Serial eeprom/fram parts are identified with part numbers such as LC46, 24CL16, 24C02, etc. The standard (not Canon CD) EPROM+ system software supports these parts, however you must determine which part is used on the assembly with which you are working. The other memory technology family used on counter assemblies are parallel eeprom/fram parts. The parallel parts are fabricated in 28 pin surface mount packages and will have part numbers such as 2817A, 28C64, MB85R256 or FM18L08.

CONNECTING TO SERIAL EEPROM/FRAM PARTS (#CTR8S)
Reference the ASERSM1 addendum for instructions on using the adapter. There are three connection options: 1.) Standard surface mount clip (#ASOIC8) with cable. This clip connects to the ASERSM1 and supports standard 8 pin surface mount parts attached to Canon assemblies. This is most 8 pin parts except the LC46. 2.) LC46 surface mount clip. This clip is wired specifically for connection to the LC46 serial eeprom. The standard surface mount clip will not work with this (LC46) part. 3.) Surface mount probe set. The probe set may be used in place of the standard clip if the clip does not fit the part or cannot fit around the part pins. The probes are color coded to match pin numbers as follows: (1-BROWN, 2-RED, 3-ORANGE, 4-YELLOW, 5-GREEN, 6-BLUE, 7-VIOLET, 8-GREY).

CONNECTING TO PARALLEL EEPROM/FRAM PARTS (#ASOIC28/LV)
You will use the EPROM+ system plus the ASOIC28/LV adapter to connect to 28 pin parallel eeprom/fram parts. Reference the ASOIC28/LV adapter addendum for insertion and connection information. Parallel eeproms and frams appear to be used only in Canon counter assemblies. **Important note:** The 2817A and 28C64 parts are eeprom technology and require that the ASOIC28/LV base switch be set to 5V. The MB85R256 and FM18L08 parts are fram technology and require that the ASOIC28/LV base switch be set to LV. **Note:** When you attach the clip to an fram part, open the clip jaws as far as possible. Align one jaw side of the clip to the proper side of the part. Do not allow the other jaw to touch until the first jaw is aligned and makes contact. At this time release the clip and allow the opposite jaw to contact the alternate side of the chip. This minimizes clip movement while attaching to the part which significantly reduces the chance of changing internal part data. **FM18L08 ASSEMBLY NOTE:** The counter assembly which uses the FM18L08, a 32K fram part, has the part physically hard wired for a maximum size of 8K. To address this restriction, the EPROM+ software includes a special device part number (**CANON18L08**) which must be used when working with this assembly. You must select the **CANON18L08** when working with these assemblies for successful data access to occur.

ADDITIONAL INFORMATION AND DOCUMENTATION
Additional documentation included with the serial eeprom/fram package:
SERIAL EEPROM TUTORIAL - 93C56 This is a step by step tutorial which uses an actual serial eeprom (included). It is intended to teach you the fundamental reading, editing and programming operations you will need when working with the actual counter and serial number memory parts. We strongly suggest you perform the steps in this tutorial before beginning your work.
WORKING WITH AND UNDERSTANDING THE DATA IN AN E/EEPROM MEMORY PART This document provides an educational foundation which explains how memory parts, including eeproms are organized internally and how the data is stored. It also provides examples showing how to use the system software to find changes and how to locate specific count values. This document will allow you to understand how count values are organized and stored in memory parts.
ADDITIONAL INFORMATION Changing the count values, serial numbers and other information stored in copy machine circuit assemblies may cause the machine to generate an error. If this occurs, refer to the machine service documentation for instructions on clearing the error. You may also use the system to copy the contents of one counter or serial number assembly into another.