

## Addendum : Commodore 64 Macro Assembler Development System

The following information contains corrections and additions to the Commodore 64 Macro Assembler Development System Users Guide.

### 1) Page 9: .DBYTE ASSEMBLER DIRECTIVES

An advanced technique to set up vector tables under the assembler directive `.DBYTE` is to push the starting vector address onto the stack, then execute an `RTS` instruction to access your routine. Remember that the addresses for the operands should be the actual address location minus one. When constructing a `JUMP` table in the usual way using an indirect jump instruction (op-code `JMP (6C)`), do not subtract one from the address of the operand.

### 2) Page 29: Section 9.2 Using the Monitor Programs

The manual states to reset (turn off) the machine to escape the monitor. An alternate method is as follows.

A) Type the following line to escape the monitor:

```
.A 00FB JMP ($FFFC) (and press RETURN twice).
```

The first `RETURN` displays `.A 00FE`. The second `RETURN` displays just the period prompt (`.`).

B) Now type `G 00FB` and press `RETURN`. This command causes a cold start (reset) and displays the initial start up message when you first turn on the computer. This allows you to escape the monitor and keep it in memory without turning off the computer. Now you can program in `BASIC`, however `BASIC` programs are lost once the monitor is reactivated with the appropriate `SYS` command appearing on page 29.

### 3) Page 36: TRANSFER COMMAND

The `TRANSFER` command is used to relocate a continuous range of memory locations from one section of memory to another. It only transfers the assembly language code to the new address specified in the command. The `TRANSFER` command DOES NOT relocate absolute addresses for you. If absolute addressing is used, the relative offset of the original address IS NOT calculated for the value in the operand field. You must manually go back and change any absolute addresses.

### 4) Page 50: APPENDIX V SAMPLE OUTPUT LISTING

The cents symbols and the commas appearing in the operand fields are incorrect. Wherever a cents symbol (`¢`) appears, replace it with a greater than (`>`) symbol. Wherever a comma appears replace it with a less than symbol (`<`).