

Bank Lock Out Feature

When you initially create the ProDrive with the PRODRIVE program, the program locks out the 64K in bank 0 of auxiliary memory. That is, the ProDrive cannot access that particular bank for use as part of the emulated disk drive. The bank 0 lock out default was used to allow other application programs which use that bank to run without conflicting with the ProDrive memory area. With ProDrive installed and bank 0 locked out, ProDOS based programs can run, use bank 0, and access the ProDrive.

Caution: The bank lock out procedure described in this section is more complicated than it sounds. Don't attempt it unless you are very familiar with Applesoft BASIC and ProDOS. Instead, you may wish to use the PARTITION program described later in this chapter.

If you wish to lock out additional banks of RamWorks memory or use all of the available banks, you must make one or two simple modifications to the PRODRIVE program. You'll need to calculate the values used to lock out the desired banks, load the PRODRIVE program into memory, insert those values into specific memory locations, and execute the modified PRODRIVE program.

Note: The numbering scheme for RamWorks memory banks is determined by the type of RAM chip (64K or 256K), which memory chip sockets are used, and the amount of RAM installed. See Chapter 6, "RamWorks Memory Configuration", for more details.

You can access two memory locations to modify the number of banks locked out. These are (decimal) 8195 for banks 0 through 7 and 8196 for banks 8 through 15. To lock out an individual bank from bank 0 to bank 7, raise 2 to the power of the bank number you want to lock out and POKE the result in location 8195. For example, to lock out bank 1:

$2^1 = 2$; therefore **POKE 8195,2**

To lock out more than one bank in the bank 0 to 7 range, POKE the sum of the individual bank results. For example, to lock out banks 0, 1, and 2:

$(2^0 + 2^1 + 2^2) = (1 + 2 + 4) = 7$; therefore **POKE 8195,7**

To lock out a bank or series of banks in the bank 8 to 15 range, apply the same formula except divide the sum of the results by 256 and POKE the final result in location 8196. For example, to lock out banks 8 and 9:

$(2^8 + 2^9) + 256 = (256 + 512) + 256 = 3$; therefore **POKE 8196,3**

To execute the now modified PRODRIVE program (in memory) issue a CALL to location 8192. These modifications do not affect the the PRODRIVE program on disk unless the PRODRIVE program in memory is saved back to disk using the BSAVE command.