

The first volume is accessible as Drive 1, the second as Drive 2. The smaller volumes are exactly the same size as standard Apple floppy disks. These are 35 tracks, with 16 sectors per track. Each sector holds 256 bytes. This computes to 143,360 bytes, which is called 140K (where "K" stands for a multiplier of 1024). The larger volumes have 50 tracks with 32 sectors per track, giving 400K bytes. In both cases, track 17 (\$11) is used for the catalog information. A small volume can catalog up to 105 files. A large volume can catalog up to 217 files.

RamFactor initializes a DOS volume like a "data" disk. That is, there is no bootable DOS image in tracks 0, 1, and 2. You can make any DOS partition bootable by selecting that partition and using the binary program, INSTALL DOS, to copy the DOS image from memory into the first 32 sectors of the current partition. In addition, a short boot routine is written at the beginning of the very first sector. INSTALL DOS does not have any effect on the previous contents of the rest of the partition, so any files you had on the partition will still be there. INSTALL DOS assumes the file name of the startup program will be "HELLO".

#### **Patches Made to DOS 3.3**

When you boot standard DOS 3.3, it has no way of telling that your RamFactor is present. You inform DOS 3.3 of the presence of a RamFactor card in slot *s* with the command *IN#s*. When the *IN#s* command is executed, RamFactor firmware installs a three-byte patch inside DOS. This patch, placed at \$BD12-BD14, jumps to a special entry point inside the RamFactor firmware whenever RWTS is called. The patch was carefully designed so as not to conflict with the method used by various hard disk systems to link to DOS 3.3 (such as Corvus and Sider).

Once the RamFactor patch is installed, all DOS commands may be used with the DOS volumes in the current partition. You can switch to a different partition by using the *PR#s* command, which brings up the RamFactor partition menu.

Note that only one RamFactor card can be linked into DOS 3.3 at any given time. However, if you have more than one card, you can use the *IN#s* command to link any card just prior to accessing it. The *IN#s* command has no other effect than patching the firmware link at \$BD12.