THE PARAMETER GUIDE

Compiled

By

Mike Moore

Contents:

Instructions

Thank you for buying The Parameter Guide. If you have any questions with this manual, please feel free to mail us at:

Moore's Microware
417 Persimmon Road
Walnut Creek, CA 94598

We are currently trying to collect as many parameters as possible. If you have any parameters that you would like to 'donate' to Moore's Microware, we would be more then glad to receive them. For any parameters we receive, we will give credit towards the next guide or update.

The additional parameter file contains many parameters that were left out of the Locksmith parameter file, because of their new policy concerning backups.

The advanced parameter file contains steps to 'break' or take out the copy protection of certain programs. Many different methods are used to do this. These steps are for the advanced user.

Moore's Microware cannot be responible for any damages caused by using these parameters. Moore's Microware also cannot be responible if the parameters do not work. These parameters are provided not for illegal purposes but for back-up only.

For ordering infomation please contact Moore's Microware at the address below. Dealer inquires welcome.

Thank you,

Mike Moore
Moore's Microware
417 Persimmon Road
Walnut Creek, CA 94598
The Source ID# TCT492

```
NIBBLES AWAY II PARAMETERS
-------- ---- -- ----------

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INFORMATION!

N O T E: Those parameters which are followed by one or more asterisks
(*) have been contributed by NIBBLES AWAY ]I users, and have not been
tested by COMPUTER:applications Inc.

COMPANY NAME:
PROGRAM NAME            COPY TRACKS    PARAMETERS TO CHANGE
---------------        -----------    --------------------
A d v e n t u r e     I n t e r n a t i o n a l:
Eliminator -------- 0-21............Addr=D5 AA 96
                      SECTMOD [F=16,C=OFF,T=03,S=0D]
                        Change address 2E from 20 to EA
                        Change address 2F from 30 to EA
                        Change address 30 from 72 to EA


A p p l e    C o m p u t e r:
Visicalc /// ------ 0-22...........SYNC
Apple Writer /// -- 0-22...........SYNC
Apple Logo -------- 0-22...........Addr D5 AA 96
                   1-1............Addr AA D6 EE
                               NIBBLE COUNT=Y
                                 FIND MAX=03
                                SHIFT N+ = 08
                                SHIFT N- = 00

Apple Writer II --- 0-2............Addr D5 AA DA (or D5 AA DB)
(Corrected)         3-22...........Addr D5 AA 96

Super Pilot ******* 0-0............Addr=D5 AA 96
                    2-22
                      SECTMOD [F=16,C=OFF,T=0,S=0A]
                        Change address 79 from 43 to EA
                        Change address 7A from 41 to EA
                        Change address 7B from C6 to EA

A R T S C I    I N C.
Magic Window ****** 0-0............Addr=FC FF FF
Magic Mailer        1-22...........Addr=D5 AA B5
Magic Window II *** 0-22...........Addr=D5 AA 96
                               SYNC SIZ=0A, FIX AMNT=04


A u t o m a t e d    S i m u l a t i o n s:
Temple of Apshai ** 0-22...........Addr=D5 AA B5
```

```
A v a n t e - G a r d e   C r e a t i o n s
Zero Gravity Pinball 0-22...........Addr=D5 AA B5
Hi-Res Golf
Hi-Res Secrets ***** 0-22..........Addr=D5 AA 96
Air Traffic Cont. ** 0-22..........Addr=D5 AA B5


A D O   S O F T W A R E
Super Puckman ****** 0-0...........Addr=D5 AA D5
                     1-E...........Addr=DD AD DA



B P I :  (REVISED)
Accounting -------- 0-22...........Addr=D5 AA 96
    System                 FIX AMNT=04,   GAPBYTE1=C8
                           GLOBAL MOD BYTE D972 from 03 to 00
                    11-11..........Ins=AD FB E6 FF E6
                           SYNC SIZ=0A


B r o d e r b u n d   S o f t w a r e:
Apple Panic ------- 0-D
Genetic Drift ----- 0-0...........Addr=D5 AA B5
                    1-3...........Addr=BB D5 BB
                    4.5-6 by 1.5
                    7.5-B.5
                    D-D...........Addr=D4 D5 BB
                    E.5-12.5.......Addr=AD B5 DE
Space Quarks ------ 0-0...........Addr=D5 AA B5
                    1-2...........Addr=FF DF DE, DATA MAX=25
                    3.5-5.5
                    7-9 by 2
                    A.5-B.5
                    D-15


Space Warrior ----- 0-0...........Addr=D5 AA B5, DATA MAX=30
                    2.5-3.5.......Addr=DF AD DE
                    5-8 by 3
                    6.5-6.5
                    A-10 by 3
Warlords ********** 0-F...........Addr=D5 AA B5

Tawala's Last ***** 0-22..........Addr=D5 AA B5
    Redoubt



B u d g c o:
Raster Blaster ---- 0-0...........Addr=D5 AA 96, SYNC
                                  DATA MIN=18, DATA MAX=40
                    5-11 by 4......Addr=AD DE, DATA MIN=13, SYNC
                    6-12 by 4......SYNC
                    7.5-F.5 by 4...SYNC
                    1.5-3.5 by 2...SYNC



C A L I F O R N I A   P A C I F I C
Ultima *********** 0-22..........Find Max = 0B
```

```
C a v a l i e r   C o m p u t e r:
Microwave --------- 0-22...........Addr=D5 AA 96
                        SECTMOD [F=16,C=ON,T=02,S=01]
                            Change address DA from A9 to AD
                            Change address DB from 60 to 03
                            Change address DC from 8D to 81
                            Change address DD from 7E to 60


C e n t r a l   P o i n t   S o f t w a r e:
Copy II Plus ****** 0-2............Normal
                                  Del Byte =20

C. P. U.   S o f t w a r e:
Oil Rig *********** 0-0............Addr=D5 AA 96
                    1-22...........Ins=B2 AC AB AB AB

C o n t i n e n t a l   S o f t w a r e:
Guardian ---------- 0-1............Addr=D5 AA B5
                    2-11...........Addr=D6 AA B5
                                   Ins=DF AA EB F7, SYNC SIZ=0A

LA Land Monopoly ** 0-2............Addr=D5 AA B5
                    3-22...........Addr=D6 AA B5
3-D Skiing ******** 0-22...........Addr=D5 AA B5

D a t a   M o s t:
County Fair ------- 0-22...........Addr=D5 AA B5
Snack Attack          SECTMOD [F=13,C=OFF-S=03,T=00]
                          Change address 63 from 38 to 18
Snack Attack ------ 0-22...........Addr=D5 AA B5
(revised)             SECTMOD [F=13,C=off,S=01,T=00]
                          Change address 39 from 38 to 18

Swashbuckler ------ 0-22...........Addr=D5 AA 96
Casino 21             SECTMOD [F=16,C=OFF,S=03,T=00]
                          Change address 42 from 38 to 18
Canyon Climber ---- 0-2............Addr=D5 AA 96
                      SYNC SIZ=0A, FIX AMNT=04
                    11-17
                     SECTMOD[F=16,C=OFF,T=00,S=01]
                          Change address 48 from 00 to 84
                          Change address 49 from 9B to 9D

Space Kadet ******* 0-22...........Addr=D5 AA 96
Mars cars                           Overide Standardizer
Crazy Mazey

Tax Beater ******** 0-22...........Addr=D5 AA 96
REAP                  SECTMOD [F=16,C=OFF,T=0,S=03]
                          Change address 42 from 38 to 18

Money Muncher ***** 0-22...........Addr=D5 AA 96
```

Tubway, Aztec
Tharolian Tunnels

Data   Soft:
Dung Beetles ------ 0-0.............Addr=D5 AA B5
                    1-1.............Addr=F5 F6 F7
                    4-22
                      SECTMOD [F=13,C=ON,T=00,S=01]
                          Change address 6D from 01 to 7B
                          Change address 6E from 61 to 69

Eduware:
The Prisoner ****** 0-22...........Sync
Algebra I ********* 0-22...........Addr=D5 AA B5
Empire 1 World **** 0-22...........Addr=D5 AA 96
Builders   3-3............Nibble Count

Prisoner II ******* 0-22...........Addr=D5 AA 96
                      SECTMOD [F=16,C=ON,T=1F,S=0E]
                          Change address D5 from AD to 2F
                          Change address D6 from 99 to AF
                          Change address D7 from F0 to 32
Rendezvous ******** 0-22...........Addr=D5 AA 96
                                OVERIDE NIBBLE FILTER

FRONTIER   COMPUTING
Adventure ********* 0-22...........Addr=D5 AA 96
(colossal cave)

Gebelli   Software:
Firebird ---------- 0-0............Addr=DD AD DA, SYNC
                    1.5-B.5........SYNC

HAYDEN
Sargon II ********* 0-2............Addr=D5 AA B5
                    4-1A...........Addr=D5 AA F7

Howardsoft:
Tax Preparer ------ 0-22...........Addr=D5 AA 96

I D S:
Prism Print ******* 0-21...........Addr=D5 AA 96
                                Overide Standardizer
                      SECTMOD [F=16,C=ON,T=21,S=00]
                          Change address 27 from FB to 22

Infocom:
Deadline ---------- 0-22...........Addr=D5 AA 96
StarCross ********* 0-22...........Addr=D5 AA 96

INFORMATION UNLIMITED
Easy Writer Pro. ** 0-22...........Addr=D5 AA B5

Innovative Design Software:
Pool 1.5 ---------- 0-15...........Addr=D5 AA B5
                   1E-21
                      SECTMOD[F=13,C=OFF,T=0B,S=07]
                         Change address 6A from 8D to 60
                      SECTMOD[F=13,C=OFF,T=00,S=03]
                         Change address 63 from 38 to 18

Insoft:
Electric Duet ***** 0-22...........Addr=D5 AA 96
                                   Ins= DE AA EB
                                   Overide Standardizer
                                   Fix Amnt=04 Sync Siz=0A

Int'l Software MKTG
Math Magic ******* 0-22...........Normal

KRELL SOFTWARE
Logo ************* 0-22...........Normal
                       (1B error ok)
                    SECTMOD [F=16,C=ON,T=02,S=03]
                      Change Address 5B from D0 to EA
                      Change Address 5C from 03 to EA

LJK Enterprises:
Letter Perfect ---- 0-22...........Addr=D5 AA B5

Learning Company
Bumble Games ****** 0-22...........Addr=D5 AA 96
Bumble Plot   NOTE: Write Protect before booting!
Rocky's Boots
Juggler's Rainbow

Level 10 Software:
Neutrons ---------- 0-22...........Addr=D5 AA 96
Kaves of Karkhan
Rings of saturn *** 0-22...........Addr=D5 AA 96 Sync

Lightning Software:
Master Type ------- 0-2...........Addr=D5 AA B5
                    3-22...........Addr=D4 AA B5
                                (Error on $1B OK)
                    SECTMOD [F=13,C=OFF,S=03,T=00]
                         Change address 63 from 38 to 18
                    SECTMOD [F=13,C=OFF,S=0A,T=02]

```
                              Change address 2E from 23 to 2E

Magna  Soft:
Tunnel Terror ----- 0-0............Addr=D5 AA B5
                    1-12...........Addr=D6 AA B5
                                   Ins=DF AA D7 EB, SYNC SIZ=0A


Micro  Lab:
Peeping Tom ------- 0-0............Addr=D5 AA B5
                    1-1............Addr=F5 AB BE
                    4-22
                      SECTMOD [F=13,C=ON,T=00,S=01]
                            Change address 6D from 01 to 7B
                            Change address 6E from 60 to 68


Roach Hotel ------- 0-0............Addr=D5 AA B5
                    1-1............Addr=EE EA FE
                    4-22
                      SECTMOD [F=13,C=OFF,T=00,S=01]
                            Change address 75 from 01 to 7B
                            Change address 76 from 61 to 69


VisiFactory ------- 0-22...........Addr=D5 AA 96
                      SECTMOD [F=16,C=OFF,T=00,S=03]
                            Change address 42 from 38 to 18
                      SECTMOD [F=16,C=OFF,T=01,S=00]
                            Change address 84 from 4C to AD
                            Change address 85 from 8E to E9
                            Change address 86 from AE to B7
Invoice Factory --- 0-22...........Addr=D5 AA 96
Jigsaw *********** 0-0............Normal
                    A-17...........Normal
                    1-9............Addr=D3 96 F2


Visiblend ********* 0-22...........Addr=D5 AA 96
                        (Errors on trks 3 & 4 OK)
                      SECTMOD[F=16,C=OFF,T=00,S=03]
                        Change address 42 from 38 to 18
                      SECTMOD[F=16,C=OFF,T=01,S=00]
                        Change address 84 from 4C to AD
                        Change address 85 from BE to E9
                        Change Address 86 from AE to B7


Miner 2049er ****** 1-22...........Addr=D3 96 F2
                    0-0............Addr=D5 AA 96, USE NIBBLE COUNT


Microsoft:
Olympic Decathalon* 0-22...........Addr=D5 AA B5


Mind  Systems  Inc:
AirSim 1 ---------- 0-2............Addr=D5 AA B5
                    8-F
                    3-7............Addr=FF FF AB
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Spitfire **********  0-2.............Addr=D5 AA 96
                     8-F
                     3-7...........Addr=FF FF AB


M i n d   T o y s:
Jabbertalky -------  0-22..........Addr=D5 AA 96
Ricochet ---------   0-22..........Addr=D5 AA 96



M U S E:
Best of MUSE ******  0-22..........Sync
Three Mile Island
Global War
Know Your Apple ***  0-22..........Addr=D5 AA B5


N i k r o m   T e c h n i c a l   P r o d u c t s:
Master ************  0-2............Addr=D5 AA 96
Diagnostics +Plus    3-3............Addr=D7 AA 96
                     5-22...........Addr=D7 AA 96


O n l i n e   S y s t e m s:
Cranston Manor ----  0-22..........ERASE DEST TRACKS
Expediter ][ ------  0-22..........Addr=D5 AA 96
                                   ERASE DEST TRACKS

Gobbler -----------  0-22..........Addr=D5 AA B5
                                   ERASE DEST TRACKS

Jaw Breaker -------  0-22..........Addr=D5 AA B5
                                   ERASE DEST TRACKS
Hires Adv #1 ------  0-22..........Addr=D5 AA B5
Hires Adv #2 ------  0-22..........Addr=D5 AA B5
Paddle Graphics ---  0-23..........Addr=D5 AA B5
Hires Soccer ------  0-22..........Addr=D5 AA B5, SYNC
Thrilogy ----------  0-22..........Addr=D5 AA B5, SYNC
Hires Cribbage ----  0-22..........Addr=D5 AA B5, SYNC
Missile Defense ---  0-22..........Addr=D5 AA B5, SYNC

Marauder ----------  0-22..........Addr=D5 AA 96, Overide
                                   Standardizer
                SECTMOD [F=16,C=ON,T=03,S=07]
                 Change Address 90 from A8 to 60

Marauder **********  0-22..........Addr=D5 AA 96, OVERIDE
                                   STANDARDIZER
                SECTMOD [F=16,C=ON,T=11,S=07]
                 Change Address 90 from A8 to 60

Pegasus ][ --------  0-22..........Addr=D5 AA B5
                                   ERASE DEST TRACKS

ScreenWriter ][ ---  0-22..........Addr D5 AA 96
                                    Sync Siz=0A, Fix Amnt=04
                SECTMOD [F=16,C=ON,T=03,S=0B]
```

```
                   Change Address 94 from 20  to EA
                               95 from 00  to EA
                               96 from 7F  to EA
               SECTMOD [F=16,C=ON,T=13,S=04]
                Change Address 4D from 20  to EA
                               4E from 00  to EA
                               4F from 60  to EA


Softporn ----------  0-22...........Addr=D5 AA B5
   Adventure 3.2                     ERASE DEST TRACKS


Softporn ----------  0-22...........Addr=D5 AA 96
   Adventure 3.3                     ERASE DEST TRACKS


Threshold ---------  0-22...........Addr=D5 AA B5
                                     ERASE DEST TRACKS


Ulysses & ---------  0-22...........Addr=D5 AA 96
   Golden Fleece                     Erase DEST TRACKS


Time Zone  (V1.0)
     Disks A-L ----  0-22...........Addr=D5 AA 96, 'OVERIDE
                                     STANDARDIZER'
   then Disk A -----  SECTMOD [F=16,C=ON,T=03,S=05]
                Change address 5B from 4C to 60
                      SECTMOD [F=16,C=ON,T=03,S=03]
                Change address AB from A9 to 60


Cannonball Blitz --  0-22...........Addr=D5 AA 96
                     SECTMOD [F=16,C=ON,T=17,S=0E]
                Change address CD from 49 to 60


Mouskattack -------  0-22...........Addr=D5 AA 96
                     SECTMOD [F=16,C=ON,T=18,S=03]
                Change address B1 from 49 to 60


General Manager ***  0-22...........Addr=D5 AA 96
V1.5                     SECTMOD [F=16,C=ON,T=1F,S=0E]
                   Change address C1 from -- to 4B
                   Change address C2 from -- to E0
                   Change address C3 from -- to 49
                     SECTMOD [F=16,C=ON,T=21,S=01]
                   Change address 2E from -- to 60


Sabotage **********  0-22...........Normal
Alien Rain
Snoggle **********  0-22...........Addr=D5 AA B5


Time Zone V1.1 ****  0-22...........Addr=D5 AA 96
                     SECTMOD [F=16,C=ON,T=03,S=0B]
                  Change Address F0 from 20 to EA
                  Change Address F1 from 00 to EA
                  Change Address F2 from 17 to EA


The Artist ********  0-22...........Addr=D5 AA 96
```

```
                        SECTMOD[F=16,C=ON,T=05,S=0A]
                           Change address B0 to EA
                           Change address B1 to EA
                           Change address B2 to EA
                        SECTMOD[F=16,C=ON,T=05,S=0B]
                           Change address 35 to EA
                           Change address 36 to EA
                           Change address 37 to EA
                           Change address D4 to 60
                        SECTMOD[F=16,C=ON,T=05,S=0B]
                           Change address 90 to 60
                        SECTMOD[F=16,C=ON,T=1C,S=07]
                           Change address 4D to EA
                           Change address 4E to EA
                           Change address 4F to EA
```
Hi-Res Football *** 0-22...........Addr=D5 AA 96, SYNC
Mission Asteroid ** 0-22...........Addr=D5 AA B5

O P T I M I Z E D   S Y S T E M S   I N C
Speed Read+ ******* 0-22...........Normal

P e n g u i n   S o f t w a r e:
Pie Man ----------- 0-22...........Addr=D5 AA 96

Spy's Demise ****** 0-22 by 2......Addr=D5 AA 96
Translvania   1-21 by 2......Addr=D4 AA 96

P e r s o n a l   B u s i n e s s   S y s t e m s:
Executive --------- 0-22...........Addr=D5 AA 96
        Secretary

P h o e n i x   S o f t w a r e:
Zoom Grafix ------- 0-0............Addr=D5 AA 96, Ins=DD AA ED B5
                                    Sync Siz=0A
                    1-22...........Addr=D4 AA 96

Zoom Graphics ***** 0-22 by 2......Addr=D5 AA 96
2nd Edition   Ins=DD AA ED B5
96
                    N O T E: Write Protect before booting!!
Adventure In Time * 0-C............Normal

Birth of the ****** 0-9............Normal
        Phoenix

Sherwood Forest *** 1-1E..........Addr=D5 AA 96, Ins=EA AA EB 99
                                    SYNC SIZ=0A, OVERIDE SYNC CONVERT

P i c a d i l l y   S o f t w a r e:
Suicide ----------- 0-0............Addr=D5 AA B5
                    11.5-22 by 1.5.Addr=DF AD DE

```
Star Blaster ------ 0-0.............Addr=D5 AA 96
                    7-20 by 1.5....Addr=DF AD DE


Falcons *********** 0-0.............Addr=D5 AA B5
                    1.5-4.5x1.5....Addr DF AD DE
                    5.5-5.5x1
                    7-Ax1
                    B.5-E.5x1.5
                    10-12x1
                    13.5-14.5x1
                    16-19x1.5
                    1A-1B.5x1.5


P r o f e s s i o n a l   S o f t w a r e   T e c h n o l o g y:
Executive --------- 0-22...........Addr=D5 AA 96, Overide
                                   Standardizer
   Briefing System  SECTMOD [F=16,C=ON,T=21,S=00]
                      Change Address 27 from FB to 22


Q u a l i t y   S o f t w a r e:
Bag of Tracks ***** 0-0............Addr=D5 AA B5, Ins=DF AA EF EF
                                   SYNC SIZ=0A
                    1-15..........Addr=D5 AA B5


R i v e r b a n k   S o f t w a r e
International ----- 0-C............Addr=FF FF FF AA
Grand Prix


S e n s i b l e   S o f t w a r e:
Image Printer ***** 0-2............Addr=D5 AA 96
                    3-7............Addr=F7 AA 96
                    9-22
                      SECTMOD [F=16,C=OFF,T=0,S=03]
                        Change address 42 from 38 to 18
                      SECTMOD [F=16,C=OFF,T=2,S=03]
                        Change address 2A from 2C to 4C
                        Change address 2B from 06 to 5D
                        Change address 2C from B7 to B4
Super Disk Copy *** 0-22...........Addr=D5 AA 96
(Version 3.7)                      Errors OK
The Bug *********** 0-0............Normal
                    15-15.........Gap Byte 2=FF
                                  Gap Size=10
                    16.5-16.5


S e n t i e n t   S o f t w a r e
Gold Rush --------- 0-22...........Addr=D5 AA 96


S i l i c o n   V a l l e y   S o f t w a r e:
Word Handler II --- 0-0............Addr=D5 AA 96
                    11-22
                    1-C...........Addr=FF DF DE
```

```
Word Handler II *** 0-0C...........Addr=FF DF DE
                    11-22..........Addr=D5 AA 96


S i r i u s   S o f t w a r e:
Autobahn ---------- 0-0.............SYNC
                    4-6.............SYNC
                    9.5-C.5........SYNC

Beer Run, Epoch --- 0-0.............Addr=DD AD DA, DATA MAX=25, SYNC
Copts & Robbers,    1.5-13.5.......SYNC
Hadron, Snake Byte
NOTE: Errors  will begin to occur somewhere between track C.5 and
track  13.5, depending on the particular disk.  This is normal.

Escape From ******* 0-2.............Addr=D5 AA 96
Rugistein           3-21............Addr=D5 AA F7
                    22-22..........Datamover

Gorgon ------------ 0-0.............Addr=DD AD DA, DATA MAX=25, SYNC
                    1.5-C.5........SYNC
                    E.5-E.5........SYNC
                    D.5-D.5........Addr=D5 AA B5, SYNC

Sneakers ---------- 0-0.............Addr=DD AD DA, SYNC
                    1.5-C.5........SYNC
                    D.5-D.5........Addr=D5 AA B5, SYNC

Gamma Goblins ----- 0-0.............Addr=DD AD DA, SYNC
                    1.5-B.5........SYNC
                    D-D............Addr=FF FF FF D5 AA EE
                                   DATA MAX=30

Orbitron ---------- 0-0.............Addr=DD AD DA, DATA MAX=25, SYNC
                    1.5-E.5........SYNC
                    F.5-F.5........Addr=FF B5 D5 AA

Outpost ----------- 0-0.............Addr=DD AD DA, SYNC
                    1.5-9.5........SYNC
                    B.5-B.5........Addr=D5 AA AD, DATA MAX=25

Pulsar ][ --------- 0-C
                    13-19
                    1A.5-1D.5

Dark Forest ------- 0-0.............Addr=DD AD DA, SYNC
                    1-22...........Addr=D5 AA A5, SYNC
                        (Errors on 6-8 and last few tracks OK)

Twerps ------------ 0-0.............Addr=DD AD DA, SYNC
                    1.5-E.5........SYNC
                    1A-1A

Borg -------------- 0-0.............Addr=DD AD DA, SYNC
```

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                        1.5-B.5........SYNC
                        D-20...........SYNC

Wayout ------------- 0-1C...........Addr=AD DA DD
                        22-22..........Addr=AA D5 D5 FF D6 FF FD
                        21-21..........Addr=AA,  USE NIBBLE COUNT
                                        SYNC SIZ=0A, MATCH NM=06

Kabul Spy ********* 0-21...........Addr=D5 AA 96
(both sides)            SECTMOD [F=16,C=OFF,T=0,S=0
                          Change address 49 from 20 to EA
                          Change address 4A from 03 to EA
                          Change address 4B from 20 to EA

Kabul Spy ********* 0-0............Addr=D5 AA 96
 (Side 1)               1-21...........Addr D5 AA F7
                        22-22..........Addr=AA D5 D5 BD BD
                        SECTMOD [F=16,C=OFF,T=0,S=0
                          Change address 49 from 20 to EA
                          Change address 4A from 03 to EA
                          Change address 4B from 20 to EA
  (Side 2)********** 0-21...........Addr=D5 AA F7

Dark Forest ******* 0-22...........Addr=D5 AA B5
                                        Overide Glitch detect

Freefall ********** 0-B............Addr=AD DA DD
                        20-20..........Addr=FE AA D5 D5 FD FB
                        22-22..........Addr=AA D5 D5 FF D6 FF FD
                        21-21..........Addr=AA   USE NIBBLE COUNT=Y
                                        SYNC SIZ=0A, MATCH NM=06

E-Z Draw 3.3 ****** 0-B............Addr=D5 AA 96
                        D-22
                        C-C............Addr=BE AB EB

S o f t a p e :
Photar ------------- 0-22...........Addr=D5 AA 96
Draw Poker -------- 0-22...........Addr=D5 AA B5
Night Crawler ***** 0-22...........Addr=D5 AA 96


S o f t w a r e   P u b l i s h i n g   C o r p

PFS/PFS Report **** 0-13...........Addr=D5 AA 96
                                     Overide Standardizer
                                     Gap Byte 1=C0, Gap Byte 2=D0
                                     Filter=C0-C8 (no inverse)
                          N O T E: Write Protect before booting!!

PFS Graph ********* 0-22...........Addr=D5 AA 96
                                     Overide Standardizer
                                     Gap Byte 1=C0, Gap Byte 2=D0
                                     Filter=C0-C8 (no inverse)
                  (For above 2, SYNC SIZ=0A may help)
```

Special Delivery Software:
Personal ---------- 0-22...........Addr=D5 AA 96
    Finance Manager

Utopia Graphics *** 0-22...........Addr=D5 AA 96
System   Turn on 3.3 filter
                   SECTMOD [F=16,C=ON,T=0,S=0]
                   Change address 42 from 38 to 18

Galactic Wars ***** 0-22...........Addr=D5 AA 96
Bridge Tutor

Stoneware:
DB Master (old) --- 0-5............Addr=D5 AA 96
                    6.5-22.5
DB Master (new) --- 0-5............Addr=D5 AA 96, SYNC
                    6.5-22.5

D B Master ******** 0-5............Addr=D5 AA 96, Sync
     Utility pac #1 6.5-22.5.......Sync
DB Master 3.02

Strategic Simulations:
Cartels & ---------- 0-0............Addr=D5 AA B5
    Cuthroats   2-22...........Addr=DB D5 DE
Operation   1-1............Addr=D5 AA DA FF
    Apocalypse

Cartels & ********* 0-0............Addr=D5 AA 96
    Cuthroats V1.1   1-22...........Addr=D4 AA B7

Torpedo Fire ------ 0-22...........Addr=D4 AA B7
Southern Command

Battle of Shiloh ** 0-22...........Addr=D4 AA B7
Warp Factor
Computer Air ****** 0-22...........Addr=D4 AA B7
Combat

S.Hoot E.M. ******* 0-22...........Addr=D4 AA B7
U.P.I.N.S.PACE
S.E.I.U.S.
President elect *** 0-22...........Addr=D4 AA B7
Computer QB ******* 0-22...........Addr=D4 AA B7

Sublogic:
FS-1 -------------- 0-0
                    1.5-21 by 1.5..Addr=DB AB BF
                                   REDUCED ERROR CHECK
                    7-8............REDUCED ERROR CHECK
                    9.5-9.5.......REDUCED ERROR CHECK

```
Saturn Navigator -- B-22...........Addr=D5 AA FD, FIND MAX=08
                         (Errors on $11 and $17 OK)
                    6.5-6.5........FF FF D5 AA, FIND MAX=0C
                    0-4...........Addr=D5 AA B5
                    11-11
Escape ------------ 0-22...........Addr=D5 AA 96

A2-PB1 Pinball ---- 0-0...........Addr=D5 AA 96, DATA MAX=25
                    1-15..........Addr=DB AB BF


S y n e r g i s t i c   S o f t w a r e :
Escape from ------- 0-22...........Addr=D5 AA 96, 'OVERIDE
                                   STANDARDIZER'
     Arcturus                      'OVERIDE NIBBLE FILTER'

Apventure to ****** 0-22...........Addr=D5 AA 96
Atlantis                           'Overide Standardizer'
                                   'Overide Nibble Filter'
U-Boat Command **** 0-22...........Addr=D5 AA 96
                                   'Overide Standardizer'
Crisis Mountain *** 0-22...........Addr=D5 AA 96, 'Overide
                                   Standardizer'
                                   'Overide Nibble Filter'


S y t o n i c   S o f t w a r e :
Interlude ----------0-22...........Addr=D5 AA B5


T e r r a p i n :
LOGO (both disks) **0-22...........Addr=D5 AA 96

T u r n k e y   S o f t w a r e :
Ceiling Zero ------ 0-2...........Addr=D5 AA B5
                    3-11..........Addr=D6 AA B5
                               Ins=DE AA EB F9, SYNC SIZ=0A

U N I T E D   S O F T W A R E
Supergraphics ***** 0-23...........Addr=D5 AA 96


U S A   S o f t w a r e :
Apple World ------- 0-23
Star Dance -------- 0-22...........Addr=D5 AA B5


V I D E X   C O R P
Pre-Boot System --- 0-22...........Addr=D5 AA 96


V i s i c o r p :
Visicalc 3.3 ------ 0-0...........Addr=D5 AA 96
                    2-22..........Addr=D5 AA B5
                         (Errors toward end OK)
```

```
Visicalc III ****** 0-22............Addr=D5 AA 96   Sync
Advanced (loader)
Advanced(program)** 0-22............Addr=D5 AA 96, Ins=DE AA EB
                                    Sync Siz=0A, Fix Amnt=04

Visidex ------------ 0-22............Addr=D5 AA 96, Ins=DE AA EB FD
                                    SYNC SIZ=0A, FIX AMNT=04

Visiterm ---------- 0-22............Addr=D5 AA 96, Ins=DE AA EB FC
                                    SYNC SIZ=0A, FIX AMNT=04

Visitrend --------- 0-22............Addr=D5 AA 96, Ins=DE AA EB
  /Visiplot                         SYNC SIZ=0A, FIX AMNT=04

Desktop Plan II --- 0-22............Addr=D5 AA 96, Ins=AA EB FD
                                    SYNC SIZ=0A, FIX AMNT=04

Visifile ---------- 0-22............Addr=D5 AA 96, Ins=DE AA EB
                                    SYNC SIZ=0A, FIX AMNT=04

Visischedule------- 0-22............Addr=D5 AA 96, Ins=DE AA EB EC
                                    SYNC SIZ=0A, FIX AMNT=04

X P S   S o f t w a r e:
Apple Cillin------- 0-D............Addr=D5 AA 96
Apple Cillin ****** 0-0............Addr=D5 AA 96
                    1-22...........Addr=D5 AA B5
                    11-11..........Addr=D5 AA 96
```

LOCKSMITH 4.1 PARAMETERS
--------- --- ----------

LOCKSMITH 4.1 IS THE MOST CURRENT VERSION. IF YOU ARE A REGISTERED
OWNER OF LOCKSMITH, YOU WILL BE NOTIFIED WHEN A NEW LOCKSMITH VERSION
IS AVAILABLE.

TO ACCESS OUR SOURCE FILES TYPE FROM COMMAND:
'BASICV SFILES>TCA640>TCA640.LOCK'
ALL SOURCE FILES LISTED BELOW WILL THEN BE AVAILABLE FROM A MENU.

SEE SOURCE file TECHNICAL.NOTES for additional information on how to
use the LOCKSMITH program (LOCKSMITH TECHNICAL NOTES).

SEE SOURCE file LOCKSMITH.EXAMPLE for an example of how PARAMETER
information is entered.

SEE SOURCE file PARAMETERS for Parameter information.

If ever there is to be a name change due to any reason, SOURCE users
can look under 'POST' AND 'APPLE' along with our user name 'TCA640'
for info on the new name.

For those customers who have LOCKSMITH 4.1 and WATSON, there is now a
patch available. It is: WTDDY/TYM/AY/ERMGAY/LXQWF/

Please remember that this 'Patch' is for LOCKSMITH 4.1 only! You may
update your LOCKSMITH 4.0 to LOCKSMITH 4.1 at no charge by sending
your LOCKSMITH disks to us by registered mail (please include a
letter requesting an update and your return address).

If your LOCKSMITH disk is a version previous to LOCKSMITH 4.0 then a
$20.00 (U.S. FUNDS) payment should be included with your request for
updating (for orders to be returned outside of North America, an
additional $5.00 (U.S. FUNDS) payment for shipping must be included).

If you have not done so already please send in your LOCKSMITH
REGISTRATION CARDS as we cannot give technical advice without your
card on file. Also provide your serial number on all correspondence
to us by mail (including SOURCE MAIL), or whenever you reach us by
telephone. Thank you.

This file may be reproduced in part or its entirety so long as it is
not altered.

OMEGA will not provide parameters for any business or utility program
that provides an archival (backup) disk along with the original at
the 'POINT OF SALE'. In addition, OMEGA will not provide parameters
for the following vendors of games because they have a replacement
policy of $6.00 or less with the return of the original. Contact the
vendor of the program for information. Software vendors wishing to
be added to this list should send a letter to us describing their
backup and replacement policies.

DATAMOST, SUB-LOGIC, SIR-TECH, SIERRA, BRODERBUND, ACCENT SOFTWARE,

SYNERGISTIC SOFTWARE, GEBELLI SOFTWARE, SENTIENT, ON-LINE SYSTEMS,
AUTOMATED SIMULATIONS

To our LOCKSMITH customers:

Do to a dramatic increase in the number of requests for information
on LOCKSMITH parameters, we would like to inform you of the process
for acquiring this information.

Subscribers to the SOURCE can access our public files for the latest
list. This file is updated regularly. If a program doesn't appear on
this list, it is unlikely that we have the information in the office.
This is because we will be updating the files whenever we get new
information and that updating will be done within 48 hours after its
receipt.

In order to better serve a greater number of callers, we will not
issue specific parameters over the phone. For those who desire a
monthly list, we will accept postage paid legal-size envelopes sent
to us and will mail parm lists as they change. This way you will be
able to receive a 'subscription' to the list without having to phone
us. Please indicate the date of the last 'Parameter List' that you
have to avoid duplication.

Omega also maintains a bulletin board that contains these files. It
may be accessed by phoning (modem only) 312-648-0307 days between 5pm
and 8am and weekends between 5pm Friday and 8am Monday Central Time.

Omega Microware, Inc. issues these parms as a Customer Service. We do
not guarantee that the parms will backup all versions of a particular
program.

When attempting to use the 'NIBBLE-EDITOR' option in LOCKSMITH, be
aware that you must have a good understanding of 'DOS', machine
language interpretation and be willing to experiment. These are
qualities that OMEGA MICROWARE, INC. cannot transfer to you. These
prerequistes must come from your own learning experience.

The following information is offered as suggested reading material
for an insight into how regular 'DOS' works. Proper understanding of
'DOS' is a prerequisite to the analysis of how a protected disk is
formatted.

1. The DOS Manual by Apple Computer, Inc., 1980.

2. Beneath Apple DOS, Quality Software, 1981. By Don Worth & Pieter
    Lechner.

In addition to these books, the use of 'Disk Utilities' such as
OMEGA'S 'THE INSPECTOR' and 'WATSON' may help you to better
comprehend the subject matter contained therein.

SYMBOL   MEANING
------   -------
T   = tracks to copy

```
NORMAL = not synchronized
:       = data listed to the right is PARMs to be changed before
          copying track(s) indicated
BY      = shows track increment (1 if not otherwise indicated) (C/R
          defaults to 1)
**      = user supplied. not verified as to accuracy
```

***** PLEASE BE SURE TO READ THE INSTRUCTIONS BELOW AS WELL AS THE
INSTRUCTIONS CONTAINED IN YOUR LOCKSMITH MANUAL *****.

NOTE-When following instructions below, do each step in the order
listed. Change parms before copying tracks indicated to the left of
the colon. Previously entered parms remain as changed unless changes
are indicated in subsequent lines. Where tracks are indicated with
single number (Ex: 9.5 in FS-1 or T0 in many others) they are entered
as both beginning and ending tracks

IF A PARTICULAR PROGRAM IS NOT LISTED, TRY T0-T22 NORMAL. PROGRAMS
THAT ONLY REQUIRE T0-T22 NORMAL ARE NOT LISTED DUE TO SPACE
CONSTRAINTS.

```
ADVANCED VERSION VISICALC FOR APPLE III
        T0-T22 SYNC: 18=50 19=00 40=04 46=96 75=00 76=00 77=00 78=00
                     79=12
AKALABETH **
        T0-T18 sync: 44=DD
ALIEN TYPHOON **
        T0-TE sync
ALIEN TYPHOON **
        T0 norm
        T1-T5 by 1: 46=AD
        T6-TE by 1: 44=DE
APPLEOIDS **
        T0-T22 normal       T3.5 normal       T21.5 normal
APPLE LOGO (NO PARMS AVAILABLE BECAUSE A BACKUP DISK IS SUPPLIED AT
        THE POINT OF SALE)
APPLE PFM (NO PARMS AVAILABLE BECAUSE AN ARCHIVAL DISK IS SUPPLIED AT
        THE POINT OF SALE)
APPLE PILOT (NO PARMS AVAILABLE BECAUSE AN ARCHIVAL DISK IS SUPPLIED
        AT THE POINT OF SALE)
APPLE PRINT USING **
        T0-T23 sync
APPLE PROGRAM MANAGER
        T0-T22: 10=04 16=40 46=96 51=00 53=0B 54=12 81=CF 82=F3 83=FC
APPLE WORLD
        T0-T23
APPLE III BUSINESS GRAPHICS
        (NO PARMS AVAILABLE BECAUSE AN ARCHIVAL DISK IS SUPPLIED AT THE
        POINT OF SALE)
APPLEWRITER III (NO PARMS AVAILABLE BECAUSE AN ARCHIVAL DISK IS
        SUPPLIED AT THE POINT OF SALE)
AUTOBAHN
        T0 normal
        T4-T6 sync: 74=00
        T9.5-TC.5 sync
```

BANDITS
    T0 NORMAL
    T1.5-T1A.5 NORMAL
    T1C.5-T1F.5 SYNC: 45=00 57=00 44=AE
BASIC MAILER
    T0-T22: 4F=0B
BATTLE OF SHILOH **   Same as TORPEDO FIRE
BEER RUN **
    T0 : 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
        T1.5-TD.5 sync
BEER RUN **
    T0 norm
    T1.5-TD.5 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20 19=00
                    44=DD 45=AD 46=DA
BLADE OF BLACK POOL
    T0 SYNC
    T1.5-TF.5 NORMAL: AE=00
    T11-T22 SYNC: 01=FF
BORG **
    T0 SYNC: 18=20 19=00 40=20 44=DD 45=AD 46=DA 72=00 73=00 77=00
            78=00 79=12 7C=00
    T1.5-TB.5 SYNC   TD-T20 SYNC
BORG **
    T0: 18=20 19=00 40=20 4D=00 4E=00 52=00 53=00 54=12 57=00
        72=00 73=00 77=00 78=00 79=12 7C=00 44=DD 45=AD 46=DA
    T1.5-TC.5 SYNC
    TD-T20 SYNC
BPI BUSINESS ACCTING SYSTEM (4 DISKS) (revised 10-26)
    T0-T22: 19=00 21=02 58=19 59=06 5A=1A 5B=FF BD=44 BE=E6 BF=45
            C0=FF C1=40 C2=01 C4=44 C5=D5 C6=45 C7=AA C8=40 C9=04
            CA=00
BRAIN SURGEON OR MASTER DIAGNOSTICS PLUS
    T0-T22 NORM
    T4: 4C=1B 57=00 E9=02 D2=0
CARTELS AND CUTTHROATS **   Same as TORPEDO FIRE
CASTLE OF DARKNESS
    T0 sync: 46=96
    T1-T23 sync: 44=AB 45=AB 79=12
CASTLE WOLFENSTEIN
    T0-T22 sync: 46=B5 79=12
COMPUTER AIR COMBAT
    T0-T22: 25=19 65=00 6B=00
COMPUTER AMBUSH **   Same as TORPEDO FIRE
COMPUTER CONFLICT **   same as TORPEDO FIRE
COMPUTER FOOSBALL
    T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
    T1.5-T9.5 BY 1 SYNC
    TA SYNC
    (IF ERROR 2 OCCURS ON TRACK 9.5 US MANUAL RETRY AND READ TILL NO
    ERROR)
COMPUTER NAPOLEONICS **   Same as TORPEDO FIRE
COMPUTER QUARTERBACK
    T0-T22 NORM: 25=19 65=00 60=00
CONGLOMERATES COLLIDE **
    T0-T22 NORM

```
        T1B: 36=01
CONGO
        T0-T22: 46=96 4D=00 4E=00 21=02 26=06 51=00
CONTEXT CONNECTION same as Desk Top Plan II
COPTS & ROBBERS
        T0: (parms same as Gorgon)
        T1.5-TF.5 by 1 sync: (parms same as Gorgon)
CRANSTON MANOR  **
        T0-T22 normal
        T18: 53=00 44=D5 45=FE 4C=1B 57=00
CROSSWORD MAGIC
        T0-T22 sync: 46=96 75=00 76=00 77=00 78=00 79=12 4B=AA
CRUNCH, CRUMBLE & CHOMP  **
        T0-T22 sync
CYBERSTRIKE
        T0 norm
        T4-TB sync: 46=F5 79=12
        T11-T1C sync: 46=B5
CYCLOD
        T0 NORMAL: 36=01
        T1.5-TE.5 SYNC: AE=00 1A=01 45=FF 60=00
        T1F-T20 NORMAL
DARK FOREST  **
        T0-T22 sync
DARK FOREST  **
        T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
        T2-T22 by 1 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                          19=00 44=D5 45=AA 46=AF
DATADEX
        T0-T2 sync: 79=12 46=96
        T3.5 sync
        T5-T22 sync
DATA FACTORY 5.0
        T0-T22 SYNC: 46=96 79=12 71=19 75=00 76=00 77=00 78=00 (boot
        copy when you get rapid beeping open door-press reset  screen
        shows 'break in 5' close door-press reset)
DATA PLAN **
        T0-T22 sync
DB MASTER and UTILITIES DISK
        T0-T5 sync        T6.5-T22.5 BY 1 norm          (AFTER COPYING--Write
        Protect copy before running)
DB MASTER VER. 3.02  **
        T0 NORM
        T1-T5 SYNC
        T6.5-T21.5 NORM
        T22.5: 4D=00 46=96 54=12     (AFTER COPYING--WRITE PROTECT DISK
        BEFORE RUNNING)
DEAD LINE  same as ZORK II  **
DESK TOP PLAN II
        T0-22: 19=00 21=02 58=19 59=06 5A=1A 5B=FF BD=44 BE=EB BF=45
                CO=FD C1=40 C2=01 C4=44 C5=D5 C6=45 C7=AA C8=40 C9=04
                CA=00
DISK LIBRARY **
        T0-T22: 40=09 53=00 16=77 46=96 47=AA 48=AA 4B=AA 54=12 21=02
DISK ORGANIZER II   **
```

```
        TO norm        T2-TB sync
        T1: 4C=1B apply patch NC30 (vers. 4.0 only)
            4C=1B 57=00 E9=04 (version 4.1 only)
DISK RECOVERY **
        TO norm        T2-T4 sync        TA-TB sync
DRAGON GAMES
        TO-T22 NORM
        T4: 4C=1B 57=00 E9=02 D2=00
ELECTRIC DUET **
        TO-T22: 40=08 16=08 41=FF 19=00 81=DE 82=AA 58=0B 59=FF
EPOCH (revised as of 10-26)
        TO: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
        T1.5-TF.5 by 1 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                             19=00 44=D5 45=AA 46=DA
ESCAPE FROM ARCTURUS
        TO-T22 SYNC: 4D=00
ESCAPE FROM RUNGISTAN
        TO-T22 NORMAL
        T22 SYNC: 46=96
EXECUTIVE SECRETARY
        TO-T22: 46=96 54=12
EXPEDITER
        TO-22 normal (all versions)
        T3 & T1F: 4C=1B D2=00 APPLY PATCH NC30 (version 4.0 only)
                  4C=1B 57=00 E9=02 D2=00 (version 4.1 only)
FALCONS **
        TO sync        T1.5-T19.5 by 1 sync
FALCONS **   (new as of 12-21-81)
        TO normal
        T1.5-T4.5 by 1.5: 18=20 34=AA 44=DF 45=AD 46=FE
            (If the above parms don't work try: 18=40 19=00 34=AA
        40=40 44=DF 45=AD 46=00 4E=00 4D=00 52=00 53=00)
        T5.5        T7-TA by 1        TB.5-TE.5 by 1.5        T10-T12 by 1
        T13.5-T14.5 by 1        T16-T19 by 1.5        T1A-T1B.5 by 1.5
FINANCIAL CONTROLLER (all 5 disks) **
        TO-T22 sync
FLY WARS
        TO: 4C=1B
        TO-T1D NORMAL
        TE.5-T22.5 SYNC: 54=12 7C=00
FOOSBALL
        TO NORMAL: 00=FE 01=DD 02=AD 03=DA 0B=0C
        T1.5-T8.5 SYNC: 0F=01 10=01 12=7E 21=17 25=02
        TA NORMAL
        TC SYNC
FREEFALL
        TO NORMAL: 00=FE 01=DD 02=AD 03=DA 0B=0C
        T1-T17: AA=01 01=FF AF=01
        T11: 36=01
GAMMA GOBLINS **        Same as SNEAKERS
GENETIC DRIFT
        TO: 18=50 19=00 40=20 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00
        T1-T3: 44=BB 45=D5 46=BB
        T4.5-T6 by 1.5        T7.5-TB.5 by 1
        TD: 44=D4 45=D5 46=BB
```

```
          TE.5-T12.5: 44=AD 45=B5 46=DE
GOBBLER
       T0-T22: 4E=00
       T3: 4C=1B D2=00 45=BD 4E=01 34=FF 54=12 52=00
            (NOTE- In this set of parms changing 4C to 1B will NOT
              invoke NIBBLE COUNT preservation since parm D2 is set to
            00.)
GOLDEN MOUNTAIN **
       T0 NORM
       T1-TD BY 2 SYNC
       T2-TE BY 2 NORM
GORGON (new as of 11-1-81)
       T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
       T1.5-TE.5 by 1 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                            19=00 44=DD 45=AD 46=DA

GORGON
       T0 NORMAL
       T1.5-E.5 by 1 normal:72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                            19=00 44=DD
HAYDEN ALIBI **
       T0-2 NORM
       T3-T22: 51=00 52=00 53=00 54=12 19=00 18=50 57=00 44=D4 46=B5
       T1B: 4C=1B E9=02
HAYDEN APPLESOFT COMPILER
       T0-T22 sync: 46=96 71=19 79=12
       NOTE - Errors on T10-T1E OK.  Also, very sensitive to drive
       speed!!
HAYDRON **      Same as GORGON
HIRES GOLF **
       T0-T22 norm: 4E=00 46=B5 54=12
HIRES SECRETS
       T0-T22: 46=96 54=12 34=FB
HOME ACCOUNTANT
       T0-T22 NORMAL: 46=96 54=12
IMAGE PRINTER
       T0-T7 SYNC
       T9-T22 SYNC
       T8: 4C=1B 57=00 E9=02 D2=00 44=FE 45=AB 54=12 50=00 51=00 52=00
           53=00
INVOICE FACTORY (2 Disks)
       T0-T22: 46=96 54=12
JELLYFISH
       T0 SYNC: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00
                40=20
       T1.5-T1F.5 SYNC: AE=00 00=FF 1B=01 01=A0
       T11: 4C=1B
KABUL SPY
       T0: 4C=1B
       T1.5-T10.5 SYNC
       T11: 36=01
       T12-T20: AE=1B 01=FF
       T23: 4C=1B
LEMMINGS
       T0 SYNC: 18=20 19=00 40=20 44=DD 45=AD 46=DA 72=00 73=00 77=00
                78=00 79=12 7C=00
```

```
        T1.5-TB.5 SYNC
        TD-T20 SYNC
LETTER PERFECT
        TO-T22:  44=00  45=D5  46=AA
MAGIC WINDOW and MAGIC SPELLER and MAGIC WORD
        TO-T22:  4F=0B
MICRO BASEBALL **
        TO-T4 normal       T5-T22 sync
MICRO COURIER
        TO-T22 normal:  46=96  54=12
        T1F:  81=97  82=EB  40=08  16=08  41=FF  19=00  58=0B  59=FF
MICRO TELEGRAM     Same as MICRO COURIER
MICROWAVE
        TO-T22 norm
        T11:  4C=1B  57=00  E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
MILLIKEN MATH
        TO-T22:  4C=18  46=B5  54=12  50=00  51=00  52=00  53=00
MISSLE DEFENSE
        TO-T22 sync
MULTI DISK CATALOG III **
        TO-T22 sync
OLYMPIC DECATHALON
        TO-T22 sync:  46=B5  A8=00  71=18  79=12
OO-TOPOS
        TO-T22:  21=02
OO-TOPOS (New Version) **
        TO-T22:  4D=00  4E=00  21=02  2C=06  48=EE  49=FF
ORBITRON (same as Gorgon)
OPERATION APOCALYPSE
        TO-T22:  25=19  65=00  6B=00
OUTPOST (same as Sneakers)
PADDLE GRAPHICS
        TO-T22 NORM
        T23:  36=01
PALACE IN THUNDERLAND
        TO-T22:  25=19
PEGASUS II
        TO-T22 normal:  4E=00  (all versions)
        T3:  4C=1B apply PATCH NC30 (version 4.0 only)
             4C=1B  57=00  E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
                                   (version 4.1 only)
```

**** NOTE FOR PFS USERS. THESE PARMS MAY WORK FOR SOME DISKS AND THEN
NOT FOR OTHERS DUE TO THE PROTECTION SCHEMES IN EFFECT. PLEASE BE
ADVISED THAT THESE PARMS BELOW ARE ALL THE INFORMATION THAT WE HAVE
FOR THESE PARTICULAR PROGRAMS BY PFS. ****

```
PFS GRAPH
        TO NORMAL
        T1.5-21 BY 1.5 NORMAL:  44=DB  45=AB  46=BF  4D=20  4E=00  54=12
        T7-T8 NORMAL
        T9.5 NORMAL (AFTER COPYING -- WRITE-PROTECT DISK BEFORE RUNNING)
PFS ** (OLD VERSION)
        Same as PFS REPORTS (track 0 error may occur)  After copying
        --Write Protect disk before running!
```

PFS REPORTS (OLD VERSION)
        T1-T13 normal
        T0: 40=08 41=FF 16=08 19=00 58=0B 59=FF 54=12 12=02 44=93 45=F3
            46=FC 47=FF 81=93 82=F3 83=FC 84=FF
PFS   (NEW VERSION)
        Same as APPLE PROGRAM MANAGER
PFS & PFS REPORTS ANOTHER VERSION **
        T0-T22 NORM
        T2:40=08 41=FF 16=08 19=00 58=0B 59=FF 54=12 12=02 44=93 45=F3
            46=FC 47=FF 81=93 82=F3 83=FC 84=FF (after copying Write
            protect before running!)
PHANTOMS FIVE
        T0 normal   T2-T1C: 44=DD
PHOTAR
        T0-T22 SYNC
POOL 1.5
        T0-T15: 21=02
        T1E-T21
PUCKMAN
        T0: 54=12   T1-TD: 54=09
PULSAR II
        T0 sync   T1C.5-T1D.5 sync
        T2-TC sync: 44=DD
        T13-T19 sync   T1A.5-T1B.5 sync
QUICK FILE FOR APPLE III (NO PARMS AVAILABLE BECAUSE A BACKUP IS
        SUPPLIED AT THE POINT OF SALE)
QUICK LOADER **
        T0 norm   T2-T11 sync
RASTER BLASTER (for old RASTER BLASTER only)
        T0 normal
        T5-T11 by 4 sync: 44=AD 45=DE 53=00
        T6-T12 by 4 sync   T7.5-TF.5 BY 4 sync   T1.5-T3.5 BY 2
        sync
RASTER BLASTER (New versions)
        T0: 46=96 54=12
        T5-T11 by 4 sync: 44=AD 45=DE 46=00 72=00 73=00 75=00 78=00
                          79=12
        T6-T12 by 4 sync   T7.5-TF.5 by 4 sync   T1.5-T3.5 by 2 sync
RETROBALL **
        T0, T4-T6, T9-TC, TE-T10, T12-T14, T17-T1D ALL NORMAL
        T20-T22: 4D=00 4E=00
RINGS OF SATURN **
        T0-T2 sync   T3-T22 normal   T5 sync   T9 sync
SABATOGE **
        T0-T22 norm
        T3: 4C=1B Apply patch NC30 (version 4.0 only)
            4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
                              (version 4.1 only)
SARGON II **
        T0-T1A norm: 19=00 54=12 47=FF 4C=18 48=FF 50=00 51=00 52=00
                     53=00
SCREENWRITER II ** (THESE PARAMETERS MAY OR MAY NOT WORK, WE HAVE
                    NO OTHER INFORMATION.)
        T0-T22: 4D=00
SHATTERED ALLIANCE
        T0-T22: 25=19

SHATTERED ALLIANCE (NEW)
        T0: 4C=18 47=FF 53=0B 54=12
        T1-T22: 44=D4 46=B7
SINGA SHAPE MANAGER **
        T0-T22 sync
SNAKEBITE ** same as GORGON
SNEAKERS
        T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
        T1.5-TD.5 by 1 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                                  19=00 44=DD 45=AD 46=DA
SNOGGLE **
        T0-T9 norm
            or
        T0-TF norm   T10.5-T11.5 sync
SOFTPORN ADVENTURE
        T0-T22 normal (all versions)
        T3: 4C=1B Apply PATCH NC30 (version 4.0 only)
            4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
            (version 4.1 only)
SOUTHERN COMMAND **
        T0-T22: 25=19 6B=00 34=D5 35=AB
SPACE EGGS
        T0 norm   T2-6 norm   T11-13 norm
        T14-1A: 44=DD
SPACE QUARKS
        T0: 18=50 19=00 40=20 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00
        T1-T2: 44=AB 45=D4 46=AB
        T3.5-T5.5 by 1
        T7
        T9: 44=FE 45=DD 46=AF
        TA.5-B.5 by 1: 44=AA 45=DE 46=BB
        TD-15 by 1
SPACE WARRIOR
        T0: 18=50 19=00 40=20 46=96 40=20 4E=00 52=00 53=00 54=12 57=00
        T2.5-T3.5: 44=DF 45=AD 46=DE
        T5-T8 by 3   T6.5   TA-T10 by 3
STAR BLASTER   **
        T0 NORM
        T7-T20.5 BY 1.5 SYNC: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                                  19=00 44=DF 45=AD 46=DE
STAR CRUISER **
        T0-T3 by 3 sync   T5-Tb by 1 sync   T11-T12 by 1 sync
        T4 sync: 44=AA 45=DD 46=BB
STAR MINES **
        T0 norm
        T1-T2 norm: 46=AD
        T4-TA norm
STAR RATERS **
        T0-T5 norm (TRACK 5 ERROR MAY OCCUR)
STAR THIEF
        T0-T13 NORMAL (TRACK E-13 ERRORS MAY OCCUR) (all versions)
        T22: 4C=1B Apply PATCH NC30 (version 4.0 only)
            4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
            (version 4.1 only)
SUPER APPLE BASIC **

```
        T0-T22 norm      T3 norm-extended retry
SUPERSCRIBE II (NO PARMS AVAILABLE BECAUSE A BACKUP IS PROVIDED AT
        THE POINT OF SALE)
TAX PREPARER
        T0-T22: 46=96 54=12 4C=19
TINY TROL
        T0-T22 normal          T3.5-T5 BY 1.5
TORPEDO FIRE
        T0 normal      T1-T22: 4F=0B
TRANSEND 2
        T0-TT22 SYNC
TWERPS **
        Same as Gorgon
        Plus T1C: 4C=1B 57=00 E9=02 D2=00
TWERPS  **
        T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
        T1.5-TE.5 BY 1 SYNC: 72=00 73=00 77=00 78=00 79=12 7C=00 44=DD
                              45=AD 46=DA
        T1C SYNC
U-BOAT COMMAND  **
        T0-T22: 4E=00 51=00 52=00 40=02 1E=30 1B=19 1D=18 44=00 45=00
                46=EB 47=AF 48=FB 49=EB
ULYSIS **
        T0-T22 norm
        T3: 4C=1B apply PATCH NC30 (version4.0 only)
            4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
            (version 4.1 only)
VC-EXPAND (NO PARMS AVAILABLE BECAUSE A BACK-UP IS SUPPLIED AT THE
        POINT OF SALE)
VISICALC (DOS 3.3 version)
        T0-T15 normal (T1 ERR Is OK)
VISICALC (APPLE III)
        (NO PARMS AVAILABLE BECAUSE AN ARCHIVAL DISK IS SUPPLIED AT THE
        POINT OF SALE)
VISIDEX (change as of 11-18-81)
        T0-T22: 40=04 16=08 41=FF 19=00 58=0B 59=FF 81=AA 82=EB 83=FD
                21=02 46=96 54=12
VISIFILE 1.01 ONLY!    Same as DESK TOP PLAN II except PARM C0=FD
        should be C0=EC
VISISCHEDULE
        T0-T22: 40=04 16=08 41=FF 19=00 58=0B 59=FF 81=AA 82=EB 83=EC
                21=02 46=96 54=12
VISITERM
        T0-T22 normal
        T6: 40=08 16=08 41=FF 19=00 58=0B 59=FF 81=AA 82=EB 83=FC
VISITREND/VISIPLOT (IF THESE PARMS DO NOT WORK, WE HAVE NO OTHER
        INFORMATION)
        T0-T22 normal
        T7: 40=08 16=08 41=FF 19=00 81=DE 82=AA 58=0B 59=FF
WARP FACTOR **      Same as TORPEDO FIRE
WORD HANDLER
        T0: 46=96 54=12
        T11-T22
        T1-TC: 44=FF 45=DF 46=DE (8 ERRORS O.K.)
WORD HANDLER II
```

```
        T0: 46=96 54=12 53=00
        T11-T22
        T1-TC: 44=FF 45=DF 46=DE
        (NOTE-IF AN 8 ERROR OCCURS RECOPY TRACK IT HAPPENED ON UNTIL NO
          ERROR.)
WORD JUGGLER FOR APPLE III (NO PARMS AVAILABLE BECAUSE A BACKUP IS
     SUPPLIED AT THE POINT OF SALE)
ZORK (old versions)
        T0-T22: 1E=0B
        T3:     4C=1B (patch NC30 for version 4.0)
                4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
        (version 4.1 only)
ZORK I and ZORK II AND ZORK III (new versions)
        T0-T22: 46=96 40=14
```

IF A PARTICULAR PROGRAM IS NOT LISTED, TRY T0-T22 NORMAL. PROGRAMS
THAT ONLY USE T0-T22 NORMAL ARE NOT LISTED DUE TO SPACE CONSTRAINTS.

PATCHES listed below should be entered before starting copy routines
unless otherwise indicated. These patches work only for version 4.0 .
They are built into version 4.1 . Entering them into 4.1 will result
in an 'incorrect patch' error.

PATCH NAME - ENTER AS LISTED BELOW
PATCH MULT - MULTNQNQG/RP THIS PATCH, WHEN APPLIED FIRST, ALLOWS
                MULTIPLE PATCHES TO BE APPLIED.
PATCH LSGP - LSGPNJMFM/G//LA/LG/M/ZNGEKCPSWQ USE AS DIRECTED.
PATCH NC30 - NC30WKDXQQSJ/EQQSJ/EY/ USE AS DIRECTED (WHEN PARM 4C IS
                CHANGED TO 1B)
PATCH SI9K - SI9KWRTY//AWRTU/NAWRTQ// ALLOWS USING SILENTYPE OR
                TRENDCOM PRINTERS

*** NOTE ***
WHEN USING PATCHES, ENTER THEM AS SHOWN WITH NO SPACES.
----

1. Please check your drive speeds frequently (inside your manual
see page 9 under #8 for directions and also the 'WARNING' on page 10
in relation to this test)

2. It is also advised to use the 'DISK SURFACE CERTIFY' test on the
diskette to be copied to, prior to copying (inside your manual see
page 9 under #7 for directions and also the 'WARNING' in relation to
this function).

3. Always 'WRITE PROTECT' the original prior to copying (if the
original is not already 'WRITE PROTECTED').

4. Switching drives sometimes enables a copy to be made.

5. If you detect 'error codes' in the STATUS AREA while making a
backup, just keep going. Many programs function ok despite 'error
codes' appearing during the backup procedure. That is the true test
of a working backup.

6. Make sure that you are using the equipment that is specified in the LOCKSMITH MANUAL. We do not claim that LOCKSMITH will work on equipment other than what is listed in the manual. If you are using equipment that claims to be APPLE compatible, it in fact may not be compatible with the LOCKSMITH program. We will not assume responsibility for claims of APPLE compatibility in conjunction with the LOCKSMITH program. Please contact the Vendor of your APPLE compatible product for advice. Thank you.

Copy II Plus 4.1 Parameters

Central point Software puts out a parameter list on the Source.
If you can access to it, you can receive the file by typing:
TY SFILES>ST2008>PARAMS

Files with a '*' attached to it have not been tested.

The Following Programs copy normally (T0-T22) or by copy disk
(from main menu)

A.B.M. *
Algerbra one and two *
Ampermagic *
Apple Access /// *
Apple Adventure *
Apple Barrel *
Apple Business Basic *
Apple Fortran
Apple // Pascal 1.1
Apple Pilot & Super Pilot *
Apple Visischedule /// *
Applesoft Compiler *
Appointment Handler *
Best Of Muse *
Bill Budge's 3D Graphics *
Bridgemaster *
Colossal Cave Adventure *
Computer Stocks & Bonds *
Counting Bee *
CTW/Apple Spotlight - Instant Zoo *
Demon's Forge *
DLM Software *
Dungeon Campaign *
Early Games *
Education Activities Software *
Electric Duet *
Escape *
Fastgammon *
First Class Mail *
Frazzle *
Global War *
Graphics Magician
Graphtrix *
Hellfire Warrior *
Hi-res football
His Majesty's Ship Impetuous (Dos 3.2) *
Interactive Fiction *
Invasion Orion *
Invoice Factory *
Key Perfect *
Know Your Apple *
Magic Mailer *
Megawriter *
Meteor Multiplication *

Micro Cookbook *
Microsoft Adventure *
Microwave *
Milliken Series *
Murder by the Dozen *
Music Maker *
Mystery House *
Nibbles Away I *
OO-Topos
PIK (Apple /// Boot Program) *
Pinball Construction *
Power Text *
Prism *
Pro Football *
PSAT Word Attack Skills *
Quick File *
Sea Dragon *
Spreadsheet *
Stellar Invaders *
Step by Step I & II *
Sterling Swift Products *
Stocks & Bonds *
Store Manager *
Strip Poker *
Tax Manager *
Tax Preparer *
Three Mile Island *
Time Manager *
Tube Way *
Typing Tutor *
V.C. *
Versaform *
Vocabulary Builder *
Wilderness Campaign *
Wizard & The Princess *
Word Handler *
World's Greatest Blackjack Game *
Write Away *

Copy II Plus Parameters

3-D Graphics System *
       T0-8
       T11-12
       T15-17
--> or try
       T0-2
       T4-8
       T11-18

Accountant *
       T0-22: 3C=1 4B=1

Ace Calc & Ace Writer *
       T0-22
--> or try
       T0-22: 10=96

Adaptable Skeleton *
       T0-T22: 10=96 9=0 19=AA 1F=AA

Address Book *
       T0-22: D=1 10=96 24=96

Advanced Visicalc For the Apple IIe and Apple /// *
       T0-22: 10=96 24=96 D=1

Adventure to Atlantis *
       T0-22: 10=96 24=96 9=0 31=0 D=1

AE *
       Front
              T0: A=3 E=DD F=AA 10=AD
              T1.5-C.5 Step 1
       Back
              Copy Disk Normally

Agenda Files *
       T0-T22: 10=96

Air Simulator I *
       t0-f

Air Traffic Conroller *
       T0-22: 10=96
       T23: 31=0 50=1 10=96

Aklabeth *
       T0: 9=0 31=0
       T2-3: E=DE F=AA 10=AD
       T6-18

Algebra Series *
       T0-22: 10=96 9=0 24=96 D=1 31=0

Alien Rain & Typhoon
      T0-5: 9=0 31=0 d=d5 f=0
      T6-TE: E=DE

Alkemstone *
      T0-22: A=3 10=96

Alpha Bytes *
      T0-22: 9=0

Apple Adventure *
      T0-22: d=1 10=96 24=96

Apple Cillin II *
      T0-C

Apple // Business Graphics *
      T0-22: D=1 10=96 24=96

Apple //e Business Graphics *
      T0-22: D=1 10=96 24=96

Apple /// Business Graphics *
      T0-22 (Error 2 OK)

Apple Logo *
      T0-T22
      T1: A=1 4B=1 50=1 E=AA 1C=AA 3B=1 4D=8

      Note: Keep retrying Track 1 until it works. Drive speed very
            important!

Apple Panic *
      T0-D
--> or try
      T0-5: 9=0 F=0
      T6-D: E=DE

Apple Pilot *
      T0-22: D=1 10=96 24=96

Apple World *
      T0-23

Applewriter II (and e)
      T0-22: 10=96

Applewriter II 80 column Pre-boot *
      T0-22: D=1 10=96 24=96 19=FF 1A=FF 1F=FF 20=FF 9=0

Applewriter //e *
      T0-22: D=1 10=96 24=96 3F=1

Applewriter II Pre-boot
      T0-23: 10=96 9=0 3F=1
--> or try

T0-22: D=1 10=96 24=96 19=FF 1A=FF 1F=FF 20=FF 9=1

Applewriter ///
       T0-22: D=1 10=96 24=96

A2-PB1
       T0: 10=96
       T1-15: A=3 E=DB F=AB 10=BF 44=1 45=D 46=F

Arsene Larcin *
       T0-23: 10=96

Autobahn *
       T0
       T4-6: D=1
       T9.5-C.5

Automated Accounting for Microcomputers *
       T0-22: 10=96

Aztec *
       T0-22: D=1 10=96 24=96

Back-it-up II *
       T0: 10=96 0=0
       T1.5-B.5: 10=B5 A=3

Back-it-up II+ 2.3 *
       T0-D: 10=96 9=0
       (Error on T1 ok, drive speed is important)

Bag of Tricks *
       T0-15: 0E=D6 3E=2 34=1 35=DF
--> or try
       T0
       T1-15: E=D6
       Sector Edit T0, Sector 8, Dos 3.2 patched, Change address A0
       from 20 to 60

Bandits *
       t0
       T1.5-1A.5
       T1C.5-1F.5: D=1

Basic Francais *
       T0-23: 10=96

Basic Tutor Series *
       T0-22: 9=0 10=96

Battle Cruiser *
       T0-22
       T4: 44=0

Battle for Normandy *
       T0-22: E=D4 10=B7 34=1 37=6E 38=FE
--> or try

TO-22: E=D4 10=B7 34=1 38=FE

Battle of Shilo *
       TO-22: E=D4 10=B7

Beer Run
       TO: 9=0
       T1.5-D.5: D=1 3B=40

Bill Budge's Space Album *
       TO-B

Bill Budge's Trilogy of Games *
       TO-A

Birth of the Phoenix *
       TO-T9

Bolo *
       TO-22: D=1 9=0 24=96 10=96

Bomb Alley *
       TO-22: E=D4 10=B7 34=1 37=6E 38=FE

Borg *
       TO: 10=96 9=0
       T1.5-B.5: d=1 24=96 A=3 E=DD F=AD 10=DA 3B=40
       TD-20
--> or try
       TO: E=DD F=AD 10=DA D=1 22=00 23=00 24=00
       T1.5-B.5
       TD-20

Brain Surgeon *
       TO-22
       T11 error 1 OK

C-Dex Training Program *
       TO-22: e=d6 F=AB 10=96 1A=AB 1D=AB 20=AB

Cannonball Blitz *
       TO-22
       T3-F: 3B=1 A=1 4B=1 4D=8 50=1
       (Error 6 OK)
--> or try
       TO-22: 10=96
       Sector Edit Dos 3.3 patched Track 17, Sector E. Change Address
       CD from 49 to 60
--> or try
       TO-22: 10=96
       Sector Edit Dos 3.3 patched Track 17, Sector E, Change Address
       C8 from 49 to 60

Caraibes *
       TO-23: 10=96

Cartels and Cut Throats *

```
        T0-22:  E=D4  10=B7

Casino *
        T0-22:  10=96

Castle of Darkness *
        T0:  D=1  24=96  10=96  9=0
        T1-22:  E=AB  F=AB

Castle Wolfenstein
        T0-22:  D=1  31=0

Caverns of Freitag *
        T0-2:  9=0  10=96

Caves of Olympus *
        T0-22:  10=96  9=0

Ceiling Zero *
        T0-2
        T3-11:  9=0  E=D6  1C=D6  34=1  38=F9  4F=1

Chess 7.0 *
        T0-22:  10=96  9=0
--> or try
        T0-22:  10=96  9=0  8=1  3E=2

Le Chomeur *
        T0-23:  10=96

Choplifter
        T0:  A=3  44=1  45=D  9=0  0=F  50=3
        T1-8:  4=FD  31=0  43=0  45=10  4F=1  46=12
        T9:  45=8  46=D
        TA-B:  45=2
        TC-1E.5 Step .5:  45=8  10=D4  51=1  D=1
        T20:  45=6  D=0  4F=0
        Note: Choplifter, serpentine, david's Midnight Magic and
Starblazer  use track arcing and are very sensitive to drive speed.
If you have  problems, try reversing drives.

        Another Choplifter note: Just use a single drive.   Error 5 on
track  1C.5 is OK.

Computer Air Combat *
        T0-22:  E=DB  F=D5  10=DE  8=1

Computer Ambush *
        T0-22:  E=D4  10=B7  34=1  37=6E  38=FE

Computer Baseball *
        T0-22:  E=D4  10=B7  34=1

Computer Math games *
        T0:  10=AD  A=3
        T1-2:  10=DB
        T3-22:  10=96
```

Computer Napoleonics *
        T0-22: E=DB F=D5 10=DE 8=1

Computer Quarterback *
        T0-22: 34=1 37=6E 3E=2 9=0 E=D4 10=B7

Congo *
        T0-22: D=1 9=0 24=96

Cops and Robbers *
        T0: 10-96 9=0
        T1.5-F.5: D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40

Coveted Mirror * side 1
        T0-22 step 2: 9=0 10=96 E=D5
        T1-17 step 2: 9=0 10=96 E=D4
        T19 step 1: 9=1 10=96 E=D4
        T1B-T21 step 2: 9=0 10=96 E=D4

Coveted Mirror * side 2
        T0-22: step 2: 9=0 10=96 E=D5
        T1-21: step 2: 9=0 10=96 E=D4
        Note: boot on side 2

Cranston Manor
        T0-22
        T18: 3B-1 A=1 4B=1 4D=8 50=1 (error 6 OK)

Crime Wave
        T0-10 step 2: E=D5 F=AA 10=96 9=00 6=04 31=00
        T1-11 step 2: E=D4 F=AA 10=96 9=00 6=04 31=00

Crisis Mountain *
        T0-22: 10=96 24=96 9=0 31=0 D=1
---> or try
        T0: 10=96
        T3-22: 9=0 3A=0 50=20

Crossfire *
        T0-B: 9=0
        T1: 3B=1 A=1 4B=1 4D=8 50=1 (error 6 OK)

Crush, Crumble and Chomp *
        T0-22: 10=96 9=0

Cubit *
        T0-22: 10=96 9=0 31=0 24=96

Dark Crystal *
        Copy Disk (from main menu) all four sides
        Sector edit Disk 1a:
        Track 5, sector F, change address A8, A9, AA to EA EA EA
        Track 7, sector C, Change addresses 22, 23, 24 to EA EA EA

Datestones of Ryn *
        T0-22: A=3 10=96

David's Midnight Magic
        T0: A=3 44=1 45=D 9=0 0=F 50=3
        T1-A: 44=0
        TB: 44=1 31=0 43=0 45=8
        TC-19 Step .5: 10=F5 F=FD 51=1 4F=1 D=1

Dawn Patrol *
        T0-22: 9=0 10=96

DB Master * (Old versions)
        T0-5: 10=96 24=96 D=1
        T6.5-22.5: D=0

DB Master Utility Packs 1 & 2 *
        T0-T5: 10=96 24=96 D=1
        T6.5-22.5: D=0

Deadline *
        T0-T11: 10=96 1E=BC

Desktop Plan II *
        T0-22: 10=96 34=1 36=2A
--> or try
        T0-22: 10=96 34=1 36=2A 37=EB 3E=2

Dictionary 2.1 *
        Copy Disk (From Main Menu)
        Sector Edit Track 8, Sector F
        Change Address 13 to 4C
                       14 to 24
                       15 to 6E

Disk Organizer *
        T0
        T1: 3B=1 A=1 4B=1 4D=8 50=1
        (Error 6 OK)
        T2-4: D=1
        TA-B

Disk Recovery *
        T0-22: 10=96 9=0 A=3
        (Error trk 1 OK, May take a few retrys)

Dung Beetles *
        T0
        T1: A=3 E=F5 F=F6 10=F7
        T4-22
        Sector Edit Track 0, Sector 1, Dos 3.2
        Change Address 6D from 01 to 7B
                       6E from 61 to 69

Dungeon *
        T0-22: 10=96 9=0

Einstein Computer *
        Copy disk (from main menu)

Sector edit Track 8, sector 4
        Change Address 2A, 2B, 2C to 4C E2 91

Eliminator *
        TO-21
        Sector Edit Track 3, Sector D, Dos 3.3 Patched
        Change Addreses 2E, 2F, 30 from 20, 30, 72 to EA, EA, EA.

Escape from Alcatraz *
        TO-22: 10=96 9=0 31=0 8=1
--> or try
        TO-22: 10=96 24=96 9=0 31=0 D=1

Escape from Rungistan *
        TO-2: 10=96
        T3-22: 10=F7
--> or try
        TO-21

Executive Briefing System *
        TO-22: 9=0
        Sector Edit Track 21, Sector 0, Dos 3.3
        Change Address 27 from FB to 22

Executive Secretary *
        TO-22: 9=0 8=1 10=96

Expeditor
        TO-22: 10=96
        T3: 3B=1 a=1 4B=1 4D=8 50=1
        T1F
        (Error 6 OK)

E-Z Draw 3.3 *
        TO-22: 9=0 E=D7 10=96 8=1 A=2 4=F3 3A=3 D=1 24=96 31=0

Firebird *
        TO-D: 10=96 9=0
        T1.5-B.5: D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40

Flight Simulator *
        TO: 10=96
        T1.5-21 Step 1.5: E=DB F=AB 10=BF A=3 4E=1
        T7-8
        9.5

Format II *
        Copy Disk (from main menu)
--> or try
        TO-T22: 10=96
        Sector Edit Dos 3.3 Track B, Sector 5
        Change Addresses 4, 5, 6 from A9, 03 BD to 4C 31 68

Galactic Attack *
        TO-22: 10=96 24=96 D=1

Galactic Gladiators *

```
        T0-20:  10=B7 E=D4 9=0 31=0
        T21-22:  34=1

Game Show *
        T0-22:  9=0

General Manager *
        (Master Program)
        T0-22:  9=0
--> or try
        T0-22:  10=96
        Sector Edit track 1F, Sector E, Dos 3.3
        Change Address C1, C2, C3 to 4B, E0, 49
        Sector Edit Track 21, Sector 1, Dos 3.3
        Change Address 2E to 60
--> or try
        Copy Disk (from main menu)
        Sector Edit:
        TD, SE, Address 2C from 60 to EA
        T21, SB, Address D7 from E3 to CB
        T21, SE, Address 1, from 8 to 60
--> or try (version 20N)
        Copy Disk (from Main Menu)
        Sector Edit: T20, Sector B
        Change address 09 from 20 to EA
                      OF from 20 to EA
                      10 from 00 to EA
                      11 from 70 to EA
--> or try (version 2.0Y)
        Copy Disk (from main menu)
        Sector edit Track 20, sector B, Dos 3.3 Patched
        Change Addresses:
        27 from 00 to EA
        28 from 70 to EA
        29 from 20 to EA
        (try the following if the above changes does not work)
        2A from OF to EA
        26 from 20 to EA

Geometry and Measurement * (Volume 1 & 2)
        T0-22:  D=1 10=96 24=96

Gertrude's Puzzles *
        T0-22:  10=96 9=0

Gobbler *
        T0-22:  9=0
        T3:  3B=1 A=1 4B=1 4D=8 50=1
        (Error 6 OK)

Gold Rush *
        T0-22:  D=1 9=0 24=96 10=96

Gorgon *
        T0:  10=96 9=0
        T1.5-E.5:  D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40
```

Graphics Processing *
     T0-22: 19=DD 1A=AA (Main Disk)
     Copy disk (from main menu) the utilities disk.

Guadelcanal Campaign *
     T0-22: E=D4 10=B7 34=1 37=6E 38=FE

Hadron *
     T0: 10=96 9=0
     T1.5-E.5: D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40

Hi-res Computer Golf *
     T0-22: 19=DF D=1 34=1
--> or try
     T0-22

Hi-res Computer Golf (Version 2) *
     T0-22: 10=96
     (Both Sides)

Hi-res Secrets *
     T0-22
--> or try
     T0-22: 10=96 4=FB 19=DF 1F=DF A=1

Home Accountant *
     T0-22: 9=0 10=96
--> or try
     T0-22: 9=0
--> or try (Version 2.0)
     T0-22
--> or try (Version 2.1)
     Copy disk (from main menu)

Home Money Minder *
     T0-22: 10=96 9=0

Hyperspace Wars *
     T0-22: 9=0

Incredible Jack *
     T0-22 (Write protect!)
--> or try
     T0-22: 10=96 24=96
     T23: D=1 9=0

Instant Zoo *
     T0-22: D=1 10=96 24=96

Jaw Breaker *
     T0-22: 9=0
     T3: 3B=1 A=1 4B=1 4D=8 50=1
     (Error 6 OK)

Jigsaw *
     T0
     T1-T17: D=1 24=96 E=D3 F=96 10=F2 9=0 31=0

```
--> or try
     T0:  10=96 0=0  31=0
     TA-T17:  10=96 9=0  31=0
     T1-9:  E=D3 F=96 10=F2 9=0  31=0


Kabul Spy *
     Side 1
          T0
          T1-21:  10=F7
          T22:  A=5 E=AA F=D5 10=D5 11=BD 12=BD
          Sector edit Track 0, Sector 0, Dos 3.3 Patched
          Change Addresses 49, 4A, 4B from 20, 03, 20 to EA, EA, EA.


     Side 2
          T0-21:  10=F7


Knight of Diamonds *
     Side 1
          T0-22:  D=1 10=96 24=96 34=01 37=00
          Write protect!


     Side 2
          TA-T22
          T0-9:  D=1 10=96 24=96  4B=1
          (Error 6 OK)
--> or try
     (both sides)
     T0-22:  10=96 24=96 D=1
     Write protect!


Knights of the Desert *
     T0-22:  E=D4 10=B7


Krell Logo *
     T0-22
--> or try (new versions)
     T0-22:  10=96
     Sector edit patched Track 2, Sector 3
     Change Addresses 5B, 5C from D0, 03 to EA, EA.
--> or try (new versions)
     T0-22:  10=96 9=0
     Sector Edit patched track 2, sector 3
     Change Addresses 5B, 5C from D0, 03 to EA, EA.


Legacy of Lygamin *
     Side 1
          T0-22:  D=1 10=96 24=96 34=01 37=00
          Write protect!
     Side 2
          TA-T22
          T0-9:  D=1 10=96 24=96  4B=1
          (Error 6 OK)
--> or try
     (both sides)
     T0-22:  10=96 24=96 D=1
     Write protect!
```

Letter Perfect *
        T0-22: 10=96 9=0

List Handler and Utility (Older versions) *
        T1-11
        T0: 9=0 A=3 44=1 45=D 50=3
        T12-22.5 step .5: D=1 E=F5 F=D7 10=F7 45=8 46=D 51=1

        Note: Uses track arcing and is very sensitive to drive speed.
If you have problems, try reversing drives or use just one drive.

List Handler Version 1.1 *
        Program Disk
            T1-11
            T0: 9=0 A=3 44=1 45=D 50=3
            T12-19.5 step .5: E=D7 F=D7 10=DD 45=8 46=D 41=1
            T20-22.5 step .5: E=0 F=FD 10=D4

        Utility Disk
            T1-11
            T0: 9=0 A=3 44=1 45=D 50=3
            T12-22.5 step .5: D=1 E=D2 F=D7 10=DF 45=8 46=D 51=1

LJK Edit 6502 *
        T0-22: 10=96 9=0

Magic Window II *
        T0-23 (Error 2 on Track 23 OK)
        (try 3C=4 if you have any problems)
--> or try
        T0-22

Magic Window I *
        T0-22
--> or try
        T0-22: 10=96 24=96 D=1

Magicalc *
        T0-22: 9=0

Mars Cars *
        T0-22: 10=96

Mask of the Sun *
        (Both Sides)
        T0-22: 10=96

        Sector Edit Side 1, Track 2, Sector D, Patched
        Change Addresses 42 from 8F to EA
                          43 from C0 to EA
        Do NOT write protect backup

        (try the following edit if you have problems)
        Sector Edit Side 1, Track 0, Sector 3, Patched
        Change Address 42 from 38 to 18

Master Type (Old versions) *

```
     T0-2
     T3-22:  E=D4
     (Error on Track 1B OK)
     Sector Edit Track 0, Sector 3, Dos 3.2 patched
     Change address 63 from 38 to 18
     Sector Edit Track 2, Sector A, Dos 3.2 patched
     Change Address 2E from 23 to 2E


Math Strategy *
     T0-22:  10=96 24=96 D=1


Marauder *
     T0-22:  10=96 9=0
     Sector Edit Track 3, Sector 7, Dos 3.3
     Change Address 90 from A8 to 60


MECC *
     Volumes 1 and 2
          T0-22
          T2: 10=96 9=0
     Volumes 3, 4, and 7
          T0-22:  9=0 8=1


Micro Deutsch *
     T0-22:  E=D4
     (Error 2 on Track 1B OK)


Microbe *
     T0-22:  10=96 9=0 31=0
---> or try
     T0-22:  10=96 24=96 9=0 31=0 D=1


Micro Skills *
     T0
     T1-22:  10=96 19=aa 1C=AA 31=00
     Sector Edit Track 0, Sector 3,
     Change address 42 from 38 to 18


Microwave *
     T0-22
     T11: 3B=1 A=1 4B=1 4D=8 50=1
---> or try
     T0-22:  10=96
     Sector Edit Track 2, Sector 1, Dos 3.3
     Change Addresses DA from A9 to AD
                      DB from 60 to 03
                      DC from 9D to 81
                      DD from 7E to 60
---> or try
     T0-22


Miner 2049er *
     T0:  4B=1  10=96
     T1-3: E=D3 F=96 10=F2 A=3 9=0 31=0 8=1 D=1 24=96 6=6 1C=96 1D=D3
           1E=E5 19=D3
     T4-22:  4B=0
---> or try
```

```
            TO:  4B=1  10=96
            T1-22:  4B=0  E=D3  F=96  10=F2  A=3  9=0  31=0  8=1  D=1  24=96  6=6


Minit Man *
        T0-22 step 2:  10=96  9=0
        T1-21 step 2:  E=D4


Missle Defence *
        T0-22:  D=1


Missing Ring
        T0-22:  D=1  24=96  10=96  34=1
        Do NOT write protect


Mission: Asteroid *
        T0-22
--> or try
        T0-22:  10=96  24=96  D=1


Mission:Escape *
        T0-1D


Mix and Match *
        Copy disk (from main menu)
--> or try
        T0-22:  9=0  10=96


Money Street and Utilities *
        T0-22
        (Errors OK)


Mouskattack *
        T0-22:  10=96
        Sector Edit Dos 3.3 patched, Track 18, Sector 3
        Change Adress B1 from 49 to 60


Multi-Disk Catalog *
        T0-8
        T3:  A=1  E=AF  3B=1  4B=1  4D=8  50=1


Multiplan
        T0-22:  10=96


Neutrons *
        T0-22:  A=3  10=96


Nibbles Away II
        (Version C2)
            TO:  10=96
            T1-E:  E=D7  10=97
            T10-15
        (Version C3)
            T0-15:  E=D7  F=AA  10=97
            Error 2 on Track F OK.


Nightmare Alley *
        T0-22:  10=96  9=0  34=1  31=0
```

North Atlantic '86 *
        TO-22: E=D4 10=B7 34=1 37=60

Olympic Decathalon *
        TO-22: 9=0
---> or try
        TO-22

Operation Apocalypse *
        TO-22: E=DB F=D5 10=DE 8=1

Orbitron *
        TO-1: 9=0 31=0
        T1.5-F.5
        Write protect back-up

Outpost *
        TO: 10=96 9=0
        T1.5-B.5: D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40

Peeping Tom *
        TO
        T1: E=F5 F=AB 10=BE 9=0
        T4-22
        Sector Edit Track 0, Sector 1, Dos 3.2
        Change Address 6E from 60 to 68

Pegasus II *
        TO-22
        T3: 3B=1 A=1 4B=1 4D=8 50=1
        (Error 6 OK)

Personal Finance Manager *
        TO-22: 10=96

Personal Secretary *
        TO-22: 10=96 9=0

PFS File, Report, Graph //e
        Copy disk (from Main menu)
        Make sure to write protect the back-up!

Phantoms Five
        TO: 9=0
        T2-1C: 3A=0 50=20

Pinball (A2-PB1) *
        TO: 10=96
        T1-15: A=3 E=DB F=AB 10=BF 44=1 45=D 46=F 30=3 D=1

Pirate Adventure *
        TO-22: 10=96 24=96 D=1

Pool 1.5 *
        TO-15

```
        T1E-21
        Sector Edit Track B, Sector 7, Dos 3.2 patched
        Change Address 6A from 8D to 60
        Sector Edit Track O, Sector 3, Dos 3.2 patched
        Change Address 63 from 38 to 18

President Elect *
        TO-22:  E=D4  10=B7  34=1

Prisoner I & II *
        TO-22:  10=96
        Sector Edit Track 1F, Sector E, Dos 3.3
        Change Addresses D5 from AD to 2F
                          D6 from 99 to AF
                          D7 from F0 to 32

Le Propio *
        TO-23:  10=96

Pulsar II *
        TO
        T1C.5-1D.5:  D=1
        T2-C:  E=DD
        T13-19
        T1A.5-1B.5

Quest *
        Side 1
                TO-22 step 2:  10=96  19=DA  1F=DA  3C=1
                T1-21 step 2:  E=D4
        Side 2
                TO-22

--> or try
        TO-22:  E=0  F=AA  6=4  9=0  10=96  31=0

Raster Blaster
        TO:  10=96
        T5-11 step 4:  D=1  9=0  31=0  A=2  E=AD  F=DE  3B=40
        T6-12 step 4
        T7.5-F.5 step 4
        T1.5-3.5 step 2

Rendezvous *
        TO-23:  10=96  9=0
--> or try
        TO-22:  10=96  24=96  D=1  9=0  31=0
        Sector Edit Track O, Sector O
        Start With Address 8C (Which has a value of $4C) and enter:
        A9 4C 8D 18 BB A9 1B 8D 19 BB A9 BB 8D 1A BB 4C 80 BA

Rescue at Rigel *
        TO-22:  A=3  10=96

Ricochet *
        TO-22:  10=96  )=0  m8=1
```

Roach Hotel *
    T0
    T1: A=3 E=EE F=EA 10=FE
    T4-22
    Sector Edit Track 0, Sector 1, Dos 3.2 patched
    Change Address 75 from 01 to 7B
    Change Address 76 from 61 to 69

Robot Wars *
    T0-22: D=1 31=0
--> or try
    T0-22

Rocky's boots *
    T0-22: 10=96 9=0

Sabotage *
    T0-22
    T3: 3B=1 A=1 4B=1 4D=8 50=1
    (Error 6 OK)

Sammy Lightfoot *
    T0-10: E=D5 F=AA 10=96 9=0 6=4 31=0

Sargon *
    T0-1A: 10=F7

Screen Writer II *
    Copy Disk (From Main Menu)
    Sector Edit Track 3, Sector B, Dos 3.3
    Change Addresses 94, 95, 96 from 20, 00, 7F to EA, EA, EA.
    Sector Edit Track 13, Sector 4, Dos 3.3
    Change Addresses 4D, 4E, 4F from 20, 00, 6D to EA, EA, EA.

Sea Dragon *
    T0-22
--> or try
    T0-22: 10=96 24=96 D=1

Seafox *
    T0: A=3 44=1 45=D 9=0 0=F 50=3
    T1-8: 4=FD 31=0 43=0 45=10 4F=1 46=12
    T9: 45=8 46=d
    TA-B: 45=2
    TC-1E.5 Step .5: 45=8 10=D4 51=1 D=1

    Note: Very sensitive to drive speed. Try reversing drives
           or use one drive if you have problems.

Sensible Speller *
    (Older versions)
    T0-10: 10=96 9=0
--> or try
    T0-22: 10=96 9=0 3B=40
    T1: 4B=1 A=2 50=2 E=D4 F=D4 3B=1
    (Drive speed on track 1 is very important. Adjust you speed
     to match orginal disk)

---> or try
     T0-22: 9=0 10=96
     Error 2 on Track 1 maybe OK.   Very sensitive to drive speed
     Retry Track 1 a few times.

Serpentine *
     T0: A=3 44=1 45=D 9=0 0=F 50=3
     T1-8: 4=FD 31=0 43=0 45=10 4F=1 46=12
     T9: 45=8 46=D
     TA-B: 45=2
     TC-1E.5 Step .5: 45=8 10=D4 51=1 D=1

     Note: Very sensitive to drive speed.   Try reversing drives
           or use one drive if you have problems.
---> or try
     Same as above, but copy tracks 20-22 on last set.

Sherwood Forest *
     T0-22
---> or try
     Copy disk (from main menu) until process hangs.
     Then bit copy as follows: T1F-22

Snack Attack (Old version)
     T0-12
     Sector Edit Track 1, Sector 3, Dos 3.2 patched
     Change Address 63 from 38 to 18

Snack Attack *
     T0-12
     Sector Edit Track 1, Sector 3, Dos 3.2 patched
     Change Address 39 from 38 to 18

Sneakers *
     T0: 9=0 10=96 44=1 45=10 D=1
     T1.5-C.5: 44=0
     TD.5: 44=1
---> or try
     T0: 9=0 10=96 44=1 45=10 D=1
     T1.5-C.5: 44=0
     TD.5
---> or try
     T0: 9=0 44=1 45=10 10=96 3C=1
     T1.5-C.5: 44=0 (Error 1 on Track A OK)
     TD.5: 44=1

Snoggle *
     T0-9: 9=0 8=1

Softporn Adventure *
     T0-22: 9=0
     T3: 3B=1 A=1 4B=1 4D=8 50=1
     (Error 6 OK)

Space Eggs *
     T0: 9=0
     T2-6

Space Invaders
        T0-22: 10=96

Space Vikings *
        T0-22
---> or try
        T0-22: 10=96 21=DA 8=1 A=3

Spectre *
        T0-2: 10=96 9=0 8=1
        T3-22: 31=0 E=C5 10=B5

Speed Reading *
        T0-22: 9=0 10=96

Spelling Strategy *
        T0-22: 10=96 24=96 D=1

Spider Raid (New Versions) *
        T0
        T1-17: A=3 E=92 F=93 4F=1 10=95 44=1 46=A 9=0 8=1 D=1
        24=96 3F=1 34=1 36=2A 37=97 31=0 43=0

        Note: Very sensitive to drive speed. Try reversing drives
               or use one drive if you have problems.

Spitfire Simulator *
        T0-F
        T15

Spy's Demise *
        T1-11 step 2: 9=0 10=96 E=D4
        T0-12 step 2: 6=4 31=0
        (Error 2 on track 12 OK)
---> or try
        T0-10 step 2: 9=0 10=96
        T1-11 step 2: E=D4
---> or try
        T0-12 step 2: 6=4 31=0 E=D5

Star Blaster *
        T0: 10=96 9=0
        T7-20 step 1.5: E=DF F=AD 10=DE

Star Blazer *
            T0: A=3 44=1 45=D 9=0 0=F 50=3
        T1-8: 4=FD 31=0 43=0 45=10 4F=1 46=12
        T9: 45=8 46=D
        TA-B: 45=2
        TC-1E.5 Step .5: 45=8 10=D4 51=1 D=1
        T20: 45=6 D=0 4F=0
  Note: Choplifter, serpentine, david's Midnight Magic and Starblazer
use track arcing and are very sensitive to drive speed. If you have
problems, try reversing drives.

Another note: Just use a single drive.   Error 5 on track   1C.5 is OK.

Starcross *
     TO-22: 10=96

Starship Commander *
     TO-22: D=1 10=96 24=96

State of the Art Accounting *
     TO-22: 3C=4
     (Write protect before booting)

Stock Portfolio System *
     T3-22
     TO-2: 4=FD 8=1 10=AD
--> or try
     T3-22
     0-2: 4=FD 8=1 10=96

Super Gradebook *
     TO-22: 10=96

Super Graphisme /// *
     TO-23: 10=96

Super Pilot *
     TO: 10=96
     T2-22
     Sector Edit Track 0, Sector A, Dos 3.3 patched
     Change Addresses 79 from 43 to EA
                      7A from 41 to EA
                      7B from C6 to EA
--> or try
     TO-22: 10=96 24=96 D=1
     Use Copy disk (From main menu) for lesson and super
     co-pilot 1 & 2

Super Taxman II *
     TO-22: 10=96 24=96 D=1
     Write Protect backup before using

Super Text *
     TO-22: D=1 31=0

Super Text 40/80 *
     TO-22: 9=0

Superscribe II *
     TO-22: 10=96
     T3: 3B=1 A=1 4D=8 5D=1 (Error 6 OK)
     T1F: 3B=1 A=1 4D=8 5D=1 (Error 6 OK)

Suspended *
     TO-22: 10=96 1E=BC
--> or try
     TO-22
--> or try

```
        T0-23:  10=96 9=0 3F=1
--> or try
        Copy disk (from main men)
        Write protect back-up


Swashbuckler *
        T0-22
        Sector Edit Track 0, Sector 3, Dos 3.3 patched
        Change Address 42 from 38 to 18
--> or try
        T0-22:  D=1 10=96 24=96


Tawala's last redouby *
        T0-22:  D=1


Tax Man
        T0-22
--> or try
        T0-B
--> or try
        T0:  10=96
        T1-B:  10=DA
        T11-12:  10=B5
        T13:  10=96


Temple of Apshai *
        T0-22:  A=3 10=96


Terrapin Logo *
        Format Target Disk
        T0-22:  10=96
        Write protect Back-up


Test Construction *
        T0-22:  10=96


Threshold
        T0-22
        T1-23 Step 22:  3B=1 A=1 4B=1 4D=8 50=1
        (Error 6 OK)


Thunderbombs *
        T0-10 step 2: E=D5 F=AA 10=96 9=00 6=04 31=00
        T1-11 step 2: E=D4 F=AA 10=96 9=00 6=04 31=00


Time Zone *
        Side A
            T0-22:  9=0
            T1:  3B=1 A=1 4B=1 4D=8 50=1
        Sides B-L
            Copy Disk (from main menu)


Torpedo Fire *
        T0-22
--> or try
        T0-22:  E=DB F=D5 10=DE
--> or try
```

T0
        T1-22: E=DB F=D5 10=DE 8=1
---> or try
        T0-22
        T20: 9=0
---> or try
        T0-22: E=D4 10=B7 34=1

Transend 1 *
        T0-23 (Error track 23 OK)
---> or try
  .   T0-22: 10=96

Transylvania *
        T0-22: E=0 10=96
---> or try
        T0-22 step 2: 9=0 10=96
        T1-21 step 2: E=D4
---> or try
        T0-22 step 2: 9=0 10=96 19=DA 1F=DA
        T1-21 step 2: E=D4

Twerps *
        T0: 9=0 10=96
        T1.5-E.5: D=1 24=96 A=3 E=DD F=AD 10=DA 3B=40
        TC

Type Attack *
        T0: 10=96
        T1-22: E=AD F=DA 10=DD 24=96 A=3 D=1

U-Boat Command *
        T0-22: 10=96 9=0 31=0 D=0 24=96
        (Ignore errors)

U-Draw II *
        T0-22: D=1 31=0

Ultima II *
        Copy Disk (From Main menu)
        Sector Edit Track 3, Sector C
        Change Addresses 84, 85, 86 to EA, EA, EA.
---> or try
        T0-22: 10=96 9=0 34=1 31=0
---> or try
        T0-23

Ultima /// *
        T0-23: 9=0 A=3 44=1 50=3 3B=1 A=1 D=1 10=96 50=1
        Write protect before running

        Note: Ultima /// is very sensitive to drive speed. Disk drives
        Need to be within .1 of 200 milliseconds per revolution.

Ulysses & the Golden Fleece *
        T0-22: 9=0
        T3: 3B=1 A=1 4B=1 4D=8 50=1

```
        (Error 6 OK)
--> or try
        Copy Disk from main menu
        T3:  3B=1  A=1  4B=1  4D=8  50=1
        (Error 6 OK)


Visicalc
        T0-16
--> or try
        T0-16:  A=3


Visicalc II Enhanced Version *
        T0-16 (Error 2 on track 1 OK)


Visicalc //e 128K Version *
        T0-22:  10=96  24=96  D=1  9=0  31=0


Visicalc Pre-boot *
        T0-22:  9=0  10=96
--> or try
        T0-23:  10=96  9=0  3F=1


Visicalc /// (All versions) *
        T0-22:  10=96  24=96  D=1


Visidex
Visischedule
Visiterm
Visitrend/plot
        Use Copy disk (from main menu)
        Do NOT bit copy.


Visifile
        T0-22:  10=96  34=1  36=2A  37=EB  3E=2


The Voice *
        T0-22:  9=0  10=96


Warp Factor *
        T0-22
--> or try
        T0
        T1-22:  E=DB  F=D5  10=DE  8=1
--> or try
        T0-22
        T20:  9=0
Windfall *
        T0-22:  10=96


Witness *
        T0-22:  10=96  1E=BC


Wiz Plus *
        T0-22:  10=96  24=96  D=1
        (Errors OK)


Wizardry *
```

Boot side
            TO-23: 10=96 24=96 D=1
            Write protect back-up!
        Scenario
            TO-22: 10=96 24=96 D=1
--> or try
        Both Sides
            Copy Disk (From Main Menu)
            TA-E: 10=96 24=96 D=1 4B=1
            Write protect boot-side!
--> or try
        Both Sides
            Copy Disk (From Main Menu)
            TO: D=1 10=96 24=96
            TA-E: 4B=1 (Error 6 OK)
            Write protect boot-side!
--> or try
        Both Sides
            TO-9: 10=96
            TF-22: 10=96
            TA-E: D=1 4B=1 10=96 24=96
            (Keep trying until no errors)

Wiz Maker *
        TO-22: D=1 24=96 10=96 34=1 8=1

Zardax *
        TO-22: D=1 10=96 24=96

Zargs *
        TO
        T1-17: A=3 E=92 F=93 4F=1 10=95 44=1 46=A 9=0 8=1 D=1
        24=96 3F=1 34=1 36=2A 37=97 31=0 43=0

        Note: Very sensitive to drive speed. Try reversing drives
              or use one drive if you have problems.

Zaxxon *
        TO-13
        Sector Edit Track 0, Sector 7, Patched
        Change Addresses 0, 1, 2 to 4C, C0 , 08
--> or try
        TO-13: 4B=1 9=0 10=96 24=96 19=CC 3C=1
        (Error 1 OK)
--> or try
        T3-12
        TO-2: 4B=1 B=1 10=96 24=96

Zoom Graphics *
        TO: 10=96
        T2-22 step 2: 9=0 8=1 3E=2
        T1-21 step 2: E=D4

Zork I, II, III *
        TO-22: 10=96 1E=BC
--> or try
        TO-22

---> or try (Zork II only)
     TO-23: 10=96 9=0 3F=1

Essential Data Duplicator Parameters
———————— ———— ——————————— ——————————

(Compiled from many sources)

The following programs copy normally:

A.B.M.
ASCII EXPRESS II
ADVENTURE
ALGERBRA I
ALKEMSTONE
APPLE PANIC
APPLE PRESENTS- ERNIE'S QUIZ
APPLE PRESENTS- INSTANT ZOO
APPLE PRESENTS- SPOTLIGHT
APPLE PRESENTS- MIX AND MATCH
APPLE WRITER
APPLE WRITER II
APPLE WRITER IIe
APPLE WRITER 60 COLMN PRE-BOOT
APVENTURE TO ATLANTIS
ASTROID FIELD
AUDEX
AZTEC
BILL BUDGE SPACE ALBUM
BILL BUDGE TRILOGY OF GAMES
BUSINESS GRAPHICS
CAMPAIGN TRILOGY
CANNONBALL BLITZ
CANYON CLIMBER
CARTELS AND CUTTHROATS
CASTLE WOLFENSTEIN
CCA DATA MANAGEMENT
CHESS 7.0
COMPUTER AMBUSH
COMPUTER AMBUSH VER 2
COMPUTER BISMARK
CONGO
COPY II PLUS
CRISIS MOUNTAIN
DARK CRYSTAL
DATA TREE
DEADINE
DESKTOP PLAN II
DOS ENHANCER
DUNG BEETLES
EASY-WRITER
EDU-PAINT
EINSTEIN COMPILER
ELECRIC DUET
EMPIRE 1: WORLD BUILDERS
E-Z DRAW
FIRE BUG
GALACTIC EMPIRE
GALACTIC REVOLUTION
GAME SHOW & SUBJECTS
GERMAN/ENGLISH HANGMAN

GERMANY 1985
HAIL
HEAD-ON
HELLFIRE WARRIOR
HOME ACCOUNTANT
INFORMATION MASTER
L.A. LAND MONOPOLY
LETTER PERFECT
LINGUSIT
MASTER TYPE
MATH GAMES
MERLIN ASSEMBLER
MICROBE
MINIT MAN
MISSION ASTROID
MUSICOMP
NIBBLES AWAY II
NIGHT MISSION PINBALL
ODYSSEY
OLYMPIC DECATHLON
OLYMPIC INSURANCE SYSTEMS
PFM
PINBALL CONTRUCTION SET
PRESIDENT ELECT
PRISONER
REAR GUARD
RESCUE AT RIGEL
ROBOT WARS
SARGON II
SCREEN WRITER II
SENSIBLE SPELLER
SERIES RU-2
SERIES SP-2
SERIES FR-2
SORCERER OF SIVA
SPACE EGGS
SPANISH/ ENGLISH HANGMAN
SPECTRE
SPITFIRE SIMULATOR
SPY'S DEMISE
STARCROSS
SUPER COPY III
TAXMAN
TEMPLE OF ASPHI
TERRORIST
THE ROUTINE MACHINE
THREE MILE ISLAND
TORPEDIO FIRE
TRANSYLVANIA
TUBEWAY
TYPING TUTOR
ULTIMA
ULTIMA ///
ULYSES
VISICALC 3.3
VISICALC 80 CLMN PREBOOT
VISICALC IIe

```
VISIDEX
VISIFILE
VISIPLOT
VISISCHEDULE
VISITERM
VOCABULARY BUILDERS
WARP FACTOR
WIZARD AND THE PRINCESS
WORLDS GREATEST BLACK-JACK
ZOOM GRAFIX
ZORK I
ZORK II
ZORK III
```

A2-FS1
     T0-T6 inc 1.5
     T7-T8
     T9.5-TA.5
     TC-T21 inc 1.5
AE (Side 1)
     T1.5-TD.5
     TE-T18.5 inc 1.5
     T0: parm 28=2 or 3
AE (Side 2)
     norm
AIRSIM-1
     norm - write protect before running
APPLE WORLD
     T0-T23
ARCADE MACHINE
     T0-T11
     T12.25-T21.25
BANK STREET WRITER
     T0-T1A
     T1B-T22: PPM #3 OR #4
BATTLE FOR NORMANDY
     See Miner 2049er
BEER RUN
     T0: parm 28=2 or 3
     T1.5-TD.5: PPM #2
BENEATH APPLE MANOR (SPECIAL EDITION)
     T0-T22: parm 0=3
BILL BUDGE 3-D GRAPHICS
     norm - write protect before running
BORG
     T1.5-TB.5
     TD-TE
     T0: parm 28=2 or 3
BROADSIDES
     T0-T22: PPM #5 OR #6
BUG ATTACK
     T0-T22
     T1.D: PPM #2
     T22: PPM #2
CHECKERS (Odesta)
     T0-T6
CHOPLIFTER
     T0-TB: parm 28=2 00=3
     TC.25-T21.25
     T22
     Note: Sometimes very hard to copy
COPTS & ROBBERS
     See Epoch
CRANSTON MANOR
     T0-T22
     T13: PPM #3
CRIME WAVE

T0-T11
CRITICAL MASS (Side A)
        T0-TA
        T22: PPM #3
CRITICAL MASS (Side B)
        norm
CROSSFIRE
        T0-T22
        T1: PPM #3
CROSSWORD MAGIC (Both Sides)
        T0-T22: PPM #2
CUSTOM MICRO SYSTEMS ASSEMBLER
        T0-T23
D.B. MASTER AND UTILITIES
        T0-T5
        T6.5-T22.5
DISK EDIT 2.0
        T0
        T1.5-T5.5
        T21.25-T22.25
DISK RECOVERY
        norm- and if that doesn't work try:
        T0
        T1.25-TD.25:   PPM #2
EPOCH
        T0: parm 28=2 or 3
        T1.5-TF.5:   PPM #2
EVOLUTION
        T0.25-T18.25
FINANCIAL MANAGMENT SYSTEM III
        T0-T22
        T3: parm 4=10 9=3 A=14 B=13 11=3: PPM #3 or #4
GAMMA GOBLINS
        See Beer-Run
GORGON
        T0: parm 28=2 or 3
        T1.5-TE.5: PPM #2
HADRON
        See Gorgon
JAWBREAKER
        T0-T22
        T3: PPM #3
KNIGHT OF DIAMONDS
        T0-T22: PPM #2
LABYRINTH
        See Choplifter
LIST HANDLER & UTILITIES
        T11
        T12.25-T22.25: parm 0=3
        T0: parm 0=0 28=2
MIDNIGHT MAGIC
        T0-T12
        T13.25-T15.25
        T22
MINER 2049er
        T1-T22
        T0: PPM #3 or #4

MINGS CHALLANGE
        See Miner 2049er
MONTY PLAYS SCRABBLE
        T0-T22: PPM #5 OR #6
MOPTOWN
        T0-T22: parm 28=3
MULTIPLAN
        T0-T22
        TA: PPM #3 or #4
PEGASUS II
        See Jawbreaker
PFS: FILE, FILE IIe, GRAPH, & REPORTS
        T1-T22
        T0: PPM #3 or #4
        (Write Protect Before Booting)
POOL 1.5
        T0-T22: PPM #2
PULSAR II
        T0-T19
        T1A.5-T1D.5
QUEEN OFF THE PHOBOS
        T0-T1A
RENDEZVOUS
        See Miner 2049er
SABATOGE
        See Jawbreaker
SEA FOX
        See Choplifter
SERPENTINE
        See Choplifter
SNEAKERS
        See Beer-Run
SOFT PORN ADVENTURE
        See Jawbreaker
STAR THIEF
        T0-T13
        T22: PPM #3
SWASHBUCKLER
        T0-T22: parm 28=10
TAWALA'S LAST REDOUT
        T0-T22: PPM #2
TERRORIST
        T0-T1F
        T20.75-T22.75
THIEF
        T0-T22
        T4-T5: PPM #2
THRESHOLD
        See Crossfire
THUNDER BOMB
        T0-T11
TIC TAC SHOW
        T0
        T1.5-T4.5
        T6-T22
TIC TAC SHOW (SERIES DISKS)
        norm

TIME ZONE (Side A)
        See Miner 2049er
TIME ZONE (Sides B-L)
        norm
TRACK ATTACK
        See Choplifter
TRANSEND
        T0-T22: PPM #2
ULTIMA II
        See Rendezvous
WIZARDRY
        T0-T22 PPM #2
WORD HANDLER
        T11
        T3.25-T10.25
        T0-TA: parm 0=0 28=2
        Note: Sometimes very hard to copy
WORD RACE
        T0-T22: PPM #2
ZENITH
        See Choplifter

```
                    BACK IT UP II+ PARAMAMTERS
                    ---- -- -- --- -----------

      NOTE: CURRENT VERSION OF BACK IT UP II+ IS 2.3.   THE VERSION # CAN
            BE FOUND ON THE LOGO PAGE ABOVE THE COPYRIGHT NOTICE.

      -----------------------------------------------------------------

AKEM-STONE
      COPY TRACKS 0 -- 22  DECODE
ALIEN RAIN
      COPY TRACKS 0 -- 5 NORMAL
      CHANGE PARM 00 TO FE
      CHANGE PARM 0D TO 21
      CHANGE PARM 0E TO 00
      COPY TRACKS 6 -- F NORMAL
APPLE ADVENTURE
      CHANGE PARM 00 TO FE
      COPY TRACKS 0 -- 22 NORMAL
APPLE PANIC
      COPY TRACKS 0 -- 5 NORMAL
      CHANGE PARM 00 FE
      COPY TRACKS 6 -- D NORMAL
APPLEWRITER ///
      COPY TRACKS 0 -- 22 SYNC
      NOTE: BACK IT UP II + VER. 2.1 USERS SHOULD CHANGE PARM 11 TO 02
ASTEROID FIELD
      COPY TRACKS 0 -- 12 NORMAL
      NOTE: YOU MAY HAVE TO COMPRESS TRACKS 0 -- 2 AND 11
AUTOBAHN
      CHANGE PARM 00 TO FE
      COPY TRACK 0 SYNC
      COPY TRACKS 4 -- 6 SYNC
      COPY TRACKS 9.5 -- C.5 SYNC
BEER RUN
      COPY TRACK 0 SYNC
      COPY TRACKS 1.5 -- D.5 SYNC
BILL BUDGES SPACE ALBUM
      COPY TRACKS 0 -- 11 NORMAL
BILL BUDGES 3-D GRAPHICS PACKAGE
      COPY TRACKS 0 -- 2 NORMAL
      COPY TRACKS 4 -- 8 NORMAL
      COPY TRACKS 11 -- 18 NORMAL
BORG
      COPY TRACK 0 NORMAL
      CHANGE PARM 00 TO FE
      CHANGE PARM 01 TO DD
      CHANGE PARM 02 TO AD
      CHANGE PARM 03 TO DA
      CHANGE PARMS 04 -- 0A TO 00
      CHANGE PARM 0B TO 0C
      COPY TRACKS 1.5  -- B.5 DECODE/SYNC
      COPY TRACKS D    -- 14  DECODE/SYNC
BPI GENERAL LEDGER, ACCOUNTS RECEIVABLE, & PAYROLL
      COPY TRACKS 0 -- 10 NORMAL
      COPY TRACKS 12 -- 22 NORMAL
      CHANGE PARM 11 TO 00
```

```
                CHANGE PARM 15 TO 18
                CHANGE PARM 17 TO 04
                CHANGE PARM 18 TO AD
                CHANGE PARM 19 TO FB
                CHANGE PARM 1A TO E6
                CHANGE PARM 1B TO FF
                COPY TRACK 11 NORMAL
BUG ATTACK (NOTE: THIS REQUIRES VERS. 2.2)
                COPY TRACKS 0 -- 12 NORMAL
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO AA
                CHANGE PARM 02 TO D5
                CHANGE PARMS 03 -- 0A TO 00
                CHANGE PARM 0B TO 0C
                CHANGE PARM 16 TO FF
                CHANGE PARM 21 TO 05
                CHANGE PARM 22 TO 02
                COPY TRACKS 1D -- 22 BY 5 SYNC/DECODE
                NOTE:  D-SPEED OF COPY DRIVE MUST BE ADJUSTED TO MATCH NIBBLE
                   COUNT OF ORIGINAL DISK
CANNONBALL BLITZ
                CHANGE PARM 11 TO 00
                CHANGE PARM 16 TO FF
                COPY TRACK 0 DECODE/SYNCHRONIZED
                CHANGE PARM 16 TO 00
                COPY TRACKS 1 -- 22 SYNCHRONIZED
CASINO
                CHANGE PARM 00 TO DB
                CHANGE PARM 11 TO 00
                CHANGE PARM 15 TO C0
                CHANGE PARM 17 TO 08
                CHANGE PARM 19 TO AA
                CHANGE PARM 1E TO DB
                CHANGE PARM 1F TO DB
                COPY TRACKS 0 -- 22 USING DECODE OPTION
CASTLE WOLFENSTEIN
                CHANGE PARM 00 TO FE
                COPY TRACKS 00 -- 22 DECODE
CASTLES OF DARKNESS
                CHANGE PARM 00 TO DB
                COPY TRACKS 00 -- 22 NORMAL
COPTS &  ROBBERS
                COPY TRACK 0 DECODE
                CHANGE PARM 00 TO FE
                CHANGE PARM 02 TO AD
                CHANGE PARM 03 TO DA
                CHANGE PARMS 04 -- 0A TO 00
                CHANGE PARM 0B TO 0C
                COPY TRACKS 1.5 -- F.5 SYNCHRONIZED/DECODED
COUNTY FAIR
                CHANGE PARM 11 TO 00
                CHANGE PARM 15 TO 40
                CHANGE PARM 17 TO 02
                CHANGE PARM 18 TO AF
                CHANGE PARM 1E TO DE
                COPY TRACKS 0 -- 11 NORMAL
CROSS CLUES
```

```
          CHANGE PARM 14 TO FE
          CHANGE PARM 15 TO 60
          CHANGE PARM 17 TO 04
          CHANGE PARM 19 TO BF
          CHANGE PARM 1B TO AA
          COPY TRACKS 0 -- 22 USING DECODE OPTION
CROSSFIRE
          COPY TRACKS 0 -- 22 SYNCHRONIZED
CROSSWORD MAGIC
          CHANGE PARM 00 TO FE
          COPY TRACKS 0 -- 22 SYNCHRONIZED/DECODE
THE CROSSWORD MACHINE
          TRACKS 0 -- 22 NORMAL
CRUSH CRUMBLE AND CHOMP
          COPY TRACKS 0 -- 22 DECODE
CYBER STRIKE
          COPY TRACK 0 NORMAL
          COPY TRACKS 3 -- B NORMAL
          COPY TRACKS 11 -- 1C NORMAL
CYBORG
          COPY TRACK 0 DECODED
          CHANGE PARM 09 TO EB
          COPY TRACKS 1 TO 22 DECODED
CYBORG (NEW VERSION)
          CHANGE PARMS 05 -- 0A TO 00
          COPY TRACKS 0 -- 22 DECODE/SYNCHRONIZED
DARK FOREST
          CHANGE PARM 00 TO FE
          CHANGE PARM 03 TO A5
          CHANGE PARMS 04 -- 0A TO 00
          CHANGE PARM 0B TO 0C
          COPY TRACKS 1 -- 5 SYNC/DECODE
          COPY TRACKS 9 -- 1F SYNC/DECODE
DB MASTER (NEW)
          CHANGE PARM 0 TO FE
          TRACKS 0 -- 5 SYNCHRONIZED INCREMENT BY 1
          TRACKS 6.5 -- 22.5 SYNCHRONIZED INCREMENT BY 1
          NOTE:  DO NOT USE THE DECODE OPTION ON TRACK 1
DB UTILITY PACK
          SAME AS DB MASTER
DESK TOP PLANNER
          CHANGE PARM 11 TO 00
          CHANGE PARM 15 TO 40
          CHANGE PARM 17 TO 03
          CHANGE PARM 18 TO AA
          CHANGE PARM 19 TO EB
          CHANGE PARM 1A TO FD
          COPY TRACKS 0 -- 22 DECODE
DIC'-TIO-NARY
          REQUIRES VERSION 2.2
          COPY TRACKS 0 -- 1F
          CHANGE PARM 0B TO 05
          CHANGE PARM 16 TO FF
          COPY TRACK 20 USING THE DECODE OPTION
          NOTE: THIS PRESERVES THE NIBBLE COUNT
DOG FIGHT (OLD)
          TRACKS 0 -- 1 NORMAL INCREMENT BY 1
```

```
        TRACKS 4 -- 10 NORMAL
DRAGON FIRE
        TRACKS 0 -- 22 NORMAL
        NOTE:  THIS IS A 16 SECTOR DISKETTE
EPOCH
        TRACK 0 NORMAL
        TRACKS 1.5 -- F.5 NORMAL INCREMENT BY 1
EXPEDITER
        TRACKS 0 -- 22 NORMAL
        YOU MAY HAVE TO CHANGE PARM 13 TO 1D
E-Z DRAW
        COPY TRACKS 0 -- 22 DECODE/SYNC
FACLONS:  TRACK 0 NORMALLY
        CHANGE PARM 00 TO FE
        CHANGE PARM 01 TO DF
        CHANGE PARM 02 TO AD
        CHANGE PARM 03 TO DE
        CHANGE PARMS 04 -- 0A TO 00
        CHANGE PARM 0B TO 0C
        COPY TRACKS 1.5 -- 4.5 BY 1.5
        COPY TRACK 5.5
        COPY TRACKS 7 -- A
        COPY TRACKS 10 -- 12
        COPY TRACKS 13.5 -- 14.5
        COPY TRACKS 16 -- 17.5 BY 1.5
        COPY TRACKS 19 TO 1A
        COPY TRACK B.5
FIREBIRD
        COPY TRACK 0 SYNC/DECODE
        CHANGE PARM 00 TO FE
        CHANGE PARM 01 TO DD
        CHANGE PARM 02 TO AD
        CHANGE PARM 03 TO DA
        CHANGE PARMS 04 TO 0A TO 00
        CHANGE PARM 0B TO 0C
        COPY TRACKS 1.5 TO B.5 SYNC.
FLIGHT SIMULATOR (SUBLOGIC)
        ALL TRACKS NORMAL
        TRACKS 0 -- 21 INCREMENT 1.5
        TRACKS 7 -- 8  INCREMENT 1
        TRACK 9.5
FOOSBALL
        COPY TRACK 0 DECODED
        CHANGE PARM 00 TO FE
        CHANGE PARM 01 TO DD
        CHANGE PARM 02 TO AD
        CHANGE PARM 03 TO DA
        CHANGE PARMS 04 -- 0A TO 00
        CHANGE PARM 0B TO 0C
        COPY TRACKS 1.5 TO 8.5 DECODED
        COPY TRACK 9.5 DECODE/SYNC
        CHANGE PARM 0F TO 01
        CHANGE PARM 10 TO 01
        CHANGE PARM 12 TO 7E
        CHANGE PARM 21 TO 17
        CHANGE PARM 25 TO 02
        CHANGE PARM 26 TO 03
```

```
          COPY TRACK A   DECODE/SYNC
          COPY TRACKS B -- 14 DECODE
GAMMA GOBLINS
          USE DECODE OPTION ON ALL TRACKS
          COPY TRACK 0 SYNCHRONIZED
          COPY TRACK D SYNCHRONIZED
          CHANGE PARM 00 TO FE
          CHANGE PARM 01 TO DD
          CHANGE PARM 02 TO AD
          CHANGE PARM 03 TO DA
          CHANGE PARMS 04 -- 0A TO 00
          CHANGE PARMS 0B TO 0C
          COPY TRACKS 1.5 TO B.5 SYNC./DECODE
GENETIC DRIFT
          USE DECODE OPTION ON ALL TRACKS
          COPY TRACK 0
          CHANGE PARM 00 TO FC
          CHANGE PARM 01 TO BB
          CHANGE PARM 02 TO D5
          CHANGE PARM 03 TO DD
          CHANGE PARMS 04 THROUGH 08 TO 00
          CHANGE PARM 09 AND A TO BB
          CHANGE PARM 0B TO 0C
          COPY TRACKS 1 -- 3
          COPY TRACKS 4.5 -- 6 BY 1.5
          COPY TRACKS 7.5 -- B.5 INCREMENT 1
          CHANGE PARM 01 TO D4
          COPY TRACK D
          CHANGE PARM 01 TO AD
          CHANGE PARM 02 TO B5
          CHANGE PARM 03 TO DE
          COPY TRACKS E.5 -- 22.5 INCREMENT 1
GENERAL MANAGER
          COPY TRACKS 0 -- 22 NORMAL
          NOTE: TRECK 3 REQUIRES CHANGING PARM 13 TO 1D
          DO NOT CHANGE PARM 13 ON ANY OTHER TRACK
GORGON
          COPY TRACK 0
          COPY TRACKS 1.5 --F.5 SYNC.
          NOTE:  NEWER VERSIONS MAY USE SNEAKERS COPY INSTRUCTIONS
HELL FIRE WARRIOR
          COPY TRACKS 0 -- 22 DECODE
HI RES CRIBBAGE
          TRACKS 0 -- 22 NORMAL
HI RES ADVENTURE #2
          TRACKS 0 -- 22 NORMAL
INVENTORY MANAGEMET SYSTEM
          COPY TRACKS 0 -- 22 DECODE
          KAVES OF KARKHAN:  TRACKS 0 -- 22 DECODE
LOGO
          COPY TRACK 0
          COPY TRACKS 2 -- 22 NORMAL
          CHANGE PARM 16 TO FF
          COPY TRACK 1
          NOTE: YOU ARE PRESERVING THE NIBBLE COUNT ON TRACK 1
LOWER REACHES OF ASPHAI
          COPY TRACKS 0 -- 22 DECODE
```

```
MOUSKATTACK
      COPY TRACKS 0 -- 22 SYNC
      CHANGE PARM 11 TO 00
      CHANGE PARM 16 TO FF
      COPY TRACK 0 SYNCRONIZED
      CHANGE PARM 16 TO 00
      COPY TRACKS 1 -- 22 SYNCHRONIZED
MISSION ESCAPE
      TRACK 0 DECODE UNREADABLE TRACKS
      TRACKS 1 -- 1D NORMAL INCREMENT BY 1
MISSLE DEFENSE
      TRACKS 0 -- 22 NORMAL
OO-TOPOS
      ALL TRACKS DECODE UNREADABLE TRACKS
      NOTE: THIS IS A 16 SECTOR DISKETTE
OUT POST
      COPY TRACK 0 COMPRESSED
      COPY TRACKS 1.5 -- 8.5 NORMAL
      CHANGE PARM 16 TO FF
      CHANGE PARM 00 TO FE
      CHANGE PARM 01 TO DD
      CHANGE PARM 02 TO AD
      CHANGE PARM 03 TO DA
      CHANGE PARMS 04 -- 0A TO 00
      CHANGE PARM 0B TO 0C
      CHANGE PARM 16 TO FF
      COPY TRACK 9.5 NORMAL NOTE: YOU ARE PRE SERVING THE NIBBLE COUNT
      CHANGE PARM 16 TO 00
      COPY TRACK A DECODE/SYNC
      COPY TRACK 9.5 DECODE/SYNC
PEGASUS II
      TRACKS 0 -- 22 NORMAL
      NOTE: CHANGE PARM 13 TO 1D FOR TRACK 3 ONLY
PFS & PFS REPORTS
      COPY TRACKS 1 -- 13 USING DECODE
      CHANGE PARM 01 TO 93
      CHANGE PARM 02 TO F3
      CHANGE PARM 03 TO FC
      CHANGE PARMS 04 -- 0A TO 00
      CHANGE PARM 11 TO 00
      CHANGE PARM 15 TO E0
      CHANGE PARM 17 TO 04
      CHANGE PARM 18 TO 93
      CHANGE PARM 19 TO F3
      CHANGE PARM 1A TO FC
      CHANGE PARM 1B TO FF
      COPY TRACK 0 USING DECODE
      WRITE PROTECT DISKETTES BEFORE USING
PFS (NEW RELEASE)
      COPY TRACKS 0 -- 1  DECODE/SYNCHRONIZED COMPRESSED
      COPY TRACKS 3 -- 22 DECODE/SYNCHRONIZED COMPRESSED
      CHANGE PARM 14 TO F8
      CHANGE PARM 15 TO 60
      CHANGE PARM 17 TO 04
      CHANGE PARM 19 TO F3
      CHANGE PARM 1A TO FC
      CHANGE PARM 1B TO FF
```

```
            COPY TRACK 2 DECODE/SYNCHRONIZED COMPRESSED (MAX RETRIES 2)
            CHANGE PARM 14 TO FC
            COPY TRACK 0 DECODE COMPRESSED (MAX RETRIES 2)
            WRITE PROTECT THE DISKETTE BEFORE USING
PHANTOMS 5
            TRACK 0 NORMAL
            TRACKS 2 -- 1C NORMAL INCREMENT BY 1
THE PRISONER
            COPY TRACKS 0 -- 22 NORMAL
PULSAR II
            CHANGE PARM 0 TO FE
            COPY TRACKS 2 -- C
            COPY TRACKS 11 -- 19
            COPY TRACKS 1A.5 -- 1D.5
RASTER BLASTER
            COPY ALL TRACKS DECODE/SYNCHRONIZE
            COPY TRACK 0
            CHANGE PARM 00 TO FE
            CHANGE PARM 01 TO AD
            CHANGE PARM 02 TO DE
            CHANGE PARMS 03 TO 0A TO 00
            CHANGE PARM 0B TO 0C
            COPY TRACK 1.5
            COPY TRACKS 3.5 TO F.5 BY 4
            COPY TRACKS 5   TO 11  BY 4
            COPY TRACKS 6   TO 12  BY 4
RETRO-BALL
            USE DECODE OPTION ON ALL TRACKS
            CHANGE PARM 00 TO FE
            COPY TRACK 00 DECODE
            COPY TRACKS 4 -- 6
            COPY TRACKS 9 -- C
            COPY TRACKS E --10
            COPY TRACKS 12 -- 14
            COPY TRACKS 17 -- 1D
            COPY TRACKS 20 -- 22
REVERSAL
            COPY TRACKS 0 -- 2 NORMAL
            COPY TRACK 3.5 NORMAL
            COPY TRACKS 5 -- 22 NORMAL
RINGS OF SATURN
            COPY TRACKS 0 -- 22 DECODE
SABOTAGE
            COPY TRACKS 0 -- 22 NORMAL
SAT ENGLISH (SIDE 1)
            NOTE:  THIS REQUIRES VERSION 2.2
            THIS IS A TWO SIDED DISKETTE.  USE THE DECODE OPTION ON
             ALL TRACKS AND BOTH SIDES.
            COPY TRACK 0 SYNCHRONIZED
            CHANGE PARM 01 TO EE
            CHANGE PARM 02 TO FC
            CHANGE PARM 03 TO 97
            CHANGE PARMS 04 -- 0A TO 00
            COPY TRACKS 1 -- 3 & TRACKS 6 -- 22
            CHANGE PARM 00 TO FE
            CHANGE PARM 01 TO FF
            CHANGE PARM 02 TO FF
```

```
                CHANGE PARM 03 TO DB
                COPY TRACKS 4 -- 5 SYNCH.
                NOTE:   THE COPY PROCESS MAY "HANG UP" DURING THE ANALYZE MODE OF
                 TRCKS 4 & 5.   THIS IS NORMAL; IF IT HAPPENS, PRESS RESET AND
                 TRYTHE TRACK AGAIN.     IF YOU FAIL TO COPY THESE TRACKS
                 PROPERLY, THE DISKETTE WILL CONTINOUSLY ATTEMPT TO REBOOT.
SAT ENGLISH (SIDE 2)
                NOTE: THIS REQUIRES VERSION 2.3
                SEE ALL NOTES FOR SIDE 1.  SIDE 2 IS VERY SIMILAR.
                COPY TRACK 0 SYNC.
                CHANGE PARM 01 TO 97
                CHANGE PARM 02 TO EE
                CHANGE PARM 03 TO D5
                CHANGE PARMS 04 -- 0A TO 00
                COPY TRACKS 1 -- 3 & TRACKS 6 -- 22
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO FF
                CHANGE PARM 02 TO FF
                CHANGE PARM 03 TO DB
                CHANGE PARM 26 TO 06
                CHANGE PARM 28 TO 06
                COPY TRACKS 4 -- 5 SYNC.
SNACK ATTACK
                CHANGE PARM 11 TO 00
                CHANGE PARM 15 TO 40
                CHANGE PARM 17 TO 02
                CHANGE PARM 18 TO AF
                CHANGE PARM 19 TO DE
                COPY TRACKS 0 -- 11 NORMAL
SNEAKERS
                COPY TRACK 0 NORMAL
                COPY TRACKS 1.5 -- F.5 SYNC
SNEAKERS (NEW)
                USE DECODE AND SYNC ON ALL TRACKS
                COPY TRACKS 0 & D.5
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO DD
                CHANGE PARM 02 TO AD
                CHANGE PARM 03 TO DA
                CHANGE PARMS 04 TO 0A TO 00
                CHANGE PARM 0B TO 0C
                COPY TRACKS 1.5 TO C.5
                NOTE FOR TRACK 2.5 ONLY YOU WILL NEED TO CHANGE PARM 00 TO FF
SNOGLE (JOYSTICK)
                COPY TRACKS 0 -- 2 NORMAL
                CHANGE PARM 00 TO FE
                COPY TRACKS 3 -- D NORMAL
SOFT PORN
                TRACKS 0 -- 22 NORMAL
                NOTE: ON TRACK 3 ONLY, CHANGE PARM 13 TO 1D
SOUTHERN COMMAND
                CHANGE PARM 07 TO 00
                COPY TRACK 0 DECODED
                CHANGE PARM 01 TO D4
                CHANGE PARM 03 TO B7
                COPY TRACKS 1 -- 22 DECODED
SPACE EGGS
```

```
                COPY TRACK 0 NORMAL
                COPY TRACK 2 -- 6 NORMAL
                COPY TRACKS 11 -- 13 NORMAL
                COPY TRACKS 14 -- 1A NORMAL
SPACE RAIDERS
                TRACKS 0 -- 4 NORMAL INCREMENT BY 1
SPACE WARRIOR
                USE DECODE OPTION FOR ALL TRACKS
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO DF
                CHANGE PARM 02 TO AD
                CHANGE PARM 03 TO DE
                CHANGE PARM 04 -- 0A TO 00
                CHANGE PARM 0B TO 0C
                COPY TRACKS 1 -- 5 BY 4
                COPY TRACKS 2.5 -- 6.5 BY 4
                COPY TRACK 3.5
                COPY TRACKS 8 -- 11
SPECIAL DELIVERY SOFTWARE (YES, ALL OF IT!)
                COPY TRACKS 0 -- 22 DECODED
STAR THIEF
                NOTE: THIS REQUIRES VERS. 2.2
                COPY TRACKS 0 -- 13 NORMAL
                CHANGE PARM 16 TO FF
                CHANGE PARM 21 TO 05
                CHANGE PARM 22 TO 02
                COPY TRACK 22 NORMAL
                NOTE: YOU WILL HAVE TO OPEN THE COPY DRIVE TO ADJUST THE D-SPEED
                THIS IS REQUIRED TO PRESERVE THE NIBBLE COUNT.
STRATEGIC SIMULATIONS
                (ALL APPEAR TO BE THE SAME)
                SEE SOUTHERN COMMAND
SUICIDE
                COPY TRACK 0 DECODED
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO DF
                CHANGE PARM 02 TO AD
                CHANGE PARM 03 TO DE
                CHANGE PARM 04 -- 0A TO 00
                CHANGE PARM 0B TO 0C
                COPY TRACKS 11.5 -- 20.5 BY 1.5 DECODED
SUPER SCRIBE
                COPY TRACKS 0 -- 22 NORMAL
                NOTE: FOR TRACK 3 ONLY CHANGING PARM 13 TO 1D MAY BE REQUIRED.
SUPER STELLER TREK
                USE DECODE OPTION ON ALL TRACKS
                COPY TRACK 0
                CHANGE PARM 00 TO FE
                CHANGE PARM 01 TO EE
                CHANGE PARM 02 TO EF
                CHANGE PARM 03 TO FE
                CHANGE PARMS 04 -- 0A TO 00
                CHANGE PARM 0B TO 0C
                COPY TRACKS 1 -- 22
SWASHBUCKLER
                CHANGE PARM 00 TO DB
                CHANGE PARM 11 TO 00
```

```
          CHANGE PARM 15 TO C0
          CHANGE PARM 17 TO 08
          CHANGE PARM 19 TO AA
          CHANGE PARM 1E TO DB
          CHANGE PARM 1F TO DB
          COPY TRACKS 0 -- 22 DECODED
TEMPLE OF ASPHAI
          COPY TRACKS 0 -- 22 DECODE
TETRAD
          COPY TRACKS 0 -- 22 NORMAL
THIEF
          USE THE DECODE OPTION FOR ALL TRACKS
          COPY TRACK 0
          CHANGE PARM 00 TO FE
          CHANGE PARM 01 TO AE
          CHANGE PARM 02 TO DE
          CHANGE PARM 03 TO FE
          CHANGE PARMS 04 -- 0A TO 00
          CHANGE PARM 0B TO 0C
          COPY TRACKS 1 -- 3
          COPY TRACKS 6 -- 22
          CHANGE PARM 01 TO DB
          CHANGE PARM 02 TO AD
          CHANGE PARM 03 TO FE
          CHANGE PARM 0F TO 00
          COPY TRACK 4 SYNCHRONIZED
          CHANGE PARM 0F TO 01
          COPY TRACK 5 SYNCHRONIZED AND COMPRESSED
          NOTE:  DRIVE SPEED MUST BE EXACTLY SET ACCORDING TO APPLE'S
            D-SPEED TEST.  VERS. 2.2 AND ABOVE MAY COPY TRACKS 4 & 5 BY
            PRESERVING THE NIBBLE COUNT.  TO DO THIS, CHANGE PARM 16 TO FF
            AND DO NOT CHANGE PARM 0F OR COMPRESS TRACK 5.
THRESHOLD
          COPY TRACKS 0 -- 22 NORMAL
          NOTE: IT MAY BE NECESSARY TO CHANGE PARM 13 TO 1D FOR TRACK 1
            ONLY
TWERP
          COPY TRACK 0 COMPRESS
          COPY TRACKS 1.5 -- E.5 NORMAL
          COPY TRACK 1A
ULTIMA
          PLAYER MASTER SIDE
                0 -- 22 NORMAL
          PROGRAM SIDE:
                CHANGE PARM 00 TO FE
                COPY TRACKS 0 -- 22 NORMAL
                NOTE: SET RETRIES TO 3 AND RECOPY TRACKS WITH READ OR WRITE
                ERRORS AS MANY TIMES AS REQUIRED TO COPY PROPERLY.
ULYSIS
          COPY TRACKS 0 -- 22 NORMAL
          NOTE: CHANGE PARM 13 TO 1D FOR TRACK 3 ONLY
VISICALC ///
          COPY TRACKS 0 -- 22 SYNCHRONIZED
          NOTE: BACK IT UP II + VER. 2.1 USERS CHANGE PARM 11 TO 02
VISICALC 16
          (NOTE VERY EARLY VERSIONS MAY COPY TRACKS 0 -- 22 NORM).
          COPY TRACK 0 DECODED
```

```
              COPY TRCKS 2 -- 16 DECODED
VISIDEX
       CHANGE PARM 11 TO 00
       CHANGE PARM 15 TO 60
       CHANGE PARM 17 TO 03
       CHANGE PARM 18 TO AA
       CHANGE PARM 19 TO EB
       CHANGE PARM 1A TO FD
       COPY TRACKS 0 -- 22 DECODE
VISIFILE
       CHANGE PARM 11 TO 00
       CHANGE PARM 15 TO 40
       CHANGE PARM 17 TO 03
       CHANGE PARM 18 TO AA
       CHANGE PARM 19 TO EB
       CHANGE PARM 1A TO EC
       COPY TRACKS 0 -- 22 DECODE
VISITREND/VISIPLOT (SEPARATE VERSIONS COPY ALIKE)
       COPY TRACKS 0 -- 6 DECODE
       COPY TRACKS 8 -- 22 DECODE
       CHANGE PARM 11 TO 02
       CHANGE PARM 15 TO 40
       CHANGE PARM 17 TO 02
       CHANGE PARM 18 TO AA
       CHANGE PARM 19 TO EB
       COPY TRACK 7 DECODED
VISITERM
       COPY TRACKS 0 -- 5 DECODE
       COPY TRACKS 7 -- 22 DECODE
       CHANGE PARM 11 TO 00
       CHANGE PARM 15 TO 20
       CHANGE PARM 17 TO 03
       CHANGE PARM 18 TO AA
       CHANGE PARM 19 TO EB
       CHANGE PARM 1A TO FC
       COPY TRACK 6 DECODED
WIZARD AND THE PRINCESS
       COPY TRACKS 0 -- 22 NORMAL
WORD HANDLER
       COPY TRACKS 11 -- 22 NORMAL
       COPY TRACK 0 DECODE/SYNC.
       CHANGE PARM 01 TO FB
       CHANGE PARM 02 TO DF
       CHANGE PARM 03 TO DD
       CHANGE PARMS 04 -- 0A TO 00
       CHANGE PARM 0B TO 0C
       COPY TRACKS 1 -- C SYNC.DECODE
ZORK I & II (NEW VERSIONS)
       CHANGE PARM 05 TO 00
       COPY TRACKS 0 -- 22 DECODE
```

ADDITIONAL PARMETERS FOR LOCKSMITH
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These parmeters were excluded from the most recent locksmith
parm list

AIRSIM-1
     T0-T2 sync: A8=B5 78=00 79=12 47=FF
     T9-T22 sync
     T3-T8 sync: 79=0E (T8 error OK)
     (Write protect before running)
APPLE III BUSINESS GRAPHICS
     T0-T22 SYNC: 18:50 19:00 40:04 46:96 75:00 76:00 77:00 78:00
                  79:12
APPLE PANIC **
     T0 norm
     T1-TC: 44=DD
APPLE WRITER (APPLE ///)
     T0-T22 sync
APPLEWRITER II
     T0-T22: 46=96 54=12
APPLE PFM
     T0-T22: 10:04 16:40 46:96 51:00 53:0B 54:12 81:CF 82:F3 83:FC
CANNONBALL BLITZ **
     T0-T22: 46=96 54=12 53=00
     T3-TF : 4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
CROSSFIRE **
     T0-T22 normal
     T1: 4C=1B APPLY PATCH NC30 (VERSION 4.0 ONLY)
         4C=1B 57=00 E9=02 (USES NIBBLE COUNT SEE TECH NOTES)
         (version 4.1 only)
CYBORG
     T0-T22: 47=FF 48=F8 4D=00 4E=00 51=00 40=04
DATA REPORTER
     T0-T22 norm: 4D=00 46=96 54=12
FIREBIRD
     T0: 18=20 19=00 46=96 4D=00 4E=00 52=00 53=00 54=12 57=00 40=20
     T1.5-TB.5 by 1 sync: 72=00 73=00 77=00 78=00 79=12 7C=00 40=20
                          19=00 44=DD 45=AD 46=DA
FS-1
     T0 norm
     T1.5-T21 by 1.5: 44=DB 45=AB 46=BF 40=20 4F=00 54=12
     T7-T8
     T9.5
GOLD RUSH **
     T0-T22: 46=96 4D=00 4E=00 21=02 26=06 51=00
HIRES CRIBBAGE and HIRES FOOTBALL **
     T0=T5 sync
     T6-T22 normal
JAWBREAKER
     T0-T22 norm
     T3: 34=FF 44=DF 45=EF 46=F7 50=00 52=00 53=00 54=12
MOUSEKATTACK
     T0-T22: 46=96 54=12 53=00
     T23: 4C=1B 57=00 E9=02   (USES NIBBLE COUNT SEE TECH NOTES)
NIGHTMARE GALLERY **
     T0-T22: 46=96 54=12 51=00 4D=00 4E=00

PRESIDENT ELECT
        T0-T22: 25=19 6B=00
SCREENWRITER II **
        T0-T2: 4D=00
SUPERSCRIBE II
        T0-T22 norm
        T3 norm: 45=00 50=00
SUPERSCRIBE II **   Same as PEGASUS II
TAX PREPARER
        T0-T22: 46=96 54=12 4C=19
THEIF
        T0-T22: 83=FF 4F=0B 53=00
        T4-T5 sync: 38=02 1E=02 19=00 12=01 7C=00
TIGERS IN THE SNOW
        T0-T22: 25=19 6B=00
TIME ZONE (Disk One)
        T0-T4 sync
        T5-T22 norm
TIME ZONE (All Other Disks)
        T0-T22 norm
THRESHOLD
        T0-T22 normal
        T1-T23 by 22: 4C=1B   (patch NC30 for version 4.0)
                      4C=1B 57=00 E9=02 (USES NIBBLE COUNT SEE TECH
                                          NOTES) (version 4.1 only)
ULTIMA
        T0-T22: 1E=0B
VISICALC (APPLE ///)
        T0-T22 SYNC
VISICALC (APPLE /// ADVANCED VERSION)
        T0-T22 SYNC: 18:50 19:00 40:04 46:96 75:00 76:00 77:00
                     78:00 79:12
WIZARDRY
        T0-T9 normal
        TF-T22 normal
        TA-TE sync: 36:01
        (Note- uses nibble count which requires drive speed
        adjustment with either the <> signs or by removing drive cover
        and adjusting actual speed. Also, you MUST put a write protect
        tab on the copy disk BEFORE running.)
WIZARDRY **
        T0: 36:01 21:02 46:96 (USES NIBBLE COUNT SEE TECH NOTES)
        T1-T22 sync: 36:00
        (note- see notes on above procedure for WIZARDRY)

NIBBLE AWAY PARMS

THRESHOLD/ TRACKS 0-22 USE ERASE DEST
ULLYSSES SAVE AS THRESHOLD(WORKS GREAT)
OUT POST SAME AS EPOCH
CROSS FIRE SAME AS THRESHOLD
AUTOBAHN-Sync Auto Half
APPLE PANIC--Sync tracks 0-D
BACK IT UP--Copy trk 0 then 1.5-4.5
D.B. MASTER VER. 3--Copy using sync, but set C04 to 40,or between
                    25-28 depending on you disk drive
EPOCH--Same as sneakers
EXECUTIVE SECRETARY GOLD LABEL--(parms) C06/A9,C07/AB normal copy
FS1.FLIGHT SIMULATOR.--You have to do this one by hand.Copy 0-21 in
                    1 1/2 increments, then copy 7,8,9 1/2
GORGON--Auto Half, copy track 0 thencopy 1.5 till you get errors
         (approx $F)
HEAD-ON--Auto Half
LOCKSMITH 3.1--COPY 0 THEN 2.5-4.5 THEN D-10
MULTI-DISK CATALOG III-All sync trks0-23
ORBITRON--Same parms as sneakers use sync, then copy track 0 then
            1.5-E.5, then change parm C03 to 03 then copy track F.5
PADDLE GRAPHICS--COPY 0-23
PEAGASUS II--Eras dest.,Sync Auto Half
PORNOPOLY--Copy 0-23 half tracks
PULSAR II--Reduced error mode,0-1A,then 1A.5-22
RINGS OF SATURN-(parms) C06/FB,C07/FC use full tracks in sync
SNEAKERS--(PARMS) C03/50,C0C/50,C0D/01, C0E/02-Copy track 00,then
                    1.5-22
SNOGGLE--Auto Half
STAR CRUISER--Auto half
ULTIMA--Sync and reduced error
VISICALC 3.3--Sync copy

COPY ALL OF THE FOLLOWING USING SYNC
AND IF A LOT OF ERRORS USE REDUCED
ERROR MODE:

    MISSLE DEFENSE
    CRIBBAGE
    SABATOGE
    THIRLOGY
    OLD SUPER SCRIB

COPY ALL OF THE FOLLOWING ERASING THE
DEST. DISK AND IMEDIATLEY COPYING USE-
ING HALF TRACKS AND MAYBE SYNC:

    EXPEDITER
    CRANSTON MANNOR
    GOBBLER
    SOFTPORN
    NEW SUPER SCRIPT

```
HADRON- SAME AS BEER RUN
VISICALC ///-use sync

BEER RUN:PARMS C03/40
              C0C/40
              C0D/01
              C0E/02
   SELECT ERASE DEST:
   COPY TRK 0 USING SYNC
   COPY TRKS 1.5-D.5 SYNC

FIREBIRD C0C/10
         C0F/31
COPY TRK 0 USING SYNC, ERASE DEST
COPY TRKS 1.5-B.5 SYNC, ERASE DEST.
COPY TRK C.5-D.5 USING DATA MOVER



LOCKSMITH (3.1) PARMS
---------------------
BACK IT UP--Copy track 0 then 1.5 to 4.5 inc 1. When booting, wait
            until you hear drive head seaking, then open door.  Close
            door after menu appears
D.B. MASTER--Copy tracks,0 to 5 sync, then tracks 6 to 22,normal
FLIGHT SIMULATOR--Copy tracks 0 to 21 inc 1.5,then tracks 7to 8 inc 1
            then track 9.5 to 9.5 inc 1
MICROSOFT ADVENTURE--sync,0-23 full trks
ONLINE SYSTEMS SOFTWARE--Copy 0 to 5 in sync then 6-22 in normal copy
SUPER DISK COPY 3.4-- All sync, 0-23 in full tracks. when booting
            wait till disk drive begins to choke.
            (brrrr....) press reset. It will come up
            working great.
TRANQUILITY BASE--Do the following type: '/' '1' 'return' '80'
                'return' 'esc' 'esc' then copy regular
VISICALC--Copy 0 to 23 in sync
ZORK--Do the following type:
      '/' 32' 'return' '88' 'return' '/' '1' 'return' '6' 'esc'
      'esc' then copy regular
```

Advanced Parameters

DB Master

DB MASTER IS AN INTERESTING CRACK BECAUSE IT USES A VARIETY OF
PRO-TECTION SCHEMES AND BECAUSE IT WORKS BACK AND FORTH BETWEEN THE
PROTECTED ORIGINAL AND COPYA DATA DISKS. ALSO THE PROGRAMS ARE ALL
WRITTEN IN APPLE SOFT, BUT NO CATALOG OR VTOC EXISTS, AND THE ENTIRE
SYSTEM IS RUN THROUGH EXTENSIVE DOS ALTERATIONS TO CONTROL DISK ACCESS
DIRECTLY THROUGH RWTS. BECAUSE THE CATALOG, VTOC, ERROR MESSSAGE AND
OTHER ROUTINES ARE NOT NEEDED, STONEWARE HAS OVERWRITTEN THESE AREAS
OF MEMORY WITH SIGNIFICANT CHANGES.

TO PROCEED WITH THIS CRACK IT IS ESSENTIAL THAT YOU HAVE SOME WAY
OF INTERRUPTING THE PROGRAM AND GETTING INTO THE MONITOR. EITHER THE
OLD NON-AUTOSTART MONITOR ROM, INTEGER BASIC CARD, OR A GOOD NMI BOARD
ARE A MUST. BENEATH APPLE DOS AND BAG OF TRICKS (OR ANOTHER GOOD
ZAPPER) ARE ALSO ESSENTIAL, AND 'DISK-O-DOC II' ALONG WITH EITHER MON+
FROM MICROSEEDS OR THE INSPECTOR ARE VERY USEFUL. THIS CRACK WAS DONE
ON THE NEWEST VERSION OF DB MASTER (VERSION 3.02!), AND WHILE THE GUTS
OF IT WILL WORK ON THE EARLIER VERSIONS, SOME OF THE LO-CATIONS (BOTH
IN RAM AND ON THE DISK) ARE DIFFERENT.

IMPORTANT WHENEVER YOU ATTEMPT TO BOOT YOUR CRACKED OR
HALF-CRACKED DB MASTER, BE SURE TO HAVE IT WRITE PROTECTED!! ** ALSO,
IT IS ALWAYS A GOOD IDEA TO WRITE PROTECT YOUR ORRIGINAL DATA DISKS
WHENEVER YOU RE-BLOCK THEM.

1) THE FIRST STEP TO THIS CRACK IS TO GET THE ENTIRE DISK
TRANSFERED OVER TO A DISK WITH STANDARD DOS FLAGS. THIS IS EASY FOR
TRACKS 0-5 AS THE ONLY PROTECTION HERE IS THE ALTERATION OF THE ENDING
ADDRESS AND DATA FLAGS FROM DE AA TO DF AB. AN IOB TYPE OF PROGRAM
CAN BE WRITTEN (SEE OLD MUSE MESSAGE) TO READ THESE TRACKS WITH THE
ALTERED FLAGS, AND THEN TO WRITE THEM ONTO ANOTHER DISK WITH STANDARD
FLAGS. BE CAREFUL THOUGH TO INITIALIZE YOUR DISK WITH VOLUME #001 AS
DB MASTER CHECKS FOR THIS.

2) TRACKS 6.5 TO 22.5 ARE HARDER TO DEAL WITH BECAUSE NOT ONLY
ARE THE FLAGS ALTERED BUT ALSO THE TRACKS ARE HALF TRACKED AND YOU
NEED TO GET THEM WRITTEN OUT ONTO THE STANDARD DISK ON WHOLE TRACKS.
YOU CAN WRITE A HALF TRACK ROUTINE INTO YOUR IOB PROGRAM (SEE EARLIER
HALF-TRACKING MESSAGE), OR IF YOU HAVE THE VIDEX ENHANCER II YOU CAN
CREATE TWO KEYBOARD MACROS AND DO THE WHOLE JOB IN ABOUT FIVE MINUTES
USING DISK-O-DOC II. D-O-D LETS YOU ALTER THE DOS FLAGS THEN READ ANY
TRACK OR HALF TRACK, THEN SET THE FLAGS TO STANDARD AND WRITE THE
TRACK BACK OUT TO ANY OTHER TRACK OR HALF TRACK. IT IS CUMBERSOME TO
DO A WHOLE DISK THIS WAY UNLESS YOU HAVE THE VIDEX ENHANCER, BUT THEN
IT IS A SNAP. WHEN YOU ARE DONE WITH THIS YOU HAVE A COPYA DB MASTER,
BUT IT WON'T RUN WITHOUT SOME CHANGES.

3) FIRST YOU HAVE TO ALTER THE DOS SO THAT IT DOESN'T LOOK FOR
THE ENDING FLAGS DF AB. THESE FLAGS RESIDE AT MEMORY LOCATIONS B935,
B93F, B991 AND B99B, AND CAN BE FOUND ON THE DISK ON TRACK 0, SECTORS
2 AND 3 WHERE THEY CAN BE ZAPPED TO THE STANDARD VALUES.

4) NOW IS A GOOD TIME TO ZAP THE ROUTINE THAT SETS THE RUN FLAG (D6) TO 80 TO PREVENT YOU FROM LISTING THE PROGRAMS. YOU CAN EA EA THE ROUTINE ON TRACK 0, SECTOR E. NOW AFTER YOU HALT THE PROGRAM AND ARE IN THE MONITOR ALL YOU HAVE TO DO IS HIT CTRL-C FOR BASIC AND THEN LIST TO SEE WHAT IS GOING ON.

5) IF YOU BOOT THE DISK AT THIS POINT (WRITE PROTECT!), IT WILL START LOADING BUT WILL BURP WHEN IT GETS TO TRACK 6 BECAUSE IT WANTS TO READ TRACK 6.5. IF YOU LOOK AT THE DOS SEEKABS ROUTINE IN MEMORY AT B9A0.B99F YOU WILL SEE THAT IT HAS BEEN ALTERED TO JSR TO B430. EXAMINING B430.B446 SHOWS THAT THE COUNTERS FOR THE TRACK NUMBER BEING READ ARE COMPARED TO #$0C, AND IF FOUND TO BE GREATER ARE INCREMENTED BY ONE BEFORE RETURNING TO SEEKABS. THIS IS THE HALF TRACK ROUTINE, AND WORKS BECAUSE THE APPLE DISK DRIVE STEPPER MOTOR REQUIRES 2 PULSES TO INCREMENT ONE WHOLE TRACK, AND ONLY 1 PULSE TO INCREMENT A HALF TRACK. $0C IS DECIMAL 12, WHICH IS THE NUMBER OF PULSES REQUIRED TO GET TO TRACK 06. THIS ROUTINE TESTS FOR THE NUMBER OF PULSES BEING REQUESTED AND IF THEY ARE FOUND TO BE EQUAL TO OR EXCEED 12 ONE EXTRA PULSE IS ADDED. TO DISABLE THIS ROUTINE CHANGE B434 TO 60, B438 TO EA EA, AND B441 TO EA EA EA. THESE CAN BE ZAPPED ON TRACK 0, SECTOR D. YOU COULD ALSO CHANGE IT BY INCREASING $0C TO $47 (DECIMAL 71) OR HIGHER, OR BY NOT JSRING TO THE ROUTINE IN THE FIRST PLACE, BUT THIS LATTER WAY IS DANGEROUS BECAUSE THE ROUTINE MIGHT BE ENTERED FROM MORE THAN ONE LOCATION.

6) NOW THE PROGRAM WILL RUN, BUT WHEN YOU TRY TO ACCESS A DATA DISK, IT BOMBS! WHY? WELL, BECAUSE THE PROGRAM THINKS THAT THE FLAGS ARE DIFFERENT ON THE DATA DISKS THAN THEY ARE ON THE PROGRAM DISK, AND BECAUSE OF THIS IT CHANGES THE FLAGS BEFORE READING THE DATA DISK. SINCE WE HAVE ALREADY CHANGED THE FLAGS TO STANDARD THE PROGRAM IS ACTUALLY SCREWING UP THE FLAGS BEFORE ACCESSING THE DATA DISK. IF YOU INTERUPT THE PROGRAM AT THIS POINT AND EXAMINE B935, B93F, B991 AND B99B YOU WILL FIND THAT THEY NO LONGER ARE DE AA, BUT ARE NOW DD A9, OR THEY HAVE BEEN DECREMENTED BY ONE EACH! SINCE ON THE ORIGINAL PROGRAM THE FLAGS ARE +1 HIGHER THAN STANDARD, THE PROGRAM GOES THROUGH A ROUTINE OF LOWERING THESE FLAGS BY -1 WHEN ACCESSING A DATA DISK, AND RAISING THEM BACK BY +1 WHEN REACCESSING THE PROGRAM DISK. WE NEED TO FIND THIS ROUTINE AND DEFEAT IT. A SCAN OF B944.B99F (THE DOS RDADR ROUTINE) REVEALS THAT THE DB MASTER VERSION IS NO DIFFERENT FROM STANDARD, SO THE CHANGE MUST BE MADE BEFORE RWTS GETS THIS FAR. FINDING THIS ROUTINE IS A BIT DIFFICULT AND TAKES SOME SEARCHING, BUT EVENTUALLY WE ARE LEAD VIA THE AREA WHERE THE FILE MANAGER USED TO RESIDE (B37F.B396) TO A SERIES OF ROUTINES AT B4E4.B52F WHICH ARE USED TO INCREMENT AND DECREMENT THE VALUES OF THE ENDING ADDRESS AND DATA FLAGS. BY CHANGING B50C TO EA EA EA, B511 TO EA EA EA, B516 TO EA EA EA AND B51B TO EA EA EA WE DISABLE THIS ROUTINE. THESE CAN BE ZAPPED ON TRACK 0, SECTOR E.

7) NOW THE PROGRAM WILL RUN, AND RUN JUST LIKE ANY NIBBLE COPIED COPY WILL RUN. THIS IS DANGEROUS. STONEWARE IS REALLY HUNG UP ON THE ISSUE OF NON FACTORY AUTHORIZED COPIES AND SO THEY HAVE PUT TRAPS IN THE PROGRAM TO CHECK THE PROGRAM DISK TO SEE IF IT IS FACTORY ISSUE OR A NIBBLE COPY. ANY ONE WHO HAS USED LOCKSMITH OR NAII ON DB MASTER KNOWS THAT ALTHOUGH THE COPIES APPEAR TO WORK FINE, EVERY ONCE IN AWHILE THE DAMN THINGS EITHER HANG UP OR EAT YOUR DATA DISKS. THIS USUALLY HAPPENS AFTER YOU HAVE PROCESSED ALOT OF DATA. THE PARMS FOR THESE PROGRAMS ARE SPECIFIC THAT YOU MUST SYNCHRONIZE THE TRACKS, SO

DB MASTER IS CHECKING FOR THE PROPER SYNCHRONIZATION AND SCREWING YOU
IF IT FINDS IMPROPER SYNCHRONIZATION. AFF7 IS THE BEGINNING OF THE
STANDARD DOS ROUTINES THAT DEAL WITH THE VTOC AND THE DIRECTORY.
SINCE DB MASTER DOES NOT USE ANY OF THESE ROUTINES, STONEWARE HAS
CHOSEN THIS AREA OF MEMORY TO PUT IN SOME TESTS ON THE PROGRAM DISK,
AND SOME DATA EATING ROUTINES. A STUDY OF B02F.B0F7 REVEAL A RAT'S
NEST OF ROUTINES DESIGNED TO TAKE SAMPLE READINGS OF THE PROGRAM
DISK'S CONTENT, TEST THEM, AND THEN TO BOMB IF THE EXPECTED RESULTS
ARE NOT ACHIEVED. THE CONSEQUENCE OF FAILING THESE TESTS IS TO END UP
AT B0E7 WHICH IS A ROUTINE THAT WIPES OUT MEMORY FROM $0400 ON. ALSO,
WE FIND THAT TESTS ARE MADE OF LOCATIONS 3F1 AND 3F0, AND AFTER
EXAMINATION OF THE FIRST THREE APPLESOFT PROGRAMS, WE FIND THAT THESE
LOCATIONS CONTAIN THE SERIAL NUMBER OF THE DISK!

        IF YOU HAVE GOTTEN THIS FAR THE FIX FOR THIS AREA IS PRETTY
STRAIGHT FORWARD, AND IT RESIDES ON TRACK 3, SECTOR 2. ZAP B06B TO EA
EA EA, B073:EA EA EA 18 EA, (THE 18 IS CLEAR CARRY), B082:18 EA,
B08F:EA EA EA EA EA A9 AND B097:EA EA. THEN MOVE ON TO B0D0 WITH 18
EA EA, B0D8:18 EA, B0E4:18 EA AND SET B0E7 THROUGH B0F5 TO 60'S.
THERE IS UNDOUBTEDLY A MORE ELEGANT WAY TO HANDLE THIS, BUT THIS
APPEARS TO DO THE JOB.

        8) NOW THAT YOU HAVE DISABLED THE SERIAL NUMBER CHECK YOU CAN
PROCEED TO ZAP THE SERIAL NUMBERS ON THE DISK AND MAKE THEM WHATEVER
YOU WANT. THEY ARE RECORDED TWICE ONCE AT THE END OF TRACK 0, SECTOR
E AND IN REVERSE ORDER AS THE LAST TWO BYTES ON TRACK 4, SECTOR E.

        NOW YOU ARE FINISHED, AT LEAST I THINK SO. I HAVE TRIED OUT THE
CRACKED VERSION AND IT APPEARS TO WORK FINE, BUT KNOWING STONEWARE,
THERE ARE PROBABLY MORE TRAPS BURIED SOMEWHERE WAITING TO JUMP UP AND
GOBBLE YOUR DATA. SO BE CAREFUL UNTIL YOU HAVE HAD ALOT OF EXPERIENCE
WITH IT, AND IF YOU HAVE ANY PROBLEMS, LET ME KNOW AND WE'LL TRACK
THEM DOWN.

        THE UTILITY PAKS CAN BE CRACKED USING THE SAME LOCATIONS WITH A
FEW SMALL CHANGES. DOUBLE CHECK WHAT YOU ARE ALTERING TO BE SURE.
NOW YOU CAN START TO HAVE SOME FUN. THE REASON THE PROGRAM IS SO DAMN
SLOW IS THAT IT IS ALL IN APPLESOFT. SOMEBODY OUT THERE SHOULD SEE IF
HE CAN GET THE PROGRAMS OUT AND COMPILE THEM! WOULDN'T THAT BE NICE.
ALSO, IT WOULD BE A MAJOR BENEFIT TO MODIFY THE PROGRAM SO THAT IT
ACCESSED A RAM CARD AND IF YOU HAD A 128K CARD THE SPEED INCREASE
COULD BE SIGNIFICANT. GO TO IT!

Magic Window II
    1.   RUN COPYA
    2.   CTRL-C
    3.   70
    4.   CALL-151
    5.   B925:18 60
    6.   B988:18 60
    7.   BE48:18
    8.   9DBFG
    9.   RUN (COPYA THE DISK)
   10.   SECTOR EDIT: TRACK 0, SECTOR A, BYTE 02, TO EA EA EA

Tubeway
    1.   BOOT SYSTEM MASTER

2.   CALL -151
    3.   B925:18 60
    4.   B942:18
    5.   B988:18 60
    6.   BE48:18
    7.   9DBFG
    8.   RUN COPYA.
    9.   SECTOR EDIT: TRACK 0, SECTOR 3, BYTE 42, FROM 38 TO 18.
   10.   NOW YOU HAVE A COPYA VERSION.   TO MAKE IT IN A FILE DO
          DO THE FOLLOWING.
   11.   SECTOR EDIT: TRACK 22, SECTOR E, BYTES CE AND CF, FROM 00 40 TO
          69 FF.
   12.   BOOT THE COPY.   WHEN THE TITLE PAGE APPEARS PRESS THE SPACE BAR
          TO COMPLETE LOADING.
   13.   AFTER LOADING, TYPE C051 AND PRESS RETURN KEY
   14.   BOOT A SLAVE DISK THAT HAS NO HELLO BY TYPEING C600G
   15.   BSAVE TUBEWAY, A$900,L$8700 ON ANY INITAIALIZED 3.3 DISK THAT
          HAS ROOM FOR A 138 SECTOR FILE.
   16.   ** IMPORTANT NOTE **
          IF YOU WANT THE PROGRAM TO CONTINUE WRITING THE HIGH SCORE TO
          YOUR DISK THEN PROTECT TRACK 3, SECTOR 0 IN THE VTOC. OTHERWISE
          WRITE PROTECT.

Music Construction Set
    1.   COPYA MCS ONTO BLANK DISK
    2.   PUT THE COPY IN THE DRIVE
    3.   BLOAD A4
    4.   CALL -151
    5.   4C62:18
    6.   4C66:18
    7.   BSAVE A4,A18944,L19296

War (Adventure International)
    1.   INIT A DOS 3.3 DISK
    2.   CALL-151
    3.   B925:18 60
    4.   B988:18 60
    5.   3D0G
    6.   BRUN FID
    7.   FID THE FILES ONTO THE NEW DISK
    8.   BOOT THE NEW DISK
    9.   LOAD HELLO
   10.   SAVE HELLO
   11.   BLOAD WAR
   12.   CALL-151
   13.   802:65
   14.   3D0G
   15.   BSAVE WAR,A$800,L$6C00
   16.   NOW YOU HAVE A COPYA-ABLE COPY

The Market Analizer
    1.   COPYA THE DISK
    2.   SECTOR EDIT TRACK 1B SECTOR E, BYTES 62,63,64,76,77,78;
          CHANGE THEM ALL TO 'EA'

Prisoner II
    1.   COPY-A THE ORIGINAL DISK

```
   2.   UNLOCK IF.SHAPE
   3.   BLOAD  IF.SHAPE
   4.   CALL -151
   5.   57A2:78 5B 61
   6.   3DOG
   7.   BSAVE IF.SHAPE,A$5600,L$26E
   8.   LOCK IF.SHAPE
```

Empire I: World Builders
```
   1.   USE DEMUFFIN PLUS TO COPY ALL THE FILES TO STANDARD DOS 3.3
   2.   BLOAD IF.SHAPE
   3.   CALL -151
   4.   *575F: A9 9E 8D 89 79 A9 2A
        *5766: 8D 87 79 60
   5.   BSAVE IF.SHAPE,A$5600,L$282
```

Software Dimension's Accounting Plus II
```
   1.   ALL FOUR DISKS ARE NOT COPY PROTECTED (COPYA-BLE)
   2.   THE FOLLOWING WILL ALLOW THE PROGRAM TO RUN PERFECTLY
        WITHOUT THE FIRMWARE CARD.

        A.   PUT THE FIRMWARE CARD IN ANY SLOT YOU LIKE (EXCEPT 0).
        B.   BSAVE FIRMWARE,A$CX00,L$100   ( X=SLOT NUMBER OF CARD )
        C.   LOAD SYSHELLO.PROG
        D.   TYPE  '22 HIMEM:36863'
        E.   TYPE  '24 PRINT CHR$(4);"BLOAD FIRMWARE,A$9000" '
        F.   SAVE SYSHELLO.PROG
        G.   BLOAD APII.CODE
        H.   CALL -151
        I.   197C:1D
        J.   1B72:C3
        K.   BSAVE APII.CODE,A$800,L$1406

   3.   YOU NOW HAVE A VERSION OF ACCOUNTING PLUS II THAT NO LONGER
        NEEDS THE FIRMWARE CARD.

   NOTE:   THIS APPLIES ONLY TO VERSION 1.3 OF THE SOFTWARE
           BUT THE TECHNIQUE WORKS FOR OTHER VERSIONS..ONLY
           THE LINE NUMBERS AND/OR LOCATIONS ARE DIFFERENT.
```

Aztec
```
   1.   BOOT SYSTEM MASTER
   2.   CALL-151
   3.   B925:18 60
   4.   B988:18 60
   5.   BE48:18
   6.   B942:18
   7.   RUN COPYA AND COPY THE DISK.
   8.   NOW USE A SECTOR EDITOR AND ACCESS TRACK 0 SECTOR 3 AND CHANGE
        BYTE 42 FROM 38 TO 18.
```

Softerm
```
   1.   DEMUFFIN 'SOFTERM'
   2.   TO RUN IT, TYPE 'BRUN SOFTERM'
```

Data*Trans
```
   1.   BOOT DOS
```

2. CALL -151
    3. B942:18
    4. RUN COPYA
    5. COPY DISK
    6. SECTOR EDIT TRACK 0, SECTOR 3:
        BYTE 42 FROM 38 TO 18

Jump Jet
    1. CTRL-C AFTER POWERUP
    2. CALL -151
    3. B925:18 60
    4. B988:18 60
    5. BE48:18
    6. BRUN FID
    7. FID TO A NORMAL DOS 3.3 DISK

Homeword
    1. COPYA DISK
    2. SECTOR EDIT TRK:06 SEC:02, CHANGE BYTES: A3 A4 A5   TO: EA EA EA

Flight Simulator 2
    1. USE ECHO 1.0 COPIER STRAIGHT.   IGNORE ALL ERRORS!

How To Make Demuffin
    1. Bload muffin
    2. Call-151
    3. Type the following
        1155:00 1E
        115B:D9 03
        1197:A0 20
        15A0:A0 D2 D3 C9 C4 C5 CE D4
        15A9:A0 C4 AE CF AE D3 AE
        15B6:B2
        15F7:C4 C5
        20A0:A9 1E 8D B9 B7 20 FD AA 48
        20A9:A9 BD 8D B9 B7 68 60
    4. Bsave DEMUFFIN,A$803,L$1900

How To Make Dumuffin Plus
    1. Boot 3.3 DOS
    2. Type INT (For integer)
    3. Bload MUFFIN
    4. Call -151
    5. Type the following   (Initialises the prgm aid relocation code)
        D4D5G
        1900 B800.BFFF CTRL-Y (Relocates the routine)
        1900 B800.BA10 CTRL-Y
        1155:00 19 03
        1197:A0 20
        15A0:A0 D2 C5 D3 C9 C4 C5 CE
        15AB:D4 A BD 8D B9 B7 68 60
    6. Bsave DEMUFFIN PLUS,A$803,L$1900

The Mask Of The Sun
    1. Boot DOS
    2. CALL-151
    3. B942:18

4.   Run COPYA and copy disk
5.   SECTMOD Track 0 Sector 3 Byte 42 from 38 to 18
6.   Access the HELLO program with a text editor and delete the line
     that says to BRUN the file that is called something like
     LL.(V27)

THE SERPENT'S STAR
1.   Do exactly the same as The Mask Of The Sun but then replace the
     DISK1 file with the same file from Mask of the Sun.

Hyperspace Wars
1.   Boot 3.3 System Master and type FP
2.   INIT HELLO on a new disk
3.   BLOAD MUFFIN
4.   CALL-151
5.   Enter:
        1A08:D6
        1A76:D6
        1A63:18
        1BD5:60 24
        1DA6:D5
6.   Then from monitor, run MUFFIN by typing: 803G
7.   Now MUFFIN all the files onto the disk you INIT.
8.   When asked what file, type '=', and copy over existing HELLO
     name.

Copy II Plus 4.1
1.   INIT a slave disk and delete the HELLO program.
2.   CALL-151
3.   9600<C600.C6FFM N 96F8:4C 59 FF
4.   Insert COPY+ disk and type 9600G
5.   9800<800.9FFM N 96F8:4C 01 98
6.   9808:98 N 98B3:4C 59 FF N 9600G
7.   4A00<B000.BFFFM N 5A00<800.8FFM
8.   Boot slave disk from the first step 9)   CALL-151
10.   800<5A00.5AFFM N 5A00:A2 00 BD 00 4A 9D 00 B0 E8 D0 F7 EE 04 5A
      EE 07 5A AD 07 5A C9 C0 90 E8 A9 60 8D FF 02 4C 10 10 N 1900:
      4C 10 10 N 7FD:4C 00 5A
11.   BSAVE COPY 2+ UTILITIES,A$7FD,L$5223
12.   Repeat steps 2-6
13.   3C9A:4C 59 FF N 1900G
14.   Press RETURN when prompted
15.   Boot Slave disk from first step
16.   CALL-151
17.   Type 8FB:A9 60 8D FF 02
18.   BSAVE BIT COPIER,A$8FB,L$2805

Zoom Grafix
1.   DEMUFFIN all the files to a normal disk
2.   Boot normal DOS; insert disk containing the DOS 3.3 ZOOM GRAFIX
      files
3.   LOAD GRAFIX II
4.   Type: 1395 LM=0
5.   SAVE GRAFIX II
6.   LOAD GRAFIX
7.   Type: 101 GR: ?CHR$(4);"MAXFILES1"
8.   Type: 102 POKE 2049,97: KB=49152: KS=KB+16: NORMAL

9.   Type: 104
10. Type: 150 VTAB 21: POKE 103,1: POKE 104,96:
          POKE 24576,0: POKE 36873,0:DR=36864
11. SAVE GRAFIX
12. LOAD GRAFIX SET-UP
13. Type: 105 POKE 47094,0
14. SAVE GRAFIX SET-UP

BPI Accounting Series
1.   Boot your System Master and run Copya. When you are asked for
     the source slot, hit CTRL-C then type CALL -151 for the
     monitor. Put This patch in Copya as follows:
               *B925:18 60   *B988:18 60   *BE48:18
     Now type 3D0G, RETURN to get back to Applesoft and then type
     RUN80 and run Copya on BPI. The disk drive should only burp
     when it hits Track 2, Sector F.
2.   Boot up a sector editor and read Track 2, Sector 4. At Byte +20
     enter: A9 90 8D 14 A4 A2 BA 3E 15 03 CA D0 FA 4C 54 1E. After
     you write this back out to the disk you have a cracked, Copya
     version which runs perfectly.
3.   BPI has also screwed around with all of the DOS commands so
     that you can't load, list or understand the programs. The
     changes are as follows:
          LOAD = LDLD   RUN = B CTRL-K
          DELETE = I CTRL-K   CLOSE = I CTRL-K
          READ = B CTRL-L   EXEC = P CTRL-L
          WRITE = I CTRL-L   POSITION = B CTRL-P
          OPEN = P CTRL-P   APPEND = I CTRL-P
          RENAME = B CTRL-G   CATALOG = P CTRL-G
          MON = PR#   NOMON = B CTRL-Z
          PR# = P CTRL-Z   IN# = I CTRL-Z
          FP = LIST   MAXFILES = B CTRL-T
          INT = CALL   BSAVE = B CTRL-E
          BLOAD = P CTRL-E   BRUN = I CTRL-E
          VERIFY = BUZZOFF
     ZAP Byte +BE from 49 to 4F on Track 1, Sector 7 to change List
     to Lost so that you can list the programs using list.

THE GALACTIC ADVENTURES BY SSI
1.   Copy the 2 disks using Nibbles Away II with Address D4 AA B7
2.   Write Protect both copies
3.   Boot up Disk #1 and hit CTRL-C to break it. This should be
     done after you hear the disk head travel up and down in the
     drive.
4.   Flip integer card switch up and hit reset then type D6:0 and
     <CR>. Next type 9DBFG to return to Basic.
5.   Type '& LOAD "HELLO"'
6.   Type '2 <CR>'
7.   Remove write protect tab
8.   Type '& DEL "HELLO"' then '& SAVE "HELLO"'
9.   Write protect the disk.

Pandora's Box and Money Munchers
1.   CALL-151
2.   B992:EA EA
3.   9DBFG
4.   Copy the entire disk with Copya

5.   Read Track 0, Sector 3 and change byte 91 to 'DE'
        6.   Write it Back

ZORK I, Zork II, Zork III, Deadline, Starcross
        1.   BOOT YOUR SYSTEM MASTER
        2.   CALL-151
        3.   TYPE:
             B925:18 60
             B988:18 60
             BE48:18
        4.   3DOG
        5.   POKE 47355,41:POKE 47356,0
        6.   RUN COPYA
        7.   MODIFY TO,S2:
             LOC $5D TO AD
             LOC $FB TO 29
             LOC $FC TO 0

Home Accountant
        1.   BOOT YOUR SYSTEM MASTER
        2.   CALL-151
        3.   B992:EA EA
        4.   3DOG
        5.   BRUN FID
        6.   COPY ALL FILES

Apple Logo
        1.   COPY DISK
        2.   READ IN TO,S $A
        3.   FIND "A4 7E 4C 41 40"
        4.   CHANGE THE "A4" TO "AE"

Ultima II
        1.   Copya Ultima II
        2.   Use a sector to read in track 3, sector C.
        3.   Change byte 84 to EA
        4.   Change byte 85 to EA
        5.   Change byte 86 to EA
        6.   Rewrite the Sector
        7.   This does not work for the galatic disk.

Suspended
        1.   BOOT NORMAL DOS
        2.   ]CALL-151
        3.   *B925:18 60
        4.   *B988:18 60
        5.   *BE48:18
        6.   *3DOG
        7.   ]POKE 47355,41
        8.   ]POKE 47356,0
        9.   Run Copya
        10. Use a sector editor and do the following:
             READ TRACH 0,SECTOR 2:
               CHANGE BYTE 5D TO AD
                  "   "   FB   29
                  "   "   FC   00
        11. Write the sector back

Visicalc
    1.   BOOT REGULAR DOS. 3.3
    2.   INIT A SLAVE DISK THEN DELETE THE HELLO PROGRAM.
    3.   BOOT VISICALC.
    4.   PRESS RESET----NOTE OLD-F8 MONITOR ROM REQUIRED OF SOMETHING
THAT ALLOWS YOU RESET INTO THE '*' PROMPT.
    5.   8800<800.8FFM
    6.   BOOT THE SLAVE DISK CREATED IN STEP 2.
    7.   A964:FF
    8.   800<8800.88FFM
    9.   7FD:4C 37 5A ---> TO JUMP TO THE ENTRY POINT
    10. BSAVE VISICALC,A$7FD,L$B7FF

· PCS
    1.   COPY PCS WITH NIBBLES AWAY TRACKS 0-22 NORMAL.
    2.   USING BAG OF TRICKS INITIALIZE THE DISK USING THE PRESERVE DATA
         OPTION 16 SECTOR FORMAT.

Pig-Pen
    1.   INIT A 3.3 DISK
    2.   BOOT PIG PEN
    3.   RESET INTO MONITOR W/INTEGER CARD
    4.   TYPE: 800: 4C 00 00
                 A964: FF
    5.   GET INTO BASIC
    6.   BSAVE IT TO YOUR INITED DISK
    7.   COPY THE PIG PEN HELLO

Micro-Wave
    1.   BOOT UP NORMAL DISK AND TYPE:
    2.   CALL-151
    3.   B925:18 60
    4.   B988:18 60
    5.   B348:18 60
    6.   3D0G
    7.   RUN COPY-A AND COPY DISK
    8.   USE SECTOR EDITOR TO READ TRACK 1, SECTOR C
    9.   CHANGE BYTE 51 TO EA
         "   "   52 TO EA
         "   "   53 TO EA
    10. REWRITE SECTOR & WRITE PROTECT DISK

Cannonball Blitz
    1.   COPY ORIGINAL USING COPY-A
    2.   USE SECTOR EDITOR AND LOAD
         TRACK 17, SECTOR E
    4.   CHANGE BYTE FROM 49 TO 60
    5.   REWRITE SECTOR

A.B.M
    1.   Boot up the disk and press Ctrl-C before it finishes booting
    2.   Type new and catalog the disk (this should catalog, if not
         re-boot and go back to step 1
    3.   Load the basic programs 1 by 1 saving each one to tape before
         loading the next. After 1 is saved re-boot a slave disk, load
         the program from the tape, make sure it looks right and save it

under the same name as on the A.B.M. disk (do this for each basic program on the disk).

4. Bload the machine language programs and either make a note of where the start and the length by looking at location AA61,AA62 for length and AA72, AA73 for the starting address; or Bload them at location 2000 and estimate at the length.

5. After that is done move one machine program at a time into location 2000 and reboot the disk you're saveing the cracked version on, Bsave the same name and the location you put it at.

6. Now you Bload the machine program at the correct location in memory and resave it under the same name and the now correct address and length.

7. You should now be able to just run the hello program and the game should work. If not see if you can figure out what's wrong and go back and redo that part of it.

8. HINTS
   If you cannot find the address and length of some of these machine programs, a few are listed in the basic programs.

   The address to bload the 2 control programs can be found in the basic program "ADJUST". They both have the same address which is A$300. The lenght can be found near the end of the listing in ADJUST.

   The basic program ABM must be changed to just machine language. This can be done easily by just saving the machine language info between $80F and $2000 to tape then reloading it once re-booted and Bsaving it. The Hello and ADJUST programs must then be changed so that they say " BRUN ABM " instead of " RUN ABM ".

   The machine file "PIC" can be simply Bloaded (which puts it between $2000 and $4000), re-booted and Bsaved on your cracked disk with no problem whatsoever.

The Einstein Compiler
   1. COPYA THE DISK
   2. Sector edit track 8 sector 4, bytes 2A-2C change from BD 8E C0 to 4C E2 91.

Graphic Processing System, Professional version
   1. DEMUFFIN THE FILES
   2. LOAD HELLO
   3. CALL-151
   4. C0B:60
   5. SAVE HELLO

Videx Preboot disks
GENESIS the Adventure Creator
The Visible Computer
Any other program win Lock It UP Protection
   1. If you have access to Lock It Up (version 5.1 or later, preferably), just use it to protect a disk on which you have put DEMUFFIN. You can then run DEMUFFIN under the altered DOS (if you don't have Lock It Up, you will probably have to load DEMUFFIN from tape as putting it in memory and then moving it for the final crack does not work well with programs protected

with Lock It Up) and take all the files off.
2.   Genesis and The Visible Computer have some additional
     protection that checks for the altered DOS. In Genesis, just
     list the program and delete the line that is a CALL to an
     address in DOS (A line number above 40000). In The Visible
     Computer you must load the long Applesoft program and then
     immediately type DEL 1,1 to delete the line that prevents
     listing. You will then find a line about 1/2 way through the
     program that is a CALL to a PEEKed address. Delete this and
     you will have cracked the program.

The Artist
    1.   Copy disk with COPYA
    2.   Boot DOS
    3.   Unlock MAIN MENU
    4.   BLOAD MAIN MENU
    5.   CALL -151
    6.   4231: 60 60... (Type 36 60s all together)
    7.   BSAVE MAIN MENU, A$4000, L$A4D

Executive Briefing System
    1.   INITALIZE DESTINATION DISK.
    2.   COPY TRACKS 0-21 NORMAL
    3.   WITH A SECTOR EDITOR - TRACK 0 - SECTOR 0 - CHANGE BYTE #48
         FROM 00 TO 4A.
    4.   TRACK 22 IS NOT USED.

Data Factory
    1.   BOOT 3.3 MASTER
    2.   CALL -151
    3.   *B942:18
    4.   3DOG
    5.   BRUN FID
    6.   COPY BOTH DISKS
    7.   DO THE FOLLOWING ON BOTH DISKS-
         A.   LOAD TDF
         B.   DELETE LINE 5
         C.   SAVE TDF
         D.   BLOAD AMPER FACTORY.OBJO
         E.   CALL -151
         F.   *8340: EA EA EA
         G.   *BSAVE AMPER FACTORY.OBJO,A$8240, L$1305

Visiterm 1.1
    1.   USE COPYA TO COPY THE DISK
    2.   UNLOCK VISITERM
    3.   BLOAD VISITERM
    4.   CALL-151
    5.   *2118:60
    6.   *9DBFG
    7.   BSAVE VISITERM,A$2000,L$01F0

Marauder
    1.   BOOT 3.3 DOS
    2.   CALL -151
    3.   *B942:18
    4.   3DOG

```
    5.   RUN COPYA
    6.   GOTO TRACK 11 - SECTOR 7 - BYTE #8B - CHANGE TO 60

VC - Expand
    1.   BOOT VC - EXPAND
    2.   CALL-151
    3.   *4000<900.2116M
    4.   BOOT SLAVE DISK
    5.   BSAVE VCX.BRUN,A$900,L$1816

Knight Of Diamonds
    1.   FRONT SIDE -
    A.   BOOT LOCKSMITH 4.0
    B.   COPY TRACK 0-9 SYNC
    C.   COPY TRACK 10-22 SYNC
    D.   CHANGE PARAMETER 36:01
    E.   COPY TRACK 9-F SYNC
    F.   WRITE PROTECT
    2.   SCENARIO
    A.   CHANGE PARAMETERS 36:01 46:96
    B.   COPY TRACK 0
    C.   CHANGE PARAMETER 36:00
    D.   COPY TRACKS 1-22 SYNC

Shadowhawk
    1.   BLOAD HEAD.PIC
    2.   CALL-151
    3.   4000:60
    4.   BSAVE HEAD.PIC,A$2000,L$2150
    5.   BLOAD HAWK.PIC
    6.   4000:60 60 60 60 60 60 60 60
    7.   4008<4000.4007M
    8.   4010<4000.400FM
    9.   4020<4000.401FM
    10.  4040<4000.403FM
    11.  4080<4000.407FM
    12.  4100<4000.40FFM
    13.  BSAVE HAWK.PIC,A$2000,L$2150

Softporn
    1.   TRANSFER THE FILES WITH MUFFIN OR DEMUFFIN ON A 3.3 DISK
    2.   BOOT DISK
    3.   HIT RESET
    4.   LOAD HELLO
    5.   GO TO MONITOR
    6.   120D:60
    7.   9DBFG
    8.   SAVE HELLO

Visidex
    1.   BOOT VISIDEX
    2.   HIT RESET
    3.   PUT NORMAL 3.3 DISK IN DRIVE
    4.   8C2:EA EA EA EA EA
    5.   9DBFG
    6.   BSAVE VD1,A$800,L$4800
    7.   BSAVE VD2,A$9CF0,L$10
```

```
    8.    BSAVE VD3,A$B600,L$100
    9.    WRITE AN EXEC PROGRAM TO --
    A.    BLOAD VD1
    B.    BLOAD VD2
    C.    BLOAD VD3
    D.    CALL 2051

Visifile
    1.    COPYA VISIFILE
    2.    GOTO TRACK 22 SECTOR 4 BYTE 2D -- CHANGE FROM OA TO OF

Congo
    1.    BOOT 3.3 DISK
    2.    CALL-151
    3.    *C091 C091 D000<9D00.BFFFM
    4.    BOOT GAME DISK
    5.    HIT RESET AND GO IN MONITOR
    6.    *C090 C090 9D00<.D000.F2FFM C091
    7.    7FD:4C OB
    8.    9DBFG
    9.    16CA:4C OO 48
   10.    A964:FF
   11.    BSAVE CONGO,A$7FD,L$8F03

Galaxy (From Avalon Hill)
    1.    USE COPY II+ 4.1 TO COPY DISK.  YOU MUST CHANGE THE DOS VERSION
          ON BOTH A AND B DRIVES TO DOS 3.2 FIRST.
    2.    USE MUFFIN TO CONVERT ALL THE FILES TO DOS 3.3
    3.    THATS IT! (COPYA VERSION!)

Data Reporter
    1.    COPYA THE DISK (IGNORE THE ERR)
    2.    RUN HELLO (ON ORIGINAL)
    3.    'QUIT' THE PROGRAM
    4.    PUT COPY IN DRIVE
    5.    BSAVE HELLO.OBJ,A$9400,L$06FF
    6.    LOCK HELLO.OBJ
    7.    UNLOCK HELLO
    8.    63999 PRINT D$;"BLOAD HELLO.OBJ":RETURN
    9.    SAVE HELLO
   10.    LOCK HELLO
   11.    THAT'S IT!
```

LOCKSMITH TECHNICAL NOTES
--------- --------- -----

(based on most frequently asked questions)
We are maintaining an extensive and detailedlist of disks which
LOCKSMITH will copy, as well as any parameter changes or patches
which the user must make to copy certain disks.

We are working hard to provide users with necessary parm changes as
we determine them. We openly solicit user input regarding LOCKSMITH
parameters which work for certain disks.

If, after you make the recommended parameter changes and you are
still unable to copy the disk in question, follow these instructions:

   1. Make sure your disk drive speed is correct.
   2. Retry the copy reversing the order of the disk drives used.
   3. If possible, attempt the copy on a different apple or set of
      drives to make sure that the problem is not your disk drives.
   4. If all fails, write us about the problem including all
      pertinent information about what attempts you made to copy the
      disk. If we are able to solve your problem, we will contact you.

Some protected disks use a technique known as nibble counting. This
technique is based on the fact that all APPLE disk drives run at
slightly different speeds, and even the speed of a specific diskdrive
varies slightly over time. Disks which are protected by this method
count the nibbles on a given track and record this unique number
somewhere else on the disk. When the disk is booted by the user
, the nibble count on the track in question is checked against
the correct value. Simply copying the track will almost always write
a different number of nibbles due to disk drive speed variation.

LOCKSMITH 4.1 has a provision for nibble counting, and will preserve
nibble counts on any track requested. To request nibble count
preservation, set parm 36 to 01. (This is automatically done for the
user when parm 4C is set to 1B.) After the track is written to the
copy disk, the nibbles are counted and compared to the original count
to be preserved. The difference is shown as a four-digit hex number
preceeded by '<' or '>' to indicate to the user which way to manually
adjust the count. The count may be adjusted in one of two ways.
Either the disk speed adjustment pot can be turned in the direction
indicated by the '<' or '>' arrows (see user manual regarding disk
speed adjustment), or a limited amount of adjustment can be done from
software without actually adjusting the disk speed.

To adjust the nibble count from software, press either '<' or '>' as
indicated, and wait until the speaker begins beeping. The speaker
will beep rapidly once for each nibble that the track is being
shortened or lengthened. Then press the return key (or any key other
than '<' and '>') and allow the nibble count routine to test the
track again. When the nibble count is within the tolerance value
specified by PARM 37 (normally 00), the track will be considered
copied correctly. This technique may seem cumbersome, but it is the
only way in which a track may be copied while preserving the nibble

count

Note that nibble count adjustment from software (using '<' and '>')
will not work if a typeahead buffer is installed on the APPLE. To
perform nibble count preservation, either remove the typeahead buf
fer, or adjust the disk speed pot directly.

When the nibble-editor is entered from the main menu, the track is
read into the buffer with no LOCKSMITH analysis whatsoever. No
nibbles will be indicated as self-sync (inverse), as this is
determined when analysis occurs during a disk copy operation. Also,
ctrl-B and ctrl-E will place the cursor at the beginning and end of
the buffer, because track-start and track-end are also determined by
analysis during disk copy.

To enter the nibble-editor after analysis by LOCKSMITH, perform a
copy operation, specifying manual error retry. Open the door of the
copy disk drive to cause a verify error (error code 8) and enter the
nibble editor by selecting: 5. Nibble-Edit Current Track Data. In
this way you may nibble-edit a track after LOCKSMITH has performed
analysis on it.

THE CHEAT GUIDE
--- ----- -----

Compiled By

Mike Moore

Contents:

Instructions
Tested Hints
Untested Hints
Hints That Failed Our Test
Notes

```
                      The Cheat Guide
                      ---  -----  -----


        Thank you for buying The Cheat Guide.  If you have any questions
concerning this guide please feel free to mail us at:

Moore's Microware
417 Persimmon Road
Walnut Creek, CA  94598

        To use The Cheat Guide you must have some knowledge of
Applesoft, DOS, and a little bit of machine language.  This Guide
was NOT made for beginners.

        We are currently trying to collect as many cheat hints as
possible.  If you have any you would like to donate to Moore's
Microware, we would be more then glad to receive them.

        The cheating hints have been arranged in three groups.  The
first group are cheating hints that we have tested and have worked.
We cannot say it will work with your copy.  The second group are
hints that we have not tested.  The last group are hints that we
have tested, but failed to work.  The hints from this group could
still possibly work with your copy of a game.

        Moore's Microware cannot be responible for any damages caused
by using these hints.  We also can not be responible if they don't
work.

        For many of the hints, you need to have a broken or un-copy-
protected version of the program.  For copy-protected disks and
other informaton refer to the 'Notes' section in the back.

        For ordering information contact us on the Source at TCT492 or
CompuServe at 71016,150.  Mail us at the address below.  Dealer
inquires welcome.


        Moore's Microware
        417 Persimmon Road
        Walnut Creek, CA  94598

Thank you,


Mike Moore
```

Tested Hints
------ -----

A.E.
    1.   Bload A.E.
    2.   Call -151
    3.   EE1: ## (##= The number of men wanted in hex.)
    4.   Type 7FDG to start.

Alien Ambush
    1.   Bload Alien Ambush
    2.   Call -151
    3.   60E9: 80 (This is the most ships possible.)
    4.   4000G

Beer Run
    1.   Bload Beer Run
    2.   Call -151
    3.   C64: ## (##= The number of men wanted in hex.)
    4.   800G

Borg
    1.   Press shift-ctrl-M-N while you are playing to show the
         different levels.

Cannonball Blitz (More Men)
    1.   Bload Cannonball Blitz
    2.   Call-151
    3.   868C: ## (##= The number of men wanted in hex.)
    4.   7FDG

Cannonball Blitz (Fast Music)
    1.   Bload Cannonball Blitz
    2.   Call-151
    3.   8F76: A0 01
    4.   3D0G
    5.   Call 2045

Choplifter
    1.   While playing press ctrl-L
    2.   Type a number from 1-3 to go to that level.

Creepy Corridors
    1.   Bload Creepy Corridors
    2.   Call-151
    3.   86A: 08 (This is the most men possible without messing up
              the program.)
    4.   800G

Evolution
    1.   Use a sector editor
    2.   Read Track 5, Sector 5
    3.   Change Byte #31 to ##. (##= The number of men wanted in hex.)

Galaxian (Lower bonus ship score)

```
      1.   Brun Apple Galaxian
      2.   Hit Reset (Do not use autostart roms.)
      3.   4886: ## (##= The thousands digit of bonus ship in hex.)
      4.   4800G


Gold Rush
      1.   Bload Gold Rush
      2.   Call -151
      3.   BE3: ## (##= The number of men wanted in hex.)
      4.   7FDG


Labyrinth
      1.   Run Labyrinth
      2.   Press 'Esc', 'K', 'A', 'Y'
      3.   Press 9 to get more ships
      4.   Press any number between 1-8 to go to that level.


Mars Cars
      1.   Bload Mars Cars
      2.   Call -151
      3.   7024: ## (##=  The number of cars wanted in hex.)
      4.   3FDG


Microwave (Only One Enemy)
      1.   Press Reset when hi-res screen appears.
      2.   Call -151
      3.   8146: 0
      4.   8100G


Miner 2049er (#1)
      1.   Run Game
      2.   Get to where the program asks you one or two players.
      3.   Type '#' and a number between 0 and 9.
      4.   You will start at that level.  (0= level 10)


Sea Dragon
      1.   Boot Game
      2.   Hit Reset when ship apears on left.
      3.   For unlimited air:
           A.   8C32: 00
           B.   8C59: 00
      4.   For no damage to sub:
           A.   8C61: EA EA EA
           B.   8C77: EA EA EA
           C.   8C6E: EA EA EA
      5.   5C40G


Serpentine
      1.   While playing the game do the following.
      2.   Press 'Esc'
      3.   Press '!' and '$'
      4.   Repeat step 3 for as many ships as you want.


Snapper
      1.   Bload Snapper
      2.   Call -151
      3.   851: ## (##= The number of men wanted in hex.)
```

4.   7FDG

Sn0ggle
     1.   Run Game
     2.   Press 'Shift-Ctrl-M' when you die (when the pie is falling
          apart)
     3.   This will give you 3 guys.

Soft Porn
     1.   Boot Game
     2.   Go into the Casino
     3.   Bet a negative sum at 21 and loose.
     4.   Repeat step 3 until you have enough money.

Space Kadet
     1.   Bload Space Kadet
     2.   Call -151
     3.   5DDE: ## (##= The number of men wanted in hex.)
     4.   7FDG

Space Quarks
     1.   Bload Space Quarks
     2.   Call -151
     3.   3C54: ## (##= The number of men wanted in hex.)
     4.   BDFG

Taxman (No Ghosts)
     1.   Bload Taxman
     2.   Call -151
     3.   505C: EA EA EA
     4.   800G (Try 4000G if 800G fails.)

Taxman (More Men)
     1.   Bload Taxman
     2.   Call -151
     3.   522B: ## (##= The level wanted to start at in hex.)
     4.   5231: ## (##= The number of men wanted in hex.)
     5.   800G (Try 4000G if 800G fails.)

Threshold
     1.   For Broken Copy:
          Bload Threshold
          Call -151
     2.   For Copy-protected disk:
          Boot Game
          Hit Reset after all loaded in
     3.   For Unlimited Ships:
          45B0: EA EA EA
          7ECD: EA EA EA
     4.   For No Laser Overheat:
          7666: 4C 7D 76
     5.   For Unlimited Fuel:
          7623: EA EA EA
          7839: EA EA EA
     6.   6B00G

Viper

```
    1.   Bload Viper
    2.   Call -151
    3.   CCD: C0
    4.   7FDG

Wargle
    1.   Bload Wargle
    2.   Call -151
    3.   7250: ## (##= The number of men wanted in hex.)
    4.   Start Game

Wavy Navy (Unlimited Ships)
    1.   Bload Wavy Navy
    2.   Call-151
    3.   1E63: EA EA EA
    4.   931G  (Use Ctrl-R to break out.)

Wizardry
    1.   Create a bishop in your party.
    2.   Inspect something, but instead of 1-8 type '9'.
    3.   Repeat step 2 until you get 'Success'.
    4.   Your bishop will now have 100,000,000 experience points!
```

Untested Hints
                          -------- -----

Akalabeth
    1. Boot Game
    2. Create a Warrior character
    3. Buy several magical amulets
    4. Use them when you are not near a creature.
    5. First you will be turned into a toad.
    6. Continue using them, and will you be turned into a lizard
        man.
    7. Each time you are turned into a lizard man, your attributes
        will increase immensely.

Alien
    1. Type Ctrl-W.

Bug Attack
    1. Bload Bug Attack
    2. Call-151
    3. 49D1: ## (##= The number of beetles wanted in hex.)
    4. 8FDG

Bug Battle
    1. Bload Bug Battle
    2. Call-151
    3. 3FE6: EA EA EA
    4. 931G

Color Planetoids
    1. Bload Color Planetoids
    2. Call-151
    3. 9B7: ## (##= The number of ships wamted in hex.)
    4. Start Game

Falcons II
    1. Run Falcons II
    2. Select (1) Ship
    3. Hit Reset
    4. Now you have 100 Ships.

Frogger
    1. Bload Frogger
    2. Call -151
    3. 6504: ## (##= The number of frogs wanted in hex.)
    4. Start Game

Money Munchers
    1. Bload Money Munchers
    2. Call -151
    3. 1020: ## (##= The number of men wanted in hex.)
    4. Start Game

Neptune
    1. Bload Neptune
    2. Call -151

```
   3.   8290: ## (##= The number of ships wanted in hex.)
   4.   Start Game

Night Crawler
   1.   Bload Night Crawler
   2.   Call -151
   3.   340A: ## (##= The number of men wanted in hex.)
   4.   3300G

Quad 6112 (More Men)
   1.   Bload Quad 6112
   2.   Call -151
   3.   980: ## (##= The number of men wanted in hex.)
   4.   2FCG

Quad 6112 (Unlimited Men)
   1.   Bload Quad 6112
   2.   Call -151
   3.   3E87: EA EA EA
   4.   2FCG

Raiders Of The Lost Ring
   1.   Run Game
   2.   Press Reset
   3.   685A: ## (##= The number of ships wanted in hex.)
   4.   803G

Spy's Demise
   1.   Bload Spy's Demise
   2.   Call -151
   3.   60AB:   ## (##= The number of men wanted in hex.  Do not exceed
        $7F.)
   4.   3F00G

Star Blazer
   1.   Bload Star Blazer
   2.   Call -151
   3.   1023: ## (##= The number of men wanted in hex.)
   4.   Start Game

Super Puckman
   1.   Bload Super Puckman
   2.   Call -151
   3.   84D: 0A
   4.   147B: 04
   5.   1C40: 60
   6.   800G

Taxman II (No Ghosts)
   1.   Bload Taxman II
   2.   Call -151
   3.   84CA: 60 N F00G

Wargle
   1.   Bload Wargle
   2.   Call -151
   3.   7250: ## (##= The number of men wanted in hex.)
```

4. Start Game

```
                    Hints That Failed Our Test
                    -----  ----  ------  ---  ----


Bolo
    1.    Bload Bolo
    2.    Call-151
    3.    19A8:   EA EA EA
    4.    1D38:   EA EA EA
    5.    1100G

Canyon Climber
    1.    Bload Canyon Climber
    2.    Call -151
    3.    3FFF: ## (##= The number of men wanted in hex.)
    4.    2000G

Eliminator
    1.    Bload Eliminator
    2.    Call -151
    3.    17AC: ## (##= The number of ships wanted in hex.)
    4.    7FDG

Falcons
    1.    Bload Falcons
    2.    Call -151
    3.    685B: ## (##= The number of ships wanted in hex.)
    4.    3FDG

Gobbler
    1.    Bload Gobbler
    2.    Call -151
    3.    6046: ## (##= The number of men wanted in hex.)
    4.    6000G

Hell Storm
    1.    Bload Hell Storm
    2.    Call -151
    3.    6F25: ## (##= The maximum level to start at in hex.)
    4.    6F4A: ## (##= The number of men wanted in hex.)
    5.    Start Game

Miner 2049er (#2)
    1.    Run Game
    2.    Get to where the program asks you one or two players.
    3.    Hit Reset
    4.    764: EA EA EA
    5.    841: ## (##= Level that player one starts at.)
    6.    842: ## (##= Level that player two starts at.)
    7.    981G

Snake Byte
    1.    Run Game
    2.    Press Reset
    3.    16AE: ## (##= The number of snakes wanted in hex.)
    4.    7265: ## (##= The level wanted to start out.)
    5.    77EAG
```

Ribbit
    1.   Bload Ribbit
    2.   Call -151
    3.   70DB: ## (##= The number of frogs wanted in hex.)
    4.   7FDG

Rocket Command
    1.   Bload Rocket Command
    2.   Call -151
    3.   4563: ## (##= The number of bases wanted in hex.)
    4.   Start Game

Sneakers
    1.   Bload Sneakers
    2.   Call -151
    3.   6EBB: ## (##= The number of ships wanted in hex.)
    4.   C050 C055
    5.   329G

Succession
    1.   Bload Succession
    2.   Call -151
    3.   6B71: ## (##= The number of men wanted in hex.)
    4.   D00G

Swashbuckler
    1.   Bload Swashbuckler
    2.   Call -151
    3.   AE0: ## (##= The number of men wanted in hex.)
    4.   1800G

Thief
    1.   Bload Thief
    2.   Call -151
    3.   4873: EA EA EA
    4.   3FFDG

Whenever the last step in a game cheat is 'Start Game' you must do the following steps to start the game:

1.   AA72.AA73
2.   You will come up with something like this:
     AA72- #1 #2
3.   Type the following using the numbers above:
     #2 #1 G

Many of the game cheats will work for copy-protected disks. This will only work on cheats that bload in step one and Call -151 in step two and do not say 'Start Game' as the last step. Do the following Steps:

1.   Boot Game
2.   Let the game fully load in
3.   Hit Reset (Do not use autostart Roms)
4.   Follow the rest of the steps

'Hex' is the number system the computer uses. Ask your Apple dealer or someone for more information concerning the hex numbering system. ('FF' is the highest number in hex.)

Sometimes the game will not work if you put in too many extra men. Some will not work if you put a letter (A-F) as the hex number.

-----> Adventure International

Rear Guard *
       0-22 : Addr = D5 AA 96
               Sectmod (F=16,C=OFF,T=03,S=03)
                     Change address 00 from AE to 60
Sea Dragon *
       0-21 : Addr = D5 AA 96
      22-22 : Addr = FC 87 E9 BA
              Overide glitch detect, overide nibble filter, overide
              sync convert, overide standardizer, nibble count
              sync size = 08, shift N- = 00, findmax = 03

-----> Add Software

Super Packman V3.0 *
       0-E : Addr = DD AD DA

-----> American Educ Computer

Micro-Read Master *
       0-2 : Addr = D5 AA 96
       4-22
       3-3 : Addr = F7 AB D5
Micro-Read 1-3 *
       0-22 : Addr = D5 AA 96

-----> Automated Simulations

Temple of Apshai *
       0-2 : Addr = D5 AA B5
       3-22 : Addr = D5 AA 96
Star Warriors *
Hellfire Warrior *
Rescue At Rigel *
       0-22 : Addr = D5 AA B5

-----> Avante-Garde Creations

Jumpjet *
       0-21 : Addr = D5 AA 96
      22-22 : DATAMOVER

-----> Budgeco

Pinball Construction Set *
       0-5 : Addr= D5 AA 96
       8-E
       11
       13-1B

-----> California Pacific

Bill Budge's Space Album *
     0-0 : Addr = D5 AA B5
     1-B : Addr = D5 AA AD

-----> Continental Software

LA Land Monopoly *
     0-2 : Addr = D5 AA 96
     3-22: Addr = D6 AA 96

-----> Data Most

A Round About *
     0-10 : Addr = D5 AA 96
     11.5 - D.5 : Overide Standardizer

-----> Double Gold Software

Lock It Up 4.1 *
     0-22 : Addr= EB D5 AA 96 FF
            Write protect before booting

-----> Dept. of Natural Sciences, ORU

Nutricheck-81 *
     0-22 : Addr = D5 AA 96

-----> Eduware

The Terrorist *
Space I *
Space II *
     0-22 : Addr = D5 AA B5

-----> Hayden

Reversal *
     0-0 : Addr = D5 AA 96
     1-15: Addr = D5 AA B5
     3.5-3.5 : Addr = D5 AA B5

-----> Highland Computer

Mummies Curse *
     0-22 : Addr = D5 AA 96

-----> Howard W. Sams

P.D.Q. Data *
     0-22 : Addr = D5 AA 96

-----> Insoft

Graforth II *
     0-22 : Addr = D5 AA 96

-----> Lighting Software

```
Mastertype (16 Sector)
     0-22 : Addr = D5 AA 96
            Sync Siz= 0A, Fix Amnt= 04
            SECMOD (F=16,C=OFF,T=00,S=05)
               Change address 42 from 38 to 18
            SECMOD (F=16,C=OFF,T=00,S=05)
               Change address FF from BB to B7


-----> Micro Lab

Madventure *
     0-22 : Addr = D5 AA 96
            Ins  = D5 AA AD


-----> Microsoft

TASC Compiler *
     0-22 : Addr= D5 AA 96


-----> Muse

Castle Wolfenstein *
     0-22 : Addr = D5 AA 96
The Voice *
Castle Wolfenstein *
U-Draw II *
Robot Wars *
     0-22 : Addr = D5 AA B5


-----> Online Systems

Cranston Manor *
     0-22 : Addr = D5 AA 96
     18-18: Addr = D5 EF F7
            Find Max = 03, Shift N- = 00, Shift N+ = 08
            Use Nibble Count
Pegasus II *
     0-22 : Addr = D5 AA 96
     3-3  : Addr = FE BF DF
            Find Max= 03, Shift N+= 08, Shift n-= 00
            Use Nibble Count
ScreenWriter II (REVISED)
     0-22 : Addr= D5 AA 96
            Sync Siz= 0A, Fix Amnt= 04
            SECTNOD (F=16,C=ON,T=03,S=0B)
               Change Address 94 from 20 to EA
               Change Address 95 from 00 to EA
               Change Address 96 from 7F to EA
            SECTMOD (F=16,C=ON,T=13,S=04)
               Change Address 4D from 20 to EA
               Change Address 4E from 00 to EA
               Change Address 4F from 6D to EA
Softporn *
     0-22 : Addr= D5 AA 96
     3-3  : Addr= D5 CF F7
            Find Max= 03, Shift N+= 08, Shift N-= 00
```

```
                    Use Nibble Count
Ulysses & the Golden Fleece *
     0-22  : Addr= D5 AA 96
     3-3   : Addr= D5 EF F7
                    Find Max= 03, Shift N+= 08, Shift N-= 00
                    Use Nibble Count
General Manager 2.0 (REVISED)
     0-22  : ADDR = D5 AA 96
                    SECTMOD (F=16,C=ON,T=21,S=0B)
                        Change Address 09 from 20  to EA
                        Change Address 0F from 20  to EA
                        Change Address 10 from 00  to EA
                        Change Address 11 from 70  to EA
General Manager 2.0 (REVISED)
     0-22  : ADDR = D5 AA 96
                    SECTMOD (F=16,C=ON,T=20,S=0B)
                        Change Address 09 from 20  to EA
                        Change Address 0F from 20  to EA
                        Change Address 10 from 00  to EA
                        Change Address 11 from 70  to EA
General Manager 2.0 *
     0-22  : Addr = D5 AA 96
                    SECTMOD (F=16,C=ON,T=21,S=0B)
                        Change Address 0B from 03 to 06
Hires Adventure 0 *
     0-22  : Addr= D5 AA 96
Cross Fire *
     0-22  : Addr= D5 AA 96
                    Erase Dest Tracks
Ultima II *
     0-22  : Addr= D5 AA 96
                    Ins = D5 AA AD
                    Overide Sync Convert, Overide Nibble Filter
                    SECTMOD (F=16,C=ON,T=3,S=0C)
                        Change Address 84 to EA
                        Change Address 85 to EA
                        Change Address 86 to EA
The Dark Crystal *
     0-22  : Addr = D5 AA 96
                    Disk 1, Side 1, SECTMOD (F=16,C=ON,T=8,S=8)
                                    Change F3 from BD to 60
The Dark Crystal *
     0-22  : Addr = D5 AA 96
                    Disk 1, Side 1, SECTMOD (F=16,C=ON,T=5,S=F)
                                    Change Address A8 from 20  to EA
                                    Change Address A9 from F0  to EA
                                    Change Address AA from 5F  to EA
Zaxxon *
     1-12  : Addr= D5 AA 96
     0-0   : Nibble Count
     13-13
Lisa 2.5
     0-22  : Addr= D5 AA 96
                    Sync

-----> Penguin Software
```

Translvania *
Crimewave *
      0-22 by 2 : Addr = D5 AA 96
      1-21 by 2 : Addr = D4 AA 96
Thunderbombs *
Crime Wave *
      0-10 by 2 : Addr = D5 AA 96
      1-11 by 2 : Addr = D4 AA 96

-----> Quality Software

Bag of Tricks *
      0-0 : Addr= D5 AA B5
             Ins= DF AA EF EF, Sync Siz= 0A
      1-15: Addr= D5 AA B5 or D6 AA B5
Bag of Tricks *
      0-0 : Addr = D5 AA B5
             Ins= DF AA AB F7, Sync Siz=0A
      1-15: Addr = D5 AA B5

-----> Rainbow Computing

Stellar Treck *
      0-22 : Addr= D5 AA B5

-----> Sensible Software

Disk Recovery V1.6 *
Disk Organizer V2.2 1981 *
      0-22 : Addr = D5 AA B5
             Error on track 1 o.k.

-----> Sentient Software

Cyborg *
Oos-Topos *
      0-22 : Addr= D5 AA 96
             Insr= AB AB AB

-----> Sirius Software

Wayout
Type Attack
      0-1C : Addr= AD DA DD
      22-22: Addr= AA D5 D5 FF D6 FF FD
      21-21: Addr= AA
             Nibble Count, Sync Siz= 0A, Match NM= 06
Repton *
Wavy Navy *
Flip Out *
      0-F : Addr= AD DA DD
             Errors after 0B o.k.
      22-22: Addr= AA D5 D5 FF D6 FF FD
      21-21: Addr= AA
             Nibble Count, Sync Siz= 0A, Match NM= 06
Repton *
      0-D : AA DA DD

```
                Data Max= 25
        20-20: Addr= FE AA D5 D5 FD FB
        22-22
        21-21: Addr= AA FD FE
                Sync Siz= 0A, Match Num= 06
Space Eggs *
        0-0 : Addr= D5 AA B5
        11-13
         2-6 : Addr= D5 AA BA
        14-19: Addr= DD AA F7
        1A-1A: Addr= F7 AA D5


 .  -----> Sirtech Software

Wizardry *
        0-22 : Addr= D5 AA 96
                Sync, Erase Dest Tracks, Gap Size= 05, Sync Siz=0A

-----> Software Emporium

Inferno *
        0-22 : Addr= D5 AA 96

-----> Software Publishing Corp.

PFS Graph (REVISED) *
        0-0 : Addr= 93 F3 FC FF
                Insr= 93 F3 FC FF
                Offset- = 02, Sync Siz= 0A
        1-13: Addr= D5 AA 96
PFS / PFS Report (REVISED) *
        0-0 : Addr= 93 F3 FC FF
                Insr= 93 F3 FC FF
                Offset- = 02, Sync Siz=0A
        1-13: Addr= D5 AA 96
                Insr= D5 AA 96
                Write Protect before booting
PFS File /// *
        0-22: Addr=D5 AA 96
                Ins = DE AA EB, Offset= 03
PFS File /// *
        0-22: Addr= D5 AA 96
                Ins = DE AA EB, Offset+= 03, Overide Standardizer
                Set Sync add on FE and FF (Inverse)

-----> Softronics

Softerm *
        0-2 : Addr= D5 AA 96
        4-22: Addr= BE AA 96
        3-3 : Addr= BE AA AB
                Find Max=03, Shift N-= 00, Shift N+= 08

-----> Strategic Simulations

Computer Ambush II *
        0-22 : Addr= D4 AA B7
```

```
Tigers In The Snow *
Shattered Alliance *
Operation Apocalypse *
Germany 1985
      0-22 : Addr= D5 AA B5
Computer Conflict
      0-0  : Addr= D5 AA B5
      1-22: Addr= DA AA EB


-----> Synergistic Software

Nicrobe *
      0-22: Addr= D5 AA 96
            Overide Standardizer, Overide Nibble Filter
Global Program Editor *
      0-22: Addr= D5 AA 96
Microbe *
      0-0  : Addr= D5 AA 96
      1-22: Addr= D5 AA BF
            (Note: Save game feature will crash disk!)

-----> Ultrasoft

Mask of the Sun *
      0-22: Addr= D5 AA 96
            SECTMOD (F=16,C=OFF,T=02,S=0D)
              Change Address 41 from 9D to EA
              Change Address 42 from 8F to EA
              Change Address 43 from C0 to EA
            SECTMOD (F=16,C=OFF,T=00,S=03)
              Change Address 42 from 38 to 18
```

INDEX

The following is an alphabetical list of programs that The
Parameter Guide has parameters for. To the right of each program
name is a 2 or 3 letter code which stands for the copier that
copys it. Most of the programs can be copied by more then one
copier.

```
CP  =   COPY II PLUS 4.1
CU  =   COPY II PLUS 4.1 UPDATE
NU  =   NIBBLES AWAY II UPDATE
EDD =   ESSENTIAL DATA DUPLICATOR
BU  =   BACK IT UP II+
LS  =   LOCKSMITH 4.1
L3  =   LOCKSMITH 3.1
LA  =   LOCKSMITH - ADDITIONAL
AP  =   ADVANCED PARAMETERS
N1  =   NIBBLES AWAY I
N2  =   NIBBLES AWAY II
```

3-D GRAPHICS SYSTEM	-CU
3-D SKIING	-N2
A2-FS1	-EDD, N2, N1, L3, BU, LA
A2-PB1	-N2
A.B.M.	-EDD, AP, CU
ACCOUNTANT	-CU
ACCOUNTING PLUS II	-AP
ACE CALC & ACE WRITER	-CU
ADAPTABLE SKELETON	-CU
ADDRESS BOOK	-CU
ADVANCED VISICALC FOR THE APPLE IIe	-CU
ADVANCED VERSION VISICALC FOR APPLE III	-LS, CU
ADVENTURE IN TIME	-N2
AE	-EDD, CU
AGENDA FILES	-CU
AIRSIM-1	-EDD, N2, LA, CU
AIR TRAFFIC CONTROLLER	-N2, CU
AKALABETH	-LS, CU
ALGERBRA I	-EDD, N2, CU
ALGERBRA II	-CU
ALIEN AMBUSH	-AP
ALIEN RAIN	-CP, N2, BU, CU
ALIEN TYPHOON	-LS, CU
ALKEM-STONE	-BU, CU
ALPHA BYTES	-CU
AMPERMAGIC	-CU
APPLE II BUSINESS GRAPHICS	-CU
APPLE IIe BUSINESS GRAPHICS	-CU
APPLE III BUSINESS GRAPHICS	-LA, CU
APPLE ACCESS ///	-CU
APPLE ADVENTURE	-CU, EDD, BU
APPLE BARREL	-CU
APPLE BUSINESS BASIC	-CU
APPLE CILLIN	-N2, CU

```
APPLE FORTRAN                                      -CU
APPLE LOGO                                         -CU
APPLE PANIC                                        -CU, EDD, N2, BU, LA
APPLE PASCAL 1.1                                   -CU
APPLE PILOT                                        -CU
APPLE PRESENTS (ALL 4)                             -EDD
APPLE PRINT USING                                  -LS
APPLE PROGRAM MANAGER                              -LS
APPLE WORLD                                        -LS, CU, EDD, N2
APPLE WRITER                                       -EDD
APPLE WRITER II                                    -CU, EDD, N2, LA
APPLE WRITER II PRE-BOOT                           -CU
APPLE WRITER IIe                                   -EDD, CU
APPLE WRITER 80 COLUMN PRE-BOOT                    -EDD, CU
APPLE WRITER ///                                   -CU, N2, BU, LA
APPLEOIDS                                          -LS
APPLESOFT COMPILER                                 -CU
APPOINTMENT HANDLER                                -CU
APVENTURE TO ATLANTIS                              -EDD, N2, CU
ARCADE MACHINE                                     -EDD
ARTIST, THE                                        -AP
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AUDEX                                              -EDD
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AUTOMATED ACCOUNTING FOR MICROCOMPUTERS            -CU
AZTEC                                              -CU, EDD, N2, AP
BACK IT UP                                         -N1, L3
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BACK IT UP II+                                     -CU
BAG OF TRICKS                                      -NU, AP, CU
BANDITS                                            -LS, CU
BANK STREET WRITER                                 -EDD
BASIC FRANCAIS                                     -CU
BASIC MAILER                                       -LS
BASIC TUTOR SERIES                                 -CU
BATTLE CRUISER                                     -CU
BATTLE FOR NORMANDY                                -EDD, CU
BATTLE OF SHILOH                                   -LS, N2, CU
BEER RUN                                           -LS, CU, EDD, N2, N1, BU
BENEATH APPLE MANOR (SE)                           -EDD
BEST OF MUSE                                       -N2, CU
BILL BUDGE 3-D GRAPHICS                            -EDD, BU, CU
BILL BUDGE'S SPACE ALBUM                           -CU, NU
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BIRTH OF THE PHOENIX                               -N2, CU
BLADE OF BLACK POOL                                -LS
BOLO                                               -CU
BOMB ALLEY                                         -CU
BORG                                               -LS, EDD, N2, BU, CU
BPI BUSINESS ACCTING SYSTEM                        -LS, N2, BU, AP
BRAIN SURGEON OR MASTER DIAGNOSTICS PLUS           -LS, CU
BRIDGE MASTER                                      -CU
BRIDGE TUTOR                                       -N2
BROADSIDES                                         -EDD
```

BUG, THE	—N2
BUG ATTACK	—EDD, BU
BUMBLE GAMES / PLOT	—N2
CAAIBES	—CU
C-DEX	—CU
CAMPAIGN TRILOGY	—EDD
CANNONBALL BLITZ	—CU, EDD, N2, BU, LA, AP
CANYON CLIMBER	—EDD, N2
CARTELS AND CUTTHROATS	—LS, EDD, N2, CU
CASINO	—CU
CASINO 21	—N2, BU
CASTLE OF DARKNESS	—LS, BU, CU
CASTLE WOLFENSTEIN	—LS, CU, EDD, BU, NU
CAVERNS OF FREITAG	—CU
CAVES OF OLYMPUS	—CU
CCA DATA MANAGEMENT	—EDD
CEILING ZERO	—CU, N2
CHECKERS (ODESTA)	—EDD
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LE CHOMEUR	—CU
CHOPLIFTER	—CU, EDD
COLOSAL CAVE	—CU, N2
COMPUTER AIR COMBAT	—LS, N2, CU
COMPUTER AMBUSH	—LS, EDD, CU, NU
COMPUTER BASEBALL	—CU
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COMPUTER CONFLICT	—LS, NU
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COMPUTER NAPOLEONICS	—LS, CU
COMPUTER QUARTERBACK	—LS, N2, CU
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CROSSFIRE	—CU, EDD, N1, BU, LA, NU
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CROSSWORD MAGIC	—LS, EDD, BU
CROSSWORD MACHINE, THE	—BU
CRUNCH, CRUMBLE & CHOMP	—LS, CU, BU
CTW/ APPLE SPOTLIGHT — INSTANT ZOO	—CU
CUBIT	—CU
CUSTOM MICRO SYSTEMS ASSEMBLER	—EDD
CYBERSTRIKE	—LS, BU
CYBORG	—BU, LA, NU

CYCLOD	—LS
DARK CRYSTAL	—EDD, CU, NU
DARK FOREST	—LS, N2, BU
DATADEX	—LS
DATA FACTORY 5.0	—LS, AP
DATA PLAN	—LS
DATA REPORTER	—LA
DATA * TRANS	—AP
DATA TREE	—EDD
DATESTONES OF RYN	—CU
DAVID'S MIDNIGHT MAGIC	—CU
DAWN PATROL	—CU
DB MASTER	—LS, CU, EDD, N2, N1
	L3, BU, AP
DB MASTER UTILITIES DISK	—LS, EDD, N2, BU, CU
DEADLINE	—LS, CU, EDD, N2, AP
DEALER DIAGNOSITIC DISK	—AP
DEMON'S FORGE	—CU
DEMUFFIN, DEMUFFIN PLUS	—AP
DESK TOP PLAN II	—LS, CU, EDD, N2, BU
DIAGNOSTICS +PLUS	—N2
DIC'—TIO—NARY	—BU, CU
DISK EDIT 2.0	—EDD
DISK LIBRARY	—LS
DISK ORGANIZER	—CU, NU
DISK ORGANIZER II	—LS, CF
DISK RECOVERY	—LS, EDD, CU, NU
DLM SOFTWARE	—CU
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DOS ENHANCER	—EDD
DRAGON FIRE	—BU
DRAGON GAMES	—LS
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DUNG BEETLES	—EDD, N2, CU
DUNGRON	—CU
DUNGEON CAMPAIGN	—CU
EARLY GAMES	—CU
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ESCAPE	—CF, N2, CU
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FALCONS	—LS, N2, BU
FASTGAMMON	—CU

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FINANCIAL MANAGMENT SYSTEM III	—EDD
FIREBIRD	—N2, N1, BU, LA, CU
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FIRST CLASS MAIL	—CU
FLIGHT SIMULATOR	—CU
FLIGHT SIMULATOR II	—AP
FLIP OUT	—NU
FOOSBALL	—BU
FORE	—AP
FORMAT II	—CU
FRAZZLE	—CU
FREEFALL	—N2
GALACTIC ADVENTURES (SSI)	—AP
GALACTIC ATTACK	—CU
GALACTIC EMPIRE	—EDD
GALACTIC GLADIATORS	—CU
GALACTIC REVOLUTION	—EDD
GALACTIC WARS	—N2
GAME SHOW & SUBJECTS	—EDD, CU
GAMMA GOBLINS	—EDD, N2, BU
GENERAL MANAGER	—NU, BU, AP, CU
GENESIS	—AP
GENETIC DRIFT	—N2, BU
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GERMAN/ENGLISH GANGMAN	—EDD
GERMANY 1985	—EDD, NU
GERTRUDE'S PUZZLES	—CU
GLOBAL PROGRAM EDITOR	—NU
GLOBAL WAR	—N2, CU
GOBBLER	—N2, N1, CU
GOLD RUSH	—N2, LA, AP, CU
GORGON	—CU, EDD, N2, N1, BU
GUADELCANAL CAMPAIGN	—CU
GRAFORTH II	—NU
GRAPHIC PROCESSING SYSTEM, PROFESSTIONAL	—AP, CU
GRAPHICS MAGICIAN	—CU
GUARDIAN	—N2
GRAPHTRIX	—CU
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JABBERTALKER	—N2
JAW BREAKER	—CU, EDD, N2, LA
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KEY PERFECT	—CU
KNIGHT OF DIAMONDS	—EDD, AP, CU
KNIGHTS OF THE DESERT	—CU
KNOW YOUR APPLE	—N2, CU
KREL LOGO	—CU
L.A. LAND MONOPOLY	—EDD, NU
LABYRINTH	—EDD
LEGACY OF LYGAWIN	—CU
LEMMINGS	—LS
LETTER PERFECT	—LS, EDD, N2, CU
LINGUSIT	—EDD
LISA 2.5	—NU
LIST HANDLER AND UTILITY	—CU, EDD
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LOCK IT UP 4.1	—NU
LOCK IT UP PROTECTION	—AP
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LOGO (TERRAPIN)	—N2
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MADVENTURE	—NU
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MAGIC SPELLER	—LS
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MAGIC WORD	—LS
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MUSIC MAKER	—CU
MYSTERY HOUSE	—N2, CU
NEOTRONS	—N2, CU
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SPIDER RAID	—CU
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STAR BLAZER	—CU
STAR CROSS	—CU, EDD, N2, AP
STAR CRUISER	—LS, N1
STAR DANCE	—N2
STAR MINES	—LS
STAR RAIDERS	—LS
STAR THIEF	—LS, EDD, BU
STARSHIP COMMANDER	—CU
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TIGERS IN THE SNOW	—LA, NU
TIME MANAGER	—CU
TIME ZONE	—EDD, N2, LA, CU
TINY TROL	—LS
TORPEDO FIRE	—LS, EDD, N2, CU
TRACK ATTACK	—EDD
TRANQUILITY BASE	—L3
TRANSEND 1	—CU
TRANSEND 2	—LS, EDD, AP
TRANSYLVANIA	—EDD, NU, CU
TUBE WAY	—CU, EDD, N2, AP
TUNNEL TERROR	—N2
TWERPS	—LS, N2, BU, CU
TYPE ATTACK	—CU, NU
TYPING TUTOR	—CU, EDD
U—BOAT COMMAND	—LS, N2, CU
U—DRAW II	—CU, NU
ULTIMA	—EDD, N2, N1, BU, LA
ULTIMA II	—CU, EDD, AP, NU
ULTIMA ///	—EDD, CU
ULYSIS AND THE GOLDEN FLEECE	—LS, EDD, NU, N1, BU, CU
UTOPIA GRAPHICS SYSTEM	—N2
V.C.	—CU
VC—EXPAND	—LS, AP
VERSAFORM	—CU
VIDEX PREBOOT DISKS	—AP
VISIBLE COMPUTER: 6502, THE	—AP

VISIBLEND	—N2
VISICALC 3.3	—LS, CU, EDD, N2, N1
	L3, BU, AP
VISICALC 80 COLUMN PRE-BOOT	—EDD, AP, CU
VISICALC ADVANCED VERSION	—N2, LA
VISICALC IIe	—EDD, CU
VISICALC IIe 128K VERSION	—CU
VISICALC ///	—CU, N2, N1, BU, LA
VISIDEX	—LS, CU, EDD, N2, BU, AP
VISIFACTORY	—N2
VISIFILE	—LS, CU, EDD, N2, BU, AP
VISIPLOT	—EDD
VISISCHEDULE	—LS, CU, EDD, N2
VISISCHEDULE ///	—CU
VISITERM	—LS, CU, EDD, N2, BU, AP
VISITREND/VISIPLOT	—LS, CU, N2, BU
VOCABULARY BUILDERS	—EDD, CU
THE VOICE	—CU, NU
WAR	—AP
WAR LORDS	—N2
WARP FACTOR	—LS, EDD, N2, CU
WAVY NAVY	—NU
WAY OUT	—NU
WILDERNESS CAMPAIGN	—CU
WINDFALL	—CU
WITNESS	—CU
WIZ MAKER	—CU
WIZ PLUS	—CU
WIZARD AND THE PRINCESS	—EDD, N2, BU, CU
WIZARDRY	—CU, EDD, LA, NU
WORD HANDLER	—LS, CU, EDD, N2, BU
WORD HANDLER II	—LS
WORD RACE	—EDD
WORLDS GREATEST BLACK-JACK	—EDD, CU
WRITE AWAY	—CU
ZARDAX	—CU
ZARGS	—CU
ZAXXON	—CU, NU
ZENITH	—EDD
ZERO GRAVITY PINBALL	—N2
ZOOM GRAFIX	—EDD, N2, AP, CU
ZORK I	—LS, EDD, L3, BU, AP, CU
ZORK II	—LS, EDD, BU, AP, CU
ZORK III	—EDD, CU