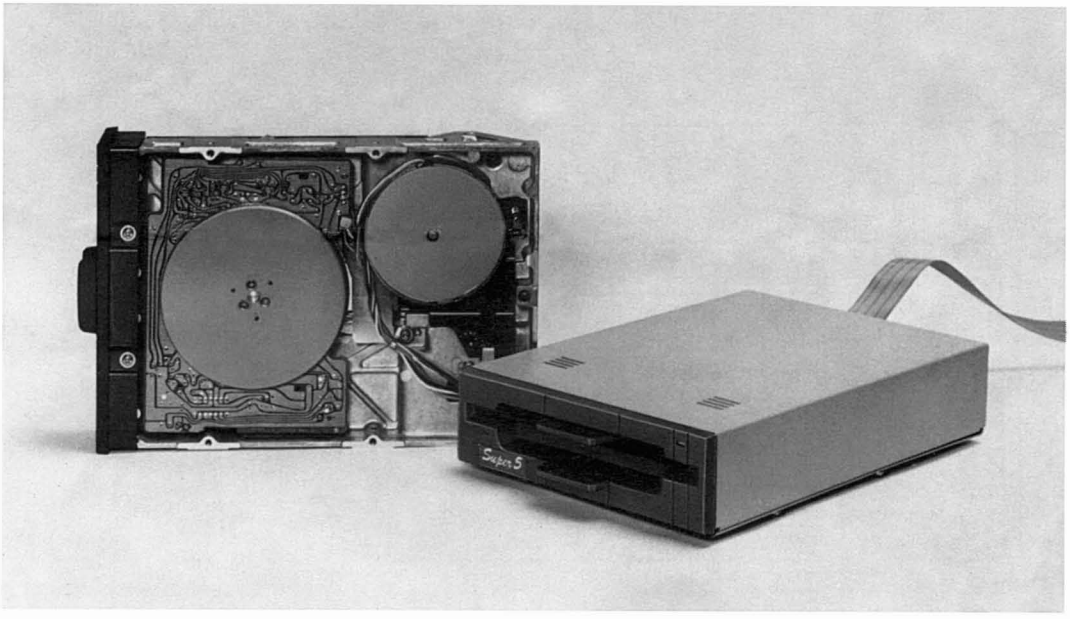
"Super 5" MINI FLOPPY DISK DRIVE

Operating Manual

C-40



Note: 1. Before use the Super 5 Mini Floppy Disk drive please read the Apple Computer Operating Manual carefully.
2. If there is any problem please contact with the shop where you bought as soon as possible.

EI-EN ELECTRONICS, LTD.
EXPORTER
EI-EN ENTERPRISE CO., LTD.

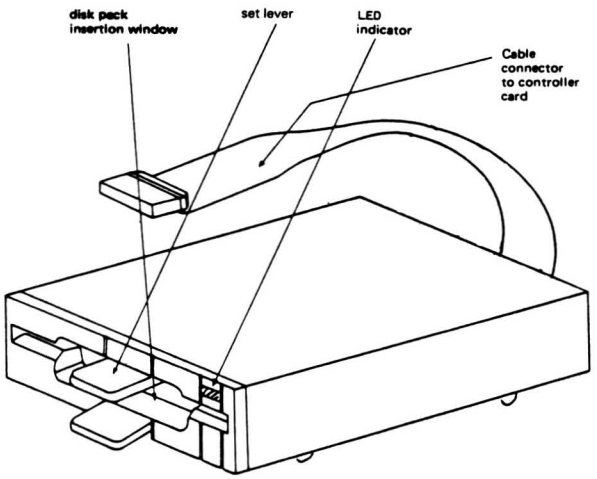
"SUPER-5" MINI FLOPPY DISK DRIVE

1. Instruction

The "SUPER-5" Drive is a high-performance, economical, standard 5.25 inch diskette, single-side, mini disk drive which is specially designed for Apple II® personal computer.

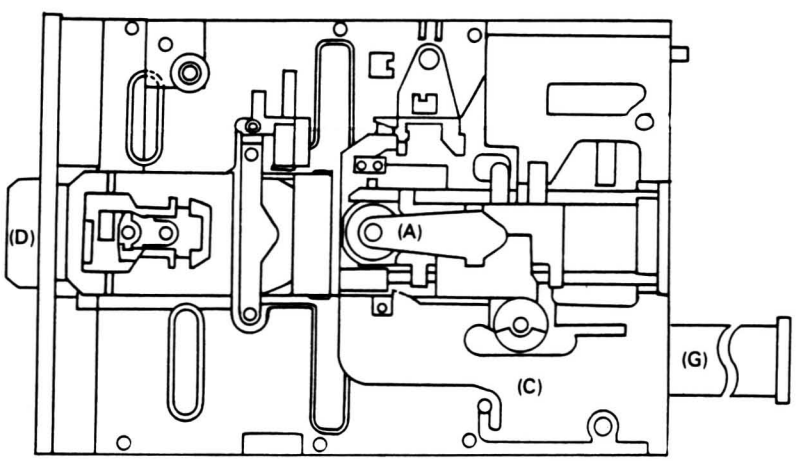
2. Physical construction

1). external view

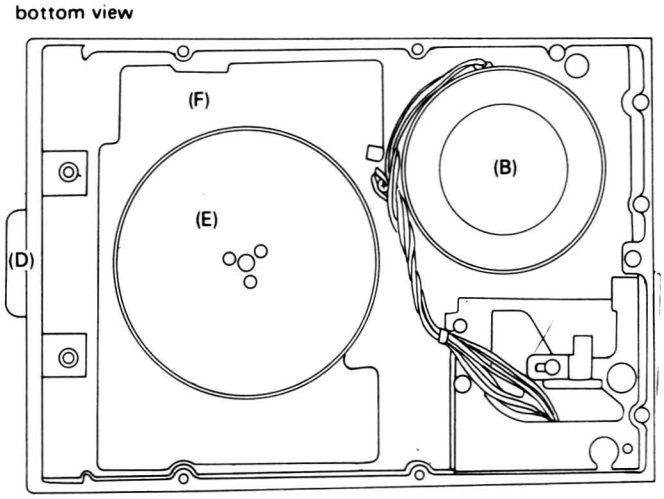


®Apple is a registered trademark of Apple computer inc.

2). top view



3). bottom view



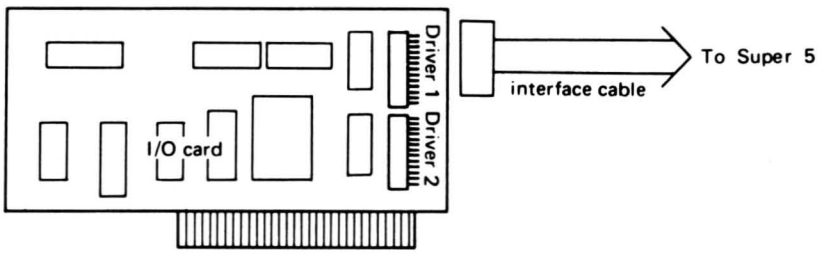
A: head
B: stepper motor
C: PC BOARD (read/write amp interface card)
D: floppy disk set lever
E: servo motor
F: motor control card
G: interface cable

3. Connecting to Apple II®

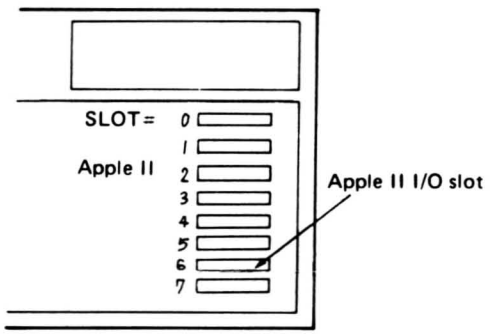
1). turn off the power switch of the Apple II®

2). open the top cover of the Apple II®

3). insert the connector of interface cable into Apple II® I/O card



4). insert Apple II I/O card into SLOT = 6



5). put the top cover back

6). turn on the power switch of the Apple II®

7). test

Note: Apple II must be switched off while the connector of interface cable is inserted into the Apple II.® I/O slot

4. Installing floppy disk

1). turn on the power switch of the Apple II®

2). open the driver's door (set floppy disk lever horizontally)

3). put the diskette into the driver

4). close the door (set floppy disk lever vertically)

5). the diskette will be running while the driver's "in use" light is on. never remove the diskette until the light is off.

Note: turn on the power switch of the Apple II® before inserting the diskette into the driver.

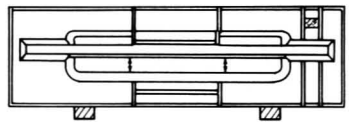
5. Removing diskette

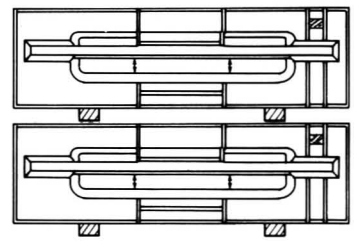
1). open the driver's door after the light of the indicator lamp is off

2). take out the diskette from the driver

6. **Inserting diskette**

put the driver horizontally as illustrated





Note: don't close the slit in the bottom of the driver because it will be damaged by the rising temperature.

Note: Open the driver's door (set floppy disk lever horizontally) before turning off the power switch of the Apple II.®

Super 5 SPECIFICATIONS

HIGH-SPEED ACCESS, HIGH ACCURACY POSITIONING
Instead of plastic CAM positioner or lead screws positioner, a high microprecision metal band positioner is adopted in the mechanism to position the head.

BRUSHLESS DC DIRECT-DRIVE MOTOR
Direct drive means that there is no improper belt seating, so the variations in speed and friction-producing side loading can be eliminated, which allows motor running lifetime to be over 10,000 hours.

MOTOR'S CLOSED LOOP SERVO
Hall effect devices are utilized as speed control sensor in DC motor system, so motor can run stably and accurately

SLIM, HALF-HEIGHT DRIVE
The disk drive is only 41mm high, it is only half the size of conventional models.

NO CONTACT WRITE-PROTECTED SENSOR
Photo coupler is used as write-protected sensor. It means no damage, long lifetime and good reliability for disk media.

LOW HEAT GENERATION
New type brushless DC motor reduces power consumption greatly to a low 5 watts for exceptionally cool operation.

LOW NOISE
Mechanical structure is accurately designed, to ensure running with low noise.

QUALITY ASSURANCE
Super-5 is backed by a one year warranty (parts and labor).

GENERAL SPECIFICATIONS

Capacity (formated):	163K (20K bytes more than the original).
No. of tracks:	40 tracks (5 tracks more).
No. of sectors / track:	13 or 16 sectors.
Disk rotation speed:	300rpm.
Track density:	48TPI.
Track to track time:	Less than 6 msec

Error rates
- a). soft errors: 1 per 10^9 bits.
- b). hard errors: 1 per 10^{12} bits.
- c). seek errors: 1 per 10^6 seeks.

Temperature
- a). operating: 5~45°C.(Disk section: 10~50°C)
- b). non-operating: 0~50°C.
- c). transportation: −40~62°C.
- d). storage: −20~60°C.

Relative humidity
- a). operating: 20-80%
- b). non-operating: 5-90%
- c). storage: 8-90%

Power requirements
- DC +12V ±5% 0.3A Type.
- DC +5V ±5% 0.55A Type.

Dimensions: W×H×L (149mm×45mm×210mm),
weight: 2.14 KGS.

Super-5 reserves the right to make improvements in the products described in this manual at any time without notice.

® Apple is a registered trademark of Apple computer Inc.

EI-EN ELECTRONICS, LTD.
EXPORTER
EI-EN ENTERPRISE CO., LTD.
RM.213, 22-23, Ebisu 1-Chome,
Shibuya-ku, Tokyo, Japan
TEL: (03) 446-6531/6421
FAX: (03) 446-6530
Cable: "EIENENT" TOKYO
Telex: J23325 EIENENT