

## TECHNICAL TIPS:

Date:

### 900 SERIES 5¼" DRIVE MAINTENANCE CHECK LIST

- 1) Clean read, write head with Isopropanol alcohol and cotton swab or head cleaning kit.
- 2) Check head load pad for oxide build up. Abnormal Disk wear will result if pad is not cleaned or replaced. (Single sided units only)
- 3) Check drive motor speed. If not within specification:
  - A) Check Diskette to see if bound.
  - B) Replace drive belt.If condition still exists:
  - C) Replace drive motor.
- 4) Check compatability setting (650 usec). If not within accepted range (plus or minus 50us from setting, check index holder for crack or break by removal and examination, then recalibrate. *P/N 4300188*
- 5) Check for drive noise:  
-High pitch squeal - Motor bearing failure or head load pad.  
-Low frequency noise - Spindle bearing failure. *ALIGNMENT DISK*
- 6) Check all drive connectors for proper seating.
- 7) Periodically clean fan filter.

### INDEX ADJUSTMENT

- A) Remove the four (4) screws holding the Drive to the chassis. Pull the Drive out of the chassis, install the power cable extender, and also the Drive extender cable.

Test Points - Reference sections 2 - 5 (4 & 5) of the 900 Series Maintenance Manual.

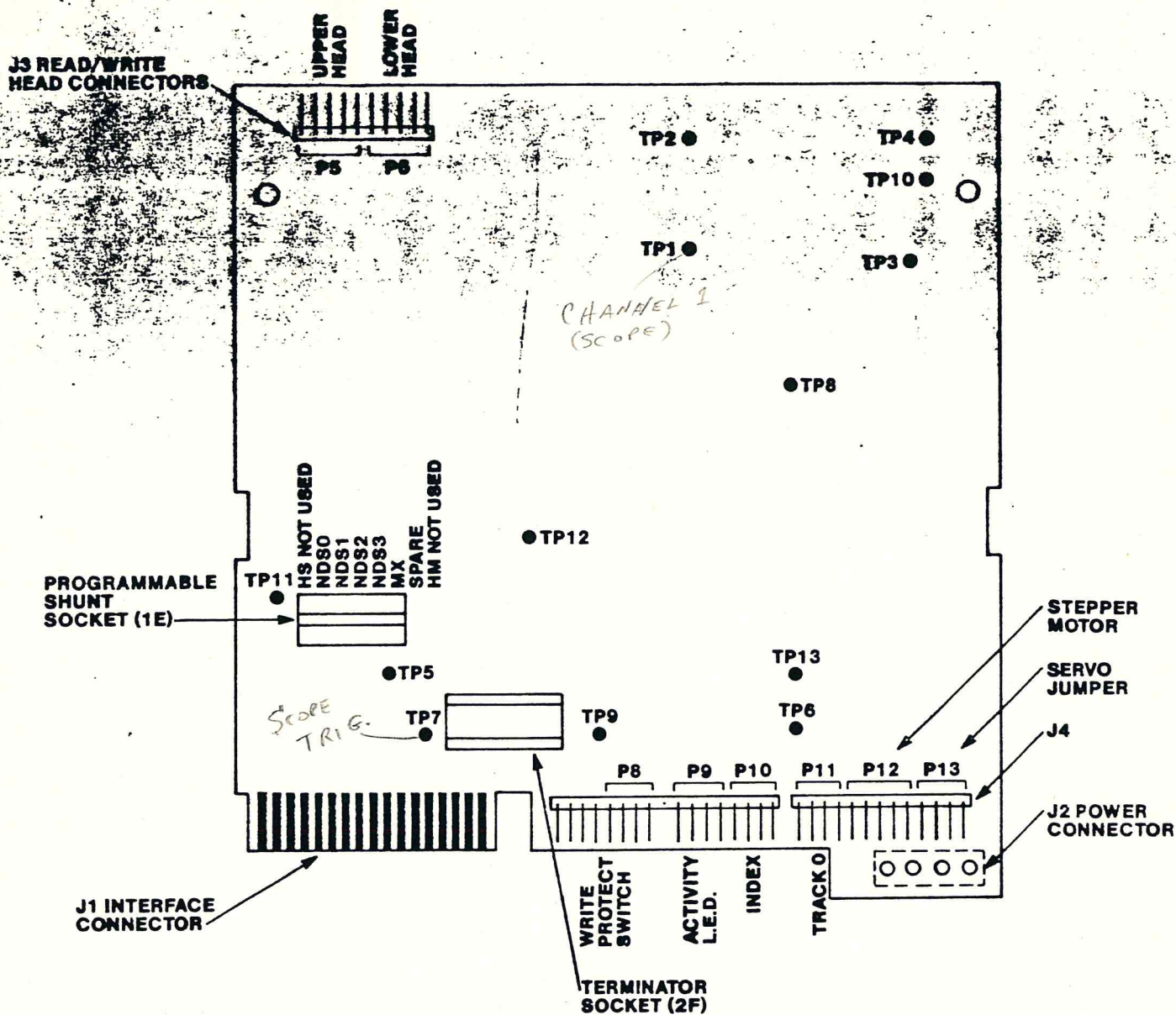
- 1) Connect trigger input of Oscilloscope to TP7 (Fig. 5-1) of Tandon section.
  - 2) Connect probe (2) to TP1 (Fig. 5-1) of <sup>SHUGART</sup> Tandon section.
- B) Loosen the index sensor's retaining screw (Fig. 5-1) in Tandon Section. By moving the boss mounting, you will be able to increase or decrease the delimiter bit time. This setting should be set according to your Techtran Index Alignment Disk.

### SPEED ADJUSTMENT

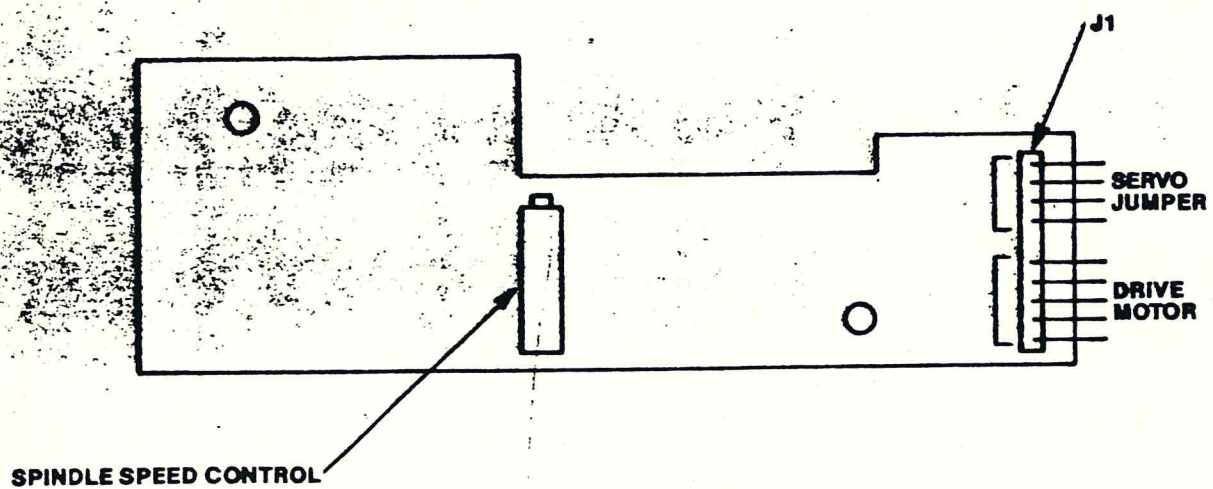
TEST EQUIPMENT: Period counter

#### Procedure

- 1). Insert Data Disk.
- 2). Monitor test point 7 (Fig. 5-1) Tandon section.
- 3). Adjust appropriate pot (Fig. 5-3) for a setting of 200ms or 5HZ ( $1/\text{period} = \text{frequency}$ ).

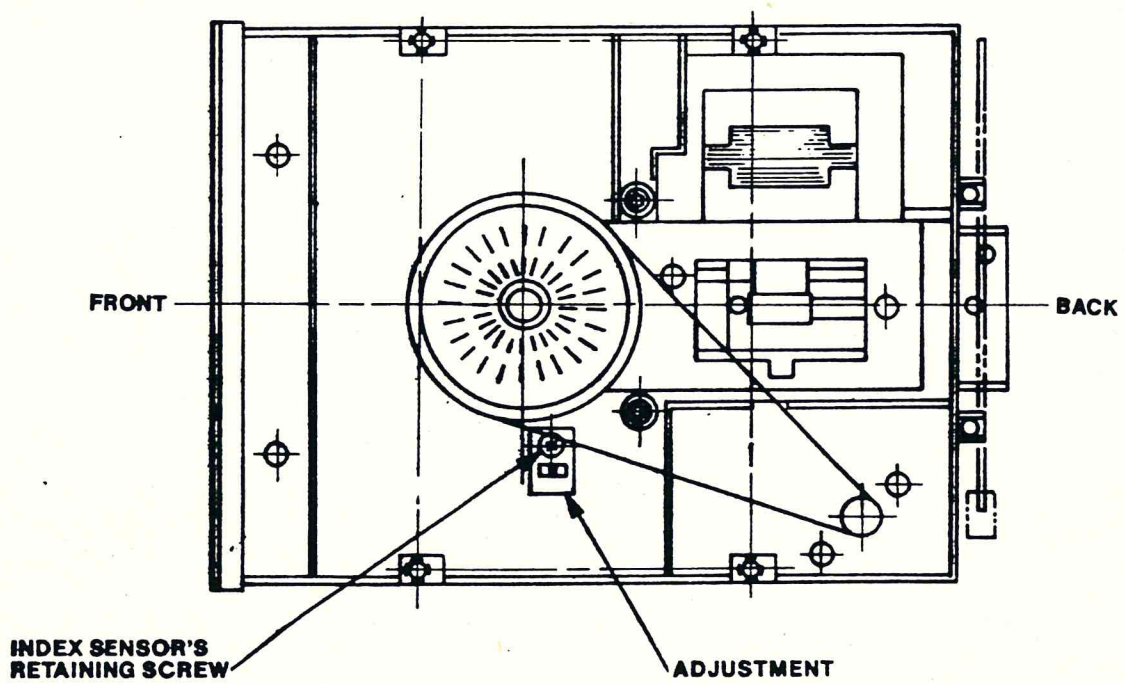


**FIGURE 5-1**  
**LOGIC CIRCUIT BOARD WITH TEST POINTS**



**FIGURE 5-3**  
**LOCATION OF R4 SPEED CONTROL POTENTIOMETER**



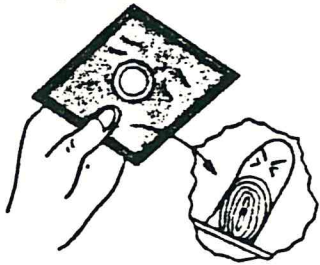


**FIGURE 5-9**  
**INDEX SENSOR'S RETAINING SCREW AND ADJUSTMENT**

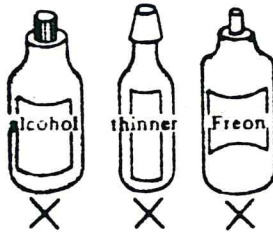
# FLOPPY DISK HANDLING AND STORAGE

## Handling precautions to protect against possible failure

1. Do not touch the disk surface. Easily contaminated, and causes errors.

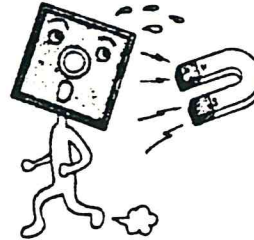


2. Do not use solutions: alcohol, thinner, Freon, to clean the disk.

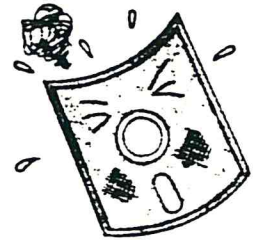


3. Do not use magnets or magnetized objects near the disk.

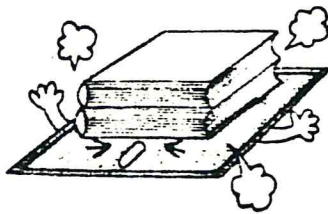
Data can be lost from a disk when exposed to a magnetic field.



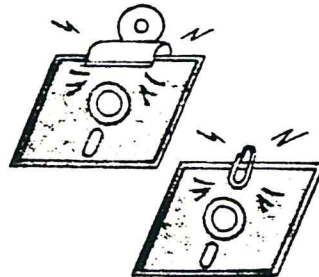
4. Do not bend or fold the disk.



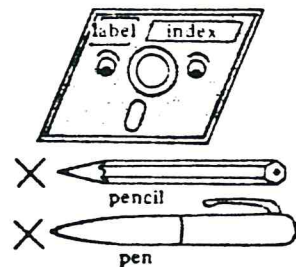
5. Do not place heavy objects on the disk.



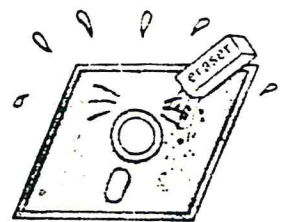
6. Do not use rubber bands or paper clips on the disk.



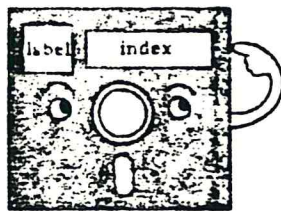
7. Do not write on a disk label with a pencil or a ball-point pen. Use a fiber-tip.



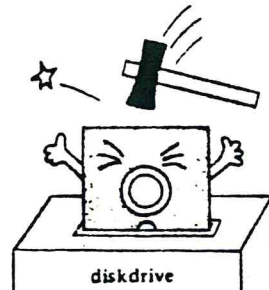
8. Do not use erasers.



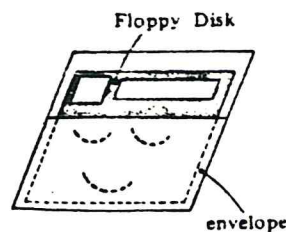
9. Put I. D. labels in a right place, never use them in layers.



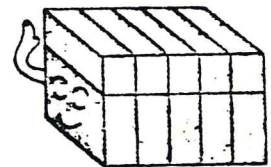
10. Insert carefully, by grasping upper edge and placing it into the drive.



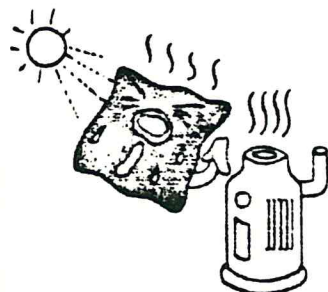
11. Keep disk in its envelope.



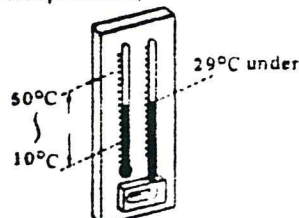
12. Store disk not for immediate use in their box, and set it up.



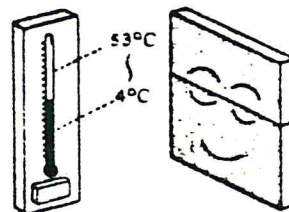
13. Do not expose the disk to excessive heat or sunlight.



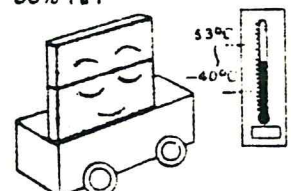
14. Operating environment  
10°C to 50°C (50°F to 122°F)  
20% to 80% RH  
less than 29°C (Wet bulb temperature)



15. Storage environment  
4°C to 53°C (40°F to 127°F)  
8% to 80% RH



16. Transportation  
During transportation the disk shall be in its envelope, and in a protective box.  
Temperature: -40°C to 53°C (-40°F to 127°F)  
Relative humidity: 8% to 90% RH



Printed in Japan

# TECHTRAN™

DRIVE MOTOR

TECHTRAN P/N 5404

DRIVE BELT

P/N 54161

R/W  
HEAD LOAD BUTTONS

P/N 54145

INDEX ALIGNMENT  
DISK

P/N 4300188

DRIVE EXTENDER

CABLE

P/N ?