SERVICE LETTER

DATE: October 5, 1974

NUMBER: DK-3004 B

SUBJECT: "INDEX TO DATA" (Circumferential) ADJUSTMENTS

PRODUCT

AFFECTED: ALL MODEL D3000 DISK DRIVES

NOTE:

SERVICE LETTER DK-3004B REPLACES SERVICE LETTER DK-3004A IN ITS ENTIRETY. REMOVE AND DESTROY SERVICE LETTER DK-3004A.

INFORMATION:

There has been some conflicting information regarding the proper timing of the index-to-data adjustment in the D3000 series disk drives. Index-to-data timing must be set to 30+5 micro seconds on all models of the D3000, standard interface, 30+5 micro seconds on Top Load Diablo Interface, and 75+5 micro seconds on all Front Load Diablo compatible Interfaces (Drive Speed is no consequence).

NOTE:

IF DRIVE HAS AN S.C. NO. (SPECIAL CON-FIGURATION NO.) ON SERIAL NUMBER TAG, TIMING MAY BE DIFFERENT. CONSULT YOUR S.C. LIST IN SERVICE LETTER DK-3019. FOR ADDITIONAL INFORMATION ON S.C. NO., CONTACT PRODUCT SUPPORT.

ACTION:

When performing the index-to-data adjustment on a D3000 series disk, monitor the index-to-data timing by connecting Channel A of the oscilloscope to the Index Pulse test point at the output of the Index Pulse Multiplexer (See Table I for Variations) on the Logic PCBA. (Sync negative internal) Connect Channel B to TP19 on the READ/WRITE PCBA (data).

The timing between the fall of the index pulse and the first positive or negative data pulse shall be adjusted to 30± 5 micro seconds or 75± 5 micro seconds using the following adjustment procedure.

FRONT LOAD:

Loosen the front screw(only) of the sector photo element assembly (accessible through a hole in the top of the receiver assembly) and adjust the allen head screw (to the right front of the sensor assembly) by inserting 7.5 inch long, 3/32 allen wrench (Circumferential Adjustment Tool P/N 103609-01) from the side of the unit. Adjust this screw until the proper index/data delay is achieved, (counter-clockwise decreases time between index and data).

Re-tighten sensor screw and recheck index-to-data timing.



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TOP LOAD:

Remove bezel and loosen Phillips screw (front center) of the disk assembly which locks down the sensor assembly. Adjust allen screw (right front of the sensor assembly) until index-to-data time delay is 30+ 5 micro seconds (clockwise direction decreases this time differential). Re-tighten sensor screws and recheck measurements.

NOTE:

ANY METHOD OF SECTORING OTHER THAN INDEX ONLY REQUIRES SPECIAL TEST TECHNIQUES TO OBTAIN PROPER OSCILLOSCOPE TRIGGERING. (REF. TABLE I REMARKS SECTION FOR VARIATION).

TABLE I:

	TIMING IN	
UNIT DESCRIPTION	μ SEC	REMARKS
Front Load Standard Interface	30 <u>+</u> 5	Adjust per D3000 Manual 102780
Front Load Diablo Interface	75 <u>+</u> 5	Adjust per D3000 Manual 103715
Top Load* Index Only Sectored	30 <u>+</u> 5	Adjust per D3000 Manual 102780 or 103715
Top Load* Mechanically Sectored	30 <u>+</u> 5	Sector Demultiplexer output must be used for triggering -
		 Standard Interface - Logic Test Point 3. Diablo Interface - Logic Test Point 3.
		Adjust as normal. (D3000 Manual 102780 or 103785)
Top Load* Electronic Multinotch	30 <u>+</u> 5	Remove J125 from Logic PCBA, Short Pin 14
•		to Pin 16 - Adjust as normal. (D3000 Man-
		ual 102780 or 103715) Remove Jumper and
		Replace J125 upon completion.

^{*} ALL TOP LOAD DISK DRIVES INDEX-TO-DATA ADJUSTMENTS SHALL BE SET TO 30 ± 5 MICRO SECONDS REGARDLESS OF SPEED, INTERFACE, OR SECTORING.