

PERIPHERAL EQUIPMENT DIVISION

TITLE: POSITIONER RETICLE REMOVAL AND REPLACEMENT PROCEDURES			PIB NO. DK-3017
PRODUCT LINE:	TAPE [] DISK XI FORMATTER []	EQUIPMENT CHANGED Reticle 103679-01	MODEL SERIES AFFECTED D3000
			EFFECTIVE DATE October 1, 1974

CLASS OF BULLETIN:	ORDER PART KIT NO.	EFFECTIVITY
<input type="checkbox"/> IMPROVEMENT <input type="checkbox"/> RETROFIT ON FAILURE <input type="checkbox"/> RETROFIT RECOMMENDED <input checked="" type="checkbox"/> SERVICE INFORMATION ONLY	N/A	ALL D3000 DISK DRIVES

TITLE: POSITIONER TRANSDUCER (RETICLE) REMOVAL AND REPLACEMENT PROCEDURES.
(Estimated time of removal, replacement and retest - 1.5 Hrs.)

PURPOSE: Product Support has prepared the following preliminary procedure to assist you whenever you find the need to replace the positioner reticle assembly.

The following procedure is not currently outlined in the D3000 Service and Maintenance Manual. However, its incorporation will be reflected in all future D3000 manuals. The addition of this procedure will add flexibility to your D3000 disk drive maintenance programs performed by your trained personnel. Your use of this procedure will probably be infrequent. It is with this understanding that the procedure has been prepared in a fundamental form so that it may be studied carefully before any step-by-step disassembly or reassembly be performed. Feel free to contact your PERTEC Product Support representative for consultation regarding this procedure.

PARTS: One Reticle Assembly (103679-01)

NOTE

REMOVAL OF READ/WRITE
HEADS NOT NECESSARY.

Should Additional Information Be Required — Contact

PERTEC

PERIPHERAL EQUIPMENT DIVISION
9600 Irondale Avenue, Chatsworth, California 91311
Phone (213) 882-0030 / TWX (910) 494-2093
ATTENTION: PRODUCT SUPPORT MANAGER
PERTEC 2018120(1)

Distribution Code - 6318

TITLE POSITIONER RETICLE REMOVAL AND REPLACEMENT PROCEDURES

PIB NO.
DK3017

1.0 Tools Required

- 1.1 Complete set of Xcelite hex drivers.
- 1.2 1 - 10" Phillips Screwdriver
- 1.3 1 - 10" Standard Flat Blade Screwdriver.
- 1.4 1 - Small pair of Diagonal Cutters.
- 1.5 1 - Reticle Adj. Tool (P/N 103659-01)
- 1.6 1 - Molex Extractor Tool.
- 1.7 1 - Strip of paper or Mylar .005, 0.6" Wide and 5" long.
- 1.8 1 - CE Cartridge (Alignment Cartridge)

2.0 Prepare Drive for Service

- 2.1 Power off and unplug unit.
- 2.2 Remove dust cover.
- 2.3 Place Logic and Servo PCBA in the service position.
- 2.4 Remove READ/WRITE Board.
- 2.5 Lay head cables against positioner magnet.

NOTE

EXTREME CARE MUST BE TAKEN
TO AVOID DAMAGE TO THE SCALE!

3.0 Remove Scale Shield

- 4.0 Remove two hex head screws and washers securing the reticle in the holder.
- 5.0 Cut the tie wraps that secure the positioner transducer (reticle) cable noting where tie wraps were placed.

6.0 Remove old reticle, cable and J203.

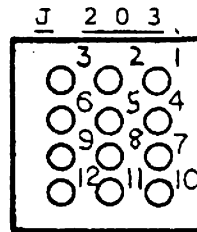
7.0 From Plug J203 remove the following : (See Figure 1 Page 3)

- 7.1 White wire from J203 Pin 10
- 7.2 Gray wire from J203 Pin 12
- 7.3 Black wire from J203 Pin 4
- 7.4 Red wire from J203 Pin 9
- 7.5 Ground Shield from J203 Pin 9

<u>Pin</u> <u>No.</u>	<u>Wire</u> <u>Color</u>	<u>Pin</u> <u>No.</u>	<u>Wire</u> <u>Color</u>
1	Green	7	Brown
2	Blue	8	Large Block (Insulated Ground)
3	Orange	9	Red
4	Black	10	White
5	Ground Shield	11	None
6	Red	12	Gray

TITLE POSITIONER RETICLE REMOVAL AND REPLACEMENT PROCEDURES

PIB NO.
DK3017



PIN VIEW

FIGURE 1

- 8.0 Reticle assembly may now be completely removed.
- 9.0 Reverse Step 7.0 for installing wires in J203 of new glass reticle (103679-01).
- 10.0 Place .005 paper between reticle holder and scale.
- 11.0 Reinstall reticle in holder.
- 12.0 Replace screws and washers and slowly tighten screws that hold reticle while moving paper. This insures that the reticle to scale distances is not too tight.
 - 12.1 If paper becomes tight and will not move, readjustment of the scale is required. Reference PRODUCT IMPROVEMENT BULLETIN DK3016.
- 13.0 With proper scale to reticle distance:
 - 13.1 Remove paper or Mylar strip.
 - 13.2 Reinstall READ/WRITE board and connect head cables.
 - 13.3 Remove J205 and J206 from servo PCBA.
 - 13.4 Apply power and turn power switch "ON".
 - 13.5 Install scratch pack when "SAFE" occurs.
 - 13.6 Push RUN/STOP: After approximately 33 seconds manually load heads.

C A U T I O N

CARE MUST BE TAKEN AS POSITIONER IS MOVED. SHOULD POSITIONER BECOME HARD TO MOVE, STOP! SCALE BREAK-AGE COULD RESULT IF POSITIONER IS FORCED.

- 13.7 Slowly move positioner to CYL 202 with .005 paper between scale and reticle. No excessive tightness should be felt. If tightness is encountered, return to Step 12.1.

TITLE POSITIONER RETICLE REMOVAL AND REPLACEMENT PROCEDURES

PIB NO.
DK3017

- 14.0 Check and adjust, if necessary, the Servo and positioner transducer signals per Section 6, pages 20-60 of the D3000 Manual.
- 15.0 To properly adjust the amplitude, and X+90 signals, use X+0 and X+90 signal polarity and quadrature check. (D3000 Manual, Page 6-29, Procedure 6.8.3) (Insure Channel B on scope is not inverted.)
- 16.0 Adjust the reticle to reflect the maximum amplitude of the added signals. Readjustment of the reticle may be necessary later to achieve perfect symmetry on over and undershoots during one track seeks.
- 17.0 Reinstall scale shield and cable ties.
- 18.0 Check unit for proper operation after dust cover is put on.