

PERIPHERAL EQUIPMENT DIVISION

TITLE INCREASE STABILITY OF PHASE LOCK LOOP (DIABLO)				PIB NO. DK3055
PRODUCT LINE:	TAPE DISK FORMATTER [] [X] []	EQUIPMENT CHANGED Logic PCBA (see below)	MODEL SERIES AFFECTED D3000	EFFECTIVE DATE May 31, 1976

CLASS OF BULLETIN:	ORDER PART KIT NO.	EFFECTIVITY
<input type="checkbox"/> IMPROVEMENT <input checked="" type="checkbox"/> RETROFIT ON FAILURE <input type="checkbox"/> RETROFIT RECOMMENDED <input type="checkbox"/> SERVICE INFORMATION ONLY	N/A	ALL DIABLO COMPATIBLE UNITS USING LOGIC PCBAs P/Ns 103705, 103685, 103691, 103726, 103728, 103730, 103749

PURPOSE

To improve data reliability when reading from the lower platter.

SYMPTOMS

Intermittent data errors when reading from the lower platter caused by sector jitter.

PARTS REQUIRED

A. PERTEC PARTS

Qty.	Part Number	Description	Location
2	131-1530	Capacitor .015 MFD, + 10%, 100 WVDC TRV-663 series. Westcap-PR series	C79, C80
2	100-2725	Resistor, 2.7K + 5%, 1/4 W, QPL-RC07GF272J	R51, R54
1	100-3325	Resistor, 3.3K, + 5%, 1/4W, QPL-RC07GF332J	R65.
2	100-6825	Resistor, 6.8K, + 5%, 1/4W, QPL-RC07GF682J	R53, R56
2	100-1035	Resistor, 10K, + 5%, 1/4W, QPL-RC07GF103J	R52, R55
2	132-1062	Capacitor, 10MFD, + 20%, 10 WVDC Mallory - TIM106M010POW Kemet - K10W10	C16, C17
2	100-1025	Resistor, .1K, + 5%, 1/4W, QPL-RC07GF102J	R58, R59

B. Or equivalent parts, approved vendors and their part numbers are listed with each component.

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 20 K012C(1)

DISTRIBUTION CODE - 6318

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REWORK INSTRUCTIONS

1. Locate components on PCBA (Zone C6 on 103705 schematic) R54,55,56,59,51,52,53,58 65 and C16,17. (See Figure 1).
2. Remove R54 and install 2.7K resistor.
3. Remove R55 and install 10K resistor.
4. Remove R56 and install 6.8K resistor.
5. Remove R59 and install 1K resistor.
6. Remove R51 and install 2.7K resistor.
7. Remove R52 and install 10K resistor.
8. Remove R53 and install 6.8K resistor.
9. Remove R58 and install 1K resistor.
10. Remove R65 and install 3.3K resistor.
11. Remove C17 and install 10 MFD capacitor.
12. Remove C16 and install 10 MFD capacitor.
13. Locate R63 and R64.
14. Note Figure 2 for piggyback installation drawing.
15. Install C79 (.015 UF capacitor) piggyback on R64 as shown in Figure 2.
16. Install C80 (.015 UF capacitor) piggyback on R63 as shown in Figure 2.

ADJUSTMENTS

Perform the Sector Phase Lock Loop Adjustment at paragraph 6.11 in the D3000 Operating and Service Manual.

DRAWING CHANGES

On schematics 103704, 103684, 103690, 103725, 103727, 103729 and 103748:

1. On sheet 5 of schematic add capacitors as shown in Figure 3.
2. On sheet 5 of schematic make changes as listed in Table 1.
3. On sheet 1, zone C17 under Reference Designations, last used change C78 to C80.
4. On sheet 1, zone D18, Table 1, add

131-1530	C79, 80
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ZONE C-6

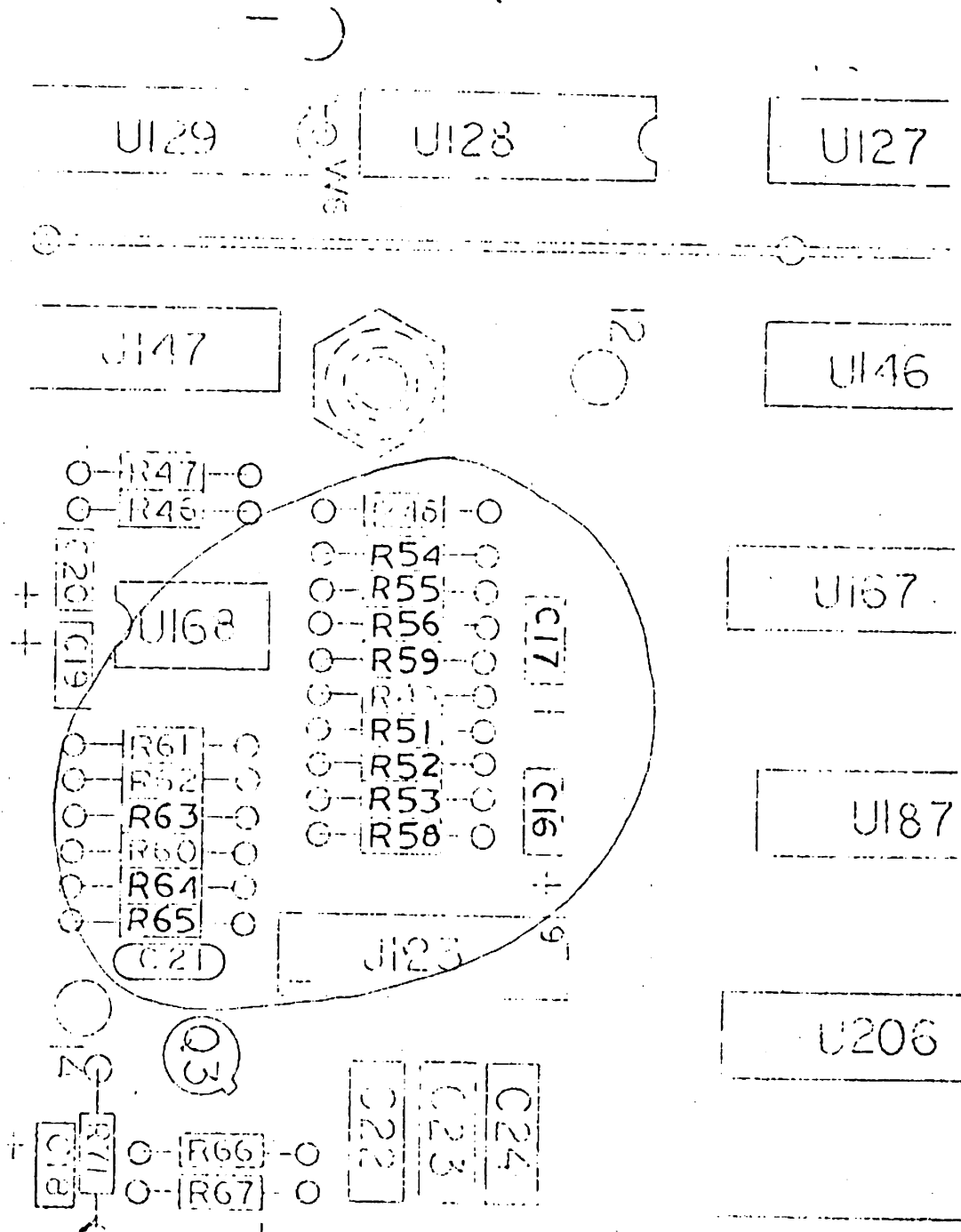


FIGURE 1

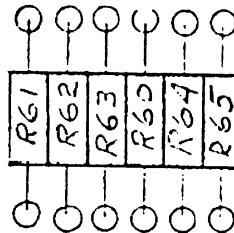
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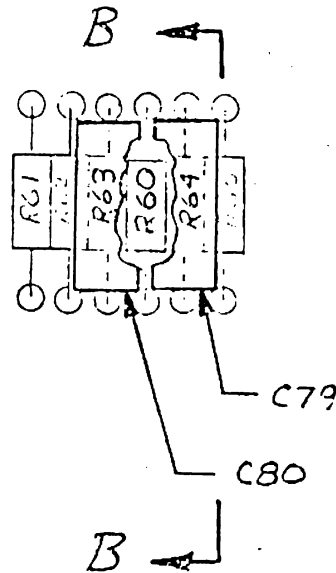
103705, 103685, 302691, 103726, 103728, 103730 and 103749

ZONE C/5

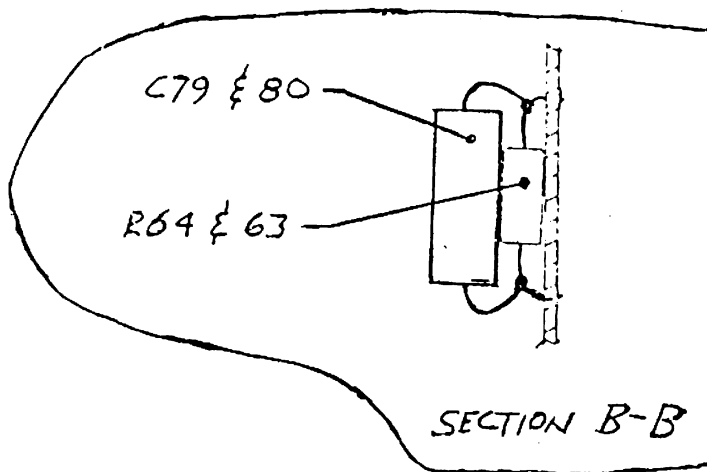
FROM:



TO:



ADD SECTION:



Solder C79 and C80

Piggyback as shown to

R64 and 63 respectively.

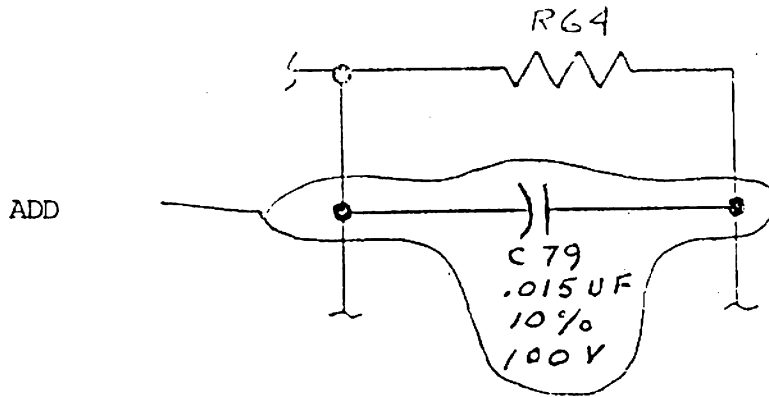
FIGURE 2

TITLE

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ZONE C/18



ZONE A/18

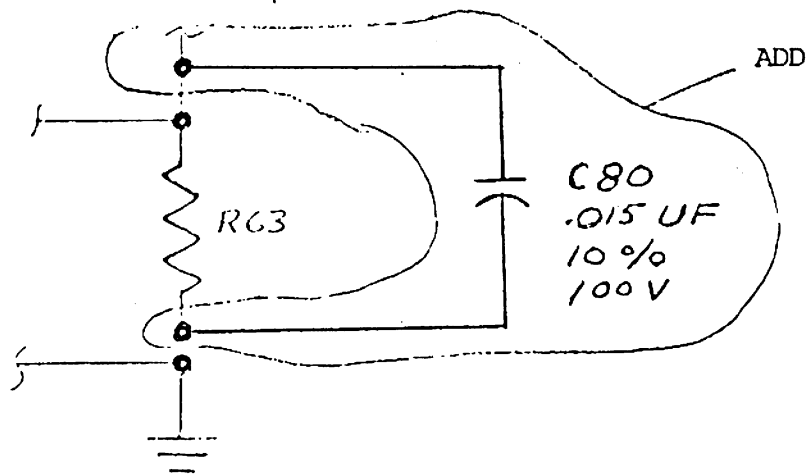


FIGURE 3.

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Zone B/19, R56	FROM: 2.7K	TO: 6.8K
Zone B/19, R55	FROM: 6.8K	TO: 10K
Zone C/19, R54	FROM: 3.9K	TO: 2.7K
Zone C/19, R53	FROM: 2.7K	TO: 6.8K
Zone C/19, R52	FROM: 6.8K	TO: 10K
Zone D/19, R51	FROM: 3.9K	TO: 2.7K
Zone C/18, C16	FROM: 22 uf 20%, 6V	TO: 10 uf 20%, 6V
Zone C/18, R58	FROM: 330	TO: 1K
Zone B/18, R59	FROM: 330	TO: 1K
Zone B/18, C17	FROM: 22 uf 20%, 6V	TO: 10 uf 20%, 10V
Zone B/17, R65	FROM: 4.7K	TO: 3.3K

TABLE 1

5. On sheet 1, Table 1

at 100-1025 add R58,59
 at 100-1035 add R52,55
 at 100-2725 delete R53,56, add R51,54
 at 100-3315 delete R58,59
 at 100-3325 add R65
 at 100-3925 delete R51, 54
 at 100-4725 delete R65
 at 100-6825 delete R52,55, add R53,56
 at 132-2262 delete C16,17
 add new line
 132-1062 C16,17

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REVISION CHANGES:

When the rework has been incorporated, re-identify the Logic PCBA as follows:

	<u>FROM</u>	<u>TO</u>
1.	103705-01K + ECN8071	103705-01K + ECN8071 + ECN8294
	103705-02E + ECN8071	103705-02E + ECN8071 + ECN8294
	103705-03F + ECN8071	103705-03F + ECN8071 + ECN8294
	103705-04C + ECN8071	103705-04C + ECN8071 + ECN8294
	103705-05B + ECN8071	103705-05B + ECN8071 + ECN8294
	103705-06B + ECN8071	103705-06B + ECN8071 + ECN8294
	103705-08A + ECN8071	103705-08A + ECN8071 + ECN8294
	103705-09F + ECN8071	103705-09F + ECN8071 + ECN8294
2.	103705-01M	103705-01N
	103705-02G	103705-02H
	103705-03H	103705-03J
	103705-04E	103705-04F
	103705-05D	103705-05E
	103705-06D	103705-06E
	103705-08C	103705-08D
	103705-09H	103705-09J
3.	103705-31C	103705-31D
	103705-32C	103705-32D
	103705-33C	103705-33D
	103705-34C	103705-34D
	103705-35C	103705-35D
	103705-36C	103705-36D
	103705-38C	103705-38D
	103705-39C	103705-39D

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FROM:

TO:

- | | | |
|----|----------------------|--------------------------------|
| 4. | 103705-01H + ECN7564 | 103705-01H + ECN7564 + ECN8294 |
| | 103705-02C + ECN7564 | 103705-02C + ECN7564 + ECN8294 |
| | 103705-03D + ECN7564 | 103705-03D + ECN7564 + ECN8294 |
| | 103705-04A + ECN7564 | 103705-04A + ECN7564 + ECN8294 |
| | 103705-05A + ECN7564 | 103705-05A + ECN7564 + ECN8294 |
| | 103705-06A + ECN7564 | 103705-06A + ECN7564 + ECN8294 |
| | 103705-09D + ECN7564 | 103705-09D + ECN7564 + ECN8294 |
| 5. | 103685-01B | 103685-01B + ECN8295 |
| | 103685-02B | 103685-02B + ECN8295 |
| | 103685-04B | 103685-04B + ECN8295 |
| | 103685-05B | 103685-05B + ECN8295 |
| | 103685-06B | 103685-06B + ECN8295 |
| 6. | 103685-01C | 103685-01D |
| | 103685-02C | 103685-02D |
| | 103685-04C | 103685-04D |
| | 102685-05C | 103685-05D |
| | 102685-06C | 103685-06D |
| 7. | 103685-31B | 103685-31C |
| | 103685-32B | 103685-32C |
| | 103685-34B | 103685-34C |
| | 103685-35B | 103685-35C |
| | 103685-36B | 103685-36C |
| | 103685-52A | 103685-52B |
| | 103685-62B | 103685-62C |

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8.	103691-01A	103691-01A + ECN8296
	103691-02A	103691-02A + ECN8296
	103691-09A	103691-09A + ECN8296
9.	103691-09B	103691-09B + ECN8296
10.	103691-01B	103691-01C
	103691-02B	103691-02C
	103691-09C	103691-09D
	103691-31B	103691-31C
	103691-32B	103691-32C
	103691-32B	103691-32C
11.	103726-01B	103726-01C
	103726-02B	103726-02C
	103726-31B	103726-31C
	103726-32B	103726-32C
12.	103728-04A	103728-04B
13.	103730-02A	103730-02B
	103730-52A	103730-52B
14.	103749-02A	103749-02A + ECN8300
15.	103749-02B	103749-02C
	103749-32B	103749-32C