



Consumer Product Service
Manager of Tehnical Support
FIELD- CHANGE ORDER number 1

MODEL: Atari 810 Disk Drive

DATE: May 28, 1982

SUBJECT:

Rear Board, Molex Connectors Removal

CHANGE DESCRIPTION:

New units manufactured by Atari have the two Molex Connectors (**J104** and **J105**) removed from the **810** rear printed circuit board. The connector removal eliminates intermittent connections which causes the Disk Drive to fail because of speed drift. The 5 Volt Regulator (**A108**) and the Pass Transistor (**Q113**) are soldered directly to the rearboard. This Field Change Order instructs Service Centers who will be repairing the 810 Disk Drive.

<u>Atari Part Number</u>	- Molex Connector	C014716-03
	- 5 Volt Regulator	CO14348
	- Pass Transistor	CO14786
<u>Part Location</u>	- Rearboard	CA014833
	Locations J104 and J105	
	- Base Plate	C012972
	Locations A108 and Q1 13	

REMOVAL/INSTALLATION PROCEDURES:

For removal, installation, troubleshooting, and testing, observe warnings or cautions stated in Atari 810 Disk Drive Field Service Manual. Before a chip or board is added to or removed from the system, power the system down. Follow instructions for disassembly and reassembly of unit (Field Service Manual).

Remove Rearboard

Desolder Molex Connectors (**C014716-03**), from locations **J104** and **3105** on rearboard

Remove 5 volt regulator from location **A108** on base plate.

Bend the leads on 5 volt regulator and pass transistor and position so that when soldered to the rearboard, the leads come over the top of the rearboard and allowing components to be mounted to the base plate.

Solder 5 volt regulator and pass transistor to rearboard.

Replace rearboard, apply a thin film of Heat Transfer Compound between **A108** and **Q113**, and base plate before securing components to the base plate.



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FIELD CHANGE ORDER number _____

MODEL: Atari 810 Disk Drive	DATE:
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Note that the Voltage Regulator (**A108**) and the Pass Transistor (**Q113**)**are** fastened to the base plate. In order to **remove** the Rearboard, you must remove the mounting screws from each. Remember to use Heat Sink Compound when replacing the **Rearboard** before securing the mounting screws. (Refer to Tech Tip #1.)

Use procedures as outlined in the Atari 810 Field Service Manual, check the disk drive speed.

TESTING PROCEDURES:

Following standard test procedures outlined in Atari 810 Disk Drive Field Service Manual.

Diagnostic Testing - Use **Flawtest III** and Align 3K Disk Alignment Program.



Consumer Product Service
Manager of Technical Support
UPGRADE BULLETIN

number 3

MODEL: Atari 810 Disk Drive

DATE: May 23, 1982

SUBJECT:

810 Disk Drive, ROM, Revision **C**,

UPGRADE DESCRIPTION:

New units manufactured by Atari contain a Revision C ROM (**CO11299C**) on the sideboard (**CA014834**). This new ROM improves diskette sector layout and gives faster access time. Consumers may wish to replace old ROM revisions (**CO11299B**) with Revision C ROM for improved Disk Drive performance. This Upgrade Bulletin instructs **Service** Dealers who install this component.

Old Atari Part Number - CO112998

New Atari Part Number - CO11299C

Part Location - Sideboard, **CA01 4834**
Location **A102**

INSTALLATION PROCEDURE5

For troubleshooting, installation and testing observe **warnings** and cautions stated in Atari Home **Computer** Division 810 Disk Drive Service **Manual**. Before a chip or board is added to **or** removed from the unit, power the system down. Follow instructions in Section 5-13 for **disassembly** and reassembly of unit.

Remove **CO11299B** from Location **A102** on sideboard, and insert **CO11299C**.

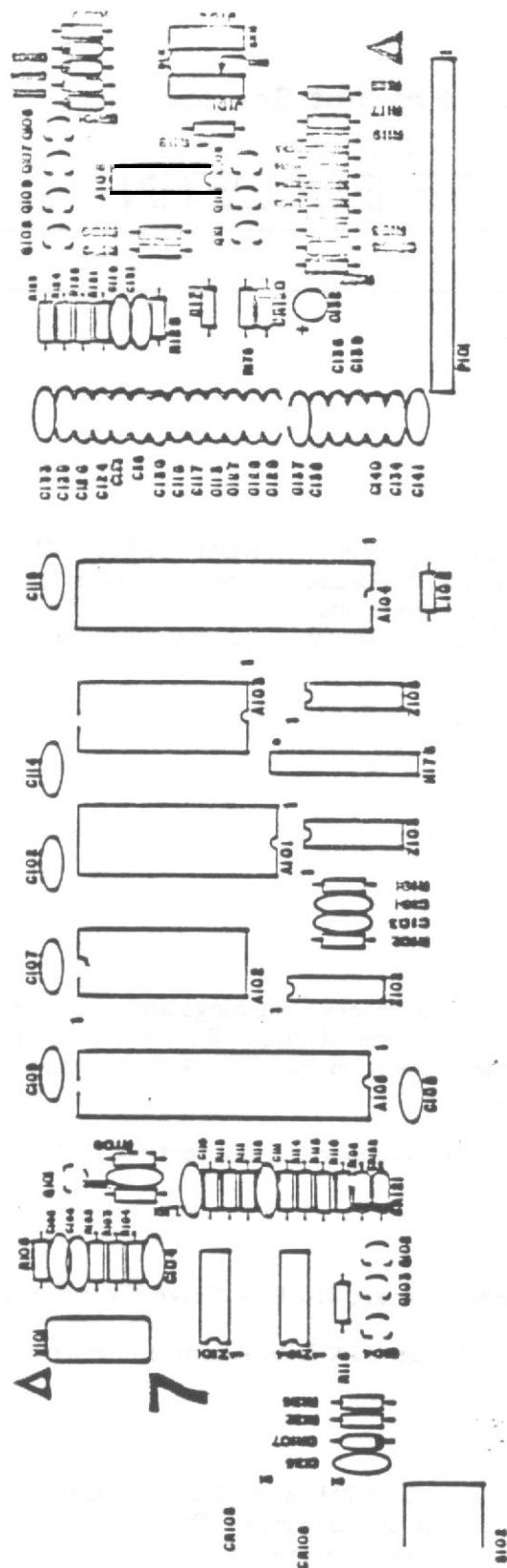
TESTING PROCEDURES

Follow standard test procedures outlined in Atari 810 Disk Drive Field Service **Manual**.

Diagnostic Testing - Use **Flawtest III** and Align. 3K **Disk** Alignment Program.

CONSUMER INFORMATION

An 810 Disk Drive with the Revision C ROM and DOS 2 offers improved speed performance by improving the sector layout on diskettes. This makes it possible to store and retrieve information more rapidly than was possible using the old **sector layout**.



Silkscreen 810 Side Board



Consumer Product Service
Manager of Technical Support
UPGRADE BULLETIN

number _____

100EL: Atari 810 Disk Drive

DATE:

COMPATIBILITY WITH DISKETTES USING THE OLD SECTOR LAYOUT.

Data stored on diskettes using the old sector layout can be read or written to using the upgraded driver. The speed will not be improved.

PARTS DISPOSITION

Not Applicable.

ENCLOSURES:

Sideboard Silk Screen



Consumer Product Service
Manager of Tehnical Support
TECH TIP

number 1

MODEL: Atari 810 Disk Drive

DATE: April 2, 1982

SUBJECT:

Atari 810 Disk Drive, Rear Board Molex Connectors

D - O N :

New Atari 810 Disk Drive Rearboards are assembled with the two 3 Pin Molex Connectors (J104 and J105) removed. The 5 Volt Regulator (A108) and the Pass Transistor (Q113) are now soldered directly to the Rearboard (see Sii Screen an back).

Parts Removed:

Atari P/N C014716-03(2)

Part Location:

810 Disk Drive - Rearboard Lacarian J104 and J105.

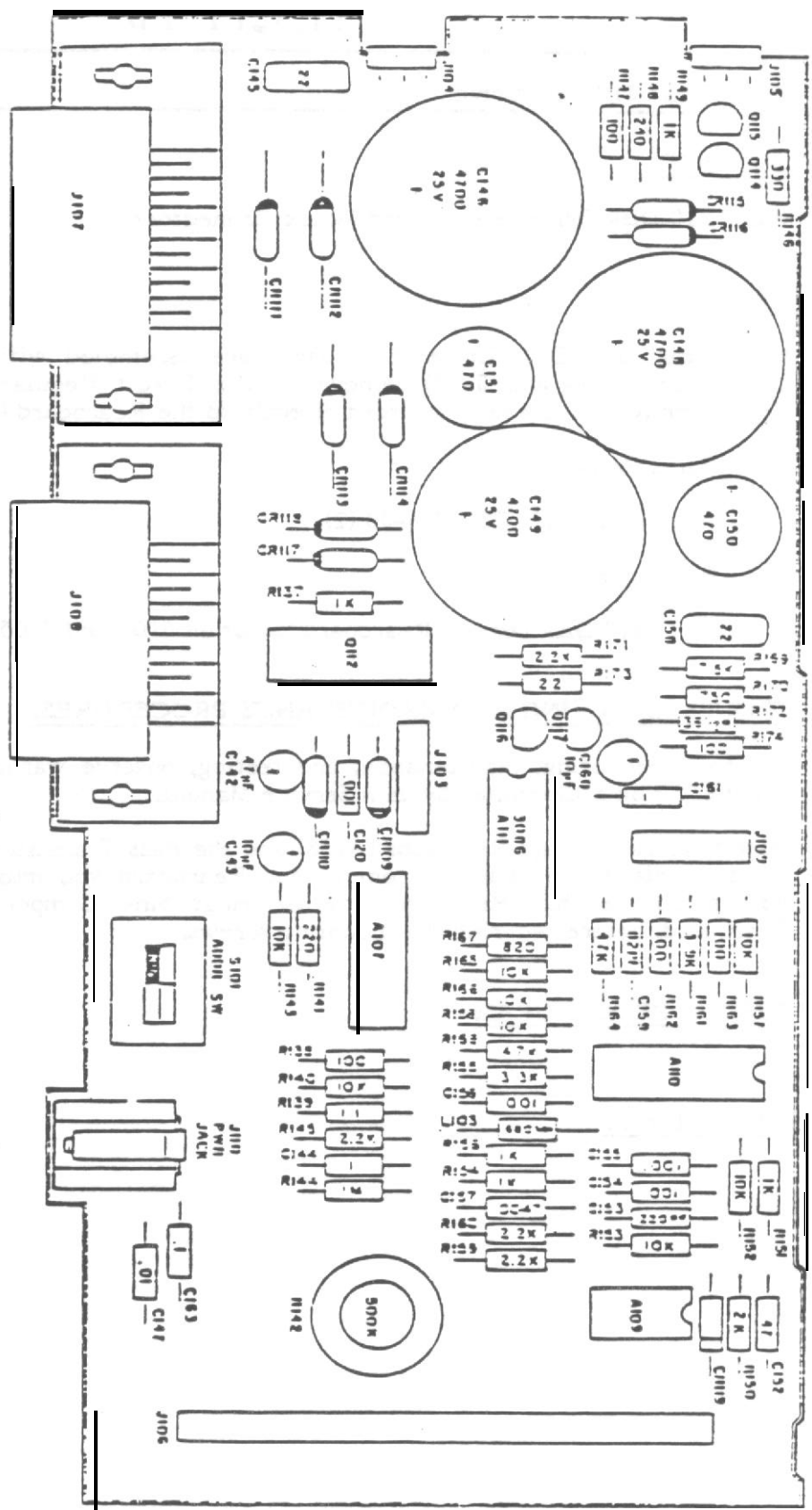
TROUBLESHOOTING AND MAINTENANCE PROCEDURES:

Far troubleshooting, maintenance, and testing, observe warnings and cautions in the Atari 810 Home Computer System Service Manual.

Note that the Voltage Regulator (A108) and the Pass Transistor (Q113) are fastened to the base plate. In order to remove the Rearboard you must remove the mounting screws from each. Remember to use Heat Sink Compound when replacing the Rearboard, before securing the mounting screws.

TESTING PROCEDURES:

ENCLOSURES:



810 Rear Board
Silk Screen



Consumer Product Service
Manager of Technical Support

TECH TIP

number 4

MODEL: Atari 810 Disk Drive

DATE: May 28, 1982

SUBJECT:

810 Disk Drive units containing the following:

- . Data Separator Board added to sideboard.
- . Sideboard stepper motor circuit voltage increase to regulated 12 volts DC.
- . New power adaptor to provide increased current required by the above modifications.

DESCRIPTION:

New 810 Disk Drive units manufactured by Atari contain a Data Separator Board added to the sideboard, modifications to the stepper motor circuit to increase voltage, and a new power adaptor. This Tech Tip instructs those who are repairing 810 Disk Drives containing these modifications.

The parts affected are:

Data Separator Board	CA017231
Sideboard	CA014834
Power Supply	CO16804

Part Location - P103 on Data Separator Board, Atari Part No. CA017231, plugs into the sideboard location A105 on Atari Sideboard Part No. CA014834, where FDC 1771 (Floppy Disk Controller) is usually installed.

TROUBLESHOOTING AND MAINTENANCE PROCEDURES:

For troubleshooting, maintenance, and testing, observe warnings and cautions stated in Atari 810 Disk Drive Field Service Manual. Before a board is added to or removed from the unit, power the system down.

If a board is suspected, follow the standard troubleshooting procedure outlined in Atari 810 Disk Drive Field Service Manual, to check circuitry and alignment. If circuitry and alignment check out but board has many 144 errors or many intermittent errors, swap the data separator board in the unit with a known good one. This procedure isolates the problem to a faulty data separator board or faulty side board.

Use procedure outlined in Atari 810 Disk Drive Field Service Manual.

NOTE: These boards cannot be installed in the existing socket in sideboards not designed for data separator. Doing so may result in short or intermittent failures.



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TECH TIP

number _____

MODEL: Atari 810 Disk Drive

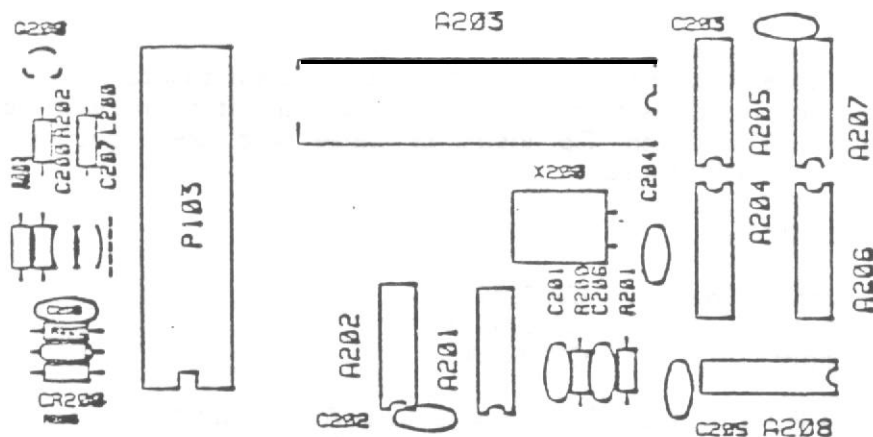
DATE: _____

TESTING PROCEDURE

Use standard test procedures outlined in the **Atari 810 Disk Drive Field Service Manual**.

Diagnostic Testing - Use **Flawtest III** and Align 3K Disk Alignment Program.

810 DATA SEPARATOR SILKSCREEN





Consumer Product Service
Manager of Technical Support
TECH TIP

number 6

ODEL: 10 Analog Disk Drive

DATE: , , 7/82

SUBJECT:

Data Reliability on the 810 Analog Disk Drive

DESCRIPTION:

810 Analog Drives (those manufactured after August 1981) that exhibit diskette **compatability** problems, **and/or** troubles in formatting new diskettes, should have the Write Current Resistor (**R218**) replaced with a **1.4K** ohm resistor.

Part Removed:

2K ohm 1/4W 5% Resistor Atari P/N 14-5202

Replace With:

1.4K ohm 1/4W 2% Resistor Atari PIN 14-2142

Part Location:

810 Analog Board location R218

TESTING AND TROUBLESHOOTING:

Follow the Diagnostic Flowchart and Troubleshooting Guide for the Analog Disk Drive in the 810 Service Manual.

ENCLOSURES:

Schematic and Silkscreen:

Analog Board — CA017935 Rev. 5



Consumer Product Service
Manager of Technical Support
TECH TIP

number 7

MODEL: ATARI 810 DISK DRIVE

DATE: 11/17/82

SUBJECT:

Reformatting Preformatted Diskettes

DESCRIPTION:

Because the format on preformatted diskettes in effect becomes the standard for in-the-field disk drive testing, they must be created on master duplicating machines. These diskettes must never be reformatted. If a diskette is reformatted by another source, it becomes useless for the test intended.

Unfortunately, there is no way to know if a "Preformatted Diskette" has been reformatted. The possible results of reformatting a "Preformatted Diskette" or not using a preformatted diskette are:

- 1) You may replace a drive mechanism when no problem exists.
- 2) You may misalign the heads, thus making your customer's diskette library unusable on the "fixed" disk drive.

DO NOT USE A REFORMATTED PREFORMATTED To ALIGN OR TROUBLESHOOT AN 810 DISK DRIVE.

DIFFICULTY REPORTING:

If you have any questions or need further clarification concerning this Tech Tip, call the ATARI Tech-Line Specialist:

Inside California
(800) 672-1466

Outside California
(800) 538-1535



Consumer Product Service
Manager of Technical Support
TECH TIP

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number

MODEL: ATARI 810 Disk Drive

DATE: June 6, 1983

SUBJECT:

Incorrect 12 Voltage Regulator

DESCRIPTION:

All 810 Disk Drives manufactured during 1982 work week 51, should be checked for the proper **12V** Regulator on the Power Supply PCB.

PROBLEM:

Some 0.5 amp Regulators became mixed-in with the 1.0 amp Regulators during production. The Regulator's specification calls for a 1.0 amp.

SOLUTION:

When performing repairs on the 810, visually inspect the voltage regulator. Make certain that it does not bear the number **78M12**. If a **78M12** is found, replace it with a 7812 (Atari Part Number - **C014712**).

TROUBLESHOOTING:

This change does not effect the troubleshooting procedures outlined in the Atari 810 Disk Drive Field Service Manual (**FD100003**).

DIFFICULTY REPORTING:

If you have questions or need further assistance, call the Atari **Techline** Specialist:

Inside California
(800) 672-1466

Outside California
(800) 538-1535



Consumer Product Service
Manager of Technical Support
TECH TIP

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number

ODEL: ATARI 810 Analog Disk Drive

DATE: June 6, 1983

SUBJECT:

Diode Replacement at **CR104**, CR105

DESCRIPTION:

Excessively high failure rates of diodes at CR104, and CR105 on the 810 Analog Power Supply **PCB**.

PROBLEM:

Diodes do not meet Atari specifications - vendor related problem.

SOLUTION:

Replace failed diodes with a diode of a higher current rating. This not only remedies the problem but also provides a greater reliability factor.

NOTE Perform the following **modification procedure only on those units** which **display** failed diodes at **CR104 and CR105** of the 810 Analog Power Supply **PCB**.

MODIFICATION PROCEDURE

Silk Screen Location	Remove Component	Part Descrip. Number	Replacement Comp. Descrip.	Part Number
CR104, CR105	Diode, IN4001	31-1N4001	Diode 1N5391	CO17988

TROUBLESHOOTING:

These changes do not effect the troubleshooting procedures outlined in the 810 Disk Drive Field Service Manual (**FD100003**).

DIFFICULTY REPORTING:

If you have questions or need further assistance, call the Atari **Techline Specialist:**

Inside California
(800) 672-1466

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(800) 538-1535