QIC DEVELOPMENT STANDARD

CLEANING CARTRIDGE RECOGNITION
WITH LIGHT PRISM

(See important notices on the following page)

Important Notices
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UNIVERSAL MINI CLEANING CARTRIDGE

AND

UNIVERSAL DATA CLEANING CARTRIDGE

BACKGROUND

Cleaning cartridge spec QIC 147-C has been adapted for a dry ribbon cleaner. There is a recognition switch scheme built into the cleaning cartridge that triggers a tape drive firmware controlled cleaning routine. This firmware controlled cleaning routine is incompatible with existing wet cleaners. A second method recognizing a different type of cleaning cartridge is needed. The scope of this proposal is to detail the mechanical requirements for recognition of a second cleaning cartridge. We are also including recomnended firmware support specifications.

1.0 Mini Cleaning Caartridge specifications:

    1.1   Cartridge conforms to Minicartridge QIC 143
             Including all optical sensing features of a standard recording Minicartridge.

2.0 Mechanical recognition specifications:

    2.1   Mechanical cut out on front of the cartridge that will create the following conditions:

           No cartridge present
           Write enabled
           Constant tape sensor LED ON

3.0 Firmware response to Cleaning Cartridge recognition:

The tape drive will recognize that it has a TYPE 11 cleaning cartridge present. Upon recognition the tape drive will automatically initiate the cleaning cycle utilizing one of the recommended Drive Speeds and Time Out responses.

3.1 Drive Speed	Cleaning Cycle Time Out
40 - 60 IPS	40 Seconds
60 - I 00 IPS	30 Seconds
100 -200 IPS	20 Seconds

3.2   Head Steps

3.3   Two flashing LED pulses per second

4.0 Data Cleaning Cartridge specifications:

4.1   Cartridge conforms to Data Cartridge ANSI Spec X3.55-1982
          Including all optical sensing features of a standard recording Data Cartridge.

5.0 Mechanical recognition specifications:

5.1   Mechanical cut out on front of the cartridge that will create the following conditions

       No cartridge present
       Write enabled
       Constant tape sensor LED ON

6.0 Firmware response to Cleaning Cartridge recognition:

The tape drive will recognize that it has a TYPE II cleaning cartridge present. Upon recognition the tape drive will automatically **initiate** the cleaning cycle utilizing one of the recommend Drive Speed and Time Out responses.

6.1   Drive Speed   Cleaning Cycle Time Out

Drive Speed	Cleaning Cycle Time Out
40 - 60 IPS	40 Seconds
60 - 100 IPS	30 Seconds
100 - 120 IPS	20 Seconds

6.2   Head Steps

6.3   Two flashing LED pulses per second

7-0 Technical cartridge drawing attached

Proposal by

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QIC MINICARTRIDGE
TECHNICAL DRAWING