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### REVISION HISTORY

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QIC Development Standard

1.0 INTRODUCTION

The objective of QIC Development Standard 147 is to establish criteria such that QIC tape drive manufacturers can utilize operating conditions that will control speed, head position, duration and use frequency of a cleaning cartridge.

2.0 APPLICABLE FORMATS

This development standard is for cleaning cartridge recognition in:

- Minicartridge
- QIC-80
- QIC-3010-MC
- QIC-3020-MC
- QIC-3040-MC
- QIC-3050-MC
- QIC-3080-MC
- QIC-3095-MC
- QIC-3210-MC
- QIC-3230-MC
- All future standards

3.0 RECOGNITION METHOD

The preferred method of recognition is by utilizing the write enable/file protect switch and the cartridge recognition switch areas for 5.25" form factor drives. The preferred method of recognition for 3.5" form factor drives is by utilizing the write enable/file protect and the cartridge recognition switch or light emission/detection sequence.

3.1 SWITCH POSITION SEQUENCES AND RESULTS

By utilizing the write enable/file protect and cartridge recognition switches in various combinations there are four possible results in 5.25" form factor drives. When both switch areas are open the result is the program firmware recognizing the absence of a cartridge of any kind. When both switch areas are closed, the program firmware result is a "Write Enable" mode. A combination of a closed Cartridge Identification switch and an open File Protect switch results in a "File Protect" mode. Cleaner Cartridge "recognition" is achieved by having the Cartridge Identification switch in it's open position while the File Protect switch is in a closed position.

The preferred method of recognition for 3.5" form factor drives is by utilizing the write enable/file protect and the cartridge recognition switch or light emission/detection sequence. Cleaner Minicartridge "recognition" is achieved by creating a no cartridge in place and write enable condition.
4.0 **OPERATION CONDITIONS**

The following Operating Conditions will be performed when the drive recognizes the cartridge as a cleaning cartridge.

4.1 Drive controls movement of head cleaning element.
   Data Cartridge drive speed of 53 ips.
   Minicartridge drive variable between 12-22 ips.

4.2 Drive steps head up and down during the cleaning element motion.

4.3 Drive controls cleaning process duration.
   Data Cartridge drive duration of 5 seconds.
   Minicartridge drive duration of 5 seconds.

4.4 Drive signals end user that cleaning is in process.
   Data Cartridge drive LED flashes at a rate of 2 cycles per second.
   Minicartridge drive LED flashes at a rate of 2 cycles per second.
QIC DEVELOPMENT STANDARD
QIC-147 Revision A, 11 June 93

5.0 QIC DATA CLEANING CARTRIDGE ILLUSTRATION

Available recognition areas for DC-600 type cleaning cartridge

ALLSOP INC. 5-12-93, (DC600) E. CLAUSEN
REVISED: 6-7-93, E.CLAUSEN
REVISED: 6-10-93, E.CLAUSEN