Run Logic

Serve Unsafe

Stop Sanding & Unload

3 Rush Cycle Control

Detects Run -> H

Detects Run -> L

Med Offline

Start Sanding

Unload Heads Logic

Any Condition Not Met Causes Heads to Unload.
DRIVE START UP TIMING

DRIVE IS IN READY MODE, IE., IT MAY SEEK, READ/WRITE, ETC.

DRIVE CYCLE DOWN TIMING

BRUSH CYCLE APPROX 11 SEC.
Hence Index produced on 01010

'D' sector

32 d of CLK pulses

Tri-bits change in pattern when sector 0 reached

H allows clock to count.

Open for 5-52kS

Clocked by last sector pulse of last sector

Gates Index time

Window opened at same time as index should be coming along i.e. at beginning of sector 0

Detected index

No index
ODD/EVEN
FOLLOWING FOR
ERROR SIGNAL ON OFFSET CORRECTION.

SWITCH BETWEEN
GLASS MAGNETIC TACHO
OFFSET DIRECTION

CLOCKED BY
COARSE TRACK
FINE TRACK
TRACK COMBINATION

OFFSET CENTRE

SERVO CONTROL
SAW TOOTH
GENERATED
FROM OPTICAL
TACHO & USED
TO COMPENSATE
FOR 'STEPPING'
VELOCITY WAVEFORM
to GIVE US A SMOOTH
RAMP.
1.1 μs Pulses

Every 3.72 μs, splits incoming waveform

Phase Lock Oscillator
(Allows for missing Tri-bits)

Voltage

Reset on 16.

Gate incoming pulse

Synchronized bits.

Servo error
(Looking for) Circuit.

Error on 4 missing bits.
(3 missing then O.K.)

Pulse integrated & used as
110 to VC8

Peak Gating A/B.
Errors: WR Gate but no write data.

Write select

Current select

Compensation for current dependent on inner and outer cylinder count.

Head selection

Heads

Seek head

Split data & clock FF.

Power fluctuates, bad filter for MEC noise.

Faulty head, imbalance in head O/P's.

Not field adjustable

Multi HD select

Write data but no write gate.
L.C. DIFF

noise-free data.

EDGE RAMP

READ DATA TO CONTROLLER.
VARISTOR

BRUSH MOTOR RELAY

SPINDLE BRAKE RELAY

DRIVE RELAYS

K1 SPINDLE RELAYS
K2 BRUSH CYCLE RELAYS
K3 BRAKE

FROM CONSTANT VOLTAGE 'TUNED' X FORMER.
BIASES X SISTER ON WHEN CURRENT OVER CURRENT, FOLDBACK

FUSE +5V

SERIES REGULATOR

VOLT DETECT (+5)

CURRENT FOLDBACK
CURRENT PROTECTION ON ±5V

AT 5.7V VOLTAGE PROTECT CROWBARS TO GND ONLY