

PREVENTIVE MAINTENANCE

RK05/RK05J DISK DRIVE

HOW TO USE THE PM

General

The PM procedures are written for the device and are written to maximize system performance and minimize the number of corrective maintenance calls necessary.

Format

The PM procedures are written in modular format according to DEC Standard 003. The introduction to each PM lists applicable options, time estimates, special equipment required, and diagnostics required.

Each step of the text is written in the order in which it is to be performed. Opposite each step is a checklist; each step should be checked $(\sqrt{})$ and dated as it is performed.

System PM Applications

The PM procedures for several hardware options can be configured to provide a PM manual for a system that includes each of these options. Manuals can be customized for specific product applications without extensive rework.

Frequency

How frequently a PM is performed depends largely upon system usage and site environment. The PM has sufficient flexibility to allow the customer and local Field Service to

tailor the PM schedule and maintenance contract coverage to suit the requirements of each specific system, ensuring maximum customer utilization of the system with a minimum of downtime.

Symbol Usage

The following symbols represent the recommended performance frequency for each step.

M Monthly
Q Quarterly
SA Semiannual
A Annual
2 Yr Biennial

Historical Reference

A checklist is included opposite each PM procedure sheet, so that a permanent record of completed PM procedures and dates performed may be maintained. Trends in adjustments or power supplies over a period of time may predict an impending failure or justify a more or less frequent check of the adjustment.

REVISION HISTORY

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1.0 Applicable Option Designation

RK05 DEC PACK DISK RK05J 2.5 MBYTE DEC PACK DISK (new version)

2.0 Preventive Maintenance Schedule

Table RK05J-1
Preventive Maintenance Schedule

		_		Step	Time† (est)
Qua	rterly	Field	Service PM (or 750 hr)		½ hour
_	Annual Field Service PM (or 3000 hrs)			1	1½ hours
		5 yr	Field Service PM (or 15,000 hrs)		2 hours
X	X	x	Inspect and Clean Heads	Q1-3	5 min
\mathbf{x}	X	Х	Inspect Disk Cartridges and Spindle Area	Q4-5	5 min
X			Clean the Prefilter	Q6	5 min
	X	Х	Replace Prefilter	A1	2 min
	X	Х	Replace Absolute Filter	A2	10 min
	X	X	Check for Worn Shock Mounts	A3	l min
	X	Х	Check for Spindle Wobble	A4	1 min
		Х	Replace the Spindle Brush Assy	5 yr-1	5 min
		X	Remove and Clean the Blower	5 yr-2	15 min
	X	X	Clean the Pulleys	A.5	1 min
	Х	X	Inspect Spindle Drive Belt	A6	1 min
	Х	X	Check Linear Positioner	A7	1 min
	Х	X	Check Power Supply	A8-10	5 min
	Х	X	Check Servo Adjustments	A11-13	20 min
	X	X	Check Spindle Runout	A14	
	X	X	Check Head Alignment	A15-16	} 30 min
	X	X	Check Sector Delay	A17] J
X	X	X	Check for HDI	Q7-8	2 min
X	X	X	Run Diagnostic	Q10	10 min

†Minimum time estimates, providing no trouble is found.

3.0 Test Equipment, Tools and Material Required. (See Table RK05J-2)

4.0 Diagnostics Required

11 Family RK11 Dynamic Test MainDEC-11-DZRKL
8 Family RK8E Drive Control Test MainDEC-08-DHRKB*
*(Rev G or higher)

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Table RK05J-2 Equipment and Parts

Equipment/Part	Model/Part No.		
Multimeter	Simpson, Micronta, or equivalent		
Oscilloscope	Tektronix 453 or equivalent		
Probe, oscilloscope (voltage X10) (2)	Tektronix P6010		
Probe, oscilloscope (voltage, X1)	DEC 29-14050, P6011		
Flag, probe (3)	DEC 29-15188		
Adapter, flag (3)	DEC 29-19363		
Tool kit, field service	DEC 76-06864		
Wrench set, 10 pieces (Hex-Key Pak No. 107)	DEC 29-13519		
Kit, head cleaning	DEC 22-00007-00		
Inspection mirror	DEC 29-19663		
Alcohol, isopropyl 91%	DEC 29-19665		
Cotton Tipped Wooden Swabs	DEC 90-08436		
Blue shim stock, 0.005 in.	DEC 29-19664		
Cartridge, alignment	DEC RK05K-AC		
Cartridge, disk (12-sector, 11 family)	DEC 30-10350-00		
Cartridge, disk (16 sector, 8 family)	DEC 30-10350-02		
Motor assembly, blower	DEC 12-10807-00		
Motor, induction 50/60 Hz (spindle motor)	DEC 12-10808-00		
Spindle assembly, disk	DEC 12-10616-00		
Brush assembly (spindle ground)	DEC 12-10985-00		
Belt, woven (spindle drive belt)	DEC 12-10812-00		
Filter, absolute	DEC 12-12175-01		
Pad, filter (prefilter)	DEC 74-09253-00		
Torque wrench 55 in-oz for old head screws	DEC 29-20994		
Allen tip for 55 in-oz screws	DEC 29-20995		
Torque Wrench 128 in-oz for new head screws	DEC 29-22521		
3/32" Allen Tip 128 in-oz screws	DEC 29-22522		
Bearing assembly	DEC 74-09386		
Encoder Lamp Assy	DEC 30-10638-03		
Clamp Assembly (for above)	DEC 70-12691		