

AC Inspection as Found American Kraft Paper 1701 Jefferson Parkway

White Hall, AR 71602

FolderID: 103687 FormID: 22095809



Location: MOTOR SHOP LR Serial Number: A03187050800001M0001

Description:25 HP AERATOR

Hi-Speed Job Number:	103687
Manufacturer:	US Motors/Nidec
Product Number:	18705080
Spec/ID #:	A 03 18705080 0001 M 0001
Serial Number:	A03187050800001M0001
HP/kW:	25 (HP)
RPM:	1190 (RPM)
Frame:	324 LPZ
Voltage:	230 / 460
Current:	62 / 31
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	08/08/2023
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **1 - High**

10 - Good

Overall Condition

Report Date 1.

11/01/2024

Ο

2. Nameplate Picture



3. Photos of all six sides of the machine.









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P37

P45



	100 m				
	4.	Describe the Overall Condition of the Equipment as Rec	eived		
		Great condition. Shaft was bent .013" and seal surfaces w	ere wore. Recommended replacing	shaft.	
Ini	tial I	Mechanical/Electrical		0	
	5.	Does Shaft Turn Freely?		(Y) Yes	
	6.	Does the shaft require T.I.R in Lathe to identify additiona	Il repairs?	(No) No	
	7.	Does Shaft Have Visible Damage?		(Yes) Yes	P26
•	8.	Assembled Shaft Runout	due to additional demose on cost of	0.013 Inches	
		existing shaft.	aue to auditional damage on seal SL	ITAGES OF	
	9.	Assembled Shaft End Play		0.002 inches	
	10.	Air Gap Variation <10%	No	Provisions for measurement	

11.	Lead Condition	(P) Pass
12.	Lead Length	6 Inches
1 3.	Does it have Lugs?, If so what is the Stud Size?	(No) No
14.	Lead Numbers	1-9
15.	Frame Condition	Pass
1 6.	Fan Condition	(P) Pass
17.	Broken or Missing Components	None
Initial	Electrical Inspection	

18. Insulation Resistance/Megger





92000 Megohms

P8



19.	Winding Resistance			P20
	1-2	1-3	2-3	
		1-3 .3747	2-3 .3723	
20.	Perform Surge Test		(P) Pass	P57
21.	Number of Stator Slots		48	
22.	Stator Condition		Pass	P85
23.	Stator Thermistors/Ohms		N/A	
24.	Stator Overloads/Ohms		N/A	-
Mecha	nical Inspection			0

10	1	2
		S
	EIN	A
	T	
	-	N. A. S.



34. Opposite Drive End Bearing Number-	6211 2RS C3	
35. Opposite Drive End Bearing Qty.	1	
36. Opposite Drive End Bearing Type	(Ball) Ball Bearing	
37. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated	
38. Opposite Drive End Bearing Insulation or Grounding Device?	None	
39. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	None	
40. Opposite Drive End Bearing Condition	Normal wear	
41. Drive End Seal	29224	P127



42.	Opposite Drive End Seal	None
Rotor I	nspection	
43.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
44.	Growler Test	(Pass) Pass
45.	Number of Rotor Bars	



47. List the Parts needed for the Repair Below 5316 C3 6211 C3 29224 seal

48. Signature of Technician that Disassembled Motor

Brandon Woodard

Pass

P41

Mechanical Fits- Rotor				
49.	Shaft Runout		0.013 inches	
50.	Rotor Runout			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
	0.002	0.002	0.003	
51.	Coupling Fit Closest to Bearing F	lousing		P33
	0 Degrees	90 Degrees	120 Degrees	
	2.375	2.375	2.375	





 52.
 Coupling Fit Closest to the end of the Shaft

 0 Degrees
 60 Degrees
 120 Degrees

 2.375
 2.375
 2.375

	53.	Drive End Bearing Shaft Fit			P79
		0 Degrees	60 Degrees	120 Degrees	
		3.1502	3.1502	3.1502	
	.	Tolerance is 3.1497-3.1502			
		- Come			
	1				
	1				
	54.	Drive End Bearing Shaft Fit Cond	ition	(P) Pass	
	55.	Opposite Drive End Bearing Shaft	t Fit		P90
		0 Degrees	60 Degrees	120 Degrees	
		2.1662	2.1662	2.1662	
		<i>Tolerance is 2.1660-2.1665</i>			
		Contraction of the second s			
	-	ACCOUNTS A REAL PROPERTY AND INCOME.			
		0			
		f be			
	56.	Opposite Drive End Bearing Shaft	t Fit Condition	(P) Pass	
	57.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		Pass	Pass		_
M	echa	nical Fits- Bearing Housings			0

58.	Drive Litu - Litubeli Dearing Fit			P2
	0 Degrees	60 Degrees	120 Degrees	
	6.6931	6.6931	6.6931	
	Tolerance is 6.6929-6.6939			
• 59.	Drive End - Endbell Bearing Fit	Condition	(P) Pass	
60.	Opposite Drive End - Endbell Be	earing Fit		P30
	0 Degrees	60 Degrees	120 Degrees	
	0 Degrees 3.9378	60 Degrees 3.9378	120 Degrees 3.9378	
-	0 Degrees 3.9378 Tolerance is 3.9370-3.9379	60 Degrees 3.9378	120 Degrees 3.9378	
	0 Degrees 3.9378 Tolerance is 3.9370-3.9379	60 Degrees 3.9378	120 Degrees 3.9378	

62.	Bearing Cap Condition		P52
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	Pass	N/A	
63.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	Pass	Pass	
64.	List Machine Work Needed Below		
	Recommend replacing shaft.		
65.	Technician		Brandon Woodard
Root C	ause of Failure		
66.	Failure locations		
	None		
67.	Root cause of failure		
	None		