

LR Motor Shop Repairs

Job Number 103318

Prepared for Delta Plastics (11016)

8801 Frazier Pike Little Rock AR 72206

Table of Contents

AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: B9126122-020002

1.0



Hi-Speed Industrial Service 7030 Ryburn Dr Millington, Tn 38053 901-873-5300

> FolderID: 103318 FormID: 21212402

AC Inspection as Found

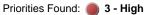
Delta Plastics (11016)

8801 Frazier Pike Little Rock, AR 72206

AC Inspection - Rev. 2

Location: MOTOR SHOP LR Serial Number: B9126122-020002 Description:150HP BALDOR 1750RPM

Hi-Speed Job Number:	103318
Manufacturer:	Baldor
Spec/ID #:	B889014
Serial Number:	B9126122-020002
HP/kW:	150 (HP)
RPM:	1750 (RPM)
Voltage:	460
Current:	180 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.00
Enclosure:	DP
# of Leads:	6
J-box Included:	Half
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
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





9 - Good

Overall Condition

1. Report Date 08/05/2024

2. Nameplate Picture



3. Photos of all six sides of the machine.







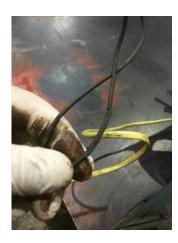










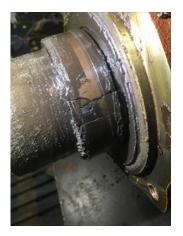












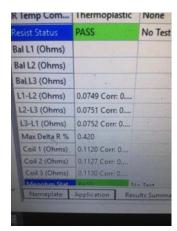






4.	Describe the Overall Condition of the Equipment as Received				
4.	• •				
	Dirty				
5.	Report Date [COPY]	08/28/2024			
Initial	Mechanical/Electrical				
6.	Does Shaft Turn Freely?	(N) No			
7 .	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No			
8.	Does Shaft Have Visible Damage?	(No) No			
9.	Assembled Shaft Runout	0 Inches			
10.	Assembled Shaft End Play	0 inches			
11.	Air Gap Variation <10%	none			
12.	Lead Condition	(P) Pass			
13.	Lead Length	16 Inches			
1 4.	Does it have Lugs?, If so what is the Stud Size?	(No) No			
15.	Lead Numbers	1-1/2-2/3-3			
16.	Frame Condition	pass			
17.	Fan Condition	(N) NA			
18.	Broken or Missing Components	J-box cover			
Initial	Initial Electrical Inspection				
19.	Insulation Resistance/Megger	Megohms			





21. Perform Surge Test(P) Pass



22.	Number of Stator Slots	48
23.	Stator Condition	pass
24.	Stator Thermistors/Ohms	
2 5.	Stator Overloads/Ohms	0.3ohms
Mecha	nical Inspection	
26.	Drive End Bearing Brand	FAG
27.	Drive End Bearing Number-	NU215
28.	Drive End Bearing Qty.	1
29.	Drive End Bearing Type	(Roller) Roller Bearing
30.	Drive End Lubrication Type	(Grease) Grease Lubricated
31.	Drive End Bearing Insulation or Grounding Device?	
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	none



34.	Opposite Drive End Bearing Brand	FAG
35.	Opposite Drive End Bearing Number-	6211
36.	Opposite Drive End Bearing Qty.	1
37.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
38.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
39.	Opposite Drive End Bearing Insulation or Grounding Device?	none
40.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	none
41.	Opposite Drive End Bearing Condition	
-	Wear	



42.	Drive End Seal	na			
43.	Opposite Drive End Seal	na			
Rotor	Rotor Inspection				
44.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast			
45.	Growler Test	(Pass) Pass			
46.	Number of Rotor Bars	40			
47.	Rotor Condition	pass			
48.	List the Parts needed for the Repair Below				
	NU-215 6211 Recommend new aegis ring				

49. Signature of Technician that Disassembled Motor

Mun

Mech	Mechanical Fits- Rotor					
50.	Shaft Runout		0.0005 inches			
51.	Rotor Runout					
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing			
	0.001	0.001	0.001			
52.	Coupling Fit Closest to Bearing Housing	ng				
	0 Degrees	90 Degrees	120 Degrees			
	0	0	0			
53.	Coupling Fit Closest to the end of the	Shaft				
	0 Degrees	60 Degrees	120 Degrees			
	0	0	0			
54.	Drive End Bearing Shaft Fit					
	0 Degrees	60 Degrees	120 Degrees			
-	Excessive wear					
55.	Drive End Bearing Shaft Fit Condition		(F) Fail			

Cw



	56.	56. Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.1657	2.1657	2.1657	
	57.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	58.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		
M	echa	anical Fits- Bearing Housings			
	59.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		5.1196	5.1191	5.1194	
	60.	Drive End - Endbell Bearing Fit Condit	ion		(P) Pass

		Fit	Opposite Drive End - Endbell Bearing	61.	6		
	120 Degrees	60 Degrees	0 Degrees				
	3.9379	3.9378	3.9379				
) Pass		Fit Condition	Opposite Drive End - Endbell Bearing	62.			
			Bearing Cap Condition	63.			
		Opposite Drive End Bearing Cap	Drive End Bearing Cap				
			Pass	-			
			End Bell Air Seal Fits	64.			
		Opposite Drive End Air Seal	Drive End Air Seal				
		ok	ok				
			List Machine Work Needed Below	65.			
			DE shaft bearing fit				
Cw			Technician	66.			
			<i>_ _ _ _</i> .				
			Drive End Air Seal ok List Machine Work Needed Below DE shaft bearing fit Technician	65.			

Mon

Co sign: RRW

Root Cause of Failure

67. Failure locations

Bearings and DE shaft bearing fit

68. Root cause of failure

DE bearing inner race failed by cracking in multiple places causing inner race to spin on shaft wearing down the bearing fit

Dynamic Balance Report

69. Rotor Weight and Balance Grade

Rotor Weight Balance Grade



70.	Initial Balance Readings	
	Drive End	Opposite Drive End
	.78	.87
71.	Final Balance Readings	
	Drive End	Opposite Drive End
	.78	.87



73.	Shaft Runout Post Repair	0.0005 inches
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74. Rotor Runout Post Repair

Drive End Bearing Fit Rotor Body Opposite Drive End Bearing

0.001 0.001
0.001



75.	Coupling Fit Closest to Bearing Housi	ng Post Repair	
	0 Degrees	90 Degrees	120 Degrees
	0	0	0
76.	Coupling Fit Closest to the end of the	Shaft Post Repair	
	0 Degrees	60 Degrees	120 Degrees
	0	0	0
77.	Drive End Bearing Shaft Fit Post Repa	air	
	0 Degrees	60 Degrees	120 Degrees
	2.9543	2.9543	2.9543
78.	Opposite Drive End Bearing Shaft Fit	Post Repair	
	0 Degrees	60 Degrees	120 Degrees
	0	0	0
79.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
	ok	ok	
80.	Shaft Repair Sign-off		Gary

Assembly

1111

82. Photograph All Major Components prior to assembly

(Complete) Complete













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83.	Final Insulation Resistance Test		2000 Megohms
84.	Assembled Shaft Endplay		0 inches
85.	Assembled Shaft Runout		0 inches
86.	Test Run Voltage		
	Volts	Volts	Volts
	457	456	459
-	Witnessed by R Wiley		



87.	Test Run Amperage		
	Amps	Amps	Amps
	53.2	50.9	51.6
88.	Drive End Vibration Readings - Inche	s Per Second	
	Horizontal	Vertical	Axial
	0.0248	0.0384	0.0142
89.	Opposite Drive End Vibration Reading	gs - Inches Per Second	
	Horizontal	Vertical	Axial
	0.0163	0.0276	0.0104
90.	Ambient Temperature - Fahrenheit		7
91.	Drive End Bearing Temps - Fahrenhe	it	
	5 Minutes	10 Minutes	15 Minutes
	70	70	70
92.	Opposite Drive End Bearing Temps -	Fahrenheit	
	5 Minutes	10 Minutes	15 Minutes
	70	70	70
93.	Document Final Condition with Picture	es after paint	looks good
94.	Final Pics and QC Review		David Maclin

Witnessed by R Wiley

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