

EVERY DAY SINCE 1946

LR Motor Shop Repairs

Job Number 103360

Prepared for DeWaffelbakkers (10743)

10000 Crystal Hill Road N.Little Rock AR 72113

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AC Inspection as Found - LR MOTOR SHOP



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

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AC Inspection as Found

DeWaffelbakkers (10743) 10000 Crystal Hill Road N.Little Rock, AR 72113

AC Inspection - Rev. 2

Location:	LR MOTOR SHOP	
Serial Number:	93X26057	

Description:200HP RAM/TOSHIBA EVAL

Hi-Speed Job Number:	103360
Manufacturer:	Toshiba
Product Number:	1279780-01-NW-P-2
Serial Number:	93X26057
HP/kW:	200 (HP)
RPM:	3565 (RPM)
Frame:	444TS
Voltage:	230 / 460
Current:	470/236
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	ODP
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	08/12/2024
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 🛑 1 - High

🔵 10 - Good

Overall Condition

1. Report Date

08/19/2024

2. Nameplate Picture







3. Photos of all six sides of the machine.

































	 Describe the Overall Condition of the Equipment as Received Serviceable 		
	5.	Report Date [COPY]	08/19/2024
In	Initial Mechanical/Electrical		
	6.	Does Shaft Turn Freely?	(Y) Yes
	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	0.001 Inches
10.	Assembled Shaft End Play	0 inches
11.	Air Gap Variation <10%	pass



13	3. Lead Length	5.5 Inches
14	Does it have Lugs?, If so what is the Stud Size?	(No) No
15	5. Lead Numbers	1-12
16	6. Frame Condition	pass
17	7. Fan Condition	(N) NA
18	8. Broken or Missing Components	none
Initia	ial Electrical Inspection	

19. Insulation Resistance/Megger

17.39 Megohms

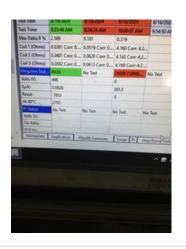


20. Winding Resistance

1-2

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1-3

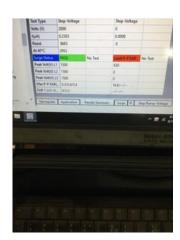


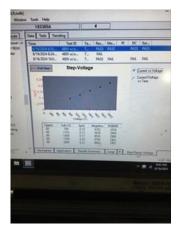


21. Perform Surge Test









22.	Number of Stator Slots	48
23.	Stator Condition	dirty
24.	Stator Thermistors/Ohms	
25.	Stator Overloads/Ohms	
Mecha	anical Inspection	

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(P) Pass

26. Drive End Bearing Brand





27.	Drive End Bearing Number-	6313 C3
28.	Drive End Bearing Qty.	1
29.	Drive End Bearing Type	(Ball) Ball Bearing
30.	Drive End Lubrication Type	(Grease) Grease Lubricated
31.	Drive End Bearing Insulation or Grounding Device?	none
32.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	
•	Gland nut and lock washer.	
33.	Drive End Bearing Condition	replace
34.	Opposite Drive End Bearing Brand	SKF
35.	Opposite Drive End Bearing Number-	6313





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?	gland nut and lock washer
41.	Opposite Drive End Bearing Condition	replace
42.	Drive End Seal	
43.	Opposite Drive End Seal	
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 B	elow	
		Bearings.		
	49.	Signature of Technician that Disasser	nbled Motor	Terrence Holland
		\rightarrow	(a)	
		/ //		
	1	- HA	man	
	1	/		
Μ	echa	anical Fits- Rotor		
	50.	Shaft Runout		0.001 inches
	51.	Rotor Runout		
		Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
	50	Courting Fit Classet to Decring Llouis		
	5Z.	Coupling Fit Closest to Bearing Housi		120 Degrees
		0 Degrees	90 Degrees	120 Degrees
	53.	Coupling Fit Closest to the end of the	Shaft	
		0 Degrees	60 Degrees	120 Degrees
		5	<u> </u>	<u> </u>
	54.	Drive End Bearing Shaft Fit		
		0 Degrees	60 Degrees	120 Degrees
		2.5593	2.5593	2.5593
	55.	Drive End Bearing Shaft Fit Condition		(P) Pass
	56.	11 0		
		0 Degrees	60 Degrees	120 Degrees
		2.5594	2.5593	2.5593
	57.	11 9	Condition	(P) Pass
	58.		Operative Drive Fred Air Cool	
		Drive End Air Seal	Opposite Drive End Air Seal	
м	echa	anical Fits- Bearing Housings		
		Drive End - Endbell Bearing Fit		
		0 Degrees	60 Degrees	120 Degrees
		5.5134	5.5131	5
	60.	Drive End - Endbell Bearing Fit Condi	tion	(F) Fail
	61.	Opposite Drive End - Endbell Bearing	Fit	
		0 Degrees	60 Degrees	120 Degrees
		5.5121	5.5123	5.512
	62.	Opposite Drive End - Endbell Bearing	Fit Condition	(P) Pass
	63.	Bearing Cap Condition		
		Drive End Bearing Cap	Opposite Drive End Bearing Cap	
		pass	pass	
	64.	End Bell Air Seal Fits		
		Drive End Air Seal	Opposite Drive End Air Seal	

65. List Machine Work Needed Below D.E housing fit out of tolerance.

66. Technician

Co sign: CRW

Holla

Root Cause of Failure

67. Failure locations

Windings were very dirty. Leads are only 5.5" long. Top connection box cover as black mark that appears to be from where the leads shorted against it.







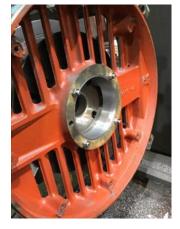
68. Root cause of failure Possible leads shorting against connection box cover.

Dynamic Balance Report

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Terrence Holland

	Rotor Weight and Balance Grade	;		
	Rotor Weight	Balance Grade		
	-			
*******	Component and Dynamic Relativity Separate Inter-			
12.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.	approximation and a second			
Testamo I	B, G, M, S			
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-	Maximum (numbricines) Max Filmethic Max Filmethic Max Filmethic Max Filmethic Max Filmethic Max Filmethic			
	and and a second			
1				
C				
6				
70.	Initial Balance Readings			
	Drive End	Opposite Drive End		
	0.19	0.54		
71.	Final Balance Readings			
	Drive End	Opposite Drive End		
	0.13	0.19		
72.	Technician			RW
	Λ			
1	$h \mid l$			
(
	anical Fits- Bearing Housing			
73.	Drive End - Endbell Bearing Fit F	Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
	5.5124	5.5124	5.5124	



74.	Opposite Drive End - Endbell Bearing	Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
-	Na			
75.	Bearing Cap Condition Post Repair			
	Drive End Bearing Cap	Opposite Drive End Bearing Ca	ρ	
	Na			
76.	End Bell Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
	Na End Bell Repair Sign-off			
	Na			
	Assembly			
78.	78. QC Check All Parts for Cleanliness Prior to Assembly RW			
79.	Photograph All Major Components pri	or to assembly	(Complete) Complete	





















80.	Final Insulation Resistance Test Pass the Hi pot		Megohms
81.	Assembled Shaft Endplay <i>Na</i>		inches
82.	Assembled Shaft Runout		0.0003 inches
83.	Test Run Voltage		
	Volts	Volts	Volts
	459	459	460



Co sign DM

84. Test Run Amperage		
Amps	Amps	Amps
71.7	69.2	70.7



	85.	. Drive End Vibration Readings - Inches Per Second				
		Horizontal	Vertical	Axial		
		0.01	0.02	0.01		
	86. Opposite Drive End Vibration Readings - Inches Per Second					
		Horizontal	Vertical	Axial		
		0.02	0.03	0.02		
	87. Ambient Temperature - Fahrenheit					
(Na				
	88.	Drive End Bearing Temps - Fahrenhei				
		5 Minutes	10 Minutes	15 Minutes		
- (Na				
	89. Opposite Drive End Bearing Temps - Fahrenheit					
		5 Minutes	10 Minutes	15 Minutes		
		Na				

90. Document Final Condition with Pictures after paint









91. Final Pics and QC Review RW Co sign DM



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- 5. DELIVERY OF GOODS AND/OR SERVICES. Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
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- 16. <u>NO INDIVIDUAL LIABILITY</u>. Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.