

# **Motor Shop Repairs**

## Job Number 100066

Prepared for Lexicon (10257)

8900 Fouche Dam Pike Little Rock AR

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1.0



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### **AC Recondition As Found**

Lexicon (10257)

8900 Fouche Dam Pike Little Rock, AR



#### AC Recondition - Rev. 2

SHOP Location: Serial Number: 823471B-3

<b>Description:</b> 4HP REULAND	1800/53RPM WEO-
215/H400	

Hi-Speed Job Number:	100066
Manufacturer:	Other
Product Number:	13273
Serial Number:	823471B-3
HP/kW:	4 (HP)
RPM:	1800 (RPM)
Frame:	WEO-215/H400
Voltage:	230 / 460
Current:	10.6/5.3
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TENV
J-box Included:	None
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** 





5 - Good

#### **Overall Condition**

Report Date 07/19/2022





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#### 2. Nameplate Picture



3. Photos of all six sides of the machine.













4. Describe the Overall Condition of the Equipment as Received

#### **Initial Mechanical/Electrical**

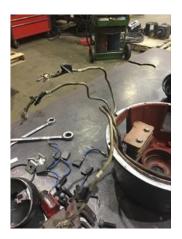
5. Does Shaft Turn Freely? (Yes) Yes

. Does Shaft Have Visible Damage? (No) No



7.	Assembled Shaft Runout	0.001 Inches
8.	Assembled Shaft End Play	0.0005 inches
9.	Air Gap Variation <10%	
10.	Lead Condition	(P) Pass





11. Lead Length 12 Inches

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#### 12. Frame Condition



13.	Fan Condition			
14.	Broken or Missing Components			
Initial	Electrical Inspection			
15.	Insulation Resistance/Megger			2000 Megohms
16.	Winding Resistance			
	1-2	1-3	2-3	
<ul><li>17.</li></ul>	Perform Surge Test			(P) Pass
18.	Stator Condition			
Mecha	anical Inspection			
19.	Drive End Bearing Number-			6306a rsr



20. Drive End Bearing Qty.	1
21. Drive End Bearing Type	(Ball) Ball Bearing
22. Drive End Lubrication Type	(Grease) Grease Lubricated
23. Drive End Bearing Insulation or Grounding Device?	
24. Drive End Wavy Washer/Snap-Ring Other Retention Device?	
25. Drive End Bearing Condition	worn



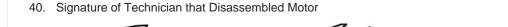
27. Opposite Drive End Bearing Qty.	1
28. Opposite Drive End Bearing Type	(Ball) Ball Bearing
29. Opposite Drive End Lubrication Type	e (Grease) Grease Lubricated
30. Opposite Drive End Bearing Insula	on or Grounding Device?
31. Opposite Drive End Wavy Washer/	Snap-Ring Other Retention Device?
32. Opposite Drive End Bearing Condit	on <b>worn</b>
33. Drive End Seal	
34. Opposite Drive End Seal	

#### **Rotor Inspection**

- 35. Rotor Type/Material
- Wound rotor



36.	Growler Test	
37.	Number of Rotor Bars	24
38.	Rotor Condition	fail
-	Needs rewound	
39.	List the Parts needed for the Repair Below	
	2-6308 rsr bearings Rewind rotor	



**Trevor Hall** 

Mech	Mechanical Fits- Rotor				
41.	Shaft Runout		0.001 inches		
42.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
43.	Coupling Fit Closest to Bearing Housi	ng			
	0 Degrees	90 Degrees	120 Degrees		
44.	Coupling Fit Closest to the end of the	Shaft			
	0 Degrees	60 Degrees	120 Degrees		
45.	Drive End Bearing Shaft Fit				
	0 Degrees	60 Degrees	120 Degrees		
	1.1806	1.1806	1.1806		



46. Drive End Bearing Shaft Fit Condition

(F) Fail

Undersized

47. Opposite Drive End Beari	ng Shaft Fit	
0 Degrees	60 Degrees	120 Degrees
1.1805	1.1806	1.1806



	48.	Opposite Drive End Bearing Shaft Fit Undersized	Condition		(F) Fail
	49.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
M		anical Fits- Bearing Housings			
	50.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.8353	2.8353	2.8353	
	51.	Drive End - Endbell Bearing Fit Cond			(P) Pass
	52.	Opposite Drive End - Endbell Bearing	ı Fit		
		0 Degrees	60 Degrees	120 Degrees	
		2.8346	2.8346	2.8346	
	7	Tight			
	53.	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
	54.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	55.	End Bell Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
	56.	List Machine Work Needed Below  Machine both shaft bearing fits			
	57.	Technician	3//_		Trevor Hall

### **Root Cause of Failure**

58. Failure locations

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	Rotor needs rewound and both bearing fits on shaft need machined
59.	Root cause of failure



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