

EVERY DAY SINCE 1946

LR Motor Shop Repairs

Job Number 99963

Prepared for Twin Rivers (12049)

3501 Jefferson Parkway Pine Bluff AR 71602

Table of Contents

AC Recondition As Found - Shop



AC Recondition As Found

Twin Rivers (12049) 3501 Jefferson Parkway Pine Bluff, AR 71602

AC Recondition - Rev. 2

Location:	Shop
Serial Number:	PG.FD212006TH

Description:800HP TECO 1200RPM 6808

Hi-Speed Job Number:	99963
Manufacturer:	TECO Westinghouse
Product Number:	KPF8006G
Serial Number:	PG.FD212006TH
HP/kW:	800 (HP)
RPM:	1192 (RPM)
Frame:	6808
Voltage:	2300/4160
Current:	189.3/108.9
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	06/23/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	Yes
Winding Type :	Form Coil
Bearing Type:	Rolling Element

Priorities Found: **1 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture

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

> FolderID: 99963 FormID: 13912456











































3.	Describe the Overall Condition of the	Equipment as Received			
4.	Photos of all six sides of the machine.				
Initial	Initial Mechanical/Electrical				
5.					
6.	Does Shaft Have Visible Damage?				
7.	Assembled Shaft Runout				
8.	Assembled Shaft End Play				
9.	Air Gap Variation <10%				
10.	Lead Condition				
11.	Lead Length				
12.	Frame Condition				
13.	Fan Condition				
14.	Heater Quantity, Ratings				
	Quantity	Volts/Watts	Pass/Fail		
15.	Broken or Missing Components				
Initial	Electrical Inspection				
16.	Insulation Resistance/Megger				
17.	Winding Resistance				
	1-2	1-3	2-3		

18. Perform Surge Test

19.	Stator Condition				
Mechanical Inspection					
20.	Drive End Bearing Number-				
21.					
22.	Drive End Bearing Type	•			
23.	Drive End Lubrication Type				
24.	Drive End Bearing Insulation or Groun	nding Device?			
25.	Drive End Wavy Washer/Snap-Ring C	Other Retention Device?			
26.	Drive End Bearing Condition				
27.	Opposite Drive End Bearing Number-				
28.	Opposite Drive End Bearing Qty.				
29.	Opposite Drive End Bearing Type				
30.	Opposite Drive End Lubrication Type				
31.	Opposite Drive End Bearing Insulation	n or Grounding Device?			
32.	Opposite Drive End Wavy Washer/Sn	ap-Ring Other Retention Device?			
33.	Opposite Drive End Bearing Condition	1			
34.	Drive End Seal				
35.	Opposite Drive End Seal				
Rotor	Inspection				
36.	Rotor Type/Material				
37.	Growler Test				
38.	Number of Rotor Bars				
39.	Rotor Condition				
40.	List the Parts needed for the Repair Below				
	Signature of Technician that Disassembled Motor				
Mech	chanical Fits- Rotor				
42.	Shaft Runout inches				
43.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
11	Coupling Fit Closest to Bearing Housi	ng			
44.	0 Degrees	-	120 Degrees		
	5	90 Degrees	120 Degrees		
45.	-	Shaft			
	0 Degrees	60 Degrees	120 Degrees		
	5	00 Degrees	120 Degrees		
46.					
101	0 Degrees	60 Degrees	120 Degrees		
	o Degrees	of Degrees	120 Degrees		
47.	Drive End Bearing Shaft Fit Condition				
48.	Opposite Drive End Bearing Shaft Fit				
	0 Degrees	60 Degrees	120 Degrees		
49.	11 0	Condition			
50.	Shaft Air Seal Fits				
	Drive End Air Seal	Opposite Drive End Air Seal			

Mech	anical Fits- Bearing Housings				
	51. Drive End - Endbell Bearing Fit				
	0 Degrees	60 Degrees	120 Degrees		
52.	2. Drive End - Endbell Bearing Fit Condition				
53.	53. Opposite Drive End - Endbell Bearing Fit				
	0 Degrees	60 Degrees	120 Degrees		
54.	Opposite Drive End - Endbell Bearing	Fit Condition			
	55. Bearing Cap Condition				
	Drive End Bearing Cap	Opposite Drive End Bearing Cap			
56.	End Bell Air Seal Fits				
	Drive End Air Seal	Opposite Drive End Air Seal			
57.	List Machine Work Needed Below				
58.	Technician				
Dyna	mic Balance Report				
59.	Rotor Weight and Balance Grade				
	Rotor Weight	Balance Grade			
60.	Initial Balance Readings				
00.	Drive End	Opposite Drive End			
61.	Final Balance Readings				
	Drive End	Opposite Drive End			
62.	Technician				
Rewin	nd				
63.	Core Test Results - Watts loss per Po	bund			
	Pre-Burnout	Post Burnout			
0.4					
64.	Core Hot Spot Test				
	Pre-Burnout	Post-Burnout			
65.	Post Rewind Electrical Test- Insulatio	n Resistance			
66.	Post Rewind Polarization Index				
67.	Post Rewind Winding Resistance				
	1-2	1-3	2-3		
60	Post Powind Surge Test				
68. 69.	0				
	Technician				
	Cause of Failure				
	Failure locations				
	Root cause of failure				
	anical Fits- Rotor - Post Repair				
	Shaft Runout Post Repair		0.0005 inches		

0 Degrees 4.875	90 Degrees 4.8752	120 Degrees 4.875
0 Degrees	90 Degrees	120 Degrees
75. Coupling Fit Closest to Bearing Housing Post Repair		
Drive End bearing Fit	Rotor Body	Opposite Drive End Bearing
Drive End Bearing Fit	Potor Body	Opposite Drive End Bearing
74. Rotor Runout Post Repair		





Modified key. Machined height to 1.173.

76.	Coupling Fit Closest to the end of the Shaft Post Repair			
	0 Degrees	60 Degrees	120 Degrees	
	4.875	4.8749	4.8749	
77.	Drive End Bearing Shaft Fit Post Repa	air		
	0 Degrees	60 Degrees	120 Degrees	
78.	Opposite Drive End Bearing Shaft Fit	Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
79.	Shaft Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
80.	Shaft Repair Sign-off			Gary Moore
Assembly				

81. Photograph All Major Components prior to assembly





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Printed on 8/2/2022

(Complete) Complete

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82. Final Insulation Resistance Test



43,500 Megohms



83.	Assembled Shaft Endplay			
84.	Assembled Shaft Runout			0.0005 inches
85.	Test Run Voltage			
	Volts	Volts	Volts	
	2282	2298	2304	
	High Voltage 4124 4138 4165			





86.	Test Run Amperage		
	Amps	Amps	Amps
	67.099999999999999	63.3	64.3
	High Voltage 42.6 40.2 40.9		
44 (M) 2 2 8 4 0 5 7 0 5	a (A) = (A)		AUGUNA Au
87.	Drive End Vibration Readings	- Inches Per Second	
	Horizontal	Vertical	Axial
88.		-	
	Horizontal	Vertical	Axial
80	Ambient Temperature - Fahrer	nheit	
	Drive End Bearing Temps - Fa		
	5 Minutes	10 Minutes	15 Minutes
91.	Opposite Drive End Bearing Te	emps - Fahrenheit	
	5 Minutes	10 Minutes	15 Minutes
00	Otatan Tampanatura Est	- 14	
92.	Stator Temperatures- Fahrenh		
	5 Minutes	10 Minutes	15 Minutes
93.	Final Test Run Sign-off		
~ 4		B ¹ <i>i i i i i i i i i i</i>	

94. Document Final Condition with Pictures after paint



95. Final Pics and QC Review

RW



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- 2. PRICE. All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
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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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- 11. <u>GOVERNING LAW AND JURISDICTION.</u> Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
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