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## LR Motor Shop Repairs

## **Job Number 100100**

Prepared for Twin Rivers (12049)

3501 Jefferson Parkway Pine Bluff AR 71602

### **Table of Contents**

AC Recondition As Found - Shop

AC Recondition - Rev. 2: M0811

1.0



FolderID: 100100

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#### **AC Recondition As Found**

Twin Rivers (12049)

3501 Jefferson Parkway Pine Bluff, AR 71602

AC Recondition - Rev. 2

Location: Shop
Serial Number: M0811

Description: 3HP BALDOR 1800RPM 145TC

WENCH

aldor
15B 99010959-002
35E60-872-C
0811
(HP)
700 (RPM)
45TC
30 / 460
4/4.2
nree
) (Hz)
15
EFC
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0
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Priorities Found: 1 - High

igh

6 - Good

#### **Overall Condition**

1. Report Date

Nameplate Picture

































	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received	
		Winch frame is broken and wire rope is in poor condition. Rusty/dirty	
	5.	Distance from the end of the shaft to the Coupling/Sheave	
In	itial	Mechanical/Electrical	
	6.	Does Shaft Turn Freely?	(No) No
	-	Brake locked up	
	7.	Does Shaft Have Visible Damage?	(No) No
	8.	Assembled Shaft Runout	
	-	Pass	
	9.	Assembled Shaft End Play	
	10.	Air Gap Variation <10%	
	11.	Lead Condition	(P) Pass
	12.	Lead Length	9 Inches
	13.	Frame Condition	
	-	Winch frame broken, motor frame is good	
	14.	Fan Condition	(N) NA
	15.	Broken or Missing Components	frame
In	itial	Electrical Inspection	
	16.	Insulation Resistance/Megger	Megohms



47	Winding Posistones				
17.	Winding Resistance	4.0	0.0		
	1-2	1-3	2-3		
18.	Perform Surge Test		(P) Pass		
	Stator Condition		Good		
<b>Mech</b>	anical Inspection				
	Drive End Bearing Number-		6205zz		
21.	Drive End Bearing Qty.		1		
22.	Drive End Bearing Type		(Ball) Ball Bearing		
23.	Drive End Lubrication Type		(Grease) Grease Lubricated		
24.	Drive End Bearing Insulation or Grou	unding Device?	no		
25.	Drive End Wavy Washer/Snap-Ring	Other Retention Device?	no		
26.	Drive End Bearing Condition		Good		
27.	Opposite Drive End Bearing Number	r-	6203zz		
28.	Opposite Drive End Bearing Qty.		1		
29.	Opposite Drive End Bearing Type		(Ball) Ball Bearing		
30.	Opposite Drive End Lubrication Type	e	(Grease) Grease Lubricated		
31.	Opposite Drive End Bearing Insulation	on or Grounding Device?	no		
32.	Opposite Drive End Wavy Washer/S	nap-Ring Other Retention D	evice? no		
33.	Opposite Drive End Bearing Condition	on	Good		
34.	34. Drive End Seal				
35. Opposite Drive End Seal					
Rotor Inspection					
36.	Rotor Type/Material		(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast		
37.	Growler Test		(Pass) Pass		
38.	Number of Rotor Bars		48		
39.	Rotor Condition		Good		
40.	40. List the Parts needed for the Repair Below				
	Brake assembly, 6205 6203				
41. Signature of Technician that Disassembled Motor  David Maclin					
Mech	anical Fits- Rotor				
42.	Shaft Runout				
43.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
44.	Coupling Fit Closest to Bearing House	sing			
	0 Degrees	90 Degrees	120 Degrees		
45.	Coupling Fit Closest to the end of the	e Shaft			
	0 Degrees	60 Degrees	120 Degrees		
	2 2 39.000	00 209.000	120 2091000		

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46.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
47.	Drive End Bearing Shaft Fit Condition			(P) Pass
48.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
49.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
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.	Drive End - Endbell Bearing Fit Condi	tion		(P) Pass
53.	Opposite Drive End - Endbell Bearing	Fit		
	0 Degrees	60 Degrees	120 Degrees	
54.	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
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 None			
58.	Technician			David Maclin
Dynaı	mic Balance Report			
-	Rotor Weight and Balance Grade			
	Rotor Weight	Balance Grade		
60.	Initial Balance Readings			
	Drive End	Opposite Drive End		
61.	Final Balance Readings			
	Drive End	Opposite Drive End		
62.	Technician			
Rewir	nd			
		und		
	nd Core Test Results - Watts loss per Po Pre-Burnout	und Post Burnout		

64	Core Hot Spot Test		
01.	Pre-Burnout	Post-Burnout	
	The Bulliout	1 ost Barriodt	
65.	Post Rewind Electrical Test- Insulation	n Resistance	
66.	Post Rewind Polarization Index		
67.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
	Post Rewind Surge Test		
	Post Rewind Hi-Pot		
	Technician		
	Cause of Failure		
71.	Failure locations		
	Brake		
72.	Root cause of failure		
	Brake did not disengage and motor bur	ned through the brake.	
	anical Fits- Rotor - Post Repair		
	Shaft Runout Post Repair		
74.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
75	Coupling Fit Closest to Bearing Housi	ng Post Renair	
70.	0 Degrees	90 Degrees	120 Degrees
	o Degrees	30 Degrees	120 Degrees
76.	Coupling Fit Closest to the end of the	Shaft Post Repair	
	0 Degrees	60 Degrees	120 Degrees
			_
77.	Drive End Bearing Shaft Fit Post Repa	air	
	0 Degrees	60 Degrees	120 Degrees
70	Opposite Drive Find Decrine Chaft Fit	Doot Downin	
78.	Opposite Drive End Bearing Shaft Fit	•	420 Daggae
	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		
Mecha	anical Fits- Bearing Housings - P	ost Repair	
81.	Drive End - Endbell Bearing Fit Post F	Repair	
	0 Degrees	60 Degrees	120 Degrees
82.	Opposite Drive End - Endbell Bearing	·	100 5
	0 Degrees	60 Degrees	120 Degrees
83	Bearing Cap Condition Post Repair		
00.	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	Drive Life Dearing Cap	Opposite Drive Life Dealing Cap	

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84. End Bell Air Seal Fits Post Repair

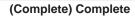
Drive End Air Seal

Opposite Drive End Air Seal

85. End Bell Repair Sign-off

#### **Assembly**

86. Photograph All Major Components prior to assembly

























87.	Final Insulation Resistance Test		
88.	Assembled Shaft Endplay		
89.	Assembled Shaft Runout		
90.	Test Run Voltage		
	Volts	Volts	Volts
	460	459	460
91.	Test Run Amperage		
	Amps	Amps	Amps
	1	1.1	1

92.	Drive End Vibration Readings - Inches	Per Second	
	Horizontal	Vertical	Axial
93.	Opposite Drive End Vibration Reading	s - Inches Per Second	
	Horizontal	Vertical	Axial
94.	94. Ambient Temperature - Fahrenheit		
95.	5. Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
96.	6. Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
97.	Final Test Run Sign-off		
98.	Document Final Condition with Picture	s after paint	
99.	Final Pics and QC Review		David Maclin
		_	











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