

LR Motor Shop Repairs

Job Number 104394

Prepared for Jacksonville Waste Water

248 Cloverdale Road Jacksonville AR 72076

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AC Inspection as Found - $\it LITTLE$ ROCK MOTOR SHOP

AC Inspection - Rev. 2: P36G3364

1.0





AC Inspection as Found

Jacksonville Waste Water

248 Cloverdale Road Jacksonville, AR 72076

FolderID: 104394 FormID: 23954951

AC Inspection - Rev. 2

LITTLE ROCK MOTOR SHOP Location:

Serial Number: P36G3364

Description:75 HP BALDOR

Hi-Speed Job Number:	104394
Manufacturer:	Baldor
Product Number:	ECP4316TP
Serial Number:	P36G3364
HP/kW:	75 (HP)
RPM:	1780 (RPM)
Frame:	365T
Voltage:	230 / 460
Current:	171/85.9 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	9
J-box Included:	None
Coupling/Sheave:	None
Date Received:	04/03/2025
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: 4 - High





11 - Good

Overall Condition

04/03/2025 1. Report Date

2. Nameplate Picture



3. Photos of all six sides of the machine.





 Describe the Overall Condition of the Equipment as Received Contamination in drive end bearing, bearing dry. End bells surface pitting.





	5.	Is this a UL Listed Motor	(No) No
	6.	Is the motor water cooled or can be pressure checked before teardown	(No) No
In	itial	Mechanical/Electrical	
	7.	Does Shaft Turn Freely?	(Y) Yes
	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	
	9.	Does Shaft Have Visible Damage?	(No) No
	10.	Assembled Shaft Runout	0.002 Inches
	11.	Assembled Shaft End Play	inches
	12.	Air Gap Variation <10%	
	13.	Lead Condition	(P) Pass
	14.	Lead Length	13.5 Inches
	15.	Does it have Lugs?, If so what is the Stud Size?	(Yes) Yes
	-	1/4	
	16.	Lead Numbers	1-9
	17.	Frame Condition	left rear foot cracked old weld

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▶ 18. Fan Condition (F) Fail

Blade broken



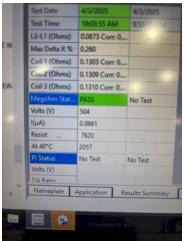
- 19. Does motor have internal fan?
- 20. Broken or Missing Components
- 21. Are the Leads insulated with Chico or other material

(No) No

Initial Electrical Inspection

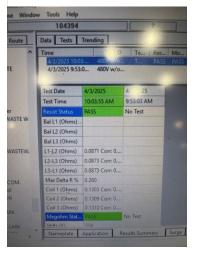
22. Insulation Resistance/Megger

Megohms

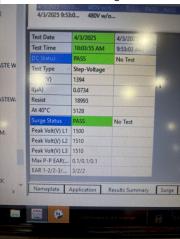


23. Winding Resistance

1-2 1-3 2-3



24. Perform Surge Test (P) Pass



25. Number of Stator Slots 60

26. Stator Condition



27.	Stator Thermistors/Ohms	na
28.	Stator Overloads/Ohms	na
Mecha	anical Inspection	
29.	Drive End Bearing Brand	
30.	Drive End Bearing Number-	6313
31.	Drive End Bearing Qty.	1
32.	Drive End Bearing Type	(Ball) Ball Bearing
33.	Drive End Lubrication Type	(Grease) Grease Lubricated
34.	Drive End Bearing Insulation or Grounding Device?	na
35.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	

36. Drive End Bearing Condition





contamination

37.	Opposite Drive End Bearing Brand	
38.	Opposite Drive End Bearing Number-	6313
39.	Opposite Drive End Bearing Qty.	1
40.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
41.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
42.	Opposite Drive End Bearing Insulation or Grounding Device?	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
44.	Opposite Drive End Bearing Condition	contamination





45.	Drive	End	Seal	

46. Opposite Drive End Seal

Rotor Inspection

	•	
47.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
48.	Growler Test	(Pass) Pass
49.	Number of Rotor Bars	43
50.	Rotor Condition	good
51.	List the Parts needed for the Repair Below	

51. List the Parts needed for the Repair Below

52. Signature of Technician that Disassembled Motor

Mechanical Fits- Rotor

53. Shaft Runout inches

54.	Rotor Runout			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End E	earing
55.	Coupling Fit Closest to Bearing Housi	ng		
	0 Degrees	90 Degrees	120 Degrees	
56.	Coupling Fit Closest to the end of the	Shaft		
	0 Degrees	60 Degrees	120 Degrees	
57.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5596	2.5593	2.5594	
5 8.	Drive End Bearing Shaft Fit Condition			(P) Pass
59.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5595	2.5594	2.5595	
60.			2.5595	(P) Pass
-			2.5595	(P) Pass
-	Opposite Drive End Bearing Shaft Fit		2.5595	(P) Pass

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit

0 Degrees 60 Degrees 120 Degrees

Surface pitting





63. Drive End - Endbell Bearing Fit Condition

(F) Fail



0 Degrees 60 Degrees 120 Degrees

Surface pitting





▶ 65. Opposite Drive End - Endbell Bearing Fit Condition

(F) Fail

66. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

good good





67. End Bell Air Seal Fits

Drive End Air Seal Opposite Drive End Air Seal

68. List Machine Work Needed Below

Sleeve both end bells

69. Technician Shon Jones

Shon Jones

Root Cause of Failure

70. Failure locations

Both end bell, bearings show contamination

71. Root cause of failure

Contamination and lack of lubrication. Add v-ring on drive end

Dynamic Balance Report

72. Rotor Weight and Balance Grade
Rotor Weight Balance Grade

73. Initial Balance Readings
Drive End Opposite Drive End



74. Final Balance Readings

Drive End Opposite Drive End



75. Technician Cw

Mechanical Fits- Bearing Housings - Post Repair

Mir

76. Drive End - Endbell Bearing Fit Post Repair			
0 Degrees	60 Degrees	120 Degrees	
5.512	5.5121	5.5121	



77. Opposite Drive End - Endbell Bearing Fit Post Repair			
0 Degrees	60 Degrees	120 Degrees	
5.512	5.512	5.512	



Assembly

78.	Bearing Cap Condition Post Repair	
	Drive End Bearing Cap	Opposite Drive End Bearing Cap
79.	End Bell Air Seal Fits Post Repair	
	Drive End Air Seal	Opposite Drive End Air Seal
80.	End Bell Repair Sign-off	Gary
80.	End Bell Repair Sign-off	Gary
80.	End Bell Repair Sign-off	Gary
80.		Gary
80.		Gary



82. Photograph All Major Components prior to assembly



















83.	Final Insulation Resistance Test			Megohms
84.	Assembled Shaft Endplay			inches
85 .	Assembled Shaft Runout			0.01 inches
86.	Test Run Voltage			
	Volts	Volts	Volts	



87.	Test Run Amperage		
	Amps	Amps	Amps
-	Witnessed run:TRH		



88.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
	0.03	0.05	0.02
89.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
	0.03	0.05	0.02
90.	Ambient Temperature - Fahrenheit		
91.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
92.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes

93. Document Final Condition with Pictures after paint







94. Final Pics and QC Review

Cw

Co sign: TRH



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