

LR Motor Shop Repairs

Job Number 103910

Prepared for Saint Jean Industries, Inc. (11653)

424 Industrial Park Road Heber Springs AR 72543

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AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: S9062235-001

1.0





AC Inspection as Found

Saint Jean Industries, Inc. (11653)

424 Industrial Park Road Heber Springs, AR 72543

FolderID: 103910 FormID: 22675598

AC Inspection - Rev. 2

Location: MOTOR SHOP LR Serial Number: S9062235-001

Description:300 HP BALDOR

Hi-Speed Job Number:	103910
Manufacturer:	Baldor
Spec/ID #:	P44G5097
Serial Number:	S9062235-001
HP/kW:	300 (HP)
RPM:	1780 (RPM)
Frame:	449T
Voltage:	460
Current:	329
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	DP
# of Leads:	12
J-box Included:	None
Coupling/Sheave:	None
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: 2 - High

10 - Good

Overall Condition

1. Report Date 01/03/2025

Nameplate Picture



3. Photos of all six sides of the machine.





















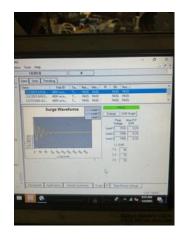
4. Describe the Overall Condition of the Equipment as Received Serviceable

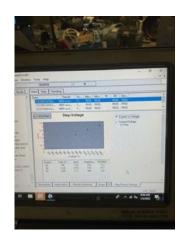
Initial Mechanical/Electrical

Na

5.	Does Shaft Turn Freely?	(Y) Yes
6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
7.	Does Shaft Have Visible Damage?	(No) No
8.	Assembled Shaft Runout	0.0002 Inches
9.	Assembled Shaft End Play	inches

10.	Air Gap Variation <10%		
-	Na		
11.	Lead Condition		(P) Pass
12.	Lead Length		18 Inches
13.	Does it have Lugs?, If so what is the	Stud Size?	(No) No
14.	Lead Numbers		1-12
15.	Frame Condition		pass
16.	Fan Condition		(N) NA
17.	Broken or Missing Components		missing connection box
	None		
Initial	Electrical Inspection		
18.	Insulation Resistance/Megger		390 Megohms
19.	Winding Resistance		
	1-2	1-3	2-3
	0.01179	0.01185	0.01176
	Perform Surge Test		(P) Pass





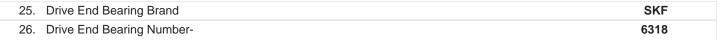
Step voltage

21. Number of Stator Slots	72
22. Stator Condition	wash and dry





23. Stator Thermistors/Ohms	na
24. Stator Overloads/Ohms	na
Machanical Inspection	





27. Drive End Bearing Qty.	1
28. Drive End Bearing Type	(Ball) Ball Bearing
29. Drive End Lubrication Type	(Grease) Grease Lubricated
30. Drive End Bearing Insulation or Grounding Device?	Na
31. Drive End Wavy Washer/Snap-Ring Other Retention Device?	na
32. Drive End Bearing Condition	water contamination



33. Opposite Drive End Bearing Brand	SKF
34. Opposite Drive End Bearing Number-	6318 ZZC3



35. Opposite Drive End Bearing Qty.	1
36. Opposite Drive End Bearing Type	(Ball) Ball Bearing
37. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
38. Opposite Drive End Bearing Insulation or Grounding Device?	NA
39. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	Wavy washer
40. Opposite Drive End Bearing Condition	water contamination



41.	Drive End Seal	pass
42.	Opposite Drive End Seal	pass
Rotor	Inspection	
43.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
44.	Growler Test	(Pass) Pass
45.	Number of Rotor Bars	56
46.	Rotor Condition	
-	Wash	



47.	List the Parts needed for the Repair Below	
	2-6318 ZZ C3 BEARING	
48.	Signature of Technician that Disassembled Motor	RW

Mechanical Fits- Rotor					
49.	Shaft Runout		0 inches		
50.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing		
	0	0	0		
51.	51. Coupling Fit Closest to Bearing Housing				
	0 Degrees	90 Degrees	120 Degrees		
	3.3743	3.3743	3.3743		
52.	Coupling Fit Closest to the end of the	Shaft			
	0 Degrees	60 Degrees	120 Degrees		
	3.3742	3.3742	3.3742		
53.	Drive End Bearing Shaft Fit				
	0 Degrees	60 Degrees	120 Degrees		
	3.5435	3.5435	3.5435		
5 4.	Drive End Bearing Shaft Fit Condition		(P) Pass		



55.	55. Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.5435	3.5435	3.5435	
56.	56. Opposite Drive End Bearing Shaft Fit Condition			(P) Pass



57.	Shaft Air Seal Fits	
	Drive End Air Seal	Opposite Drive End Air Seal
	pass	pass

Mech	Mechanical Fits- Bearing Housings				
58.	Drive End - Endbell Bearing Fit				
	0 Degrees	60 Degrees	120 Degrees		
	7.4819	7.4818	7.4818		
59.	Drive End - Endbell Bearing Fit Cond	ition		(F) Fail	



60. Opposite Drive End - Endb	60. Opposite Drive End - Endbell Bearing Fit		
0 Degrees	60 Degrees	120 Degrees	
7.482	7.4819	7.482	
61. Opposite Drive End - Endbell Bearing Fit Condition		(F) Fail	



62. Bearing Cap Condition Drive End Bearing Cap Opposite Drive End Bearing Cap pass



63.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	pass	pass	
64.	List Machine Work Needed Below		
	De and. Ode end bell bearing fit bad		
65.	Technician	RW	

Co sign CRW

Root Cause of Failure

66. Failure locations

Bearing and housing. Winding very dirty

67. Root cause of failure *Water*

Dynamic Balance Report



69.	Initial Balance Readings		
	Drive End	Opposite Drive End	
	0.15	0.22	
70.	Final Balance Readings		
	Drive End	Opposite Drive End	
	0.15	0.22	
71.	Technician		RW

MM

Mechanical Fits- Bearing Housings - Post Repair

72. Drive End - Endbell Bearing Fit Post Repair
 0 Degrees
 60 Degrees
 120 Degrees

7.481 7.481 7.481



73. Opposite Drive End - End	73. Opposite Drive End - Endbell Bearing Fit Post Repair		
0 Degrees	60 Degrees	120 Degrees	
7.4805	7.4805	7.4804	



74.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
75.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
76.	End Bell Repair Sign-off		Gary

Assembly

77. QC Check All Parts for Cleanliness Prior to Assembly

RW

78. Photograph All Major Components prior to assembly

(Complete) Complete















79. Final Insulation Resistance Test

5230 Megohms



80.	Assembled Shaft Endplay			0 inches
81.	Assembled Shaft Runout			0 inches
82.	Test Run Voltage			
	Volts	Volts	Volts	
	456	456	457	

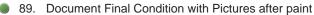


Co sign TRH

83. Test Run Amperage		
Amps	Amps	Amps
87	85.4000000000001	83.900000000001



84.	Drive End Vibration Readings - Inches	s Per Second	
	Horizontal	Vertical	Axial
	0.01	0.01	0.05
85.	Opposite Drive End Vibration Reading	s - Inches Per Second	
	Horizontal	Vertical	Axial
	0.02	0.02	0.05
86.	Ambient Temperature - Fahrenheit		
87.	7. Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
88.	. Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
00	Decument Final Condition with Disturc	a ofter point	











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90. Final Pics and QC Review

RW

Co sign TRH



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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> 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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- 8. WARRANTIES. Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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- 10. <u>SEVERABILITY.</u> The partial or complete invalidity of any provision of these Standard Terms and Conditions shall not affect the enforceability of the remainder of these Standard Terms and Conditions. If any provision is found to be invalid or unenforceable, that portion shall be modified to make it enforceable or shall be stricken and the remainder of these Standard Terms and Conditions shall enforced.
- 11. **GOVERNING LAW AND JURISDICTION.** 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.
- 12. ABANDONED EQUIPMENT. Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
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