

LR Motor Shop Repairs

Job Number 104755

Prepared for TREX COMPANY

2500 TREX WAY WINCHESTER VA 22601

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AC Inspection - Rev. 2: C2312200332

1.0





AC Inspection as Found TREX COMPANY

2500 TREX WAY WINCHESTER, VA 22601

FolderID: 104755 FormID: 24815980

AC Inspection - Rev. 2

Location: LR MOTOR SHOP Serial Number: C2312200332

Hi-Speed Job Number:	104755
Manufacturer:	Baldor
Product Number:	CAT#EM4110T
Spec/ID #:	12H013Y276
Serial Number:	C2312200332
HP/kW:	40 (HP)
RPM:	1775 (RPM)
Frame:	324T
Voltage:	230 / 460
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.0
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
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:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 16 - Good

Overall Condition

1. Report Date 06/20/2025

2. Nameplate Picture

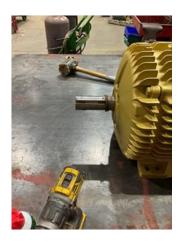


3. Photos of all six sides of the machine.



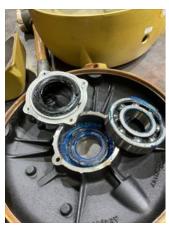






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	4.	Describe the Overall Condition of the Equipment as Received		
		Serviceable		
	5.	Is this a UL Listed Motor	(No) No	
	6.	Is the motor water cooled or can be pressure checked before teardown	(No) No	
In	Initial Mechanical/Electrical			
	7.	Does Shaft Turn Freely?	(Y) Yes	
	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No	
	9.	Does Shaft Have Visible Damage?	(No) No	
	10.	Assembled Shaft Runout	0.0002 Inches	

11.	Assembled Shaft End Play	inches
12.	Air Gap Variation <10%	
13.	Lead Condition	(P) Pass

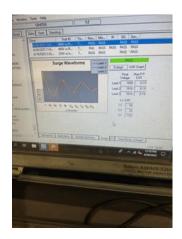


14.	Lead Length	12 Inches
15.	Does it have Lugs?, If so what is the Stud Size?	(No) No
16.	Lead Numbers	1-9
17.	Are the Leads insulated with Chico or other material	
18.	Frame Condition	pass
19.	Fan Condition	(P) Pass



2 0.	Does motor have internal fan?		(No) No
21.	Broken or Missing Components		NO
Initial	Electrical Inspection		
22.	Insulation Resistance/Megger		7965 Megohms
23.	Winding Resistance		
	1-2	1-3	2-3
	0.153	0.152	0.152

24. Perform Surge Test (P) Pass





25. Number of Stator Slots 48

26. Stator Condition reconditioning





27. Stator Thermistors/Ohms

Na

28. Stator Overloads/Ohms

Na

Mechanical Inspection

29. Drive End Bearing Brand

SKF



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?	
-	Na	
36.	Drive End Bearing Condition	replace
37.	Opposite Drive End Bearing Brand	SKF
38.	Opposite Drive End Bearing Number-	6311/C3



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
	Opposite Drive End Bearing Insulation or Grounding Device? Na	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	Wavy washer
44.	Opposite Drive End Bearing Condition	
45.	Drive End Seal	
	Na	
46.	Opposite Drive End Seal	
•	Na	

Rotor Inspection			
47. Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast		
48. Growler Test	(Pass) Pass		
49. Number of Rotor Bars	40		
50. Rotor Condition	pass		



51. List the Parts needed for the Repair Below
1-6312 C3 Bearing
2-6311 C3 Bearing

52. Signature of Technician that Disassembled Motor

60. Opposite Drive End Bearing Shaft Fit Condition

RW

(P) Pass

Mechanical Fits- Rotor

IV	lechanical Fits- Rotor				
	53.	Shaft Runout		0.0002 inches	
	54.	Rotor Runout			
		Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
	-	Na			
	55.	Coupling Fit Closest to Bearing Housing	ng		
		0 Degrees	90 Degrees	120 Degrees	
		2.125	2.125	2.125	
	56.	Coupling Fit Closest to the end of the	Shaft		
		0 Degrees	60 Degrees	120 Degrees	
		2.125	2.125	2.125	
	57.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.3625	2.3625	2.3625	
	58.	Drive End Bearing Shaft Fit Condition		(P) Pass	
	59.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.1659	2.1659	2.1659	

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61.	Shaft Air Seal Fits				
	Drive End Air Seal	Opposite Drive End Air Seal			
-	Pass				
Mech	Mechanical Fits- Bearing Housings				
62.	Drive End - Endbell Bearing Fit				
	0 Degrees	60 Degrees	120 Degrees		
	5.119	5.119	5.119		
63.	Drive End - Endbell Bearing Fit Condi	tion		(P) Pass	



64.	64. Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	4.7253	27253	4.7253	
65.	65. Opposite Drive End - Endbell Bearing Fit Condition			(P) Pass



66.	Bearing Cap Condition	
	Drive End Bearing Cap	Opposite Drive End Bearing Cap
-	Pass	
67.	End Bell Air Seal Fits	
	Drive End Air Seal	Opposite Drive End Air Seal
-	Pass	

68. List Machine Work Needed Below
None

69. Technician

Co sign TRH

Root Cause of Failure

70. Failure locations *Conn. Box*

71. Root cause of failure

Lead burnt into from lose connection

Dynamic Balance Report

72. Rotor Weight and Balance Grade

Rotor Weight Balance Grade



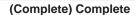
73. Initial Balance Readings		
Drive End	Opposite Drive End	
1.14	1.20	
74. Final Balance Readings		
Drive End	Opposite Drive End	
.11	.31	
75. Technician		RW

Assembly





77. Photograph All Major Components prior to assembly











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78. Final Insulation Resistance Test

66,900 Megohms



7	9.	Assembled Shaft Endplay		inches
• 8	80.	Assembled Shaft Runout		0.0004 inches
8	1.	Test Run Voltage		
		Volts	Volts	Volts
		459	458	460
-	1	Co sign TRH		



82. Test Run Amperage			
Amps	Amps	Amps	
21.1	20.5	20.1	

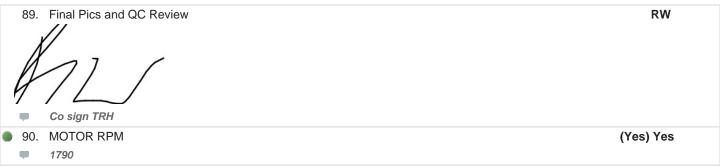


83.	3. Drive End Vibration Readings - Inches Per Second			
	Horizontal	Vertical	Axial	
	0.05	0.03	0.03	
84.	Opposite Drive End Vibration Readings - Inches Per Second			
	Horizontal	Vertical	Axial	
	0.03	0.03	0.02	
85.	Ambient Temperature - Fahrenheit			
86.	Drive End Bearing Temps - Fahrenheit			
	5 Minutes	10 Minutes	15 Minutes	
87.	Opposite Drive End Bearing Temps - Fahrenheit			
	5 Minutes	10 Minutes	15 Minutes	
88.	. Document Final Condition with Pictures after paint			











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