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— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

**Job Number 104842**

Prepared for ARKANSAS INDUSTRIAL MACHINERY

3804 N. NONA ST  
NORTH LITTLE ROCK AR 72118

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AC Inspection as Found - *LR MOTOR SHOP*

AC Inspection - Rev. 2: 3467064-1

1.0

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Hi-Speed Industrial Service  
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**AC Inspection as Found**  
**ARKANSAS INDUSTRIAL MACHINERY**  
3804 N. NONA ST  
NORTH LITTLE ROCK, AR 72118

FolderID: 104842  
FormID: 25016911

**AC Inspection - Rev. 2**

Location: LR MOTOR SHOP

Serial Number: 3467064-1

Description: 55 KW ABB

Hi-Speed Job Number: 104842

Manufacturer: ABB

Product Number: 3G1P204701909

Spec/ID #: IP55

Serial Number: 3467064-1

HP/kW: 55 (kW)

Voltage: 460

Phase: Three

Hz: 60 (Hz)

Enclosure: TEFC

# of Leads: 6

J-box Included: Complete

Coupling/Sheave: Gear

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:  1 - High  8 - Good

**Overall Condition**

1. Report Date

07/11/2025

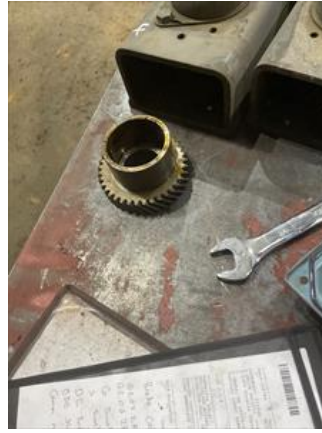
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## 2. Nameplate Picture



## 3. Photos of all six sides of the machine.





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4.	Describe the Overall Condition of the Equipment as Received	
	<i>Serviceable</i>	
5.	Is this a UL Listed Motor	(NO) NO
6.	Is the motor water cooled or can be pressure checked before teardown	(NO) NO
<b>Initial Mechanical/Electrical</b>		
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	
11.	Distance from the end of the shaft to the Coupling/Sheave	inches
	<i>Na</i>	
12.	Assembled Shaft End Play	inches
13.	Air Gap Variation <10%	
14.	Lead Condition	(P) Pass
15.	Lead Length	12 Inches
16.	Does it have Lugs?, If so what is the Stud Size?	(YES) YES
17.	Lead Numbers	6
18.	Are the Leads insulated with Chico or other material	(NO) NO
19.	Frame Condition	pass
20.	Fan Condition	(P) Pass



21.	Does motor have internal fan?	(NO) NO
22.	Broken or Missing Components	No

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## Initial Electrical Inspection

23. Insulation Resistance/Megger	6848 Megohms	
24. Winding Resistance		
1-2	1-3	2-3
<b>0.380</b>	<b>0.378</b>	<b>0.379</b>
25. Perform Surge Test	(P) Pass	



26. Number of Stator Slots	48
27. Stator Condition	wash and dry .oil in stator



28. Stator Thermistors/Ohms	Na
29. Stator Overloads/Ohms	Na

## Mechanical Inspection

30. Drive End Bearing Brand	SKF
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31. Drive End Bearing Number-

NU 213



32. Drive End Bearing Qty.	1
33. Drive End Bearing Type	(Roller) Roller Bearing
34. Drive End Lubrication Type	(Oil) Oil Lubricated
35. Drive End Bearing Insulation or Grounding Device?	
<input type="checkbox"/> No	
36. Drive End Wavy Washer/Snap-Ring Other Retention Device?	Snap ring
37. Drive End Bearing Condition	rollers skidding




38. Opposite Drive End Bearing Brand	SKF
39. Opposite Drive End Bearing Number-	6215 2RS



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40. Opposite Drive End Bearing Qty.	1
41. Opposite Drive End Bearing Type	(Ball) Ball Bearing
42. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
43. Opposite Drive End Bearing Insulation or Grounding Device?	
 Na	
44. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	Snap ring
45. Opposite Drive End Bearing Condition	normal wear



46. Drive End Seal	Yes
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47. Opposite Drive End Seal	
 Na	

## Rotor Inspection

48. Rotor Type/Material

(Squirrel Aluminum) Squirrel  
Cage Aluminum Die Cast



49. Growler Test	(Pass) Pass		
50. Number of Rotor Bars	40		
51. Rotor Condition	Pass		
52. List the Parts needed for the Repair Below	NU 213 Roller bearing 6215 2RS BEARING		
53. Signature of Technician that Disassembled Motor	RW		
<b>Mechanical Fits- Rotor</b>			
54. Shaft Runout	0.0002 inches		
55. Rotor Runout			
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
56. Coupling Fit Closest to Bearing Housing			
0 Degrees	90 Degrees	120 Degrees	
57. Coupling Fit Closest to the end of the Shaft			
0 Degrees	60 Degrees	120 Degrees	
58. Drive End Bearing Shaft Fit			
0 Degrees	60 Degrees	120 Degrees	
2.5595	2.5595	2.5595	

59. Drive End Bearing Shaft Fit Condition

(P) Pass



60. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.9531	2.9531	2.9531

61. Opposite Drive End Bearing Shaft Fit Condition

(P) Pass



62. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
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Pass

**Mechanical Fits- Bearing Housings**

63. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
4.725	4.725	4.725

64. Drive End - Endbell Bearing Fit Condition

(P) Pass



65. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

5.1189

5.1189

5.1189

66. Opposite Drive End - Endbell Bearing Fit Condition

(P) Pass



67. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

Pass

68. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

Pass

69. List Machine Work Needed Below

None

70. Technician

RW



Co sign TRH

### Root Cause of Failure

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71. Failure locations	<i>De leaking oil into stator</i>		
72. Root cause of failure	<i>Bad seal</i>		
<b>Dynamic Balance Report</b>			
73. Rotor Weight and Balance Grade			
Rotor Weight	Balance Grade		
74. Initial Balance Readings			
Drive End	Opposite Drive End		
75. Final Balance Readings			
Drive End	Opposite Drive End		
76. Technician			
<b>Rewind</b>			
77. THERMAL DETECTION EQUIPMENT FINAL TESTING - RTD'S/KLIXONS/THERMISTORS			
<b>Assembly</b>			
78. QC Check All Parts for Cleanliness Prior to Assembly			
79. Photograph All Major Components prior to assembly			
80. Was a Insulated bearing or end bell tested?			
81. Final Insulation Resistance Test			
82. Assembled Shaft Endplay			
83. Assembled Shaft Runout			
84. Test Run Voltage			
Volts	Volts	Volts	
85. Test Run Amperage			
Amps	Amps	Amps	
86. Motor RPM			
87. Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
88. Opposite Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
89. Ambient Temperature - Fahrenheit			
90. Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
91. Opposite Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
92. Document Final Condition with Pictures after paint			
93. Final Pics and QC Review			



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1. **APPLICABILITY.** The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
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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.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
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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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