



**KEEPING YOUR FACILITY UP TO SPEED**  
— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

**Job Number 103154**

Prepared for Windsor Door (10299-WIN)

5800 Scott Hamilton  
Little Rock AR 72209

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AC Inspection as Found - *MOTOR SHOP LR*

AC Inspection - Rev. 2: 857611A-2

**1.0**

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*Printed on 6/26/2024*

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Millington, Tn 38053  
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## AC Inspection as Found

Windsor Door (10299-WIN)

5800 Scott Hamilton  
Little Rock, AR 72209

FolderID: 103154  
FormID: 20810717

### AC Inspection - Rev. 2

Location: MOTOR SHOP LR

Serial Number: 857611A-2

Description: 5HP 1675RPM REULAND

Hi-Speed Job Number: 102548

Manufacturer: Reuland

Spec/ID #: 13035-XX2975A

Serial Number: 857611A-2

HP/kW: 5 (HP)

RPM: 1675 (RPM)

Frame: 1014

Voltage: 460

Phase: Three

Hz: 60 (Hz)

Service Factor: 1.15

Enclosure: TENV

# of Leads: 9

J-box Included: Complete

Coupling/Sheave: Brake

Date Received: 06/26/2024

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Final

Rewind: Yes

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: ● 3 - High ● 9 - Good

### Overall Condition

1. Report Date

06/26/2024

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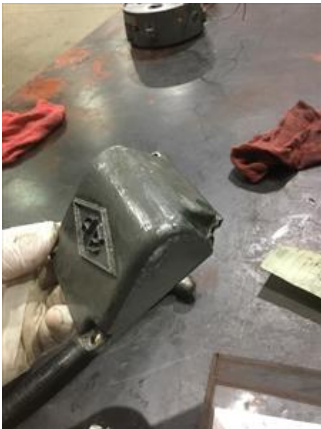
1.0

## 2. Nameplate Picture




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

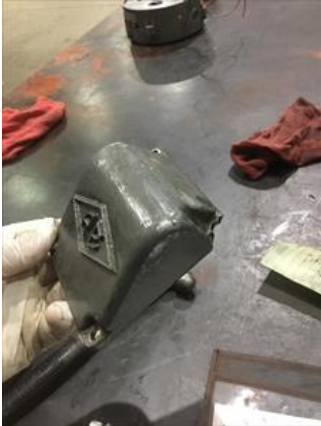





4.	Describe the Overall Condition of the Equipment as Received	
	<i>Dirty covered in oil</i>	
5.	Distance from the end of the shaft to the Coupling/Sheave	inches
<b>Initial Mechanical/Electrical</b>		
6.	Does Shaft Turn Freely?	(Y) Yes
7.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
8.	Does Shaft Have Visible Damage?	(No) No
9.	Assembled Shaft Runout	Inches
10.	Assembled Shaft End Play	inches

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11. Air Gap Variation <10%	
12. Lead Condition	(NA) Not Applicable
 <i>Rewind</i>	
13. Lead Length	10 Inches
14. Does it have Lugs?, If so what is the Stud Size?	(No) No
15. Lead Numbers	1-9
16. Frame Condition	
17. Fan Condition	(N) NA
18. Broken or Missing Components	J-box cover has a broken ear



### Initial Electrical Inspection

19. Insulation Resistance/Megger		Megohms
20. Winding Resistance		
1-2	1-3	2-3
21. Perform Surge Test		(NA) Not Applicable
 <i>Coil to coil short</i>		
22. Number of Stator Slots		36
23. Stator Condition		pass
24. Stator Thermistors/Ohms		
25. Stator Overloads/Ohms		

### Mechanical Inspection

26. Drive End Bearing Brand		FAG
27. Drive End Bearing Number-		6207
28. Drive End Bearing Qty.		1
29. Drive End Bearing Type		(Ball) Ball Bearing
30. Drive End Lubrication Type		(Grease) Grease Lubricated
31. Drive End Bearing Insulation or Grounding Device?		
32. Drive End Wavy Washer/Snap-Ring Other Retention Device?		wavy washer





34. Opposite Drive End Bearing Brand	<b>FAG</b>
35. Opposite Drive End Bearing Number-	<b>6207</b>
36. Opposite Drive End Bearing Qty.	<b>1</b>
37. Opposite Drive End Bearing Type	<b>(Ball) Ball Bearing</b>
38. Opposite Drive End Lubrication Type	<b>(Grease) Grease Lubricated</b>
39. Opposite Drive End Bearing Insulation or Grounding Device?	
40. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	
41. Opposite Drive End Bearing Condition	

Replace



42. Drive End Seal  
43. Opposite Drive End Seal

#### Rotor Inspection

44. Rotor Type/Material	<b>(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast</b>
45. Growler Test	<b>(Pass) Pass</b>
46. Number of Rotor Bars	<b>45</b>
47. Rotor Condition	<b>pass</b>
48. List the Parts needed for the Repair Below	
6207 x2 New j-box cover or repair	

49. Signature of Technician that Disassembled Motor

Cw



### Mechanical Fits- Rotor

50. Shaft Runout inches

51. Rotor Runout

Drive End Bearing Fit

Rotor Body

Opposite Drive End Bearing

52. Coupling Fit Closest to Bearing Housing

0 Degrees

90 Degrees

120 Degrees

53. Coupling Fit Closest to the end of the Shaft

0 Degrees

60 Degrees

120 Degrees

54. Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

1.3783

1.3783

1.3783

55. Drive End Bearing Shaft Fit Condition

(P) Pass

56. Opposite Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

1.378

1.378

1.378

57. Opposite Drive End Bearing Shaft Fit Condition

(P) Pass

58. Shaft Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

### Mechanical Fits- Bearing Housings

59. Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

2.8347

2.835

2.8349

60. Drive End - Endbell Bearing Fit Condition

(P) Pass

61. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

2.8372

2.8364

2.8358

62. Opposite Drive End - Endbell Bearing Fit Condition

(F) Fail

63. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

64. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

65. List Machine Work Needed Below

*ODE housing bearing fit*





Co sign: RW

**Root Cause of Failure**

67. Failure locations

*Windings and bearing fit*

68. Root cause of failure

*Wear and turn to turn short***Dynamic Balance Report**

69. Rotor Weight and Balance Grade

Rotor Weight

Balance Grade

70. Initial Balance Readings

Drive End

Opposite Drive End

71. Final Balance Readings

Drive End

Opposite Drive End

72. Technician

**Rewind**

73. Core Test Results - Watts loss per Pound

Pre-Burnout

Post Burnout

74. Core Hot Spot Test

Pre-Burnout

Post-Burnout

75. Post Rewind Electrical Test- Insulation Resistance

76. Post Rewind Polarization Index

77. Post Rewind Winding Resistance

1-2

1-3

2-3

78. Post Rewind Surge Test

79. Post Rewind Hi-Pot

80. Technician

**Mechanical Fits- Bearing Housings - Post Repair**

81. Drive End - Endbell Bearing Fit Post Repair

0 Degrees

60 Degrees

120 Degrees

82. Opposite Drive End - Endbell Bearing Fit Post Repair

0 Degrees

60 Degrees

120 Degrees

83. Bearing Cap Condition Post Repair

Drive End Bearing Cap

Opposite Drive End Bearing Cap

84. End Bell Air Seal Fits Post Repair			
Drive End Air Seal	Opposite Drive End Air Seal		
85. End Bell Repair Sign-off			
<b>Assembly</b>			
86. QC Check All Parts for Cleanliness Prior to Assembly			
87. Photograph All Major Components prior to assembly			
88. Final Insulation Resistance Test			
89. Assembled Shaft Endplay			
90. Assembled Shaft Runout			
91. Test Run Voltage			
Volts	Volts	Volts	
92. Test Run Amperage			
Amps	Amps	Amps	
93. Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
94. Opposite Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
95. Ambient Temperature - Fahrenheit			
96. Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
97. Opposite Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
98. Document Final Condition with Pictures after paint			
99. Final Pics and QC Review			



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