Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition As Found

Remington (10243)
2592 AR Hwy 15 N
Lonoke, AR 72086

FolderID: 101094
FormID: 16235738

AC Recondition - Rev. 2

Location:	Shop
Serial Number:	5KS324BL115A
Description:	40HP GE 3600RPM 324TS

Hi-Speed Job Number:	101094
Manufacturer:	GE
Product Number:	5KS324BL115A
Serial Number:	LW
HP/kW:	40 (HP)
RPM:	3565 (RPM)
Frame:	324TS
Voltage:	230 / 460
Current:	87.4/43.7
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **1 - High** **7 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture P37

3. Photos of all six sides of the machine. P45

	4.	Describe the Overall Condition of the Equipment as Received	

Initial Mechanical/Electrical

●	5.	Does Shaft Turn Freely?	**(Yes) Yes**	
	6.	Does Shaft Have Visible Damage?	**(No) No**	P18

	7.	Assembled Shaft Runout		
	8.	Assembled Shaft End Play		
	9.	Air Gap Variation <10%		
●	10.	Lead Condition	**(P) Pass**	P54

	11.	Lead Length	**10 Inches**
	12.	Frame Condition	**pass**

13. Fan Condition **(P) Pass** P91

14. Broken or Missing Components

Initial Electrical Inspection

15. Insulation Resistance/Megger

16. Winding Resistance

1-2	1-3	2-3

17. Perform Surge Test **(P) Pass** P57

18. Number of Stator Slots

19.	Stator Condition		P68

Mechanical Inspection

20.	Drive End Bearing Brand	**skf**	
21.	Drive End Bearing Number-	**6312**	P32

22.	Drive End Bearing Qty.	**1**	P35

23.	Drive End Bearing Type	**(Ball) Ball Bearing**
24.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
25.	Drive End Bearing Insulation or Grounding Device?	**none**
26.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**none**
27.	Drive End Bearing Condition	**replace**
28.	Opposite Drive End Bearing Brand	**skf** P84

29.	Opposite Drive End Bearing Number-	P86

30.	Opposite Drive End Bearing Qty.	**1**
31.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
32.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**

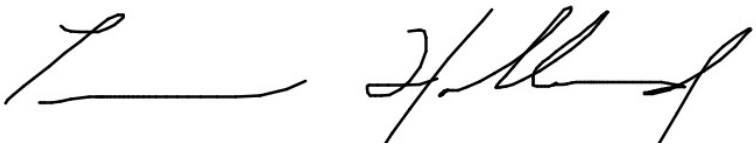
33.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
34.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer destroyed**	P96

35.	Opposite Drive End Bearing Condition	**replace**	
36.	Drive End Seal		
37.	Opposite Drive End Seal		

Rotor Inspection

38.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

39.	Growler Test	**(Pass) Pass**
40.	Number of Rotor Bars	
41.	Rotor Condition	**pass**
42.	List the Parts needed for the Repair Below	
43.	Signature of Technician that Disassembled Motor	**Terrence Holland**



Mechanical Fits- Rotor

44.	Shaft Runout		**0.001 inches**
45.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

	46.	Coupling Fit Closest to Bearing Housing			
		0 Degrees	90 Degrees	120 Degrees	
	47.	Coupling Fit Closest to the end of the Shaft			
		0 Degrees	60 Degrees	120 Degrees	
	48.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.3625	**2.3625**	**2.3624**	
●	49.	Drive End Bearing Shaft Fit Condition			**(P) Pass**
	50.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.9686	**1.9685**	**1.9686**	
●	51.	Opposite Drive End Bearing Shaft Fit Condition			**(P) Pass**
	52.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

	53.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		5.1185	**5.1187**	**5.1186**	
●	54.	Drive End - Endbell Bearing Fit Condition			**(P) Pass**
	55.	Opposite Drive End - Endbell Bearing Fit			P30
		0 Degrees	60 Degrees	120 Degrees	

Excessive wear groove. Re-sleeve housing fit.q

●	56.	Opposite Drive End - Endbell Bearing Fit Condition	**(F) Fail**

Excessive wear.

57. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	**pass**

58. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

59. List Machine Work Needed Below

Re-sleeve O.D.E housing fit.

60. Technician **Terrence Holland**

Dynamic Balance Report

61. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

62. Initial Balance Readings

Drive End	Opposite Drive End

63. Final Balance Readings

Drive End	Opposite Drive End

64. Technician

Rewind

65. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

66. Core Hot Spot Test

Pre-Burnout	Post-Burnout

67. Post Rewind Electrical Test- Insulation Resistance

68. Post Rewind Polarization Index

69.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
70.	Post Rewind Surge Test		
71.	Post Rewind Hi-Pot		
72.	Technician		

Root Cause of Failure

73.	Failure locations		
74.	Root cause of failure		

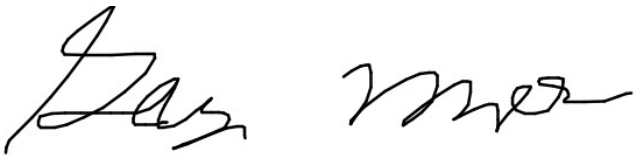
Mechanical Fits- Rotor - Post Repair

75.	Shaft Runout Post Repair		
76.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
77.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
78.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
79.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
80.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
81.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
82.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

83.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
85.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
86.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	

87. End Bell Repair Sign-off



Assembly

88. QC Check All Parts for Cleanliness Prior to Assembly

89. Photograph All Major Components prior to assembly

90. Final Insulation Resistance Test

91. Assembled Shaft Endplay

92. Assembled Shaft Runout

93. Test Run Voltage

Volts	Volts	Volts

94. Test Run Amperage

Amps	Amps	Amps

95. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

96. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

97. Ambient Temperature - Fahrenheit

98. Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

99. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

100. Document Final Condition with Pictures after paint

101. Final Pics and QC Review