

# LR Motor Shop Repairs

# **Job Number 102696**

Prepared for Remington (10243)

2592 AR Hwy 15 N Lonoke AR 72086

# **Table of Contents**

AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: Z1809170127

1.0



FolderID: 102696

FormID: 19888036



## **AC Inspection as Found**

Remington (10243)

2592 AR Hwy 15 N Lonoke, AR 72086

AC Inspection - Rev. 2

Location: MOTOR SHOP LR Serial Number: Z1809170127

Description: 15HP BALDOR 3520RPM

Hi-Speed Job Number:	102696
Manufacturer:	Baldor
Product Number:	CAT: 85600H24
Spec/ID #:	09G939Z602G1
Serial Number:	Z1809170127
HP/kW:	15 (HP)
RPM:	3520 (RPM)
Frame:	254TCZ
Hz:	60 (Hz)
Service Factor:	1.15
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**

03/29/2024 1. Report Date

Nameplate Picture

























	3.	Photos of all six sides of the machine	).		ok
	4.	Describe the Overall Condition of the Ok	Equipment as Received		
	5.	Distance from the end of the shaft to	the Coupling/Sheave	0	inches
Ir	Initial Mechanical/Electrical				
	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		0	Inches
	10.	Assembled Shaft End Play		0	inches
	11.	Air Gap Variation <10%			none
	12.	Lead Condition		(1	P) Pass
	13.	Lead Length		12	Inches
	14.	Does it have Lugs?, If so what is the	Stud Size?		(No) No
	15.	Lead Numbers			1-9
	16.	Stator Temperature Detector Rating	and Function		
		Quantity	Rating	Quantity Passed	
		0			
	17.	Bearing Temperature Detector Rating	g and Function		
		Quantity	Rating	Quantity Passed	
		0			
	18.	Frame Condition			ok

<b>1</b> 9.	Fan Condition			(P) Pass
20.	Broken or Missing Components			none
Initial	Electrical Inspection			
21.	Insulation Resistance/Megger			2000 Megohms
22.	Winding Resistance			
	1-2	1-3	2-3	
	.669	.669	.669	
<b>2</b> 3.	Perform Surge Test			(P) Pass
	r enomi ourge rest			(F) F a 3 3
24.	•			36
	Number of Stator Slots			` '
24.	Number of Stator Slots Stator Condition			36
24. 25. 26.	Number of Stator Slots Stator Condition			36 good
24. 25. 26. 27.	Number of Stator Slots Stator Condition Stator Thermistors/Ohms			36 good na



29.	Drive End Bearing Number-	7309
30.	Drive End Bearing Qty.	1
31.	Drive End Bearing Type	(Thrust) Thrust
32.	Drive End Lubrication Type	(Grease) Grease Lubricated
33.	Drive End Bearing Insulation or Grounding Device?	na
34.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	na
35.	Drive End Bearing Condition	normal wear
36.	Opposite Drive End Bearing Brand	SKF
37.	Opposite Drive End Bearing Number-	6208
38.	Opposite Drive End Bearing Qty.	1
39.	Opposite Drive End Bearing Type	(Ball) Ball Bearing
40.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
41.	Opposite Drive End Bearing Insulation or Grounding Device?	na
42.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy
43.	Opposite Drive End Bearing Condition	water contamination
44.	Drive End Seal	13369
45.	Opposite Drive End Seal	na
Rotor	Inspection	
46.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
47.	Growler Test	(Pass) Pass

	48.	Number of Rotor Bars		46
	49.	Rotor Condition		good
	50.	D. List the Parts needed for the Repair Below		
		7309, 6208, 13369 seal		
	51.	Signature of Technician that Disassen	nbled Motor	David Maclin
M	echa	anical Fits- Rotor		
	52.	Shaft Runout		0 inches
	53.	Rotor Runout		
		Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
		0	0	0
	54.	Coupling Fit Closest to Bearing Housing	ng	
		0 Degrees	90 Degrees	120 Degrees
		0	0	0
	55.	Coupling Fit Closest to the end of the	Shaft	
		0 Degrees	60 Degrees	120 Degrees
		0	0	0
	56.	Drive End Bearing Shaft Fit		
		0 Degrees	60 Degrees	120 Degrees
		1.772	1.772	1.772
		Drive End Bearing Shaft Fit Condition		(P) Pass
	58.	Opposite Drive End Bearing Shaft Fit	00.0	100 0
		0 Degrees	60 Degrees	120 Degrees
	50	1.5751	1.5751	1.5751
	59.	Opposite Drive End Bearing Shaft Fit Shaft Air Seal Fits	Condition	(P) Pass
	60.	Drive End Air Seal	Opposite Drive End Air Seel	
		ok	Opposite Drive End Air Seal  ok	
N/I	och:	anical Fits- Bearing Housings	OK .	
IVI		Drive End - Endbell Bearing Fit		
	01.	0 Degrees	60 Degrees	120 Degrees
		3.9377	3.9376	3.9377
	62.	Drive End - Endbell Bearing Fit Condit		(P) Pass
		Opposite Drive End - Endbell Bearing		(1)1 000
		0 Degrees	60 Degrees	120 Degrees
		3.151	3.1511	3.1511
	64.	Opposite Drive End - Endbell Bearing	Fit Condition	(F) Fail
	65.	Bearing Cap Condition		
		Drive End Bearing Cap	Opposite Drive End Bearing Cap	
		ok	ok	
	66.	End Bell Air Seal Fits		
		Drive End Air Seal	Opposite Drive End Air Seal	
		ok	ok	

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67.	List Machine Work Needed Below
	Sleeve ode

68. Technician David Maclin



#### **Root Cause of Failure**

69. Failure locations

Ode bearing

70. Root cause of failure

No grease

### **Dynamic Balance Report**

71. Rotor Weight and Balance Grade

Rotor Weight Balance Grade



72.	Initial Balance Readings	
	Drive End	Opposite Drive End
	.39	.48
73.	Final Balance Readings	
	Drive End	Opposite Drive End
	.14	.14

74. Technician David Maclin



### Mechanical Fits- Bearing Housings - Post Repair

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





77.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
78.	End Bell Air Seal Fits Post Repair		
1	Drive End Air Seal	Opposite Drive End Air Seal	
79.	End Bell Repair Sign-off		RW

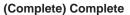


## Assembly

80. QC Check All Parts for Cleanliness Prior to Assembly

**David Maclin** 

81. Photograph All Major Components prior to assembly





















82.	Final Insulation Resistance Test		2000 Megohms
83.	Assembled Shaft Endplay		0 inches
84.	Assembled Shaft Runout		0 inches
85.	Test Run Voltage		
	Volts	Volts	Volts
	460	459	461
-	Witnessed by Chris		



86	Test Run Amperage			
	Amps	Amps	Amps	
	5.9	5.6	5.8	
87	Drive End Vibration Readings - Inche	s Per Second		
	Horizontal	Vertical	Axial	
	0.0265	0.0118	0.006	
88	Opposite Drive End Vibration Reading	gs - Inches Per Second		
	Horizontal	Vertical	Axial	
	0.0305	0.0289	0.012	
89	Ambient Temperature - Fahrenheit			75
90	Drive End Bearing Temps - Fahrenhe	it		
	5 Minutes	10 Minutes	15 Minutes	
	75	75	75	
91	Opposite Drive End Bearing Temps -	Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes	

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75 75 75

92. Document Final Condition with Pictures after paint

good
David Maclin

93. Final Pics and QC Review















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