

# LR Motor Shop Repairs

# **Job Number 103636**

Prepared for Modern Build (12793)

315 Dupree Drive Jacksonville AR 72076

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AC Inspection - Rev. 2: 0676133

1.0

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### **AC Inspection as Found**

Modern Build (12793)

315 Dupree Drive Jacksonville, AR 72076

FolderID: 103636 FormID: 21949787

#### AC Inspection - Rev. 2

LITTLE ROCK MOTOR SHOP Location:

Serial Number: 0676133

Description: 7.5KW CEG

Hi-Speed Job Number:	103335
Serial Number:	0676133
HP/kW:	7.5 (kW)
RPM:	2920 (RPM)
Frame:	NA
Voltage:	Other
Current:	31.7/18.3 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1
Enclosure:	TEFC
# of Leads:	6
J-box Included:	Half
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	Yes
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: **2 - High** 



8 - Good

#### **Overall Condition**

1. Report Date

#### 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 *Dirty* 

		Dirty	
In	itial	Mechanical/Electrical	
	5.	Does Shaft Turn Freely?	(Y) Yes
	6.	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
	7.	Does Shaft Have Visible Damage?	(No) No
	8.	Assembled Shaft Runout	Inches
	9.	Assembled Shaft End Play	inches
	10.	Air Gap Variation <10%	

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11.	2000 00110111011		(NA) Not Applicable
-	Rewind		
12.	Lead Length		8 Inches
13.	Does it have Lugs?, If so what	is the Stud Size?	
-	Yes		
14.	Lead Numbers		1-6
15.	Frame Condition		
16.	Fan Condition		(P) Pass
17.	7. Broken or Missing Components		
Initial	Electrical Inspection		
18.	Insulation Resistance/Megger		Megohms
19.	Winding Resistance		
	1-2	1-3	2-3
20.	Perform Surge Test		(NA) Not Applicable
21.	Number of Stator Slots		36
22.	Stator Condition		pass
23.	Stator Thermistors/Ohms		
24.	Stator Overloads/Ohms		
Mech	anical Inspection		
	Drive Food Decrine Drend		fag
25.	Drive End Bearing Brand		lag



27. Drive End Bearing Qty.	1
28. Drive End Bearing Type	(Ball) Ball Bearing
29. Drive End Lubrication Type	(Grease) Grease Lubricated
30. Drive End Bearing Insulation or Grounding Device?	
31. Drive End Wavy Washer/Snap-Ring Other Retention Device?	
32. Drive End Bearing Condition	
33. Opposite Drive End Bearing Brand	fag



35.	Opposite Drive End Bearing Qty.	1	
36.	Opposite Drive End Bearing Type	(Ball) Ball Bearing	
37.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated	
38.	Opposite Drive End Bearing Insulation or Grounding Device?		
39.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer	
40.	Opposite Drive End Bearing Condition		
41.	Drive End Seal		
42.	Opposite Drive End Seal		
Rotor Inspection			
40	Deter Type / Metarial	(2 1 111 1 12 1	
43.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast	
44.			
	Growler Test	Cage Aluminum Die Cast	
44.	Growler Test Number of Rotor Bars	Cage Aluminum Die Cast (Pass) Pass	
44. 45. 46.	Growler Test Number of Rotor Bars	Cage Aluminum Die Cast (Pass) Pass 30	
44. 45. 46.	Growler Test Number of Rotor Bars Rotor Condition	Cage Aluminum Die Cast (Pass) Pass 30	

(Main

Mechanical Fits- Rotor			
49. Shaft Runout		inches	
50. Rotor Runout			
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
51. Coupling Fit Closest to Bearing Housing			
0 Degrees	90 Degrees	120 Degrees	
52. Coupling Fit Closest to the end of the Shaft			
0 Degrees	60 Degrees	120 Degrees	

53.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
<b>5</b> 4.	Drive End Bearing Shaft Fit Condition			(P) Pass
55.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
56.	11 5	Condition		(P) Pass
57.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
	anical Fits- Bearing Housings			
58.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
- 50	Drive Food Foodball Descriper Fit Cond			(D) Door
<ul><li>59.</li></ul>				(P) Pass
60.	Opposite Drive End - Endbell Bearing		400 D	
	0 Degrees	60 Degrees	120 Degrees	
<b>6</b> 1.	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
_	Bearing Cap Condition	THE CONTRACTOR		(1)1 400
02.	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	Drive End Bearing Cap	Opposite Drive Life Bearing Cap		
63.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
64.	List Machine Work Needed Below			
65.	Technician			Cw
	(Mu	•		
	0-00			
-	Co sign: RRW			
Root	Cause of Failure			
66.	Failure locations			
	Windings			
67.	Root cause of failure			
	Over loaded			
Dynamic Balance Report				
-	Rotor Weight and Balance Grade			
	Rotor Weight	Balance Grade		
69.	Initial Balance Readings			
	Drive End	Opposite Drive End		
70.	Final Balance Readings			
	Drive End	Opposite Drive End		

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71.	Technician			
Rewir	ewind			
72.	2. Core Test Results - Watts loss per Pound			
	Pre-Burnout	Post Burnout		
73.	Core Hot Spot Test			
	Pre-Burnout	Post-Burnout		
	4. Post Rewind Electrical Test- Insulation Resistance			
	5. Post Rewind Polarization Index			
76.	Post Rewind Winding Resistance			
	1-2	1-3	2-3	
77	Post Rewind Surge Test			
	Post Rewind Hi-Pot			
	9. Technician			
Asser				
	QC Check All Parts for Cleanliness Pr	ior to Assembly		
	Photograph All Major Components pri	·		
	Final Insulation Resistance Test			
	Assembled Shaft Endplay			
	Assembled Shaft Runout			
85.	5. Test Run Voltage			
	Volts	Volts	Volts	
86.	Test Run Amperage			
	Amps	Amps	Amps	
07	Drive End Vibration Deadings Inches	. Dor Cooond		
07.	Drive End Vibration Readings - Inches		Avial	
	Horizontal	Vertical	Axial	
88.	Opposite Drive End Vibration Reading	s - Inches Per Second		
	Horizontal	Vertical	Axial	
89.	9. Ambient Temperature - Fahrenheit			
90.	Drive End Bearing Temps - Fahrenhe	it		
	5 Minutes	10 Minutes	15 Minutes	
_				
91.	Opposite Drive End Bearing Temps -			
	5 Minutes	10 Minutes	15 Minutes	
92.	Document Final Condition with Picture	es after paint		
	Final Pics and QC Review			

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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> 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.
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- 7. INSPECTION/ACCEPTANCE. All goods and services ordered pursuant to any quotation shall be subject to inspection by Buyer after delivery or performance to determine conformity with the quotation and/or purchase order and Hi-Speed's advertised or published specifications. Buyer shall have a period of thirty (30) days from shipment of goods at the delivery destination specified in the quotation within which to inspect the goods for conformity with the quotation, order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. Buyer shall have a period of thirty (30) days following completion of any services within which to inspect the services for conformity with the quotation, purchase order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. If the goods delivered or services performed do not so conform, upon delivery of notice to Hi-Speed of any discrepancy, nonconformance or rejection, Hi-Speed shall have sixty (60) days to cure the alleged discrepancy and/or nonconformance. If Hi-Speed fails to cure in this time period, Buyer shall have the right to reject such goods or services. After the cure period, goods that have been delivered and rejected, in whole or in part, shall be returned to Hi-Speed. Buyer shall notify Hi-Speed and arrange for the return of the goods as required. Should such non-conforming services be rejected Hi-Speed shall, at its sole cost, re-perform the non-conforming services. Inspection or failure to inspect on any occasion shall not affect Buyer's rights under the warranty provisions herein.
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