

# EVERY DAY SINCE 1946

LR Motor Shop Repairs

## Job Number 104284

Prepared for Kiswire (12060)

5100 industrial dr. S. white hall ar 71602

### Table of Contents

AC Inspection as Found - LR MOTOR SHOP



#### **AC Inspection as Found**

Kiswire (12060) 5100 industrial dr. S. white hall, ar 71602

#### AC Inspection - Rev. 2

Location:	LR MOTOR SHOP
Serial Number:	1013498VY

Description:25 HP NEMA MR W FAN ASSEMBLY FolderID: 104284 FormID: 23732654

Hi-Speed Job Number:	104284
Manufacturer:	Other
Product Number:	PEWWE25-36-284T
Serial Number:	1013498VY
HP/kW:	25 (HP)
RPM:	3550 (RPM)
Frame:	284T
Voltage:	230 / 460
Current:	58.7/29.3 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.25
Enclosure:	TEFC
# of Leads:	12
J-box Included:	Complete
Coupling/Sheave:	Fan
Date Received:	03/13/2025
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 Overall Condition**

🔵 23 - Good

1. Report Date

03/20/2025

#### 2. Nameplate Picture



3. Photos of all six sides of the machine.























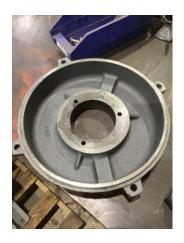




















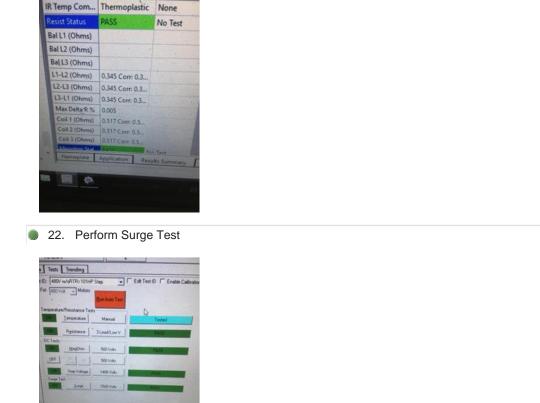


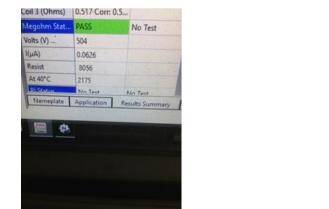






4. Describe the Ove Pass	rall Condition of the Equipment as Received	
<ol> <li>Distance from the Flush</li> </ol>	end of the shaft to the Coupling/Sheave	inches
Initial Mechanical/Ele	ctrical	
6. Does Shaft Turn	Freely?	(Y) Yes
7. Does the shaft re	quire T.I.R in Lathe to identify additional repairs?	(No) No
8. Does Shaft Have	Visible Damage?	(No) No
9. Assembled Shaft	Runout	Inches
10. Assembled Shaft	End Play	inches
11. Air Gap Variation	<10%	
12. Lead Condition		(P) Pass
13. Lead Length		14 Inches
14. Does it have Lug	s?, If so what is the Stud Size?	
Yes		
15. Lead Numbers		T1-T12
16. Frame Condition		
17. Fan Condition		(P) Pass
18. Does motor have	internal fan?	(No) No
19. Broken or Missing	g Components	
Initial Electrical Inspe	ction	





21. Winding Resistance 

1-2

1-3

2-3

(P) Pass

	23.	Number of Stator Slots	36
	24.	Stator Condition	
	25.	Stator Thermistors/Ohms	
	26.	Stator Overloads/Ohms	
Ν	lecha	anical Inspection	

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27. Drive End Bearing Brand	fag
28. Drive End Bearing Number-	6311



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

34. Drive End Bearing Condition

Normal signs of wear ф.



35.	Opposite Drive End Bearing Brand	skf
36.	Opposite Drive End Bearing Number-	6309



37. Opposite Drive End Bearing Qty.	1
38. Opposite Drive End Bearing Type	(Ball) Ball Bearing
39. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
40. Opposite Drive End Bearing Insulation or Grounding Device?	
41. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	snap ring
42. Opposite Drive End Bearing Condition	
Normal signs of wear	



43.	Drive End Seal	slinger
44.	Opposite Drive End Seal	slinger
Rotor	Inspection	
45.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
46.	Growler Test	(Pass) Pass
47.	Number of Rotor Bars	28
48.	Rotor Condition	
49.	List the Parts needed for the Repair Below	
	6311 6309 Rivets	

Ami

N	lecha	anical Fits- Rotor		
	51.	Shaft Runout		inches
	•	0.03		
	52.	Rotor Runout		
		Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
	50	Courling Fit Classet to Desting Llousi		
	53.	Coupling Fit Closest to Bearing Housin		
		0 Degrees	90 Degrees	120 Degrees
	54.	Coupling Fit Closest to the end of the	Shaft	
		0 Degrees	60 Degrees	120 Degrees
		-	-	
	55.	Drive End Bearing Shaft Fit		
		0 Degrees	60 Degrees	120 Degrees
		2.1662-2.1661-2.1661		
	56.			(P) Pass
	57.			(1)1 235
	07.	0 Degrees	60 Degrees	120 Degrees
		o Degrees		120 Degrees
	•	1.7720-1.7720-1.7720		
	58.	Opposite Drive End Bearing Shaft Fit	Condition	(P) Pass
	59.	Shaft Air Seal Fits		
		Drive End Air Seal	Opposite Drive End Air Seal	
N		anical Fits- Bearing Housings		
	60.	Drive End - Endbell Bearing Fit		100.5
		0 Degrees	60 Degrees	120 Degrees
		4.7250-4.7251-4.7250		
	61.	Drive End - Endbell Bearing Fit Condit	tion	(P) Pass
	62.	Opposite Drive End - Endbell Bearing		
		0 Degrees	60 Degrees	120 Degrees
		C.	C C	5
	•	3.9372-3.9372-3.9371		
۲	63.	Opposite Drive End - Endbell Bearing	Fit Condition	(P) Pass
	64.	Bearing Cap Condition		
		Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	65.	End Bell Air Seal Fits		
	00.		Opposite Drive End Air Sool	
		Drive End Air Seal	Opposite Drive End Air Seal	

Cw

#### 66. List Machine Work Needed Below

Drill and replace all rivets in fan

67. Technician

**Root Cause of Failure** 

- 68. Failure locations Bearings and fan rivets
- 69. Root cause of failure *Wear*

#### **Dynamic Balance Report**

70. Rotor Weight and Balance Grade Rotor Weight

Balance Grade

71. Initial Balance Readings Drive End

**Opposite Drive End** 



Rotor



Fan

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Cw

72. Final Balance Readings	
Drive End	Opposite Drive End
itions	Conditions
Finish	Finish
Mils: 0.15 in/s: 0.003	Mila: 0.27 in/a: 0.006 Angle: 127.68
Angle: 320.76 Milm: 0.22 in/s: 0.005 Angle: 187.34	ni 95.857 g-in, 3.381 oz-in Right Sin ni: 1.125 g, 0.06 oz Right Sin turi 16.355 g-in, 0.625 oz-in Right Sin
14.452 g-in, 0.510 oz-in Right gi. 32.075 g-in, 0.750 g-in Left glub 3.065 g, 0.07 on Nigg-in Left glub 3.40 g, 0.08 or Left glub 5.455 g-in, 0.200 oz-in Right glub 6.453 g-in, 0.230 oz-in Right glub	the second
Add 2 0.00 in this at 0.00 in imp	11 27 1
and the	1 Piles

Fan

Rotor

73. Technician Jun

Assembly

74. QC Check All Parts for Cleanliness Prior to Assembly

in

75. Photograph All Major Components prior to assembly



New rivets



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Cw

Cw











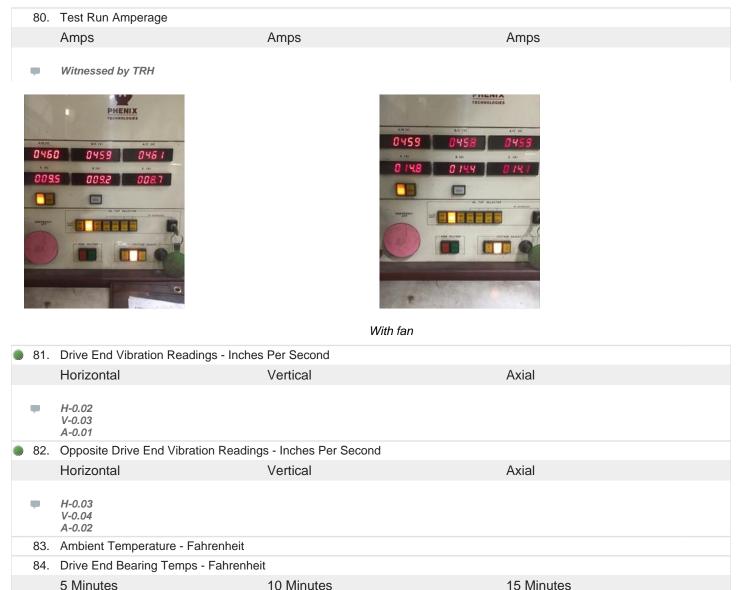


76.	Final Insulation Resistance Test		Megohms	
77.	Assembled Shaft Endplay		inches	
78.	Assembled Shaft Runout		0.001 inches	
79.	Test Run Voltage			
	Volts	Volts	Volts	
79.	U U	Volts	Volts	





With fan



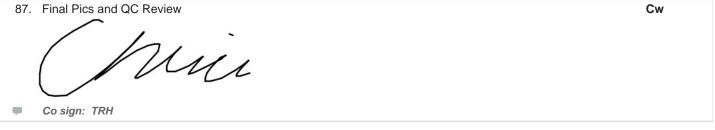
85. Opposite Drive End Bearing Temps - Fahrenheit 5 Minutes 10 Minutes

15 Minutes

86. Document Final Condition with Pictures after paint









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