

LR Motor Shop Repairs

Job Number 103526

Prepared for Saint Jean Industries, Inc. (11653)

424 Industrial Park Road Heber Springs AR 72543

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AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: M910LT9ES0T-W22

1.0



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

> FolderID: 103526 FormID: 21670428

AC Inspection as Found

Saint Jean Industries, Inc. (11653)

424 Industrial Park Road Heber Springs, AR 72543

AC Inspection - Rev. 2

Location: MOTOR SHOP LR Serial Number: M910LT9ES0T-W22

Description:50HP Weg w/ Blower Assembly

Hi-Speed Job Number:	103526
Manufacturer:	WEG
Spec/ID #:	M: M910LT9ES20T-W22
HP/kW:	50 (HP)
RPM:	1775 (RPM)
Frame:	324/6T
Voltage:	230 / 460
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	12
J-box Included:	Complete
Coupling/Sheave:	Sheave
Bearing RTDs:	No
Stator RTDs:	No
Rewind:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element
11 Good	

Priorities Found: 3 - High

3 - Low

11 - Good

Overall Condition

09/26/2024 1. Report Date

2. Nameplate Picture



3. Photos of all six sides of the machine.

































- 4. Describe the Overall Condition of the Equipment as Received *Dirty*
- 5. Distance from the end of the shaft to the Coupling/Sheave
- 6. Report Date [COPY]

Initial Mechanical/Electrical

- 7. Does Shaft Turn Freely?
 - Stator shaft turns free Fan shaft does not turn free
- 8. Does the shaft require T.I.R in Lathe to identify additional repairs?

(No) No

inches

- 9. Does Shaft Have Visible Damage?
 - Stator shaft has no visible damage Fan shaft has visible damage



200			
	10.	Assembled Shaft Runout	Inches
	11.	Assembled Shaft End Play	inches
	12.	Air Gap Variation <10%	
	13.	Lead Condition	(P) Pass
	14.	Lead Length	8 Inches
	15.	Does it have Lugs?, If so what is the Stud Size?	
		Yes	



16.	Lead Numbers	T1-T12
17.	Frame Condition	pass
18.	Fan Condition	(P) Pass
19.	Broken or Missing Components	
-	Flange bolts are broke on pedestal	



Initial Electrical Inspection

20. Insulation Resistance/Megger

Megohms

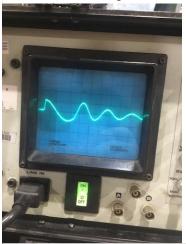


21. Winding Resistance

1-2 1-3

22. Perform Surge Test (P) Pass

2-3



23. Number of Stator Slots 48

24. Stator Condition pass

25. Stator Thermistors/Ohms

26. Stator Overloads/Ohms

Mechanical Inspection			
27. Drive End Bearing Brand	nsk		
28. Drive End Bearing Number-	6312		
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?			
22 Drive Ford Market Machan Chan Bing Other Betartion Basines			
33. Drive End Wavy Washer/Snap-Ring Other Retention Device?			
33. Drive End Wavy Washer/Snap-Ring Other Retention Device? 34. Drive End Bearing Condition			



35.	Opposite Drive End Bearing Brand	skf
36.	Opposite Drive End Bearing Number-	6212
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?	wavy washer
42.	Opposite Drive End Bearing Condition	
-	Frosting	



43. Drive End Seal slinger

Fail

•	44.	Opposite Drive End Seal		slinger
	-	Fail		
Ro	otor	Inspection		
	45.	Rotor Type/Material		(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
	46.	Growler Test		(Pass) Pass
	47.	Number of Rotor Bars		40
	48.	Rotor Condition		pass
	49.	List the Parts needed for the Repair B	elow	
		Seal master: 9.145.920 B2 x2 bearings Fan shaft 3.1772" width, 64" long 6312 6212 Aegis ring: 2.8176		
	50.	Signature of Technician that Disassen	nbled Motor	Cw
Me	echa	anical Fits- Rotor		
	51.	Shaft Runout		millimeters
		Fan shaft is bent 0.040		
	52.	Rotor Runout		
		Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
	53.	Coupling Fit Closest to Bearing Housi	ng	
		0 Degrees	90 Degrees	120 Degrees
	E 1	Coupling Fit Closest to the end of the	Chaft	
	54.			120 Dograda
		0 Degrees	60 Degrees	120 Degrees
	55.	Drive End Bearing Shaft Fit		
		0 Degrees	60 Degrees	120 Degrees
		2.3628	2.3627	2.3627
	56.			(P) Pass
_		Opposite Drive End Bearing Shaft Fit		()
		0 Degrees	60 Degrees	120 Degrees
		2.3625	2.3625	2.3625
	58.			(P) Pass
_		Shaft Air Seal Fits		. ,
		Drive End Air Seal	Opposite Drive End Air Seal	
		, <u></u>		
Me	echa	anical Fits- Bearing Housings		
	60.	Drive End - Endbell Bearing Fit		
		0 Degrees	60 Degrees	120 Degrees

5.1186

(P) Pass

5.1185

5.1187

61. Drive End - Endbell Bearing Fit Condition

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	62.	Opposite Drive End - Endbell Bearing	Fit		
		0 Degrees	60 Degrees	120 Degrees	
		4.331	4.331	4.331	
	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			
		Drive End Air Seal	Opposite Drive End Air Seal		
	66	List Machine Work Needed Below			
	00.	New fan shaft			
	67.	Technician			Cw
		(Jein			
	,				
	—	Co sign: RRW			
R	oot (Cause of Failure			
	68.	Failure locations			
		Fan shaft, fan bearings, and motor bea	rings		
	69.	Root cause of failure			
		Fan shaft bearing failed causing shaft t Motor bearings have contaminants and	o bounce in housing and bend. frosting		
D	ynar	nic Balance Report			
	70.	Rotor Weight and Balance Grade			
		Rotor Weight	Balance Grade		
	71.	Initial Balance Readings			
		Drive End	Opposite Drive End		





Rotor balance Fan balance

72. Final Balance Readings

Drive End

Opposite Drive End





Rotor balance Fan balance

Min

73. Technician Cw

Mechanical Fits- Rotor - Post Repair

74. Shaft Runout Post Repair inches



Machined new fan shaft.

75. Rotor Runout Post Repair		
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
76. Coupling Fit Closest to Bea	ring Housing Post Repair	
0 Degrees	90 Degrees	120 Degrees
77. Coupling Fit Closest to the	end of the Shaft Post Repair	
0 Degrees	60 Degrees	120 Degrees

78.	Drive End Bearing Shaft Fit Post Repa	air		
	0 Degrees	60 Degrees	120 Degrees	
79.	Opposite Drive End Bearing Shaft Fit	Post Repair		
	0 Degrees	60 Degrees	120 Degrees	
80.	Shaft Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
81.	Shaft Repair Sign-off			Gary

Assembly

82. QC Check All Parts for Cleanliness Prior to Assembly

Cw

Mun

83. Photograph All Major Components prior to assembly

(Complete) Complete























8 4.	Final Insulation Resistance Test		Megohms
85.	Assembled Shaft Endplay		inches
86.	Assembled Shaft Runout		inches
87.	Test Run Voltage		
	Volts	Volts	Volts



88. Test Run Amperage Amps Amps Amps



89. Drive End Vibration Readings - Inches Per Second

	Horizontal	Vertical	Axial
	0.01	0.02	0.02
90.	Opposite Drive End Vibration Reading	s - Inches Per Second	
	Horizontal	Vertical	Axial
	0.03	0.03	0.02
91.	Ambient Temperature - Fahrenheit		
92.	92. Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
93.	Opposite Drive End Bearing Temps -	Fahrenheit	
	5 Minutes	10 Minutes	15 Minutes
0.4	D (E: 10 E: 11 D: 1		











95. Final Pics and QC Review Crw

Co sign RRW



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- 3. SCOPE OF GOODS AND/OR SERVICES. The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only bee effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
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