

LR Motor Shop Repairs

Job Number 101878

Prepared for UAMS (10286)

4301 West Markham St. Little Rock AR 72205

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AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2: 81257280

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AC Inspection as Found UAMS (10286)

4301 West Markham St. Little Rock, AR 72205

Serial Number:

FolderID: 101878 FormID: 17911539

AC Inspection - Rev. 2

Location: MOTOR SHOP LR

81257280 Description: FUJI ELECTRIC COMPRESSOR

Hi-Speed Job Number:	101878
Manufacturer:	Other
Product Number:	VFC804A-7W
Serial Number:	81257280
Voltage:	230 / 460
Current:	23/11.5
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	Propeller
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 4 - High



7 - Good

Overall Condition

Report Date

Nameplate Picture



Photos of all six sides of the machine.



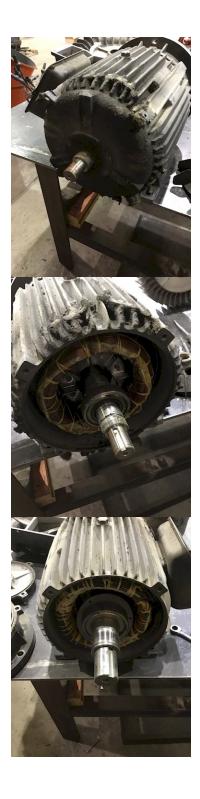


















Describe the Overall Condition of the Equipment as Received
Dirty

5. Distance from the end of the shaft to the Coupling/Sheave

Initial Mechanical/Electrical

6.	Does Shaft Turn Freely?	(Yes) Yes
7.	Does Shaft Have Visible Damage?	(No) No

8. Assembled Shaft Runout

9. Assembled Shaft End Play

10. Air Gap Variation <10%

11. Lead Condition(P) Pass

Requires repair



12. Lead Length	10 Inches
13. Lead Numbers	T1-T9 & P1-P2
14. Frame Condition	pass





16. Broken or Missing Components na **Initial Electrical Inspection** 17. Insulation Resistance/Megger 18. Winding Resistance 1-2 1-3 2-3 (P) Pass

19. Perform Surge Test









25. Drive End Bearing Number-	6308
26. Drive End Bearing Qty.	1
27. Drive End Bearing Type	(Ball) Ball Bearing
28. Drive End Lubrication Type	(Grease) Grease Lubricated
29. Drive End Bearing Insulation or Grounding Device?	na
30. Drive End Wavy Washer/Snap-Ring Other Retention Device?	na
31. Drive End Bearing Condition	



32. Opposite Drive End Bearing Brand





33. Opposite Drive End Bearing Number-

6207

34. Opposite Drive End Bearing Qty.	1
35. Opposite Drive End Bearing Type	(Ball) Ball Bearing
36. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
37. Opposite Drive End Bearing Insulation or Grounding Device?	na
38. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
39. Opposite Drive End Bearing Condition	





• 40.	Drive End Seal	50-64-10
-	Lip seal	
41.	Opposite Drive End Seal	na
Rotor	Inspection	
42.	Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
43.	Growler Test	(Pass) Pass
44.	Number of Rotor Bars	
45.	Rotor Condition	pass
4 6.	List the Parts needed for the Repair Below	
	New seal 6308 bearing 6207 bearing 2 new filters	

47.	Signature of Technic	cian that Disassemb	led Motor
	//	1	

Cw	

M	lecha	anical Fits- Rotor			
IV		Shaft Runout			
		Rotor Runout			
	49.		Deter Dedic	Opposite Drive Ford F	
		Drive End Bearing Fit	Rotor Body	Opposite Drive End E	searing
	50	Coupling Fit Closest to Bearing Housing	na		
	00.	0 Degrees	90 Degrees	120 Degrees	
		o Degrees	30 Degrees	120 Degrees	
	51.	Coupling Fit Closest to the end of the	Shaft		
		0 Degrees	60 Degrees	120 Degrees	
		<u> </u>	· ·	J	
	52.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.575	1.5751	1.5751	
	53.	Drive End Bearing Shaft Fit Condition			(P) Pass
	54.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.378	1.3782	1.3781	
	55.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	56.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
N	Mechanical Fits- Bearing Housings				
	57.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		3.5437	3.5438	3.5437	
		Drive End - Endbell Bearing Fit Condit			(P) Pass
	59.	Opposite Drive End - Endbell Bearing			
		0 Degrees	60 Degrees	120 Degrees	
		2.8344	2.8346	2.8344	
		Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
	61.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	-	Pass			
	62.	End Bell Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
			•		
	63.	List Machine Work Needed Below Na			

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64. Technician Cw

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-	nic Balance Report		
65.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
66.	Initial Balance Readings		
	Drive End	Opposite Drive End	
07	Final Balance Beadings		
67.	Final Balance Readings	O	
	Drive End	Opposite Drive End	
68	Technician		
Rewir			
	Core Test Results - Watts loss per Po	und	
09.	Pre-Burnout		
	Pre-burnout	Post Burnout	
70.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
	To Barriout	r cot Barriout	
71.	Post Rewind Electrical Test- Insulation	n Resistance	
72.	Post Rewind Polarization Index		
73.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
74.	Post Rewind Surge Test		
75.	Post Rewind Hi-Pot		
76.	Technician		
Root	Cause of Failure		
77.	Failure locations		
	Bearings		
7 8.	Root cause of failure		
	Contamination and metal fatigue		
Mech	anical Fits- Rotor - Post Repair		
79.	Shaft Runout Post Repair		
80.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
81.	1 0	· · · · · · · · · · · · · · · · · · ·	
	0 Degrees	90 Degrees	120 Degrees
	0 1 5 6	OL (D.) D. ;	
82.	1 0	·	100 5
	0 Degrees	60 Degrees	120 Degrees

83.	Drive End Bearing Shaft Fit Post Rep	air	
	0 Degrees	60 Degrees	120 Degrees
84. Opposite Drive End Bearing Shaft Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees
85.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
	Shaft Repair Sign-off		
Mecha	anical Fits- Bearing Housings - P	ost Repair	
87.	Drive End - Endbell Bearing Fit Post F	Repair	
	0 Degrees	60 Degrees	120 Degrees
88.	Opposite Drive End - Endbell Bearing	Fit Post Repair	
	0 Degrees	60 Degrees	120 Degrees
89.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
90.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
91.	End Bell Repair Sign-off		
Asser	nbly		

93. Photograph All Major Components prior to assembly

92. QC Check All Parts for Cleanliness Prior to Assembly





Trevor Hall























94.	Final Insulation Resistance Test		2000 Megohms
95.	Assembled Shaft Endplay		
96.	Assembled Shaft Runout		
97.	Test Run Voltage		
	Volts	Volts	Volts
	465	464	465
98.	Test Run Amperage		
	Amps	Amps	Amps
	5.6	5.3	5.3

99. Drive End Vibration Reading	s - Inches Per Second	
Horizontal	Vertical	Axial
0.1	0.2	0.2
100. Opposite Drive End Vibration Readings - Inches Per Second		
Horizontal	Vertical	Axial
0.1	0.1	0.1
101. Ambient Temperature - Fahr	renheit	
102. Drive End Bearing Temps - I	Fahrenheit	
5 Minutes	10 Minutes	15 Minutes
103. Opposite Drive End Bearing	Tomps Eabrophoit	
		45 Minutes
5 Minutes	10 Minutes	15 Minutes
104. Document Final Condition w	ith Pictures after paint	
105. Final Pics and QC Review		Trevor Hall. David Maclin
7~M	MA	7

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