







Submersible Pump Repair Report

FolderID: 104590  
FormID: 24403102

HOT SPRINGS VILLAGE  
895 DESOTO DR  
HOT SPRINGS VILLAGE, AR 71909  
LR MOTOR SHOP

Priorities Found: 8 - High 24 - Good

General		
1. Job Number	104590	
2. Report Date		
3. Customer	Hot Springs village	P27
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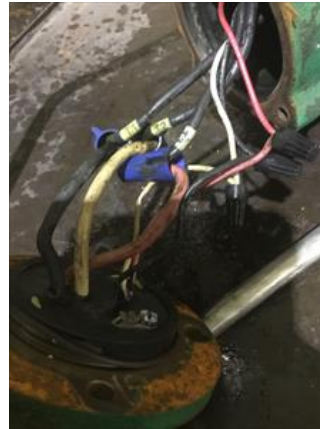
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## Initial Pump Inspection









6.	Power Cord Length	26 ft	
7.	Power Cord Condition	(P) Pass	P37
			
8.	Sensor Cord Wire Size	14 AWG	
9.	Sensor Cord # of Conductors	4	
10.	Sensor Cord Length	4 ft	P58
	<i>Need at least 25' as replacement</i>		
			
11.	Sensor Cord Condition	(F) Fail	
12.	Sensor Cord for Thermal Protection?	(Y) Yes	
13.	Sensor Cord for Water Protection	(Y) Yes	
14.	Bowl Condition	(P) Pass	

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15. Impeller Condition

(F) Fail

P80



16. Number of Wear Rings

1

17. Wear Ring Condition

(P) Pass

18. Wear Ring Size

in

19. Wear Ring Clearance to Impeller

in

20. Wear Ring Material

brass

21. Seal Surfaces Condition

(F) Fail

P98

Outer seal surface worn



22. Seal Type

Mechanical

23. Number of Seals

2



P105



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Outer seal, Tungsten, seat and rotary face


Inner seal, carbon, ceramic.

24.	Seal Material on Rotary Face	tungsten	
	 Tungsten, outer Carbon, inner		
25.	Seal Material on Stationary Seat		
	 Tungsten, outer Ceramic, inner		
26.	Elastic Component Material	Buna	
27.	Seal OD	mm	P112
	 See pictures		



D-1500-358  
54.01 mm or 2.1245

D-1500-358  
54.06 mm or 2.1275in

28.	Seal ID	in	
	 Shaft diameter:1.51		
29.	Seal Sleeve Material		
	30. Seal Plate Condition	(P) Pass	
	31. Water Sensor in Seal Cavity?	(Y) Yes	
	32. Oil Filled Seal Cavity?	(Y) Yes	
	33. Oil Filled Stator?	(Y) Yes	

**Initial Inspection**

34.	Number of Leads	3	
35.	Lead Length	8 Inches	
36.	Lead Size		P31



	37. Lead Condition	(P) Pass	
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39. Lead Size for Oil Filled Stator

14 AWG

40. Lug Size, Condition, and Type

☒ 41. Overload Required?

(Y) Yes

42. Winding RTD's

43. Winding Rtd's Condition

44. Shaft Run Out

45. Does Shaft Turn Freely

no

46. Does Shaft Have Visible Damage

no

47. Bearing Rtd's

48. Bearing Rtd's Condition

49. Contamination

Water

☒ 50. Frame Condition

(P) Pass

51. Fan Condition

52. Broken or missing components

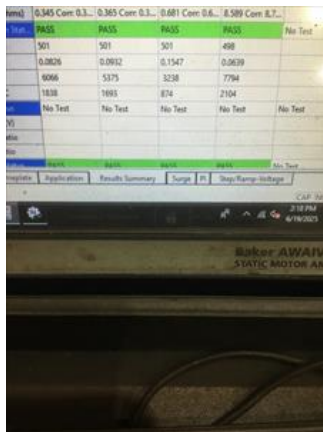
## Initial Electric Test



53. Resistance to Ground

0.11 Mohm






P5




After wash and bake.






64.	Number of Rotor Bars	44	
65.	Number of Broken Rotor Bars	0	
66.	Growler Test	(P) Pass	
67.	Rotor Condition	(P) Pass	
<b>Mechanical Inspection</b>			
68.	Bearing Manufacturer	ntn	
69.	Bearing DE Size	7308	P18
			
70.	Bearing DE Type	thrust	
71.	DE Bearing Qty.	1	
72.	Bearing ODE Size	6206	
73.	Bearing ODE Type	ball bearing	P47
 			
74.	ODE Bearing Qty.	1	
75.	Insulated Bearing	no	
76.	Lubrication Type	oil	
77.	Grease Condition		
78.	Bearing Retainers		
79.	Shaft Grounding Device	(N) No	
80.	DE Seal	(Y) Yes	
81.	DE Seal Type/Size	machanical	
	 Tungsten/tungsten		
82.	ODE Seal	(Y) Yes	
83.	ODE Seal Type/Size	carbon, ceramic	
<b>Root Cause of Failure</b>			

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84.	Component Failure	seals
85.	Cause of Failure	<i>Seals failed and impeller had rag like material wrapped around it.</i>
86.	Comments	
87.	Service Technician	Terrence Holland
		
<b>Machine Fit Inspection Report</b>		
88.	Shaft Run Out	(P) Pass
89.	Initial Shaft Run Out	0.002 "
90.	Final Shaft Run Out	
91.	DE Bearing Shaft Fit	(P) Pass
92.	DE Initial Shaft Bearing Fit Size	
	Measure 1	Measure 2
	1.5753	1.5754
	Measure 3	1.5753
93.	DE Final Shaft Bearing Fit Size	
	Measure 1	Measure 2
	Measure 3	
94.	ODE Bearing Shaft Fit	(P) Pass
95.	ODE Initial Shaft Bearing Fit Size	
	Measure 1	Measure 2
	1.1813	1.1812
	Measure 3	1.1813
96.	ODE Final Shaft Bearing Fit Size	
	Measure 1	Measure 2
	Measure 3	
97.	DE Air Seal Shaft Fit	
98.	DE Air Seal Shaft Size	
	Initial	Final
99.	ODE Air Seal Shaft Fit	
100.	ODE Air Seal Shaft Size	
	Initial	Final
101.	DE Endbell Fit	(P) Pass
102.	DE Initial Endbell Fit Size	
	Measure 1	Measure 2
	3.5438	3.5439
	Measure 3	3.5439
103.	DE Final Endbell Fit Size	
	Measure 1	Measure 2
	Measure 3	
104.	DE Endbell Fit Insulated	(N) No
105.	DE Endbell Air Seal Fit	

106. DE Endbell Air Seal Fit Size			
Initial	Final		
107. ODE Endbell Fit	(P) Pass		
108. ODE Initial Endbell Fit Size			
Measure 1	Measure 2	Measure 3	
109. ODE Final Endbell Fit Size			
Measure 1	Measure 2	Measure 3	
110. ODE Endbell Fit Insulated	(N) No		
111. ODE Endbell Air Seal Fit			
112. ODE Endbell Air Seal Fit Size			
Initial	Final		
113. Foot Flatness	(P) Pass		
114. Foot Condition	(P) Pass		
115. Flange Condition	(NA) Not Applicable		
116. Service Technician	Terrence Holland		
			

### Balancing Report

117. Balance Type
118. Balance Operating Speed
119. Start Left End
120. Start Right End
121. Balancing Specification
122. Finish Left End
123. Finish Right End
124. Service Technician

### Assembly and Final Test

125. Rotor and Impeller Balanced		
126. Stator Housing Refilled with Oil (if required)		
127. Stator Pressure Test		
128. Seal Cavity Pressure Test		
129. Time Under Pressure		
130. Overload Continuity		
131. Water Sensor Open?		
132. Meggar Testing Reading		
133. Surge Test		
134. Hi-Pot		
135. Winding Resistance		
1-2	2-3	3-1
136. Test Run		

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137. Test Run Voltage			
Phase A	Phase B	Phase C	
138. Test Run Current			
Phase A	Phase B	Phase C	
139. DE Vibration Reading			
Horizontal	Vertical	Axial	
140. ODE Vibration Reading			
Horizontal	Vertical	Axial	
141. Ambient Temp at start of Test Run			
142. Temp at 5 minutes			
143. Temp at 10 minutes			
144. Temp at 15 minutes			
145. Temp at 20 minutes			
146. Temp at 25 minutes			
147. Temp at 30 minutes			
148. Temp at 35 minutes			
149. Temp at 40 minutes			
150. Temp at 45 minutes			
151. Temp at 50 minutes			
152. Temp at 55 minutes			
153. Temp at 60 minutes			
154. Motor Paint			
155. Service Technician			