

# LR Motor Shop Repairs

# **Job Number 104761**

Prepared for Clarksville Light & Water (12117)

710 East Main Clarksville AR

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Submersible Pump Repair Report -  $LR\ MOTOR\ SHOP$ 

Submersible Pump Repair Report: 10075104

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### **Submersible Pump Repair Report** Clarksville Light & Water (12117)

710 East Main Clarksville, AR

FolderID: 104761 FormID: 24833707

Submersible Pump Repair Report			
Location:	LR MOTOR SHOP		

Serial Number: 10075104 Description: PENTAIR MR W PUMP

**EXPLOSION PROOF** TEMP CODE T4 (NO UL #)

Make:	PENTAIR
Model:	SA4NX100FB
Serial:	10075104
V:	460 (V)
RPM:	1150 (RPM)
Hz:	60 (Hz)
Phase:	3
Service Factor:	2.2
Impeller Diameter:	6.37 (in)

Priorities Found: **7 - High** 

22 - Good

#### General

104761 1. Job Number























2.	Report Date	07/14/2025	
3.	Customer	Clarksville Light & Water	
Initial	Pump Inspection		
4.	Power Cord Wire Size	14 AWG	
5.	Power Cord # of Conductors	4	
6.	Power Cord Length	ft	
-	Cord has been cut off		



7.	Power Cord Condtion	(F) Fail	
8.	Sensor Cord Wire Size	18 AWG	
9.	Sensor Cord # of Conductors	5	

Cord has been cut off



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



15. Impeller Condition
 (F) Fail



16.	Number of Wear Rings	1
17.	Wear Ring Condition	(P) Pass

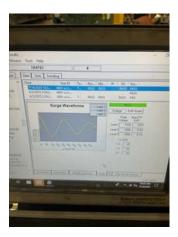


18.	Wear Ring Size Na	in
19.	Wear Ring Clearance to Impeller Na	in
20.	Wear Ring Material	cast iron
21.	Seal Surfaces Condition	(P) Pass
22.	Seal Type	Mechanical



23.	Number of Seals	2
24.	Seal Material on Rotary Face	carbon
25.	Seal Material on Stationary Seat	ceramic
26.	Elastic Component Material	Buna
27.	Seal OD	mm
-	2.125	
28.	Seal ID	in
-	1.50	
29.	Seal Sleeve Material	
•	Na	
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	
	Number of Leads	3
	Lead Length	10 Inches
	Lead Size	14
	Lead Condition	(P) Pass
	Lead Condition  Lead Markings	none
	Lead Markings  Lead Size for Oil Filled Stator	14 AWG
	Lug Size, Condition, and Type	14 AWG
40.	Na	
<b>41</b> .		(Y) Yes
41.	·	(N) No
<b>42.</b>	-	(NA) Not Applicable
44.	2	0.0001
	Does Shaft Turn Freely	yes
46.		No.
<b>4</b> 7.	-	(N) No
48.	•	(NA) Not Applicable
49.	•	(NA) NOT Applicable
43.	None	
50	Frame Condition	(P) Pass
	Fan Condition	(NA) Not Applicable
_	Broken or missing components	(,
	None	
Initial	Electric Test	
53.	Resistance to Ground	6657 Mohm
54.	Winding Resistance 1-2	21.74 Ohm
55.		21.74 Ohm's
56.		21.74 Ohm's
57.	3	0.005 %
58.	Hi-Pot	0.0997 Ua
<b>5</b> 9.	Surge Test	(P) Pass



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60. Stator Condition wash and dry



61. Failure Location

	-	Na			
In	Initial Rotor Inspection				
	62.	Rotor Type	aluminum cage		
	63.	Air Gap <10% Variation	(NA) Not Applicable		
	64.	Number of Rotor Bars	48		
	65.	Number of Broken Rotor Bars	0		
	66.	Growler Test	(P) Pass		
	67.	Rotor Condition	(P) Pass		



### **Mechanical Inspection**

68. Bearing Manufacturer KOYO

69. Bearing DE Size 6308 C3



70. Bearing DE Type	ball
71. DE Bearing Qty.	1
72. Bearing ODE Size	6303 C3



73.	Bearing ODE Type	ball	
74.	ODE Bearing Qty.	1	
75.	Insulated Bearing	No	
76.	Lubrication Type	oil	
<b>77</b> .	Grease Condition	(NA) Not Applicable	
<b>7</b> 8.	Bearing Retainers	(N) No	
<b>9</b> 79.	Shaft Grounding Device	(N) No	
<b>8</b> 0.	DE Seal	(Y) Yes	
81.	DE Seal Type/Size	Mechanical	
-	Shaft 1.50 Seat 2.125		
<b>8</b> 2.	ODE Seal	(Y) Yes	
83.	ODE Seal Type/Size	Mechanical shaft 1.25 Seat 1.875	
Root	Root Cause of Failure		

84. Component Failure seals and impeller





#### Found inside of the seal cavity

85.	Cause of Failure	
	Snap ring missing on shaft that holds seal in place	
86.	Comments	
	Needs new seals bearings and impeller also new cords	
87.	Service Technician	RW

AW

	•				
-	Co sign: TRH				
Machine Fit Inspection Report					
88.	Shaft Run Out				
89.	Initial Shaft Run Out		п		
90.	Final Shaft Run Out				
91.	DE Bearing Shaft Fit				
92.	DE Initial Shaft Bearing Fit Size				
	Measure 1	Measure 2	Measure 3		
93.	DE Final Shaft Bearing Fit Size				
	Measure 1	Measure 2	Measure 3		
94.	ODE Bearing Shaft Fit				
95.	ODE Initial Shaft Bearing Fit Size				
	Measure 1	Measure 2	Measure 3		
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			
	Titte	Tilla			
101.	DE Endbell Fit				
102.	DE Initial Endbell Fit Size				
	Measure 1	Measure 2	Measure 3		
103.	DE Final Endbell Fit Size				
	Measure 1	Measure 2	Measure 3		
	DE Endbell Fit Insulated				
	DE Endbell Air Seal Fit				
106.	DE Endbell Air Seal Fit Size				
	Initial	Final			
107	ODE Endbell Fit				
	ODE Initial Endbell Fit Size				
100.	Measure 1	Measure 2	Measure 3		
	Woodalo 1	Wooddio Z	Modedie 6		
109.	ODE Final Endbell Fit Size				
	Measure 1	Measure 2	Measure 3		
	ODE Endbell Fit Insulated				
	ODE Endbell Air Seal Fit				
112.	ODE Endbell Air Seal Fit Size				
	Initial	Final			
112	Foot Flatness				
	Foot Condition				
	Flange Condition				
	Service Technician				
	cing Report				
	117. Balance Type				
	Balance Operating Speed				
	Start Left End				
120.	Start Right End				
121.	Balancing Specification				
122.	Finish Left End				
123.	Finish Right End				
124.	Service Technician				
Asser	nbly and Final Test				
125.	Rotor and Impeller Balanced				
126.	Ctator Hausing Defilled with Oil (if regu	iired)			
	Stator Housing Refilled with Oil (if requ	anou,			
	Stator Pressure Test	an out			
128.	Stator Pressure Test Seal Cavity Pressure Test	an out			
128. 129.	Stator Pressure Test Seal Cavity Pressure Test Time Under Pressure				
128. 129. 130.	Stator Pressure Test Seal Cavity Pressure Test				

	Meggar Testing Reading		
	Surge Test		
	Hi-Pot		
135.	Winding Resistance		
	1-2	2-3	3-1
	Test Run		
137.	Test Run Voltage		
	Phase A	Phase B	Phase C
400	Tank Davis Occurrent		
138.	Test Run Current	DI D	DI O
	Phase A	Phase B	Phase C
139	DE Vibration Reading		
100.	Horizontal	Vertical	Axial
	Honzontal	vertical	Axiai
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		
4.50			
153.	Temp at 60 minutes		
	Temp at 60 minutes  Motor Paint		
154.	•		

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