

# Motor Shop Repairs

## Job Number 99561

Prepared for Arauco-Malvern MDF (10298)

1275 Willamette Rd Malvern AR 72104

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### **AC Recondition Repair Report**

Arauco-Malvern MDF (10298)

1275 Willamette Rd Malvern, AR 72104

Priorities Found: **2 - High** 

14 - Good

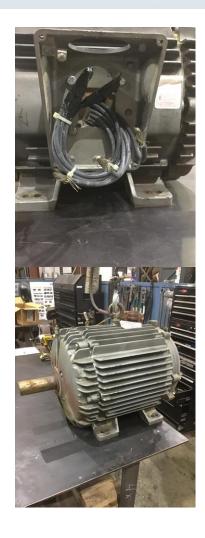
General				
1.	Job Number		99561	
2.	Report Date		3/25/2022	
3.	Customer		Arauco	

#### **Name Plate Information**

Manufacturer





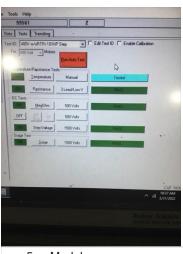






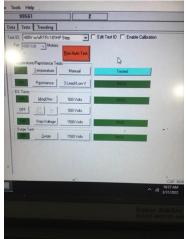






5.	Model	H4316T
-	SPEC 14C051X385H1	
6.	Serial Number	C0304040114
7.	Horsepower	75
8.	KW	
9.	Volts	460
10.	Amps	87
11.	RPM	1775
12.	Frame	365T
13.	Enclosure	TEFC
14.	Cycles	60
15.	Phase	3
16.	Service Factor	1.15
17.	Motor Mount Position	
Initial	Inspection	
18.	Number of Leads	9
19.	Lead Length	8 Inches
20.	Lead Size	
21.	Lead Condition	(P) Pass
22.	Lead Markings	
23.	Lug Size, Condition, and Type	
24.	Winding RTD's	
25.	Winding Rtd's Condition	
26.	Shaft Run Out	
27.	Does Shaft Turn Freely	yes
28.	Does Shaft Have Visible Damage	no
29.	Bearing Rtd's	
30.	Bearing Rtd's Condition	
31.	Contamination	
	Grease	
	Frame Condition	(P) Pass
<ul><li>33.</li></ul>	Fan Condition	(P) Pass
34.	Broken or missing components	
	Two fan cover bolts are missing and the J-box cover is missing	

# Initial Electric Test 35. Resistance to Ground 36. Winding Resistance 1-2 37. Winding Resistance 2-3 38. Winding Resistance 1-3 39. Resistive Imbalance 40. Hi-Pot 41. Surge Test (P) Pass



- 42. Stator Condition
- 43. Failure Location

#### **Initial Rotor Inspection**

- 44. Rotor Type cast aluminum
- 45. Air Gap <10% Variation
- 46. Number of Rotor Bars
- 47. Number of Broken Rotor Bars 0
- 48. Growler Test (P) Pass
- 49. Rotor Condition (P) Pass

#### **Mechanical Inspection**

50. Bearing Manufacture





**SKF** 

51. Bearing DE Size	6313
52. Bearing DE Type	ball bearing
53. DE Bearing Qty.	1

54.	Bearing ODE Size	6312
55.	Bearing ODE Type	ball bearing
56.	ODE Bearing Qty.	1
57.	Insulated Bearing	
58.	Lubrication Type	grease
59.	Grease Condition	(F) Fail
60.	Bearing Retainers	(Y) Yes
	Installed Agis ring on D.E. Bearing retainer.	





Agis ring installed

61.	Shaft Grounding Device		
62.	DE Seal	(NA) Not Applicable	
63.	DE Seal Type/Size		
64.	ODE Seal	(NA) Not Applicable	
65.	ODE Seal Type/Size		
Root	Cause of Failure		
66.	Component Failure	bearings and ODE end bell bearing fit	
67.	Cause of Failure		
	Wear and grease mixing. Evidence of frosting with the start of fluting in bearing races.		
68.	68. Comments		
	Recommend reconditioning, machine work one ODE bearing fit of the end bell, bearings, and	d aegis ring	
69.	Service Technician		
Mach	ne Fit Inspection Report		
70.	Shaft Run Out		
71.	Initial Shaft Run Out		
72.	Final Shaft Run Out		
<b>7</b> 3.	DE Bearing Shaft Fit	(P) Pass	
74.	DE Initial Shaft Bearing Fit Size 1	2.5593 "	
75.	DE Initial Shaft Bearing Fit Size 2	2.5594 "	
76.	DE Initial Shaft Bearing Fit Size 3	2.5592 "	
77.	DE Finial Shaft Bearing Fit Size 1		
78.	DE Finial Shaft Bearing Fit Size 2		
79.	DE Finial Shaft Bearing Fit Size 3		
<b>8</b> 0.	ODE Bearing Shaft Fit	(P) Pass	

81.	ODE Initial Shaft Bearing Fit Size 1	2.3624 "
82.	ODE Initial Shaft Bearing Fit Size 2	2.3624 "
83.	ODE Initial Shaft Bearing Fit Size 3	2.3623 "
84.	ODE Finial Shaft Bearing Fit Size 1	
85.	ODE Finial Shaft Bearing Fit Size 2	
86.	ODE Finial Shaft Bearing Fit Size 3	
87.	DE Air Seal Shaft Fit	
88.	DE Initial Air Seal Shaft Size	
89.	DE Final Air Seal Shaft Size	
90.	ODE Air Seal Shaft Fit	
91.	ODE Initial Air Seal Shaft Size	
92.	ODE Final Air Seal Shaft Size	
93.	DE Endbell Fit	(P) Pass
94.	DE Initial Endbell Fit Size 1	5.5128 "
95.	DE Initial Endbell Fit Size 2	5.5127 "
96.	DE Initial Endbell Fit Size 3	5.5128 "
97.	DE Final Endbell Fit Size 1	
98.	DE Finial Endbell Fit Size 2	
99.	DE Final Endbell Fit Size 3	
100.	DE Endbell Fit Insulated	
101.	DE Endbell Air Seal Fit	
102.	Initial Endbell Air Seal Fit Size	
103.	Finial Endbell Air Seal Fit Size	
104.	ODE Endbell Fit	(F) Fail
-	Has lip worn in bearing fit	
105.	ODE Initial Endbell Fit Size 1	
106.	ODE Initial Endbell Fit Size 2	
107.	ODE Initial Endbell Fit Size 3	
108.	ODE Final Endbell Fit Size 1	5.1188 "



109. ODE Final Endbell Fit Size 2	5.1188 "
110. ODE Final Endbell Fit Size 3	5.1187 "
111. ODE Endbell Fit Insulated	
112. ODE Endbell Air Seal Fit	
113. ODE Initial Endbell Seal Fit Size	
114. ODE Finial Endbell Seal Fit Size	

115. Foot Flatness
 116. Foot Condition
 117. Flange Condition
 118. Service Technician

(P) Pass

 (NA) Not Applicable

#### **Balancing Report**

119. Balance Type



120. Balance Operating Speed

121. Start Left End

122. Start Right End

123. Balancing Specification

124. Finish Left End

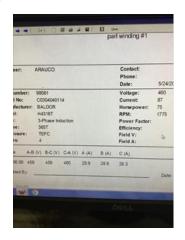
125. Finish Right End

126. Service Technician

#### **Assembly and Final Test**

127. Meggar Testing Reading

Mohm



128. Surge Test

129. Hi-Pot

130. Winding Resistance 1-2

131. Winding Resistance 2-3

132. Winding Resistance 1-3

133. Test Run Voltage Phase A

134. Test Run Amps A

135. Test Run Voltage Phase B	
136. Test Run Amps B	
137. Test Run Voltage Phase C	
138. Test Run Amps C	
139. DE Horizontal Vibration Reading	
140. DE Vertical Vibration Reading	
141. DE Axial Vibration Reading	
142. ODE Horizontal Vibration Reading	
143. ODE Vertical Vibration Reading	
144. ODE Axial Vibration Reading	
145. Ambient Temp at start of Test Run	
146. Temp at 5 minutes	
147. Temp at 10 minutes	
148. Temp at 15 minutes	
149. Temp at 20 minutes	
150. Temp at 25 minutes	
151. Temp at 30 minutes	
152. Temp at 35 minutes	
153. Temp at 40 minutes	
154. Temp at 45 minutes	
155. Temp at 50 minutes	
156. Temp at 55 minutes	
157. Temp at 60 minutes	
158. Motor Paint	(P) Pass

































159. Service Technician



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