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Motor Shop Repairs

**Job Number 97506**

Prepared for Arauco-Malvern MDF (10298)

1275 Willamette Rd  
Malvern AR 72104

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AC Recondition Repair Report

1.0

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Millington, Tn 38053  
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## AC Recondition Repair Report

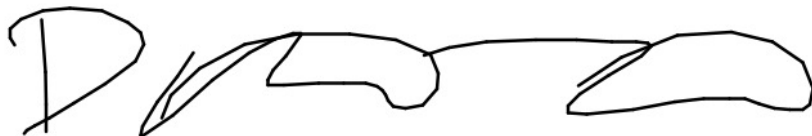
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**Arauco-Malvern MDF (10298)**  
1275 Willamette Rd  
Malvern, AR 72104

Priorities Found: 11 - Good

General		
1. Job Number	97506	
2. Report Date		
3. Customer	ARAUCO	
Name Plate Information		
4. Manufacturer	RELIANCE	P5
5. Model		
6. Serial Number		
7. Horsepower	100	
8. KW		
9. Volts	460	
10. Amps	120	
11. RPM		
12. Frame	444TS	
13. Enclosure	ODP	
14. Cycles	60	
15. Phase	3	
16. Service Factor		
17. Motor Mount Position	Feet	
Initial Inspection		
18. Number of Leads	3	P13
19. Lead Length	24 Inches	
20. Lead Size	2	
21. Lead Condition		
22. Lead Markings	none	P51
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	np	
29. Bearing Rtd's		
30. Bearing Rtd's Condition		
31. Contamination		P104
<i>Sawdust</i>		
32. Frame Condition		

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33.	Fan Condition		
34.	Broken or missing components		
<b>Initial Electric Test</b>			
35.	Resistance to Ground	Mohm	P7
36.	Winding Resistance 1-2		
37.	Winding Resistance 2-3		
38.	Winding Resistance 1-3		
39.	Resistive Imbalance		
40.	Hi-Pot		
41.	Surge Test		
42.	Stator Condition		
43.	Failure Location		
<b>Initial Rotor Inspection</b>			
44.	Rotor Type	Cast Aluminum	P4
45.	Air Gap <10% Variation		
46.	Number of Rotor Bars	88	
47.	Number of Broken Rotor Bars		
	48. Growler Test	(P) Pass	
	49. Rotor Condition	(P) Pass	
<b>Mechanical Inspection</b>			
50.	Bearing Manufacture	FAG	P1
51.	Bearing DE Size	6213 RSR	
52.	Bearing DE Type	Deep Groove Ball	
53.	DE Bearing Qty.	1	
54.	Bearing ODE Size	6213 RSR	
55.	Bearing ODE Type	Deep Groove Ball	
56.	ODE Bearing Qty.	1	
57.	Insulated Bearing		
58.	Lubrication Type		
	59. Grease Condition	(P) Pass	
60.	Bearing Retainers	(NA) Not Applicable	
61.	Shaft Grounding Device	(NA) Not Applicable	
62.	DE Seal	(NA) Not Applicable	
63.	DE Seal Type/Size		
64.	ODE Seal	(NA) Not Applicable	
65.	ODE Seal Type/Size		
<b>Root Cause of Failure</b>			
66.	Component Failure	None	
67.	Cause of Failure		P14
	None		
68.	Comments		
69.	Service Technician	David Maclin	
			

## Machine Fit Inspection Report

70. Shaft Run Out	
71. Initial Shaft Run Out	
72. Final Shaft Run Out	
73. DE Bearing Shaft Fit	(P) Pass
74. DE Initial Shaft Bearing Fit Size 1	2.5592 "
75. DE Initial Shaft Bearing Fit Size 2	2.5592 "
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	
80. ODE Bearing Shaft Fit	(P) Pass
81. ODE Initial Shaft Bearing Fit Size 1	2.5592 "
82. ODE Initial Shaft Bearing Fit Size 2	2.5593 "
83. ODE Initial Shaft Bearing Fit Size 3	2.5594 "
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	4.7244 "
95. DE Initial Endbell Fit Size 2	4.7244 "
96. DE Initial Endbell Fit Size 3	4.7245 "
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	(P) Pass
105. ODE Initial Endbell Fit Size 1	4.7244 "
106. ODE Initial Endbell Fit Size 2	4.7242 "
107. ODE Initial Endbell Fit Size 3	4.7244 "
108. ODE Final Endbell Fit Size 1	
109. ODE Final Endbell Fit Size 2	
110. ODE Final Endbell Fit Size 3	
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	(P) Pass

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116. Foot Condition	(P) Pass
117. Flange Condition	(NA) Not Applicable
118. Service Technician	David Maclin
	

### 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	44,200 Mohm	P3
128. Surge Test	(P) Pass	
129. Hi-Pot		
130. Winding Resistance 1-2		
131. Winding Resistance 2-3		
132. Winding Resistance 1-3		
133. Test Run Voltage Phase A	458 Volts	
134. Test Run Amps A	41.7 Amps	
135. Test Run Voltage Phase B	456 Volts	
136. Test Run Amps B	40.5 Amps	
137. Test Run Voltage Phase C	458 Volts	
138. Test Run Amps C	41 Amps	P83
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		

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157. Temp at 60 minutes	
● 158. Motor Paint	(P) Pass
159. Service Technician	RW



P1.1



P3.2



P4.3



P5.4



P5.5



P5.6



P5.7



P5.8



P5.9



P7.10



P7.11



P7.12

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**P7.13**



**P13.14**



**P14.15**



**P51.16**



**P83.17**



**P104.18**



**P104.19**





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4. **BILLING AND PAYMENT TERMS.** Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
5. **DELIVERY OF GOODS AND/OR SERVICES.** Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
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8. **WARRANTIES.** Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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13. **FORCE MAJEURE.** Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earthquake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
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15. **ASSIGNMENT.** The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
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