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Motor Shop Repairs

**Job Number 97562**

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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7030 Ryburn Dr  
Millington, Tn 38053  
901-873-5300

## AC Recondition Repair Report

FolderID: 97562  
FormID: 9375698




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

Performed By: Motor Shop LR 1  
Date Completed: 11/30/2020

Priorities Found: ● 1 - High ● 11 - Good

General		
1. Job Number	97562	
2. Report Date		
3. Customer	Arauco	
Name Plate Information 		
4. Manufacturer	TOSHIBA	P5
5. Model	B0504FLFL3US01	
6. Serial Number	96700509	
7. Horsepower	50	
8. KW		
9. Volts	Volts	
10. Amps	Amps	
11. RPM	1760 RPM	
12. Frame		
13. Enclosure	TEFC	
14. Cycles	60	
15. Phase	3	
16. Service Factor	1.15	
17. Motor Mount Position	F1	
Initial Inspection 		
18. Number of Leads	3	P13
19. Lead Length	11 Inches	
20. Lead Size		
<span style="color: green;">●</span> 21. Lead Condition	(P) Pass	P42
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	P94
29. Bearing Rtd's	(NA) Not Applicable	
30. Bearing Rtd's Condition	(NA) Not Applicable	
31. Contamination		
<i>Water in grease inside d.e. end bell housing/bearing.</i>		
<span style="color: green;">●</span> 32. Frame Condition	(P) Pass	P106

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33. Fan Condition	(P) Pass	P109
34. Broken or missing components <i>No connection box</i>		P113
<b>Initial Electric Test</b> 		
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	P58
42. Stator Condition	good	
43. Failure Location		
<b>Initial Rotor Inspection</b> 		
44. Rotor Type	squirrel cage	P4
45. Air Gap <10% Variation		
46. Number of Rotor Bars	41	
47. Number of Broken Rotor Bars		
48. Growler Test	(P) Pass	
49. Rotor Condition	(P) Pass	
<b>Mechanical Inspection</b> 		
50. Bearing Manufacture	SKF	P1
51. Bearing DE Size	6312 2rs	P15
52. Bearing DE Type	sealed ball bearing	
53. DE Bearing Qty.	1	
54. Bearing ODE Size	6312 2rs	P43
55. Bearing ODE Type	sealed ball bearing	
56. ODE Bearing Qty.	1	
57. Insulated Bearing		
58. Lubrication Type	grease	
59. Grease Condition  <i>Water/dirty</i>	(F) Fail	
60. Bearing Retainers	(Y) Yes	P80
61. Shaft Grounding Device  <i>None</i>		
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	bearings	
67. Cause of Failure <i>Dirty/contaminated grease.</i>		
68. Comments		

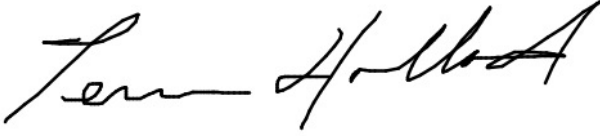


## Machine Fit Inspection Report



70. Shaft Run Out		
71. Initial Shaft Run Out		
72. Final Shaft Run Out		
73. DE Bearing Shaft Fit		
74. DE Initial Shaft Bearing Fit Size 1		
75. DE Initial Shaft Bearing Fit Size 2		
76. DE Initial Shaft Bearing Fit Size 3		
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		
81. ODE Initial Shaft Bearing Fit Size 1		
82. ODE Initial Shaft Bearing Fit Size 2		
83. ODE Initial Shaft Bearing Fit Size 3		
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	P129
94. DE Initial Endbell Fit Size 1	5.1186 "	
95. DE Initial Endbell Fit Size 2	5.1187 "	
96. DE Initial Endbell Fit Size 3	5.1187 "	
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	(NA) Not Applicable	
101. DE Endbell Air Seal Fit	(NA) Not Applicable	
102. Initial Endbell Air Seal Fit Size	"	
103. Finial Endbell Air Seal Fit Size		
104. ODE Endbell Fit	(P) Pass	P145
105. ODE Initial Endbell Fit Size 1	5.1188 "	
106. ODE Initial Endbell Fit Size 2	5.1186 "	
107. ODE Initial Endbell Fit Size 3	5.1188 "	
108. ODE Final Endbell Fit Size 1	"	
109. ODE Final Endbell Fit Size 2		
110. ODE Final Endbell Fit Size 3		

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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
● 116. Foot Condition	(P) Pass
117. Flange Condition	(NA) Not Applicable
118. Service Technician	Terrence Holland
	

### Balancing Report




119. Balance Type	2 plane	P6
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		
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	Volts	P56
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	0.0494 In/Sec	
140. DE Vertical Vibration Reading	0.0818 In/Sec	
141. DE Axial Vibration Reading	0.0393 In/Sec	
142. ODE Horizontal Vibration Reading	0.063200000000000001 In/Sec	
143. ODE Vertical Vibration Reading	0.0266 In/Sec	
144. ODE Axial Vibration Reading	0.0485 In/Sec	
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		

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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	P136
159. Service Technician	David Maclin
	



P1.1



P4.2



P5.3



P5.4



P5.5



P5.6



P5.7



P5.8



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P5.10



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P13.18



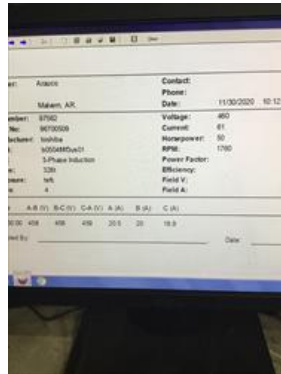
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P80.24



P94.25



P106.26



P109.27



P113.28





**P129.29**



**P136.30**



**P136.31**



**P136.32**



**P136.33**



**P136.34**



**P136.35**



**P136.36**



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**P136.38**



**P136.39**



**P136.40**



**P145.41**



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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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