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— EVERY DAY SINCE 1946 —

Motor Shop Repairs

**Job Number 97413**

Prepared for INDUSTRIAL SUPPLY & SERVICE

8203 DISTRIBUTION DRIVE  
LITTLE ROCK AR 72209

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AC Recondition Repair Report

1.0

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Millington, Tn 38053  
901-873-5300

## AC Recondition Repair Report

INDUSTRIAL SUPPLY & SERVICE  
8203 DISTRIBUTION DRIVE  
LITTLE ROCK, AR 72209

FolderID: 97413  
FormID: 9083495

Priorities Found: 2 - High 8 - Good

### General

1. Job Number	97413
2. Report Date	
3. Customer	INDUSTRIAL SUPPLY & SERVICE

### Name Plate Information



4. Manufacturer	ABB	P5
5. Model		
6. Serial Number	1476874-1	
7. Horsepower		
8. KW	105.3	
9. Volts	460	
10. Amps	174	
11. RPM	3033	
12. Frame	250SMA	
13. Enclosure	TEFC	
14. Cycles	60 HZ	
15. Phase	3 PH	
16. Service Factor		
17. Motor Mount Position	horizontal	

### Initial Inspection



18. Number of Leads	6
19. Lead Length	12 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	no
28. Does Shaft Have Visible Damage	no
29. Bearing Rtd's	
30. Bearing Rtd's Condition	
31. Contamination	P104

*Parts of bearing*

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32.	Frame Condition	(P) Pass	
33.	Fan Condition	(P) Pass	P109
34.	Broken or missing components <i>Missing J-box cover and fan cover</i>		
<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	(F) Fail	
42.	Stator Condition		P60
43.	Failure Location		P66
<b>Initial Rotor Inspection</b>			
44.	Rotor Type	cast aluminum	
45.	Air Gap <10% Variation		
46.	Number of Rotor Bars	58	
47.	Number of Broken Rotor Bars		
48.	Growler Test	(P) Pass	
49.	Rotor Condition	(P) Pass	
<b>Mechanical Inspection</b>			
50.	Bearing Manufacture	SKF	
51.	Bearing DE Size	6213	P14
52.	Bearing DE Type	ball	
53.	DE Bearing Qty.		
54.	Bearing ODE Size		P43
55.	Bearing ODE Type	ball	
56.	ODE Bearing Qty.		
57.	Insulated Bearing		
58.	Lubrication Type	grease	
59.	Grease Condition	(NA) Not Applicable	
60.	Bearing Retainers	(Y) Yes	
61.	Shaft Grounding Device		
62.	DE Seal		
63.	DE Seal Type/Size		
64.	ODE Seal		
65.	ODE Seal Type/Size		
<b>Root Cause of Failure</b>			
66.	Component Failure	bearings and winding	
67.	Cause of Failure <i>ODE bearing fail apart and metal from the bearings caused windings to blow</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	(P) Pass	
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	4.7253 "	
95. DE Initial Endbell Fit Size 2	4.7254 "	
96. DE Initial Endbell Fit Size 3	4.7253 "	
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	P145
105. ODE Endbell Fit Insulated		
106. ODE Endbell Air Seal Fit		
107. ODE Initial Endbell Seal Fit Size		
108. ODE Finial Endbell Seal Fit Size		
109. Foot Flatness	(NA) Not Applicable	
110. Foot Condition	(NA) Not Applicable	

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111. Flange Condition

112. Service Technician

Chris Wiley



### Balancing Report

113. Balance Type

114. Balance Operating Speed

115. Start Left End

116. Start Right End

117. Balancing Specification

118. Finish Left End

119. Finish Right End

120. Service Technician

### Assembly and Final Test

121. Meggar Testing Reading

122. Surge Test

123. Hi-Pot

124. Winding Resistance 1-2

125. Winding Resistance 2-3

126. Winding Resistance 1-3

127. Test Run Voltage Phase A

128. Test Run Amps A

129. Test Run Voltage Phase B

130. Test Run Amps B

131. Test Run Voltage Phase C

132. Test Run Amps C

133. DE Horizontal Vibration Reading

134. DE Vertical Vibration Reading

135. DE Axial Vibration Reading

136. ODE Horizontal Vibration Reading

137. ODE Vertical Vibration Reading

138. ODE Axial Vibration Reading

139. Ambient Temp at start of Test Run

140. Temp at 5 minutes

141. Temp at 10 minutes

142. Temp at 15 minutes

143. Temp at 20 minutes

144. Temp at 25 minutes

145. Temp at 30 minutes

146. Temp at 35 minutes

147. Temp at 40 minutes

148. Temp at 45 minutes

149. Temp at 50 minutes

150. Temp at 55 minutes

151. Temp at 60 minutes

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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.
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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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11. **GOVERNING LAW AND JURISDICTION.** Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
12. **ABANDONED EQUIPMENT.** Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
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.
16. **NO INDIVIDUAL LIABILITY.** Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and Hi-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between Hi-Speed and the Buyer, even if the Hi-Speed owner, director, officer or employee is or could be construed to be a party to such contract.