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# Motor Shop Repairs

## **Job Number 1298**

Prepared for 3M-Main Plant (10001)

310 Walter Road Little Rock AR 72216

## **Table of Contents**



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### **AC Recondition Repair Report**

3M-Main Plant (10001) 310 Walter Road Little Rock, AR 72216

Performed By: Motor Shop LR 2 Date Completed: 3/15/2021

FolderID: 1298 FormID: 9842054

Priorities Found: 11 - Good

1 Hornio	Thomas Touris.		
General			
1.	Job Number	97785	
2.	Report Date		
3.	Customer	3M	
Name Plate Information			

P&H









5.	Model	HEW445
6.	Serial Number	119185-1-A-1163
7.	Horsepower	50 HP
8.	KW	
9.	Volts	460 Volts
10.	Amps	61 Amps
11.	RPM	1160 RPM
12.	Frame	
13.	Enclosure	
14.	Cycles	60
15.	Phase	3
16.	Service Factor	
17.	Motor Mount Position	
Initial Inspection		

18. Number of Leads



19.	Lead Length	
20.	Lead Size	4
21.	Lead Condition	(NA) Not Applicable
22.	Lead Markings	1-9
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	(NA) Not Applicable
30.	Bearing Rtd's Condition	(NA) Not Applicable
31.	Contamination	
	No	
32.	Frame Condition	(P) Pass
33.	Fan Condition	(NA) Not Applicable
34.	Broken or missing components	
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	(NA) Not Applicable







43. Failure Location

#### 



#### **Mechanical Inspection**

50. Bearing Manufacture

SKF

51. Bearing DE Size

6314ZZ



52. Bearing DE Type	ball
53. DE Bearing Qty.	1
54. Bearing ODE Size	6314



1		
55.	Bearing ODE Type	ball
56.	ODE Bearing Qty.	1
57.	Insulated Bearing	no
58.	Lubrication Type	grease
<b>9</b> 59.	Grease Condition	(P) Pass
<b>6</b> 0.	Bearing Retainers	(Y) Yes
61.	Shaft Grounding Device	(NA) Not Applicable
62.	DE Seal	(NA) Not Applicable
63.	DE Seal Type/Size	
64.	ODE Seal	
65.	ODE Seal Type/Size	
Root	Cause of Failure	
66.	Component Failure	
67.	Cause of Failure	
68.	Comments	
69.	Service Technician	

# 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



200	The state of the s		
	74.	DE Initial Shaft Bearing Fit Size 1	2.756 "
	75.	DE Initial Shaft Bearing Fit Size 2	2.756 "
	76.	DE Initial Shaft Bearing Fit Size 3	2.756 "
	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	2.7562 "
82.	ODE Initial Shaft Bearing Fit Size 2	2.7562 "
83.	ODE Initial Shaft Bearing Fit Size 3	2.7562 "
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	



92. ODE Final Air Seal Shaft Size

93. DE Endbell Fit

(P) Pass





94.	DE Initial Endbell Fit Size 1	5.9064 "
95.	DE Initial Endbell Fit Size 2	5.9064 "
96.	DE Initial Endbell Fit Size 3	5.9064 "
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	
<b>1</b> 04.	ODE Endbell Fit	(P) Pass



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  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	· (CECOSE):		
107. ODE Initial Endbell Fit Size 3  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	105.	ODE Initial Endbell Fit Size 1	5.9064 "
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	106.	ODE Initial Endbell Fit Size 2	5.9064 "
109. ODE Final Endbell Fit Size 2 110. ODE Final Endbell Fit Size 3 111. ODE Endbell Fit Insulated	107.	ODE Initial Endbell Fit Size 3	5.9064 "
110. ODE Final Endbell Fit Size 3 111. ODE Endbell Fit Insulated	108.	ODE Final Endbell Fit Size 1	
111. ODE Endbell Fit Insulated	109.	ODE Final Endbell Fit Size 2	
	110.	ODE Final Endbell Fit Size 3	
112. ODE Endbell Air Seal Fit	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
<ul><li>116. Foot Condition</li></ul>	(P) Pass
117. Flange Condition	(NA) Not Applicable
118. Service Technician	RW
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 11.3 Mohm



128. Surge Test	(P) Pass
129. Hi-Pot	
130. Winding Resistance 1-2	
131. Winding Resistance 2-3	
132. Winding Resistance 1-3	

456 Volts



134. Test Run Amps A 18.9 Amps

135. Test Run Voltage Phase B



136. Test Run Amps B 18.7 Amps

137. Test Run Voltage Phase C 458 Volts



138. Test Run Amps C	18.5 Amps
139. DE Horizontal Vibration Reading	

140. DE Vertical Vibration Reading

141. DE Axial Vibration Reading

142. ODE Horizontal Vibration Reading

140 OPEN (1 1)(I) (1 P. II)	
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 RW





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