



**KEEPING YOUR FACILITY UP TO SPEED**  
— EVERY DAY SINCE 1946 —

Motor Shop Repairs

**Job Number 98914**

Prepared for Hobby Electric

4390 Steel Bridge Road  
Benton AR 72019

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AC Recondition Repair Report

1.0

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Printed on 10/25/2021

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Hi-Speed Industrial Service  
7030 Ryburn Dr  
Millington, Tn 38053  
901-873-5300

## AC Recondition Repair Report

FolderID: 98914  
FormID: 11877073

**Hobby Electric**  
4390 Steel Bridge Road  
Benton, AR 72019

Priorities Found: ● 4 - High ● 12 - Good

### General

1. Job Number	98914
2. Report Date	10/22/2021
3. Customer	Hobby Electric

### Name Plate Information

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5. Model	<b>10018X13E405T</b>
6. Serial Number	<b>11439868</b>
7. Horsepower	<b>100</b>
8. KW	
9. Volts	<b>460</b>
10. Amps	<b>113</b>
11. RPM	<b>1780</b>
12. Frame	<b>405T</b>
13. Enclosure	<b>XP</b>

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14. Cycles	60
15. Phase	3
16. Service Factor	1.15
17. Motor Mount Position	
<b>Initial Inspection</b>	
18. Number of Leads	12
19. Lead Length	15 Inches
20. Lead Size	
21. Lead Condition	(F) Fail



22. Lead Markings	1-12
23. Lug Size, Condition, and Type	
24. Winding RTD's	
25. Winding Rtd's Condition	
26. Shaft Run Out	0.001
27. Does Shaft Turn Freely	yes
28. Does Shaft Have Visible Damage	no
29. Bearing Rtd's	
30. Bearing Rtd's Condition	
31. Contamination	<i>Water and rust</i>
32. Frame Condition	(P) Pass



33. Fan Condition	(P) Pass
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34. Broken or missing components

#### Initial Electric Test

35. Resistance to Ground	<b>0 Mohm</b>
36. Winding Resistance 1-2	
37. Winding Resistance 2-3	
38. Winding Resistance 1-3	
39. Resistive Imbalance	
40. Hi-Pot	
41. Surge Test	<b>(F) Fail</b>
42. Stator Condition	<b>rewind</b>
43. Failure Location	<b>connection</b>



#### Initial Rotor Inspection

44. Rotor Type

cast aluminum



45. Air Gap <10% Variation

46. Number of Rotor Bars

40

47. Number of Broken Rotor Bars

0

● 48. Growler Test

(P) Pass

● 49. Rotor Condition

(P) Pass

### Mechanical Inspection

50. Bearing Manufacture

nsk



51. Bearing DE Size

6217c3

52. Bearing DE Type

ball

53. DE Bearing Qty.

1

54. Bearing ODE Size

6314c3

55. Bearing ODE Type

ball

56. ODE Bearing Qty.

1

57. Insulated Bearing

58. Lubrication Type

grease

59. Grease Condition

(F) Fail



60. Bearing Retainers

(Y) Yes



61. Shaft Grounding Device

62. DE Seal

(Y) Yes

63. DE Seal Type/Size

lip APC3513

64. ODE Seal

65. ODE Seal Type/Size

#### Root Cause of Failure

66. Component Failure

windings, grease, bearings

67. Cause of Failure

*Water in motor*

68. Comments

69. Service Technician

Trevor Hall

#### Machine Fit Inspection Report

70. Shaft Run Out

(P) Pass

71. Initial Shaft Run Out

0.001 "

72. Final Shaft Run Out

73. DE Bearing Shaft Fit

(P) Pass

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74.	DE Initial Shaft Bearing Fit Size 1	3.3472 "
75.	DE Initial Shaft Bearing Fit Size 2	3.3472 "
76.	DE Initial Shaft Bearing Fit Size 3	3.3472 "
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	3.7563 "
82.	ODE Initial Shaft Bearing Fit Size 2	3.7562 "
83.	ODE Initial Shaft Bearing Fit Size 3	3.7562 "
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	
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	5.9061 "
95.	DE Initial Endbell Fit Size 2	5.9059 "
96.	DE Initial Endbell Fit Size 3	5.9061 "
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
■	Egg shaped	

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105. ODE Initial Endbell Fit Size 1	5.9064 "
106. ODE Initial Endbell Fit Size 2	5.907 "
107. ODE Initial Endbell Fit Size 3	5.907 "
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 Final Endbell Seal Fit Size	
● 115. Foot Flatness	(P) Pass
● 116. Foot Condition	(P) Pass
117. Flange Condition	
118. Service Technician	Trevor Hall

### 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
128. Surge Test
129. Hi-Pot
130. Winding Resistance 1-2
131. Winding Resistance 2-3
132. Winding Resistance 1-3

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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
159. Service Technician



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1. **APPLICABILITY.** The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
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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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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.
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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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