

# Motor Shop Repairs

# **Job Number 98337**

Prepared for CONWAY COUNTY WATER

30 H2O DRIVE PLUMMERVILLE AR 72127

# **Table of Contents**



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

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# **AC Recondition Repair Report**

## **CONWAY COUNTY WATER**

30 H2O DRIVE PLUMMERVILLE, AR 72127

Priorities Found: 1 - High

10 - Good

Gene	ral	
1.	Job Number	98337
2.	Report Date	6/15/2021
3.	Customer	CONWAY COUNTY WATER

#### **Name Plate Information**

Manufacturer **U.S. MOTORS** 















5.	Model	CAT# HO35V2SLH-C
6.	Serial Number	
7.	Horsepower	350
8.	KW	
9.	Volts	460
10.	Amps	389
11.	RPM	1785
12.	Frame	447TPA
13.	Enclosure	WPI
14.	Cycles	60
15.	Phase	3
16.	Service Factor	1.15
17.	Motor Mount Position	
Initial	Inspection	

18. Number of Leads



19.	Lead Length	32 Inches
20.	Lead Size	4
21.	Lead Condition	(P) Pass
22.	Lead Markings	1 ,1,2,2,3,3,7,7,8,8,9,9
23.	Lug Size, Condition, and Type	
	No	
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	
30.	Bearing Rtd's Condition	
31.	Contamination	
32.	Frame Condition	(P) Pass
33.	Fan Condition	(NA) Not Applicable
34.	Broken or missing components	
nitial	Electric Test	
35.	Resistance to Ground	0.039 Mohm



- 36. Winding Resistance 1-2
- 37. Winding Resistance 2-3

- 38. Winding Resistance 1-339. Resistive Imbalance
  - 40. Hi-Pot
- 41. Surge Test
  (F) Fail
  - 42. Stator Condition rewind









43. Failure Location

## **Initial Rotor Inspection**

44. Rotor Type cast aluminum



45. Air Gap <10% Variation



- 47. Number of Broken Rotor Bars
- 48. Growler Test

49. Rotor Condition(P) Pass

# **Mechanical Inspection**

50. Bearing Manufacture FAG KBC





51. Bearing DE Size 7322



52. Bearing DE Type Thrust ball bearing

53. DE Bearing Qty.



55. Bearing ODE Type ball bearing



56.	ODE Bearing Qty.	1	
57.	Insulated Bearing	no	
58.	Lubrication Type	Grease	
59.	Grease Condition	(P) Pass	



60.	Bearing Retainers	(Y) Yes	
61.	Shaft Grounding Device	(Y) Yes	



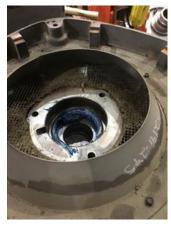
## Needs to be replaced with a aegis ring shaft size 3.8395

62.	DE Seal
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
Mach	ine 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
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

93.	. DE Endbell Fit	(P) Pass
92.	ODE Final Air Seal Shaft Size	
91.	ODE Initial Air Seal Shaft Size	
90.	ODE Air Seal Shaft Fit	
89.	. DE Final Air Seal Shaft Size	
88.	. DE Initial Air Seal Shaft Size	
87.	. DE Air Seal Shaft Fit	
86.	ODE Finial Shaft Bearing Fit Size 3	
85.	ODE Finial Shaft Bearing Fit Size 2	
84.	ODE Finial Shaft Bearing Fit Size 1	
83.	ODE Initial Shaft Bearing Fit Size 3	
82.	ODE Initial Shaft Bearing Fit Size 2	
81.	ODE Initial Shaft Bearing Fit Size 1	



94.	DE Initial Endbell Fit Size 1	
95.	DE Initial Endbell Fit Size 2	
96.	DE Initial Endbell Fit Size 3	
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
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
113.	ODE Initial Endbell Seal Fit Size
114.	ODE Finial Endbell Seal Fit Size
115.	Foot Flatness
116.	Foot Condition
117.	Flange Condition
118.	Service Technician
Balan	cing 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
Asser	nbly 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
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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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> 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.
- **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buver 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. <u>WARRANTIES.</u> 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.
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- 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.