

# EVERY DAY SINCE 1946

**Motor Shop Repairs** 

## Job Number 98491

Prepared for Reynolds Metals company

1333 highway 270 Malvern AR 72104

## Table of Contents

DC Recondition Repair Report



🔵 14 - Good

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

### **DC Recondition Repair Report**

#### **Reynolds Metals company**

1333 highway 270 Malvern, AR 72104

#### General

- 1. Job Number
- 2. Report Date
- 3. Customer
- Name Plate Information
  - 4. Manufacturer









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GE MOTORS

7/22/2021

98491

12368







5.	Model	5CD203PA
6.	Serial Number	PL-7-7-PL
7.	Horsepower	125
8.	KW	
9.	Armature Volts	
10.	Armature Amps	202
11.	Field Voltage	300
12.	Field Amps	2.95
13.	RPM	2100
14.	Frame	
15.	Enclosure	TEUC
16.	Service Factor	
17.	Motor Mount Position	
Initial Inspection		
18.	Lead Length	
19	Lead Size	

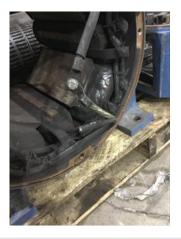
19. Lead Size

#### 20. Lead Condition

(P) Pass

A1 Lead needs replaced





21.	Lead Markings	A1 A2 S1 S2 F1 F2 F3 F4
22.	Lug Size, Condition, and Type	
23.	Winding RTD's	
24.	Winding Rtd's Condition	
25.	Shaft Run Out	
26.	Does Shaft Turn Freely	yes
27.	Does Shaft Have Visible Damage	no
28.	Bearing Rtd's	
29.	Bearing Rtd's Condition	
30.	Contamination	
31.	Frame Condition	(P) Pass
32.	Fan Condition	
• 33.	Brush Condition	(F) Fail
34.	Quantity of brushes	8



35. Brush Holder Assembly Condition

(F) Fail



36. Broken or missing components Brush spring needs replaced



**Initial Electric Test** 

37. Armature Resistance to Ground

276.3 Mohm



#### 38. Field Resistance to Ground



39.	Armature Hi-Pot	
40.	Field Hi-Pot	
41.	Armature Bar to Bar Test	(P) Pass
42.	DC field frame Drop Test	(P) Pass
43.	DC Field Frame Polarity Check	
44.	Field Frame Condition	Wash and bake



45. Field Frame Failure Location

#### **Initial Armature Inspection**

- 46. Air Gap <10% Variation
- 47. Number of Commutator Bars





49. Commutator Condition
Turn and under cut



50. Armature Condition



51. Armature Failure Location **Mechanical Inspection** 

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Wash and bake

(P) Pass



53. Bearing DE Size



FAG



54.	Bearing DE Type	
55.	Bearing ODE Size	



 56. Bearing ODE Type
Bearing fluted needs aegis ring Aegis ring shaft size 3.124 ball bearing 6213 ZZ

ball bearing



57. Insulated Bearing	no
58. Lubrication Type	grease



#### 59. Grease Condition



#### Mixed grease

60.	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	(NA) Not Applicable

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(NA) Not Applicable

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



74.	DE Initial Shaft Bearing Fit 1	2.7562 "
75.	DE Finial Shaft Bearing Fit 1	
76.	DE Initial Shaft Bearing Fit 2	2.7562 "
77.	DE Finial Shaft Bearing Fit 2	
78.	DE Initial Shaft Bearing Fit 3	2.7562 "
79.	DE Finial Shaft Bearing Fit 3	
80.	ODE Bearing Shaft Fit	(P) Pass



81. ODE Initial Shaft Bearing Fit 1	2.5596 "
82. ODE Finial Shaft Bearing Fit 1	
83. ODE Initial Shaft Bearing Fit 2	2.5596 "
84. ODE Finial Shaft Bearing Fit 2	

1.9

- 86. ODE Finial Shaft Bearing Fit 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

85. ODE Initial Shaft Bearing Fit 3

- 93. DE Endbell Fit
  - Щ. Sleeve



94.	DE Initial Endbell Fit Size 1	4.924 "
95.	DE Final Endbell Fit Size 1	
96.	DE Initial Endbell Fit Size 2	4.924 "
97.	DE Finial Endbell Fit Size 2	
98.	DE Initial Endbell Fit Size 3	4.924 "
99.	DE Final Endbell Fit Size 3	
100.	DE Endbell Fit Insulated	(NA) Not Applicable
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
	Resleeve	



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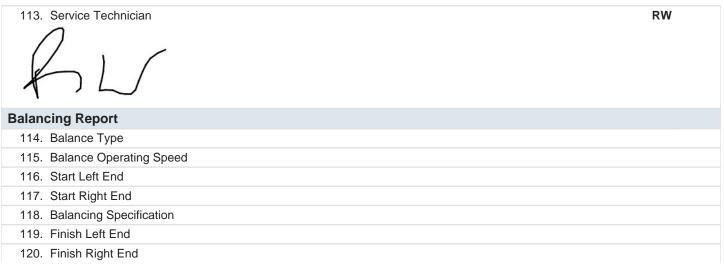
(F) Fail



106. ODE Endbell Air Seal Fit	
107. ODE Initial Endbell Seal Fit Size	
108. ODE Finial Endbell Seal Fit Size	
109. Foot Flatness	(P) Pass
110. Foot Condition	(P) Pass
111. Flange Condition	
112. Turn and Under Cut Armature	(NA) Not Applicable

Turn and under cut





121.	Service Technician
Assembly and Final Test	
122.	Armature Meggar Testing Reading
123.	Armature Hi-Pot
124.	Field Frame Meggar Testing Reading
125.	Field Frame Hi-Pot
126.	Test Run Field Voltage
127.	Test Run Field Amps
128.	Test Run Armature Voltage
129.	Test Run Armature Amps
130.	Brushes seated
131.	DE Horizontal Vibration Reading
132.	DE Vertical Vibration Reading
133.	DE Axial Vibration Reading
134.	ODE Horizontal Vibration Reading
135.	ODE Vertical Vibration Reading
136.	ODE Axial Vibration Reading
137.	Ambient Temp at start of Test Run
138.	Temp at 5 minutes
139.	Temp at 10 minutes
140.	Temp at 15 minutes
141.	Temp at 20 minutes
142.	Temp at 25 minutes
143.	Temp at 30 minutes
144.	Temp at 35 minutes
145.	Temp at 40 minutes
146.	Temp at 45 minutes
147.	Temp at 50 minutes
148.	Temp at 55 minutes
149.	Temp at 60 minutes
150.	Motor Paint
151.	Service Technician



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- 1. <u>APPLICABILITY.</u> 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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**TermsAndConditions** 

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- 10. <u>SEVERABILITY</u>. The partial or complete invalidity of any provision of these Standard Terms and Conditions shall not affect the enforceability of the remainder of these Standard Terms and Conditions. If any provision is found to be invalid or unenforceable, that portion shall be modified to make it enforceable or shall be stricken and the remainder of these Standard Terms and Conditions shall enforced.
- 11. <u>GOVERNING LAW AND JURISDICTION.</u> 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. <u>NO INDIVIDUAL LIABILITY</u>. 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.