

Motor Shop Repairs

Job Number 98558

Prepared for J & S MANUFACTERING

P.O. BOX 826 BRYANT AR 72022

Table of Contents



Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

Printed on 10/20/2021 Powered by INSPECTALL Table of Contents



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

> FolderID: 98558 FormID: 11300460

DC Rewind Repair Report

J & S MANUFACTERING

P.O. BOX 826 BRYANT, AR 72022

Priorities Found: 16 - Good

General		
1. Job Number	98558	
2. Report Date	8/9/2021	
3. Customer	10479	

Name Plate Information

BALDOR

















5.	Model	D2010R
6.	Serial Number	S9041983-001002
7.	Horsepower	10
8.	KW	
9.	Armature Volts	150
10.	Armature Amps	2.13
11.	Field Voltage	
12.	Field Amps	
13.	RPM	2300
14.	Frame	C1812A12
15.	Enclosure	DP
16.	Service Factor	
17.	Motor Mount Position	
Initial	Inspection	
18.	Lead Length	12 Inches
19.	Lead Size	
2 0.	Lead Condition	(P) Pass
21.	Lead Markings	
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	
	Carbon	
31.	Frame Condition	(P) Pass
3 2.	Fan Condition	(NA) Not Applicable

Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.





34. Quantity of brushes

35. Brush Holder Assembly Condition



2



36. Broken or missing components

Initial Electric Test

37. Armature Resistance to Ground

34.05 Mohm



38. Field Resistance to Ground 35,950 Mohm



	R-Dan	
39.	Armature Hi-Pot	
40.	Field Hi-Pot	
41.	Armature Bar to Bar Test	
42.	DC field frame Drop Test	
43.	DC Field Frame Polarity Check	
44.	Field Frame Condition	
45.	Field Frame Failure Location	
Initial	Armature Inspection	
46.	Air Gap <10% Variation	
47.	Number of Commutator Bars	
48.	Growler Test	
49.	Commutator Condition	
50.	Armature Condition	
51.	Armature Failure Location	
Mecha	anical Inspection	
52.	Bearing Manufacture	
53.	Bearing DE Size	6208
54.	Bearing DE Type	ball bearing
55.	Bearing ODE Size	6206
56.	Bearing ODE Type	ball bearing
57.	Insulated Bearing	
58.	Lubrication Type	grease
59.	Grease Condition	(P) Pass





61.	Shaft Grounding Device	
62.	DE Seal	(NA) Not Applicable
63.	DE Seal Type/Size	
64.	ODE Seal	(NA) Not Applicable
65.	ODE Seal Type/Size	
Root (Cause of Failure	
66.	Component Failure	armature
67.	Cause of Failure	
	Short	
68.	Comments	
	Recommend armature rewind and new bearings	
69.	Service Technician	
Comn	nutator Data	
70.	Front V Ring Ext.	
71.	Total Copper Segment Length	
72.	Length Brush Surface	
73.	Rear V Ring Ext.	
74.	Max Comm Dia.	
75.	Comm Dia.	
76.	Dia Over V Ring	
77.	Front Bore Dia.	
78.	Rear Bore Dia.	
79.	Dia. Over V Ring	
80.	Riser Dia.	
81.	Number of Copper Segments	
82.	Wire Size	
83.	Mica Segment Thickness	
84.	Wires/riser slot	
85.	Equalizer Size	
86.	Equalizer/riser slot	
87.	Equalizer seq. on comm.	
88.	Commutator Type	

89. Shaft Diamater Keyway alignment with center line of

90.	Key way size
91.	Riser Type
92.	Commutator Condition
93.	Riser to Core dimension
94.	Armature Core Length
	Comm End Coil Ext
96.	Knuckle End Coil Ext
97.	Armature Core Diameter
	Armature Throw
	Service Technician
	ture Winding Sheet
	Slots
	Wire Size
	Bars
	Turns per coil
	Wires in Mult
_	Slot span 1 to
	Coil per slot
	Wire Type
	Comm Span 1 to
	Wire Weight
	Number of Equalizers
	Span 1 to
	Equalizers Wire Size
	Compensating Winding Wire Size
	Compensating Turns per slot
	Compensating or Face Winding
	Wave Winding Leads from Slot 1 to Bar
	Lap Winding leads from slot 1 to bar
	Total Slot Depth
	Slot Depth under wedge
	Slot Width
121.	Coil Knuckle Type
	Service Technician
Field I	Frame Winding Sheet
	Winding Type
	Coils Wound on Flat or Edge
	Coils would left or right handed
	Interpoles
	Permanent Magnet
	Shut Coil Dimensions
	Number of Shunt Coils
	Number of Circuits
	Turns per coil
	Wire Size
	Lbs. Per Coil
	Series Coil Dimensions

	135.	5. Number of Series Coils	
	136.	6. Number of Series Coil Circuits	
	137.	7. Series Turns per coil	
	138.	3. Series Coil Wire Size	
	139	Series coil lbs per coil	
		D. Interpole Coil Dimensions	
		Number of Interpole Coils	
		·	
		2. Number of Interpole Circuits	
		3. Interpole Turns per coil	
		I. Interpole wire size	
		5. Interpole lbs per coil	
	146.	S. Service Technician	
M	achi	nine Fit Inspection Report	
	147.	7. Shaft Run Out	
	148.	3. Initial Shaft Run Out	
	149.	9. Final Shaft Run Out	
	150.). DE Bearing Shaft Fit (P)	Pass
	151.	. DE Initial Shaft Bearing Fit 1	749 "
		·	748 "
		•	.575 "
		I. DE Finial Shaft Bearing Fit 2	.070
		5. DE Initial Shaft Bearing Fit 3	
	155.	•	
	150	DE Finial Chaft Booring Fit 2	
		6. DE Finial Shaft Bearing Fit 3	Dana
•	157.	7. ODE Bearing Shaft Fit (P)	Pass
	157. 158.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1	814 "
•	157. 158. 159.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1	814 " 814 "
	157. 158. 159. 160.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 1.1 1.1 1.1	814 "
	157. 158. 159. 160. 161.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 1.1 1.1 1.1 1.1 1.1 1.1	814 " 814 "
•	157. 158. 159. 160. 161.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 1.1 1.1 1.1	814 " 814 "
	157. 158. 159. 160. 161. 162.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 1.1 1.1 1.1 1.1 1.1 1.1	814 " 814 "
	157. 158. 159. 160. 161. 162. 163.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 1.1 1.1 1.1 1.1 1.1 1.1	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Initial Shaft Bearing Fit 2 1.1 9. ODE Finial Shaft Bearing Fit 2 1.2 9. ODE Finial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164. 165.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Initial Shaft Bearing Fit 2 1.1 1.2 1.3 1.4 1.5 1.5 1.5 1.6 1.7 1.7 1.7 1.7 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Initial Shaft Bearing Fit 2 1.1 9. ODE Finial Shaft Bearing Fit 2 1.2 9. ODE Finial Shaft Bearing Fit 3 9. ODE Initial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3 9. DE Finial Shaft Bearing Fit 3 9. DE Air Seal Shaft Fit 9. DE Initial Air Seal Shaft Size	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Initial Shaft Bearing Fit 2 1.1 1.2 1.3 1.4 1.5 1.5 1.5 1.6 1.7 1.7 1.7 1.7 1.8 1.8 1.9 1.9 1.9 1.9 1.9 1.9	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Initial Shaft Bearing Fit 2 1. ODE Initial Shaft Bearing Fit 2 1. ODE Finial Shaft Bearing Fit 2 2. ODE Initial Shaft Bearing Fit 3 3. ODE Finial Shaft Bearing Fit 3 4. DE Air Seal Shaft Fit 5. DE Initial Air Seal Shaft Size 6. DE Final Air Seal Shaft Size 7. ODE Air Seal Shaft Fit	814 " 814 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168.	7. ODE Bearing Shaft Fit 7. ODE Initial Shaft Bearing Fit 1 7. ODE Finial Shaft Bearing Fit 1 7. ODE Finial Shaft Bearing Fit 1 7. ODE Initial Shaft Bearing Fit 2 7. ODE Initial Shaft Bearing Fit 3 7. ODE Finial Shaft Bearing Fit 3 7. ODE Finial Shaft Bearing Fit 3 7. ODE Initial Air Seal Shaft Size 7. ODE Air Seal Shaft Fit 8. ODE Finial Air Seal Shaft Fit 9. ODE Initial Air Seal Shaft Size	814 " 814 " 815 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169.	7. ODE Bearing Shaft Fit 7. ODE Initial Shaft Bearing Fit 1 7. ODE Finial Shaft Bearing Fit 1 7. ODE Finial Shaft Bearing Fit 1 7. ODE Initial Shaft Bearing Fit 2 7. ODE Initial Shaft Bearing Fit 3 7. ODE Initial Shaft Bearing Fit 3 7. ODE Finial Shaft Bearing Fit 3 7. ODE Finial Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 8. ODE Initial Air Seal Shaft Size 9. ODE Initial Air Seal Shaft Size 9. ODE Initial Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. ODE Endbell Fit 9. (P)	814 " 814 " 815 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 9. ODE Initial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3 9. DE Air Seal Shaft Fit 9. DE Initial Air Seal Shaft Size 9. ODE Air Seal Shaft Size 9. ODE Finial Air Seal Shaft Size 9. DE Endbell Fit 9. DE Initial Endbell Fit Size 1 9. DE Initial Endbell Fit Size 1	814 " 814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 170.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 9. ODE Initial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 2 9. ODE Initial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3 9. ODE Finial Shaft Bearing Fit 3 9. DE Air Seal Shaft Fit 9. DE Initial Air Seal Shaft Size 9. ODE Air Seal Shaft Fit 9. ODE Initial Air Seal Shaft Size 9. ODE Initial Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. DE Endbell Fit 9. DE Initial Endbell Fit Size 1 9. DE Initial Endbell Fit Size 1 9. DE Final Endbell Fit Size 1 9. DE Final Endbell Fit Size 1 9. DE Final Endbell Fit Size 1	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 170. 171. 172. 173.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 1 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Initial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 2.2 1. ODE Initial Shaft Bearing Fit 3 3 1. ODE Finial Shaft Bearing Fit 3 3 1. DE Air Seal Shaft Fit 5 1. DE Initial Air Seal Shaft Size 5 1. DE Initial Air Seal Shaft Size 7 1. ODE Air Seal Shaft Fit 8 1. ODE Final Air Seal Shaft Size 9 1. ODE Final Air Seal Shaft Size 9 1. ODE Final Air Seal Shaft Size 9 1. DE Initial Endbell Fit Size 1 3.1 1. DE Initial Endbell Fit Size 1 3.1 1. DE Initial Endbell Fit Size 2 3.1	814 " 814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 170. 171. 172. 173.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 1 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 2.2 2. ODE Initial Shaft Bearing Fit 3 3.3 3. ODE Finial Shaft Bearing Fit 3 3.4 3. DE Air Seal Shaft Fit 5.5 5. DE Initial Air Seal Shaft Size 5.5 6. DE Final Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Finial Endbell Fit Size 1 3.1 6. DE Finial Endbell Fit Size 2 3.1 6. DE Finial Endbell Fit Size 2 3.1	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 170. 171. 172. 173. 174.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 1 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 2.2 2. ODE Initial Shaft Bearing Fit 3 3.3 3. ODE Finial Shaft Bearing Fit 3 3.4 3. ODE Finial Shaft Bearing Fit 3 3.5 4. DE Air Seal Shaft Fit 5.5 5. DE Initial Air Seal Shaft Size 5.5 6. DE Final Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 8. ODE Final Endbell Fit Size 1 3.1 8. DE Initial Endbell Fit Size 1 3.1 8. DE Initial Endbell Fit Size 2 3.1 8. DE Initial Endbell Fit Size 2 3.1 8. DE Initial Endbell Fit Size 3	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 167. 170. 171. 172. 173. 174. 175.	7. ODE Bearing Shaft Fit 7. ODE Bearing Shaft Bearing Fit 1 7. ODE Initial Shaft Bearing Fit 1 7. ODE Finial Shaft Bearing Fit 1 7. ODE Initial Shaft Bearing Fit 2 7. ODE Initial Shaft Bearing Fit 2 7. ODE Initial Shaft Bearing Fit 3 7. ODE Finial Shaft Bearing Fit 3 7. ODE Finial Shaft Bearing Fit 3 7. ODE Initial Air Seal Shaft Size 7. ODE Air Seal Shaft Fit 7. ODE Air Seal Shaft Fit 7. ODE Initial Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 8. ODE Final Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. ODE Final Air Seal Shaft Size 9. DE Endbell Fit 9. ODE Initial Endbell Fit Size 1 9. DE Initial Endbell Fit Size 1 9. DE Initial Endbell Fit Size 2 9. DE Initial Endbell Fit Size 2 9. DE Initial Endbell Fit Size 2 9. DE Initial Endbell Fit Size 3 9. DE Final Endbell Fit Size 3 9. DE Final Endbell Fit Size 3 9. DE Final Endbell Fit Size 3	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 170. 171. 172. 173. 174. 175. 176.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 2.2 1. ODE Initial Shaft Bearing Fit 3 3.3 1. ODE Finial Shaft Bearing Fit 3 3.4 1. DE Air Seal Shaft Bearing Fit 3 3.5 1. DE Air Seal Shaft Fit 5.5 1. DE Initial Air Seal Shaft Size 5.5 1. DE Final Air Seal Shaft Fit 6.5 1. ODE Initial Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Initial Endbell Fit Size 1 3.1 1. DE Initial Endbell Fit Size 1 3.1 1. DE Final Endbell Fit Size 2 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Endbell Fit Insulated	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 170. 171. 172. 173. 174. 175. 176. 177.	7. ODE Bearing Shaft Fit 8. ODE Initial Shaft Bearing Fit 1 9. ODE Finial Shaft Bearing Fit 1 10. ODE Finial Shaft Bearing Fit 2 11. ODE Initial Shaft Bearing Fit 2 12. ODE Finial Shaft Bearing Fit 2 13. ODE Finial Shaft Bearing Fit 3 14. ODE Finial Shaft Bearing Fit 3 15. ODE Finial Shaft Bearing Fit 3 16. ODE Finial Shaft Bearing Fit 3 17. ODE Finial Shaft Bearing Fit 3 18. DE Air Seal Shaft Size 19. DE Initial Air Seal Shaft Size 19. ODE Air Seal Shaft Size 20. ODE Final Air Seal Shaft Size 21. ODE Finial Air Seal Shaft Size 22. ODE Finial Air Seal Shaft Size 23. ODE Finial Air Seal Shaft Size 24. ODE Finial Air Seal Shaft Size 25. ODE Finial Air Seal Shaft Size 26. DE Finial Air Seal Shaft Size 27. ODE Finial Endbell Fit Size 1 28. DE Initial Endbell Fit Size 1 29. DE Initial Endbell Fit Size 2 30. DE Initial Endbell Fit Size 2 30. DE Initial Endbell Fit Size 3 30. DE Finial Endbell Fit Size 3 31. DE Finial Endbell Fit Size 3 32. DE Endbell Fit Insulated 33. DE Endbell Fit Insulated	814 " 815 " Pass 503 "
	157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179.	7. ODE Bearing Shaft Fit (P) 8. ODE Initial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 1 1.1 9. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 1.1 1. ODE Finial Shaft Bearing Fit 2 2.2 1. ODE Initial Shaft Bearing Fit 3 3.3 1. ODE Finial Shaft Bearing Fit 3 3.4 1. DE Air Seal Shaft Bearing Fit 3 3.5 1. DE Air Seal Shaft Fit 5.5 1. DE Initial Air Seal Shaft Size 5.5 1. DE Final Air Seal Shaft Fit 6.5 1. ODE Initial Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Initial Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Final Air Seal Shaft Size 7. ODE Initial Endbell Fit Size 1 3.1 1. DE Initial Endbell Fit Size 1 3.1 1. DE Final Endbell Fit Size 2 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Finial Endbell Fit Size 3 3.1 1. DE Endbell Fit Insulated	814 " 815 " Pass 503 "

181. ODE Endbell Fit	(P) Pass	
182. ODE Endbell Fit Insulated		
183. ODE Endbell Air Seal Fit		
184. ODE Initial Endbell Seal Fit Size		
185. ODE Finial Endbell Seal Fit Size	п	
■ 186. Foot Flatness	(P) Pass	
■ 187. Foot Condition	(P) Pass	
■ 188. Flange Condition	(NA) Not Applicable	
189. Turn and Under Cut Armature		
190. Service Technician		
Balancing Report		
191. Balance Type		



192.	Balance Operating Speed
193.	Start Left End
194.	Start Right End
195.	Balancing Specification
196.	Finish Left End
197.	Finish Right End
198.	Service Technician
Assem	bly and Final Test
199.	Armature Meggar Testing Reading
200.	Armature Hi-Pot
201.	Field Frame Meggar Testing Reading
202.	Field Frame Hi-Pot



204. Test Run Field Amps	2 Amps
205. Test Run Armature Voltage	237.2 Volts



206.	Test Run Armature Amps	1.3 Amps
207 .	Brushes seated	(P) Pass
208.	DE Horizontal Vibration Reading	
209.	DE Vertical Vibration Reading	
210.	DE Axial Vibration Reading	
211.	ODE Horizontal Vibration Reading	
212.	ODE Vertical Vibration Reading	
213.	ODE Axial Vibration Reading	
214.	Ambient Temp at start of Test Run	
215.	Temp at 5 minutes	
216.	Temp at 10 minutes	
217.	Temp at 15 minutes	
218.	Temp at 20 minutes	
219.	Temp at 25 minutes	
220.	Temp at 30 minutes	
221.	Temp at 35 minutes	
222.	Temp at 40 minutes	
223.	Temp at 45 minutes	
224.	Temp at 50 minutes	

225. Temp at 55 minutes

226. Temp at 60 minutes

227. Motor Paint (P) Pass



228. Service Technician RW



STANDARD TERMS AND CONDITIONS FOR PURCHASE OF GOOD AND/OR SERVICES

- 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.
- 2. PRICE. All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
- 3. SCOPE OF GOODS AND/OR SERVICES. The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only bee effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
- 4. <u>BILLING AND PAYMENT TERMS.</u> 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. <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.
- 7. INSPECTION/ACCEPTANCE. All goods and services ordered pursuant to any quotation shall be subject to inspection by Buyer after delivery or performance to determine conformity with the quotation and/or purchase order and Hi-Speed's advertised or published specifications. Buyer shall have a period of thirty (30) days from shipment of goods at the delivery destination specified in the quotation within which to inspect the goods for conformity with the quotation, order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. Buyer shall have a period of thirty (30) days following completion of any services within which to inspect the services for conformity with the quotation, purchase order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. If the goods delivered or services performed do not so conform, upon delivery of notice to Hi-Speed of any discrepancy, nonconformance or rejection, Hi-Speed shall have sixty (60) days to cure the alleged discrepancy and/or nonconformance. If Hi-Speed fails to cure in this time period, Buyer shall have the right to reject such goods or services. After the cure period, goods that have been delivered and rejected, in whole or in part, shall be returned to Hi-Speed. Buyer shall notify Hi-Speed and arrange for the return of the goods as required. Should such non-conforming services be rejected Hi-Speed shall, at its sole cost, re-perform the non-conforming services. Inspection or failure to inspect on any occasion shall not affect Buyer's rights under the warranty provisions herein.
- 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

replace any defective or non-conforming goods in accordance with the applicable manufacturer's warranty. Warranty for any defective or incorrect parts is limited to the repair or replacement of those parts. Hi-Speed warrants that all services will conform in all material respects to the description of services identified in the quotation and will be performed in a good and workmanlike manner in accordance with industry practices and standards. Should the services be reasonably rejected or not conform with the foregoing warranties, Hi-Speed shall, at its sole cost, re-perform the defective or nonconforming services. Notwithstanding the foregoing, these warranties do not extend to goods or services to the extent that such goods have been subject to misuse, neglect or abuse not caused by Hi-Speed or have been used in violation of the approved written instructions furnished to Buyer. THE FOREGOING REPRESENTS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY HI-SPEED WITH RESPECT TO ALL GOODS SOLD AND IS IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESS OR IMPLIED. HI-SPEED EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICLAR USE OR PURPOSE. BUYER WAIVES ANY CLAIM THAT THESE EXCLUSIONS OR LIMITATIONS DEPRIVE IT OF AN ADEQUATE REMEDY AT EQUITY OR LAW OR CAUSE THIS AGREEMENT TO FAIL IN ITS ESSENTIAL PURPOSE. BUYER SHALL BE ENTITLED TO NO OTHER REMEDY OTHER THAN AS SET FORTH HEREIN, REGARDLESS OF THE CLAIM OR CAUSE OF ACTION, WHETHER BASED IN CONTRACT, TORT, NEGLIGENCE, GOODS LIABILITY, STRICT LIABILITY OR OTHERWISE.

- 9. <u>LIMITATION OF DAMAGES.</u> HI-SPEED SHALL HAVE NO LIABILITY TO BUYER WITH RESPECT TO THE SALE OR DELIVERY OF ANY GOODS OR THE REPAIR THEREOF OR WITH RESPECT TO THE SALE OR PERFORMANCE OF ANY SERVICES, FOR LOST PROFITS, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR INCIDENTAL DAMAGES OF ANY KIND OR NATURE WHETHER ARISING IN CONTRACT, TORT, GOODS LIABILITY OR OTHERWISE, EVEN IF HI-SPEED WAS ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES. HI-SPEED SHALL NOT BE LIABLE FOR ANY DAMAGES OR DELAYS CAUSED BY ANY FAILURE TO MAKE ANY DELIVERY OF GOODS BY ANY EXPECTED TIME OR DATE OR THE FAILURE TO PROVIDE OR COMPLETE ANY SERVICES BY ANY EXPECTED DATE OR TIME. IN NO EVENT SHALL HI-SPEED BE LIABLE TO BUYER FOR ANY DAMAGES WHATSOEVER IN EXCESS OF THE TOTAL PRICE PAID FOR ALL GOODS AND/OR SERVICES HEREUNDER OR REFERENCED IN ANY QUOTATION OR THE PURCHASE ORDER.
- 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. **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, earth quake, 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.
- 14. <u>NONWAIVER.</u> No course of dealing or failure of either party to strictly enforce any term, right, or condition of these Standard Terms and Conditions will be construed as a waiver of such term, right or condition. Any waiver by Hi-Speed will only be in writing and will waive no succeeding breach of a term, right or condition.
- 15. <u>ASSIGNMENT.</u> 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.