

# Motor Shop Repairs

# Job Number 99087

Prepared for Bryce Corporation (10053-BRC)

450 S. Benton Searcy AR 72143

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### **DC** Recondition Repair Report

**Bryce Corporation (10053-BRC)** 

450 S. Benton Searcy, AR 72143

Priorities Found: 6 5 - High

15 - Good

	· nomes realising of ring.		
General			
1.	Job Number	99087	
2.	Report Date	12/9/2021	
3.	Customer	Bryce Corporation	
Name	Plate Information		
4.	Manufacturer	Emerson	









5.	Model	5050B452L17
6.	Serial Number	82093-BU
7.	Horsepower	300
8.	KW	
9.	Armature Volts	500

10.	Armature Amps	480
11.	Field Voltage	300
12.	Field Amps	5
13.	RPM	1750
14.	Frame	505AT
15.	Enclosure	DP
16.	Service Factor	
17.	Motor Mount Position	
Initia	Inspection	
18.	Lead Length	8 Inches
19.	Lead Size	
<b>2</b> 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	0.001
26.	Does Shaft Turn Freely	yes
27.	Does Shaft Have Visible Damage	no
28.	Bearing Rtd's	
29.	Bearing Rtd's Condition	
30.	Contamination	
	Dirt and carbon	



31. Frame Condition(P) Pass

32. Fan Condition (P) Pass



33. Brush Condition(F) Fail



34. Quantity of brushes

12

35. Brush Holder Assembly Condition

(P) Pass



36.	Broken or missing components		
Initia	Initial Electric Test		
37.	Armature Resistance to Ground	1 Mohm	
38.	Field Resistance to Ground	900 Mohm	
39.	Armature Hi-Pot		

#### 40. Field Hi-Pot

#### 41. Armature Bar to Bar Test(P) Pass



	42.	DC field frame Drop Test	(F) Fail
	-	.7v, .69v, 237 mv, 250mv	
	43.	DC Field Frame Polarity Check	(P) Pass
	44.	Field Frame Condition	good
	45.	Field Frame Failure Location	
li	nitial	Armature Inspection	
	46.	Air Gap <10% Variation	
	47.	Number of Commutator Bars	111
	48.	Growler Test	(P) Pass
	49.	Commutator Condition	(P) Pass



50. Armature Condition pass



51. Armature Failure Location	
Mechanical Inspection	
52. Bearing Manufacture	skf
53. Bearing DE Size	6218 c3
54. Bearing DE Type	ball



55. Bearing ODE Size 6215 c3
56. Bearing ODE Type ball



#### 57. Insulated Bearing





61.	Shaft Grounding Device	
62.	DE Seal	
63.	DE Seal Type/Size	
64.	ODE Seal	
65.	ODE Seal Type/Size	
Root	Cause of Failure	
66.	Component Failure	bearings
67.	Cause of Failure	
	Lack of lubrication	
68.	Comments	
69.	Service Technician	
Mach	ine Fit Inspection Report	
<b>0</b> 70.	Shaft Run Out	(P) Pass
71.	Initial Shaft Run Out	0.001 "
72.	Final Shaft Run Out	
<b>7</b> 3.	DE Bearing Shaft Fit	(P) Pass
74.	DE Initial Shaft Bearing Fit 1	3.5439 "
75.	DE Finial Shaft Bearing Fit 1	"
76.	DE Initial Shaft Bearing Fit 2	3.5438 "
77.	DE Finial Shaft Bearing Fit 2	
78.	DE Initial Shaft Bearing Fit 3	3.5438 "
79.	DE Finial Shaft Bearing Fit 3	
<b>8</b> 0.	ODE Bearing Shaft Fit	(P) Pass
81.	ODE Initial Shaft Bearing Fit 1	2.9531 "
82.	ODE Finial Shaft Bearing Fit 1	
83.	ODE Initial Shaft Bearing Fit 2	2.9531 "
84.	ODE Finial Shaft Bearing Fit 2	
85.	ODE Initial Shaft Bearing Fit 3	2.9531 "
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	
9	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	6.2992 "
	95.	DE Final Endbell Fit Size 1	
9	96.	DE Initial Endbell Fit Size 2	6.2992 "
	97.	DE Finial Endbell Fit Size 2	
9	98.	DE Initial Endbell Fit Size 3	6.2992 "
	99.	DE Final Endbell Fit Size 3	
1	100.	DE Endbell Fit Insulated	
1	101.	DE Endbell Air Seal Fit	
1	102.	Initial Endbell Air Seal Fit Size	
1	103.	Finial Endbell Air Seal Fit Size	
• 1	104.	ODE Endbell Fit	(F) Fail
-		Pitted	



105.	ODE Endbell Fit Insulated	
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	(F) Fail
113.	Service Technician	
Balan	cing Report	
114.	Balance Type	
115.	Balance Operating Speed	
116.	Start Left End	
117.	Start Right End	
118.	Balancing Specification	
119.	Finish Left End	
120.	Finish Right End	

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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- 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

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