

# LR Motor Shop Repairs

# **Job Number 102948**

Prepared for Bryce Corporation (10053-BRC)

450 S. Benton Searcy AR 72143

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AC Inspection as Found - MOTOR SHOP LR

AC Inspection - Rev. 2

1.0



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

> FolderID: 102948 FormID: 20404746

## **AC Inspection as Found Bryce Corporation (10053-BRC)**

450 S. Benton Searcy, AR 72143

AC Inspection - Rev. 2	
Location:	MOTOR SHOP LR

Serial Number:

Description:40HP

Hi-Speed Job Number:	102948
Product Number:	5CD184PA021B808
Serial Number:	PV82P
HP/kW:	40 (HP)
RPM:	1150 (RPM)
Date Received:	05/16/2024
Repair Stage:	Final
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 1 - High

9 - Good

#### **Overall Condition**

1. Report Date 05/17/2024

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### 2. Nameplate Picture







### 3. Photos of all six sides of the machine.

















4.	Describe the Overall Condition of the Equipment as Received Clean			
5.	Distance from the end of the shaft to the Coupling/Sheave	0 inches		
Initia	Initial Mechanical/Electrical			
<b>6</b> .	Does Shaft Turn Freely?	(Y) Yes		
<b>7</b> .	Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No		
8.	Does Shaft Have Visible Damage?	(No) No		
9.	Assembled Shaft Runout	0 Inches		
10	. Assembled Shaft End Play	0 inches		

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11.	Air Gap Variation <10%		na
12.	Lead Condition		(P) Pass
13.	Lead Length		6 Inches
14.	Does it have Lugs?, If so what is the St	ud Size?	(No) No
15.	Lead Numbers		f1-f4 a1 a2
16.	Stator Temperature Detector Rating and	d Function	
	Quantity	Rating	Quantity Passed
	0		
17.	Bearing Temperature Detector Rating a	nd Function	
	Quantity	Rating	Quantity Passed
	0		
18.	Frame Condition		good
19.	Fan Condition		(N) NA
20.	Broken or Missing Components		lower shield on DE end bell
nitial	Electrical Inspection		
	Insulation Resistance/Megger		2000 Megohms
	Winding Resistance		-
		1-3	2-3
	64	0	0
23.	Perform Surge Test		(P) Pass
24.			0
25.	Stator Condition		na
26.	Stator Thermistors/Ohms		0
27.	Stator Overloads/Ohms		0
Mech	anical Inspection		
	Drive End Bearing Brand		koyo
29.	<del>_</del>		6211
30.			1
31.			(Ball) Ball Bearing
	Drive End Lubrication Type		(Grease) Grease Lubricated
33.	Drive End Bearing Insulation or Ground	ing Device?	na
34.	Drive End Wavy Washer/Snap-Ring Otl	•	none
35.			
36.	Opposite Drive End Bearing Brand		koyo
37.			6210
38.	Opposite Drive End Bearing Qty.		1
39.			(Ball) Ball Bearing
40.			(Grease) Grease Lubricated
41.	Opposite Drive End Bearing Insulation	or Grounding Device?	na
42.			na
	Opposite Drive End Wavy Washer/Snar		iiu.
43	Opposite Drive End Wavy Washer/Snap	3	
43. 44.	Opposite Drive End Bearing Condition		no
44.	Opposite Drive End Bearing Condition Drive End Seal		no
44. 45.	Opposite Drive End Bearing Condition Drive End Seal Opposite Drive End Seal		no no
44. 45. <b>Rotor</b>	Opposite Drive End Bearing Condition Drive End Seal		

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48	Number of Rotor Bars	0
49	. Rotor Condition	good
50	List the Parts needed for the Repair Below	
	6210, 6211, 2 - T563 36A167402AA brushes	
51	Signature of Technician that Disassembled Motor	David Maclin

			<i>(</i>		
N	Mechanical Fits- Rotor				
	52.	Shaft Runout			inches
	53.	Rotor Runout			
		Drive End Bearing Fit	Rotor Body	Opposite Drive End E	Bearing
		0	0	0	
	54.	Coupling Fit Closest to Bearing Housing	ng		
		0 Degrees	90 Degrees	120 Degrees	
		0	0	0	
	55.	Coupling Fit Closest to the end of the	Shaft		
		0 Degrees	60 Degrees	120 Degrees	
		0	0	0	
	56.	Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.1657	2.1658	2.1658	
	57.	Drive End Bearing Shaft Fit Condition			(P) Pass
	58.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		1.9688	1.9688	1.9689	
	59.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	60.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		
N	lecha	anical Fits- Bearing Housings			
	61.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		3.9372	3.9372	3.9372	
	62.	Drive End - Endbell Bearing Fit Condition	ion		(P) Pass
	63.	Opposite Drive End - Endbell Bearing	Fit		
		0 Degrees	60 Degrees	120 Degrees	
		3.5436	3.5436	3.5437	
	64.	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
	65.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Cap		
		ok	ok		
	66.	End Bell Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
		ok	ok		

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67.	List Machine Work Needed Below		
	Turn and undercut comm		
68.	Technician		David Maclin
,			
Root (	Cause of Failure		
69.	Failure locations		
	No defect noted		
70.	Root cause of failure		
	No defect noted		
Dynar	nic Balance Report		
71.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
72.	9		
	Drive End	Opposite Drive End	
72	Final Balance Readings		
73.	Drive End	Opposite Drive End	
	Drive Eria	Opposite Drive End	
74.	Technician		
Asser	nbly		
	QC Check All Parts for Cleanliness P	rior to Assembly	
76.	Photograph All Major Components pr	ior to assembly	
77.	Final Insulation Resistance Test		
78.	Assembled Shaft Endplay		
79.	Assembled Shaft Runout		
80.	Test Run Voltage		
	Volts	Volts	Volts
81.	Test Run Amperage		
	Amps	Amps	Amps
82.	Drive End Vibration Readings - Inche	a Dar Sacand	
02.	Horizontal	Vertical	Axial
	Honzontal	vertical	Axidi
83.	Opposite Drive End Vibration Reading	gs - Inches Per Second	
	Horizontal	Vertical	Axial
84.	Ambient Temperature - Fahrenheit		
85.	• .		
	5 Minutes	10 Minutes	15 Minutes
00	Onneits Drive For LD	Fabruarit eli	
86.	11 0 1		45 M
	5 Minutes	10 Minutes	15 Minutes

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87.	Document Final Condition with Pictures after paint
88.	Final Pics and QC Review



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