



**KEEPING YOUR FACILITY UP TO SPEED**  
— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

**Job Number 103244**

Prepared for Georges Inc

1810 S. St. Louis Street  
Batesville AR 72501

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AC Inspection as Found - *Shop*

AC Inspection - Rev. 2: *C1405070887*

**1.0**

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*Printed on 7/19/2024*

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Hi-Speed Industrial Service  
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## AC Inspection as Found


Georges Inc  
1810 S. St. Louis Street  
Batesville, AR 72501

FolderID: 103244  
FormID: 21041008

### AC Inspection - Rev. 2

Location: Shop  
Serial Number: C1405070887  
Description: 40HP 1775RPM MOTOR EVAL

Hi-Speed Job Number:	103244
Spec/ID #:	12C052Y276G1
Serial Number:	C1405070887
HP/kW:	40 (HP)
RPM:	1775 (RPM)
Frame:	324TC
Voltage:	230 / 460
Current:	96/48A
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
# of Leads:	9
J-box Included:	Complete
Coupling/Sheave:	Coupling
Date Received:	07/18/2024
Bearing RTDs:	No
Stator RTDs:	No
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:  11 - Good

### Overall Condition

1. Report Date

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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	
5. Distance from the end of the shaft to the Coupling/Sheave	inches

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### Initial Mechanical/Electrical

6.	Does Shaft Turn Freely?	(Y) Yes
7.	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	Inches
10.	Assembled Shaft End Play	inches
11.	Air Gap Variation <10%	
12.	Lead Condition	(P) Pass
13.	Lead Length	18 Inches
14.	Does it have Lugs?, If so what is the Stud Size?	(No) No
15.	Lead Numbers	1-9
16.	Frame Condition	pass
17.	Fan Condition	(P) Pass
18.	Broken or Missing Components	
	J-box cover bolts	

### Initial Electrical Inspection

19.	Insulation Resistance/Megger	Megohms
-----	------------------------------	---------

Coil 2 (Ohms)	0.218	Corr: 0.2...
Coil 3 (Ohms)	0.227	Corr: 0.2...
Megohm Stat...	PASS	No T
Volts (V)	501	
I(μA)	0.0033	
Resist	151351	
At 40°C	40867	
PI Status	Nn Test	Nn Test
Nameplate	Application	Results S

## 20. Winding Resistance

1-2

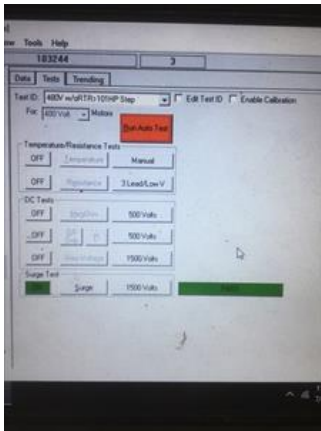
1-3

2-3

Test Time	11:04:25 AM	10:51:58
IR Temp Cor...	Thermoplastic	None
Resist Status	PASS	No Test
Bal L1 (Ohms)		
Bal L2 (Ohms)		
Bal L3 (Ohms)		
L1-L2 (Ohms)	0.146 Corr: 0.1...	
L2-L3 (Ohms)	0.146 Corr: 0.1...	
L3-L1 (Ohms)	0.149 Corr: 0.1...	
Max Delta R %	2.212	
Coil 1 (Ohms)	0.217 Corr: 0.2...	
Coil 2 (Ohms)	0.218 Corr: 0.2...	
Coil 3 (Ohms)	0.227 Corr: 0.2...	
Min Ohm Stat	PASS	No Test
Nameplate	Application	Results Sum

## 21. Perform Surge Test

(P) Pass



## 22. Number of Stator Slots

48

## 23. Stator Condition

pass needs cleaned

## 24. Stator Thermistors/Ohms

## 25. Stator Overloads/Ohms

## Mechanical Inspection



26. Drive End Bearing Brand

SKF



27. Drive End Bearing Number-	6312
28. Drive End Bearing Qty.	1
29. Drive End Bearing Type	(Ball) Ball Bearing
30. Drive End Lubrication Type	(Grease) Grease Lubricated
31. Drive End Bearing Insulation or Grounding Device?	
32. Drive End Wavy Washer/Snap-Ring Other Retention Device?	spanner nut
33. Drive End Bearing Condition	

Contamination and frosting



34. Opposite Drive End Bearing Brand

SKF



35. Opposite Drive End Bearing Number-	6311
36. Opposite Drive End Bearing Qty.	1
37. Opposite Drive End Bearing Type	(Ball) Ball Bearing
38. Opposite Drive End Lubrication Type	(Grease) Grease Lubricated
39. Opposite Drive End Bearing Insulation or Grounding Device?	
40. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy washer
41. Opposite Drive End Bearing Condition	
<div> Contamination and frosting </div>	



42. Drive End Seal	na
43. Opposite Drive End Seal	na
<b>Rotor Inspection</b>	
44. Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
45. Growler Test	(Pass) Pass
46. Number of Rotor Bars	42
47. Rotor Condition	pass
48. List the Parts needed for the Repair Below	
6312 6311	

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49. Signature of Technician that Disassembled Motor

Cw



### Mechanical Fits- Rotor

50. Shaft Runout inches

51. Rotor Runout

Drive End Bearing Fit

Rotor Body

Opposite Drive End Bearing

52. Coupling Fit Closest to Bearing Housing

0 Degrees

90 Degrees

120 Degrees

53. Coupling Fit Closest to the end of the Shaft

0 Degrees

60 Degrees

120 Degrees

54. Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

2.3625

2.3626

2.3625

55. Drive End Bearing Shaft Fit Condition

(P) Pass

56. Opposite Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

2.1655

2.1655

2.1656

57. Opposite Drive End Bearing Shaft Fit Condition

(P) Pass

58. Shaft Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

### Mechanical Fits- Bearing Housings

59. Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

5.119

5.1191

5.1191

60. Drive End - Endbell Bearing Fit Condition

(P) Pass

61. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

4.7244

4.7245

4.7245

62. Opposite Drive End - Endbell Bearing Fit Condition

(P) Pass

63. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

Pass

64. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

65. List Machine Work Needed Below

66. Technician

Cw



Co sign: DM

**Root Cause of Failure**

67. Failure locations

*Bearings*

68. Root cause of failure

*Contamination***Dynamic Balance Report**

69. Rotor Weight and Balance Grade

Rotor Weight

Balance Grade

70. Initial Balance Readings

Drive End

Opposite Drive End

71. Final Balance Readings

Drive End

Opposite Drive End

72. Technician

**Assembly**

73. QC Check All Parts for Cleanliness Prior to Assembly

74. Photograph All Major Components prior to assembly

75. Final Insulation Resistance Test

76. Assembled Shaft Endplay

77. Assembled Shaft Runout

78. Test Run Voltage

Volts

Volts

Volts

79. Test Run Amperage

Amps

Amps

Amps

80. Drive End Vibration Readings - Inches Per Second

Horizontal

Vertical

Axial

81. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal

Vertical

Axial

82. Ambient Temperature - Fahrenheit

83. Drive End Bearing Temps - Fahrenheit

5 Minutes

10 Minutes

15 Minutes

84. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes

10 Minutes

15 Minutes

85. Document Final Condition with Pictures after paint

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