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— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

**Job Number 100731**

Prepared for Searcy Water and Sewer System (11242)

300 N. Elm Street  
Searcy AR 72145

# Table of Contents



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

**AC Recondition As Found**  
**Searcy Water and Sewer System (11242)**  
300 N. Elm Street  
Searcy, AR 72145

FolderID: 100731  
FormID: 15620807

**AC Recondition - Rev. 2**

Location: MOTOR SHOP LR

Serial Number: 40115281

Description: 7.5HP GE 1800RPM L213TP10

Hi-Speed Job Number: 100731

Manufacturer: GE

Product Number: 5KE213DTT6005

Serial Number: 40115281

HP/kW: 7.5 (HP)

RPM: 1760 (RPM)

Frame: L213TP10

Voltage: 230 / 460

Current: 19.4/9.7

Phase: Three

Hz: 60 (Hz)

Service Factor: 1.15

Enclosure: WPI

J-box Included: Complete

Coupling/Sheave: Brake

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Teardown Inspection

Heaters: No

Winding Type : Random Wound

Bearing Type: Rolling Element

Priorities Found: ● 1 - High ● 5 - Good

**Overall Condition**

1. Report Date
2. Nameplate Picture



3. Photos of all six sides of the machine.

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1.1



4.	Describe the Overall Condition of the Equipment as Received
5.	Distance from the end of the shaft to the Coupling/Sheave
<b>Initial Mechanical/Electrical</b>	
6.	Does Shaft Turn Freely?
7.	Does Shaft Have Visible Damage?
8.	Assembled Shaft Runout
9.	Assembled Shaft End Play
10.	Air Gap Variation <10%
● 11.	Lead Condition
<b>(P) Pass</b>	

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12. Lead Length			<b>10 Inches</b>
13. Frame Condition			<b>pass</b>
14. Fan Condition			<b>(N) NA</b>
15. Broken or Missing Components			
<b>Initial Electrical Inspection</b>			
16. Insulation Resistance/Megger			
17. Winding Resistance			
	1-2	1-3	2-3
18. Perform Surge Test			<b>(F) Fail</b>



19. Number of Stator Slots			<b>48 Megohms</b>
20. Stator Condition			<b>rewind</b>
<b>Mechanical Inspection</b>			
21. Drive End Bearing Number-			<b>6209</b>



*Mixed grease*

22. Drive End Bearing Qty.			<b>1</b>
23. Drive End Bearing Type			<b>(Ball) Ball Bearing</b>
24. Drive End Lubrication Type			<b>(Grease) Grease Lubricated</b>
25. Drive End Bearing Insulation or Grounding Device?			<b>no</b>
26. Drive End Wavy Washer/Snap-Ring Other Retention Device?			<b>no</b>
27. Drive End Bearing Condition			

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- |  |                            |
|--|----------------------------|
| 29. Opposite Drive End Bearing Qty.                                  | 1                          |
| 30. Opposite Drive End Bearing Type                                  | (Thrust) Thrust            |
| 31. Opposite Drive End Lubrication Type                              | (Grease) Grease Lubricated |
| 32. Opposite Drive End Bearing Insulation or Grounding Device?       |                            |
| 33. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device? |                            |
| 34. Opposite Drive End Bearing Condition                             |                            |
| 35. Drive End Seal   |                            |
| 36. Opposite Drive End Seal  |                            |

#### Rotor Inspection

- |                          |  |
|--------------------------|--|
| 37. Rotor Type/Material  | (Squirrel Aluminum) Squirrel<br>Cage Aluminum Die Cast |
| 38. Growler Test         |  |
| 39. Number of Rotor Bars |  |
| 40. Rotor Condition      |  |



- |   |    |
|---|----|
| 41. List the Parts needed for the Repair Below      |    |
| 42. Signature of Technician that Disassembled Motor | RW |

RW

#### Mechanical Fits- Rotor

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43. Shaft Runout		
44. Rotor Runout		
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
45. Coupling Fit Closest to Bearing Housing		
0 Degrees	90 Degrees	120 Degrees
46. Coupling Fit Closest to the end of the Shaft		
0 Degrees	60 Degrees	120 Degrees
47. Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
1.722	1.772	1.772



48. Drive End Bearing Shaft Fit Condition	(P) Pass	
49. Opposite Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
1.7711	1.7711	1.7711



50. Opposite Drive End Bearing Shaft Fit Condition	(P) Pass	
51. Shaft Air Seal Fits		
Drive End Air Seal	Opposite Drive End Air Seal	

### Mechanical Fits- Bearing Housings

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## 52. Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

3.3471

3.1471

3.3471



## 53. Drive End - Endbell Bearing Fit Condition

(P) Pass

## 54. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

3.9373

3.9373

3.9373



## 55. Opposite Drive End - Endbell Bearing Fit Condition

(P) Pass

56. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap



57. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

58. List Machine Work Needed Below

59. Technician

RW

RW

Root Cause of Failure

60. Failure locations

DE

61. Root cause of failure

DE BEARING FAILED CAUSED THE ROTOR TO DRAG THE IRON which burnt the top sticks





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