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— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

**Job Number 100478**

Prepared for FUTURE FUEL CHEMICAL

2800 GAP RD HWY 394 SO  
BATESVILLE AR 72501

# Table of Contents

AC Recondition As Found - *Shop*

AC Recondition - Rev. 2

**1.0**

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*Table of Contents*



Hi-Speed Industrial Service  
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## AC Recondition As Found

### FUTURE FUEL CHEMICAL

2800 GAP RD HWY 394 SO  
BATESVILLE, AR 72501

FolderID: 100478  
FormID: 14869535

#### AC Recondition - Rev. 2

Location: Shop

Serial Number:

Description: 10/5HP LOUIS ALLIS 1800/900RPM  
256TDZ XP

Hi-Speed Job Number: 100478

Manufacturer: Other

HP/kW: 10 (HP)

RPM: 1800 (RPM)

Frame: 256TDZ

Voltage: 460

Current: 12.5/9.8

Phase: Three

Hz: 60 (Hz)

Enclosure: XP

J-box Included: Complete

Coupling/Sheave: None

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Teardown Inspection

Heaters: No

Winding Type : Random Wound

Bearing Type: Rolling Element

Priorities Found: ● 2 - High

● 6 - Good

#### Overall Condition

1. Report Date
2. Nameplate Picture



3. Photos of all six sides of the machine.

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4. Describe the Overall Condition of the Equipment as Received

*Dirty*


#### Initial Mechanical/Electrical

|                                    |           |
|------------------------------------|-----------|
| 5. Does Shaft Turn Freely?         | (Yes) Yes |
| 6. Does Shaft Have Visible Damage? | (No) No   |
| 7. Assembled Shaft Runout          |           |
| 8. Assembled Shaft End Play        |           |
| 9. Air Gap Variation <10%          |           |

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|   |                     |
|---|---------------------|
| 10. Lead Condition  | (NA) Not Applicable |
|  <i>Rewind</i> |                     |
| 11. Lead Length   | 7 Inches            |
| 12. Frame Condition   | pass                |
| 13. Fan Condition   | (P) Pass            |



|   |                            |
|---|----------------------------|
| 14. Broken or Missing Components  | fan cover bolt             |
| <b>Initial Electrical Inspection</b>  |                            |
| 15. Insulation Resistance/Megger  | Megohms                    |
| 16. Winding Resistance  |                            |
| 1-2   | 1-3 2-3                    |
| 17. Perform Surge Test  | (NA) Not Applicable        |
|  <i>Rewind</i> |                            |
| 18. Stator Condition  |                            |
| <b>Mechanical Inspection</b>  |                            |
| 19. Drive End Bearing Number-   | 6309                       |
| 20. Drive End Bearing Qty.  | 1                          |
| 21. Drive End Bearing Type  | (Ball) Ball Bearing        |
| 22. Drive End Lubrication Type  | (Grease) Grease Lubricated |
| 23. Drive End Bearing Insulation or Grounding Device?   | na                         |
| 24. Drive End Wavy Washer/Snap-Ring Other Retention Device?                                       | snap ring                  |
| 25. Drive End Bearing Condition   | frosting and contamination |



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|  |                            |
|--|----------------------------|
| 26. Opposite Drive End Bearing Number-                               | 6209                       |
| 27. Opposite Drive End Bearing Qty.                                  | 1                          |
| 28. Opposite Drive End Bearing Type                                  | (Ball) Ball Bearing        |
| 29. Opposite Drive End Lubrication Type                              | (Grease) Grease Lubricated |
| 30. Opposite Drive End Bearing Insulation or Grounding Device?       | na                         |
| 31. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device? | wavy washer                |
| 32. Opposite Drive End Bearing Condition                             | normal wear                |



|                             |    |
|-----------------------------|----|
| 33. Drive End Seal          | na |
| 34. Opposite Drive End Seal | na |

#### Rotor Inspection

|   |  |
|---|--|
| 35. Rotor Type/Material   | (Squirrel Aluminum) Squirrel<br>Cage Aluminum Die Cast |
| 36. Growler Test  | (Pass) Pass  |
| 37. Number of Rotor Bars  | 40   |
| 38. Rotor Condition   | pass   |
| 39. List the Parts needed for the Repair Below<br>6309<br>6209<br>Fan cover bolts |  |
| 40. Signature of Technician that Disassembled Motor                               | Cw   |

#### Mechanical Fits- Rotor

|  |            |                            |
|--|------------|----------------------------|
| 41. Shaft Runout                                 |            |                            |
| 42. Rotor Runout                                 |            |                            |
| Drive End Bearing Fit                            | Rotor Body | Opposite Drive End Bearing |
|  |            |                            |
| 43. Coupling Fit Closest to Bearing Housing      |            |                            |
| 0 Degrees  | 90 Degrees | 120 Degrees                |
|  |            |                            |
| 44. Coupling Fit Closest to the end of the Shaft |            |                            |
| 0 Degrees  | 60 Degrees | 120 Degrees                |

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|  |   |             |
|--|---|-------------|
| 45. Drive End Bearing Shaft Fit  |   |             |
| 0 Degrees  | 60 Degrees  | 120 Degrees |
|  1.7714, 1.7716, 1.7716 |   |             |
| 46. Drive End Bearing Shaft Fit Condition  |   | (F) Fail    |
| 47. Opposite Drive End Bearing Shaft Fit   |   |             |
| 0 Degrees  | 60 Degrees  | 120 Degrees |
|  1.7714, 1.7717, 1.7715 |   |             |
| 48. Opposite Drive End Bearing Shaft Fit Condition   |   | (F) Fail    |
| 49. Shaft Air Seal Fits  |   |             |
| Drive End Air Seal   | Opposite Drive End Air Seal   |             |
| <b>Mechanical Fits- Bearing Housings</b>   |   |             |
| 50. Drive End - Endbell Bearing Fit  |   |             |
| 0 Degrees  | 60 Degrees  | 120 Degrees |
|  3.9379, 3.9379, 3.9380 |   |             |
| 51. Drive End - Endbell Bearing Fit Condition  |   | (P) Pass    |
| 52. Opposite Drive End - Endbell Bearing Fit   |   |             |
| 0 Degrees  | 60 Degrees  | 120 Degrees |
|  3.3474, 3.3465, 3.3468 |   |             |
| 53. Opposite Drive End - Endbell Bearing Fit Condition   |   | (P) Pass    |
| 54. Bearing Cap Condition  |   |             |
| Drive End Bearing Cap  | Opposite Drive End Bearing Cap  |             |
|  Pass                 |   |             |
| 55. End Bell Air Seal Fits   |   |             |
| Drive End Air Seal   | Opposite Drive End Air Seal   |             |
| 56. List Machine Work Needed Below   |   |             |
| <i>Both shaft bearing fits and DE seal surface on shaft</i>  |   |             |
| 57. Technician   |   | Cw          |
|                       |   |             |
| <b>Root Cause of Failure</b>   |   |             |
| 58. Failure locations  | <i>Windings, bearings, both shaft bearing fits, and DE shaft seal surface</i> |             |
| 59. Root cause of failure  | <i>Oil contamination and wear</i>   |             |



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