

## Job Information

Job #: 94533

Date: August 3, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Riceland

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Reliance

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: 89MN444826

Model#: P44G4826A

Service Factor: 1.0

Frame: 445T

Horsepower/kW: 150 Hp

Rated RPM: 1785

Rated Amps: 170

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Dirt

Shaft rotation: Bi-directional

Contaminant(s) Amt: Other

Shaft grounding device present?: Yes

Contaminant Image:



Type of grounding device: Aegis

Shaft runout(TIR-Inbound): .002

Bearings DE: Worn

Bearings DE make: Koyo

Insulated: No

Bearing DE Size: 6318 ZZ

Bearings ODE: Worn

Bearings ODE make: Koyo

Bearing Type: Ball

Bearing ODE Size: 6318 ZZ

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: Good

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection

Not Available



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## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: Other

Grease Amt ODE: Full

Grease Cond. ODE: Other

Seals DE type: N/A

Seals Image:

Seals DE size:

Not  
Available

Seals DE (inbound) condition :

Seals ODE type: N/A

Seals Image 2:

Seals ODE size:

Not  
AvailableSeals ODE (inbound) condition  
:

Shaft damage cause: Other

Shaft Image:

**WEST TENNESSEE**

7030 Ryburn Drive  
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Phone 901-873-5300  
Fax 901-873-5301

**CENTRAL ARKANSAS**

6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: N/A

Fan: Broken

Frame cond.: Good

Not  
Available



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

☐ J-Box cover ☐ O-rings ☐ J-Box☐ HH cover ☐ Glands ☐ None

Other missing parts

Endbell Image:

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## Mechanical Inspection (Continued)

### Air Gap Measurements (N/A on Single Piece Endbell)

Does Air Gap Meet Customer or EASA spec(<10% variation)?

DE @ 0

ODE @ 0

—

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

## AC Electrical Inspection

Number of leads: 3

Terminal Markings:

Length of leads: 12"

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads:

1-Blue  
2-White  
3-Orange  
4-Yellow

5-Black  
6-No color assigned  
7-No color assigned  
8-Red

P1-No color assigned  
P2-Brown

Lead condition: Worn

Connections As Received:

Lug type:

Lug Condition: —

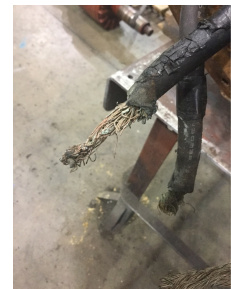
Terminal

Lugs

Lug size:

Not  
Available

Lug Attachment: —



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars:

Num broken bars:



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

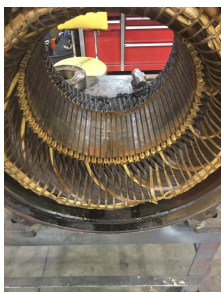
Stator condition: Ok

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:

Not  
Available

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## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: Good

Winding Thermal Protection ODE: —

Stator test results: Salvageable



Not Available

Megs incoming: Good

Surge incoming: Good

Hi-pot incoming: Good

### Winding Resistance Incoming

|          | Phases A to B | Phases B to C | Phases C to A | Resistive imbalance |
|----------|---------------|---------------|---------------|---------------------|
| Incoming | 39.852        | 40.088        | 40.096        | 0.6                 |

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:

Not Available



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## Conclusion

### Component Failure

DE & OD EB's Worn, DE shaft outer seal worn

### Cause of Failure

### Comments

Leads had high resistance connection, De & ODE EB's need sleeves, DE outer seal worn, ODE sleeve is insulated DE shaft outer seal surface is worn. ODE fan cover bolts broken off in EB (4). New Aegis ring (4.121")

Service Tech name: Lynn McDonald

Service Tech signature:

A handwritten signature in black ink that reads 'Lynn McDonald'.

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