

## Job Information

Job #: 94764

Date: October 2, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Arkansas Electric

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Allis Chalmers

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 1-5112-75377-1-1

Model#: Type GS

Service Factor: 1.15

Frame: 3023S6

Horsepower/kW: 800

Rated RPM: 1775

Rated Amps: 99

Rated Voltage: 4,000

Phase: 3

Cycles: 60

Special design: No



Nameplate

DE

ODE

F1


F2

Top



## Mechanical Inspection

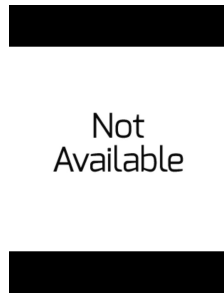
Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?:	Yes	Contaminant(s):	Dirt
Shaft rotation:	Bi-directional	Contaminant(s) Amt:	Gallon
Shaft grounding device present?:	No	Contaminant Image:	
Type of grounding device:			
Shaft runout(TIR-Inbound):			
Bearings DE:	Worn	Bearings DE make:	Other
Insulated:	No	Bearing DE Size:	
Bearings ODE:	Worn	Bearings ODE make:	Other
Bearing Type:	Babbitt	Bearing ODE Size:	
Bearings Retainer:	Yes	Thermal Protection:	Yes
Retainer condition:	Good	Thermal Protection Type:	RTD

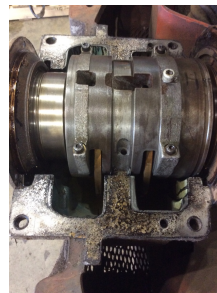
Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: N/A

Grease Cond. DE: Other

Grease Amt ODE: N/A

Grease Cond. ODE: Other

Seals DE type: Slinger

Seals Image:



Seals DE size:

Not  
Available

Seals DE (inbound) condition :



Seals ODE type: Slinger

Seals Image 2:



Seals ODE size:

Not  
AvailableSeals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:



## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:

Not  
Available

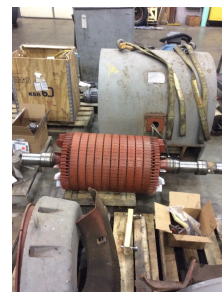
Water jacket: N/A

Not  
Available

Fan: N/A

Not  
Available

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Split type

Missing parts?

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

Endbell Image:



Other missing parts

## 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: 20"

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: Good

Lug type:

Connections As Received:

Lug Condition: Good

Terminal

Lugs

Lug size:

Lug Attachment: Acceptable

Not  
Available





## AC Electrical Inspection (Continued)

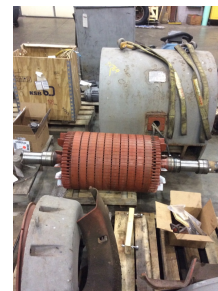
Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 56

Num broken bars: 0

Rotor



### Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ok

If other, stator condition:

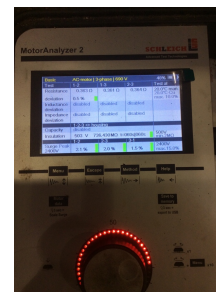
Failure location: Other

If other, stator failure:

Stator Image:



Failure Image:



#### WEST TENNESSEE

7030 Ryburn Drive  
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## AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: Good

Winding Thermal Protection ODE: Good

Stator test results: Salvageable



Megs incoming: Good

Surge incoming: Good

Hi-pot incoming: Good

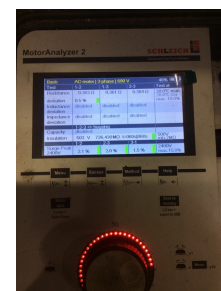
### Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	36.3	36.1	36.4	0.5

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



## Conclusion

### Component Failure

O.d.e bearing is undersized on outside diameter.004. Top of bearing housing out of tolerance and needs to be machined. Both bearings need to re-surfaced.

### Cause of Failure

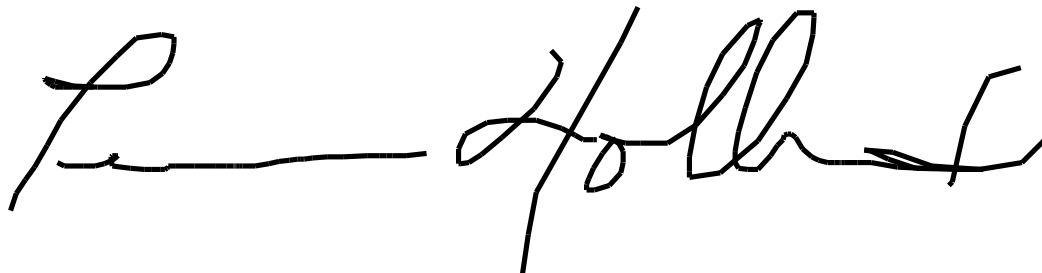
Recondition/bearings resurfaced and top bearing housing out of tolerance. D.E. Heater terminals corroded and heater needs replacing.

### Comments

Replace d.e. 115v heater. Both bearings being sent off to be resurfaced. D.E. Top bearing holder worn and needs machining. O.d.e. Bearing is undersized on outside diameter. All RTD's check @approximately 120 ohms. (6) ea.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Terrence Holland', written in a cursive style.**WEST TENNESSEE**

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