

## Job Information

Job #: 140206

Date: July 18, 2019

Priority: 4

Authorized OT: No

Authorized by:

## Customer Information

Name: USG

Reason: Motor locked up

Contact:

Motor#:

PO#:

Application: Direct Drive

Special notes: Customer requested to have a peckerhead installed on motor.

## Name Plate Information

Manufacturer: Siemens

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: 1LA04054SE41A

Model#: RGZESD

Service Factor: 1.15

Frame: 405T

Horsepower/kW: 100

Rated RPM: 1785

Rated Amps: 113

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?: No Contaminant(s): Water

Shaft rotation: Bi-directional Contaminant(s) Amt: Quart

Shaft grounding device present?: No Contaminant Image:



Type of grounding device: N/A

Shaft runout(TIR-Inbound): N/A

Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6316

Bearings ODE: Worn Bearings ODE make: SKF

Bearing Type: Ball Bearing ODE Size: 6316

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



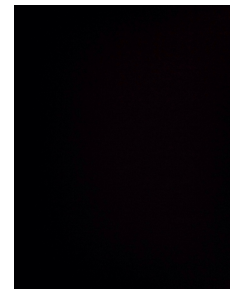
Bearing Make Image



Bearing Retainer Image



Thermal Protection





MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Unknown

Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 1/4

Grease Cond. DE: Watery

Grease Amt ODE: 1/4

Grease Cond. ODE: Watery

Seals DE type: Slinger

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: Slinger

Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:

### WEST TENNESSEE

7030 Ryburn Drive  
Millington, TN 38053  
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)

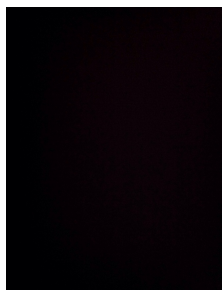
Brg. Image:



Bushings/sleeves image:



Water jacket: N/A



Fan: Ok



Frame cond.: Good



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:





## 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: 1-3

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: Bad

Lug type: N/A

Connections As Received: Bad

Lug Condition: Bad

Lug size:

Lug Attachment: —

Terminal



Lugs



## AC Electrical Inspection (Continued)

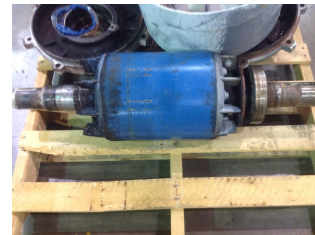
Rotor Type: Barred Copper

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: Coil-Coil short

If other, stator condition:

Failure location: Coil head

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Dull black

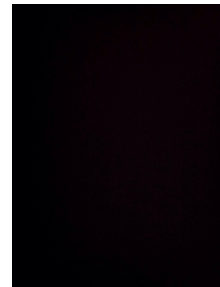
Winding image

Winding Thermal Protection: No

Winding condition : Charred

Winding Thermal  
Protection DE: BadWinding Thermal  
Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

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

Leads/jumpers: Replace

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

Windings burnt

### Cause of Failure

Water in motor

### Comments

Customer requests that a peckerhead be installed on motor.

Service Tech name: Erich Sodam

Service Tech signature:

A handwritten signature in black ink, appearing to read 'E. Sodam', written over a white background.

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