

## Job Information

Job #: 141581

Date: January 15, 2020

Priority: —

Authorized OT: No

Authorized by: Terry f

## Customer Information

Name: Ktg

Reason:

Contact: R.henery

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Ge

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: Sk405ss30s

Model#:

Service Factor:

Frame: 405t

Horsepower/kW: 75

Rated RPM: 1190

Rated Amps: 86

Rated Voltage: 460

Phase: 3

Cycles:

Special design: No



Nameplate

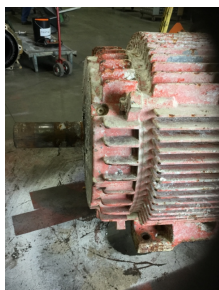
DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): Other

Shaft rotation: — Contaminant(s) Amt: Full

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: Koyo

Insulated: No Bearing DE Size: 316zz

Bearings ODE: Worn Bearings ODE make: Koyo

Bearing Type: Ball Bearing ODE Size: 316zz

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



### 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)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

Grease Cond. DE: Watery

Grease Amt ODE: 0

Grease Cond. ODE: Watery

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :



Seals ODE type: N/A

Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition :



Shaft damage cause: Other

Shaft Image:



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## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Broken



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: 6 inches make 18

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

Size of leads: AWG 4

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: —

Lug type: None

Connections As Received:

Lug Condition: Warn

Lug size: Na

Lug Attachment: Replace

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 0

Num broken bars:

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: In slot

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Painted

Winding image

Winding Thermal Protection: Yes

Winding condition : Cracks

Winding Thermal  
Protection DE: —

Winding Thermal  
Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

Surge incoming: Bad

Hi-pot incoming: Bad

### Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



## Conclusion

### Component Failure

Water ,moisture inside windings to much paper and water destroyed this motor

### Cause of Failure


End bell shaft windings

### Comments

Drill and tap all ode fan bolts ,water damage end bells and bearings causing windings to short ,shaft failure as well

Service Tech name: Terry f

Service Tech signature:

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke.**WEST TENNESSEE**

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