

## Job Information

Job #: 141532

Date: January 8, 2020

Priority: —

Authorized OT: No

Authorized by: Terry

## Customer Information

Name: Ktg

Reason: Ball bearings come apart

Contact: Richard

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Us

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 656287

Model#:

Service Factor:

Frame: 449t

Horsepower/kW: 200

Rated RPM: Z1785

Rated Amps: 45/28

Rated Voltage: 2300/4000

Phase: 3

Cycles:

Special design: No



Nameplate

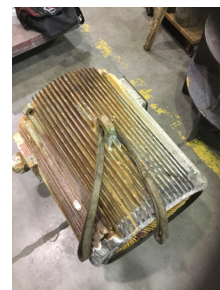
DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): None

Shaft rotation: Bi-directional

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Fell Apart

Bearings DE make: SKF

Insulated: No

Bearing DE Size: 226zz

Bearings ODE: Loose

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 220zz

Bearings Retainer: Yes

Thermal Protection: Yes

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



## 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: Full

Grease Cond. DE: Watery

Grease Amt ODE: Full

Grease Cond. ODE: Gritty

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :



Seals ODE type: Other

Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition :



Shaft damage cause: None

Shaft Image:





## Mechanical Inspection (Continued)

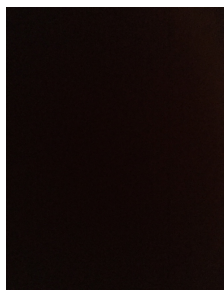
Brg. Image:



Bushings/sleeves image:



Water jacket:     Ok



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: 6

Terminal Markings:

Length of leads: 18 inches

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

Size of leads: AWG 1

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: 2whole lug

Connections As Received: 1-6

Lug Condition: Good

Lug size:

Lug Attachment: —

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:



#### 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

## AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

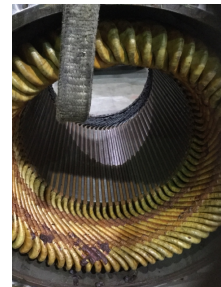
Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: —

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	0.2	0.2	0.2	0.20

Leads/jumpers: Ok

Lead jumper Image. :



If other, leads/jumpers:

## Conclusion

### Component Failure

Ball bearings

### Cause of Failure

Motor got hot ,bearings come apart causing motor to trip

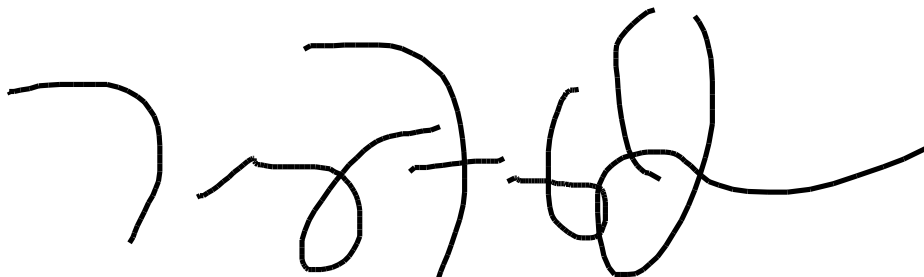
### Comments

Overloads ohms .5

Heaters ohms 46.2

Service Tech name: Terry f

Service Tech signature:

A handwritten signature in black ink, appearing to be 'Terry f', written in a cursive style.

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