

## Job Information

Job #: 136106

Date: February 27, 2018

Priority: —

Authorized OT: No

Authorized by: Terry f

## Customer Information

Name: Ktg

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: ABB

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 4586528

Model#: Hxr500I

Service Factor:

Frame: 500I

Horsepower/kW: 1050

Rated RPM: 999

Rated Amps: 1545

Rated Voltage: 480

Phase:

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):     | Dirt                                                                                |
| Shaft rotation:                  | Bi-directional | Contaminant(s) Amt: | Cup                                                                                 |
| Shaft grounding device present?: | No             | Contaminant Image:  |  |
| Type of grounding device:        |                |                     |                                                                                     |
| Shaft runout(TIR-Inbound):       |                |                     |                                                                                     |

|                     |      |                          |      |
|---------------------|------|--------------------------|------|
| Bearings DE:        | Worn | Bearings DE make:        | SKF  |
| Insulated:          | No   | Bearing DE Size:         | 6326 |
| Bearings ODE:       | Worn | Bearings ODE make:       | SKF  |
| Bearing Type:       | Ball | Bearing ODE Size:        | 6324 |
| Bearings Retainer:  | Yes  | Thermal Protection:      | Yes  |
| Retainer condition: | Good | Thermal Protection Type: | —    |

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: Thermal Overloads

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: Thermal Overloads

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: Watery

Grease Amt ODE: Full

Grease Cond. ODE: Watery

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :



Seals Image 2:

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition :

Not  
Available

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:     Ok

Fan:     Ok

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:



## 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: —

Terminal Markings:

Length of leads: 18

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

Size of leads: Awg1

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: Regular

Connections As Received:

Lug Condition: Good

Lug size:

Lug Attachment: Acceptable

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 72

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: 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: Like new

Winding image

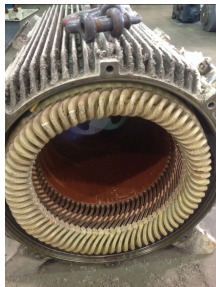
Winding Thermal Protection: Yes

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

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



## Conclusion

### Component Failure

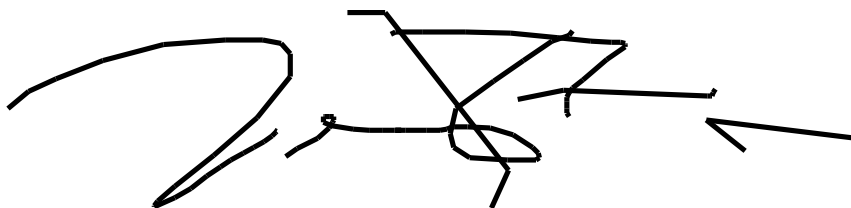
Clean up new bearings

### Cause of Failure

### Comments

Service Tech name: Terry Frazier

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Terry Frazier', with a stylized, cursive-like script.