

## Job Information

Job #: 142225

Date: April 3, 2020

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Nucor

Reason:

Contact:

Motor#: 142225

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: P&amp;H

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 512454. 5/97

Model#: EBM111F1E

Service Factor:

Frame: 405

Horsepower/kW: 60

Rated RPM: 1160

Rated Amps: 67.00 / 14.60

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?: Yes

Contaminant(s): None

Shaft rotation: —

Contaminant(s) Amt: None

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: 6216

Bearings ODE: Worn

Bearings ODE make: SKF

Bearing Type: Ball

Bearing ODE Size: 6214

Bearings Retainer: Yes

Thermal Protection: Yes

Retainer condition: Good

Thermal Protection Type: —

Bearing Type Image



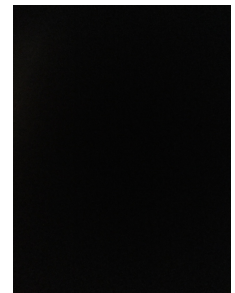
Bearing Make Image



Bearing Retainer Image



Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Slinger

Seals Image:

Seals DE size: N/A

Seals DE (inbound) condition :

Seals ODE type: Slinger

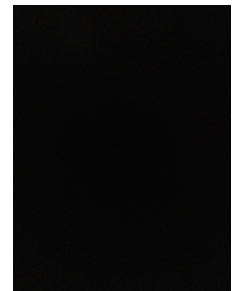
Seals Image 2:

Seals ODE size: N/A

Seals ODE (inbound) condition  
:

Shaft damage cause: Other

Shaft Image:



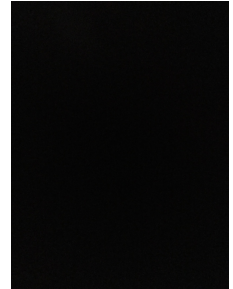


## Mechanical Inspection (Continued)

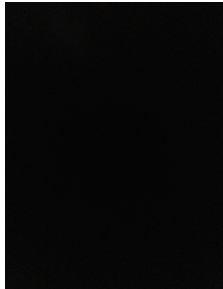
Brg. Image:



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- |                                      |                                  |                                |
|--------------------------------------|----------------------------------|--------------------------------|
| <input type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input type="checkbox"/> J-Box |
| <input type="checkbox"/> HH cover    | <input type="checkbox"/> Glands  | <input type="checkbox"/> 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: 1-2-3

Length of leads: 16inches

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

Size of leads: 6

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

Connections As Received: 1-3

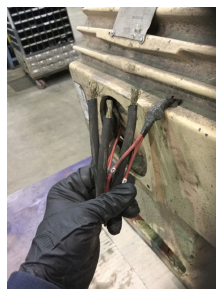
Lug type: None

Lug Condition: —

Lug size:

Lug Attachment: —

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 49

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:

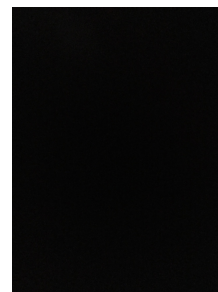
Failure location: Other

If other, stator failure:

Stator Image:



Failure Image:



#### WEST TENNESSEE

7030 Ryburn Drive  
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

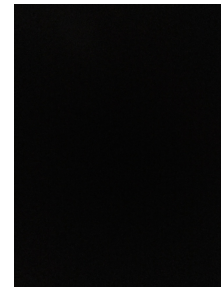
Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: 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

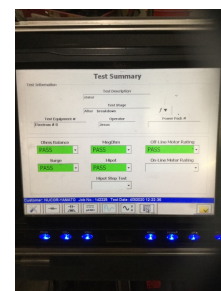
Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

### Cause of Failure

Unknown

### Comments

Shaft needs to be mic ODE smeared area

Service Tech name: Jesus

Service Tech signature:

A handwritten signature in black ink, appearing to be 'Jesus', written over a light gray grid background.

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