

## Job Information

Job #: 140848

Date: October 7, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Runyon

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer:	Nidec	Enclosure :	Totally Enclosed Fan Cooled
Serial#:	A057713325-0017 M0003	Model#:	GB02
Service Factor:	1.15	Frame:	256T
Horsepower/kW:	20	Rated RPM:	3535
Rated Amps:	46/23.0	Rated Voltage:	230/460
Phase:	3	Cycles:	60
Special design:	No		

Enclosure Type image



Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Water

Shaft rotation: Bi-directional

Contaminant(s) Amt: Other

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: FAG

Insulated: No

Bearing DE Size:

Bearings ODE: Worn

Bearings ODE make: FAG

Bearing Type: Ball

Bearing ODE Size:

Bearings Retainer: No

Thermal Protection: Yes

Retainer condition: —

Thermal Protection Type: —

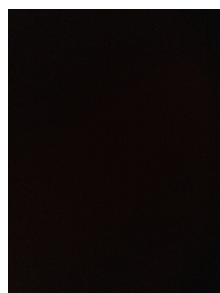
Bearing Type Image



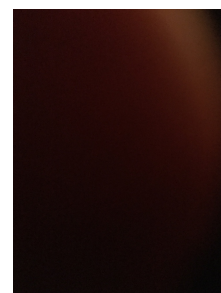
Bearing Make Image



Bearing Retainer Image



Thermal Protection



### WEST TENNESSEE

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### CENTRAL ARKANSAS

6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
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## 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: Slinger

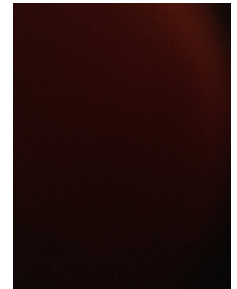
Seals Image:



Seals DE size:

Seals DE (inbound) condition :

Seals Image 2:



Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:

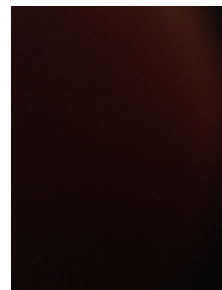


## Mechanical Inspection (Continued)

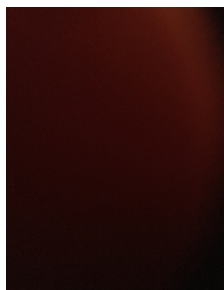
Brg. Image:



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: —

Terminal Markings:

Length of leads:

REF: NEMA Std. 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: —

Lug type:

Connections As Received:

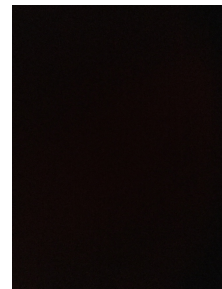
Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —



## AC Electrical Inspection (Continued)

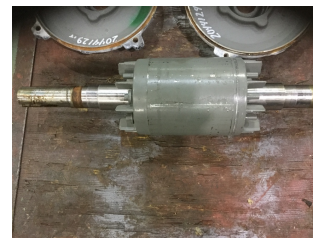
Rotor Type: Cast Aluminum

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:

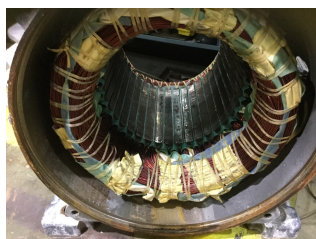
Stator condition: Ok

If other, stator condition:

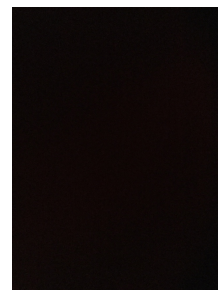
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Still has color

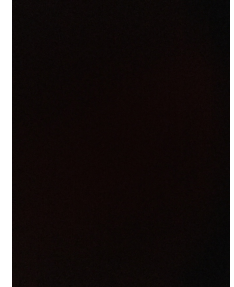
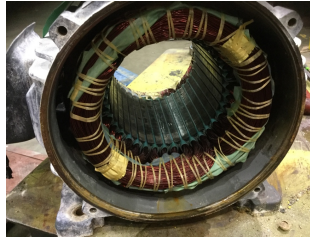
Winding image

Winding Thermal Protection: No

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

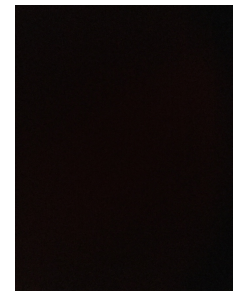
Phases C to A

Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :



If other, leads/jumpers:



MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

Bearings

### Cause of Failure

Buildup of dirt and water lead to bearing failure

### Comments

Service Tech name: Stone Hubbard

Service Tech signature:

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