

Job Information

Job #: 141440

Date: December 19, 2019

Priority: 1A Rush/OT

Authorized OT: Yes

Authorized by:

Customer Information

Name: Hino

Reason:

Contact:

Motor#:

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: Toshiba

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 30095714

Model#: IKK

Service Factor:

Frame: 132S

Horsepower/kW: 5.5KW

Rated RPM: 1740

Rated Amps: 20

Rated Voltage: 220

Phase: 3

Cycles: 60

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): Other

Shaft rotation: Bi-directional

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): N/A

Bearings DE: Worn

Bearings DE make: Other

Insulated: No

Bearing DE Size: 6308ZZ

Bearings ODE: Worn

Bearings ODE make: NSK

Bearing Type: Ball

Bearing ODE Size: 6306ZZ

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

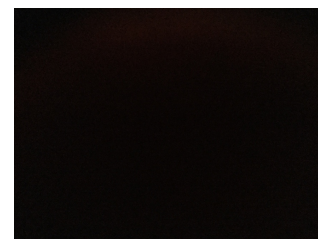
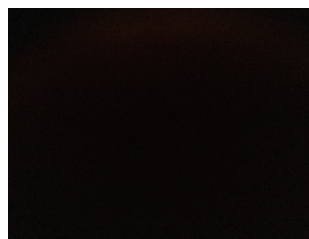
Thermal Protection Type: —

Bearing Type Image

Bearing Make Image

Bearing Retainer Image

Thermal Protection





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LITTLE ROCK, AR

Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

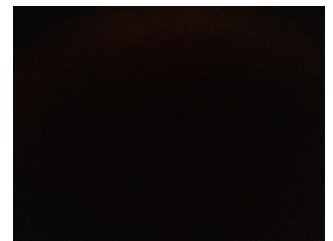
Grease Cond. DE: Other

Grease Amt ODE: 0

Grease Cond. ODE: Other

Seals DE type: N/A

Seals Image:

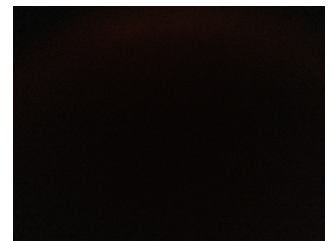


Seals DE size: N/A

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:



WEST TENNESSEE

7030 Ryburn Drive
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Fax 901-873-5301

CENTRAL ARKANSAS

6812 Lindsey Rd.
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Phone 501-375-9178
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Mechanical Inspection (Continued)

Brg. Image:



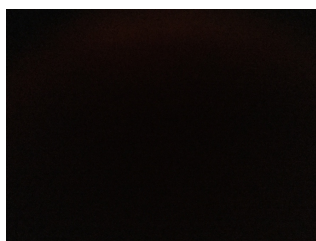
Bushings/sleeves image:



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: 6

Terminal Markings: V2 to U1, W2 to V1, U2 to W1

Length of leads: 6"

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

Size of leads: 16AWG

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: Bolt on

Connections As Received: Connected

Lug Condition: Good

Terminal

Lugs

Lug size: 5



Lug Attachment: Acceptable

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:

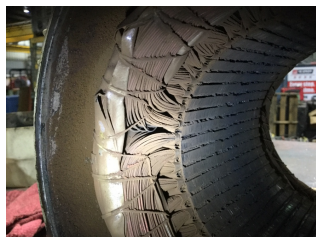
Stator condition: Ok

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: Dull black

Winding image

Winding Thermal Protection:

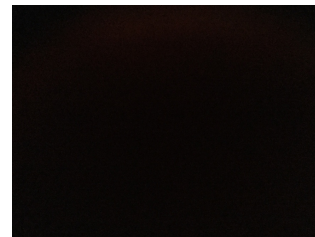
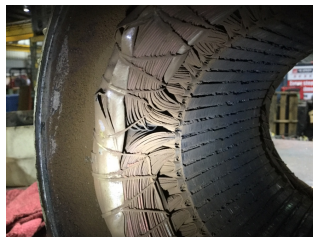
No

Winding condition : Solid

Winding Thermal
Protection DE: —

Winding Thermal
Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

Surge incoming: Bad

Hi-pot incoming: Bad

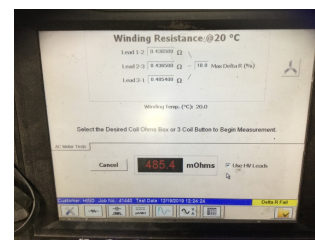
Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	0.4365	0.4365	0.4854	0.0511

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:





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Conclusion

Component Failure

Iron shifted, windings burnt, shaft damaged, bearings bad

Cause of Failure

Shaft bearings went out causing shaft to contact end bell

Comments

Service Tech name: Erich Sodam

Service Tech signature:

A handwritten signature in black ink, appearing to read 'ESD', is written over a large, faint, light-gray watermark of the same signature.

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