

Job Information

Job #: 141305

Date: December 11, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Toyota

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Yaskawa

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: T10860101

Model#:

Service Factor:

Frame: 250CD

Horsepower/kW: 160

Rated RPM: 1750



Armature

Volts 390

Amps

Fields

Volts 150

Amps

Nameplate



DE



ODE



F1



F2



Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Carbon

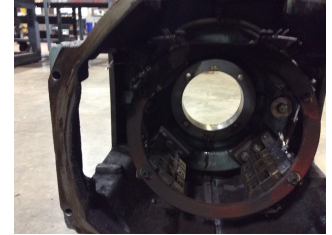
Shaft rotation: Bi-directional

Contaminant(s) Amt: Other

Shaft Condition: —

Contaminant Image:

Shaft grounding device present?: No



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearing Type Image



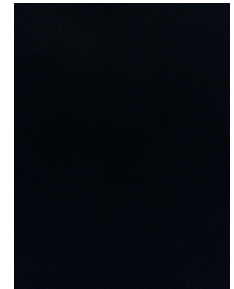
Bearing Make Image



Bearing Retainer Image



Thermal Protection



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: Full

Grease Cond. DE: Hard

Grease Amt ODE: Full

Grease Cond. ODE: Hard

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)

Brushholders

Number	12
Condition	Good
Size	
Spring type	

Brushes

Number	12
Size	
Shunt Len.	
Insulated	No
TermType	

Brg Image



Shaft Image



Brushing/sleeves



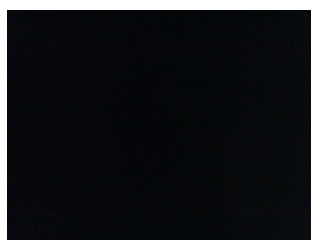
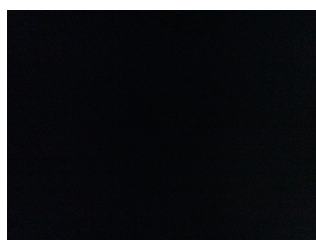
End bell



Water jacket: N/A

Fan: N/A

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Foot/Flange condition: Ok

Foot flatness: Pass

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MILLINGTON, TN

LITTLE ROCK, AR

Mechanical Inspection (Continued)

Missing parts?

☐ J-Box cover☐ O-rings☐ J-Box☐ HH cover☐ Glands☒ None

Other missing parts

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

Electrical Inspection

☐ Move armature imbalance to Assemble

Commutator: —

Winding Inspection

Meg Test IP to Flds: Good

Polarity Check IP to Flds: Yes

Meg Series to Shunt: Good

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DC Electrical Inspection

Brushes: Normal wear

Brush Image:



Brush holders: Replace Qty. 12

Insulators: Salvageable Qty.

Lead support stud: Salvageable Qty.

Alternate brush image:



Rocker ring: Salvageable Qty.

Commutator Type: Tig welded

Commutator images

Commutator Hardness: Good

Commutator Condition : Streaked

Commutator Film: Ok



Armature type: Factory If other

Failure mode: Ok If other

Failure location: Front V ring If other

Armature condition: Solid If other

Winding color: Like new

Armature images



DC Electrical Inspection (Continued)

Armature Test Results

Megs: Good Hi-pot: Good Core loss: Good

Armature image



Fields condition

Series/Stab condition: Ok

Fields condition image:

Shunts condition: Ok

InterCoils condition: Ok



Fields test results

Series/Stab Meg: Ok

Hi Pot: Ok

Resistance: Ok

Shunts Meg: Ok

Hi Pot: Ok

Resistance: Ok

InterCoils Meg: Ok

Hi Pot: Ok

Resistance: Ok

Thermistors: In use

Field Test image

RTD: In use

At

Thermostat: Open



Leads/jumpers: Ok

Lead jumper Image:



Conclusion

Component Failure

Bearings worn out and brushes worn out

Cause of Failure

Bearings

Comments

DE Bearing NSK. NU320 Roller Bearing

ODE Bearing NSK 6314Z

Service Tech name: Kelly Felts

Service Tech
signature:

A handwritten signature in black ink that reads 'Kelly Felts'.