

## Job Information

Job #: 141239

Date: November 22, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Toyota

Reason:

Contact:

Motor#: 141239

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Yaskawa

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: S14E71101

Model#:

Service Factor:

Frame: 280BD

Horsepower/kW: 185kw

Rated RPM: 1750



Armature

Volts 440

Amps 452

Fields

Volts 150

Amps 127

Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): Grease

Shaft rotation: Bi-directional

Contaminant(s) Amt: Full

Shaft Condition: Good

Contaminant Image:

Shaft grounding device present?: No



Type of grounding device:

Shaft runout(TIR-Inbound): .001

Bearing Type Image



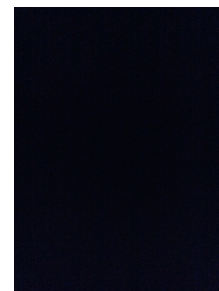
Bearing Make Image



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: Charred

Grease Amt ODE: Full

Grease Cond. ODE: New

### 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	16
	Condition	Replace
	Size	33251
	Spring type	Yes

Brushes	Number	16
	Size	33251
	Shunt Len.	Yes
	Insulated	Yes
	TermType	Yes

Brg Image



Shaft Image



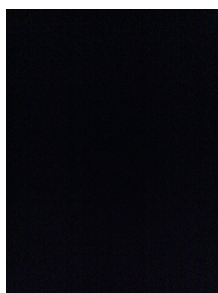
Brushing/sleeves



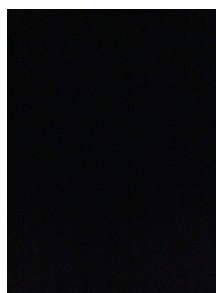
End bell



Water jacket: Ok



Fan: Ok



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

Yes

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

## Electrical Inspection

☐ Move armature imbalance to Assemble

Commutator: Salvageable

## Winding Inspection

Meg Test IP to Flds: —

Polarity Check IP to Flds: —

Meg Series to Shunt: —

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## DC Electrical Inspection

Brushes: Broken

Brush Image:



Brush holders: Replace Qty.

Insulators: Salvageable Qty.

Lead support stud: Salvageable Qty.

Alternate brush image:



Rocker ring: Replace Qty.

Commutator Type: Tig welded

Commutator images

Commutator Hardness: Good

Commutator Condition : Oil soaked

Commutator Film: Ok



Armature type: Factory If other

Armature images

Failure mode: Ok If other

Failure location: Front V ring If other

Armature condition: Solid If other

Winding color: Dull black



## DC Electrical Inspection (Continued)

### Armature Test Results

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

Armature image



### Fields condition

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Series/Stab condition:      Ok

Fields condition image:

Shunts condition:      Ok

InterCoils condition:      Ok



### Fields test results

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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

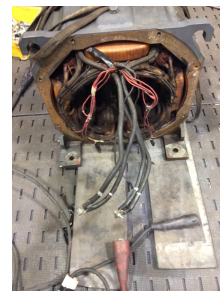
At

Thermostat:      Open



Leads/jumpers:     Ok

Lead jumper Image:



## Conclusion

### Component Failure

Bearings

### Cause of Failure

Bearings

### Comments

ode bearing 6316 de bearing 322ec

Service Tech name:     Jeremy Yarbrough

Service Tech  
signature:

