

#### **Job Information**

Job #: 138829 Date: December 31,

2018

Priority: — Authorized OT: No Authorized by:

#### **Customer Information**

Name: Toyota Boshoku Reason: Motor inspection

Contact: David Carr Motor#: PO#:

Application: Direct Drive Special notes:

#### **Name Plate Information**

Manufacturer: Fujihensokuki Enclosure: Open Drop Proof Enclosure Type image

(ODP)

Serial#: 311641001 Model#: Vx08-160B-0178

Service Factor: Frame:

Horsepower/kW: .75 Rated RPM: 1720

Rated Amps: 3.2 Rated Voltage: 230

Phase: 3 Cycles:

Special design: Yes

Nameplate DE ODE F1 F2 Top













Fax 901-873-5301



## **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device

present?:

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: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



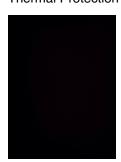
Bearing Make Image



Bearing Retainer Image



Thermal Protection





## **Mechanical Inspection (Continued)**

Lubrication Type: Oil 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: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type:

Seals Image 2:

...

Slinger

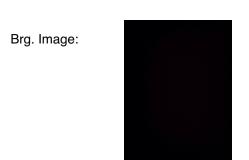
Seals ODE size:

Seals ODE (inbound) condition

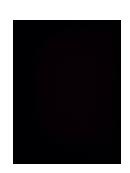
Shaft damage cause: None Shaft Image:



# **Mechanical Inspection (Continued)**



Bushings/sleeves image:



Water jacket: Ok



Fan: Ok



Frame cond.:



Motor Mount Position:

Horizontal/Foot mount

Endbell type:

Endbell Image:

Single piece

Missing parts?

_	i
	J-Box cover

O-rings

☐ J-Box

☐ HH cover

Glands

■ None

to.

Other missing parts



## **Mechanical Inspection (Continued)**

Air Gap Meaurements (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: U V W

Length of leads: 6 inches REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal

Markings Identified By Color:

Size of leads: 10 wag 1-Blue 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: 230 v

Lug Condition: — Terminal

Lug size:

Lug Attachment: —





Lugs



# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Num rotor bars:

Rotor Condition: Ok

Num broken bars:

# 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: In slot If other, stator failure:

Stator Image: Failure Image:







## **AC Electrical Inspection (Continued)**

Winding color: Like new Winding image W

Winding Thermal Protection:

No

Winding condition: Solid

Winding Thermal Protection DE:

Winding Thermal Protection ODE:

Stator test results: Rewind



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:

If other, leads/jumpers:

Ok

Lead jumper Image.:





#### Conclusion

Com	ponent	t Failure
-----	--------	-----------

Rectifier failed

#### **Cause of Failure**

Possible overload on rectifier

#### Comments

Tested brake and stator both test good. Tested rectifier and was getting no output voltage from it. Took apart and you can see its blown.

Service Tech name: Dan Mahan

Service Tech signature:

D- ~