

## Job Information

Job #: 96541

Date: February 10, 2020

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Synovos

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Toshiba

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: 96806430

Model#: B0752FLG3UM01

Service Factor: 1.15

Frame: 365TS

Horsepower/kW: 75

Rated RPM: 3545

Rated Amps: 178/89

Rated Voltage: 230/460

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?: No Contaminant(s): None

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

Shaft grounding device present?: No

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Fell Apart Bearings DE make: FAG

Insulated: No Bearing DE Size: 6312

Bearings ODE: Worn Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size: 6312

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image

Bearing Make Image

Bearing Retainer Image

Thermal Protection



## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: N/A

Grease Cond. DE: Other

Grease Amt ODE: Full

Grease Cond. ODE: Charred

Seals DE type: N/A

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: Extensions bent

Shaft Image:



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## Mechanical Inspection (Continued)

Brg. 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

Endbell Image:



Other missing parts

Bolts for J-box cover are missing



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## 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: 12

Terminal Markings:

Length of leads: 7in

REF: NEMA Stds. 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: Worn

Lug type: NA

Connections As Received:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —

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## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

Rotor



### Rotor Test Results

Visual: Fail

Growler: Fail

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Ground

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: Painted

Winding image

Winding Thermal Protection: No

Winding condition : Charred

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	0.00	0.00	0.00	

Leads/jumpers: Ok

Lead jumper Image. :



If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Damaged

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: 6312

Shaft runout(TIR-Inbound): 0.009

Bearing ODE Size: 6312

Retainer condition: Good



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## Mechanical Inspection (Continued)

Seals DE condition : None

Brg. Seats DE: Good

Seals DE type: N/A

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.:

Seals ODE condition : None

Shaft damage: OK

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Bad

Foot/Flange condition: Ok

Endbell DE size: 5.1198

Foot flatness: Pass

Endbell DE insulated?: —

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 5.1196

—

Endbell ODE insulated?: —

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## Conclusion

### Component Failure

### Cause of Failure

### Comments

Rotor is blown, stator windings are blown, iron has core damage, both end bells are over sized, shaft is bent, both bearing fits on shaft are under sized, DE bearing gave out and fail apart, a bolt for the ODE end bell is broke and still in housing, DE grease insert is missing, bolts for J-box cover are missing. Recommend new bearings, new shaft, new rotor, rewind, core repair, and new bolts, and machine work.

Service Tech name: Chris Wiley

Service Tech signature:

A handwritten signature in black ink that reads 'Chris Wiley'.

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