

## Job Information

Job #: 94683

Date: September 11, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: SMF

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: BONFIGLIOLI

Enclosure : Totally Enclosed  
Fan Cooled

Enclosure Type image

Serial#: 00306745403

Model#: W86UB31

Service Factor:

Frame:

Horsepower/kW: 5.4

Rated RPM: 1710

Rated Amps: 15.8/7.9

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?: Yes 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: Worn Bearings DE make: Other

Insulated: No Bearing DE Size: 6211ZZ

Bearings ODE: Worn Bearings ODE make: NACHI

Bearing Type: Ball Bearing ODE Size: 6206ZZ

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: Other

Seals Image:

Seals DE size: 45-80-10

Seals DE (inbound) condition : Bad



Seals ODE type: Other

Seals Image 2:

Seals ODE size: 50-80-10/8

Seals ODE (inbound) condition :  
Bad



Shaft damage cause: Keyway bad

Shaft Image:





## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:



Water jacket:     Ok



Fan:     Ok



Frame cond.:     Good



Motor Mount Position:     Horizontal/Foot mount

Endbell type:     Single piece

Missing parts?

- |                                      |                                  |  |
|--------------------------------------|----------------------------------|--|
| <input type="checkbox"/> J-Box cover | <input type="checkbox"/> O-rings | <input type="checkbox"/> J-Box           |
| <input type="checkbox"/> HH cover    | <input type="checkbox"/> Glands  | <input checked="" type="checkbox"/> None |

Endbell Image:



Other missing parts

## 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: 9

Terminal Markings: 1-9

Length of leads:

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: Good

Lug type:

Connections As Received: High voltage

Lug Condition: —

Lug size:

Lug Attachment: —

Terminal

Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

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: Other

If other, stator failure:

Stator Image:



Failure Image:



#### WEST TENNESSEE

7030 Ryburn Drive  
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Phone 901-873-5300  
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#### CENTRAL ARKANSAS

6812 Lindsey Rd.  
Little Rock, AR 72206  
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## AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: —



Stator test results: Salvageable

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	2.825	2.830	2.830	0.2

Leads/jumpers: Ok

Lead jumper Image. :



If other, leads/jumpers:



MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

### Cause of Failure

Found fatigue I one of the output bearings. Three seal surface need repair output shaft and key way bad ode End bell housing fits bad

### Comments

Service Tech name: Robert Wiley

Service Tech signature:

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

#### WEST TENNESSEE

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