

Job Information

Job #: 96857

Date: May 14, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Searcy water and sewer systems

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Us

Enclosure : Totally Enclosed
Fan Cooled

Enclosure Type image

Serial#:

Model#:

Service Factor: 1.15

Frame: 6

Horsepower/kW: 5.0

Rated RPM: 1150

Rated Amps: 15.4/7.7

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: FAG

Insulated: No

Bearing DE Size: 5211

Bearings ODE: Worn

Bearings ODE make: FAG

Bearing Type: Ball

Bearing ODE Size: 6206

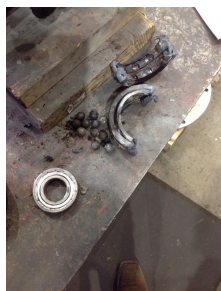
Bearings Retainer: Yes

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: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: Other

Seals DE size:

Seals DE (inbound) condition : Bad

Seals ODE type: N/A

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: None

Shaft Image:



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Mechanical Inspection (Continued)

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

4 bolts



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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: 9

Terminal Markings:

Length of leads: 8in

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: 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: 27

Num broken bars: 0

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: Coil head

If other, stator failure:

Stator Image:



Failure Image:



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AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

Winding Thermal Protection: Yes

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	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: Good

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: 5211

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6206

Retainer condition: Good



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Mechanical Inspection (Continued)

Seals DE condition : Brittle

Brg. Seats DE: Good

Seals DE type: Other

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition : Bad

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: Good

Foot/Flange condition: Ok

Endbell DE size: 3.9377

Foot flatness: Pass

Endbell DE insulated?: —

Does Air Gap Meet Customer or EASA spec(<10% variation)?

Endbell ODE size: 2.4413

—

Endbell ODE insulated?: —

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Conclusion

Component Failure

Cause of Failure

Comments

Windings are blown, bushing is worn, DE seals are bad, and one eye bolt is broke, and 4 bolts missing on DE side. .
Recommend new bearings, new bushings, new seals, rewind, and eye bolt replaced and 4 new bolts

Service Tech name: Chris Wiley

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Chris Wiley', is written over a large, faint, light-gray watermark of the same signature.

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