

Job Information

Job #: 96197

Date: November 8, 2019

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Maple creek sewer

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Barnes

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 61680407-0414

Model#: 45e7544I

Service Factor: 1.15

Frame:

Horsepower/kW: 7.5

Rated RPM: 1750

Rated Amps: 13.4

Rated Voltage: 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): Water

Shaft rotation: CCW Contaminant(s) Amt: Full

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn Bearings DE make: NACHI

Insulated: No Bearing DE Size: 5307 C3

Bearings ODE: Worn Bearings ODE make: NACHI

Bearing Type: Ball Bearing ODE Size: 6205 C3

Bearings Retainer: No 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: Thermal Overloads

Lubrication brand inbound: Unknown

Thermal Protection device ODE: Good

Lubrication brand outbound: Unknown

Grease Amt DE: N/A

Grease Cond. DE: Other

Grease Amt ODE: N/A

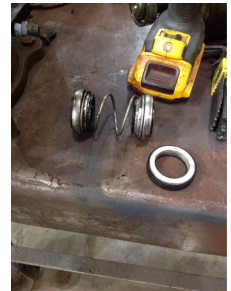
Grease Cond. ODE: Other

Seals DE type: Other

Seals Image:

Seals DE size: 1.25x1.875

Seals DE (inbound) condition : Bad

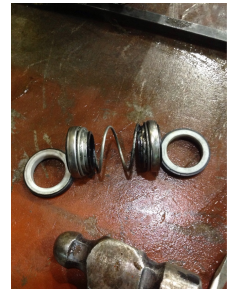


Seals ODE type: Other

Seals Image 2:

Seals ODE size: 1.25x1.875

Seals ODE (inbound) condition : Bad



Shaft damage cause: None

Shaft Image:



Mechanical Inspection (Continued)

Brg. Image:



Water jacket: N/A

Fan: N/A

Frame cond.: Good



Motor Mount Position: Other

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:

Length of leads: 15 inches

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads: 10 awg

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: Crimp

Connections As Received:

Lug Condition: Good

Terminal

Lugs

Lug size: Same

Lug Attachment: —



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 46

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Coil-Coil short

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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

AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: Good

Winding Thermal Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

Surge incoming: Bad

Hi-pot incoming: Bad

Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

Resistive imbalance

Incoming

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: No

Type of grounding device:

Bearing DE Size: 5307 C3

Shaft runout(TIR-Inbound): 0.001

Bearing ODE Size: 6205 C3

Retainer condition: —



MILLINGTON, TN

LITTLE ROCK, AR

Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Good

Seals DE type: Other

If DE undersized, amt.:

Seals DE size: 1.25x1.875

Brg. Seats ODE: Good

Seals DE (inbound) condition : Bad

If ODE undersized, amt.:

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Other

Seals ODE size: 1.25x1.875

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition : Bad

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 3.1502

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 2.0478

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Seals, bearings, windings

Cause of Failure

Seals failed

Comments

Service Tech name: Trevor Hall

Service Tech signature:

A handwritten signature in black ink, appearing to read 'Trevor Hall', written in a cursive style.**WEST TENNESSEE**

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