

Job Information

Job #: 94745

Date: November 17, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Firestone

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Reuland

Enclosure : Totally Enclosed
Non-Ventilated

Enclosure Type image

Serial#: 0075E-1BEN-0009

Model#: 887847A-12

Service Factor:

Frame: 286U

Horsepower/kW: 7.5/2.81

Rated RPM: 1200/450

Rated Amps: 10.7/11.0

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): None

Shaft rotation: Bi-directional

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Not Available

Shaft runout(TIR-Inbound):



Bearings DE: Worn

Bearings DE make: NTN

Insulated: No

Bearing DE Size: 6309 ZZ

Bearings ODE: Worn

Bearings ODE make: NTN

Bearing Type: Ball

Bearing ODE Size: 6309 ZZ

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Not Available



Thermal Protection



Not Available



WEST TENNESSEE

7030 Ryburn Drive
Millington, TN 38053
Phone 901-873-5300
Fax 901-873-5301

CENTRAL ARKANSAS

6812 Lindsey Rd.
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Phone 501-375-9178
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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: 1/4

Grease Cond. DE: Hard

Grease Amt ODE: 1/4

Grease Cond. ODE: Hard

Seals DE type: N/A

Seals Image:



Seals DE size:

Not
Available

Seals DE (inbound) condition :



Seals ODE type: N/A

Seals Image 2:



Seals ODE size:

Not
Available

Seals ODE (inbound) condition
:



Shaft damage cause: Spline bad

Shaft Image:



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Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves image:

Not
Available

Water jacket: N/A

Not
Available

Fan: N/A

Not
Available

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



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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: 6

Terminal Markings:

Length of leads: 8"

REF: NEMA Std. 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:

Lug Condition: —

Terminal

Lugs

Lug size:

Lug Attachment: —

Not
Available

Not
Available

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AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 57

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: In slot

If other, stator failure:

Stator Image:



Failure Image:



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AC Electrical Inspection (Continued)

Winding color: Still has color

Winding image

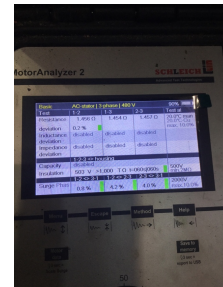
Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: —

Stator test results: 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	1.4	1.4	1.4	0.2

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Worn

Bearings Retainer: No

Type of grounding device:

Bearing DE Size: 6309 ZZ

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6309 ZZ

Retainer condition: —



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Mechanical Inspection (Continued)

Seals DE condition : Worn

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 : Worn

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: 1.7723

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 1.7725

—

Endbell ODE insulated?: No

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Conclusion

Component Failure

Splined shaft worn

Cause of Failure

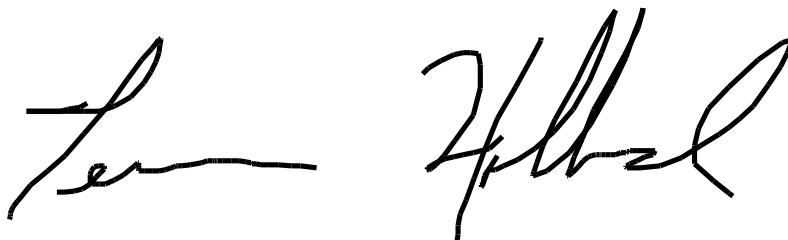
Splined output shaft worn.

Comments

All electrical tests check good. Mechanical checks revealed worn splines on the D.E. shaft.

Service Tech name: Terrence Holland /Lynn McDonald

Service Tech signature:

Two handwritten signatures in black ink. The first signature is 'Terrence' and the second is 'Holland'.