

Job Information

Job #: 94036

Date: March 6, 2018

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: U.p.railroad

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

Name Plate Information

Manufacturer: Hydromatic

Enclosure : Totally Enclosed
Non-Ventilated

Enclosure Type image

Serial#: G85371

Model#: HPG200M4-2

Service Factor:

Frame:

Horsepower/kW: 2

Rated RPM:

Rated Amps: 4.1

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: CCW Contaminant(s) Amt: None

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): .001

Bearings DE: Worn Bearings DE make: Other

Insulated: No Bearing DE Size:

Bearings ODE: Worn Bearings ODE make: Other

Bearing Type: Ball Bearing ODE Size: 2.4409

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: Unknown

Thermal Protection device ODE: —

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:

Seals DE (inbound) condition :

Seals ODE type: Other

Seals Image 2:



Seals ODE size:

Seals ODE (inbound) condition :

Shaft damage cause: None

Shaft Image:



Mechanical Inspection (Continued)

Brg. 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 type="checkbox"/> None |

Other missing parts

Endbell Image:





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	Yes
DE @ 90	ODE @ 90	
DE @ 180	ODE @ 180	
DE @ 270	ODE @ 270	

AC Electrical Inspection

Number of leads: 9

Terminal Markings:

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: Worn

Lug type:

Connections As Received:

Lug Condition: —	Terminal	Lugs
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Lug size:

Lug Attachment: —

AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor

Rotor Condition: Ok

Num rotor bars:
Num broken bars:



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:



AC Electrical Inspection (Continued)

Winding color: Like new

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

Winding Thermal Protection DE: —

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	499.999	499.999	71.747	

Leads/jumpers: Loose connection

Lead jumper Image:



If other, leads/jumpers:

Conclusion

Component Failure

Seals.

Cause of Failure

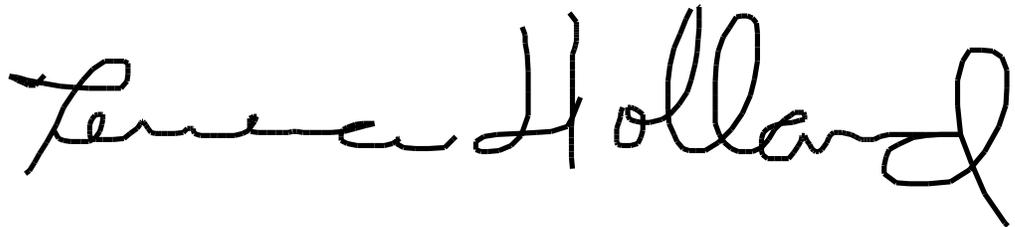
Seal failure. Also found loose connections inside cord cap.

Comments

Need complete rebuild / seal, o rings and bearing kits as well as a new power cord cap assembly, Stator requires a rewind as well.

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink that reads 'Terrence Holland'.