

Job Information

Job #: 141815

Date: February 10, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Hydro flow pumps

Reason:

Contact:

Motor#: 141815

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: MARATHON

Enclosure : Totally Enclosed
Air Over (TEAO)

Enclosure Type image

Serial#:

Model#:

Service Factor:

Frame: BA90AS

Horsepower/kW: 1/2

Rated RPM: 825

Rated Amps: 6.60/3.30

Rated Voltage: 115/230

Phase: 1

Cycles: 60/50

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): Dirt

Shaft rotation: Bi-directional

Contaminant(s) Amt: Other

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: 6203ZZ

Bearings ODE: Worn

Bearings ODE make: Other

Bearing Type: Ball

Bearing ODE Size: 6203ZZ

Bearings Retainer: No

Thermal Protection: Yes

Retainer condition: —

Thermal Protection Type: Thermocouple

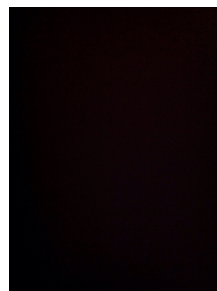
Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: Bad

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: Gritty

Grease Amt ODE: Full

Grease Cond. ODE: Gritty

Seals DE type: N/A

Seals Image:

Seals DE size: N/A

Seals DE (inbound) condition :

Seals ODE type: N/A

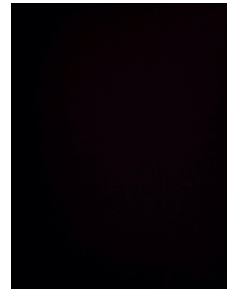
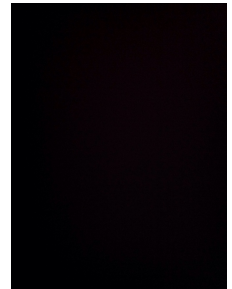
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition
:

Shaft damage cause: None

Shaft Image:

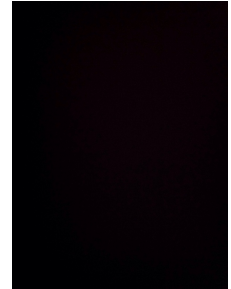


Mechanical Inspection (Continued)

Brg. Image:



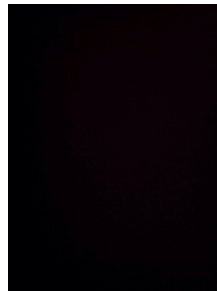
Bushings/sleeves image:



Water jacket: Ok



Fan: N/A



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

Missing parts?

- | | | |
|---|----------------------------------|--------------------------------|
| <input checked="" 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:

**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

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: —

Terminal Markings: 5 leads

Length of leads: 8"

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

Size of leads: 16

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: N/A

Connections As Received: White, red ,blue open orange an black together

Lug Condition: —

Lug size: N/A

Lug Attachment: Replace

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 52

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

Stator condition: Roast-out

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: Dull black

Winding image

Winding Thermal Protection: Yes

Winding condition : Charred

Winding Thermal Protection DE: —

Winding Thermal Protection ODE: Bad

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: Replace

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

Windings ,bearings ,thermo

Cause of Failure

Windings are roasted

Comments

The cap 30uf 370 vac is good
Cuplin is flush
Spring washer in the ODE
Rewind stator
Two new bearings

Service Tech name: Michael Jordan

Service Tech signature:

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