

Job Information

Job #: 142449

Date: May 11, 2020

Priority: —

Authorized OT: No

Authorized by:

Customer Information

Name: Micro port ortho

Reason:

Contact:

Motor#: 142449

PO#:

Application: Direct Drive

Special notes:

Name Plate Information

Manufacturer: Reliance

Enclosure : Totally Enclosed
Air Over (TEAO)

Enclosure Type image

Serial#: S9005387-001

Model#: 90500011

Service Factor: 1.0

Frame: 326TY/200L

Horsepower/kW: 70KW

Rated RPM: 1800

Rated Amps: 136

Rated Voltage: 400

Phase: 3

Cycles: 60

Special design: No



Nameplate

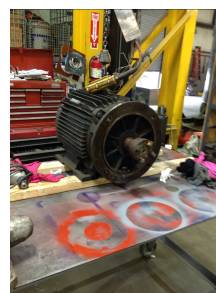
DE

ODE

F1

F2

Top



Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes Contaminant(s): Grease

Shaft rotation: Bi-directional Contaminant(s) Amt: Other

Shaft grounding device present?: No Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound): Bad

Bearings DE: Worn Bearings DE make: NTN

Insulated: No Bearing DE Size: 6213ZZ

Bearings ODE: Worn Bearings ODE make: NTN

Bearing Type: Ball Bearing ODE Size: 6311ZZ

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Bad Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



WEST TENNESSEE

7030 Ryburn Drive
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CENTRAL ARKANSAS

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Phone 501-375-9178
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Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: N/A

Lubrication brand inbound: Unknown

Thermal Protection device ODE: N/A

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: Watery

Grease Amt ODE: Full

Grease Cond. ODE: Watery

Seals DE type: N/A

Seals Image:

Seals DE size: N/A

Seals DE (inbound) condition : N/A

Seals ODE type: N/A

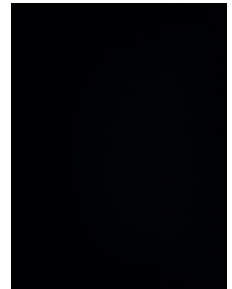
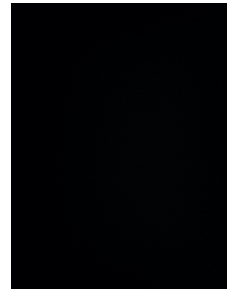
Seals Image 2:

Seals ODE size: N/A

Seals ODE (inbound) condition : N/A

Shaft damage cause: Other

Shaft Image:

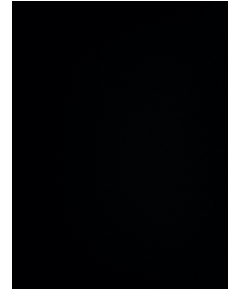


Mechanical Inspection (Continued)

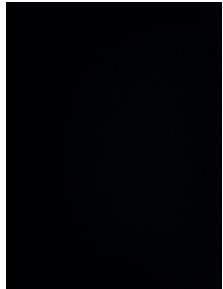
Brg. Image:



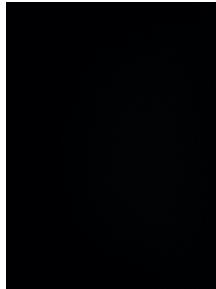
Bushings/sleeves image:



Water jacket: N/A



Fan: N/A



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 checked="" 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

—

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

AC Electrical Inspection

Number of leads: 6

Terminal Markings: 1-1 / 2-2 / 3-3

Length of leads: 10"

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

Size of leads: 6

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: Reg

Connections As Received: Open

Lug Condition: Warn

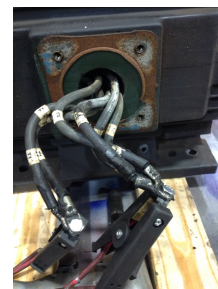
Lug size: 6

Lug Attachment: Replace

Terminal



Lugs



AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 40

Num broken bars: 0

Rotor



Rotor Test Results

Visual: Pass

Growler: Pass

Single phase: Pass

Stator type: Factory

If other, stator type:

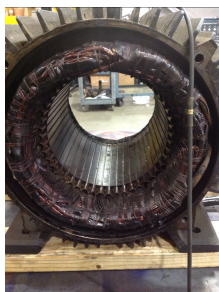
Stator condition: Phase-to-phase short

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: Dull black

Winding image

Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal
Protection DE: —Winding Thermal
Protection ODE: —

Stator test results: Rewind



Megs incoming: Good

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:





MILLINGTON, TN

LITTLE ROCK, AR

Conclusion

Component Failure

BEARINGS - DRIVE END JRL - BEARING RETAINER ODE - BAD BEARING HOUSING ODE - BAD WINDING

Cause of Failure

Bearing went down causing JRL to go bad which put the windings under strain causing stator too go bad

Comments

Machine work on DRIVE END JRL
Machine work on OPE END BELL
Two new bearings 6311zz /6213zz
REWIND STATOR
ORDER 1 NEW COUPLING (KTR-ROTEX 48 CH-NR 35901...) # on the back is (1174)

Service Tech name: Michael

Service Tech signature:

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