

## Job Information

Job #: 138747

Date: December 18, 2018

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Motion industries

Reason: Motor inspection

Contact: Derick Turner

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Baldor

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: X1806217504

Model#: 1021w

Service Factor:

Frame: Tens

Horsepower/kW: 1.5

Rated RPM: 1500/1800

Rated Amps: 2.6/1.3

Rated Voltage: 208-230/460

Phase: 3

Cycles:

Special design: No



Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No

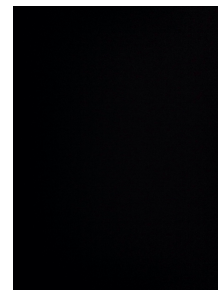
Contaminant(s): None

Shaft rotation: CW

Contaminant(s) Amt: None

Shaft grounding device present?: No

Contaminant Image:



Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Other

Bearings DE make: FAG

Insulated: No

Bearing DE Size: 6206

Bearings ODE: Other

Bearings ODE make: FAG

Bearing Type: Ball

Bearing ODE Size: 6206

Bearings Retainer: No

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

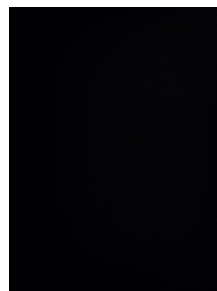
Bearing Type Image



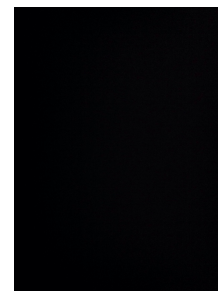
Bearing Make Image



Bearing Retainer Image



Thermal Protection





MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Lubrication Type: Grease

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: Full

Grease Cond. DE: New

Grease Amt ODE: Full

Grease Cond. ODE: New

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

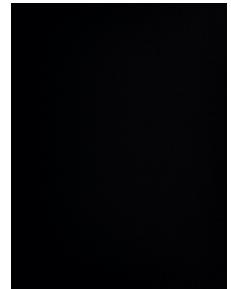
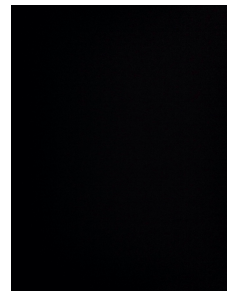
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: None

Shaft Image:



### WEST TENNESSEE

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

### CENTRAL ARKANSAS

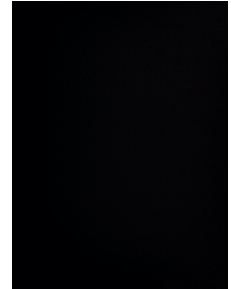
6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## Mechanical Inspection (Continued)

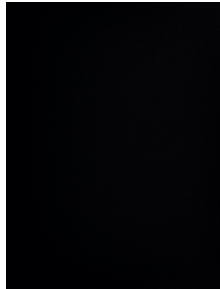
Brg. Image:



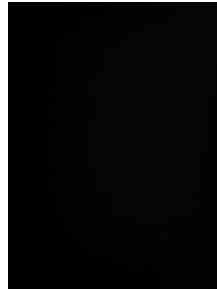
Bushings/sleeves image:



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:





MILLINGTON, TN

LITTLE ROCK, AR

## 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: 3

Terminal Markings:

Length of leads: 12 inches

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

Size of leads: 12-14 wag

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: —

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## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 48

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:

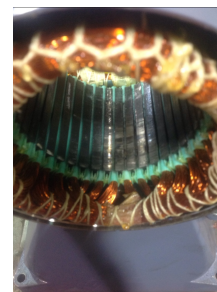
Failure location: In slot

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Like new

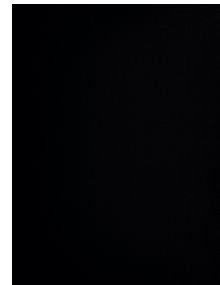
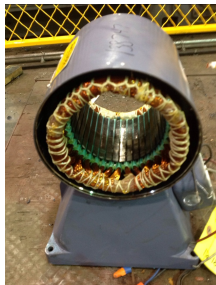
Winding image

Winding Thermal Protection: No

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

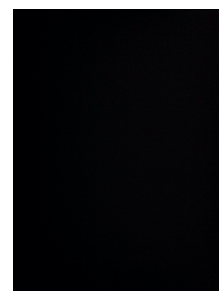
Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



## Conclusion

### Component Failure

Loose frame bolts

### Cause of Failure

### Comments

Found 2 loose frame bolts. Causing #2 housing to not set in stator properly causing a bind on #2 end that caused the iron from rotor to drag on iron in stator. In doing so the wedges at the bottom got burned though burning some of the windings. Recommend rewind or replace.

Service Tech name: Dan Mahan

Service Tech signature:

A handwritten signature in black ink, appearing to read 'D - m' followed by a horizontal line.