

## Job Information

Job #: 139158

Date: February 20, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: S Chemours Co

Reason:

Contact: Donnie White

Motor#:

PO#:

Application: Radial Load

Special notes:

## Name Plate Information

Manufacturer: US Motors

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#:

Model#:

Service Factor:

Frame: 445TP

Horsepower/kW: 200

Rated RPM: 1775

Rated Amps: 236

Rated Voltage: 460

Phase: 3

Cycles:

Special design: No



Nameplate

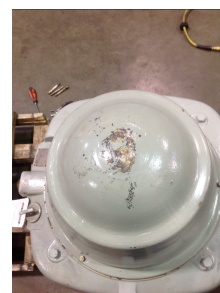
DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: 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):

Bearings DE: Worn

Bearings DE make: NTN

Insulated: No

Bearing DE Size: 73228

Bearings ODE: Worn

Bearings ODE make: NTN

Bearing Type: Ball

Bearing ODE Size: 6215ZZ

Bearings Retainer: Yes

Thermal Protection: No

Retainer condition: —

Thermal Protection Type: —

Bearing Type Image



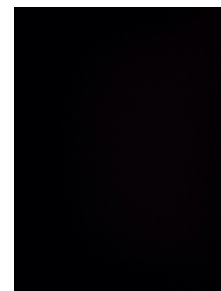
Bearing Make Image



Bearing Retainer Image



Thermal Protection





MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Mobile Polyrex EM

Thermal Protection device ODE: —

Lubrication brand outbound: Mobile Polyrex EM

Grease Amt DE: 0

Grease Cond. DE: Watery

Grease Amt ODE: Full

Grease Cond. ODE: Other

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

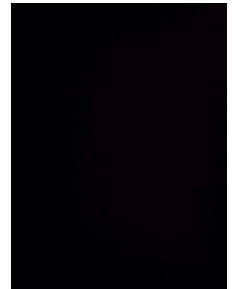
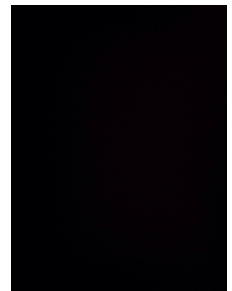
Seals Image 2:

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

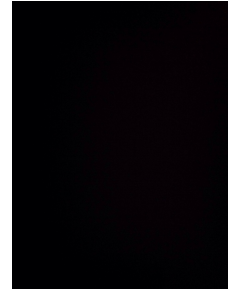
6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## Mechanical Inspection (Continued)

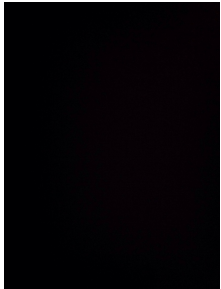
Brg. Image:



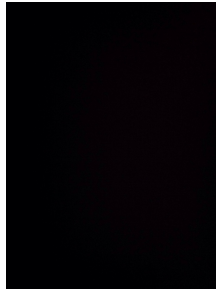
Bushings/sleeves image:



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 checked="" 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

—

DE @ 90

ODE @ 90

DE @ 180

ODE @ 180

DE @ 270

ODE @ 270

## AC Electrical Inspection

Number of leads: 6

Terminal Markings:

Length of leads: 18

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

Size of leads: 2AWG

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: Standard

Connections As Received:

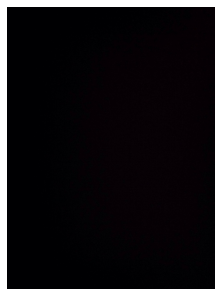
Lug Condition: Good

Terminal

Lugs

Lug size: 2

Lug Attachment: Acceptable



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars: 56

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: Coil head

If other, stator failure:

Stator Image:



Failure Image:



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## AC Electrical Inspection (Continued)

Winding color: Dull black

Winding image

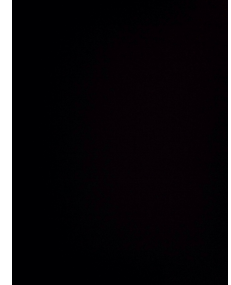
Winding Thermal Protection: No

Winding condition : Solid

Winding Thermal  
Protection DE: —

Winding Thermal  
Protection ODE: —

Stator test results: Rewind



Megs incoming: Bad

Surge incoming: Bad

Hi-pot incoming: Bad

### Winding Resistance Incoming

Phases A to B

Phases B to C

Phases C to A

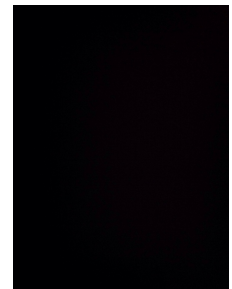
Resistive imbalance

Incoming

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:



## Conclusion

### Component Failure

ODE Bearing and windings

### Cause of Failure

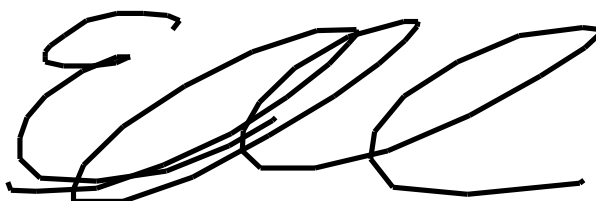
Bearing

### Comments

ODE Bearing failed causing iron to iron rub which caused windings to overheat and fail

Service Tech name: Erich Sodam

Service Tech signature:

A handwritten signature in black ink, appearing to be 'Erich Sodam', written in a cursive style.