

## Job Information

Job #: 97038

Date: July 13, 2020

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Certainteed

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Derrick

Enclosure : Totally Enclosed  
Non-Ventilated

Enclosure Type image

Serial#: F-2091

Model#: F-5-36-460/480  
6-01

Service Factor: 1.0

Frame:

Horsepower/kW: 1.5

Rated RPM: 3600

Rated Amps: 2.5

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

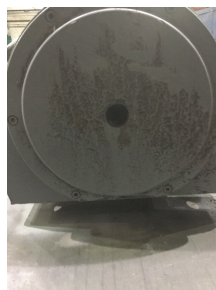
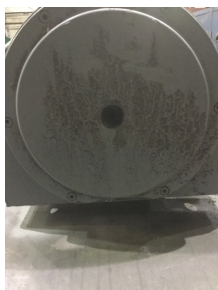
DE

ODE

F1

F2

Top



### WEST TENNESSEE

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### CENTRAL ARKANSAS

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## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: No Contaminant(s): None

Shaft rotation: Bi-directional 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: NACHI

Insulated: No Bearing DE Size: 6315 C3

Bearings ODE: Worn Bearings ODE make: NACHI

Bearing Type: Ball Bearing ODE Size: 6315 C3

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: — Thermal Protection Type: —

Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection





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## Mechanical Inspection (Continued)

Lubrication Type: Other

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: New

Grease Amt ODE: 0

Grease Cond. ODE: New

Seals DE type: Slinger

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: Keyway bad

Shaft Image:



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## Mechanical Inspection (Continued)

Brg. Image:



Bushings/sleeves 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 checked="" type="checkbox"/> None |

Endbell Image:



Other missing parts



## 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:

REF: NEMA Std. 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: Good

Lug type:

Connections As Received:

Lug Condition: Good

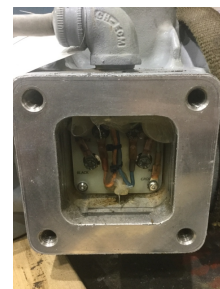
Lug size:

Lug Attachment: —

Terminal



Lugs



## AC Electrical Inspection (Continued)

Rotor Type: Cast Aluminum

Rotor Condition: Ok

Num rotor bars:

Num broken bars:

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:

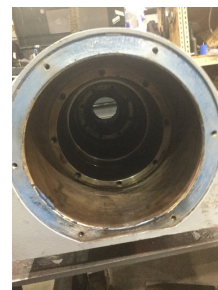
Failure location: In slot

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: Yes

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	0.00	0.00	0.00	0.00

Leads/jumpers: Ok

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Damaged

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: 315

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6315

Retainer condition: —



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## Mechanical Inspection (Continued)

Seals DE condition : Worn

Brg. Seats DE: Undersized

Seals DE type: N/A

If DE undersized, amt.: 2.9497

Seals DE size:

Brg. Seats ODE: Undersized

Seals DE (inbound) condition :

If ODE undersized, amt.: 2.9495

Seals ODE condition : Worn

Shaft damage: Replace

Seals ODE type: N/A

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Bad

Foot/Flange condition: Ok

Endbell DE size: 6.3051

Foot flatness: Pass

Endbell DE insulated?: No

Does Air Gap Meet Customer or EASA spec(&lt;10% variation)?

Endbell ODE size: 6.3044

—

Endbell ODE insulated?: —

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## Conclusion

### Component Failure

### Cause of Failure

### Comments

Both bearing housing fit bad Both bearing hubs are bad .#1 and #2 shaft bad keyway and snap ring grove also one shoulder bad on #1 end .Both spacers and weights are bad

Service Tech name: Robert Wiley

Service Tech signature:

A handwritten signature in black ink that reads 'Robert Wiley'.

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