

## Job Information

Job #: 96462

Date: January 18, 2020

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Firestone

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: GE

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#:

Model#: 5CD144FCOD4B007

Service Factor:

Frame: 186ATC

Horsepower/kW: 5

Rated RPM: 1750/2300



Armature

Volts 500

Amps 8.5

Fields

Volts 300

Amps 0.42

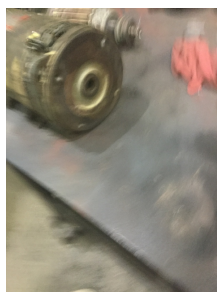
Nameplate



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

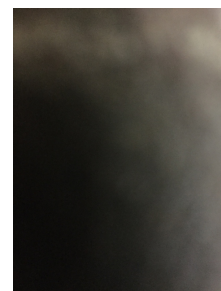
Shaft Condition: Damaged

Contaminant Image:

Shaft grounding device present?: No

Type of grounding device:

Shaft runout(TIR-Inbound):



Bearing Type Image



Bearing Make Image



Bearing Retainer Image



Thermal Protection



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: 0

Grease Cond. DE: Other

Grease Amt ODE: 0

Grease Cond. ODE: Other

### WEST TENNESSEE

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

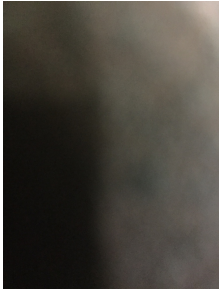
### CENTRAL ARKANSAS

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

## Mechanical Inspection (Continued)

Brushholders	Number	2	Brushes	Number	2
	Condition	Good		Size	
	Size			Shunt Len.	
	Spring type			Insulated	No
				TermType	

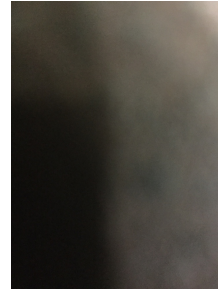
Brg Image



Shaft Image



Brushing/sleeves



End bell



Water jacket: Ok



Fan: Ok



Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Foot/Flange condition: Ok

Foot flatness: Pass



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Missing parts?

☐ J-Box cover☐ O-rings☐ J-Box☐ HH cover☐ Glands☐ None

Other missing parts

Bolts and brushes

### 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

## Electrical Inspection

☐ Move armature imbalance to Assemble

Commutator: Salvageable

## Winding Inspection

Meg Test IP to Flds: Good

Polarity Check IP to Flds: No

Meg Series to Shunt: Good

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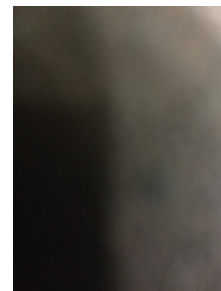
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## DC Electrical Inspection

Brushes: Normal wear

Brush Image:



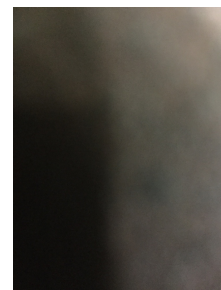
Brush holders: Salvageable Qty. 2

Insulators: Salvageable Qty. 2

Lead support stud: Salvageable Qty. 2

Alternate brush image:

Rocker ring: Salvageable Qty. 1



Commutator Type: Soldered

Commutator images

Commutator Hardness: Good

Commutator Condition : Salvageable

Commutator Film: Ok



Armature type: Factory If other

Failure mode: Ok If other

Failure location: Front V ring If other

Armature condition: Solid If other

Winding color: Like new

Armature images



## DC Electrical Inspection (Continued)

### Armature Test Results

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Megs: Good Hi-pot: Good Core loss: Good

Armature image



### Fields condition

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Series/Stab condition: Ok

Fields condition image:

Shunts condition: Roast out

InterCoils condition: Ok



### Fields test results

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Series/Stab Meg: Ok

Hi Pot: Ok

Resistance: Ok

Shunts Meg: Ok

Hi Pot: Ok

Resistance: Bad

InterCoils Meg: Ok

Hi Pot: Ok

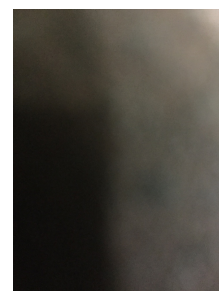
Resistance: Ok

Thermistors: In use

Field Test image

RTD: In use

At



Thermostat: Open

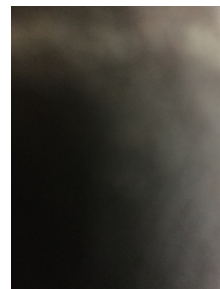


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Leads/jumpers: Ok

Lead jumper Image:



## Conclusion

Component Failure

Cause of Failure

## Comments

DE AND ODE END BELL HOUSING FIT BAD OUT PUT SHAFT AND KEYWAY BAD BAD FIELDS

Service Tech name: Robert Wiley

Service Tech  
signature:

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