



MILLINGTON, TN

LITTLE ROCK, AR

## Job Information

Job #: 95674

Date: June 24, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name:

Reason:

Contact:

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: Johnson Controls

Enclosure : Weather Protected  
I (WPI)

Enclosure Type image

Serial#: K12-200567

Model#: BF71

Service Factor: 1.15

Frame: 445TPA

Horsepower/kW: 200

Rated RPM: 1785

Rated Amps: 228

Rated Voltage: 460

Phase: 3

Cycles: 60

Special design: No



Nameplate

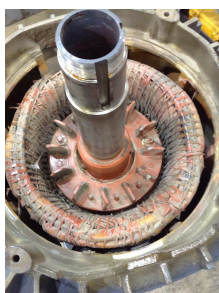
DE

ODE

F1

F2

Top

**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

Inspect bolt holes and fasteners. Validate correct fasteners.

Does the shaft turn freely?: Yes

Contaminant(s): None

Shaft rotation: CW

Contaminant(s) Amt: None

Shaft grounding device  
present?: No

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Worn

Bearings DE make: Koyo

Insulated: No

Bearing DE Size: 7322B

Bearings ODE: Worn

Bearings ODE make: Koyo

Bearing Type: Ball

Bearing ODE Size: 6215J

Bearings Retainer: Yes

Thermal Protection: Yes

Retainer condition: Good

Thermal Protection Type: Thermocouple

Bearing Type Image



Bearing Make Image



Bearing Retainer Image

Thermal Protection

## Mechanical Inspection (Continued)

Lubrication Type: Oil

Thermal Protection device DE: —

Lubrication brand inbound: Unknown

Thermal Protection device ODE: —

Lubrication brand outbound: Unknown

Grease Amt DE: N/A

Grease Cond. DE: Other

Grease Amt ODE: 1/2

Grease Cond. ODE: Watery

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: 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)

Water jacket: N/A

Fan: N/A

Frame cond.: Good



Motor Mount Position: Horizontal/Foot mount

Endbell type: Single piece

### Missing parts?

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

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: 6

Terminal Markings:

Length of leads: 12"

REF: NEMA Stds. 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: —

Terminal

Lugs

Lug size:

Lug Attachment: —



## 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:

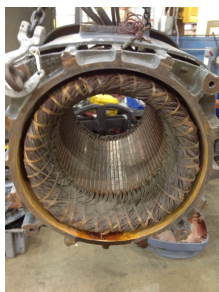
Stator condition: Ok

If other, stator condition:

Failure location: In slot

If other, stator failure:

Stator Image:



#### 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



## AC Electrical Inspection (Continued)

Winding color: Painted

Winding image

Winding Thermal Protection: Yes

Winding condition : Solid

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

Stator test results: Rewind



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

If other, leads/jumpers:

## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition: Good

Bearings Retainer: Yes

Type of grounding device:

Bearing DE Size: 7322B

Shaft runout(TIR-Inbound):

Bearing ODE Size: 6215J

Retainer condition: Good



MILLINGTON, TN

LITTLE ROCK, AR

## Mechanical Inspection (Continued)

Seals DE condition : None

Brg. Seats DE: Good

Seals DE type: N/A

If DE undersized, amt.:

Seals DE size:

Brg. Seats ODE: Good

Seals DE (inbound) condition :

If ODE undersized, amt.:

Seals ODE condition : Worn

Shaft damage: OK

Seals ODE type: Slinger

Seals ODE size:

Bushings/sleeves DE: Ok

Seals ODE (inbound) condition :

Bushings/sleeves ODE: Ok

Endbell fits/damage: Good

Foot/Flange condition: Ok

Endbell DE size: 4.3315

Foot flatness: Pass

Endbell DE insulated?: No

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

Endbell ODE size: 2.9533

—

Endbell ODE insulated?: —

**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





MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

Windings

### Cause of Failure

Sparks seen coming from windings by customer. Recommend rewind due to insulation integrity being compromised.

### Comments

Disassembly and measurements by Roberson/report done by T. Holland

Service Tech name: Terrence Holland

Service Tech signature:

A handwritten signature in black ink, appearing to read 'T. Holland', written in a cursive style.

#### 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