

### **Job Information**

Job #: 95736 Date: July 31, 2019

Priority: — Authorized OT: No Authorized by:

## **Customer Information**

Name: Future fuel Reason:

Contact: Motor#: PO#:

Application: – Special notes:

### **Name Plate Information**

Manufacturer: Reliance Enclosure: Totally Enclosed Enclosure Type image

Fan Cooled

Serial#: Model#: 24H7501-L

Service Factor: Frame: L405LPZ16

Horsepower/kW: 75 Rated RPM: 1190

Rated Amps: Rated Voltage: 460

Phase: 3 Cycles: 60

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: Bi-directional Contaminant(s) Amt: None

Shaft grounding device

present?:

No

Type of grounding device:

Shaft runout(TIR-Inbound):

Bearings DE: Good Bearings DE make: FAG

Insulated: No Bearing DE Size:

Bearings ODE: Good Bearings ODE make: FAG

Bearing Type: Ball Bearing ODE Size:

Bearings Retainer: Yes Thermal Protection: Yes

Retainer condition: Good Thermal Protection Type: —

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: Full Grease Cond. DE: New

Grease Amt ODE: Full Grease Cond. ODE: New

Seals DE type: Slinger Seals Image:

Seals DE size:

Seals ODE type: Slinger

Seals ODE size:

Seals ODE (inbound) condition

Seals DE (inbound) condition:

Shaft damage cause: None

Shaft Image:





Bushings/sleeves image:



Water jacket: N/A Fan: Ok Frame cond.: Good





Motor Mount Position: Horizontal/Foot mount Endbell type: Single piece

Missing parts? Endbell Image:

☐ J-Box cover ☐ O-rings ☐ J-Box

☐ HH cover ☐ Glands ☐ None

Other missing parts







Air Gap Meaurements (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 5-Black P1-No color assigned

2-White 6-No color assigned P2-Brown

3-Orange 7-No color assigned

Lead condition: Good 4-Yellow 8-Red

Connections As Received: Lug type:

Lug Condition: — Terminal Lugs

Lug size:

Lug Attachment: —



# **AC Electrical Inspection (Continued)**

Rotor Type: Cast Aluminum

Ok

Rotor

Rotor Condition:

Num rotor bars:

Num broken bars:

#### **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:







## **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

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:

Shaft runout(TIR-Inbound): Bearing ODE Size:

Retainer condition: Good



Seals DE condition: Worn Brg. Seats DE: Good

Seals DE type: If DE undersized, amt.: Slinger

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

Bushings/sleeves DE: Ok Seals ODE size:

Bushings/sleeves ODE: Ok Seals ODE (inbound) condition:

> Endbell fits/damage: Foot/Flange condition: Good Ok

Endbell DE size: Foot flatness: **Pass** 

Endbell DE insulated?: No

> Does Air Gap Meet Customer or EASA spec(<10% variation)?

Endbell ODE insulated?: No

Endbell ODE size:



### Conclusion

#### **Component Failure**

Teflon bushing melted

#### **Cause of Failure**

#### **Comments**

Customer believes the power cord assembly became entangled causing the motor bushing to overheat and fail prematurely.

Service Tech name: Terrence Holland

Service Tech signature: