

#### MILLINGTON, TN LITTLE ROCK, AR

## **Job Information**

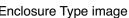
Job #:	96057				Date:	October 2, 2019
Priority:	_	Authorized OT:	No	Authorized by:		

## **Customer Information**

Name:	Welspun		Reason:	
Contact:		Motor#:		PO#:
Application:	_	Special notes:		

## **Name Plate Information**

Manufacturer:	U.S. Motors	Enclosure :	Totally Enclosed Fan Cooled	Enclosure Type imag
Serial#:	T07-391400-0001- GT	Model#:	HT30S2BLG-C	
Service Factor:	1.15	Frame:	286 TPH	
Horsepower/kW:	30	Rated RPM:	1755	
Rated Amps:	74/37	Rated Voltage:	230/460	
Phase:	3	Cycles:	60	
Special design:	No			





Nameplate

DE

ODE

F1

F2

Тор







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## **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:	FAG
Insulated:	No	Bearing DE Size:	7310 BTVP
Bearings ODE:	Worn	Bearings ODE make:	FAG
Bearing Type:	Ball	Bearing ODE Size:	6210 2Z/C3
Bearings Retainer:	Yes	Thermal Protection:	No
Retainer condition:	_	Thermal Protection Type:	_

#### Bearing Type Image



Bearing Make Image



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# Bearing Retainer Image



**Thermal Protection** 



# **Mechanical Inspection (Continued)**

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:	Gritty
Grease Amt ODE:	Full	Grease Cond. ODE:	Gritty
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:	



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#### **Mechanical Inspection (Continued)**

Brg. Image:



Water jacket: N/A Fan: Ok



Frame cond.: Good



Single piece

Endbell type: Motor Mount Position: Horizontal/Foot mount Missing parts? Endbell Image: J-Box cover O-rings J-Box HH cover None Glands





Other missing parts

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## **Mechanical Inspection (Continued)**

Air Gap Meaurements (N/A on Single Pie	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:	9	Terminal Markings:			
Length of leads:	10"	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	5-Black 6-No color assigned 7-No color assigned	P1-No color assigned P2-Brown	
Lead condition:	Good	4-Yellow	8-Red		
Lug type:		Connections As Re	eceived:		
Lug Condition:	_		Terminal	Lugs	
Lug size:					
Lug Attachment:	_				

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# **AC Electrical Inspection (Continued)**

Rotor Type:	Cast Aluminum			Rotor
Rotor Condition:	Ok	Num rotor bars: Num broken bars:		
Rotor Test Results				
Visual: Pass	Grow	vler: Pass	Single phase:	Pass
Stator type: Stator condition:	Factory Ok	If other, stator ty If other, stator conditi	on:	
Failure location:	Other	If other, stator failu	ire:	
Stator Image:				

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## **AC Electrical Inspection (Continued)**

Winding color:	Still has color	Winding	image	Winding Therma	I Protection:	: Yes	
Winding condition :	Solid						
Winding Thermal Protection DE:	_						
Winding Thermal Protection ODE:	_	$\geq$					
Stator test results:	Salvageable						
Megs incoming: Go	od	Surge incoming:	Good	Hi-pot in	coming:	Good	
Winding Resistance Inc	coming						
Phase	es A to B	Phases B to C	Phase	s C to A	Resistive i	mbalance	
Incoming							
Leads/jumpe	ers: Ok						
If other, leads/jumpe	ers:						

# **Mechanical Inspection**

Inspect bolt holes and fasteners. Validate correct fasteners.

Shaft Condition:	Good	Bearings Retainer:	Yes
Type of grounding device:		Bearing DE Size:	7310
Shaft runout(TIR-Inbound):		Bearing ODE Size:	6210

Retainer condition: 0

n: Good

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# **Mechanical Inspection (Continued)**

Seals DE condition :	Worn	Brg. Seats DE:	Good
Seals DE type:	Slinger	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:	ОК
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:	4.3312	Foot flatness:	Pass
Endbell DE insulated?:	No		tomer or EASA spec(<10%
Endbell ODE size:	3.5435	variation)?	
Endbell ODE insulated?:	No		

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### Conclusion

#### **Component Failure**

Bearings

Cause of Failure

Grease contamination

#### Comments

Found multiple kinds of grease inside end bell housing and bearings. The different kinds of grease inside the bearings may have been incompatible types which contributed to premature bearing failure.

Service Tech name: Terrence Holland

Service Tech signature:

Terrence Hilland

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