

## Job Information

Job #: 139645

Date: May 8, 2019

Priority: —

Authorized OT: No

Authorized by:

## Customer Information

Name: Barnhart

Reason: Recondition motor

Contact: Lori Kelly

Motor#:

PO#:

Application: —

Special notes:

## Name Plate Information

Manufacturer: P&amp;H

Enclosure : Open Drop Proof (ODP)

Enclosure Type image

Serial#: 270478

Model#: HEW505X

Service Factor:

Frame:

Horsepower/kW: 125

Rated RPM: 1180

Rated Amps: Sta-279/139.  
Rot-155

Rated Voltage: Sta-230/460. Rot  
373

Phase: 3

Cycles:

Special design: Yes



Nameplate

DE

ODE

F1

F2

Top



## Mechanical Inspection

Inspect bolt holes and fasteners. Validate correct fasteners.

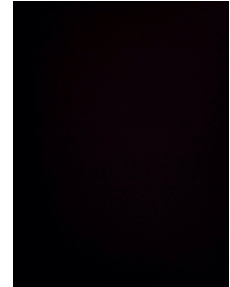
Does the shaft turn freely?: Yes Contaminant(s): None

Shaft rotation: Bi-directional Contaminant(s) Amt: None

Shaft grounding device present?: No Contaminant Image:

Type of grounding device:

Shaft runout(TIR-Inbound):



Bearings DE: Worn Bearings DE make: SKF

Insulated: No Bearing DE Size: 6218zz

Bearings ODE: Worn Bearings ODE make: Koyo

Bearing Type: Ball Bearing ODE Size: 6216zz

Bearings Retainer: Yes Thermal Protection: No

Retainer condition: Good Thermal Protection Type: —

Bearing Type Image



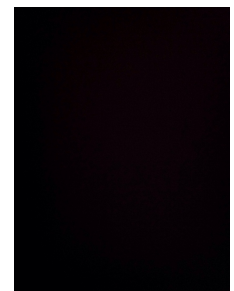
Bearing Make Image



Bearing Retainer Image



Thermal Protection



### 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

## 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: 1/4

Grease Cond. DE: Hard

Grease Amt ODE: 1/4

Grease Cond. ODE: Hard

Seals DE type: N/A

Seals Image:

Seals DE size:

Seals DE (inbound) condition :

Seals ODE type: N/A

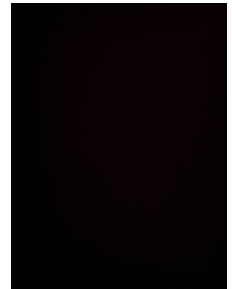
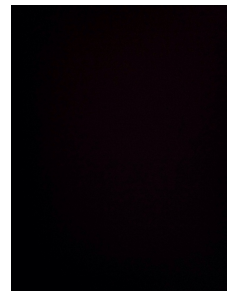
Seals Image 2:

Seals ODE size:

Seals ODE (inbound) condition  
:

Shaft damage cause: Taper bad

Shaft Image:



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

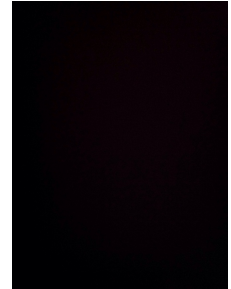
**CENTRAL ARKANSAS**  
6812 Lindsey Rd.  
Little Rock, AR 72206  
Phone 501-375-9178  
Fax 501-375-4254

## Mechanical Inspection (Continued)

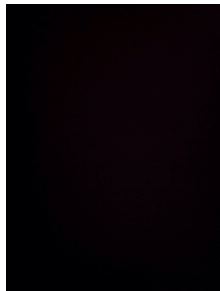
Brg. Image:



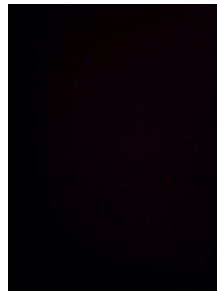
Bushings/sleeves image:



Water jacket: N/A



Fan: N/A



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 |

Other missing parts

Endbell Image:





## 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: 9

Terminal Markings:

Length of leads: 18 inches

REF: NEMA Stds. MG 1-2009, Rev. 1-2010, 2.41-Terminal Markings Identified By Color:

Size of leads: 2awg

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: Bad

Lug type: Standard

Connections As Received:

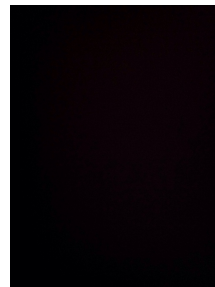
Lug Condition: —

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:

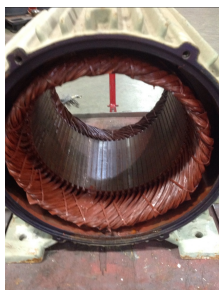
Stator condition: Ok

If other, stator condition:

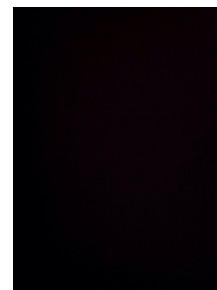
Failure location: In slot

If other, stator failure:

Stator Image:



Failure 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: Still has color

Winding image

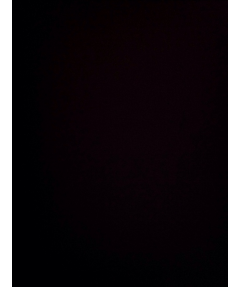
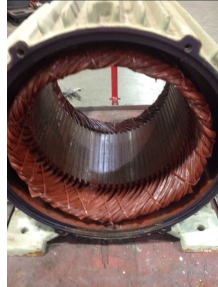
Winding Thermal Protection: No

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

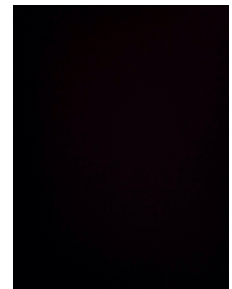
### Winding Resistance Incoming

	Phases A to B	Phases B to C	Phases C to A	Resistive imbalance
Incoming	0.0643	0.0643	0.0643	

Leads/jumpers: Ok

Lead jumper Image. :

If other, leads/jumpers:





MILLINGTON, TN

LITTLE ROCK, AR

## Conclusion

### Component Failure

### Cause of Failure

### Comments

Relead motor, hi temp protection on leads is bad. New ring leads, Bad taper end on shaft,

Service Tech name: Dan Mahan

Service Tech signature:

A handwritten signature in black ink, consisting of a stylized 'D' followed by a horizontal line, then a stylized 'm' followed by another horizontal line.

#### 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