Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition As Found

Weaver-Bailey Contractors
1601 Mayor Lane
Conway, AR 72032

FolderID: 100696
FormID: 15521523

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	SAH7155712 001
Description:	75HP TECO 1800RPM 365T

Hi-Speed Job Number:	100696
Manufacturer:	TECO Westinghouse
Product Number:	NP0754
Serial Number:	SAH7155712 001
HP/kW:	75 (HP)
RPM:	1775 (RPM)
Frame:	365T
Voltage:	230 / 460
Current:	170.2/85.1
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **4 - High** **4 - Good**

Overall Condition

1. Report Date

2. Nameplate Picture P20

3. Photos of all six sides of the machine. P27

	4.	Describe the Overall Condition of the Equipment as Received ***Fan broken, four ea. fan cover mount bolts broken off. Coupling has wear on aft end.***	
Initial Mechanical/Electrical			
	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No**
	7.	Assembled Shaft Runout	**0.002 Inches**
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	

10.	Lead Condition			P32

11.	Lead Length			
12.	Frame Condition		**pass.**	
13.	Fan Condition		**(F) Fail**	P54

Replacement found

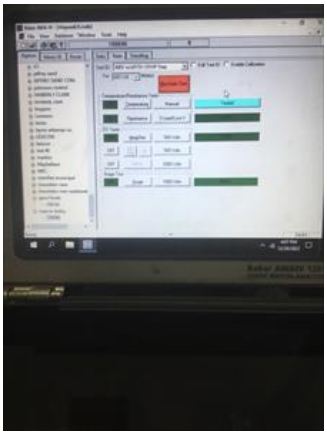
14.	Broken or Missing Components		**6 fan cover bolts broken off in housing.**	

Initial Electrical Inspection

15.	Insulation Resistance/Megger			
16.	Winding Resistance			

1-2	1-3	2-3

17.	Perform Surge Test	**(P) Pass**	P35



18.	Number of Stator Slots		
19.	Stator Condition	**pass**	

Mechanical Inspection

20.	Drive End Bearing Number-	**6313**	P8

21.	Drive End Bearing Qty.	**1**	
22.	Drive End Bearing Type	**(Ball) Ball Bearing**	
23.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
24.	Drive End Bearing Insulation or Grounding Device?	**none**	
25.	Drive End Wavy Washer/Snap-Ring Other Retention Device?		
26.	Drive End Bearing Condition	**replace**	

27.	Opposite Drive End Bearing Number-	**6213**	P47

28.	Opposite Drive End Bearing Qty.	**1**
29.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**
30.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**
31.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**
32.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**spacer goes on before bearing** P56

33.	Opposite Drive End Bearing Condition	**replace**
34.	Drive End Seal	**none**
35.	Opposite Drive End Seal	**none**

Rotor Inspection

36.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
37.	Growler Test	**(Pass) Pass**
38.	Number of Rotor Bars	
39.	Rotor Condition	**pass**
40.	List the Parts needed for the Repair Below	
41.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

42.	Shaft Runout			**0.002 inches**
43.	Rotor Runout			
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing	
44.	Coupling Fit Closest to Bearing Housing			
	0 Degrees	90 Degrees	120 Degrees	
45.	Coupling Fit Closest to the end of the Shaft			
	0 Degrees	60 Degrees	120 Degrees	
46.	Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5598	**2.5598**	**2.5598**	
47.	Drive End Bearing Shaft Fit Condition			**(P) Pass**
48.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5596	**2.5596**	**2.5595**	
49.	Opposite Drive End Bearing Shaft Fit Condition			**(P) Pass**
50.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		

Mechanical Fits- Bearing Housings

51.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	Lip worn in.			
52.	Drive End - Endbell Bearing Fit Condition			**(F) Fail**
	Lip worn in.			
53.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	Lip worn in.			
54.	Opposite Drive End - Endbell Bearing Fit Condition			**(F) Fail**
	Lip worn in			
55.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	pass	**pass**		
56.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
57.	List Machine Work Needed Below			
	Both housing fits bad. Drill and tap multiple fan cover mount bolts on ode housing.			

58. Technician **Terrence Holland**

Root Cause of Failure

59. Failure locations

Both housing fits bad. D.E. bearing has fatigue damage.

60. Root cause of failure