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

AC Recondition As Found

Remington (10243)
2592 AR Hwy 15 N
Lonoke, AR 72086

FolderID: 100702
FormID: 15531267

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	Z1507300199X
Description:	15HP BALDOR 3600RPM 254TCZ

Hi-Speed Job Number:	100702
Manufacturer:	Baldor
Product Number:	85600H24
Spec/ID #:	09G939Z602G1
Serial Number:	Z1507300199X
HP/kW:	15 (HP)
RPM:	3520 (RPM)
Frame:	254TCZ
Voltage:	230 / 460
Current:	35/17.5
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	None
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

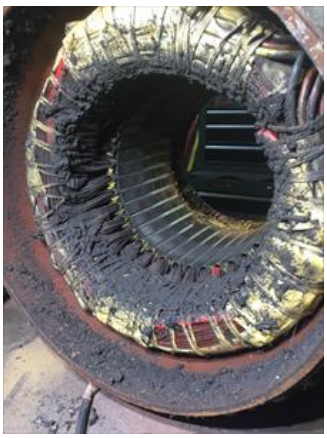
Priorities Found: **2 - High** **6 - Good**

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

Serviceable

Initial Mechanical/Electrical

5. Does Shaft Turn Freely? **(No) No**

6.	Does Shaft Have Visible Damage?	**(No) No**	P11

7.	Assembled Shaft Runout		
8.	Assembled Shaft End Play		
9.	Air Gap Variation <10%		
10.	Lead Condition	**(P) Pass**	P32

11.	Lead Length	**12 Inches**	
12.	Frame Condition	**pass**	
13.	Fan Condition	**(P) Pass**	P54

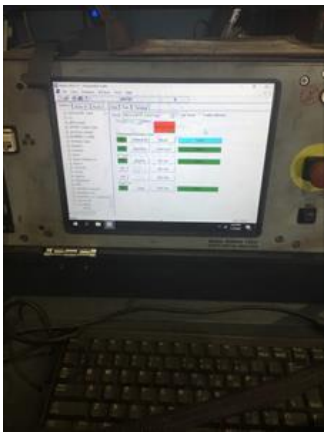
14.	Broken or Missing Components	**4 each housing mount bolts.**

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-	**7309**	P8

21.	Drive End Bearing Qty.	**1**
22.	Drive End Bearing Type	**(Thrust) Thrust**
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?	**none**	
26.	Drive End Bearing Condition	**replace.**	
27.	Opposite Drive End Bearing Number-	**6208**	
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?	**yes**	P56

2 each

33.	Opposite Drive End Bearing Condition	**cage failure**	P57

34.	Drive End Seal	**replace**	P59
	Cho: 13369. (1.687, 2.275, 0.313)		

35.	Opposite Drive End Seal	**none**

Rotor Inspection

36.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
37.	Growler Test	
38.	Number of Rotor Bars	
39.	Rotor Condition	**pass**
40.	List the Parts needed for the Repair Below	
	Replace all 4 end bell mount bolts. Replace broken fan cover. Re-sleeve ODE housing.	
41.	Signature of Technician that Disassembled Motor	**Terrence Holland**

Mechanical Fits- Rotor

42.	Shaft Runout	**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
1.7721	**1.772**	**1.7719**

47.	Drive End Bearing Shaft Fit Condition	**(P) Pass**
48.	Opposite Drive End Bearing Shaft Fit	

0 Degrees	60 Degrees	120 Degrees
1.575	**1.575**	**1.575**

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
	3.9374	**3.9376**	**3.9375**
52.	Drive End - Endbell Bearing Fit Condition		**(P) Pass**
53.	Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees

Lip worn in.

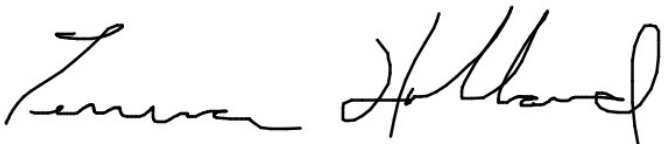
54.	Opposite Drive End - Endbell Bearing Fit Condition		**(F) Fail**
55.	Bearing Cap Condition		P30
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
	pass	**pass**	

56.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

57. List Machine Work Needed Below

ODE housing fit grooved.

58. Technician **Terrence Holland**



Root Cause of Failure

59. Failure locations

Grease contaminated with water. ODE bearing cage failed.

60. Root cause of failure

P12

Moisture inside stator. Contaminated grease in both bearings. Cage failure on ODE bearing.