



## AC Recondition As Found

### 3M-Main Plant (10001)

310 Walter Road  
Little Rock, AR 72216

FolderID: 100224  
FormID: 14419410

#### AC Recondition - Rev. 2

Location: MOTOR SHOP LR

Serial Number: 90934948

Description: 125HP TOSHIBA 1800RPM 444T

Hi-Speed Job Number: 100224

Manufacturer: Toshiba

Product Number: B1254FLF4U3

Serial Number: 90934948

HP/kW: 125 (HP)

RPM: 1770 (RPM)

Frame: 444T

Voltage: 230 / 460

Current: 300/150

Phase: Three

Hz: 60 (Hz)

Service Factor: 1.15

Enclosure: TEFC

J-box Included: Complete

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Teardown Inspection

Heaters: No

Winding Type : Random Wound

Bearing Type: Rolling Element

Priorities Found: ● 3 - High

● 3 - Good

#### Overall Condition



1. Report Date
2. Nameplate Picture

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3. Photos of all six sides of the machine.
4. Describe the Overall Condition of the Equipment as Received  
*Serviceable*

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5. Distance from the end of the shaft to the Coupling/Sheave

#### Initial Mechanical/Electrical

<input checked="" type="radio"/>	6. Does Shaft Turn Freely?	(No) No
	7. Does Shaft Have Visible Damage?	(Yes) Yes
	8. Assembled Shaft Runout	
	9. Assembled Shaft End Play	
	10. Air Gap Variation <10%	
<input checked="" type="radio"/>	11. Lead Condition	(P) Pass

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12.	Lead Length	9 Inches	
13.	Frame Condition	pass	
14.	Fan Condition	(P) Pass	
15.	Broken or Missing Components	end cap mount bolts	
<b>Initial Electrical Inspection</b>			
16.	Insulation Resistance/Megger	Megohms	
	<i>Grounded</i>		
17.	Winding Resistance		
	1-2	1-3	2-3
18.	Perform Surge Test	(NA) Not Applicable	
19.	Stator Condition	rewind stator	
<b>Mechanical Inspection</b>			
20.	Drive End Bearing Number-	SKF 3nu18EC	P8
			
21.	Drive End Bearing Qty.	1	
22.	Drive End Bearing Type	(Roller) Roller 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	destroyed	P43
			

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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?	none
33. Opposite Drive End Bearing Condition	worn/contaminated grease
34. Drive End Seal	
35. Opposite Drive End Seal	

**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	rotor dragged iron

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40. List the Parts needed for the Repair Below  
*New shaft, rewind stator, sleeve housing fits*
41. Signature of Technician that Disassembled Motor

**Mechanical Fits- Rotor**

42. Shaft Runout		
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
47.	Drive End Bearing Shaft Fit Condition		
48.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
49.	Opposite Drive End Bearing Shaft Fit Condition		
50.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
<b>Mechanical Fits- Bearing Housings</b>			
51.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
	<i>Lip worn</i>		
	52.	Drive End - Endbell Bearing Fit Condition	(F) Fail
	53.	Opposite Drive End - Endbell Bearing Fit	
		0 Degrees	60 Degrees 120 Degrees
	<i>Lip worn</i>		
	54.	Opposite Drive End - Endbell Bearing Fit Condition	(F) Fail
	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		
	<i>Both housing fits and make new shaft</i>		
58.	Technician	Terrence Holland	
			
<b>Root Cause of Failure</b>			
59.	Failure locations		
60.	Root cause of failure		
	<i>D.E bearing shattered due to contaminated hard grease. Also found multiple large pieces of hardened varnish in stator.</i>		

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