



## AC Recondition As Found

**Twin Rivers (12049)**  
3501 Jefferson Parkway  
Pine Bluff, AR 71602

FolderID: 100078  
FormID: 14160702

### AC Recondition - Rev. 2

**Location:** Shop  
**Serial Number:** YZH714B713001  
**Description:** 75HP TECO 1800RPM 365T

<b>Hi-Speed Job Number:</b>	100078
<b>Manufacturer:</b>	TECO Westinghouse
<b>Serial Number:</b>	YZH714B713001
<b>HP/kW:</b>	75 (HP)
<b>RPM:</b>	1775 (RPM)
<b>Frame:</b>	365T
<b>Voltage:</b>	230 / 460
<b>Current:</b>	170.2/85.1
<b>Phase:</b>	Three
<b>Hz:</b>	60 (Hz)
<b>Service Factor:</b>	1.15
<b>Enclosure:</b>	TEFC
<b>J-box Included:</b>	Complete
<b>Coupling/Sheave:</b>	None
<b>Bearing RTDs:</b>	No
<b>Stator RTDs:</b>	No
<b>Repair Stage:</b>	Teardown Inspection
<b>Heaters:</b>	No
<b>Winding Type :</b>	Random Wound
<b>Bearing Type:</b>	Rolling Element

Priorities Found: ● 4 - High ● 5 - Good

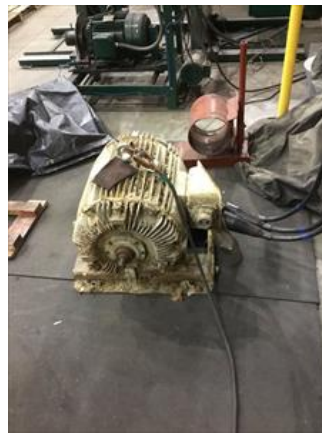
### Overall Condition



1. Report Date
2. Nameplate Picture

P37







*Mount bolts corroded and need replacing.*











3. Photos of all six sides of the machine.

P48







4. Describe the Overall Condition of the Equipment as Received

5. Distance from the end of the shaft to the Coupling/Sheave **1 inches**

**Initial Mechanical/Electrical**



6. Does Shaft Turn Freely? **(Yes) Yes**

7. Does Shaft Have Visible Damage? **(No) No**

P20



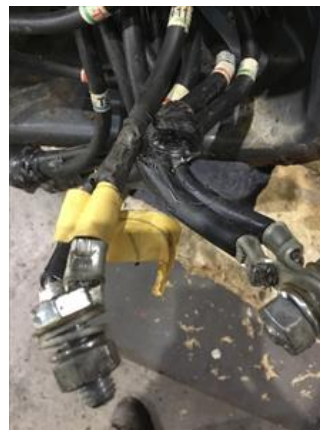
8. Assembled Shaft Runout **0.001 Inches**

9. Assembled Shaft End Play **0 inches**

10. Air Gap Variation <10%





11. Lead Condition **(F) Fail**

P54

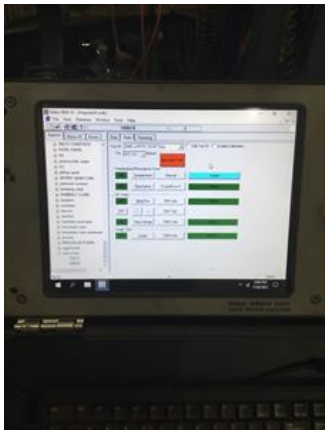


12. Lead Length **8 Inches**

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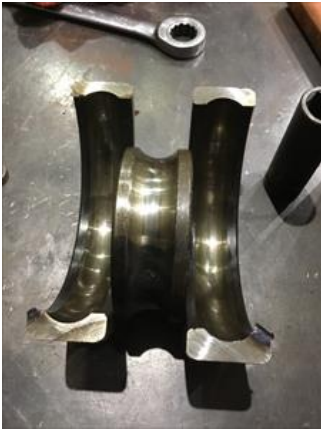
13. Stator Temperature Detector Rating and Function			
Quantity		Rating	Quantity Passed
14. Bearing Temperature Detector Rating and Function			
Quantity		Rating	Quantity Passed
15. Frame Condition			pass
16. Fan Condition			(P) Pass
			
17. Heater Quantity, Ratings			
Quantity		Volts/Watts	Pass/Fail
18. Broken or Missing Components			sheave hub & motor mount base brackets
			
Initial Electrical Inspection			
19. Insulation Resistance/Megger			500 Megohms
20. Winding Resistance			
1-2		1-3	2-3





Mechanical Inspection





24. Drive End Bearing Qty.	1
25. Drive End Bearing Type	(Ball) Ball Bearing
26. Drive End Lubrication Type	(Grease) Grease Lubricated
27. Drive End Bearing Insulation or Grounding Device?	none
28. Drive End Wavy Washer/Snap-Ring Other Retention Device?	none
29. Drive End Bearing Condition	grease dirty and contaminated

30. Opposite Drive End Bearing Number-

6213

P87





31.	Opposite Drive End Bearing Qty.	1	
32.	Opposite Drive End Bearing Type	(Ball) Ball Bearing	
33.	Opposite Drive End Lubrication Type	(Grease) Grease Lubricated	
34.	Opposite Drive End Bearing Insulation or Grounding Device?	none	
35.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	none	
36.	Opposite Drive End Bearing Condition	grease dirty and contaminated	
37.	Drive End Seal	none	
38.	Opposite Drive End Seal		
39.	DE Sleeve Bearing Inside Diameter		
	0 degrees	120 degrees	240 degrees
40.	DE Sleeve Bearing Outside Diameter		
	0 degrees	120 degrees	240 degrees
41.	DE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
42.	DE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees
43.	ODE Sleeve Bearing Inside Diameter		
	0 degrees	120 degrees	240 degrees
44.	ODE Sleeve Bearing Outside Diameter		
	0 degrees	120 degrees	240 degrees
45.	ODE Sleeve Bearing Housing Inside Diameter		
	0 degrees	120 degrees	240 degrees
46.	ODE Sleeve Bearing to Housing Clearance		
	0 degrees	120 degrees	240 degrees

## Rotor Inspection







48. Growler Test (Pass) Pass

49. Number of Rotor Bars

50. Rotor Condition pass

51. List the Parts needed for the Repair Below

P50

*Replace sheave hub 2 3/8" and repair broken motor mount base brackets. Replace worn and corroded hardware mount bolts.*



52. Signature of Technician that Disassembled Motor

**Mechanical Fits- Rotor**

53. Shaft Runout 0.001 inches

54. Rotor Runout

Drive End Bearing Fit

Rotor Body

Opposite Drive End Bearing

55. Coupling Fit Closest to Bearing Housing

0 Degrees

90 Degrees

120 Degrees

56. Coupling Fit Closest to the end of the Shaft

0 Degrees

60 Degrees

120 Degrees

57. Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees




2.5594

2.5594

2.5594

58. Drive End Bearing Shaft Fit Condition (P) Pass

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59.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.5598	2.5598	2.5598	
60.	Opposite Drive End Bearing Shaft Fit Condition			(P) Pass
61.	Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
Mechanical Fits- Bearing Housings				
62.	Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	5.5133	5.5134	5.5134	
63.	Drive End - Endbell Bearing Fit Condition			(F) Fail P16
	Lip groove worn in fit			
				
64.	Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	4.7258	4.7257	4.7257	
65.	Opposite Drive End - Endbell Bearing Fit Condition			(F) Fail P42
	Lip groove worn in fit			
				

## 66. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

pass



## 67. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

## 68. List Machine Work Needed Below

*Both housing fits bad. Motor mount base brackets need replacement.*

## 69. Technician

Terrence. Holland

A handwritten signature in black ink, appearing to read 'Terrence Holland'.

**Dynamic Balance Report**

## 70. Rotor Weight and Balance Grade

Rotor Weight

Balance Grade

## 71. Initial Balance Readings

Drive End

Opposite Drive End

## 72. Final Balance Readings

Drive End

Opposite Drive End

## 73. Technician

**Rewind**

## 74. Core Test Results - Watts loss per Pound

Pre-Burnout

Post Burnout

## 75. Core Hot Spot Test

Pre-Burnout

Post-Burnout

## 76. Post Rewind Electrical Test- Insulation Resistance

## 77. Post Rewind Polarization Index



78.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
79.	Post Rewind Surge Test		
80.	Post Rewind Hi-Pot		
81.	Technician		
Root Cause of Failure			
82.	Failure locations		
83.	Root cause of failure		
Mechanical Fits- Rotor - Post Repair			
84.	Shaft Runout Post Repair		
85.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
86.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
87.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
88.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
89.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
90.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
91.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
92.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
93.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
94.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
95.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
96.	DE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3

97.	DE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
98.	DE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
99.	DE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3
100.	End Bell Repair Sign-off		
101.	ODE Sleeve Bearing Inside ID Post Repair		
	Measure 1	Measure 2	Measure 3
102.	ODE Sleeve Bearing Outside ID Post Repair		
	Measure 1	Measure 2	Measure 3
103.	ODE Sleeve Bearing Inside OD Post Repair		
	Measure 1	Measure 2	Measure 3
104.	ODE Sleeve Bearing Outside OD Post Repair		
	Measure 1	Measure 2	Measure 3
<b>Assembly</b>			
105.	Photograph All Major Components prior to assembly		
106.	Final Insulation Resistance Test		
107.	Assembled Shaft Endplay		
108.	Assembled Shaft Runout		
109.	Test Run Voltage		
	Volts	Volts	Volts
110.	Test Run Amperage		
	Amps	Amps	Amps
111.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
112.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
113.	Ambient Temperature - Fahrenheit		
114.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
115.	Drive End Bearing Temps - Fahrenheit 20-30 Minutes		
	20 Minutes	25 Minutes	30 Minutes

116. Drive End Bearing Temps - Fahrenheit 35-45 Minutes			
35 Minutes	40 Minutes	45 Minutes	
117. Drive End Bearing Temps - Fahrenheit 50-60 Minutes			
50 Minutes	55 Minutes	60 Minutes	
118. Opposite Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
119. Opposite Drive End Bearing Temps - Fahrenheit 20-30 Minutes			
20 Minutes	25 Minutes	30 Minutes	
120. Opposite Drive End Bearing Temps - Fahrenheit 35-45 Minutes			
35 Minutes	40 Minutes	45 Minutes	
121. Opposite Drive End Bearing Temps - Fahrenheit 50-60 Minutes			
50 Minutes	55 Minutes	60 Minutes	
122. Stator Temperatures- Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
123. Stator Temperatures- Fahrenheit 20-30 Minutes			
20 Minutes	25 Minutes	30 Minutes	
124. Stator Temperatures- Fahrenheit 35-45 Minutes			
35 Minutes	40 Minutes	45 Minutes	
125. Stator Temperatures- Fahrenheit 50-60 Minutes			
50 Minutes	55 Minutes	60 Minutes	
126. Final Test Run Sign-off			
127. Document Final Condition with Pictures after paint			
128. Final Pics and QC Review			