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

AC Recondition As Found

STEPHENS INC
2111 BOND ST
LITTLE ROCK, AR 72206

FolderID: 100145
FormID: 14273177

AC Recondition - Rev. 2

Location:	MOTOR SHOP LR
Serial Number:	F0805142096
Description:	1.5HP RELIANCE 1800RPM D90

Hi-Speed Job Number:	100145
Manufacturer:	Reliance
Product Number:	P90H2205
Spec/ID #:	35W424W206G1
Serial Number:	F0805142096
HP/kW:	1.5 (HP)
RPM:	1725 (RPM)
Frame:	D90
Voltage:	230 / 460
Current:	5/2.5
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:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **1 - High** **3 - Good**

Overall Condition

1. Report Date
2. Nameplate Picture P21

	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received ***Good***	
Initial Mechanical/Electrical			
●	5.	Does Shaft Turn Freely?	**(Yes) Yes**
	6.	Does Shaft Have Visible Damage?	**(No) No**
	7.	Assembled Shaft Runout	
	8.	Assembled Shaft End Play	
	9.	Air Gap Variation <10%	
●	10.	Lead Condition	**(P) Pass**
	11.	Lead Length	**8 Inches**
	12.	Frame Condition	**good**
●	13.	Fan Condition	**(P) Pass**
	14.	Broken or Missing Components	
Initial Electrical Inspection			
	15.	Insulation Resistance/Megger	
	16.	Winding Resistance	

1-2	1-3	2-3

●	17.	Perform Surge Test	**(F) Fail**
	18.	Stator Condition	
Mechanical Inspection			
	19.	Drive End Bearing Number-	**6207**
	20.	Drive End Bearing Qty.	**1**

21.	Drive End Bearing Type	**(Ball) Ball Bearing**	P20

22.	Drive End Lubrication Type
23.	Drive End Bearing Insulation or Grounding Device?
24.	Drive End Wavy Washer/Snap-Ring Other Retention Device?
25.	Drive End Bearing Condition
26.	Opposite Drive End Bearing Number-
27.	Opposite Drive End Bearing Qty.
28.	Opposite Drive End Bearing Type
29.	Opposite Drive End Lubrication Type
30.	Opposite Drive End Bearing Insulation or Grounding Device?
31.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?
32.	Opposite Drive End Bearing Condition
33.	Drive End Seal
34.	Opposite Drive End Seal

Rotor Inspection

35.	Rotor Type/Material
36.	Growler Test
37.	Number of Rotor Bars
38.	Rotor Condition
39.	List the Parts needed for the Repair Below
40.	Signature of Technician that Disassembled Motor

Mechanical Fits- Rotor

41.	Shaft Runout
42.	Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

43.	Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

44.	Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

45.	Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees

46.	Drive End Bearing Shaft Fit Condition		
47.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
48.	Opposite Drive End Bearing Shaft Fit Condition		
49.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

50.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
51.	Drive End - Endbell Bearing Fit Condition		
52.	Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
53.	Opposite Drive End - Endbell Bearing Fit Condition		
54.	Bearing Cap Condition		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
55.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
56.	List Machine Work Needed Below		
57.	Technician		

Dynamic Balance Report

58.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
59.	Initial Balance Readings		
	Drive End	Opposite Drive End	
60.	Final Balance Readings		
	Drive End	Opposite Drive End	
61.	Technician		

Rewind

62.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	
63.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
64.	Post Rewind Electrical Test- Insulation Resistance		
65.	Post Rewind Polarization Index		

66.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
67.	Post Rewind Surge Test		
68.	Post Rewind Hi-Pot		
69.	Technician		

Root Cause of Failure

70.	Failure locations		
71.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

72.	Shaft Runout Post Repair		
73.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
74.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
75.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
76.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
77.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
78.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
79.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

80.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees

81. Opposite Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees
1.5751	**1.5752**	**1.5751**

82. Bearing Cap Condition Post Repair

Drive End Bearing Cap	Opposite Drive End Bearing Cap

83. End Bell Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

84. End Bell Repair Sign-off

Assembly

85. Photograph All Major Components prior to assembly
86. Final Insulation Resistance Test
87. Assembled Shaft Endplay
88. Assembled Shaft Runout
89. Test Run Voltage

Volts	Volts	Volts

90. Test Run Amperage

Amps	Amps	Amps

91. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

92. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

93. Ambient Temperature - Fahrenheit
94. Drive End Bearing Temps - Fahrenheit

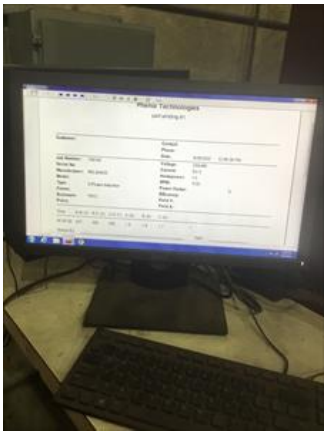
5 Minutes	10 Minutes	15 Minutes

95. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes	10 Minutes	15 Minutes

96. Final Test Run Sign-off

97. Document Final Condition with Pictures after paint P2200



98. Final Pics and QC Review