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

AC Recondition As Found

CoorsTek Inc.
3315 Boone Road
Benton, AR 72015

FolderID: 100532
FormID: 15025973

AC Recondition - Rev. 2

Location:	LR MOTORSHOP
Serial Number:	NO NP
Description:	SMALL BLOWER FAN

Hi-Speed Job Number:	100532
Manufacturer:	Other
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TENV
# of Leads:	3
J-box Included:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

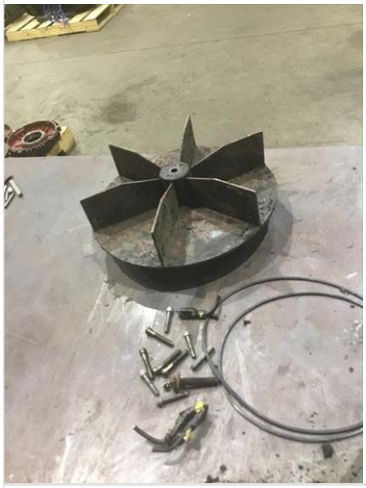
Priorities Found: **4 - High** **4 - Good**

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	
	5.	Distance from the end of the shaft to the Coupling/Sheave	
Initial Mechanical/Electrical			
●	6.	Does Shaft Turn Freely?	**(Yes) Yes**
	7.	Does Shaft Have Visible Damage?	**(No) No**
	8.	Assembled Shaft Runout	
	9.	Assembled Shaft End Play	
	10.	Air Gap Variation <10%	
●	11.	Lead Condition	**(F) Fail**
	12.	Lead Length	**10 Inches**
	13.	Frame Condition	**pass**

14.	Fan Condition	**(P) Pass**	P54



15.	Broken or Missing Components		

Initial Electrical Inspection

16.	Insulation Resistance/Megger	**0 Megohms**	
17.	Winding Resistance		

1-2	1-3	2-3

18.	Perform Surge Test	**(F) Fail**	
19.	Stator Condition	**rewind**	P39

20.	Number of Stator Slots		

Mechanical Inspection

21.	Drive End Bearing Number-	**6206 2RS**	P8

22.	Drive End Bearing Qty.	**1**	
23.	Drive End Bearing Type	**(Ball) Ball Bearing**	
24.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	
25.	Drive End Bearing Insulation or Grounding Device?	**no**	
26.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**no**	
27.	Drive End Bearing Condition	**carriage came apart**	
28.	Opposite Drive End Bearing Number-	**6205 2RS**	
29.	Opposite Drive End Bearing Qty.	**1**	
30.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
31.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
32.	Opposite Drive End Bearing Insulation or Grounding Device?	**no**	
33.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	P56

34.	Opposite Drive End Bearing Condition	**okay**	
35.	Drive End Seal		
36.	Opposite Drive End Seal		

Rotor Inspection

37.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	
38.	Growler Test	**(Pass) Pass**	
39.	Number of Rotor Bars		

40. Rotor Condition **wash and bake** P23

41. List the Parts needed for the Repair Below

1-6206 2RS 1-6205 2RS

42. Signature of Technician that Disassembled Motor **RW**

Mechanical Fits- Rotor

43. Shaft Runout

44. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

45. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

46. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

47. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
1.1807	**1.1802**	**1.1804**

48. Drive End Bearing Shaft Fit Condition **(F) Fail** P44

49. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
0.9846	**0.9846**	**0.9846**

50. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass** P49

51. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

52. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
2.4416	**2.4416**	**2.4416**

53. Drive End - Endbell Bearing Fit Condition **(P) Pass**

54. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
2.0493	**2.0493**	**2.0493**

55. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail**

Resleeve

56. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
na	**na**

57. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

58. List Machine Work Needed Below

De shaft bearing fit bad also ode end bell housing fit bad

59. Technician **RW**

Dynamic Balance Report

60. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

61. Initial Balance Readings

Drive End	Opposite Drive End

62. Final Balance Readings

Drive End	Opposite Drive End

63. Technician

Rewind

64. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

65. Core Hot Spot Test

Pre-Burnout	Post-Burnout

66. Post Rewind Electrical Test- Insulation Resistance

67. Post Rewind Polarization Index

68. Post Rewind Winding Resistance

1-2	1-3	2-3

69. Post Rewind Surge Test

70. Post Rewind Hi-Pot

71. Technician

Root Cause of Failure

72. Failure locations

De bearing failed causes the rotor to drag iron and burn up winding

73. Root cause of failure

Mechanical Fits- Rotor - Post Repair

74. Shaft Runout Post Repair

75. Rotor Runout Post Repair

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

76. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees	90 Degrees	120 Degrees

77. Coupling Fit Closest to the end of the Shaft Post Repair

0 Degrees	60 Degrees	120 Degrees

78. Drive End Bearing Shaft Fit Post Repair P400

0 Degrees	60 Degrees	120 Degrees
1.1815	**1.1814**	**1.1814**

79. Opposite Drive End Bearing Shaft Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

80. Shaft Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

81. Shaft Repair Sign-off

Mechanical Fits- Bearing Housings - Post Repair

82. Drive End - Endbell Bearing Fit Post Repair

0 Degrees	60 Degrees	120 Degrees

83. Opposite Drive End - Endbell Bearing Fit Post Repair P100

0 Degrees	60 Degrees	120 Degrees
2.0475	**2.0475**	**2.0474**

84. Bearing Cap Condition Post Repair

Drive End Bearing Cap	Opposite Drive End Bearing Cap

85. End Bell Air Seal Fits Post Repair

Drive End Air Seal	Opposite Drive End Air Seal

86. End Bell Repair Sign-off

Assembly

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

Volts	Volts	Volts

92. Test Run Amperage

Amps	Amps	Amps

93. Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

94. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal	Vertical	Axial

95. Ambient Temperature - Fahrenheit

96.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
97.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
98.	Final Test Run Sign-off		
99.	Document Final Condition with Pictures after paint		
100.	Final Pics and QC Review	**Terrence Holland**	P2300