



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

## AC Recondition Repair Report

FolderID: 97951  
FormID: 10191950

Union Pacific-Vine St 10945  
1020 N. Vine Street  
North Little Rock, AR

Priorities Found: ● 4 - High ● 10 - Good

### General

1. Job Number	97951
2. Report Date	03/09/2021
3. Customer	UNION PACIFIC

### Name Plate Information



4. Manufacturer	RELIANCE	P5
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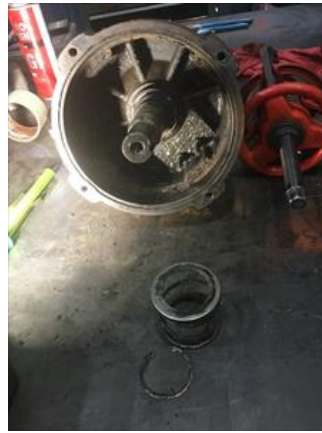
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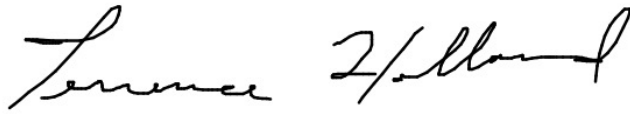




5. Model	TYPE: P
6. Serial Number	ID: P1862702J-6K
7. Horsepower	5
8. KW	
9. Volts	460
10. Amps	7
11. RPM	1725
12. Frame	XO180TY
13. Enclosure	TENV
14. Cycles	60
15. Phase	3
16. Service Factor	1.15
17. Motor Mount Position	
<b>Initial Inspection</b>	
18. Number of Leads	
19. Lead Length	Inches
20. Lead Size	
21. Lead Condition	(F) Fail
22. Lead Markings	
23. Lug Size, Condition, and Type	
24. Winding RTD's	
25. Winding Rtd's Condition	
26. Shaft Run Out	
27. Does Shaft Turn Freely	no
28. Does Shaft Have Visible Damage	yes
29. Seal surfaces worn and pitted	
29. Bearing Rtd's	
30. Bearing Rtd's Condition	
31. Contamination	
Yes	
32. Frame Condition	(P) Pass
33. Fan Condition	(NA) Not Applicable
34. Broken or missing components	
Inner snap ring broken. Multiple bolts missing n wear plate.	
<b>Initial Electric Test</b>	
35. Resistance to Ground	Mohm

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36.	Winding Resistance 1-2	
37.	Winding Resistance 2-3	
38.	Winding Resistance 1-3	
39.	Resistive Imbalance	
40.	Hi-Pot	
41.	Surge Test	(F) Fail
42.	Stator Condition	pass
43.	Failure Location	windings blown from excessive moisture
<b>Initial Rotor Inspection</b>		
44.	Rotor Type	squirrel cage
45.	Air Gap <10% Variation	
46.	Number of Rotor Bars	
47.	Number of Broken Rotor Bars	
48.	Growler Test	(P) Pass
49.	Rotor Condition	
<b>Mechanical Inspection</b>		
50.	Bearing Manufacture	SKF
51.	Bearing DE Size	6210 2Z/C3
52.	Bearing DE Type	regular ball bearing
53.	DE Bearing Qty.	1
54.	Bearing ODE Size	6205 2Z/C3
55.	Bearing ODE Type	regular ball bearing
56.	ODE Bearing Qty.	1
57.	Insulated Bearing	no
58.	Lubrication Type	grease
59.	Grease Condition	(F) Fail
	Contaminated with water	
60.	Bearing Retainers	(Y) Yes
61.	Shaft Grounding Device	(NA) Not Applicable
62.	DE Seal	
63.	DE Seal Type/Size	
64.	ODE Seal	
65.	ODE Seal Type/Size	
<b>Root Cause of Failure</b>		
66.	Component Failure	seals failed.
67.	Cause of Failure	Excessive debris entangled around the impeller caused the seals to fail, allowing water to permeate the stator windings.
68.	Comments	Rewind stator. Repair seal surfaces and D.E. shaft bearing journal. Replace both power and sensor cords @ 27' long. Sensor cord: 5c/18 AWG Power cord: 4c/12 AWG Replace broken snap ring and missing bolts.



### Machine Fit Inspection Report

70.	Shaft Run Out	
71.	Initial Shaft Run Out	
72.	Final Shaft Run Out	
●	73. DE Bearing Shaft Fit	(F) Fail
	74. DE Initial Shaft Bearing Fit Size 1	1.9684 "
	75. DE Initial Shaft Bearing Fit Size 2	1.9685 "
	76. DE Initial Shaft Bearing Fit Size 3	
	77. DE Finial Shaft Bearing Fit Size 1	
	78. DE Finial Shaft Bearing Fit Size 2	
	79. DE Finial Shaft Bearing Fit Size 3	
●	80. ODE Bearing Shaft Fit	(P) Pass
	81. ODE Initial Shaft Bearing Fit Size 1	0.9848 "
	82. ODE Initial Shaft Bearing Fit Size 2	0.9847 "
	83. ODE Initial Shaft Bearing Fit Size 3	0.9849 "
	84. ODE Finial Shaft Bearing Fit Size 1	
	85. ODE Finial Shaft Bearing Fit Size 2	
	86. ODE Finial Shaft Bearing Fit Size 3	
	87. DE Air Seal Shaft Fit	
	88. DE Initial Air Seal Shaft Size	
	89. DE Final Air Seal Shaft Size	
	90. ODE Air Seal Shaft Fit	
	91. ODE Initial Air Seal Shaft Size	
	92. ODE Final Air Seal Shaft Size	
●	93. DE Endbell Fit	(P) Pass
	94. DE Initial Endbell Fit Size 1	
	95. DE Initial Endbell Fit Size 2	
	96. DE Initial Endbell Fit Size 3	
	97. DE Final Endbell Fit Size 1	
	98. DE Finial Endbell Fit Size 2	
	99. DE Final Endbell Fit Size 3	
	100. DE Endbell Fit Insulated	
	101. DE Endbell Air Seal Fit	
	102. Initial Endbell Air Seal Fit Size	
	103. Finial Endbell Air Seal Fit Size	
●	104. ODE Endbell Fit	(P) Pass
	105. ODE Initial Endbell Fit Size 1	
	106. ODE Initial Endbell Fit Size 2	
	107. ODE Initial Endbell Fit Size 3	
	108. ODE Final Endbell Fit Size 1	
	109. ODE Final Endbell Fit Size 2	
	110. ODE Final Endbell Fit Size 3	

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111.	ODE Endbell Fit Insulated	
112.	ODE Endbell Air Seal Fit	
113.	ODE Initial Endbell Seal Fit Size	
114.	ODE Finial Endbell Seal Fit Size	
● 115.	Foot Flatness	(NA) Not Applicable
● 116.	Foot Condition	(NA) Not Applicable
● 117.	Flange Condition	(P) Pass
118.	Service Technician	
<b>Balancing Report</b>		
119.	Balance Type	
120.	Balance Operating Speed	
121.	Start Left End	
122.	Start Right End	
123.	Balancing Specification	
124.	Finish Left End	
125.	Finish Right End	
126.	Service Technician	
<b>Assembly and Final Test</b>		
127.	Megger Testing Reading	
128.	Surge Test	
129.	Hi-Pot	
130.	Winding Resistance 1-2	
131.	Winding Resistance 2-3	
132.	Winding Resistance 1-3	
133.	Test Run Voltage Phase A	
134.	Test Run Amps A	
135.	Test Run Voltage Phase B	
136.	Test Run Amps B	
137.	Test Run Voltage Phase C	
138.	Test Run Amps C	
139.	DE Horizontal Vibration Reading	
140.	DE Vertical Vibration Reading	
141.	DE Axial Vibration Reading	
142.	ODE Horizontal Vibration Reading	
143.	ODE Vertical Vibration Reading	
144.	ODE Axial Vibration Reading	
145.	Ambient Temp at start of Test Run	
146.	Temp at 5 minutes	
147.	Temp at 10 minutes	
148.	Temp at 15 minutes	
149.	Temp at 20 minutes	
150.	Temp at 25 minutes	
151.	Temp at 30 minutes	
152.	Temp at 35 minutes	
153.	Temp at 40 minutes	
154.	Temp at 45 minutes	
155.	Temp at 50 minutes	
156.	Temp at 55 minutes	

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157. Temp at 60 minutes
158. Motor Paint
159. Service Technician