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

# AC Recondition Repair Report

FolderID: 97723
FormID: 9727516

**Hillcrest Camshaft**
5502 West 65th Str
Little Rock, AR

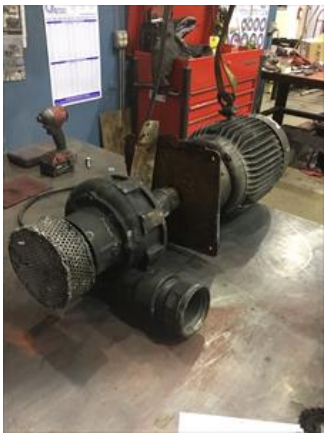
Priorities Found: **1 - High** **2 - Good**

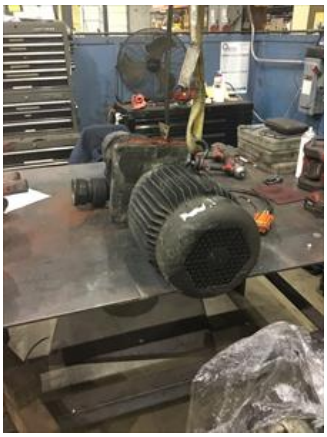
## General

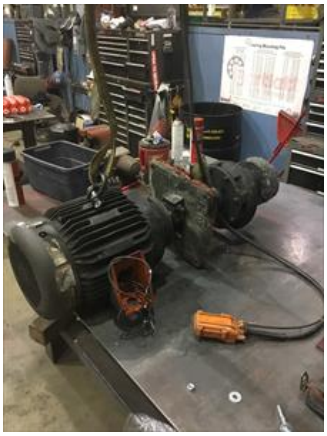
| | | |
|---|---|---|
| 1. | Job Number | **97723** |
| 2. | Report Date | |
| 3. | Customer | **HILLCREST CAMSHAFT** |

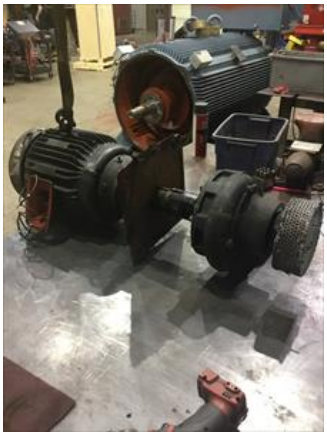
## Name Plate Information

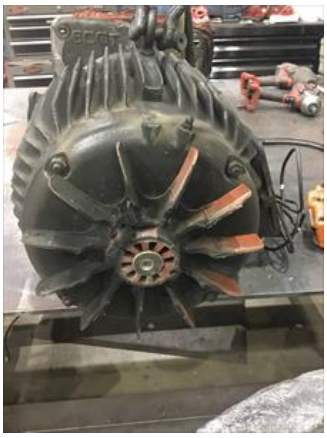
4. Manufacturer P5

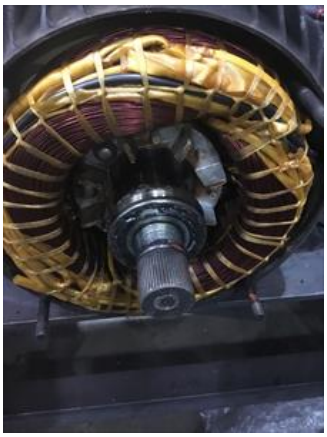


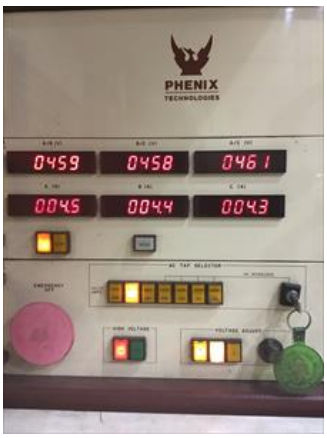


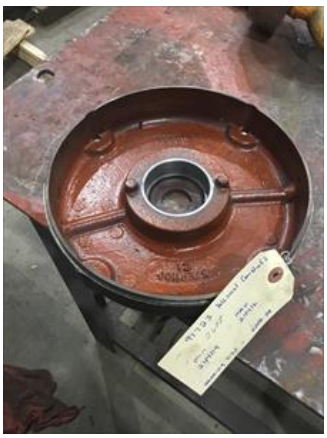


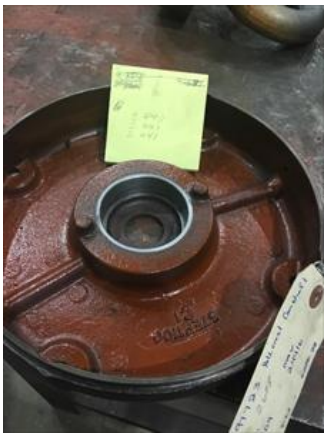


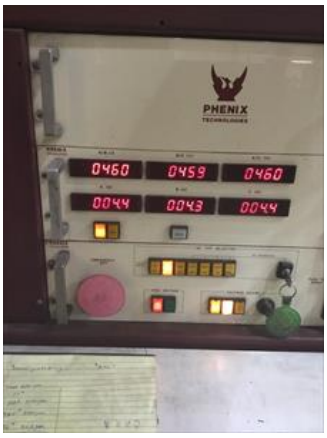











| | | | |
|---|---|---|---|
| 5. | Model | | |
| 6. | Serial Number | **F1309246780** | |
| 7. | Horsepower | **20** | |
| 8. | KW | | |
| 9. | Volts | **230460** | |
| 10. | Amps | | |
| 11. | RPM | **3500** | |
| 12. | Frame | **215YZ** | |
| 13. | Enclosure | **TE** | |
| 14. | Cycles | **60 HZ** | |
| 15. | Phase | | |
| 16. | Service Factor | | |
| 17. | Motor Mount Position | | |
| **Initial Inspection** | | | |
| 18. | Number of Leads | **3** | |
| 19. | Lead Length | | |
| 20. | Lead Size | | |
| 21. | Lead Condition | | |
| 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 | | |
| 28. | Does Shaft Have Visible Damage | | |
| 29. | Bearing Rtd's | | |
| 30. | Bearing Rtd's Condition | | |
| 31. | Contamination | | |
| 32. | Frame Condition | | |
| 33. | Fan Condition | **(P) Pass** | |
| 34. | Broken or missing components | | |
| **Initial Electric Test** | | | |
| 35. | Resistance to Ground | | |
| 36. | Winding Resistance 1-2 | | |
| 37. | Winding Resistance 2-3 | | |
| 38. | Winding Resistance 1-3 | | |

| | |
|---|---|
| 39. | Resistive Imbalance |
| 40. | Hi-Pot |
| 41. | Surge Test |
| 42. | Stator Condition |
| 43. | Failure Location |

## Initial Rotor Inspection

| | |
|---|---|
| 44. | Rotor Type |
| 45. | Air Gap <10% Variation |
| 46. | Number of Rotor Bars |
| 47. | Number of Broken Rotor Bars |
| 48. | Growler Test |
| 49. | Rotor Condition |

## Mechanical Inspection

| | |
|---|---|
| 50. | Bearing Manufacture |
| 51. | Bearing DE Size |
| 52. | Bearing DE Type |
| 53. | DE Bearing Qty. |
| 54. | Bearing ODE Size |
| 55. | Bearing ODE Type |
| 56. | ODE Bearing Qty. |
| 57. | Insulated Bearing |
| 58. | Lubrication Type |
| 59. | Grease Condition |
| 60. | Bearing Retainers |
| 61. | Shaft Grounding Device |
| 62. | DE Seal |
| 63. | DE Seal Type/Size |
| 64. | ODE Seal |
| 65. | ODE Seal Type/Size |

## Root Cause of Failure

66. Component Failure — **O.D.E bearing housing.**

67. Cause of Failure

***Housing fit too large and out of tolerance. Has excessive up and down play.***

68. Comments

***Re-sleeve housing fit.***

69. Service Technician — **Terrence Holland**

## Machine Fit Inspection Report

| | |
|---|---|
| 70. | Shaft Run Out |
| 71. | Initial Shaft Run Out |
| 72. | Final Shaft Run Out |
| 73. | DE Bearing Shaft Fit |
| 74. | DE Initial Shaft Bearing Fit Size 1 |
| 75. | DE Initial Shaft Bearing Fit Size 2 |

| | | | |
|---|---|---|---|
| | 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 | |
| | 82. | ODE Initial Shaft Bearing Fit Size 2 | |
| | 83. | ODE Initial Shaft Bearing Fit Size 3 | |
| | 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 | |
| | 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 | **(F) Fail** |
| | | ***ODE shaft has excessive up and down play. Bearing play is excessively loose in the housing and machine work is required.*** | |
| | 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 | |
| | 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 | |
| | 116. | Foot Condition | |
| | 117. | Flange Condition | |
| | 118. | Service Technician | **Terrence Holland** |

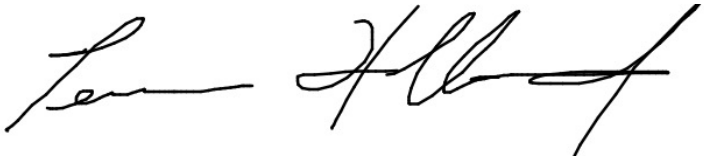
## Balancing Report

| | |
|---|---|
| 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 |

## Assembly and Final Test

| | |
|---|---|
| 127. | Meggar 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 |
| 157. | Temp at 60 minutes |
| 158. | Motor Paint |

159. Service Technician **Terrence Holland**



*Replaced ode bearing and re-sleeved end bell housing fit. Motor test ran good.*