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

AC Recondition Repair Report

FolderID: 99847
FormID: 13700812

FUTURE FUEL CHEMICAL
2800 GAP RD HWY 394 SO
BATESVILLE, AR 72501

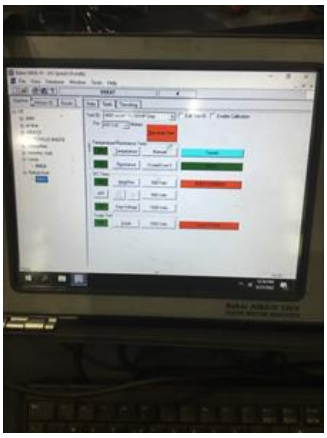
Priorities Found: **1 - High** **11 - Good**

General

1.	Job Number	**99847**	
2.	Report Date		
3.	Customer	**Future Fuel**	

Name Plate Information

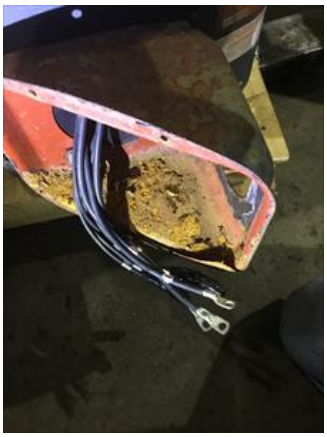
4.	Manufacturer	**U.S. Motors**	P5



5.	Model	**FC80**	
6.	Serial Number	**HO40P2BLG**	
7.	Horsepower	**40 HP**	
8.	KW		
9.	Volts	**460 Volts**	
10.	Amps	**45 Amps**	
11.	RPM	**1780 RPM**	
12.	Frame	**324TP**	
13.	Enclosure	**WPI**	
14.	Cycles	**60 HZ**	
15.	Phase	**3 PH**	
16.	Service Factor	**1.15**	
17.	Motor Mount Position		

Initial Inspection

18.	Number of Leads	**9**	P13



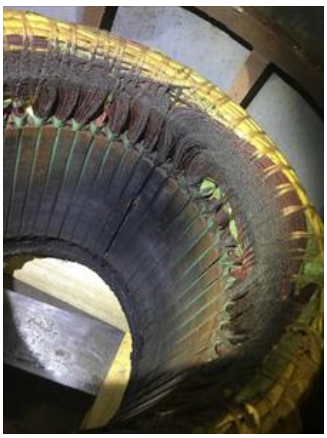
19.	Lead Length	**12 Inches**	
20.	Lead Size		
21.	Lead Condition	**(P) Pass**	
22.	Lead Markings	**1-9**	
23.	Lug Size, Condition, and Type		
24.	Winding RTD's		
25.	Winding Rtd's Condition		
26.	Shaft Run Out		

	27.	Does Shaft Turn Freely	**no**	
	28.	Does Shaft Have Visible Damage	**no**	
	29.	Bearing Rtd's		
	30.	Bearing Rtd's Condition		
	31.	Contamination		
●	32.	Frame Condition	**(P) Pass**	
●	33.	Fan Condition	**(NA) Not Applicable**	P109

	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	**(F) Fail**	
	42.	Stator Condition		
	43.	Failure Location	**in slot**	P68



Initial Rotor Inspection

44.	Rotor Type		P4

45.	Air Gap <10% Variation		
46.	Number of Rotor Bars	**56**	
47.	Number of Broken Rotor Bars	**0**	
48.	Growler Test	**(P) Pass**	
49.	Rotor Condition	**(P) Pass**	

Mechanical Inspection

50.	Bearing Manufacture	**Fag**	
51.	Bearing DE Size	**6211 Z**	
52.	Bearing DE Type	**7220**	P23

53.	DE Bearing Qty.	**1**	

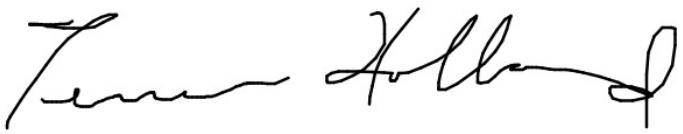
54.	Bearing ODE Size	**6211**	P43

55.	Bearing ODE Type	**open ball bearing**
56.	ODE Bearing Qty.	**1**
57.	Insulated Bearing	**no**
58.	Lubrication Type	**grease/oil**
59.	Grease Condition	P74

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		

Root Cause of Failure

66.	Component Failure	**windings blown**
67.	Cause of Failure	
68.	Comments	
	Windings shorted in slot.	
69.	Service Technician	**Terrence. Holland**



Machine Fit Inspection Report

●	70.	Shaft Run Out	**(P) Pass**
	71.	Initial Shaft Run Out	**0.001 "**
	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	**2.166 "**
	82.	ODE Initial Shaft Bearing Fit Size 2	**2.1598 "**
	83.	ODE Initial Shaft Bearing Fit Size 3	**2.1599 "**
	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	**(P) Pass**
	105.	ODE Initial Endbell Fit Size 1	**3.937 "**
	106.	ODE Initial Endbell Fit Size 2	**3.9371 "**
	107.	ODE Initial Endbell Fit Size 3	**3.9371 "**
	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	**(P) Pass**
	116.	Foot Condition	

117.	Flange Condition	**(P) Pass**
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