

# **Motor Shop Repairs**

## Job Number 98825

Prepared for FUTURE FUEL CHEMICAL

2800 GAP RD HWY 394 SO BATESVILLE AR 72501

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## **AC Recondition Repair Report**

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

Priorities Found: 7 - High

7 - Good

FHOILIE	rionites round. 7 - night 7 - good			
General				
1.	Job Number	98825		
2.	Report Date	10/6/2021		
3.	Customer	FutureFuel Chemical		
Name	Name Plate Information			
4.	Manufacturer	GE		



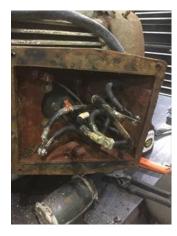






5.	Model	5K4053T328B
6.	Serial Number	SN6Z24031
7.	Horsepower	75
8.	KW	
9.	Volts	460

12. Frame  13. Enclosure  14. Cycles  15. Phase  16. Service Factor  17. Motor Mount Position  Initial Inspection	190 Z16 EFC 60
12. Frame L405L 13. Enclosure 14. Cycles 15. Phase 16. Service Factor 17. Motor Mount Position  Initial Inspection	Z16 EFC
13. Enclosure  14. Cycles  15. Phase  16. Service Factor  17. Motor Mount Position  Initial Inspection	EFC
<ul> <li>14. Cycles</li> <li>15. Phase</li> <li>16. Service Factor</li> <li>17. Motor Mount Position</li> <li>Initial Inspection</li> </ul>	_
<ul> <li>15. Phase</li> <li>16. Service Factor</li> <li>17. Motor Mount Position</li> <li>Initial Inspection</li> </ul>	60
16. Service Factor 17. Motor Mount Position Initial Inspection	00
17. Motor Mount Position  Initial Inspection	3
Initial Inspection	
18. Number of Leads	3
19. Lead Length	hes
20. Lead Size	
21. Lead Condition (P)	



22.	Lead Markings	
23.	Lug Size, Condition, and Type	
24.	Winding RTD's	
25.	Winding Rtd's Condition	
26.	Shaft Run Out	0.1
27.	Does Shaft Turn Freely	yes
28.	Does Shaft Have Visible Damage	yes. cracked at end of shaft



- 29. Bearing Rtd's
- 30. Bearing Rtd's Condition

#### 31. Contamination

Grease, water, copper debris



● 32. Frame Condition (P) Pass

33. Fan Condition (P) Pass



34. Broken or missing components

Broken shaft. Replace

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

Windings blown

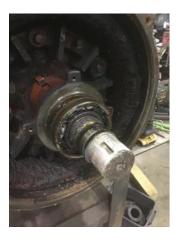
43. Failure Location connection



Ir	Initial Rotor Inspection		
	44.	Rotor Type	cast aluminum
	45.	Air Gap <10% Variation	
	46.	Number of Rotor Bars	60
	47.	Number of Broken Rotor Bars	0
	48.	Growler Test	(P) Pass
	49.	Rotor Condition	(P) Pass
N	Mechanical Inspection		
	50.	Bearing Manufacture	
	51.	Bearing DE Size	3216 a/c3
	52.	Bearing DE Type	double row ball



53. DE Bearing Qty.



55.	Bearing ODE Type	ball
56.	ODE Bearing Qty.	1
57.	Insulated Bearing	
58.	Lubrication Type	grease
59.	Grease Condition	(F) Fail
60.	Bearing Retainers	(Y) Yes



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	bearings, grease, shaft, windings
67.	Cause of Failure	
	Lack of lubrication and moisture in windings	
68.	Comments	

69. Service Technician Trevor Hall

T-Jull

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M	achi	ne Fit Inspection Report	
	70.	Shaft Run Out	(F) Fail
	71.	Initial Shaft Run Out	0.1 "
	72.	Final Shaft Run Out	
)	73.	DE Bearing Shaft Fit	(F) Fail
	74.	DE Initial Shaft Bearing Fit Size 1	3.149 "
	75.	DE Initial Shaft Bearing Fit Size 2	3.149 "
	76.	DE Initial Shaft Bearing Fit Size 3	3.1489 "
	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	2.3623 "
	82.	ODE Initial Shaft Bearing Fit Size 2	2.3623 "
	83.	ODE Initial Shaft Bearing Fit Size 3	2.3623 "
	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	(F) Fail
	94.	DE Initial Endbell Fit Size 1	3.151 "
	95.	DE Initial Endbell Fit Size 2	3.151 "
	96.	DE Initial Endbell Fit Size 3	3.151 "
	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
	105.	ODE Initial Endbell Fit Size 1	2.363 "
	106.	ODE Initial Endbell Fit Size 2	2.363 "
	107.	ODE Initial Endbell Fit Size 3	2.363 "
	108.	ODE Final Endbell Fit Size 1	
	109.	ODE Final Endbell Fit Size 2	
	110.	ODE Final Endbell Fit Size 3	

	ODE Endbell Fit Insulated		
112.	ODE Endbell Air Seal Fit		
	ODE Initial Endbell Seal Fit Size		
114.	ODE Finial Endbell Seal Fit Size		
115.	Foot Flatness		
	Foot Condition		
<ul><li>117.</li></ul>	Flange Condition (F) Fail		
-	Very rusted		
	Service Technician Trevor Hall		
	cing Report		
	Balance Type		
	Balance Operating Speed		
	Start Left End		
	Start Right End  Relative Specification		
	Balancing Specification Finish Left End		
	Finish Left End Finish Right End		
	Service Technician		
	mbly and Final Test  Meggar Testing Reading		
	Surge Test		
	Hi-Pot		
	Winding Resistance 1-2		
	Winding Resistance 2-3		
	Winding Resistance 1-3		
	Test Run Voltage Phase A		
	Test Run Amps A		
	Test Run Voltage Phase B		
	Test Run Amps B		
	Test Run Voltage Phase C		
	Test Run Amps C		
	DE Horizontal Vibration Reading		
	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		
	Temp at 15 minutes		
149.	Temp at 20 minutes		

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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	



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- 1. APPLICABILITY. The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
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- 5. <u>DELIVERY OF GOODS AND/OR SERVICES.</u> Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
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- 8. WARRANTIES. Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

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- 13. FORCE MAJEURE. Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earth quake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
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