

### LR Motor Shop Repairs

### **Job Number 100419**

Prepared for BAD BOY

102 INDUSTRIAL DRIVE BATESVILLE AR 72501

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AC Recondition As Found - MOTOR SHOP LR

AC Recondition - Rev. 2: 1024595876

1.0

FolderID: 100419

FormID: 14768269



# AC Recondition As Found BAD BOY

102 INDUSTRIAL DRIVE BATESVILLE, AR 72501



#### AC Recondition - Rev. 2

Location: MOTOR SHOP LR
Serial Number: 1024595876

Manufacturer:	WEG
Product Number:	AL112M-02
Serial Number:	1024595876
HP/kW:	4 (kW)
RPM:	3500 (RPM)
Frame:	112M
Voltage:	460
Current:	6.6 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: 4 - Good

#### **Overall Condition**

1. Report Date

2. Nameplate Picture





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- 3. Photos of all six sides of the machine.
- 4. Describe the Overall Condition of the Equipment as Received

#### **Initial Mechanical/Electrical**

- 5. Does Shaft Turn Freely?
- 6. Does Shaft Have Visible Damage?
- 7. Assembled Shaft Runout
- 8. Assembled Shaft End Play
- 9. Air Gap Variation <10%
- 10. Lead Condition
- 11. Lead Length
- 12. Frame Condition
- 13. Fan Condition
- 14. Broken or Missing Components

#### **Initial Electrical Inspection**

15. Insulation Resistance/Megger





16.	Winding Resistance		
	1-2	1-3	

- 17. Perform Surge Test
- 18. Stator Condition

#### **Mechanical Inspection**

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20. Drive End Bearing Qty.  21. Drive End Bearing Type  (Ball) Ball Bearing  22. Drive End Lubrication Type  (Grease) Grease Lubricated  23. Drive End Bearing Insulation or Grounding Device?  none  24. Drive End Wavy Washer/Snap-Ring Other Retention Device?  none  25. Drive End Bearing Condition  good  26. Opposite Drive End Bearing Number-  6206  27. Opposite Drive End Bearing Qty.  1 28. Opposite Drive End Bearing Type  (Ball) Ball Bearing  29. Opposite Drive End Bearing Type  (Grease) Grease Lubricated  30. Opposite Drive End Bearing Insulation or Grounding Device?  none  31. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?  wavy  32. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?  wavy  33. Drive End Searing Condition  good  33. Drive End Searing Condition  good  34. Opposite Drive End Seal  none  Rotor Inspection  55. Rotor Type/Material  (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars  34.  38. Rotor Condition			
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29. Opposite Drive End Lubrication Type  30. Opposite Drive End Bearing Insulation or Grounding Device?  31. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?  32. Opposite Drive End Bearing Condition  33. Drive End Seal  34. Opposite Drive End Seal  35. Rotor Type/Material  36. Growler Test  37. Number of Rotor Bars  (Grease) Grease Lubricated  (Grease) Grease Lubricated  (Grease) Grease Lubricated  (Squirrel Aluminum) Squirrel Cage Aluminum Squirrel Cage Aluminum Die Cast  (Pass) Pass	27.	Opposite Drive End Bearing Qty.	1
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33. Drive End Seal  34. Opposite Drive End Seal  Rotor Inspection  35. Rotor Type/Material  (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars	31.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	wavy
34. Opposite Drive End Seal  Rotor Inspection  35. Rotor Type/Material  (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars  34.	32.	Opposite Drive End Bearing Condition	good
Rotor Inspection  35. Rotor Type/Material  (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars  34	33.	Drive End Seal	none
35. Rotor Type/Material  (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars  34	34.	Opposite Drive End Seal	none
Cage Aluminum Die Cast  36. Growler Test  (Pass) Pass  37. Number of Rotor Bars  34	Rotor	Inspection	
37. Number of Rotor Bars 34	35.	Rotor Type/Material	
	36.	Growler Test	(Pass) Pass
38. Rotor Condition good	37.	Number of Rotor Bars	34
	38.	Rotor Condition	good

## 39. List the Parts needed for the Repair Below 6307-2Z, 6206-2Z, plug-in varistor (see pictures)



embled Motor	Signature of Technician that Disassembl
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	M	>
Mech	anical Fits- Rotor	
41.	Shaft Runout	
40		

Mechanical Fits- Rotor					
41.	Shaft Runout			0 inches	
42.	Rotor Runout				
	Drive End Bearing Fit	Rotor Body	Opposite Drive End E	Bearing	
43.	Coupling Fit Closest to Bearing Housi				
	0 Degrees	90 Degrees	120 Degrees		
4.4	Occupios Fit Olescot to the conduct the	Ob a fi			
44.	Coupling Fit Closest to the end of the		100 5		
	0 Degrees	60 Degrees	120 Degrees		
45	Drive End Bearing Shaft Fit				
10.	0 Degrees	60 Degrees	120 Degrees		
	1.3785	1.3785	1.3785		
<b>46.</b>			1.0700	(P) Pass	
47.	-			( )	
	0 Degrees	60 Degrees	120 Degrees		
	1.1815	1.1815	11815		
<b>48.</b>	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass	
49.	Shaft Air Seal Fits				
	Drive End Air Seal	Opposite Drive End Air Seal			
	Mechanical Fits- Bearing Housings				
50.	Drive End - Endbell Bearing Fit				
	0 Degrees	60 Degrees	120 Degrees		
	3.1499	3.15	3.1499		
<b>1</b> 51.	Drive End - Endbell Bearing Fit Condi	tion		(P) Pass	

**David Maclin** 

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52.	2. Opposite Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	2.441	2.441	2.441	
53.	Opposite Drive End - Endbell Bearin	g Fit Condition		(P) Pass
54.	Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
-	Good			
55.	End Bell Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
56.	List Machine Work Needed Below			
	None			
57.	Technician			David Maclin
	DU			
Root	Cause of Failure			
58.	Failure locations			
	Motor plugin connection damaged			
59.	Root cause of failure			
	Unknown			



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- 11. **GOVERNING LAW AND JURISDICTION.** Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
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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.
- 14. <u>NONWAIVER.</u> No course of dealing or failure of either party to strictly enforce any term, right, or condition of these Standard Terms and Conditions will be construed as a waiver of such term, right or condition. Any waiver by Hi-Speed will only be in writing and will waive no succeeding breach of a term, right or condition.
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