



KEEPING YOUR FACILITY UP TO SPEED
— EVERY DAY SINCE 1946 —

LR Motor Shop Repairs

Job Number 103832

Prepared for Reynolds Metals company

1333 highway 270
Malvern AR 72104

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AC Inspection as Found - *LITTLE ROCK MOTOR
SHOP*

AC Inspection - Rev. 2: *J2312200008*

1.0

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Printed on 12/27/2024

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AC Inspection as Found

Reynolds Metals company

1333 highway 270

Malvern, AR 72104

FolderID: 103832

FormID: 22471046

AC Inspection - Rev. 2

Location: LITTLE ROCK MOTOR SHOP

Serial Number: J2312200008

Description: 25HP ABB 3525RPM

Hi-Speed Job Number: 103832

Manufacturer: ABB

Product Number: PART: 1LE23212DA112AA3

Spec/ID #: TYPE: SD100

Serial Number: J2312200008

HP/kW: 25 (HP)

RPM: 3525 (RPM)

Frame: 284TS

Voltage: 460

Current: 30 (Amps)

Phase: Three

Hz: 60 (Hz)

Service Factor: 1.15

Enclosure: TEFC

of Leads: 3

J-box Included: Half

Coupling/Sheave: None

Bearing RTDs: No

Stator RTDs: No

Repair Stage: Final

Rewind: Yes

Shaft Machined Fit Repairs
Required: No

Bearing Housing Machined
Fit Repairs Required: No

Heaters: No

Winding Type : Random Wound

Bearing Type: Rolling Element

Priorities Found: ● 2 - High ● 9 - Good

Overall Condition

1. Report Date

12/27/2025

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1.0

2. Nameplate Picture



3. Photos of all six sides of the machine.





4. Describe the Overall Condition of the Equipment as Received
Serviceable

Initial Mechanical/Electrical

5. Does Shaft Turn Freely?	(Y) Yes
6. Does the shaft require T.I.R in Lathe to identify additional repairs?	(No) No
7. Does Shaft Have Visible Damage?	(No) No
8. Assembled Shaft Runout	0 Inches
9. Assembled Shaft End Play	0 inches
10. Air Gap Variation <10%	0

11. Lead Condition

(P) Pass



12. Lead Length	12 Inches
13. Does it have Lugs?, If so what is the Stud Size?	(No) No
14. Lead Numbers	1-3
15. Frame Condition	pass
16. Fan Condition	(P) Pass



17. Broken or Missing Components	none
Initial Electrical Inspection	
18. Insulation Resistance/Megger	0 Megohms
19. Winding Resistance	
1-2	1-3
2-3	
0	
20. Perform Surge Test	(F) Fail
21. Number of Stator Slots	36

22. Stator Condition

rewind



23. Stator Thermistors/Ohms

Na

24. Stator Overloads/Ohms

Na

Mechanical Inspection

25. Drive End Bearing Brand

ORS

26. Drive End Bearing Number-

6310SO C3



27. Drive End Bearing Qty.

1

28. Drive End Bearing Type

(Ball) Ball Bearing

29. Drive End Lubrication Type

(Grease) Grease Lubricated

30. Drive End Bearing Insulation or Grounding Device?

na

31. Drive End Wavy Washer/Snap-Ring Other Retention Device?

na

32. Drive End Bearing Condition

■ *Axial load*



33. Opposite Drive End Bearing Brand

ORS

34. Opposite Drive End Bearing Number-

6310SO C3



35. Opposite Drive End Bearing Qty.

1

36. Opposite Drive End Bearing Type

(Ball) Ball Bearing

37. Opposite Drive End Lubrication Type

(Grease) Grease Lubricated

38. Opposite Drive End Bearing Insulation or Grounding Device?

na

39. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?

Wavy washer



40. Opposite Drive End Bearing Condition


normal wear

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41. Drive End Seal	pass
42. Opposite Drive End Seal	
Pass	
Rotor Inspection	
43. Rotor Type/Material	(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
44. Growler Test	(Pass) Pass



45. Number of Rotor Bars	22
46. Rotor Condition	pass
47. List the Parts needed for the Repair Below	
	2-6310 C3 bearing
48. Signature of Technician that Disassembled Motor	RW
	
Mechanical Fits- Rotor	
49. Shaft Runout	0 inches
50. Rotor Runout	
Drive End Bearing Fit	Rotor Body
0	Opposite Drive End Bearing

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51. Coupling Fit Closest to Bearing Housing		
0 Degrees	90 Degrees	120 Degrees
1.625	1.625	1.625
52. Coupling Fit Closest to the end of the Shaft		
0 Degrees	60 Degrees	120 Degrees
1.625	1.625	1.625
53. Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
1.969	1.969	1.969
54. Drive End Bearing Shaft Fit Condition		(P) Pass



55. Opposite Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
1.969	1.969	1.969
56. Opposite Drive End Bearing Shaft Fit Condition		(P) Pass



57. Shaft Air Seal Fits		
Drive End Air Seal	Opposite Drive End Air Seal	
pass	pass	
Mechanical Fits- Bearing Housings		
58. Drive End - Endbell Bearing Fit		
0 Degrees	60 Degrees	120 Degrees
4.3315	4.3315	4.3315

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59. Drive End - Endbell Bearing Fit Condition

(P) Pass




60. Opposite Drive End - Endbell Bearing Fit		
0 Degrees	60 Degrees	120 Degrees
4.3313	4.3313	4.3313
61. Opposite Drive End - Endbell Bearing Fit Condition		(P) Pass



62. Bearing Cap Condition	
Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	pass



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63. End Bell Air Seal Fits		
Drive End Air Seal	Opposite Drive End Air Seal	
pass		
64. List Machine Work Needed Below	None	
65. Technician	RW	
		
Co sign TRH		
Root Cause of Failure		
66. Failure locations	Bearings had water in drive end bearing. Windings were single phased	
67. Root cause of failure	Looks like lose of power to one phase	
Dynamic Balance Report		
68. Rotor Weight and Balance Grade		
Rotor Weight	Balance Grade	
69. Initial Balance Readings		
Drive End	Opposite Drive End	
70. Final Balance Readings		
Drive End	Opposite Drive End	
71. Technician		
Rewind		
72. Core Test Results - Watts loss per Pound		
Pre-Burnout	Post Burnout	
73. Core Hot Spot Test		
Pre-Burnout	Post-Burnout	
74. Post Rewind Electrical Test- Insulation Resistance		
75. Post Rewind Polarization Index		
76. Post Rewind Winding Resistance		
1-2	1-3	2-3
77. Post Rewind Surge Test		
78. Post Rewind Hi-Pot		
79. Technician		
Assembly		
80. QC Check All Parts for Cleanliness Prior to Assembly		
81. Photograph All Major Components prior to assembly		
82. Final Insulation Resistance Test		
83. Assembled Shaft Endplay		

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84. Assembled Shaft Runout			
85. Test Run Voltage			
Volts	Volts	Volts	
86. Test Run Amperage			
Amps	Amps	Amps	
87. Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
88. Opposite Drive End Vibration Readings - Inches Per Second			
Horizontal	Vertical	Axial	
89. Ambient Temperature - Fahrenheit			
90. Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
91. Opposite Drive End Bearing Temps - Fahrenheit			
5 Minutes	10 Minutes	15 Minutes	
92. Document Final Condition with Pictures after paint			
93. Final Pics and QC Review			



STANDARD TERMS AND CONDITIONS FOR PURCHASE OF GOOD AND/OR SERVICES

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.
2. **PRICE.** All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
3. **SCOPE OF GOODS AND/OR SERVICES.** The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only be effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
4. **BILLING AND PAYMENT TERMS.** Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
5. **DELIVERY OF GOODS AND/OR SERVICES.** 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.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
7. **INSPECTION/ACCEPTANCE.** All goods and services ordered pursuant to any quotation shall be subject to inspection by Buyer after delivery or performance to determine conformity with the quotation and/or purchase order and Hi-Speed's advertised or published specifications. Buyer shall have a period of thirty (30) days from shipment of goods at the delivery destination specified in the quotation within which to inspect the goods for conformity with the quotation, order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. Buyer shall have a period of thirty (30) days following completion of any services within which to inspect the services for conformity with the quotation, purchase order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. If the goods delivered or services performed do not so conform, upon delivery of notice to Hi-Speed of any discrepancy, nonconformance or rejection, Hi-Speed shall have sixty (60) days to cure the alleged discrepancy and/or nonconformance. If Hi-Speed fails to cure in this time period, Buyer shall have the right to reject such goods or services. After the cure period, goods that have been delivered and rejected, in whole or in part, shall be returned to Hi-Speed. Buyer shall notify Hi-Speed and arrange for the return of the goods as required. Should such non-conforming services be rejected Hi-Speed shall, at its sole cost, re-perform the non-conforming services. Inspection or failure to inspect on any occasion shall not affect Buyer's rights under the warranty provisions herein.
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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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, earthquake, 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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