

# EVERY DAY SINCE 1946

**Motor Shop Repairs** 

# Job Number 97703

Prepared for SAGE

5901 SLOAN DRIVE LITTLE ROCK AR 72206

## Table of Contents

AC Recondition Repair Report



## **AC Recondition Repair Report**

FolderID: 97703 FormID: 9679644

SAGE

5901 SLOAN DRIVE LITTLE ROCK, AR 72206

Priorities Found: 🛑 4 - High	🌑 9 - Good	
General		
1. Job Number		97703
2. Report Date		
3. Customer		SAGE LR
Name Plate Information		

#### STERLING

#### 4. Manufacturer













14. Cycles		60
15. Phase		3
16. Service I	Factor	
17. Motor Mo	ount Position	
Initial Inspecti	ion	
18. Number	of Leads	12



19.	Lead Length	8 Inches
20.	Lead Size	12
21.	Lead Condition	(P) Pass
22.	Lead Markings	1-12
23.	Lug Size, Condition, and Type	
24.	Winding RTD's	(NA) Not Applicable
25.	Winding Rtd's Condition	(NA) Not Applicable
26.	Shaft Run Out	
27.	Does Shaft Turn Freely	yes
28.	Does Shaft Have Visible Damage	no
29.	Bearing Rtd's	(NA) Not Applicable
30.	Bearing Rtd's Condition	(NA) Not Applicable
31.	Contamination	
32.	Frame Condition	(P) Pass
33.	Fan Condition	(P) Pass

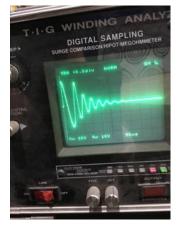


34. Broken or missing components

- 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





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(P) Pass

0.186 Ohm

0.185 Ohm's

0.184 Ohm's

#### 43. Failure Location

#### **Initial Rotor Inspection**

44. Rotor Type

cast aluminum



45.	Air Gap <10% Variation	
46.	Number of Rotor Bars	40
47.	Number of Broken Rotor Bars	0
<b>4</b> 8.	Growler Test	(P) Pass
<b>4</b> 9.	Rotor Condition	(P) Pass
Mechanical Inspection		

50. Bearing Manufacture

DE KOYO ODE NSK



#### 6310ZZ

### 51. Bearing DE Size

Frosted





52. Bearing DE Type	Ball
53. DE Bearing Qty.	1
54. Bearing ODE Size	6210ZZ
Frosted	





55.	Bearing ODE Type	ball
56.	ODE Bearing Qty.	1
57.	Insulated Bearing	no
58.	Lubrication Type	grease
59.	Grease Condition	(NA) Not Applicable
60.	Bearing Retainers	
61.	Shaft Grounding Device	(NA) Not Applicable
62.	DE Seal	(NA) Not Applicable
63.	DE Seal Type/Size	
64.	ODE Seal	(NA) Not Applicable
65.	ODE Seal Type/Size	
Root	Cause of Failure	
66.	Component Failure	
67.	Cause of Failure	
68.	Comments	
69.	Service Technician	

#### **Machine Fit Inspection Report**

- 70. Shaft Run Out
- 71. Initial Shaft Run Out
- 72. Final Shaft Run Out
- 73. DE Bearing Shaft Fit

(P) Pass



74.	DE Initial Shaft Bearing Fit Size 1	1.9689 "
75.	DE Initial Shaft Bearing Fit Size 2	1.9689 "
76.	DE Initial Shaft Bearing Fit Size 3	1.7689 "
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	1.9687 "
82. ODE Initial Shaft Bearing Fit Size 2	1.9687 "
83. ODE Initial Shaft Bearing Fit Size 3	1.9687 "
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

Control Contro

DE Initial Endbell Fit Size 1	4.3321 "
DE Initial Endbell Fit Size 2	4.3322 "
DE Initial Endbell Fit Size 3	4.3322 "
DE Final Endbell Fit Size 1	
DE Finial Endbell Fit Size 2	
DE Final Endbell Fit Size 3	
DE Endbell Fit Insulated	(N) No
DE Endbell Air Seal Fit	
Initial Endbell Air Seal Fit Size	
Finial Endbell Air Seal Fit Size	
ODE Endbell Fit	(F) Fail
	DE Initial Endbell Fit Size 1 DE Initial Endbell Fit Size 2 DE Initial Endbell Fit Size 3 DE Final Endbell Fit Size 1 DE Finial Endbell Fit Size 2 DE Final Endbell Fit Size 3 DE Endbell Fit Insulated DE Endbell Air Seal Fit Initial Endbell Air Seal Fit Size Finial Endbell Air Seal Fit Size ODE Endbell Fit



105. ODE Initial Endbell Fit Size 1	3.5451 "
106. ODE Initial Endbell Fit Size 2	3.5451 "
107. ODE Initial Endbell Fit Size 3	3.5451 "
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	(N) No
112. ODE Endbell Air Seal Fit	

110	ODE Initial English Society	
	ODE Initial Endbell Seal Fit Size	
	ODE Finial Endbell Seal Fit Size	
	Foot Flatness	
-	Foot Condition	(P) Pass
117.	Flange Condition	
118.	Service Technician	RW
Balan	cing 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	
Assen	nbly 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	
	DE Axial Vibration Reading	
	ODE Horizontal Vibration Reading	
	ODE Vertical Vibration Reading	
	ODE Axial Vibration Reading	
	Ambient Temp at start of Test Run	
	Temp at 5 minutes	
	Temp at 10 minutes	
	Temp at 15 minutes	
	Temp at 20 minutes	
	Temp at 25 minutes	
	Temp at 30 minutes	
	Temp at 35 minutes	
	Temp at 40 minutes	
	-	
	Temp at 45 minutes	
	Temp at 50 minutes	
	Temp at 55 minutes	
157.	Temp at 60 minutes	

158. Motor Paint		
159. Service Technician		



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- 1. <u>APPLICABILITY.</u> 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.
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- 4. <u>BILLING AND PAYMENT TERMS.</u> 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 Buver 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.
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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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- 10. <u>SEVERABILITY</u>. The partial or complete invalidity of any provision of these Standard Terms and Conditions shall not affect the enforceability of the remainder of these Standard Terms and Conditions. If any provision is found to be invalid or unenforceable, that portion shall be modified to make it enforceable or shall be stricken and the remainder of these Standard Terms and Conditions shall enforced.
- 11. <u>GOVERNING LAW AND JURISDICTION.</u> 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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- 16. <u>NO INDIVIDUAL LIABILITY</u>. Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.