

# Motor Shop Repairs

## **Job Number 97403**

Prepared for SAGE

5901 SLOAN DRIVE LITTLE ROCK AR 72206

## **Table of Contents**



Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

Printed on 10/20/2020 Powered by INSPECTALL Table of Contents





### **AC Recondition Repair Report**

SAGE

5901 SLOAN DRIVE LITTLE ROCK, AR 72206 Performed By: Motor Shop LR Date Completed: 10/9/2020 FolderID: 97403 FormID: 9052185

Priorities	s Found:  1 - High 17 - Good		
Gene	ral		
1.	Job Number	97403	
2.	Report Date		
3.	Customer	SAGE	
Name	Plate Information		0
4.	Manufacturer	BALDOR	P
5.	Model		
6.	Serial Number		
7.	Horsepower	50	
8.	KW		
9.	Volts		
-	230/460		
10.	Amps		
-	114/57		
11.	RPM	1775	
12.	Frame	326TDZ	
13.	Enclosure	TEFC	
14.	Cycles	60	
15.	Phase	3	
16.	Service Factor	1.0	
17.	Motor Mount Position	F1	
nitial	I Inspection		0
18.	Number of Leads	3	P13
19.	Lead Length	12 Inches	
20.	Lead Size		
21.	Lead Condition	(P) Pass	
22.	Lead Markings		
23.	Lug Size, Condition, and Type		
	None		
24.	Winding RTD's	(NA) Not Applicable	
25.	Winding Rtd's Condition	(NA) Not Applicable	
26.	Shaft Run Out	0.003	
27.	Does Shaft Turn Freely	yes	
28.	Does Shaft Have Visible Damage	no	P9:
29.	Bearing Rtd's	(NA) Not Applicable	
30.	Bearing Rtd's Condition	(NA) Not Applicable	

Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

None   (P) Pass   P109	31	Contamination		
33.         Frame Condition         (P) Pass         P108           33.         Fan Condition         (P) Pass         P108           34.         Broken or missing components         P108           Initial Electric Test           35.         Resistance to Ground         Mohm         P7           36.         Winding Resistance 1-2         Winding Resistance 2-3         Winding Resistance 1-3         Ohm's         P36           39.         Resistive Imbalance         P7         P85         P57           41.         Surge Test         (P) Pass         P57           42.         Stator Condition         good         P6           43.         Fallure Location         good         P6           44.         Rotor Type         squirrel cage           44.         Rotor Type         squirrel cage           45.         Air Cap + 10% Variation         graph = 10%           46.         Number of Rotor Bars         40         47           47.         Number of Rotor Bars         40         47           48.         Growler Test         (P) Pass         P52           49.         Rotor Condition         (P) Pass         P52           49.	51.			
33. Fan Condition (P) Pass P108 34. Broken or missing components  Initial Electric Test  35. Resistance to Ground Mohm P7 36. Winding Resistance 1-2 37. Winding Resistance 1-3 38. Winding Resistance 1-3 39. Resistive Imbalance 40. Hi-Pot 9000 9000 9000 9000 9000 9000 9000 90	<b>32</b>		(P) Pass	
34. Broken or missing components	_			P109
Initial Electric Test			(1)1 000	
35. Resistance to Ground 36. Winding Resistance 1-2 37. Winding Resistance 1-3 38. Winding Resistance 1-3 39. Resistive Imbalance 40. Hi-Pot 41. Surge Test 40. Hi-Pot 41. Surge Test 41. Surge Test 42. Stator Condition 43. Failure Location 44. Rotor Type 45. Air Gap <10% Variation 46. Number of Rotor Bars 47. Number of Broken Rotor Bars 49. Rotor Condition 49. Rotor Condition 40. Bearing DE Size 40. Bearing DE Size 41. Solar Bearing ODE Size 42. Stator Condition 43. Failure Location 44. Rotor Type 45. Air Gap <10% Variation 46. Number of Broken Rotor Bars 40. Type 47. Number of Broken Rotor Bars 40. Solar Test 40. Solar Test 41. Rotor Type 42. Stator Condition 43. Failure Location 44. Rotor Type 45. Air Gap <10% Variation 46. Number of Broken Rotor Bars 47. Number of Broken Rotor Bars 48. Growler Test 49. Rotor Condition 40. P78 40. Rotor Condition 40. P88 41. Rotor Condition 40. P88 42. Stator Condition 43. Failure Location 44. Rotor Type 45. Bearing DE Size 46. Salar S		<u> </u>		li de la
36. Winding Resistance 1-2 37. Winding Resistance 2-3 38. Winding Resistance 2-3 39. Resistive Imbalance 40. Hi-Pot 41. Surge Test (P) Pass P57 42. Stator Condition good P60 43. Fallure Location bearings Initial Rotor Inspection 44. Rotor Type squirrel cage 45. Air Gay -10% Variation 46. Number of Broken Rotor Bars 40 47. Number of Broken Rotor Bars 40 48. Growler Test (P) Pass P52 Mechanical Inspection 50. Bearing Manufacture RSR P51 51. Bearing DE Size 6312 2SS/C3 P14 52. Bearing ODE Size 6312 2SS/C3 P14 53. DE Bearing ODE Size 6312 2SS/C3 P155. Bearing ODE Size 6311 2ZS/C3 P155. Bearing ODE Size 755. Bearing ODE Size 7555. Bearing			Mohm	
37. Winding Resistance 2-3 38. Winding Resistance 1-3 39. Resistive Imbalance 40. Hi-Pot 411. Surge Test 412. Stator Condition 414. Rotor Condition 415. Air Gap <10% Variation 416. Number of Rotor Bars 417. Number of Broken Rotor Bars 418. Growler Test 419. Rotor Condition 419. Rotor Condition 420. Air Gap <10% Variation 430. Air Gap <10% Variation 4410. Number of Broken Rotor Bars 442. Rotor Type 443. Growler Test 444. Rotor Type 445. Air Gap <10% Variation 446. Number of Broken Rotor Bars 447. Number of Broken Rotor Bars 448. Growler Test 469. Rotor Condition 470. Rotor Condition 480. Rotor Condition 481. Growler Test 482. Rotor Condition 483. Growler Test 484. Growler Test 485. Bearing DE Size 486. Salade, ball bearing 585. Bearing DE Type 586. Bearing ODE Type 586. Bearing ODE Type 586. Bearing ODE Type 586. Ubfrication Type 587. Insulated Bearing 588. Lubrication Type 589. Grease Condition 699. Grease Condition 690. Bearing Retainers 600. Bearing Retainers 600. DE Seal			WOIIII	. ,
38. Winding Resistance 1-3         Ohm's         P35           39. Resistive Imbalance         40. Hi-Pot         41. Surge Test         (P) Pass         P57           41. Surge Test         (P) Pass         P60         P60           42. Stator Condition         good         P60		•		
39. Resistive Imbalance 40. Hi-Pot 41. Surge Test (P) Pass P57 42. Stator Condition good P60 43. Failure Location bearings Initial Rotor Inspection 44. Rotor Type squirrel cage 45. Air Gap <10% Variation 46. Number of Rotor Bars 40. 47. Number of Broken Rotor Bars 49. Rotor Condition (P) Pass 49. Rotor Condition (P) Pass 49. Rotor Condition (P) Pass 49. Rotor Specific RSR 49. Rotor Specific RSR 40. 50. Bearing Manufacture 8 RSR 51. Bearing DE Size 6312 2RS/C3 52. Bearing DE Type Sealed, ball bearing 53. DE Bearing Qty. 154. Bearing ODE Size 6311 2Z/C3 54. Bearing ODE Type 155. Bearing ODE Type 166. ODE Bearing Qty 177. Insulated Bearing 178. Lubrication Type 189. Grease Condition (F) Fail 189. Dirty 180. D			Ohm'a	D35
40. Hi-Pot  41. Surge Test (P) Pass P57 42. Stator Condition good P60 43. Failure Location bearings  Initial Rotor Inspection  44. Rotor Type squirrel cage  45. Air Gap <10% Variation  46. Number of Rotor Bars 0  48. Growler Test (P) Pass  49. Rotor Condition (P) Pass  49. Rotor Bearing Manufacture RSR P1  51. Bearing DE Size 6312 2RS/C3 P14  52. Bearing DE Type Sealed, ball bearing P23  53. DE Bearing Qty. 1  54. Bearing ODE Type Sealed, ball bearing P23  55. Bearing ODE Type regular ball bearing P43  56. ODE Bearing Qty. 1  57. Insulated Bearing Not 1 P58  59. Grease Condition (F) Fail P58  60. Bearing Retainers (Y) Yes P68  61. Shaft Grounding Device (Y) Yes P68  63. DE Seal Type/Size  64. ODE Seal  65. ODE Seal			Ollilis	1 33
41. Surge Test				
42. Stator Condition         good bearings         P60           43. Failure Location         bearings           Initial Rotor Inspection         squirrel cage           44. Rotor Type         squirrel cage           45. Air Gap <10% Variation			(D) Door	DET
43. Failure Location         bearings           Initial Rotor Inspection           44. Rotor Type         squirrel cage           45. Air Gap < 10% Variation		· ·		
Initial Rotor Inspection           44. Rotor Type         squirrel cage           45. Air Gap <10% Variation			•	P60
44.       Rotor Type       squirrel cage         45.       Air Gap <10% Variation			bearings	_
45. Air Gap <10% Variation  46. Number of Rotor Bars  40. 47. Number of Broken Rotor Bars  49. Rotor Condition  (P) Pass  49. Rotor Condition  (P) Pass  63.12 RS/C3  P14  52. Bearing Manufacture  53. DE Bearing DE Type  54. Bearing ODE Type  55. Bearing ODE Size  56. ODE Bearing Qty.  57. Insulated Bearing  58. Lubrication Type  60. Bearing Retainers  61. Shaft Grounding Device  42. Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal  63. DE Seal  (Y) Yes  64. ODE Seal  65. ODE Seal  67. Insulated Bearing  66. ODE Seal  (Y) Yes  67. Insulated Bearing  68. Lubrication Type  69. Grease Condition  (F) Fail  P75. Insulated Bearing  (Y) Yes  P86. ODE Seal  (Y) Yes				0
46. Number of Rotor Bars 40 47. Number of Broken Rotor Bars 0 48. Growler Test (P) Pass ■ 49. Rotor Condition (P) Pass ■ 49. Rotor Condition  50. Bearing Manufacture 51. Bearing DE Size 52. Bearing DE Type 53. DE Bearing Oty. 54. Bearing ODE Size 55. Bearing ODE Size 56. ODE Bearing Oty. 57. Insulated Bearing 58. Lubrication Type 59. Grease Condition  60. Bearing Retainers 61. Shaft Grounding Device 4 Aegis. Worn/Replace. Shaft size 2.8750. 62. DE Seal 63. DE Seal 64. ODE Seal 65. ODE Seal 66. ODE Seal 67. Yes 66. Shaft Grounding Device 67. Shaft Size 2.8750. 68. ODE Seal 69. ODE Seal 69. ODE Seal 69. ODE Seal 60. ODE Seal 60. ODE Seal 60. DE Seal 60. ODE Seal		••	squirrel cage	
47. Number of Broken Rotor Bars       0         ● 48. Growler Test       (P) Pass         ● 49. Rotor Condition       (P) Pass       P52         Mechanical Inspection         50. Bearing Manufacture       RSR       P1         51. Bearing DE Size       6312 2RS/C3       P14         52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1       +         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       1       P58         59. Grease Condition       (F) Fail       P75         Dirty       P0irty       P0irty       P75         60. Bearing Retainers       (Y) Yes       P75         61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes         62. DE Seal       (Y) Yes       P66         63. DE Seal Type/Size       P96		•		
● 48. Growler Test       (P) Pass         ● 49. Rotor Condition       (P) Pass         Mechanical Inspection       RSR         50. Bearing Manufacture       RSR       P1         51. Bearing DE Size       6312 2RS/C3       P14         52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1       P43         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       58. Lubrication Type       polyrex em       P68         59. Grease Condition       (F) Fail       P75         Dirty       60. Bearing Retainers       (Y) Yes       P81         61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes       P81         62. DE Seal       (Y) Yes       P86         63. DE Seal Type/Size       (Y) Yes       P86	46.		40	
● 49. Rotor Condition       (P) Pass       P52         Mechanical Inspection       RSR       P1         50. Bearing Manufacture       RSR       P1         51. Bearing DE Size       6312 2RS/C3       P14         52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1       1         54. Bearing ODE Type       regular ball bearing       P47         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       no         58. Lubrication Type       polyrex em       P68         59. Grease Condition       (F) Fail       P75         Dirty       60. Bearing Retainers       (Y) Yes       P81         61. Shaft Grounding Device       (Y) Yes       P81         62. DE Seal       (Y) Yes       63. DE Seal Type/Size         64. ODE Seal       P96         Worn       Worn       P96	47.			
Mechanical Inspection           50. Bearing Manufacture         RSR         P1           51. Bearing DE Size         6312 2RS/C3         P14           52. Bearing DE Type         Sealed, ball bearing         P23           53. DE Bearing Qty.         1         1           54. Bearing ODE Size         6311 2Z/C3         P43           55. Bearing ODE Type         regular ball bearing         P47           56. ODE Bearing Qty.         1         P58           57. Insulated Bearing         no         no           58. Lubrication Type         polyrex em         P68           59. Grease Condition         (F) Fail         P75           Dirty         060. Bearing Retainers         (Y) Yes         P81           61. Shaft Grounding Device         (Y) Yes         P81           62. DE Seal         (Y) Yes         P81           63. DE Seal Type/Size         (Y) Yes         P96           64. ODE Seal         P96         P96				
50. Bearing Manufacture       RSR       P1         51. Bearing DE Size       6312 2RS/C3       P14         52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       no         58. Lubrication Type       polyrex em       P68         • 59. Grease Condition       (F) Fail       P75         □ Dirty       (F) Fail       P75         • 61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes       P81         62. DE Seal       (Y) Yes       P68         64. ODE Seal       P96       P96         Worn       P96       P96       P96	<b>4</b> 9.	Rotor Condition	(P) Pass	P52
51. Bearing DE Size       6312 2RS/C3       P14         52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       no         58. Lubrication Type       polyrex em       P68         59. Grease Condition       (F) Fail       P75         □ Dirty       (Y) Yes       P79         61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes         62. DE Seal       (Y) Yes         63. DE Seal Type/Size       (Y) Yes         64. ODE Seal       P96         Worn       Worn	Mech	anical Inspection		0
52. Bearing DE Type       Sealed, ball bearing       P23         53. DE Bearing Qty.       1         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       no         58. Lubrication Type       polyrex em       P68         59. Grease Condition       (F) Fail       P75         □ Dirty       0       (Y) Yes       P79         61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes       P81         62. DE Seal       (Y) Yes       P96         63. DE Seal Type/Size       P96       P96         Worn       Worn       P96	50.	Bearing Manufacture	RSR	P1
53. DE Bearing Qty.       1         54. Bearing ODE Size       6311 2Z/C3       P43         55. Bearing ODE Type       regular ball bearing       P47         56. ODE Bearing Qty.       1       P58         57. Insulated Bearing       no       P68         58. Lubrication Type       polyrex em       P68         59. Grease Condition       (F) Fail       P75         □ Dirty       P75       P75         60. Bearing Retainers       (Y) Yes       P81         61. Shaft Grounding Device       (Y) Yes       P81         Aegis. Worn/Replace. Shaft size 2.8750.       (Y) Yes         62. DE Seal       (Y) Yes         63. DE Seal Type/Size       P96         64. ODE Seal       P96         Worn       P96	51.	Bearing DE Size	6312 2RS/C3	P14
54. Bearing ODE Size  55. Bearing ODE Type  76. ODE Bearing Qty.  76. ODE Bearing Qty.  77. Insulated Bearing  78. Lubrication Type  79. Grease Condition  79. Dirty  79. OB. Bearing Retainers  79. OB. Shaft Grounding Device  79. Aegis. Worn/Replace. Shaft size 2.8750.  79. OB. Seal  79. ODE Seal	52.	Bearing DE Type	Sealed, ball bearing	P23
55. Bearing ODE Type  56. ODE Bearing Qty.  57. Insulated Bearing  58. Lubrication Type  59. Grease Condition  Dirty  60. Bearing Retainers  61. Shaft Grounding Device  Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal  63. DE Seal Type/Size  64. ODE Seal  Worn	53.	DE Bearing Qty.	1	
56. ODE Bearing Qty.  57. Insulated Bearing  58. Lubrication Type  59. Grease Condition  Dirty  60. Bearing Retainers  61. Shaft Grounding Device  Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal  63. DE Seal Type/Size  64. ODE Seal  Worn	54.	Bearing ODE Size	6311 2Z/C3	P43
57. Insulated Bearing  58. Lubrication Type  59. Grease Condition  Dirty  60. Bearing Retainers  61. Shaft Grounding Device  Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal  63. DE Seal Type/Size  64. ODE Seal  Worn	55.	Bearing ODE Type	regular ball bearing	P47
58. Lubrication Type polyrex em P68  59. Grease Condition (F) Fail P75  Dirty  60. Bearing Retainers (Y) Yes P79  61. Shaft Grounding Device (Y) Yes P81  Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal (Y) Yes  63. DE Seal Type/Size  64. ODE Seal  Worn	56.	ODE Bearing Qty.	1	P58
<ul> <li>59. Grease Condition</li> <li>Dirty</li> <li>60. Bearing Retainers</li> <li>61. Shaft Grounding Device</li> <li>Aegis. Worn/Replace. Shaft size 2.8750.</li> <li>62. DE Seal</li> <li>63. DE Seal Type/Size</li> <li>64. ODE Seal</li> <li>Worn</li> <li>P75</li> <li>(Y) Yes</li> <li>P79</li> <li>(Y) Yes</li> <li>P81</li> <li>(Y) Yes</li> <li>P96</li> </ul>	57.	Insulated Bearing	no	
<ul> <li>Dirty</li> <li>60. Bearing Retainers</li> <li>61. Shaft Grounding Device</li> <li>Aegis. Worn/Replace. Shaft size 2.8750.</li> <li>62. DE Seal</li> <li>63. DE Seal Type/Size</li> <li>64. ODE Seal</li> <li>Worn</li> </ul>	58.	Lubrication Type	polyrex em	P68
<ul> <li>60. Bearing Retainers</li> <li>61. Shaft Grounding Device</li> <li>Aegis. Worn/Replace. Shaft size 2.8750.</li> <li>62. DE Seal</li> <li>63. DE Seal Type/Size</li> <li>64. ODE Seal</li> <li>Worn</li> </ul>	<b>9</b> 59.	Grease Condition	(F) Fail	P75
<ul> <li>61. Shaft Grounding Device  Aegis. Worn/Replace. Shaft size 2.8750.</li> <li>62. DE Seal  63. DE Seal Type/Size</li> <li>64. ODE Seal  Worn</li> <li>(Y) Yes  P81  (Y) Yes  P81  (Y) Yes  P81  (Y) Yes  P81  (Y) Yes  (Y) Y</li></ul>	-	Dirty		
Aegis. Worn/Replace. Shaft size 2.8750.  62. DE Seal 63. DE Seal Type/Size 64. ODE Seal Worn  P96	<b>6</b> 0.	Bearing Retainers	(Y) Yes	P79
<ul> <li>62. DE Seal</li> <li>63. DE Seal Type/Size</li> <li>64. ODE Seal</li> <li>Worn</li> </ul>	<b>6</b> 1.	Shaft Grounding Device	(Y) Yes	P81
63. DE Seal Type/Size  64. ODE Seal  Worn	-	Aegis. Worn/Replace. Shaft size 2.8750.		
64. ODE Seal  Worn  P96	<b>6</b> 2.	DE Seal	(Y) Yes	
■ Worn	63.	DE Seal Type/Size		
	64.	ODE Seal		P96
65 ODE Seal Type/Size	-	Worn		
00. OBE 0001 1 ypo/0120	65.	ODE Seal Type/Size		P102
Root Cause of Failure				
66. Component Failure bearings worn			bearings worn	
67. Cause of Failure		•	3. 2	
68. Comments				

Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

T- Holl

	\	
Mach	nine Fit Inspection Report	
70.	Shaft Run Out	
71.	Initial Shaft Run Out	
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	
<b>8</b> 0.	ODE Bearing Shaft Fit	(P) Pass
81.	ODE Initial Shaft Bearing Fit Size 1	2.1657 "
82.	ODE Initial Shaft Bearing Fit Size 2	2.1656 "
83.	ODE Initial Shaft Bearing Fit Size 3	2.1656 "
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	(P) Pass
94.	DE Initial Endbell Fit Size 1	5.1189 "
95.	DE Initial Endbell Fit Size 2	5.119 "
96.	DE Initial Endbell Fit Size 3	5.1189 "
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 Endbell Fit Insulated	
106	. ODE Endbell Air Seal Fit	
107	. ODE Initial Endbell Seal Fit Size	4.7252 "
108	. ODE Finial Endbell Seal Fit Size	
<b>1</b> 09	. Foot Flatness	(P) Pass
110	. Foot Condition	(P) Pass

Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

111. Flange Condition

(P) Pass

112. Service Technician

Balancing Report

113. Balance Type

114. Balance Operating Speed

115. Start Left End

116. Start Right End

117. Balancing Specification

118. Finish Left End

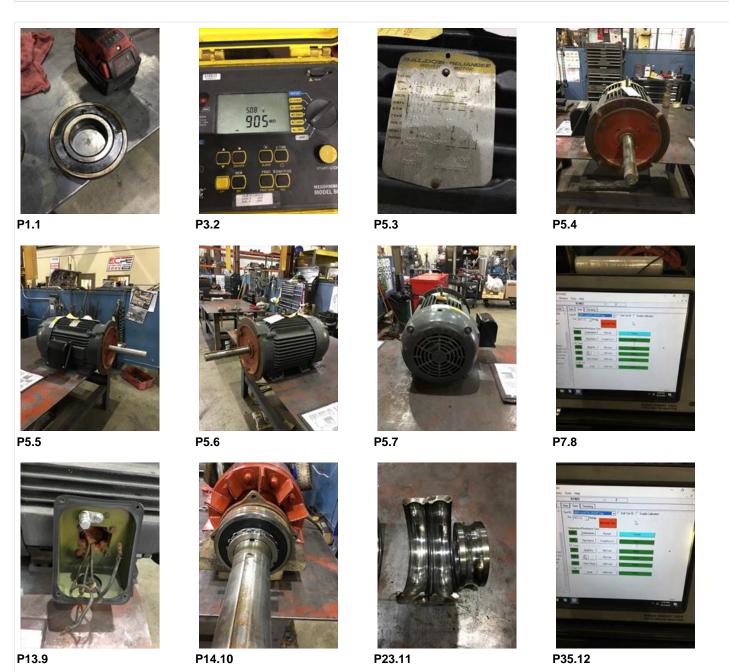
119. Finish Right End

117.	Balancing Specification	
118.	Finish Left End	
119.	Finish Right End	
120.	Service Technician	
Assen	nbly and Final Test	О
121.	Meggar Testing Reading 905 Mohm	P3
122.	Surge Test (P) Pass	
123.	Hi-Pot Ua	
124.	Winding Resistance 1-2	
125.	Winding Resistance 2-3	
126.	Winding Resistance 1-3	
127.	Test Run Voltage Phase A 455 Volts	P54
128.	Test Run Amps A 22.8 Amps	
129.	Test Run Voltage Phase B 454 Volts	
130.	Test Run Amps B 22.3 Amps	
131.	Test Run Voltage Phase C 456 Volts	
132.	Test Run Amps C 21.7 Amps	
133.	DE Horizontal Vibration Reading 0.02 In/Sec	
134.	DE Vertical Vibration Reading 0.03 In/Sec	
135.	DE Axial Vibration Reading 0.02 In/Sec	
136.	ODE Horizontal Vibration Reading 0.01 In/Sec	
137.	ODE Vertical Vibration Reading 0.03 In/Sec	
138.	ODE Axial Vibration Reading	
139.	Ambient Temp at start of Test Run 0.02 Degrees F.	P110
140.	Temp at 5 minutes Degrees F.	P113
141.	Temp at 10 minutes	
142.	Temp at 15 minutes	
143.	Temp at 20 minutes	
144.	Temp at 25 minutes	
145.	Temp at 30 minutes	
146.	Temp at 35 minutes	
147.	Temp at 40 minutes	
148.	Temp at 45 minutes	
149.	Temp at 50 minutes	
150.	Temp at 55 minutes	
151.	Temp at 60 minutes	

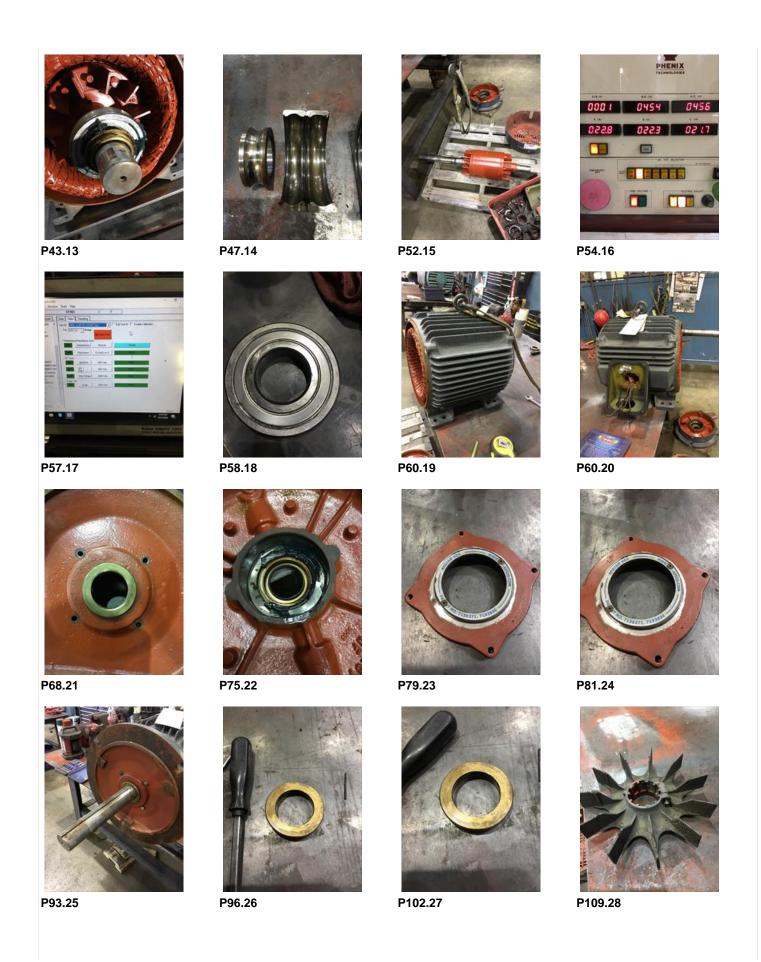
Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.

● 152. Motor Paint (P) Pass P135

153. Service Technician Robert Wiley



Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.



Hi-Speed Industrial Service disclaims all warranties, both express and implied, relating to the information, reports, opinions and analysis disclosed to the Customer by Hi-Speed. Hi-Speed shall not be liable for any errors or omissions, or any losses, injury or damages arising from the use of such information, reports, opinions and analysis by the Customer.







P110.29 P113.30 F



#### 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 bee 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. <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. <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.
- **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.
- 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

replace any defective or non-conforming goods in accordance with the applicable manufacturer's warranty. Warranty for any defective or incorrect parts is limited to the repair or replacement of those parts. Hi-Speed warrants that all services will conform in all material respects to the description of services identified in the quotation and will be performed in a good and workmanlike manner in accordance with industry practices and standards. Should the services be reasonably rejected or not conform with the foregoing warranties, Hi-Speed shall, at its sole cost, re-perform the defective or nonconforming services. Notwithstanding the foregoing, these warranties do not extend to goods or services to the extent that such goods have been subject to misuse, neglect or abuse not caused by Hi-Speed or have been used in violation of the approved written instructions furnished to Buyer. THE FOREGOING REPRESENTS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY HI-SPEED WITH RESPECT TO ALL GOODS SOLD AND IS IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESS OR IMPLIED. HI-SPEED EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICLAR USE OR PURPOSE. BUYER WAIVES ANY CLAIM THAT THESE EXCLUSIONS OR LIMITATIONS DEPRIVE IT OF AN ADEQUATE REMEDY AT EQUITY OR LAW OR CAUSE THIS AGREEMENT TO FAIL IN ITS ESSENTIAL PURPOSE. BUYER SHALL BE ENTITLED TO NO OTHER REMEDY OTHER THAN AS SET FORTH HEREIN, REGARDLESS OF THE CLAIM OR CAUSE OF ACTION, WHETHER BASED IN CONTRACT, TORT, NEGLIGENCE, GOODS LIABILITY, STRICT LIABILITY OR OTHERWISE.

- 9. LIMITATION OF DAMAGES. HI-SPEED SHALL HAVE NO LIABILITY TO BUYER WITH RESPECT TO THE SALE OR DELIVERY OF ANY GOODS OR THE REPAIR THEREOF OR WITH RESPECT TO THE SALE OR PERFORMANCE OF ANY SERVICES, FOR LOST PROFITS, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR INCIDENTAL DAMAGES OF ANY KIND OR NATURE WHETHER ARISING IN CONTRACT, TORT, GOODS LIABILITY OR OTHERWISE, EVEN IF HI-SPEED WAS ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES. HI-SPEED SHALL NOT BE LIABLE FOR ANY DAMAGES OR DELAYS CAUSED BY ANY FAILURE TO MAKE ANY DELIVERY OF GOODS BY ANY EXPECTED TIME OR DATE OR THE FAILURE TO PROVIDE OR COMPLETE ANY SERVICES BY ANY EXPECTED DATE OR TIME. IN NO EVENT SHALL HI-SPEED BE LIABLE TO BUYER FOR ANY DAMAGES WHATSOEVER IN EXCESS OF THE TOTAL PRICE PAID FOR ALL GOODS AND/OR SERVICES HEREUNDER OR REFERENCED IN ANY QUOTATION OR THE PURCHASE ORDER.
- 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. **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.
- 12. ABANDONED EQUIPMENT. Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
- 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.
- 15. **ASSIGNMENT.** The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
- 16. NO INDIVIDUAL LIABILITY. 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.