Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Inspection as Found

MARS FOOD (0001269)
1098 N. Broadway
Greenville, MS 38701

FolderID: 155285
FormID: 24097609

AC Inspection - Rev. 2

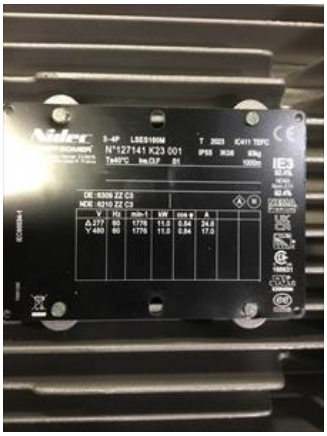
Location:	Motor Shop
Serial Number:	
Description:	11KW AC

Hi-Speed Job Number:	155285
Manufacturer:	US Motors/Nidec
HP/kW:	11 (kW)
RPM:	1776 (RPM)
Voltage:	480
Current:	17 (Amps)
Phase:	Three
Hz:	60 (Hz)
Enclosure:	TEFC
# of Leads:	6
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	04/08/2026
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Rewind:	No
Shaft Machined Fit Repairs Required:	No
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: **3 - High** **10 - Good**

Overall Condition

1.	Report Date	**04/14/2025**	
2.	Nameplate Picture		P2



3.	Photos of all six sides of the machine.		P3

	4.	Describe the Overall Condition of the Equipment as Received ***Stator passed all electrical tests. Drive end bearing failed. Needs bore and bushing installed in opposite drive end and damaged end of shaft filed.***	
🟢	5.	Is this a UL Listed Motor	**(No) No**
🟢	6.	Is the motor water cooled or can be pressure checked before teardown	**(No) No**

Initial Mechanical/Electrical

🔴	7.	Does Shaft Turn Freely?	**(N) No**
🟢	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	9.	Does Shaft Have Visible Damage?	**(Yes) Yes** P9

	10.	Assembled Shaft Runout	**Inches**
	11.	Assembled Shaft End Play	**inches**
	12.	Air Gap Variation <10%	**No Provisions for measurement**

13.	Lead Condition	**(P) Pass**	P13

14.	Lead Length	**6 Inches**
15.	Does it have Lugs?, If so what is the Stud Size?	**(Yes) Yes**
	#10	
16.	Lead Numbers	**UVW 1-2**
17.	Are the Leads insulated with Chico or other material	**(No) No**
18.	Frame Condition	**Pass**
19.	Fan Condition	**(N) NA**
20.	Does motor have internal fan?	**(No) No**
21.	Broken or Missing Components	**Yes** P21

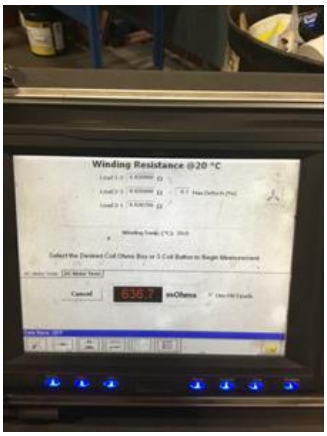
Missing fan and fan shroud.

Initial Electrical Inspection

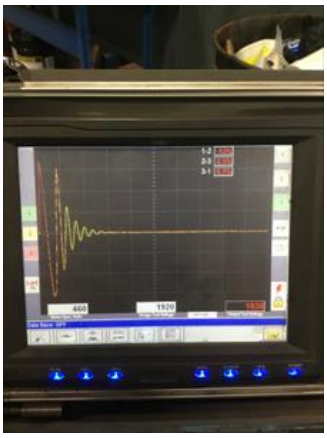
22. Insulation Resistance/Megger **92000 Megohms** P22

23. Winding Resistance P23

1-2	1-3	2-3
.6359	**.6358**	**.6367**



24. Perform Surge Test **(P) Pass** P24



25.	Number of Stator Slots	**48**	
26.	Stator Condition	**Pass**	P26

Stator had moisture present. Stator was dried out and retested.

27.	Stator Thermistors/Ohms	**230**	P27

28.	Stator Overloads/Ohms	**N/A**	

Mechanical Inspection

29.	Drive End Bearing Brand	**UNK**	
30.	Drive End Bearing Number-	**6309 2RS C3**	
31.	Drive End Bearing Qty.	**1**	
32.	Drive End Bearing Type	**(Ball) Ball Bearing**	
33.	Drive End Lubrication Type	**(Grease) Grease Lubricated**	

34.	Drive End Bearing Insulation or Grounding Device?	**None**	
35.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Snap Ring and seal sleeve**	P35

36.	Drive End Bearing Condition	**Destroyed**	P36

37.	Opposite Drive End Bearing Brand	**HCH**	P37

38.	Opposite Drive End Bearing Number-	**6210 2RS C3**	
39.	Opposite Drive End Bearing Qty.	**1**	
40.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	
41.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
42.	Opposite Drive End Bearing Insulation or Grounding Device?	**None**	
43.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**Wavy Washer**	
44.	Opposite Drive End Bearing Condition	**Normal wear**	P44

45.	Drive End Seal	**50 62 7**	P45

46.	Opposite Drive End Seal	**VA50**	P46

Rotor Inspection

47.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
48.	Growler Test	**(Pass) Pass**
49.	Number of Rotor Bars	**40**

50.	Rotor Condition	**Pass**	P50

51.	List the Parts needed for the Repair Below	

50 62 7
VA 50
6210 2rs C3
6309 3rs C3

52.	Signature of Technician that Disassembled Motor	**Brandon Woodard**

Mechanical Fits- Rotor

53.	Shaft Runout	**0.002 inches**

54. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
0.001	**0.001**	**0.001**

55. Coupling Fit Closest to Bearing Housing — P55

0 Degrees	90 Degrees	120 Degrees
1.378	**1.378**	**1.378**

56. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees
1.378	**1.378**	**1.378**

57.	Drive End Bearing Shaft Fit			P57
	0 Degrees	60 Degrees	120 Degrees	
	1.7719	**1.7719**	**1.7719**	
	1.7718-1.7722			

58.	Drive End Bearing Shaft Fit Condition		**(P) Pass**
59.	Opposite Drive End Bearing Shaft Fit		P59
	0 Degrees	60 Degrees	120 Degrees
	1.969	**1.969**	**1.969**
	1.9686-1.9690		

60.	Opposite Drive End Bearing Shaft Fit Condition		**(P) Pass**
61.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
	Pass	**Pass**	

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit P62

0 Degrees	60 Degrees	120 Degrees
3.9381	**3.9381**	**3.9381**

Tolerance is 3.9370-3.9379. .0002 over tolerance recommend no machine work

63. Drive End - Endbell Bearing Fit Condition **(P) Pass**

64. Opposite Drive End - Endbell Bearing Fit P64

0 Degrees	60 Degrees	120 Degrees
3.5455	**3.5452**	**3.5452**

Tolerance is 3.5433-3.5442

65. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail**

66. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
Pass	**N/A**

67. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
Pass	**Pass**

68. List Machine Work Needed Below

Bore and bush opposite drivecend.
Repair end of shaft.

69. Technician **Brandon Woodard**

Root Cause of Failure

70. Failure locations

Drive end bearing.

71. Root cause of failure

No grease.