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

AC Inspection as Found

American Kraft Paper
1701 Jefferson Parkway
White Hall, AR 71602

FolderID: 104436
FormID: 24073137

AC Inspection - Rev. 2

Location: LR MOTOR SHOP

Serial Number:

Description:125 HP
NAMEPLATE NOT READABLE FOR SOME SPECS

Hi-Speed Job Number:	104436
Manufacturer:	Toshiba
Product Number:	B1258FLF4BD
Serial Number:	AB02797-03
HP/kW:	125 (HP)
RPM:	1175 (RPM)
Frame:	445T
Voltage:	460
Current:	152 (Amps)
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.1
Enclosure:	TEFC
# of Leads:	6
J-box Included:	None
Coupling/Sheave:	None
Date Received:	07/18/2025
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Rewind:	Yes
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: **2 - High** **15 - Good**

Overall Condition

1.	Report Date	**04/16/2025**
2.	Nameplate Picture	P37




	3.	Photos of all six sides of the machine.	
	4.	Describe the Overall Condition of the Equipment as Received *Dirty*	
●	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?	**(Y) Yes**
●	8.	Does the shaft require T.I.R in Lathe to identify additional repairs?	**(No) No**
	9.	Does Shaft Have Visible Damage?	**(No) No**
●	10.	Assembled Shaft Runout	**0 Inches**
	11.	Assembled Shaft End Play	**0 inches**
	12.	Air Gap Variation <10%	**ok**
●	13.	Lead Condition	**(P) Pass**
	14.	Lead Length	**12 Inches**
●	15.	Does it have Lugs?, If so what is the Stud Size? *3/8*	**(Yes) Yes**
	16.	Lead Numbers	**1-6**
●	17.	Are the Leads insulated with Chico or other material	**(No) No**
	18.	Frame Condition	**good**
●	19.	Fan Condition	**(P) Pass**
●	20.	Does motor have internal fan?	**(Yes) Yes**
	21.	Broken or Missing Components	**none**
Initial Electrical Inspection			

	22.	Insulation Resistance/Megger		**0 Megohms**	
	23.	Winding Resistance			
		1-2	1-3	2-3	
	24.	Perform Surge Test		**(F) Fail**	
	25.	Number of Stator Slots		**72**	
	26.	Stator Condition		**rewind**	
	27.	Stator Thermistors/Ohms			
	28.	Stator Overloads/Ohms			

Mechanical Inspection

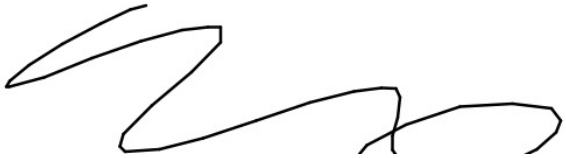
	29.	Drive End Bearing Brand	**NTN**	P12

	30.	Drive End Bearing Number-	**NU318**
	31.	Drive End Bearing Qty.	**1**
	32.	Drive End Bearing Type	**(Roller) Roller 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?	**none**
	36.	Drive End Bearing Condition	**normal wear**
	37.	Opposite Drive End Bearing Brand	**NTN**
	38.	Opposite Drive End Bearing Number-	**6318**
	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?	**snap ring**
	44.	Opposite Drive End Bearing Condition	**fatigue**
	45.	Drive End Seal	
	46.	Opposite Drive End Seal	

Rotor Inspection

	47.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**
	48.	Growler Test	**(Pass) Pass**
	49.	Number of Rotor Bars	**55**
	50.	Rotor Condition	**good**
	51.	List the Parts needed for the Repair Below	
		NU318, 6318 2Z	

52. Signature of Technician that Disassembled Motor **David Maclin**



Mechanical Fits- Rotor

53. Shaft Runout **0 inches**

54. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
0	**0**	**0**

55. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

56. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

57. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
3.5451	**3.5449**	**3.5441**

58. Drive End Bearing Shaft Fit Condition **(P) Pass**

59. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
3.544	**3.544**	**3.544**

60. Opposite Drive End Bearing Shaft Fit Condition **(P) Pass**

61. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
ok	**ok**

Mechanical Fits- Bearing Housings

62. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
7.481	**7.4809**	**7.481**

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

64. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
7.4822	**7.4823**	**7.4821**

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

66. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
ok	**ok**

67. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

68. List Machine Work Needed Below

Sleeve ODE end bell bearing fit

69. Technician **David Maclin**

Root Cause of Failure

70. Failure locations

Stator

71. Root cause of failure

Grounded

Dynamic Balance Report

72. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

73. Initial Balance Readings

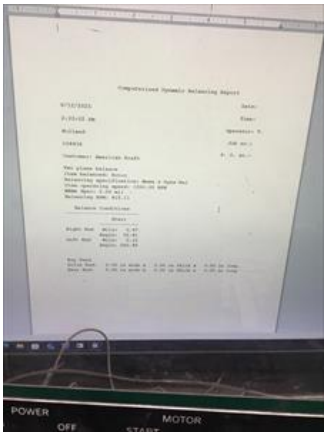
Drive End	Opposite Drive End

See below.

74. Final Balance Readings

P27

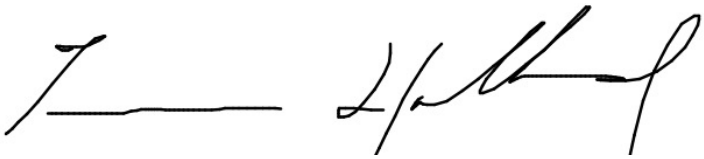
Drive End	Opposite Drive End



Rotor

Rotor and fan

75. Technician **Terrence Holland**



Rewind

76. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

77.	Core Hot Spot Test			
	Pre-Burnout	Post-Burnout		
78.	Post Rewind Electrical Test- Insulation Resistance			**Megohms**
79.	Post Rewind Polarization Index			**Polarization Index**
80.	Post Rewind Winding Resistance			
	1-2	1-3	2-3	
81.	Post Rewind Surge Test			
82.	Post Rewind Hi-Pot			**micro-amps**
83.	Technician			

Mechanical Fits- Bearing Housings - Post Repair

84.	Drive End - Endbell Bearing Fit Post Repair			
	0 Degrees	60 Degrees	120 Degrees	
85.	Opposite Drive End - Endbell Bearing Fit Post Repair			P19
	0 Degrees	60 Degrees	120 Degrees	
	7.4808	**7.4808**	**7.4808**	

86.	Bearing Cap Condition Post Repair			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
87.	End Bell Air Seal Fits Post Repair			
	Drive End Air Seal	Opposite Drive End Air Seal		
88.	End Bell Repair Sign-off			**RW**

Assembly

89. QC Check All Parts for Cleanliness Prior to Assembly **Terrence Holland**

See item below

90. Photograph All Major Components prior to assembly P17

	91. Final Insulation Resistance Test	**87 Gigohms**	P31

	92. Assembled Shaft Endplay	**0 inches**
	93. Assembled Shaft Runout	**0.001 inches**

94.	Test Run Voltage			P55
	Volts	Volts	Volts	
	457	**454**	**459**	

95.	Test Run Amperage		
	Amps	Amps	Amps
	48.1	**46.4**	**46.3**
96.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
97.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
98.	Ambient Temperature - Fahrenheit		
99.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
100.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
101.	Document Final Condition with Pictures after paint		**see below**
102.	Final Pics and QC Review		**Terrence Holland** P135

Co sign RW