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

AC Inspection as Found

Peco Foods
625 S. Allen Street
Batesville, AR 72501

FolderID: 101748
FormID: 17633798

AC Inspection - Rev. 2

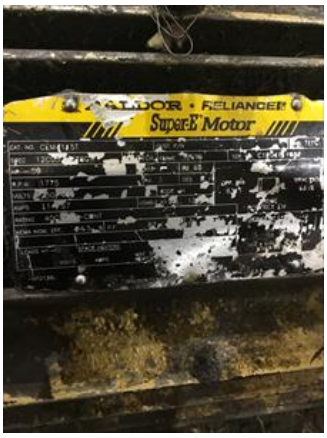
Location:	Shop
Serial Number:	C1204191062
Description:	50HP BALDOR 1800RPM 326TC

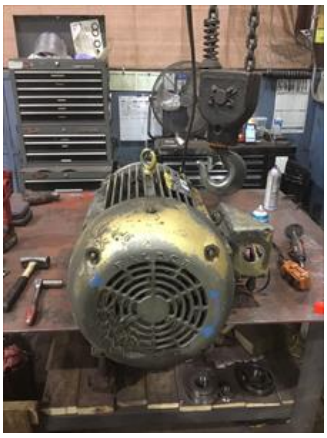
Hi-Speed Job Number:	101748
Manufacturer:	Baldor
Product Number:	CEM4115T
Spec/ID #:	12C052Z278G1
Serial Number:	C1204191062
HP/kW:	50 (HP)
RPM:	1775 (RPM)
Frame:	326TC
Voltage:	230 / 460
Current:	114/57
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Bearing RTDs:	No
Stator RTDs:	No
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

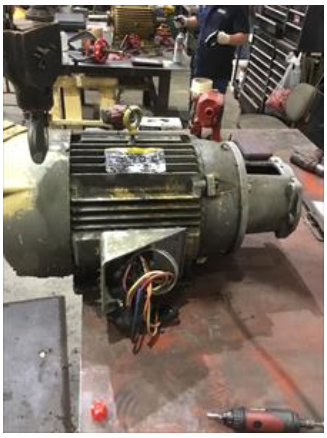
Priorities Found: **2 - High** **6 - Good**

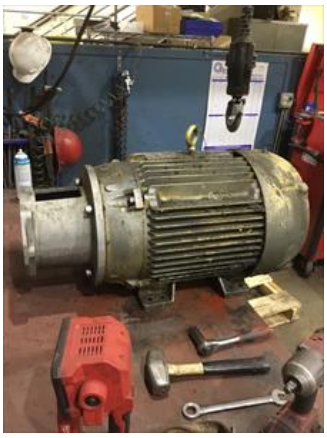
Overall Condition

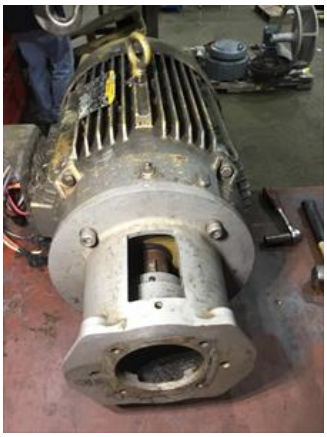
1. Report Date
2. Nameplate Picture P37

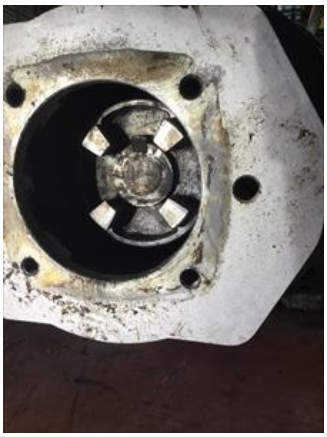


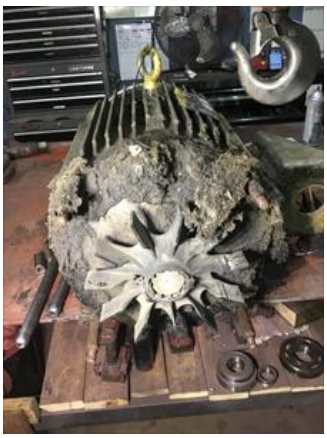


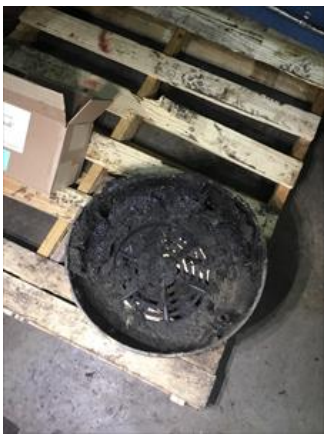


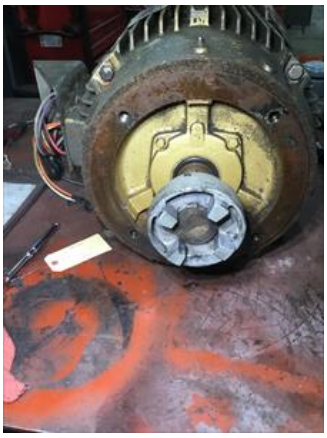


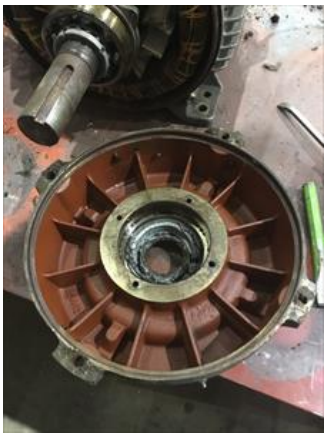


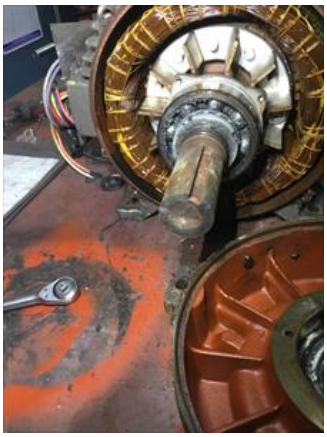


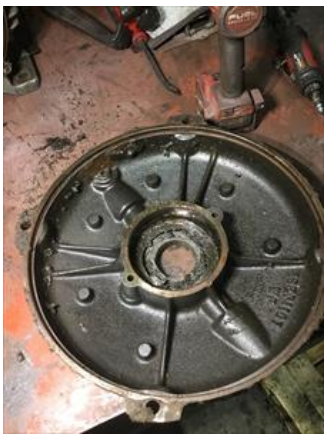


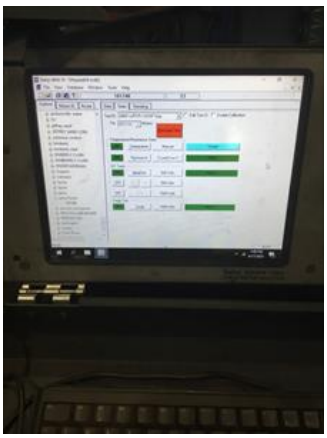


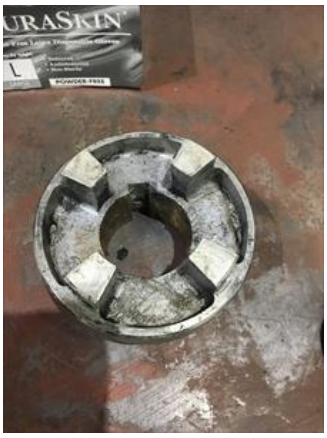


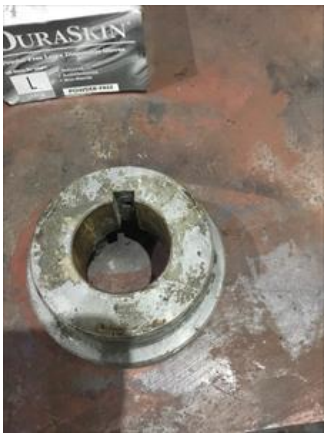








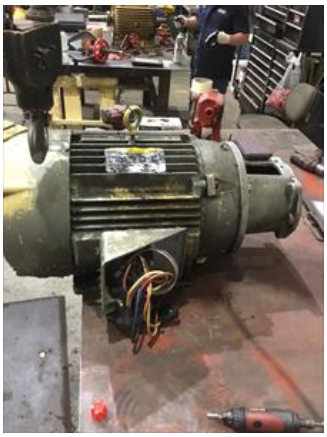




	3.	Photos of all six sides of the machine.		
	4.	Describe the Overall Condition of the Equipment as Received ***Serviceable.***		

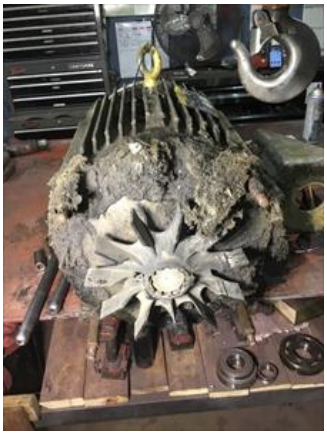
Initial Mechanical/Electrical

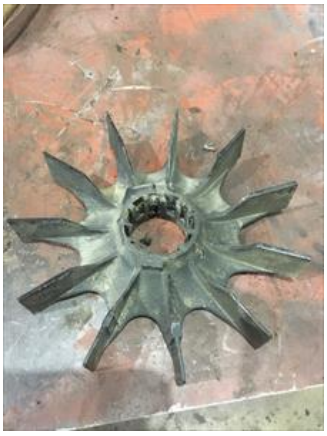
●	5.	Does Shaft Turn Freely?	**(Yes) Yes**	
	6.	Does Shaft Have Visible Damage?	**(No) No**	
●	7.	Assembled Shaft Runout	**0.001 Inches**	
	8.	Assembled Shaft End Play		
	9.	Air Gap Variation <10%		
●	10.	Lead Condition	**(P) Pass**	P55



	11.	Lead Length	**18.75 Inches**	
	12.	Lead Numbers	**1-9**	
	13.	Frame Condition	**pass**	

14.	Fan Condition		P95





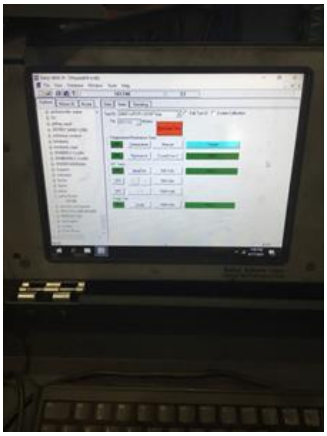
15.	Broken or Missing Components	**connection box top cover missing**	

Initial Electrical Inspection

16.	Insulation Resistance/Megger		
17.	Winding Resistance		

1-2	1-3	2-3

18.	Perform Surge Test	**(P) Pass**	P57

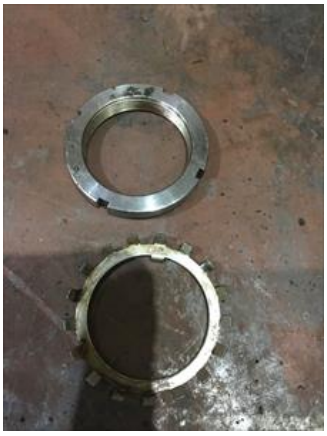


19.	Number of Stator Slots	**48**
20.	Stator Condition	**pass**
21.	Stator Thermistors/Ohms	**none**
22.	Stator Overloads/Ohms	**n/a**

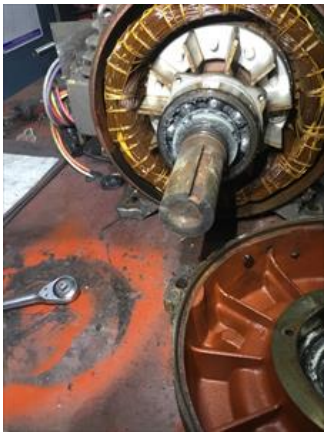
Mechanical Inspection

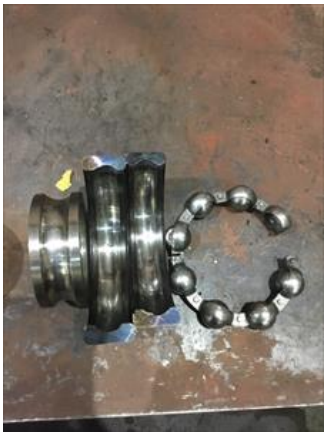
23.	Drive End Bearing Brand	**skf**
24.	Drive End Bearing Number-	**6312 2Z**
25.	Drive End Bearing Qty.	**1**
26.	Drive End Bearing Type	**(Ball) Ball Bearing**
27.	Drive End Lubrication Type	**(Grease) Grease Lubricated**
28.	Drive End Bearing Insulation or Grounding Device?	**none**

29.	Drive End Wavy Washer/Snap-Ring Other Retention Device?	**star washer and locking nut**	P72

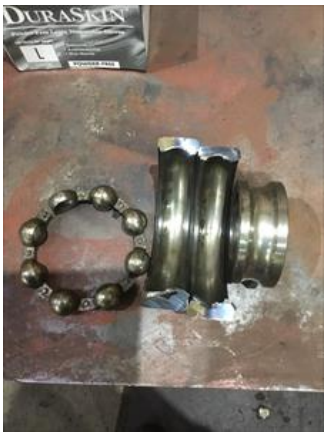


30.	Drive End Bearing Condition	**fail**	P77

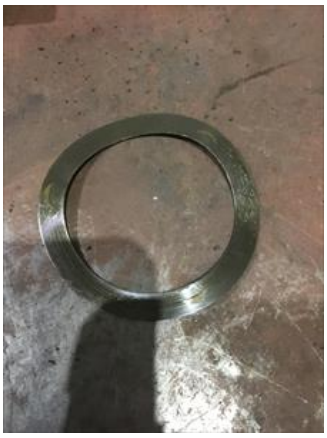




31.	Opposite Drive End Bearing Brand	**skf**	
32.	Opposite Drive End Bearing Number-	**6311**	
33.	Opposite Drive End Bearing Qty.	**1**	
34.	Opposite Drive End Bearing Type	**(Ball) Ball Bearing**	P92

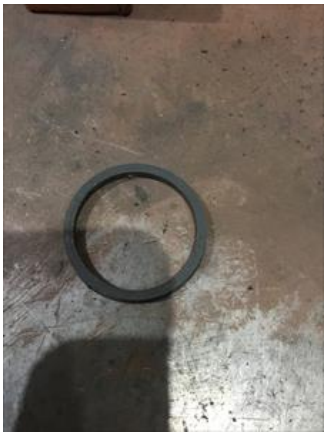


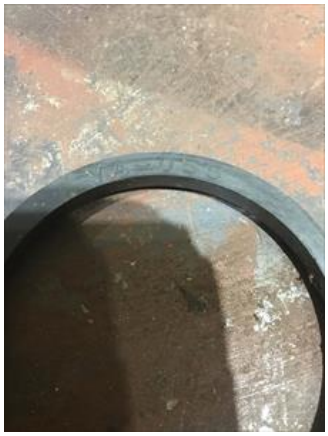
35.	Opposite Drive End Lubrication Type	**(Grease) Grease Lubricated**	
36.	Opposite Drive End Bearing Insulation or Grounding Device?	**none**	
37.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?	**wavy washer**	P98



38.	Opposite Drive End Bearing Condition	**replace**	
39.	Drive End Seal	**lip seal VA-055**	P101

Replace

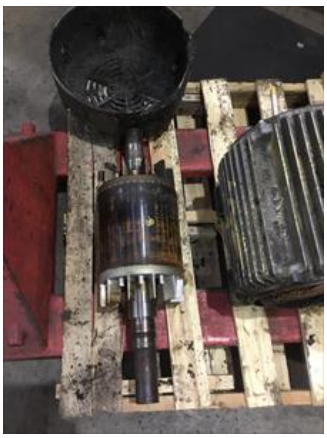




40.	Opposite Drive End Seal	**none**	

Rotor Inspection

41.	Rotor Type/Material	**(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast**	P3

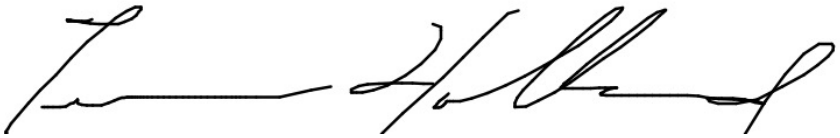


42.	Growler Test	**(Pass) Pass**	
43.	Number of Rotor Bars	**40**	
44.	Rotor Condition	**pass**	

45. List the Parts needed for the Repair Below

Repair O.D.E shaft bearing journal. Replace lip seal VA-055.

46. Signature of Technician that Disassembled Motor **Terrence Holland**



Mechanical Fits- Rotor

47. Shaft Runout **0.001 inches**

48. Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

49. Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

50. Coupling Fit Closest to the end of the Shaft

0 Degrees	60 Degrees	120 Degrees

51. Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.3626	**2.3627**	**2.3626**

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

53. Opposite Drive End Bearing Shaft Fit

0 Degrees	60 Degrees	120 Degrees
2.1601	**2.1603**	**2.1602**

54. Opposite Drive End Bearing Shaft Fit Condition **(F) Fail**

55. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

56. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.1187	**5.1186**	**5.1185**

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

58. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
4.7258	**4.7258**	**4.7258**

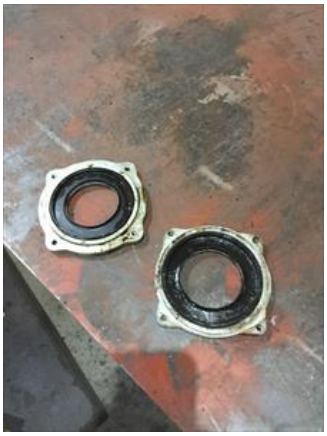
Fail

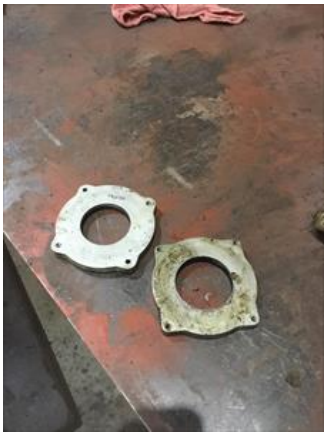
59. Opposite Drive End - Endbell Bearing Fit Condition **(F) Fail**

Lip worn in

60. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
pass	**pass**





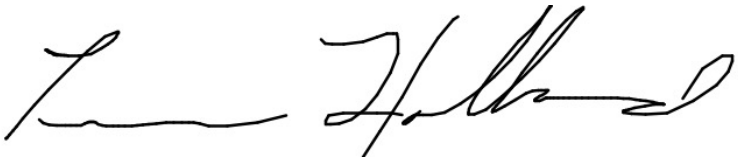
61. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal

62. List Machine Work Needed Below

Ode shaft fit, and end bell housing fit has lip worn in.

63. Technician **Terrence Holland**



Dynamic Balance Report

64. Rotor Weight and Balance Grade

Rotor Weight	Balance Grade

65. Initial Balance Readings

Drive End	Opposite Drive End

66. Final Balance Readings

Drive End	Opposite Drive End

67. Technician

Rewind

68. Core Test Results - Watts loss per Pound

Pre-Burnout	Post Burnout

69. Core Hot Spot Test

Pre-Burnout	Post-Burnout

70. Post Rewind Electrical Test- Insulation Resistance

71. Post Rewind Polarization Index

72.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
73.	Post Rewind Surge Test		
74.	Post Rewind Hi-Pot		
75.	Technician		

Root Cause of Failure

76.	Failure locations		
77.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

78.	Shaft Runout Post Repair		
79.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
80.	Coupling Fit Closest to Bearing Housing Post Repair		
	0 Degrees	90 Degrees	120 Degrees
81.	Coupling Fit Closest to the end of the Shaft Post Repair		
	0 Degrees	60 Degrees	120 Degrees
82.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
83.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
84.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
85.	Shaft Repair Sign-off		

Mechanical Fits- Bearing Housings - Post Repair

86.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
87.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
88.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
89.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
90.	End Bell Repair Sign-off		

Assembly

91.	QC Check All Parts for Cleanliness Prior to Assembly		

92.	Photograph All Major Components prior to assembly		
93.	Final Insulation Resistance Test		
94.	Assembled Shaft Endplay		
95.	Assembled Shaft Runout		
96.	Test Run Voltage		
	Volts	Volts	Volts
97.	Test Run Amperage		
	Amps	Amps	Amps
98.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
99.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
100.	Ambient Temperature - Fahrenheit		
101.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
102.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
103.	Document Final Condition with Pictures after paint		
104.	Final Pics and QC Review		