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

AC Inspection as Found

MIDDLETON INCORPORATED
P.O. BOX 506
BRYANT, AR 72089

FolderID: 102000
FormID: 18181591

AC Inspection - Rev. 2

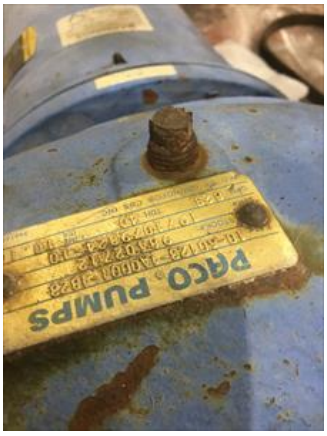
Location:	MOTOR SHOP LR
Serial Number:	Z1202271456

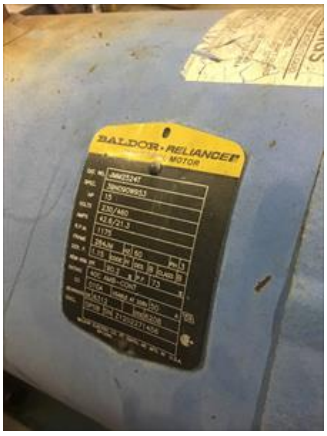
Description:15HP BALDOR 1200RPM 284JM PACO PUMP 10-60123-1A0001-1823

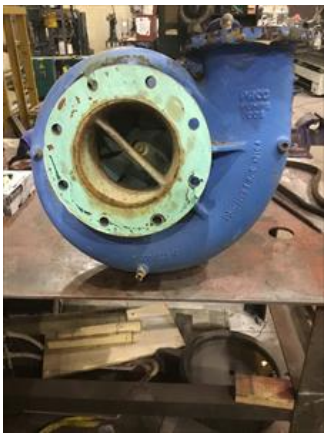
Hi-Speed Job Number:	102000
Manufacturer:	Baldor
Product Number:	JMM2524T
Spec/ID #:	39N090W953
Serial Number:	Z1202271456
HP/kW:	15 (HP)
RPM:	1175 (RPM)
Frame:	284JM
Voltage:	230 / 460
Current:	42.6/21.3
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	ODP
J-box Included:	Complete
Coupling/Sheave:	Propeller
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

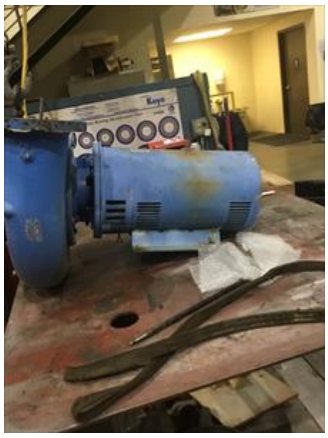
Overall Condition

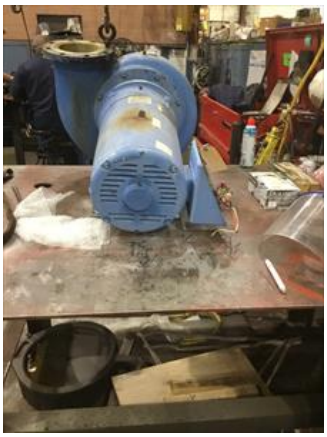
1. Report Date
2. Nameplate Picture P37

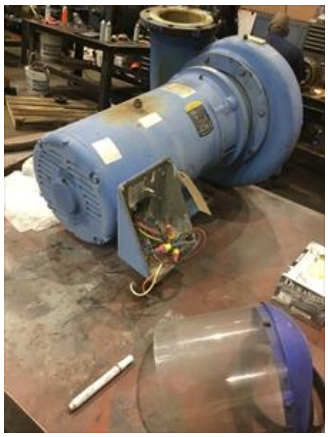


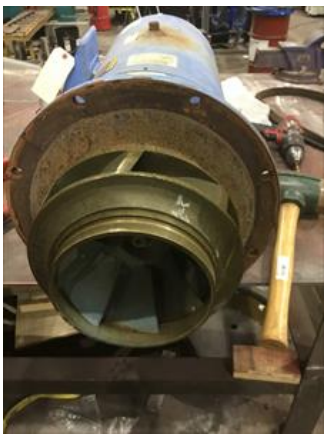


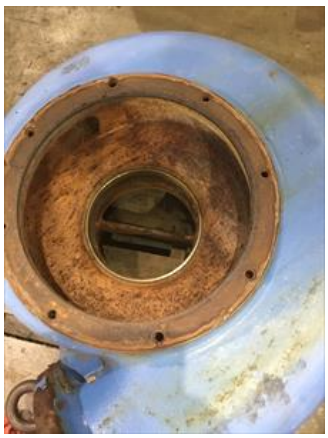


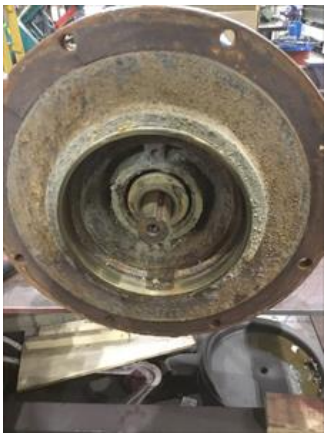


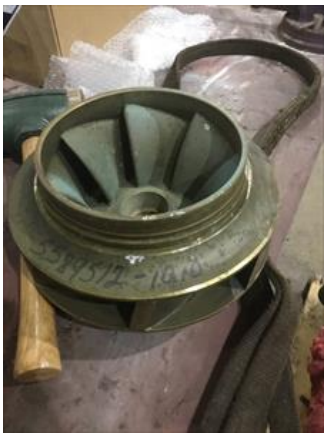


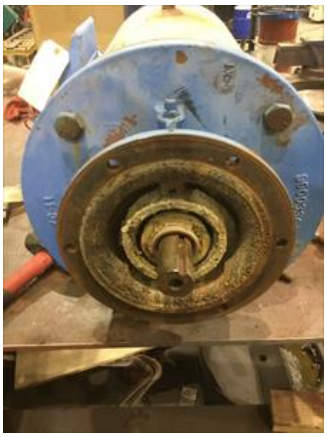


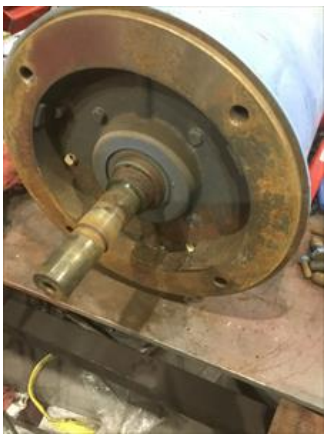












3.	Photos of all six sides of the machine.
4.	Describe the Overall Condition of the Equipment as Received
5.	Distance from the end of the shaft to the Coupling/Sheave
Initial Mechanical/Electrical	
6.	Does Shaft Turn Freely?
7.	Does Shaft Have Visible Damage?
8.	Assembled Shaft Runout
9.	Assembled Shaft End Play
10.	Air Gap Variation <10%
11.	Lead Condition
12.	Lead Length

13.	Lead Numbers
14.	Frame Condition
15.	Fan Condition
16.	Broken or Missing Components

Initial Electrical Inspection

17.	Insulation Resistance/Megger
18.	Winding Resistance

1-2	1-3	2-3

19.	Perform Surge Test
20.	Number of Stator Slots
21.	Stator Condition
22.	Stator Thermistors/Ohms
23.	Stator Overloads/Ohms

Mechanical Inspection

24.	Drive End Bearing Brand
25.	Drive End Bearing Number-
26.	Drive End Bearing Qty.
27.	Drive End Bearing Type
28.	Drive End Lubrication Type
29.	Drive End Bearing Insulation or Grounding Device?
30.	Drive End Wavy Washer/Snap-Ring Other Retention Device?
31.	Drive End Bearing Condition
32.	Opposite Drive End Bearing Brand
33.	Opposite Drive End Bearing Number-
34.	Opposite Drive End Bearing Qty.
35.	Opposite Drive End Bearing Type
36.	Opposite Drive End Lubrication Type
37.	Opposite Drive End Bearing Insulation or Grounding Device?
38.	Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?
39.	Opposite Drive End Bearing Condition
40.	Drive End Seal
41.	Opposite Drive End Seal

Rotor Inspection

42.	Rotor Type/Material
43.	Growler Test
44.	Number of Rotor Bars
45.	Rotor Condition
46.	List the Parts needed for the Repair Below
47.	Signature of Technician that Disassembled Motor

Mechanical Fits- Rotor

48.	Shaft Runout
49.	Rotor Runout

Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing

50.	Coupling Fit Closest to Bearing Housing

0 Degrees	90 Degrees	120 Degrees

51.	Coupling Fit Closest to the end of the Shaft		
	0 Degrees	60 Degrees	120 Degrees
52.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
53.	Drive End Bearing Shaft Fit Condition		
54.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
55.	Opposite Drive End Bearing Shaft Fit Condition		
56.	Shaft Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	

Mechanical Fits- Bearing Housings

57.	Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
58.	Drive End - Endbell Bearing Fit Condition		
59.	Opposite Drive End - Endbell Bearing Fit		
	0 Degrees	60 Degrees	120 Degrees
60.	Opposite Drive End - Endbell Bearing Fit Condition		
61.	Bearing Cap Condition		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
62.	End Bell Air Seal Fits		
	Drive End Air Seal	Opposite Drive End Air Seal	
63.	List Machine Work Needed Below		
64.	Technician		

Dynamic Balance Report

65.	Rotor Weight and Balance Grade		
	Rotor Weight	Balance Grade	
66.	Initial Balance Readings		
	Drive End	Opposite Drive End	
67.	Final Balance Readings		
	Drive End	Opposite Drive End	
68.	Technician		

Rewind

69.	Core Test Results - Watts loss per Pound		
	Pre-Burnout	Post Burnout	

70.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
71.	Post Rewind Electrical Test- Insulation Resistance		
72.	Post Rewind Polarization Index		
73.	Post Rewind Winding Resistance		
	1-2	1-3	2-3
74.	Post Rewind Surge Test		
75.	Post Rewind Hi-Pot		
76.	Technician		

Root Cause of Failure

77.	Failure locations		
78.	Root cause of failure		

Mechanical Fits- Rotor - Post Repair

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

Mechanical Fits- Bearing Housings - Post Repair

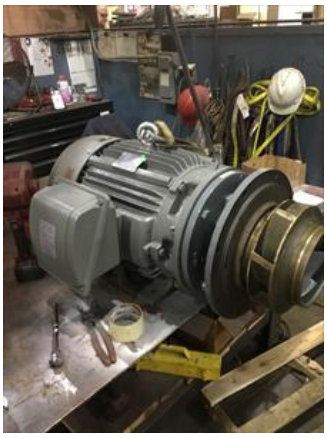
87.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
88.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
89.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	

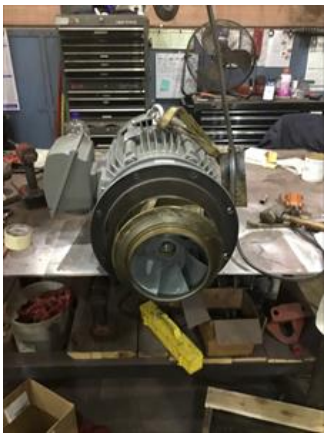
90.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
91.	End Bell Repair Sign-off		

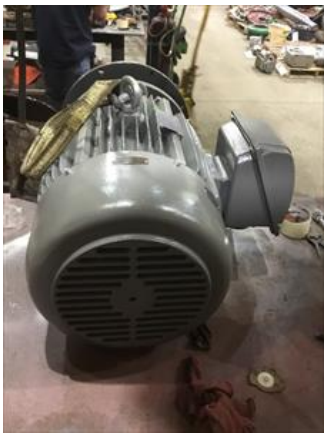
Assembly

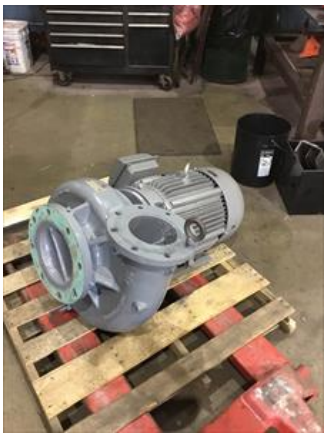
92.	QC Check All Parts for Cleanliness Prior to Assembly		
93.	Photograph All Major Components prior to assembly		
94.	Final Insulation Resistance Test		
95.	Assembled Shaft Endplay		
96.	Assembled Shaft Runout		
97.	Test Run Voltage		
	Volts	Volts	Volts
98.	Test Run Amperage		
	Amps	Amps	Amps
99.	Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
100.	Opposite Drive End Vibration Readings - Inches Per Second		
	Horizontal	Vertical	Axial
101.	Ambient Temperature - Fahrenheit		
102.	Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes
103.	Opposite Drive End Bearing Temps - Fahrenheit		
	5 Minutes	10 Minutes	15 Minutes

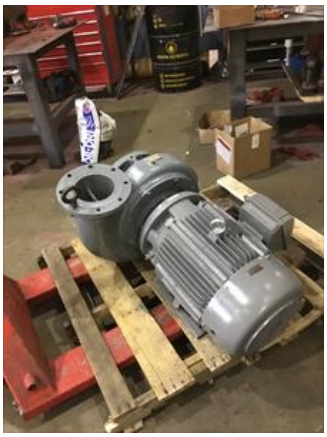
104. Document Final Condition with Pictures after paint P104

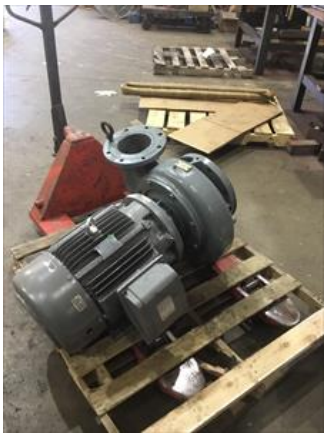


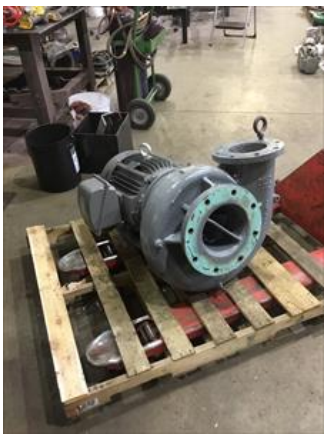












105. Final Pics and QC Review **Terrence Holland**

Co. Sign TLH