



AC Recondition As Found

Kinder Morgan (9000036)

2227 Highway 267 South
Searcy, AR 72143

FolderID: 99781
FormID: 13552683

AC Recondition - Rev. 2

Location: Shop

Serial Number: 0-12N1157

Description: 50HP Westinghouse 1200RPM 445

Hi-Speed Job Number:	99781
Manufacturer:	TECO Westinghouse
Product Number:	12N1157
Serial Number:	0-12N1157
HP/kW:	50 (HP)
RPM:	1180 (RPM)
Frame:	445
Voltage:	230 / 460
Current:	122/61
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	ODP
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	05/10/2022
Bearing RTDs:	No
Stator RTDs:	No
Shaft Machined Fit Repairs Required:	Yes
Bearing Housing Machined Fit Repairs Required:	Yes
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: ● 3 - High ● 5 - Good

Overall Condition



- Report Date
- Nameplate Picture

P21










- Describe the Overall Condition of the Equipment as Received

Initial Mechanical/Electrical



- | | |
|---|-----------|
| ● 4. Does Shaft Turn Freely? | (Yes) Yes |
| 5. Does Shaft Have Visible Damage? | (No) No |
| ● 6. Assembled Shaft Runout | 0 Inches |

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7.	Assembled Shaft End Play	inches	
8.	Air Gap Variation <10%		
●	9. Lead Condition	(P) Pass	P31
			
10.	Lead Length	18 Inches	
11.	Frame Condition		P50
			
12.	Fan Condition	(N) NA	
13.	Broken or Missing Components	connection box	
Initial Electrical Inspection			
14.	Insulation Resistance/Megger	2 Megohms	
15.	Winding Resistance		
	1-2	1-3	2-3
●	16. Perform Surge Test	(F) Fail	P32
			
17.	Stator Condition	Rewind	P39
 			
Mechanical Inspection			

18. Drive End Bearing Number-

W314PPS55627 Fafnir

P8



19. Drive End Bearing Qty.

1

20. Drive End Bearing Type

(Ball) Ball Bearing

21. Drive End Lubrication Type

(Grease) Grease Lubricated

22. Drive End Bearing Insulation or Grounding Device?

no

23. Drive End Wavy Washer/Snap-Ring Other Retention Device?

24. Drive End Bearing Condition

P41



25. Opposite Drive End Bearing Number-

FafnirW314PPS55627

P46



26. Opposite Drive End Bearing Qty.

1

27. Opposite Drive End Bearing Type

(Ball) Ball Bearing

28. Opposite Drive End Lubrication Type

(Grease) Grease Lubricated

29. Opposite Drive End Bearing Insulation or Grounding Device?

no

30. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?

31. Opposite Drive End Bearing Condition

32. Drive End Seal

33. Opposite Drive End Seal

Rotor Inspection


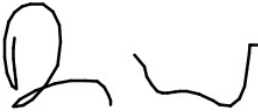



34. Rotor Type/Material

(Squirrel Aluminum) Squirrel
Cage Aluminum Die Cast

P3



35. Growler Test	(Pass) Pass	
36. Number of Rotor Bars	87	
37. Rotor Condition	P23	
		
38. List the Parts needed for the Repair Below		
39. Signature of Technician that Disassembled Motor	RW	
		
Mechanical Fits- Rotor		
40. Shaft Runout		
41. Rotor Runout		
Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
42. Coupling Fit Closest to Bearing Housing		
0 Degrees	90 Degrees	120 Degrees
43. Coupling Fit Closest to the end of the Shaft		
0 Degrees	60 Degrees	120 Degrees
44. Drive End Bearing Shaft Fit	P37	
0 Degrees	60 Degrees	120 Degrees
2.7562	2.7562	2.5761
		
45. Drive End Bearing Shaft Fit Condition	(P) Pass	
46. Opposite Drive End Bearing Shaft Fit		
0 Degrees	60 Degrees	120 Degrees
2.756	2.756	2.756



48. Shaft Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
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Mechanical Fits- Bearing Housings



49. Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.9073	5.9073	5.9073



51. Opposite Drive End - Endbell Bearing Fit

0 Degrees	60 Degrees	120 Degrees
5.906	5.906	5.906



53. Bearing Cap Condition

Drive End Bearing Cap	Opposite Drive End Bearing Cap
na	

54. End Bell Air Seal Fits

Drive End Air Seal	Opposite Drive End Air Seal
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55. List Machine Work Needed Below

De end bell resleeve

56. Technician

RW


Dynamic Balance Report

57. Rotor Weight and Balance Grade

Rotor Weight

Balance Grade

58. Initial Balance Readings

Drive End

Opposite Drive End

59. Final Balance Readings

Drive End

Opposite Drive End

60. Technician

Rewind

61. Core Test Results - Watts loss per Pound

Pre-Burnout

Post Burnout

62. Core Hot Spot Test

Pre-Burnout

Post-Burnout

63. Post Rewind Electrical Test- Insulation Resistance

64. Post Rewind Polarization Index

65. Post Rewind Winding Resistance

1-2

1-3

2-3

66. Post Rewind Surge Test

67. Post Rewind Hi-Pot

68. Technician

Root Cause of Failure

69. Failure locations

70. Root cause of failure

Mechanical Fits- Rotor - Post Repair

71. Shaft Runout Post Repair

72. Rotor Runout Post Repair

Drive End Bearing Fit

Rotor Body

Opposite Drive End Bearing

73. Coupling Fit Closest to Bearing Housing Post Repair

0 Degrees

90 Degrees




120 Degrees

74. Coupling Fit Closest to the end of the Shaft Post Repair

0 Degrees

60 Degrees

120 Degrees

75.	Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
76.	Opposite Drive End Bearing Shaft Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
77.	Shaft Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
78.	Shaft Repair Sign-off		
Mechanical Fits- Bearing Housings - Post Repair			
79.	Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
	5.9059	5.9058	5.9058
			
80.	Opposite Drive End - Endbell Bearing Fit Post Repair		
	0 Degrees	60 Degrees	120 Degrees
81.	Bearing Cap Condition Post Repair		
	Drive End Bearing Cap	Opposite Drive End Bearing Cap	
82.	End Bell Air Seal Fits Post Repair		
	Drive End Air Seal	Opposite Drive End Air Seal	
83.	End Bell Repair Sign-off		
Assembly			
84.	Photograph All Major Components prior to assembly		

P0

P0



85. Final Insulation Resistance Test

86. Assembled Shaft Endplay

87. Assembled Shaft Runout

88. Test Run Voltage

Volts

Volts

Volts

89. Test Run Amperage

Amps

Amps

Amps

90. Drive End Vibration Readings - Inches Per Second

Horizontal

Vertical

Axial

91. Opposite Drive End Vibration Readings - Inches Per Second

Horizontal

Vertical

Axial

92. Ambient Temperature - Fahrenheit

93. Drive End Bearing Temps - Fahrenheit

5 Minutes

10 Minutes

15 Minutes

94. Opposite Drive End Bearing Temps - Fahrenheit

5 Minutes

10 Minutes

15 Minutes

95. Final Test Run Sign-off

96. Document Final Condition with Pictures after paint

97. Final Pics and QC Review

Terrence. Holland

P2300

Terrence Holland

