



KEEPING YOUR FACILITY UP TO SPEED
— EVERY DAY SINCE 1946 —

Motor Shop Repairs

Job Number 99877

Prepared for Little Rock Federal Building

700 W Capital
Little Rock AR 72201

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

AC Recondition As Found

Little Rock Federal Building

700 W Capital
Little Rock, AR 72201

FolderID: 99877
FormID: 13761620

AC Recondition - Rev. 2

Location: MOTOR SHOP LR
Serial Number: HAN009592
Description: 100HP MARATHON 1800RPM
404TCV

Hi-Speed Job Number:	99877
Manufacturer:	US Motors/Nidec
Product Number:	CMTTRS61037207
Spec/ID #:	M190009
Serial Number:	HAN009592
HP/kW:	100 (HP)
RPM:	1785 (RPM)
Frame:	405TCV
Voltage:	460
Current:	115
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	ODP
J-box Included:	None
Coupling/Sheave:	None
Date Received:	06/03/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

Priorities Found: ● 2 - High ● 5 - Good

Overall Condition

1. Report Date

06/06/2022

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2. Nameplate Picture



3. Describe the Overall Condition of the Equipment as Received

Clean and dry



Initial Mechanical/Electrical

4. Does Shaft Turn Freely?	(Yes) Yes
5. Does Shaft Have Visible Damage?	(No) No
6. Assembled Shaft Runout	Inches
7. Assembled Shaft End Play	
8. Air Gap Variation <10%	
9. Lead Condition	(P) Pass
10. Lead Length	12 Inches
11. Frame Condition	good
12. Fan Condition	(N) NA
13. Broken or Missing Components	none

Initial Electrical Inspection

14. Insulation Resistance/Megger	0 Megohms
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15. Winding Resistance		
1-2	1-3	2-3
16. Perform Surge Test		(F) Fail
17. Stator Condition		rewind
Mechanical Inspection		
18. Drive End Bearing Number-		6316 2Z
		
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?		pressed in aegis
		
4.0645 (4 1/16) OD, 3.0 Shaft diameter		
23. Drive End Wavy Washer/Snap-Ring Other Retention Device?		
24. Drive End Bearing Condition		good
25. Opposite Drive End Bearing Number-		6313 2RS
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?		
30. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?		wavy washer
31. Opposite Drive End Bearing Condition		good
32. Drive End Seal		
33. Opposite Drive End Seal		
Rotor Inspection		
34. Rotor Type/Material		(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
35. Growler Test		(Pass) Pass
36. Number of Rotor Bars		52
37. Rotor Condition		good
38. List the Parts needed for the Repair Below		
Rewind, 6316 2Z, 6313 2RS		

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39. Signature of Technician that Disassembled Motor

David Maclin



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

0 Degrees

60 Degrees

120 Degrees

45. Drive End Bearing Shaft Fit Condition

(P) Pass

46. Opposite Drive End Bearing Shaft Fit

0 Degrees

60 Degrees

120 Degrees

47. Opposite Drive End Bearing Shaft Fit Condition

(P) Pass

48. Shaft Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

Mechanical Fits- Bearing Housings

49. Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

50. Drive End - Endbell Bearing Fit Condition

(P) Pass

51. Opposite Drive End - Endbell Bearing Fit

0 Degrees

60 Degrees

120 Degrees

52. Opposite Drive End - Endbell Bearing Fit Condition

(F) Fail

R

53. Bearing Cap Condition

Drive End Bearing Cap

Opposite Drive End Bearing Cap

54. End Bell Air Seal Fits

Drive End Air Seal

Opposite Drive End Air Seal

55. List Machine Work Needed Below

56. Technician

Root Cause of Failure

57. Failure locations

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12. **ABANDONED EQUIPMENT.** Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
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