

# EVERY DAY SINCE 1946

**Motor Shop Repairs** 

# Job Number 100037

Prepared for Twin Rivers (12049)

3501 Jefferson Parkway Pine Bluff AR 71602

# Table of Contents

AC Recondition As Found - Shop



# **AC Recondition As Found**

Twin Rivers (12049) 3501 Jefferson Parkway Pine Bluff, AR 71602

### AC Recondition - Rev. 2

Location:	Shop

Serial Number:

10031 Description: 300HP WORLDWIDE 1800RPM 449TS

Hi-Speed Job Number:	100037
Manufacturer:	Other
Product Number:	WWE300-18-449TSBB
Serial Number:	10031
HP/kW:	300 (HP)
RPM:	1790 (RPM)
Frame:	449TS
Voltage:	460
Current:	334
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	None
Coupling/Sheave:	None
Date Received:	07/11/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Teardown Inspection
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

## Priorities Found: **5 - High**

# 🔵 4 - Good

# **Overall Condition**

- Report Date 1.
- 2. Nameplate Picture





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

> FolderID: 100037 FormID: 14049666











8. Air Gap Variation <10%



#### 10. Lead Length 16 Inches 11. Frame Condition pass



12. Fan Condition



13. Broken or Missing Components

missing connection box and cover

# **Initial Electrical Inspection**

### 14. Insulation Resistance/Megger

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(P) Pass

1 Megohms

15.	Winding Resistance			
	1-2	1-3	2-3	
	.01147	.01171	.01047	
16.	Perform Surge Test		(F)	Fail



17. Stator Condition





Mechanical Inspection	
18. Drive End Bearing Number-	6320ZZ C3
19. Drive End Bearing Qty.	1
20. Drive End Bearing Type	(Ball) Ball Bearing

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Rewind

# 21. Drive End Lubrication Type

# Grease burnt



22. Drive End Bearing Insulation or Grounding Device?	no
23. Drive End Wavy Washer/Snap-Ring Other Retention Device?	no
24. Drive End Bearing Condition	indentation from debris and frosting



25. Opposite Drive End Bearing Number-



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

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6320ZZ C3



- 29. Opposite Drive End Bearing Insulation or Grounding Device?
- 30. Opposite Drive End Wavy Washer/Snap-Ring Other Retention Device?
- 31. Opposite Drive End Bearing Condition

snap ring

no

indentation from debris



32. Drive End Seal



33. Opposite Drive End Seal **Rotor Inspection** 

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99 127 15

# (Squirrel Aluminum) Squirrel Cage Aluminum Die Cast

# 34. Rotor Type/Material



35.	Growler Test		(Pass) Pass
36.	Number of Rotor Bars		44
37.	Rotor Condition		wash and bake
38.	List the Parts needed for the Repair B	elow	
39. (	Signature of Technician that Disassen	nbled Motor	RW
Mecha	anical Fits- Rotor		
40.	Shaft Runout		0.0005 inches
41.	Rotor Runout		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
42.	Coupling Fit Closest to Bearing Housi		
	0 Degrees	90 Degrees	120 Degrees
43.	Coupling Fit Closest to the end of the	Shaft	
	0 Degrees	60 Degrees	120 Degrees
	C C	<u> </u>	
44.	Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
	3.9375	3.9375	3.9375



46.	Opposite Drive End Bearing Shaft Fit			
	0 Degrees	60 Degrees	120 Degrees	
	3.9377	3.9377	3.9377	
<b>4</b> 7.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass



48	. Shaft Air Seal Fits			
	Drive End Air Seal	Opposite Drive End Air Seal		
Мес	nanical Fits- Bearing Housings			
49	. Drive End - Endbell Bearing Fit			
	0 Degrees	60 Degrees	120 Degrees	
	8.466699999999999	8.466699999999999	8.4666999999999999	
•	Resleeve			
50	. Drive End - Endbell Bearing Fit Cond	ition		(F) Fail
51	. Opposite Drive End - Endbell Bearing	g Fit		
	0 Degrees	60 Degrees	120 Degrees	
	8.4665	8.4665	8.4665	
•	Resleeve			
52	. Opposite Drive End - Endbell Bearing	y Fit Condition		(F) Fail
53	. Bearing Cap Condition			
	Drive End Bearing Cap	Opposite Drive End Bearing Cap		
	pass	pass		

54. End Bell Air Seal Fits Drive End Air Seal Opposite Drive End Air Seal 55. List Machine Work Needed Below Both end bells need resleeved 56. Technician RW ACCAUSE of Failure
Both end bells need resleeved       56. Technician       RW
Both end bells need resleeved       56. Technician       RW
56. Technician RW
R
Root Cause of Failure
Root Cause of Failure
57. Failure locations
Connection end bottom of slot .both end bells need resleeved
58. Root cause of failure
Overload



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- 5. DELIVERY OF GOODS AND/OR SERVICES. Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
- 6. DELIVERY SITE AND TIME FOR PERFORMANCE. Hi-Speed and Buver agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
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- 8. WARRANTIES. Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

**TermsAndConditions** 

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- 16. <u>NO INDIVIDUAL LIABILITY</u>. Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.