

# EVERY DAY SINCE 1946

**Motor Shop Repairs** 

## Job Number 99794

Prepared for Peco Foods

625 S. Allen Street Batesville AR 72501

### Table of Contents

AC Recondition As Found - Shop



#### **AC Recondition As Found**

Peco Foods 625 S. Allen Street Batesville, AR 72501

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

FolderID: 99794 FormID: 13585350

Hi-Speed Industrial Service

AC	Recor	ndition -	Rev. 2
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Location:	Shop
Serial Number:	B 06 7738761-0005 R 0002

Description:150HP US Motors 1800RPM 445T

Hi-Speed Job Number:	99794
Manufacturer:	US Motors/Nidec
Product Number:	HD150P2FB
Serial Number:	B 06 7738761-0005 R 0002
HP/kW:	150 (HP)
RPM:	1790 (RPM)
Frame:	445T
Voltage:	460
Current:	171
Phase:	Three
Hz:	60 (Hz)
Service Factor:	1.15
Enclosure:	TEFC
J-box Included:	Complete
Coupling/Sheave:	None
Date Received:	05/12/2022
Bearing RTDs:	No
Stator RTDs:	No
Repair Stage:	Final
Heaters:	No
Winding Type :	Random Wound
Bearing Type:	Rolling Element

#### Priorities Found: 🔵 1 - High

8 - Good

#### **Overall Condition**

1. Report Date

#### 2. Nameplate Picture





































3. Describe the Overall Condition of the Equipment as Received

Good

		Good			
In	itial	Mechanical/Electrical			
	4.	Does Shaft Turn Freely?			(Yes) Yes
	5.	Does Shaft Have Visible D	amage?		(No) No
	6.	Assembled Shaft Runout			0.001 Inches
	7.	Assembled Shaft End Play			
	8.	Air Gap Variation <10%			
٠	9.	Lead Condition			(P) Pass
	10.	Lead Length			14 Inches
	11.	Frame Condition			good
					(P) Pass
		Broken or Missing Compor	nents		
In		Electrical Inspection			
		Insulation Resistance/Meg	ger		Megohms
	15.	Winding Resistance			
		1-2	1-3	2-3	
	16.	Perform Surge Test			(P) Pass

#### 17. Stator Condition





#### **Mechanical Inspection**

18. Drive End Bearing Number-







- 19. Drive End Bearing Qty.
- 20. Drive End Bearing Type
- 21. Drive End Lubrication Type
- 22. Drive End Bearing Insulation or Grounding Device?
- 23. Drive End Wavy Washer/Snap-Ring Other Retention Device?
- 24. Drive End Bearing Condition





25. Opposite Drive End Bearing Number-

6313-2Z/C3

1



26. Opposite Drive End Bearing Qty.

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none

N318-E-XL-M1-C3

(Roller) Roller Bearing

(Grease) Grease Lubricated

grease dirty/wear on outer race

#### 27. Opposite Drive End Bearing Type



28.			
-0.	Opposite Drive End Lubrication Ty	ире	(Grease) Grease Lubricated
29.	Opposite Drive End Bearing Insula	ation or Grounding Device?	none
30.	Opposite Drive End Wavy Washer	/Snap-Ring Other Retention Device?	none
31.	Opposite Drive End Bearing Cond	ition	pass
32.	Drive End Seal		lip seal
33.			none
	r Inspection		
34.	Rotor Type/Material		(Squirrel Aluminum) Squirrel Cage Aluminum Die Cast
35.	Growler Test		(Pass) Pass
36.	Number of Rotor Bars		
37.	Rotor Condition		pass
38.	List the Parts needed for the Repa	ir Below	
39.	Signature of Technician that Disas	Mang	Terrence. Holland
Mech	anical Fits- Rotor		
40.	Shaft Runout		0.001 inches
	Rotor Runout		
41.			
41.	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
	-	-	Opposite Drive End Bearing
	Drive End Bearing Fit Coupling Fit Closest to Bearing Ho 0 Degrees	-	Opposite Drive End Bearing 120 Degrees
42.	Coupling Fit Closest to Bearing He	90 Degrees	
42.	Coupling Fit Closest to Bearing Ho 0 Degrees	90 Degrees	
42. 43.	Coupling Fit Closest to Bearing Ho 0 Degrees Coupling Fit Closest to the end of	90 Degrees the Shaft	120 Degrees
42. 43.	Coupling Fit Closest to Bearing Ho 0 Degrees Coupling Fit Closest to the end of 0 Degrees	90 Degrees the Shaft	120 Degrees

	45.	Drive End Bearing Shaft Fit Condition			(P) Pass
	46.	Opposite Drive End Bearing Shaft Fit			
		0 Degrees	60 Degrees	120 Degrees	
		2.559	2.559	2.559	
	47.	Opposite Drive End Bearing Shaft Fit	Condition		(P) Pass
	48.	Shaft Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
N	lecha	anical Fits- Bearing Housings			
	49.	Drive End - Endbell Bearing Fit			
		0 Degrees	60 Degrees	120 Degrees	
		7.481	7.4812	7.4813	
	50.	Drive End - Endbell Bearing Fit Condition	tion		(P) Pass
	51.	Opposite Drive End - Endbell Bearing	Fit		
		0 Degrees	60 Degrees	120 Degrees	
		5.5126	5.5126	5.5124	
	52.	Opposite Drive End - Endbell Bearing	Fit Condition		(P) Pass
	53.	Bearing Cap Condition			
		Drive End Bearing Cap	Opposite Drive End Bearing Cap		
		pass	pass		
Ι.		-	-		
	1				
	LUB				
	<b>F</b> 4	Fred Dell Air Cool Fite			
	54.	End Bell Air Seal Fits			
		Drive End Air Seal	Opposite Drive End Air Seal		
	55	List Machine Work Needed Below			
	00.	None			
	56	Technician		Terrence	. Holland
	50.	rechnician		Terrence	. Honand
		1 71	10 -		
			lland		
	/	Jerren Vp			
D	-	nic Balance Report			
	57.	Rotor Weight and Balance Grade			
		Rotor Weight	Balance Grade		
	58.	0			
		Drive End	Opposite Drive End		
	<b>F^</b>	Final Dalance Description			
	59.	Final Balance Readings			
		Drive End	Opposite Drive End		

	Technician		
Rewir			
61.	Core Test Results - Watts loss per Po	bund	
	Pre-Burnout	Post Burnout	
62.	Core Hot Spot Test		
	Pre-Burnout	Post-Burnout	
62	Post Rewind Electrical Test- Insulatio	n Pagistanga	
	Post Rewind Polarization Index	n Resistance	
60.	Post Rewind Winding Resistance	4.0	0.0
	1-2	1-3	2-3
66.	Post Rewind Surge Test		
	Post Rewind Hi-Pot		
	Technician		
Root	Cause of Failure		
	Failure locations		
03.	D.E bearing grease was dirty		
A A A A A A A A A A A A A A A A A A A			
70.	Root cause of failure		
	Customer request reconditioning.		
Mecha	anical Fits- Rotor - Post Repair		
71.	Shaft Runout Post Repair		
72.	Rotor Runout Post Repair		
	Drive End Bearing Fit	Rotor Body	Opposite Drive End Bearing
			<u> </u>
73.	Coupling Fit Closest to Bearing Housi	ng Post Repair	
	0 Degrees	90 Degrees	120 Degrees
74.	Coupling Fit Closest to the end of the		
	0 Degrees	60 Degrees	120 Degrees
		_ 1_	
75.	Drive End Bearing Shaft Fit Post Rep		100 D
	0 Degrees	60 Degrees	120 Degrees
76	Opposite Drive End Passing Chaft Fit	Post Popair	
76.	Opposite Drive End Bearing Shaft Fit		
	0 Degrees	60 Degrees	120 Degrees
77.	Shaft Air Seal Fits Post Repair		
11.	Drive End Air Seal	Opposite Drive End Air Seal	
	Drive Lifu Ali Seal	Opposite Drive Litu Ali Seai	

78.	Shaft Repair Sign-off				
Mecha	Mechanical Fits- Bearing Housings - Post Repair				
79.	Drive End - Endbell Bearing Fit Post F	Repair			
	0 Degrees	60 Degrees	120 Degrees		
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				
Asser	nbly				

84. Photograph All Major Components prior to assembly



















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 - Inche	s Per Second	
	Horizontal	Vertical	Axial
91.	Opposite Drive End Vibration Readin	gs - Inches Per Second	
	Horizontal	Vertical	Axial
92.	Ambient Temperature - Fahrenheit		
93.	Drive End Bearing Temps - Fahrenhe	eit	
	5 Minutes	10 Minutes	15 Minutes
94.	Opposite Drive End Bearing Temps -	Fahrenheit	
	5 Minutes	10 Minutes	15 Minutes
95.	9		
96.	Document Final Condition with Pictur	es after paint	
97.	Final Pics and QC Review		
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- 1. <u>APPLICABILITY.</u> The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
- 2. PRICE. All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
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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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- 11. <u>GOVERNING LAW AND JURISDICTION.</u> Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
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- 13. FORCE MAJEURE. Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earth quake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
- 14. <u>NONWAIVER</u>. No course of dealing or failure of either party to strictly enforce any term, right, or condition of these Standard Terms and Conditions will be construed as a waiver of such term, right or condition. Any waiver by Hi-Speed will only be in writing and will waive no succeeding breach of a term, right or condition.
- 15. <u>ASSIGNMENT.</u> The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
- 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.