

# EVERY DAY SINCE 1946

**Motor Shop Repairs** 

## Job Number 99975

Prepared for Remington (10243)

2592 AR Hwy 15 N Lonoke AR 72086

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AC Recondition As Found - MOTOR SHOP LR



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

> FolderID: 99975 FormID: 13935880

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

Remington (10243) 2592 AR Hwy 15 N

| AC Reconditio                           | n - Rev. 2            | Hi-Speed Job Number: | 99975               |
|---|-----------------------|----------------------|---------------------|
| Location:                               | MOTOR SHOP LR         | Manufacturer:        | Reliance            |
| Serial Number:                          | 02MB0005783 G 003 UZ  | Product Number:      | P25G5096A           |
| Description:20HP RELIANCE 1800RPM 256TD | Serial Number:        | 02MB0005783 G 003 UZ |                     |
|   |                       | HP/kW:               | 20 (HP)             |
|   |                       | RPM:                 | 1755 (RPM)          |
|   |                       | Frame:               | 256TD               |
|   |                       | Voltage:             | 460                 |
|   | Current:              | 25.2                 |                     |
|   | Phase:                | Three                |                     |
|   | Hz:                   | 60 (Hz)              |                     |
|   | Service Factor:       | 1.15                 |                     |
|   | Enclosure:            | TEFC                 |                     |
|   | J-box Included:       | Complete             |                     |
|   | Coupling/Sheave:      | None                 |                     |
|   |                       | Date Received:       | 06/27/2022          |
|   |                       | Bearing RTDs:        | No                  |
|   |                       | Stator RTDs:         | No                  |
|   |                       | Repair Stage:        | Teardown Inspection |
|   |                       | Rewind:              | No                  |
|   |                       | Heaters:             | No                  |
|   |                       | Winding Type :       | Random Wound        |
|   |                       | Bearing Type:        | Rolling Element     |
| ioritiesFound: 🔵                        | 3 - High 🛛 🌑 5 - Good |                      |                     |
| overall Condit                          | ion                   |                      |                     |
| 1. Report D                             | ate                   |                      |                     |

2. Nameplate Picture









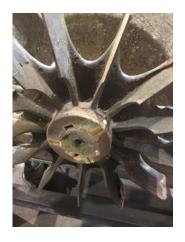


















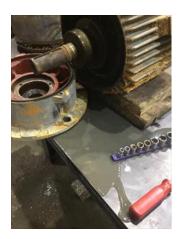




























| 3.     | Describe the Overall Condition of the Equipment as Received |           |  |  |
|--------|---|-----------|--|--|
|        | Rusty   |           |  |  |
| Initia | Initial Mechanical/Electrical                               |           |  |  |
| • 4.   | Does Shaft Turn Freely?                                     | (Yes) Yes |  |  |
| 5.     | Does Shaft Have Visible Damage?                             | (No) No   |  |  |
| 6.     | Assembled Shaft Runout                                      |           |  |  |
| 7.     | Assembled Shaft End Play                                    |           |  |  |
| 8.     | Air Gap Variation <10%                                      |           |  |  |
| 9.     | Lead Condition  | (F) Fail  |  |  |
| 10     | Lead Length   | 8 Inches  |  |  |
| 11     | Frame Condition   | pass      |  |  |



| 13.         | Broken or Missing Components          |                                  |  |
|-------------|---------------------------------------|----------------------------------|--|
|             | Na                                    |                                  |  |
| Initial     | Electrical Inspection                 |                                  |  |
| 14.         | Insulation Resistance/Megger          |                                  |  |
| 15.         | Winding Resistance                    |                                  |  |
|             | 1-2                                   | 1-3                              | 2-3  |
|             |                                       |                                  |  |
| <b>1</b> 6. | Perform Surge Test                    |                                  | (NA) Not Applicable                                    |
|             | Rewind                                |                                  |  |
| 17.         |                                       |                                  |  |
| Mecha       | anical Inspection                     |                                  |  |
| 18.         | · · · · · · · · · · · · · · · · · · · |                                  | 6309   |
| 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 Grou  | unding Device?                   | na   |
| 23.         | Drive End Wavy Washer/Snap-Ring       | Other Retention Device?          | na   |
| 24.         | Drive End Bearing Condition           |                                  | very worn and contamination                            |
| 25.         | Opposite Drive End Bearing Number     | r-                               | 6309   |
| 26.         | Opposite Drive End Bearing Qty.       |                                  | 1  |
| 27.         | Opposite Drive End Bearing Type       |                                  | (Ball) Ball Bearing                                    |
| 28.         | Opposite Drive End Lubrication Type   | 9                                | (Grease) Grease Lubricated                             |
| 29.         | Opposite Drive End Bearing Insulation | on or Grounding Device?          | na   |
| 30.         | Opposite Drive End Wavy Washer/S      | nap-Ring Other Retention Device? | wavy washer  |
| 31.         | Opposite Drive End Bearing Condition  | on                               | worn and contamination                                 |
| 32.         | Drive End Seal                        |                                  | labyrinth seal   |
| 33.         | Opposite Drive End Seal               |                                  | na   |
| Rotor       | Inspection                            |                                  |  |
| 34.         | Rotor Type/Material                   |                                  | (Squirrel Aluminum) Squirrel<br>Cage Aluminum Die Cast |
| 35.         | Growler Test                          |                                  | (Pass) Pass  |
| 36          | Number of Rotor Bars                  |                                  |  |

36. Number of Rotor Bars

#### 37. Rotor Condition



| <ol> <li>List the Parts needed for the Repair I<br/>Rewind<br/>2-6309</li> </ol> | Below  |                            |  |  |
|--|--|----------------------------|--|--|
| 39. Signature of Technician that Disasse   | mbled Motor                                    | Cw                         |  |  |
| 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 Hous   | ing  |                            |  |  |
| 0 Degrees  | 90 Degrees                                     | 120 Degrees                |  |  |
| 0 Degrees  | 30 Degrees                                     | 120 Degrees                |  |  |
| 43. Coupling Fit Closest to the end of the                                       | . Coupling Fit Closest to the end of the Shaft |                            |  |  |
| 0 Degrees  | 60 Degrees                                     | 120 Degrees                |  |  |
| 44 Drive End Descript Shoft Fit  |  |                            |  |  |
| 44. Drive End Bearing Shaft Fit  | CO Degrees                                     | 100 Degrees                |  |  |
| 0 Degrees  | 60 Degrees                                     | 120 Degrees                |  |  |
| <b>1.7718</b>  |  |                            |  |  |
| 45. Drive End Bearing Shaft Fit Condition  | 1  | (P) Pass                   |  |  |
| 46. Opposite Drive End Bearing Shaft Fit   |  |                            |  |  |
| 0 Degrees  | 60 Degrees                                     | 120 Degrees                |  |  |
| <b>1.7717</b>  |  |                            |  |  |
| 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 |          |
|             |  |                                |             |          |
|             | 3.9482   |                                |             |          |
| <b>5</b> 0. | Drive End - Endbell Bearing Fit Condition          |                                |             | (F) Fail |
| 51.         | . Opposite Drive End - Endbell Bearing Fit         |                                |             |          |
|             | 0 Degrees  | 60 Degrees                     | 120 Degrees |          |
|             |  |                                |             |          |
|             | 3.9372   |                                |             |          |
| 52.         | Opposite Drive End - Endbell Bearing Fit Condition |                                |             | (P) Pass |
| 53.         | Bearing Cap Condition                              |                                |             |          |
|             | Drive End Bearing Cap                              | Opposite Drive End Bearing Cap |             |          |
|             |  |                                |             |          |

Pass



| 54.  | End Bell Air Seal Fits                 |  |   |
|------|--|--|---|
|      | Drive End Air Seal                     | Opposite Drive End Air Seal                                |   |
|      |  |  |   |
| 55.  | List Machine Work Needed Below         |  |   |
|      | DE end bell bearing fit                |  |   |
| 56.  | Technician                             | C  | w |
|      | M                                      |  |   |
| Root | Cause of Failure                       |  |   |
| 57.  | Failure locations                      |  |   |
|      | Winding insulation deteriorated and de | end bell bearing fit                                       |   |
| 58.  | Root cause of failure                  |  |   |
|      | Winding insulation deteriorated and wa | ter got into the motor and DE end bell bearing fit is work |   |



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- 3. <u>SCOPE OF GOODS AND/OR SERVICES.</u> The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only be effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
- 4. <u>BILLING AND PAYMENT TERMS.</u> Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
- 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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- 10. <u>SEVERABILITY</u>. The partial or complete invalidity of any provision of these Standard Terms and Conditions shall not affect the enforceability of the remainder of these Standard Terms and Conditions. If any provision is found to be invalid or unenforceable, that portion shall be modified to make it enforceable or shall be stricken and the remainder of these Standard Terms and Conditions shall enforced.
- 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.
- 12. <u>ABANDONED EQUIPMENT.</u> 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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- 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.
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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.