Maintenance Manual

HTCM-006

Part Number 204P2100-101
Models UH-1H, UH-1B*, TH-1F, UH-1F, UH-1P, 204B, 205A, and 205A-1
MAIN ROTOR BLADE
(Installation and Maintenance)

* with STC # SR00026DE Installed

Initial Release Date: 12/17/2013

Revision

<table>
<thead>
<tr>
<th>Change Letter</th>
<th>Change Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>05/12/2015 GHB</td>
</tr>
</tbody>
</table>

C  Added Applic. – TH-1F, UH-1F, UH-1P, 204B, 205A, 205A-1 05/ 12/ 2015 GHB
B  Added Applicability - UH-1B with STC #SR00026DE Installed 04/ 10/ 2015 GHB
A  Added Applicability - All FAA Certificated UH-1H 03/ 31/ 2014 GHB
N/ C Released 12/ 17/ 2013 GHB

Note

See Section “REFERENCE DOCUMENTS” below for indicated references.

The most current revision of this document (HTCM-006) will be available on the Helicopter Technology Company (HTC) website at www.helicoptertech.com under Technical Publications.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF EFFECTIVE PAGES</td>
<td>21</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>22</td>
</tr>
<tr>
<td>REFERENCE DOCUMENTS</td>
<td>24</td>
</tr>
<tr>
<td>DEFINITIONS AND ABBREVIATIONS</td>
<td>26</td>
</tr>
<tr>
<td>WEIGHT AND BALANCE</td>
<td>27</td>
</tr>
<tr>
<td>WARNINGS</td>
<td>28</td>
</tr>
<tr>
<td>INDEX</td>
<td>29</td>
</tr>
<tr>
<td>AIRWORTHINESS LIMITATIONS</td>
<td>30</td>
</tr>
<tr>
<td>Interchangeability and Life Limits</td>
<td>30</td>
</tr>
</tbody>
</table>
Chapter 1. Introduction

Section I. Servicing

1-7. Main and Tail Rotor System
1-14. Cleaning
1-15. Description - Cleaning
1-15. Rotor Blades - Cleaning
1-20. Treatment of Aluminum and Magnesium Corrosion
1-21. Snow and Ice Removal
1-22. Consumable Maintenance Supplies and Materials
1-23. Description - Consumable Maintenance Supplies and Materials

Table 1-1. Consumable Maintenance Supplies and Materials

1-24. Special Tools and Test Equipment
1-25. Description - Special Tools and Test Equipment

Table 1-2. Special Tools and Test Equipment

1-26. Support Equipment
1-27. Description - Support Equipment

Table 1-3. Support Equipment

1-28. Standard Torque Procedures and Requirements

Table 1-4. Standard Torque Chart

1-29. Reuse of Self-Locking Nuts

Table 1-7. Minimum Breakaway Torque

Section IV. Inspection Requirements

1-56. General Information
1-57. Standards of Serviceability
1-58. Special Inspection
1-59. Description - Special Inspection
1-60. Definition and General Information - Special Inspection
1-61. Requirements - Special Inspection
Section V. Overhaul and Retirement Schedule

1-62. Introduction
1-63. Overhaul Interval
1-64. Description - Overhaul Interval
1-65. Retirement Schedule
1-66. Description - Retirement Schedule

Table 1-8. Overhaul and Retirement Schedule

Section VI. Flight Safety Critical Aircraft Parts

1-67. Flight Safety Critical Aircraft Parts

Table 1-9. Flight Safety Critical Aircraft Parts

Chapter 5. Rotors

Section I. Main Rotor System

5-1. Main Rotor System
5-2. Description - Main Rotor System
5-3. Main Rotor Hub and Blade Assembly
5-4. Description - Main Rotor Hub and Blade Assembly
5-5. Cleaning - Main Rotor Hub and Blade Assembly
5-6. Lubrication - Main Rotor Hub and Blade Assembly
5-7. Alignment - Main Rotor Hub and Blade Assembly
5-8. Adjustment, Collective Pitch Forces - Main Rotor Hub with Metal Blade Installed
5-9. Operational Check - Main Rotor Hub and Blade Assembly
5-10. Autorotation RPM Adjusting - Main Rotor Hub and Blade Assembly
5-11. Troubleshooting - Main Rotor Hub and Blade Assembly

Table 5-1. Troubleshooting Main Rotor System
5-12. Removal - Main Rotor Hub and Blade Assembly
5-13. Installation - Main Rotor Hub and Blade Assembly

Section III. Main Rotor Blades

5-27. Main Rotor Blade
5-28. Description - Main Rotor Blade
5-29. Inspection - Main Rotor Blade (Installed)

Table 5-3. Inspection Requirements Main Rotor Blade
5-30. Removal - Main Rotor Blade
5-31. Inspection - Main Rotor Blade
Table 5-4. Main Rotor Blade - Repairable Nicks, Scratches, and Corrosion Limits 43
Table 5-5. Main Rotor Blade - Dent Limits 43
5-32. Repair or Replacement - Main Rotor Blade 43
5-33. Installation - Main Rotor Blade 43
5-34. Touchup Refinish Procedure - Main Rotor Blade 43
5-34.1. Preparation for Storage or Shipment - Main Rotor Blade 43
Section IX. Tracking Procedures 44
5-120. Tracking and Operational Check - Main Rotor Blades 44
5-121. Vibration Analysis - Main Rotor Blades 44
5-122. Deleted 44
5-125. Tracking and Balancing with the Vibrex 4591 System 44
5-126. General 44
5-127. Description 44
5-128. Main Rotor Track and Balance 44
5-129. Attach Test Equipment to Aircraft 45
5-130. Hover Track of Main Rotor with Metal Blades 45
5-131. Check Main Rotor Balance 45
5-132. Correct Main Rotor Balance 45
5-133. Check Main Rotor In-Flight Track 45
5-134. Correct In-Flight Track 45
5-140. Vibration Source Location 46
Table 5-7. Operating Speeds 46
5-141. Troubleshooting 46
Table 5-8. Troubleshooting 46
I. General Information

1-1. General Information

1-13. Leading Particulars

Table 1-1. Leading Particulars

1-14. Station Locations

Figure 1-2. Station Locations

1-22. Preservation

1-28. Long Term Preservation

1-31. Drive System – Preservation (Inoperable Engine)

1-40. Depreservation

1-42. Long Term Depreservation

1-52. Main Rotor Assembly

1-53. Extreme Climactic Environmental Maintenance

1-54. Extremes in Temperature

II. Ground Handling, Servicing, and Lubrication Instructions

2-1. Ground Handling

2-2. General

2-3. Towing

2-5. Towing

Figure 2-1. Towing and Parking

2-34. Parking

2-35. Parking Procedures

2-36. Anchoring and Mooring

2-37. Mooring Procedures

Figure 2-14. Typical Mooring

2-38. Blade Tie Down

2-39. Jacking

2-41. Jacking Procedure
2-43. Jacking for Weighing
2-47. Hoisting
2-48. Maintenance Hoist
Figure 2-15. Jacking-Hoisting-Leveling
2-56. Cold Weather Ground Check
2-57. Servicing
2-58. General
2-70. Air Transportability
2-71. General
2-74. Torque Requirements
  2-75. Torqueing Instructions
  2-76. Torqueing Limits
  Table 2-1. Standard Torque Values
  Figure 2-24. Torque Values
  2-77. Correct Recommended Torque
  2-78. Torque – Tightening Procedures
  2-79. Use of Extension Wrench (Crowfoot)
  2-80. Measuring Effective Length of Crowfoot Wrench
  Figure 2-26. Torque Values for Studs
  2-81. Determination of Gage Reading when using a Crowfoot Wrench
  Figure 2-27. Decimal Equivalent Conversion Table
  Figure 2-28. Temperature Conversion Chart (Fahrenheit to Centigrade)
  Figure 2-29. Measuring Effective Length of Extension Wrench
  Figure 2-30. Torque Application using Extension Wrench
  2-86. Materials Required
  Table 2-3. Materials Required
  Figure 2-34. Special Tools and Equipment
  2-87. Special Tools and Equipment
  Table 2-4. Special Tools and Equipment
VII. Main and Tail Rotor and Flight Controls

7-1. Main Rotor Hub and Blade Assembly

7-2. Description

Figure 7-1. Main Rotor Group

Figure 7-2. Rotor System Torque Values

Figure 7-3. Main Rotor Hub and Blade Assembly

7-3. Removal – Main Rotor Hub and Blade Assembly

Figure 7-4. Grip Positioning Links

7-4. Alternate Removal – Main Rotor Hub and Blade Assembly

7-4A. Removal – of Pitch Change Link Assembly

7-5. Removal – Main Rotor Blades

7-6. Inspection and Repair Main Rotor Blades

7-7. Inspection and Repair Drag Brace Assembly

Figure 7-5. Blade Removal

7-8. Covering Leading Edge of Main Rotor Blades

Figure 7-8. Rotor Blade Retention Bolt Extracting Fixture

7-17. Reassembly after Replacement of Main Rotor Blade Retention Straps

7-19. Installation - Main Rotors

7-20. Aligning - Main Rotors

Figure 7-16. Main Rotor Blade Alignment

Figure 7-17. Blade Alignment Jig Assembly

7-21. Installation - Main Rotor Hub and Blade Assembly

Figure 7-18. Pitch Change Link Assembly

7-22. Alternate Installation - Main Rotor Hub and Blade Assembly

7-23. Setting Minimum Blade Angle - Main Rotor

7-24. Clean Main Rotor Blades

7-25. Operational Check of Main Rotor

7-26. Vibrations

7-27. Extreme Low Frequency Vibration

7-28. Low Frequency Vibration

7-29. Medium Frequency Vibration

7-30. High Frequency Vibration

7-30A. Vibration Analysis and Troubleshooting
7-31. Tracking and Balancing Main and Tail Rotor Assembly

7-32. Vibrex System Tracking and Balancing Main and Tail Rotor Blades and Hubs

7-33. Description of Equipment

Table 7-1. Tools and Equipment Required

Figure 7-20. Description and Specification of the Vibrex System

Figure 7-20A. Spectrum Analyzer, Model 192

Figure 7-21. Vibrex B Equipment

Figure 7-22. Vibrex / Airframe Interface

Figure 7-23. Phase Relationships for Improperly and Properly Tuned Filters

Figure 7-24. Typical Charts

Figure 7-25. Accurate Charts

Figure 7-26. Balance Chart Clock Angle Corrector Instruction Sheet

Figure 7-27. Balance Chart Clock Angle Corrector

Figure 7-28. Reclocked Chart

7-34. Operating Equipment

Figure 7-29. Installation of Interrupter on Swashplate

Figure 7-30. Installation Magnetic Pickup

7-35. Installation of Equipment

Figure 7-31. Installation of Interrupter

Figure 7-32. Adjustment of Magnetic Pickup Clearance

Figure 7-33. Installation of Magnetic Pickup and Accelerometer Cable

Figure 7-34. Installation of Retro-Reflective Tape to Main Rotor Tip Targets

Figure 7-35. Installation of Tip Targets

Figure 7-36. Installation of Accelerometer and Bracket, PN 3382

Figure 7-37. Installation of Reflective Target Tape to Blade Grip

Figure 7-38. Installation of Retro-Reflective Target Tape to Blade Tip

7-36. Hover Tracking Main Rotor

Figure 7-39. Stopped Target Image Tail Rotor

Figure 7-40. Hover and Ground Track Blade Pattern

7-37. Dynamic Balancing of Main Rotor

7-38. Inflight Tracking Main Rotor Blades

Figure 7-42. Balance Chart Main Rotor (Typical)

Figure 7-43. Inflight Track Blade Pattern

7-41. Troubleshooting Vibration using Vibrex B
7-42. Removal of Equipment
7-43. Tracking Flag Method
Figure 7-44. Tracking Main Rotor
7-44. Vibration Check and Adjustment of Main Rotor
Figure 7-45. Main Rotor Tracking Procedure
Figure 7-46. Rotor Smoothing Procedure
7-45. Sweeping Blade of Main Rotor
7-46. Autorotation RPM Adjustment of Main Rotor
Figure 7-47. Troubleshooting Lateral Vibration
Figure 7-48. Trim Tab Bender and Gage Application
Figure 7-49. Tracking Flag
7-47. Adjusting for Collective Forces
7-48. Adjustment - Collective Pitch Force – Main Rotor Hub and Blade Assembly
Figure 7-50. Collective Pitch Retention Strap Adjustment
7-49. Resetting Tension Torsion Straps to Initial Settings
7-50. Resetting Main Rotor Grip Strap
7-51. Troubleshooting Rotors and Controls
Table 7-2. Troubleshooting Rotors and Controls
7-101. Packaging and Preservation of Components
7-102. Installing Main Rotor Blades in Shipping Containers
204P2100-101 MAIN ROTOR BLADE ASSEMBLY: FOR 204B MODELS (BHT-204B-M&O-1)

Introduction
1. Use of the Manual
2. Bulletins
3. Consumable Materials
4. Special Tools
5. Torques
6. Terminology
7. Warnings, Cautions, and Notes
8. Use of Procedural Words
9. Wear Limits
10. Standard Practices
11. Replacement Parts and Assemblies

Section I. General Information
Figure 1-1. 204B Helicopter
1-1. General Information
1-2. Description
1-3. General
1-7. Main Rotor
1-20. Helicopter Dimensions
1-21. Ground Handling
Figure 1-2. Three-View Dimensional Diagram
Figure 1-3. Station Line Diagram
Figure 1-4. Ground Handling (Hoisting, Jacking, Leveling, and Towing)
1-29. Parking – Normal Conditions
1-30. Parking – Turbulent Conditions
1-31. Mooring
Figure 1-5. Parking and Mooring
1-32. Helicopter Storage
1-33. Environmental Conditions
1-34. Flyable Storage
1-35. Short Term Storage
1-36. Intermediate Storage
1-67. Maintenance Hoist
1-78. Inspection
    1-79. Daily Inspection
    1-79. Daily Inspection
1-80. 100 Hour Inspection
1-81. 1000 Hour Inspection
1-82. 3000 Hour Inspection
1-83. 1000 Hour Component Overhaul
1-84. 1500 Hour Component Overhaul
1-85. 2000 Hour Component Overhaul
1-86. 2400 Hour Component Overhaul
1-86A. 2500 Hour Component Overhaul
1-87. Between 5 and 10 Hours of Flight After Installation
1-88. Each 10 Hours of Component Operation
1-89. Each 25 Hours of Component Operation
1-90. Between 25 and 30 Hours of Flight After Installation
1-91. Each 50 Hours or 15/30 Days
1-92. 100 Hours After Initial Installation of Tailboom
1-93. Each 100 Hours
1-94. Each 100 Hours or 3 Months, Whichever Occurs First
1-95. Each 300 Hours or 3 Months, Whichever Occurs First
1-96. Each 500 Hours or 12 Months, Whichever Occurs First
1-96A. Each 24 Months
1-96B. Deleted
1-97. Each 1200 Hours or 24 Months, Whichever Occurs First
1-98. Hard Landing
1-99. Sudden Stoppage - Power On or Off
1-100. Overspeed
1-101. Overtorque
Section II. Main Rotor Hub and Blade Assembly

2-1. Main Rotor Hub and Blade Assembly

2-2. Description

2-3. Removal – Main Rotor Hub and Blade Assembly

2-4. Main Rotor Blades

2-5. Description

2-6. Removal – Main Rotor Blades

Figure 2-1. Main Rotor Assembly

Figure 2-2. Grip Positioning Links

Figure 2-3. Removing Rotor Blades

Figure 2-4. Main Rotor Blade Retention Bolt Extracting Fixture

2-8. Preventative Maintenance – Main Rotor Blades

2-9. Leading Edge Protection – Main Rotor Blades (Polyurethane Tape)

2-10. Daily Inspection – Main Rotor Blades

2-11. 1000 Hour Inspection and Repair – Main Rotor Blades

Figure 2-5. Main Rotor Blade Repair

2-12. Conditional Inspection – Main Rotor Blades

2-13. Inspection – Main Rotor Blades

2-14. Field Repairs – Main Rotor Blades

2-15. Trim Tab Replacement – Main Rotor Blade

Figure 2-6. Trim Tab Replacement

2-16. Main Rotor Blade Splice Cover

2-17. Installation – Main Rotor Blade Splice Cover

2-18. Preservation, Storage, and Blade Packaging
2-19. Main Rotor Hub  83
2-43. Balancing – Main Rotor Hub Assembly  83
Figure 2-34. Balancing Main Rotor Hub  83
2-44. Installation – Main Rotor Blades  83
2-45. Alignment – Main Rotor Blades  84
2-46. Installation – Main Rotor Hub and Blade Assembly  84
Figure 2-35. Main Rotor Blade Alignment  84
2-47. Torque Limits – Main Rotor  84
2-48. Maintenance Operational Check - Main Rotor  84
2-49. Tracking – Main Rotor Blades  84
Figure 2-36. Rotor System Torque Limits  84
Figure 2-37. Tracking Main Rotor Blades  85
Figure 2-38. Trim Tab Bender and Gage Application  85
2-50. Spanwise Balance Check  85
2-51. Chordwise Balance Check  85
2-52. Autorotation RPM Check  85
2-53. Collective Pitch Force Check and Adjustment  85
Figure 2-39. Collective Force Pitch Adjustment  85
2-54. Main Rotor Hub Sealing  86
204P2100-101 MAIN ROTOR BLADE ASSEMBLY: FOR 205A MODELS (BHT-205A1-MM-1) AND FOR 205A-1 MODELS (BHT-205A1-MM-1)

Chapter 1. Introduction
1-1. General
1-2. Helicopter Description
   Figure 1-1. Model 204A-1 Helicopter (Typical)
1-3. Use of the Manual
1-4. Bulletins
1-5. Consumable Materials
1-6. Special Tools
1-7. Torques
1-8. Terminology
   1-9. Warnings, Cautions, and Notes
   1-10. Use of Procedural Words
1-11. Wear Limits
1-12. Standard Practices
1-13. Replacement Parts and Assemblies

Chapter 4. Airworthiness Limitations
4-1. Airworthiness Limitations Schedule

Chapter 5. Inspections
Inspections
   5-1. General
   5-2. Inspection Requirements
   5-3. Crash Damage
   5-4. Types of Inspections
   5-5. Definitions
   5-6. Inspection and Overhaul Tolerance
Scheduled Inspections

5-7. Scheduled Inspections 92
5-8. Daily Inspection 92
5-9. 100 Hour Inspection 92
5-10. 1000 Hour Inspection 92

Special Inspections

5-11. Special Inspections 93
5-12. Daily or Each 10 Hours of Flight Operation, Whichever Occurs First until 250 Hours 93
5-13. Between 5 and 10 Hours of Flight After Installation 93
5-14. Each 8 Hours of Component Operation 93
5-15. Each 25 Hours of Component Operation 93
5-16. Each 25 Hours for the Next Four Inspections 93
5-17. Each 25 Hours of Component Operation or 15 Days, or Each 5 Days for Blades Operating in a Salt Laden Atmosphere, Whichever Occurs First 94
5-18. 100 Hours After Each Installation 94
5-19. Main Rotor Grip Ultrasonic Inspection 94
5-20. Each 300 Hours of Component Operation 94
5-21. Each 300 Hours or 3 Months of Component Operation 94
5-22. Each 500 Hours of Component Operation 94
5-23. Each 600 Hours/6 Months of Tail Rotor Drive Shaft Coupling Operation 95
5-24. Each 600 Hours or 12 Months of Component Operation 95
5-25. Each 6 Months 95
5-26. Each 12 Months 95
5-27. Each 1000 Hours or 12 Months of Component Operation 95
5-28. First 1000 Hours of Component Time and Each 3000 Hours Thereafter of Component Time 95
5-29. Each 1200 Hours of Component Operation - Deleted 96
5-30. Each 1200 Hours or 24 Months, Whichever Comes First 96
5-31. Each 24 Months of Flight Control System Bolt Operation 96
5-32. Each 3000 Hours of Component Operation 96
5-33. Each 3100 Hours of Component Operation 96
Conditional Inspections
  5-34. Conditional Inspections
  5-35. Hard Landing
  5-36. After Blade Strike or Other Rotating System Torque Spike Spike
  5-37. Sudden Stoppage/Acceleration – Main Rotor
  5-38. Sudden Stoppage/Acceleration – Tail Rotor
  5-39. Overspeed
  5-40. Overtorque
  5-41. Compressor Stall or Surge
  5-42. Lightning Strikes
  5-43. Magnetic Compass Malfunction
Component Overhaul Schedule
  5-44. Component Overhaul Schedule
  Figure 5-1. Component Overhaul Schedule

Chapter 6. Dimensions and Charts
  6-1. Principal Dimensions
  6-2. Stations, Waterlines, and Buttocklines
      Figure 6-1. Principal Dimensions
      Figure 6-2. Station Diagram

Chapter 7. Lifting and Jacking
  7-1. Lifting and Jacking
  7-2. Lifting the Complete Helicopter
  7-3. Lifting the Tailboom Only
  7-4. Jacking
      Figure 7-1. Jacking

Chapter 9. Towing
  9-1. Towing
Chapter 10. Parking and Mooring

10-1. Parking - Normal Conditions
10-2. Parking - Turbulent Conditions
10-3. Mooring
   Figure 10-1. Parking and Mooring
10-4. Helicopter Storage
   10-5. Environmental Conditions
   10-6. Flyable Storage
   10-7. Short Term Storage
   10-8. Intermediate Storage

Chapter 65. Rotor System

65-1. Rotor System
65-2. Vibration Analysis
   65-3. Extreme Low Frequency Vibration
   65-4. Low Frequency Vibration
   65-5. Medium Frequency Vibration
   65-6. High Frequency Vibration
65-7. Main Rotor Troubleshooting
   Table 65-1. Main Rotor Troubleshooting
65-9. Operational Check - Main Rotor System
   65-10. Main Rotor Tracking
   Figure 65-1. Main Rotor Tracking Procedure
65-11. Main Rotor Blade Vibration Check and Adjustment
65-12. Main Rotor Blade Sweeping
65-13. Main Rotor Autorotation RPM Adjustment
   Figure 65-2. Lateral Vibration Check
   Figure 65-3. Rotor Smoothing Procedure
   Figure 65-4. Trim Tab Bender and Gage
65-14. Main Rotor Hub and Blade
65-15. Removal – Main Rotor Hub and Blade
65-15A. Inspection and Repair – Main Rotor Hub and Blade
65-16. Installation – Main Rotor Hub and Blade
Figure 65-5. Main Rotor System
Figure 65-6. Main Rotor Retaining Nut Damage and Repair Limits
Figure 65-7. Main Rotor Cone Set Damage and Repair Limits
65-17. Minimum Blade Angle – Main Rotor Hub and Blade
65-18. Collective Pitch Forces – Adjustment
Figure 65-8. Main Rotor System Torque Values
Figure 65-9. Collective Pitch Retention Strap Adjustment
65-19. Resetting Main Rotor Grip Tension-Torsion Strap
65-20. Resetting Main Rotor Grip Tension-Torsion Strap – Initial Setting
65-21. Main Rotor Blades
65-22. Preventative Maintenance for Main Rotor Blades
65-23. Main Rotor Blade Daily Inspection
65-25. Inspection and Minor Repair - Main Rotor Blades
Figure 65-10. Main Rotor Blade
65-26. Field Repairs - Main Rotor blades
Figure 65-11. Main Rotor Blade Repair
65-27. Polyurethane Tape - Installation
65-28. Deleted
65-29. Main Rotor Blade Paint Touch-Up
65-30. Main Rotor Blade Trim Tab
65-31. Replacement - Main Rotor Blade - Trim Tab
Figure 65-12. Trim Tab Replacement
| HTC SPECIFIC INSPECTIONS | 112 |

**HTC Proprietary Data Not to be Distributed**
## LIST OF EFFECTIVE PAGES

<table>
<thead>
<tr>
<th>Sheets</th>
<th>Revision Date</th>
<th>Sheets</th>
<th>Revision Date</th>
<th>Sheets</th>
<th>Revision Date</th>
<th>Sheets</th>
<th>Revision Date</th>
<th>Sheets</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>05/12/2015 C</td>
<td>29</td>
<td>05/12/2015 C</td>
<td>57</td>
<td>05/12/2015 C</td>
<td>85</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>05/12/2015 C</td>
<td>30</td>
<td>05/12/2015 C</td>
<td>58</td>
<td>05/12/2015 C</td>
<td>86</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>05/12/2015 C</td>
<td>31</td>
<td>05/12/2015 C</td>
<td>59</td>
<td>05/12/2015 C</td>
<td>87</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>05/12/2015 C</td>
<td>32</td>
<td>05/12/2015 C</td>
<td>60</td>
<td>05/12/2015 C</td>
<td>88</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>05/12/2015 C</td>
<td>33</td>
<td>05/12/2015 C</td>
<td>61</td>
<td>05/12/2015 C</td>
<td>89</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>05/12/2015 C</td>
<td>34</td>
<td>05/12/2015 C</td>
<td>62</td>
<td>05/12/2015 C</td>
<td>90</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>05/12/2015 C</td>
<td>35</td>
<td>05/12/2015 C</td>
<td>63</td>
<td>05/12/2015 C</td>
<td>91</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>05/12/2015 C</td>
<td>36</td>
<td>05/12/2015 C</td>
<td>64</td>
<td>05/12/2015 C</td>
<td>92</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>05/12/2015 C</td>
<td>37</td>
<td>05/12/2015 C</td>
<td>65</td>
<td>05/12/2015 C</td>
<td>93</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>05/12/2015 C</td>
<td>38</td>
<td>05/12/2015 C</td>
<td>66</td>
<td>05/12/2015 C</td>
<td>94</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>05/12/2015 C</td>
<td>39</td>
<td>05/12/2015 C</td>
<td>67</td>
<td>05/12/2015 C</td>
<td>95</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>05/12/2015 C</td>
<td>40</td>
<td>05/12/2015 C</td>
<td>68</td>
<td>05/12/2015 C</td>
<td>96</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>05/12/2015 C</td>
<td>41</td>
<td>05/12/2015 C</td>
<td>69</td>
<td>05/12/2015 C</td>
<td>97</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>05/12/2015 C</td>
<td>42</td>
<td>05/12/2015 C</td>
<td>70</td>
<td>05/12/2015 C</td>
<td>98</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>05/12/2015 C</td>
<td>43</td>
<td>05/12/2015 C</td>
<td>71</td>
<td>05/12/2015 C</td>
<td>99</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>05/12/2015 C</td>
<td>44</td>
<td>05/12/2015 C</td>
<td>72</td>
<td>05/12/2015 C</td>
<td>100</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>05/12/2015 C</td>
<td>45</td>
<td>05/12/2015 C</td>
<td>73</td>
<td>05/12/2015 C</td>
<td>101</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>05/12/2015 C</td>
<td>46</td>
<td>05/12/2015 C</td>
<td>74</td>
<td>05/12/2015 C</td>
<td>102</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>05/12/2015 C</td>
<td>47</td>
<td>05/12/2015 C</td>
<td>75</td>
<td>05/12/2015 C</td>
<td>103</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>05/12/2015 C</td>
<td>48</td>
<td>05/12/2015 C</td>
<td>76</td>
<td>05/12/2015 C</td>
<td>104</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>05/12/2015 C</td>
<td>49</td>
<td>05/12/2015 C</td>
<td>77</td>
<td>05/12/2015 C</td>
<td>105</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>05/12/2015 C</td>
<td>50</td>
<td>05/12/2015 C</td>
<td>78</td>
<td>05/12/2015 C</td>
<td>106</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>05/12/2015 C</td>
<td>51</td>
<td>05/12/2015 C</td>
<td>79</td>
<td>05/12/2015 C</td>
<td>107</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>05/12/2015 C</td>
<td>52</td>
<td>05/12/2015 C</td>
<td>80</td>
<td>05/12/2015 C</td>
<td>108</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>05/12/2015 C</td>
<td>53</td>
<td>05/12/2015 C</td>
<td>81</td>
<td>05/12/2015 C</td>
<td>109</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>05/12/2015 C</td>
<td>54</td>
<td>05/12/2015 C</td>
<td>82</td>
<td>05/12/2015 C</td>
<td>110</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>05/12/2015 C</td>
<td>55</td>
<td>05/12/2015 C</td>
<td>83</td>
<td>05/12/2015 C</td>
<td>111</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>05/12/2015 C</td>
<td>56</td>
<td>05/12/2015 C</td>
<td>84</td>
<td>05/12/2015 C</td>
<td>112</td>
<td>05/12/2015 C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PURPOSE

The purpose of this document is to both provide instructions for Maintenance and Use of HTC produced Main Rotor Blade Assemblies and to provide an index to the relevant Chapters or Sections of the applicable Maintenance Manual for the particular model of helicopter.

It is extremely important that these relevant sections of the be followed precisely.

The most current revision of this document (HTCM-006) will be available on the Helicopter Technology Company (HTC) website at www.helicoptertech.com under Technical Publications.

Note: As applicable and unless otherwise noted, all references below are to be found in:

- Technical Manual – 
  Aviation and Intermediate Maintenance Instructions Army Model UH-1H/V/EH-1H/X (TM 55-1520-210-23-1).

- Helicopter Maintenance Manual – 
  Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category).

- Technical Manual – 
• Maintenance and Overhaul Instructions –
  Bell Model 204B – BHT-204B-M&O-1.

• Maintenance Manual –

Note: HTC has used the best possible materials for the construction of its Main Rotor Blade Assemblies.
REFERENCE DOCUMENTS


4. Federal Aviation Administration (FAA) Supplemental Type Certificate (STC) Number SR00026DE, Rotorcraft Development Corp., Corvalis, Montana, dated 06 September 2012, or later approved revision.

5. Helicopter Maintenance Manual Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category), San Joaquin Helicopters, Delano, California.


8. Maintenance and Overhaul Instructions – Bell Model 204B – BHT-204B-M&O-1, Bell Helicopter, a Textron Company, Fort Worth, Texas, Revision 10, dated 24 June 2011, or later approved revision.

DEFINITIONS AND ABBREVIATIONS

As applicable and unless otherwise noted, all Definitions and Abbreviations are to be found in:

- Technical Manual –
  Aviation and Intermediate Maintenance Instructions Army Model UH-1H/V/EH-1H/X (TM 55-1520-210-23-1).

- Helicopter Maintenance Manual –
  Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category).

- Technical Manual –

- Maintenance and Overhaul Instructions –
  Bell Model 204B – BHT-204B-M&O-1.

- Maintenance Manual –
WEIGHT AND BALANCE

Installation of the Helicopter Technology Company (HTC) Part Number 204P2100-101 Main Rotor Blade is a direct replacement the Bell Helicopter - Textron Part Number 204-011-250-113 Main Rotor Blade and does not constitute a change to the Weight and Balance of the aircraft.
WARNINGS

As applicable and unless otherwise noted, all Warnings are to be found in:

- Technical Manual –
  Aviation and Intermediate Maintenance Instructions Army Model UH-1H/V/EH-1H/X (TM 55-1520-210-23-1).

- Helicopter Maintenance Manual –
  Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category).

- Technical Manual –

- Maintenance and Overhaul Instructions –
  Bell Model 204B – BHT-204B-M&O-1.

- Maintenance Manual –
INDEX

Index is to be found in the Technical Manual – Aviation and Intermediate Maintenance Instructions Army Model UH-1H/V/EH-1H/X (TM 55-1520-210-23-1), Headquarters, Department of the Army, Washington D.C. unless otherwise noted.

As applicable and unless otherwise noted, the Index is to be found in:

- Technical Manual –
  Aviation and Intermediate Maintenance Instructions Army Model UH-1H/V/EH-1H/X (TM 55-1520-210-23-1).

- Helicopter Maintenance Manual –
  Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category).

- Technical Manual –

- Maintenance and Overhaul Instructions –
  Bell Model 204B – BHT-204B-M&O-1.

- Maintenance Manual –
AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is FAA Approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA Approved.

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>FAA Signature / Printed</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>01/13/2014</td>
<td>Maurice A. Mocettini</td>
</tr>
<tr>
<td>B</td>
<td>06/08/2015</td>
<td>Greg DiLibero (On File)</td>
</tr>
<tr>
<td>A</td>
<td>06/17/2014</td>
<td>Ronald Atmur (On File)</td>
</tr>
<tr>
<td>N/C</td>
<td>01/13/2014</td>
<td>Greg DiLibero (On File)</td>
</tr>
</tbody>
</table>

Interchangeability and Life Limit

The Helicopter Technology Company (HTC) Part Number 204P2100-101 Main Rotor Blade is a direct replacement the Bell Helicopter - Textron Part Number 204-011-250-113 Main Rotor Blade. The HTC Main Rotor Blade is fully interchangeable and carries a life-limit of 2,600 hours.

Installation of this Blade is covered by FAA Supplemental Type Certificate (STC) Number SR02492LA.
Part Number **204P2100-101** Main Rotor Blade is applicable on the following UH-1H Models:

- JJASPP Engineering Services (R00004RC)
- Tamarack Helicopters (R00010SE)
- OAS Parts LLC (H7SO)
- Rotorcraft Dev. Corp. (H13WE)
- Southwest Florida Aviation (H6SO)
- Global Helicopter Technology (R00002RC)
- Hagglund Helicopters (H15NM)
- Arrow Falcon Exporters (R00007DE)
- Richard’s Heavylift Helo Inc. (H3SO)
- Northwest Rotorcraft (R00005SE)

Part Number **204P2100-101** Main Rotor Blade is applicable on the following UH-1B Models with STC SR00026DE Installed:

- Rotorcraft Dev. Corp. (H3NM)
- Rotorcraft Dev. Corp. (H13WE)
- San Joaquin Helicopters (H1RM)
- International Helicopters (H5SO)
- Richards Heavylift Helo, Inc. (H3SO)
- OAS Parts LLC (H7SO)

**Note:** On UH-1B Models with STC SR00026DE Installed, reference FAA STC Number SR00026DE and San Joaquin Helicopters Helicopter Maintenance Manual Supplement No. 1 to Army Model UH-1B Helicopter (Restricted Category).

Part Number **204P2100-101** Main Rotor Blade is applicable on the following TH-1F Models:

- Rotorcraft Dev. Corp. (H12NM)
- Tamarack Helicopters (H7NE)
- Robinson Air Crane, Inc. (R00008AT)
Part Number **204P2100-101** Main Rotor Blade is **applicable on the following**

**UH-1F Models:**
- Rotorcraft Dev. Corp. (H12NM)
- Tamarack Helicopters (H7NE)
- Robinson Air Crane, Inc. (R00008AT)
- AST, Inc (H11SW)
- California Department of Forestry (H2NM)

Part Number **204P2100-101** Main Rotor Blade is **applicable on the following**

**UH-1P Models:**
- Rotorcraft Dev. Corp. (H12NM)
- Robinson Air Crane, Inc. (R00008AT)

Part Number **204P2100-101** Main Rotor Blade is **applicable on the following**

**204B Model:**
- Bell Helicopter Textron, Inc. (H1SW)

Part Number **204P2100-101** Main Rotor Blade is **applicable on the following**

**205A Model:**
- Bell Helicopter Textron, Inc. (H1SW)

Part Number **204P2100-101** Main Rotor Blade is **applicable on the following**

**205A-1 Model:**
- Bell Helicopter Textron, Inc. (H1SW)
204P2100-101 MAIN ROTOR BLADE ASSEMBLY:
FOR UH-1H MODELS (TM 55-1520-210-23-1)
AND
FOR UH-1B MODELS WITH STC NUMBER
SR00026DE INSTALLED (TM 55-1520-210-23-1)

CHAPTER 1. INTRODUCTION

Section I. Servicing

1-7. Main and Tail Rotor System

Refer to Paragraph 1-7.

1-14. Cleaning

1-15. Description - Cleaning

Refer to Paragraph 1-15.

1-19. Rotor Blades - Cleaning

Refer to Paragraph 1-19.

1-20. Treatment of Aluminum and Magnesium Corrosion

Refer to Paragraph 1-20.
1-21. Snow and Ice Removal

Refer to Paragraph 1-21.
1-22. Consumable Maintenance Supplies and Materials

1-23. Description - Consumable Maintenance Supplies and Materials

Refer to Paragraph 1-23.

Table 1-1. Consumable Maintenance Supplies and Materials

Refer to Table 1-1.

1-24. Special Tools and Test Equipment

1-25. Description - Special Tools and Test Equipment

Refer to Paragraph 1-25.

Table 1-2. Special Tools and Test Equipment

Refer to Table 1-2.
1-26. Support Equipment

1-27. Description - Support Equipment

Refer to Paragraph 1-27.

Table 1-3. Support Equipment

Refer to Table 1-3.

1-28. Standard Torque Procedures and Requirements

Refer to Paragraph 1-28.

Table 1-4. Standard Torque Chart

Refer to Table 1-4.

1-29. Reuse of Self-Locking Nuts

Refer to Paragraph 1-29.

Table 1-7. Minimum Breakaway Torque
SECTION IV. INSPECTION REQUIREMENTS

1-56. General Information

Refer to Paragraph 1-56.

1-57. Standards of Serviceability

Refer to Paragraph 1-57.

1-58. Special Inspection

1-59. Description - Special Inspection

Refer to Paragraph 1-59.

1-60. Definition and General Information - Special Inspection

Refer to Paragraph 1-60.

1-61. Requirements - Special Inspection

Refer to Paragraph 1-61.
Section V. Overhaul and Retirement Schedule

1-62. Introduction

Refer to Paragraph 1-62.

1-63. Overhaul Interval

1-64. Description - Overhaul Interval

Refer to Paragraph 1-64.

1-65. Retirement Schedule

1-66. Description - Retirement Schedule

Refer to Paragraph 1-66.

Table 1-8. Overhaul and Retirement Schedule

Refer to Table 1-8.
Section VI. Flight Safety Critical Aircraft Parts

1-67. Flight Safety Critical Aircraft Parts

Refer to Paragraph 1-67.

Table 1-9. Flight Safety Critical Aircraft Parts

Refer to Table 1-9.
CHAPTER 5. ROTORS

Section I. Main Rotor System

5-1. Main Rotor System

5-2. Description – Main Rotor System

Refer to Paragraph 5-2.

5-3. Main Rotor Hub and Blade Assembly

5-4. Description - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-4.

5-5. Cleaning - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-5.

5-6. Lubrication - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-6.

5-7. Alignment - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-7.
5-8. Adjustment, Collective Pitch Forces - Main Rotor Hub with Metal Blade Installed

Refer to Paragraph 5-8.

5-9. Operational Check - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-9.

5-10. Autorotation RPM Adjusting - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-10.

5-11. Troubleshooting - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-11.

Table 5-1. Troubleshooting Main Rotor System

Refer to Table 5-1.

5-12. Removal - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-12.

5-13. Installation - Main Rotor Hub and Blade Assembly

Refer to Paragraph 5-13.
Section III. Main Rotor Blades

5-27. Main Rotor Blade

5-28. Description - Main Rotor Blade

Refer to Paragraph 5-28.

5-29. Inspection - Main Rotor Blade (Installed)

Refer to Paragraph 5-29.

Table 5-3. Inspection Requirements Main Rotor Blade

Refer to Table 5-3.

5-30. Removal - Main Rotor Blade

Refer to Paragraph 5-30.
5-31. Inspection - Main Rotor Blade

Refer to Paragraph 5-31.

Table 5-4. Main Rotor Blade - Repairable Nicks, Scratches, and Corrosion Limits

Refer to Table 5-4.

Table 5-5. Main Rotor Blade - Dent Limits

Refer to Table 5-5.

5-32. Repair or Replacement - Main Rotor Blade

Refer to Paragraph 5-32.

5-33. Installation - Main Rotor Blade

Refer to Paragraph 5-33.

5-34. Touchup Refinish Procedure - Main Rotor Blade

Refer to Paragraph 5-34.

5-34.1. Preparation for Storage or Shipment - Main Rotor Blade

Refer to Paragraph 5-34.1
Section IX. Tracking Procedures

5-120. Tracking and Operational Check - Main Rotor Blades

Refer to Paragraph 5-120.

5-121. Vibration Analysis - Main Rotor Blades

Refer to Paragraph 5-121.

5-122. Deleted

Paragraph 5-122 has been Deleted.

5-125. Tracking and Balancing with the Vibrex 4591 System

5-126. General

Refer to Paragraph 5-126.

5-127. Equipment Description

Refer to Paragraph 5-127.

5-128. Main Rotor Track and Balance

Refer to Paragraph 5-128.
5-129.  Attach Test Equipment to Aircraft

Refer to Paragraph 5-129.

5-130.  Hover Track of Main Rotor with Metal Blades

Refer to Paragraph 5-130.

5-131.  Check Main Rotor Balance

Refer to Paragraph 5-131.

5-132.  Correct Main Rotor Balance

Refer to Paragraph 5-132.

5-133.  Check Main Rotor In-Flight Track

Refer to Paragraph 5-133.

5-134.  Correct In-Flight Track

Refer to Paragraph 5-134.
5-140. Vibration Source Location

Refer to Paragraph 5-140.

Table 5-7. Operating Speeds

Refer to Table 5-7.

5-141. Troubleshooting

Refer to Paragraph 5-141.

Table 5-8. Troubleshooting

Refer to Table 5-8.
204P2100-101 MAIN ROTOR BLADE ASSEMBLY: FOR TH-1F MODELS (T.O. 1H-1(U)F-2-1), FOR UH-1F MODELS (T.O. 1H-1(U)F-2-1), AND FOR UH-1P MODELS (T.O. 1H-1(U)F-2-1)

I. GENERAL INFORMATION

1-1. General Information

Refer to Paragraph 1-1.

1-13. Leading Particulars

Refer to Paragraph 1-13.

Table 1-1. Leading Particulars

Refer to Table 1-1.

1-14. Station Locations

Refer to Paragraph 1-14.

Figure 1-2. Station Locations

Refer to Figure 1-2.
1-22. Preservation

Refer to Paragraph 1-22.

1-28. Long Term Preservation

Refer to Paragraph 1-28.

1-31. Drive System – Preservation (Inoperable Engine)

Refer to Paragraph 1-31.

1-40. Depreservation

Refer to Paragraph 1-40.

1-42. Long Term Depreservation

Refer to Paragraph 1-42.

1-52. Main Rotor Assembly

Refer to Paragraph 1-52.
1-53. Extreme Climactic Environmental Maintenance

Refer to Paragraph 1-53.

1-54. Extremes in Temperature

Refer to Paragraph 1-54.
II. GROUND HANDLING, SERVICING, AND LUBRICATION INSTRUCTIONS

2-1. Ground Handling

Refer to Paragraph 2-1.

2-2. General

Refer to Paragraph 2-2.

2-3. Towing

Refer to Paragraph 2-3.

2-5. Towing

Refer to Paragraph 2-5.

Figure 2-1. Towing and Parking

Refer to Figure 2-1.

2-34. Parking

Refer to Paragraph 2-34.
2-35. Parking Procedures

Refer to Paragraph 2-35.

2-36. Anchoring and Mooring

Refer to Paragraph 2-36.

2-37. Mooring Procedures

Refer to Paragraph 2-37.

Figure 2-14. Typical Mooring

Refer to Figure 2-14.

2-38. Blade Tie Down

Refer to Paragraph 2-38.

2-39. Jacking

Refer to Paragraph 2-39.

2-41. Jacking Procedure

Refer to Paragraph 2-41.
2-43. Jacking for Weighing

Refer to Paragraph 2-43.

2-47. Hoisting

Refer to Paragraph 2-47.

2-48. Maintenance Hoist

Refer to Paragraph 2-48.

Figure 2-15. Jacking-Hoisting-Leveling

Refer to Figure 2-15.

2-56. Cold Weather Ground Check

Refer to Paragraph 2-56.

2-57. Servicing

Refer to Paragraph 2-57.

2-58. General

Refer to Paragraph 2-58.
2-70. Air Transportability

Refer to Paragraph 2-70.

2-71. General

Refer to Paragraph 2-71.

2-74. Torque Requirements

Refer to Paragraph 2-74.

2-75. Torqueing Instructions

Refer to Paragraph 2-75.

2-76. Torqueing Limits

Refer to Paragraph 2-76.

Table 2-1. Standard Torque Values

Refer to Table 2-1.

Figure 2-24. Torque Values

Refer to Figure 2-24.
2-77. Correct Recommended Torque

Refer to Paragraph 2-77.

2-78. Torque – Tightening Procedures

Refer to Paragraph 2-78.

2-79. Use of Extension Wrench (Crowfoot)

Refer to Paragraph 2-79.

2-80. Measuring Effective Length of Crowfoot Wrench

Refer to Paragraph 2-80.

Figure 2-26. Torque Values for Studs

Refer to Figure 2-26.

2-81. Determination of Gage Reading when using a Crowfoot Wrench

Refer to Paragraph 2-81.

Figure 2-27. Decimal Equivalent Conversion Table

Refer to Figure 2-27.
Figure 2-28. Temperature Conversion Chart (Fahrenheit to Centigrade)

Refer to Figure 2-28.

Figure 2-29. Measuring Effective Length of Extension Wrench

Refer to Figure 2-29.

Figure 2-30. Torque Application using Extension Wrench

Refer to Figure 2-30.

2-86. Materials Required

Refer to Paragraph 2-86.

Table 2-3. Materials Required

Refer to Table 2-3.

Figure 2-34. Special Tools and Equipment

Refer to Figure 2-34.
2-87. Special Tools and Equipment

Refer to Paragraph 2-87.

Table 2-4. Special Tools and Equipment

Refer to Table 2-4.
VII. MAIN AND TAIL ROTOR AND FLIGHT CONTROLS

7-1. Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-1.

7-2. Description

Refer to Paragraph 7-2.

Figure 7-1. Main Rotor Group

Refer to Figure 7-1.

Figure 7-2. Rotor System Torque Values

Refer to Figure 7-2.

Figure 7-3. Main Rotor Hub and Blade Assembly

Refer to Figure 7-3.

7-3. Removal – Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-3.

Figure 7-4. Grip Positioning Links

Refer to Figure 7-4.
7-4. Alternate Removal – Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-4.

7-4A. Removal of Pitch Change Link Assembly

Refer to Paragraph 7-4A.

7-5. Removal – Main Rotor Blades

Refer to Paragraph 7-5.

7-6. Inspection and Repair Main Rotor Blades

Refer to Paragraph 7-6.

7-7. Inspection and Repair Drag Brace Assembly

Refer to Paragraph 7-7.

Figure 7-5. Blade Removal

Refer to Figure 7-5.

7-8. Covering Leading Edge of Main Rotor Blades

Refer to Paragraph 7-8.
Figure 7-8. Rotor Blade Retention Bolt Extracting Fixture

Refer to Figure 7-8.

7-17. Reassembly after Replacement of Main Rotor Blade Retention Straps

Refer to Paragraph 7-17.

7-19. Installation - Main Rotor Blades

Refer to Paragraph 7-19.

7-20. Aligning - Main Rotor Blades

Refer to Paragraph 7-20.

Figure 7-16. Main Rotor Blade Alignment

Refer to Figure 7-16.

Figure 7-17. Blade Alignment Jig Assembly

Refer to Figure 7-17.

7-21. Installation - Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-21.
Figure 7-18. Pitch Change Link Assembly

Refer to Figure 7-18.

7-22. Alternate Installation - Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-22.

7-23. Setting Minimum Blade Angle - Main Rotor

Refer to Paragraph 7-23.

7-24. Clean Main Rotor Blades

Refer to Paragraph 7-24.

7-25. Operational Check of Main Rotor

Refer to Paragraph 7-25.

7-26. Vibrations

Refer to Paragraph 7-26.

7-27. Extreme Low Frequency Vibration

Refer to Paragraph 7-27.
7-28. Low Frequency Vibration

Refer to Paragraph 7-28.

7-29. Medium Frequency Vibration

Refer to Paragraph 7-29.

7-30. High Frequency Vibration

Refer to Paragraph 7-30.

7-30A. Vibration Analysis and Troubleshooting

Refer to Paragraph 7-30A.
7-31. Tracking and Balancing Main and Tail Rotor Assembly

Refer to Paragraph 7-31.

7-32. Vibrex System Tracking and Balancing Main and Tail Rotor Blades and Hubs

Refer to Paragraph 7-32.

7-33. Description of Equipment

Refer to Paragraph 7-33.

Table 7-1. Tools and Equipment Required

Refer to Table 7-1.

Figure 7-20. Description and Specifications of the Vibrex System

Refer to Figure 7-20.

Figure 7-20A. Spectrum Analyzer, Model 192

Refer to Figure 7-20A.

Figure 7-21. Vibrex B Equipment

Refer to Figure 7-21.
Figure 7-22. Vibrex / Airframe Interface

Refer to Figure 7-22.

Figure 7-23. Phase Relationships for Improperly and Properly Tuned Filters

Refer to Figure 7-23.

Figure 7-24. Typical Charts

Refer to Figure 7-24.

Figure 7-25. Accurate Charts

Refer to Figure 7-25.

Figure 7-26. Balance Chart Clock Angle Corrector Instruction Sheet

Refer to Figure 7-26.

Figure 7-27. Balance Chart Clock Angle Corrector

Refer to Figure 7-27.

Figure 7-28. Reclocked Chart

Refer to Figure 7-28.
7-34. Operating Equipment

Refer to Paragraph 7-34.

Figure 7-29. Installation of Interrupter on Swashplate

Refer to Figure 7-29.

Figure 7-30. Installation Magnetic Pickup

Refer to Figure 7-30.

7-35. Installation of Equipment

Refer to Paragraph 7-35.

Figure 7-31. Installation of Interrupter

Refer to Figure 7-31.

Figure 7-32. Adjustment of Magnetic Pickup Clearance

Refer to Figure 7-32.

Figure 7-33. Installation of Magnetic Pickup and Accelerometer Cable

Refer to Figure 7-33.
Figure 7-34. Installation of Retro-Reflective Tape to Main Rotor Tip Targets

Refer to Figure 7-34.

Figure 7-35. Installation of Tip Targets

Refer to Figure 7-35.

Figure 7-36. Installation of Accelerometer and Bracket, PN 3382

Refer to Figure 7-36.

Figure 7-37. Installation of Reflective Target Tape to Blade Grip

Refer to Figure 7-37.

Figure 7-38. Installation of Retro-Reflective Target Tape to Blade Tip

Refer to Figure 7-38.

7-36. Hover Tracking Rotor

Refer to Paragraph 7-36.

Figure 7-39. Stopped Target Image Tail Rotor

Refer to Figure 7-39.
Figure 7-40. Hover and Ground Track Blade Pattern

Refer to Figure 7-40.

7-37. Dynamic Balancing of Main Rotor

Refer to Paragraph 7-37.

7-38. Inflight Tracking Main Rotor Blades

Refer to Paragraph 7-38.

Figure 7-42. Balance Chart, Main Rotor (Typical)

Refer to Figure 7-42.

Figure 7-43. Inflight Track Blade Pattern

Refer to Figure 7-43.

7-41. Troubleshooting Vibration using Vibrex B

Refer to Paragraph 7-41.

7-42. Removal of Equipment

Refer to Paragraph 7-42.
7-43. Tracking Flag Method

Refer to Paragraph 7-43.

Figure 7-44. Tracking Main Rotor

Refer to Figure 7-44.

7-44. Vibration Check and Adjustment of Main Rotor

Refer to Paragraph 7-44.

Figure 7-45. Main Rotor Tracking Procedure

Refer to Figure 7-45.

Figure 7-46. Rotor Smoothing Procedure

Refer to Figure 7-46.

7-45. Sweeping Blade of Main Rotor

Refer to Paragraph 7-45.

7-46. Autorotation RPM Adjustment of Main Rotor

Refer to Paragraph 7-46.
Figure 7-47. Troubleshooting Lateral Vibration

Refer to Figure 7-47.

Figure 7-48. Trim Tab Bender and Gage Application

Refer to Figure 7-48.

Figure 7-49. Tracking Flag

Refer to Figure 7-49.

7-47. Adjusting for Collective Forces

Refer to Paragraph 7-47.

7-48. Adjustment - Collective Pitch Force – Main Rotor Hub and Blade Assembly

Refer to Paragraph 7-48.

Figure 7-50. Collective Pitch Retention Strap Adjustment

Refer to Figure 7-50.

7-49. Resetting Tension Torsion Straps to Initial Setting

Refer to Paragraph 7-49.
7-50. Resetting Main Rotor Grip Strap

Refer to Paragraph 7-50.

7-51. Troubleshooting Rotors and Controls

Refer to Paragraph 7-51.

Table 7-2. Troubleshooting Rotors and Controls

Refer to Table 7-2.

7-101. Packaging and Preservation of Components

Refer to Paragraph 7-101.

7-102. Installing Main Rotor Blades in Shipping Containers

Refer to Paragraph 7-102.
INTRODUCTION

1. Use of the Manual

Refer to Paragraph 1.

2. Bulletins

Refer to Paragraph 2.

3. Consumable Materials

Refer to Paragraph 3.

4. Special Tools

Refer to Paragraph 4.

5. Torques

Refer to Paragraph 5.
6. Terminology

Refer to Paragraph 6.

7. Warnings, Cautions, and Notes

Refer to Paragraph 7.

8. Use of Procedural Words

Refer to Paragraph 8.

9. Wear Limits

Refer to Paragraph 9.

10. Standard Practices

Refer to Paragraph 10.

11. Replacement Parts and Assemblies

Refer to Paragraph 11.
SECTION I. GENERAL INFORMATION

Figure 1-1. 204B Helicopter

Refer to Figure 1-1.

1-1. General Information

Refer to Paragraph 1-1.

1-2. Description

Refer to Paragraph 1-2.

1-3. General

Refer to Paragraph 1-3.

1-7. Main Rotor

Refer to Paragraph 1-7.

1-20. Helicopter Dimensions

Refer to Paragraph 1-20.
1-21. Ground Handling

Refer to Paragraph 1-21.

Figure 1-2. Three-View Dimensional Diagram

Refer to Figure 1-2.

Figure 1-3. Station Line Diagram

Refer to Figure 1-3.

Figure 1-4. Ground Handling (Hoisting, Jacking, Leveling, and Towing)

Refer to Figure 1-4.

1-29. Parking – Normal Conditions

Refer to Paragraph 1-29.

1-30. Parking – Turbulent Conditions

Refer to Paragraph 1-30.

1-31. Mooring

Refer to Paragraph 1-31.
Figure 1-5. Parking and Mooring

Refer to Figure 1-5.

1-32. Helicopter Storage

Refer to Paragraph 1-32.

1-33. Environmental Conditions

Refer to Paragraph 1-33.

1-34. Flyable Storage

Refer to Paragraph 1-34.

1-35. Short Term Storage

Refer to Paragraph 1-35.

1-36. Intermediate Storage

Refer to Paragraph 1-36.

1-67. Maintenance Hoist

Refer to Paragraph 1-67.
1-78. Inspection

Refer to Paragraph 1-78.

1-79. Daily Inspection

Refer to Paragraph 1-79.

1-79. Daily Inspection

Refer to Paragraph 1-79.

1-80. 100 Hour Inspection

Refer to Paragraph 1-80.

1-81. 1000 Hour Inspection

Refer to Paragraph 1-81.

1-82. 3000 Hour Inspection

Refer to Paragraph 1-82.

1-83. 1000 Hour Component Overhaul

Refer to Paragraph 1-83.
1-84. 1500 Hour Component Overhaul

Refer to Paragraph 1-84.

1-85. 2000 Hour Component Overhaul

Refer to Paragraph 1-85.

1-86. 2400 Hour Component Overhaul

Refer to Paragraph 1-86.

1-86A. 2500 Hour Component Overhaul

Refer to Paragraph 1-86A.

1-87. Between 5 and 10 Hours of Flight After Installation

Refer to Paragraph 1-87.

1-88. Each 10 Hours of Component Operation

Refer to Paragraph 1-88.

1-89. Each 25 Hours of Component Operation

Refer to Paragraph 1-89.
1-90. Between 25 and 30 Hours of Flight After Installation

Refer to Paragraph 1-90.

1-91. Each 50 Hours or 15/30 Days

Refer to Paragraph 1-91.

1-92. 100 Hours After Initial Installation of Tailboom

Refer to Paragraph 1-92.

1-93. Each 100 Hours

Refer to Paragraph 1-93.

1-94. Each 100 Hours or 3 Months, Whichever Occurs First

Refer to Paragraph 1-94.

1-95. Each 300 Hours or 3 Months, Whichever Occurs First

Refer to Paragraph 1-95.

1-96. Each 500 Hours or 12 Months, Whichever Occurs First

Refer to Paragraph 1-96.
1-96A. Each 24 Months

Refer to Paragraph 1-96A.

1-96B. Deleted

Paragraph 1-96B has been Deleted.

1-97. Each 1200 Hours or 24 Months, Whichever Occurs First

Refer to Paragraph 1-97.

1-98. Hard Landing

Refer to Paragraph 1-98.

1-99. Sudden Stoppage – Power On or Off

Refer to Paragraph 1-99.

1-100. Overspeed

Refer to Paragraph 1-100.

1-101. Overtorque

Refer to Paragraph 1-101.
1-102. Compressor Surge or Stall

Refer to Paragraph 1-102.

1-103. Lightning Strikes

Refer to Paragraph 1-103.

1-104. Magnetic Compass Malfunction

Refer to Paragraph 1-104.

1-105. Overhaul Evaluation Criteria

Refer to Paragraph 1-105.

1-106. Airworthiness Limitations Schedule

Refer to Paragraph 1-106.

Table 1-2. Airworthiness Limitations Schedule

Refer to Table 1-2.
SECTION II. MAIN ROTOR HUB AND BLADE ASSEMBLY

2-1. Main Rotor Hub and Blade Assembly

Refer to Paragraph 2-1.

2-2. Description

Refer to Paragraph 2-2.

2-3. Removal – Main Rotor Hub and Blade Assembly

Refer to Paragraph 2-3.

2-4. Main Rotor Blades

Refer to Paragraph 2-4.

2-5. Description

Refer to Paragraph 2-5.

2-6. Removal – Main Rotor Blades

Refer to Paragraph 2-6.

Figure 2-1. Main Rotor Assembly

Refer to Figure 2-1.
Figure 2-2. Grip Positioning Links

Refer to Figure 2-2.

2-7. Installation – Main Rotor Blades

Refer to Paragraph 2-7.

Figure 2-3. Removing Main Rotor Blades

Refer to Figure 2-3.

Figure 2-4. Main Rotor Blade Retention Bolt Extracting Fixture

Refer to Figure 2-4.

2-8. Preventative Maintenance – Main Rotor Blades

Refer to Paragraph 2-8.

2-9. Leading Edge Protection – Main Rotor Blades (Polyurethane Tape)

Refer to Paragraph 2-9.

2-10. Daily Inspection – Main Rotor Blades

Refer to Paragraph 2-10.
2-11. 1000 Hour Inspection and Repair – Main Rotor Blades

Refer to Paragraph 2-11.

Figure 2-5. Main Rotor Blade Repair

Refer to Figure 2-5.

2-12. Conditional Inspection – Main Rotor Blades

Refer to Paragraph 2-12.

2-13. Inspection – Main Rotor Blades

Refer to Paragraph 2-13.

2-14. Field Repairs – Main Rotor Blades

Refer to Paragraph 2-14.

2-15. Trim Tab Replacement – Main Rotor Blade

Refer to Paragraph 2-15.

Figure 2-6. Trim Tab Replacement

Refer to Figure 2-6.
2-16. Main Rotor Blade Splice Cover

Refer to Paragraph 2-16.

2-17. Installation – Main Rotor Blade Splice Cover

Refer to Paragraph 2-17.

2-18. Preservation, Storage, and Blade Packaging

Refer to Paragraph 2-18.

2-19. Main Rotor Hub

Refer to Paragraph 2-19.

2-43. Balancing - Main Rotor Hub Assembly

Refer to Paragraph 2-43.

Figure 2-34. Balancing Main Rotor Hub

Refer to Figure 2-34.

2-44. Installation – Main Rotor Blades

Refer to Paragraph 2-44.
2-45. Alignment – Main Rotor Blades

Refer to Paragraph 2-45.

2-46. Installation – Main Rotor Hub and Blade Assembly

Refer to Paragraph 2-46.

Figure 2-35. Main Rotor Blade Alignment

Refer to Figure 2-35.

2-47. Torque Limits – Main Rotor

Refer to Paragraph 2-47.

2-48. Maintenance Operational Check - Main Rotor

Refer to Paragraph 2-48.

2-49. Tracking – Main Rotor Blades

Refer to Paragraph 2-49.

Figure 2-36. Rotor System Torque Limits

Refer to Figure 2-36.
Figure 2-37. Tracking Main Rotor Blades

Refer to Figure 2-37.

Figure 2-38. Trim Tab Bender and Gage Application

Refer to Figure 2-38.

2-50. Spanwise Balance Check

Refer to Paragraph 2-50.

2-51. Chordwise Balance Check

Refer to Paragraph 2-51.

2-52. Autorotation RPM Check

Refer to Paragraph 2-52.

2-53. Collective Pitch Force Check and Adjustment

Refer to Paragraph 2-53.

Figure 2-39. Collective Pitch Force Adjustment

Refer to Figure 2-39.
**2-54. Main Rotor Hub Sealing**

Refer to Paragraph 2-54.
204P2100-101 MAIN ROTOR BLADE ASSEMBLY:
   FOR 205A MODELS (BHT-205A1-MM-1)
   AND
   FOR 205A-1 MODELS (BHT-205A1-MM-1)

CHAPTER 1. INTRODUCTION

1-1. General

Refer to Paragraph 1-1.

1-2. Helicopter Description

Refer to Paragraph 1-2.

Figure 1-1. Model 204A-1 Helicopter (Typical)

Refer to Figure 1-1.

1-3. Use of the Manual

Refer to Paragraph 1-3.

1-4. Bulletins

Refer to Paragraph 1-4.

1-5. Consumable Materials

Refer to Paragraph 1-5.
1-6. Special Tools

Refer to Paragraph 1-6.

1-7. Torques

Refer to Paragraph 1-7.

1-8. Terminology

Refer to Paragraph 1-8.

1-9. Warnings, Cautions, and Notes

Refer to Paragraph 1-9.

1-10. Use of Procedural Words

Refer to Paragraph 1-10.

1-11. Wear Limits

Refer to Paragraph 1-11.

1-12. Standard Practices

Refer to Paragraph 1-12.
1-13. Replacement Parts and Assemblies

Refer to Paragraph 1-13.
CHAPTER 4. AIRWORTHINESS LIMITATIONS

4-1. Airworthiness Limitations Schedule

Refer to Paragraph 4-1.
CHAPTER 5. INSPECTIONS

Inspections

5-1. General

Refer to Paragraph 5-1.

5-2. Inspection Requirements

Refer to Paragraph 5-2.

5-3. Crash Damage

Refer to Paragraph 5-3.

5-4. Types of Inspections

Refer to Paragraph 5-4.

5-5. Definitions

Refer to Paragraph 5-5.

5-6. Inspection and Overhaul Tolerance

Refer to Paragraph 5-6.
Scheduled Inspections

5-7. Scheduled Inspections

Refer to Paragraph 5-7.

5-8. Daily Inspection

Refer to Paragraph 5-8.

5-9. 100 Hour Inspection

Refer to Paragraph 5-9.

5-10. 1000 Hour Inspection

Refer to Paragraph 5-10.
Special Inspections

5-11. Special Inspections

Refer to Paragraph 5-11.

5-12. Daily or Each 10 Hours of Flight Operation, Whichever Occurs First until 250 Hours

Refer to Paragraph 5-12.

5-13. Between 5 and 10 Hours of Flight After Installation

Refer to Paragraph 5-13.

5-14. Each 8 Hours of Component Operation

Refer to Paragraph 5-14.

5-15. Each 25 Hours of Component Operation

Refer to Paragraph 5-15.

5-16. Each 25 Hours for the Next Four Inspections

Refer to Paragraph 5-16.
5-17. Each 25 Hours of Component Operation or 15 Days, or Each 5 Days for Blades Operating in Salt Laden Atmosphere, Whichever Occurs First

Refer to Paragraph 5-17.

5-18. 100 Hours After Each Installation

Refer to Paragraph 5-18.

5-19. Main Rotor Grip Ultrasonic Inspection

Refer to Paragraph 5-19.

5-20. Each 300 Hours of Component Operation

Refer to Paragraph 5-20.

5-21. Each 300 Hours or 3 Months of Component Operation

Refer to Paragraph 5-21.

5-22. Each 500 Hours of Component Operation

Refer to Paragraph 5-22.
5-23. Each 600 Hours/6 Months of Tail Rotor Driveshaft Coupling Operation

Refer to Paragraph 5-23.

5-24. Each 600 Hours or 12 Months of Component Operation

Refer to Paragraph 5-24.

5-25. Each 6 Months

Refer to Paragraph 5-25.

5-26. Each 12 Months

Refer to Paragraph 5-26.

5-27. Each 1000 Hours or 12 Months of Component Operation

Refer to Paragraph 5-27.

5-28. First 1000 Hours of Component Time and Each 3000 Hours Thereafter of Component Time

Refer to Paragraph 5-28.
5-29. Each 1200 Hours of Component Operation - Deleted

Paragraph 5-29 has been Deleted.

5-30. Each 1200 Hours or 24 Months, Whichever Comes First

Refer to Paragraph 5-30.

5-31. Each 24 Months of Flight Control System Bolt Operation

Refer to Paragraph 5-31.

5-32. Each 3000 Hours of Component Operation

Refer to Paragraph 5-32.

5-33. Each 3100 Hours of Component Operation

Refer to Paragraph 5-33.
Conditional Inspections

5-34. Conditional Inspections

Refer to Paragraph 5-34.

5-35. Hard Landing

Refer to Paragraph 5-35.

5-36. After Blade Strike or Other Rotating System Torque Spike

Refer to Paragraph 5-36.

5-37. Sudden Stoppage/Acceleration – Main Rotor

Refer to Paragraph 5-37.

5-38. Sudden Stoppage/Acceleration – Tail Rotor

Refer to Paragraph 5-38.

5-39. Overspeed

Refer to Paragraph 5-39.
5-40. Overtorque

Refer to Paragraph 5-40.

5-41. Compressor Stall or Surge

Refer to Paragraph 5-41.

5-42. Lightning Strikes

Refer to Paragraph 5-42.

5-43. Magnetic Compass Malfunction

Refer to Paragraph 5-43.
Component Overhaul Schedule

5-44. Component Overhaul Schedule

Refer to Paragraph 5-44.

Table 5-1. Component Overhaul Schedule

Refer to Table 5-1.
CHAPTER 6. DIMENSIONS AND CHARTS

6-1. Principal Dimensions

Refer to Paragraph 6-1.

6-2. Stations, Waterlines, and Buttocklines

Refer to Paragraph 6-2.

Figure 6-1. Principal Dimensions

Refer to Figure 6-1.

Figure 6-2. Station Diagram

Refer to Figure 6-2.
CHAPTER 7. LIFTING AND JACKING

7-1. Lifting and Jacking

Refer to Paragraph 7-1.

7-2. Lifting the Complete Helicopter

Refer to Paragraph 7-2.

7-3. Lifting the Tailboom Only

Refer to Paragraph 7-3.

7-4. Jacking

Refer to Paragraph 7-4.

Figure 7-1. Jacking

Refer to Figure 7-1.
CHAPTER 9. TOWING

9-1. Towing

Refer to Paragraph 9-1.
CHAPTER 10. PARKING AND MOORING

10-1. Parking – Normal Conditions

Refer to Paragraph 10-1.

10-2. Parking – Turbulent Conditions

Refer to Paragraph 10-2.

10-3. Mooring

Refer to Paragraph 10-3.

Figure 10-1. Parking and Mooring

Refer to Figure 10-1.

10-4. Helicopter Storage

Refer to Paragraph 10-4.

10-5. Environmental Conditions

Refer to Paragraph 10-5.

10-6. Flyable Storage

Refer to Paragraph 10-6.
10-7. Short Term Storage

Refer to Paragraph 10-7.

10-8. Intermediate Storage

Refer to Paragraph 10-8.
CHAPTER 65. ROTOR SYSTEM

65-1. Rotor System

Refer to Paragraph 65-1.

65-2. Vibration Analysis

Refer to Paragraph 65-2.

65-3. Extreme Low Frequency Vibration

Refer to Paragraph 65-3.

65-4. Low Frequency Vibration

Refer to Paragraph 65-4.

65-5. Medium Frequency Vibration

Refer to Paragraph 65-5.

65-6. High Frequency Vibration

Refer to Paragraph 65-6.
65-7. Main Rotor Troubleshooting

Refer to Paragraph 65-7.

Table 65-1. Main Rotor Troubleshooting

Refer to Table 65-1.

65-9. Operational Check - Main Rotor System

Refer to Paragraph 65-9.

65-10. Main Rotor Tracking

Refer to Paragraph 65-10.

Figure 65-1. Main Rotor Tracking Procedure

Refer to Figure 65-1.

65-11. Main Rotor Blade Vibration Check and Adjustment

Refer to Paragraph 65-11.

65-12. Main Rotor Blade Sweeping

Refer to Paragraph 65-12.
65-13. Main Rotor Autorotation RPM Adjustment

Refer to Paragraph 65-13.

Figure 65-2. Lateral Vibration Check

Refer to Figure 65-2.

Figure 65-3. Rotor Smoothing Procedure

Refer to Figure 65-3.

Figure 65-4. Trim Tab Bender and Gage

Refer to Figure 65-4.

65-14. Main Rotor Hub and Blade

Refer to Paragraph 65-14.

65-15. Removal – Main Rotor Hub and Blade

Refer to Paragraph 65-15.

65-15A. Inspection and Repair – Main Rotor Hub and Blade

Refer to Paragraph 65-15A.
65-16. Installation – Main Rotor Hub and Blade

Refer to Paragraph 65-16.

Figure 65-5. Main Rotor System

Refer to Figure 65-5.

Figure 65-6. Main Rotor Retaining Nut Damage and Repair Limits

Refer to Figure 65-6.

Figure 65-7. Main Rotor Cone Set Damage and Repair Limits

Refer to Figure 65-7.

65-17. Minimum Blade Angle – Main Rotor Hub and Blade

Refer to Paragraph 65-17.

65-18. Collective Pitch Forces – Adjustment

Refer to Paragraph 65-18.

Figure 65-8. Main Rotor System Torque Values

Refer to Figure 65-8.
Figure 65-9. Collective Pitch Retention Strap Adjustment

Refer to Figure 65-9.

65-19. Resetting Main Rotor Grip Tension-Torsion Strap

Refer to Paragraph 65-19.

65-20. Resetting Main Rotor Grip Tension-Torsion Strap – Initial Setting

Refer to Paragraph 65-20.

**65-21. Main Rotor Blades**

Refer to Paragraph 65-21.

65-22. Preventative Maintenance for Main Rotor Blades

Refer to Paragraph 65-22.

65-23. Main Rotor Blade Daily Inspection

Refer to Paragraph 65-23.


Refer to Paragraph 65-24.
65-25. Inspection and Minor Repair - Main Rotor Blades

Refer to Paragraph 65-25.

Figure 65-10. Main Rotor Blade

Refer to Figure 65-10.

65-26. Field Repairs - Main Rotor Blades

Refer to Paragraph 65-26.

Figure 65-11. Main Rotor Blade Repair

Refer to Figure 65-11.

65-27. Polyurethane Tape - Installation

Refer to Paragraph 65-27.

65-28. Deleted

Paragraph 65-28 has been Deleted.

65-29. Main Rotor Blade Paint Touch-Up

Refer to Paragraph 65-29.
65-30. Main Rotor Blade Trim Tab

Refer to Paragraph 65-30.

65-31. Replacement - Main Rotor Blade - Trim Tab

Refer to Paragraph 65-31.

Figure 65-12. Trim Tab Replacement

Refer to Figure 65-12.
HTC SPECIFIC INSPECTIONS

There are no HTC Specific Inspections for the Part Number 204P2100-101 Main Rotor Blade Assembly produced by Helicopter Technology Company (HTC).

The most current technical data for Helicopter Technology Company (HTC) products is available at the company website www.helicoptertech.com under Technical Publications.