



**Helicopter
Technology
Company**

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

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A	Added Applicability - All FAA Certificated UH-1H	03/ 31/ 2014	GHB
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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.

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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 –
Organizational Maintenance USAF Models TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-1.

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

- Maintenance Manual –
Bell Model 205A-1 – BHT-205A1-MM-1.

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

REFERENCE DOCUMENTS

1. 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., Change 47, dated 20 September 2005, or later approved revision.
2. Technical Manual – Preventative Maintenance Daily Inspection Checklist (TM 55-1520-210-PMD), Headquarters, Department of the Army, Washington, D.C.
3. Technical Manual – Phased Maintenance Checklist (TM 55-1520-210-PM), Headquarters, Department of the Army, Washington, D.C.
4. Federal Aviation Administration (FAA) Supplemental Type Certificate (STC) Number SR00026DE, Rotorcraft Development Corp., Corvallis, 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.
6. Technical Manual – Organizational Maintenance USAF Models TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-1, Secretary of the Air Force, Washington, D.C., Change 14, dated 28 April 1988, or later approved revision.
7. Technical Manual – Scheduled Inspection and Maintenance Requirements USAF Series TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-6, Secretary of the Air Force, Washington, D.C., Change 16, dated 16 February 1988, or later approved revision.

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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.
9. Maintenance Manual – Bell Model 205A-1 – BHT-205A1-MM-1, Bell Helicopter, a Textron Company, Fort Worth, Texas, Revision 7, dated 08 July 2013, 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 –
Organizational Maintenance USAF Models TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-1.
- Maintenance and Overhaul Instructions –
Bell Model 204B – BHT-204B-M&O-1.
- Maintenance Manual –
Bell Model 205A-1 – BHT-205A1-MM-1.

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 –
Organizational Maintenance USAF Models TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-1.
- Maintenance and Overhaul Instructions –
Bell Model 204B – BHT-204B-M&O-1.
- Maintenance Manual –
Bell Model 205A-1 – BHT-205A1-MM-1.

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 –
Organizational Maintenance USAF Models TH-1F, UH-1F, and UH-1P Helicopters - T.O. 1H-1(U)F-2-1.
- Maintenance and Overhaul Instructions –
Bell Model 204B – BHT-204B-M&O-1.
- Maintenance Manual –
Bell Model 205A-1 – BHT-205A1-MM-1.

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.

Revision	Date	FAA Signature / Printed
C	<i>10/8/15</i>	<i>Maureen A Moreland</i> / <i>Maureen A Moreland</i>
B	06/08/2015	Greg DiLibero (On File)
A	06/17/2014	Ronald Atmur (On File)
N/C	01/13/2014	Greg DiLibero (On File)

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)**

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**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)**

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8. Use of Procedural Words

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1-88. Each 10 Hours of Component Operation

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1-89. Each 25 Hours of Component Operation

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

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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

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1-96A. Each 24 Months

Refer to Paragraph 1-96A.

1-96B. Deleted

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

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**204P2100-101 MAIN ROTOR BLADE ASSEMBLY:
FOR 205A MODELS (BHT-205A1-MM-1)
AND
FOR 205A-1 MODELS (BHT-205A1-MM-1)**

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5-12. Daily or Each 10 Hours of Flight Operation, Whichever Occurs First
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5-13. Between 5 and 10 Hours of Flight After Installation

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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

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5-19. Main Rotor Grip Ultrasonic Inspection

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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

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

Refer to Paragraph 5-24.

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Refer to Paragraph 5-25.

5-26. Each 12 Months

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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

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5-32. Each 3000 Hours of Component Operation

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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.