

# CHAPTER 5 — INSPECTIONS AND COMPONENT OVERHAUL SCHEDULE

#### **TABLE OF CONTENTS**

Paragraph Number	Title	Chapter/Section Number	Page Number
	INSPECTIONS AND COMPONENT OVERHAUL SCI	HEDULE	
5-1	General	5-00-00	3
5-2	Items Not Covered and Inspection Responsibility		3
5-3	Crash Damage	5-00-00	4
5-4	Types of Inspections	5-00-00	4
5-5	Definitions		4
5-6	Inspection and Overhaul Tolerance		5
	SCHEDULED INSPECTIONS		
5-6A	Scheduled Inspections	5-00-00	6A
5-7	100 Hour and Annual Inspections	5-00-00	7
5-8	300 Hour Inspection		17
5-9	1200 Hour Inspection	5-00-00	21
5-10	Six Month Inspection	5-00-00	23
5-11	Weekly Inspection	5-00-00	25
5-12	12 Month Inspection	5-00-00	27
5-13	24 Month Inspection		29
5-14	As Required by Manufacturer		31
5-15	Three Year Inspection		33
5-16	300 Hours or 6 Months of Component Operation	. 5-00-00	35
5-17	300 Hours or 12 Months of Component Operation		37
5-18	600 Hours of Component Operation		39
5-19	600 Hours or 12 Months of Component Operation		43
5-20	1200 Hours of Component Operation		45
5-21	1200 Hours or 24 Months of Component Operation		49
5-22	1500 Hours of Component Operation		51
5-23	1500 Hours of Component Operation and		
	Every 50 Hours Thereafter	5-00-00	53
5-23A	2250 Hours or 60 Months of Component Operation		54A
5-24	3000 Hours of Component Operation		55
5-25	12 Months of Component Operation		57
	SPECIAL INSPECTIONS		
5-26	Special Inspections	5-00-00	59
5-27	After Fuel System Maintenance and/or Component Change		61
5-28	1 to 5 Hours After Each Installation		63
5-29	3 to 8 Hours After Each Installation		65
5-30	10 to 25 Hours After Each Installation		67
5-31	100 Hours After Each Installation		69



# **TABLE OF CONTENTS (CONT)**

Paragraph Number	Title	Chapter/Section Number	Page Number
	CONDITIONAL INSPECTIONS		
5-32	Conditional Inspections		71
5-33	Hard Landing	5-00-00	73
5-34	Sudden Stoppage/Acceleration — Main Rotor — Power ON		
	or OFF		79
5-35	Sudden Stoppage/Acceleration — Tail Rotor		85
5-36	Overspeed Main Rotor — 114% or Greater		89
5-37	Overtorque		93
5-38	Engine Compressor Stall or Surge		99
5-39	Lightning Strike		107
5-40	Engine Overtemp		113
5-40A	Pylon Whirl	5-00-00	114A
	COMPONENT OVERHAUL SCHEDULE		
5-41	Component Overhaul Schedule	5-00-00	115
	FIGURES		
Figure Number	Title		Page Number
5-1 5-2	24-Month Inspection of Main Rotor Flight Control Bolts/Nuts 24-Month Fuel Vent/Purge Fitting Filter Inspection		30A 30B

#### **TABLES**

Table Number	Title	Page Number
5-1	Special Inspections	60
5-2	Component Overhaul Schedule	115

Page 2 Rev. 10 8 APR 2011 ECCN EAR99



#### INSPECTIONS AND COMPONENT OVERHAUL SCHEDULE

#### 5-1. GENERAL

This chapter contains the time limit intervals and the requirements for the Scheduled Inspection, Special Inspection, Conditional Inspection, and for the Component Overhaul Schedule.

# WARNING

FAILURE TO CORRECT CONDITIONS SUCH AS, BUT NOT LIMITED TO, CORROSION, EROSION, MECHANICAL DAMAGE, OR OBVIOUS WEAR FOUND DURING A SCHEDULED INSPECTION COULD SERIOUSLY AFFECT THE AIRWORTHINESS OF THE HELICOPTER.

The inspection intervals given in this chapter are the maximum permitted. Do not exceed these intervals. The owner/operator is responsible for increasing the scope and the frequency of the inspections as necessary. Make sure the helicopter is maintained safely during all unusual local changes, such as environmental conditions, helicopter use, etc. You can request changes to the requirements in this chapter through the local Aviation Authority.

The inspection intervals and the component overhaul schedule provided in this chapter are applicable only to Bell Helicopter Textron approved parts.

#### NOTE

The time period given for the overhaul of a component (or the failure to give a time period for the overhaul of a component) does not constitute a warranty of any kind. The only warranty applicable to the helicopter or any component is the warranty included in the Purchase Agreement for the helicopter or the component.

The Time Between Overhaul (TBO) and the inspection periods are determined through experience, tests, Lead The Fleet (LTF), or any other special programs and the judgement of Bell Helicopter Textron engineers. They are subject to change only by Bell

Helicopter Textron or an approved Airworthiness Authority.

Changes to the TBO will be introduced by either revision to the Maintenance Manual, Chapter 5 or a Technical Bulletin (TB).

Every calendar and hourly inspection is a thorough visual inspection to determine the airworthiness of the helicopter and the components. Qualified personnel must do the inspections in accordance with quality standard aircraft practices and the applicable maintenance manuals. Bell Helicopter Textron considers that it is mandatory to obey all the applicable Alert Service Bulletins (ASB) and the Airworthiness Directives (AD).

Component operating time records are necessary for components that have scheduled maintenance procedures, which are different from those of the airframe. It is the owner/operator's responsibility to keep the Historical Service Records for the applicable component and to do the necessary maintenance procedures.

Before each inspection, remove or open the necessary cowlings, fairing, inspection doors, and panels.

# 5-2. ITEMS NOT COVERED AND INSPECTION RESPONSIBILITY

This manual does not include the specific inspection intervals for some components such as the compass calibration and the pitot static test. These specific inspection intervals are given by your government regulatory authority. Refer to their requirements for these specific inspections.

The owner/operator of the helicopter is responsible for the maintenance done on the helicopter and for ensuring that the specific time interval of any inspection procedure is not exceeded. It is the owner/ operator's responsibility to:

- **1.** Establish, maintain, and review the log books for discrepancies.
- **2.** Make sure the Alert Service Bulletins (ASB), the Airworthiness Directives (AD), and the special



inspections are done when they are required to be done.

- **3.** Make sure the scheduled inspections, the special inspections, and the required inspections for all of the installed kits are complied with.
- **4.** Make sure all parts and components for which Historical Service Records are required have documented traceability to their original installation in the helicopter.
- **5.** Make sure all limited life parts that have completed their published operating limits are replaced.
- **6.** Make sure all of the components that have completed their published overhaul periods are overhauled.
- **7.** Make sure all of the maintenance that is done on the helicopter is done by an approved maintenance organization.

The maintenance organization/personnel doing the maintenance is responsible for the quality of the maintenance done.

The owner/operator may choose to ask the maintenance organization/personnel doing the maintenance to perform the tasks listed by prior arrangement through a separate formal agreement.

#### 5-3. CRASH DAMAGE

Because of the many possible combinations that can result from crash damage, it is not possible to include the specific repair tasks in this category. The helicopter mechanic must make an analysis of the crash damage for each situation. Do the repair in accordance with the degree of damage to the specific part and the applicable repair procedures in this manual. Call Bell Helicopter Textron Product Support Engineering with your analysis of the crash damage.

#### 5-4. TYPES OF INSPECTIONS

**1.** The maintenance procedures may include scheduled inspections, special inspections, conditional inspections, component interim inspections, and component overhaul inspections.

- **a.** Scheduled inspections must occur at specified operating intervals. The intervals may be in operating time (hours), cycles, torque events (RIN), calendar (days, months, years) or other assigned units. This makes sure that the helicopter is airworthy.
- **b.** Special inspections are of a temporary nature or of a special interval that is not consistent with the scheduled inspections.
- **c.** Conditional inspections do not occur at a specified time. A conditional inspection is the result of a known or suspected unusual event, known or suspected malfunctions, or defects.
- **d.** An interim inspection occurs between overhauls.
- **e.** The component overhaul schedule gives the elapsed operating time at which a component must be removed, disassembled, examined for condition, and overhauled, in accordance with data approved by Bell Helicopter Textron.
- **2.** Lubrication and servicing requirements are in addition to those stated in this chapter (Chapter 12).
- **3.** For corrosion control, refer to the Corrosion Control Guide, CSSD-PSE-87-001 and the BHT-ALL-SPM.
- **4.** For the 250-C18/-C20/-C20B/J engines, refer to the applicable Rolls-Royce Operation and Maintenance Manual (5W2 or 10W2) for the scheduled inspection, special inspection, conditional inspection, and component overhaul schedule.
- **5.** For the common Bell Helicopter Textron approved optional equipment that is integrated into this Maintenance Manual, refer to this chapter for the scheduled inspection, conditional inspection, component interim inspection, and component overhaul inspection.
- **6.** For all other Bell Helicopter Textron approved equipment, refer to the applicable information in this Maintenance Manual or the specific Service Instruction (SI) for the scheduled inspection, special inspection, conditional inspection, component interim inspection, and component overhaul inspection.
- **7.** For the inspection requirements for optional equipment approved under Supplement Type

5-00-00

Page 4 Rev. 10 8 APR 2010 ECCN EAR99



Approval/Certificate (STA/STC), refer to the applicable STA/STC documentation. Maintenance and inspection of these items are the responsibility of the owner/operator.

#### 5-5. DEFINITIONS

- Check, inspect, examine Look carefully to find the condition of the component. Find how that condition relates to a specific standard.
- Condition The state of an item compared to a known standard.
- Security The presence of attaching parts that are properly tightened or appear to be, and the presence of properly installed (as required) locking devices such as lockwire, cotter pins, or other.
- Standard A specified rule or measure that you use to find the condition of a component.
- Damage Physical deterioration of a component.
- Discard Reject a component that has damage that cannot be repaired. To permanently remove from service.
- Inspection A procedure that includes checking, inspecting, and examining a system or a component.
- Non-scheduled inspection An inspection that has not been scheduled.
- Periodic inspection An inspection that is repeated at equal time intervals.
- Progressive inspection A scheduled inspection that is divided into smaller segments. This makes the best use of the time and the resources available.
- Maintenance The servicing and/or the repair of a helicopter, a system, or a component that keeps it serviceable.

- Preventive maintenance To do small maintenance action(s) on a regular basis to prevent non-scheduled maintenance.
- Operating time Actual flight or calendar time that must be recorded in the Historical Service Records or in the helicopter logs. The operating time is specified as:
  - Time in service (flight time) The measured time that starts the moment the helicopter leaves the ground and continues until it touches the ground at the next point of landing. The time when the helicopter is on the ground, with the engine and the rotor turning, is not included.
  - Calendar time The elapsed time starts on the day the inspection is completed, the component is installed, or the rotor is turned for the first time and ends on the last day of the month that the time limit expires. Calendar time is continuous. Calendar time does not stop when you remove a component, put the helicopter in storage, etc.
- Maintenance zone A specified area of the helicopter that may contain more than one system or more than one group of related components.
- Lead-The-Fleet (LTF) Program This is a program to validate the performance of an approved product improvement or a change to a maintenance interval. The engineering aspects of this change are approved. The program is closely monitored by Bell Helicopter Textron in an operational environment with selected operators.
- Special Programs These are approved programs that may be initiated under certain special conditions to meet specific requirements. These programs will be clearly defined through a plan and the engineering and maintenance aspects will be approved by the regulatory authorities.



#### 5-6. **INSPECTION AND OVERHAUL TOLERANCE**



DO NOT APPLY THESE TOLERANCES TO PARTS WITH A LIMITED AIRWORTHINESS LIFE (CHAPTER 4).

The Bell Helicopter Textron approved tolerance for scheduled inspections, special inspections, interim inspections, and overhaul intervals, unless otherwise stated, is 10% or up to a maximum of 300 hours operating time/6 months calendar time, whichever is less. The tolerances are established for maintenance scheduling convenience only.

Scheduled inspections, special inspections, interim inspections, or overhaul intervals required beyond the stated tolerances must be approved by Product Support Engineering.

#### NOTE

The following is only applicable for those operators whose governing authority requires to specifically approve the inspection and overhaul tolerance.

If approval of the inspection and overhaul tolerance is required by the applicable governing aviation authority, this is the responsibility of the owner/operator.

Refer to the applicable Rolls-Royce 250 Series Operation and Maintenance Manual for inspection and overhaul tolerances.

Page 6 Rev. 10 8 APR 2010 **ECCN EAR99** 



#### 5-6A. SCHEDULED INSPECTIONS

# WARNING

FAILURE TO CORRECT CONDITIONS SUCH AS, BUT NOT LIMITED TO, CORROSION, EROSION, MECHANICAL DAMAGE, OR OBVIOUS WEAR FOUND DURING A SCHEDULED INSPECTION COULD SERIOUSLY AFFECT THE AIRWORTHINESS OF THE HELICOPTER.

Accomplish the following scheduled inspections (paragraph 5-7 through paragraph 5-25):

- 100-hour and annual inspection
- 300-hour inspection
- 1200-hour inspection
- · Weekly inspection
- 6-month inspection
- 12-month inspection
- 24-month inspection

- · As required by manufacturer
- 3-year inspection
- 300 hours or 6 months of component operation
- 300 hours or 12 months of component operation
- 600 hours of component operation
- 600 hours or 12 months of component operation
- 1200 hours of component operation
- 1200 hours or 24 months of component operation
- 1500 hours of component operation
- 1500 hours of component operation and every 50 hours thereafter
- 2250 hours or 60 months of component operation
- 3000 hours of component operation
- 12 months of component operation

#### 5-7. 100 HOUR AND ANNUAL INSPECTIONS.

DATA REFERENCE	INSPECTION TASK DESCRIPTION		TAL OTHER
	DATE:W.O		
	FACILITY:	1	
	HELICOPTER S/N:		
	REGISTRY No.:	1	
	TOTAL TIME:TOTAL CYCLES:		
	GENERAL		
	1. Review logbook for recorded discrepancies. Correct discrepancies on installed equipment. Equipment not required under all operating conditions, and not on minimum equipment list (MEL), may be removed for repair.		
	2. Ensure all applicable and required Scheduled and Special Inspections, Technical Bulletins (T.B.), Alert Service Bulletins (ASB), and Airworthiness Directives (AD) are accomplished.		
	<b>3.</b> Comply with inspections and tests required for installed kit(s). Comply with Special Inspection as required. Refer to applicable Chapter of this manual or to Service Instruction (SI) manual.		
Chapter 4	<b>4.</b> Replace all limited life components that have completed published operating limits.		
BHT-206A/B- SERIES- CR&O	5. Overhaul all components that have completed overhaul published periods. Refer to Component Overhaul Schedule in this chapter.		
CCSD-PSE- 87-001	<b>6.</b> Perform corrosion inspection in accordance with Corrosion Control Guide.		
Chapter 12	7. Service and lubricate helicopter.		
Chapter 63, 65, and 96	<b>8.</b> Inspect transmission chip detectors, mast bearing chip detector (if installed), freewheeling chip detector and tail rotor gearbox chip detector for metal particles.		
Allison 250 Series Operation and Maintenance Manual	9. Perform applicable engine inspection.		
	FORWARD FUSELAGE/LANDING GEAR AREA.		
	— CABIN INTERIOR		
Chapter 25	1. Inspect seat cushions, seat backs, and interior trim for tears, excessive deterioration, and security of attachment.		
	2. Inspect safety belts and shoulder harnesses for operation, deterioration, and security of attachment.		

# 5-7. 100 HOUR AND ANNUAL INSPECTIONS. (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION		TAL OTHER
Chapter 11	3. Inspect placards, decals and instrument markings for appearance, legibility and conformity to configuration.		
Chapter 21	4. Inspect ventilation system for debris and inspect drain for obstructions.		
Chapter 95	5. Check fuel valve switch guard for proper operation.		
Chapter 26	<b>6.</b> Visually inspect fire extinguisher for damage, corrosion, proper charge, and security of quick opening clamp.		
	— FUSELAGE		
Chapter 11	1. Inspect placards and decals for appearance, legibility, and conformity to configuration.		
Chapter 52	2. Inspect all cabin doors for damage, cracks, distortion, positive locking mechanisms, seals for tears or separations, and doors for security of attachment.		
	3. Inspect antennas for condition and security. Inspect sealant for voids and condition.		
Chapter 95	4. Drain moisture from pitot and static piping installation.		
Chapter 52	5. Inspect battery door for condition of seal and security, and check battery vent line for damage and obstructions.		
BHT- ELECTRICAL- SPM	<b>6.</b> Service battery according to BHT-ELECTRICAL-SPM manual and service manual provided by manufacturer.		
Chapter 53 Chapter 52	7. Inspect forward fuselage for condition, cracks, dents, corrosion, and delamination. Inspect windows for condition.		
	8. Inspect intake fairing and plenum for obvious damage, cleanliness and obstructions. Inspect inlet screen for missing or damaged wire and rivets.		
Chapter 53	9. Inspect lower fuselage for evidence of fuel leaks.		
	<b>10.</b> Inspect particle separator (if installed) for distorted, damaged, or missing tubes and vortex generator. Ensure ejector tube and ejector nozzle are clean.		
	— LANDING GEAR.		
Chapter 32	Inspect landing gear retaining straps and fuselage attachment fittings for damage and security.		
	2. Inspect landing gear fairings for damage and security.		
	3. Inspect crosstubes for nicks, scratches, chafe marks or other mechanical damage.		

# 5-7. 100 HOUR AND ANNUAL INSPECTIONS. (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Chapter 32	4. Inspect all areas of crosstubes that equipment is mounted for corrosion, security, and condition of teflon tape and sealant.		
	5. Inspect crosstube riveted supports and electrical bonding clips for loose rivets or damaged sealant.		
	<b>6.</b> Inspect skid tubes for damage and doublers for corrosion, debonding, and loose rivets.		
	7. Inspect ground handling wheel attachments for wear and play.		
	8. Inspect skid saddles for cracks, loose screws, loose rivets, and sealant joints.		
	9. Inspect skid shoes for damage and security.		
	PYLON AND POWER PLANT AREA.		
	— CONTROLS		
Chapter 53	Inspect forward cowling for condition and attachment.		
Chapter 67	2. Inspect all control tubes, links, rod end bearings, bellcranks, supports, and attaching bolts for corrosion, wear, and mechanical damage, and for security of attachment.		
	3. Inspect all control tubes and bellcranks for freedom of travel throughout range.		
BHT-206A/B- SERIES- CR&O	<b>4.</b> Inspect main rotor pitch links with a 3-power magnifying glass for damage, corrosion and cracks. (Pay particular attention to swaged ends at jamnut or insert faying surface.)		
	— MAIN ROTOR HUB AND BLADE		
Chapter 62	Check main rotor flap restraint for freedom of movement and general condition.		
	2. Inspect pitch horn trunnion bearing for evidence of damage, wear, and security.		
	3. Check main rotor blades for cleanliness and overall condition. Inspect for cracks, corrosion, and doubler debonding.		
			Į.



# 5-7. 100 HOUR AND ANNUAL INSPECTIONS (CONT)

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
ASB 206-97-90	<b>4.</b> Torque check pillow block retention bolts and nuts (84 to 107 inch-pounds (9.4 to 12 Nm). Check for misalignment of anti-slippage marks (ASB 206-97-90).		
BHT-206A/B-M&O BHT-206B3-CR&O	5. Inspect main rotor yoke for corrosion or mechanical damage as follows:		
	a. Visually inspect fillet radii of both yoke spindles inboard of wear sleeves for evidence of corrosion. If corrosion is evident, remove with fine abrasive pad. If corrosion cannot be removed with pads or is extensive, disassemble hub, inspect, and repair.		
	NOTE		
	If hub must be disassembled, omit remaining steps.		
	<b>b.</b> Visually inspect yoke center section (inboard and outboard surfaces) from pillow block bores and tooling holes to lower web section for nicks, scratches, tool marks, and cracks.		
	c. On acceptable main rotor yoke, inspect to ensure no sealant voids are evident around shields or wear sleeve.		
	Inspect main rotor hub assembly and mast nut for condition and security.		
Chapter 62	<u>SWASHPLATE</u>		
	1. Rotate outer ring to check duplex bearing for condition. Bearing must be smooth with no evidence of roughness, binding, dragging, or looseness. Check should be accomplished before duplex bearing is lubricated with pitch link and idler link disconnected.		
	2. Inspect boot for evidence of deterioration.		
	Inspect pivot sleeve slot side walls and teflon slider bearing for wear.		

5-00-00 Page 10 Rev. 6 7 DEC 2009 ECCN EAR99



#### 5-7. 100 HOUR AND ANNUAL INSPECTIONS (CONT)

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>4.</b> Inspect swashplate and collar set linkage for axial, radial, and accumulative wear. Inspect bushings for cracks and damage.		
	5. Inspect swashplate support.		
	6. Inspect swashplate assembly for condition and security.		
	7. Inspect pivot sleeve bearing for wear.		
Chapter 29	<u>HYDRAULIC</u>		
	1. Inspect hydraulic lines for chafing, leaks, and security.		
	2. Check hydraulic filter differential pressure indicator button.		
	<b>3.</b> Check hydraulic oil level and change oil if color is turned dark or if oil emits bad odor.		
	<b>4.</b> Inspect all hydraulic servo actuator valve linkage pivot bolts for freedom of rotation and security of attachment. Inspect actuators for leakage and condition.		
ASB 206-76-1	<b>5.</b> If installed, inspect hydraulic actuator support 206-001-520-005 as follows:		
	<b>a.</b> Using a 5X magnifying glass, visually inspect the two forward webs of the support assembly for cracks. All cracks reported in the support assembly have originated in the top edge of the forward web.		
	<b>b.</b> If a crack is found, remove and replace the support assembly. Notify Product support Engineering concerning any assembly found cracked.		
Chapter 63	TRANSMISSION		
	1. Inspect transmission pylon support links, fittings, and surrounding structure for condition and security.		
	2. Inspect spherical bearings and bushings of transmission pylon support links, spherical bearing of fittings, isolation mount, and drag pin bearing for excessive axial and radial wear or looseness of bearing stake fitting.		



#### 100 HOUR AND ANNUAL INSPECTIONS (CONT) 5-7.

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	3. Inspect transmission drag pin and static stop plate for condition and evidence of contact.		
	4. Inspect isolation mount for condition and security.		
	<b>5.</b> Inspect isolation mount for evidence of driveshaft coupling contact.		
	<b>6.</b> Inspect transmission, electrical harness, accessories, and fluid lines for damage, chafing, security of attachment, and fluid leaks.		
	7. Inspect transmission for evidence of oil leaks.		
	<b>8.</b> Inspect oil cooler air passage for obstruction, condition, and security of attachment. Check cooling air duct for damage, chafing, and security of attachment.		
	<b>9.</b> Inspect oil cooler, accessories, electrical harness, oil hoses, and tubes for chafing, damage, leakage, and security.		
Chapter 63	MAIN DRIVESHAFT		
	1. Inspect main driveshaft for visual damage and couplings for grease leakage. Check driveshaft for freedom and smoothness of axial movement.		
	2. Inspect bolts for security.		
	NOTE		
	TEMP-PLATE indicator dots are of a white or gray color, which turns black when exposed to an overtemperature condition. Chemical contamination can also cause the indicating dots to turn black.		
	<b>3.</b> Inspect TEMP-PLATES for evidence of overheating indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
	POWER PLANT		
Chapter 71	Inspect power plant area for evidence of fuel or oil leaks.		



#### 5-7. 100 HOUR AND ANNUAL INSPECTIONS (CONT)

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 28 Chapter 79	2. Inspect engine area for loose bolts, nuts, and obvious damage.		
Rolls-Royce 250 Series Operation and Maintenance Manual	3. Inspect all engine fuel, oil flex and rigid lines for wear, chafing, damage, loose connections, and security of attachment. Inspect tubing for evidence of chafing in clamps and brackets.		
	<b>4.</b> Inspect firewalls for cracks, distortion, missing rivets, and hardware.		
	5. Inspect fuel control lever bolt hole and bolt for wear.		
	6. Inspect fuel filter for evidence of leakage and security.		
	7. Inspect engine mounts, fittings, and legs for damage and security of attachment.		
	8. Inspect exhaust stacks for cracks and security.		
	<b>9.</b> Inspect engine accessories and wiring for damage and security of attachment.		
Chapter 75	<b>10.</b> Inspect engine anti-ice actuator and control linkage for condition and security.		
Chapter 76	<b>11.</b> Inspect engine controls for proper installation and operation (rigging).		
Chapter 76	12. Inspect engine $N_1$ and $N_2$ control systems for freedom of movement throughout full range of travel. Check for excessive looseness, lost motion, and binding of linkage.		
Chapter 65	<b>13.</b> Inspect forward short tail rotor driveshaft for freedom of movement, condition, and condition of splined adapters.		
	14. Inspect air intake fairing for condition and security.		
Chapter 71 Chapter 96	<b>15.</b> Inspect engine chip detectors for metal particles.		
	<b>16.</b> Inspect starter generator for wear of generator gearshaft, mating drive spline, and bearings (dry splined only).		



#### 100 HOUR AND ANNUAL INSPECTIONS (CONT) 5-7.

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	AFT FUSELAGE/TAILBOOM AREA		
	AFT FUSELAGE		
Chapter 53	Inspect aft fairing for condition and attachment.		
	2. Inspect aft fuselage for evidence of oil leaks.		
Chapter 79	3. Inspect engine oil cooler for obstruction, cleanliness, damage, and oil leakage.		
	<b>4.</b> Check oil tank for condition, leakage, and security; oil lines for condition and security.		
Chapter 65	<b>5.</b> Inspect oil cooler blower hanger bearings for evidence of overheating, and check driveshaft splined adapters for adequate lubrication and freedom of movement.		
	<b>6.</b> Check oil cooler blower for cleanliness, condition, and security.		
	7. Check oil cooler blower housing for evidence of cracking in mount radii.		
	NOTE		
	Particular attention must be given to inspection of the upper left fitting and to fasteners between fittings and intercoastal.		
Chapter 53	8. Inspect tailboom attachment fittings on fuselage aft bulkhead for cracks.		
	NOTE		
	Pay particular attention to aft crosstube support tunnel structure for cracks.		
	<b>9.</b> Inspect aft fuselage structure for condition, damage, cracks, and loose rivets.		



# 5-7. 100 HOUR AND ANNUAL INSPECTIONS (CONT)

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	NOTE		
	Pay particular attention to sealant condition between interface of fuselage skins, upper longeron, and engine pan.		
	<b>10.</b> Inspect longerons and structure, including engine attachments for cracks, corrosion, and deterioration.		
	<b>11.</b> Inspect visible portion of aft fuselage bulkhead for cracks and condition.		
	TAILBOOM		
Chapter 53	<b>1.</b> Inspect aft fuselage and tailboom structure for damage and condition.		
	2. Inspect tail rotor driveshaft cover for damage and security of attachments and condition of protective tape on tailboom.		
	3. Inspect horizontal stabilizers for condition and security of attachment. Inspect inboard rib for cracks.		
	<b>4.</b> Inspect vertical fin and tail skid for condition and security of attachment.		
	<b>5.</b> Inspect the vertical fin attachment support for damage. Pay particular attention to the fin attachment points.		
	<b>6.</b> Do a torque check on the vertical fin attachment hardware.		
	NOTE		
	Pay particular attention to rivets attaching tail rotor gearbox support to tailboom. If cracks are found, contact Product Support Engineering for repair procedures and assistance.		
	7. Inspect tailboom skin for cracks, dents, deformation, working rivets, and chafing between tailboom skin and fairing.		
	8. Inspect hanger bearing support brackets for condition and security.		



#### **100 HOUR AND ANNUAL INSPECTIONS (CONT)** 5-7.

-	DATA REFERENCES	INSPECTION TASK DESCRIPTION		TIAL OTHER
-		9. Inspect driveshaft cover retaining clips for condition and security.		
	Chapter 65	<b>10.</b> Inspect tail rotor driveshaft hanger bearings for evidence of overheating. Check tail rotor drive spline adapters (steel) for adequate lubrication and freedom of movement.		
		<b>11.</b> Inspect tail rotor driveshaft bonded joints/adapters and Thomas couplings for condition and security. Check torque of Thomas coupling retention bolts/nuts. Apply torque seal after torquing.		
		TAIL ROTOR GEARBOX AND PITCH CHANGE CONTROL		
	Chapter 65	<b>1.</b> Inspect tail rotor gearbox for condition, evidence of oil leaks, and oil for contamination.		
		2. Inspect tail rotor gearbox support for cracks at tail rotor gearbox attachment.		
I		3. Deleted.		
	Chapter 67	<b>4.</b> Inspect tail rotor pitch control mechanism for damage, grease leakage, and security of attachment. Inspect bearing for wear and boot deterioration.		
		<b>5.</b> Inspect tail rotor pitch change link for condition and security. Inspect spherical bearings for excessive wear.		
		<b>6.</b> Check tail rotor flight control for condition, security, binding, and freedom of travel throughout range.		
	Chapter 64	TAIL ROTOR HUB AND BLADE ASSEMBLY		
		1. Inspect tail rotor hub assembly for damage, cleanliness, cracks, and wear.		
I	BHT-206A/B-M&O BHT-206B3-CR&O	2. Inspect tail rotor blades as follows:		
1	5111-20050-011ttO	<b>a.</b> Tip block brazier head rivets for corrosion and looseness.		
-	ASB 206-85-28	<b>b.</b> For suspected voids, special attention should be given to the tip block skin mating areas.		

Page 16 Rev. 6 7 DEC 2009 **ECCN EAR99** 



#### **100 HOUR AND ANNUAL INSPECTIONS (CONT)** 5-7.

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	c. Blade for bulging, nicks, dents, and scratches.		
	d. Inspect blade feathering bearings for excessive wear.		
	<b>3.</b> Clean tail rotor blades to maintain an improved visibility of warning stripes.		
	ELECTRICAL/AVIONICS/INSTRUMENTS		
Chapter 95 Chapter 96 Chapter 97	<b>1.</b> Inspect electrical and avionics components, instruments, and all mounts for condition and security.		
	2. Inspect all visible electrical wiring for worn or frayed cables, and loose or broken clamps and fasteners.		
	3. Apply electrical power and check the following:		
	<b>a.</b> With caution light circuit breaker in, check illumination of all caution light segments on panel.		
	<b>b.</b> Depress airframe fuel filter differential switch button on top of filter head to verify caution light operation.		
	<b>c.</b> Check operation of engine out and low rotor RPM mute switch, if installed.		
	d. Check chip detector circuit for proper operation.		
	e. Check operation of defog blowers.		
	<b>f.</b> Check linear N <sub>2</sub> actuator stroke.		
Chapter 63 Chapter 65 Chapter 71 Chapter 96	<b>g.</b> Inspect transmission chip detectors, mast bearing chip detector (if installed), freewheel chip detector, tail rotor gearbox chip detector, and engine chip detector for proper operation.		
Chapter 96	<b>4.</b> Check operation and condition of navigation, anticollision, landing, and instrument lights.		
	5. Check battery temperature sensing system for proper operation.		

5-00-00 Page 16A



# 5-7. 100 HOUR AND ANNUAL INSPECTIONS (CONT)

DATA REFERENCES	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	<u>ENGINE</u>	
	Perform inspection per Rolls-Royce 250 Series Operation and Maintenance Manual.	
BHT-206A-FM-1 BHT-206B-FM-1	GROUND RUN	
BHT-206B3-FM-1	CAUTION	
	GROUND RUN OF HELICOPTER SHALL BE ACCOMPLISHED BY QUALIFIED PERSONNEL ONLY.	
	Upon completion of preflight inspection, start helicopter engine and determine compliance with manufacturer recommendations for the following:	
	<b>a.</b> $N_1$ idle and $N_2$ beep range	
	<b>b</b> . Fuel and oil pressures	
	c. Electrical power generation	
	2. Check voltage regulator setting.	
	3. Check operation of engine anti-ice system.	
	4. Check for fuel, oil, and hydraulic leaks.	
	<b>5.</b> Check operation of all installed equipment for satisfactory performance.	
	<b>6.</b> Observe vibration of right-hand horizontal stabilizer with $N_2$ set at 96 to 100% flat pitch to determine if tail rotor hub and blade assembly is out of balance.	



#### 5-8. **300 HOUR INSPECTION**

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:		
Chapter 67	FORWARD FUSELAGE		
Chapter 67	CABIN INTERIOR		
	Exercise care and use adequate screw length when reinstalling vertical tunnel cover to avoid contact with tail rotor control tube. It is recommended that the fifth screw from the top and nutplate (if installed) on left side vertical tunnel cover be replaced with a speed clinch (C60207AA-020). Washer AN960PD10 may be used as required under speed clinch head to adjust for grip length.		
	1. Open vertical tunnel and inspect flight control system bellcranks, levers, yokes, supports, and walking beams for evidence of binding, excessive looseness, and security of attachment.		
	2. Check area for evidence of chafing between control tubes, oil lines, flex cable, and heating ducts (if installed).		ı
	3. Check oil lines for condition, security, and leakage.		



# 5-8. 300 HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	<b>4.</b> Remove pilot and copilot seats and panels, inspect flight control system bellcranks, levers, yokes, supports, and walking beams for evidence of binding, excessive looseness, and security of attachment.		
	5. Deleted.		
	<b>6.</b> Check minimum friction on cyclic, collective, and anti-torque control system and adjust as necessary.		
Chapter 53	<u>FUSELAGE</u>		
	1. Inspect latches on all doors for proper adjustment and wear.		
	2. Inspect center post to roof beam attachment interface for cracks.		
	PYLON AREA		
Chapter 62	SWASHPLATE ASSEMBLY		
	Check swashplate tilt friction.		
	2. Value must be between 15 to 32 pounds (67 to 142 N). If out of limits, adjust to 15 to 32 pounds (67 to 142 N) and check again.		
Chapter 29	HYDRAULIC		
	1. Inspect hydraulic pump spline, transmission pump spline, and adapter spline for condition and security.		
	POWER PLANT AREA		
	<u>GENERAL</u>		
	Inspect engine per Rolls-Royce 250 Series Operation and Maintenance Manual.		
Chapter 95	2. Perform operational check of turbine outlet temperature system.		

5-00-00 Page 18 Rev. 6 7 DEC 2009 ECCN EAR99



# 5-8. 300 HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 76	3. Inspect $N_1$ and $N_2$ tachometer shafts and gearbox adapters.		
	AIRFRAME FUEL FILTER		
Chapter 28	1. Replace airframe fuel filter element, kit KD651511, element 52-01103-1, or element 7582301, as applicable.		
	2. Inspect filter head as follows:		
	<b>a.</b> Remove outlet port fitting from filter head. Using a 0.020 inch (0.508 mm) wire, pass wire through bleed hole in outlet port side of filter head to ensure that hole is unobstructed. (applicable to P/N 306001, 306005, 222-366-621-001/-003/-101, 52-2889-016, and 52-2889-016A fuel filter assemblies).		
	<b>b.</b> Purge airframe fuel filter and engine fuel system.		
Chapter 28 Rolls-Royce 250 Series Operation and Maintenance Manual	3. When purging airframe fuel filter and the engine fuel system of air, ensure that both fuel boost pumps are ON and motor engine for approximately 15 seconds or until there is no evidence of air coming from fuel supply hose. In addition, depress the airframe fuel filter bypass indicator button during the motoring operation to remove air more rapidly.		
BHT-206A-FM-1 BHT-206B-FM-1 BHT-206B3-FM-1	<b>4.</b> Ground run helicopter at 100% N <sub>2</sub> for minimum of 2 minutes to ensure remaining air is purged from fuel filter head and to check for fuel leaks.		
Chapter 28	FUEL PUMP		
	1. Check engine fuel pump filter impending bypass as follows (applicable to helicopters S/N 4 through 3566 prior to incorporation of TB 206-82-75):		
	<b>a.</b> Disconnect hose from forward end of differential pressure switch and plug hose.		
	<b>b.</b> Activate fuel boost pump and verify caution light illuminates.		

5-00-00 ECCN EAR99 7 DEC 2009 Rev. 6 Page 19



# 5-8. 300 HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	2. If caution light illuminates, deactivate fuel boost pump, remove plug, and connect hose removed in step a. If caution light fails to illuminate, troubleshoot impending bypass warning system per procedure.		
Chapter 71 Chapter 96	STARTER GENERATOR		
	Inspect starter generator brushes and commutator for wear.		
	AFT FUSELAGE/TAILBOOM AREA		
	AFT FUSELAGE		
Chapter 53	Visually inspect longeron and engine pan interface for corrosion as follows:		
	a. Open overhead access panel in baggage compartment.		
	<b>b.</b> Using bright light and mirror, inspect exposed upper and lower edges of joints and fastener between aluminum longeron and titanium engine pan. Edge of sealant coating must be visible. No indications of corrosion are acceptable.		
	NOTE		
	Pay particular attention to inner structure.		
	2. Inspect engine mount-to-fuselage attachment areas for condition.		
	TAIL ROTOR DRIVESHAFT		
Chapter 65	Inspect bearings for condition and evidence of overheating. Check should be accomplished before lubrication.		
Chapter 12	Lubricate tail rotor driveshaft hanger bearings.		
	3. Inspect tail rotor driveshaft spline adapters for wear and overheating.		
Chapter 12	4. Lubricate tail rotor driveshaft spline adapters.		

5-00-00 Page 20 Rev. 6 7 DEC 2009 ECCN EAR99



# 5-8. 300 HOUR INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	NOTE Impeller 206-061-432-031 requires inspection. Impeller 206-061-432-109 and subsequent do not require inspection.		
BHT-206A/B-M&O BHT-206B3-CR&O	5. Inspect (dye penetrant method) oil cooler blower impeller. Particular attention should be given for cracks at mounting flange where individual blades attach. Inspection may be accomplished with impeller installed.		
Chapter 65	TAIL ROTOR GEARBOX  1. Torque check tail rotor gearbox retaining nuts 50 to 70 inch-pounds (5.6 to 7.9 Nm).  TAIL ROTOR HUB AND BLADE ASSEMBLY		
Chapter 18	<ol> <li>Perform dynamic balance of tail rotor.</li> <li>Adjust as required.</li> </ol>		

# 5-9. 1200 HOUR INSPECTION.

DATA		INIT	
REFERENCE	INSPECTION TASK DESCRIPTION	MECH	OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:TOTAL CYCLES:		
	TOTAL TIME:TOTAL CYCLES:		
	CYCLIC CONTROL STICK.		
Chapter 67	1. Remove pilot and copilot (if installed) cyclic control sticks.		
BHT-206A/B- SERIES- CR&O	2. Inspect tube for cracks and condition. Pay particular attention to area adjacent to two slots in tube where bolts secure tube when installed in pivot lever assembly.		
Chapter 4			
BHT-ALL-SPM			

# 5-10. SIX MONTH INSPECTION.

DATA	INSPECTION TASK DESCRIPTION		IAL
REFERENCE	INSPECTION TASK DESCRIPTION	MECH	OTHER
	DATE:W.O		
	FACILITY:HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:	ı	
Chapter 99	EMERGENCY FLOTATION SYSTEM.		
	Perform the following at the completion of each 6 month period.		
	1. Park helicopter in clear area with sufficient room for bags to be inflated.		
	2. Perform check on electrical circuit.	İ	
	3. Inflate float bags for the 6 month inspection as follows:	1	
BHT-206-SI 115	Unpack bags and inflate with compressed air through manual inflation OPEN-CLOSE fittings provided on bags.		
	<b>b.</b> Inspect bags and bag attachments.	1	•
		:	
		1	
		ļ	



#### 5-11. WEEKLY INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
Chapter 65	MAIN ROTOR HUB AND BLADES, AND TAIL ROTOR HUB AND BLADES		
	NOTE		
	The following procedures shall be accomplished as frequently as deemed necessary when operating in rain, corrosive salt laden air, or other adverse environmental conditions.		
	The following preventive maintenance procedures for the main rotor hub and blades and tail rotor hub and blades are recommended to prevent corrosion and extend their life.		
	The inspection may be accomplished more frequently or may be extended beyond the weekly interval, as deemed necessary, based on the actual operating environment.		
	1. Wipe hub and blades with drycleaning solvent (C-304).		
	2. Wash hub and blades with mild cleaning compound (C-318). Rinse with water and dry with clean cloths.		
	3. Inspect hub and blades for evidence of corrosion.		



# 5-11. WEEKLY INSPECTION (CONT)

NOTE  Do not allow preservative oil (C-125) to contact tail rotor blade bearings.  4. Apply a light coat of preservative oil (C-125) to all hub and blade surfaces. Flood areas between main rotor hub grip tangs and blades, latch bolts to grips and yoke fillet areas just inboard of pitch horn to ensure complete coverage.



#### 5-12. 12 MONTH INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION		TIAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	SIGNATURE:		
Chapter 96	FUEL SYSTEM		
	Check operation of low fuel warning system, if installed.		
Chapter 28	2. Remove fuel boost pump assemblies and inspect fuel cell interior for debris, water contamination, and fungus growth.		
Chapter 53	AIRFRAME		
	Remove overhead upholstery hat bin soundproofing and inspect engine and transmission support structure for cracks and corrosion.		
Chapter 62	MAIN ROTOR BLADE		
	Remove leading edge polyurethane tape, if installed.		
	Inspect leading edge for corrosion and condition.		



#### 5-13. 24-MONTH INSPECTION

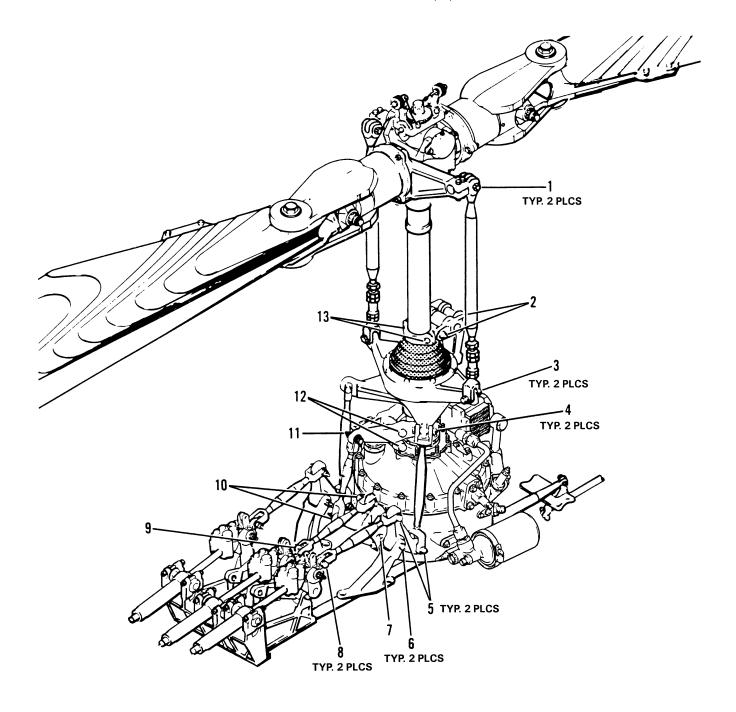
DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
Chapter 62 and Chapter 67	MAIN ROTOR FLIGHT CONTROL BOLTS/NUTS		
	NOTE		
	Operation in environmental conditions that erode corrosion preventive compound (C-101) may require periodic touch up of corrosion preventive compound. Before touch up, visually check expsoed surfaces for evidence of corrosion.		
	Remove main rotor flight control bolts/nuts (1 through 13, Figure 5-1) and visually inspect bolts/nuts for corrosion and mechanical and thread damage.		
ASB 206-05-103	FUEL VENT/PURGE FITTING FILTER CLEANING		
	NOTE		
	This inspection is applicable to helicotpers S/N 004 through 2123 Post ASB 206-05-103.		
	1. Remove the fuel valve access panel on the right side of helicopter to gain access to the fuel vent/purge fitting (1, Figure 5-2).		
	<b>2.</b> Disconnect the fuel tube assembly (4) from the top of the filter (3).		
	3. Remove the filter (3) and discard packing (2).		



# 5-13. 24 MONTH INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	4. Clean the filter (3) by back-flushing with clean fuel. Make sure the filter is clean or replace as required.	
	<b>5.</b> Reinstall the filter (3) with new packing (2) and reconnect the fuel tube assembly (4) to the filter.	
	<b>6.</b> Perform After Fuel System Maintenance and/or Component Change inspection (paragraph 5-27).	
	7. Reinstall the fuel valve access panel on right side of helicopter.	





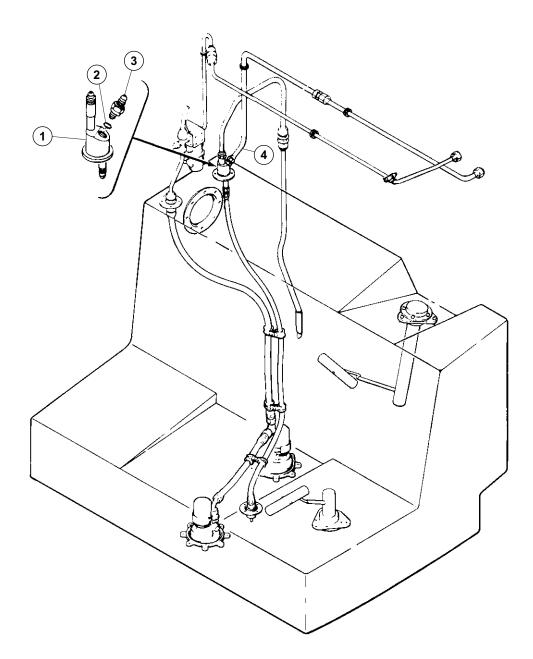
- 1. M/R pitch links to M/R hub pitch horns
- 2. Swashplate drive link/lever assembly
- 3. Swashplate to M/R pitch links
- 4. Cyclic control tubes to swashplate
- 5. Control tubes to cyclic bellcranks
- 6. Cyclic bellcrank pivots
- 7. Collective bellcrank pivot

- 8. Cyclic servos to control tubes
- 9. Collective servo to control tube
- 10. Control tubes to collective bellcrank
- 11. Control link to collective lever
- 12. Link assembly (collective lever to swashplate support)
- 13. Swashplate drive collar set

206A/BS-M-5-1

Figure 5-1. 24-Month Inspection of Main Rotor Flight Control Bolts/Nuts





S/N 004 THROUGH 2123 POST ASB 206-05-103

- 1. Fuel vent/purge fitting
- 2. Packing
- 3. Filter (213-593)
- 4. Tube assembly

206AB\_MM\_05\_0002

Figure 5-2. 24-Month Fuel Vent/Purge Fitting Filter Inspection



### 5-14. AS REQUIRED BY MANUFACTURER

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Rolls-Royce 250 Series Operation and Maintenance Manual	INSPECTION TASK DESCRIPTION  DATE:		

### 5-15. THREE YEAR INSPECTION.

DATA		INIT	
REFERENCE	INSPECTION TASK DESCRIPTION	MECH	OTHER
	DATE:W.O	•	
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:TOTAL CYCLES:		
Chapter 99	EMERGENCY FLOTATION SYSTEM.		
Onapier 33	Perform the following at the completion of each 3 year period, concurrent with bottle hydrostatic test  1. Park helicopter in clear area with sufficient room for bags to be inflated.		
	2. Perform check on electrical circuit.		
	3. Perform 3 year inspection as follows and perform complete operational check of pneumatic inflation system.		
	a. Unpack bags.		
	<b>b.</b> With float system in READY-FOR-FLIGHT configuration, inflate system by activating the ship inflation system.		
	c. Inspect bags and bag attachments.		



### 5-16. 300 HOURS OR 6 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:		
BHT-206B3-CR&O	MAIN DRIVESHAFT 206-040-100-ALL  Inspect inner and outer coupling spline teeth for wear and corrosion, boot for condition, and shaft for damage and corrosion. Inspection to be accomplished concurrently with lubrication requirement.		



### 5-17. 300 HOURS OR 12 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:SIGNATURE:		
	BATTERY		
BHT-ELEC-SPM	Remove battery and recondition according to the BHT-ELEC-SPM and manufacturers service manual. Inspect vent lines for obstructions or damage. Clean battery mounting area prior to installing reconditioned battery.		
Chapter 62	SWASHPLATE AND SUPPORT ASSEMBLY 206-010-450-113 AND SUBSEQUENT		
	1. Inspect the swashplate sleeve assembly for signs of corrosion or mechanical damage, and for loose or worn bushings.		
	a. Swashplate support assembly		
	<b>b.</b> Collective lever		
	c. Collective idler link		
	d. Collective sleeve assembly		

### 5-18. 600 HOURS OF COMPONENT OPERATION.

REFERENCE	INSPECTION TASK DESCRIPTION	INIT   MECH	OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:		
	206-040-002-5 TRANSMISSION.		
	NOTE		
	If modification of 206-040-002-5 transmission has been complied with as outlined in paragraph 3., the 600 hour inspection of sun gear, top case, and pinion bearings may be omitted.		
	— SUN GEAR AND PINION BEARINGS.		
Chapter 63	1. Remove transmission.		
BHT-206A/B- SERIES- CR&O	2. Remove top case. Mast assembly may be left attached to top case unless top case is to be inspected.		
	CAUTION		
	HANDLE PLANETARY ASSEMBLY WITH CAUTION TO AVOID TILTING OF PLANET GEARS AND SPILLING OF SPHERICAL ROLLERS. IF PLANET ASSEMBLY BECOMES TILTED, DO NOT FORCE TO STRAIGHTEN; ROTATE PLANET GENTLY TO STRAIGHTEN. IF PLANET WILL NOT TURN FREELY, ONE OR MORE ROLLERS MAY HAVE SHIFTED FROM PROPER POSITION; PRESS ROLLERS TOWARD CENTER OF PLANET WITH FINGERS TO FREE ASSEMBLY. (FORCING ASSEMBLY TO STRAIGHTEN CAN BRINNEL THE INNER RACE.)		
	3. Remove internal planetary gear.		
BHT-206A/B- SERIES CR&O	<b>4.</b> Remove planetary assembly and sun gear as one assembly. Inspect planetary assembly.		
	a. Inspect sun gear as follows:		
	(1) Visually inspect for general condition.		
	(2) Perform over pins dimensional inspection.		
	(3) If over pins dimension is greater than REPLACE dimension allowed, inspect gear teeth of sun and planet gears, and if acceptable, the assembly may be reinstalled. If over pins dimension is less than REPLACE dimensions allowed, replace sun gear.		

# 5-18. 600 HOURS OF COMPONENT OPERATION. (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	b. Inspect pinion bearing assemblies as follows:		
	(1) Visually inspect gear for chipped, broken or worn teeth.		
	(2) Check bearing surfaces of rollers, inner race and outer race for chips, cracks, nicks, brinelling, spalling or corrosion.		
	CAUTION		
	REMOVE ALL SAFETY WIRE AND TAPE. ENSURE PARTS DO NOT DROP INTO TRANSMISSION CASE.		
BHT-206A/B- SERIES CR&O	5. Reassemble transmission and install.		
Oriao	NOTE		
	If it becomes necessary to replace sun gear for second time due to spline wear, the mating main input gear shaft must also be inspected.		
BHT-206A/B- SERIES-	— TOP CASE ASSEMBLY.		
CR&O	1. At time of sun gear inspection, remove mast assembly, oil filler cap and vent assembly, split spacer ring in ring gear spline relief groove, and the oil jet.		
	2. Fluorescent penetrant inspect top case in area of ring gear spline tooth roots for indications of cracks. If cracks are found, part must be replaced. It is not necessary to strip paint from exterior of case. Use of dye-check is not recommended.		
	3. Determine amount of wear of top case involute spline. If dimension measured between pins is greater than maximum, replace top case.		
	<b>4.</b> On reassembly, ensure all inspection compound has been removed from inside surfaces, internal oil passages, and oil fitting bosses.		
	5. Reassemble transmission.		

# 5-18. 600 HOURS OF COMPONENT OPERATION. (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
BHT-206A/B- SERIES- CR&O	ANY CHANGE NUMBER PAINTED ON CASE AND ADJACENT TO IDENTIFICATION AND/OR DATA PLATE HAS NO RELATION TO MODIFICATIONS REQUIRED IN FOLLOWING PARAGRAPH AND SHALL BE DISREGARDED.  — MODIFICATION REQUIRED BEFORE OMITTING 600-HOUR INSPECTION OF 206-040-002-005 TRANSMISSION SUN GEAR AND TOP CASE.		
	NOTE		
	Transmissions delivered which were marked "CHG" instead of "MOD" on Data Plate are to be considered has having modification completed.		
	NOTE		
	Inspection at 600 hours for transmission sun gear and top case is not required when following five modifications have been complied with and completion is shown on data plate.		
	MOD 1: First line of Data Plate. Transmission Sun Gear (206-040-123-3) with shaft (206-040-040-3).		
	MOD 2: Second line of Data Plate. Pinion (206-040-035-007).		
	MOD 3: Third line of Data Plate. Top Case (206-040-151-009).		
	MOD 4: Fourth line of Data Plate. Heavy Duty Spider (206-040-080-003) with three longer shafts (206-040-043-005).		
	MOD 5: Fifth line of Data Plate. Longer Magnetic Drain Plug (B-148).		
	or		
	Chip Detector (B-3228). (Refer to Service Letter No. 206A-133).		

### 5-19. 600 HOURS OR 12 MONTHS OF COMPONENT OPERATION.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:		
	TAIL ROTOR CONTROL TUBE (WITHOUT NYLATRON SLEEVE).		
BHT-206A/B- SERIES- CR&O	1. Remove and inspect tail rotor control tube for wear at five areas where tube contacts fairleads as follows:		
	a. Measure diameter of tube just forward and aft of each worn area. Make all measurements in same plane.		
	<b>b.</b> Measure tube diameter in worn area and compare measurement with those taken in step a.		
	<b>c.</b> If wear does not extend through tube finish, install tube. If wear in area extends through dry film lubricant (black color) and the anodize (brown color), but is not in excess of 0.004 inch (0.10 mm) on one side, tube may be rotated 180 degrees and installed. If wear extends completely around tube and does not exceed 0.004 inch (0.10 mm) on any side, install tube assembly end for end.		
	<b>d.</b> If wear is found in any one area in excess of 0.004 inch (0.10 mm) on any side, remove and scrap tube.		
Chapter 67	2. Install and connect tail rotor control tubes.		
	206-040-015 MAIN DRIVESHAFT.		
BHT-206A/B- SERIES- CR&O	Inspect inner and outer coupling teeth splines for wear and corrosion, boot for condition, shaft for damage and corrosion. Inspection to be accomplished concurrently with lubrication requirement.		
	ELECTRICAL.		
Chapter 96	Perform electrical test of battery overtemperature sensor module.		



#### 5-20. 1200 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	MAIN ROTOR HUB ASSEMBLY  NOTE  Applicable only to main rotor hub 206-011-100-127		
	<ul> <li>and subsequent with yoke 206-011-149-105 installed.</li> <li>1. Inspect yoke and trunnion bearing surfaces for brinelling.</li> <li>2. Inspect yoke, latch bolts, strap pins, strap fittings, trunnion, pillow blocks, grips, and pitch horns for corrosion.</li> </ul>		
BHT-206A/B- SERIES-CR&O	Visually inspect all hub components for excessive wear or damage.  TRANSMISSION 206-040-002-005, -013, AND -015		
	NOTE		
	Transmission 206-040-002-005, -013, and -015 with four pinion planetary do not require this inspection. (Refer to 206-040-002-025 transmission inspection requirements.)		



#### 1200 HOURS OF COMPONENT OPERATION (CONT) 5-20.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	NOTE		
	Transmission top case, planetary ring gear, and planetary assembly must have special inspection performed more frequently than normal overhaul cycle.		
	Transmission 206-040-002-005 must have modifications 1 through 4 complied with and completion confirmed by modification number on transmission data plate. (Reference paragraph 5-18.)		
BHT-206-SI-123	Transmission 206-040-002-005, -013, and -015 must have chip detector with warning light installed.		
	TRANSMISSION		
Chapter 63	Remove transmission.		
	DISASSEMBLY		
BHT-206A/B- SERIES-CR&O	1. Remove top case.		
	2. Remove ring gear.		
	3. Remove planetary assembly and sun gear as one assembly.		
	TOP CASE		
	1. Fluorescent penetrant inspect top case in area of ring gear spline tooth roots for indications of cracks. If cracks are found, part must be replaced. It is not necessary to strip paint from exterior of case. Use of dye-check is not recommended.		
BHT-206A/B- SERIES-CR&O	2. Determine amount of wear of top case involute spline. If dimension measured between pins is greater than maximum, replace top case.		
	3. On reassembly, ensure all inspection compound has been removed from inside surfaces, internal oil passages, and oil fitting bosses.		



## 5-20. 1200 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	DATA REFERENCE INSPECTION TASK DESCRIPTION		
	PLANETARY RING GEAR		
	1. Visually inspect spline and teeth of gear for chipped, cracked, or worn teeth. Use a fine India stone to dress small nicks, burrs, or scratches from spline and gear teeth.		
	2. Where evidence indicates wear or damage, check dimensions of affected parts.		
BHT-206A/B- SERIES-CR&O	3. Perform magnetic particle inspection.		
	PLANETARY ASSEMBLY		
BHT-206A/B- SERIES-CR&O	Disassemble planetary assembly.		
	PLANETARY ASSEMBLY INSPECTION		
Chapter 12	1. Parts should be inspected immediately after cleaning and then oiled, using approved lubricating oil. Avoid fingerprints on unoiled surfaces. Exercise care to prevent corrosion of bearing surfaces.		
BHT-206A/B- SERIES-CR&O	2. Visually inspect all parts for wear or damage.		
	<b>3.</b> Inspect pinion and gear teeth for chipped, broken, or worn teeth.		
	4. Inspect bearing retainer for cracks, wear, or damage.		
	<b>5.</b> Inspect bearing surfaces of rollers, inner race, outer race (planet gear) for chips, cracks, nicks, brinelling, spalling, or corrosion.		
	<b>6.</b> Retain rollers from each side of bearing in a separate plastic bag. Keep shaft, nut, and bearing assembly together, as removed from spider, in plastic bag.		
	7. Inspect parts dimensionally that show evidence of wear or damage.		
BHT-206A/B- SERIES-CR&O	8. Inspect sun gear for gear spline wear.		



### 5-20. 1200 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	<b>9.</b> Refer to BHT-206A/B-SERIES-CR&O for Magnetic Particle or Fluorescent Penetrant Inspection Criteria.	
	10. Replace all unserviceable parts.	
	SUN GEAR	
	Visually inspect for general condition.	
	2. Perform over pins dimensional inspection.	
	3. If over pins dimension is greater than REPLACE dimension allowed, inspect gear teeth of sun and planet gears, and if acceptable, the assembly may be reinstalled. If over pins dimension is less than REPLACE dimension allowed, replace sun gear.	
	REASSEMBLY	
	Reassemble planetary assembly and sun gear.	
	2. Reassemble transmission.	
Chapter 63	3. Install transmission.	
	<b>4.</b> Inspect packing and reducer, or filter, at transmission oil pressure regulating valve boss. Install new packing. Replace reducer/filter if worn or damaged.	
	TAIL ROTOR DRIVESHAFT 206-040-301 (LONG SHAFT ASSEMBLY – ALL DASH NUMBERS)	
	NOTE	
	During visual inspection, pay attention to area where collars 206-040-315 contact shaft 206-040-301 for possible corrosion.	
	Remove, disassemble, clean, and visually inspect tail rotor driveshaft.	
	2. Remove, disassemble, clean and visually inspect fan shaft assembly.	

### 5-21. 1200 HOURS OR 24 MONTHS OF COMPONENT OPERATION.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:		
	TAIL ROTOR CONTROL TUBE (WITH NYLATRON SLEEVES).		
Chapter 67	1. Remove and inspect tail rotor control tube and Nylatron sleeves at five areas where tube contacts fairleads as follows:		
	a. If Nylatron sleeves show wear on one side only, but surface of control tube is unworn, tube may be rolled 180 degrees and reinstalled.	!	
BHT-206A/B- SERIES- CR&O	<b>b.</b> If Nylatron sleeves were worn through, exposing bare surface of control tube and control tube is worn, refer to detail repair in CR&O.		
	<b>c.</b> Inspect tube for corrosion. Pay particular attention to Nylatron sleeves bond line.		



### 5-22. 1500 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:		
Chapter 63 BHT-206A/B-M&O BHT-206B3-CR&O	<ol> <li>Remove, disassemble, and clean main rotor mast.</li> <li>Inspect main rotor mast as follows:         <ul> <li>Visually inspect mast splines for burrs, nicks, cracks, and wear. Indication of wear requires an over pins dimensional check.</li> <li>Visually inspect mast inner and outer surfaces for corrosion. Inspect surface protective coatings for condition.</li> <li>Visually inspect bearing balls and races for pits, erosion, spalling, and brinelling.</li> </ul> </li> <li>Reassemble and install main rotor mast.</li> </ol>		



## 5-22. 1500 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER	
Chapter 63	TRANSMISSION			
	NOTE			
	To increase the inspection interval to 2250 hours or 60 months, transmissions 206-040-002-115 and subsequent must have been operated with DOD-PRF-85734 oil since new or since the last overhaul (TB 206-04-179).			
Chapter 63	Remove transmission.			
	2. Remove mast assembly, oil filter, and housing assembly. Inspect oil filter for debris and metal contamination.			
BHT-206A/B-M&O BHT-206B3-CR&O	3. Remove top case, planetary, and sun gear.			
	<b>4.</b> Perform a sun gear special inspection. Inspect gearshaft splines.			
	5. Install sungear, planetary, and top case.			
	6. Install mast, oil filter, and transmission.			
Chapter 63	FREEWHEEL ASSEMBLY			
Chapter 63	Remove freewheel assembly.			
BHT-206A/B-M&O BHT-206B3-CR&O	2. Disassemble the freewheel assembly to the extent necessary to perform a visual inspection of the clutch assembly, inner shaft, and outer shaft. It is not necessary to remove the thrust bearing from the outer shaft. Remove all sealant and clean all parts. The stripping of paint is not required.			



## 5-22. 1500 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	TIAL OTHER
	3. Visually inspect clutch assembly, inner and outer race shaft assemblies, and bearings for serviceability.		
	4. Assemble freewheel assembly.		
Chapter 63	5. Install freewheel assembly.		

#### 5-23. 1500 HOURS OF COMPONENT OPERATION AND EVERY 50 HOURS THEREAFTER.

DATA	INSPECTION TASK DESCRIPTION	INIT	
REFERENCE		MECH	OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:TOTAL CYCLES:		
Chapter 62 ASB 206-93-74	SWASHPLATE SUPPORT 206-010-452-001/-005/-109.		
	NOTE		
	If windy conditions prevail, secure blades with tiedown to prevent excessive main rotor flapping.		
	1. Thoroughly clean swashplate support base area using solvent (C-304) to remove all dirt, grease and oil residue, then wipe dry. Visually inspect full circumference of fillet radius for cracks using a 10-power magnifying glass. Pay particular attention to aft side of swashplate support assembly.		
	2. If after accomplishment of step 1, a crack is suspected, carry out further inspection by dye penetrant inspection method. Paint finish may be removed as required in suspected area.		



### 5-23A. 2250 HOURS OR 60 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	ΓΙΑL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	TOTAL TIME:		
	SIGNATURE:		
	TRANSMISSION		
	NOTE		
	This inspection is applicable to transmission assemblies 206-040-002-115 and subsequent that have been operating with DOD-PRF-85734 oil since new or since last overhaul (TB 206-04-179).		
	If the transmission has been operated with MIL-PRF-7808 oil, the 1500 Hours of Component Operation scheduled inspection applies.		
Chapter 63	If installed on the helicopter, remove the transmission assembly.		
	2. Remove the mast and swashplate assembly from the transmission assembly.		
	3. Inspect oil filter for debris and metal contamination.		
BHT-206B3-CR&O	<b>4.</b> Remove the transmission top case, the planetary assembly, and the sun gear.		
	5. Visually examine all removed components for condition.		



## 5-23A. 2250 HOURS OR 60 MONTHS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	6. Insert a mirror between the spiral bevel gear edge and the lower case and use a bright light to examine the spiral bevel gear, input pinion gears, and surrounding areas for condition.		
	7. Reassemble the transmission.		
Chapter 63	8. Install the mast and swashplate assembly into the transmission assembly.		
	9. Apply sealant, primer, and paint to the required areas.		
	10. Install the transmission assembly into the helicopter.		
Chapter 12	<b>11.</b> Service the transmission with oil (DOD-PRF-85734).		



### 5-24. 3000 HOURS OF COMPONENT OPERATION

DATA REFERENCE	DATA REFERENCE INSPECTION TASK DESCRIPTION		
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
BHT-206A/B- SERIES-CR&O	TAIL ROTOR GEARBOX		
	NOTE		
	For the 206-040-402 gearbox, this inspection may be accomplished concurrent with 206-040-410-003 and -005 duplex bearing replacement at 3000 hours.  1. Perform backlash check of the gearbox prior to disassembly.  2. Remove input pinion and bearings. Remove output cap and oil level sight glass.  3. If this inspection is being done in conjunction with replacement of 206-040-410-003 and -005 bearing in 206-040-402-003 gearbox, removal of input pinion assembly is not required. Remove output cap, output shaft, and 206-040-410-003 and -005 duplex bearing after complying with step 1 above.  4. Inspect spiral bevel gear and input pinion gear for corrosion and chipped, broken or worn gear teeth. Inspect gear wear patterns.		



## 5-24. 3000 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	5. Visually inspect accessible areas of input pinion duplex bearing, input pinion roller alignment bearing and output shaft roller alignment bearing and race for roughness, spalling, scoring, pitting, flaking, broken or damaged retainers and for evidence of overheating, and corrosion.		
	<b>6.</b> Visually inspect studs and dowel pins in case assembly for security and damage. Replace damaged studs and/or dowel pins.		
	7. Inspect accessible areas of case and output cap for corrosion and damage.		
	8. Inspect sight glass for cracking, crazing or any condition which may obscure level or color of oil. Inspect oil level indicator for discoloration, peeling paint or evidence of a plastic film on painted side. Remove plastic film if present.		
	9. Check gearbox backlash. Backlash shall fall within overhaul limits if input pinion and spiral bevel gear are replaced.		



# 5-25. 12 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	MAIN ROTOR MAST		
Chapter 63 BHT-206A/B-M&O BHT-206B3-CR&O	<ol> <li>Inspect mast assembly internal surface (internal diameter) of mast for corrosion and condition of protective coating as follows:         <ul> <li>a. Remove mast nut, flap restraint kit (if installed), and cap plug. With the help of a bright light, inspect internal surface (internal diameter) of mast for corrosion and condition of protective coating.</li> <li>b. Install cap plug, flap restraint kit (if previously installed), and mast nut.</li> </ul> </li> </ol>		
TB 206-07-190	2. Check mast nut for torque (250 to 275 foot-pounds (339.0 to 372 Nm)) after 1 to 5 hours of flight operation.		



#### **SPECIAL INSPECTIONS**

#### 5-26. SPECIAL INSPECTIONS

Accomplish the following special inspections (Table 5-1) on the helicopter (paragraph 5-27 through paragraph 5-31):

- After fuel system maintenance and/or component change
- 1 to 5 hours after each installation
- 3 to 8 hours after each installation
- 10 to 25 hours after each installation
- 100 hours after each installation



Table 5-1. Special Inspections

	INSPECTION SCHEDULE					
COMPONENT	HOURS AFTER INITIAL INSTALLATION					
	1 TO 5 HOURS	3 TO 8 HOURS	10 TO 25 HOURS	100 ±10 HOURS	INITIAL	
Main Rotor Hub Mast Nut Torque Check (paragraph 5-28)	Х					
Pillow Block Retention Bolts Torque Check (paragraph 5-29)		X <u>∕₁</u>				
Tail Rotor Gearbox Torque Check (paragraph 5-30)			X <u>∕2</u>			
Swashplate Tilt Friction (paragraph 5-30)			X_4			
Disc Pack Coupling Torque Check (paragraph 5-30)			Х			
Power Plant Torque Check (paragraph 5-31)				X <u>/3</u>		
Tailboom Attachment Torque Check (paragraph 5-31)				Х		
Transmission Top Case Torque Check (paragraph 5-31)				Х		
Fuel System (paragraph 5-27)	Immediately after maintenance or component change \( \frac{1}{5} \)					

#### NOTES:



Retouch corrosion preventive compound and anti-slippage marks as required after torque check. Repeat torque check every 100 flight hours.



Torque check must be repeated every 10 to 25 hours until the torque is stabilized. After torque has stabilized, repeat torque check every 300 flight hours.



If fastener is improperly torqued:

- Inspect nuts and bolt threads, and shank for damage.
- · Inspect engine mounts and supporting structure for damage.
- 4

Repeat the swashplate tilt friction check every 300 flight hours.

<u>/</u>5\

Complete fuel system operational check immediately after fuel system maintenance or component change (paragraph 5-27).

Page 60 Rev. 6 7 DEC 2009 **ECCN EAR99** 

### 5-27. AFTER FUEL SYSTEM MAINTENANCE AND/OR COMPONENT CHANGE.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:		
	NOTE		
	Accomplish immediately after fuel system maintenance and/or component change/removal at an adequate maintenance facility.		
	FUEL SYSTEM.		:
	NOTE		
	Installation and removal of a fuel boost pump cartridge, upper or lower fuel quantity probe or fuel drain valve does not require this inspection.		
	If fuel system maintenance and/or component change/removal is performed at a site remote from an adequate maintenance facility, accomplish steps 1.c., 1.d., 1.e., and 3., or steps 2. and 3., as applicable, prior to flight. Upon return to an adequate maintenance facility, but not to exceed 10 flight hours, accomplish entire inspection.		
Chapter 28	1. When maintenance or component change/removal is conducted below top fitting of aft fuel cell immediately following fuel system maintenance and/or major component change/removal (boost pump assembly, check valve, fuel line or hoses), ground run helicopter and check for air and fuel leaks and for proper operation as follows:	!	
Chapter 12	a. Ensure all fuel has been drained from fuel cell.		
	<b>b.</b> Service fuel cell with 10 gallons (37.90 liters) of fuel.		
BHT-206A/B- FM	c. Perform normal engine starting and run-up checks.		
	<b>d.</b> Set throttle to full open and operate engine at 100% N2 for a minimum of 2 minutes with BOTH FUEL BOOST PUMPS OFF. If flameout or power loss occurs, refer to step 3.		
	e. Perform normal engine shutdown.		
	2. When maintenance and/or component change is conducted above top fitting of fuel cell, immediately following fuel system maintenance and/or component change/removal (fuel pressure transducer, fuel valve, schedule fuel component change/removal fuel line or hose), ground run helicopter and check for air or fuel leaks and for proper operation as follows:		
BHT-206A/B- FM	a. Perform normal engine start and runup checks.		

# 5-27. AFTER FUEL SYSTEM MAINTENANCE AND/OR COMPONENT CHANGE. (CONT)

DATA			TIAL .
REFERENCE	INSPECTION TASK DESCRIPTION	MECH	OTHER
	<b>b.</b> Set throttle to full open and operate engine at 100% N2 for a minimum of 2 minutes with BOTH FUEL BOOST PUMPS OFF. If flameout or power loss occurs, refer to step 3.		
	<b>3.</b> If flameout or power loss occurs, air is entering engine fuel system or an engine pneumatic leak exists. Malfunction must be corrected before commencing flight operations.		
	<b>a.</b> Verify fuel boost pump, check valve and fuel shutoff valve for proper operation.		
	<b>b.</b> Ensure all hoses and lines are serviceable and do not have cracked flares and that "B" nuts are correctly torqued.		
Allison 250 Series Operation and Maintenance Manual	c. Purge air from fuel system and accomplish pneumatic leak check.		



### 5-28. 1 TO 5 HOURS AFTER EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	MAIN ROTOR		
Chapter 62 TB 206-07-190	Torque check main rotor mast nut 250 to 275 foot-pounds (339.0 to 372 Nm) (TB 206-07-190).		



### 5-29. 3 TO 8 HOURS AFTER EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
ASB 206-97-90	INSPECTION TASK DESCRIPTION  DATE:		



### 5-30. 10 TO 25 HOURS AFTER EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	SWASHPLATE ASSEMBLY		
Chapter 62	Check swashplate tilt friction. Value must be between 15 to 32 pounds (67 to 142 N), if not within limits, adjust to 15 to 32 pounds (67 to 142 N) and check again.		
Chapter 65	DISC PACK COUPLING		
	Torque check disc pack coupling attaching hardware as follows:		
	1. Apply the minimum torque (50 inch-pounds (5.65 Nm)) required for the fasteners. If the fasteners do not move, the check is completed. Check torque seal and apply as required.		
	2. If the fastener(s) moved, do the steps that follow:		
	<b>a.</b> Remove the affected disc pack coupling and examine the bolts, nuts (minimum tare torque, refer to BHT-ALL-SPM) and washer for condition. Discard damaged parts.		
	<b>b.</b> Examine the disc pack coupling for condition. Discard damaged disc pack coupling.		
	c. Install the removed disc pack coupling and repeat torque check after 10 to 25 hours.		



### 5-30. 10 TO 25 HOURS AFTER EACH INSTALLATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Chapter 65	TAIL ROTOR GEARBOX		
	Torque check tail rotor gearbox retaining nuts 50 to 70 inch-pounds (5.6 to 7.9 Nm). Repeat every 10 to 25 hours until torque has stabilized.		



### 5-31. 100 HOURS AFTER EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 71	INSPECTION TASK DESCRIPTION  DATE:		· · · · · · · · · · · · · · · · · · ·
	c. Install new fastener if required, and apply torque.  Recheck torque at next 100 hours.		
	TAILBOOM		
	1. Torque check tailboom attachment nuts 360 to 390 inch-pounds (40.67 to 44.06 Nm).		
	TRANSMISSION		
Chapter 63	1. Replace oil filter element and oil. Inspect removed element for metal particles. If particles are found, investigate to determine cause.		



## 5-31. 100 HOURS AFTER EACH INSTALLATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TAL OTHER
	NOTE  If a nut is improperly torqued, remove and check tare torque, and replace as required. Recheck torque at next 100 hours.  2. Check transmission top case stud nuts for torque (50 to 70 inch-pounds (6 to 8 Nm)).		
BHT-ALL-SPM	3. Touch up paint finish as required.		



### 5-32. CONDITIONAL INSPECTIONS

Accomplish applicable Conditional Inspection (paragraph 5-33 through paragraph 5-40) of helicopter after:

- Hard Landing
- Sudden Stoppage Main Rotor
- Sudden Stoppage Tail Rotor

- Overspeed Main Rotor
- Overtorque
- Engine Compressor Stall or Surge
- Lightning Strike
- · Engine Overtemp

## 5-33. HARD LANDING.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY No.:		
	TOTAL TIME:TOTAL CYCLES:		
	HARD LANDING.		
	A hard landing is defined as any incident in which impact of helicopter with ground causes severe pitching of main rotor. Blades involved in this type of hard landing must be thoroughly inspected visually. If no obvious damage is discovered, blades may be retained in service for continued usage.		
	If, on a hard landing, either main rotor blade comes into contact with ground, tailboom, or other foreign object, both main rotor blades are to be regarded as having been involved in a Sudden Stoppage and must be returned to a blade repair station for inspection.		
	Airframe landing skids and crosstubes will deform and yield under load forces in excess of 2.5 G's. If cabin fuselage contacts the ground, G forces in the fuselage increase abruptly. If, following a hard landing cabin fuselage is resting on the ground or shows evidence of having touched the ground, it is considered to have sustained a 10 G load.		
	Components removed from helicopter for evaluation following a hard landing shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.		
Chapter 32	1. Inspect landing gear skid tubes and crosstubes for damage and deflection.		
BHT-ALL- SPM	2. Remove riveted or clamped crosstube support and accomplish NDI inspection of forward and aft crosstube.		
Chapter 53	3. Inspect crosstube attachment points on fuselage for damage or distortion.		
	<b>4.</b> Check all cowling, fairing and doors for proper fit and alignment. Misaligned cowling, fairing or doors may indicate a distorted fuselage, resulting in major stresses and damage to components.		
	5. Remove all cowlings and fairings necessary to perform a complete visual inspection.		
Allison 250 Series Operation and Maintenance Manual	<b>6.</b> Engine. Refer to Allison 250 Series Operation and Maintenance Manual for inspection instruction.		

## 5-33. HARD LANDING. (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
Chapter 29 and 67	7. Check for leaks in hydraulic system, interference or binding of hydraulic actuator and controls, and for satisfactory operation.		
Chapter 67	<b>8.</b> Perform complete visual inspection of the flight control system from pilot controls to main rotor head and check for bent or damaged tubes, bellcranks, and supports. Particular attention should be given to pitch link assemblies swaged ends for cracks and to swashplate pivot sleeve at lever attachment points for damage.		
	a. Remove and inspect suspected control tube for straightness by rolling on a surface plate or with use of a metal straight edge. On fixed control tubes swaged end must be concentric to tube within 0.06 inch (1.5 mm) (TIR). Scrap damaged control tube. If no damage is found, reinstall control tube.		
BHT-206A/B- SERIES- CR&O	<b>b.</b> If visual inspection reveals damage to swashplate and support assembly, accomplish the following:		
	(1) Overhaul swashplate and support assembly.		
BHT-206A/B- SERIES- CR&O	(2) Accomplish Conditional Overhaul Inspection of main rotor hub assembly.		
	(3) Overhaul drive collar, link, and lever.		
	(4) Overhaul all connecting control tubes, and scrap all connecting control bolts.		
	c. Inspect all bearings for smoothness, and axial and radial play.		
	<b>9.</b> Inspect 206-031-509 drag pin fitting for damage or distortion. Inspect four studs retaining drag pin fitting for looseness, damage and studs surrounding area on lower case for cracks.		
	<b>10.</b> Inspect transmission stop mount 206-031-510 where spike of drag pin fitting fitS into plate for damage or cracks. Check for loose or sheared rivets and check torque of bolts at following locations:		
	a. Eight rivets in stop plate. Four rivets are located on each side of hole.		
	<b>b.</b> Two bolts at each end and nine rivets in forward half of circular pattern around stop plate holder.		
	11. Inspect stop mount supporting structure and roof shell surrounding area for deformation and cracks.		
	<b>12.</b> Inspect structure with a 10-power magnifying glass around the transmission mounting points. Particular attention should be given to isolation mount and pylon supports attachment points to the box beam.		



## 5-33. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	13. Inspect isolation mount for damage.	
BHT-206A/B-M&O BHT-206B3-CR&O	<b>14.</b> If one or more inspection requirements in step 9 through step 13 reveal an unsatisfactory condition, a mast runout inspection shall be performed.	
	15. Deleted.	
	<b>16.</b> If damage in any inspection requirements of step 9 through step 15 is noted, main rotor hub assembly must be overhauled in accordance with Special Conditional Inspection criteria.	
	<b>17.</b> Inspect mast for indentions caused by static stop(s). If mast is damaged from an excessively hard contact with main rotor static stop, scrap mast pole and remove and overhaul the following components to ensure airworthiness:	
Chapter 62	a. Main rotor hub assembly	
Chapter 63	<b>b.</b> Transmission assembly	
	c. Main driveshaft assembly	
	d. Isolation mount	
	e. Remove main rotor blades and send to a Bell Helicopter Textron approved blade repair facility for evaluation.	
Chapter 53	<b>18.</b> Inspect engine mounts at fuselage attachment points for cracks.	
	<b>19.</b> Inspect tailboom for contact with main rotor blades. If damage is found, accomplish main rotor sudden stoppage inspection.	
	<b>20.</b> Inspect oil cooler blower shaft for straightness, and impeller and shaft assembly for balance.	

5-00-00 ECCN EAR99 7 DEC 2009 Rev. 6 Page 75



## 5-33. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
Chapter 64	<b>21.</b> Inspect tail rotor blades for damage. If damage is found, accomplish tail rotor sudden stoppage inspection.		
Chapter 53	<b>22.</b> Inspect tail skid tube and mounting for damage. Inspect tailboom internally and externally for cracks, distortion, and sheared or loose rivets. Inspect the tailboom attachment points for elongated bolt holes and damaged structure.		
	<b>23.</b> Inspect fuel and oil system for damage. During ground run, check fuel and oil systems for leaks.		
BHT-206A/B-M&O BHT-206B3-CR&O	<b>24.</b> If damage to fuselage structure or tailboom is such that a major repair alignment in a fixture is required, or if landing gear crosstubes permanent set exceeds limits, remove and overhaul the following components in accordance with special inspection requirements.		
Chapter 62	a. Main rotor hub assembly		
Chapter 67	<b>b.</b> Swashplate and support assembly with drive collar, link, and lever		
	c. All control tubes		
	d. Main rotor pitch link assemblies		
Chapter 63	e. Transmission and mast assembly		
	f. Main driveshaft		
	g. Freewheel assembly		
Chapter 65	h. Tail rotor driveshaft assembly		
	i. Tail rotor gearbox		
	j. Tail rotor hub and blade assembly		
Chapter 63	k. Isolation mount		
Chapter 62	I. Remove main rotor blade and send to a Bell Helicopter Textron approved blade repair facility for evaluation.		

Page 76 **ECCN EAR99** Rev. 6 7 DEC 2009



## 5-33. HARD LANDING (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	m. Replace all control bolts from hydraulic servo actuator to main rotor hub.		
BHT-206A-FM-1 BHT-206B-FM-1 BHT-206B3-FM-1	25. Provided no visual damage was found, start engine and check main rotor for evidence of 1/rev vibration and lateral balance while at flat pitch.		



### 5-34. SUDDEN STOPPAGE/ACCELERATION — MAIN ROTOR — POWER ON OR OFF

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	Sudden stoppage/acceleration is defined as any rapid deceleration or acceleration of drive system whether caused by seizure within drive system, sudden freewheel clutch engagement, impact of main rotor with the ground or with a foreign object of sufficient inertia to cause rapid deceleration.		
	NOTE		
	Components removed from helicopter for evaluation following a sudden stoppage/acceleration shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.		
BHT-206A/B-M&O BHT-206B3-CR&O	After sudden stoppage, inspect main rotor blade as follows:		
20020 Ortac	<b>a.</b> Remove tip cover plate from both main rotor blades.		
	<b>b.</b> Inspect blade skin and bonded doublers for visible damage.		
	<b>c.</b> Check tip weights. If any movement of tip weights has occurred, blade shall be scrapped.		
	2. After sudden stoppage of main rotor, remove both main rotor blades. Send blades to a Bell Helicopter Textron approved repair facility for evaluation.		



#### SUDDEN STOPPAGE/ACCELERATION — MAIN ROTOR — POWER ON OR OFF (CONT) 5-34.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	3. Remove the following components and visually inspect for evidence of torsional yielding, deformation, cracks, or other obvious damage that would render them non-repairable. Unless otherwise specified, conduct an overhaul and special accident/incident inspection of these components.		
	NOTE		
	If main rotor mast was severed during main rotor sudden stoppage/acceleration, main rotor hub assembly must be considered unserviceable and scrapped.		
Chapter 62	a. Main rotor hub assembly		
	NOTE		
	If main rotor mast was severed during a main rotor sudden stoppage/acceleration, the main rotor mast has sustained torsional yielding.		
	<b>b.</b> Concurrently with mast assembly overhaul, accomplish the following inspections:		
	(1) Check mast for torsional yielding by measuring the offset between the mast splines above and below the main rotor trunnion split cone groove using either of the following methods:		
	Sliding a 0.1600 inch (4.06 mm) diameter measuring pin across the upper and lower spline		
	Sliding a straight edge across the upper and lower unworn face of the spline (coast side of the spline)		

Page 80 Rev. 6 7 DEC 2009 **ECCN EAR99** 



## 5-34. SUDDEN STOPPAGE/ACCELERATION — MAIN ROTOR — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER	
	NOTE			
	If main rotor mast has evidence of torsional yielding, the mast assembly, transmission assembly, main driveshaft, and freewheel assembly (outer race, inner race, and clutch) shall be considered unserviceable and scrapped. Major damage to the mast assembly other than torsional yielding requires replacement of transmission top case. If transmission top case has to be scrapped, pylon mount spindles and mast bearings shall also be scrapped.			
	(2) Check mast TIR.			
Chapter 63	c. Transmission assembly			
Chapter 62	d. Swashplate assembly			
	e. Replace all control bolts from hydraulic servo actuator to main rotor hub.			
Chapter 67	<b>f.</b> All cyclic and collective control tubes from mixing lever to swashplate			
	g. Main rotor pitch link assemblies			
Chapter 63	h. Freewheel assembly			
	i. Main driveshaft assembly			
	j. Inspect transmission restraint and transmission mount system for condition and fuselage attachment points for cracks.			
Chapter 53	<b>k.</b> Inspect engine mounts at fuselage attachment points for cracks.			



## 5-34. SUDDEN STOPPAGE/ACCELERATION — MAIN ROTOR — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	If a tail rotor driveshaft has failed as a result of torsional overload, the forward short shaft, the aft short shaft, the fan shaft, the impeller, ALL hangers, driveshafts, adapters, and disc couplings shall be considered unserviceable and scrapped. Inspect hanger attachment points for cracks and distortion. Overhaul tail rotor gearbox to ensure airworthiness.  If a tail rotor driveshaft has been damaged by main rotor strike or damaged other than torsional overload, ALL tail rotor driveshafts, plus hanger assemblies, adapters, and disc couplings fore and aft of damaged area shall be considered unserviceable and scrapped. Inspect remaining hanger assemblies, adapters, and disc couplings according to step m and step n. Inspect hanger attachment points for cracks and distortion.		
Chapter 65	I. Inspect tail rotor driveshafts per Conditional Inspection. If any defect is detected to one driveshaft, scrap all bonded tail rotor driveshafts. If any defect is detected, scrap the defective riveted tail rotor driveshaft.      m. Inspect steel tail rotor driveshaft and steel adapters for cracks using magnetic particle inspection method.		
	n. Inspect tail rotor driveshaft hangers, disc couplings, and aluminum driveshaft adapters using fluorescent penetrant inspection method.		
	<b>4.</b> In addition to step I and related notes, all bonded tail rotor driveshafts shall be considered unserviceable and scrapped, if during a sudden stoppage/acceleration inspection, any of the following conditions that are attributable to sudden stoppage/acceleration are noted:		
	Any impact damage to a main rotor blade leading edge or lower skin, or any main rotor blade skin buckling or tears		
	Main rotor mast is sheared, power on or off, or with torsional yielding, or Total Indicated Runout (TIR) check exceeds limits		

5-00-00 Page 82 Rev. 6 7 DEC 2009 ECCN EAR99



## 5-34. SUDDEN STOPPAGE/ACCELERATION — MAIN ROTOR — POWER ON OR OFF (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	Any deformation of any coupling disc that results in gaps between laminates greater than 0.015 inch (0.381 mm)		
	Structural failure or distortion of any coupling disc bolts		
	Structural failure or distortion exceeding the specified limits of the tail rotor driveshaft steel or aluminum adapters		
	<b>5.</b> Refer to applicable Rolls-Royce 250 Series Operation and Maintenance Manual for sudden stoppage inspection requirements.		



### 5-35. SUDDEN STOPPAGE/ACCELERATION — TAIL ROTOR

DATA REFERENCE	A REFERENCE INSPECTION TASK DESCRIPTION		
	DATE:W.O  FACILITY:  HELICOPTER S/N:		
	TOTAL TIME:		
	SIGNATURE:		
	Sudden stoppage is defined as any rapid deceleration or acceleration of drive system whether caused by seizure within helicopter drive system, sudden freewheel clutch engagement, or by contact of tail rotor blades with ground, water, or with a foreign object of sufficient inertia to cause rapid deceleration.		
	CAUTION		
	DAMAGE TO TAIL ROTOR BLADE ASSEMBLY COULD BE PRESENT ALTHOUGH IT MAY NOT BE READILY DETECTED BY STANDARD VISUAL, DIMENSIONAL, AND MAGNETIC PARTICLE OR FLUORESCENT PENETRANT INSPECTION METHODS.		
	NOTE		
	Components removed from helicopter for evaluation following a sudden stoppage/acceleration shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.		
Chapter 64	Remove and scrap tail rotor hub and blade assembly.		



## 5-35. SUDDEN STOPPAGE/ACCELERATION — TAIL ROTOR (CONT)

	DATA REFERENCE	INS	SPECTION TASK DESCRIPTION	INIT MECH	
_	BHT-206A/B-M&O BHT-206B3-CR&O	2.	Overhaul the following components:		
			a. Tail rotor gearbox assembly		
			b. Freewheel assembly		
			c. Main driveshaft assembly		
			d. Tail rotor pitch change mechanism		
	BHT-206A/B-M&O BHT-206B3-CR&O		Inspect all tail rotor driveshaft, impeller, steel and aluminum pters, flexible coupling discs, and hangers using magnetic icle or fluorescent penetrant methods.		
		out spe bon	Visually inspect shafts for evidence of twisting. Check for of round and Total Indicated Runout (TIR) exceeding cified limits. Inspect bonds between tail rotor driveshaft and ded adapter for integrity. If any defect is detected, scrap all ded tail rotor driveshafts.		
		<b>5</b> . atta	Inspect tail rotor hanger support at tailboom and fuselage chment points for cracks.		
		6.	Inspect tail rotor hanger supports for cracks and distortion.		
			NOTE		
			If tail rotor driveshaft has failed as a result of torsional overload, ALL hangers, driveshafts, adapters, impellers, and disc couplings shall be considered unserviceable and scrapped. Inspect hanger attachment points for cracks and distortion. Ensure airworthiness of tail rotor gearbox by conducting a major overhaul.		
			If a tail rotor driveshaft has been damaged by main rotor strike or damage other than torsional overload, ALL bonded tail rotor driveshafts, plus hanger assemblies, adapters, and disc couplings fore and aft of damaged area shall be considered unserviceable and scrapped. Inspect remaining hanger assemblies, adapters, and disc couplings using magnetic particle or fluorescent penetrant inspection, whichever is applicable for cracks and distortion.		



## 5-35. SUDDEN STOPPAGE/ACCELERATION — TAIL ROTOR (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	NOTE		
	Step 7, substep a and substep b are not applicable to riveted tail rotor segmented driveshafts.		
BHT-206A/B-M&O BHT-206B-CR&O	<b>7.</b> In addition, ALL bonded tail rotor driveshafts shall be considered unserviceable and scrapped, if during a sudden stoppage inspection any of the following conditions, which are attributable to sudden stoppage, are noted:		
	<b>a.</b> Any impact damage to a tail rotor blade leading edge or skin, or any tail rotor blade skin buckling or tears		
	<b>b.</b> Any deformation of any coupling disc that results in gaps between laminates greater than 0.015 inch (0.38 mm)		
	c. Structural failure or distortion of any coupling disc bolts		
	d. Structural failure or distortion exceeding specified limits of tail rotor driveshaft steel or aluminum adapters		
	8. Inspect tailboom area of tail rotor gearbox mounting studs for cracks.		
	<b>9.</b> Inspect four tailboom attachment points for cracks, distortion damage, and security. Check torque on nuts of tailboom attachment bolts.		
BHT-206-SRM-1	<b>10.</b> Inspect tailboom internally for cracks, distortion, and loose or missing rivets. Check external skin of tailboom for cracks and waviness paying particular attention to area of horizontal stabilizer and attachment points of vertical fin.		
	11. Inspect horizontal stabilizer for cracks and looseness.		
BHT-206A/B-M&O BHT-206B3-CR&O	<b>12.</b> Inspect vertical fin for security and overall condition. Check tail skid for condition and security. Check mounting of anticollision light for security and condition.		
	<b>13.</b> Refer to applicable Rolls-Royce 250 Series Operation and Maintenance Manual for sudden stoppage inspection requirements.		



### 5-36. OVERSPEED MAIN ROTOR — 114% OR GREATER

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	Components removed from a helicopter for evaluation following an overspeed shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.  For main rotor overspeed above 107 up to 114%, visually inspect main rotor blades and tail rotor blades for skin wrinkles or damage. If damage or wrinkles are detected, accomplish complete overspeed inspection.  1. If main rotor overspeeds in excess of 114% RPM, proceed with the following:		
BHT-206A/B-M&O BHT-206B3-CR&O	a. Replacement of the following items is mandatory.		
	(1) Tension/torsion straps		
	(2) Inboard strap fittings and pins		
	(3) Latch bolts		



## 5-36. OVERSPEED MAIN ROTOR — 114% OR GREATER (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	b. Main rotor blades		
	(1) Dimensionally check main rotor blade retention bolt hole for indications of permanent deformation or damage. If inside diameter of bushing in hole is elongated in excess of 0.0015 inch (0.038 mm), remove blade from service and return it to a major overhaul facility for further inspection. Any evident looseness of bushing is cause for blade scrapping.		
BHT-206A/B-M&O BHT-206B3-CR&O	(2) Remove tip cap assembly from main rotor blade and inspect tip cap attaching screws for deformation. Any deformation of screws or elongation of mating holes in spar is cause for blade scrapping.		
	(3) Visually inspect main rotor blade for skin wrinkles or deformation. If any indication of wrinkles or deformation exist, return blade to a major overhaul facility for evaluation.		
	(4) If main rotor blades pass previous inspection, they are acceptable for continued service.		
	c. Tail rotor blades		
	(1) If one tail rotor blade of a pair has been damaged badly enough that metal has been torn or any bond plies have separated, then both blades and tail rotor hub must be scrapped.		
	(2) If contour of a blade has been damaged slightly (distortion), then both blades and tail rotor hub shall be scrapped.		
	(3) If any movement of tip block or root end balance weights has occurred, scrap tail rotor hub assembly and both tail rotor blades.		
	(4) If tip block is cracked, scrap tail rotor hub assembly and both tail rotor blades.		
	(5) If tail rotor blades pass above inspection requirements and no other discrepancies exist, blades are acceptable for continued service.		



## 5-36. OVERSPEED MAIN ROTOR — 114% OR GREATER (CONT)

INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
<b>d.</b> Main and tail rotor hub assemblies shall be inspected by conducting a special accident/incident overhaul inspection.		
<b>e.</b> Inspect oil cooler fan impeller for visible distortion, or cracks of brazed vane joints using dye penetrant inspection method.		
2. Refer to applicable Rolls-Royce 250 Series Operation and Maintenance Manual for inspection requirements.		
	<ul> <li>d. Main and tail rotor hub assemblies shall be inspected by conducting a special accident/incident overhaul inspection.</li> <li>e. Inspect oil cooler fan impeller for visible distortion, or cracks of brazed vane joints using dye penetrant inspection method.</li> <li>2. Refer to applicable Rolls-Royce 250 Series Operation and</li> </ul>	d. Main and tail rotor hub assemblies shall be inspected by conducting a special accident/incident overhaul inspection.  e. Inspect oil cooler fan impeller for visible distortion, or cracks of brazed vane joints using dye penetrant inspection method.  2. Refer to applicable Rolls-Royce 250 Series Operation and



### 5-37. OVERTORQUE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O  FACILITY:  HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	<u>OVERTORQUE — 110 TO 120%</u>		
	NOTE		
	Components removed from a helicopter for evaluation following an overtorque shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.		
	NOTE		
	If overtorque from 100 to 110% should occur, no inspection is required.		
	<b>1.</b> If overtorque from 110 to 120% should occur, perform the following:		
	<b>a.</b> Conduct a visual inspection of the following assemblies (installed on the helicopter) for any evidence of damage, deformation, yielding, etc.:		
BHT-206A/B-M&O BHT-206B3-CR&O	(1) Main rotor blades and attachments. Blade for skin wrinkles and bond separation. If any indications of wrinkles or deformation exists, send blades to a Bell Helicopter Textron repair facility for evaluation.		
	(2) Main rotor hub assembly $\sqrt[\Lambda]{}$		



## 5-37. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	(3) Transmission top case $1 \times 1 $		
	(4) Transmission mount spindles 1		
	(5) Cabin roof and beam at transmission mount support assemblies attachment points 1		
	(6) Cabin roof and beam at transmission isolation mount attachment point $\bigwedge_1 \bigwedge_4$		
	(7) Tail rotor hub, blades, and attachments $\frac{1}{4}$		
BHT-206A-FM-1 BHT-206B-FM-1 BHT-206B3-FM-1	<b>b.</b> Start engine and check main rotor, while in a flat pitch condition, for any evidence of a 1/rev vibration or lateral vibration.		
BHT-206A/B-M&O BHT-206B3-CR&O	c. If one or more of the previous inspection requirements, step a substep (1), substep (2) and/or step b, reveals an unsatisfactory condition, a mast runout inspection shall be performed.		
BHT-206A/B-M&O BHT-206B3-CR&O	d. Check mast torsional yielding as follows:		
	(1) Check offset between mast splines above and below main rotor split cone groove by sliding a 0.1600 inch (4.064 mm) diameter measuring pin along spline, across the groove.		
	or		
	(2) Slide a straight edge across upper and lower unworn face of spline grooves (coast side of spline).		
	e. Transmission electric chip detector		
	<b>f.</b> Remove, disassemble, and inspect main driveshaft couplings for indications of wear and overheating.		
	2. Refer to applicable Rolls-Royce 250 Series Operation and Maintenance Manual for applicable inspection requirements.		

5-00-00 Page 94 Rev. 6 7 DEC 2009 ECCN EAR99



## 5-37. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
BHT-206A/B-M&O BHT-206B-CR&O	3. After the first 25 hours following an overtorque, conduct a thorough visual inspection of the following:	
	a. Main rotor blades and attachments	
	<b>b.</b> Main rotor hub assembly	
	c. Main rotor mast	
	d. Transmission top case	
	e. Transmission spindles, pylon support links, and deck fittings	
	f. Cabin roof shell and beam at transmission mount attachment points	
	g. Transmission isolation mount attachment points	
	h. Transmission electric chip detectors	
	i. Tail rotor gearbox chip detectors and gearbox attachments	
	j. Tail rotor hub, blades, and attachments	
	OVERTORQUE — ABOVE 120%	
	Overtorque conditional inspection restriction may be changed to 130% and above provided transmission and tail rotor gearbox are serviced with DOD-L-87534 oil and torque gauge 206-075-739-115 is installed. (Helicopters S/N 4311 and subsequent will have torque gauge 206-075-739-115 installed.)	



## 5-37. OVERTORQUE (CONT)

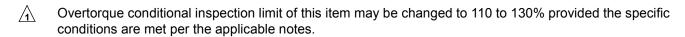
DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	NOTE  Components removed from helicopter for evaluation following an overtorque shall be evaluated as an interrelated group. Removal records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.  The overhaul inspection criteria in specific sections, including limit charts and other pertinent information, shall be used to establish that detail parts in each assembly are dimensionally within limits and have not yielded or become deformed.		
BHT-206A/B-M&O BHT-206B3-CR&O	<ul> <li>1. If an overtorque above 120% occurs, accomplish all inspections required for overtorque — 110 to 120% and, in addition, conduct the following inspection:</li> <li>a. Main rotor hub. Remove and accomplish special accident/incident overhaul inspections. 2 3 4</li> <li>b. Main rotor mast. Remove and accomplish special accident/incident overhaul inspections. 2 4 5</li> <li>c. Main transmission. Remove and overhaul. Replace top case of main transmission. During overhaul, inspect gear patterns for shifting and scuffing. 2 4 5 6</li> </ul>		
BHT-206A/B-M&O BHT-206B3-CR&O	<ul> <li>d. Driveshaft. Remove and overhaul.   2. Freewheel assembly. Remove and overhaul.</li> <li>2. Refer to applicable Rolls-Royce 250 Series Operation and Maintenance Manual for applicable inspection requirements.</li> <li>3. After the first 25 hours following an overtorque, conduct thorough inspection of the following: <ul> <li>a. Main rotor blades and attachments</li> <li>b. Main rotor hub assembly</li> <li>c. Main rotor mast</li> </ul> </li> </ul>		

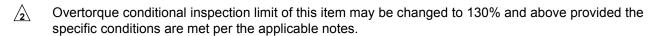


## 5-37. OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	d. Transmission top case		
	e. Transmission spindles, pylon support links, and deck fittings		
	<b>f.</b> Cabin roof shell and beam at transmission mount attachment points		
	g. Transmission isolation mount attachment points		
	h. Transmission electric chip detectors		
	i. Tail rotor gearbox chip detectors and gearbox attachments		
	j. Tail rotor hub, blades, and attachments		

### **NOTES:**





- $\sqrt{}_3$  If main rotor hub is 206-011-100-127 or subsequent.
- $\frac{1}{4}$  If 206-075-739-115 torque gauge is installed.
- $\uparrow_{5}$  If transmission is serviced with DOD-L-85734.
- $\stackrel{\wedge}{}_{6}$  If top case is installed on transmission 206-040-002-025 and subsequent.
- // If the main driveshaft is 206-040-015-103 or subsequent.



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	An engine compressor stall or surge can be described as a sharp rumble, a series of loud sharp pops, severe engine vibration, or a rapid rise in Turbine Outlet Temperature (TOT) depending on the severity of stall or surge. When a stall or surge is suspected, follow steps as dictated by reported conditions.		
	NOTE		
	The components removed from the helicopter for evaluation following a compressor stall or surge shall be evaluated as a matched group. The records accompanying each component shall cross reference part and serial numbers of other drive system components removed for evaluation.  1. Obtain a pilot's report of the circumstances related to the suspected compressor stall or surge to determine if it corresponds to one of the following conditions:  • If the compressor stall or surge occurred on the ground or in flight at any N <sub>R</sub> speed or torque setting, and there was no noticeable yaw of the helicopter, do Part I and Part II of this inspection.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	If the compressor stall or surge occurred on the ground or in flight at any N <sub>R</sub> speed or torque setting, and there was a noticeable yaw of the helicopter, do Part I, Part II, and Part III of this inspection.		
	PART I: INVESTIGATE CAUSE OF COMPRESSOR STALL OR SURGE		
	POWER PLANT		
	1. Examine the induction fairing for blockage. If the induction fairing is found obstructed, refer to the appropriate Rolls-Royce Operation and Maintenance Manual for further maintenance action. If no blockage is found, do step 2.		
	2. Remove the induction fairing and examine the compressor intake area as follows:		
Chapter 71	<b>a.</b> Examine the compressor rotor for contamination. If contamination is found, perform a compressor wash.		
	<b>b.</b> Inspect the compressor rotor for foreign object damages in accordance with the appropriate Rolls-Royce Operation and Maintenance Manual for proper action.		
	3. If step 1 and step 2 do not reveal an obvious cause for compressor stall or surge, refer to appropriate Rolls-Royce Operation and Maintenance Manual for further maintenance action.		



# 5-38. ENGINE COMPRESSOR STALL OR SURGE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	NOTE  Removal or dismantling of components is not required while performing the following inspection.  PART II: INSPECTION FOR COMPRESSOR STALL OR		
Chapter 63 Chapter 65	SURGE WITHOUT NOTICEABLE YAW  DRIVE SYSTEM		
	1. Examine the chip detectors of the transmission, freewheel assembly, and the tail rotor gearbox. If the chip detector shows signs of metal particles, perform a serviceability check. Components that fail the serviceability check shall be removed. Make an entry on the applicable components Historical Service Record, and attach a tag and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to an approved facility for overhaul.		
	2. Examine the tail rotor driveshafts for condition and security of attachment.		
	<b>3.</b> Examine the tail rotor disc pack couplings for cracks or gapping greater than 0.015 inch (0.38 mm).		
	<b>4.</b> Examine the tail rotor steel driveshaft and adapters for structural failure or distortion exceeding specified limits.		
	<b>5.</b> Examine the bondlines between adapters and tube of the long tail rotor driveshaft (if installed) for any evidence of cracks and voids.		
	<b>6.</b> Examine the bondlines on all bonded tail rotor driveshaft adapters (if installed) for any evidence of cracks and voids.		
	7. If any defect is detected in step 2 through step 6, all bonded tail rotor driveshafts shall be considered unserviceable and scrapped.		
	8. Examine the tail rotor driveshaft segments having riveted adapters (if installed) for condition.		

5-00-00 ECCN EAR99 7 DEC 2009 Rev. 6 Page 101



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	9. Examine the oil cooler shaft and forward short shaft for condition.		
	<b>10.</b> Examine the engine-to-transmission driveshaft for condition.		
	<b>11.</b> If no defects were detected that may have been caused by the compressor stall or surge, all drivetrain components are serviceable.		
Chapter 62 Chapter 67	ROTATING CONTROL SYSTEM		
	1. Examine the swashplate and support assembly, swashplate drive components, the tail rotor pitch change mechanism, and all rotating controls (main and tail). Replace any unserviceable parts as necessary.		
Chapter 64	TAIL ROTOR HUB AND BLADES		
	1. Examine the tail rotor hub assembly for condition. If any damage suspected to be related to the compressor stall or surge is found, remove the tail rotor hub assembly. Make an entry on the Historical Service Record, and attach a tag on the tail rotor hub assembly and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/ SURGE". Send the hub to an approved facility for overhaul.		
	2. Examine the tail rotor blade(s) for condition. If any damage suspected to be related to the compressor stall or surge is found, remove the tail rotor blade(s). Make an entry on the Historical Service Record, and attach a tag on the tail rotor blade(s) and write "THIS BLADE WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the tail rotor blade(s) assembly to a Bell Helicopter Textron approved rotor blade repair facility for further inspection and repair.		
	3. Examine the tail rotor blade bolts for security of attachment. If damage suspected to be related to the compressor stall or surge is found, discard them.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	ΓIAL OTHER
	4. If any defect is detected in step 1 through step 3, all bonded tail rotor driveshafts shall be considered unserviceable and scrapped.		
Chapter 62	MAIN ROTOR HUB AND BLADES		
	1. Examine the main rotor blades for damage. Check for wrinkled skin, delamination, deformation, and cracks.		
	2. If any blade has visible damage suspected to be related to the compressor stall or surge, make an entry on the Historical Service Record, and attach a tag on blades and write "THIS BLADE WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the blade(s) to a Bell Helicopter Textron approved rotor blade repair facility for further inspection and repair.		
	3. If no defects were detected on any blade, the blade(s) are serviceable.		
	NOTE		
	This inspection does not require disassembly or removal from the helicopter.		
	4. Examine the main rotor hub for condition. If any damage is suspected to be related to the compressor stall or surge, remove the main rotor hub assembly. Make an entry on the Historical Service Record, and attach a tag on the main rotor hub and write "THIS MAIN ROTOR HUB ASSEMBLY WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.		
	5. If no defects were detected on main rotor hub, the main rotor hub is serviceable.		
	<b>6.</b> If defects were detected in step 1, step 2, and step 4, discard all bonded tail rotor driveshafts and perform a main rotor sudden stoppage inspection.		



#### **ENGINE COMPRESSOR STALL OR SURGE (CONT)** 5-38.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	SPECIAL INSPECTION		
	After 25 hours of operation, examine chip detectors of transmission, freewheel assembly, and tail rotor gearbox. If the chip detector shows signs of metal particles, perform a serviceability check. Components that fail the serviceability check shall be removed. Make an entry on the applicable components Historical Service Record, and attach a tag and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.		
	PART III: INSPECTION FOR COMPRESSOR STALL OR SURGE WITH NOTICEABLE YAW		
	CAUTION		
	WHEN A COMPRESSOR STALL OR SURGE WITH NOTICEABLE YAW HAS OCCURRED, DISCARD ALL TAIL ROTOR BONDED DRIVESHAFTS.		
BHT-206B3-CR&O	ENGINE-TO-TRANSMISSION DRIVESHAFT		
	Remove and examine the engine-to-transmission driveshaft for condition.		
	2. If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the driveshaft and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the driveshaft to a Bell Helicopter Textron CPR for evaluation.		
	3. If no defects were detected, return the engine-to-transmission driveshaft to service.		
BHT-206A/B-M&O BHT206B3-CR&O	TRANSMISSION ASSEMBLY		
	Remove the transmission input pinion and triplex bearing.		

Page 104 Rev. 6 7 DEC 2009 **ECCN EAR99** 



		OTHER
<b>2.</b> Inspect the following gear teeth for scoring and other mechanical damage.		
a. Input pinion gear		
<b>b.</b> Main input driven bevel gear		
<b>3.</b> If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the transmission assembly and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.		
<b>4.</b> If no defects were detected on the gears, the transmission assembly is serviceable.		
TAIL ROTOR GEARBOX		
1. Remove the tail rotor gearbox input pinion.		
<b>2.</b> Inspect the following gear teeth for scoring and other mechanical damage.		
a. Input pinion gear		
<b>b.</b> Spiral bevel gear		
<b>3.</b> If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the tail rotor gearbox and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the driveshaft to a Bell Helicopter Textron approved facility for overhaul.		
<b>4.</b> If no defects were detected on the gears, the tail rotor gearbox is serviceable.		
	<ul> <li>a. Input pinion gear</li> <li>b. Main input driven bevel gear</li> <li>3. If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the transmission assembly and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.</li> <li>4. If no defects were detected on the gears, the transmission assembly is serviceable.</li> <li>TAIL ROTOR GEARBOX</li> <li>1. Remove the tail rotor gearbox input pinion.</li> <li>2. Inspect the following gear teeth for scoring and other mechanical damage.</li> <li>a. Input pinion gear</li> <li>b. Spiral bevel gear</li> <li>3. If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the tail rotor gearbox and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the driveshaft to a Bell Helicopter Textron approved facility for overhaul.</li> <li>4. If no defects were detected on the gears, the tail rotor</li> </ul>	a. Input pinion gear  b. Main input driven bevel gear  3. If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the transmission assembly and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.  4. If no defects were detected on the gears, the transmission assembly is serviceable.  TAIL ROTOR GEARBOX  1. Remove the tail rotor gearbox input pinion.  2. Inspect the following gear teeth for scoring and other mechanical damage.  a. Input pinion gear  b. Spiral bevel gear  3. If any damage suspected to be related to the compressor stall or surge is found, make an entry on the Historical Service Record, and attach a tag on the tail rotor gearbox and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the driveshaft to a Bell Helicopter Textron approved facility for overhaul.  4. If no defects were detected on the gears, the tail rotor



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Chapter 53	<u>FUSELAGE</u>		
	1. Examine the complete tailboom structure for distortion, buckles, cracks in the skin, and sheared or loose rivets.		
	2. Inspect tailboom attachment fittings for cracks.		
	3. Inspect the vertical fin for condition and security of attachment.		
Chapter 63 Chapter 65	GROUND RUN		
BHT-206A-FM-1 BHT-206B-FM-1 BHT-206B3-FM-1	1. Perform a ground run for a minimum of 30 minutes with the helicopter light on its skids. Remove and examine the chip detectors of the transmission assembly, freewheel assembly, and tail rotor gearbox.		
	2. If the chip detector shows signs of metal particles, perform a serviceability check. Components that fail the serviceability check shall be removed. Make an entry on the applicable components Historical Service Record, and attach a tag and write "THIS COMPONENT WAS REMOVED FROM SERVICE BECAUSE OF A COMPRESSOR STALL/SURGE". Send the component to a Bell Helicopter Textron approved facility for overhaul.		
	<b>3.</b> If no metal particles were found, the transmission assembly, freewheel assembly, and/or tail rotor gearbox are serviceable.		



## 5-39. LIGHTNING STRIKE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	<u>LIGHTNING STRIKE</u>		
	Because lightning behavior is difficult to predict, conduct a thorough inspection of entire helicopter. Lightning damage may appear as burn marks, heat discoloration, arc marks, or small weld marks (where metal has melted and resolidified). Honeycomb and other composite materials may exhibit delamination.		
	NOTE		
	In all of the following instances, if significant damage has been found in any area, inspection shall be expanded in those areas until it extends beyond the zone of damage.		
	Any damage found anywhere on helicopter shall be recorded in detail stating lightning strike as reason for removal. Copies of these records shall be provided along with any component returned or overhauled to assist overhauling facility in evaluating component.		



## 5-39. LIGHTNING STRIKE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TAL OTHER
	1. Visually inspect all external surfaces of helicopter paying particular attention to main rotor blades and hub, main rotor mast and controls, transmission and mounts, power plant and mounts, main and tail rotor driveshafts, tail rotor gearbox, tail rotor blades and hub, vertical fin and horizontal stabilizer. Inspect landing gear skid tubes, crosstubes, and their fuselage attachment points. Check electrical instruments and systems. Check standby compass for erroneous indications. Remove and overhaul defective and/or damaged electrical instruments and systems.		
	2. If visual indications of damage are present, proceed as follows:		
	NOTE		
	Evaluate components removed from helicopter following a lightning strike as an interrelated group.  Make entries in component records to cross reference part and serial numbers of other drive system components removed for evaluation.		
	<b>a.</b> Remove and visually inspect main rotor blades. Scrap blades if any of the following indications show:		
	(1) Inspect blades for signs of burns and arcing at tip cap, root end closure, buffer pads, and blade bolt bushings. Burn marks can be very minute.		
	(2) Inspect main rotor blade bonded areas for debonding.		
	<b>b.</b> Remove main rotor hub for overhaul.		
	c. Remove transmission and mast assembly for overhaul.		
	<b>d.</b> Remove main driveshaft and freewheel unit for overhaul.		
	<b>e.</b> Inspect tail rotor blades and hub. Scrap blades if indications of burns or debonding are present. Remove tail rotor hub for overhaul.		

5-00-00 Page 108 Rev. 6 7 DEC 2009 ECCN EAR99



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	f. Remove tail rotor driveshaft bearing hangers and tail rotor gearbox for overhaul.		
	g. Check vertical fin for evidence of burning or debonding.		
	h. Inspect tailboom fitting for indication of arcing burns around mounting points of tail rotor gearbox and vertical fin.		
	NOTE		
	If no visual indications of damage are found, check all ferrous dynamic components by magnetometer with a range no larger than ±5 gauss. Point the arrow within 0.5 inch (12.7 mm) of the component. If parts of any component have a reading that is greater than 1 gauss, degauss these components.		
	3. If no indications of damage are found:		
BHT-206A/B-M&O BHT-206B3-CR&O	a. Remove main rotor grips.		
	(1) Visually inspect needle bearings for signs of electrical arcing, burning, or delamination.		
	(2) Visually check pitch horns and trunnion bearing connections for arcing burns.		
	(3) If indications of arcing or burning are present, overhaul main rotor hub assembly and scrap pitch link and all attaching hardware.		
	(4) If no indications are found, reassemble main rotor hub and return to service.		
	<b>b.</b> Remove main rotor mast assembly. Without removing bearing from mast, inspect visible portions of bearing for signs of electrical arcing or burning. Rotate bearing during inspection. Check bearing for smooth rotation. Visually inspect lower mast bearing race and driving spline on mast for signs of arcing or burning.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	(1) If indications of arcing, burning, or roughness of bearing are present, remove transmission and mast assembly, and freewheel unit, and return for overhaul.		
	(2) Deleted.		
	<b>c.</b> Remove transmission top case and inspect for entry and exit of lightning strike. Special attention should be given to planetary pinion and sun gear, ring gear, spiral bevel gear, and quill pinion. Rotate all bearings for smooth rotation and damage.		
	(1) If indications of arcing, burning, or roughness of bearing are present, remove transmission, mast assembly, and freewheel unit, and return for overhaul.		
BHT-206A/B-M&O BHT-206B3-CR&O	(2) If no indications of arcing are found, reassemble transmission and mast assembly, and return to limited service.		
	(3) After 5 hours, remove the chip detectors and filter, and inspect for chips.		
	(a) If no chip indications are found, return transmission to full service.		
	<b>(b)</b> If chip indications are found, remove transmission, mast assembly, and freewheel unit, and return for overhaul.		
	<b>d.</b> Inspect pylon and transmission mount fittings and engine mounts.		
	(1) Visually inspect exterior surfaces for evidence of arcing or burning. Special attention should be given to contact surfaces of transmission and engine to their mounting systems and of mounting systems to airframe.		
	(2) If indications of arcing or burning are present, overhaul parts.		
	e. Remove output quill assembly from tail rotor gearbox. Visually inspect gear teeth for signs of electrical arcing or burning. Rotate tail rotor mast to check for smooth rotation of bearings.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITI MECH	AL OTHER
	(1) If evidence of arcing or burning is found, or if bearings do not rotate smoothly, remove gearbox and return it for overhaul.		
	(2) If no indications of damage are found, and if bearings rotate smoothly, reassemble gearbox and return it to limited service.		
	(3) After 5 hours, remove chip detector and inspect for chips.		
	(a) If no chip indications are found, return gearbox to full service.		
	<b>(b)</b> If chip indications are found, return gearbox for overhaul.		
BHT-206B3-CR&O	<b>f.</b> Inspect main driveshaft inner and outer couplings for evidence of arcing or burning on all gear teeth.		
	(1) If no evidence of arcing is found, reassemble driveshaft and return to service.		
	(2) Parts that exhibit arcing or burning shall be scrapped.		
	(3) If indications of arcing or burning are present on the main driveshaft or on any component of the tail rotor driveshaft, return the freewheel for overhaul.		
	<b>g.</b> Disassemble swashplate and support assembly. Visually inspect for evidence of burning or arcing. Inspect bearings for smooth rotation and all hardware for evidence of arcing.		
	(1) If indications of arcing or burning are present, or if bearings do not rotate smoothly, overhaul swashplate assembly. Replace the affected hardware.		
	(2) If no indications are found, assemble the swashplate assembly and return to service.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	h. Inspect tailboom, horizontal stabilizer, and vertical fin for evidence of arcing, burning, or debonding paying particular attention to area around the mounting points for the tail rotor driveshaft hangers and tail rotor gearbox.		
	i. Refer to applicable Rolls Royce 250 Series Operation and Maintenance Manual for applicable inspection requirements.		



### 5-40. ENGINE OVERTEMP

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
Rolls-Royce 250 Series Operation and Maintenance Manual	<ul> <li>ENGINE OVERTEMP</li> <li>— Inspect.</li> <li>1. Perform hot end inspection of power plant assembly if start or transient turbine outlet temperature limits have been exceeded.</li> </ul>		



## 5-40A. PYLON WHIRL

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:		
	PYLON WHIRL  NOTE  Perform pylon whirl inspection following pilot report or evidence of abnormal landing, excessive slope landing, operation in severe turbulence, low rotor RPM during flight (power ON or OFF), rapid and extreme cyclic input, excessive spike knock, or main driveshaft contact with isolation mount.		
Chapter 63	1. Do a pylon whirl inspection.		



### **COMPONENT OVERHAUL SCHEDULE**

#### 5-41. COMPONENT OVERHAUL SCHEDULE

The Component Overhaul Schedule (Table 5-2) provides the time interval between overhaul for each applicable helicopter component.



DO NOT APPLY TOLERANCES TO PARTS WITH A LIMITED AIRWORTHINESS LIFE (CHAPTER 4).



DO NOT EXCEED RETIREMENT LIFE FOR CRITICAL COMPONENTS. REFER TO AIRWORTHINESS LIMITATIONS SCHEDULE (CHAPTER 4).

SOME PARTS INSTALLED AS ORIGINAL EQUIPMENT ON MILITARY HELICOPTERS MAY HAVE A LOWER AIRWORTHINESS LIFE AND/OR OVERHAUL SCHEDULE THAN WHEN USED ON A COMMERCIAL HELICOPTER. CONSEQUENTLY, PARTS THAT HAVE BEEN USED ON MILITARY HELICOPTERS SHOULD NOT BE USED ON COMMERCIAL HELICOPTERS.



OVERHAUL SCHEDULE FOR SOME KIT COMPONENTS AND/OR PARTS IS NOT COVERED IN THIS SCHEDULE. REFER TO APPLICABLE SERVICE INSTRUCTIONS FOR KIT COMPONENTS SCHEDULE.

#### NOTE

Refer to paragraph 5-6 for information on inspection and overhaul tolerance.

#### NOTE

Neither assignment of a time period for overhaul of a component or failure to assign a time period for overhaul of component constitutes warranty of any kind. The only warranty applicable to helicopter and any component is the warranty included in Purchase Agreement for helicopter or component.

The overhaul interval specified for any given part number contained in this Component Overhaul Schedule applies to all successive dash numbers for that item, unless otherwise specified.

Table 5-2. Component Overhaul Schedule

NOMENCLATURE	PART NUMBER	OVERHAUL INTERVAL (HOURS)
	MAIN ROTOR CONTROLS	
Swashplate and Support	206-010-450-005	4800 hours
	MAIN ROTOR HUB	
Hub Assembly	206-010-100-003	1200 hours
Hub Assembly	206-011-100-001/-003/-005/-007/-011/-017/-021	1200 hours

5-00-00 ECCN EAR99 8 APR 2010 Rev. 10 Page 115



Table 5-2. Component Overhaul Schedule (Cont)

NOMENCLATURE	PART NUMBER	OVERHAUL INTERVAL (HOURS)
,	MAIN ROTOR HUB (CONT)	
Hub Assembly	206-011-100-103/-107	2400 hours
Hub Assembly	206-011-100-127	<u>∕₂</u> 1200 hours
Hub Assembly	206-011-100-137	2400 hours
	POWER TRAIN	
Mast Assembly	206-040-002-007	3000 hours
Transmission (without electrical chip detector)	206-040-002-005/-013/-015	1200 hours
Transmission (with electrical chip detector)	206-040-002-005/-013/-015	2400 hours
Transmission	206-040-002-025	4500 hours
Freewheel Assembly	206-040-230-011	4 1200 hours
Freewheel Assembly	206-040-270-001	3000 hours
	TAIL ROTOR SYSTEM	
Tail Rotor Hub Assembly	206-010-701-013	1200 hours
Tail Rotor Hub Assembly	206-011-801-001	1200 hours
Tail Rotor Hub Assembly	206-011-810-003/-009	<u></u>
Tail Rotor Hub Assembly	206-011-810-015	2400 hours
Tail Rotor Hub Assembly	206-011-810-119	1200 hours
Tail Rotor Hub Assembly	206-011-810-125/-139/-153	
Tail Rotor Gearbox	206-040-400-003	$\sqrt{_3}$ 1200 hours
Tail Rotor Gearbox	206-961-401-001	$\sqrt{_3}$ 1200 hours
Tail Rotor Gearbox	206-040-402-003	6000 hours
	HYDRAULIC SYSTEM	
Hydraulic Pump and Reservoir	206-076-022-001	3600 hours
Hydraulic Servo Actuator	206-076-025-001	2400 hours



Table 5-2. Component Overhaul Schedule (Cont)

NOMENCLATURE	PART NUMBER 1	OVERHAUL INTERVAL (HOURS)
	HYDRAULIC SYSTEM (CONT)	
Hydraulic Servo Actuator	206-076-031-001/-003/-005	1200 hours
Hydraulic Servo Actuator	206-076-031-007	2400 hours
Hydraulic Servo Actuator	206-076-031-013/-015/-017/-021/-023/-107/-109	3600 hours
Hydraulic Servo Actuator	HR41103650-007/-009	2400 hours
Hydraulic Servo Actuator	HR41103750-002/-003/-007/-009/-017	2400 hours
	POWER PLANT	
Rolls-Royce Engine	250-C18	Refer to Rolls-Royce 250-C18 Series Operation and Maintenance Manual, 5W2
	250-C20/-C20B/-C20J	Refer to Rolls-Royce 250-C20 Series Operation and Maintenance Manual, 10W2
	STARTER GENERATORS	
Starter Generator	ALL	1000 hours
	CARGO HOOK KIT	
Cargo Hook Unit		<u>/5</u> \
NOTES:		

- The operating time specified for overhaul of any given part number listed applies to all successive dash numbers for that component, unless otherwise specified.
- The overhaul interval of the main rotor hub assembly 206-011-100-127 may be increased to 2400 hours provided main rotor yoke 206-011-149-105 is installed.
- The overhaul interval of 206-040-400 and 206-961-401 tail rotor gearbox assembly may be increased to 6000 hours with indicating chip detector system installed and operational.
- The overhaul interval of 206-040-230 freewheel assembly may be increased to 3000 hours provided clutch assembly CL-41742-1 or CL-42250-1 is installed.
- $\stackrel{\wedge}{}_{5}$  Refer to applicable Service Instruction.



## Table 5-2. Component Overhaul Schedule (Cont)

# NOTES (CONT):

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Refer to ASB 206-80-12, dated 9 September 1980.

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Refer to TB 206-86-115, dated 27 Februrary 1986.

Page 118 Rev. 10 8 APR 2010 ECCN EAR99