

# CHAPTER 5 — INSPECTIONS AND COMPONENT OVERHAUL SCHEDULE

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#### INSPECTIONS AND COMPONENT OVERHAUL SCHEDULE

#### 5-1. GENERAL

This chapter contains the requirements for the Scheduled, Special, and Conditional Inspections and a Component Overhaul Schedule.

These inspection requirements constitute an approved inspection program for the Bell Helicopter Model 212. For the convenience of the operator, two separate Scheduled Inspections are provided as follows:

Scheduled Inspections — Part A consists of a daily inspection, 100 hour/12 calendar month inspection, 1000 hour inspection, and a 3000 hour/5 year inspection.

Scheduled Inspections — Part B consists of a 25 hour/ 30 day inspection, 300 hour inspection, 600 hour/ 12 month inspection, and a 3000 hour/5 year inspection.

Either Part A or Part B inspection program may be utilized. However, once a helicopter has been started on an inspection program, it shall be maintained on that program except as follows:

If a helicopter is being inspected on the Part A inspection program and it is preferable to change to the Part B program, a complete Part A — 1000 Hour Inspection shall be accomplished. The helicopter may then be changed to the Part B inspection program beginning with a 25 Hour/15 Day Inspection.

If a helicopter is being inspected on the Part B inspection program and it is preferable to change to the Part A program, a complete Part B — 600 Hour/12 Month Inspection shall be accomplished. The helicopter may then be changed to the Part A inspection program beginning with a Daily Inspection.

#### **NOTE**

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

Time between overhauls and inspection periods is based upon experience, testing, and engineering judgement, and is subject to change at the sole discretion of Bell Helicopter Textron or an appropriate government agency.

The inspection intervals designated herein are the maximum allowable and should not be exceeded. When unusual local conditions such as environmental conditions, utilization, etc. dictate, it is the responsibility of the operator to increase the scope and frequency of inspections as necessary to ensure safe operation.

The tolerance for scheduled inspections, special inspections, or overhaul intervals unless otherwise stated, is 10% or up to a maximum of 100 hours operating time/30 days calendar time, whichever is less. Scheduled inspections, special inspections, or overhaul intervals required beyond the stated tolerances must be approved by Product Support Engineering. The tolerance is established for maintenance scheduling convenience only. When an inspection is done more than 10% early, subsequent inspections will be advanced as required to not exceed the maximum tolerance. Concurrence and final approval of inspection interval tolerance by the governing civil aviation authority is the responsibility of the owner/operator.

Calendar and hourly inspections shall be a visual and thorough searching inspection to determine the airworthiness of the helicopter and components. The inspection shall be conducted by qualified personnel and in accordance with quality standard aircraft practices and appropriate Maintenance Manuals. Compliance with all applicable Alert Service Bulletins (ASB) and Airworthiness Directives (AD) is mandatory.

#### NOTE

Component operating time records are required for components that have scheduled maintenance actions that differ from the airframe. It is the operator's responsibility to maintain component records and perform the required maintenance actions.

Inspection requirements do not include specific inspections required by the FAA or other government



regulatory authorities. Refer to applicable FARs or other government regulatory authorities inspection requirements for specific inspections.

Crash damage: In view of the many possible combinations resulting in crash damage, it is not possible to include specific repair schemes in this category. Crash damage must be evaluated for individual situations and repairs carried out in accordance with the degree of damage to the specific part and the appropriate repair instructions in this manual. It is recommended that Product Support Engineering be contacted for assistance with crash damage evaluation.

Lubrication and service requirements are in addition to those stated herein. Refer to lubrication chart and servicing diagram (Chapter 12).

For detailed inspection requirements of installed kits not found in this manual, refer to appropriate Service Instruction (SI).

Prior to inspection, remove or open necessary cowling, fairings, inspection doors and panels.

#### 5-2. **DEFINITIONS**

#### NOTE

The words CHECK and INSPECT are used synonymously in this chapter. It is not intended that a different meaning be applied when one or the other is used.

Inspect — Determine condition relative to an established standard.

Condition — The state of being of an item as related to serviceable or unserviceable standard.

Standard — An established rule or measure to determine condition.

Damage — Physical deterioration whereby the standard renders the condition or an item acceptable or not acceptable for continuous use.

Preventive maintenance — Simple or minor preservation and the replacement of small standard parts not involving complex assembly operations.

Maintenance — Inspection, overhaul, repair, preservation, and the replacement of parts, but excludes preventive maintenance.

Operating time — Time required to be recorded in historical record sheets or helicopter logs. Operating time to be recorded may be identified as follows:

- Time in service Time from the moment a helicopter leaves the surface of the earth until it touches down at the next point of landing. Time during which the engine and rotor are turning with the helicopter on the ground is not taken into account.
- Calendar time Elapse time starts the day
  the inspection is accomplished, 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 shall be recorded without interruption.
  Removal of the component or storage of the
  helicopter etc. does not stop calendar time.

Planned event — Occurrence of interval in which a specific action is to be taken as in the case of preventive maintenance, scheduled overhaul, or replacement in accordance with maximum airworthiness life guidelines.

#### 5-3. INSPECTIONS

Scheduled inspections — Part A consists of the following:

- Daily inspection Accomplish daily before flight operation.
- 100 hours/12 calendar months Accomplish each 100 hours of flight operation or 12 calendar months, whichever comes first.
- 1000 hours Accomplish each 1000 hours of flight operation.
- 3000 hours/5 years Accomplish each 3000 hours of flight operation or each 60 calendar months, whichever comes first.



Scheduled inspections — Part B consists of the following:

- 25 hours/30 days Accomplish each 25 hours of flight operation or each 30 days, whichever comes first.
- 300 hours Accomplish each 300 hours of flight operation.
- 600 hours/12 months Accomplish each 600 hours of flight operation or each 12 calendar months, whichever comes first.
- 3000 hours/5 years Accomplish each 3000 hours of flight operation or each 60 calendar months, whichever comes first.

Special inspections — Required for certain systems or components at other than scheduled inspection time intervals.

Conditional inspections — Required for certain systems, and/or components after unusual events, such as hard landings or sudden stoppage of rotor, etc.



ALL PARTS REMOVED, DUE TO REACHING THEIR LIMITS OR AS A RESULT OF AN ACCIDENT/INCIDENT INSPECTION AND DEEMED UNAIRWORTHY, SHALL BE PERMANENTLY MARKED AS SCRAP OR PHYSICALLY DESTROYED TO THE EXTENT THAT THERE IS NO CHANCE OF REPAIR OR INSTALLATION ON ANY HELICOPTER OR COMPONENT.

#### NOTE

For conditional inspections applying specifically to the engine, refer to Pratt & Whitney PT6T-3 Maintenance Manual for requirements.

Component overhaul limitations — Overhaul components in accordance with overhaul schedule.

Airworthiness limitations — Replace components in accordance with Airworthiness Limitations Schedule (Chapter 4).



#### 5-4. SCHEDULED INSPECTIONS

Part A — Inspect helicopter daily, each 100 hours/12 calendar months, each 1000 hours, each 3000 hours/5 years.

Part B — Inspect helicopter each 25 hours/30 days, each 300 hours, each 600 hours/12 calendar months, each 3000 hours/5 years.



#### 5-5. DAILY INSPECTION — PART A

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	NOTE  For helicopters on the Part A inspection program, accomplish the following checks daily before flight		
	operation.		
	GENERAL		
	1. Each listed inspection item or maintenance function is to be performed in accordance with the referenced Maintenance Manual or BHT-212-CR&O manual chapter specified.		
	2. Refer to the Pratt & Whitney PT6T-3 Maintenance Manual for engine inspection requirements.		
	PRELIMINARY REQUIREMENTS		
Corrosion Control Guide, CSSD-PSE-87-001	Use medium helicopter corrosion control guide to establish helicopter corrosion control program.		
Chapter 4	2. Replace all finite life components that have completed published operating limitations.		
Chapter 5	3. Overhaul all components that have completed published overhaul periods.		
Chapter 12	4. Lubricate and service helicopter as required.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 5	5. Review Special Inspections and carry out applicable inspections.		
	<b>6.</b> Examine all inspection windows and sight glasses for cracking, crazing, and discoloration. If any of these conditions are present the part must be removed and replaced prior to returning helicopter for service.		
Service Instructions (SI)	7. Comply with all inspections and test requirements of all installed kits.		
Chapter 21	BLEED AIR HEATING SYSTEM COMPONENTS		
	1. Visually inspect heater compartment for cleanliness, condition, and security of heating system components, wiring, ducts, supports, and structure for damage and corrosion.		
	<b>2.</b> Visually inspect overhead ventilating system components for condition and security.		
	3. Visually inspect heat/vent air ducts for condition and security.		
	<b>4.</b> Visually inspect ventilation/defog components for condition and security.		
Chapter 25	CREW/PASSENGER SEATS		
	Visually inspect crew seats for condition, security, and operation.		
	2. Visually inspect crew seats restraints for condition, security, and operation.		
	3. Visually inspect passenger seats for condition and security.		
	<b>4.</b> Visually inspect passenger seats restraints for condition and security.		
Chapter 25	MISCELLANEOUS FURNISHINGS		
	Visually inspect miscellaneous furnishings (map and data case, first aid kit, and emergency equipment) for condition and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
Chapter 26	FIRE EXTINGUISHERS		
	Visually inspect cockpit and cabin portable fire extinguishers and engine compartment fire extinguisher containers for security and condition.		
Chapter 28	FUEL SYSTEM		
	Visually inspect fuel samples for contamination.		
Chapter 29	HYDRAULIC SYSTEMS		
	Visually inspect the following:		
	<ul> <li>a. Hydraulic system 1 and 2 filter bypass indicator buttons</li> <li>— not extended.</li> </ul>		
	<b>b.</b> Collective and cyclic servo actuators and boost tubes for leaks, damage, and security.		
	<b>c.</b> Hydraulic system 1 and 2 pumps for leaks, damage, and security.		
	<b>d.</b> Hydraulic system 1 and 2 valve and filter modules for leaks, damage, and security.		
	<b>e.</b> Hydraulic system 1 and 2 lines, hoses, and fittings for leaks, damage, chafing, kinking, and security.		
	<b>f.</b> Hydraulic system 1 and 2 reservoirs for proper fluid levels, damage, corrosion, and security.		
	<b>g.</b> Tail rotor hydraulic actuator and hoses for leakage, corrosion, and security.		
	2. Remote hydraulic filter bypass indicator (located in right nose window) — confirm not tripped.		
Chapter 30	WINDSHIELD WIPER		
	Visually inspect windshield wiper blades for serviceability and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER	
Chapter 32	LANDING GEAR SYSTEM			
	Visually inspect landing gear as follows:			
	<b>a.</b> Forward crosstube assembly and retention caps for condition and security of attachment.			
	<b>b.</b> Aft crosstube assembly and retention caps for condition and security of attachment.			
	c. Skid tubes and skid shoes for condition and security of attachment. Replace skid shoes that are worn into shoe surface. Repair weld beads as required.			
	<b>d.</b> Fuselage supports for wear, damage, and security of attachment.			
	e. If installed, landing gear forward crosstube crew step fittings for corrosion, damage, and security in area of attachment.			
	<b>f.</b> Emergency float reservoir pressure indicator for proper charge indication (if installed).			
	g. Floats for proper stowage and condition (if installed).			
	2. Visually inspect tail skid for deformation and security of attachment.			
Chapter 52	DOORS, WINDOWS, AND EMERGENCY EXIT			
	<b>1.</b> Visually inspect nose door for obvious damage, security of attachment, proper latching, and seal for condition.			
	2. Visually inspect all windows for damage. Crew door windows, cargo hinged door window, passenger sliding door windows, cabin roof windows, cabin lower nose windows and windshields.			
	<b>3.</b> Visually inspect crew door emergency release pins for security.			
	<b>4.</b> Visually inspect crew and cabin doors for condition, security, and freedom of operation.			



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	TIAL OTHER
	5. Visually inspect avionics/electrical and heater compartment doors for condition and security of attachment. Latches for proper operation.		
Chapter 53	FUSELAGE		
	— General Visual Inspection		
	Fuselage exterior for condition and damage to protective finish.		
	2. Fuselage underside for evidence of fuel and hydraulic fluid leakage.		
	<b>3.</b> All cowlings and fairings for condition and security, missing fasteners, cracks, and proper operation of latches.		
	4. Inspect tailboom fuselage attachment points for security.		
	5. Pitot tube(s) and static ports for obstruction and damage.		
	6. Fuselage interior for evidence of water entrapment.		
	a. Nose compartment.		
	<b>b.</b> Pilot and passenger cabin.		
	c. Electrical compartment.		
	d. Heater compartment.		
	e. Baggage compartment.		
Chapter 53	TAILBOOM		
	Inspect tailboom exterior structure for general condition.		
Chapter 52	2. Inspect baggage compartment interior for condition and cleanliness.		
	<b>3.</b> Check baggage compartment door for damage, proper operation, and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	4. Inspect driveshaft and intermediate gearbox covers for damage and security.	
Chapter 62	MAIN ROTOR BLADES	
	— Detailed Visual Inspection	
	<b>1.</b> Main rotor blades for condition, damage, security, and cleanliness.	
Chapter 62	MAIN ROTOR HUB	
	— Detailed Visual Inspection	
	1. Main rotor hub assembly (grips, drag braces, trunnion, pillow blocks, static stops, and mast nut) for condition and security.	
	2. Hub assembly for proper oil level or grease lubrication.	
	3. Main rotor yoke for evidence of cracks at pillow block bushing bores. Proper sealing of pillow blocks, yoke, and attaching through bolts, washers, nuts, and bushings.	
	4. Inspect blade retention bolts for condition and security.	
Chapter 62	MAIN ROTOR CONTROLS	
	— Detailed Visual Inspection	
	Swashplate and support assembly and collective lever for condition and security.	
	2. Scissors and sleeve assembly for security and condition.	
	<b>3.</b> Pitch links, damper tubes, and connecting links for condition and security. Bearings for looseness.	
	4. Stabilizer bar assembly for condition and security.	
	5. Stabilizer bar dampers for condition, security, and proper fluid level.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 63	ENGINE-TO-TRANSMISSION MAIN DRIVESHAFT		
	Visually inspect main driveshaft for condition and security.		
	WARNING		
	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.		
	2. Visually inspect main driveshaft forward and aft couplings, boots, seals, and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of any yellow bordered TEMP-PLATE, from white/off-white to black, will indicate a possible overheat condition and/or component degradation (step 3). If one or more of the red bordered TEMP-PLATE dots change from white/off-white to black, an overheat condition is present and may require replacement of both outer and inner couplings.		
	<b>3.</b> Visually inspect overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of overtemperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
Chapter 63	MAIN ROTOR MAST		
	— Detailed Visual Inspection		
	1. Mast assembly for security, corrosion, and mechanical damage. Pay particular attention to area contacted by main rotor static stops and damper assembly/adapter set splines.		
	2. Mast nut for security.		
	3. Inspect lower area for evidence of oil leaks at mast bearing cap.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Chapter 63	TRANSMISSION		
	— General Visual Inspection		
	External oil filters bypass indication.		
	2. Proper oil level.		
	<b>3.</b> Transmission cases for damage, condition, and evidence of leaking.		
	<b>4.</b> Accessories for condition, damage, and security of attachment.		
Information Letter 212-00-34	<b>5.</b> External oil lines and hoses for condition, damage, chafing, and leaks, paying particular attention to lines running aft of the thermostatic relief valve.		
	6. Transmission mount dust boots for condition.		
	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.		
	7. Transmission tail rotor output quill coupling and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black, indicates an overheat condition, and may require replacement of both outer and inner couplings (step 8).		
	<b>8.</b> Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of overtemperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	ΓIAL OTHER
Chapter 63 and SI 212-6	ROTOR BRAKE QUILL AND DISC ASSEMBLY		
	— Detailed Visual Inspection		
	Rotor brake quill for condition, damage, and leaking.		
	2. Rotor brake for condition, damage, and leaking.		
	3. Rotor brake disc for warpage.		
Chapter 63	TRANSMISSION, ENGINE, AND COMBINING GEARBOX OIL COOLING		
	— Detailed Visual Inspection		
	Oil coolers for leaking, damage, and obstruction.		
	2. Oil cooler hoses and tubes for leaking, damage, chafing, and fraying.		
	3. Oil cooler blowers for damage and obstruction.		
Chapter 64	TAIL ROTOR HUB AND BLADE ASSEMBLY		
	— Detailed Visual Inspection		
	NO CRACKS ARE PERMITTED ON ANY SURFACE OF THE TAIL ROTOR BLADES.  1. Tail rotor blades for condition of bond lines, cracks, corrosion, leading edge erosion, damage, security, and cleanliness. Clean blades are required to maintain enhanced visibility for safety.  2. Tail rotor hub for security, corrosion, and condition.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	3. Flapping bearings and pitch change bearings for excessive looseness and freedom of movement through full range of travel with antitorque pedals positioned full right and then full left.		
	<b>4.</b> Tail rotor pitch change links, crosshead, pitch horns, counterweight arms, and links for security, corrosion, and condition.		
	<b>5.</b> Pitch link bearing and counterweight link bearing looseness shall not exceed 0.015 inch (0.381 mm) axial. Check freedom of movement through full range of travel with antitorque pedals positioned full right nd then full left.		
	<b>6.</b> Pitch change links for binding with tail rotor blade moved to both full flapping positions. Binding is not acceptable.		
Chapter 65	TAIL ROTOR DRIVESHAFT		
	1. Hanger assemblies — bearings and surrounding areas for evidence of grease leakage, condition, damage, security, corrosion, and overheating. Visual overheat indicator stripe(s) for discoloration and overheat condition (color change from green to brown). Discoloration of bearing (color change to blue to blue/black in color) or multi-color appearance of hanger that darkens adjacent to bearing is evidence of overheating. Brown color of bearing shield is normal and is not evidence of overheating.		
	<b>2.</b> Driveshaft sections for cracks, rivet failure, distortion, dents, corrosion, and damage to anodized finish.		
	3. Clamp sets for condition, security, and proper installation.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 65	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.  4. Flexible couplings and surrounding areas for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings (step 5).  5. Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of over temperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.  INTERMEDIATE GEARBOX  — Detailed Visual Inspection  1. Gearbox assembly for security, condition, corrosion, damage, and oil leaking.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 65	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.  2. Input and output quill flexible couplings and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings (step 3).  3. Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of over temperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.  4. Gearbox for proper oil level and oil for evidence of contamination.  5. Gearbox assembly for security, condition, corrosion, damage, and oil leaking.  TAIL ROTOR GEARBOX  — Detailed Visual Inspection  1. Gearbox assembly for security, condition, corrosion, damage, and oil leaking.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	WARNING		
	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.		
	2. Input quill flexible coupling and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings.		
	3. Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of overtemperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
	<b>4.</b> Gearbox for proper oil level and oil for evidence of contamination.		
Chapter 67	ELEVATORS		
	— Detailed Visual Inspection		
	Elevators for damage and security.		
Chapter 71	LEFT POWER SECTION		
	— Detailed Visual Inspection		
	Gas generator case for cracks, buckled areas, and hot spots.		
	2. Oil and fuel hoses and tubes for chafing, leaking, and security.		
	3. Electrical wiring for fraying, chafing, and security.		



#### DAILY INSPECTION — PART A (CONT) 5-5.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	4. Proper oil level.		
Chapter 71	RIGHT POWER SECTION		
	— Detailed Visual Inspection		
	Gas generator case for cracks buckled areas, and hot spots.		
	2. Oil and fuel hoses and tubes for chafing, leaking, and security.		
	3. Electrical wiring for fraying, chafing, and security.		
	4. Proper oil level.		
Chapter 71	REDUCTION GEARBOX		
	— Detailed Visual Inspection		
	Hoses and lines for security, leaks, and chafing.		
	2. Oil filter impending bypass indicator button not extended.		
	3. Proper oil level.		
Chapter 71	ENGINE AND REDUCTION GEARBOX MOUNTS		
	— Detailed Visual Inspection		
	Mounts for loose bearings and security.		
	ENGINE FIREWALLS		
	— Detailed Visual Inspection		
	<b>1.</b> Firewalls for cracks, distortion, missing rivets, broken spot welds, and deteriorating seals or gaskets.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT	TIAL OTHER
	ENGINE AIR MANAGEMENT SYSTEM		
	— Detailed Visual Inspection		
	Exhaust ejector and ducts for condition, obstruction, and security.		
	<b>2.</b> Air intake ducts and plenum for condition, obstruction, and security.		
Chapter 79	ENGINE OIL SYSTEM		
	— Detailed Visual Inspection		
	Oil cooler heat exchangers for damage and obstruction.		
Chapter 95	INSTRUMENTS		
	— Detailed Visual Inspection		
	Instrument panel for cleanliness.		
	<b>2.</b> All instruments, placards, decals, and markings for appearance and legibility.		
	3. Check magnetic compass for condition and security.		
	4. All compass cards for validity.		
Chapter 96	ELECTRICAL SYSTEMS		
	— General Visual Inspection		
	Nose compartment electrical equipment for condition and security.		
	2. Pedestal mounted avionics/electrical equipment for condition, cleanliness, and security.		
	3. Overhead console for condition, cleanliness, and security.		
	<b>4.</b> All instrument lights, integrally lit panels, secondary lights, and map lights for serviceability.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	5. All caution and warning lights for proper operation by using master caution, fire test, and baggage compartment smoke detector press to test functions.		
	6. Landing/search lights for condition and security.		
	7. Navigation and anticollision lights for condition and security.		
Chapter 96	BATTERY SYSTEM		
	— General Visual Inspection		
	Battery and external connections for condition and security.		
	2. Battery vent and drain tubes for obstruction and security.		
Chapter 97	<u>ANTENNAS</u>		
	Visually inspect all antennas located on fuselage and tailboom for condition and security.		
Chapter 97	AVIONICS EQUIPMENT		
	<b>1.</b> Visually inspect all avionics located in fuselage and tailboom for condition and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:		
	REGISTRY NO.:		
	SIGNATURE:		
	NOTE		
	For helicopters on the Part A inspection program, accomplish each 100 hours of flight operation or after 12 calendar months, whichever comes first.		
	GENERAL		
	1. Each listed inspection item or maintenance function is to be performed in accordance with the referenced maintenance manual, chapter specified, or BHT-212-CR&O manual.		
	2. Refer to Pratt & Whitney PT6T-3 Maintenance Manual for engine inspection requirements.		
	3. Record all work accomplished during inspection in the helicopter maintenance record.		
	4. Check helicopter records for recorded discrepancies.		
	<b>5.</b> Accomplish complete Daily Inspection — Part A scheduled inspection program.		
Paragraph 5-13	<b>6.</b> Review special inspections and perform any special inspection required.		
Chapter 4	7. Replace all finite life components that have completed published operating limitations.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Paragraph 5-53	8. Overhaul all components which have completed published overhaul periods.		
Chapter 12	9. Perform lubrication requirements.		
Chapter 21	HEAT/VENT AIR DUCTS		
	<b>1.</b> Visually inspect all heating, ventilation, cooling ducts, and controls for cracks, security and proper operation.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	2. Bleed air heating and ventilation/defog system components:		
	<b>a.</b> Perform functional check of bleed air heating system and components.		
	<b>b.</b> Perform functional check of defog blower.		
Chapter 25	MISCELLANEOUS FURNISHINGS		
	Check all safety equipment for inspection due dates and operation.		
Chapter 26	FIRE PROTECTION		
	Make sure fire extinguishers are properly charged.		
	2. Baggage compartment smoke detector for condition and security.		
	3. Deleted.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	<b>1.</b> Weight check crew and passenger cabin portable fire extinguishers.		
Chapter 96	2. Functionally check voltage of engine fire extinguishing circuits.		
	3. Functionally check baggage compartment smoke detector.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHE	
Chapter 4	<b>4.</b> Replace engine fire extinguisher container firing cartridges in accordance with specified service life.		
Chapter 28	FUEL SYSTEM		
	Inspect all exposed fuel lines and connections for leakage, damage, and security.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	2. Remove four access doors, located just forward of the aft crosstube, from the underside of the fuselage. Inspect fuel lines for evidence of leakage, damage, and security.		
Chapter 29	HYDRAULIC SYSTEMS		
	1. Inspect all lines and hoses for security and general condition.		
	Every sixth 100 hour (600 hours) inspection or 12 months:		
	NOTE		
	Hydraulic filter elements 205-076-034-003 are non-cleanable. It is recommended they be replaced every 600 hours or 12 months. Filter elements 205-076-034-007 are cleanable. The -003 and -007 elements are interchangeable; intermixing of different element types is not permitted.		
	Remove and inspect hydraulic filter elements.		
	2. Discard or clean filter elements as applicable.		
	3. Install hydraulic filter elements.		
	<b>4.</b> Install 0 to 500 PSIG (0 to 3447 kPa) gauge in quick disconnect at rotor brake caliper. Slowly pull rotor brake handle through travel. Cylinder should generate 240 to 260 PSI (1655 to 1793 kPA) at any handle velocity and shall maintain 150 PSI (1034 kPa) minimum in over center position for 3 minutes. Adjust as necessary.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>5.</b> Inspect rotor brake linings for wear (minimum thickness 0.150 inch (3.81 mm)).		
Chapter 32	LANDING GEAR SYSTEM		
	— General Visual Inspection		
	If installed, emergency float reservoir pressure indicator for proper charge indication.		
	2. If installed, floats for proper stowage and condition.		
	3. Landing gear crosstube assemblies, skid tubes, and skid shoes, for condition and security of attachment. Inspect crosstube retention cap (rubber bumper pads) for condition and security of attachment.		
	4. Tail skid for deformation and security of attachment.		
	<b>5.</b> Fuselage supports for wear, damage, and security of attachment.		
	<b>6.</b> If installed, landing gear forward crosstube crew step fittings for corrosion, damage, and security in area of attachment.		
	— Restoration		
	Torque check crosstube to skid tube saddle bolts.		
	2. Torque check forward and aft crosstube support fittings "U" bolts to 80 to 100 inch-pounds (9.0 to 11.3 Nm).		
	3. Torque check ground handling wheel attachment eyebolts on skid tubes 40 to 58 foot-pounds (54 to 79 Nm). Eyebolts that rotate prior to reaching 40 foot-pounds (54 Nm) shall be removed and inspected for evidence of bending. No bending is permitted.		
Chapter 52	DOORS AND WINDOWS		
	<b>1.</b> Crew and passenger doors structure for corrosion, damage, distortion, and positive locking mechanisms. Seals for adherence, tears, separations, and deterioration.		



# 5-6. 100 HOURS/12 CALENDAR MONTHS — PART A (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	2. Crew doors emergency jettison mechanism for condition, security, and operation.		
	NOTE		
	The following inspection (step a) is for helicopters equipped with escape panels which may be identified by a rotating handle installed below the passenger door windows. The handle is labeled EMERGENCY RELEASE PULL COVER TURN LEFT AND PUSH.		
	Every third 100 hour inspection (300 hours) or 12 months:		
	<b>a.</b> Inspect passenger door emergency egress panel pins and mechanisms for wear, corrosion, operation, and security.		
	<b>b.</b> Perform operational check of passenger door escape panels.		
	<b>3.</b> Passenger door window retainers and fillers (if applicable) for damage.		
	<b>4.</b> Nose, electrical, and equipment compartment access doors for corrosion, damage, distortion, and positive locking mechanisms.		
	<b>5.</b> Baggage compartment door for corrosion, damage, and positive locking.		
	<b>6.</b> Inspect heated windshield, if installed, for condition and proper operation.		
Chapter 53	TAILBOOM		
	— General Visual Inspection		
ASB 212-90-63 and TB 212-94-147	Internal and external structure of tailboom for cracks, distortion, corrosion, and security.		
	2. Inspect tailboom attachment points for cracks and security.		
	3. Ensure all drain holes are open.		
	4. Torque check intermediate gearbox mounting bolts.		

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#### 100 HOURS/12 CALENDAR MONTHS — PART A (CONT) 5-6.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	5. Torque check tail rotor gearbox attachment nuts.		
ASB 212-00-110	6. Inspect vertical fin spar caps for cracks and corrosion.		
	7. Inspect vertical fin spar caps forward side and web from upper tailboom skin to approximately 4 inches (101.6 mm) below upper tailboom skin as follows:  Remove aft tailboom access door. Face aft and use bright light and small mirror to inspect area for cracks, especially near rivet holes.		
	NOTE		
	If necessary, clean area with cloth dampened with MEK (C-309) or equivalent. Ventilate area to prevent breathing fumes.		
	Every third 100 hour inspection (300 hours) or every 12 months:		
	1. Inspect tailboom joints, splices, longerons, attach fittings, and attaching hardware for corrosion, damage, and cracks.		
ASB 212-90-63	2. Remove plug button at BS 99.00.		
	NOTE		
	Paint fissures are common in the splice area, cracks will be evident by black powder emanating from cracked area, and corrosion will leave evidence of white powder.		
	<b>3.</b> Using a borescope or suitable means, inspect inside of longeron paying particular attention to cracking and/or corrosion in area of splice.		
	4. Report any cracks to Product Support Engineering.		
	5. Install plug button with sealant (C-308).		
Chapter 53	<u>FUSELAGE</u>		
	Inspect fuselage tailboom attachment points for security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	2. Inspect fuselage tailboom attachment components and hardware for cracks with a 10X magnifying glass. Pay particular attention to interface between forward end of tailboom attachment fitting and cap angle (Figure 5-1).		
	3. Move pylon fore and aft. Using mast as lever, check friction dampers for freedom of movement and smooth operation.		
	<b>4.</b> Inspect transmission mounts, mounting brackets, and structure for cracked or broken parts.		
	5. Inspect lift link and fitting for cracks and security.		
	6. Cabin interior and exterior for corrosion and damage.		
	7. All compartments for evidence of water entrapment and corrosion.		
	8. Ensure all drain holes are open.		
	9. Inspect underside of fuselage:		
	<b>a.</b> Fuselage structure for damage, corrosion, and working rivets.		
	<b>b.</b> Exterior finish for condition and cleanliness.		
	c. Evidence of excessive fluid leakage.		
	<b>d.</b> Structure around landing gear for condition.		
	<b>e.</b> Forward crosstube support structure for working fasteners, cracks, corrosion, and excessive wear.		
	<b>f.</b> Aft crosstube support structure for working fasteners, cracks, corrosion, and excessive wear.		
	10. Fuselage bonded panels for damage and delamination.		
	11. Cabin roof structure:		
	<b>a.</b> Cabin roof structure, cowlings, and fairings for damage, delamination, and general condition.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	ΓIAL OTHER
	<b>b.</b> Cabin roof and cowling/fairing mounted antennas for condition and security.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	Fuselage cabin structure:		
	<b>a.</b> Fuselage structure for corrosion and damage to finish and sealant. Pay particular attention to edges of joints and seams and around fastener heads.		
	<b>b.</b> Engine compartment floor and service deck at FS 155.06 to 241.22 for damage, delamination, and corrosion.		
	NOTE		
	To adequately inspect the following, it will be necessary to remove the auxiliary fuel tanks if installed.		
	2. Pylon wall for damage, working fasteners, cracks, delamination, and corrosion.		
	CENTER FUSELAGE		
	Lower cyclic hydraulic actuator supports P/N 212-030-286-001 and -002 in cargo hook compartment (hellhole).		
	NOTE		
	Inspection is not applicable to helicopter S/N 30790 and subsequent and helicopters modified in accordance with TB 212-76-12.		
	1. Clean area around fuel vent line hole with MEK (C-309) or equivalent and remove finish from beam cap.		
	2. Inspect each beam cap for hairline cracks using a bright light. Inspect inboard side of left and right main beams around fuel vent line that goes through cap extrusion at FS 131.00, WK 21.50, and BL 14.00. Pay particular attention to first high shear rivet hole above WL 22.00 at FS 129.00 (Figure 5-2, Detail A and Detail B).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	3. Apply clear lacquer over cleaned area.		
Chapter 62	MAIN ROTOR BLADE INSPECTION SYSTEM (BIS)		
	— Inspect		
BHT-212-CR&O and Chapter 96	Test detector unit.		
	Perform continuity check on blade conductor circuits.		
	3. Remove BIS battery.		
	4. Perform battery condition check on replacement battery. Install replacement battery.		
Chapter 62	MAIN ROTOR BLADES		
	Wash main rotor blades with mild soap and water. Rinse and dry thoroughly.		
	— Detailed Visual Inspection		
	2. Main rotor blades upper and lower surfaces for condition of bond lines, doublers, and leading edge for erosion. Inspect blade surfaces for corrosion, cracks, damage, and voids.		
Chapter 62	MAIN ROTOR HUB		
	— Detailed Visual Inspection		
	1. Main rotor hub assembly (grips, drag braces, trunnion, pillow blocks, static stops, and mast nut) for condition and security.		
	2. Hub assembly for proper oil level or grease lubrication.		
	3. Main rotor yoke for evidence of cracks at pillow block bushing bores. Proper sealing of pillow blocks, yoke, and attaching through bolts, washers, nuts, and bushings.		
	4. Inspect blade retention bolts for condition and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT	TIAL OTHER
Chapter 62	MAIN ROTOR CONTROLS		
	Swashplate and support assembly:		
	a. Inspect for condition and security.		
	NOTE		
	The presence of black oxide powder will require investigation to determine the cause.		
	<b>b.</b> Inspect gimble ring bearings, liners, and attaching hardware for excessive looseness and wear. Gimble ring bearing and attaching bolt axial or radial looseness shall not exceed 0.005 inch (0.127 mm) and no binding is allowed.		
	2. Disconnect flight control tubes from swashplate and collective lever assembly. Inspect six trunnion bearings 204-011-451-001 for 0.020 inch (0.508 mm) maximum axial play. Rotate bearings 180° and purge lubricate.		
	3. Inspect collective levers for condition and evidence of corrosion, and scissors and sleeve assembly for security and condition.		
	<b>4.</b> Inspect stabilizer bar dampers clamps for condition and evidence of corrosion.		
	<b>5.</b> Inspect stabilizer bar assembly for condition and security. Pay particular attention to tubes P/N 204-011-328-001 and -011 for cracks. Closely inspect area covering 360°, 1.5 inches (38.1 mm) outboard from vertical bolt.		
	<b>6.</b> Replace bearings MS20201KP8A or MS27641-8 in scissors levers 204-011-406.		
	7. Replace bearings AN204KP6A or MS27641-6 in mixing levers 204-011-301.		
Chapter 63	TRANSMISSION		
	Inspect mounts for damage and security. Check boots for condition and ensure boots are in place.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	Inspect lift link and attachments for corrosion, damage, and security. Check bearings for looseness.		
	3. Inspect for evidence of oil leakage.		
	4. Check all transmission chip detectors for debris and then clean.		
	5. Test all transmission chip detectors electrical circuits.		
	<b>6.</b> Every third 100 hour inspection (300 hours), check internal oil filter or full flow oil monitor for debris and then clean.		
	7. Every third 100 hour inspection (300 hours), torque check top case to ring gear case nuts, ring gear case to main case nuts, and main case to support case nuts 230 to 250 inch-pounds (25.99 to 28.25 Nm). Retorque as required.		
Chapter 63	MAIN ROTOR MAST		
	— Detailed Visual Inspection		
	1. Inspect mast assembly for security, corrosion, and mechanical damage. Pay particular attention to area contacted by main rotor hub static stops, and damper assembly/adapter set splines.		
	2. Inspect for evidence of oil leaks at mast bearing cap.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 64	TAIL ROTOR HUB AND BLADE ASSEMBLY		
	CAUTION		
	COUNTERWEIGHT BELLCRANK RETENTION NUTS P/N MS14145L6 OR ITS EQUIVALENT MS17826-6 ARE DESIGNATED AS ONE TIME USE ONLY. IF MAINTENANCE ACTION REQUIRES THAT IT BE REMOVED, THE COUNTERWEIGHT BELLCRANK NUT IS TO BE DISCARDED AND REPLACED WITH A NEW NUT. OVERTORQUING OR INCORRECT APPLICATION OF THE NUT COULD CAUSE MECHANICAL FAILURE RESULTING IN EXCESSIVE VIBRATION OR DAMAGE TO THE TAIL ROTOR BLADES.		
	<b>1.</b> Inspect the tail rotor counterweight bellcrank (P/N 212-011-705-001) retention nuts for cracks, corrosion, and security. Reapply corrosion preventive compound (C-101) if nuts are not completely covered.		
	Every third 100 hour inspection (300 hours) or every 12 months:		
Chapter 18	Dynamically balance tail rotor.		
	2. Torque check nuts on tail rotor blade retention bolts.		
	3. Torque check tail rotor retaining nut.		
Chapter 65	TAIL ROTOR GEARBOX		
	<b>1.</b> Inspect chip detector for debris. If metallic particles are found, determine and correct cause.		
	2. Clean chip detector.		
	3. Test chip detector electrical circuit.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
Chapter 65	TAIL ROTOR DRIVESHAFT		
	Hanger assemblies for cracks at mounting ears, corrosion, and security of attachment.		
	2. Hanger supports for condition and security of attachment.		
	<b>3.</b> Driveshaft sections and attaching hardware for condition and security.		
	<b>a.</b> Condition of clamps for tail rotor driveshaft coupling to gearbox couplings (90° apart).		
	<b>b.</b> Inspect clamps for cracks in or near the bolt hole lugs.		
Chapter 65	INTERMEDIATE GEARBOX		
	Inspect chip detector for debris. If metallic particles are found, determine and correct cause.		
	2. Clean chip detector.		
	3. Test chip detector electrical circuit.		
Chapter 67	ELEVATOR		
	— Detailed Visual Inspection		
	<b>1.</b> Elevators for security, cracks, damage, loose or missing rivets, and corrosion.		
	2. Check elevator attachment lugs at each end of elevator horn for cracks and security of attachment. Check elevator horn to elevator spar attaching bolts and surrounding joints for cracks and security of attachment.		



-	DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
		Every third 100 hour inspection (300 hours) or 12 months:		
		1. Check left and right elevator assemblies for excessive axial and radial play using a dial indicator mounted on the tailboom, with stylus touching inboard edge of elevator near attachment bolt for axial measurement, and touching upper surface near attachment bolt for radial measurement. Applying light force to move elevator in required direction, check that radial movement does not exceed 0.010 inch (0.254 mm), and that axial movement is within 0.005 to 0.030 inch (0.127 to 0.762 mm). Adjust shims as required.		
		2. Elevator rigging for proper setting and travel.		
		3. Check elevator horn for security, mechanical damage, and corrosion.		
I		4. Trailing edge tabs and tip caps for condition and security.		
		Every sixth 100 hour inspection (600 hours) or 12 months:		
		Remove left and right elevators.		
		2. Clean elevator spars and inspect for corrosion.		
		3. Clean internal bore of elevator horn and inspect for corrosion.		
		<b>4.</b> With elevator control removed, attach a spring scale to hole in arm of horn where control tube is normally installed. Pull scale at right angle to arm, verify friction is 26 to 32 pounds (115.65 to 142.34 N). If friction is not within limits, adjust shim thickness.		
		5. Install left and right elevators.		
	Chapter 67	FLIGHT CONTROLS		
		— Detailed Visual Inspection		
		1. Inspect all control tube assemblies for clearances, security, and general condition, paying particular attention to tail rotor and elevator control tubes for chafing and wear (maximum allowable wear 0.008 inch (0.2032 mm)).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	ΓIAL OTHER
	2. Control tube bellcranks, supports, and attaching hardware for corrosion, security, wear, and damage.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	Collective flight controls:		
	<b>a.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Friction shoes and liners for condition.		
	c. Check collective lever friction adjuster for operation.		
	d. Check for proper collective minimum friction.		
	e. Check collective flight controls for smooth movement throughout full range of travel.		
	2. Cyclic flight controls:		
	<b>a.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Check cyclic stick friction adjuster for proper operation.		
	<b>c.</b> Check for proper cyclic minimum friction (applicable to AFCS equipped helicopters).		
	<b>d.</b> Check cyclic flight controls for smooth movement throughout full range of travel.		
	3. Antitorque flight controls:		
	<b>a.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Check antitorque friction adjuster for proper friction.		
	<b>c.</b> Check antitorque flight controls for smooth movement throughout full range of travel.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 67	COLLECTIVE AND CYCLIC FLIGHT CONTROL ACTUATORS	
	— Detailed Visual Inspection	
	Universal bearings for looseness.	
	2. Input lever bearings and bolts for wear and looseness.	
	<b>3.</b> Fasteners attaching cylinder lower supports to structure for looseness.	
	4. Cylinder lower bearings for looseness.	
	5. Actuator assemblies for condition, leakage, and security.	
	6. Cylinder extension tubes for condition and security.	
	7. Upper cylinder housing mounting bracket for condition and security. Check mounting bracket cavity for corrosion. Cavity drain hole for obstruction. Dust boot for condition. Reapply corrosion preventive compound (C-104) as required.	
	8. Actuator linkage for wear and security.	
	<b>9.</b> Clean exposed area of actuator piston with hydraulic fluid (C-002) and a clean lint-free cloth.	
	<b>10.</b> Check cyclic and collective hydraulic cylinders piston rods for evidence of excessive wear and scoring. Wear of the piston rods indicates cylinder assembly is incorrectly aligned to lower supports and requires adjustment.	
Chapter 67	— Restoration	
	Every third 100 hour inspection (300 hours) or 12 months:	
	Torque check nuts attaching actuator cylinder to upper supports.	
	2. Remove bolts attaching actuator to lower supports. Check cylinder alignment to lower support. Rod end bearing side loads are not permitted. Reinstall bolts.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	TAIL ROTOR FLIGHT CONTROL ACTUATOR		
	1. Tail rotor hydraulic actuator for leaks and security of attachment, mechanical damage, corrosion, and bearings and linkages for looseness.		
Chapter 71	POWER PLANT		
	Every third 100 hour inspection (300 hours) or 12 months:		
	NOTE		
	If applicable, refer to BHT-212-SI-96 for installation of adjustable seals or refer to Chapter 71 for seal adjustment.		
ASB 212-10-137	1. Inspect the left-hand and right-hand engine air inlet cowlings for gaps between the lower surface of the cowling firewall and the mating horizontal engine firewall.		
Chapter 71	LEFT POWER SECTION		
	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	Every third 100 hour inspection (300 hours) or 12 months:		
	— Detailed Visual Inspection		
	Ignition leads for corrosion, chafing and security.		
	2. Chip detectors for debris.		
	— Restoration		
	Clean chip detectors.		
	— Functional Check		
	Test chip detectors electrical circuits.		



#### 100 HOURS/12 CALENDAR MONTHS — PART A (CONT) 5-6.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	RIGHT POWER SECTION		
	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	Every third 100 hour inspection (300 hours) or 12 months:		
	— Detailed Visual Inspection		
	Ignition leads for corrosion, chafing and security.		
	2. Chip detectors for debris.		
	— Restoration		
	1. Clean chip detectors.		
	— Functional Check		
	Test chip detectors electrical circuits.		
Chapter 76	ENGINE FUEL AND POWER CONTROLS		
	Every third 100 hour inspection (300 hours) or 12 months:		
	— Operational Check		
	Check controls for smooth movement through full travel ranges.		
Chapter 71	STARTER GENERATOR		
	Every third 100 hour inspection (300 hours) or 12 months.		
	— Detailed Visual Inspection		
	Left power section starter generator cooling ducts for obstruction, kinking, and security.		
	2. Right power section starter generator cooling ducts for obstruction, kinking, and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	3. Left power section starter generator brushes for allowable wear.		
	<b>4.</b> Right power section starter generator brushes for allowable wear.		
Chapter 76	ENGINE CONTROLS		
	Check controls for smooth movement through full range of travel.		
	Every third 100 hour inspection (300 hours) or 12 months:		
	1. Engine fuel and power controls:		

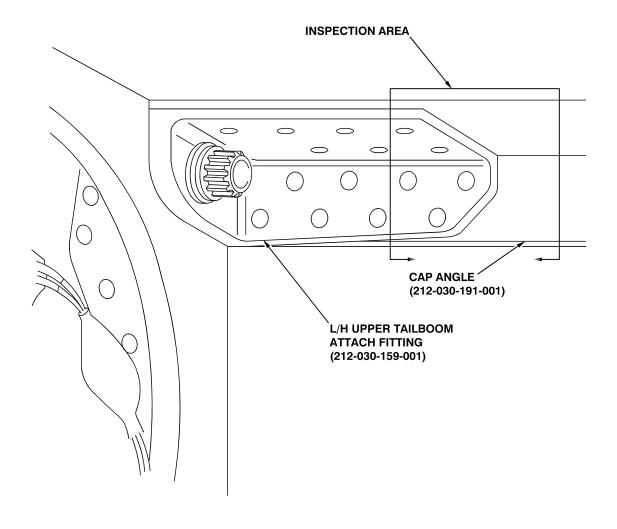


DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>a.</b> Engine control linkages for looseness, lost motion, chafing, damage, and security of attachment.		
	<b>b.</b> Bellcranks, mounts, and jackshafts for looseness, damage, and security of attachment.		
	Every sixth 100 hour inspection (600 hours) or 12 months:		
	Perform maximum N <sub>G</sub> topping check.		
Chapter 71	COMBINING (REDUCTION) GEARBOX		
	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	Every third 100 hour inspection (300 hours) or 12 months:		
	— Detailed Visual Inspection		
	Chip detectors for debris.		
	— Restoration		
	Clean chip detectors.		
	— Functional Check		
	Test chip detectors electrical circuits.		
Chapter 95	INSTRUMENTS		
	NOTE		
	The following checks are required every 12 months only.		
	Calibrate pilot and copilot compass systems and standby magnetic compass.		
	2. Drain pitot-static system of any accumulated moisture.		
	3. Test pitot-static system for leaks.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 96	ELECTRICAL SYSTEM	
	Check inverters for security of mounting and connections.	
	2. Check generator control units for damage and security of mounting and terminals.	
	<b>3.</b> All exposed wire bundles, bundle supports and connectors for damage, corrosion, and security. Pay particular attention to engine deck connectors and harnesses.	
	<b>4.</b> Inspect relays and main bus area for security of mounting and connections.	
	5. Inspect bus insulation for damage and condition.	
	<b>6.</b> Operationally check cabin heater system, bleed air shutoff, and line check valve.	
Chapter 96	BATTERY SYSTEM	
	<b>1.</b> Service battery in accordance with battery manufacturer's recommendation.	
	2. Inspect battery compartment for general condition.	
	3. Check battery mount for security and corrosion.	
Chapter 96	POWER DIODES	
	Every third 100 hour inspection (300 hours) or 12 months:	
	Perform functional check of power diodes.	

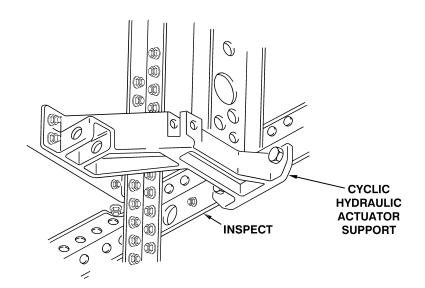




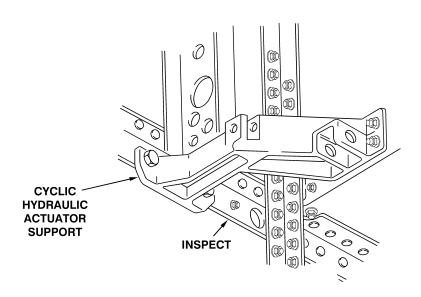
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Figure 5-1. Fuselage Tailboom Attachment Inspection





# DETAIL A RIGHT SIDE



DETAIL B LEFT SIDE

# VIEW LOOKING UP INTO CARGO HOOK OPENING

212\_MM\_05\_0001

Figure 5-2. Inspection of Beam Caps



#### 5-7. 1000 HOURS — PART A

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	For helicopters on the Part A inspection program, accomplish the following checks each 1000 hours of flight operation.		
	<u>GENERAL</u>		
	— Instruction		
	Each listed inspection item or maintenance function is to be performed in accordance with this Maintenance Manual.		
	2. All work accomplished during the inspection shall be recorded in the helicopter maintenance record.		
	3. Accomplish complete 100 hour/12 month — Part A Scheduled Inspections.		
Chapter 12	4. Refer to Lubrication Chart (Chapter 12) for 1000 hour requirements.		
Chapter 62	SWASHPLATE AND SUPPORT ASSEMBLY — SCISSORS AND SLEEVE ASSEMBLY		
	Inspect swashplate and support assembly, and scissors and sleeve assembly.		



### 5-7. 1000 HOURS — PART A (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	OTHER
	2. Disconnect bottom of each drive link from swashplate trunnion and each mixing lever control tube from scissors.		
	3. Check swashplate duplex bearing and collective sleeve hub bearing set for roughness and ease of rotation.		
	4. Purge lubricate bearings.		
	5. Reconnect drive links and tubes.		



#### 5-8. 3000 HOURS/5 YEARS — PART A

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	For helicopters on the Part A inspection program, accomplish each 3000 hours of flight operation or 60 calendar months, whichever occurs first.		
	<u>GENERAL</u>		
	— Instruction		
	1. Each listed inspection item or maintenance function is to be performed in accordance with the Maintenance Manual chapter specified or BHT-212-CR&O manual.		
	PRELIMINARY REQUIREMENTS		
	All work accomplished during inspection shall be recorded in helicopter maintenance records.		
	<b>2.</b> Remove all panels, fairings, and cowlings required to satisfactorily carry out the inspection.		
	<b>3.</b> In addition to the 3000 hour/5 year — Part A inspection items, carry out the following:		
	a. Complete Daily — Part A inspection.		
	<b>b.</b> Complete 100 hour/12 month — Part A inspection.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TAL OTHER
	c. Complete 1000 hour — Part A inspection.		
	AFTER COMPLETION OF INSPECTION		
	Reinstall all panels, fairings, and cowlings removed during inspection.		
	2. Carry out a ground run and leak check prior to releasing the helicopter back to service.		
Chapter 53	FUSELAGE CABIN STRUCTURE		
	— Detailed Visual Inspection		
	<b>1.</b> Center and outboard bulkhead below WL 22.0 at FS 23.0 for cracks, deformation, and corrosion along structure joints.		
	2. Collective and cyclic controls jackshafts support intercoastals for cracks and corrosion.		
	3. Cyclic support for corrosion and cracks.		
	<b>4.</b> Collective, cyclic and antitorque control system bellcranks, levers and support brackets for corrosion, cracks, and indication of wear at attaching points.		
	<b>5.</b> Crew seat support beams at BL 14.0 and 30.0 and FS 23.0 and 74.30 for cracks and corrosion.		
	<b>6.</b> Forward crosstube attach points and support structure at FS 63.33 and 74.30 for damage, corrosion, and cracks. Aft crosstube attach points and support structure at FS 155.06 and 166.00 for damage, corrosion, and cracks.		
	<b>7.</b> Crew and passenger cabin floor FS 23.0 to 156.0 for corrosion, damage, seat fasteners for condition, and cargo tie-down rings for condition.		
	<b>8.</b> Area under floor panel at BL 14.0 left and right and FS 74.25 to 92.0 joints and supports for corrosion, cracks, and bottom skin damage.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	<b>9.</b> Under floor fuel cell cavities left and right at FS 102.0 to 145.56 joints and supports for corrosion, cracks, and bottom skin damage.	
	<b>10.</b> Bottom skin between FS 23.0 and 243.937 skin for damage, joints for corrosion, access panels and covers for condition and security.	
	<b>11.</b> Main transmission compartment interior FS 129.0 to 166.0 and WL 7.44 to 76.0. Bulkheads and main beam panels for damage and corrosion, attaching supports and brackets for condition and security.	
	<b>12.</b> Electrical/avionics compartment FS 166.0 to 243.937. Doors for condition and security. Door frames for cracks and corrosion. Compartment interior for condition, joints for corrosion, skin for damage and cracks.	
	<b>13.</b> Oil cooler compartment FS 166.0 to 243.937. Doors for condition and security. Main beam panels and bulkheads for condition and corrosion.	
	<b>14.</b> Firewalls FS 155.06 to 241.22 for seal wear and damage, cracks, and attachment.	
	<b>15.</b> Cabin roof FS 35.0 to 166.0 above WL 68.0, BL 50 left and right. Skin and joints for corrosion and damage.	
	<b>16.</b> Bulkhead at FS 241.22 for corrosion, cracks, tailboom attach bolt holes for damage and corrosion.	
Chapter 53	TAILBOOM STRUCTURE	
	— Detailed Visual Inspection	
	NOTE	
	The following steps will require the removal of the tailboom in order to carry out a thorough inspection.	
	<b>1.</b> Bulkhead at BS 17.42 for corrosion, cracks, fuselage attach bolt holes for damage and corrosion.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	2. Tailboom and fin driveshaft covers for condition and attachment.	
	3. Tailboom and fin external skin for damage, corrosion, and cracks.	
	4. Tailboom access panels and covers for condition and attachment.	
	5. Tailboom baggage compartment door for condition, attachment, and latching.	
	<b>6.</b> Tailboom baggage compartment interior for damage and corrosion.	
	7. Tailboom interior bulkheads and stringers for cracks and corrosion.	
	8. Intermediate gearbox mount pad for damage and corrosion. Tail rotor gearbox mount pad for damage and corrosion.	
	<b>9.</b> Tailboom exterior bonded panels adjacent to baggage compartment for damage, delamination, and corrosion.	
Chapter 28	FUEL SYSTEM	
	Inspect fuel cells for condition and serviceability. Verify self-sealing gum of the lower cells has not been activated. Repairs to be accomplished at an authorized facility.	
Chapter 67	FLIGHT CONTROLS	
BHT212-CR&O BHT-212-SI-4 BHT-212-SI-89	Disassemble pilot and copilot collective sticks (if installed) to the extent necessary to remove throttle twist grips.	
TB 212-87-98	2. Referring to Figure 5-3, visually inspect stick tube for cracks using a 3X magnifying glass and a bright light. Pay particular attention to the base of the throttle slots that form the twist grip stops.	
	3. If a crack is found replace stick tube.	
	4. Reassemble pilot and copilot collective sticks (if installed).	



DATA REFERENCE	INSPECTION TASK DESCRIPTION		TIAL OTHER
	5. Check throttle controls for proper operation.		
	6. Check collective controls for proper operation.		



#### 5-9. 25 HOURS/30 DAYS — PART B

DATE:W.O
FACILITY:
HELICOPTER S/N:
TOTAL TIME:
SIGNATURE:
NOTE
For helicopters on the Part B inspection program, accomplish the following checks each 25 hours of flight operation or 30 days, whichever occurs first.
GENERAL
Each listed inspection item or maintenance function is to be performed in accordance with the referenced Maintenance Manual chapter specified or BHT-212-CR&O manual.
2. Refer to Pratt & Whitney PT6T-3 Series Maintenance Manual for engine inspection requirements.
PRELIMINARY REQUIREMENTS
CSSD-PSE-87-001  1. Use medium helicopter corrosion control guide to establish helicopter corrosion control program.
Chapter 4  2. Replace all finite life components that have completed published operating limitations.
Chapter 5  3. Overhaul all components that have completed published overhaul periods.
Chapter 12  4. Lubricate and service helicopter as required.



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
Chapter 5	5. Review Special Inspections and carry out applicable inspections.		
	<b>6.</b> Examine all inspection windows and sight glasses for cracking, crazing, and discoloration. If any of these conditions are present the part must be removed and replaced prior to returning helicopter to service.		
Service Instructions (SI)	7. Comply with all inspections and test requirements of all installed kits.		
	FUSELAGE — NOSE SECTION		
Chapter 95	Pitot tubes and static ports for visible obstruction and damage.		
Chapter 52	2. Nose doors for damage, corrosion, security of attachment, and missing or damaged twist fasteners, seal for condition.		
Chapter 53	3. Fuselage:		
	<b>a.</b> Forward fuselage area structure and skin for damage, corrosion, cleanliness, and damage to protective finish.		
	<b>b.</b> Avionics and electrical compartment for water entrapment.		
Chapter 96	4. Battery installation:		
	<b>a.</b> Battery and external connections for security, corrosion, and condition.		
	<b>b.</b> Battery vent and drain tubes are unobstructed.		
	<b>c.</b> Every fourth 25 hour/30 day inspection (100 hours) check battery mounts for corrosion and service battery in accordance with battery manufacturer's recommendation.		
Chapter 96	5. Electrical equipment for condition, corrosion, and security.		
Chapter 97	6. Avionics equipment for condition and security.		
Chapter 52	7. All windows for damage and cleanliness.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
Chapter 30	8. Windshield wiper arms and blades for serviceability and security.		
Chapter 29	<b>9.</b> Remote hydraulic filter bypass indicator — check for bypass indication.		
Chapter 97	10. Antennas for condition and security.		
Chapter 52	<b>11.</b> Crew doors (and surrounding structure) for damage, corrosion, and proper operation, emergency release pins for security.		
	FUSELAGE — CABIN SECTION		
Chapter 53	<b>1.</b> Fuselage structure and compartments for condition, corrosion, water entrapment, and damage to protective finish.		
Chapter 53	2. Fuselage underside for evidence of fuel and hydraulic fluid leakage.		
Chapter 28	3. Visually inspect fuel samples for contamination.		
Chapter 32	4. Landing gear system:		
	<b>a.</b> Forward crosstube assembly and retention caps for condition and security of attachment.		
	<b>b.</b> Aft crosstube assembly and retention caps for condition and security of attachment.		
	<b>c.</b> Skid tubes and skid shoes for condition and security of attachment. Replace skid shoes that are worn into shoe surface. Repair weld beads as required.		
	<b>d.</b> Fuselage supports for wear, damage, and security of attachment.		
	<b>e.</b> If installed, landing gear forward crosstube crew step fittings for corrosion, damage, and security in area of attachment.		
	<b>f.</b> Emergency float reservoir pressure indicator for proper charge indication (if installed).		



#### 25 HOURS/30 DAYS — PART B (CONT) 5-9.

DATA REFERENCE	INSPECTION TASK DESCRIPTION IN MECH	
	g. Floats for proper stowage and condition (if installed).	
Chapter 96	5. Landing light and searchlight for condition and security.	
Chapter 97	6. Antennas for damage, cleanliness, and security.	
Chapter 52	<b>7.</b> Passenger/cargo doors and surrounding structure for damage, corrosion, and proper operation. Window seals for condition.	
Chapter 25	8. Crew seats:	
	a. Seats for condition, security, and proper operation.	
	<b>b.</b> Cushions and backs for cleanliness, excessive deterioration, and tears.	
	<b>c.</b> Crew seat restraint assemblies for condition, security, and proper operation.	
Chapter 25	9. Passenger seats:	
	a. Seats for condition and security.	
	<b>b.</b> Cushions and backs for cleanliness, excessive deterioration, and tears.	
	<b>c.</b> Passenger seat restraint assemblies for condition, security, and proper operation.	
Chapter 95	10. Instruments:	
	a. Instrument panel for cleanliness.	
	<b>b.</b> All instrument, placards, decals, and markings for appearance and legibility.	
	c. Check magnetic compass for condition and security.	
	d. All compass cards for validity.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
Chapter 96 and Chapter 97	11. Avionics and electrical equipment:		
	<b>a.</b> Pedestal mounted avionics/electrical equipment for condition, cleanliness, and security.		
	<b>b.</b> Overhead console for condition, cleanliness, and security.		
	<b>c.</b> All instrument lights, integrally lit panels, secondary lights, and map lights for serviceability.		
	<b>d.</b> All caution and warning lights for proper operation by using master caution, fire test, and baggage compartment smoke detector. Press to test functions.		
	e. Landing and search lights for condition and security.		
	<b>f.</b> Navigation and anticollision lights for condition and security.		
	<b>g.</b> Every fourth 25 hour/ 30 day inspection operationally check cabin heater system, bleed air shutoff and line check valve.		
Chapter 26	<b>12.</b> Two portable fire extinguishers for condition, mounting, and valid inspection certificate.		
Chapter 21	13. Cabin heating and ventilation system:		
	<b>a.</b> Ventilating system components for condition and security.		
	<b>b.</b> Heat/vent air ducts for condition and proper operation.		
	c. Ventilation/defog components for condition and security.		
Chapter 25	<b>14.</b> Miscellaneous furnishings (map and data case, first aid kit, and emergency equipment) for condition and security.		
Chapter 63	15. Main rotor transmission:		
	a. Proper oil level.		



#### 25 HOURS/30 DAYS — PART B (CONT) 5-9.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTH	
	<b>b.</b> External oil filter for bypass indication.		
	<b>c.</b> Cases for damage, corrosion, condition, and evidence of leakage.		
	<b>d.</b> Accessories for condition, corrosion, damage, and security of attachment.		
	<b>e.</b> External oil lines and hoses for condition, damage, chafing, and leaks, paying particular attention to lines running aft of the thermostatic relief valve.		
	f. Transmission mount dust boots for condition.		
	CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.		
	<b>g.</b> Transmission tail rotor output quill coupling and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black, indicates an overheat condition, and may require replacement of both outer and inner couplings (step h).		
	h. Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of overtemperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
Chapter 29	16. Hydraulic systems:		
	<b>a.</b> Hydraulic system 1 and 2 filter bypass indicator buttons are not extended.		
	<b>b.</b> Collective and cyclic servo actuators for leaks, corrosion, damage, and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	TIAL OTHER
	c. Hydraulic system 1 pump for leaks, damage, and security.		
	<b>d.</b> Hydraulic system 1 and 2 valve and filter modules for leaks, damage, and security.		
	e. Hydraulic system 1 and 2 lines, hoses, and fittings for leaks, damage, chafing, kinking, and security.		
	CENTER FUSELAGE		
	NOTE		
	Accomplish the following checks every fourth 25 hour/30 day inspection.		
	Lower cyclic hydraulic actuator supports P/N 212-030-826-001 and -002 in cargo hook compartment (hellhole).		
	NOTE		
	The following inspection is not required for helicopters S/N 30790 and subsequent and helicopters modified in accordance with TB 212-76-12.		
	1. Clean area around fuel vent line hole with MEK (C-309) and remove finish from beam cap.		
	2. Inspect each beam cap for hairline cracks using a bright light. Inspect inboard side of left and right main beams around fuel vent line that goes through cap extrusion at FS 131.00, WL 21.50, and BL 14.00. Pay particular attention to first high shear rivet hole above WL 22.00 at FS 129.00 (Figure 5-2, Detail A and Detail B).		
	3. Apply clear lacquer over cleaned area.		
	FUSELAGE AFT OF CABIN LEFT AND RIGHT SIDE		
Chapter 52	<b>1.</b> Avionics/electrical and heater compartment doors for condition and security of attachment. Latches for proper operation.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 53	2. Fuselage structure:	
	<b>a.</b> Avionics/electrical and heater compartments for evidence of water entrapment.	
	<b>b.</b> Engine decks for condition and evidence of delamination.	
Chapter 96 and Chapter 97	<b>3.</b> Avionics and electrical equipment for security and condition.	
Chapter 21	<b>4.</b> Heater compartment for cleanliness, condition, and security of heating system components, wiring, ducts, and supports. Structure for damage and corrosion including connections and fasteners.	
Chapter 29	<b>5.</b> Tail rotor hydraulic actuator and hoses for leakage, corrosion, and security.	
Chapter 67	<b>6.</b> Tail rotor control tubes for condition, corrosion, and security.	
Chapter 63	7. Transmission oil cooling system:	
	a. Oil coolers for leakage, damage, and obstruction.	
	<b>b.</b> Oil cooler hoses and tubes for leakage, damage, chafing, and fraying.	
	<b>c.</b> Oil cooler blowers for damage, corrosion, and obstruction.	
Chapter 79	8. Engine oil system:	
	<b>a.</b> Oil coolers for leakage, corrosion, damage, and obstruction.	
	<b>b.</b> Oil cooler hoses and tubes for leakage, damage, chafing, and fraying.	
	<b>c.</b> Reduction gearbox oil filter impending bypass indicator button is not extended.	
	d. Power section 1 for proper oil level.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	e. Power section 2 for proper oil level.		
	f. Reduction gearbox for proper oil level.		
Chapter 26	<b>9.</b> Engine compartment fire extinguisher containers for proper charge, condition, and mounting.		
Chapter 71	<b>10.</b> Engine and reduction gearbox mounts for loose bearings and security.		
Chapter 71	11. No. 1 (left) engine power section:		
	a. Exhaust ejector and duct for damage and security.		
	<b>b.</b> Gas generator case for cracks, buckled areas, and hot spots.		
	<b>c.</b> Oil and fuel hoses and tubes for chafing, leaking, and security.		
	d. Electrical wiring for fraying, chafing, and security.		
Chapter 71	<b>12.</b> No. 2 (right) engine power section:		
	a. Exhaust ejector and duct for damage and security.		
	<b>b.</b> Gas generator case for cracks, buckled areas, and hot spots.		
	<b>c.</b> Oil and fuel hoses and tubes for chafing, leaking, and security.		
	d. Electrical wiring for fraying, chafing, and security.		
Chapter 71	<b>13.</b> Engine firewalls, air intake ducts, and plenum for cracks, distortion, missing rivets, broken spots welds, and deteriorating seals or gaskets.		
Chapter 71	<b>14.</b> Engine cowling for missing fasteners and cracks. Latches for proper operation.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 53	FUSELAGE AFT TAILBOOM ATTACHMENT	
	Inspect fuselage tailboom attachment points for security.	
	2. Every fourth 25 hour/30 day inspection:	
	<b>a.</b> Inspect fuselage and tailboom attachment components and hardware for cracks with 10X magnifying glass. Pay particular attention to interface between forward end of tailboom attachment fitting and cap angle (Figure 5-1).	
	TAILBOOM	
Chapter 53	1. Tailboom structure:	
	a. Exterior structure for condition, damage, and corrosion.	
	<b>b.</b> Baggage compartment interior for condition and cleanliness.	
Chapter 52	2. Baggage compartment door for damage, proper operation, and security.	
Chapter 52	3. Driveshaft and intermediate gearbox covers for damage and security.	
Chapter 67	4. Elevators for damage and security.	
Chapter 97	5. Tailboom mounted avionics equipment for condition and security.	
Chapter 53	<b>6.</b> Every fourth 25 hour/30 day inspection:	
ASB 212-00-110	a. Inspect vertical fin caps for cracks and/or corrosion.	
	<b>b.</b> Inspect interior structure (including joints, splices, longerons, attach fittings and hardware) for condition, corrosion, damage, and cracks.	
Chapter 67	c. Check elevator attachment lugs at each end of elevator horn for cracks, corrosion, and security.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>*</sup> MECH	TIAL OTHER
	d. Check elevator horn to elevator spar attaching bolts and surrounding joint for cracks, corrosion, and security.		
	<b>e.</b> Check elevator control tubes, supports, attaching hardware, and surrounding structure for corrosion, damage, and security.		
Chapter 65	f. Torque check tail rotor gearbox attachment lugs.		
	g. Torque check intermediate gearbox mounting bolts.		
Chapter 65	7. Tail rotor driveshaft:		
	THE CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.  a. Hanger assemblies — bearings and surrounding areas for evidence of grease leakage, condition, damage, security, corrosion, and overheating. Visual overheat indicator stripe(s) on hangers for discoloration and overheat condition (color change from green to brown). Discoloration of bearing (color change to blue or blue/black) or multi-color appearance of hanger that darkens adjacent to bearing is evidence of overheating. Brown color of bearing shield is normal and is not evidence of overheating.  b. Driveshaft sections for cracks, rivet failure, distortion, dents, corrosion, and damage to anodized finish.  c. Clamp sets for condition, security, and proper installation.		



#### 25 HOURS/30 DAYS — PART B (CONT) 5-9.

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 65	WARNING  THE CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.  d. Flexible couplings and surrounding areas for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings (step e).  e. Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of over temperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.  8. Intermediate gearbox:  a. Gearbox assembly for security, condition, corrosion, damage, and oil leaking.  WARNING  THE CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.  b. Input and output quill flexible couplings and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLAETS or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings (step c).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	ΓIAL OTHER
	<b>c.</b> Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of over temperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
	<b>d.</b> Gearbox for proper oil level and oil for evidence of contamination.		
Chapter 65	9. Tail rotor gearbox:		
	<b>a.</b> Gearbox assembly for security, condition, corrosion, damage, and oil leaking.		
	WARNING		
	THE CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.		
	<b>b.</b> Input quill flexible coupling and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of one or more of the red bordered TEMP-PLATE dots from white/off-white to black indicates an overheat condition and may require replacement of both outer and inner couplings (step c).		
	<b>c.</b> Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of over temperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.		
	<b>d.</b> Gearbox for proper oil level and oil for evidence of contamination.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 64	10. Tail rotor hub and blade assembly:		
	WARNING NO ORACKO ARE REPMITTED ON ANY OURSEASE		
	NO CRACKS ARE PERMITTED ON ANY SURFACE OF THE TAIL ROTOR BLADES.		
	a. Tail rotor blades for condition of bond lines, cracks, corrosion, leading edge erosion, damage, security, and cleanliness. Clean blades are required to maintain enhanced visibility for safety.		
	<b>b.</b> Tail rotor hub for security, corrosion, and condition.		
	<b>c.</b> Flapping bearings and pitch change bearings for excessive looseness and freedom of movement through full range of travel with antitorque pedals positioned full right and then full left.		
	<b>d.</b> Tail rotor pitch change links, crosshead, pitch horns, counterweight arms, and links for security, corrosion, and condition.		
	<b>e.</b> Pitch link bearing and counterweight link bearing looseness shall not exceed 0.015 inch (0.381 mm) axial. Check freedom of movement through full range of travel with antitorque pedals positioned full right and then full left.		
	<b>f.</b> Pitch change links for binding with tail rotor blade moved to both full flapping positions. Binding is not acceptable.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	11. Every fourth 25 hour/30 day inspection:	
	CAUTION	
	COUNTERWEIGHT BELLCRANK RETENTION NUTS P/N MS14145L6 OR ITS EQUIVALENT MS17826-6 ARE DESIGNATED AS ONE TIME USE ONLY. IF MAINTENANCE ACTION REQUIRES THAT IT BE REMOVED, THE COUNTERWEIGHT BELLCRANK NUT IS TO BE DISCARDED AND REPLACED WITH A NEW NUT. OVERTORQUING OR INCORRECT APPLICATION OF THE NUT COULD CAUSE MECHANICAL FAILURE RESULTING IN EXCESSIVE VIBRATION OR DAMAGE TO THE TAIL ROTOR BLADES.	
	<b>a.</b> Inspect the tail rotor counterweight bellcrank P/N 212-011-705-001 retention nuts for cracks, corrosion, and security. Reapply corrosion preventive compound (C-101) if nuts are not completely covered.	
Chapter 32	12. Tail skid for deformation and security of attachment.	
	CABIN ROOF	
Chapter 52 and Chapter 53	Cabin structure and cowlings/fairings for condition.	
Chapter 63	2. Transmission and transmission oil lines for condition, corrosion, and leaks.	
Chapter 63 and BHT-212-SI-6	3. Rotor brake quill, disc and brake assembly (if installed):	
	a. Brake quill for condition, damage, and leakage.	
	<b>b.</b> Brake disc for condition, damage, security, warpage, and evidence of overheat.	
	<b>c.</b> Caliper switches and wiring for condition and security of attachment.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHEI
Chapter 29	4. Hydraulic systems:	
	A. Hydraulic system 2 pump for leakage and security.	
	<b>b.</b> Hydraulic lines for leaks, chafing, and kinking.	
	<b>c.</b> Hydraulic system 1 and 2 reservoirs for proper fluid levels, damage, corrosion, and security.	
Chapter 62	5. Main rotor blades:	
	a. Main rotor blades upper and lower surfaces for condition of bond lines, doublers, and leading edge for erosion. Inspect blade surfaces for corrosion, cracks, damage, and voids.	
	<b>b.</b> Every fourth 25 hour/30 day inspection, wash main rotor blades with mild soap and water. Rinse and dry thoroughly.	
Chapter 62	6. Main rotor hub:	
	— Detailed Visual Inspection	
	a. Main rotor hub assembly (grips, drag braces, trunnion pillow blocks, static stops, and mast nut) for condition and security.	
	<b>b.</b> Hub assembly for proper oil level or grease lubrication.	
	<b>c.</b> Main rotor yoke for evidence of cracks at pillow block bushing bores. Proper sealing of pillow blocks, yoke, and attaching through bolts, washers, nuts, and bushings.	
Chapter 62	7. Main rotor controls:	
	NOTE	
	The presence of black oxide powder will require investigation to determine the cause.	



## 5-9. 25 HOURS/30 DAYS — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>a.</b> Swashplate and support assembly and collective lever for security and mechanical and corrosion damage. Pay special attention to gimbal ring bearings, trunnion bearings, and attaching hardware for excessive looseness and security. Gimbal ring bearing and attaching bolt axial or radial looseness shall not exceed 0.005 inch (0.127 mm) and no binding is allowed.		
	— Detailed Visual Inspection		
	<b>b.</b> Every fourth 25 hour/30 day inspection, disconnect flight control tubes from swashplate and collective lever assembly. Inspect six bearings 204-011-451-001 for 0.020 inch (0.508 mm) maximum axial play. Rotate bearings 180° and purge lubricate.		
	<b>c.</b> Scissors and sleeve assembly for security and condition. Collective lever for condition and evidence of corrosion.		
	<b>d.</b> Every fourth 25 hour/30 day inspection, replace bearings MS20201KP8A or MS27641-8 in scissors levers 204-011-406.		
	e. Pitch links, damper tubes, and connecting links for condition and security. Bearings for looseness.		
	<b>f.</b> Stabilizer bar dampers for condition, security, and proper fluid level.		
	<b>g.</b> Every fourth 25 hour/30 day inspection, replace bearings AN201KP6A or MS27641-6 in missing levers 204-011-301.		
	h. Inspect stabilizer bar assembly for condition and security. Pay particular attention to tubes P/N 204-011-328-001 and -011 for cracks. Closely inspect area covering 360° 1.5 inches (38.1 mm) outboard from vertical bolt AN174-23A.		



## 5-9. 25 HOURS/30 DAYS — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
Chapter 63	8. Main rotor mast:	
	<b>a.</b> Inspect mast assembly for security, corrosion, and mechanical damage. Pay particular attention to area contacted by main rotor static stops and damper assembly/adapter set splines.	
	<b>b.</b> Inspect for evidence of oil leaks at mast bearing cap.	
	c. Mast nut for security.	
Chapter 63	9. Engine-to-transmission (main) driveshaft:	
	a. Main driveshaft for corrosion, condition, and security.	
	WARNING	
	THE CAUSE OF ANY DISCOLORATION SHALL BE DETERMINED AND CORRECTED PRIOR TO NEXT FLIGHT.	
	<b>b.</b> Main driveshaft forward and aft couplings, boots, seals and surrounding area for grease leakage, damage, corrosion, and evidence of overheat as indicated by TEMP-PLATES or coupling discoloration. A change in color of any yellow bordered TEMP-PLATE, from white/off-white to black, will indicate a possible overheat condition and/or component degradation (step c). If one or more of the red bordered TEMP-PLATE dots change from white/off-white to black, an overheat condition is present and may require replacement of both outer and inner couplings.	
	<b>c.</b> Overheat TEMP-PLATES for condition and security. TEMP-PLATES must not show evidence of overtemperature indication, deterioration, debonding, or excessive discoloration of the epoxy overcoating.	



#### 5-10. 300 HOURS — PART B

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	For helicopters on the Part B inspection program, accomplish the following checks each 300 hours of flight operation.		
	<u>GENERAL</u>		
	Each listed inspection item or maintenance function is to be performed in accordance with the chapter specified.		
	PRELIMINARY REQUIREMENTS		
	All work accomplished during inspection shall be recorded in helicopter maintenance records.		
	<b>2.</b> Remove all panels, fairings, and cowlings required to satisfactorily carry out the inspection.		
	3. Perform a complete 25 hour/30 day — Part B inspection.		
	AFTER COMPLETION OF INSPECTION		
	Reinstall all panels, fairings, and cowlings removed during inspection.		
	2. Carry out a ground run and leak check prior to releasing the helicopter back to service.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	FUSELAGE — CABIN		
Chapter 53	Forward fuselage:		
	a. Cabin exterior structure for corrosion and damage.		
	<b>b.</b> Cabin interior structure for corrosion and damage.		
	c. Ensure all drain holes are open.		
	<b>d.</b> All compartments for evidence of water entrapment and corrosion.		
	2. Underside of fuselage:		
	<b>a.</b> Fuselage structure for damage, corrosion, and working rivets.		
	<b>b.</b> Exterior finish for condition and cleanliness.		
	c. Evidence of excessive fluid leakage.		
	d. Structure around landing gear for condition.		
	<b>e.</b> Forward crosstube support structure for working fasteners, cracks, corrosion, and excessive wear.		
	<b>f.</b> Aft crosstube support structure for working fasteners, cracks, corrosion, and excessive wear.		
Chapter 52	3. Doors and windows:		
	<b>a.</b> Crew and passenger doors structure for corrosion, damage, distortion, and positive locking mechanisms. Seals for adherence, tears, separations, and deterioration.		
	<b>b.</b> Crew doors emergency jettison mechanism for condition, security, and operation.		



NOTE	MECH OTHER
The following inspection (step c and step d) is helicopters equipped with escape panels which redentified by a rotating handle installed below passenger door windows. The handle is labe EMERGENCY RELEASE PULL COVER TO LEFT AND PUSH.  c. Inspect passenger door emergency egress pand mechanisms for wear, corrosion, operation, and seed the decision of the passenger door panels.  e. Passenger door window retainers and applicable) for damage.  f. Nose, electrical, and equipment compartment doors for corrosion, damage, distortion, and positive mechanisms.  g. Inspect heated windshield, if installed, for conceptoper operation.  Chapter 67  4. Collective flight control actuator.  a. Universal bearings for looseness.  b. Input lever bearings and bolts for wear and looc. Fasteners attaching cylinder lower supports to for looseness.  d. Cylinder lower bearings for looseness.  e. Actuator assembly for damage and leakage.  f. Cylinder extension tube for condition and secure.  g. Actuator linkage, balance spring, and bracket	s for may verthe beled URN  Danel pins ecurity.  Or escape  fillers (if ont access vertice locking or escape)  dition and obseness.  Distructure or established the second of the second



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	h. Torque check nuts attaching actuator cylinder to upper supports.		
	i. Remove bolts attaching actuator to lower supports. Check cylinder alignment to lower support. Rod end bearing side loads are not permitted. Install bolts.		
	j. Clean exposed area of actuator piston with hydraulic fluid and a clean lint-free cloth.		
BHT-ALL-SPM	<b>k.</b> Upper cylinder housing mounting bracket cavity for corrosion. Cavity drain hole for obstruction. Reapply corrosion preventive compound (C-104) as required. Dust boot for condition.		
Chapter 67	5. Collective control tubes:		
	<b>a.</b> Control tubes between collective jackshaft and collective control actuator pilot valve input lever for corrosion, wear, and damage.		
	<b>b.</b> Control tube bellcrank, supports, and attaching hardware for corrosion, wear, and damage.		
Chapter 67	6. Cyclic flight control actuators.		
	a. Universal bearings for looseness.		
	<b>b.</b> Input lever bearings and bolts for wear and looseness.		
	<b>c.</b> Fasteners attaching cylinder lower supports to structure for looseness.		
	d. Cylinder lower bearings for looseness.		
	e. Actuator assembly for damage and leakage.		
	f. Cylinder extension tube for condition and security.		
	g. Actuator linkage for wear and security.		
	h. Torque check nuts attaching actuator cylinder to upper supports.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	i. Remove bolts attaching actuator to lower supports. Check cylinder alignment to lower support. Rod end bearing side loads are not permitted. Install bolts.		
	j. Clean exposed area of actuator piston with hydraulic fluid and a clean lint-free cloth.		
BHT-ALL-SPM	<b>k.</b> Upper cylinder housing mounting bracket cavity for corrosion. Cavity drain hole for obstruction. Reapply corrosion preventive compound (C-104) as required. Dust boot for condition.		
Chapter 67	7. Cyclic control tubes:		
	<b>a.</b> Control tubes between cyclic jackshaft and cyclic control actuator pilot valve input lever for corrosion, wear, and damage.		
	<b>b.</b> Control tube bellcranks, mixing levers, supports, and attaching hardware for corrosion, wear, and damage.		
Chapter 63	8. Transmission:		
	a. All transmission chip detectors for debris.		
	<b>b.</b> Clean all transmission chip detectors.		
	c. Test all transmission chip detector electrical circuits.		
	<b>d.</b> Transmission internal oil filter or full flow debris monitor for debris.		
	e. Clean transmission internal oil filter or full flow debris monitor.		
	f. Mounts for damage and security.		
	<b>g.</b> Lift link and attachments for corrosion, damage, and security. Bearings for looseness.		
BHT-212-CR&O	<b>h.</b> Torque check — top case to ring gear case nuts, ring gear case to main case nuts and main case to support case nuts 230 to 250 inch-pounds (25.99 to 28.25 Nm). Retorque as required.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
Chapter 71	POWER PLANT		
	NOTE		
	If applicable, refer to BHT-212-SI-96 for installation of adjustable seals or refer to Chapter 71 for seal adjustment.		
ASB 212-10-137	1. Inspect the left-hand and right-hand engine air inlet cowlings for gaps between the lower surface of the cowling firewall and the mating horizontal engine firewall.		
	LEFT POWER SECTION		
Chapter 71	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	— Detailed Visual Inspection		
	1. Chip detectors for debris.		
	— Restoration		
	1. Clean chip detector.		
	— Functional Check		
	Test chip detector electrical circuits.		
	RIGHT POWER SECTION		
	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	— Detailed Visual Inspection		
	1. Chip detectors for debris.		



## 5-10. 300 HOURS — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	ΓIAL OTHER
	— Restoration		
	1. Clean chip detector.		
	— Functional Check		
	Test chip detector electrical circuits.		
Chapter 71	ENGINE ELECTRICAL CONNECTIONS		
	— Detailed Visual Inspection		
	Left power section ignition leads for corrosion, chafing, and security.		
	2. Right power section ignition leads for corrosion, chafing, and security.		
Chapter 71	COMBINING (REDUCTION) GEARBOX		
	NOTE		
	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine inspection requirements.		
	— Detailed Visual Inspection		
	Chip detectors for debris.		
	— Restoration		
	Clean chip detector.		
	— Functional Check		
	Test chip detector electrical circuits		
Chapter 71	STARTER GENERATOR		
	— Detailed Visual Inspection		
	Left power section starter generator brushes for allowable wear.		

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DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	2. Right power section starter generator brushes for allowable wear.		
	3. Left power section starter generator cooling ducts for obstruction, kinking, and security.		
	<b>4.</b> Right power section starter generator cooling ducts for obstruction, kinking, and security.		
Chapter 76	ENGINE FUEL AND POWER CONTROLS		
	— Detailed Visual Inspection		
	Engine control linkages for looseness, lost motion, chafing, damage, and security of attachment.		
	2. Bellcranks, mounts, and jackshafts.		
	— Operational Check		
	Check controls for smooth movement through full travel ranges.		
Chapter 96	POWER DIODES		
	Perform functional check of power diodes.		
Chapter 32	LANDING GEAR SYSTEM		
	— Detailed Visual Inspection		
	<b>1.</b> Landing gear skid shoes for excessive wear, cracks, damage, corrosion, and security of attachment.		
	— Restoration		
	Torque check crosstube to skid tube saddle bolts.		
	2. Torque check forward and aft crosstube support fittings "U" bolts 80 to 100 inch-pounds (9.0 to 11.3 Nm).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	3. Torque check ground handling wheel attachment eyebolts on skid tubes 40 to 58 foot-pounds (54 to 79 Nm). Eyebolts that rotate prior to reaching 40 foot-pounds (54 Nm) shall be removed and inspected for evidence of bending. No bending is permitted.		
Chapter 26	FIRE DETECTION SYSTEM		
	— General Visual Inspection		
	Engine fire detection elements for condition and security.		
	TAILBOOM		
Chapter 53	1. Tailboom structure:		
	a. Tailboom exterior structure for corrosion and damage.		
	<b>b.</b> Tailboom interior structure for corrosion and damage.		
	<b>c.</b> Inspect tailboom joints, splices, longerons, attach fittings, and attaching hardware for corrosion, damage, and cracks.		
ASB 212-90-63	<b>d.</b> Remove plug button at BS 99.00.		
	NOTE		
	Paint fissures are common in the splice area, cracks will be evident by black powder emanating from cracked area, and corrosion will leave evidence of white powder.		
	<b>e.</b> Using a borescope or suitable means, inspect inside of longeron paying particular attention to cracking and/or corrosion in area of splice.		
	f. Report any cracks to Product Support Engineering.		
	g. Install plug button with sealant (C-308).		
	h. Ensure all drain holes are open.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	i. Vertical fin spar caps forward side and web from upper tailboom skin to approximately 4 inches (101.6 mm) below upper tailboom skin as follows: remove aft tailboom access door. Face aft and use bright light and small mirror to inspect area for cracks, especially near rivet holes.	
BHT-ALL-SPM	NOTE	
	If necessary, clean area with cloth dampened with MEK (C-309) or equivalent. Ventilate area to prevent breathing fumes.	
Chapter 67	2. Antitorque controls:	
	<b>a.</b> Tail rotor control tubes between tail rotor pedals and tail rotor gearbox for corrosion, wear, and damage.	
	<b>b.</b> Control tube bellcrank, supports, and attaching hardware for corrosion, security, wear, and damage.	
	<b>c.</b> Tail rotor hydraulic actuator for leaks and security of attachment, damage, corrosion, and bearings and linkages for looseness.	
Chapter 67	3. Elevator:	
	— Detailed Visual Inspection	
	<b>a.</b> Check synchronized elevator push-pull tubes for chafing, corrosion, wear, and damage.	
	<b>b.</b> Check elevator and horn assembly for security, cracks, wear, damage, and corrosion.	
	c. Check left and right elevator assemblies for excessive axial and radial play using a dial indicator mounted on the tailboom, with stylus touching inboard edge of elevator near attachment bolt for axial measurement, and touching upper surface near attachment bolt for radial measurement. Applying light force to move elevator in required direction, check that radial movement does not exceed 0.010 inch (0.254 mm), and that axial movement is within 0.005 to 0.030 inch (0.127 to 0.762 mm). Adjust shims as required.	



## 5-10. 300 HOURS — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	d. Elevator rigging for proper setting and travel.		
Chapter 52	<b>4.</b> Baggage compartment door for corrosion, damage, distortion, and positive locking mechanism.		
Chapter 26	5. Baggage compartment smoke detector for condition and security.		
Chapter 96	<b>6.</b> Inspect wire bundles and clamping for chafing, condition, and security.		
Chapter 65	7. Tail rotor driveshaft:		
	<b>a.</b> Hanger assemblies for cracks at mounting ears, corrosion, and security of attachment.		
	<b>b.</b> Hanger supports for condition and security of attachment.		
	<b>c.</b> Driveshaft sections and attaching hardware for condition and security.		
	<b>d.</b> Coupling clamps for cracks in or near bolt lugs. Clamps for proper position.		
Chapter 65	8. Intermediate gearbox:		
	a. Chip detector for debris.		
	<b>b.</b> Clean chip detector.		
	c. Functionally test chip detector electrical circuit.		
Chapter 12	d. Service gearbox as required.		
Chapter 65	9. Tail rotor gearbox:		
	a. Chip detector for debris.		
	<b>b.</b> Clean chip detector.		
	c. Functionally test chip detector electrical circuit.		

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DATA REFERENCE	ICE INSPECTION TASK DESCRIPTION		
Chapter 12	d. Service gearbox as required.		
Chapter 64	10. Tail rotor hub and blade assembly:		
	a. Torque check nuts on tail rotor blade retention bolts.		
	<b>b.</b> Torque check tail rotor hub retaining nut.		
Chapter 18	c. Dynamically balance tail rotor.		
Chapter 62	MAIN ROTOR BLADE INSPECTION SYSTEM (BIS) (IF INSTALLED)		
	— Inspect		
BHT-212-CR&O and Chapter 96	1. Test detector unit.		
	2. Perform continuity check on blade conductor circuits.		
	3. Remove BIS battery.		
	4. Perform battery condition check on replacement battery. Install replacement battery.		
Chapter 52 and Chapter 53	CABIN ROOF		
	1. Cabin roof structure:		
	<b>a.</b> Cabin roof structure, cowlings and fairings for damage, delamination, and general condition.		
	<b>b.</b> Cabin roof and cowling/fairing mounted antennas for condition and security.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:	MECH	OTHER
	For helicopters on the Part B inspection program, accomplish the following checks each 600 hours flight time or 12 calendar months, whichever occurs first.  GENERAL		
	Each listed inspection item or maintenance function is to be performed in accordance with the 212 Maintenance Manual chapter specified.		
	<ol> <li>All work accomplished during inspection shall be recorded in helicopter maintenance records.</li> <li>Remove all fuselage and tailboom access panels, removable floor panels, fairings, and cowlings.</li> <li>Perform a complete 300 hour — Part B inspection.</li> <li>Ensure all applicable Special Inspections, Alert Service Bulletins, and Airworthiness Directives have been accomplished.</li> </ol>		
	accomplished.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	AFTER COMPLETION OF INSPECTION		
	Reinstall all panels, fairings, and cowlings removed during inspection.		
	2. Carry out a ground run and leak check prior to releasing the helicopter back to service.		
	FUSELAGE		
Chapter 25	Emergency and safety equipment:		
	<b>a.</b> Emergency and safety equipment for inspection due dates.		
	<b>b.</b> Contents of first aid kit for missing or over age items.		
Chapter 26	2. Perform weight check of cockpit and cabin portable fire extinguishers.		
Chapter 52	3. Perform operational check of crew doors emergency release mechanisms.		
Chapter 21 and Chapter 96	<b>4.</b> Bleed air heating and ventilation/defog system components:		
	a. Perform functional check of bleed air heating system and components.		
	<b>b.</b> Perform functional check of defog blower.		
Chapter 95	5. Instruments: (required at 12 months calendar time only)		
	<b>a.</b> Calibrate pilot and copilot compass systems and standby magnetic compass.		
	<b>b.</b> Drain pitot-static system of any accumulated moisture.		
	c. Test pitot-static system for leaks.		
Chapter 96	<b>6.</b> Perform functional check of battery temperature sensor caution light system.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
Chapter 67	7. Collective flight controls:		
	a. Friction shoes and liners for condition.		
	<b>b.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>c.</b> Functionally check collective lever friction adjuster for proper friction and operation.		
	<b>d.</b> Functionally check collective minimum friction for proper friction and operation		
	e. Functionally check collective flight controls for smooth movement throughout their full travel ranges.		
Chapter 67	8. Cyclic flight controls.		
	<b>a.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Functionally check cyclic stick friction adjuster for proper friction and operation.		
	<b>c.</b> Functionally check cyclic flight controls for smooth movement throughout their full travel ranges.		
	9. Deleted.		
Chapter 67	10. Antitorque flight controls:		
	<b>a.</b> Flight control systems bellcrank and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Functionally check antitorque friction adjuster for proper friction and operation.		
	<b>c.</b> Functionally check antitorque flight controls for smooth movement throughout their full travel ranges.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
Chapter 62	<b>11.</b> Swashplate and support assembly, and scissors and sleeve assembly:		
	<b>a.</b> Disconnect bottom of each drive link from swashplate trunnion and each mixing lever control tube from scissors.		
	<b>b.</b> Check swashplate duplex bearing and collective sleeve hub bearing set for roughness and ease of rotation.		
	c. Purge lubricate bearings.		
	d. Reconnect drive links and tubes.		
Chapter 76 Pratt & Whitney PT6T-3 Maintenance Manual	<b>12.</b> Engine: Perform maximum N <sub>G</sub> topping check.		
Chapter 76	13. Engine controls:		
	<b>a.</b> Engine control system bellcranks, mounts, and control tubes for damage, chafing, corrosion, and security of attachment.		
	<b>b.</b> Functionally check collective lever throttle friction adjusters for proper friction and operation.		
	<b>c.</b> Functionally check engine controls for smooth movement throughout their full travel ranges.		
	<b>14.</b> Inspect all exposed fuel lines and attachments for leakage, damage, and security.		
Chapter 29	15. Hydraulic system:		
	NOTE		
	Hydraulic filter elements 205-076-034-003 are non-cleanable. It is recommended they be replaced every 600 hours or 12 months. Filter elements 205-076-034-007 are cleanable. The -003 and -007 elements are interchangeable. Intermixing of different element types is not permitted.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER		
	a. Remove and inspect hydraulic filter elements.				
	<b>b.</b> Discard or clean filter elements as applicable.				
	c. Install hydraulic filter elements.				
	<b>d.</b> Install 0 to 500 PSIG (0 to 3447 kPa) gauge in quick disconnect at rotor brake caliper. Slowly pull rotor brake handle through travel. Cylinder should generate 240 to 260 PSI (1655 to 1793 kPa) at any handle velocity and shall maintain 150 SPI (1034 kPa) minimum in over center position for 3 minutes. Adjust as necessary.				
	e. Inspect rotor brake linings for wear (minimum thickness 0.150 inch (3.81 mm)).				
Chapter 53	<b>16.</b> Fuselage cabin structure:				
	a. Fuselage structure for corrosion and damage to finish and sealant. Pay particular attention to edges of joints and seams and around fastener heads.				
	<b>b.</b> Ensure all drain holes are open.				
	<b>c.</b> Engine compartment floor and service deck, FS 155.06 to 241.22 for damage, delamination, and corrosion.				
	<b>d.</b> Fuselage bonded panels for damage and delamination.				
	NOTE				
	To adequately inspect the following, it will be necessary to remove the auxiliary fuel tanks, if installed.				
	e. Pylon wall for damage, working fasteners, cracks, delamination, and corrosion.				
	17. Electrical system:				
	<b>a.</b> Check inverters for security of mounting and connections.				



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	<b>b.</b> Check generator control units for damage and security of mounting and terminals.	
	<b>c.</b> Inspect all exposed wire bundles, bundle supports and connectors for damage, corrosion, and security. Pay particular attention to engine deck connectors and harnesses.	
	<b>d.</b> Inspect relays and main bus area for security of mounting and connections.	
	e. Inspect bus insulation for damage and condition.	
Chapter 96	<b>18.</b> All wire bundles, bundle supports, and connectors for damage, corrosion, and security. Pay particular attention to engine deck connectors and harnesses.	
Chapter 4, Chapter 26, and Chapter 96	19. Fire extinguishing system:	
	<b>a.</b> Functionally check voltage of engine fire extinguishing circuits.	
	<b>b.</b> Replace engine fire extinguisher container firing cartridges in accordance with specified service life.	
Chapter 28	<b>20.</b> Remove four access doors, located just forward of the aft crosstube, from the underside of the fuselage. Inspect fuel lines for evidence of leakage, damage, and security.	
	TAILBOOM	
Chapter 53	1. Tailboom structure for corrosion and damage to finish and sealant. Pay particular attention to edges of joints and seams and around fastener heads.	
Chapter 26	2. Functionally check baggage compartment smoke detector.	
Chapter 67	3. Synchronized elevator:	
	a. Remove left and right elevators.	
	<b>b.</b> Clean elevator spars and inspect for corrosion.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITI MECH	AL OTHER
	c. Clean internal bore of elevator horn and inspect for corrosion.		
	<b>d.</b> With elevator control removed, attach a spring scale to hole in arm of horn where control tube is normally installed. Pull scale at right angle to arm, verify friction is 26 to 32 pounds (115.65 to 142.34 N). If friction is not within limits, adjust shim thickness.		
	e. Install left and right elevators.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	For helicopters on the Part B inspection program accomplish the following checks each 3000 hours flight time or 60 calendar months, whichever occurs first.		
	GENERAL		
	Each listed inspection item or maintenance function is to be performed in accordance with the maintenance manual chapter specified.		
	PRELIMINARY REQUIREMENTS		
	<b>1.</b> All work accomplished during inspection shall be recorded in helicopter maintenance records.		
	<b>2.</b> Remove all panels, fairings, and cowlings required to satisfactorily carry out the inspection.		
	<b>3.</b> In addition to the 3000 hour/5 year — Part B inspection items, carry out the following:		
	a. Complete 25 hour/30 day — Part B inspection.		
	<b>b.</b> Complete 300 hour — Part B inspection.		
	c. Complete 600 hour/12 month — Part B inspection.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	AFTER COMPLETION OF INSPECTION		
	Reinstall all panels, fairings, and cowlings removed during inspection.		
	2. Carry out a ground run and leak check prior to releasing the helicopter back to service.		
	FORWARD FUSELAGE		
Chapter 53	Center and outboard bulkhead, below WL 22.0 at FS 23.0 for cracks, deformation, and corrosion along structure joints.		
	2. Collective and cyclic control jackshafts support intercostal for cracks and corrosion.		
	3. Cyclic support for corrosion and cracks.		
	<b>4.</b> Collective, cyclic, and antitorque control system bellcranks, levers, and support brackets for corrosion, cracks, and indication of wear at attaching points.		
	<b>5.</b> Crew seat support beams at BL 14.0 and 30.0 and FS 23.0 and 74.30 for cracks and corrosion.		
	<b>6.</b> Forward crosstube attach points and support structure at FS 63.33 and 74.30 for damage, corrosion, and cracks. Aft crosstube attach points and support structure at FS 155.06 and 166.00 for damage, corrosion, and cracks.		
	7. Crew and passenger cabin floor FS 23.0 to 155.06 for corrosion and damage. Seat fasteners and cargo tie-down rings for condition.		
	<b>8.</b> Joints and supports in area under floor panel at BL 14.0 left and right and FS 74.25 to 92.0 for corrosion, cracks, and bottom skin damage.		
	<b>9.</b> Joints and supports under floor fuel cell cavities left and right at FS 102.0 to 145.56 for corrosion, cracks, and bottom skin damage.		



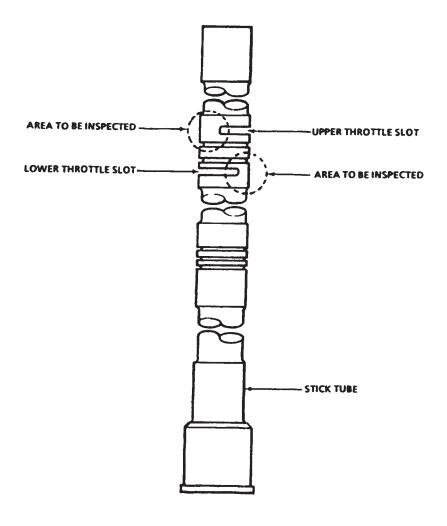
DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	<b>10.</b> Bottom skin FS 23.0 to 243.937 for damage. Joints for corrosion. Access panels and covers for condition and attachment.		
	<b>11.</b> Main transmission compartment interior FS 129.0 to 166.0 and WL 7.44 to 76.0 for corrosion. Bulkheads and main beam panels for damage and corrosion. Attaching supports and brackets for condition and security.		
	<b>12.</b> Electrical/avionics compartment FS 166.0 to 243.937 doors for condition and security. Door frames for cracks and corrosion. Compartment interior for condition and joints for corrosion. Skin for damage and cracks.		
	<b>13.</b> Oil cooler compartment FS 166.0 to 243.937 doors for condition and security. Main beam panels and bulkheads for condition and corrosion.		
	<b>14.</b> Firewalls FS 155.06 to 241.22 for seal wear, damage, cracks, and security of attachment.		
	<b>15.</b> Cabin roof FS 35.0 to 166.0 above WL 68.0, BL 50.0 left and right, for damaged skin and joints for corrosion.		
	<b>16.</b> Bulkhead FS 241.22 for corrosion and cracks. Tailboom attach bolt holes for damage and corrosion.		
	TAILBOOM		
Chapter 53	NOTE		
	The following step will require the removal of the tailboom in order to carry out a thorough inspection.		
	<b>1.</b> Bulkhead BS 17.42 for corrosion and cracks. Fuselage attach bolts holes for damage and corrosion.		
	2. Tailboom and fin driveshaft covers for condition and attachment.		
	3. Tailboom and fin external skin for damage, corrosion, and cracks.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	4. Tailboom access panels and covers for condition and attachment.	
	5. Tailboom baggage compartment door for condition, attachment, and latching.	
	<b>6.</b> Tailboom baggage compartment interior for damage and corrosion.	
	7. Tailboom interior bulkheads and stringers for cracks and corrosion.	
	8. Intermediate gearbox mount pad for damage and corrosion. Tail rotor gearbox mount pad for damage and corrosion.	
	<b>9.</b> Tailboom exterior bonded panels adjacent to baggage compartment for damage, delamination, and corrosion.	
Chapter 28	FUEL SYSTEM	
	1. Inspect fuel cells for condition and serviceability. Verify self-sealing gum of the lower cell has not been activated. Repairs to be accomplished at an authorized facility.	
Chapter 67 BHT-212-CR&O BHT-212-SI-4 BHT-212-SI-89 TB 212-87-98	FLIGHT CONTROLS	
	Disassemble pilot and copilot collective sticks (if installed) to the extent necessary to remove throttle twist grips.	
	2. Referring to Figure 5-3 visually inspect stick tube for cracks using a 3X magnifying glass and a bright light. Pay particular attention to the base of the throttle slots that form the twist grip stops.	
	3. If a crack is found, replace stick tube.	
	4. Reassemble pilot and copilot collective sticks (if installed).	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	5. Check throttle controls for proper operation.	
	6. Check collective controls for proper operation.	



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Figure 5-3. Collective Stick Tube



#### SPECIAL INSPECTIONS

#### 5-13. SPECIAL INSPECTION

Perform applicable special inspection of helicopter:

- 1. Daily inspection.
- **2.** Daily or each 10 hours of flight, whichever occurs first until 250 hours.
- **3.** Between 5 and 10 hours of flight after each installation.
- **4.** Fin spar cap inspection every 8 hours.
- **5.** Each 25 hours for the next four inspections.
- 6. Each 25 hours of flight.
- **7.** Each 7 days in a corrosive environment and each 30 days in a noncorrosive environment.
- 8. 50 hours after installation of components.
- **9.** Each 50 hours of component operation.
- 10. Each 100 hours of main rotor blade operation.
  - **11.** Each 100 hour/12 calendar months of transmission operation.
  - **12.** Each 100 hours/12 months of intermediate gearbox operation.
  - **13.** Each 100 hours/12 months of tail rotor gearbox operation.
  - **14.** Each 100 hours/12 months of battery system operation.
  - **15.** 100 hours after installation of tailboom.
  - **16.** Each 150 hours of starter generator operation.

- **17.** Fin spar cap inspection every 300 hours.
- **18.** Each 300 hours/12 months of transmission operation.
- 19. Each 300 hours/3 months of driveshaft operation.
- 20. Each 500 hours or 6 months of blade service.
- **21.** Each 600 hours of transmission operation.
- 22. Main rotor grip ultrasonic inspection.
- 23. Each 1000 hours of component operation.
- **24.** Each 600 hours/6 months of tail rotor driveshaft coupling operation.
- **25.** Each 600 hours/12 months of main driveshaft operation.
- **26.** First 1000 hours of component time and each 3000 hours thereafter of component time.
- **27.** Each 1000 hours/12 months of main rotor blade operation.
- **28.** Each 1200 hours/24 months of component operation.
- 29. Each 1200 hours of main rotor hub pin operation.
- **30.** Each 24 months of flight control system bolt operation.
- **31.** Each 3000 hours of component operation.
- **32.** Each 10,000 hour total airframe time and each 300 hours/12 months of main beam cap operation.

Use the following time frame criteria when accomplishing the required Maintenance Manual torque checks after installation of components.



#### NOTE

Torque check is the term used when the specified torque or standard torque plus tare torque is applied to a fastener in a tightening direction. The specified or standard torque plus tare torque would have been previously recorded. However, if the specified or standard torque and tare were not recorded, use the minimum specified or standard torque, plus the tare torque listed in the BHT-ALL-SPM, Chapter 2.

Looseness may occur until components seat themselves and fasteners are tightened. This is not cause for disassembly, however the fastener will have to be torque checked again at the same scheduled interval set for the first torque check until the assembly is completely seated.

For additional information, refer to BHT-ALL-SPM. If any confusion exists, or a clarification is desired, contact Product Support Engineering.

#### **Torque Check Requirements**

MANUAL SPECIFIES	SUGGESTED TIME FRAME TO ACCOMPLISH
100 hours	90 to 110 hours
50 hours	40 to 60 hours
25 hours	20 to 30 hours
10 hours	5 to 15 hours

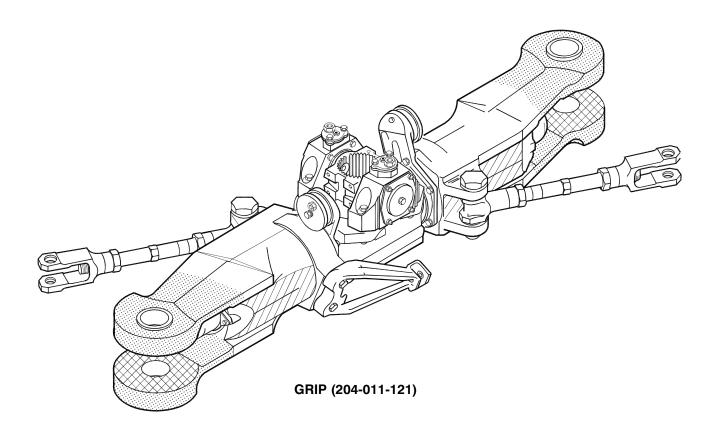


#### **SPECIAL INSPECTIONS**

#### 5-14. DAILY INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
Chapter 62	MAIN ROTOR HUB GRIP 204-011-121-009  — Detailed Visual Inspection  1. For 204-011-121-009 main rotor grip, inspect grip barrels both leading and trailing sides for evidence of hairline cracks (Figure 5-4).  TAIL FIN  — Inspect  1. Helicopters modified by TB 212-91-138 — If TB 212-88-104 has not been incorporated, inspect right tail fin skin for cracks.		





- 1 AREA TO BE INSPECTED
  UPPER AND LOWER TANGS
  ALL EXPOSED SURFACES
- AREA TO BE INSPECTED
  GRIP BARREL LEADING
  AND TRAILING SIDES
  EXPOSED SURFACE (-009
  GRIP ONLY)

#### **NOTES**

- 1 Inspect every 25 hours for all grips.
- 2 Inspect daily for grip (204-011-121-009) only.

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Figure 5-4. Inspection of Main Rotor Hub Grip Tangs and Barrel



#### **SPECIAL INSPECTIONS**

# 5-15. DAILY OR EACH 10 HOURS OF FLIGHT OPERATION, WHICHEVER OCCURS FIRST UNTIL 250 HOURS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	ΓΙΑL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
Chapter 63 and ASB 212-89-54	NOTE  Accomplish daily or each 10 hours flight operation, whichever occurs first until 250 hours, on transmission with affected gears with 50 hours or more.  SPIRAL BEVEL GEAR 204-040-701-103		
	— Inspect		
	NOTE  This inspection is only applicable to transmissions/		
	helicopters with the spiral bevel gears, shown in Figure 5-5, installed.		
	1. Remove and inspect the transmission internal sump filter for metal contamination. If metal contamination is evident, notify Product Support Engineering of spiral bevel gear serial number, hours, and type of contamination.		
	<b>2.</b> Every 50 hours (until 250 hours), visually inspect spiral bevel gear.		
	<b>a.</b> Remove quill pad cover (204-040-174-001) or rotor brake quill from transmission.		



## **SPECIAL INSPECTIONS**

# 5-15. DAILY OR EACH 10 HOURS OF FLIGHT OPERATION, WHICHEVER OCCURS FIRST UNTIL 250 HOURS (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	<b>b.</b> Utilizing port opening in main gear case and a bright light and mirror, inspect all 62 teeth in spiral bevel gear, P/N 204-040-701-103. Carefully inspect each tooth for evidence of chipping or loss of material (Figure 5-6).		
	c. Remove and replace any gear not meeting inspection requirements set forth in step b. Notify Product Support Engineering of serial number and total time of any gear replaced.		
	d. Install quill pad cover or rotor brake quill.		
	3. Spare (uninstalled) affected spiral bevel gears.		
	<b>a.</b> Return spare affected serial numbered spiral bevel gears to Bell Helicopter Textron for inspection and reidentification. Refer to Information Letter IL GEN-04-98 for shipping instructions.		



A-3819	A-3896	A-4085	A-4243	A-4368
A-3821	A-3897	A-4087	A-4244	A-4369
A-3825	A-3899	A-4089	A-4245	A-4370
A-3826	A-3901	A-4090	A-4254	A-4371
A-3829	A-3911	A-4091	A-4266	A-4372
A-3833	A-3915	A-4092	A-4267	A-4374
A-3834	A-3916	A-4093	A-4274	A-4376
A-3836	A-3919	A-4094	A-4275	A-4377
A-3838	A-3920	A-4095	A-4280	A-4378
A-3840	A-4008	A-4096	A-4282	A-4379
A-3845	A-4014	A-4097	A-4288	A-4380
A-3847	A-4017	A-4098	A-4289	A-4383
A-3848	A-4019	A-4107	A-4290	A-4385
A-3850	A-4020	A-4108	A-4303	A-4386
A-3855	A-4021	A-4109	A-4319	A-4387
A-3856	A-4027	A-4147	A-4320	A-4394
A-3857	A-4029	A-4184	A-4325	A-4395
A-3858	A-4068	A-4186	A-4327	A-4397
A-3861	A-4069	A-4187	A-4328	A-4400
A-3878	A-4071	A-4188	A-4329	A-4401
A-3880	A-4075	A-4191	A-4332	A-4403
A-3885	A-4077	A-4192	A-4333	A-4411
A-3886	A-4078	A-4193	A-4334	A-4417
A-3889	A-4079	A-4213	A-4335	A-4418
A-3891	A-4080	A-4233	A-4336	A-4428
A-3892	A-4081	A-4235	A-4337	
A-3893	A-4083	A-4236	A-4358	
A-3895	A-4084	A-4241	A-4366	

#### NOTE

Spiral bevel gears with the suffix "R" after the serial number are acceptable for service.

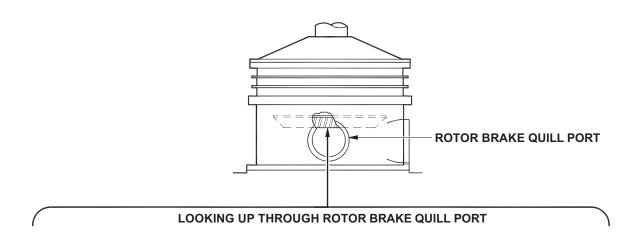
Transmissions/helicopters delivered with an affected serial numbered spiral bevel gear P/N 204-040-701-103.

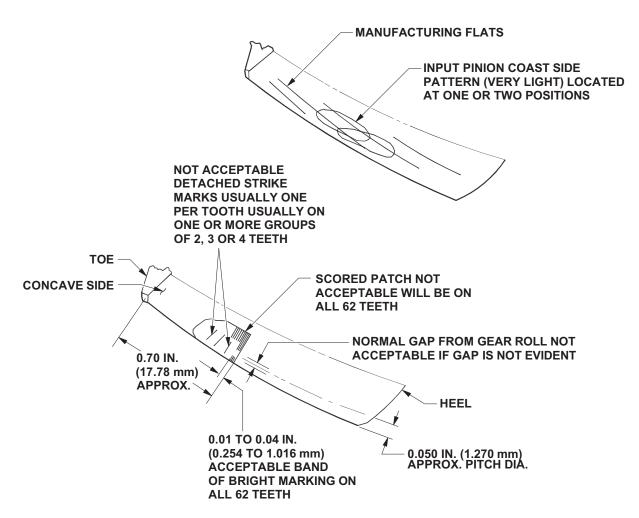
	Serial Number	
Bevel Gear	<b>Transmission</b>	<u>212</u>
A-3822	A-632	31305
A-3881	A-626	31304
A-4006	A-678	31307

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Figure 5-5. Spiral Bevel Gears Serial Numbers





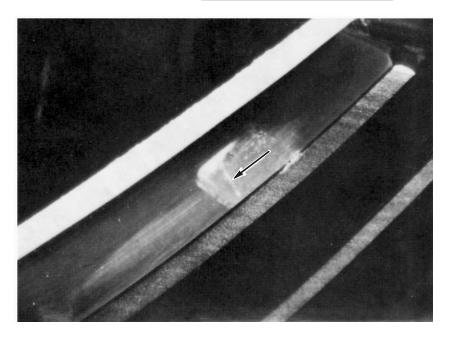


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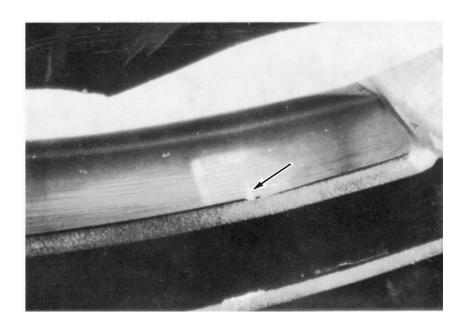
Figure 5-6. Inspection of Spiral Bevel Gear (Sheet 1 of 3)



**REGISTRATION NO.** 



SPIRAL BEVEL GEAR (204-040-701) UNACCEPTABLE PATTERN



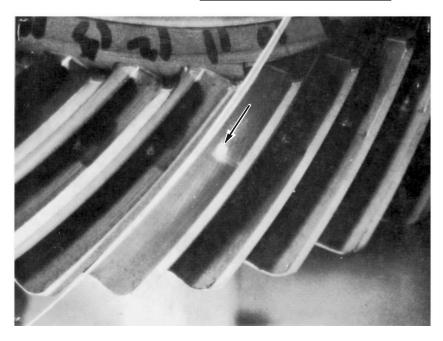
SPIRAL BEVEL GEAR (204-040-701) UNACCEPTABLE PATTERN

Figure 5-6. Inspection of Spiral Bevel Gear (Sheet 2 of 3)

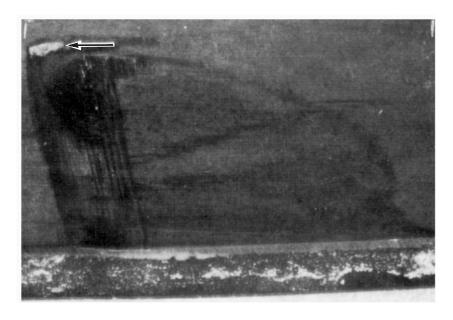
212\_MM\_05\_0005



REGISTRATION NO.\_\_\_\_



SPIRAL BEVEL GEAR (204-040-701) UNACCEPTABLE PATTERN



SPIRAL BEVEL GEAR (204-040-701) UNACCEPTABLE PATTERN

212\_MM\_05\_0006

Figure 5-6. Inspection of Spiral Bevel Gear (Sheet 3 of 3)



## 5-16. BETWEEN 5 AND 10 HOURS OF FLIGHT AFTER EACH INSTALLATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish between 5 and 10 hours of flight after each installation.		
Chapter 62	MAIN ROTOR		
	<b>1.</b> Torque check main rotor retaining nut 520 to 780 foot-pounds (705 to 1057 Nm).		
Chapter 64	<b>2.</b> Main rotor hub blade attachment bolts, torque check nuts 260 to 300 foot-pounds (353 to 407 Nm).		
	TAIL ROTOR		
	<b>1.</b> Torque check tail rotor retaining nut 900 inch-pounds (101.69 Nm).		
	2. Torque check tail rotor blade retaining nuts 500 to 550 inch-pounds (56 to 62 Nm).		
Chapter 65	TAIL ROTOR GEARBOX		
	Torque check tail rotor gearbox retaining nuts 200 to 235 inch-pounds (22.60 to 26.55 Nm). Using a 0.005 inch (0.127 mm) or less feeler gauge, verify no gap exists between gearbox input quill shim and gearbox case shim.		



# 5-16. BETWEEN 5 AND 10 HOURS OF FLIGHT AFTER EACH INSTALLATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
Chapter 65	INTERMEDIATE GEARBOX		
	Torque check intermediate gearbox retaining bolts 50 to 70 inch-pounds (5.65 to 7.91 Nm).		



## 5-17. FIN SPAR CAP INSPECTION EVERY 8 HOURS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:	
ASB 212-00-110	1. Accomplish inspection of fin spar caps P/N 212-030-125-001, 212-030-447-001 and 212-030-447-101 every 8 flight hours.  2. This special inspection is not required if fin spar cap P/N 212-030-447-117 has been installed as original equipment or in accordance with TB 212-00-184.  3. Fin spar cap P/N 212-030-447-117 can be identified by the presence of decals that identify the cold-worked holes.  FIN SPAR CAP 212-030-125-001 AND 212-030-447-001/101  1. Carry out 8 hour recurring inspection in accordance with applicable section of ASB 212-00-110.  2. Any discrepancies (cracks, corrosion, debonding, or other damage) are to be reported to Product Support Engineering before further flight.	



## 5-18. EACH 25 HOURS FOR THE NEXT FOUR INSPECTIONS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:		
	SIGNATURE:		
	TAIL ROTOR HANGER BEARINGS WITNESS MARKS		
	NOTE		
	Accomplish visual inspection of witness (scribe) marks each 25 flight hours for the next four inspections after installation or initial inspection of hanger bearings.		
	NOTE		
	All newly installed hanger bearings must contain a scribe or paint witness mark and will require an initial inspection.		
ASB 212-95-95 Revision C	1. Perform helicopter run-up for 5 minutes. Shut down helicopter and inspect tail rotor hanger bearings for movement of the dust shields, identified by breakage of the witness marks. Remove any bearings from service that display dust shield movement.		
	2. Hanger bearings not displaying movement at the run-up may remain in service, but must be inspected for dust shield movement at each of the next four mandatory 25 hour inspections, or any time the bearing is inspected between any of the 25 hour inspections. Bearings that do not display grease shield movement after the fourth 25 hour inspection may remain in service with no further inspection required. Record accomplishment of inspection in the helicopter log book.		



## 5-18. EACH 25 HOURS FOR THE NEXT FOUR INSPECTIONS (CONT)

DATA REFERENCE	EFERENCE INSPECTION TASK DESCRIPTION			
	3. Remove any hanger bearing from service where the witness marks indicate that the grease shield has moved.			



## 5-19. EACH 25 HOURS OF FLIGHT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:	
Chapter 62	SWASHPLATE GIMBAL RING BOLTS	
	NOTE  This swashplate gimbal ring bolt special inspection is applicable to helicopters on Part A scheduled inspection program only. The intent of this special inspection is included in the 25 hour/30 day inspection — Part B.  Do not attempt to turn bolts or nuts. Bolt rotation will fail loctite in joint and permit bolt wear.  The presence of black oxide powder will require investigation to determine the cause.  — Inspect  1. Grasp swashplate rotating ring, 204-011-403, and attempt to move it in a horizontal plane on an axis in line with gimbal ring attach points to support assembly, 204-011-404. Maximum allowable axial looseness across gimbal ring bearings and attaching bolts is 0.005 inch (0.127 mm).  2. Repeat step 1 on axis 90° and attempt to detect looseness in line with gimbal ring attach points to inner ring. Maximum allowable axial looseness across the gimbal ring bearing and attaching bolts is 0.005 inch (0.127 mm).	



## 5-19. EACH 25 HOURS OF FLIGHT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 62	204-011-451 TRUNNION INSTALLED IN 204-011-403 SWASHPLATE ROTATING RING		
	— Detailed Visual Inspection		
	Check trunnions for excessive axial looseness.		
	MAIN ROTOR HUB GRIP 204-011-121		
	— Detailed Visual Inspection		
	<b>1.</b> Prepare both main rotor grip tangs for inspection by cleaning exposed surfaces with denatured alcohol (C-326) as per the BHT-ALL-SPM. Wipe dry.		
	2. Inspect grip surfaces for evidence of hairline cracks on grip barrels and upper and lower tangs exposed surfaces. Pay particular attention to the lower tang lower surface from blade bolt bushing flange to the trailing and leading edge of the tang (Figure 5-4).		
Chapter 64	TAIL ROTOR HUB ASSEMBLY		
	— Detailed Visual Inspection		
	<b>1.</b> Flapping bearings P/N 212-010-723-001 or 212-010-768-001, exposed outer races for cracks using a 3X magnifying glass. Any crack is cause for immediate replacement of both bearings.		
	<b>2.</b> Inspect tail rotor yoke P/N 212-010-704, P/N 212-010-744, or P/N 212-011-702.		
	TAIL ROTOR STATIC STOP		
ASB 212-96-100 and ASB 212-96-101	1. Inspect P/N 212-010-738 or P/N 212-011-713 flapping stop for yielding as noted in Chapter 64, to determine if tail rotor yoke assembly may have been exposed to bending.		



## 5-19. EACH 25 HOURS OF FLIGHT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	If any doubt exists as to the serviceability of these components, contact the following:		
	Bell Helicopter Textron Product Support Engineering		
	Tel: 1-800-363-8028 (USA and Canada)		
	Tel: 1-450-437-6201 (all other areas, call collect)		
	Fax: 1-450-433-0272		
	Email: psemedium@bellhelicopter.textron.com		
Chapter 64	TAIL ROTOR BLADE		
	1. Clean each tail rotor blade by hand using mild soap and cheesecloth (C-486) in a spanwise direction; dry thoroughly.		
	2. Carry out a detailed visual inspection of both sides of the entire blade with a 3X magnifying glass, or higher, and a bright light. Inspect the tail rotor blade skin, leading edge spar, doublers, grip plates, and trailing edge for cracks, corrosion, nicks, dents, and scratches. Refer to Chapter 64 for damage limits.		
	3. If any blistering, peeling, flaking, bubbling, or cracked paint is detected, remove the paint from the affected area and visually inspect the affected area for corrosion or a crack using a 10X magnifying glass, or higher. If any corrosion is found, measure the depth of the corrosion.		
	<b>4.</b> Only superficial corrosion that can be removed with aluminum wool or very fine grade abrasive pad (C-407) is permissible. Corrosion on the spar 0.003 inch deep or less is acceptable when polished out. Replace any blade that has corrosion on the spar greater than 0.003 inch.		
	<b>5.</b> If a nick, scratch, or dent is found, visually inspect for crack using a 10X magnifying glass, or higher, and measure the depth of the damage. (A digital optical micrometer is one tool that can be used for this measurement).		
	<b>6.</b> Repair damage and/or corrosion found on tail rotor blades in accordance with Chapter 64.		



## 5-19. EACH 25 HOURS OF FLIGHT OPERATION (CONT)

DATA REFERENCE	TIAL OTHER	
	7. Replace any blade that has a crack. No cracks are permitted.	



# 5-20. EACH 7 DAY IN A CORROSIVE ENVIRONMENT AND EACH 30 DAYS IN A NONCORROSIVE ENVIRONMENT

DATA REFERENCE	INSPECTION TASK DESCRIPTION	 TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:	
Chapter 62	NOTE  Accomplish each 7 days in a corrosive environment and each 30 days in a noncorrosive environment.  MAIN ROTOR BLADES 204-012-001, 212-010-750, AND 212-015-501  — Clean  1. Wash upper and lower surfaces with a solution of cleaning compound (C-318) and water. Rinse thoroughly and wipe dry.  2. Inspect surfaces for condition.  3. Apply a light coat of preservative oil (C-125) to surfaces of blade, including areas between main rotor hub grip tangs.	



## 5-21. 50 HOURS AFTER INSTALLATION OF COMPONENTS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish 50 flight hours after installation of components.		
Chapter 53	TAILBOOM		
	Torque check antitorque bellcrank support 212-001-706-001/101 attachment nuts 75 to 95 inch-pounds (8.47 to 10.73 Nm).		
Chapter 29	ROTOR BRAKE		
	1. Torque check brake assembly (caliper) attachment bolts 80 to 100 inch-pounds (9.04 to 11.30 Nm).		
	<b>2.</b> Torque check brake disc attachment bolts 50 to 70 inch-pounds (5.65 to 7.91 Nm).		



## 5-22. EACH 50 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	Accomplish each 50 hours of component operation.		
Chapter 63	TRANSMISSION		
	— Detailed Visual Inspection		
	1. Transmission 212-040-001-115, -119, -123, and -127 — remove internal filter and sump chip detector. Visually inspect filter element and detector for metallic chips, particles, and contamination. If contamination or debris is found, investigate to determine cause. Thoroughly clean and reinstall detector and filter. Service transmission oil system (Chapter 12) to proper level.		
	NOTE		
	Accomplish each 50 hours of component operation.		
Chapter 65	TAIL ROTOR PITCH CHANGE SHAFT (CROSSHEAD) BEARING 212-010-762-001		
	— Inspect		
	NOTE		
	The following inspection does not apply to helicopter S/N 30712 and subsequent or to helicopter S/N 30711 and prior, after modification by SI 212-49.		



## 5-22. EACH 50 HOURS OF COMPONENT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	1. Visually inspect bearing for indications of lubricant depletion, metal contamination, and bearing for roughness when rotated by hand. Rough bearing or metal contamination is cause for immediate replacement.		
	HELICOPTERS MODIFIED BY TB 212-91-138		
TB 212-76-18 TB 212-86-92 TB 212-91-132	If Technical Bulletins 212-76-18, 212-86-92 and 212-91-132 have not been incorporated, the following listed inspection is mandatory.		
	Inspect lift beam caps for cracks.		
	2. Inspect L/H spar cap, fin for cracks.		
	3. Inspect lift link fitting for cracks.		



## 5-22A. EACH 100 HOURS OF MAIN ROTOR BLADE OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:		
Chapter 62 ASB 212-08-130	NOTE  Accomplish each 100 hours of main rotor blade P/N 212-015-501-ALL operation.  MAIN ROTOR BLADE  1. Wash upper and lower main rotor blade surfaces with a solution of cleaning compound (C-318) and water. Rinse thoroughly and wipe dry.		
	Accomplishment of this inspection does not require removal of the blades from the main rotor hub.  2. Inspect the main rotor blade upper and lower grip plates and doublers between blade station 24.5 and 40.0 and the whole width of the chord. Inspect for signs of edge voids, corrosion, and cracks. Hairline cracks in the paint finish should be suspect for possible cracks or voids.  3. Carry out a detailed visual inspection of the top and bottom inspection areas of the blade using a 3X magnifying glass.		



## 5-22A. EACH 100 HOURS OF MAIN ROTOR BLADE OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TAL OTHER
	CAUTION		
	PAY PARTICULAR ATTENTION NOT TO REMOVE ANY PARENT MATERIAL FROM THE SKIN OR DOUBLERS DURING SANDING OPERATION.		
	<b>4.</b> Any cracks in the finish must be investigated further by removing paint in affected areas (sand with 180 to 220 grit abrasive paper (C-423) in a spanwise direction) to determine if the grip plate or doublers are cracked.		
	<b>5.</b> Any blade determined to be cracked must be removed from service.		
	6. Refinish the sanded area as per BHT-212-CR&O.		
	7. Following the inspection, apply a light coat of preservative oil (C-125) to all surfaces of the blade.		



## 5-23. EACH 100 HOURS/12 MONTHS OF TRANSMISSION OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	Accomplish each 100 hours/12 months (whichever occurs first) of transmission operation.		
Chapter 63	TRANSMISSION		
	— General Visual Inspection		
	1. Transmission oil system (transmissions 212-040-001-115, -119, -123, and -127 with 10 micron external filter) — drain transmission oil system and replace filter. Remove and inspect sump pump screen for debris. If debris is found, determine and correct cause. Thoroughly clean and reinstall sump pump screen and service transmission oil system to proper level (Chapter 12).		
	CAUTION		
	*******		
	DO NOT SUBSTITUTE 10 MICRON FOR 3 MICRON FILTER ELEMENT FOR HELICOPTERS S/N 31207 AND SUBSEQUENT (AND HELICOPTERS MODIFIED BY TB 212-83-78).		



## 5-23. EACH 100 HOURS/12 MONTHS OF TRANSMISSION OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER	
	NOTE			
	Helicopters S/N 31207 and subsequent (and helicopters modified by TB 212-83-78) use 3 micron filter element. Oil change and filter replacement is extended to 1/2 transmission TBO or 12 months, whichever occurs first.			
	2. Drain transmission oil. Inspect and clean sump screen, internal filter, and chip. If metallic chips or particles are found, determine and correct cause.			
	3. Replace filter element.			
	<b>4.</b> Visually inspect the main case, 204-040-353-023, for cracks in web above input quill bore (using dye penetrant method if case has been previously reworked). Any crack indication is cause for replacement of case.			



## 5-24. EACH 100 HOURS/12 MONTHS OF INTERMEDIATE GEARBOX OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish each 100 hours/12 months (whichever occurs first) inspection of intermediate gearbox operation.		
	INTERMEDIATE GEARBOX		
	— Detailed Visual Inspection		
Chapter 65	Torque check gearbox mounting bolts.		
	2. Remove, inspect, and clean gearbox chip detector. If metallic particles are found, determine and correct cause.		
	3. Change oil in 212-040-003-007.		
Chapter 12	NOTE		
	Oil change interval for gearbox 212-040-003-023 is every 300 hours or 12 months, whichever occurs first.		



## 5-25. EACH 100 HOURS/12 MONTHS OF TAIL ROTOR GEARBOX OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:		
	SIGNATURE:		
Chapter 65 Chapter 12	NOTE  Accomplish each 100 hours/12 months (whichever occurs first) inspection of tail rotor gearbox operation.  TAIL ROTOR GEARBOX  — Detailed Visual Inspection  1. Torque check gearbox mounting nuts.  2. Remove, inspect, and clean gearbox chip detector. If metallic particles are found, determine and correct cause.  3. Change oil in gearbox 212-040-004-005.		
	NOTE  Oil change interval for gearbox 212-040-004-009 is every 300 hours or 12 months, whichever occurs first.		



## 5-26. EACH 100 HOURS/12 MONTHS OF BATTERY SYSTEM OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 96 and BHT-ALL-SPM	DATE:	MECH	OTHER
			I



## 5-27. 100 HOURS AFTER INSTALLATION OF TAILBOOM

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	Accomplish 100 hours inspection after each installation of tailboom.		
Chapter 53	TAILBOOM		
	— Torque		
	Torque check tailboom attachment bolts.		



## 5-28. EACH 150 HOURS OF STARTER GENERATOR P/N 200SG119Q OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	DATE:W.O	
	FACILITY:	
	HELICOPTER S/N:	
	REGISTRY NO.:	
	TOTAL TIME:	
	SIGNATURE:	
	NOTE	
	Accomplish each 150 hours of starter generator P/N 200SG119Q operation or more frequently if conditions warrant.	
	P/N 200SG119Q refers to the starter generator without the QAD kit consisting of the mounting flange and ring clamp.	
	This special inspection is not applicable to starter generator P/N 209-060-221-001.	
Chapter 71	Remove starter generator P/N 200SG119Q.	
	Inspect starter generator brushes for wear.	
TM106 – Aircraft Parts Corp. Overhaul Instructions with Illustrated Parts Breakdown	3. If brushes are worn beyond allowable limits, refer to vendor manual and replace in accordance with manufacturer's instructions.	
	4. Install starter generator.	



## 5-29. FIN SPAR CAP INSPECTION EVERY 300 HOURS

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	DATE:W.O		
	FACILITY:		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish inspection of fin spar caps P/N 212-030-125-001 and 212-030-447-101 every 300 flight hours.		
	This special inspection is not required if fin spar cap P/N 212-030-125-001 has not been modified by retrofit kit 212-704-087 (ASB 212-01-73-1).		
	This special inspection is not required if fin spar cap PN 212-030-447-117 has been installed as original equipment or in accordance with TB 212-00-184.		
	Fin spar cap P/N 212-030-447-117 can be identified by the presence of decals that identify the cold-worked holes.		
	FIN SPAR CAP 212-030-125-001 AND 212-030-447-101		
ASB 212-00-110	<b>1.</b> Carry out 300 hour recurring inspection in accordance with applicable section of ASB 212-00-110.		
	2. Any discrepancies (cracks, corrosion, de-bonding, or other damage) are to be reported to Product Support Engineering before further flight.		



## 5-30. EACH 300 HOURS/12 MONTHS OF TRANSMISSION OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
Chapter 63	INSPECTION TASK DESCRIPTION  DATE:		
	correct cause.  — Restoration		
	Clean transmission internal oil filter or internal full flow debris monitor.	ow	
	2. Service transmission oil system (Chapter 12) to proper level.		
	— Functional Check		
	1. If installed, test internal full flow debris monitor chip detector electrical circuit.		



#### 5-31. EACH 300 HOURS/3 MONTHS OF DRIVESHAFT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>*</sup>	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE  Accomplish each 300 hours/3 months (whichever occurs first) of driveshaft operation.		
Chapter 12 Chapter 63 BHT-212-CR&O	MAIN DRIVESHAFT 212-040-005-001 AND -011		
	Remove main driveshaft assembly.		
	2. Visually inspect and lubricate.		
ASB 212-94-93	3. Check date of manufacture of boot assembly (212-040-176-101).		



#### 5-32. EACH 500 HOURS/6 MONTHS OF BLADE SERVICE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	 TIAL OTHER
	DATE:	
	NOTE  Accomplish each 500 hours/6 months (whichever	
	occurs first) of blade inspection system (if installed).	
Chapter 62	MAIN ROTOR BLADES	
	Accomplish Blade Inspection System (BIS) check.	



#### 5-33. EACH 600 HOURS OF TRANSMISSION OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE  Accomplish each 600 hours inspection of transmission operation.  TRANSMISSION ASSEMBLY 212-040-001-115, -119, -123, AND -127  — Inspect  1. Remove input pinion quill assembly and No. 2 hydraulic pump drive quill from transmission main case. Dimensionally inspect input pinion quill bore diameter of main case for out-of-round condition. Input quill bore shall be 6.7521 inches (171.5033 mm) and maximum out-of-round condition (maximum diameter — minimum diameter) shall be 0.0030 inch (0.0762 mm). Replace case assembly if bore diameter exceeds maximum conditions. Dimensionally inspect No. 2 hydraulic pump quill bore of main case assembly for out-of-round condition. Hydraulic drive quill bore maximum diameter shall be 5.0021 inches (127.05 mm) and maximum out-of-round condition shall be 0.0030 inch (0.0762 mm). Replace case assembly if bore diameter exceeds maximum conditions.		



## 5-33. EACH 600 HOURS OF TRANSMISSION OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	2. Disassemble input pinion quill assembly sufficiently to ascertain whether triplex ball bearing outer races have rotated in sleeve. Note if etched V markings are still aligned. If bearing outer races have rotated, complete the disassembly of quill. Dimensionally inspect sleeve bore. If dimension is 5.51 inches (139.95 mm) or greater, replacement is required. Dimensionally inspect bearing outer diameter. If dimension is 5.51 inches (139.95 mm) or less, replacement is required.		
	3. Inspect main input driven spiral bevel gear P/N 204-040-701-003 as follows:		
	<b>a.</b> Utilizing transmission case input quill port, inspect all 62 teeth of the main input driven spiral bevel gear convex side for unsatisfactory conditions such as scoring, hard lines, nicks, dents, chipping, metal deformation, etc.		
	NOTE		
	Inspection mirrors and a suitable light are required.  Turn rotor slowly to permit inspection of all gear teeth.		
	<b>b.</b> Inspect concave side of all 62 teeth. Refer to Figure 5-6 for unacceptable conditions on concave side.		
BHT-212-CR&O	<b>c.</b> Remove and replace any gear that does not meet inspection requirements.		



#### 5-34. MAIN ROTOR GRIP ULTRASONIC INSPECTION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE		
	Main rotor grips P/N 204-011-121-009 with 4000 hours or more Time In Service (TIS) are to be ultrasonically inspected every 400 hours or 1600 start/stop cycles, which ever occurs first. Main rotor grips P/N 204-011-121-009 with less than 4000 hours TIS do not require inspection until reaching 4000 hours.		
	Main rotor grips P/N 204-011-121-121 with 500 hours or more Time In Service (TIS) are to be ultrasonically inspected every 150 hours or 600 start/stop cycles, whichever occurs first. Main rotor grips P/N 204-011-121-121 with less than 500 hours TIS do not require inspection until reaching 500 hours.		
	This inspection is not applicable to main rotor grips P/N 204-011-121-125.		
	A start/stop cycle is defined as any time one or both of the helicopter engines are started followed by a shutdown.		
ASB 212-02-116	MAIN ROTOR GRIPS P/N 204-011-121-009 AND P/N 204-011-121-121		
Chapter 62	Carry out ultrasonic inspection.		



## 5-34. MAIN ROTOR GRIP ULTRASONIC INSPECTION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	2. Any indication of a crack detected in accordance with the instructions will require the grip to be removed from service and a serviceable grip installed. If the grip was inspected by a level I special, the unserviceable grip is to be sent to a facility that has level II or III ultrasonic capability for further investigation. All grips that have a crack indication and have been inspected by a level II or III are to be sent to Bell Helicopter Textron. Refer to Information Letter IL GEN-04-98 for shipping instructions.	MECH	OTHER



#### 5-35. EACH 1000 HOURS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish each 1000 hours of component operation.		
Chapter 29	HYDRAULIC ACCUMULATORS		
	Remove hydraulic accumulators.		
BHT-212-CR&O	2. Disassemble, clean, and visually inspect for corrosion and damage.		
	3. Replace any unserviceable parts.		
	4. Reassemble hydraulic accumulators.		
Chapter 29	5. Install hydraulic accumulators.		
Chapter 79	OIL COOLER BLOWERS		
	1. Remove oil cooler blowers.		
BHT-212-CR&O	<b>2.</b> Disassemble, clean, and visually inspect for corrosion and damage.		
	3. Replace bearings and any other unserviceable parts.		
	4. Reassemble oil cooler blowers.		



DATA REFERENCE	ATA REFERENCE INSPECTION TASK DESCRIPTION		INITIAL MECH OTHER
Chapter 79	5. Install oil cooler blowers.		



#### 5-36. 600 HOURS/6 MONTHS OF TAIL ROTOR DRIVESHAFT COUPLING OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
BHT-212-CR&O Chapter 65	INSPECTION TASK DESCRIPTION  DATE:		



#### 5-37. 600 HOURS/12 MONTHS OF MAIN DRIVESHAFT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:		
	NOTE		
	Accomplish each 600 hours/12 months (whichever occurs first) of main driveshaft operation.		
	MAIN DRIVESHAFT 212-040-005-003, -007, AND -103		
Chapter 63	Remove main driveshaft.		
BHT-212-CR&O	2. Clean, visually inspect, and repack flexible couplings.		
	3. Install main driveshaft.		



## 5-38. FIRST 1000 HOURS OF COMPONENT TIME AND EACH 3000 HOURS THEREAFTER OF COMPONENT TIME

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	NOTE		
	Accomplish first 1000 hours inspection of component time and each 3000 hours thereafter of component time.		
	Applicable to flight control tube assemblies: 204-001-957-001, 205-001-017-001/-007, 212-001-051-001, 212-001-060-001, and 212-076-151-001/-003/-005/-007/-009/-011. Supersedes ASB 212-76-6.		
ASB 212-76-6	Flight Control Tube Assemblies are identified by the following sub-assemblies:		
	204-001-957-001 contains tube assembly 204-001-957-003 205-001-017-001 contains tube assembly 205-001-017-003 205-001-017-007 contains tube assembly 205-001-017-009 212-001-051-001 contains tube assembly 212-001-051-005 212-001-060-001 contains tube assembly 212-001-060-003		
	212-076-151-005 contains tube assembly 212-076-150-005 212-076-151-007 contains tube assembly 212-001-275-001 212-076-151-007 contains tube assembly 212-001-280-101 1 212-076-151-009 contains tube assembly 212-001-275-003 212-076-151-009 contains tube assembly 212-001-280-103 1 212-076-151-011 contains tube assembly 212-001-275-005 212-076-151-011 contains tube assembly 212-001-280-105		
	Control tube assemblies 212-001-280-101/-103/-105 are fabricated from corrosion Resistant Steel (CRES), special inspection not applicable.		



# 5-38. FIRST 1000 HOURS OF COMPONENT TIME AND EACH 3000 HOURS THEREAFTER OF COMPONENT TIME (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	1. Inspect flight control tube assemblies P/N 212-076-151-001/-003/-005/-007/-009/-011 as follows:		
	<b>a.</b> Measure and record overall length of control tube, and then remove adjustable clevis.		
BHT-212-CR&O	<b>b.</b> Inspect control rube for internal corrosion using a borescope or equivalent. (Paint removal is not necessary.) Particular attention shall be given to threaded areas. Any paint anomalies such as blistering or discoloration will require paint removal and further inspection. Any sighted internal corrosion is cause for control tube rejection. If serviceable, refinish internal surface of control tube with two coats of lacquer (C-226) using fill and drain method.		
	c. Visually inspect external surfaces of control tubes for mechanical damage and/or corrosion. Refer to the BHT-212-CR&O manual for limits.		
	<b>d.</b> If serviceable, coat the control tube threaded area with corrosion preventive compound (C-101), reinstall clevis into control tube and adjust to recorded length.		
	<b>2.</b> Inspect P/N 204-001-957-001, 205-001-017-001 and -007, 212-001-051-001, 212-001-060-001 control tubes as follows:		
	<b>a.</b> Using a suitable container filled with 135 to 155°F (57 to 68°C) water, fully immerse the control tube for 2 minutes.		
	<b>b.</b> Any air bubbles detected from the control tube as a result of the water immersion is cause for rejection of the tube.		
	<b>c.</b> Provided no air bubbles are detected, the control tube may be considered serviceable.		
	3. Install flight control tubes and check rigging.		



## 5-38. FIRST 1000 HOURS OF COMPONENT TIME AND EACH 3000 HOURS THEREAFTER OF **COMPONENT TIME (CONT)**

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
Chapter 67	ELEVATORS		
	— Inspect		
	Remove and Inspect elevators as follows:		
BHT-212-CR&O	<b>a.</b> Remove both elevators and inspect condition of ears on elevator horn 205-001-914 and mating ears on elevator attach fitting 205-030-475. Inspect ears by dye penetrant method. Replace horn or fitting if any cracks are evident.		
BHT-212-CR&O	<b>b.</b> Inspect elevators for general condition, cracks, and corrosion. Repair inboard rib if any cracks exist. The inboard rib shall be replaced if any cracks extend into rib flange.		



#### 5-39. EACH 1000 HOURS/12 MONTHS OF MAIN ROTOR BLADE OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:		
	SIGNATURE:		
	NOTE  Accomplish each 1000 hours/12 months (whichever occurs first) of main rotor blade operation.		
Chapter 62	MAIN ROTOR BLADES		
	— Clean and Inspect		
	1. Clean blade from an area starting at butt end of blade to several inches outboard of doublers on both upper and lower surfaces, using aliphatic naphtha (C-305) or equivalent.		
	NOTE		
	Inspection may be accomplished with blades installed on main rotor hub assembly.		
BHT-212-CR&O	2. Inspect main rotor blade grip pads, grip plates, doublers, drag plates, and adjacent surfaces for voids, edge voids, corrosion, cracks, and condition of adhesive squeeze-out along bond lines. Refer to BHT-212-CR&O manual for inspection criteria and repair limits.		



#### 5-40. EACH 1200 HOURS/24 MONTHS OF COMPONENT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	DATE:		
	Accomplish each 1200 hours/24 months (whichever occurs first) of listed component operation.  MAIN ROTOR YOKE 212-011-102		
BHT 212-CR&O	<ol> <li>Detailed Visual Inspection</li> <li>Remove bearing races and spacers.</li> <li>Inspect yoke spindle for cracks and corrosion pits.</li> <li>Inspect yoke spindle bearing journals for wear.</li> <li>Any crack or wear beyond limits is cause for rejection of the yoke. Remove any corrosion.</li> <li>Assemble yoke.</li> <li>MAIN ROTOR DRAG BRACE 204-011-140</li> </ol>		
BHT-212-CR&O	Inspect  1. Remove drag brace assemblies.		



## 5-40. EACH 1200 HOURS/24 MONTHS OF COMPONENT OPERATION (CONT)

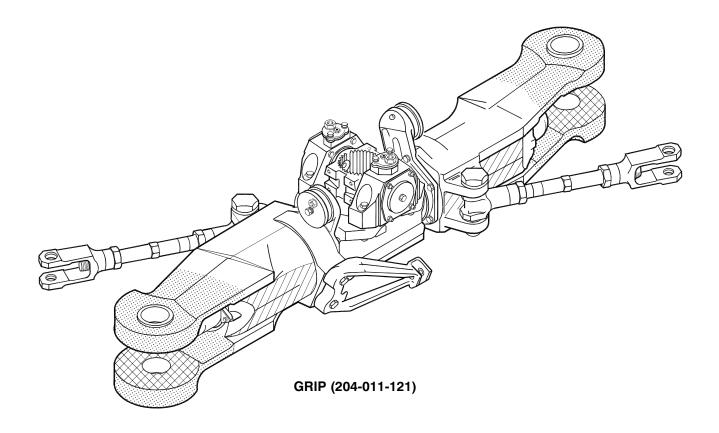
DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	2. Inspect drag brace assemblies for corrosion and mechanical damage.		
BHT-ALL-SPM	3. Perform a magnetic particle inspection.		
	4. Install drag brace assemblies.		
BHT-212-CR&O	MAIN ROTOR HUB GRIP 204-011-121		
	— Detailed Visual Inspection		
	<b>1.</b> Prepare both main rotor grip tangs for inspection by cleaning exposed surfaces with denatured alcohol (C-326) as per BHT-ALL-SPM. Wipe dry.		
	2. Inspect grip surfaces for evidence of hairline cracks on upper and lower tangs exposed surfaces. Pay particular attention to the lower tang lower surface from the blade bolt bushing flange to the trailing and leading edge of the tang. Crack indication requires the grip to be removed from service for further evaluation (Figure 5-7).		
	<b>3.</b> For 204-011-121-009 main rotor grip, inspect grip barrels both leading and trailing sides for evidence of hairline cracks (Figure 5-7).		
	<b>4.</b> Check for gap (360°) between flange of blade bolt bushing and surface of grip tang. Maximum gap of 0.0025 inch (0.0635 mm) permitted. Noted gap greater than the maximum permitted requires bushing to be replaced.		
	<b>5.</b> Fit a blade bolt through both bushings simultaneously, bolt should be able to be turned with the fingers. If this cannot be accomplished refer to BHT-212-CR&O, Chapter 62, Condition Inspection for further inspection requirements.		
	<b>6.</b> Inspect buffer pads on tang inner surfaces for delamination. Any delamination will require buffer pad replacement (Figure 5-7).		



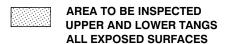
## 5-40. EACH 1200 HOURS/24 MONTHS OF COMPONENT OPERATION (CONT)

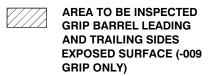
DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	MAIN INPUT QUILL CLUTCH ASSEMBLY 205-040-250		
	— Inspect		
Chapter 63	Remove main input quill assembly.		
BHT-212-CR&O	2. Disassemble and inspect.		











212\_MM\_05\_0007

Figure 5-7. Inspection of Main Rotor Hub Grip (1200 Hours)



#### 5-41. EACH 1200 HOURS OF MAIN ROTOR HUB PIN OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
ASB 212-02-117 BHT-212-CR&O	NOTE Accomplish each 1200 hours of main rotor hub pin operation.  MAIN ROTOR HUB PINS 204-012-104-003/-005  1. Remove four pins P/N 204-012-104-003/-005 from the main rotor hub assembly.  2. Inspect pins by magnetic particle method.  3. Magnetic particle indication interpreted as cracks are not acceptable and the pin must be scrapped.  4. If any strap pins are found cracked, the mating strap fitting must also be scrapped.  5. If the pins are replaced (e.g., time expired) the mating fittings will be considered serviceable only after NDT inspection of the removed pins has confirmed they are not cracked.  6. Reassemble main rotor hub assembly.  7. Make an entry in the helicopter Historical Records (HR) to show that the main rotor hub pins have been inspected in accordance with this special inspection.		



#### 5-42. EACH 24 MONTHS OF FLIGHT CONTROL SYSTEM BOLT OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	ΓΙΑL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
Chapter 67	NOTE  Accomplish each 24 months of flight control system bolt operation.  FLIGHT CONTROL SYSTEM BOLTS		
	NOTE  Refer to Chapter 4 for retirement life of flight control system bolts.  — Inspect		
	<ul> <li>1. Remove the following flight control bolts:</li> <li>a. Two fixed swashplate to right and left cyclic boost tube bolts P/N 20-057-5-24D.</li> <li>b. One collective lever to collective boost tube bolt P/N 20-057-5-24D.</li> </ul>		
	<ul> <li>c. Three boost tube universal bolts P/N 20-057-24D.</li> <li>d. Three universal to hydraulic cylinder tube bolts P/N 20-057-5-24D.</li> <li>e. Two mixing lever to scissors tubes bolts P/N 20-057-5-27D.</li> </ul>		



## 5-42. EACH 24 MONTHS OF FLIGHT CONTROL SYSETM BOLT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTI	HER
	f. Two scissors tube to scissors bolts P/N 20-057-5-27D.		
	g. Two pitch link to universal tube bolts P/N 20-057-6-27D.		
	<b>h.</b> Two drive link to rotating swashplate bolts P/N 20-057-5-30D.		
	i. Two pitch horn to pitch link bolts P/N 20-057-6-31D.		
	j. Two universal to mixing lever bolts P/N 20-057-6-34D.		
	<b>k.</b> Four mixing lever 204-011-301, pivot bolts P/N 20-057-6S20D.		
	I. Four 20-057-6S24D mixing lever 212-010-302, pivot bolts P/N 20-057-6S23D or 20-057-6S24D.		
	m. Two scissors to drive link bolts P/N 20-057-8S69D.		
	<b>n.</b> Two scissors 204-011-406, pivot bolts P/N 20-057-8S90D.		
	o. Two stabilizer bar pivot bolts P/N 20-057-10S27D or 20-057-10S29D.		
	<b>p.</b> Three hydraulic cylinder to lower support bolts P/N 212-001-304-003 or 212-001-323-001.		
	<b>q.</b> Two scissors 212-010-407, pivot bolts P/N 212-010-411-005 or 212-010-411-003-001 (ASB 212-89-56).		
	r. Two stabilizer bar damper tube to damper wing shaft bolts P/N AN174-15.		
	<b>s.</b> Two stabilizer bar damper tube to stabilizer bar bolts P/N AN174-20.		
	t. Two collective lever to swashplate support bolts P/N AN178-22A.		
	2. Clean bolts with cloth dampened with MEK (C-309).		



## 5-42. EACH 24 MONTHS OF FLIGHT CONTROL SYSETM BOLT OPERATION (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	3. Inspect bolts for thread damage, shank wear, and corrosion. Replace any bolt that has damaged threads, detectable shank wear, or exhibits corrosion pitting.		
Chapter 67	<b>4.</b> Apply corrosion preventive compound (C-104) to shanks of bolts only and install bolts.		
	<b>5.</b> After bolts have been installed and nuts torqued and safetied, coat head of bolt, nuts, and lockwire with corrosion preventive compound (C-101).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	 OTHER
	DATE:W.O	
	HELICOPTER S/N:	
	REGISTRY NO.:	
	TOTAL TIME:	
	SIGNATURE:	
	NOTE	
	Accomplish each 3000 hours of listed component operation.	
	MAIN ROTOR MAST 204-040-366-021 AND 212-540-002-105	
	NOTE	
	Mast assembly 204-040-366-021 (installed in transmission prior to 212-040-001-059/-141) with no top case chip detector, overhaul interval is 2500 hours.	
BHT-212-CR&O	Remove mast assembly from transmission and inspect inner and outer diameters of mast for corrosion and mechanical damage.	
	TRANSMISSIONS 212-040-001-059, -137 AND SUBSEQUENT AND 212-540-002-103	
	— Disassembly	
	1. Visually inspect outside of transmission for evidence of corrosion, damage, and any oil leaks before disassembling transmission.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
BHT-212-CR&O	NOTE  Parts exhibiting evidence of wear or physical damage shall be checked dimensionally. Refer to BHT-212-CR&O manual for wear and damage limits.  2. Disassemble transmission to accomplish the following:  a. Remove B4430 chip detector from 212-040-059 top case. Clean chip detector using drycleaning solvent (C-304). Visually inspect chip detector for cut packings, burrs, bent tube, and foreign material.  b. Remove 212-040-059 top case. Inspect mast assembly mating surface, pilot diameter and ring gear mating surface, pilot diameter for fretting and wear.  c. Planetary component removal:  (1) Remove 204-040-360 upper planetary assembly and 204-040-117 adapter as an assembly.  (2) Remove M27426-1220C retaining ring and 204-040-117 adapter from 204-040-360 planetary assembly. Do		
	(3) Remove 204-040-337 liner and 204-040-135 bearing as an assembly. Do not disassemble.  (4) Remove 205-040-231 ring gear assembly.  (5) Remove 205-040-230 upper sun gear, 204-040-378 deflector, and RR687L retaining ring as an assembly.  (6) Remove 204-040-784 lower planetary assembly.  (7) Remove 204-040-338 liner, 204-040-135 bearing, and 204-040-257 liner as an assembly. Do not disassemble.  (8) Remove 205-040-229 lower sun gear.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	3. Planetary component inspection:		
BHT-212-CR&O	<b>a.</b> Visually inspect all parts of planetary assembly for evidence of wear and/or damage.		
	<b>b.</b> Visually inspect gear tooth contact patterns on eight pinion assemblies in upper planetary assembly. It is normal for ring gear meshing side of planet pinions to have a double wear pattern. Check bearings for smoothness and freedom from binding by rotating the eight pinion assemblies. Visually inspect all lockwire provisions.		
	<b>c.</b> Visually inspect external and internal spline teeth of 204-040-117 adapter for excessive wear and general condition.		
	<b>d.</b> Check planetary support liners and 204-040-135 bearings for smoothness and freedom of rotation.		
	e. Visually inspect upper flange surface and upper pilot diameter and lower flange surface and lower pilot diameter of 205-040-231 ring gear for fretting and wear. Visually inspect upper and lower gear teeth contact patterns for evidence of pitting, scoring, wear, or damage.		
BHT-212-CR&O	<b>f.</b> Visually inspect upper sun gear teeth for wear, damage, and contact pattern.		
BHT-212-CR&O	<b>g.</b> Disassemble 204-040-784 lower planetary to remove 204-040-785 spider.		
BHT-ALL-SPM	(1) Magnetic particle inspect 204-040-785 spider.		
	(2) Visually inspect 204-040-785 spider spline for evidence of wear (i.e., step, end loading, etc.).		
BHT-212-CR&O	(3) Visually inspect gear tooth contact patterns on four pinion assemblies in lower planetary assembly. It is normal for ring gear meshing side of planetary pinions to have a double wear pattern. Check bearings for smoothness and freedom from binding by rotating the four pinion assemblies. Visually inspect all lockwire provisions.		
BHT-212-CR&O	h. Visually inspect 205-040-229 lower sun gear teeth for wear, damage, and contact pattern.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL
		MECH OTHER
	<b>4.</b> Remove B4429 chip detector from 212-040-053 case. Clean chip detector as required using drycleaning solvent (C-304). Visually inspect chip detector for cut packings, burrs, bent tube, and foreign material.	
	<b>5.</b> Remove and inspect 204-040-393 manifold assembly. Remove, clean, and inspect 204-040-388 jet No. 7 for cut packing, burrs, and foreign material.	
BHT-212-CR&O	<b>6.</b> Remove 204-040-362 quill assembly from 212-040-053 main case. Do no disassemble. Visually inspect mating flanges and pilot diameters for evidence of corrosion, fretting, and wear. Visually inspect all lockwire provisions. Check duplex bearing for smoothness and freedom of rotation by manually turning 204-040-701 gear. Visually check index marks on 204-040-701 gear and inner race of 205-040-245 bearing set for alignment.	
	NOTE	
	If index marks indicate movement between gear and inner race of bearing set, remove 204-040-701 gear, 204-040-357 plate, 204-040-348 shim, 205-040-245 bearing set, and 204-040-350 shim. Visually inspect inside diameter of 205-040-245 bearing set for signs of spinning. Visually inspect 205-040-245 bearing journal on 204-040-701 gear for sign of fretting. Inspect detail components to determine cause for inner race rotation.	
	7. Using a torque wrench, check each of the 32 bevel gear retaining bolts 214-040-117-005, for minimum torque of 300 inch-pounds (33.895 Nm).	
	NOTE	
	Torque check is accomplished with increasing torque, not break away or loosening torque.	
	<b>a.</b> If torque value of any one retaining bolt is less than 300 inch-pounds (33.895 Nm), remove bevel gear and inspect mating surfaces of gear 204-040-701, and shaft 204-040-324, for fretting damage.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>-</sup> MECH	TIAL OTHER
	<b>b.</b> The maximum acceptable depth of pitting is 0.0005 inch (0.0127 mm). Pitting is acceptable only in area on gear or shaft surface outside of diameter of bolt holes and is not acceptable within 0.100 inch (2.54 mm) of the edge of a bolt hole. Damage in excess of these limits is cause for rejection of part.		
BHT-212-CR&O	<b>c.</b> Visually examine 204-040-701 gear teeth for evidence of wear, scoring, pitting, and contact pattern.		
	<b>d.</b> Visually inspect roller bearing race on lower end of shaft for evidence of skidding, scoring, pitting, or damage.		
	<b>e.</b> Visually inspect splines on upper and lower end of shaft for damage and/or wear.		
	<b>8.</b> Visually inspect 204-040-700 pinion teeth for excessive wear, scoring, pitting, and contact pattern. Visually inspect vibro-etched index marks on 204-040-700 pinion and 214-040-118 bearing set for alignment. Inspection may be accomplished with input quill installed by viewing pinion shaft and bearing inner race between teeth and main case.		
	NOTE		
	If index marks indicate rotational movement between pinion and inner race of bearing set, 212-040-263 quill shall be removed from main case. Disassemble quill to remove 212-040-700 pinion and 214-040-118 bearing set.		
	<b>a.</b> Visually inspect pinion bearing journal for signs of fretting and bearing inner race spinning.		
	<b>b.</b> Clean 214-040-097 sleeve in drycleaning solvent (C-304).		
	c. Visually ensure oil holes in 214-040-097 sleeve are free of any foreign material.		
	<b>d.</b> Inspect detail components to determine cause for inner race rotation.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
BHT-212-CR&O	<b>9.</b> Remove tail rotor drive quill 212-040-365-025, to gain access to accessory drive and sump gears. Visually inspect accessory case input quill gear 212-040-150-005, and tail rotor drive quill gear 212-040-151-009, for general condition and wear pattern.		
BHT-212-CR&O	10. Assemble transmission.		



#### **SPECIAL INSPECTIONS**

# 5-44. 10,000 HOUR TOTAL AIRFRAME TIME AND EACH 300 HOURS/12 MONTHS MAIN BEAM CAP OPERATION

DATA REFERENCE	INSPECTION TASK DESCRIPTION	TIAL OTHER
	DATE:W.O	
	FACILITY:	
	HELICOPTER S/N:	
	REGISTRY NO.:	
	TOTAL TIME:	
	SIGNATURE:	
	NOTE	
	Accomplish at 10,000 hours total airframe time and each 300 hours/12 months (whichever occurs first) thereafter.	
	MAIN BEAM CAP	
	This inspection is not required after main beam cap 205-030-186-101 is installed.	
	Inspect main beam cap 205-030-186-005 in accordance with TB 212-88-106.	



#### **CONDITION INSPECTION** 5-45.

- 1. Perform applicable conditional inspection of helicopter after hard landing, after blade strike or other rotating system torque spike, overspeed, overtorque, compressor stall or surge, lightning strikes, and after reduction (combining) gearbox clutch nonengagement, misengagement, or in-flight slippage (paragraph 5-46 through paragraph 5-52).
- 2. If overhaul evaluation is specified, complete both the conditional inspection and normal inspection procedures (as applicable) for that component listed in BHT-212-CR&O manual.
- If applicable conditional inspection does not provide complete information on a specific type of

incident or if any doubt exists as to the serviceability of the helicopter of related components, contact:

**Product Support Engineering** 

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#### 5-46. AFTER HARD LANDING

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish inspection after hard landing.		
	AFTER HARD LANDING		
	NOTE		
	Evaluate components removed from a helicopter following a hard landing as an interrelated group. Make entries in component records of each removed component to cross reference part and serial numbers of other drive system components removed for evaluation.		
	Hard landing is defined as any accident or incident in which ground impact of helicopter results in yielding or cracking of mounting lugs of transmission support case or noticeable yielding or cracking of fuselage pylon support structure, landing gear, or tailboom attachment structure. This definition is confined only to those accidents not involving sudden stoppage of main rotor or tail rotor.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	— Inspect	
	If a hard landing is suspected, step a through step h shall be accomplished:	
	<b>a.</b> Inspect main and tail rotor blades for evidence of strike damage. If such evidence is found on either rotor, perform sudden stoppage — power on or off.	
	<b>b.</b> Visually inspect underside of fuselage and tailboom for evidence of ground contact.	
Chapter 32	c. Perform landing gear deflection check.	
	(1) If crosstubes have yielded, remove landing gear and inspect support and attaching structure for signs of yielding or other damage.	
	(2) If supports and attaching structure are not damaged, replace damaged landing gear components.	
	<b>d.</b> Inspect mast for evidence of hard rotor hub contact sufficient enough to yield or deform mast.	
	e. Inspect mast area around pylon mount for loose rivets or other damage.	
	<b>f.</b> Inspect tailboom and fuselage attachment for loose rivets, cracks, or other damage.	
	g. If no damage other than yielded landing gear crosstubes has been found at this point, it is reasonably certain a true hard landing did not occur. For helicopters on the Part A inspection program, complete a 100 hour /12 month inspection. For helicopters on the Part B inspection program, complete a 25 hour/15 day inspection and return helicopter to flight status provided no further evidence of damage is found.	
	<b>h.</b> If damage is more extensive than landing gear crosstube yielding, a hard landing has occurred. Comply with requirements of step 2 through step 4.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	2. If a hard landing has occurred, the following steps shall be accomplished:		
	<b>a.</b> Remove and perform an overhaul evaluation inspection of following components:		
	(1) Mast assembly.		
	NOTE		
	If there is any yielding or deformation in area contacted by main rotor hub static stops or any other obvious damage, mast is unserviceable and non-repairable.		
	(2) Transmission.		
	(3) Main driveshaft.		
	<b>b.</b> Perform a thorough visual inspection of following components that may be kept in service if no discrepancy or obvious damage is found. Replace any damaged component:		
	(1) Main rotor blades.		
	(2) Main rotor hub.		
	(3) Tail rotor blades.		
	(4) Tail rotor hub.		
ASB 212-96-100 and ASB 212-96-101	NOTE		
ASB 212-90-101	Inspect P/N 212-010-738 or P/N 212-011-713 flapping stop for yielding as noted in Chapter 64 to determine if tail rotor yoke assembly may have been exposed to bending.		
	(5) Intermediate gearbox.		
	(6) Tail rotor gearbox.		
	(7) Tail rotor driveshafts.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	(8) Tail rotor driveshaft hangers.		
	(9) Swashplate and support assembly.		
	(10) Scissors and sleeve assembly and collective levers.		
	(11) Stabilizer bar assembly.		
	(12) Helicopter structure directly supporting damaged components identified in previous inspections.		
	<b>c.</b> Check all cowling and doors for proper fit and alignment. Remove cowling and inspect all attachment fittings.		
	NOTE		
	If significant damage has been found in any area of airframe, inspection shall be expanded in those areas until it extends beyond zone of damage.		
	d. Make a complete inspection, using a 10X magnifying glass, of pylon support structure for loose or sheared rivets, cracked brackets, buckled or cracked support angles and webs. Pay particular attention to pylon mounts attaching points.		
	e. Make a complete inspection of lift link, lift link attachment fittings, and lift beam for cracks and other evidence of damage. Remove lift link and replace with like serviceable item, if damaged.		
	<b>f.</b> Remove both pylon dampers, disassemble and check for internal yielding. Assemble dampers and install if no evidence of damage exists. Replace with like serviceable item if any damage is found.		
	<b>g.</b> Install serviceable mast, transmission assembly, and main driveshaft assembly. Install removed pylon control components.		
	h. Check all engine mount fittings and bolts for damage and looseness.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	<ul> <li>i. Inspect engine firewalls for evidence of warping, crushing, or other damage.</li> </ul>		
	j. Make a complete inspection of area where tailboom is attached to forward fuselage section. This includes both sets of attachment fittings and longerons, beam caps, skins, webs, bulkhead flanges, and other structural members. Check torque on attachment bolts to determine if yielding has occurred.		
	<b>k.</b> Completely inspect flight control system from pilot (and copilot) controls to rotor head for bent or damaged tubes, bellcranks, bellcrank supports, and for damaged control system bearings. Particular attention should be given to pylon controls, lower cylinder attachment support fitting, and adjacent airframe structure.		
	I. Pressurize hydraulic systems and check for leaks, interference, binding, and satisfactory operation.		
	m. Inspect fuel, oil, and pneumatic system for damage. Make engine ground run and visually check fuel, oil, and pneumatic lines for leaks.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	3. Inspect power plant in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.		
	<b>4.</b> If no significant damage has been found, no further inspection is necessary.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	DATE:W.O  FACILITY:  HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	To be accomplished after a main rotor blade or tail rotor blade strike or any drive system failure which inhibits free rotation of drive system.		
	AFTER BLADE STRIKE OR OTHER ROTATING SYSTEM TORQUE SPIKE		
	NOTE		
	If the blade strike or rotating system torque spike is the result of crash damage or results in crash damage, all rotating system components shall be considered unserviceable and non-repairable.		
	Crash damage is any damage sustained beyond the scope of that identified in the After Hard Landing conditional inspection (paragraph 5-46).		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER	
	NOTE		
	Components removed from a helicopter for evaluation following a sudden stoppage 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.		
	Sudden stoppage is defined as any rapid deceleration of drive system whether caused by seizure within helicopter transmission or by contact of main or tail rotor blades with the ground, water, snow, dense vegetation, trees, or other objects of sufficient density to cause rapid deceleration. Main or tail rotor blade damage, when caused by striking some object sufficient to require blade replacement (defined as removal for repair or scrap), is considered sudden stoppage. When sudden stoppage occurs, inspect helicopter and replace components as follows:		
	Perform a sudden stoppage inspection as follows:		
	NOTE		
	If sudden stoppage inspection is the result of a tail rotor strike or main rotor blades striking the tail rotor driveshaft, comply with step g through step n.		
	a. Main rotor blades.		
	(1) Visually inspect both main rotor blades for evidence of damage. Check closely for wrinkled skin.		
	(2) If any blade is damaged sufficiently to require blade repair, return both blades to an authorized overhaul facility. Make an entry in component record to show reason for removal was sudden stoppage.		
	(3) If no evidence of damage is found on either blade, both blades may be retained in service.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>b.</b> Main rotor hub.		
	(1) If main rotor blades were not damaged sufficiently to require blade replacement, hub may be retained in service.		
BHT-212-CR&O	(2) If a main rotor blade is damaged sufficiently to require blade replacement, perform overhaul inspection on main rotor hub. If any doubt exists, contact Product Support Engineering.		
	(3) If a main rotor blade is damaged beyond repair, scrap 204-011-121 grips and perform overhaul evaluation on main rotor hub. Make entry in component record to show reason for removal was sudden stoppage.		
	<b>c.</b> Pylon control components.		
BHT-212-CR&O	(1) If one or more of the following discrepancies in step (a) through step (f) are found, swashplate assembly, stabilizer bar assembly, and scissors and sleeve assembly shall be removed and an overhaul evaluation performed.		
	(a) Severe main rotor blade damage sufficient to require replacement.		
	(b) Pitch horn failure.		
	(c) Yielded stabilizer bar tube.		
	(d) Control tube buckled or broken.		
	(e) Transmission main support case mounting leg broken.		
	(f) Damaged isolation mounts.		
	If no condition exists as listed in preceding step (1), perform a close visual inspection. If no evidence of damage is found, the swashplate assembly, stabilizer bar assembly, and scissors and sleeve assembly may remain in service.		
	<b>d.</b> Replace all bolts in rotating controls. Discard removed bolts.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
BHT-212-CR&O	e. Remove and inspect main driveshaft visually. If evidence of yielding or deformation is noted, scrap driveshaft assembly and attaching bolts. If no visual evidence of damage is detected, perform an overhaul evaluation. Make an entry in component record to show reason for removal and sudden stoppage.	
	f. Transmission and mast assembly.	
	(1) The following criteria are established to determine the need for removal and overhaul of the transmission and mast assembly. If any doubt exists contact Product Support Engineering.	
	(a) Damage to the main rotor blades due to striking a foreign object requiring removal to repair or scrap blades.	
	(b) Damage to the main rotor hub due to the main rotor blades striking a foreign object.	
	(c) Damage or shearing of main rotor mast.	
	(d) Seizure of drive system components.	
	NOTE	
	The transmission and mast assembly must be evaluated for serviceability as a set when removed for inspection requirements due to sudden stoppage. Inspect in accordance with the BHT-212-CR&O manual, ensuring both conditional and normal inspections are accomplished.	
BHT-212-CR&O	NOTE	
	If mast has evidence of torsional yielding (defined as excessive runout, bending, deformation or spline misalignment), mast assembly (including mast bearing), transmission top case, transmission lower planetary spider, lower mast bearing, and pylon mounts shall be scrapped. The transmission shall be overhaul evaluated. If the main case is magnesium it shall be scrapped.	



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER		
	If mast assembly does not exhibit evidence of torsional yielding and transmission has no obvious damage that would render it non-repairable, perform an overhaul evaluation on both the transmission and mast assembly.			
	If transmission is considered non-repairable as a result of sudden stoppage, the mast assembly shall be scrapped.			
	If a main rotor blade is damaged beyond repair, main rotor mast assembly (204-011-450-ALL) shall be scrapped.			
	In all cases, make an entry in component records to show reason for component removal was sudden stoppage.			
	g. Tail rotor driveshaft hanger assemblies:			
	(1) If a tail rotor driveshaft has been damaged beyond limits due to contact with a main rotor blade or other similar circumstance, the hanger assemblies to which the damaged shaft was attached shall be scrapped. If a tail rotor driveshaft fails as a result of torsional overload, all hanger assemblies and shafts shall be scrapped.			
BHT-212-CR&O	(2) If inspection reveals no damage that would render hanger assemblies non-repairable, hanger assemblies shall have an overhaul evaluation performed. Make an entry in component record to show reason for removal is blade strike or torque spike.			
Chapter 65	h. Tail rotor driveshaft.			
	(1) Remove tail rotor driveshafts and inspect for following conditions. If one or more of conditions listed in step (a) through step (e) are noted, all driveshafts and bearing hangers shall be considered unserviceable and non-repairable and shall be scrapped.			
	(a) Curvic faces distorted.			
	(b) Evidence of overload.			



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
	(c) Cracks.		
	(d) Loose or sheared rivets.		
	(e) Scratches in excess of limits.		
	(2) If inspection reveals no condition as previously listed in step (a) through step (e) exists, driveshaft may remain in service.		
	i. Tail rotor hub and blade assembly.		
	NOTE		
	Nicks, scratches, or dents on top or bottom of blade (nonleading edge) that do not require removal of blades for replacement may not require the tail rotor assembly to be scrapped. If any doubt exists, contact Product Support Engineering.		
	(1) Tail rotor hub and blade assembly: If sudden stoppage originated at tail rotor blades, tail rotor hub assembly shall be considered unserviceable and non-repairable and must be discarded.		
	(a) If sudden stoppage originated at main rotor or main rotor transmission, tail rotor hub and blade assembly may remain in service provided there is no visible external damage. If visible damage is noted on tail rotor hub and blade assembly, an overhaul of the tail rotor hub shall be performed. Make an entry in component records to show reason for removal was sudden stoppage.		
	(b) If sudden stoppage originated at tail rotor driveshaft, intermediate gearbox, or tail rotor gearbox remove tail rotor hub and blade assembly and perform an overhaul of the tail rotor hub. Make an entry in component record to show reason for removal was sudden stoppage.		
	(c) If either tail rotor blade is damaged sufficiently to require blade repair, return both blades to an authorized overhaul facility. Make an entry in component record to show that reason for removal was sudden stoppage.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	(d) If no evidence of damage is found on either tail rotor blade, both blades may remain in service.		
	(2) Tail rotor hubs with 212-011-702 yoke assembly and 212-011-713-103 flapping stop, reference ASB 212-96-101. Tail rotor hubs with 212-010-704-ALL yoke assembly or 212-010-744-ALL yoke assembly and 212-010-738-001 trunnion assembly, reference ASB 212-96-100.		
	(a) Inspect 212-011-713 and 212-010-738 flapping stops for yielding, to determine if tail rotor yoke assembly may have been exposed to bending. A yielded flapping stop requires removal of the tail rotor yoke and flapping stop, and they shall be considered unserviceable and non-repairable, and must be discarded.		
	j. Tail rotor rotating controls.		
	(1) Perform a close visual inspection of the tail rotor rotating controls. If no evidence of damage is found, the tail rotor rotating control may remain in service. Replace all tail rotor rotating control bolts. If damage to the tail rotor rotating controls is found, perform an overhaul of the tail rotor rotating controls. Make an entry in component record to show that reason for removal was sudden stoppage.		
	<b>k.</b> Tail rotor gearbox.		
	(1) Remove tail rotor gearbox. Check for cracks, sheared or bent attaching studs, and evidence of case distortion. If any of these conditions are noted, gearbox is unserviceable and non-repairable and shall be scrapped.		
BHT-212-CR&O	(2) If inspection reveals no condition as listed in previous step (1), perform an overhaul evaluation. Make an entry in component record to show reason for removal was sudden stoppage.		
	I. Intermediate gearbox.		
	(1) Remove intermediate gearbox. Check for cracks, case distortion, or broken lugs. If any of these conditions are noted, gearbox is unserviceable and non-repairable and shall be scrapped.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
BHT-212-CR&O	(2) If inspection reveals no condition as listed in previous step (1), perform an overhaul. Make an entry in component record to show reason for removal was sudden stoppage.	
	m. Transmission sump case.	
	NOTE	
	If no evidence of damage was found in step g through step k, or step I, omit following step (1) through step (3).	
	(1) If damage was found on bearing hangers, tail rotor driveshaft, intermediate gearbox, or tail rotor gearbox, remove tail rotor drive output quill from transmission sump case assembly.	
	(2) Inspect output quill pinion for unusual load patterns on both sides of teeth. If no damage is found, reinstall quill. Transmission may be retained in service.	
BHT-212-CR&O	(3) If tail rotor quill reveals discrepancies, remove transmission and perform an overhaul evaluation. Make an entry in component record to show reason for removal was sudden stoppage.	
	n. Reinstall or replace, as applicable, all removed components with serviceable components.	
Pratt & Whitney PT6T-3/-3B Maintenance Manual	o. Inspect engine in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.	



#### 5-48. AFTER OVERSPEED

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish inspection after overspeed.		
	AFTER OVERSPEED		
	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.		
	Overspeed is defined as any incident in which 110% main rotor RPM is exceeded.		
	Perform overspeed inspection as follows:		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	<b>a.</b> Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine overspeed and inspection requirements.		
	<b>b.</b> Main rotor hub assembly.		
	(1) Remove main rotor hub. Remove main rotor blades.		



# 5-48. AFTER OVERSPEED (CONT)

	DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	IAL OTHER
•	BHT-212-CR&O	(2) Perform an overhaul conditional evaluation inspection. Make an entry in component record to show reason for removal was overspeed. Include amount of overspeed and duration, if known.		
	BHT-212-CR&O	(3) Inspect main rotor blade retention bolts and drag brace bolts.		
		c. Main rotor blades.		
		(1) Inspect main rotor blades skin for wrinkles and deformation.		
		(2) Deleted.		
I		(3) If no discrepancies are found in inspections outlined in step (1), main rotor blades may be retained in service.		
		(4) If discrepancies are found in step (1), return both blades to an authorized blade repair station. Make an entry in component record to show reason for removal was overspeed. Include amount of overspeed and duration, if known.		
		d. Tail rotor hub and blades.		
		(1) Remove tail rotor hub and blade assembly.		
		(2) Remove tail rotor blades.		
		(3) Replace tail rotor blade retention bolts.		
		e. Tail rotor blades.		
	BHT-212-CR&O	(1) Perform major overspeed inspection of tail rotor blades. Make an entry in component record to show reason for removal was overspeed.		



# 5-48. AFTER OVERSPEED (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	f. Perform a close inspection of the following components. If no visual damage is found, components may be retained in service.	
	(1) Main transmission.	
	(2) Intermediate gearbox. Check gearbox for security and retaining bolts.	
	(3) Tail rotor gearbox. Check gearbox for security and retorque retaining nuts.	
	(4) Main rotor mast.	
	(5) Main input driveshaft.	
	(6) Tail rotor driveshafts.	
	(7) Tail rotor driveshaft hangers.	
	(8) Stabilizer bar.	
	(9) Swashplate.	
	(10) Scissors and sleeve.	
	(11) Tail rotor hub.	
	<b>g.</b> Install a serviceable main rotor hub and blade assembly. Install serviceable tail rotor blades. Balance and install tail rotor hub and blade assembly.	



#### 5-49. AFTER OVERTORQUE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	
	DATE:W.O		
	HELICOPTER S/N:		
	REGISTRY NO.:		
	TOTAL TIME:		
	SIGNATURE:		
	NOTE		
	Accomplish inspection after overtorque.		
	AFTER OVERTORQUE		
	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.		
	Overtorque is defined as any incident in which torsional loads are introduced into the helicopter dynamic system in excess of established limits.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	Refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for engine overtorque inspection limits.		
	NOTE		
	To assist with determining engine overtorque inspection requirements, the following table provides a comparison between Bell Helicopter cockpit torque gauge % values and Pratt & Whitney Maintenance Manual FT LB values.		



# 5-49. AFTER OVERTORQUE (CONT)

DATA REFERENCE	INSF	PECTION TAS	SK DESCRIF	PTION		М	INIT ECH	TIAL OTHER
		PT6T-3 PT6T-3B						
		BELL % TORQUE	P&WC FT LB	BELL % TORQUE	P&WC FT LB			
		87.6	900	89.1	915	1		
		83.6	859	85.2	875	1		
		77.8	800	79.4	815			
		71.8	738	71.8	738			
	retord f	ue retaining be. Tail rotor pue retaining retaining retaining retaining retaining retaining retaining retail rotor defended. Stabilizer be.	hub.  te gearbox. colts. gearbox. Chuts. riveshafts. riveshaft han					



# 5-49. AFTER OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	I. Mast.	
	m. Transmission.	
	<b>3.</b> When overtorque exceeds 104% (108% for helicopters with TB 212-91-138 incorporated), but does not exceed 112% perform the following:	
	<b>a.</b> Perform thorough visual inspection of components listed in step 2.	
	<b>b.</b> Inspect main transmission chip detector(s).	
	c. Inspect main transmission internal filter or full flow debris monitor (as applicable).	
	(1) If metal particles are found, indicating internal failure, remove transmission for overhaul evaluation. Make an entry in the component record explaining reason for removal was overtorque. Remove all transmission system oil lines. Flush and reinstall oil lines. Replace external oil filter element. Remove and scrap oil cooler. Install new oil cooler.	
	(2) If chip detector(s) and internal filter or full flow debris monitor (as applicable) appear normal and there is no evidence of internal failure, return helicopter to service. Operate normally for 5 hours and then check chip detector(s) and internal filter or full flow debris monitor. If no metal particles are found indicating internal failure, normal scheduled inspection intervals may then be followed. If metal particles are present prior to or at the 5 hour check, or if there is any evidence of internal failure, remove transmission for overhaul evaluation. Make an entry in the component record explaining reason for removal was overtorque. Remove all transmission system oil lines. Flush and reinstall oil lines. Replace external oil filter element. Remove and scrap oil cooler. Install new oil cooler.	
	d. Remove fifth mount bolts and remove fifth mount. Perform a thorough inspection of bolts and fifth mount support. Check for bent bolts and bent fifth mount support. Check for bolt hole alignment between transmission and fifth mount support.	
	<b>4.</b> When overtorque has exceeded 112% perform the following:	



#### 5-49. AFTER OVERTORQUE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	ΓIAL OTHER
	<b>a.</b> Return the following components to an overhaul facility for overhaul evaluation.		
	NOTE		
	Component removal record of dynamic components shall reflect overtorque as reason for removal. Include amount of overtorque and duration, if known.		
	(1) Transmission.		
	(2) Main driveshaft.		
	(3) Main rotor hub.		
	(4) Mast.		
	(5) Perform thorough visual inspection of other components outlined in step 2.		
	<b>b.</b> Remove fifth mount bolts and remove fifth mount. Perform a thorough inspection of bolts and fifth mount support. Check for bent bolts and bent fifth mount support. Check for bolt hole alignment between transmission and fifth mount support.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:  TOTAL TIME:  SIGNATURE:		
	NOTE  Accomplish inspection after engine compressor stall or surge.  AFTER ENGINE COMPRESSOR STALL OR SURGE  NOTE  Discuss circumstances of reported compressor stall with pilot, if possible. Determine N <sub>1</sub> (GAS PROD) speed at which reported stall occurred. Check helicopter and engine logs for any pertinent history.  Engine compressor stall or surge is characterized by a sharp rumble or a series of loud sharp reports, severe engine vibration and a rapid rise in Interturbine Temperature (ITT), depending on severity of surge. When a surge has been reported, progressively perform the following inspections as dictated by discrepant conditions.  Components removed from a helicopter for evaluation following a compressor stall or surge 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.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	1. Power plant.		
	a. Examine inlet screen for blockage.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	<b>b.</b> Inspect engine compressor region for salt, dust, oil, or other contaminants. If contaminants are found, clean and perform a power check in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.		
	c. Inspect for visible Foreign Object Damage (FOD) to visible compressor blades.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	<b>d.</b> If compressor stall (surge) occurred during acceleration, refer to Pratt & Whitney PT6T-3/-3B Maintenance Manual for inspection procedures.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	e. Perform test on pneumatic sense lines.		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	<b>f.</b> If step a through step e do not reveal cause of surge, perform a hot end inspection in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.		
	2. Power train.		
	<b>a.</b> If compressor stall occurs below 85% N <sub>1</sub> (GAS PROD) speed, comply with step b and step c.		
	<b>b.</b> Remove magnetic chip detectors from transmission, intermediate gearbox, and tail rotor gearbox. Inspect for metal particles.		
	c. If no evidence of damage is found on tailboom pylon and no indication of metal particles are found on chip detectors, clean chip detectors and reinstall. Return helicopter to flight status and repeat chip detector inspection after 5 to 10 operating hours. If positive indication of damage is found on tailboom pylon or metal chips are found on chip detectors, during initial or 5 to 10 hour inspection, comply with the following step e through step i.		
	<b>d.</b> If compressor stall occurs at 85% $N_1$ (GAS PROD) or above, comply with the following step e through step i.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Chapter 65	e. Remove and inspect tail rotor driveshaft.		
	<b>f.</b> Remove input and output drive quill from intermediate gearbox and inspect gear teeth on pinion and gear for damage with a 10X magnifying glass. if no evidence of scoring or scuffing is found, and there is no mechanical damage that would render gearbox unserviceable, reassemble and return to service. If gear teeth are scuffed or scored, or gearbox has sustained other damage, gearbox shall be replaced with a like, serviceable item and the following step g and step h accomplished.		
	g. Remove tail rotor gearbox from helicopter and remove input quill. Inspect gear teeth on pinion and gear for damage with a 10X magnifying glass. If no evidence of scoring or scuffing is found, and there is no other damage that would render gearbox unserviceable, it may be reassembled and reinstalled for continued use. If gear teeth are scored or scuffed, or there is other damage that would render gearbox unserviceable, replace gearbox with a like, serviceable item.		
	h. Remove tail rotor drive quill from transmission and inspect gear teeth for damage with a 10X magnifying glass. If there is no indication of scoring or scuffing, and there is no other damage that would render transmission unserviceable, it is suitable for continued use. If gear teeth are scored or scuffed, or there is other damage and that would render transmission unserviceable, replace transmission with a like, serviceable item and comply with step j.		
	i. Install serviceable tail rotor driveshaft if transmission is not to be replaced.		
	<b>j.</b> If transmission is to be replaced, the following components shall also be replaced (step (1) through step (3) and procedures outlines in step (4) through step (8) performed).		
	(1) Tail rotor bearing hanger assemblies.		
	(2) Tail rotor driveshafts.		
BHT-212-CR&O	(3) Tail rotor hub and blade assembly. Perform an overhaul evaluation. Make an entry in component record to show reason for removal was compressor stall.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	(4) Remove inboard and outboard drag brace bolts. Check bolts for deformation and perform magnetic particle inspection. If satisfactory, return to service.		
	(5) Visually inspect stabilizer bar outer tubes for bending. (Allowable deflection is 0.150 inch (3.81mm) in each tube.)		
	(6) Remove main rotor pillow blocks from main rotor yoke and check for deformation of bushings and bushing holes in pillow blocks and yoke.		
	(7) Perform close visual inspection of all other main rotor components.		
BHT-212-CR&O	(8) If any discrepancies are noted as a result of inspection in step (4) through step (7), remove and replace main rotor hub and blade assembly, stabilizer bar assembly, and mast assembly. Removed assemblies shall have an overhaul evaluation performed. Make an entry in component records to show reason for removal was compressor stall.		
	3. Airframe.		
	a. Check tailboom fin for evidence of damaged skin panels and/or structure and rivets for looseness and/or sheared heads. If inspection shows no indication of damage, return helicopter to flight status. If positive evidence of damage is found, comply with step b through step e.		
	<b>b.</b> Remove skin from tailboom fin adjacent to tail rotor gearbox mounting. Inspect all support structures in this area and repair as required. Install new skin.		
	c. Make close visual inspection of complete tailboom structure for distortion, buckles, skin cracks, and sheared or loose rivets, paying particular attention to tailboom attachment points at FS 241.43 to 243.9 and adjacent fuselage to tailboom structure and intermediate gearbox support structure.		
	<b>d.</b> Make close visual inspection of main pylon support and engine mount attachment structure for distortion, buckles, cracks, sheared, or loose rivets, etc.		



DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	e. If discrepancies found during inspection in step b through step d cannot be repaired by standard procedures, replace discrepant assembly.		



#### 5-51. AFTER LIGHTNING STRIKES

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI <sup>T</sup> MECH	TIAL OTHER
	DATE:		
	Accomplish inspection after lightning strikes.		
	AFTER LIGHTNING STRIKES		
	In all instances in the following inspections, if significant damage has been found in any area, inspection shall be expanded in those areas until it extends beyond zone of damage. Any damage found anywhere on helicopter shall be recorded in detail and copies of these records shall be provided along with any component returned for overhaul to assist overhauling facility in evaluating component.  When helicopter is suspected of receiving a lightning strike, the following precautions shall be followed:  1. Visually inspect all external surfaces with particular attention to main rotor blades and hub, transmission and mast assembly, tail rotor blades and hub, tail rotor gearbox, and vertical fin. Check electrical instruments and systems. Verify magnetic compass accuracy.		



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	2. If visual indications of damage are present, proceed as follows:	
	<b>a.</b> Remove main rotor blades and visually inspect. If blades show any of the following indications, scrap blades.	
	(1) Inspect blades for signs of burns. Burn marks can be very minute.	
	(2) Inspect blades for debond in all bonded areas.	
	<b>b.</b> Remove main rotor hub and forward to an overhaul facility for overhaul. Tag hub stating lightning strike as reason for removal. Inspect main rotor hub and rotating controls for indication of arcing or burning.	
	c. Remove main driveshaft for inspection.	
BHT-212-CR&O	(1) Disassemble to the same extent required for coupling. Repack and clean couplings.	
	(2) Visually inspect couplings for any evidence of arc burning or pitting. Pay special attention to tips, roots, and profiles of male and female coupling teeth. Any evidence of arc burning or pitting is cause for rejection.	
	d. Remove tail rotor output coupling for inspection.	
BHT-212-CR&O	(1) Disassemble to same extent required for coupling. Repack and clean couplings.	
	(2) Visually inspect couplings for any evidence of arc burning or pitting. Pay special attention to the tips, roots, and profiles of male and female coupling teeth. Any evidence of arc burning or pitting is cause for rejection.	



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	e. If main rotor blades, main rotor hub, main driveshafts, or tail rotor output coupling exhibit evidence of damage that can be attributed to a lightning strike, remove transmission and mast assembly for overhaul. Tag components stating lightning strike as reason for removal. If no evidence of damage is noted on above mentioned components, partially remove and inspect main transmission as follows:		
Chapter 63	(1) Remove and inspect all transmission chip detectors.		
	(2) If any evidence of arc burning or pitting is noted, or excessive debris is found, remove transmission and mast assembly for overhaul. Tag components stating lightning strike as reason for removal.		
Chapter 63	(3) If no evidence of arc burning or pitting is noted, ground run light on skids for 1 hour. Reinspect chip detectors and remove and inspect oil filter. Repeat these inspections after accumulating 5 flight hours but prior to 10 flight hours.		
	<b>f.</b> Inspect tail rotor blades and hub. Scrap blades if indications of burns or debonding are present. Remove tail rotor hub for overhaul. Tag hub stating lightning strike as reason for removal.		
Chapter 65	<b>g.</b> Remove and inspect tail rotor gearbox chip detector and intermediate gearbox chip detector.		
	h. If the tail rotor blades, tail rotor hub, or tail rotor output coupling exhibit evidence of damage, which can be attributed to a lightning strike, or excessive debris is found on chip detectors, remove tail rotor gearbox, intermediate gearbox and tail rotor driveshaft hangers for overhaul. Tag components stating lightning strike as reason for removal. Additionally, the tail rotor driveshaft tubes, disc pack couplings, and attaching hardware shall be visually inspected for evidence of arc burns or pitting. Any evidence of arc burns or pitting is cause for rejection.		
	i. If no evidence of arc burns or pitting is noted, operate helicopter light on skids for 1 hour. Reinspect chip detector. Repeat this inspection after accumulating 5 flight hours but prior to 10 flight hours.		



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH OTHER
	3. If no visual indications of damage are present, proceed as follows:	
Chapter 63	a. Remove and inspect all transmission chip detectors.	
	(1) If excessive debris is found on chip detectors, remove transmission and mast assembly for overhaul.	
Chapter 63 BHT-212-CR&O	(2) If little or no debris is found, operate helicopter light on skids for 1 hour. Reinspect chip detectors and remove and inspect oil filter. Repeat these inspections after accumulating 5 flight hours but prior to 10 flight hours.	
BHT-212-CR&O	<b>b.</b> Remove main rotor hub grips.	
	(1) Visually inspect bearings for signs of electrical arcing, burning, or delamination.	
	(2) Visually inspect pitch change links at drive assembly connections for arcing burns.	
	(3) If indications of arcing or burning are present, overhaul main rotor hub and drive assembly. Replace affected pitch change link, including attaching hardware.	
	(4) If no indications are found, reassemble main rotor hub.	
	<b>4.</b> Prior to first flight after a suspected or confirmed lightning strike, verify proper function of all drive system component chip detectors as follows:	
	a. Remove electrical connector from chip detector.	
	<b>b.</b> Remove chip detector and reinstall connector.	
	<b>c.</b> With helicopter electrical power on, bridge chip detector gap with a clean conductive object (screwdriver).	
	d. Verify proper indication on the CHIP indicator panel and caution panel. Verify illumination of MASTER CAUTION light.	
	e. Using a single strand of steel wool to bridge gap of one chip detector, verify proper function of chip burn off system.	



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	f. Make repairs as required.		
	<b>5.</b> When established that lightning has struck helicopter, inspections of electrical and instrument systems that follow are mandatory to ensure safety of flight.		
	a. Inspect all electrical wiring, bundles, and connectors for burning or electrical arcing. Unplug all connectors and inspect pins and housing for electrical arcing or burning. Inspect interior of all circuit breaker panels for burning or electrical arcing. Replace any wires, connectors, or circuit breakers found to be damaged.		
	<b>b.</b> inspect main rotor blade and control links, transmission system, driveshafts, gearboxes, and tailboom structure for magnetization. Using a magnetometer with a range no larger than ±5 gauss, place arrow or red dot (depending on magnetometer model) within 0.5 inch (12.7 mm) of item being checked, and point it directly at item. If any items or components have a reading greater than 1 gauss, those items shall be degaussed.		
	NOTE		
	Do not test chip detectors for magnetization. If transmission or gearbox magnetic readings are greater than 1 gauss near chip detector, remove chip detector from housing and repeat test.		
	<b>c.</b> Remove and bench test voltage regulator(s). Operationally check DC generator, starter generator, and inverter(s) for proper operation. Visually inspect generator, starter generator, and inverter(s) for burns or electrical arcing. If damaged, remove for internal inspection and bench test.		
	d. Perform operational check of bussing system.		
	<b>e.</b> Inspect transmission and tail rotor gearbox chip detectors for proper operation. Remove chip detectors found inoperative.		
	<b>f.</b> Perform operational check of interior and exterior lighting system. Replace lamps, bulbs, and lighting assemblies as required.		



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TAL OTHER
	g. Perform operational check on all instruments. Remove and repair/replace instruments and sensor found to be defective.		
	<b>h.</b> Perform operational check on all caution messages for proper operation.		
	<b>6.</b> When it has been established that lightning has struck the helicopter, the inspections of structure that follow are mandatory to ensure safety of flight:		
	NOTE		
	Arcing damage on metal components of airframe structure, when cleaned out to twice its visible depth, shall be treated as mechanical damage. Damage limits establish repairability and/or scrapping of component. Any other structural damage, tears, voids, rupture, etc., directly or indirectly related to lightning strike, shall also be treated as mechanical damage.		
	<b>a.</b> Check sandwich panels in suspect areas for voids or debond. If damage is apparent, proceed with normal maintenance procedures.		
	<b>b.</b> Check fixed controls and support system components for possible arcing damage. Bearings in rod ends, bellcranks, and supports should be most susceptible to arcing damage. Check bearings for smooth rotation. Visibly inspect attaching hardware of support for signs of lightning damage, damaged finish and/or burns. If damage is evident, remove supports and inspect mounting holes and mating surfaces for arcing damage. Arcing damages shall be blended out to twice its visible depth, and repaired damages shall not exceed mechanical damage limits.		
Chapter 32	c. When apparent lightning has grounded through skid landing gear, remove entire landing gear assembly and inspect crosstubes and airframe support fittings for possible arcing damage. Specifically, inspect attaching holes and mating surfaces of the crosstubes directly beneath landing gear bearing/retaining supports. Clean out arcing damage to twice its visible depth. The damage, after cleanup, shall not exceed allowable mechanical damage limits.		



# 5-51. AFTER LIGHTNING STRIKES (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TIAL OTHER
	<b>d.</b> Any airframe metal parts not specifically identified above, but are suspect, shall be noted in maintenance log and shall be reinspected prior to next 100 hours of flight.		



5-52. AFTER ENGINE COMBINING GEARBOX CLUTCH NONENGAGEMENT, MISENGAGEMENT, OR IN-FLIGHT SLIPPAGE

DATA REFERENCE	INSPECTION TASK DESCRIPTION	 ΓΙΑL OTHER
	DATE:W.O  FACILITY:  HELICOPTER S/N:  REGISTRY NO.:	
	TOTAL TIME:SIGNATURE:	
	NOTE  Accomplish inspection after engine combining gearbox clutch nonengagement, misengagement, or in-flight slippage.  AFTER ENGINE COMBINING GEARBOX CLUTCH NONENGAGEMENT, MISENGAGEMENT, IN-FLIGHT SLIPPAGE	
	$\begin{array}{c} \textbf{NOTE} \\ \textbf{A} \ \ \text{nonengaged engine is indicated by near zero} \\ \textbf{torque, higher N}_2, \ \textbf{and much cooler ITT as compared} \\ \textbf{to engaged engine.} \end{array}$	
	<ul><li>— Inspect</li><li>1. Nonengagement.</li></ul>	
Pratt & Whitney PT6T-3/-3B Maintenance Manual	Perform inspection in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.	



#### NONENGAGEMENT, 5-52. **AFTER ENGINE** COMBINING **GEARBOX** CLUTCH MISENGAGEMENT, OR IN-FLIGHT SLIPPAGE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INI7 MECH	TIAL OTHER
	2. Misengagement.		
	NOTE		
	If a sprag clutch has failed to engage, and/or subsequently engages with or without audible or physical (helicopter jolt) indications, proceed as follows:		
Pratt & Whitney PT6T-3/-3B Maintenance Manual	<b>a.</b> Combining gearbox shall be removed and inspected in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.		
	<b>b.</b> Inspect transmission spiral bevel gear as follows:		
SI 212-6 and Chapter 63	(1) Gain access to left side of transmission and remove rotor brake and quill assembly.		
	(2) Utilizing rotor brake quill port opening, inspect all 62 teeth of main spiral bevel gear convex side for unsatisfactory conditions such as scoring, hard lines, nicks, dents, chipping, metal deformation, etc. Inspect all 62 teeth on spiral bevel gear concave side. See Figure 5-6 for unacceptable conditions of spiral bevel gear.		
	NOTE		
	Inspection mirrors and a suitable light are required.  Turn rotor slowly to permit inspection of all gear teeth.		
SI 212-6 and BHT-212-CR&O	(3) Remove and replace any gear that does not meet inspection requirements set forth in step (2). Overhaul rotor brake quill.		



5-52. AFTER ENGINE COMBINING GEARBOX CLUTCH NONENGAGEMENT, MISENGAGEMENT, OR IN-FLIGHT SLIPPAGE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
	NOTE		
	Components removed from a helicopter for evaluation following combining gearbox clutch nonengagement, misengagement, or in-flight slippage 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.		
SI 212-6 and Chapter 63	(4) Install rotor brake and quill.		
	(5) Install cowling and inspection panels.		
	(6) Perform a 15 minute ground run to determine if any oil leaks are present at rotor brake quill assembly.		
	<b>c.</b> Perform inspection in accordance with compressor stall or surge inspection (paragraph 5-48), except drive train shall be inspected as follows:		
	(1) Visually inspect main rotor mast and controls for damage. If signs of yielding are evident, transmission and mast assembly and any other damaged components shall be replaced.		
	(2) Visually inspect tail rotor driveshaft for damage.		
BHT-212-CR&O	(3) Remove output quill from tail rotor gearbox and inspect both sides of gear teeth for scoring, scuffing, or other damage or marks indicating excessive load.		



#### NONENGAGEMENT, 5-52. **ENGINE** COMBINING **GEARBOX** CLUTCH **AFTER** MISENGAGEMENT, OR IN-FLIGHT SLIPPAGE (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INIT MECH	TAL OTHER
Pratt & Whitney PT6T-3/-3B Maintenance Manual	If a tail rotor driveshaft has failed or yielded, all tail rotor driveshafts, hanger assemblies, intermediate gearbox, and tail rotor gearbox shall be replaced, and tail rotor drive quill in transmission shall be removed and inspected for damage in accordance with the compressor stall inspection (paragraph 5-42). If scoring, scuffing, or other damage or marks indicate excessive load are found in intermediate gearbox or tail rotor gearbox, but tail rotor driveshafts are serviceable, gearbox(es) that are not serviceable shall be replaced.  3. In-flight clutch slippage.  NOTE  If clutch slippage is confirmed or suspected, proceed as follows:  a. Combining gearbox shall be removed and inspected in accordance with Pratt & Whitney PT6T-3/-3B Maintenance Manual.  b. Inspect spiral bevel gear in accordance with misengagement inspection step b, substep (2). If spiral bevel gear is damaged, perform misengagement inspection given in step c.		



#### **COMPONENT OVERHAUL SCHEDULE**

#### 5-53. COMPONENT OVERHAUL SCHEDULE

This component overhaul schedule (Table 5-1) summarizes overhaul interval of helicopter components.

Refer to Pratt & Whitney PT6T-3 Series bulletins for engine and related component overhaul intervals.



COMPONENT OVERHAUL SCHEDULE FOR KIT COMPONENT AND/OR PARTS ARE NOT COVERED IN THIS COMPONENT OVERHAUL SCHEDULE. REFER TO APPLICABLE SERVICE INSTRUCTIONS FOR COMPONENT OVERHAUL SCHEDULE.

#### NOTE

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

Time between overhauls and inspection periods is based upon experience, testing, and engineering judgement, and is subject to change at the sole discretion of Bell Helicopter Textron or an appropriate government agency.



ALL PARTS REMOVED, DUE TO REACHING THEIR LIMITS OR AS A RESULT OF AN ACCIDENT/INCIDENT INSPECTION AND DEEMED UNAIRWORTHY, SHALL BE PERMANENTLY MARKED AS SCRAP OR PHYSICALLY DESTROYED TO THE EXTENT THAT THERE IS NO CHANCE OF REPAIR OR INSTALLATION ON ANY HELICOPTER OR COMPONENT.

Table 5-1. Component Overhaul Schedule

PART NUMBER	NOMENCLATURE	OVERHAUL INTERVAL HOURS
	ROTORS	
204-011-326-013	Stabilizer Bar Assembly	1000/Conditional 🛕
204-011-400-017	Swashplate and Support Assembly	Conditional
204-011-401-019	Scissors and Sleeve Assembly	Conditional
204-012-101-009	Main Rotor Hub Assembly	2400
212-510-001-103	Main Rotor Hub Assembly	2400 🛕
212-010-701-001	Tail Rotor Hub Assembly	1000
212-011-701-001	Tail Rotor Hub Assembly	2500
209-011-700-003	Tail Rotor Installation	<u>/3</u> \



Table 5-1. Component Overhaul Schedule (Cont)

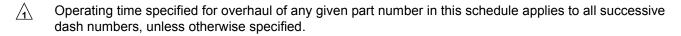
PART NUMBER 1	NOMENCLATURE	OVERHAUL INTERVAL HOUR
212-011-700-001	Tail Rotor Installation	<u>\_3\</u>
	POWER TRAIN	
412-040-123-101	Rotor Brake Quill	2500
212-040-001-115, -119, -123 and -127	Transmission	1000 🛕
212-040-001-131	Transmission	1500 🛕
212-040-001-059, -137 and subsequent	Transmission	6000 🛕 🟂
212-540-002-103	Transmission	6000 🛕 🏡 🤦
212-040-703-105	Quill Assembly, Auxiliary Equipment	1000 🞪
212-040-003-007	Intermediate Gearbox Assembly	3000
212-040-003-023	Intermediate Gearbox Assembly	5000
212-540-001-105	Intermediate Gearbox Assembly	5000 🛕
212-040-004-005	Tail Rotor Gearbox Assembly	3000
212-040-004-009	Tail Rotor Gearbox Assembly	5000
212-540-001-107	Tail Rotor Gearbox Assembly	5000 🛕
212-040-005-003	Engine to Transmission (Main) Driveshaft	1000
212-040-005-007	Engine to Transmission (Main) Driveshaft	3000
204-040-366-015	Mast assembly with 204-040-136-009 bearing	1000
	Mast Assembly with 212-040-136-001 Bearing	2500
204-040-366-017	Mast Assembly	2500
204-040-366-021	Mast Assembly	5000 🛕
212-540-002-105	Mast Assembly	5000 🛕 💁
212-040-600-001	Tail Rotor Driveshaft Hanger Assembly	3000

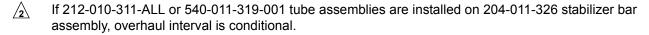


Table 5-1. Component Overhaul Schedule (Cont)

PART NUMBER	NOMENCLATURE	OVERHAUL INTERVAL HOURS	
HYDRAULIC			
212-076-004-003	Cylinder Assembly (Servo Actuator)	1000/Conditional 🏠	
212-076-004-005	Cylinder Assembly (Servo Actuator)	Conditional	
212-076-005-007	Cylinder Assembly (Flight Control)	2500	
	POWER PLANT		
PT6T3/-3B	Engine Combining (Reduction) Gearbox	3500 🛕	
209-060-221-001	Starter Generator	1000	
200SG119Q	Starter Generator	1000	
209-062-908-001	Fire Extinguisher Container	5 years 11	

#### **NOTES:**





- $\sqrt{}_{3}$  Overhaul the following items every 2500 hours of operation:
  - a. Idler Assembly 209-011-711-ALL
  - b. Lever Assembly 209-011-712-ALL
  - c. Nut 212-010-706-ALL
  - d. Crosshead 212-010-707-ALL or 212-010-775-ALL
  - e. Link Assembly 209-011-713-ALL
- Overhaul schedule of transmission quills is same as transmission in which quills are installed, with exception of rotor brake quill.
- Special inspection is required at 3000 hours, and overhaul is 6000 hours.
- Special inspection is required at 3000 hours and overhaul is 5000 hours. If 204-040-366-021 mast assembly is installed in transmission 212-040-001-115, -123, and -131, mast assembly TBO is 2500 hours.
- If cylinders have Greene, Tweed type seals installed, overhaul is conditional. Cylinders with assembly date of April 30, 1974 or later were fitted with Greene, Tweed type seals at manufacturer. However, cylinders without Greene, Tweed type seals shall be overhauled at 1000 hours.



#### Table 5-1. Component Overhaul Schedule (Cont)

#### NOTES: (CONT)



Engine combining gearboxes that have incorporated the preceding referenced Pratt & Whitney Service Bulletin numbers 5119, 5177, 5185, 5186, 5198, and 5199 are increased to 4000 hours TBO.



Refer to TB 212-91-138.



Refer to BHT-212-SI-87 for maintenance information.



Hydrostatic test in accordance with specification DOT-4 DA, DOT-4 DS700 or DOT-SP-7945, as marked on the reservoir, every 5 years or prior to refill after leakage or discharge. Extensions to this item are not permitted.