

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL MECH 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 300 hours of flight operation or 12 calendar months, whichever occurs first. <u>GENERAL</u> Each listed inspection item or maintenance function is to be performed in accordance with the chapter specified. <u>PRELIMINARY REQUIREMENTS</u> 1. All work accomplished during inspection shall be recorded in helicopter maintenance records. 2. Remove all panels, fairings, and cowlings required to satisfactorily carry out the inspection. 3. Deleted. <u>AFTER COMPLETION OF INSPECTION</u> 1. 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.		

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
	<u>FUSELAGE — CABIN</u>		
Chapter 53	1. Forward fuselage:		A0301
	a. Cabin exterior structure for corrosion and damage.		
	b. Cabin interior structure for corrosion and damage.		
	c. Ensure all drain holes are open.		
	d. All compartments for evidence of water entrapment and corrosion.		
Chapter 52	2. Doors and windows:		A0301
	a. Crew doors structure for corrosion, damage, distortion, and positive locking mechanisms. Seals for tears and separations.		
	b. Crew door emergency jettison mechanism for condition and security. Perform operational check.		
	c. Passenger door structure for corrosion, damage, distortion, and positive locking mechanisms.		
	d. Nose, electrical, and equipment compartment access doors for corrosion, damage, distortion, and positive locking mechanisms.		
	e. Passenger door window retainers and fillers for damage. Seals for adherence, tears, separations, and deterioration.		
	f. If installed, inspect heated windshield for condition and proper installation.		
Chapter 67	3. Collective flight control actuator:		A0302
	a. Universal bearings for looseness.		
	b. Input lever bearings and bolts for wear and looseness.		

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
BHT-ALL-SPM Chapter 67 Chapter 67	c. 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, balance spring, and bracket for wear and security. h. Clean exposed area of actuator piston with hydraulic fluid and a clean lint-free cloth. i. Check hydraulic cylinder piston rod for evidence of excessive wear and scoring. Wear of the piston rod indicates cylinder assembly is incorrectly aligned to lower support and requires adjustment. j. Remove bolts attaching actuator to lower supports. Check cylinder alignment to lower support. Rod end bearing side loads are not permitted. Install bolts. k. Torque check nuts attaching actuator cylinder to upper supports. l. 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.		A0302
	4. Collective control tubes: a. Control tubes between collective jackshaft and collective control actuator pilot valve input lever for corrosion, wear, and damage. b. Control tube bellcrank, supports, and attaching hardware for corrosion, wear, and damage.		
	5. Cyclic flight control actuators: a. Universal bearings for looseness.		A0302

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
BHT-ALL-SPM Chapter 67 Chapter 63	b. Input lever bearings and bolts for wear and looseness. c. 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. Clean exposed area of actuator piston with hydraulic fluid and a clean lint-free cloth. i. Check hydraulic cylinder piston rod for evidence of excessive wear and scoring. Wear of the piston rod indicates cylinder assembly is incorrectly aligned to lower support and requires adjustment. j. Remove bolts attaching actuator to lower supports. Check cylinder alignment to lower support. Rod end bearing side loads are not permitted. Install bolts. k. Torque check nuts attaching actuator cylinder to upper supports. l. Upper cylinder housing mounting bracket cavity for corrosion. Cavity drain hole for obstruction. Re-apply corrosion preventive compound (C-104) as required. Dust boot for condition.		
	6. Cyclic control tubes: a. Control tubes between cyclic jackshaft and cyclic control actuator pilot valve input lever for corrosion, wear, and damage. b. Control tube bellcranks, mixing levers, supports, and attaching hardware for corrosion, wear, and damage.		A0302
	7. Transmission:		A0303

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
BHT-412-CR&O Chapter 32	a. All transmission chip detectors for debris. b. Clean all transmission chip detectors. c. Test all transmission chip detector electrical circuits. d. Transmission internal oil filter or full flow oil debris monitor for debris. e. Clean transmission internal oil filter or full flow oil debris monitor. f. Move pylon fore and aft, using mast as lever. Check friction dampers for freedom of movement and smooth operation. g. Mounts for damage and security. h. Lift link and attachments for corrosion, damage, and security. Bearings for looseness. i. Mast torque sensor (if installed) installation for condition and security. j. 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). Re-torque as required.		
	8. Landing gear assembly: a. Landing gear skid shoes for excessive wear, cracks, damage, corrosion, and security of attachment. b. Aft cross tube support beam for cracks, damage, corrosion, and security of attachment. c. Retighten cross tube to skid tube saddle bolts. d. Torque forward and aft cross tube support fittings U-bolts to 80 to 100 inch-pounds (9.04 to 11.29 Nm).		A0301

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
BHT-412-SI-58 Chapter 53	e. 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. f. If gross weight towing kit provisions are installed, inspect fitting assembly for condition and security. Torque check attachment bolts 160 to 190 inch-pounds (18.1 to 21.4 Nm). If bolts are found loose, inspect for condition. 9. Underside of fuselage: a. Fuselage structure for damage, corrosion, and working rivets. b. Exterior finish for condition and cleanliness. c. Evidence of excessive fluid leakage. d. Structure around landing gear for condition. e. Forward crosstube support structure for working fasteners, cracks, corrosion, and excessive wear. f. Aft crosstube support structure for working fasteners, cracks, corrosion, and excessive wear. <u>FUSELAGE AFT OF CABIN LEFT AND RIGHT SIDE</u> NOTE Refer to Pratt & Whitney Canada PT6T-3 Series Maintenance Manual for engine inspection requirements.		A0301
	1. No. 1 (left) engine power section: a. Chip detectors for debris. b. Clean chip detectors. c. Test chip detector electrical circuits.		
Chapter 71			B0312

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 71	2. No. 2 (right) engine power section: a. Chip detectors for debris. b. Clean chip detectors. c. Test chip detector electrical circuits.		B0312
Chapter 71	3. Reduction (combining) gearbox: a. Chip detector for debris. b. Clean chip detector. c. Test chip detector electrical circuits.		A0303.5.2
Chapter 71	4. Engine electrical connections: a. Power section 1 ignition leads for corrosion, chafing, and security. b. Power section 2 ignition leads for corrosion, chafing, and security.		B0312
Chapter 71	5. Starter generator: a. Power section 1 starter generator brushes for allowable wear. b. Power section 2 starter generator brushes for allowable wear. c. Power section 1 starter generator cooling ducts for obstruction, kinking, and security. d. Power section 2 starter generator cooling ducts for obstruction, kinking, and security. NOTE If applicable, refer to BHT-412-SI-87 for installation of adjustable seals or refer to Chapter 71 for seal adjustment.		CALM

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 71 ASB 412-10-140	6. Inspect the left side and right side engine air inlet cowlings for gaps between the lower surface of the cowling firewall and the mating horizontal engine firewall.		A0301
Chapter 76	7. Engine fuel and power controls: a. Engine control linkages for looseness, lost motion, chafing, damage, and security of attachment. b. Bellcranks, mounts, and jackshafts for looseness, damage, and security of attachment. c. Check controls for smooth movement throughout full range of travel.		A0301
Chapter 26	8. Engine fire detection systems for condition and security.		A0301
	<u>TAILBOOM</u>		A0304
Chapter 53	1. Tailboom structure: a. Tailboom exterior structure for corrosion and damage. b. Tailboom interior structure for corrosion and damage. c. Inspect tailboom joints, splices, longerons, attach fittings, and attaching hardware for corrosion, damage, and cracks.		
ASB 412-90-49	d. 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, corrosion will leave evidence of white powder. e. Using a borescope or other 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.		

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
BHT-ALL-SPM	g. Install plug button with sealant (C-308). h. Ensure all drain holes are open. i. Vertical fin spar caps forward side and web from upper tailboom skin to approximately 4.0 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.		
Chapter 67	2. Antitorque controls: a. Tail rotor control tubes between tail rotor pedals and tail rotor gearbox for corrosion, wear, and damage. b. Control tube bellcranks, supports, and attaching hardware for corrosion, security, wear, and damage. c. Tail rotor hydraulic actuator for leaks and security of attachment, damage, corrosion, and bearings and linkages for looseness.		A 0304
Chapter 67	3. Aerodynamically actuated elevator: a. Elevator control tube between forward support bracket and elevator horn for corrosion, wear, and damage. b. Control tube support and attaching hardware for security, corrosion, wear, and damage. c. Elevators and support structure for loose or missing rivets and cracks in the skin. d. Trailing edge tabs and tip caps for condition and security.		A 0304

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
	e. Functionally check operation of tube as follows:  DO NOT RELEASE ELEVATOR AND ALLOW THE SPRING TO DRIVE ELEVATOR BACK TO ORIGINAL POSITION. (1) Move elevator to extreme nose down position and while holding allow elevator to slowly return to original position. Failure to return to original position, binding and/or lock-up are not acceptable. (2) If any of these conditions exist, replace tube. f. Remove elevator control tube and measure spring breakout force for 90 to 100 pounds (400.32 to 444.80 N). Install elevator control tube. g. Functionally check elevator rigging for proper setting and travel. h. Inspect and measure elevator trailing edge tab for 16° ±1/4° angle down from upper surface of elevator.		
Chapter 52	4. Baggage compartment door for corrosion, damage, distortion, and positive locking mechanism.		A0301
Chapter 26	5. Baggage compartment smoke detector for condition and security.		A0301
Chapter 96	6. Inspect wire bundles and clamping for chafing, condition, and security.		A0301.8.3
	NOTE Step 7 pertains to helicopters S/N 33001 through 33213 and S/N 36001 through 36019 not modified by 412-570-001-103 or Pre BHT-412-SI-74 (412SP to 412HP Upgrade).		

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 65	7. Tail rotor driveshaft: a. Hanger assemblies for cracks at mounting ears, corrosion, and security of attachment. b. Hanger supports for condition and security of attachment. c. Driveshaft sections and attaching hardware for condition and security. d. Coupling clamps for cracks in or near bolt lugs. Clamps for proper position. NOTE Step 8 pertains to helicopters S/N 36020 and subsequent and helicopters modified by 412-570-001-103 or Post BHT-412-SI-74 (412SP to 412HP Upgrade).		A0305
Chapter 65	8. Tail rotor driveshaft: a. Hanger assemblies for cracks at mounting ears, corrosion, and security of attachment. b. Hanger supports for condition and security of attachment. c. Driveshaft sections and attaching hardware for condition and security. d. Disc pack couplings and attaching hardware for condition and security.		A0305
Chapter 65	9. Intermediate gearbox: a. Chip detector for debris. b. Clean chip detector. c. Functionally test chip detector electrical circuit.		A0305
Chapter 12	d. Service gearbox as required.		

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 65	10. Tail rotor gearbox: a. Chip detector for debris. b. Clean chip detector. c. Functionally test chip detector electrical circuit. d. Service gearbox as required.		A 0305
Chapter 64	11. Tail rotor hub and blade assembly: a. Dynamically balance tail rotor. b. Torque check nuts on tail rotor blade retention bolts. c. Torque check tail rotor retaining nut.		A 0305
Chapter 18			
	<u>CABIN ROOF</u>		A0301
Chapter 52 Chapter 53	1. Cabin roof structure: a. Cabin roof structure, cowlings and fairings for damage, delamination, and general condition. b. Cabin roof and cowling/fairing mounted antennas for condition and security.		
Chapter 62	2. Main rotor hub and blade assembly: a. Main rotor blades upper and lower surfaces for condition of bond lines and doublers. Leading edge for erosion. Blade surfaces for corrosion, cracks, damage, and voids. b. Main rotor hub assembly for corrosion and damage. c. Blade retention bolts for condition and security. d. Torque check eight main rotor yoke assembly through bolt nuts to 70 to 80 foot-pounds (95 to 108 Nm).		A0306

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5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 62	e. Ensure bolts EWB0420 are installed (16 places) for simple pendulum absorber bracket. Torque check bolts. Apply 29 to 33 foot-pounds (39 to 45 Nm) in increasing torque direction. 3. Main rotor controls: a. Torque check swashplate link elastomeric rod end bearings (as applicable) attachment bolts 165 to 200 inch-pounds (18.65 to 22.59 Nm). b. Torque check swashplate outer ring through bolts to 165 to 175 inch-pounds (18.65 to 19.74 Nm). c. Torque check four hub and sleeve to rephasing lever attachment bolts to 24 to 34 foot-pounds (33 to 46 Nm) for 1/2 inch bolts or to 160 to 200 inch-pounds (18.08 to 22.59 Nm) for 3/8 inch bolts (if installed). d. Torque check four drive link to rephasing lever attachment bolts to 165 to 200 inch-pounds (18.65 to 22.59 Nm). e. Torque check pitch link elastomeric rod end bearings (as applicable) attachment bolts to 165 to 200 inch-pounds (18.65 to 22.59 Nm). f. Torque check swashplate support to mast plate bolts AN5H-6A to 130 to 140 inch-pounds (14.67 to 15.79 Nm).		A0306
Chapter 96	4. Emergency bus interconnect circuit breaker and diodes: NOTE Helicopters S/N 33001 through 33107, except those modified for CAA, remove screw, spacer, and washer installed in the emergency load switch guard. a. Inspect EMERG BUS INTC circuit breaker for wear. Operate circuit breaker manually and check by feel. Worn or loose circuit breaker is not acceptable. Close circuit breaker.		A0306

SCHEDULED INSPECTIONS

5-10. 300 HOUR/12 MONTH INSPECTION — PART B (CONT)

DATA REFERENCE	INSPECTION TASK DESCRIPTION	INITIAL	
		MECH	OTHER
Chapter 96	b. Place all switches in OFF or NORM position and close all circuit breakers. c. Connect battery. d. Place BATTERY BUS 1 switch and BATTERY BUS 2 switch in the ON position. Position INV 1 and INV 2 switches in the ON position. Caution panel INVERTER 1 and INVERTER 2 segments should not be illuminated. e. Check emergency bus power by pressing the FIRE EXT PRESS TO TEST button momentarily. Observe both FIRE PULL handle warning lights illuminate. f. Position emergency bus switch to EMERG LOAD position. Check emergency bus power by pressing the FIRE EXT PRESS TO TEST button momentarily. Observe both FIRE PULL handles illuminate. Verify INVERTER 1 and INVERTER 2 segments are illuminated on the caution panel. NOTE S/N 33108 and subsequent — Check INVERTER 1 light segment on the caution panel is not illuminated and INVERTER 2 segment is illuminated. g. Position BATTERY BUS 1 and BATTERY BUS 2 switches off. Check emergency bus power by pressing FIRE EXT PRESS TO TEST button momentarily. Observe FIRE PULL handles illuminate. h. Position INVERTER 1 and INVERTER 2 switches OFF. Position emergency bus switch to NORMAL. Disconnect battery. i. Install screw, spacer, and washer in the emergency load switch guard if removed.		
	5. Perform functional check of power diodes.		A0306