

PLEASE REVIEW FOR EFFECTIVITY AND RETURN



MAINTENANCE MANUAL BO 105

101 - 9 EXTENDED PERIODICAL INSPECTION 6000 hr / 8 Years

101 - 9.1 Extended Periodical Inspection Basic Helicopter

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(3) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(4) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(5) Ensure compliance with all supplementary inspections and special inspections		
(6) Ensure life-limited parts do not exceed service life		
(7) Ensure TBO-components do not exceed TBO		
(8) Ensure all required inspections of engines, equipment and components have been performed according to respective manufacturer's documentation		
(9) Record compliance with these inspections in Historical Record		
11 - MAIN TRANSMISSION		
(1) Inspect main transmission and attached parts for condition	11-3, step 1 thru 16	
(2) Remove magnetic plug and inspect for deposits, clean and test for magnetic retaining force	11-17, 11-18, 11-19, 02-14	
(3) EFFECTIVITY H/C up to S/N 690 if not installed with washers P/N 105-13104.17: Inspect underside of rotor mast flange in the area of bores, including webs between the bores, for cracks, using a magnifying glass	AD 97-26-02	
12 - ROTOR BRAKE SYSTEM		
(1) Inspect rotor brake system for condition	12-3	
13 - MAIN ROTOR SYSTEM		
(1) Inspect main rotor system for condition	13-3	
(2) Remove primary bolts and secondary bolts, clean and inspect for condition; crack inspection not necessary	13-10, -11, -14, -16, -17, -18	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (1 of 5)

Inspection or Maintenance Work		Reference	Initial
14 - MAIN ROTOR BLADE			
(1) Inspect main rotor blade for condition		14-2 or 14-3	
NOTE	Note following when inspecting erosion protective shells for debonding: When first-time debonds are found, or existing debonds have increased in area, the inspection shall be repeated after 50Fh. Only when an inspection has revealed no further debonding do the periodic inspection intervals re-apply		
(2) EFFECTIVITY Discharger Adapter P/N B621M1026 201		14-5 step 6	
Visually inspection of corrosion and cracks		Not Installed	
NOTE	Inspect adapters from now on at the periodical inspection every 600fh or 4 years (600fh or 2 years at CBS-5 KLH), depending on witch time limit is reached first.		
21 - FUSELAGE			
(1) Inspect fuselage for condition		21-3	
(2) Inspect following frames for cracks:			
- upper corners of frames 7, 8, 9, forward and aft, and diagonal frame and frame 10			
- lower frame segments 7 and 8			
NOTE	Stop-drill cracks. Repair any cracks in the upper area of frames 7 and 9 and diagonal frame within the next 50Fh. Repair any cracks in the upper area of frames 8 and 10 and in the lower area of frames 7 and 8 within the next 600Fh. Check for crack propagation every 200Fh. Repair cracks which show propagation within the next 50Fh.		
(3) Clean, grease and functionally check jettison device of cockpit doors. Renew lead wire seal		21-4	
31 - TAIL BOOM			
(1) EFFECTIVITY Tail boom assemblies up to S/N 350 if AB 15 not accomplished:			
Remove tail rotor shaft fairing and visually inspect in the vicinity of the three bearing brackets P/N 105-30251.17/.18/.19 for cracks. Refer to AB 15 for further limitations			
(2) Inspect tail boom assembly for condition		31-2	
32 - TAIL ROTOR DRIVE			
(1) Inspect tail rotor drive for condition		32-3	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (2 of 5)

Inspection or Maintenance Work		Reference	Initial
32 - TAIL ROTOR DRIVE			
(2) EFFECTIVITY "Single webbed" type of gearbox housing (see Fig. 32-23): Visually inspect flange to housing transition area for cracks and conditions indicating presence of cracks, such as oil leakage and accumulation of dirt		Put on 100 hr	
33 - TAIL ROTOR			
(1) Inspect tail rotor for condition		33-4, step 1 - 7	
(2) Without disassembly, inspect spherical bearings in fork end of tail rotor shaft for play		33-21, step 1.c put on 100 hr	
(3) EFFECTIVITY Tail rotor blade mounting forks made from aluminum alloy P/N 105-31711, 105-31722: Remove and inspect blade mounting forks for condition		33-14 thru 33-18	
(4) Remove bellcrank assy and inspect for condition		33-9 thru 33-12	
(5) Check ball bearings of sliding sleeve for proper running and absence of play		33-27, step 14	
(6) Remove bolt connecting tail rotor shaft to tail rotor head, and clean and inspect bolt for condition		33-21, step 1.e Put on 100 hr	
34 - TAIL ROTOR BLADE			
(1) Inspect tail rotor blades for condition		34-2	
41 - MAIN ROTOR CONTROLS			
(1) Inspect all flight control components for condition		41-3	
(2) Check swash plate bearing for proper running		41-73	
(3) Check rigging of collective control forces Needs hyd mule		102-16, step 9	
(4) Clean swash plate sliding surface on support tube. Move swash plate to uppermost position to expose sliding surface. Use cleaning solvent (CM 201, 202 or 217)			
42 - TAIL ROTOR CONTROLS			
(1) EFFECTIVITY H/C up to S/N 310 if SB-BO105-30-17 not accomplished: Remove control rod in the tail boom and inspect chafe protection for condition and grease sliding surface		42-33, step 4 N/A	
(2) Visually inspect seals on rod end and clevis for damage Following rods are affected: - control rod in the tail boom - control rod in vertical fin (upper clevis)		42-3	
(3) Control rod in vertical fin: Visually inspect sealing of blind hole in fork end for damage			

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (3 of 5)

Inspection or Maintenance Work	Reference	Initial
43 - HYDRAULIC SYSTEM		
(1) Inspect switchover control linkage for play	43-17 or 43-17A	
(2) Inspect hydraulic system for condition	43-11	
(3) Spray-coat N2-lever (droop-compensation) with corrosion preventive compound (CM 508)		
(4) Check filter contamination indicator (lateral indicator pin configuration)	43-14	
(5) Functionally test hydraulic system	43-15	
(6) Perform ground run check of selector valve setting AD 98 08 04	43-16 or 43-16A	
(7) Inspect system 1 selector valve for corrosion	43-13	
51 - LANDING GEAR		
(1) Inspect landing gear for condition	51-2	
61 - ENGINE		
(1) Inspect exhaust clamps for corrosion and cracks	61-34 ASB	
(2) Inspect engine accessories and mounting struts for condition	61-3	
(3) Remove anti-icing valve actuators and inspect mounting brackets for condition	61-37, 61-38, 61-39	
(4) Remove chip detectors and test their magnetic retaining force NOTE For removal and installation procedures, see Allison OMM 10W2 or 5W2 as applicable	02-14 weighted ball bearings	
62 - FUEL SYSTEM		
(1) Inspect fuel lines in the engine compartment for condition	62-3	
(2) Check fuel differential pressure switch for function plugger filter required	62-39	
(3) Perform functional test and leakage test of fuel shutoff valves	92-82, 92-83	
63 - LUBRICATION SYSTEM		
(1) EFFECTIVITY Ram air ventilation not installed: Visually inspect baffle plate, located between oil cooler and fan, and attaching clamps for cracks		
(2) Inspect lubrication system for condition	63-3	
(3) Remove oil drain plugs of oil tank and test the magnetic retaining force of their respective magnetic plugs	63-4, step 1.b, 02-14	
64 - FIREWALLS		
(1) Inspect fire walls for condition	64-2	
65 - ENGINE OPERATION AND CONTROL		
(1) Inspect engine operation and control linkages for condition	65-3	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (4 of 5)

Inspection or Maintenance Work	Reference	Initial
700 - STANDARD EQUIPMENT		
(1) Inspect pilot and copilot seats for condition	701-2	
(2) Inspect cabin equipment for condition	702-2	
(3) Inspect cabin ventilation for condition, check for function	704-2	
(4) Inspect identification and other markings for legibility, and adhesive-backed decals for damage and proper adhesion		
91 - INSTRUMENT SYSTEM		
(1) Ventilate dual torque indication system	91-57	
(2) Inspect instruments for condition	91-4	
(3) Clean and drain pitot-static system, inspect for condition and check for function	91-9 thru 91-12	
(4) Inspect magnetic compass for condition and function and compensate magnetic compass Requires master compass	91-24 thru 91-26	
(5) Calibrate TOT indication system - Barfield	91-45	
(6) Inspect instrument panel, center panel and overhead panel for presence, legibility and security of labels and placards NOTE Replace missing placards and rebond separated placards		
92 - ELECTRICAL SYSTEMS		
(1) Inspect battery bonding jumper for tight installation and unimpaired surface protection		
(2) Check voltage regulator setting - calibrated Volt Meter	92-17	
(3) Inspect socket of anti-collision light for condition	92-116	
(4) Remove starter-generator and inspect carbon brushes run in required	92-20, 92-20A	
(5) Inspect battery-temperature warning - done at deep cycle	92-34E	

Table 101-9.1 - Extended Periodical Inspection Basic-Helicopter (5 of 5)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature

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101 – 9.2 Extended Periodical Inspection Optional Equipment

Registration No.: _____ H/C Serial No.: _____ Total Hours: _____ Fh

Inspection or Maintenance Work	Reference	Initial
GENERAL		
(1) Review aircraft log book and ensure all recorded discrepancies have been corrected		
(2) Ensure compliance with all applicable airworthiness directives and manufacturer's (ECD) directives		
(3) Ensure compliance with all supplementary inspections and special inspections		
(4) Ensure life-limited parts do not exceed service life		
(5) Ensure TBO-components do not exceed TBO		
(6) Record compliance with these inspections in Historical Record		
831 – LONG RANGE FUEL TANK		
(1) Check long range fuel tank for condition (if tank remains installed)	831-4 not installed	
836 – RESCUE HOIST ASSEMBLY		
(1) Lubricate winch unit not installed	836-22	
845 – CHIP WARNING INDICATION		
(1) Remove chip detector, check, clean, test for function and test magnetic retaining force weighted ball bearings required	845-4, 845-5, 845-6, 02-14	
854 – MAIN ROTOR BLADE FOLDING SYSTEM		
(1) Remove locking lever assembly, clean and inspect for condition (crack inspection not required)	854-3, step 1.	
(2) Remove locking lever assembly		
– Clean and inspect nickel-plated bolts for condition, and provide with corrosion protection (crack inspection not required)	854-3, step 1.a and 854-4, step 2.f	
– Clean and inspect solid film lubricant-coated bolts for condition (crack inspection not required). Coat bolt with lubricant (CM146)	854-3, step 1.b and 854-4, step 2.g	

Table 101-9.2 – Extended Periodical Inspection Optional Equipment (1 of 2)

Inspection or Maintenance Work	Reference	Initial
857 – CONTINUOUS IGNITION SYSTEM		
(1) Check spark igniters for condition - covered by AD	857-4	
(2) Visually inspect noise suppressor and accessible parts of wiring for condition	857-4	

Table 101-9.2 – Extended Periodical Inspection Optional Equipment (2 of 2)

Technician		Inspector	
Date:		Date:	
Name	Signature	Stamp	Signature