MAINTENANCE MANUAL (MM)

APPENDIX –A–

INSPECTIONS

AND

AIRWORTHINESS LIMITATIONS

MODEL

MBB–BK 117 A-1

MBB–BK 117 A-3

MBB–BK 117 A-4

MBB–BK 117 B-1

MBB–BK 117 B-2



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APPENDIX -A-

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APPENDIX A

INSPECTIONS AND AIRWORTHINESS LIMITATIONS

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A 1 GENERAL – INSPECTIONS AND AIRWORTHINESS LIMITATIONS

1. General

a. The inspections/measures specified in Appendix A must be accomplished by the latest on reaching those time limits as determined in Section A2 to ensure **continued airworthiness of helicopter**.

b. Fig. A1 represents Appendix A "Inspections and Airworthiness Limitations". The contents of Sections A5 thru A9 are compiled in such a way, that on reaching the corresponding time limits only the required inspections have to be performed. Inspections with shorter intervals are fully incorporated. This means, that the Extended Periodical Inspection A9 contains the Periodical Inspection A8, which in turn contains the Supplementary Check 100 Fh A6 and the 12 Month Inspection A7. The Supplementary Check 50 Fh A5 is incorporated in the Supplementary Check 100 Fh A6.

c. The inspections/measures are to be performed in compliance with specified sections. The column **Reference** of the inspection schedules denotes according to which detailed instruction the inspection and maintenance work is to be performed. The column **Initial** is intended for verification of performance of inspection.

d. Inspections of **Basic–Helicopter** are described in Sections A X.1, inspections of **Optional Equipment** are described in Sections A X.2.

e. Inspections of vendor components and systems are to be performed in accordance with applicable vendor documentation. Refer to List of Applicable Publications (LOAP).

f. Supplementary checks may also be performed by trained pilots.

2. Scheduled Checks/Inspections

a. The scheduled checks/ inspections listed in Section **A3 thru A9** are to be performed by the latest on reaching corresponding operating time of helicopter. In case the operating times of components do not coincide with those of the helicopter, regard the operating times of components as applicable.

b. The supplementary inspections listed in Section **A10** supplement the periodical inspections/measures A5 thru A9.

c. Inspection resp. maintenance points of scheduled checks/inspections may be performed earlier. For this make sure that the specified time limits are not exceeded for those measures performed in advance.

3. Further Scheduled Measures

a. Time Between Overhaul–components are contained in Section **A14**. These components are to be overhauled by the respective manufacturer or an authorized service station according to applicable documentation.

b. Section **A15** contains a listing of all time change items, their related time limits as well as special regulations determining the use of these items. The operating times of these items may not be exceeded.

4. Unscheduled Inspections

a. Section **A11** contains special inspections to be performed after specific maintenance activities.

b. Section **A12** contains special inspections to be performed after lengthy operation under special environmental conditions. Special environmental conditions could be: saline atmosphere, high share of sand particles in air or polluted atmosphere. It is the responsability of the helicopter operator to judge the necessity of these special inspections.

c. Section **A13** contains special inspections to be performed immediately after the occurance of specific operational incidents. These inspections ensure the upholding respectively re–establishment of airworthiness.

5. Inspection Scheme

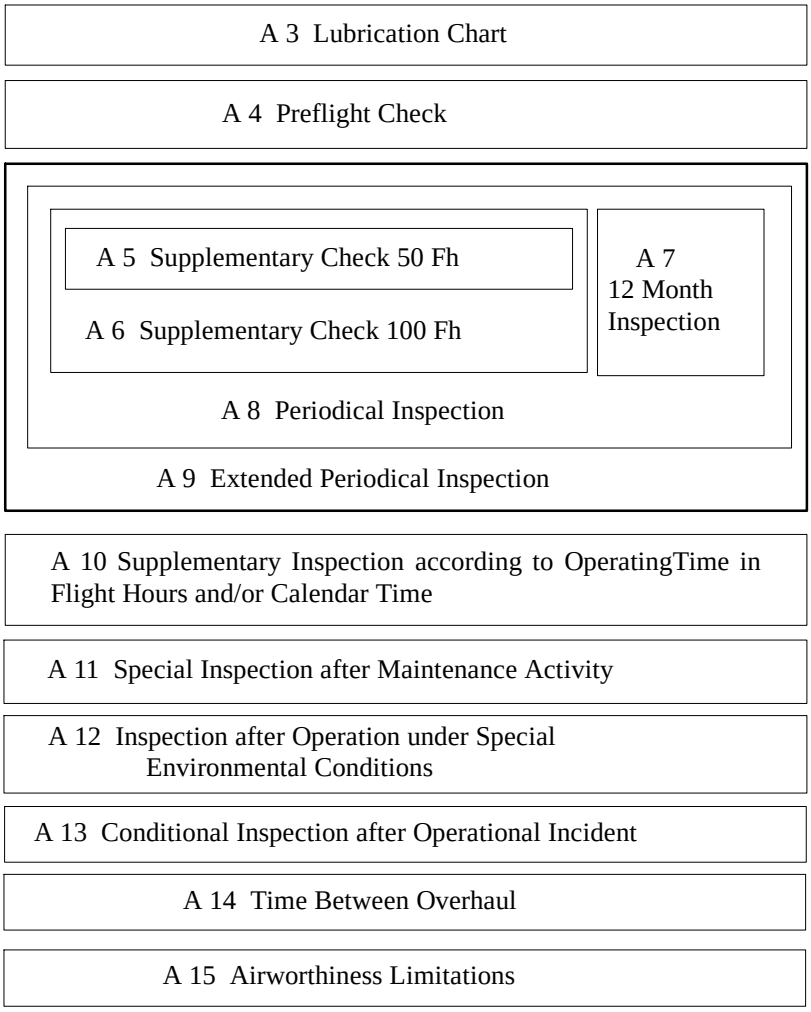


Fig. A1 – Inspection Scheme

6. Abbreviations

IPC	Illustrated Parts Catalog
Fh	Flight hours
FLM	Flight Manual
REM	Repair Manual
LOAP	List of Applicable Publications
NHA	Next Higher Assembly
OAT	Outside Air Temperature
SPM	Standart–Practicies–Manual
TBO	Time Between Overhaul
TCI	Time Change Item
TSI	Time Since Inspection
TSN	Time Since New
TSO	Time Since Overhaul
TSR	Time Since Repair

A 2 INSPECTIONS - TIME LIMITS

1. Notes regarding Time Limits

a. The time limits and allowable over-the-limit times for the inspections/measures are specified under point 2.

b. When unusual local conditions dictate, it is the responsability of the helicopter operator to increase the frequency and scope of inspections/measures to guarantee safe flight operation.

c. It is permissable to **exceed intervals** up to specified limits. These over-the-limit times are to be disregarded when determining time of next inspection or measure.

d. The time of inspection is specified by the following **expressions**:

1) **Flight hours** (Fh) are the intervals between takeoff and landing of the helicopter. If time limits are expressed in flight hours, they generally apply to the flight hours of the helicopter, unless the listed flight hours are directly related to a specific component (Nomenclature, Part Number).

2) **Calendar Time** in months or years are the intervals of Time Since New (TSN) or Time Since Inspection (TSI). If time limits are expressed in calendar time, they generally apply to the helicopter, unless the listed calendar time is directly related to a specific component (Nomenclature, Part Number).
Storage times following operation must be taken into account. These inspection requirements do not apply to new or overhauled equipment that has been stored according to manufacturer's directives and that has not been operated.

3) **Number of Flights** is the number of landings (ground contacts).

4) **Retirement Time** is the permissable operating time for Time Change Items (TCI) in flight hours, calendar time or number of flights since new. It is always related to a component identified by nomenclature and part number.

5) **Time Between Overhaul** (TBO) is the operating time of a component (Nomenclature, Part Number), after which the component is to be overhauled. The interval begins with Time Since New (TSN) or Time Since Overhaul (TSO).

2. Time Limits

a. The **oil-/ lubricant change** is to be performed according to Section A3. The listed time intervals are applicable. It is permissable to exceed the respective intervals by 10%.

b. The **Preflight Check** is to be performed according to Section A4 by the latest prior to the first flight of the day. Items marked with a symbol have to be checked each flight before takeoff.

c. The **Supplementary Check 50 Fh** is to be performed according to Section A5 every 50 flight hours. It is permissable to exceed the time by 5 flight hours.

This does not apply if the Supplementary Check 100 Fh, the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.

d. The **Supplementary Check 100 Fh** is to be performed according to Section A6 every 100 flight hours. It is permissable to exceed the time by 10 flight hours.

The Supplementary Check 100 Fh does not apply if the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.

e. The **12 Month Inspection** is to be performed according to Section A7 every 12 months. It is permissable to exceed the time by 3 months.

   The 12 Month Inspection does not apply if the Periodical Inspection or the Extended Periodical Inspection is performed on reaching scheduled time.

f. The **Periodical Inspection** is to be performed according to Section A8 every 600 flight hours or 2 years, depending on which time limit is reached first. It is permissable to exceed the time by 60 flight hours resp. 6 months.

   The Periodical Inspection does not apply if the Extended Periodical Inspection is performed on reaching scheduled time.

g. The **Extended Periodical Inspection** is to be performed according to Section A9 for the first time on reaching 6000 flight hours or 12 years, depending on which time limit is reached first. It is permissable to exceed the time by 600 flight hours resp. 12 months.

   The subsequent **Extended Periodical Inspections** are to be performed according to Section A9 every 6000 flight hours or 6 years, depending on which time limit is reached first. It is permissable to exceed the time by 600 flight hours resp. 6 months.

h. The **Supplementary Inspections** are to be performed according to Section A10. The listed time intervals are applicable. It is permissable to exceed the respective intervals by 10%.

i. The **Special Inspections after Maintenance Activity** are to be performed according to Section A11. The listed time intervals are applicable. It is permissable to exceed the respective intervals by 10%.

j. The **Inspections after Operation under Special Environmental Conditions** are to be performed according to Section A12. The listed time intervals are applicable. It is permissable to exceed the respective intervals by 10%.

k. The **Conditional Inspections after Operational Incidents** are to be performed according to Section A13. The listed time intervals are applicable. Intervals may not be exceeded.

l. **Time Between Overhaul components** are to be replaced according to Section A14. The listed Time Between Overhaul are applicable. It is permissable to exceed the respective intervals by 3%.

m. **Life-limited components** are to be replaced according to Section A15. The listed limits are applicable. These may not be exceeded.

A 3 LUBRICATION CHART

A 3.1 Lubrication Chart Basic Helicopter

NOTE Specifications and quantities of lubrication items are contained in Fig. A3-1.

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

Inspection or Maintenance Work	Interval	Reference	Initial
11 – MAIN TRANSMISSION			
(1) Change oil, inspect and clean oil filters	50Fh TSN/TSO/TSR for the first time, then after 600Fh or 12 months TSN/TSO, then every 600Fh or 12 months	11-4, 11-10 thru 11-13	
12 – ROTOR BRAKE			
(1) Change oil	600Fh or 12 months	12–16 thru 12–18	
14 – MAIN ROTOR BLADE			
(1) Check shaft seal of vibration absorber for leaking oil In case of leakage inspect vibration absorber i.a.w. para 14–2 and repair as necessary	Flight Manual Section 4	Flight Manual Section 4	
32 – TAIL ROTOR DRIVE			
(1) Change oil of intermediate gear box	50Fh TSN/TSO/TSR for the first time, then after 600Fh or 12 months TSN/TSO, then every 600Fh or 12 months	32-5	
(2) Change oil of tail rotor transmission	50Fh TSN/TSO/TSR for the first time, then after 600Fh or 12 months TSN/TSO, then every 600Fh or 12 months	32-5	

Table A3.1 – Lubrication Chart Basic Helicopter (1 of 2)

Inspection or Maintenance Work	Interval	Reference	Initial
33 – TAIL ROTOR			
(1) Grease ball bearings of sliding sleeve	12 months	33-27 step 13	
(2) Grease splines of tail rotor shaft	12 months		
41 – FLIGHT CONTROLS MAIN ROTOR			
(1) Grease swashplate bearings	12 months	41-53	
43 – HYDRAULIC SYSTEM			
(1) Grease splines of hydraulic pump drive shaft	600Fh or 2 years	43-20, 43-22	
(2) Change hydraulic fluid	2 years	43-6	
61 – ENGINE			
(1) Remove greased starter generators, clean and again grease splines of drive shaft	200Fh		
(2) Oil change and filter change If the scavenge oil filter installed, also observe inspection point A10.2–836	Refer to Lycoming Maintenance Manual	Refer to Lycoming Maintenance Manual	

Table A3.1 – Lubrication Chart Basic Helicopter (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

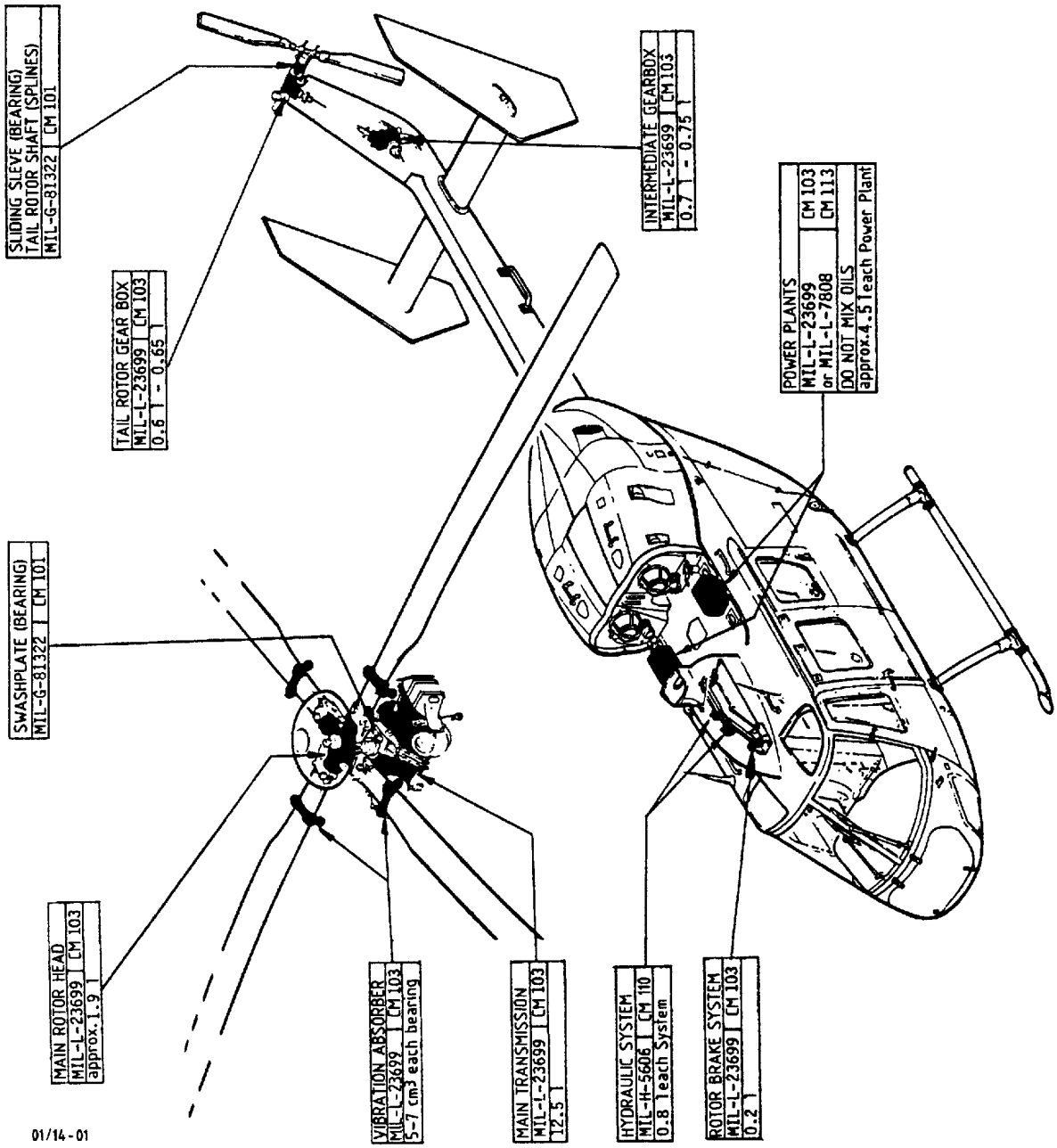


Fig. A3-1: Lubrication Chart Basic Helicopter

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A 4 PREFLIGHT CHECK

General

Perform the preflight check according to Flight Manual (BK117 all versions, Section 4).

NOTE

- The preflight check can be accomplished either by mechanics with type rating or by pilots with type rating.
- For optional equipment check items refer to Section A4.2 and the respective Flight Manual Supplements.

A 4.1 Preflight Check Basic Helicopter

Exterior Check

Perform this check according to Flight Manual (BK117 all versions, Section 4).

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A 4.2 Preflight Check Optional Equipment

Perform this check according to Flight Manual (BK117 all versions, Section 4).

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A 5 SUPPLEMENTARY CHECK 50 FH

A 5.1 Supplementary check 50 Fh Basic Helicopter

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation			
(7)	Record compliance with these inspections in Historical Record			
		14 – MAIN ROTOR BLADE		
(1)	Task not longer necessary			
		32 – TAIL ROTOR DRIVE		
(1)	**EFFECTIVITY**	All BK117 if SB MBB–BK117–90–119 has not been implemented	32-32, step 3	
	Remove magnetic plug of intermediate gear box and tail rotor transmission and inspect for deposits			

Table A5.1 – Supplementary Check 50 Fh Basic Helicopter (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 6 SUPPLEMENTARY CHECK 100 FH

A 6.1 Supplementary Check 100 Fh Basic Helicopter

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation			
(7)	Record compliance with these inspections in Historical Record			
		12 – ROTOR BRAKE SYSTEM		
(1)	Inspect braking pads for movability by hand (Rotor brake not applied)		12-3, step 2	
		14 – MAIN ROTOR BLADE		
(1)	DELETED			
		22 – COWLINGS		
(1)	Visually inspect goosenecks P/N 117-23236-01, P/N 117-23237-01 of transmission cowling for cracks		22-9 thru 22-11	
		31 – TAIL BOOM		
(1)	Visually inspect tail rotor transmission mounting brackets in the vertical fin for loose rivets and cracks and adjacent areas for cracks		31-2, step 6	
(2)	DELETED			
		32 – TAIL ROTOR DRIVE		
(1)	**EFFECTIVITY**	All BK117 if SB MBB–BK117–90–119 has not been implemented Remove magnetic plug of intermediate gear box and tail rotor transmission and inspect for deposits	32-32, step 3	
(2)	**EFFECTIVITY**	MBB–BK117 up to and including S/N 7261, if ASB MBB–BK117–30–104 has not been implemented Inspect tail rotor transmission hardware for proper torque and tighten as necessary	32-37	

Table A6.1 – Supplementary Check 100 Fh Basic Helicopter (1 of 2)

Inspection or Maintenance Work			Reference	Initial
		33 – TAIL ROTOR		
(1)	Without disassembly, check the spherical bearings in the fork end of the tail rotor shaft for play, corrosion and binding		33-21 step 1	
(2)	Inspect flapping hinge function		33-4 step 3	
		34 – TAIL ROTOR BLADE		
(1)	**EFFECTIVITY**	All tail rotor blades except P/N: 117-31743, 117-317411, B641M1001 101 Inspect tail rotor blade for cracks in surface protection. It is not necessary to remove the cover tape in the nose shell area.	34-2 step 2	
		41 – FLIGHT CONTROLS MAIN ROTOR		
(1)	**EFFECTIVITY**	If lock washers P/N 117–142041.04 or P/N 105–13101.25 are <u>not</u> installed: Inspect attachment bolts between rotating control rods and control levers of main rotor head for security of mounting	41-3 step 4e	

Table A6.1 – Supplementary Check 100 Fh Basic Helicopter (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 7 12 MONTH INSPECTION

A 7.1 12 Month Inspection Basic Helicopter

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

	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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
	11 – MAIN TRANSMISSION		
(1)	Remove chip detector, clean and test magnetic retaining force	11-14 thru 11-17, 02-14	
	14 – MAIN ROTOR BLADE		
(1)	**EFFECTIVITY** Lower fitting P/N 117–80166.02 Visually inspect the lower fitting	14–2 step 11 h	
	21 – FUSELAGE		
(1)	Check jettison device for cockpit doors and cabin doors for function	21-5, -7, -9(A), -11(A)	
(2)	Inspect the cabin doors for condition	21–3 step 2	
(3)	Inspect the door spar for the cabin doors for condition	21–3 step 2.a	
	32 – TAIL ROTOR DRIVE		
(1)	Remove magnetic plugs of intermediate gear box and tail rotor transmission and test magnetic retaining force	32-32 step 3, 02-14	
	41 – FLIGHT CONTROLS MAIN ROTOR		
(1)	Inspect upper rod end seals for damage	41-59 step 6	
	42 – FLIGHT CONTROLS TAIL ROTOR		
(1)	Inspect upper rod end seals for damage	42-31 step 4	

Table A7.1 – 12 Month Inspection Basic Helicopter (1 of 3)

Inspection or Maintenance Work		Reference	Initial
	43 – HYDRAULIC SYSTEM		
(1)	Inspect rod end seals for damage. In case of damaged seals, remove control rods, disassemble and inspect for condition	43-32 thru 43-37	
(2)	Bleed both reservoirs	43-5	
(3)	Inspect hydraulic system for condition	43-11	
(4)	Do the leakage check of the hydraulic system	43-12	
(5)	Do the functional test of the hydraulic system	43-14	
	61 – ENGINES		
(1)	Remove chip detector, clean and test magnetic retaining force	02-14	
	63 – LUBRICATION SYSTEM		
(1)	Remove chip detector, clean and test magnetic retaining force	63-21, 02-14, 63-23	
	65 – ENGINE OPERATION AND CONTROL		
(1)	Inspect N2 controls for condition	65–13	
	70 – STANDARD EQUIPMENT		
(1)	Inspect identification and lettering for readability, placards for damage and security of attachment	IPC – FLM	
(2)	Inspect windshield wiper system for condition and function	702-3, 702-4	
(3)	Inspect fire extinguishing system for condition and function	706-3, 706-4	
(4)	Inspect hand fire extinguisher for security of attachment and proper charge		
(5)	Inspect first aid kit for completeness of contents and security of attachment		
	91 – INSTRUMENT SYSTEMS		
(1)	Inspect instrument panel decals for presence and readability		
(2)	Inspect visible parts of pitot static system for condition	91-23	
(3)	Check pitot system for leakage	91-21 step 1	
(4)	Check airspeed indicator for correct indication	91-21 step 2	
(5)	Check altimeter for correct indication	91-21 step 4	
(6)	Check static system for leakage	91-21 step 3	
(7)	Compensate compasses and inspect for condition	91-46, 91-47, 91-56	
(8)	Inspect directional gyro for function	91-49	

Table A7.1 – 12 Month Inspection Basic Helicopter (2 of 3)

Inspection or Maintenance Work		Reference	Initial
92 – ELECTRICAL SYSTEMS			
(1)	Inspect ground leads and ground connections of fueling nozzle and fuselage/landing gear for condition		
(2)	Inspect battery connector and cable for condition	92–65 step 1	

Table A7.1 – 12 Month Inspection Basic Helicopter (3 of 3)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 7.2 12 Month Inspection Optional Equipment

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
802 - EMERGENCY FLOAT SYSTEM MAX. TOW 2850 KG			
(1)	Check emergency float system for operational readiness **NOTE** Circuit breaker EMER FLOATS must be set and toggle switch EMER FLOATS must be in ARMED position. If green indicator light is not on, refer to para 802-2, TROUBLESHOOTING		
(2)	Inspect emergency float system for condition (floats installed)	802-4	
(3)	Perform trial inflation	Refer to manufacturer CMM 25-60-97	
821 - P/R CSAS SYSTEM			
(1)	Inspect P/R CSAS for condition	821-4	
825 - INSTANTANEOUS VERTICAL SPEED INDICATOR			
(1)	Examine indicators		
826 - EMERGENCY POWER SUPPLY - STANDBY HORIZON			
(1)	Performe discharge check	826-10	
832 - RESCUE WINCH			
(1)	Perform change of drum oil	Lucas Manual 5.2.1	

Table A7.2 - 12 Month Inspection Optional Equipment (1 of 2)

Inspection or Maintenance Work	Reference	Initial
833 - DIGITAL AUTOMATIC FLIGHT CONTROL SYSTEM (DAFCS)		
(1) Inspect digital automatic flight control system for condition	833-4	
835 - EMERGENCY FLOAT SYSTEM MAX. TOW 3350 KG		
(1) Inspect emergency float system for condition	835-4, without step 9	
(2) Perform trial inflation test	Manufacturer's Component Maintenance Manual CMM 25-63-04	
836 - SCAVENGE OIL FILTER SYSTEM		
(1) Remove chip detector and test magnetic retaining force	836-9, 02-14, 836-10	

Table A7.2 - 12 Month Inspection Optional Equipment (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 8 PERIODICAL INSPECTION

A 8.1 Periodical Inspection Basic Helicopter

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
	11 – MAIN TRANSMISSION		
(1)	Inspect main transmission for condition	11-3 steps 1 and 2 and 4 thru 6	
(2)	Remove chip detector and test magnetic retaining force	11-14 thru 11-17, 02-14	
(3)	Slider guide P/N 4639305053, P/N 4639305030: Inspect transition radius in the flange area for cracks		
	12 – ROTOR BRAKE SYSTEM		
(1)	Inspect rotor brake system for condition	12-3	
	13 – MAIN ROTOR SYSTEM		
(1)	Inspect main rotor head for condition; for this remove rotor hub cap	13-5	
(2)	Remove primary bolts, clean and inspect for condition (crack inspection not necessary)	13-10, 13-11	
(3)	Remove secondary bolts, clean and inspect for condition (crack inspection not necessary)	13-17, 13-18	
	14 – MAIN ROTOR BLADE		
(1)	Inspect main rotor blades for condition	14-2	
	21 – FUSELAGE		
(1)	Check jettison device of cockpit doors and cabin doors for function	21-5, -7, -9(A), -11(A)	

Table A8.1 – Periodical Inspection Basic Helicopter (1 of 4)

Inspection or Maintenance Work			Reference	Initial
	21 – FUSELAGE			
(2)	Inspect the cabin doors for condition		21–3 step 2	
(3)	Inspect tail boom attachment for condition (frame 1L and 2L)		21-3 step 21A	
(4)	**EFFECTIVITY**	MBB–BK117 up to and including S/N 7250, if SB MBB–BK117–20–101 has not been implemented:	SB MBB-BK117-20-101	
	Remove tail boom and inspect frame (STA 6616) for condition			
	22 – COWLINGS			
(1)	Visually inspect goosenecks for cracks		22-9 thru 22-11	
(2)	**EFFECTIVITY**	After performance of SB–MBB–BK 117–20–109	22–10, 22–14	
	Check latch of engine cowlings and transmission cowlings for function			
	31 – TAIL BOOM			
(1)	Inspect tail boom for condition		31-2	
	32 – TAIL ROTOR DRIVE			
(1)	Inspect tail rotor gear box attaching hardware for cracks of the self–locking nuts and for proper torque and tighten as necessary		32–36, 32-37	
(2)	Inspect tail rotor drive for condition		32-3	
(3)	Test magnetic plugs of intermediate gear box and tail rotor transmission for magnetic retaining force		32-32 step 3, 02-14	
	33 – TAIL ROTOR			
(1)	Inspect tail rotor for condition		33-4 steps 1 thru 7 and 9 thru 13	
(2)	Remove bellcrank and inspect for condition		33-10 thru 33-12	
(3)	Remove bolts attached to tail rotor shaft/ tail rotor head and inspect for condition		33-21 step 1.e	
(4)	Without disassembly, inspect spherical bearings in fork end of tail rotor shaft for play, corrosion and binding		33-21 step 1.c	
	34 – TAIL ROTOR BLADE			
(1)	Inspect tail rotor blades for condition		34-2	
	41 – FLIGHT CONTROLS MAIN ROTOR			
(1)	Inspect flight control components (boosted section of flight controls) located above hydraulic system including swash plate for condition		41-3 step 4	
(2)	Clean sliding surface of swash plate on sluiding guide			
(3)	Inspect swash plate bearings for rough running		41-52	
(4)	Inspect upper rod end seals for damage		41-59 step 6	
(5)	Check friction forces of pitch brake		41-14 step 5	

Table A8.1 – Periodical Inspection Basic Helicopter (2 of 4)

	Inspection or Maintenance Work	Reference	Initial
	42 – FLIGHT CONTROLS TAIL ROTOR		
(1)	Inspect upper rod end seals for damage	42-31 step 4	
	43 – HYDRAULIC SYSTEM		
(1)	Inspect rod end seals for damage. In case of damaged seals, remove control rods, disassemble and inspect for condition	43-32 thru 43-37	
(2)	Bleed both reservoirs	43-5	
(3)	Inspect hydraulic system for condition	43-11	
(4)	Do the leakage check of the hydraulic system	43-12	
(5)	Do the functional test of the hydraulic system	43-14	
	51 – LANDING GEAR		
(1)	Inspect skid protective plates for condition	51-2 step 4	
(2)	Inspect cross tubes for condition	51-2 step 1	
	61 – ENGINES		
(1)	Remove chip detectors, clean and test magnetic retaining force	02-14	
(2)	Inspect engine mounts and accessories for condition	61-3	
	62 – FUEL SYSTEM		
(1)	Check fuel shutoff valves for function and evidence of leakage	62-39 step 5	
(2)	Inspect fuel system for leakage	62-40	
	63 – LUBRICATION SYSTEM		
(1)	Remove chip detectors, clean and test magnetic retaining force	63-21, 02-14, 63-23	
(2)	Inspect lubricating system for condition	63-3	
	64 – FIRE WALLS		
(1)	Inspect fire walls for condition	64-2	
(2)	Inspect ejector for condition	64-10	
	65 – ENGINE OPERATION AND CONTROL		
(1)	Inspect engine operation and controls for condition	65-3	
	70 – STANDARD EQUIPMENT		
(1)	Inspect identification and lettering for readability, placards for damage and security of attachment	IPC – FLM	
(2)	Inspect windshield wiper system for condition and function	702-3, 702-4	
(3)	Inspect fire extinguishing system for condition and function	706-3, 706-4	
(4)	Inspect YAW system for condition	709-3	

Table A8.1 – Periodical Inspection Basic Helicopter (3 of 4)

Inspection or Maintenance Work		Reference	Initial
70 – STANDARD EQUIPMENT			
(5)	Inspect hand fire extinguisher for security of attachment and proper charge		
(6)	Inspect first aid kit for completeness of contents and security of attachment		
91 – INSTRUMENT SYSTEMS			
(1)	Inspect instrument panel decals and all instrument markings for presence and readability		
(2)	Inspect visible parts of pitot static system for condition	91-23	
(3)	Check pitot system for leakage	91-21 step 1	
(4)	Check airspeed indicator for correct indication	91-21 step 2	
(5)	Check altimeter for correct indication	91-21 step 4	
(6)	Check static system for leakage	91-21 step 3	
(7)	Compensate compasses and inspect for condition	91-46, 91-47, 91-56	
(8)	Inspect directional gyro for function	91-49	
92 – ELECTRICAL SYSTEMS			
(1)	Inspect ground leads and ground connections of fueling nozzle and fuselage/landing gear for condition		

Table A8.1 – Periodical Inspection Basic Helicopter (4 of 4)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 8.2 Periodical Inspection Optional Equipment

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
	802 - EMERGENCY FLOAT SYSTEM, MAX. TOW 2850 KG		
(1)	Check emergency float system for operational readiness **NOTE** Circuit breaker EMER FLOATS must be set and toggle switch EMER FLOATS must be in ARMED position. If green indicator light is not on, refer to para 802-2, TROUBLESHOOTING		
(2)	Inspect emergency float system for condition (floats removed)	802-4	
(3)	Perform trial inflation	Refer to manufacturer CMM 25-60-97	
	804 - SETTLING PROTECTORS		
(1)	Inspect settling protectors for condition	804-3	
	805 - AUXILIARY FUEL TANK 80 KG		
(1)	deleted		

Table A8.2 - Periodical Inspection Optional Equipment (1 of 5)

Inspection or Maintenance Work	Reference	Initial
806 – HIGH DENSITY SEATS		
(1) Inspect high density seats for condition	806-3	
807 – LITTER ADAPTER RAILS		
(1) Inspect litter adapter rails for condition	807-3	
808 – FIXED LANDING LIGHT – FUSELAGE		
(1) Inspect fixed landing light for condition	808-5	
809 – FIXED LANDING LIGHT – CROSS TUBE		
(1) Inspect landing light for general condition	809-4	
810 – STROBE LIGHT SYSTEM		
(1) Inspect strobe light system for general condition	810-5 step 1. and step 2.	
811 – BOARDING STEP – LONG		
(1) Inspect boarding step for condition	811-2	
812 – MAIN ROTOR BLADE FOLDING SYSTEM		
(1) Remove, clean and inspect safety lever assemblies for condition (crack inspection not required)	812-3	
813 – EXTERNAL LOUDSPEAKER SYSTEM		
(1) Inspect external loudspeaker system for condition	813-4	
814 – AFT BATTERY		
(1) Check battery system for condition	814-3	
815 – RADOM		
(1) Remove radome and inspect for condition	815-2	
816 – PROTECTIVE COVERS FOR DUAL CONTROLS		
(1) Check protective covers for condition	816-2	

Table A8.2 – Periodical Inspection Optional Equipment (2 of 5)

Inspection or Maintenance Work		Reference	Initial
817 - SNOW SKIDS			
(1)	Check condition of snow skids	817-2	
818 - SEARCHLIGHT			
(1)	Functional test of searchlight	818-4	
(2)	Inspect searchlight for condition	818-5	
819 - EXTERIOR MIRROR			
(1)	Check mirror for condition	819-3	
820 - CARTRIDGE-TYPE FUEL PUMP			
(1)	Check fuel pump for condition	820-3	
821 - P/R CSAS SYSTEM			
(1)	Inspect P/R CSAS for condition	821-4	
822- COPILOT'S FLIGHT INSTRUMENTS			
(1)	Inspect instrument lighting - copilot for condition	822-5	
823 - DUAL AC SYSTEM			
(1)	Inspect system for condition	823-5	
(2)	Test conducting and blocking function of diodes **EFFECTIVITY** Only applicable to helicopters S/N 7183 and prior, equipped with DAFCS system.	823-8	
825 - INSTANTANEOUS VERTICAL SPEED INDICATOR			
(1)	Inspect indicator for condition	825-4	
(2)	Examine indicators		
826 - EMERGENCY POWER SUPPLY - STANDBY HORIZON			
(1)	Perform discharge check	826-10	

Table A8.2 - Periodical Inspection Optional Equipment (3 of 5)

Inspection or Maintenance Work	Reference	Initial
828 - HF-ANTENNA		
(1) Inspect HF-antenna for condition	828-3	
(2) Inpect antenna cable ends	828-4	
829 - LANDING AND SEARCH LIGHT SYSTEM		
(1) Check condition of system	829-4	
(2) Carry out functional test on system	829-5	
830 - ENGINE CLEANING PROVISION		
(1) Inspect engine water washing equipment for condition	830-2	
831 - SAND FILTER		
(1) Remove and inspect bypass door actuators	831-15 and 831-16	
832 - RESCUE WINCH		
(1) Perform change of drum oil	Lucas Manual 5.2.1	
833 - DIGITAL AUTOMATIC FLIGHT CONTROL SYSTEM (DAFCS)		
(1) Inspect digital automatic flight control system for condition	833-4	
835 - EMERGENCY FLOAT SYSTEM MAX. TOW 3350 KG		
(1) Inspect emergency float system for condition	835-4, without step 9	
(2) Perform trial inflation test	Manufacturer's Component Maintenance Manual CMM 25-63-04	
836 - SCAVENGE OIL FILTER SYSTEM		
(1) Remove chip detector and test magnetic retaining force	836-9, 02-14, 836-10	

Table A8.2 - Periodical Inspection Optional Equipment (4 of 5)

Inspection or Maintenance Work	Reference	Initial
840 - HIGH LANDING GEAR		
(1) Inspect high landing gear for condition	840-3 step 1. thru 14. and 16.	
844 - WIRE STRIKE PROTECTION SYSTEM (WSPS)		
(1) Inspect WSPS for condition	844-3	

Table A8.2 - Periodical Inspection Optional Equipment (5 of 5)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 9 EXTENDED PERIODICAL INSPECTION

A 9.1 Extended Periodical Inspection Basic Helicopter

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
	11 – MAIN TRANSMISSION		
(1)	Inspect main transmission for condition	11-3 steps 1 and 2 and 4 thru 6	
(2)	Remove chip detector, clean and test magnetic retaining force	11-14 thru 11-17	
(3)	Slider guide P/N 4639305053, P/N 4639305030: Inspect transition radius in the flange area for cracks		
	12 – ROTOR BRAKE SYSTEM		
(1)	Inspect rotor brake system for condition	12-3	
	13 – MAIN ROTOR SYSTEM		
(1)	Inspect main rotor head for condition; for this remove rotor hub cap	13-5	
(2)	Remove primary bolts, clean and inspect for condition (crack inspection not necessary)	13-10, 13-11	
(3)	Remove secondary bolts, clean and inspect for condition (crack inspection not necessary)	13-17, 13-18	
	14 – MAIN ROTOR BLADE		
(1)	Inspect main rotor blades for condition	14-2	
	21 – FUSELAGE		
(1)	Inspect fuselage for condition	21-3	
(2)	Check jettison device of cockpit doors and cabin doors for function	21-5, -7, -9(A), -11(A)	

Table A9.1 – Extended Periodical Inspection Basic Helicopter (1 of 4)

Inspection or Maintenance Work		Reference	Initial
22 – COWLINGS			
(1)	Visually inspect goosenecks for cracks	22-9 thru 22-11	
31 – TAIL BOOM			
(1)	Inspect tail boom for condition	31-2	
32 – TAIL ROTOR DRIVE			
(1)	Inspect tail rotor gear box attaching hardware for proper torque and tighten as necessary	32-37	
(2)	Inspect tail rotor drive for condition	32-3	
(3)	Test magnetic plugs of intermediate gear box and tail rotor transmission for magnetic retaining force	32-32 step 3, 02-14	
33 – TAIL ROTOR			
(1)	Inspect tail rotor for condition	33-4 steps 1 thru 7 and 9 thru 13	
(2)	Remove bellcrank and inspect for condition	33-10 thru 33-12	
(3)	Remove bolts attaching tail rotor shaft to tail rotor head and inspect for condition	33-21 step 1	
(4)	Without disassembly, inspect spherical bearings in fork end of tail rotor shaft for play, corrosion and roughness	33-21 step 1	
34 – TAIL ROTOR BLADE			
(1)	Inspect tail rotor blades for condition	34-2	
41 – FLIGHT CONTROLS MAIN ROTOR			
(1)	Inspect flight control components (non–boosted section of flight controls) located below hydraulic system for condition.	41-3, 41–18	
(2)	Inspect flight control components (boosted section of flight controls) located above hydraulic system including swash plate for condition	41-3 step 4	
(3)	Clean sliding surface of swash plate on sluiding guide		
(4)	Inspect swash plate bearings for rough running	41-52	
(5)	Inspect upper rod end seals for damage	41-59 step 6	
(6)	Check friction forces of pitch brake	41-14 step 5	
42 – FLIGHT CONTROLS TAIL ROTOR			
(1)	Inspect flight controls tail rotor located in front of actuator for free movement, play and condition	42-3	
(2)	Inspect upper rod end seals for damage	42-31 step 4	

Table A9.1 – Extended Periodical Inspection Basic Helicopter (2 of 4)

Inspection or Maintenance Work		Reference	Initial
43 – HYDRAULIC SYSTEM			
(1)	Inspect rod end seals for damage. In case of damaged seals, remove control rods, disassemble and inspect for condition	43-32 thru 43-37	
(2)	Bleed both reservoirs	43-5	
(3)	Inspect hydraulic system for condition	43-11	
(4)	Do the leakage check of the hydraulic system	43-12	
(5)	Do the functional test of the hydraulic system	43-14	
51 – LANDING GEAR			
(1)	Inspect landing gear for condition	51-2	
61 – ENGINES			
(1)	Remove chip detectors, clean and test magnetic retaining force	02-14	
(2)	Inspect engine mounts and accessories for condition	61-3	
62 – FUEL SYSTEM			
(1)	Check fuel shutoff valves for function and evidence of leakage	62-39 step 5	
(2)	Inspect fuel system for leakage	62-40	
63 – LUBRICATION SYSTEM			
(1)	Remove chip detectors, clean and test magnetic retaining force	63-21,02-14,63-23	
(2)	Inspect lubrication system for condition	63-3	
64 – FIRE WALLS			
(1)	Inspect fire walls for condition	64-2	
(2)	Inspect ejector for condition	64-10	
65 – ENGINE OPERATION AND CONTROL			
(1)	Inspect engine operation and controls for condition	65-3	
70 – STANDARD EQUIPMENT			
(1)	Inspect identification and lettering for readability, placards for damage and security of attachment	IPC – FLM	
(2)	Inspect windshield wiper system for condition and function	702-3, 702-4	
(3)	Inspect fire extinguishing system for condition and function	706-3, 706-4	
(4)	Inspect YAW system for condition	709-3	
(5)	Inspect hand fire extinguisher for security of attachment and proper charge		
(6)	Inspect first aid kit for completeness of contents and security of attachment		
91 – INSTRUMENT SYSTEMS			
(1)	Inspect instrument panel decals for presence and readability		
(2)	Inspect visible parts of pitot static system for condition	91-23	

Table A9.1 – Extended Periodical Inspection Basic Helicopter (3 of 4)

Inspection or Maintenance Work		Reference	Initial
91 – INSTRUMENT SYSTEMS			
(3)	Check pitot system for leakage	91-21 step 1	
(4)	Check airspeed indicator for correct indication	91-21 step 2	
(5)	Check altimeter for correct indication	91-21 step 4	
(6)	Check static system for leakage	91-21 step 3	
(7)	Compensate compasses and inspect for condition	91-46, 91-47, 91-56	
(8)	Inspect directional gyro for function	91-49	
92 – ELECTRICAL SYSTEMS			
(1)	Inspect ground leads and ground connections of fueling nozzle and fuselage/landing gear for condition		

Table A9.1 – Extended Periodical Inspection Basic Helicopter (4 of 4)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 9.2 Extended Periodical Inspection Optional Equipment

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

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)	Ensure all required inspections of engines, equipment and components have been performed according to manufacturer's documentation		
(7)	Record compliance with these inspections in Historical Record		
	802 - EMERGENCY FLOAT SYSTEM		
(1)	Check emergency float system for operational readiness **NOTE** Circuit breaker EMER FLOATS must be set and toggle switch EMER FLOATS must be in ARMED position. If green indicator light is not on, refer to para 802-2, TROUBLESHOOTING		
(2)	Inspect emergency float system for condition (floats removed)	802-4	
(3)	Perform trial inflation	Refer to manufacturer CMM 25-60-97	
	803 - CARGO HOOK SYSTEM		
(1)	Inspect cargo hook system fittings for cracks		
	804 - SETTLING PROTECTORS		
(1)	Inspect settling protectors for condition.	804-3	

Table A9.2- Extended Periodical Inspection Optional Equipment (1 of 5)

Inspection or Maintenance Work		Reference	Initial
805 – AUXILIARY FUEL TANK, 80 KG			
(1)	Inspect vent line for chafe marks and signs of leakage **NOTE** Remove lateral floor panel in the area of cabin door		
806 – HIGH DENSITY SEATS			
(1)	Inspect high density seats for condition.	806-3	
807 – LITTER ADAPTER RAILS			
(1)	Inspect litter adapter rails for condition.	807-3	
808 – FIXED LANDING LIGHT – FUSELAGE			
(1)	Inspect fixed landing light for condition.	808-5	
809 – FIXED LANDING LIGHT – CROSS TUBE			
(1)	Inspect fixed landing light for general condition.	809-4	
810 – STROBE LIGHT SYSTEM			
(1)	Inspect strobe light system for condition.	810-5	
811 – BOARDING STEP – LONG			
(1)	Inspect boarding step for condition.	811-2	
812 – MAIN ROTOR BLADE FOLDING SYSTEM			
(1)	Remove, clean and inspect safety lever assembly for cracks and condition.	812-3	
813 – EXTERNAL LOUDSPEAKER SYSTEM			
(1)	Inspect external loudspeaker system for condition.	813-4	
814 – AFT BATTERY			
(1)	Check battery power system for condition	814-3	

Table A9.2- Extended Periodical Inspection Optional Equipment (2 of 5)

Inspection or Maintenance Work		Reference	Initial
815 - RADOM			
(1)	Remove radome and inspect for condition	815-2	
816 - PROTECTIVE COVERS FOR DUAL CONTROLS			
(1)	Check protective covers for condition.	816-2	
817 - SNOW SKIDS			
(1)	Check snow skids for condition.	817-2	
818 - SEARCHLIGHT			
(1)	Perform functional test of searchlight	818-4	
(2)	Inspect searchlight for condition.	818-5	
819 - EXTERIOR MIRROR			
(1)	Check mirror for condition.	819-3	
820 - CARTRIDGE-TYPE FUEL PUMP			
(1)	Check fuel pump for condition.	820-3	
821 - P/R CSAS SYSTEM			
(1)	Inspect P/R CSAS for condition	821-4	
822 - COPILOT'S FLIGHT INSTRUMENTS			
(1)	Inspect instrument lighting - copilot for condition	822-5	
823 - DUAL AC SYSTEM			
(1)	Inspect system for condition	823-5	
(2)	Test conducting and blocking function of diodes **EFFECTIVITY** Only applicable to helicopters S/N 7183 and prior, equipped with DAFCS system	823-8	

Table A9.2- Extended Periodical Inspection Optional Equipment (3 of 5)

Inspection or Maintenance Work	Reference	Initial
825 – INSTANTENOUS VERTICAL SPEED INDICATOR		
(1) Check indicator for condition.	825-4	
(2) Examine indicators		
826 – EMERGENCY POWER SUPPLY – STANDBY HORIZON		
(1) Perform discharge check	826-10	
828 – HF-ANTENNA		
(1) Inspect HF-Antenna for condition.	828-3	
(2) Inspect antenna cable ends.	828-4	
829 – LANDING AND SEARCHLIGHT SYSTEM 450W		
(1) Check condition of the system.	829-4	
(2) Carry out functional test on system.	829-5	
830 – ENGINE CLEANING PROVISION		
(1) Inspect engine water washing provision for condition.	830-2	
831 – SAND FILTER		
(1) Remove and inspect bypass door actuators	831-15 and 831-16	
832 – RESCUE WINCH		
(1) Perform change of drum oil	Lucas Manual 5.2.1	
833 – DIGITAL AUTOMATIC FLIGHT CONTROL SYSTEM (DAFCS)		
(1) Inspect digital automatic flight control system for condition	833-4	
835 – EMERGENCY FLOAT SYSTEM, MAX TOW 3350 KG		
(1) Inspect emergency float system for condition	835-4	
(2) Perform trial inflation test	Manufacturer's Component Maintenance Manual CMM 25-63-04	
836 – SCAVENGE OIL FILTER SYSTEM		
(1) Remove chip detector and test magnetic retaining force	836-9, 02-14, 836-10	

Table A9.2- Extended Periodical Inspection Optional Equipment (4 of 5)

Inspection or Maintenance Work	Reference	Initial
840 - HIGH LANDING GEAR		
(1) Inspect high landing gear for condition	840-3	
844 - WIRE STRIKE PROTECTION SYSTEM (WSPS)		
(1) Inspect WSPS for condition	844-3	

Table A9.2- Extended Periodical Inspection Optional Equipment (5 of 5)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 10 SUPPLEMENTARY INSPECTION ACCORDING TO OPERATING TIME IN FH AND/OR CALENDAR TIME

A 10.1 Supplementary Inspection According to Operating Time in Fh and/or Calendar Time Basic Helicopter

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

Inspection or Maintenance Work		Interval	Reference	Initial
11 – MAIN TRANSMISSION				
(1)	If washers P/N 105–13101.16 are installed: Use magnifying glass to inspect underside of rotor mast flange in the area of bores as well as webs between bores for cracks	200Fh		
(2)	Inspect drive shaft for condition (without removal)	600 Fh or 3 years	11–3 step 3	
(3)	Remove drive shaft and inspect for condition	4800Fh or 6 years	11-54 thru 11-57	
(4)	Remove spacer tube P/N 4639205007 and inspect for condition	2500Fh	11-35 thru 11-37	
(5)	Remove free wheel clutch and inspect for condition. P/N 4639202011, P/N 4639302016	1800Fh	11-40 A	
(6)	Inspect side load mount (y–strut) for condition	1800Fh	11-3, step 7	
(7)	Remove main transmission mounting and inspect for condition	5000Fh	11-50 thru 11-53	
(8)	Inspect oil sensors of main transmission for function	2400Fh TSN and 2400Fh TSO of main transmission	11-5	
12 – ROTOR BRAKE				
(1)	Change oil of rotor brake	600Fh or 1 years	12–4	
13 – MAIN ROTOR SYSTEM				
(1)	Remove driving link assy, disassemble and inspect for condition	5000Fh	13-19 thru 13-24	
(2)	**EFFECTIVITY** Only MBB–BK117 A-1 Use magnifying glass to visually inspect bearing bracket P/N 117–132011.11 of driving link assy for cracks	prior to first flight of day		
(3)	Remove primary bolts, clean and inspect for cracks and condition	2400Fh	13-10, 13-11	
(4)	Remove secondary bolts, clean and inspect for cracks and condition	2400Fh	13-17, 13-18	
(5)	Inspect quadruple nuts top/bottom P/N 117-141061.19/.20, P/N 1121-14102.19/.20 for cracks (penetrant or magnetic particle inspection)	2400Fh or 4 years	REM 106	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (1 of 6)

Inspection or Maintenance Work	Interval	Reference	Initial
13 – MAIN ROTOR SYSTEM			
(6) Inspect bolts P/N 117-141061.22/.23, P/N 1121-14102.22/.23 for cracks (penetrant or magnetic particle inspection)	2400Fh or 4 years	REM 106	
(7) Remove main rotor head P/N 105-14106, P/N 117-141061 and inspect for condition	2400Fh or 4 years	REM 106	
(8) Remove main rotor head P/N 117-141071, P/N 117-141081 and inspect for condition	4800Fh or 8 years TSN, 4800Fh or 6 years TSI	REM 106	
14 – MAIN ROTOR BLADES			
(1) Remove main rotor blades and inspect for condition	1200Fh	14-3 thru 14-5	
EFFECTIVITY Main rotor blades (blade sweep angle 1 degree) P/N 117–150001, P/N 117–150011 and all versions, 117–150021 and all versions, 117–150061 and all versions, 117–151321 and all versions, 117–151341 and all versions, 117–151351 and all versions, 117–151361 and all versions.			
(2) Perform lead–lag check **or alternatively** inspect the blade thimble area	350 Fh TSN, then every 200 Fh	APPENDIX F **alternatively**: 14–9 thru 14–11	
EFFECTIVITY Main rotor blades (blade sweep angle 1 degree) P/N 117–150001, P/N 117–150011 and all versions, 117–150021 and all versions, 117–150061 and all versions, 117–151321 and all versions, 117–151341 and all versions, 117–151351 and all versions, 117–151361 and all versions.			
(3) Inspect blade thimble area **NOTE** When accomplishing the inspection of the blade thimble area it is not necessary to perform the lead–lag check.	950 Fh TSN then every 600Fh	14–9 thru 14–11	
EFFECTIVITY Main rotor blades which have been modified i.a.w. SB MBB–BK117–10–122 (blade sweep angle 0 degree)			
(4) Inspect blade thimble area	600 Fh	14–9 thru 14–11	
EFFECTIVITY Main rotor blades (blade sweep angle 0 degree) P/N 117–151421V001, 117–151441 and all versions, 117–151451 and all versions, 117–151461 and all versions, P/N 117–151511 and P/N 117–151521			
(5) Inspect blade thimble area	1600 Fh TSN, and then 600 Fh TSI	14–9 thru 14–11	
EFFECTIVITY Valid for all main rotor blades except P/N 117–151501, 117–151511 and 117–151521			
(6) Inspect main rotor blades for bulges in the vicinity of the lead balance weights	300 Fh	14–2, step 5.	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (2 of 6)

Inspection or Maintenance Work		Interval	Reference	Initial
14 – MAIN ROTOR BLADES				
EFFECTIVITY	Blade fittings P/N 117–15854.05, 117–15860.05, 117–15854.06 and 117–15860.06			
(7)	Inspect main rotor blade fittings for cracks	6 months or 300 Fh TSN, than every 300Fh	14–10 step 3	
21 – FUSELAGE				
(1)	Visually inspect force induction areas of transmission mountings to fuselage for cracks and loose rivets	1800Fh	21-3, steps 8a, 10a, 12,13	
(2)	Inspect tail cone for condition with tail boom removed	1800Fh	21-3	
(3)	Inspect bushings and holes of mounting for main transmission struts for condition	5000Fh	21-3, steps 9, 11, 15	
22 – COWLINGS				
(1)	Remove cowlings and inspect for condition	1800Fh	22-2 thru 22-19	
31 – TAIL BOOM				
(1)	**EFFECTIVITY** If vertical fin has been repaired per ASB-MBB-BK 117-30-106 because of cracks found, using a repair method other than “REPAIR OF VERTICAL FIN – 117-30405-002, Index B/02”. Visually inspect vertical fin on inner and outer surface for condition	100 Fh	31–2, step 5	
(2)	Visually inspect vertical fin on inner and outer surface for condition	300 Fh	31–2, step 5	
(3)	Remove tail boom and inspect for condition	1800Fh	31-2, 31-4 thru 31-6	
32 – TAIL ROTOR DRIVE				
(1)	Remove long drive shaft and inspect for condition	3600Fh	32-15	
(2)	Remove forward short drive shaft, couplings and aft short drive shaft (in vertical fin), disassemble and inspect for condition	3600Fh	32-7 thru 32-11, 32-18 thru 32-23, 32-25 thru 32-29	
33 – TAIL ROTOR				
(1)	Remove bolts P/N 105–31717 of bellcrank and inspect for condition	600Fh or 1 year	33-9	
33 – TAIL ROTOR				
(2)	Remove tail rotor head, disassemble and inspect for condition	2400Fh or 6 years	REM 301 or REM 308	
(3)	Remove blade attachment bolts and inspect for condition	2400Fh or 6 years	34–2, step 17	
(4)	Inspect tail rotor shaft for play	2400Fh	33-4, step 8	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (3 of 6)

Inspection or Maintenance Work		Interval	Reference	Initial
33 – TAIL ROTOR				
(5)	Remove tail rotor shaft and inspect for condition	3600Fh	33-21	
(6)	Dynamically balance the tail rotor	300Fh	33–3	
(7)	Inspect the bearings of the pitch links	300Fh	33–7 step 3	
34 – TAIL ROTOR BLADES				
(1)	Remove the tail rotoblades. Inspect erosion protection for debonds. Inspect attachment area for damages. Inspect tail rotor blades for cracks in surface protection. It is not necessary to remove the cover tape in the nose shell area.	300Fh	34-2 step 2 and 7	
(2)	Remove tail rotor blades and inspect for condition	2400Fh	34-2, 34-4, 34-5	
41 – FLIGHT CONTROLS MAIN ROTOR				
(1)	Inspect bearing forks of swashplate control ring and swashplate bearing ring for cracks	300Fh	41-3	
(2)	**EFFECTIVITY** Not affected are: Control rods with P/N FDT 16163 and control rods with <u>two</u> P/N: i.e. FDT 16163 <u>and</u> P/N 117–44120 Remove control rods between hydraulic system and main transmission, disassemble and inspect for condition	3000Fh or 4 years	41-57 41–58, 41–59, 41–60, 41–62	
(3)	Remove control rods between main transmission and mixing lever assy as well as rotating control rods, disassemble and inspect for condition	3000Fh or 4 years	41–57 41–58, 41–59, 41–60, 41–62	
(4)	Remove and inspect all bolts of flight controls of main rotor following hydraulic system (boosted section) for cracks and corrosion. Perform crack test according to penetrant method or magnetic particle method acc. SPM 20.02.09.101 Parts affected: – Bolts of all control rods (13, 14, 15 and 16, fig. 41–61) located between hydraulic system and main rotor head (24 pieces) – Bolts (22, fig. 41–50) of rocker support bearing block (23, fig. 41–50) of mixing lever assy (2 pieces)	3000Fh or 4 years	41–57, 51–62	
(5)	Disassemble swash plate and inspect for condition	5000Fh	REM 403	
(6)	Remove mixing lever assy, disassemble and inspect for condition	5000Fh	41-44 thru 41-49	
(7)	Remove bearing block (main transmission), disassemble and inspect for condition	5000Fh	41-38 thru 41-43	
(8)	Remove longitudinal trimmer/lateral trimmer, disassemble and inspect for condition	4 years	41-24 thru 41-31	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (4 of 6)

Inspection or Maintenance Work		Interval	Reference	Initial
41 – FLIGHT CONTROLS MAIN ROTOR				
(9)	Inspect support assy and socket assy for condition. Visually inspect sealing compound between support assy and cabin for damage	4 years	41-3 step 3e	
(10)	Remove control rods (16, fig. 41–61) between mixing lever assy and swash plate and inspect for condition	3600Fh	41-57 41–59, 41–62	
42 – FLIGHT CONTROLS TAIL ROTOR				
(1)	Remove control rod in tail boom and inspect for condition	1800Fh	42-31	
(2)	Inspect chafe protector of control rod in fuselage (RH) for condition	3600Fh or 6 years	42-31	
(3)	Inspect bellcrank on the intermediate gear box and on the tail rotor transmission for condition	1800Fh	42-3 step 9 and 10	
43 – HYDRAULIC SYSTEM				
(1)	**EFFECTIVITY** If SB MBB–BK117–40–2 has not been implemented. Inspect sights P/N 105–46748 for security of bonding of upper part to bottom part of sight by pulling upper part upwards	prior to first flight of day		
(2)	Replace filter elements. If the unit was not operated following replacement of the filter, the filter need not be replaced again until 2 years after resumption of hydraulic unit operation	2 years	43-28, 43-29	
(3)	Deleted			
61 – ENGINE				
(1)	Remove engine mounts and inspect for condition	2400h	61-9 thru 61-19	
(2)	Remove stubshaft and inspect flange for cracks and condition	3000Fh or 6 years	61-42 thru 61-45	
62 – FUEL SYSTEM				
(1)	Inspect fuel feed and vent lines for chafing and evidence of fuel leakage. Inspect feed line connectors for security of mounting with inner cowlings and side panels removed	1200Fh		
63 – LUBRICATION SYSTEM				
NOTE	If possible perform inspection of cooling fan in conjunction with overhaul of main transmission (TBO) or change of main transmission.			
(1)	Disassemble cooling fan and inspect for condition	5000Fh	63-16 thru 63-18	
65 – ENGINE OPERATION AND CONTROL				
(1)	Inspect override spring for condition	2400Fh or 6 years	65-13 step 6	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (5 of 6)

Inspection or Maintenance Work			Interval	Reference	Initial
		70 – STANDARD EQUIPMENT			
(1)	**EFFECTIVITY** Inspect for bushing play in input lever of yaw actuator	Actuator P/N 741C 0000–05 only	600Fh	709–3	
(2)	**EFFECTIVITY** Inspect yaw actuator	Actuator P/N 741B 0000–05 and P/N 741C 0000–05 only	300Fh	709–3.6.A	
(3)	Inspect passenger seats for condition		1200Fh	708-2	
(4)	Remove yaw brake and inspect for condition		1800Fh	709-12	
(5)	Inspect heating system with electrical temperature control – for condition, – inspect leak warning switch (S088) for function, – inspect overtemperature switch (S896) of heating system for function		2400Fh or 4 years	704A-4 704A-10 704A-13	
(6)	Inspect heating system for condition		2400Fh or 4 years	704-4	
(7)	Inspect overtemperature switch (S086) of heating system for function		2400Fh or 4 years	704-7	
(8)	Inspect SPAS system for condition		3600Fh	710-3	
(9)	Determination of weight of fire extinguishing bottle		5 years	706–8	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (6 of 6)

	91 – INSTRUMENT SYSTEMS			
(1)	**EFFECTIVITY** IFR–equipped HC only Inspect altimeter for correct indication and static system for leakage	2 years	91-21 step 5	
	92 – ELECTRICAL SYSTEMS			
(1)	**EFFECTIVITY** Helicopters up to S/N 7183, if autopilot system (DAFCS) is installed Test conducting and blocking function of Zener diode in electrical line to BUS TIE SW switch	1200Fh	92-30 step 6	
(2)	Inspect bonding connections and bonding points for condition without disassembling	2 years	02–15	
(3)	Inspect bonding connections and bonding wire for condition without disassembling	300Fh	92–33 step 2 and 02–15	
	93 – DC SUPPLY SYSTEM from S/N 7184 up			
(1)	Test conducting and blocking function of diodes in the DC power system	1200Fh	93-28 step 5	

Table A10.1 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Basic Helicopter (1 of 1)

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 10.2 Supplementary Inspection according to oprating time in Fh and/or calendar time Optional Equipment

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

Inspection or Maintenance Work	Interval	Reference	Initial
801 - LONG RANGE FUEL TANK			
(1) Check long range fuel tank for condition	50h if the tank remains installed	801-4	
802 - EMERGENCY FLOAT SYSTEM MAX TOW 2850 KG			
(1) Perform bottle hydrostatic test	3 years	Refer to manufacturer CMM 25-65-07	
NOTE In addition, it is also necessary to observe the national regulations pertaining to the hydrostatic test and to the provisions for the scrapping of the cylinder. If there are no particular regulations, testing and removing from the service shall be performed in accordance with guidelines by the Dept. of Transportation (Hazardous Materials Regulations of the Dept. of Transportation) and the Compressed Gas Assoc. Inc., New York ("Standard for Regulations of DOT-3HT Cylinders" and "Standards for Visual Inspection of Compressed Gas Cylinders")			
803 - CARGO HOOK SYSTEM			
(1) Inspect cargo hook system for condition.	300Fh	803-5	
(2) Check hook unit for condition. **NOTE** (*) One load cycle = 1x opening and closing of hook unit.	After 1000 cycles (*) or 3 years since new (TSN).	Actions shall be taken in accordance with manufacturer's instructions.	
805 - AUXILLARY FUEL TANK 80 KG			
(1) Inspect vent line for chafe marks and signs of leakage **NOTE** Remove lateral floor panel in the area of cabin door	1200Fh		
806 - HIGH DENSITY SEATS			
(1) Inspect lap belt with buckle and shoulder harness.	For inspection interval refer to vendor documentation	AM-Safe vendor documentation	

Table A10.2 - Supplementary Inspection according to operating time in Fh or calendar time Optional Equipment (1 of 4)

Inspection or Maintenance Work	Interval	Reference	Initial
813 - EXTERNAL LOUDSPEAKER SYSTEM			
(1) Check function of power amplifier.	For inspection interval refer to vendor documentation	Equipment Handbook from Wandel and Goltermann Ltd.	
(2) Check function of pre-amplifier	For inspection interval refer to vendor documentation	Equipment Handbook from Wandel and Goltermann Ltd.	
814 - AFT BATTERY			
(1) Remove battery and perform “MAINTENANCE”	For inspection interval refer to VARTA battery manual 53003	VARTA battery manual 53003 Removal 814-5	
(2) Remove battery and perform “GENERAL OVERHAUL”	For inspection interval refer to VARTA battery manual 53003	VARTA battery manual 53003 Removal 814-5	
818 - SEARCHLIGHT			
(1) Inspect the searchlight SX-16 in accordance with the Operation and Maintenance Instructions, SX-16 Nightsun Searchlight, Spectrolab Inc. and the Inspection and Maintenance Schedule, SX-16 Nightsun, Spectrolab Inc..			
826 - EMERGENCY POWER SUPPLY - STANDBY HORIZON			
(1) Perform functional test after charging	300Fh	826-4	
(2) Check emergency power supply unit for condition	300Fh	826-6	
(3) Charge emergency power supply unit	If functional test was not satisfactory or if helicopter has been out of operation for more than 2 month		
831 - SAND FILTER			
(1) Remove and inspect particle separator assy	300Fh	831-11, 831-12	
(2) Inspect scavenge blower assemblies in installed position	300Fh	831-21	
(3) Inspect mast seal for condition and security	300Fh	831-25	
(4) Visually inspect instruments	300Fh	91-4	
(5) Inspect airframe wiring	300Fh	92-7	
(6) Functionally test sand filter	1200Fh	831-4	

Table A10.2 - Supplementary Inspection according to operating time in Fh or calendar time Optional Equipment (2 of 4)

Inspection or Maintenance Work		Interval	Reference	Initial
832 – RESCUE WINCH				
(1)	Inspect boom, winch and cable for condition. Perform rescue winch functional test **NOTE** If more than 25 cycles are flown on one day, the cable inspection after 25 cycles refers only to the maximum used cable length; the functional test and the winch inspection for condition have to be performed after the last flight of the day	Every 1500 m (15 hm*) or 25 cycles**	Lucas Manual 5.2.2.1, 5.2.2.2 5.2.3.2, 5.2.3.4	
(2)	Grease cable guide	Every 6000 m (60 hm*) or 100 cycles **	Lucas Manual 5.2.3.3	
(3)	Check winch brake **NOTE** Intervals start from beginning after repair of winch brake	12000m (120 hm*) or 250 cycles** or 5 years for the first time, again after 12000m (120 hm*) or 250 cycles** or 5 years then every 24000m (240 hm*) or 500 cycles** or 5 years	Lucas Manual 5.2.3.1	
(4)	Check electromagnetic brake	Every 24000 m (240 hm*)or 500 cycles** or 5 years	Lucas Manual 5.2.7.2	
(5)	Check motor brushes	Every 24000 m (240 hm*) or 500 cycles** or 5 years	Lucas Manual 5.2.7.1	
(6)	Disassemble and inspect hook and bumper assy.	Every 5 years (installation and storage)	Lucas Manual 5.2.5	
(7)	Disassemble and inspect boom.	Every 5 years (installation and storage)	832–8	

Table A10.2 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Optional Equipment (3 of 4)

Inspection or Maintenance Work	Interval	Reference	Initial
832 – RESCUE WINCH			
(8) Remove and inspect airframe–mounted brackets.	Every 5 years (installation and storage) or 600 Fh, regardless the fact the winch was installed or not	832–28 step (9), 832–35 thru 832–38	
NOTE * Indication in hectometers (hm) ** 1 cycle equals one in–flight cable payout and retrieval If the totalizer of cumulated cable travel fails, only the cable reeled out has to be taken for actual cable travel per cycle and consequently be added to the value in the Historical Record.			
835 – EMERGENCY FLOAT SYSTEM MAX TOW 3350 kg			
(1) Perform hydrostatic test of pressure bottle.	3 years	Manufacturer‘s Component Maintenance Manual CMM 25–65–14	
NOTE In addition, it is also necessary to observe the national regulations pertaining to the hydrostatic test and to the provisions for the scrapping of the cylinder. If there is no particular regulations, testing and removing from service shall be performed in accordance with guidelines by the Dept. of Transportation (Hazardous Materials Regulations of the Dept. of Transportation) and the Compressed Gas Assoc. Inc., New York (”Standard for Requalification of DOT–3HT Cylinders” and “Standards for Visual Inspection of Compressed Gas Cylinders”).			
836 – SCAVENGE OIL FILTER			
(1) Inspect the Scavenge filter system and renew the filter elements.	600 Fh	836–2, 836–5 and 836–6	
843 – EXTERNAL FUEL TANK SYSTEM			
(1) Inspect external fuel tank system for condition	50 Fh, if tank remains installed	843–11	

Table A10.2 – Supplementary Inspection According to Operating Time in Fh or Calendar Time Optional Equipment (4 of 4)

Technician	Date:	Inspector	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 11 SPECIAL INSPECTIONS AFTER MAINTENANCE ACTIVITY

A 11.1 Special Inspections after Maintenance Activity Basic Helicopter

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
14 – MAIN ROTOR BLADES				
(1) Installation of new main rotor blade or replacement of erosion protective shell **NOTE** If peeling occurs within 5 to 10 Fh, inform ECD product support before next flight	Inspect erosion protective shell for peeling	5Fh – 10Fh after incident and once after 200Fh	14-2	
(9) If debonding was found in the warning area of the blade, perform special tapping test to monitor progress of debonding	Inspect erosion protective shell for increase in debonding	Every 25Fh after incident, but have erosion protective shell replaced by manufacturer before more than 100 Fh have elapsed.	14–2	
21 – FUSELAGE				
(1) After repair, adjustment and installation of cabin door	Inspect adjustment and function		21–11A, 21–11C	
32 – TAIL ROTOR DRIVE				
(1) MBB–BK117 up to and including S/N 7261 if ASB–MBB–BK117–30–104 has not been implemented. Installation of a new tail rotor drive	Inspect tail rotor transmission attaching hardware for proper torque and tighten as necessary	5h–10h after installation	32-37	
(2) After dynamic balancing of tail rotor with more than 1.0 IPS.	Inspect the tail rotor gearbox and the vertical fin for cracks.		31–2, step 5 and 6 32–36, step 2	

Table A11.1 – Special Inspections after Maintenance Activity Basic Helicopter (1 of 2)

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
34 – TAIL ROTOR BLADES				
(1) Installation of new tail rotor blade or replacement of erosion protection **NOTE** If debonding occurs within 5 to 10 Fh, inform ECD service engineering before next flight	Inspect erosion protection for debonds	5Fh – 10Fh after incident and once after 100Fh	34-2, step 7	
91 – INSTRUMENT SYSTEMS				
(1) Extensive modifications of helicopter	Compensate compasses	after completion of maintenance activity	91-47, 91-56	

Table A11.1 – Special Inspections after Maintenance Activity Basic Helicopter (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 11.2 Special Inspections after Maintenance Activity Optional Equipment

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
801 – LONG RANGE FUEL TANK				
(1) After every installation of a nother long range fuel tank or after replacement of parts.	Perform functional test of electrical components.		801–5	
(2) At re–installation of long range fuel tank, already checked as per step (1), into the same helicopter.	Inspect shut off valve for function.		801–5, step 3.a. thru c.	
(3) Prior to each installation.	Inspect long range fuel tank for condition.		801–4	
812 – MAIN ROTOR BLADE FOLDING SYSTEM				
(1) Prior to installation	Inspect rotor blade folding cradles, handling bar and clip assembly for general condition.		812–3 step 2.	
813 – EXTERNAL LOUDSPEAKER SYSTEM				
(1) After installation of the external loudspeaker.	Check installation of specified ram plates.			
818 – SEARCHLIGHT				
(1) Prior to searchlight installation.	Visually inspect searchlight for cracks in housing and mounting bracket.		Figure 818–1	
831 – SAND FILTER				
(1) After removal/i.nstallation of components.	Functionally test sand filter.		831–4	
(2) After particle se.parator assy is installed.	Test electrical bonding connections.		831–5	
833 – DIGITAL AUTOMATIC FLIGHT CONTROL SYSTEM (DAFCS)				
(1) After removal/installation of components.	Check digital automatic flight control system for correct functioning.		Honeywell Maintenance Manual 22–15–00	

Table A11.2 – Special Inspections after Maintenance Activity Optional Equipment (1 of 2)

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
836 – SCAVENGE OIL FILTER SYSTEM				
(1) Task not longer necessary.				
843 – EXTERNAL FUEL TANK SYSTEM				
(1) Prior to each installation.	Inspect external fuel tank for condition.		843–11	
(2) After each installation of external fuel tank, or after replacement of parts.	Perform functional test of electric components.		843–5	

Table A11.2 – Special Inspections after Maintenance Activity Optional Equipment (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 12 INSPECTIONS AFTER OPERATION UNDER SPECIAL ENVIRONMENTAL CONDITIONS

A 12.1 Inspections after Operation under Special Environmental Conditions Basic Helicopter

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

Inspection or Maintenance Work	Interval	Reference	Initial
11 - MAIN TRANSMISSION			
(1) Remove drive shafts and inspect for condition	4 years TSN, 2 years TSI	11-54 thru 11-57	
13 - MAIN ROTOR SYSTEM			
(1) Remove primary and secondary bolts, clean and inspect for condition	300Fh	13-9, 13-15	
21 - FUSELAGE			
(1) Inspect tail cone for condition with tail boom removed	4 years	21-3	
(2) Inspect side channels for condition	4 years	21-3	
(3) Inspect landing gear mounting brackets for condition	4 years	21-3	
31 - TAIL BOOM			
(1) Remove tail boom and inspect for condition	4 years	31-2, 31-4 thru 31-6	

Table A12.1 - Inspections after Operation under Special Environmental Conditions Basic Helicopter (1 of 2)

Inspection or Maintenance Work		Interval	Reference	Initial
33 – TAIL ROTOR				
(1)	Remove, clean and inspect following bolts for condition: Bolts between tail rotor shaft and tail rotor head, bolts between tail rotor head and tail rotor blade and bolts between laminated strap pack and blade mounting fork **NOTE** Protect nickel–plated bolts against corrosion by brush–coating them with grease (CM 101, 102, 120, 146) or with corrosion preventive compound (CM 505). Do not lubricate new bolts coated with solid film lubricant. Apply lubricant (CM 146) to previously installed bolts with solid film lubricant	300Fh		
(2)	Inspect control rod	300Fh	33-4	

Table A12.1 – Inspections after Operation under Special Environmental Conditions Basic Helicopter (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 12.2 Inspections after Operation under Special Environmental Conditions Optional Equipment

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

Inspection or Maintenance Work	Interval	Reference	Initial
812 - MAIN ROTOR BLADE FOLDING SYSTEM			
(1) Remove safety lever assembly - Nickel-plated bolts shall be cleaned, inspected for condition, and provided with corrosion protection (crack inspection is not required). - Bolts coated with solid film lubricant shall be cleaned and inspected for condition (crack inspection is not required).	300 Fh	812-3 and 812-4 step 2.e.	
832 - RESCUE WINCH			
(1) Disassemble and inspect hook and bumper assy **NOTE** ** One cycle equals one inflight cable payout and retrieval	Every 500 cycles**	Lucas Manual 5.2.5	
(2) Rinse hook and bumper assembly.	Following last misssion of the day	Lucas Manual 5.1	
(3) Rinse boom	Following last misssion of the day	832-9	

Table A12.2 - Inspections after Operation under Special Environmental Conditions Optional Equipment (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 13 CONDITIONAL INSPECTION AFTER OPERATIONAL INCIDENT

A 13.1 Conditional Inspection after Operational Incident Basic-Helicopter

1. Measures after exceeding Rotor Speed

2. Special Inspection after contact of main rotor with an obstacle

3. Special Inspection after contact of tail rotor with an obstacle

4. Special Inspections following Hard Landing

5. Measures after exceeding Mast Moment Limit (MM-Limit warning light continuously illuminated)

6. Special Inspection after excessive Main Rotor Blade Bending

7. Special Inspections Main Transmission

- after clogging indicator pin has come out
- after finding considerable amount of metallic deposits
- defective or removed Mast Moment System

8. Special Inspections Instrument Systems

- after flight through thunderstorm
- after longer period (3 months) of parking helicopter in one direction

9. Measures after Flight in Sandy Environment

10. Measures with defective or removed mast moment indication system (see para 7.)

11. Measures after chip indication of:

- Main transmission, i.a.w. chapter 11-16
- Intermediate gear box, i.a.w. chapter 32-32 step 3.A.
- Tail rotor transmission, i.a.w. chapter 32-32 step 3.A.

1. Measures after exceeding Rotor Speed (Overspeed)

WARNING DO THE FOLLOWING MAINTENANCE ACTION ONLY, IF THE INPUT TORQUE LIMITATIONS (AS SPECIFIED IN THE FLIGHT MANUAL) HAVE NOT BEEN EXCEEDED. IN ALL CASES WHERE INPUT TORQUE AND ROTOR SPEED LIMITATIONS HAVE BEEN EXCEEDED AT THE SAME TIME, CONTACT ECD SERVICE ENGINEERING OR A LOCAL ECD REPRESENTATVIE. DISREGARD CAN SERIOUSLY AFFECT THE AIRWORTHINESS OF THE HELICOPTER.

a. Overspeed is any incident in which the main rotor RPM (NRO) exceeds the limits specified in the flight manual.

b. In case of overspeed the respective actions for the engine have to be performed i.a.w. the engine maintenance manual.

c. In case of overspeed the actions for the dynamic system have to be performed i.a.w. table A13.1.0. The actions are depending on the effective main rotor RPM, the torque and the number of incident. Figure A13–1 shows the actions in relation with the incident.

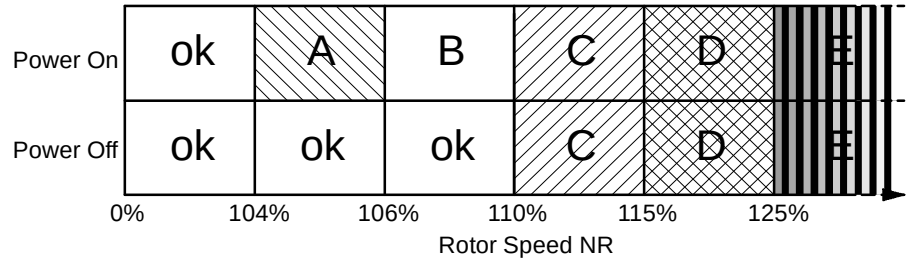


Figure 13–1 Limits for the main rotor RPM (rotor speed, not shown to scale)

Category	Actions	Reference	Initial
OK	No further actions required.		
A	1. If the exceedance time has been within the transient range, no action required. 2. If the input torque has been below 2x30%, no action required. 3. In every other case perform actions i.a.w. category B		
B	Inspect the magnetic chip detector of the intermediate gearbox and of the tail rotor transmission for chips. **NOTE** The above action is not necessary, if an electrical chip detector system or a fuzz burner system is installed and if the caution CHIP is not illuminated. Enter duration and category of overspeed in the historical record of the main transmission.	32–32 Step 3 32–36 Step 1	
C	1. Perform actions i.a.w. category B. 2. If in total more than 60 incidents i.a.w. category C have been recorded, perform action i.a.w. category D.		

Category	Actions	Reference	Initial
D	1. Perform actions i.a.w. category B. 2. Perform actions i.a.w. table A13.1.1 3. Contact ECD or a local ECD representative.		
E	1. Perform actions i.a.w. table A13.1.1 and table A13.1.1a. 2. Contact ECD or a local ECD representative.		

Tabelle A13.1.0 – Actions after Exceedance of Main Rotor RPM Limits (2 von 2)

NOTE Some P/N were changed by SB MBB-BK 117-10-3. The parts affected are listed with their new and (in brackets) old P/N.

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

Inspection or Maintenance Point		Reference	Initial
The following parts must be removed and replaced by new parts:			
(1) LIFTING SYSTEM:		Contact ECD or a local ECD subsidiary	
Tension–Torsion–Strap	117–14110 (2604067)		
Tie Bar	117–14111 (J 17322-1)		
Quadruple Nut	117-141061.19 (1121-14102.19)		
Quadruple Nut	117-141061.20 (1121-14102.20)		
Quadruple Nut	117-141071.19		
Quadruple Nut	117-141071.20		
Bolt	117-141061.22 (1121-14102.22)		
Bolt	117-141061.23 (1121-14102.23)		
Bolt	117-141071.22		
Bolt	117-141071.23		
(2) TAIL BOOM:		Contact ECD or a local ECD subsidiary.	
Laminated Pile Assy	105-31727		
Laminated Pile Assy	105-317261		
Fitted Bolt	1121-31712.10		
Fitted Bolt	105-317391.12		
Fitted Bolt	105-31732.11		
Fitted Bolt	105-317391.11		
Blade Mounting Fork	105-31734 or		
Blade Mounting Fork	105–31735		

Table A13.1.1 – Measures after exceeding Rotor Speed of 115% (1 of 1)

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

Inspection or Maintenance Point		Reference	Initial
The following parts must be removed and replaced by new parts:			
(1) LIFTING SYSTEM:		Contact ECD or a local ECD subsidiary	
Primary bolt	105-14101.57 or		
Primary bolt	117-14101.10		
Secondary bolt	105-14101.79 or		
Secondary bolt	105-14101.111 or		
Secondary bolt	105-141081.11		

Table A13.1.1.a – Measures after exceeding Rotor Speed of 125% (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

2. Special inspection after contact of main rotor with an obstacle.

WARNING **IF SEVERE VIBRATIONS OR TRACK OR BALANCE PROBLEMS OCCUR FOLLOWING KNOWN OR SUSPECTED ROTOR CONTACT WITH AN OBSTACLE, CONTACT THE ECD CUSTOMER SERVICE FOR ADVICE ON HOW TO PROCEED.**

NOTE **If the allowable damage limits on any component have been exceeded as a result of contact with an obstacle, contact the ECD Customer Service for advice on how to proceed.**

a. Special inspection after contact of main rotor with an obstacle **without a change** in main rotor rpm.

This inspection shall be performed if contact with an obstacle did not cause a change in the rotor speed or sudden stoppage of the main rotor.
This inspection shall also be performed if a main rotor blade contacts the end plate of the tail boom during engine start or shutdown.

Inspection or Maintenance Work		Reference	Initial
14 - MAIN ROTOR BLADE			
(1)	Remove main rotor blade and inspect for condition	14-4	

b. Special inspection after contact of main rotor with an obstacle **with a change** in main rotor rpm.

The sudden stoppage of the main rotor, or change in main rotor rpm, is caused by contact of the main rotor blades with the ground, water, snow, dense vegetation, or objects of sufficient mass.
The following types of main rotor blade damage may be regarded as evidence of a blade strike:

- Skin damage, such as deformation, delaminations or cracks.
- Deformation of erosion protection and end cap.
- Trailing edge damage, such as bulging, delaminations and chipping.
- Out-of-track and imbalance conditions that cannot be rectified.

Inspection or Maintenance Work		Reference	Initial
11 - MAIN ROTOR TRANSMISSION			
(1)	Inspect main rotor transmission for condition	11-3, step 1. thru step 6.	
(2)	Inspect drive shafts for condition	11-3, step 7. and 7.a.	
(3)	Inspect transmission mounting struts for condition, also for correct installed position of main transmission relative to fuselage	11-3, step 8. 9. and 11. or 11-52	
(4)	Note: If drive shaft is damaged, inspect engines i. a. w. the Sudden Stoppage Inspection criteria in the engine MM.	MM	

Table A13.1.2 - Special inspection after contact of main rotor with an obstacle (1 of 2)

Inspection or Maintenance Work		Reference	Initial
13 - MAIN ROTOR SYSTEM			
(1)	Inspect main rotor system for condition, in particular the main rotor head (including visible area of inner sleeves) and driving links (including fitted bolts and other attaching hardware)	13-5	
(2)	Check torque on special nuts of main rotor head to main rotor mast connection	13-5, step 13.	
14 - MAIN ROTOR BLADE			
(1)	Remove main rotor blade and inspect for condition	14-4	
21 - FUSELAGE			
(1)	Inspect gearbox and engine attachment area for condition	21-3	
(2)	Inspect fuselage exterior, including inboard area of transmission deck (remove cowlings to obtain access) for condition	21-3	
31 - TAIL BOOM			
(1)	Visually inspect tail rotor gearbox attachment fitting for cracks	31-2	
32 - TAIL ROTOR DRIVE			
(1)	Inspect tail rotor drive and couplings for condition	32-3	
(2)	Visually inspect tail rotor gearbox for cracks and check torque on its vertical fin connection	Fig. 32-22	
33 - TAIL ROTOR			
(1)	Inspect tail rotor for condition	33-4	
34 - TAIL ROTOR BLADE			
(1)	Inspect tail rotor blade for condition (inspect with blade installed)	34-2	
41 - MAIN ROTOR CONTROLS			
(1)	Inspect condition of control elements in the boosted section (including hydraulic unit mounting connections), in particular the rotating control rods, swashplate, mixing lever assembly and associated attaching hardware	41-3 and Fig. 43-12	

Table A13.1.2 - Special inspection after contact of main rotor with an obstacle (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

3. Special inspection after contact of tail rotor with an obstacle.

WARNING **IF SEVERE VIBRATIONS OR BALANCE PROBLEMS OCCUR FOLLOWING KNOWN OR SUSPECTED ROTOR CONTACT WITH AN OBSTACLE, CONTACT THE ECD CUSTOMER SERVICE FOR ADVICE ON HOW TO PROCEED.**

NOTE **If the allowable damage limits on any component have been exceeded as a result of contact with an obstacle, contact the ECD Customer Service for advice on how to proceed.**

This inspection shall be performed if there has been contact with e.g. the ground, snow, cables or dense vegetation. The pilot may not always be aware of tail rotor blade contact with an obstacle.

Inspection or Maintenance Work		Reference	Initial
	31 - TAIL BOOM		
(1)	Visually inspect tail boom for cracks, loose rivets and other damage (e.g. deformation of vertical fin)	31-2	
(2)	Remove tail rotor gearbox and visually inspect tail rotor gearbox attachment fitting on vertical fin for cracks	31-2, step 6.	
	32 - TAIL ROTOR DRIVE		
(1)	Visually inspect tail rotor drive and couplings for condition, especially the rivets connecting the shaft to the flange	32-3	
(2)	Visually inspect intermediate gearbox and tail rotor gearbox for cracks	32-32, 32-36	
	33 - TAIL ROTOR		
(1)	Inspect tail rotor for condition If pitch link(s) are broken/deformed, or significant unbalance has been reported or is evident, perform following inspections: - Remove, disassemble and inspect tail rotor head per REM Remove following bolts and inspect for cracks (using visible dye method): - Bolts connecting laminated strap pack to blade mounting fork - Bolts connecting blade mounting fork to tail rotor blades - Close-tolerance bolt between tail rotor head and tail rotor shaft - Bolts between tail rotor head and pitch links - Bolts between sliding sleeve and pitch links - Bolts between sliding sleeve and bellcrank - Bolts between bellcrank and tail rotor gearbox	33-4 REM 301 or REM 308 - - - - - - -	

Table A13.1.3 - Special inspection after contact of tail rotor with an obstacle (1 of 2)

Inspection or Maintenance Work		Reference	Initial
	34 – TAIL ROTOR BLADE		
(1)	Remove and inspect tail rotor blade for condition	34–2, 34–4, 34–5	
	42 – TAIL ROTOR CONTROLS		
(1)	Inspect tail rotor controls for condition. Visually inspect pivot pin for bellcrank on tail rotor gearbox for cracks, using magnifying glass	42–3 –	
	709 – YAW CSAS		
(1)	Inspect yaw actuator for condition.	709–3 step 6	
(2)	Inspect actuator ram for deformation and cracks, using magnifying glass. In case of damage replace yaw actuator.		
(3)	Perform functional test of yaw actuator	709–5	

Table A13.1.3 – Special inspection after contact of tail rotor with an obstacle (2 of 2)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

4. Special Inspections following Hard Landing

Hard landing is a landing causing:

a. contact of fuselage bottom with ground

b. visible permanent deformation of tail boom

c. buckling of fuselage outer skin.

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

Inspection or Maintenance Work		Reference	Initial
	GENERAL		
(1)	Remove all cowlings, fire walls and tail boom		
	11 - MAIN TRANSMISSION		
(1)	Remove main transmission		
(2)	Inspect the following bolts for cracks (penetrant crack inspection per MIL-I-6866 type II visible dye): - Upper and lower bolts of transmission vertical struts - Bolts on both ends of torque strut - Bolts on both ends of side load mount rod - Bolts in vertical mount fittings as well as side load mount fittings		
(3)	Inspect vertical strut assembly, torque strut, side load mount rod assembly for deformation and using a magnifying glass (10 times) inspect for cracks. Inspect bearings for damage		
	21 - FUSELAGE		
(1)	Inspect bolt holes of transmission mount fittings, bushings on the fuselage and bolt holes of engine support fittings for condition		
(2)	Inspect upper flange of transmission support beam (connecting flange with ceiling skin) for buckling and other damage		
(3)	Visually inspect attachment areas of aft cross tube on fuselage side, outer skin, tail boom and tail cone for deformation and other damage		
(4)	Visually inspect riveting connecting engine support fittings to engine support beam and surrounding load carrying structure for cracks, loose rivets and other damage. If cracks are suspected perform penetrant crack inspection per MIL-I-6866 type II visible dye		
(5)	Visually inspect landing gear fittings and their riveting to fuselage for damage		
(6)	Check flush fit of doors. Improper seating indicates fuselage deformation. If deformation is evident, contact ECD for further action.		
(7)	Inspect inclined frame for damage		
(8)	If damage is found in places as specified, repair must be carried out by ECD or by an ECD authorized agency		

Table A13.1.4 - Special Inspections following Hard Landing (1 of 3)

Inspection or Maintenance Work		Reference	Initial
	31 – TAIL BOOM		
(1)	Inspect necked down bolts of attaching flange to fuselage for required torque (7.5 Nm). Discard loose bolts and associated nuts		
(2)	Visually inspect tail boom for condition		
	32 – TAIL ROTOR DRIVE		
(1)	Inspect tail rotor drive shaft for proper alignment		
(2)	Inspect intermediate gear box and tail rotor transmission for secure mounting. Inspect housing for cracks using a magnifying glass		
(3)	Visually inspect attachment fitting of intermediate gear box and tail rotor transmission for cracks and proper riveting. If damage is suspected, remove intermediate gear box respectively tail rotor transmission and perform penetrant crack inspection per MIL–I–6866 type II visible dye of attaching areas and bolts. Inspect attachment bolts also for cracks		
	33 – TAIL ROTOR		
(1)	Visually inspect tail rotor for damage. If there is evidence of contact with an obstacle, refer to “Special inspections after contact of tail rotor with an obstacle”		
	41 – FLIGHT CONTROLS MAIN ROTOR		
(1)	Inspect all control rods, bellcranks between hydraulic unit and main rotor as well as bearing block, mixing lever assembly, swashplate and rotating control rods for damage. Inspect bearings for easy movement and freedom of play		
	43 – HYDRAULIC SYSTEM		
(1)	Inspect hydraulic unit for damage and secure mounting on fuselage		
(2)	Apply operating pressure to hydraulic unit using a ground cart or a portable unit and visually inspect hydraulic unit for leaks		
	51 – LANDING GEAR		
(1)	Measure cross tube deformation		
(2)	Inspect landing gear for condition		
	61 – ENGINE		
NOTE	When fuselage hits ground during hard landing, impact loads affecting engines of 10g or more must be assumed		
(1)	For inspections of engines and engine accessories refer to Maintenance Manual of engine		
(2)	Visually inspect engine mounts (outside, inside and aft) for deformation and cracks using a magnifying glass		

Table A13.1.4 – Special Inspections following Hard Landing (2 of 3)

Inspection or Maintenance Work	Reference	Initial
61 – ENGINE		
(3) Visually inspect vibration absorber (bushing) for damage		
62 – FUEL SYSTEM		
(1) Inspect fuel system for evidence of leakage		
(2) Inspect fuel lines for damage, secure connections and security of attachment		
(3) Inspect fuel system for evidence of leakage (under operating pressure)		
63 – LUBRICATION SYSTEM		
(1) Inspect lubrication lines for damage, secure connections and security of attachment		
(2) Inspect lubrication oil system for evidence of leakage (under operating pressure)		
64 – FIRE WALLS		
(1) Visually inspect fire walls for damage		
(2) Inspect exhaust pipe for security of attachment		
70 – STANDARD EQUIPMENT		
(1) Visually inspect interior panels for damage		
(2) Inspect seat fittings and safety belts for security of attachment		
OPTIONAL EQUIPMENT		
(1) Inspect optional equipment for condition and function. If in doubt, contact ECD or an ECD authorized agency		
91 – INSTRUMENT SYSTEMS		
(1) Inspect instruments for security of attachment and function		
92 – ELECTRICAL SYSTEMS		
(1) Inspect battery for condition (refer to Manufacturer's Instructions)		
(2) Visually inspect battery mounting support for damage		

Table A13.1.4 – Special Inspections following Hard Landing (3 of 3)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

5. Measures after exceeding Mast Moment Limit (MM-Limit warning light continuously illuminated)

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

Inspection or Maintenance Work		Reference	Initial
(1)	Enter the incident in the Historical Record		
(2)	Check special nuts on the studs connecting main rotor head to rotor mast for required tightening torque. If the tightening torque on all nuts exceeds 140 Nm, flight operation may be continued		
(3)	If the tightening torque on one or more nuts is below 140 Nm, stop flight operation and give ECD a detailed report of the incident		

Table A13.1.5 – Measures after exceeding Mast Moment Limit (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

6. Special Inspection after excessive Main Rotor Blade Bending

WARNING THE DESIGN OF THE MAIN ROTOR BLADE IS SUCH THAT DAMAGE NOT IMMEDIATELY DETECTABLE ON THE BLADE EXTERIOR WILL BECOME EVIDENT THROUGH DISTINCT CHANGES IN THE BALANCE AND TRACK BEHAVIOR OF THE BLADE.

NOTE A maximum bending limit of 1.4 m at the blade tips is acceptable for both upward and downward bending in relation to the rotor plane. This corresponds to the blades bending 1 m downwards and 1.8 m upwards from their static droop (natural blade bending due to weight of blade).

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

Inspection or Maintenance Work		Reference	Initial
(1)	Unrestrained or inadequately tied-down main rotor blades which are suspected of having been bent beyond the permissible limits due to high winds or otherwise, are to be inspected.	14-2	
(2)	Balance and blade track behaviour to be checked during next flight.	APPENDIX F	

Table A13.1.6 - Special Inspection after excessive Main Rotor Blade Bending (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

7. Special Inspections Main Transmission

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
11 - MAIN TRANSMISSION				
(1) After clogging indicator pin has come out	Inspect oil filter and clean	after coming out and then after 5h-15h	11-10	
(2) After finding considerable amount of metallic deposits	Inspect oil filter and clean, clean magnetic plug	after detection and then after 5h-15h	11-10	
(3) Defective or removed Mast Moment System	Check special nuts on the studs connecting main rotor head to rotor mast for required tightening torque	200Fh	13-5, step 13	

Table A13.1.7 - Special Inspection Main Transmission (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

8. Special Inspections Instrument Systems

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
91 - INSTRUMENT SYSTEMS				
(1) After flight through thunderstorm	Compensate compasses	after incident	91-45, 91-56	
(2) After longer period (3 months) of parking helicopter in one direction	Compensate compasses	after incident	91-45, 91-56	

Table A13.1.8 - Special Inspections Instrument Systems (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

9. Measures after Flight in Sandy Environment

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

After flight in sandy environment treat engines according to documentation of engine manufacturer.

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

A 13.2 Conditional Inspection after Operational Incident Optional Equipment

1. Special Inspections Sand Filter

2. Special Inspections Scavenge Oil Filter System

1. Special Inspections Sand Filter

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
831 - SAND FILTER				
(1) After lightning strikes	Test electrical bonding connections		831-5	
(2) When corrosion or contamination is evident	Test electrical bonding connections		831-5	

Tabelle A13.2.1 - Special Inspections Sand Filter (1 von 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

2. Special Inspections Scavenge Oil Filter System

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

Incident	Inspection or Maintenance Work	Interval	Reference	Initial
836 – SCAVENGE OIL FILTER SYSTEM				
(1) When chip indication by failure warning lights ENG I CHIP or ENG II CHIP occurs.	Remove and inspect chip detector		836–9 Also refer to Lycoming Maintenance Manual	
(2) Following chip indication	Remove and inspect filter elements		836–5	
(3) Immediately following actuation of differential pressure indicator button	Replace filter elements		836–5 and 836–6	

Table A13.2.2 – Special Inspections Scavenge Oil Filter System (1 of 1)

Technician	Date:	**Inspector**	Date:
Name	Signature	Stamp	Signature
Name	Signature	Stamp	Signature

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A 14 TIME BETWEEN OVERHAUL OF COMPONENTS (TBO)

The following tables are arranged in chapter sequence and list the time between overhaul of individual assemblies. At the end of such an operation period the unit concerned must be removed and overhauled or replaced by a new or overhauled unit. In case several TBO's are listed for parts of one unit, the time expiring first applies. Periodical inspections do not affect TBO.

A 14.1 Time between Overhaul of Components (TBO) Basic-Helicopter

NOTE Certain part numbers have been changed by ASB-MBB-BK117-10-109. Both the new and the old part numbers are shown in the following list. The old part numbers are shown in brackets.

Unit/Part	Part No.	TBO
11 – LIFTING SYSTEM		
Main Transmission	117-12005-01	5000Fh
Main Transmission with brake disk	117-120061	5000Fh
32 – TAIL UNIT		
Intermediate Gear Box	4639 002 005 (4639 002 001)	3600 Fh
Tail Rotor Transmission	4639 003 007 (4639 003 001)	3600 Fh
61 – POWER PLANT		
Engines		Refer to AlliedSignal (LYCOMING) documentation for time intervals and scope of tests
Starter/Generator		Refer to manufacturer's instructions, for time intervals and scope of tests
70 – STANDARD EQUIPMENT		
Pitch Bias Actuator (SPAS)	39.1-1100 39.1-1100-01 39.1-1100-02	3600 Fh 3600 Fh 3600 Fh

Table A14.1 – Time Between Overhaul of Components Basic Helicopter (1 of 1)

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A 14.2 Time between Overhaul of Components (TBO) Optional equipment

Unit/Part	Part No.	TBO
805 – EXTERNAL CARGO HOOK SYSTEM		
Load Hook	S1609.1.118A **	1500 cycles * or 5 years whichever occurs first
Load Hook	S1609.1.119A **	1500 cycles * or 5 years whichever occurs first
NOTE	*One cycle means hooking, lifting, fly and release by hook opening with load landed. ** The part number can be written with a hyphen instead of a point, e.g. S1609–1–119A.	
832 – RESCUE WINCH		
Winch	76375–300 and –200	105 000 m (1050 hm**) or 10 years or 3500 cycles***, whichever occurs first
Winch	76378–300 and –200	105 000 m (1050 hm**) or 10 years or 3500 cycles***, whichever occurs first
Actuator	13.1–0110	10 Years
Control pendant	76803	10 Years
Control Box	61148–110	10 Years
NOTE	** Indication in hectometers *** One cycle equals one inflight cable payout and retrieval If the totalizer of cumulated cable travel fails, only the cable reeled out has to be taken for actual cable travel per cycle and consequently be added to the value in the Historical Record.	

Tabelle A14.2 – Time between overhaul (TBO) Optional Equipment (1 von 1)

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EFFECTIVITY FAA-Registered MBB-BK117

This Airworthiness Limitations Section is FAA-approved for U. S. registered MBB-BK117 Helicopters in accordance with the provisions of 14 CFR Section 21.29. In addition, this section is required by FAA Type Certificate Date Sheet No. H 13 EU. and it specifies maintenance required under 14 CFR Sections 43.16 and 91.163 unless an alternative program has been FAA-approved.

LBA approved on Feb. 20, 1983

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A 15 AIRWORTHINESS LIMITATIONS

List of Revisions to Chapter A 15 AIRWORTHINESS LIMITATIONS

Revision	Date	LBA Certification
First Issue	Nov. 1, 1983	signed by Schönemann
Revision 1	July 1, 1984	deleted, as Chapter A 15 is not affected
Revision 2	Dec. 15, 1984	signed by Schönemann
Revision 3	Sep. 2, 1985	signed by Schönemann
Revision 4	July 1, 1986	signed by Schönemann
Revision 5	Nov. 3, 1986	signed by Schönemann
Revision 6	May 1, 1987	signed by Schönemann
Revision 7	Oct. 1, 1987	signed by Schönemann
Revision 8	Dec. 15, 1987	signed by Schönemann
Revision 9	July 15, 1987	deleted, as Chapter A 15 is not affected
Revision 10	Sep. 15, 1988	signed by Schönemann
Revision 11	Oct. 1, 1989	signed by Schönemann
Revision 12	Mar. 30, 1990	signed by Schönemann
Revision 13	Aug. 1, 1990	deleted, as Chapter A 15 is not affected
Revision 14	Oct. 1, 1990	signed by Schönemann
Revision 15	Sep. 15, 1991	signed by Schönemann
Revision 16	Nov. 15, 1991	deleted, as Chapter A 15 is not affected
Revision 17	July 15, 1992	signed by Schönemann
Revision 18	Dec. 15, 1992	signed by Schönemann
Revision 19	Apr. 15, 1993	deleted, as Chapter A 15 is not affected
Revision 20	Aug. 20, 1993	deleted, as Chapter A 15 is not affected
Revision 21	Feb. 1, 1994	signed by Schönemann
Revision 22	Apr. 15, 1994	deleted, as Chapter A 15 is not affected
Revision 23	Aug. 15, 1994	deleted, as Chapter A 15 is not affected
Revision 24	Dec. 1, 1994	signed by Schönemann
Revision 25	Feb. 15, 1995	deleted, as Chapter A 15 is not affected
Revision 26	Jan. 18, 1996	signed by Schönemann
Revision 27	Mar. 29, 1996	deleted, as Chapter A 15 is not affected
Revision 28	June 28, 1996	signed by Schönemann
Revision 29	June 2, 1997	deleted, as Chapter A 15 is not affected
Revision 30	Dec. 15, 1997	signed by Schönemann
Revision 31	April 1, 1998	deleted, as Chapter A 15 is not affected
Revision 32	July 1, 1998	deleted, as Chapter A 15 is not affected
Revision 33	June 24, 1999	signed by Schönemann
Revision 34	June 25, 2001	signed by Schönemann

Revision 35	April 30, 2004	deleted, as Chapter A 15 is not affected

Revision of Appendix A15	**Date**	**Approval number and date of approval by EASA**
Revision 36	June 1, 2005	deleted, as Chapter A 15 is not affected
Revision 37	Aug. 1, 2008	EASA R.C.01859, November 15, 2006
Revision 40	Nov. 1, 2011	EASA Major Change Approval 10036552, Sep. 19, 2011
Temporary Revision 42a	April 1, 2013	EASA Major Change Approval 10044132, Mar. 20, 2013
Revision 42	April 1, 2013	deleted, as Chapter A 15 is not affected,
Revision 43	Sep. 1, 2013	EASA Major Change Approval 10045919, July 29, 2013. Temporary Revision 42a is incorporated.

In the tables of this section life limitations are listed for parts, failure of which could adversely affect the airworthiness of the helicopter. Exceeding these limitations is not permissible.

In addition all requirements contained in Appendix A (Inspections as well as Time Between Overhaul of Components) must be observed.

Parts specified in this section must not be used longer than the time indicated. They must be removed and replaced with new parts or parts that have not yet reached their life limitations. Special attention must be paid to the fact that exceeding operation limitations may affect life limitations (see Section A13).

WARNING CONTINUED USE OF TIME CHANGE ITEMS IS NOT PERMITTED AFTER EXPIRY OF THEIR LIFE LIMIT BECAUSE IT CAN SERIOUSLY AFFECT THE AIRWORTHINESS OF THE HELICOPTER.

WARNING TIME CHANGE ITEMS WITH IDENTICAL PART NUMBERS MUST NOT BE INTERCHANGED BETWEEN BK117 AND BO105 HELICOPTERS OR BETWEEN BK117 AND BO 105LS HELICOPTERS.

WARNING IF TIME CHANGE ITEMS ARE INTERCHANGED BETWEEN DIFFERENT BK117 MODELS, THEY MUST BE RESTRICTED TO THE LOWEST SERVICE LIFE FOR THE MODELS AFFECTED.

WARNING WHEN TIME CHANGE ITEMS ARE REMOVED THEIR ATTACHING HARDWARE MUST BE RENDERED UNSERVICABEL, EVEN IF THE LIFE LIMIT WAS NOT REACHED.
FOR INSTALLATION NEW (UNUSED) ATTACHING HARDWARE MUST BE USED.
ATTACHING HARDWARE WHICH IS IDENTIFIED AS A LIFE–LIMITED PART WITH A SEPARATE LIFE LIMITATION IS EXCLUDED. THESE COMPONENTS MUST BE REPLACED WHEN THEIR RESPECTIVE LIFE LIMITATIONS HAVE BEEN REACHED.

NOTE Certain part numbers have been changed by SB MBB-BK117-10-3, SB MBB-BK117-10-5, ASB MBB-BK117-10-106, ASB MBB-BK117-10-109, ASB MBB–BK117–10–120 and ASB MBB–BK117–10–121. Both the new and old part numbers of the affected parts are shown in the following list. The old part numbers are shown in brackets.

NOTE Concerning supplier parts, for which in this chapter no life times limits are specified, the appropriate documentation of the suppliers must be observed.

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Part	Part No.	Retirement Time
	LIFTING SYSTEM	
Bearing Block	117-132011.11	300 h
Bearing Block	117-132031.12 (117-132031.11, 117-132031.09)	14 000 h
Fitted Bolt	117-132031.15 (117-132031.13, 117-132021.10)	14 000 h
Hex. Bolt	105-13104.13 (117-13103.13)	4 500 h
Inner Sleeve Assy	117-141831 (105-14183)	20 000 h
Quadruple Nut ⚠2	117-141061.19 (1121-14102.19)	8 500 flights ⚠1
Quadruple Nut ⚠2	117-141061.20 (1121-14102.20)	8 500 flights ⚠1
Bolt ⚠2	117-141061.22 (1121-14102.22)	8 500 flights ⚠1
Bolt ⚠2	117-141061.23 (1121-14102.23)	8 500 flights ⚠1
Rotor Shaft ⚠2	4639 205 011	12 000 h
Tension–Torsion–Strap	117–14110 (2604067)	10 years or 25 000 flights ⚠1 ⚠4 ⚠5
Tension–Torsion–Strap	117–14111 (J17322–1)	12 years or 25 000 flights ⚠1 ⚠4 ⚠5
Nut	105–142241.01	lifetime limit no longer applicable
Transmission Case	117-12280-01	12 000 h
Bevel gear	117–12215–01	18 500 h
Support Assy	117-12821-01	12 000 h
Fitting Assy	117-11170-01	12 000 h
Fitting	117-11172-01	12 000 h
Stay Assy LH	117-11181-01	12 000 h
Stay Assy RH	117-11181-02	12 000 h
Stay Assy LH	117-11182-01	12 000 h
Stay Assy LH	117-11182-09	12 000 h
Stay Assy RH	117-11182-03	12 000 h
Mount Assy	117-12415-01	12 000 h
Mount Assy	117-12415-05	12 000 h
Lug	117-11207-01	12 000 h
Lug	117-11207-03	12 000 h
Lug	117-11208-01	12 000 h
Rod Assy	117-11203-01	12 000 h
Free–Wheel Clutch	4639 202 011	3 600 h
Free–Wheel Clutch	4639 302 016	3 600 h
Free–Wheel Clutch	4639 302 044	3 600 h

Table A15 – Airworthiness Limitations (1 of 4)

WARNING REFER TO WARNINGS, APPENDIX A, PAGE 101.

⚠1 The number of flights is to be considered equal to the number of landings (ground contacts).

⚠2 Item without retirement time is available as a substitute, refer to IPC.

⚠4 Whatever occurs first.

⚠5 Life time startes from the first load / flight.

Part	Part No.	Retirement Time
Main Rotor Blade ⚠2	117–150011 and all versions, 117–150021 and all versions, 117–150061 and all versions, 117–151321 and all versions, 117–151341 and all versions, 117–151351 and all versions, 117–151361 and all versions, 117–151421 and all versions, 117–151441 and all versions, 117–151451 and all versions, 117–151461 and all versions	2 500 h after repair i.a.w. RI117–100000.00.20 (determine whether repaired and date of repair i.a.w. ASB–MBB–BK117–10–125)
TAIL UNIT		
Laminated Pile Assy	105-31727	25 350 flights ⚠1 ⚠6
Laminated Pile Assy	105-317261	25 350 flights ⚠1 ⚠6
Fitted Bolt	1121-31712.10	25 350 flights ⚠1 ⚠6
Fitted Bolt	105-317391.12	25 350 flights ⚠1 ⚠6
Shaft (NHA: Shaft Assy P/N 117-31521 or 1120-31521)	1120-31526	11 200 h
Shaft (NHA: Shaft Assy P/N 117-31521)	117-315251	11 200 h
Shaft (NHA: Shaft Assy P/N 117-31521)	117-315271	11 200 h
Bevel Gear Shaft	4639 310 063 (4639 310 003)	10 800 h
Bevel Gear	4639 310 062 (4639 310 001)	10 800 h
Bevel Gear Shaft	4639 311 043 (4639 311 002)	13 200 h
Bevel Gear	4639 311 042 (4639 311 001)	13 200 h
FLIGHT CONTROL SYSTEM		
Control Lever ⚠2	117-421211 (105-42121)	3 300 h
Slide Guide (Support Tube) ⚠2	4639 305 030	5 000 h
Slide Guide (Support Tube) ⚠2	4639 305 053	5 000 h
Bearing Bracket ⚠2	117-421331 (105-42123)	2 100 h
Hinged Support Assy ⚠2	117-421241 (105-42124)	2 100 h
Hinged Support Assy ⚠2	117-421251 (105-42125)	2 100 h
deleted		
Cylinder Housing ⚠3 (NHA: Shuttle Valve P/N 105-46751)	105-45351.16	1 200 h

Table A15 – Airworthiness Limitations (2 of 4)

WARNING REFER TO WARNINGS, APPENDIX A, PAGE 101.

⚠1 The number of flights is to be considered equal to the number of landings (ground contacts).

⚠2 Item without retirement time is available as a substitute, refer to IPC.

⚠3 The next higher assembly shuttle valve P/N 105-46751 may include the cylinder body P/N 105-45351.16 or cylinder body P/N 105-45351.04. Essential characteristics of cylinder bodies: cylinder body, P/N 105-45351.16, time change item, milled; cylinder body, P/N 105-45351.04, forged.

⚠6 If the number of flights is not known: 3900 Fh

Part	Part No.	Retirement Time
	POWER PLANT	
NOTE	For time change items of the engine, refer to SB LT 101-71-00-0002	
	STANDARD EQUIPMENT	
FIRE EXTINGUISHING SYSTEM		
Explosive cartridge	13083-5	6 years
NOTE	If cartridges are stored in the original factory packaging, the total life of the cartridges will be 6 years (storage time and service life), in which case service life may not exceed 4 years.	
	OPTIONAL EQUIPMENT	
SEARCHLIGHT		
Cardan Ring (Aluminum)	019059–4 019059–10 019059–11	7 years
Cardan Ring (Steel)	022955–21 022955–22	10 years
RESCUE WINCH		
Cable	711131-390	24 000 m (240 hm *) or 500 cycles ** or 4 years or 2 years, if missions have been flown under harsh conditions
Cable	711131-290	24 000 m (240 hm *) or 500 cycles ** or 4 years or 2 years, if missions have been flown under harsh conditions
NOTE	See next page.	

Table A15 – Airworthiness Limitations (3 of 4)

WARNING REFER TO WARNINGS, APPENDIX A, PAGE 101.

Part	Part No.	Retirement Time
Cable	711131–291	24 000 m (240 hm *) or 500 cycles ** or 4 years or 2 years, if missions have been flown under harsh conditions

NOTE

* Indication in hectometers (hm)

** One cycle equals one inflight cable payout and retrieval as well as a real out of more than 5m on ground.

If the totalizer of cumulated cable travel fails, only the cable reeled out has to be taken for actual cable travel per cycle and consequently be added to the value in the Historical Record.

The life time of the cable starts after opening the package.***

*** If the cable is stored according to manufacturers instructions in its original package:

- the total time under non harsh conditions is:
  9 years (storage time and service life) with the service life not to exceed 4 years.
- the total time under harsh conditions is:
  7 years (storage time and service life) with the service life not to exceed 2 years.

Cartridge	20 CF 4D	18 months (period of installation)

NOTE

If the explosive cartridge is stored in its original packaging (at a storage temperature of –25°C to +45°C), its total service life amounts to 42 months (comprising storage and installed time), of which not more than 18 months shall be installed time.

EMERGENCY FLOAT SYSTEM		
Pressure bottle	D37012-103 D17902-101	15 years (period of installation and storage)

Table A15 – Airworthiness Limitations (4 of 4)

WARNING REFER TO WARNINGS, APPENDIX A, PAGE 101.