

SECTION 05-60

OPTIONAL EQUIPMENT

This section of the manual identifies the scheduled maintenance requirements which apply to the optional equipment.

NOTE 1: For the retirement life of parts installed on the optional equipment refer to the Airworthiness Limitation [Section 04-00-00](#).

NOTE 2: For non Flight Critical Parts installed on the optional equipment refer to the Miscellaneous Replacement Schedule [05-12-00](#).

NOTE 3: For the mandatory inspection arising from the Certification Process on the optional equipment refer to the Certification Maintenance Requirement [04-30](#).

Installation number	Denomination
1	Bleed-air heater
2	Emergency Locator Transmitter (EBC-502H)
3	Emergency Medical Transportation (E.M.T.)
4	Emergency Medical Service (E.M.S.)
5	Oxygen system
6	Supplementary fuel tanks
7	Cargo hook and safety hook
8	Rotor brake
9	External hoist
10	Wire Strike Protection System
11	Snow ski installation
12	Pulsed chip detector kit
13	Emergency Locator Transmitter (ELT) (C406-2HM)
14	Engine Air Particle Separator (EAPS)
15	Engine Monitoring System (ADAS)
16	Battery in the baggage compartment
17	Emergency Locator Transmitter (ELT) (C406-N-HM)

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
1. BLEED-AIR HEATER A. Bleed air pipes, relevant joints and lines for condition and security B. Perform operational checkout of system. ref. to para 21-41-11 .			X			X			Phase 2			Phase II	

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
2. EMERGENCY LOCATOR TRANSMITTER (EBC 502H) A. Inspect ELT case, antenna and attachment support for proper installation. B. Inspect battery (on transmitter and audible monitor) for corrosion. C. Perform ELT operational test. NOTE 1: Always perform the test within the first 5 minutes of the hour (UTC). Be sure to notify any nearby control tower of your intentions.						X							Phase III
						X							Phase III
						X							Phase III

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED					PROGRESSIVE					Initial		
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
INITIAL EACH ITEM AFTER ACCOMPLISHMENT													
INSTALLATION													
3. E.M.T. EQUIPMENT													
A. E.M.T. Equipment for condition and security.	X						X						.....
B. Litter for cleanliness, condition and security.	X						X						.....

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
4. EMERGENCY MEDICAL SERVICE (E.M.S.)													
A. E.M.S. for condition and security.	X						X						.....
B. Litter(s) for cleanliness, condition and security.	X						X						.....
C. Medical storage chest for condition, damage, security and completeness.	X						X						.....
D. Examine Litter adjustable torso restraint assy and safety belt assy. Ref. to Para 25-65-9A.						X						X	.....

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED						PROGRESSIVE						
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
5. OXYGEN SYSTEM A. Oxygen distribution system and shut-off control knob for correct operation. B. Oxygen bottle (cylinder) for proper servicing.	X						X						.....
	X						X						.....
SPECIAL INSPECTIONS EACH 3 MONTHS A. Perform oxygen system bleeding procedure (para 25-65-14 step D.).													.....

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
6. SUPPLEMENTARY FUEL TANKS SPECIAL INSPECTIONS EACH 10 YEARS A. Tank and internal components for condition. Perform tank pressure test. Ref. to para 28-12-4.													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED						PROGRESSIVE						
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
7. CARGO HOOK AND SAFETY HOOK A. Check operation of emergency cargo release system. Leave hook in stowed position. Ref. to Section 25-92 and 25-93 . B. Inspect cargo hook components, structure and electrical connection for condition and security. C. Visually check the exterior of the cargo hook for corrosion, paying particular attention to the attach lug areas of the side plates. Corrosion on the side plates is cause for immediate overhaul. D. Perform functional check of loading indicating system. Ref to para 25-92-8B . E. Inspect area inside the fuselage in proximity of the front hook internal attachments. F. Inspect cargo hook supporting frame, fittings and surrounding fuselage area for corrosion and damage.	X						X						.....
	X						X						.....
						X						Phase III	.....
						X						Phase III	.....
			X						Phase 4				.....
						X						Phase III	.....
SPECIAL INSPECTIONS EVERY MONTH (only if the cargo hook is used or stored in a marine atmosphere) A. Visually check the exterior of the cargo hook for corrosion, paying particular attention to the attach lug areas of the side plates. Corrosion on the side plates is cause for immediate overhaul.													.....

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED						PROGRESSIVE						
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
EVERY 1000 HOURS OF EXTERNAL LOAD OPERATION OR 5 YEARS NOTE: "Hours of external load operations" is defined as the time in which a helicopter is engaged in external load operations (with a load on hook). An external load operation hour "h" is counted as "2 x h" in the cases that follow: - Sand and dust condition; - Or logging application. A. Do a calibration of the cargo hook weight system. Refer to para 25-92-8A . B. Visually inspect all visible and accessible electrical cables for security of attachment and chafing. Do an inspection of all the accessible connectors for mechanical damage and/or oxidation. The connectors must be disconnected, checked and then firmly reconnected.													
EVERY 2000 FLIGHT HOURS A. Perform operational test of the system. Ref. to para 25-92-6 and 25-93-8 .													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
8. ROTOR BRAKE													
A. Perform operational test of Rotor Brake System Ref. to para 63-23-11.				X						X			.....
B. Check rotor brake assy for security of attachments.	X						X						.....
C. Check ring nut of rotor brake disc adapter for correct torque. Ref. to para 63-23-32.				X						X			.....
D. Check rotor brake linings for wear. Ref. to para 63-23-25.			X						Phase 4				.....
E. Check rotor brake disc for corrosion and condition.			X						Phase 4				.....

PAGE INTENTIONALLY LEFT BLANK

A119/AW119MKII-MPM

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED					PROGRESSIVE							
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
9. EXTERNAL HOIST													
A. Visually inspect oil level sight gauge. Ref. to 25-91-18.	X						X						.....
B. Visually inspect external hoist mount, struts, fittings and surrounding fuselage area for condition, damage and security. Ref. to 25-91-18.	X						X						.....
C. Visually inspect hoist assembly for leaks. Ref. to 25-91-18.	X						X						.....
D. Visually inspect External Hoist motor and cable cutter electrical connections for condition and security.	X						X						.....
E. Visually check bumper assembly for condition and damage, and ensure that the hook and bumper assembly are correctly homed when the system is not in use. Check bearings for freedom of rotation.	X						X						.....
F. Check hook swivel bearing for smooth and non-binding operation.	X						X						.....
G. Perform general visual inspection of cable cutter pin ensure it is correctly installed.	X						X						.....
H. Check that HOIST CABLE LOCKED message is not present upon hoist power up.	X						X						.....
I. Check security of setscrew holding the wire rope cable in drum flange.	X						X						.....
J. Check manual cable cutter and hoist operator harness for condition.			X			X			Phase 4			X	.....
													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED					PROGRESSIVE							
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
K. Perform operation check of the pendant and pilots cyclic stick UP/DOWN switches, variable speed electronic controller and hoist master switch. Ref. para. 25-91-6. SPECIAL INSPECTIONS SOONEST OF: AFTER THE LAST USE OF THE DAY/EVERY WEEK SINCE THE LAST USE. A. Measure the hook bumper assembly with the hook at full in position. Ref. para. 25-91-18. B. Perform general visual inspection of cable swaged ball end area for integrity of attachment (bumper assy slide up required). Ref. para 25-91-18. C. Clean, inspect and lubricate cable guide shaft. Ref. para. 25-91-18A. D. Perform visual inspection to ensure the cable cutter setscrew is correctly installed. E. Perform operation check of hoist assy intermediate up/down and full in/ full out switches. Ref. para. 25-91-6. F. Perform operation check of full cable legth for damage and condition. Ref. para. 25-91-7. G. Inspect and clean hoist cable drum. Ref. para. 25-91-17. H. Wash the full length of the cable with fresh water and dry using a clean heavy duty lint free cloth. Ref. para. 25-91-17.		X						Phase B					.....
													
													
													
													
													
													
													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
INITIAL EACH ITEM AFTER ACCOMPLISHMENT													
INSTALLATION													
SPECIAL INSPECTIONS (Cont.) NOTE: A cycle is defined as an unreeling and recovery of the cable with a load attached to the hook, independently of the length of the cable that is deployed/recovered. An unreeling/recovering of the cable with no load on the hook is not considered to be a "cycle". Any operation where a load is applied for half the operation, i.e. unreeling or recovery, must be considered as a cycle. EVERY 200 HOIST CYCLES/3 MONTHS A. Clean and inspect levelwind follower and levelwind shaft for wear, corrosion and lubricate cable guide shaft. Ref. para. 25-91-18A. EVERY 400 EXTERNAL HOIST CYCLES/6 MONTHS A. Inspect pressure roller for wear and defects. Ref. para 25-91-18B. B. Inspect tension roller for wear and defects. Ref. para 25-91-18B. C. Clean and inspect fleet angle assy for wear, corrosion and defects. Ref. 25-91-18B. D. Inspect Geneva wheel for wear, corrosion and defects. Ref. para 25-91-18B.													
													
													
													
													
													

PAGE INTENTIONALLY LEFT BLANK

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
10. WIRE STRIKE PROTECTION SYSTEM (WSPS) A. Inspect for condition and security. Ref. to para 53-24-7. CONDITIONAL INSPECTION GROUND CONTACT OF LOWER WSPS A. Visually inspect lower WSPS for damage. (Ref. to CMM). WIRE STRIKE A. Visually inspect the aircraft and external components for damage. B. Visually inspect the WSPS installation and components for damage. Ref. to para 53-24-7.	X						X						.....
													
													
													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED						PROGRESSIVE						
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
11. SNOW SKIS													
A. Check snow ski fitting supports and hardware for damage and security.	X						X						
B. Check earth braid for integrity.	X						X						
C. Check ski lower surface for wear.	X						X						
12. PULSED CHIP DETECTOR													
CONDITIONAL INSPECTION													
ACTIVATION OF PULSED CHIP DETECTOR BURNER													
A. If the number of recorded activations during last flight is less than 4 and no previous activation has been recorded in the preceding flights, verify cleanliness of the chip detectors and check continuity of the electrical harness.													
B. Otherwise carry out the procedures as for the basic detection system activation.													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											
	EXTENDED					PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT											
INSTALLATION												
13. EMERGENCY LOCATOR TRANSMITTER C406-2HM A. Perform ELT operational test using cockpit switch. NOTE: Always perform the test within the first 5 minutes of the hour (UTC). Be sure to notify any nearby control tower of your intentions. B. Visually inspect ELT case and antenna for secure mounting. C. Inspect battery pack of ELT for corrosion. D. Check operation of controls and crash sensor. Ref. to para 25-61B-9 .						X						Phase III
						X						Phase III
						X						Phase III
						X						Phase III

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM											Initial	
	EXTENDED					PROGRESSIVE							
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
CONDITIONAL INSPECTIONS 14. ENGINE AIR-INTAKE PARTICLE SEPARATOR A. EAPS-Air intake for condition, foreign matter, damage/missing vortex generators and loose attaching hardware. B. EAPS- shut-off valve for cracks and security of installation. C. Visually check proper sealing between EAPS and firewalls. D. Visually check the joint between nozzle and bleed air supply pipe (visible part). E. Inspect for cracks both port and starboard EAPS plenums. F. By means of calliper, check diameter of the holes in the bleed air manifold (ref. to 71-62-11 and 71-62-12). Note: According to CMM 71-61-00 the above value shall be 2,53mm maximum. ENGINE START-UP WITH EAPS SWITCHED TO ON If engine ITT exceeds limits, perform engine inspection according to relevant EMM.													
	X						X						.....
	X						X						.....
	X						X						.....
	X						X						.....
			X						Phase 2				.....
			X						Phase 2				.....
													

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED					PROGRESSIVE					Initial		
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
15.ENGINE MONITORING SYSTEM (ADAS) A. Inspect processor for: - Security to the mounting bracket. - Inspect electrical ground strap for proper connection. - Inspect electrical connectors for proper connection to ADAS processor. B. Inspect TREND Switch / Fault Lamp for: - Electrical connectors for loose connections. - Wiring for proper routing and security. - Wiring for signs of interference and wire chaffing. C. Inspect Download Port for: - Electrical connectors for loose connections. - Wiring for proper routing and security. - Wiring for signs of interference and wire chaffing. D. Inspect harness for: - Proper routing and security. - Harness for signs of interference and wire chaffing.		X						Phase C					.....
		X						Phase C					.....
		X						Phase C					.....
		X						Phase C					.....

PAGE INTENTIONALLY LEFT BLANK

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
	INITIAL EACH ITEM AFTER ACCOMPLISHMENT												
INSTALLATION													
16.BATTERY IN THE BAGGAGE COMPARTMENT													
A. Baggage compartment electrical/avionic components, battery, relative mounts and floor attachment area for condition, cracks and security, inspect ventlines for obstruction and damage.	X						X						.....
B. External power receptacle for condition and arcing; door for correct closure.						X						Ph III	.....
C. Starter-generator for condition and security. Electrical connections for arcing and/ or short circuit evidence.						X						Ph III	.....
D. Electrical wiring for interference and chafing with surrounding areas, for condition and security of connections.						X						Ph III	.....
E. Overhead panel internal wirings, breakers and connectors for condition, chafing and arcing.						X						Ph III	.....
F. Remove battery (para 24-31A-25) and recondition (para 24-31A-26), inspect vent lines for obstructions and damage.						X						Ph III	.....
G. Perform DC electrical system operational check per para 24-31A-12, 24-31A-14 and 24-31A-15.						X						Ph III	.....
H. Generator control Box, Relays box and related terminals for damage and security of connections.						X						Ph III	.....

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE						Initial
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
INITIAL EACH ITEM AFTER ACCOMPLISHMENT													
INSTALLATION													
I. Perform operational test of AC electrical system 24-21-9.						X						Ph III	.....
J. Perform operational test of the battery temperature warning circuit. Ref. to para 24-31A-13.						X						Ph III	.....
K. Connectors and cables on transmission deck and engines bays for condition and corrosion.						X						Ph III	.....
L. Starter-generator brushes for wear. Commutator contacts for wear, pittings and burnings. Ref. to para 24-31-36 (only for standard starter generator).		X						X					.....
M. Starter-generator brushes for wear. Commutator contacts for wear, pittings and burnings. Ref. to para 24-31-36 (only for starter generator with XL2 marked after the S/N and P/N 200SGL129Q).			X						X				.....
N. Nose compartment: ballast tray, relative mounts and floor attachment area for condition, cracks and security.		X						X					.....

Date..... Signature..... Helicopter Registration No. Helicopter Flight hours.....	INSPECTION PROGRAM												
	EXTENDED						PROGRESSIVE					Initial	
	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	50 flight hours/60 days	200 flight hours	400 flight hours	800 flight hours	3200 flight hours	12 months	
INITIAL EACH ITEM AFTER ACCOMPLISHMENT													
INSTALLATION													
17. EMERGENCY LOCATOR TRANSMITTER C406-N-HM A. Perform ELT operational test using cockpit switch. NOTE: Always perform the test within the first 5 minutes of the hour (UTC). Be sure to notify any nearby control tower of your intentions. B. Visually inspect ELT case and antenna for secure mounting. C. Inspect battery pack of ELT for corrosion. D. Check operation of controls and crash sensor. Ref. to para 25-61C-3 .						X						Phase III	.....
						X						Phase III	.....
						X						Phase III	.....
						X						Phase III	.....

PAGE INTENTIONALLY LEFT BLANK