Edition du :
Issue Dated : **06/11/2023**

EC 120 B
SITUATION DES REVISIONS DU MANUEL DE VOL
FLIGHT MANUAL REVISIONS STATUS
CERTIFICATION EASA
EASA CERTIFICATION

Ce manuel doit contenir la révision normale (RN) et les révisions rapides (RR) référencées dans l'édition (EDIT) considérée.

This manual must contain the normal revision (RN) and rush revisions (RR) listed under the relevant issue (EDIT).

PARTIE REGLEMENTAIRE
PRESCRIBED SECTION
Volume 1

SECT. / SUP.	. EDIT .	. DATE	
0 => 5.1	RN3	23-35	R
SUP.0	RN1	22-12	
SUP.4	RN0	16-26	
SUP.6	RN0	16-26	
SUP.7	RN0	16-26	
SUP.11	RN0	16-26	
SUP.12	RN0	16-26	
SUP.13	RN0	16-26	
SUP.14	RN0	16-26	
SUP.17	RN1	22-12	
SUP.19	RN0	16-26	
SUP.20	RN0	16-26	
SUP.55.1	RN0	16-26	
SUP.55.2	RN0	16-26	
SUP.55.5	RN0	16-26	
SUP.55.6	RN0	16-26	
SUP.55.7	RN0	16-26	

PARTIE COMPLEMENTAIRE
COMPLEMENTARY SECTION
Volume 2

SECT.	EDIT	DATE	
0, 5.2, 6, 7, 8, 9	RN2	23-35	R

Please refer to the Inventory Sheet of this flight manual for export control classification information.

INVENTORY SHEET
EC120 B FLIGHT MANUAL
EASA
[RFM dated on 06/11/2023]

The following chapters of EC120 B **FLIGHT MANUAL for EASA CERTIFICATION** are subjected to export control regulations.
Classified sections or appendices are provided within this Flight Manual only if relevant to the aircraft (equipment installed/not installed) and if authorized by the proper export licence.
The presence of this sheet means the documentation has been checked and meets Export Control requirements.

US extraterritorial jurisdiction (ITAR)
US_EC_NoUScontent

US extraterritorial jurisdiction (Dual Use)
US_EC_NotAssessed

French Jurisdiction (ML)
FR_EC_NotAssessed

AIRBUS HELICOPTERS

REVISION TO AIRCRAFT PUBLICATION: EC120 B					
PUBLICATION CONCERNED: FLIGHT MANUAL					
CUSTOMIZATION AIRCRAFT:					
PMVR	**REVISION No. : 3**	**DATE CODE:**	**23-35**	**CERTIFICATION CODE:**	**A**
PMVN	**REVISION No. : 2**	**DATE CODE:**	**23-35**	**CERTIFICATION CODE:**	**/**

- The outline of the revision is given below :
  . Sections or supplements affected (added or modified),
  . Major points of the revision.
- Check that pages in each section are those specified in the list of effective pages.
- Withdraw old and insert new pages affected by this revision.
- Return the acknowledgement card.
- This list of amended pages may be filed (apart from the manual).

THE CONTENT OF THE FLIGHT MANUAL REVISION MUST BE BROUGHT TO THE ATTENTION OF FLIGHT CREWS.

	DELETED PAGES			INSERTED PAGES		
	Section, SUP or APP	Pages	DATE CODE	Section, SUP or APP	Pages	DATE CODE
SRD EASA	-	-	28/02/2023	-	-	06/11/2023
SRD ANAC	-	-	23/03/2023	-	-	06/11/2023
SRD FATA	-	-	28/02/2023	-	-	06/11/2023
Inventory sheet	-	-	-	-	1 to 1	06/11/2023
NORMAL REVISION	0.0.P5 Vol 1	1 to 4	21-21	0.0.P5 Vol 1	1 to 4	23-35
	2.6	1 to 7	16-26	2.6	1 to 7	23-35
	4.3	1 to 5	20-11	4.3	1 to 5	23-35
	0.0.P5 Vol 2	1 to 3	22-12	0.0.P5 Vol 2	1 to 3	23-35
	8.3	1 to 16	22-12	8.3	1 to 16	23-35

DESCRIPTION OF THE REVISION	Section	§
Update of list of approved effective pages and integration of log of approved normal revisions (VOL 1).	0.0.P5	all
Door placards deleted (Light Helicopters RFM harmonization).	2.6	3
Hydraulic check procedure updated.	4.3	3
Update of list of effective pages and integration of log of normal revisions (VOL 2).	0.0.P5	all
Hydraulic check procedure updated (sheet No. 2C)	8.3	2

LIST OF APPROVED EFFECTIVE PAGES - EASA CERTIFICATION

(1) AIRWORTHINESS EFFECTIVITY:

- Without indication..... Applicable to all aircraft
- [A] ..... Specific to EASA.

(2) VARIANT OF STANDARD DEFINITION EFFECTIVITY:

- Without indication..... Applicable to all aircraft
- XXX..... Specific to aircraft equipped with XXX

SECTION	PAGES	DATE CODE	(1)	(2)
0.0.P1	1 to 2	16-26	[A]	
0.0.P2	1 to 1	16-26		
0.0.P3	1 to 2	21-21		
0.0.P4	1 to 1	16-26		
0.0.P5	1 to 4	23-35	[A]	
1.0.P6	1 to 1	16-26		
1.1	1 to 2	16-26		
1.2	1 to 2	16-26		
1.3	1 to 4	16-26		
1.4	1 to 1	16-26		
2.0.P6	1 to 2	20-11		
2.1	1 to 2	16-26		
2.2	1 to 2	16-26		
2.3	1 to 4	21-21		
2.4	1 to 4	16-26		
2.5	1 to 6	20-11		
2.6	1 to 7	23-35		
3.0.P6	1 to 2	21-21		
3.1	1 to 2	16-26		
3.2	1 to 2	16-26		
3.3	1 to 2	21-21		
3.4	1 to 2	20-11		
3.5	1 to 6	21-21		
3.6	1 to 9	20-11		
3.7	1 to 1	16-26		
3.8	1 to 2	20-11		
4.0.P6	1 to 2	16-26		
4.1	1 to 1	16-26		
4.2	1 to 4	21-21		
4.3	1 to 5	23-35		
4.4	1 to 1	20-11		

LIST OF APPROVED EFFECTIVE PAGES - EASA CERTIFICATION

SECTION	PAGES	DATE CODE	(1)	(2)
4.5	1 to 1	16-26		
4.6	1 to 1	16-26		
4.7	1 to 1	16-26		
4.8	1 to 1	16-26		
5.1.P6	1 to 1	16-26		
5.1	1 to 14	16-26		

LOG OF APPROVED NORMAL REVISIONS

BASIC RFM REVISIONS - EFFECTIVITY (1) (2) - EASA

ISSUE 1: NR 0 to NR 19:

NORMAL REVISION 19 - SEPTEMBER 2014	Approved under the authority of EASA DOA No. 21J056 on June 11, 2015

ISSUE 2:

NORMAL REVISION 0 date code 16-26	EASA Approval No. 10070977 on September 16, 2019
Title	New issue
Revised information	All
Deleted information	None
NORMAL REVISION 1 date code 20-11	Approved on June 14, 2022 under the authority of EASA DOA No. 21J700
Title	Addition of "Engine Starter/Generator" paragraph in the limitations section. Modification of the engine alarms procedure. Addition of procedure after extinguisher use. Procedure improvement.
Revised information	0.0.P3 pages 1 to 2; 0.0.P5 pages 1 to 3; 2.0.P6 page 2; 2.5 pages 5 and 6; 3.0.P6 pages 1 to 2; 3.4 page 2; 3.6 page 1; 3.8 page 2; 4.3 pages 3 and 5; 4.4 page 1.
Deleted information	None
NORMAL REVISION 2 date code 21-21	Approved on June 14, 2022 under the authority of EASA DOA No. 21J700
Title	Addition of "if necessary" during exterior check MGB cowling, wording improvement, minor corrections.
Revised information	0.0.P3 pages 1 and 2; 0.0.P5 pages 1 to 3; 2.3 page 4; 3.0.P6 page 1; 3.3 page 2; 3.5 pages 1 and 2; 4.2 pages 2 and 3.
Deleted information	None

LOG OF APPROVED NORMAL REVISIONS

BASIC RFM REVISIONS - EFFECTIVITY (1) (2) - EASA

NORMAL REVISION 3 date code 23-35	Approved on October 20, 2023 under the authority of EASA DOA No. 21J700
Title	Update of hydraulic check procedure. Deletion of door placards.
Revised information	0.0.P5 pages 1 to 4; 2.6 page 2 and 4.3 page 5.
Deleted information	Doors placards: 2.6 page 2.

SECTION 2.6

PLACARDS

All placards shown hereafter are usually presented in bilingual form French/English. However, the State of Registry may approve markings and placards in local language intended for:

- Emergency passenger information and instruction,
- Instruction for operation of passenger doors.

The following illustrations of placards and decals are typical presentations. Slight formal differences from the real placards and decals do not affect information presented therein.

1 VNE PLACARDS

MV.EC120.0094.00

V.N.E. POWER ON	
HP (ft)	Vi (kts)
0	150
2 000	144
4 000	138
6 000	132
8 000	126
10 000	120
12 000	114
14 000	108
16 000	102
18 000	96
20 000	90
* V.N.E. POWER OFF : LESS 30 kts	

MV.EC120.0170.00

V.N.E. POWER ON	
HP (m)	VI (kmh)
0	278
500	269
1 000	260
1 500	250
2 000	241
2 500	232
3 000	223
3 500	214
4 000	205
4 500	196
5 000	187
5 500	178
6 100	167
POWER OFF : – 56 kmh	

Location: Inside cabin, on center post, above standby compass.

2 OPERATING LIMITATION PLACARD

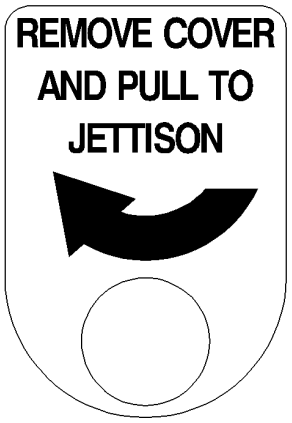
MV.EC120.0067.01

THE HELICOPTER IS APPROVED TO OPERATE BY DAY AND NIGHT IN VFR.
THE MARKINGS AND PLACARDS INSTALLED ON THIS HELICOPTER CONTAIN OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS ROTORCRAFT. OTHER OPERATING LIMITATIONS WHICH MUST BE COMPLIED WITH WHEN OPERATING THIS ROTORCRAFT ARE CONTAINED IN THE ROTORCRAFT FLIGHT MANUAL. THE "AIRWORTHINESS LIMITATIONS" SECTION OF THE ROTORCRAFT MAINTENANCE MANUAL MUST BE COMPLIED WITH.

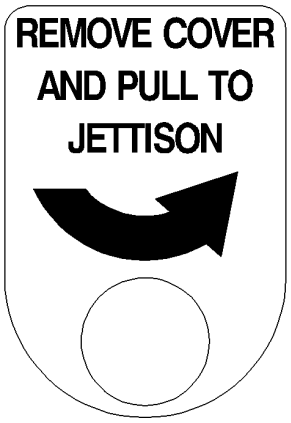
Location: Inside cabin, near the overhead control quadrant.

3 OTHER PLACARDS DISPLAYED IN THE COCKPIT

MV.EC120.0072.00

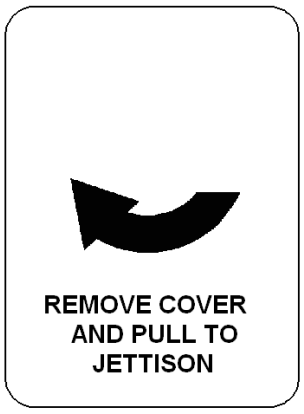


- LH side



- RH side.

or



- LH side

- RH side.

Location: Inside cabin near door jettisoning handle.

MV.EC120.0060.00

DO NOT STOW ANYTHING
UNDER ALL THE SEATS

Location: - RH forward seat, at bottom RH side,
- LH forward seat, at bottom LH side,
- Bench seat LH side.

MV.EC120.0061.00

A/C SERIAL N°:
WEIGHT :
C. OF G. :
DATE :

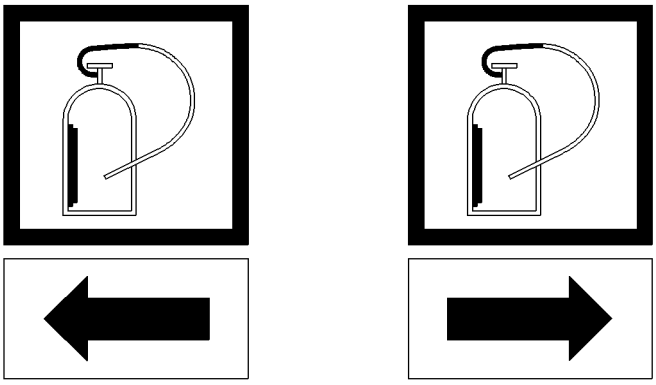
Location: Console RH side.

MV.EC120.0063.00

COMPASS AIRCRAFT DATE	
HEADING MAGNETIC	CORRECTED
000	
045	
090	
135	
180	
225	
270	
315	

Location: Inside cabin, on center post, near standby compass.

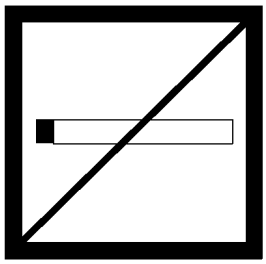
MV.EC120.0074.00



RH side LH side.

Location: Inside cabin, on console lateral side.

MV.EC120.0075.00



Location: Inside cabin, near reading light.

4 FLOOR LOADING PLACARD

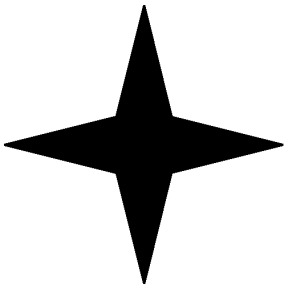
MV.EC120.0062.01

DISTRIBUTED LOADS MAXI ON FLOOR 62.5 POUNDS/SQ FEET - 300 kg/m²
MAX WEIGHT 970 lb - 441 kg

Location : Console LH side, cargo hold, RH side.

5 FUEL AND LUBRICANT PLACARDS

MV.EC120.0064.00



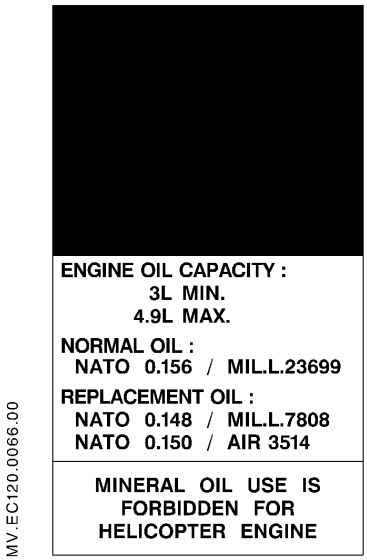
Location : LH filler neck, LH side.

MV.EC120.0065.02

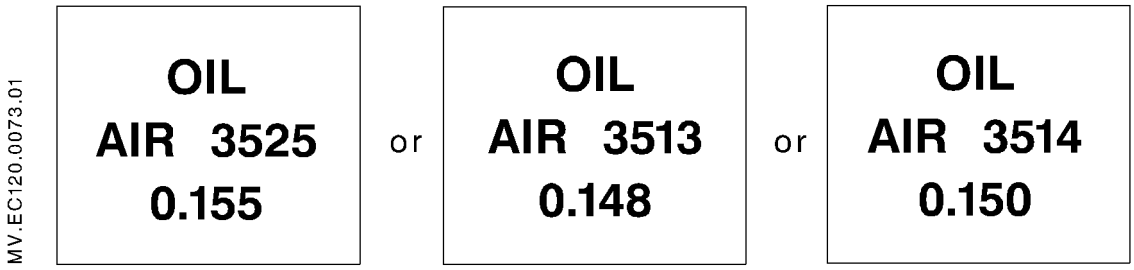
CARBURANT : JP1-JP4-JP5-JP8
JET A1-JET A-JET B
FUEL : F34-F35-F40-F43-F44
PRC FUEL : N°3 JET FUEL
CAPACITE / CAPACITY :

108,5	U.S. GALLONS
90,4	IMP. GALLONS
410,5	LITRES / LITERS
326,3	KG

Location : RH of filler neck, LH side.

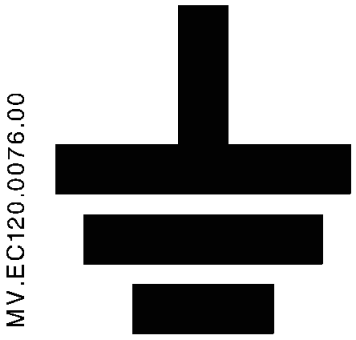


Location : RH of engine oil filler cap.



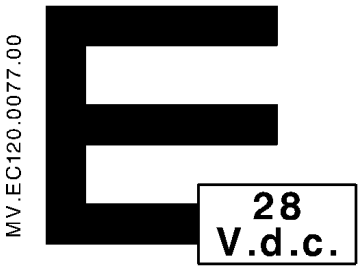
Location : Near TGB and MGB filler neck RH side.

6 ELECTRICAL PLACARDS



Location : LH side of aircraft, above grounding point.

If installed:



Location : RH side, on ground power receptacle cover.

SECTION 4.3

START UP

1 ENGINE PRESTART CHECK

- Seats and control pedals.....ADJUST and SECURE
- Seat belts .....FASTEN

NOTE 1

Copilot seat belts shall be fastened in all cases.

NOTE 2

The safety belts of unoccupied rear seats must not be fastened and the button on the shoulder belts must not be visible.

NOTE 3

Check that, when flying with doors open there are no loose objects in the cabin, and the belts of unoccupied rear seats are stowed between the backrest foam and the backrest.

1. Heating, demisting, air conditioning (if installed).....OFF
2. Rotor brake .....FORWARD
3. Fuel shut-off lever .....FORWARD LOCKWIRED
4. **[EMER SW]** (if fitted).....ON
5. Light selector.....SET to OFF or DAY
6. **[BAT/EPU]**, **[GENE]** and **[HORN]** .....ON, check BAT voltage > 22V
7. **[LIGHT TST]** .....PERFORM
8. **[FIRE TST]**.....PERFORM, check gong
9. Electrical mirror (if fitted) .....SET to avoid dazzling (night flight)
10. ICS and GPS navigation system.....ON (if fitted)
11. CWP.....CHECK:
    - With battery power.....:

    - With EPU power .....: Same lights as above + BATT

12. VEMD.....Engine page DISPLAYED, check no message
13. Control pedals.....Free travel, then NEUTRAL
14. Collective .....LOCK
15. Twist grip.....Free travel, check time-delay mechanism then SHUT OFF position
16. Hydraulic cut-off switch (both collective grips).....ON, guarded
17. Cyclic .....CENTER, friction adjusted

2 ENGINE STARTING

CAUTION

In case of any doubt on the success of the start, abort starting procedure:

- **Keep the starter button pressed,**
- **Set twist grip to OFF position,**
- **Release the starter button, then [FUEL P] OFF, [GENE] OFF.**

In case of residual T4 higher than 200°C or aborted start, if BAT voltage permit, apply CRANKING procedure section 4.3.4.

- **Voltage under 15 VDC when starting:**

If BAT voltage < 15 VDC during start, abort the starting procedure immediately, set the twist grip to OFF position, release the starter button.

1. [**FUEL P**] .....ON, check **FUEL P**
2. [**A/COL LT**] .....ON
3. Cyclic control.....HAND ON

- After 30 sec.:

4. Twist grip.....TURN slowly to START position (white index)
5. Starter .....PRESS
6. Twist grip.....CONTROL to maintain T4 within limits

- When Ng = 50%:

7. Starter .....RELEASE
8. Twist grip.....Progressively to IDLE position, check: **ENG P** **HYDR**
9. [**HORN**] .....OFF, check **HORN**

NOTE 1

In case of failed engine start, return the engine starting selector to OFF. Observe the engine starter limitation given in SECTION 2.5 § 6.

NOTE 2

At Ng > 60 % the VEMD upper screen automatically switches to FLI display.

- If EPU is used:
  EPU.....DISCONNECT, check **GENE** **BATT**

3 RUN-UP CHECK

NOTE 1

For aircraft equipped with spot light only: If a flight under night conditions is envisaged adjust the right map light so that it illuminates the pilot's side of the instrument panel and dim it to minimum necessary level before switching the spot light on.

NOTE 2

Do not use the windshield wiper on a dry windshield or in light rain.

1. **[PITOT]** ..... ON, check **PITOT**
2. **[FUEL P]** or **[PUMP]** ..... OFF
3. **[V/A SELECT]**:
   - Check electrical system voltage and current
4. Check ENG OIL pressure
5. All necessary systems..... ON and TEST
   (Radio, radio navigation, lights, windshield wiper*, instrument panel lighting*, etc.)
6. Hydraulic checks:

CAUTION

If not locked, the collective lever will move up when the accumulators are depleted or when the hydraulic cut-off switch on the collective grip is set to OFF.

- Accumulator checks:
  - **Collective..... CHECK correctly locked**
  - **[ACCU TST]** or **[HYDR]** ..... ON
  - CWP ..... CHECK **HYDR**
  - Move the cyclic 2 or 3 times on each axis ± 10 % of total travel (± 2.5 cm, 1 inch) and check for accumulator hydraulic assistance on pitch and roll (no control loads).
  - **[ACCU TST]** or **[HYDR]** ..... RESET to OFF position
  - CWP ..... CHECK **HYDR**

- Hydraulic cut-off test:
  - Collective ..... **CHECK correctly locked**
  - Hydraulic cut-off switch (collective grip)..... OFF
  - CWP ..... CHECK **HYDR**
  - Check that loads are felt immediately and that cyclic can be moved in pitch and roll with normal feedback loads.
  - Hydraulic cut-off switch (collective grip)..... ON, guarded

(*) If installed

- CWP ..... CHECK **HYDR**.
  Maintenance action must be performed prior to flight if time extinction is greater than 3 sec.

7. Twist grip ..... Progressively to FLIGHT position
   Maintain Tq < 40 %

- When NR = 350 rpm:
  - **[HORN]** ..... ON, check:
    - Low NR audio warning sounds for NR < 370 rpm
    - **HORN**
    - **MGB P**

- When twist grip is in flight position:

8. Parameter checks ..... No warning light illuminated,
   Electrical system voltage and current,
   Engine oil pressure.

NOTE

In strong wind, perform the hydraulic tests at the nominal power rating, apply a small cyclic input into the wind direction and accelerate the engine to NR ≈ 320 rpm, as fast as compatible with T4 limitations, then follow the normal procedure (refer to SECTION 4.8.1).

4 CRANKING

The cranking procedure shall be performed after a failed or aborted start and can be used for check or maintenance purposes.

Proceed as follows:

CAUTION

Do not crank the engine with the emergency fuel shutoff valve closed as this could damage the engine high pressure fuel pump.

- Check:

1. Twist grip ..... OFF
2. [**FUEL P**] or [**PUMP**] ..... ON
3. Engine starting selector ..... OFF
4. Emergency fuel shut-off lever ..... FORWARD
5. Ng ..... CHECK ≤ 10 %
6. [**CRANK**] ..... PRESS for 30 sec. max.
7. [**FUEL P**] or [**PUMP**] ..... OFF

NOTE

Observe the engine starter limitation given in SECTION 2.5 § 6