



# SERVICE INSTRUCTION n°93-01

9, route de l'Aviation  
21121 DAROIS  
Tel 03 80 35 65 10  
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EFFECTIVITY : CAP10B  
TITLE : Memorandum for mechanics

Issue	Revision	Date	Reason for change	Visa
0	0	23/03/93	Original Issue	
0	1	30/03/93	Completed Issue	
0	2	26/08/98	Completed Issue Controls balancing	

## 1. PLANNING INFORMATION

### 1.1. EFFECTIVITY

Aircraft	CAP10		
Serial n°	All		

### 1.2. REASON

<input type="checkbox"/>	Optional
<input checked="" type="checkbox"/>	Recommended
<input type="checkbox"/>	Mandatory

### 1.3. DESCRIPTION

This Service Instruction has been compiled with the aim of providing complimentary information, which is required to carry out the Inspection Program for the CAP 10B aircraft, as proposed by the Bureau Véritas.

This Service Instruction cancels and replaces all previous publications which presented equivalent details, and is compiled for use in conjunction with the Inspection program for the CAP 10B.

## 2. MEMORANDUM

Following the ATA breakdown of systems	Applied values
24 - Electrical Power	
• Stéco lead battery, voltage regulator	Max.13.8 volts
27 - Flight controls	
• Aileron deflection	High 25° ± 2° - Low 15° ± 2°
• Aileron cable tension	18 daN - 40 lbs
• Flap deflection	15° / 40° ± 2°
• Neutral flap	Low 2°
• Elevator deflection	High 25° +0° -2° - Low 25° +0° -2°
• Elevator cable tension	18 daN - 40 lbs
• Tab flap deflection	High 24° ± 2° - Low 14° ± 2°
• Rudder deflection	18° ± 2°
• Rudder cable tension	18 daN - 40 lbs



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Following the ATA breakdown of systems	Applied values
<b>32 - Landing gear</b>	
• Type of hydraulic fluid in main undercarriage	AéroShell Fluids 4
• Inflation pressure of shock absorbers	8 bars - 116 Psi
• Tightening torque of main undercarriage attachments	4 m.daN - 29 ft.lbs
• Tightening torque of wheel half-rims	0.5 m.daN - 3.6 ft.lbs
• Tightening torque on brake disc	0.3 m.daN - 2.3 ft.lbs
• Tightening torque on brake brackets	0.5 m.daN - 3.6 ft.lbs
• Type of brake fluid	AéroShell Fluide 4
• Tightness of wheel support under the fuselage	0.6 m.daN - 4.3 ft.lbs
• Design of pneumatics used	Forward : 380 x 150 Rear : 2" x 6"
• Recommended inflation pressure	2 bars - 29 Psi
<b>53 - Fuselage</b>	
• Tightening torque of bottle pins on fuselage surface	5 m.daN - 36 ft.lbs
• Tightening torque of rear fittings on fuselage surface	1.5 m.daN - 11 ft.lbs
• Tightening torque of firewall mount	1.5 m.daN - 11 ft.lbs
• Tightening torque of rudder supports	0.15 m.daN - 1.1 ft.lbs
• Tightening torque of fittings horizontal tail	0.15 m.daN - 1.1 ft.lbs
<b>55 - Stabilizers</b>	
• Tightening torque of horizontal stabilizer	0.5 m.daN - 3.6 ft.lbs
• Tightening torque of stabilizer support hinges	0.15 m.daN - 1.1 ft.lbs
• Control surface pivot pin	1 m.daN - 7.2 ft.lbs
• Vertical stabilizer balancing (see figure 1)	1400 g +/-250 g - 3.08 lbs +/-0.55 lbs
• Horizontal stabilizer balancing (see figure 2)	650 g +/-150 g - 1.43 lbs +/-0.33 lbs
<b>57 - Wing</b>	
• Tightening torque for aileron and flap support beams	0.15 m.daN - 1.1 ft.lbs
• Tightening torque for aileron flap angle beams	0.15 m.daN - 1.1 ft.lbs
• Aileron and flap hinge pins	1.5 m.daN - 11 ft.lbs
• Aileron balancing (see figure 3)	160 g +/- 50 g - 0.35 lbs +/- 0.11 lbs
<b>61 - Propeller</b>	
• Tightening torque for Hoffmann propeller	3.5 m.daN - 25 ft.lbs
• Tightening torque for Evra propeller	3 m.daN - 20 ft.lbs
<b>71 - Engine mount</b>	
• Tightening torque for shock mount bolts	3 m.daN - 20 ft.lbs
<b>74 - Ignition</b>	
• Type of plugs used	REM40E
<b>79 - Lubrication</b>	
• Tightening torque for oil filter	2.2 m.daN - 16 ft.lbs
• Type of oil	Mineral during first 50 hours from new D80 or Total AéroDM thereafter
• Quantity	8 quarts during convoy 6 quarts during aerobatics

### 3. PRACTICAL DETAILS

- Do not commence tightening the bolts on the aircraft if the torque is less than 50% of the indicated value.
- Most American tensiometers do not include direct instructions for tension. The value read on the needle is not an exact reading.
- The reading must be used in conjunction with the apparatus calibration table where the corresponding tension value may vary depending on the cable diameter of the object being controlled.
- The diameters of the cables used on the CAP 10B are 3.17 mm or 1/8 inch.

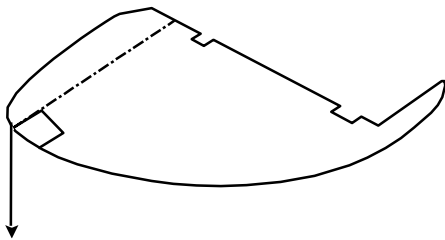


Figure 1 : Vertical stabilizer balancing

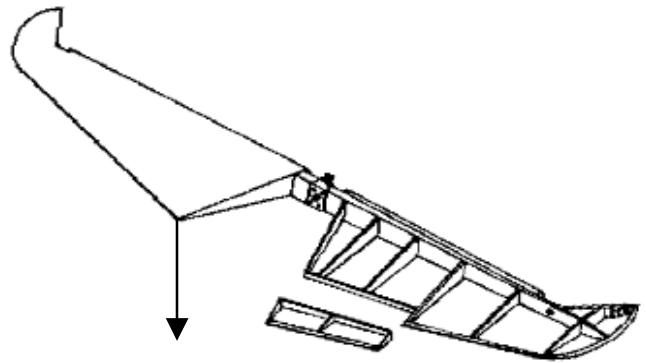


Figure 2 : Horizontal stabilizer balancing

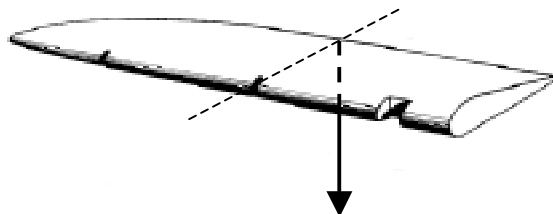


Figure 3 : Aileron balancing