

EC135 SERVICE BULLETIN

CHANGE INSTRUCTION NO. 3 FOR EC135-67-013

Date: Revision 0: 2008-07-28
 Revision 1: 2009-03-09
 Revision 2: 2011-04-28
 Revision 3: 2013-03-25

Please replace Revision 2 of Service Bulletin EC135-67-013 with Revision 3.

With Revision 3 retrofit kit SB-135-67-013-2C3-1 is modified because of improved components. Furthermore, the adjustment procedure is modified i.a.w. Section 3.G.

If a previous issue of this Service Bulletin has already been accomplished no further action is required due to this Revision.

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Rotor Flight Control – Collective Control – Replacement of collective levers and introduction of a weight compensation

1. Planning Information

A. Effectivity

- | | | |
|---------------------------|--|---------------|
| (1) Helicopters affected: | EC135/EC635, all models, S/N 0005 up to and including S/N 0504 (collective levers and weight compensation system), S/N 0505 up to and including S/N 0699 (weight compensation system). | |
| (2) Components affected: | RH collective lever | L671M5018101 |
| | LH collective lever | L671M5840101. |
| (3) Spare parts affected: | Not applicable. | |

B. Concurrent Requirements

Not applicable.

C. Reason

With this Service Bulletin ECD offers collective levers with grips ENG 1/ ENG 2 that offer an increased mechanical protection against unintentional adjustment. Furthermore, the surface structure of grips ENG 1 and ENG 2 differs decisively so that they can be distinguished by tactual sensation.

In order to compensate for the changed forces required to move the new collective levers, ECD offers an optional weight compensation which is adjustable to single and dual pilot operation.

D. Description

Remove installed collective levers and install new collective levers. Adjust collective brake. If Pratt & Whitney engine are installed, additionally remove "gear box pilot" and "gear box copilot", install new "gear box pilot" and new "gear box copilot" contained in retrofit kit and adjust. Optional: installation of the weight compensation system.

E. Compliance

Compliance with this Service Bulletin is recommended.

F. Approval

The information or instructions contained in this document refer to change no. K-2575. The technical content of this document is approved under the authority of DOA No. EASA.21J.034.

G. Manpower

For replacement of collective levers:

- If engine Turbomeca is installed: approx. 25 man-hours.
- If engine Pratt & Whitney is installed: approx. 40 man-hours.

For retrofit of weight compensation: 4 hours

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H. Weight and Balance

EFFECTIVITY In case of retrofit of collective levers, Turbomeca engine.

Weight: 0.303 kg Arm (longitudinal): 2250mm Moment (longitudinal): 682 kgmm

Arm (lateral): 0 mm Moment (lateral): 0 kgmm

EFFECTIVITY In case of retrofit of collective levers, Pratt & Whitney engine.

Weight: - 0.004 kg Arm (longitudinal): 2800 mm Moment (longitudinal): - 11 kgmm

Arm (lateral): 0 mm Moment (lateral): 0 kgmm

EFFECTIVITY In case of retrofit of the weight compensation.

Weight: 0,351 kg Arm (longitudinal): 2764 mm Moment (longitudinal): 970 kgmm

Arm (lateral): - 141 mm Moment (lateral): - 50 kgmm

I. Electrical Load Data

Not applicable.

J. Software Accomplishment Summary

Not applicable.

K. References

AMM EC135.

L. Other publications affected

The changes to AMM EC135, AMM EC135/635 and to IPC EC135, IPC EC635 which are required as a result of this Service Bulletin will be incorporated with one of the next revisions.

M. Interchangeability of Parts

Not applicable.

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2. Material Information

A. Material - Price and Availability

Information on price and availability of required retrofit kits SB-135-67-013-2C1, SB-135-67-013-2C2 and SB-135-67-013-2C3-1 will be provided by ECD, Dept. Spares Order Administration on request.

B. Support Information

Not applicable.

C. Material Necessary for Each Helicopter

EFFECTIVITY All.

Retrofit kit SB-135-67-013-2C1 for retrofit of collective levers.

No.	New P/N	Keyword	Old P/N	Qty	Disposition
1	L671M5038101	RH collective lever	-	1	A
	-		L671M5018101	1	C
2	L671M5846101	LH collective lever	-	1	A
	-		L671M5840101	1	C
3	T30L	Ty-raps	T30L	2	A, C

EFFECTIVITY HC, equipped with engine **Pratt & Whitney**.

Retrofit kit SB-135-67-013-2C2 for retrofit of collective levers.

No.	New P/N	Keyword	Old P/N	Qty	Disposition
1	200-150	Gear box for ball bearing control	-	2	A
	-		200-151* or 200-152**	2	C
2	-	Lockwire (CM776)	-	0.2 m	B

* The part number N200-151 mentioned in the first issue of this Service Bulletin is incorrect due to a printing error.

** The part number N200-152 mentioned in the Alert Service Bulletin EC135-76A-001 is incorrect due to a printing error.

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EFFECTIVITY All.

Retrofit kit SB-135-67-013-2C3-1 for retrofit of the weight compensation.

No.	New P/N	Keyword	Old P/N	Qty	Disposition
1	DIN65188-0519Y	Insert	-	2	A
2	L671M6001101	Bracket assy	-	1	A
3	L671M6003203	Shouldered srew	-	2	A
4	L671M60C1001	Cable	-	1	A
5	L671M6003102	Weight compensation collective	-	1	A
6	LN9038-05010	Screw	-	2	A
7	LN9016-05K	Washer	-	2	A
8	ECS6093-6980	Tension spring	-	1	A
9	EN2367-14018	Cotter pin	EN2367-14018	1	C, D
10	-	PU-Laquer (CM 478)	-	a.n.*	B
11	-	Hardener (CM 479)	-	a.n.*	B
12	-	Thinner (CM 480)	-	a.n.*	B
13	-	Corrosion preventive paste (CM 518)	-	a.n.*	B
14	-	Locking fluid (CM 626)	-	a.n.*	B
15	-	Adhesive paste (CM 6057)	-	a.n.*	B
16	-	Lockwire (CM 775)	-	a.n.*	B
*a.n. = as needed					

Disposition:

A = New, included in kit.

B = Consumable material, to be ordered from the Interturbine company as needed.
CM item number i.a.w. list of consumable materials in the AMM.

C = Part with old P/N is discarded
Discarded parts are not taken back by ECD.

D = The retrofit kit contains no standard parts (ISO, EN).
If this item is needed, a separate order has to be placed for it.

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D. Material Necessary for Each Spare

Not applicable.

E. Reidentified Parts

Not applicable.

F. Special Tooling

- Spring scale with maximum indication 100 N.
- Rigging device L761M0103X01G365-01.

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3. Accomplishment Instructions

List of contents:

- A. Remove installed components.
- B. Install new components.
- C. Adjustment of twist grips ENG 1 and ENG 2 of the **single pilot** emergency engine control.
- D. Adjustment of twist grips ENG 1 and ENG 2 of the **dual pilot** emergency engine control.
- E. Conclusive work.
- F. Install weight compensation.
- G. Configure weight compensation.

A. Remove installed components:

(1) Remove collective lever (pilot):

NOTE On helicopters with single / double cargo hook (optional equipment) its lever for manual emergency release is installed on the collective lever (pilot).

NOTE When the Bowdenflex cable is removed, ensure that it does not disengage from the control handle and that its setting cannot accidentally shift.

- (a) If single / double cargo hook is installed, determine release point of the control handle and note dimension "d", Figure 3.
- (b) If installed, remove lever of the single / double cargo hook by loosening the attachment hardware on the collective lever (pilot). Remove ty-raps and remove the associated Bowdenflex cable together with the control handle from the collective lever and put aside.

NOTE On single pilot helicopters the switch unit can be additionally bonded into the collective lever.

- (c) Remove switch unit i.a.w. AMM, 67-12-00, 4-3 and store for reuse. Ensure that any bonding material is removed from the collective lever and switch unit mating surfaces. A hot air blower can be used to aid removal of switch unit and bonding material residue.

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- (2) Remove collective lever (copilot):

NOTE On dual pilot flight control installation a vibration compensator block (tuning mass) may be installed inside the collective lever with which vibrations of the collective lever are neutralized.

NOTE On dual pilot flight control installation the switch unit can be bonded into the collective lever.

- (a) Remove switch unit i.a.w. AMM, 67-12-00, -4-3 and store for reuse. Ensure that any bonding material is removed from the collective lever and switch unit mating surfaces. A hot air blower can be used to aid removal of switch unit and bonding material residue. If tuning mass is installed, remove, clean and store for reuse.

EFFECTIVITY HC, equipped with Pratt & Whitney engine.

- (3) Remove "gear box pilot" i.a.w. AMM, 76-12-00, 4-4 and remove "gear box copilot" i.a.w. AMM, 76-12-00, 4-6. Discard removed gear boxes.

B. Install new components:

EFFECTIVITY Pratt & Whitney engine.

- (1) Install "gear box pilot" contained in retrofit kit i.a.w. AMM, 76-12-00, 4-4. Emergency engine control will be adjusted following installation of the collective levers and i.a.w. the details contained in this Service Bulletin.
- (2) Install "gear box copilot" contained in retrofit kit i.a.w. AMM, 76-12-00, 4-6. Emergency engine control will be adjusted following installation of the collective levers and i.a.w. the details contained in this Service Bulletin.

EFFECTIVITY All.

- (3) Install previously removed switch units to collective lever (pilot) and collective lever (copilot) contained in retrofit kit i.a.w. AMM, 67-12-00, 4-3. If originally installed, re-install vibration compensator block (tuning mass).
- (4) Install the new collective lever (pilot) i.a.w. AMM 67-12-00, 4-1 and accomplish adjustment of the emergency engine control i.a.w. 3.C. or 3.D. of this Service Bulletin.
- (5) Install the new collective lever (copilot) i.a.w. AMM 67-12-00, 4-2 and accomplish adjustment of the emergency engine control i.a.w. 3.D. of this Service Bulletin.

EFFECTIVITY HC, equipped with Pratt & Whitney engine.

- (6) Adjust ball bearing controls i.a.w. AMM, 76-12-00, 4-3.

EFFECTIVITY All.

- (7) Adjust basic setting of collective brake:
- (a) Detach bellows from the hook-and-pile tape on the floor, and slide bellows upwards on the collective lever.

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- (b) Switch on pump drive.
- (c) Remove cotter pin (1, Figure 3) from castellated nut.
- (d) Fully release collective brake and pull collective lever (pilot side) until the ring of the twist grip is situated 165 ± 1 mm away from the bare floor (see Figure 3).
- (e) Use a spring scale to push/pull the collective lever downwards and turn the castellated nut to adjust the collective brake in such a way that the force required to move the lever is **at least** 10–14 N (see Figure 3).
- (f) If necessary, repeat adjustment operation i.a.w. (d) and (e).
- (g) Switch off pump drive.
- (h) Secure castellated nut with a cotter pin (1, Figure 3).

C. Adjustment of twist grips ENG 1 and ENG 2 of the **single pilot** emergency engine control:

(1) Preliminary work steps:

- (a) Remove lockwire and loosen nuts (5, Figure 1) from gear box pilot (2).

EFFECTIVITY HC, equipped with Turbomeca engines.

NOTE It is not required to have FADECs' on for all EC135, equipped with Pratt & Whitney engines.

- (b) Energize helicopter electrical system i.a.w. AMM, 24-00-00, 2-1. Press circuit breakers "FADEC I" and "FADEC II" on the overhead panel and switch on FADEC switches I and II.

EFFECTIVITY All.

- (2) Unscrew detent pins (3, 4, Figure 1) from gear box pilot (2) until only few threads are left in the gear box.
- (3) Attach rigging device (7, Figure 1) to twist grip ENG 1 i.a.w. Figure 1, View B.

NOTE The break-out force must be :
 – Turbomeca: 20–45 N
 – Pratt & Whitney: 15–30 N

- (4) Attach spring scale (6, Figure 1) to the **upper** eye of the rigging device (7) and continuously pull to the direction **MAX** until the twist grip breaks out from its zero position. Read off the required break-out force on the spring scale.
- (5) If the break-out force is too low, screw detent pin (4, Figure 1) in and if it is too high screw detent pin out. Repeat test in 3.C.(4) until proper results are reached and record (see Figure 6 or 7).

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- (6) Attach spring scale (6, Figure 1) to the **lower** eye of the rigging device (7) and continuously pull to the direction **MIN** until the twist grip breaks out from its zero position. Read off the required break-out force on the spring scale and enter into the test record.
- (7) Correspondingly accomplish work steps C.(3) up to and including C.(6) on twist grip ENG 2 by adjustment of the detent pin (3).
- (8) Hold detent pins (3, 4, Figure 1) from moving then tighten and secure nuts (5) with lockwire.
- (9) Check manual engine controls:

- (a) Ensure that the engine can be shut down manually: Press red OFF pushbutton on the twist grip and fully turn both twist grips towards **MIN**.

D. Adjustment of twist grips ENG 1 and ENG 2 of the **dual pilot** emergency engine control:

- (1) Preliminary work steps:
 - (a) Remove lockwire and loosen nuts (5, Figure 1) on gear box copilot (1) and on gear box pilot (2).

EFFECTIVITY HC, equipped with Turbomeca engines.

- (b) Energize helicopter electrical system i.a.w. AMM, 24-00-00, 2-1. Press circuit breakers "FADEC I" and "FADEC II" on the overhead panel and switch on FADEC switches I and II.

EFFECTIVITY All.

- (2) Adjustment of collective lever (**pilot**):

NOTE The collective lever (copilot) must be installed for the entire adjustment period.

NOTE The break-out force (**pilot**) must be:

- Turbomeca: 25-55 N
- Pratt & Whitney: 22-35-N

- (a) Turn the detent pins (3, 4, Figure 1) into the gear box, copilot (1) until the stop is reached.
- (b) Attach rigging device (7, Figure 1) to twist grip ENG 1 of the collective lever (pilot) i.a.w. Figure 1, View B.
- (c) Attach spring scale (6, Figure 1) to the **upper** eye of the rigging device (7) and continuously pull to the direction **MAX** until the twist grip breaks out from its zero position. Read off the required break-out force on the spring scale.

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- (d) Adjust detent pin (4, Figure 1) i.a.w. section 3.C.(5) of this Service Bulletin.
- (e) Attach spring scale (6, Figure 1) to the **lower** eye of the rigging device (7) and continuously pull to the direction **MIN** until the twist grip breaks out from its zero position. Read off the required break-out force on the spring scale and enter into the test record.
- (f) Correspondingly accomplish work steps (2)(b) thru (2)(e) on twist grip ENG 2 of collective lever (**pilot**) by adjustment of the detent pin (3).
- (g) Hold detent pins (3, 4, Figure 1) from moving then tighten and secure nuts (5) with lockwire.

(3) Adjustment of collective lever (**copilot**):

NOTE The break-out force (**copilot**) must be:

- Turbomeca: 25-55 N
- Pratt & Whitney: 22-35-N

- (a) Correspondingly accomplish work steps (2)(a) thru (2)(g) for the collective lever (copilot) and apply the effective break-out force noted for copilot.

(4) Check manual engine operation (**pilot**):

- (a) Ensure that the engine can be shut down manually: Press red OFF pushbutton on the twist grip and fully turn both twist grips towards **MIN**.

E. Conclusive work:

EFFECTIVITY HC, equipped with Pratt & Whitney engine.

- (1) Conclude installation of "gear box pilot" i.a.w. AMM, 76-12-00, 4-4.
- (2) Conclude installation of "gear box copilot" i.a.w. AMM, 76-12-00, 4-6.

EFFECTIVITY HC with optional equipment single/double cargo hook.

- (3) Install lever of the mechanical emergency release of the single/double cargo hook to collective lever (pilot) i.a.w. Figure 2 and AMM, 85-11-00, 5-4. Install Bowdenflex cable with ty-raps contained in retrofit kit.
- (4) Ensure correct release point of the control handle(s).

EFFECTIVITY All.

- (5) Confirm accomplishment of sections A.-E. of this Service Bulletin by an entry in the historical record of the helicopter.

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F. Install weight compensation:

- (1) Remove forward access cover i.a.w. AMM, 52-40-00, 4-3.
- (2) Install bracket:
 - (a) Mark forward position "V" (Figure 4) on the bottom side of the floor. Align bracket (4) with this mark and mark aft position "H" on the floor.
 - (b) Pilot drill holes through the top layer of the floor if necessary, then use a drill to drill final holes with a diameter of 11.5 mm i.a.w. detail A, Figure 4. Deburr boreholes and remove drilling chips.
 - (c) Make a blind hole (depth 20⁺¹ mm) in the honeycomb structure of the floor, e. g. with a face mill, i.a.w. detail A, Figure 4. Remove drilling chips.
 - (d) Position and fix inserts (1, Figure 4), and inject adhesive paste (CM 6057). Use adhesive paste i.a.w. the manufacturer's instructions.
 - (e) After adhesive cures remove aluminium cover foil from the inserts and discard.
 - (f) Re-establish surface protection using PU-Laquer (CM 478, 479, 480).
 - (g) Apply corrosion-preventive paste (CM 518) to screws (3, Figure 4) and install bracket (4) with screws (3) and washers (2). Torque screws (3) to 2-3 Nm.
- (3) Slide weight compensation (8, Figure 4) onto the cantilever of the collective shaft, apply corrosion-preventive paste (CM 518) to shouldered screws (6, Figure 4) and install. Torque-tighten shouldered screws (6) to 2-3 Nm and safety against each other using lockwire (CM 775).
- (4) Install spring (5, Figure 4) and cable (7) between bracket (4) and weight compensation (8). When installing the components, ensure that the cable (7) and spring (5) are properly aligned.
- (5) Install forward access cover i.a.w. AMM, 52-40-00, 4-3.
- (6) Confirm accomplishment of this section of this Service Bulletin by an entry in the historical record of the helicopter.

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G. Configure weight compensation / adjust to "Single-Pilot" (SP) and "Dual-Pilot" (DP):

(1) Set from SP (single pilot) to DP (dual pilot):

- (a) Ensure that the collective lever (pilot) is unlocked.
- (b) Disconnect the boot from the hook-and-pile tapes on the floor and slide the boot up on the collective lever (pilot).
- (c) Remove spring cotter (2, Figure 8).



WARNING

A SPRING FORCE IS EXERTED ON THE ADJUSTING AXIS WHICH PUSHES THE ADJUSTING AXIS TO THE SP POSITION. THE ADJUSTING AXIS THEREFORE MUST BE HELD DURING THE ENTIRE ADJUSTMENT PROCEDURE, AS OTHERWISE INJURIES CAN BE CAUSED.



CAUTION

MOVE THE ADJUSTING AXIS WITHOUT THE HELP OF ANY TOOLS, MOVE THE ADJUSTING AXIS ONLY BY APPLYING NORMAL MANUAL FORCE. OTHERWISE, PARTS OF THE WEIGHT COMPENSATION COULD BE DAMAGED.

- (d) Turn the adjusting axis (1, Figure 8) by approx. 1 3/4 turns clockwise until the stop in the DP position (3) is reached. Hold the adjusting axis (1) in this position.
 - (e) Install spring cotter (2, Figure 8) in position DP (4). Ensure that the adjusting axis (1) cannot move inadvertently in the direction of the SP position (3).
 - (f) Re-attach the boot to the hook-and-pile tapes on the floor.
- (2) Set from DP (dual pilot) to SP (single pilot):
- (a) Ensure that the collective lever (pilot) is unlocked.
 - (b) Disconnect the boot from the hook-and-pile tapes on the floor and slide the boot up on the collective lever (pilot).

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**WARNING**

A SPRING FORCE IS EXERTED ON THE ADJUSTING AXIS WHICH PUSHES THE ADJUSTING AXIS TO THE SP POSITION. THE ADJUSTING AXIS THEREFORE MUST BE HELD WHEN THE SPRING COTTER IS DISCONNECTED AND DURING THE ENTIRE ADJUSTMENT PROCEDURE, AS OTHERWISE INJURIES CAN BE CAUSED.

- (c) Hold the adjusting axis (1, Figure 8).
- (d) Remove spring cotter (2, Figure 8).

**CAUTION**

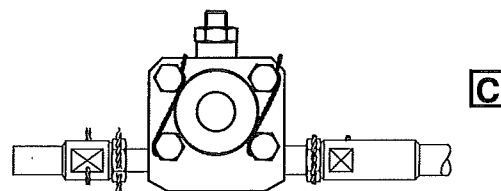
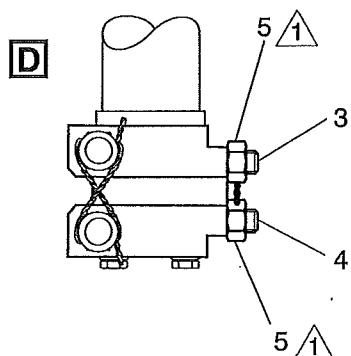
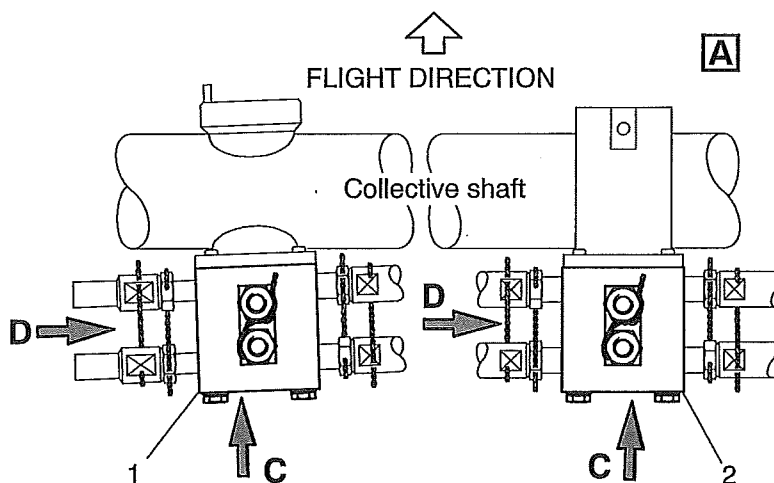
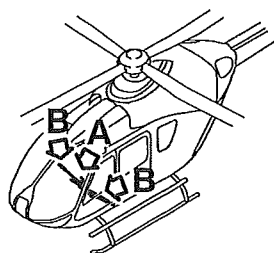
MOVE THE ADJUSTING AXIS WITHOUT THE HELP OF ANY TOOLS, MOVE THE ADJUSTING AXIS ONLY BY APPLYING NORMAL MANUAL FORCE. OTHERWISE, PARTS OF THE WEIGHT COMPENSATION COULD BE DAMAGED.

- (e) Carefully turn the adjusting axis (1, Figure 8) to the SP position (3) until the stop is reached.
- (f) Install spring cotter (2, Figure 8) in position SP (3). Rule out an inadvertent moving of the adjustment axis (1) in the DP position (4) by checks.
- (g) Re-attach the boot to the hook-and-pile tapes on the floor.

4. Appendix

Not applicable.

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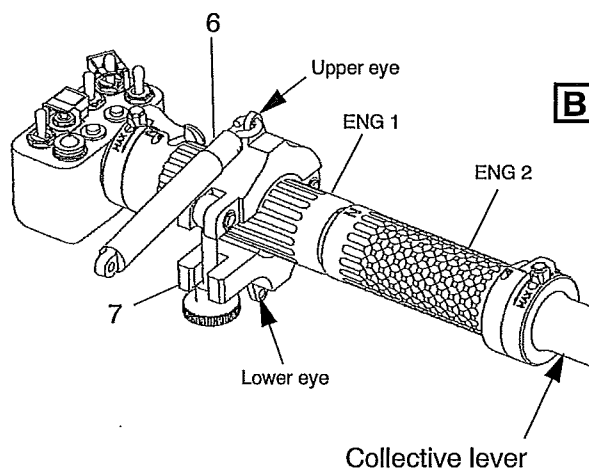


Illustrations without scale.

⚠ Safety with CM 776.

- 1 Gear box copilot
- 2 Gear box pilot
- 3 Detent pin **ENG 2**
- 4 Detent pin **ENG 1**
- 5 Nut
- 6 Spring scale
- 7 Rigging device

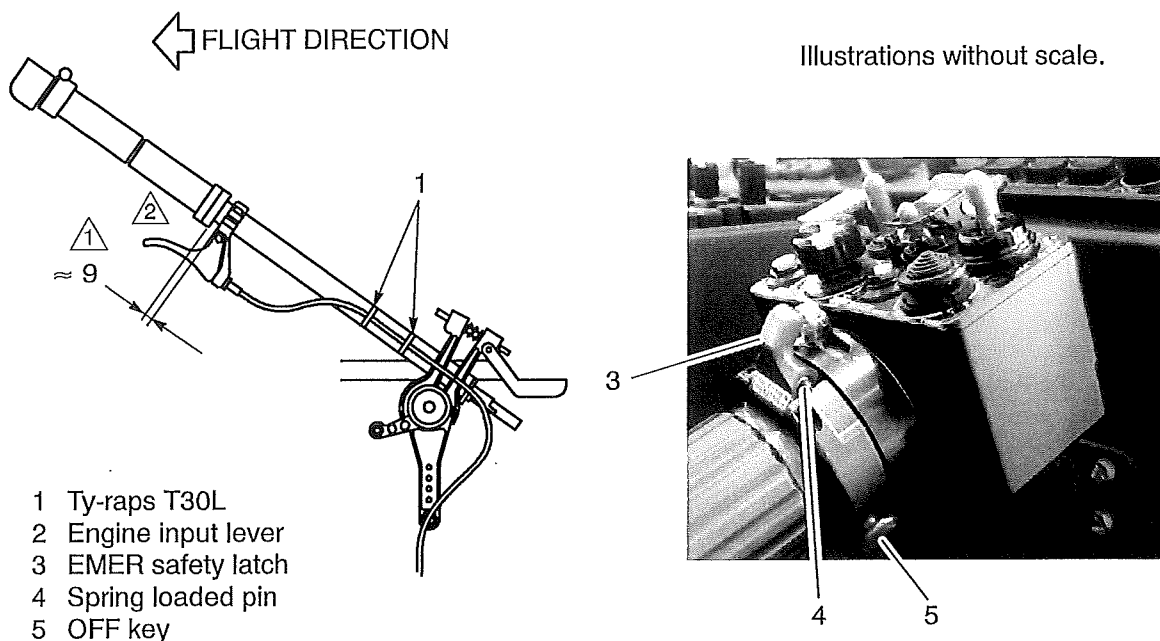
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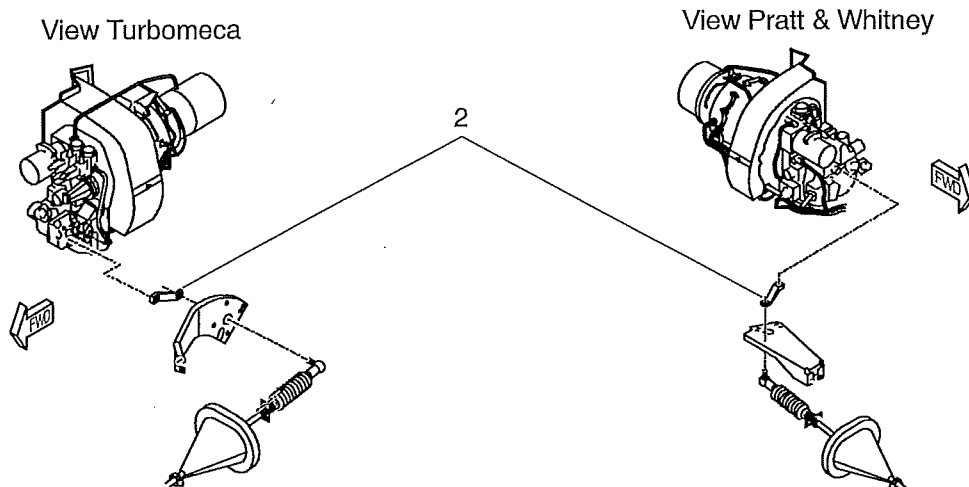
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Adjustment of Gear Boxes
Figure 1

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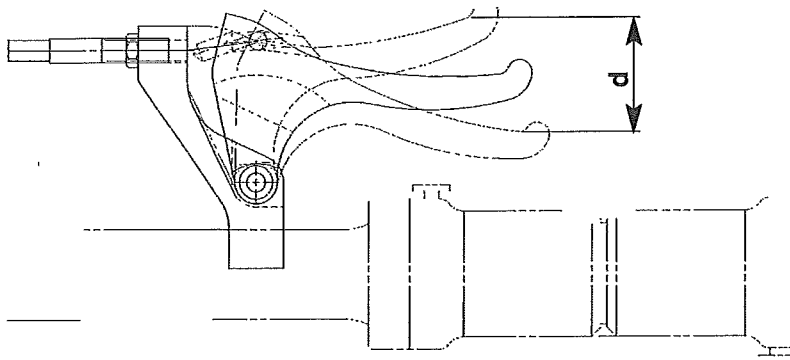
- ⚠ 1 If the first issue of the SB has already been accomplished, adjust the Cargo/Double Cargo Hook Control Lever to this value.
- ⚠ 2 When the control lever is installed ensure that it points downwards and cannot be turned to the side (→ freedom of movement towards other components).



Installation of Cargo Hook Control Lever – Installation Location of Engine Input Lever Switch Unit
Figure 2

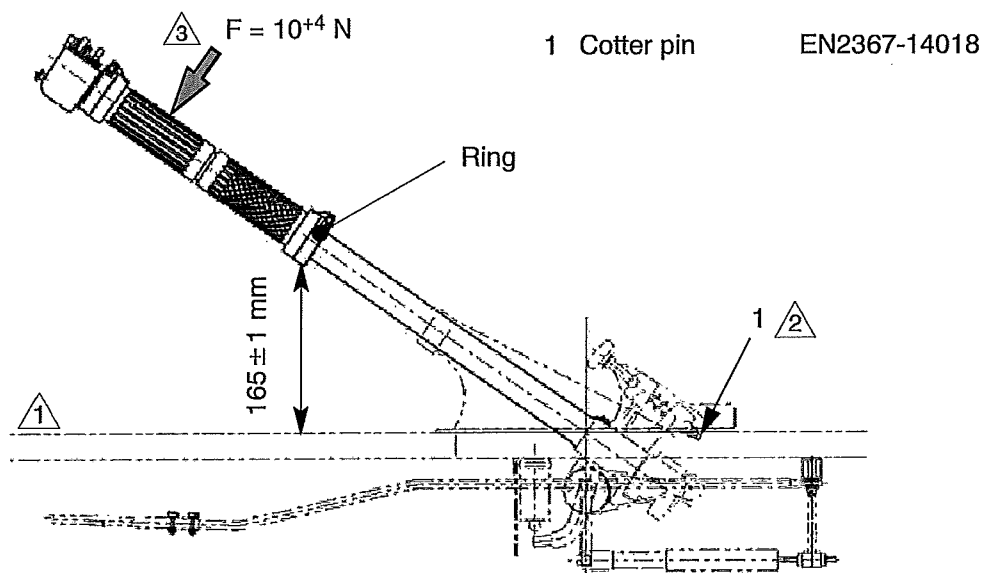
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View A



- △1 Bare floor (without carpet, etc.).
- △2 Secure castellated nut with cotter pin (1).
- △3 Attach spring scale here in order to measure the force.

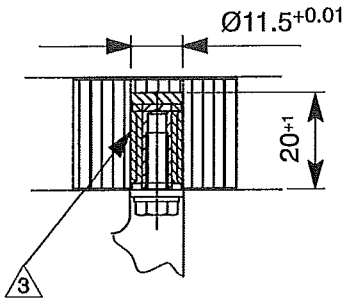
View B



Check Release Point of Cargo Hook Control Handle – Adjustment of Collective Brake
Figure 3

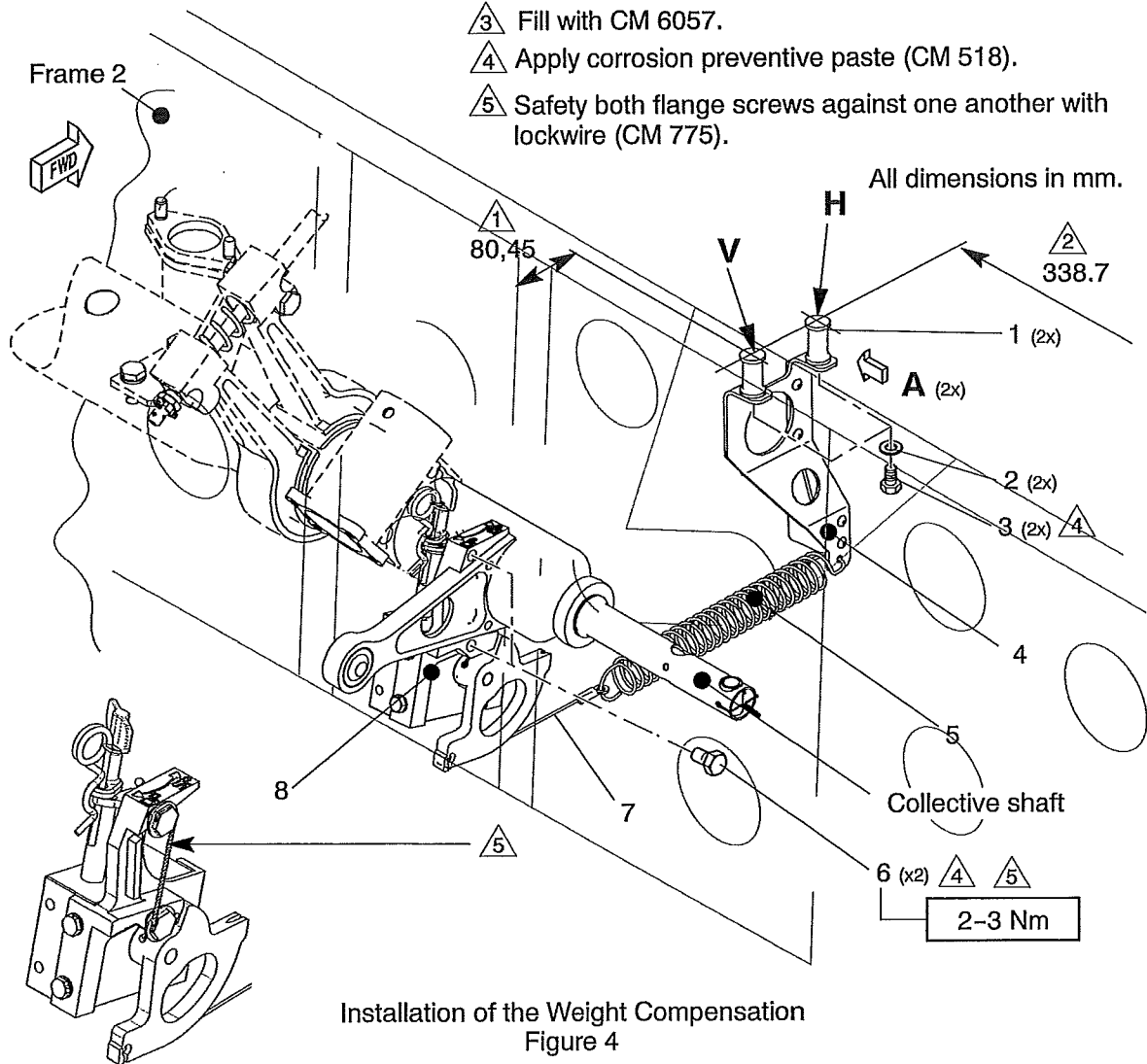
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Detail A



- | | |
|-----------------------|----------------|
| 1 Insert | DIN65188-0519Y |
| 2 Washer | LN9016-05K |
| 3 Screw | LN9038-05010 |
| 4 Support plate | L671M6001101 |
| 5 Tension spring | ECS6093-6980 |
| 6 Flange screw | L671M6003203 |
| 7 Cable | L671M60C1001 |
| 8 Weight compensation | L671M6003102 |

- △1 Clearance to frame 2.
- △2 Clearance to longitudinal beam.
- △3 Fill with CM 6057.
- △4 Apply corrosion preventive paste (CM 518).
- △5 Safety both flange screws against one another with lockwire (CM 775).



Installation of the Weight Compensation
Figure 4

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Turbomeca:

Sollwert: **20 – 45 N**

Drehung MIN: Drehung MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

Turbomeca:

Default: **20 – 45 N**

Direction MIN: Direction MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

P&W:

Sollwert: **15 – 30 N**

Drehung MIN: Drehung MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

P&W:

Default: **15 – 30 N**

Direction MIN: Direction MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

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Test Record for the Adjustment of the **Single Pilot** Engine Control
Figure 5

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Turbomeca:

Sollwert Pilotenseite: 25 – 55 N
 (Druckstift Co-Pilot eingebaut)

Drehung MIN: Drehung MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

Sollwert Copilotenseite: 25– 55 N
 (Druckstift Co-Pilot eingebaut)

Drehung MIN: Drehung MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

Turbomeca:

Default pilot side: 25 - 55 N
 (spring plunger co-pilot installed)

Direction MIN: Direction MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

Default Copilot side: 25 - 55 N
 (spring plunger co-pilot installed)

Direction MIN: Direction MAX:

Eng 1: _____ ☐ OK

Eng 2: _____ ☐ OK

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Test Record for the Adjustment of the **Dual Pilot Engine Control (Turbomeca)**
 Figure 6

EC135 SERVICE BULLETIN

P&W:
Sollwert Pilotenseite: 22 - 35 N

(Druckstift Co-Pilot eingebaut)

Drehung MIN: Drehung MAX:

 Eng 1: _____ ☐ OK

 Eng 2: _____ ☐ OK

Sollwert Copilotenseite: 22 - 35 N

(Druckstift Co-Pilot eingebaut)

Drehung MIN: Drehung MAX:

 Eng 1: _____ ☐ OK

 Eng 2: _____ ☐ OK

P&W:
Default pilot side: 22 - 35 N

(spring plunger co-pilot installed)

Direction MIN: Direction MAX:

 Eng 1: _____ ☐ OK

 Eng 2: _____ ☐ OK

Default Copilot side: 22 - 35 N

(spring plunger co-pilot installed)

Direction MIN: Direction MAX:

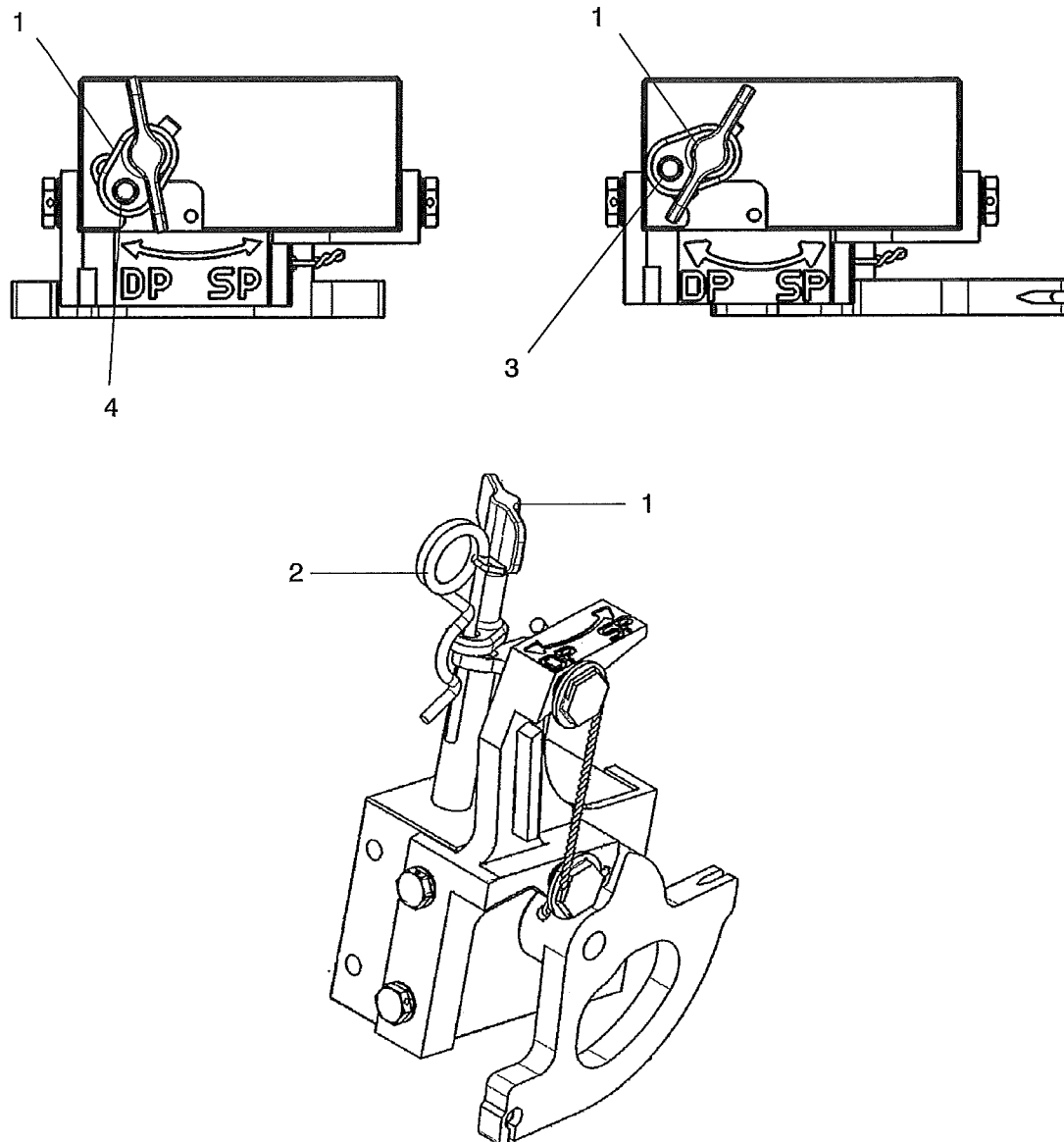
 Eng 1: _____ ☐ OK

 Eng 2: _____ ☐ OK

Please copy page. Original page remains in Service Bulletin!

Test Record for the Adjustment of the **Dual Pilot Engine Control (Pratt & Whitney)**
Figure 7

EC135 SERVICE BULLETIN



- 1 Adjusting axis
- 2 Spring cotter
- 3 Position SP
- 4 Position DP

Adjustment of the Weight Compensation
Figure 8