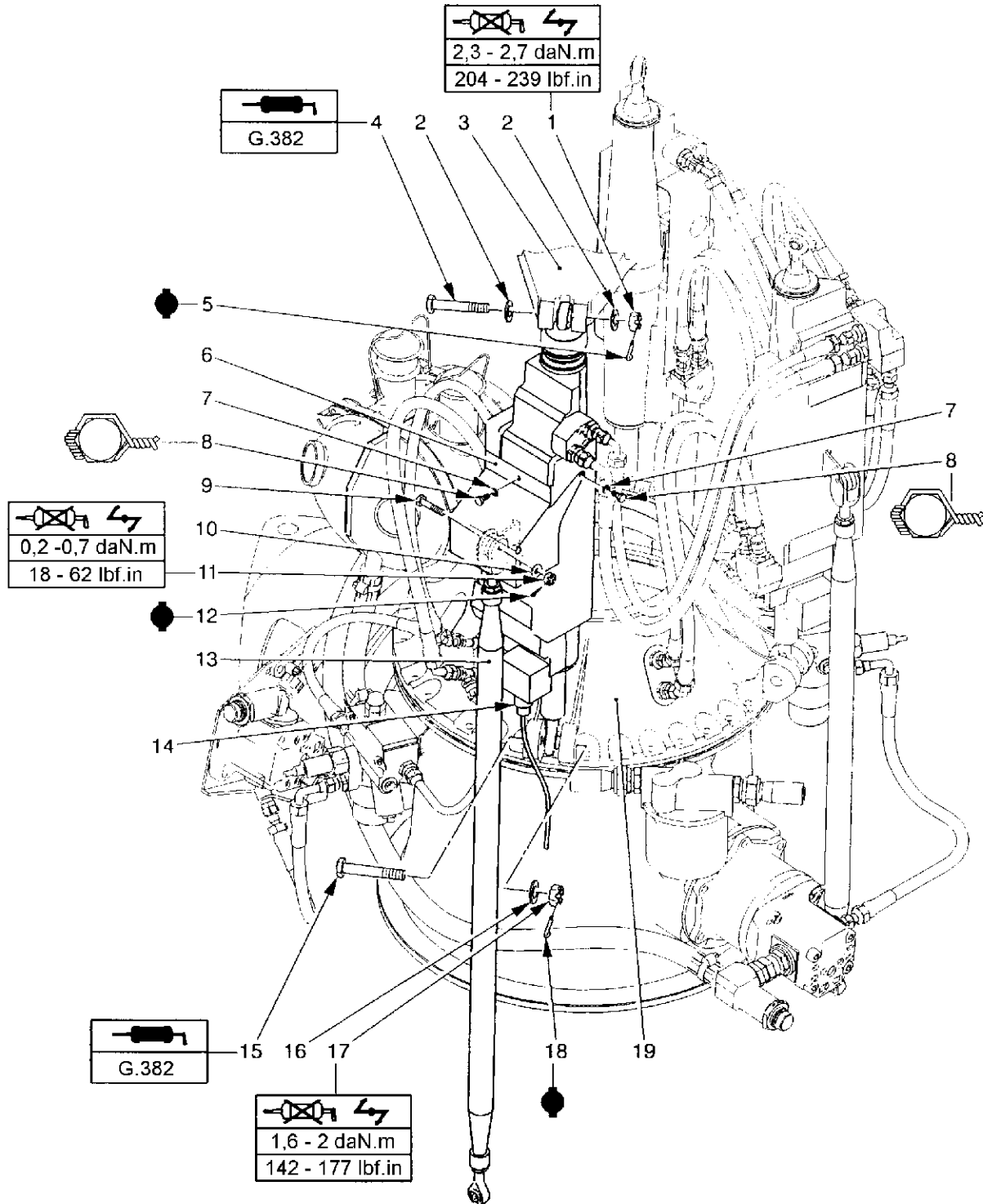


## **Attachment 3. Eurocopter Main Rotor Servo Installation Procedures**

### **DCA12MA020 Maintenance Factual Report**

N



SERVOCONTROLS TWIN HYDRAULIC SYSTEM (OP3082)

Main rotor servocontrols :  
Removal - Installation

1 EQUIPMENT REQUIRED

Also refer to "EQUIPMENT REQUIRED" section of documents referenced in 1.4.

1.1 Special Tools

- Blanking caps Commercial

1.2 Materials

- Grease G.382
- Lockwire 0.8 mm dia.

1.3 Routine replacement parts

- Cotter pin (5) IPC 62.30.11.01
- Cotter pin (18) IPC 62.30.11.04
- Cotter pin (12) 23310AA015015L Not listed in the IPC

1.4 Applicable documents

- Maintenance Manual (MET) W.C. 24.00.00.301 - 29.00.00.301 -  
67.10.00.301 - 67.10.00.501 - 67.10.00.502 - 67.30.15.401. R

2 FOREWORD

CAUTION : FOR ALL THE REMOVAL AND INSTALLATION OPERATIONS, EVEN REMOVAL  
IN PART, PROTECT THE PISTON ROD WITH A CLEAN CLOTH.

NOTE : The RH lateral servocontrol only is equipped with load sensor.

3 PRELIMINARY STEPS

- Remove the MGB cowlings.
- Comply with the electrical general instructions of W.C. 24.00.00.301.
- Comply with the hydraulic general instructions of W.C. 29.00.00.301.
- Comply with the rotor control general instructions of W.C. 67.10.00.301.

R

#### 4 REMOVAL (Figure 1)

NOTE : The servolcontrol is removed as an assembly.

- Loosen and remove the hydraulic lines of the top and bottom manifolds of the applicable servocontrol.
- Cut and remove the lockwire from the screws (8) which attach the fairing (6) of the servocontrol.
- Loosen and remove the screws (8) and washers (7). Remove the fairing (6).
- Disconnect the connector (14) from the servolcontrol.
- Remove and discard the pin (12). Loosen and remove the nut (11), the washer (10) and the bolt (9) of the pitch-change link (13) at the servocontrol.
- Remove and discard the pin (18). Loosen and remove the nut (17), the washer (16) and the bolt (15) which attach the conical housing (19).
- Remove and discard the pin (5). Hold the servocontrol. Loosen and remove the nut (1), the washers (2) and the bolt (4) which attach the swashplate (3).
- Remove the servocontrol.
- Install the blanking caps to the hydraulic lines and the servocontrol.
- If necessary, tear down the servocontrol as per W.C. 67.30.15.401.

#### 5 INSTALLATION (Figure 1)

- If necessary, build up the servocontrol as per W.C. 67.30.15.401.
- Apply the grease G.382 on the smooth part of the bolts (4) and (15).
- Put the servocontrol in position with the actuator down.
- Install the bolt (4), the washers (2) and the nut (1) on the non-rotating swashplate (3).
- Install the bolt (15), the washer (16) and the nut (17) on the flared housing side (19).
- Torque the nuts (1) and (17).
- Savety the nuts (1) and (17) with the split pins (5) and (18).
- Attach the input rod (13) with the bolt (9), the washer (10) and the nut (11).
- Torque the nut (11).
- Savety the nut (11) with the split pin (12).
- Connect the connector (14) of the servolcontrol.
- Remove the blanking caps from the hydraulic lines and from the servocontrol.
- Install and tighten the hydraulic lines on the servocontrol.
- Install and attach the fairing (6) with the washers (7) and the screws (8).
- Savety the screws (8) with the lockwire.

## 6 FINAL STEPS

- Check flight control rigging as per W.C. 67.10.00.501 (version without AFCS) or W.C. 67.10.00.502 (version with AFCS). R
- Comply with the hydraulic general instructions of W.C. 29.00.00.301. R
- Comply with the rotor control general instructions of W.C. 67.10.00.301.
- Install the MGB cowlings.