No. EC155-67-013

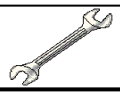
Civil versions: B, B1

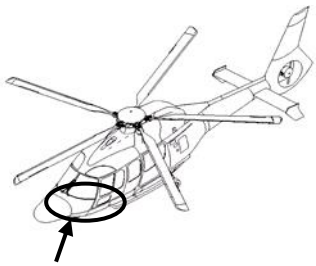
SERVICE BULLETIN

CORRECTIVE MEASURE

ROTOR FLIGHT CONTROLS
Washer under the screw head of trim lever assembly

Corresponds to modification 0722B80 or 0767B73

For the attention of




Revision No.	Date of issue
Revision 0	2019-07-02
Revision 1	2019-10-15
Revision 2	2021-09-30

Summary:

The purpose of this Service Bulletin is to add a washer under the head of the tightening screw of the lever.
This removes the occasional play between the lever and the trim shaft, which is due to insufficient thread length of this screw.

Reason for last revision:

After compliance with this Service Bulletin, Airbus Helicopters received feedback from customers, informing about their technical issues when using the kit that is necessary for modification 0722B80.

The objective of revision 2 of this Service Bulletin is to install a new attachment design for the trim lever assembly through modification 0767B73.

Modification 0767B73 replaces modification 0722B80 for all helicopters which have not yet embodied modification 0722B80 or for the helicopters on which customers could not embody it through old revisions.

Compliance:

Airbus Helicopters recommends compliance with this Service Bulletin.

1. PLANNING INFORMATION

CAUTION

MAKE SURE THAT THE MODIFICATIONS RELATED TO THIS SERVICE BULLETIN AGREE WITH THE HELICOPTER CONFIGURATION AT THIS TIME. IF THE MODIFICATIONS DO NOT AGREE WITH THE HELICOPTER CONFIGURATION:

- **PREPARE THE NECESSARY ADAPTATION WORK.**
- **GET THE APPROVAL BY THE APPLICABLE LOCAL AIR TRANSPORT AUTHORITIES.**
- **COMPLY WITH THE AIRWORTHINESS REQUIREMENTS.**

THIS SERVICE BULLETIN IS WRITTEN FOR THE INITIAL HELICOPTER CONFIGURATION SPECIFIED IN THE INDIVIDUAL INSPECTION LOGBOOK (RIC). IT INCLUDES ONLY THE POST-DELIVERY CONFIGURATION CHANGES WHICH ARE KNOWN AND APPROVED BY AIRBUS HELICOPTERS.

1.A. EFFECTIVITY

1.A.1. Helicopters/installed equipment or parts

Helicopters equipped with lever P/N 365A27-3813-22 and/or 365A27-3814-20 and/or 365A27-8049-21 and/or 365A27-8053-21 and/or 365A27-8097-20 and/or 365A27-8218-20 and/or 365A27-8251-20 and which have not embodied modification 0722B80 or 0767B73.

NOTE

Refer to the Individual Inspection Log Book (RIC AMS) and/or Aircraft Log Book to identify the current modification status of the helicopter.

1.A.2. Non-installed equipment or parts

Not applicable.

1.B. ASSOCIATED REQUIREMENTS

CAUTION

BEFORE YOU COMPLY WITH THIS SERVICE BULLETIN, MAKE SURE THAT THERE WAS NO ALERT SERVICE BULLETIN RELATED TO THE INSTALLATION OF A NEW ATTACHMENT FOR THE TRIM LEVER ASSEMBLY BETWEEN SERVICE BULLETIN APPROVAL AND SERVICE BULLETIN EMBODIMENT DATES.

1.C. REASON

Revision 0:

An occasional play between the roll trim lever and the roll trim shaft has been identified in operation. If so, this can cause a play in the cyclic control, which leads to oscillation due to the autopilot.

The insertion of a washer under the screw head and the torque value modification remove the occasional play between the lever and the trim shaft.

Revision 1:

The purpose of revision 1 of this Service Bulletin is to modify the "in.lb" torque values in Figure 1 and to provide a detail on the performance of functional tests.

Revision 2:

After compliance with this Service Bulletin, Airbus Helicopters received feedback from customers, informing about their technical issues when using the kit that is necessary for modification 0722B80.

This is because not all Dauphin helicopters have the same lever references depending on their thickness.

Airbus Helicopters has developed modification 0767B73 as a solution to this technical issue. This new solution creates two configurations for all levers, with the different thicknesses: 18 mm and 21 mm.

The objective of revision 2 of this Service Bulletin is to install a new attachment design for the trim lever assembly through modification 0767B73.

Revision 2 of this Service Bulletin has no effect on the compliance with former revisions of this Service Bulletin.

1.D. DESCRIPTION

This Service Bulletin consists in installing a washer under the head of the tightening screw of the lever and increasing the torque value range from "3.7 to 4.2 N.m" to "4.0 to 6.0 N.m".

Revision 2 of this Service Bulletin consists in replacing the screws and adding washers, referring to the two types of levers (18 mm or 21 mm thick levers).

1.E. COMPLIANCE

1.E.1. Compliance at H/C manufacturer level

Not applicable.

1.E.2. Compliance in service

The work must be performed on the helicopter by the operator.

Helicopters/installed equipment or parts:

Airbus Helicopters recommends compliance with this Service Bulletin.

For helicopters which did not comply with one of the former revisions of this Service Bulletin, comply with paragraph 3.B.2.a. of this Service Bulletin.

Non-installed equipment or parts:

Not applicable.

1.F. APPROVAL

Approval of modifications:

The information or instructions relate to modification 0722B80 issue 2, which was approved on March 19, 2019 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The information or instructions relate to modification 0767B73 revision 2, which was approved through CRD DA07.67B73 on June 28, 2021 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

Approval of this document:

The technical information contained in this Service Bulletin Revision 0 was approved on June 19, 2019 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin Revision 1 was approved on October 14, 2019 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

The technical information contained in this Service Bulletin Revision 2 was approved on September 15, 2021 under the authority of EASA Design Organization Approval No. 21J.700 for civil version helicopters subject to an Airworthiness Certificate.

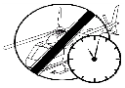
1.G. MANPOWER

For compliance with this Service Bulletin, Airbus Helicopters recommends the following staff qualifications:

Qualification: 1 Mechanical Technician.

The Estimated Man-hours are indicated for reference purposes only and based on a standard helicopter configuration.

Estimated Man-hours: 2 hours for Mechanical Technician.



Estimated helicopter downtime is indicated for reference purposes only, based on a standard helicopter configuration.

Helicopter downtime is estimated at one day.

1.H. WEIGHT AND BALANCE

Not applicable.

1.I. POWER CONSUMPTION

Not applicable.

1.J. SOFTWARE UPGRADES/UPDATES

Not applicable.

1.K. REFERENCES

The following documents are required for compliance with this Service Bulletin:

Aircraft Maintenance Manual (AMM):

AMM: 22-10-00-721A: Functional Tests - Autopilot System After You Replace an Autopilot Module (APM)
AMM: 22-10-00-721B: Functional tests - Auto-Pilot System After Replacing an Auto-Pilot Module (APM) POST 0722B70
AMM: 22-11-01-062: Removal / Installation - Pitch Trim Actuator
AMM: 22-11-03-062: Removal / Installation - Collective Trim Actuator
AMM: 24-00-00-911: General safety instructions - Electrical power
AMM: 67-00-00-911: General safety instructions - Flight controls
AMM: 67-00-00-222: Detailed inspection - Flight controls

Standard Practices Manual (MTC):

MTC: 20-02-05-404: Assembly by screws and nuts - Joining
MTC: 20-07-02-201: Helicopter parked in a repair shop - Safety instructions
MTC: 20-07-03-406: Instructions applicable when working on an aircraft electrical circuit and power generating systems - Technical instructions
MTC: 20-07-03-408: Appearance checks on an aircraft after an inspection or repair - Technical instructions

Information Notice (IN):

IN 3481-I-00: The Marketplace: an AirbusWorld eOrdering service
IN 3643-I-00: Introduction of the digital Service Bulletin reporting service R-Tex

1.L. OTHER AFFECTED PUBLICATIONS

CAUTION

TO COMPLY WITH THIS SERVICE BULLETIN, THE OPERATOR MUST MAKE SURE THAT ALL THE MAINTENANCE DOCUMENTS NECESSARY FOR THE MAINTENANCE OF THIS INSTALLATION ARE AVAILABLE. IF THEY ARE NOT AVAILABLE, THE OPERATOR MUST CONTACT AIRBUS HELICOPTERS TO GET THESE DOCUMENTS.

The modification will be added to the manual that follows:
Aircraft Maintenance Manual (AMM).

You will receive the documents to which you subscribe.

Revision of Illustrated Parts Catalog (IPC) will be updated on the customer's order.

1.M. PART INTERCHANGEABILITY OR MIXABILITY

Interchangeability:

PRE MOD and POST MOD components are not interchangeable.

Mixability:

Mixing between PRE MOD and POST MOD components is prohibited.

2. EQUIPMENT OR PARTS INFORMATION

2.A. EQUIPMENT OR PARTS: PRICE - AVAILABILITY - PROCUREMENT

Price
For any information on the price of modification kits and/or components or for assistance, contact the Airbus Helicopters Network Sales and Customer Relations Department.

Availability
Delivery lead times will be indicated by the Sales and Customer Relations Department on the operator's request.

Procurement
Order the required quantity from the Airbus Helicopters Network Sales and Customer Relations Department:

Airbus Helicopters
Etablissement de Marignane
Direction Ventes et Relations Client
13725 MARIGNANE CEDEX
FRANCE

In the purchase order, write the information that follows:
- The mode of transport
- The destination
- The serial numbers of the helicopters to change.

2.B. LOGISTIC INFORMATION

Not applicable.

2.C. EQUIPMENT OR PARTS REQUIRED PER HELICOPTER/COMPONENT

Kits to be ordered for one helicopter or one assembly:

For helicopters with a 18 mm thick lever **(CONF 1)**:

Key Word	Qty	New P/N	Item	Old P/N	→	Instruction
INSTALLATION KIT FOR 18 MM THICK LEVER		**365A08-9649-1071**				
Hex. head bolt	4	22129BC050028L	1			
Washer	8	23112AG050LE	3			
Castellated hex. nut	4	ASNA0045BC050L	4			
Split pin	4	EN2367-10014	5			
Plain washer	4	EN2138-05005	6			See NOTE 1

Kits to be ordered for one helicopter or one assembly (cont.):

For helicopters with a 21 mm thick lever **(CONF 2)**:

Key Word	Qty	New P/N	Item	Old P/N	→	Instruction
INSTALLATION KIT FOR 21 MM THICK LEVER		**365A08-9649-1171**				
Hex. head bolt	4	22129BC050032L	2			
Washer	12	23112AG050LE	3			
Castellated hex. nut	4	ASNA0045BC050L	4			
Split pin	4	EN2367-10014	5			
Plain washer	4	EN2138-05005	6			See NOTE 1

NOTE 1

If it is not possible to install the split pin (5) on the stacking of the washer (3) and the castellated hex. nut (4):
The customer will use the plain washer (6) as an alternative to the washer (3) under the castellated hex. nut (4).

Consumables to be ordered separately:

Refer to the Work Cards and Tasks identified in this Service Bulletin.

You can send an order for the consumables from the AirbusWorld Marketplace through e-ordering (IN 3481-I-00).
If you cannot get access to e-ordering, please contact your Logistic Focal Point.

Special tools:

As per Work Cards and Tasks indicated in this Service Bulletin or equivalent.

2.D. EQUIPMENT OR PARTS TO BE RETURNED

Not applicable.

3. ACCOMPLISHMENT INSTRUCTIONS

3.A. GENERAL

- As per Task 24-00-00-911 (AMM), read and comply with general electrical instructions.
- As per Task 67-00-00-911 (AMM), read and comply with general safety instructions for the flight controls.
- As per Work Card 20-07-03-406 (MTC), read and comply with instructions applicable when working on an aircraft electrical circuit and power generating systems.

Unless differently specified, apply the standard tightening torque values as per Work Card 20-02-05-404 (MTC).

3.B. WORK STEPS

3.B.1. Preliminary steps

- Park the helicopter in a hangar as per Work Card 20-07-02-201 (MTC).
- Install appropriate access equipment.
- Disconnect all electrical power supplies.
- Remove equipment to enable adequate access to the work area.

3.B.2. Procedure

WARNING

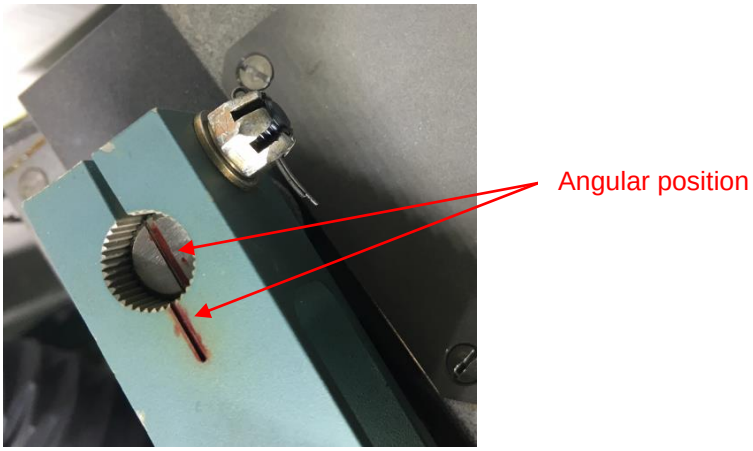
IF THERE ARE NO MARKS ON THE TRIM LEVER AND ON THE OUTPUT SPLINED SHAFT OF THE TRIM ACTUATOR, IDENTIFY THE ANGULAR POSITION OF THE ONE RELATIVE TO THE OTHER (SEE THE EXAMPLE ON THE PICTURE BELOW).

NOTE 1

Depending on the helicopter configuration, it can be necessary to remove the pitch trim as per Task 22-11-01-062 (AMM) and/or the collective trim as per Task 22-11-03-062 (AMM) to apply the corresponding tightening torque.

NOTE 2

When MOD 0722B80 is embodied, the end of the bolt does no longer protrude beyond the end of the castellated hex. nut and is now positioned as shown below.
This assembly is only acceptable for the assembly of trim levers.



3.B.2.a. Replacing the screws and adding washers referring to the two types of lever thickness (Figure 1, Figure 2 and Figure 3)

- Remove and discard (Figure 1):
  . The pin (a)
  . The self-locking nut (b)
  . The castellated hex. nut (c)
  . The washer (d)
  . The screw (e).

NOTE 3

Figure 1 and type of lever will help you identify the items to remove.

CAUTION

IF THE WASHER (3) IS INSTALLED, IT MUST BE DONE WITH THE CHAMFER ON THE BOLT HEAD SIDE.

- Refer to the lever thickness to install (Figure 2 or Figure 3):
  . The bolt (1) or (2)
  . The washer (3) or (6)
  . The castellated hex. nut (4).

NOTE 4

Referring to the lever thickness, the customer will use the KITs that follow:
- For a helicopter with a 18 mm thick lever (CONF 1): 365A08-9649-1071 (Figure 2)
- For a helicopter with a 21 mm thick lever (CONF 2): 365A08-9649-1171 (Figure 3).

NOTE 5

As necessary:
- For 18 mm thick lever: It is possible not to use the washer (3) under the head of the bolt (1)
- For 21 mm thick lever: It is possible not to use the second washer (3) under the head of the bolt (2).

CAUTION

IF DURING THE TIGHTENING PROCEDURE NO SLOT OF THE CASTELLATED HEX. NUT (4) IS ALIGNED WITH THE PIN HOLE OF THE BOLT (1) OR (2) (REFER TO THE LEVER THICKNESS), REMOVE AND DISCARD THE CASTELLATED HEX. NUT (4), INSTALL A NEW CASTELLATED HEX. NUT (4) AND REPEAT THE TIGHTENING PROCEDURE.

- Tighten between the minimum and the maximum value of the torque value range (Figure 2 or Figure 3) until a slot of the castellated hex. nut (4) is aligned with the pin hole of the bolt (1) or (2). Refer to the lever thickness.
- Install the split pin (5).

NOTE 6

If it is not possible to install the split pin (5) on the stacking of the washer (3) and the castellated hex. nut (4):
The customer will use the plain washer (6) as an alternative to the washer (3) under the castellated hex. nut (4).

3.B.3. Tests

- Set the helicopter into test condition.
- Connect all electrical power supplies.
- Energize helicopter systems.
- Perform functional tests as per Task 22-10-00-721A (AMM) for PRE MOD 0722B70 helicopters or Task 22-10-00-721B (AMM) for POST MOD 0722B70 helicopters.
- De-energize helicopter electrical power systems.

3.B.4. Final steps

- Clean the work areas and the helicopter as per Work Card 20-07-03-408 (MTC).
- Install equipment which were removed during preliminary steps (3.B.1.).
- Reconnect all electrical power supplies.
- Clear access equipment.
- Set helicopter into flight condition.

3.C. RECORD OF COMPLIANCE

Compliance with this document:

- Record the full compliance with this Service Bulletin, with the revision number, in the helicopter documents.

- Record the full compliance with this Service Bulletin (see IN 3643-I-00 for instructions):
  QR code or hypertext link

NOTE 7

The recording of compliance with Service Bulletins in the R-Tex tool does not replace the recording in the helicopter documents.

SB EC155-67-013

Tracking of modifications in the documentation:

Record the full embodiment of modification 0767B73 in the helicopter documents.

3.D. OPERATING AND MAINTENANCE INSTRUCTIONS

Not applicable.

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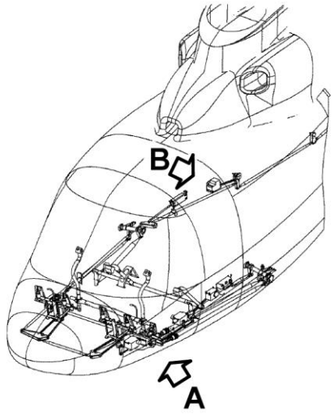
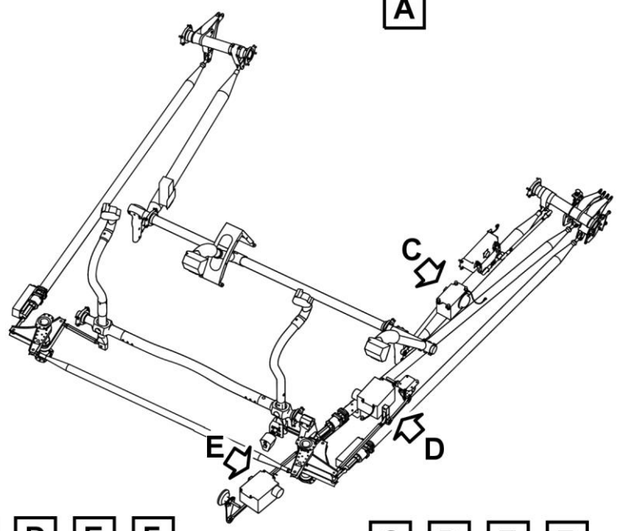
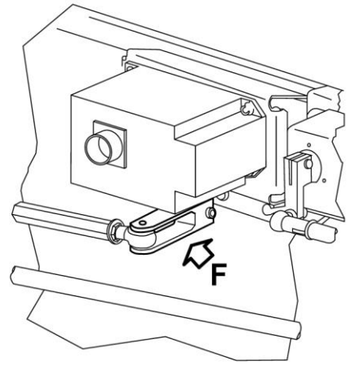
PRE MOD

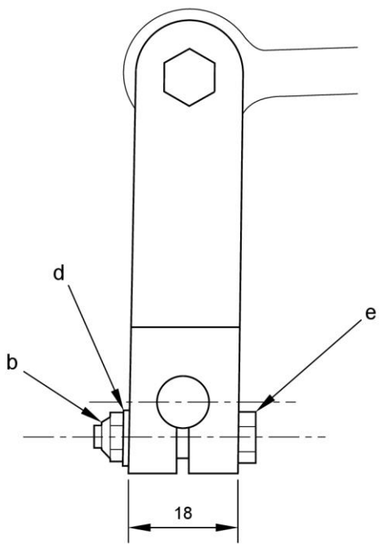
CONF 1: 18 mm THICK LEVER
CONF 2: 21 mm THICK LEVER



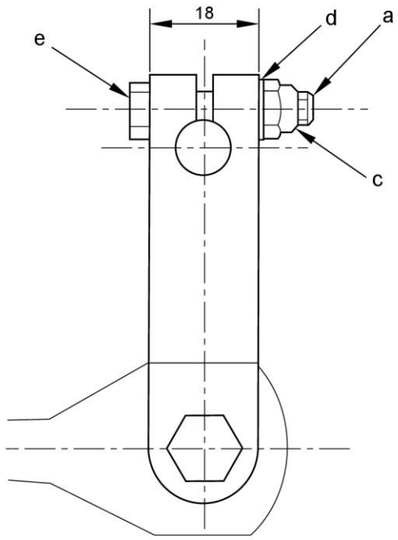




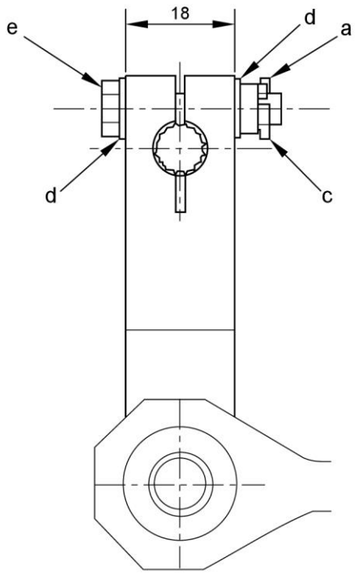
C D E F
TYPE 1
(18 mm THICK LEVER)



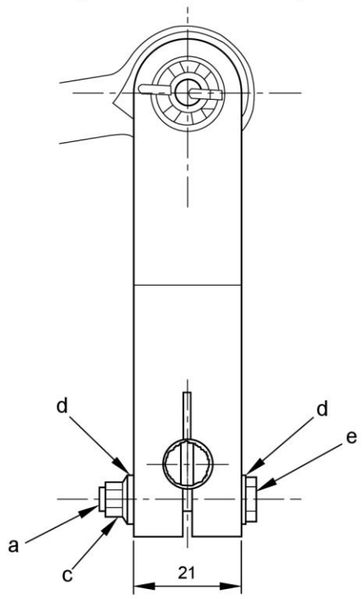
C D E F
TYPE 2
(18 mm THICK LEVER)



C D E F
TYPE 3
(18 mm THICK LEVER)



C D E F
TYPE 4
(21 mm THICK LEVER)



C D E F
TYPE 5
(21 mm THICK LEVER)

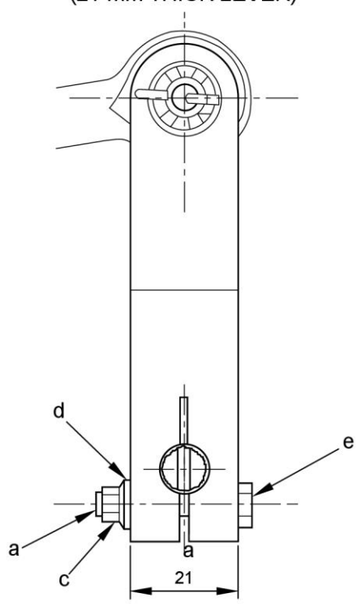


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Figure 1

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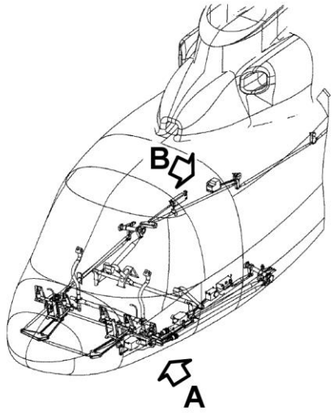
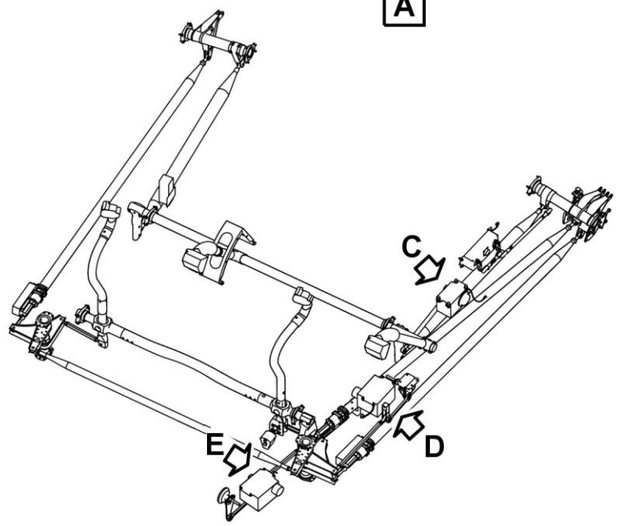
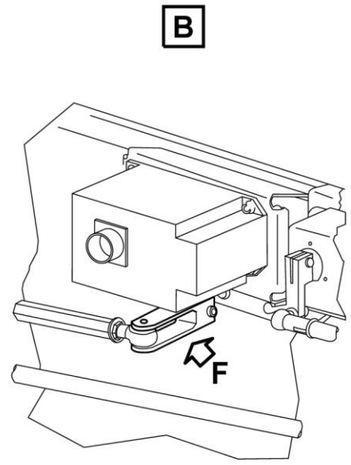
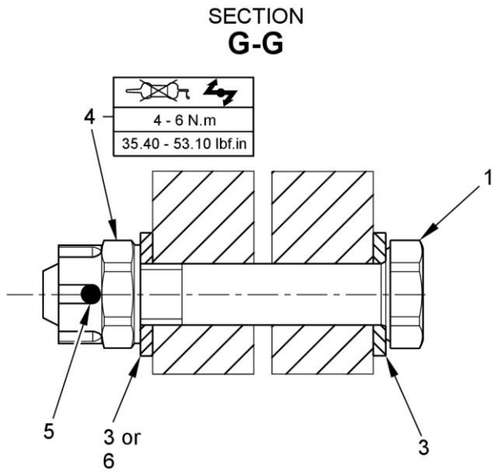


POST MOD



CONF 1: 18 mm THICK LEVER





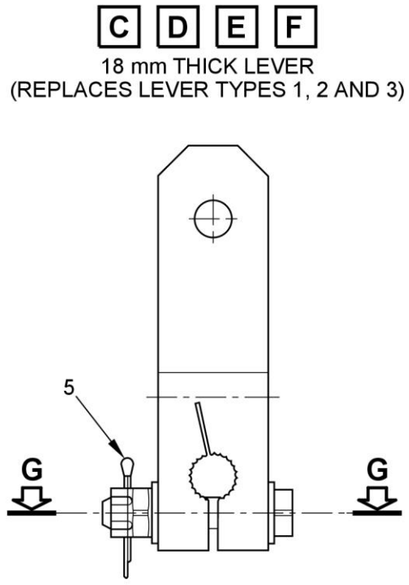


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Figure 2

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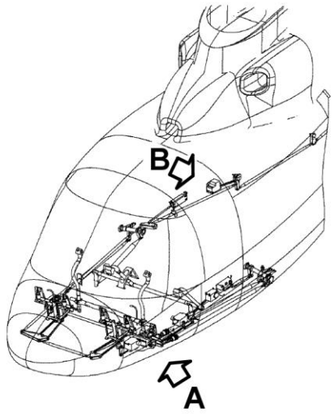
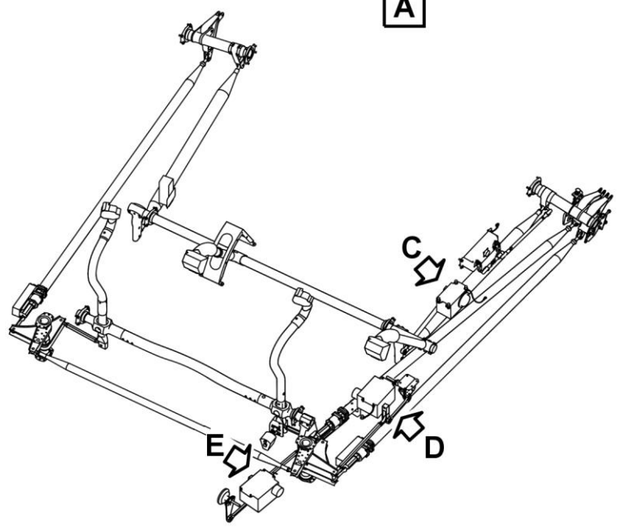


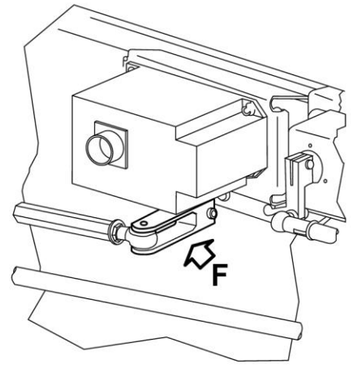
POST MOD

A



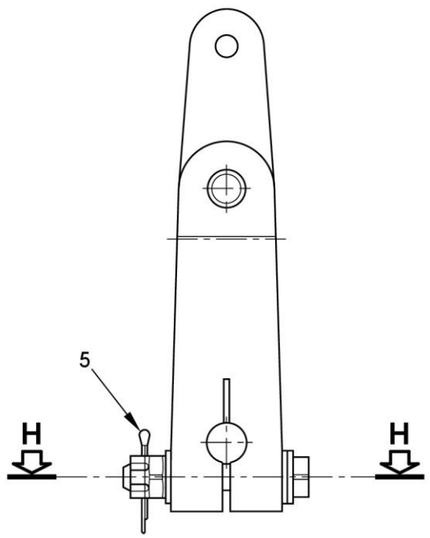
CONF 2: 21 mm THICK LEVER

B



C D E F

21 mm THICK LEVER
(REPLACES LEVER TYPES 4 AND 5)



SECTION
H-H

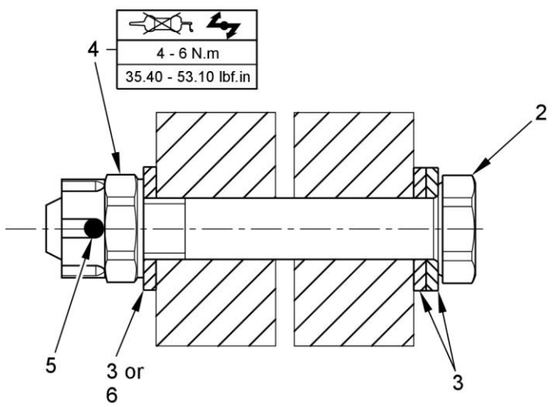


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Figure 3