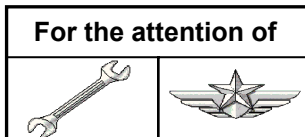


Information Notice

SUBJECT: ENGINE CONTROLS

Use of the twist grip



AIRCRAFT CONCERNED	Version(s)	
	Civil	Military
AS350	B3	
AS550		C3

Information Notice 2169-I-67 informed you about the various types of twist grips that exist for AS350 B3 helicopters and explained the differences in handling according to the twist grip version and the engine (Arriel 2B or Arriel 2B1).

Airbus Helicopters has recently been informed of several cases of overspeed on AS350 B3 helicopters equipped with an Arriel 2B engine. One of the possible causes for this type of event is non-compliance with the Flight Manual procedures.

In this respect, Airbus Helicopters would like to remind you of the following instructions:

- when energizing the helicopter and before starting the engine, the twist grip must be in the "FLIGHT" position and the "TWT GRIP" or "Amber GOV" indicator lights must be off,
- during engine shut-down, the engine must be set to idle using the start-up selector switch,
- after the engine shut-down command, the helicopter electrical power systems must be switched off,
- at the end of a regulating system failure training session, the "AUTO/MANU" selector must be set back to "AUTO" and the twist grip back to the "FLIGHT" detent.

More generally, Airbus Helicopters would also like to remind you that the twist grip must not be used when the EECU is not energized.

In parallel, Airbus Helicopters is modifying AMM Task 76-12-02, 5-2 "Adjustment / Testing - "Forced idle" microswitch - ARRIEL 2B Twist Grip" in order to:

- divide the procedure into two Tasks, depending on whether MOD 073357 (Improved reliability of the twist grip on B3 helicopters with Arriel 2B engine) has been embodied or not:
 - . AMM 76-12-02, **5-2a** if PRE MOD 073357,
 - . AMM 76-12-02, **5-2b** if POST MOD 073357.
- simplify the test procedure (code checks on the VEMD and indicator light checks will be required instead of the strength test).

The draft version of this Task is given below.

Twist grip ARRIEL 2B – Adjustment / Testing

5-2a Adjustment / Testing - "Forced idle" microswitch (before MOD 073357)

A. Applicable Documents

- (1) Main information
AMM 31-61-00, 5-2 Access to and Use of the "MAINT" Mode - VEMD
- (2) Conditional information
None
- (3) General information
AMM 24-00-00, 2-1 Electrical Power Supply on Ground
AMM 24-00-00, 3-1 General Safety Instructions - Electrical Power
Supply System

B. Special Tools

None

C. Materials

None

D. Routine Replacement Parts

None

E. Job set-up

WARNING

APPLY THE ROTOR BRAKE TO AVOID STARTING

CAUTION

DO NOT OPERATE THE TWIST GRIPS IF THEY ARE CONNECTED TO THE
ENGINE REGULATOR WITHOUT HAVING ENERGISED THE AIRCRAFT AND "FADEC"
BEFOREHAND

- (1) Comply with the general safety instructions for the electrical power supply system (AMM 24-00-00, 3-1)
- (2) Disconnect 'STARTING' breaker on PP9

- (3) Check that the start selector switch is on 'OFF'
- (4) Check that the twist grip is on 'FLIGHT'

F. Procedure

- (1) Energize the helicopter systems (AMM 24-00-00, 2-1)
 - o Amber 'GOV' and red 'GOV' warnings appear and go out.
- (2) Set VEMD to maintenance mode (AMM 31-61-00, 5-2)
- (3) Select 'FADEC DATA' page on VEMD
 - o Amber 'GOV' warning appears
 - o On the VEMD, 'LOG IN' line indicates 'XX0C'
- (4) Set 'AUTO/MAN' switch to 'MAN'
 - o Red 'GOV' warning appears
 - o On the VEMD, 'LOG IN' line indicates 'XX8C'
- (5) Set starting switch to 'IDLE' position
 - o On the VEMD, 'LOG IN' line indicates 'XXA4'
- (6) Set starting switch to 'ON' position
 - o On the VEMD, 'LOG IN' line indicates 'XX94'
- (7) Move twist grip out of 'FLIGHT' notch
 - o Red warning 'TWT GRIP' appears
 - o On the VEMD, 'LOG IN' line indicates 'XX90'
- (8) Move twist grip to 'MIN' position
 - o On the VEMD, 'LOG IN' line indicates 'XXA0'
- (9) Move twist grip to 'FLIGHT' position
 - o Red warning 'TWT GRIP' goes off
 - o On the VEMD, 'LOG IN' line indicates 'XX94'
- (10) Set starting switch to 'OFF' position
 - o On the VEMD, 'LOG IN' line indicates 'XX8C'
- (11) De-energize the helicopter systems (AMM 24-00-00, 2-1)
- (12) Engage 'STARTING' breaker on PP9
- (13) Set 'AUTO/MAN' switch to 'AUTO'

(14) Energize the helicopter systems (AMM 24-00-00, 2-1)

(15) Amber 'GOV' and red 'GOV' warnings appear and go out

(16) 'TWIST GRIP' warning is off.

G. Job close-up

(1) De-energize the helicopter systems (AMM 24-00-00, 2-1).

(2) Release the rotor brake

DRAFT

Twist grip ARRIEL 2B – Adjustment / Testing

5-2b Adjustment / Testing - "Forced idle" microswitch (after MOD 073357)

A. Applicable Documents

- (1) Main information
AMM 31-61-00, 5-2 Access to and Use of the "MAINT" Mode - VEMD
- (2) Conditional information
None
- (3) General information
AMM 24-00-00, 2-1 Electrical Power Supply on Ground
AMM 24-00-00, 3-1 General Safety Instructions - Electrical Power
Supply System

B. Special Tools

None

C. Materials

None

D. Routine Replacement Parts

None

E. Job set-up

WARNING

APPLY THE ROTOR BRAKE TO AVOID STARTING

CAUTION

DO NOT OPERATE THE TWIST GRIPS IF THEY ARE CONNECTED TO THE
ENGINE REGULATOR WITHOUT HAVING ENERGISED THE AIRCRAFT AND "FADEC"
BEFOREHAND

- (1) Comply with the general safety instructions for the electrical power supply system (AMM 24-00-00, 3-1)
- (2) Disconnect the breaker 'STARTING' on PP9

- (3) Check that the start selector switch is on 'OFF'
- (4) Check that the twist grip is on 'FLIGHT'

F. Procedure

- (1) Energize the helicopter systems (AMM 24-00-00, 2-1)
 - o Amber 'GOV' and red 'GOV' warnings appear and go out.
- (2) Set VEMD to maintenance mode (AMM 31-61-00, 5-2)
- (3) Select 'FADEC DATA' page on VEMD
 - o Amber 'GOV' warning appears
 - o On the VEMD, 'LOG IN' line indicates 'XX0C'
- (4) Set 'AUTO/MAN' switch to 'MAN'
 - o Red 'GOV' warning appears
 - o On the VEMD, 'LOG IN' line indicates 'XX8C'
- (5) Set starting switch to 'IDLE' position
 - o On the VEMD, 'LOG IN' line indicates 'XXA4'
- (6) Set starting switch to 'ON' position
 - o On the VEMD, 'LOG IN' line indicates 'XX94'
- (7) Move twist grip out of 'FLIGHT' notch
 - o Red warning 'TWT GRIP' appears
 - o On the VEMD, 'LOG IN' line indicates 'XX90'
- (8) Move twist grip to 'MIN' position
 - o On the VEMD, 'LOG IN' line indicates 'XXA0'
- (9) Move twist grip to 'FLIGHT' position
 - o Red warning 'TWT GRIP' goes off
 - o On the VEMD, 'LOG IN' line indicates 'XX94'
- (10) Set starting switch to 'OFF' position
 - o On the VEMD, 'LOG IN' line indicates 'XX8C'
- (11) Set starting switch to 'ON' position
 - o On the VEMD, 'LOG IN' line indicates 'XX94'

- (12) Move twist grip to 'MIN' position
 - o Red warning 'TWT GRIP' appears
 - o On the VEMD, 'LOG IN' line indicates 'XXA0'

 - (13) Disconnect the breaker 'GOV' on PP6 on lateral breaker panel
 - o On the VEMD, 'LOG IN' line indicates 'XXB0'
 - o Red 'GOV' and amber 'GOV' warnings go off
 - o Red warning 'TWT GRIP' goes off

 - (14) Move twist grip to 'FLIGHT' position
 - o On the VEMD, 'LOG IN' line indicates 'XX94'

 - (15) Set starting switch to 'OFF' position
 - o On the VEMD, 'LOG IN' line indicates 'XX8C'

 - (16) De-energize the helicopter systems (AMM 24-00-00, 2-1)

 - (17) Engage the breaker 'GOV' on PP6 on lateral breaker panel

 - (18) Engage the breaker 'STARTING' on PP9

 - (19) Set 'AUTO/MAN' switch to 'AUTO'

 - (20) Energize the helicopter systems (AMM 24-00-00, 2-1)

 - (21) Amber 'GOV' and red 'GOV' warnings appear and go out

 - (22) 'TWIST GRIP' warning is off
- G. Job close-up**
- (1) De-energize the helicopter systems (AMM 24-00-00, 2-1).
 - (2) Release the rotor brake