

## **SUPPLEMENT No. 13**

### **INSTALLATION OF THROTTLE LEVER L.H.**

This Supplement must be included in the Z 143 L - Z 143 LSi Airplane Maintenance Manual (Doc. No. 005.022.2), Chapter 95, the throttle lever L.H., Drwg. No. L 143.7301 when is installed.

The information contained herein supplements or supersedes the information in Airplane Maintenance Manual (Doc .No. 005.022.2).

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**EFFECTIVITY: ALL**

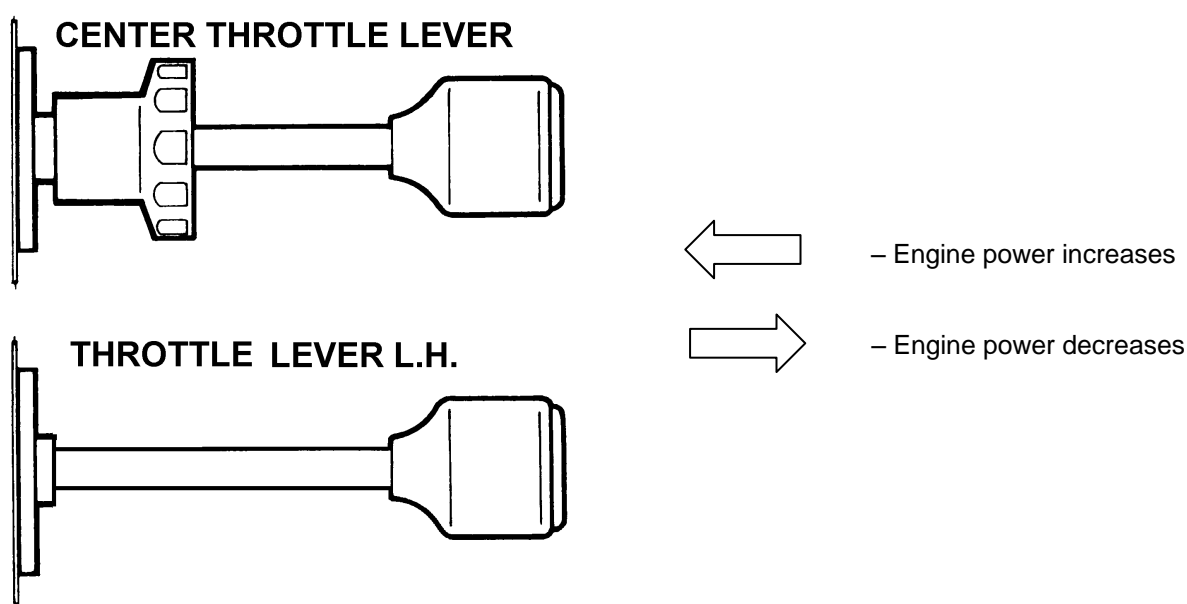
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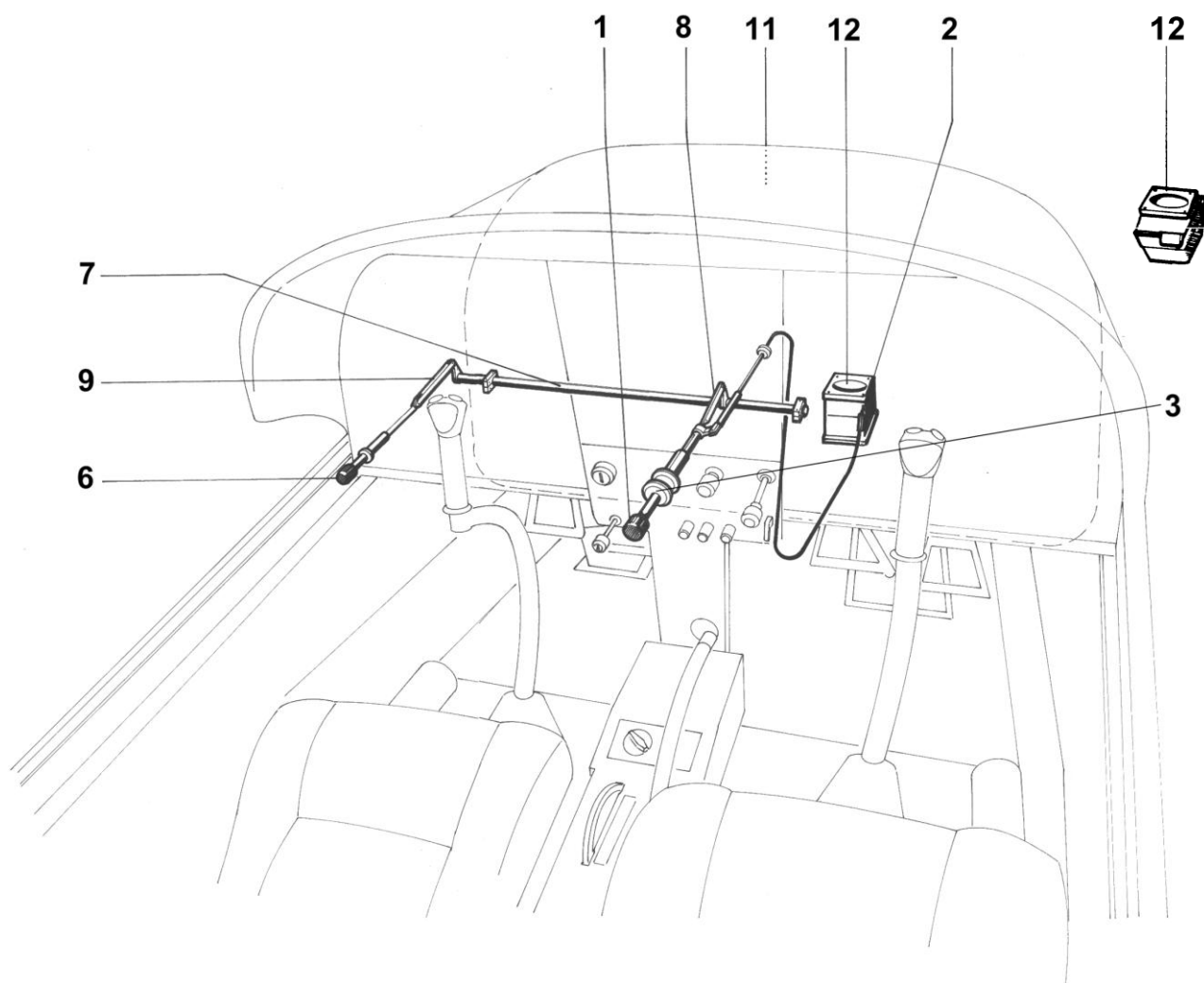
Chapter Section / Subsection Item	Page	Date	Effectivity
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# POWER CONTROL

## DESCRIPTION AND OPERATION

The engine power is controlled (increased/decreased) by two throttle lever (Fig. 1, item. 1, 6). The movement of throttle lever in cockpit is transferred to the lever of power control (2) by Teleflex cable. Pushing the throttle lever in cockpit increases the engine power while pulling decreases the power. The friction of throttle lever is adjustable by tightening/releasing the nut (3) upon the throttle lever (1). The throttle lever (1) is located in console under the instrument panel; the throttle lever (6) is located on L.H. instrument panel.





- 1 ... Throttle lever
- 2 ... Power control lever
- 3 ... Nut
- 4 ... -
- 5 ... -
- 6 ... Throttle lever
- 7 ... Countershaft
- 8 ... Clip
- 9 ... Pull rod

For information only:

11 ... Fire wall

12 ... Injector (Z 143 LSi) or Carburetor (Z 143 L)

*Fig. 1 Power Control*

**EFFECTIVITY: ALL**

## **MAINTENANCE**

### **REMOVAL AND INSTALLATION**

#### **REMOVAL OF POWER CONTROL**

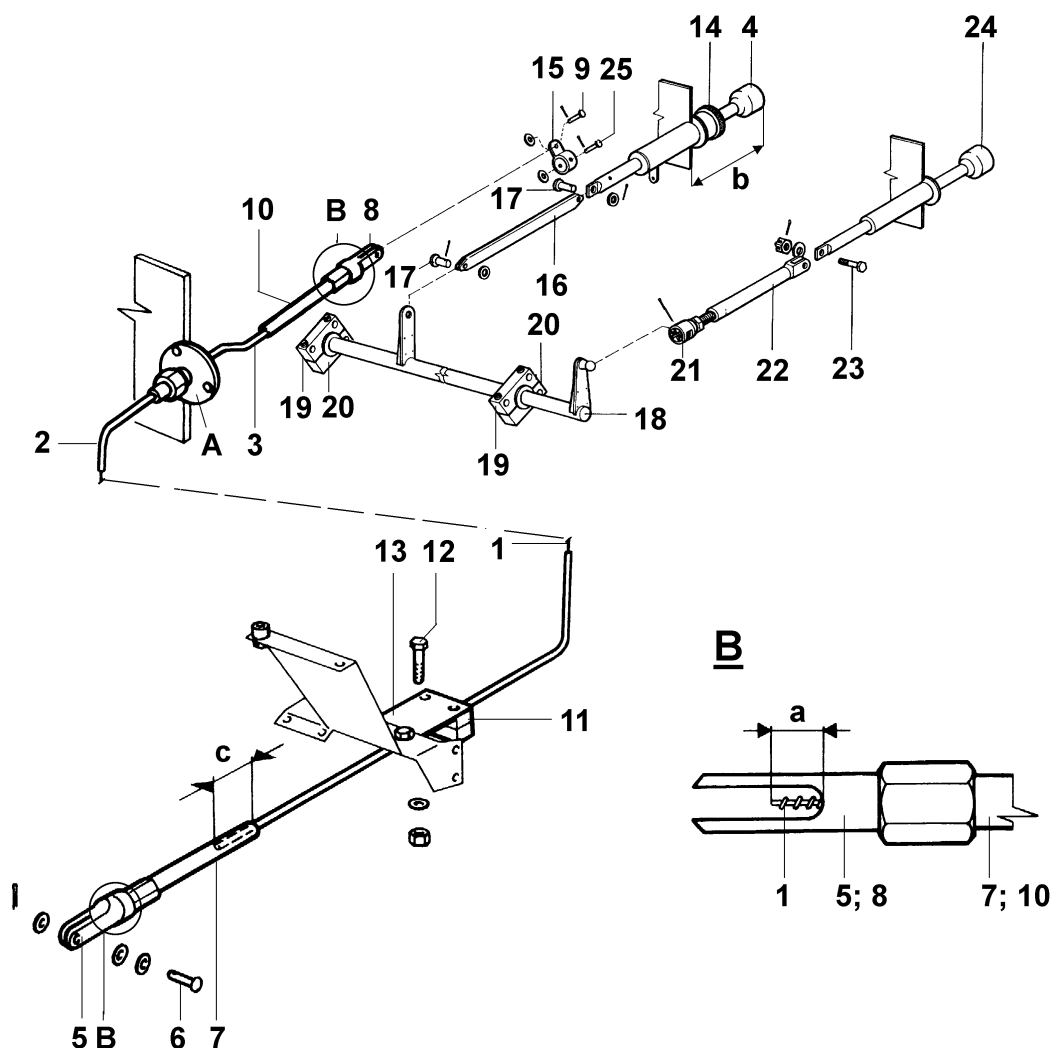
##### **Preparatory works**

- a) Open side cowlings (Fig. 71-1, item 4).
- b) Set the fwd seats to very aft position.

##### **Removal of Teleflex Cable with Tubes of Engine Power Control**

- a) Push the throttle lever (Fig. 2, item 4) to the console.
- b) Pull cotter pin out and slide pin off the suspension to disjoin the fork (5) from the power control lever.
- c) Unlock and unscrew fork (5) from the guide (7) and remove guide from the fwd tube (2).
- d) Remove screws (12) from the support (11) to release fwd tube (2).
- e) Unlock and unscrew cap nut (Fig. 76-2A, item 5).
- f) Pull cotter pin out remove washer, and slide pin (Fig. 2, item. 9) off the suspension to disjoin fork (8) from the eye (15).
- g) Unlock and unscrew fork (8) from the guide (10). Remove guide from the aft tube (3).
- h) Pull theTeleflex cable (1) from the tube. Pull the fwd (2) and aft (3) tubes from the bushing (A) in firewall to the space of engine compartment.

**EFFECTIVITY: ALL**



A ... Bushing in firewall (Fig. 76-2A)

B ... Overhanging of Teleflex cable to fork (5; 8)

a ... Overhanging of Teleflex cable to the forks; a = 10 mm (0.4 in)

b ... Distance between face of throttle lever and console; b = 120 mm (4.72 in)

c ... Length of insertion of tube to guide; c = 35 mm (1.4 in)

1 ... Teleflex cable

2 ... Fwd tube

3 ... Aft tube

4 ... Throttle lever

5 ... Fork

6 ... Pin

7 ... Guide

8 ... Fork

9 ... Pin

10 ... Guide

11 ... Support

12 ... Screw

13 ... Flat springs

14 ... Nut

15 ... Eye

16 ... Clip

17 ... Pin

18 ... Countershaft

19 ... Upper cube

20 ... Lower cube

21 ... Ball journal

22 ... Pull rod

23 ... Screw

24 ... Throttle lever L.H.

25 ... Pin

Fig. 2 Center and L.H power control

EFFECTIVITY: ALL

### **INSTALLATION OF POWER CONTROL**

- a) Insert aft insertion piece (Fig. 76-2A, item 6) and aft tube (3) into bushing body (4) from the front side.
- b) Insert Teleflex cable (Fig. 2, item 1) greased with Aero Shell Grease 22 + 3% MOLYKOTE grease into aft tube.
- c) Provide bushing body (4) from fwd side with ring (8), fwd tube (2) and fwd insertion piece (7). Screw and tighten the cap nut (5), with 20 Nm (14.8 lbf.ft) torque.
- d) Make sure the center punches (9) of tubes (2; 3) are about 5 to 7 mm i.e. 0.2 to 0.28 in (dimension **a**) from the face of insertion pieces (7; 6).
- e) Lock the cap nut (5) with safety wire (A).
- f) Join Teleflex cable (Fig. 2, item 1) with the shaft of power control:
  - Insert guide (10) upon the aft tube (3) and insert fork (8) upon teleflex cable (1); to overhang for about 10 mm, i.e. 0.4 in (dimension **a**);
  - Screw the guide (10) upon the fork (8) and lock it after tightening with safety wire;
  - Join fork (8) by means of pin (9) with the eye (15). Provide pin with washers and lock the join with cotter pin.
- g) Join the fwd tube (2) to engine console:
  - Provide fwd tube with support (11) and join it to two flat springs by screws (12) with washers and nuts.
- h) Set the throttle lever (4) to be with its face 120 mm i.e. 4.72 in (dimension **b**) from the console.
- i) Insert guide (7) upon fwd tube (2) and fork (5) upon teleflex cable (1).
- j) Join the fork (5) by pin (6) provided with washers to the power control lever set to TAKE-OFF POWER. Lock the joining pin with washers by stainless steel cotter pin.
- k) Screw the guide (7) upon the fork (5) and lock it after tightening with safety wire.

### **NOTE**

The Teleflex cable should overhand into the fork (5) for about 10 mm, i.e. 0.4 in (dimension **a**). The fwd tube (2) should be inserted in the guide (7) for about 35 mm, i.e. 1.4 in (dimension **c**).

### **Final works**

- a) Adjust power control at idle run, i.e. at 600 RPM after engine warm-up:
  - Push the propeller controller to the very end to maximum propeller speed and set prescribed speed by throttle lever;
  - Cut off engine and adjust aft power control lever stop of injector to the set position.
- b) Start up the engine and check correct setting of power control.
- c) Shut side engine cowlings (Fig. 71-1, item 4).

## **APPROVED REPAIRS**

### **REPAIRS OF POWER CONTROL**

See Subsection 76-10-00.

**EFFECTIVITY: ALL**

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