

**CHAPTER**

**52**

**DOORS**



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## GENERAL

Fwd section of cockpit is covered with sliding canopy (Fig. 52-1), that enables crew and passenger embarking and debarking. The canopy opens sliding fwd and it is provided with emergency jettisoning.

**EFFECTIVITY:** All

**52-00-00**

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# SLIDING COCKPIT CANOPY

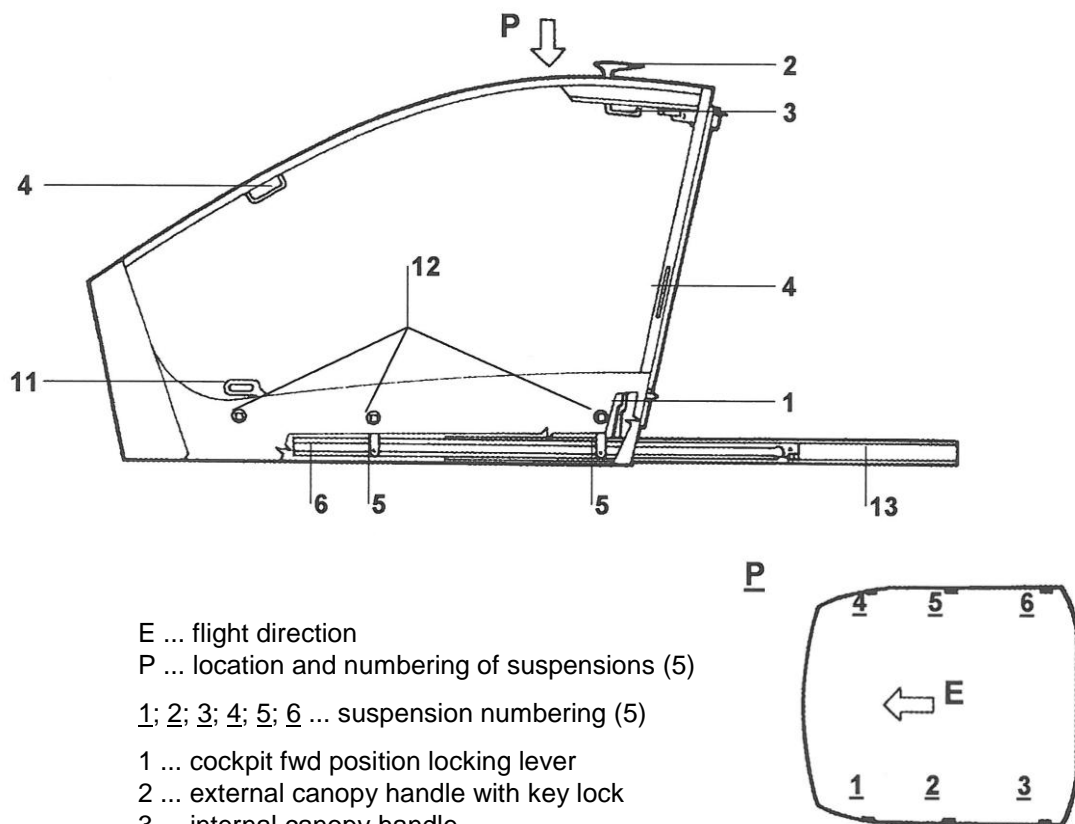
## DESCRIPTION AND OPERATION

### CAUTION

DO NOT OPEN THE COCKPIT CANOPY IF THE ENGINE COWLINGS ARE OPEN.

The canopy is opened by sliding it fwd. The canopy locking in fwd position is made by locking lever (Fig. 52-1, item 1) that is on the left side of sliding cockpit canopy. The canopy in shut position is locked by lock controlled by handle (2, 3) upon the upper side of canopy. The cockpit canopy may during airplane parking locked by key.

The cockpit canopy is equipped with emergency jettisoning (section 52-20-00).

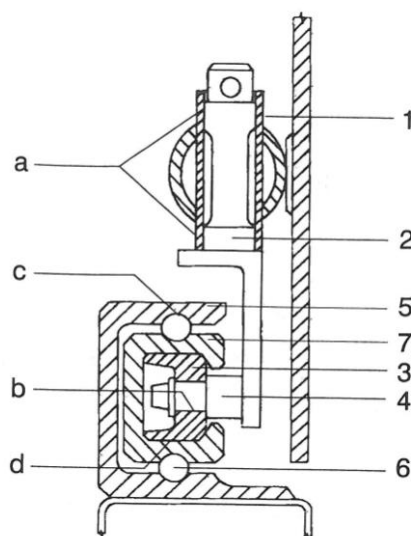


- E ... flight direction  
 P ... location and numbering of suspensions (5)
- 1; 2; 3; 4; 5; 6 ... suspension numbering (5)
- 1 ... cockpit fwd position locking lever  
 2 ... external canopy handle with key lock  
 3 ... internal canopy handle  
 4 ... handle  
 5 ... suspensions  
 6 ... L., R. sliding rail

For information only:  
 11 ... canopy emergency jettisoning lever  
 12 ... locking holes in paint  
 13 ... L., R. fixed rail

Fig. 52-1 Sliding cockpit canopy

EFFECTIVITY: All



Joint	Item	Name	Dimensions (mm)			
			Original			Operation
			D1	T1	V min./max.	T2 max.
a	1	Suspension bushing	Ø 10 H8	+ 0,022 0	$\frac{0,013}{0,057}$	+ 0,035
	2	Suspension	Ø 10 f8	- 0,013 - 0,035		- 0,045
b	3	Pulley	Ø 6 H7	+ 0,012 0	$\frac{0,010}{0,034}$	+ 0,020
	4	Pin	Ø 6 f7	- 0,010 - 0,022		- 0,035
c	5	L., R. fixed rail	31	+ 0,100 0	$\frac{0,134}{0,338}$	+ 0,200
	6	Ball	Ø 4,982	+ 0,001 - 0,001		
	7	L., R. extensible rail	20,9	0 - 0,100		- 0,200
d	7	L., R. extensible rail	16,2	+ 0,200 0	$\frac{0,200}{0,600}$	+ 0,300
	3	Pulley	Ø 16	0 - 0,200		- 0,300

Fig. 52-2 Dimensions, allowances and plays in sliding canopy suspensions and fittings

EFFECTIVITY: All

## **REMOVAL**

### **REMOVAL / INSTALLATION**

#### **REMOVAL OF SLIDING COCKPIT CANOPY**

##### **CAUTION**

REMOVE THE SLIDING COCKPIT CANOPY WITH THE ASSISTANCE OF OTHER PERSON.

##### **Preparatory works**

- a) Shut engine side cowlings (Fig. 71-1, item 4).

##### **Removal of sliding cockpit canopy**

- a) Slide the cockpit canopy forward.
- b) Hold cockpit canopy and suspensions (Fig. 52-1, item 5) number 1 and 4 to prevent their falling out. Pull at the lever (11) of emergency canopy jettisoning and the suspensions (5) get released.
- c) Remove suspensions (5) number 1 and 4.
- d) Lift the canopy to release it and remove it from the airplane.
- e) Remove suspensions (5) number 2; 3; 5 and 6 from the extensible rails (6).

#### **INSTALLATION OF SLIDING COCKPIT CANOPY**

##### **CAUTION**

FIT SUSPENSIONS (Fig. 52-1, item 5) INTO THE EXTENSIBLE RAILS (6) IN ORIGINAL LOCATIONS (detail P).

- a) Grease following parts (subsection 05-21-00):
  - cockpit canopy guide with extensible rails (6)
  - canopy jettisoning mechanism
  - locking mechanism of open canopy
  - suspensions (5).
- b) Fit suspensions (5) into the extensible rails (6):
  - insert suspensions number 1; 2; 4 and 5 from front side.
  - insert suspensions 3 and 6 from behind (through) the hole in side of extensible rails.
- c) Pull the lever (11) backward, fit the sliding cockpit canopy from upward upon the suspensions (5), set lever (11) forward and the locking pins (Fig. 52-3, item 2) lock the suspensions.

##### **NOTE**

Install sliding cockpit canopy with the help of two assistants.

- d) Check through the inspection windows in paint (Fig. 52-1, item 12) locking of suspensions (5) by locking pins.
- e) Make sure the canopy opens and shuts freely and canopy locking/unlocking by handle is serviceable (2; 3).
- f) Lock the lever (11) in fwd position by thread of 85 to 95 N (19 to 21 lbs) strength and provide thread with seal.

**EFFECTIVITY: All**



## **INSPECTION / CHECK**

### **CHECK OF UNLOCKING, SLIDING AND LOCKING OF SLIDING COCKPIT CANOPY**

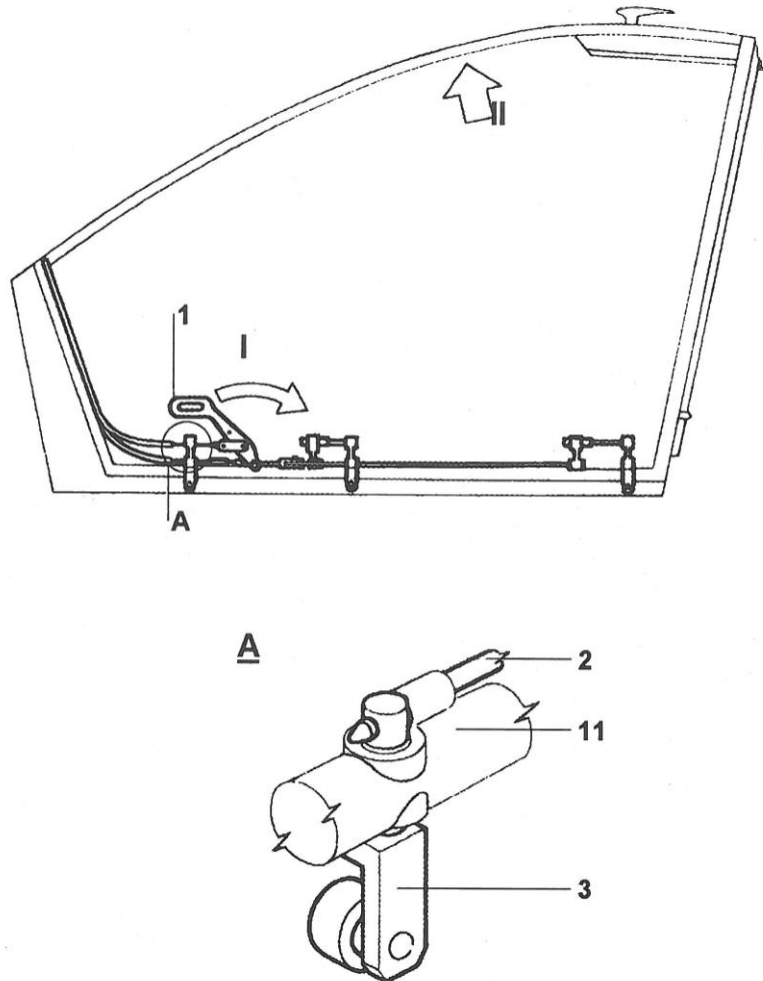
- a) Check canopy unlocking by canopy handle and canopy sliding by repeated canopy movement fully fwd and rear.  
The lock unlocking should be simple and canopy sliding light and continuous.
- b) Check shutting the sliding canopy and its locking in shut position.  
The canopy shutting should be possible by light pushing upon internal or external canopy handles (Fig. 52-1, item 4) followed by canopy locking in position by canopy locking handle. Canopy locking by canopy locking handle should be simple and reliable. The canopy as soon as shut reliably, should be tight all along the canopy periphery. The play between canopy and other parts of fuselage should be  $4 \pm 2$  mm ( $0,16 \pm 0,08$  in).

# **CANOPY EMERGENCY JETTISONING**

## **DESCRIPTION AND OPERATION**

Emergency canopy jettisoning is controlled by canopy jettisoning lever (Fig. 52-3, item 1) upon left side of cockpit canopy. Pulling the canopy jettisoning lever unlock the canopy suspensions (detail A) by releasing the suspensions (3) by locking pins (2). Pushing by hands upon canopy upwards causes canopy jettisoning.

Canopy jettisoning levers (1) are locked in fwd position with threads of 85 to 95 N (19 to 21 lbs) strength and seal.



I ... direction of lever (1) movement during canopy jettisoning

II ... direction of pushing to canopy

A ... locking of canopy suspension

1 ... L., R. canopy jettisoning levers

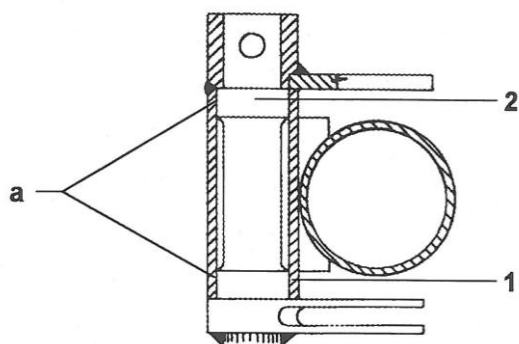
2 ... locking pin

3 ... suspension

For information only:

11 ... canopy frame

*Fig. 52-3 Emergency canopy jettisoning*



Joint	Item	Name	Dimensions (mm)			
			Original			Operation
			D1	T1	V min./max.	T2 max.
a	1	Mechanism bushing	Ø 10 H8	+ 0,022 0	$\frac{0}{0,044}$	+ 0,030
	2	Mechanism shaft	Ø 10 h8	0 - 0,022		- 0,030

Fig. 52-4 Dimensions, allowances and plays of shaft fitting of canopy jetissoning mechanism

## **MAINTENANCE**

### **INSPECTION / CHECK**

#### **SERVICEABILITY CHECK OF CANOPY JETTISONING MECHANISM**

##### **CAUTION**

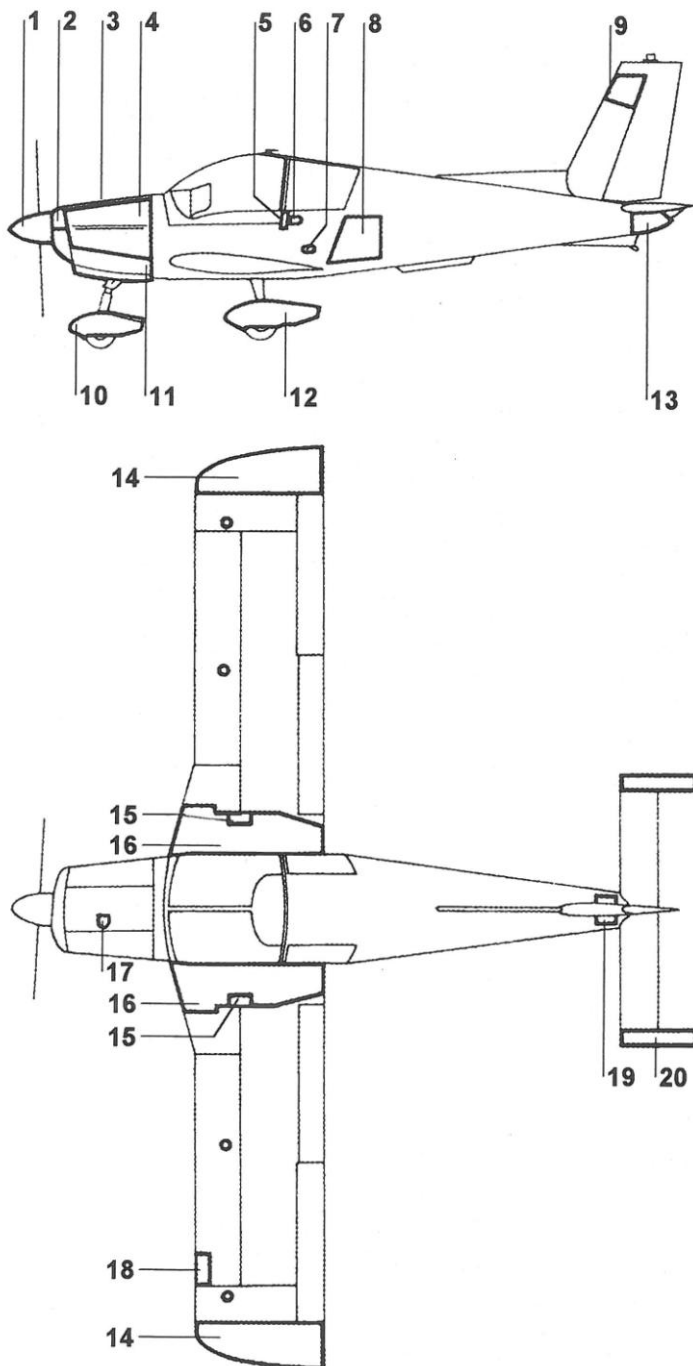
THE OPERATION OF CANOPY JETTISONING MECHANISM SHOULD BE CONTINUOUS WITHOUT SEIZING AND EXCESSIVE FRICTION. REMOVE CANOPY AND GREASE IF NECESSARY THE CANOPY JETTISONING MECHANISM.

- a) Set one canopy jettisoning lever fully backward.
- b) Check through the check view ports in glazing (Fig. 52-1, item 12) if the suspensions of canopy are unlocked with locking pins (Fig. 52-3, item 2) that should be slid off the holes in suspension pins (3).
- c) Set canopy jettisoning lever fully forward and check through the view ports in paint if all the suspensions are locked, i.e. if all the locking pins are in the holes of suspension pins.
- d) Repeat check of serviceability of canopy jettisoning using the other canopy jettisoning lever on the other side of cockpit according to paragraphs a), b), c).
- e) Lock the canopy jettisoning levers in fwd position with 85 to 95 N (19 to 21 lbs) strong thread and provide thread with seal.

**EFFECTIVITY: All**

# COVERS, TIPS AND DOORS

This chapter contains covers, tips and doors of the airplanes Z 143 L, Z 143 LSi and their fastening.



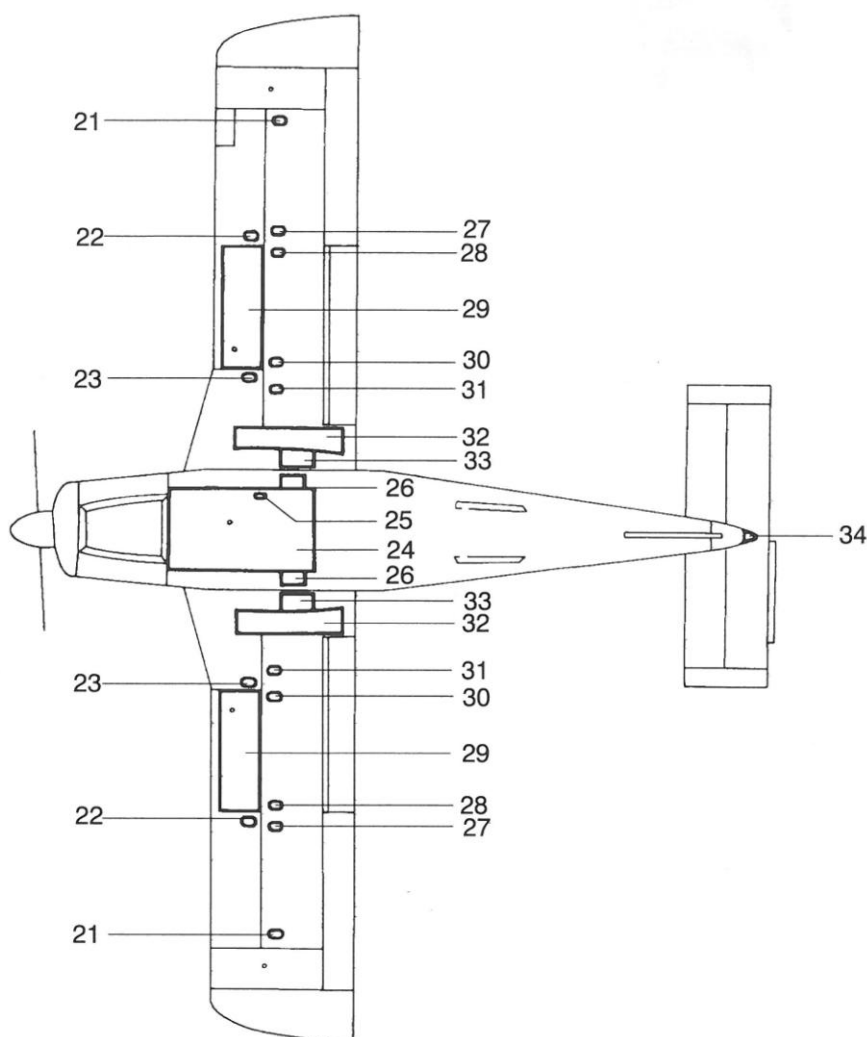
- 1 ... propeller spinner  
- screwed
- 2 ... fwd engine cowling (Note)
- 3 ... upper engine cowling (Note)
- 4 ... L., R. side engine cowling (Note)
- 5 ... cover of auxiliary lamp  
micro-switch -screwed
- 6 ... L., R. cover of passenger  
compartment venting - screwed
- 7 ... external power source connector  
access port door - tilting
- 8 ... door of bottom cargo  
compartment – may be locked
- 9 ... fin upper tip that covers  
navigation antenna - screwed
- 10 ... nose wheel fairing
- 11 ... bottom engine cowling (Note)
- 12 ... L., R. main landing gear wheels  
fairings
- 13 ... rear fuselage tip that covers tail  
unit controls and stabilizer support  
- screwed
- 14 ... L., R. wingtip - screwed
- 15 ... L., R. upper wing mount cover -  
screwed
- 16 ... L., R. wing center section panel -  
screwed
- 17 ... engine cowling upper access  
port door – access to oil dipstick
- 18 ... taxi/landing light cover - joined  
by means of shims
- 19 ... upper rear cover of rear fuselage  
section that covers stabilizer  
mounts, control of trim tab and  
rudder control - screwed
- 20 ... L., R. elevator tip that covers  
mass balance of elevator -  
screwed

### **NOTE**

The engine covers are described in section 71-10-00.

*Fig. 52-5 Access port covers, door and tips  
(page 1 of 2)*

**EFFECTIVITY: All**



- 21 ... access port door of L., R. auxiliary fuel tank check
- 22 ... access port door of L., R. wing fuel system check
- 23 ... access port door of L., R. aileron control and fuel system in L., R. wing
- 24 ... bottom fuselage panel that covers controls and fwd fuselage section systems - screwed up to airplane S/N 0024 and joined by fast fasteners from the S/N 0025
- 25 ... access port doors for check of pitot-static system water traps
- 26 ... cover of L., R. main landing gear mount - screwed up to airplane S/N 0024 and joined by fast fastener from the S/N 0025
- 27 ... access port doors for check of L., R. aileron control
- 28 ... access port doors for check of L., R. wing spars
- 29 ... bottom wing panel under the L., R. main fuel tank - screwed
- 30 ... access port doors for check of L., R. main wing spars
- 31 ... access port doors for check of L., R. wing flaps
- 32 ... access port covers of L., R. bottom and rear wing mounts - screwed
- 33 ... L., R. bottom wing center section panels - screwed
- 34 ... cover of elevator control - screwed

*Fig. 52-5 Access port covers, doors and tips  
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