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MANDATORY
SERVICE
BULLETIN

MANDATORY BULLETIN Z 242L/7a - Rev. 1

Supersedes Mandatory Bulletin Z 242L/7a dated January 31, 1994

1. MODEL AFFECTED: Z 242L airplanes S/N 0541 and 0651 up to 0659 inclusive, if they shall be registered in the U.S.A. or in another country where the Z 242L airplane was certificated on the basis of the FAA Type Certificate No. A76EU, or in Canada. The airplanes S/N 0660 and up are manufactured in compliance with this Bulletin.
2. SUBJECT: Modifying all manufactured Z 242L aircraft to conform with the approved configuration in accordance with the Master Drawing No. L 242.0020.
3. CORRECTION: Modify the aircraft as follows:
1. Install the doubled control system of the trim tab and balance tab.
 2. Modify the Alternate static pressure source to meet the required tolerances.
 3. Install the guide rollers at the longitudinal trim control cable pulleys.
 4. Install the release-catch in front of the "OFF" position at the fuel selector valve knob.
 5. Apply the placard with baggage shelf loading limitations.
 6. Apply the protective coat onto the composite parts of engine cowls and fuselage covers to improve their heat resistance.
 7. Replace the composite bottom cover of the fuselage with the one made of light-alloy sheet.
 8. Install the drain valves into oil and the fuel systems.

4. TIME OF COMPLIANCE: By the time of presenting application for the airplane registration in the U.S.A. or in another country where the Z 242L airplane was certificated on the basis of the FAA Type Certificate No. A76EU, or in Canada and, by the time of the airplane demonstration before registration performed by Aviation Authorities of above-mentioned countries.
5. PERFORMED BY: The manufacturer's Customer Service.
6. EXPENSES COVERED BY: The manufacturer: Aircraft S/N 0541, 0654, 0656.
The user: Aircraft S/N 0651, 0652, 0653, 0655, 0657, 0658, 0659.
7. NECESSARY MATERIAL: Is Specified in the Appendices of this Bulletin; will be delivered by the manufacturer on the order basis.
8. PROCEDURE: Is described in enclosed Appendices.
9. THE BULLETIN IS EFFECTIVE WITHIN 30 DAYS FROM THE DATE OF APPROVAL BY THE CIVIL AVIATION INSPECTORATE.
10. ENCLOSURE: Material and work sheets for individual operations (8 Appendices, 16 pages total).


Ing. Antonín Partika

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Manufacturer's
Representative


Ing. Milan Vyhnálek

.....
CAI Representative

26. 6. 1995
.....
Date of approval by the CAI

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Appendix No.1

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1. Installation of the doubled control rods of the trim tab and the balance tab.

- 1.1. The material necessary for one aircraft :

All material which is necessary for carrying out this modification is specified in the Drawings (See para. 1.2.)

- 1.2. Doubling the trim tab and the balance tab control rods shall be accomplished by the manufacturers authorised mechanic in accordance with the following drawings :

- Z 143-S 151
- Z 143-S 151-01
- Z 143-S 151-01.01
- Z 143-S 151-02
- Z 143-S 151-03
- Z 143-S 151-04
- Z 143-S 152
- Z 143-S 152-01

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2. Modification of the Alternate static pressure source arrangement
Drwg. No. L 242.8257 to the L 242.8258 one.

2.1. The material necessary for one aircraft :

Item 1	- Hoses assembly	
Item 2	- Probe	Part.No. L 242.8258-00.05
Item 3	- Probe cover	Part No. L 242.8258-00.06
Item 4	- Nut	M 8x1 ČSN 02 1403.24
Item 5	- Sealing ring	8x12 ČSN 02 9310.3
Item 6	- Binding wire	
Item 7	- Varnish	C 2001/8140 /Not delivered - any appropriate for securing the nut (4)/ 850-429.2
Item 8	- Placard	

2.2. Procedure :

1. Drill the hole \varnothing 8,5 in the firewall - See Fig. 1.
2. Install the probe assembly (which consists of Items 2 through 5) into the hole - See Fig.2 Bend the probe cover (Item 3) into the required shape using the roller \varnothing 10. Secure the nut (Item 4) with a drop of the varnish (Item 7).
3. Install the hoses assembly (Item 1) in accordance with the Fig. 2. Lock connections with three windings of the binding wire.
4. Replace the original placard located on the LUN 7375 valve on the instrument panel with the new one - Item 8.

obr. 2

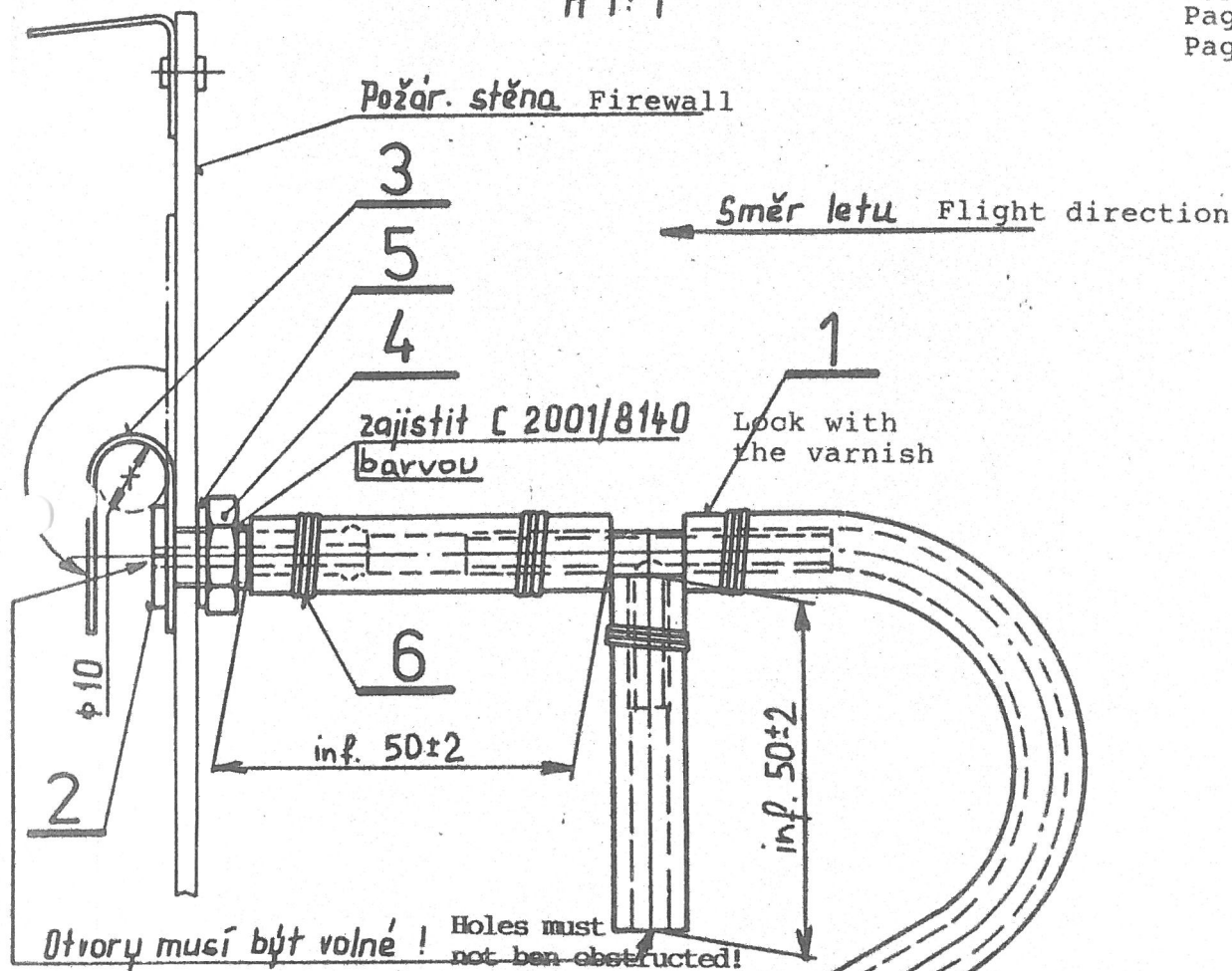
Fig. 2

M 1:1

Appendix No.2

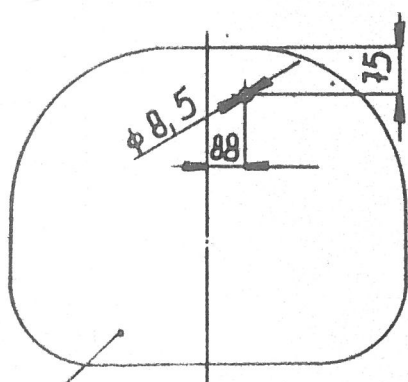
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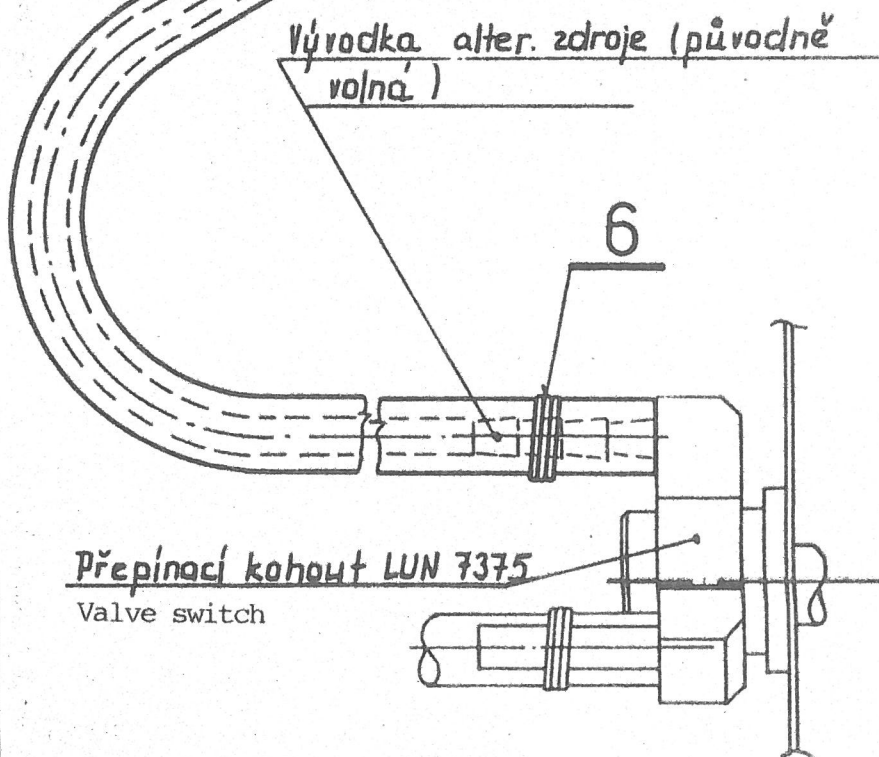
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Fig.1



Požární stěna
(pohled z motorové strany)

Firewall (view from the engine side)



Výrodek alter. zdroje (původně volná)

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3. Installation of the guide rollers of the longitudinal trim control cable pulleys.

3.1. The material necessary for one aircraft :

Item 1 : Bracket assembled LH:	Bracket LH	- L 242.4410-00.07
	Bell	- L 242.4410-00.21
	Pin	- 4x40 ONL 3331.1
	Washer	- B 4,3 ČSN 02 1702.15
	Split pin	- 1x8 ČSN 02 1781.04

Item 2 : Bracket assembled RH:	Bracket RH	- L 242.4410-00.08
	Bell	- L 242.4410-00.20
	Pin	- 4x40 ONL 3331.1
	Washer	- B 4,3 ČSN 02 1702.15
	Split pin	- 1x8 ČSN 02 1781.04

Item 3 : Spacer	- L 242.4410-00.09
Item 4 : Pulley	- L 242.4410-00.23
Item 5 : Pulley	- L 242.4410-00.24
Item 6 : Bolt	- L 4x22 LeN 3121.14
Item 7 : Washer	- B 4,3 ČSN 02 1702.15
Item 8 : Nut	- M4 ONL 3210.44
Item 9 : Split pin	- 1x10 ČSN 02 1781.04
Item 10: Split pin	- 2x20 ČSN 02 1781.04

3.2. Procedure : Follow the Figure on the page No. 2 of this Enclosure.

- Slacken control cables by releasing turnbuckles.
- Disassemble pulleys by removing the split pins and pins.
- Install assembled brackets LH and RH (Items 1,2), spacers ++ (Item 3), pulleys (Items 4 and 5), bolts (Item 6) with washers (Item 7) and nuts (Item 8), lock with split pins (Item 9).
- Pass split pins (Item 10) through brackets.
- Stretch cables using the turnbuckle and lock them.
- Check pulleys for free motion.

++ Note: The bracket holes are to be reamed in accordance with
 — the bolt size.

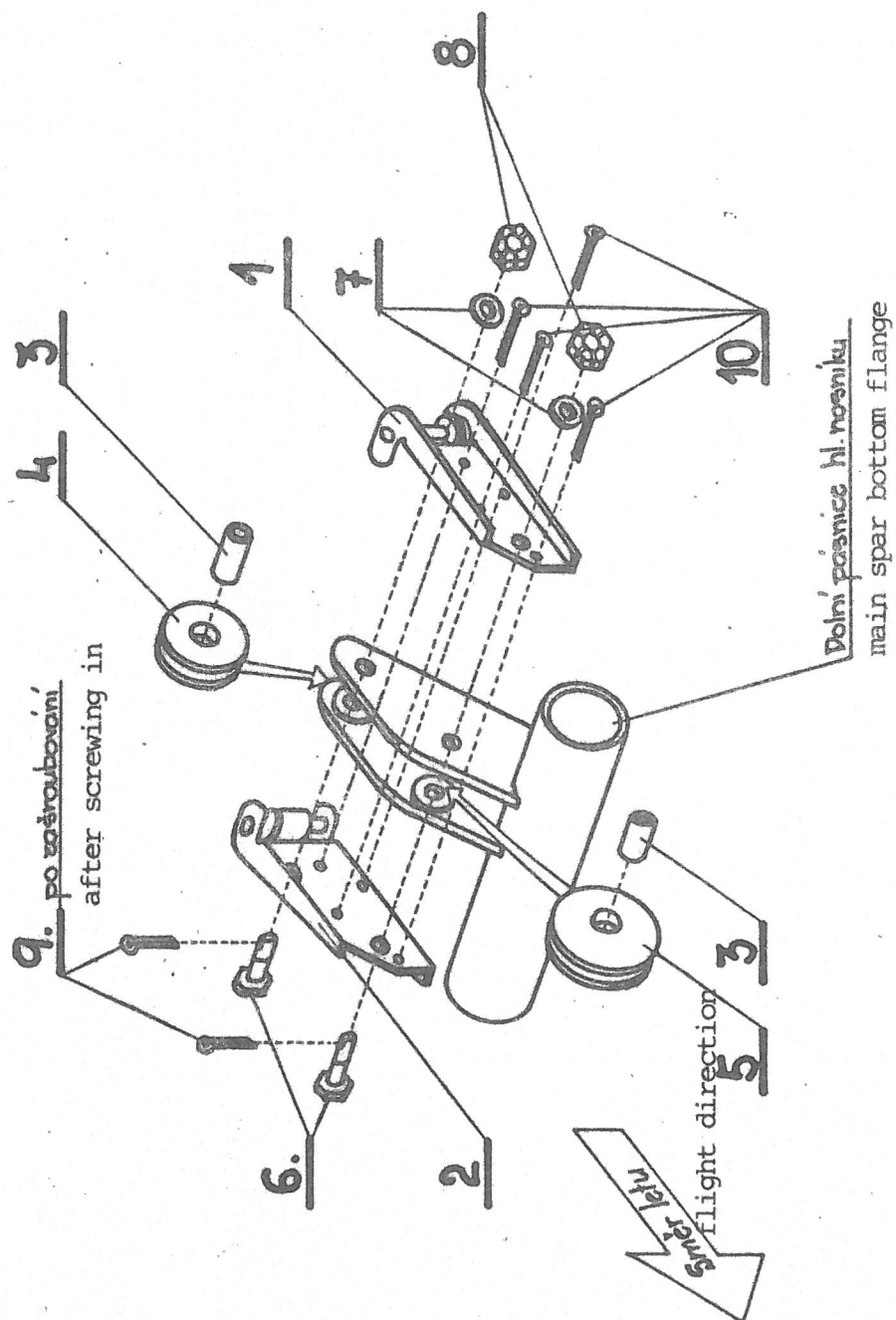
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4. Installation of the release-catch in front the "OFF" position at the fuel selector valve knob.

4.1. The material necessary for one aircraft :

Item 1 :	Knob	L 242.7400-02.00	1 pc
Item 2 :	Washer	L 242.7400-00.10	1 pc
Item 3 :	Washer	L 242.7400-00.11	1 pc
Item 4 :	Spring	L 242.7400-00.16	1 pc
Item 5 :	Screw	M 3x12 ČSN 02 1151.24	1 pc
Item 6 :	Nut	M 4 ONL 3248	1 pc
Item 7 :	Washer	14 ČSN 31 3282.42	1 pc
Item 8 :	Washer	3 ČSN 31 3284.4	1 pc
Item 9 :	Placard	L 242.8952	

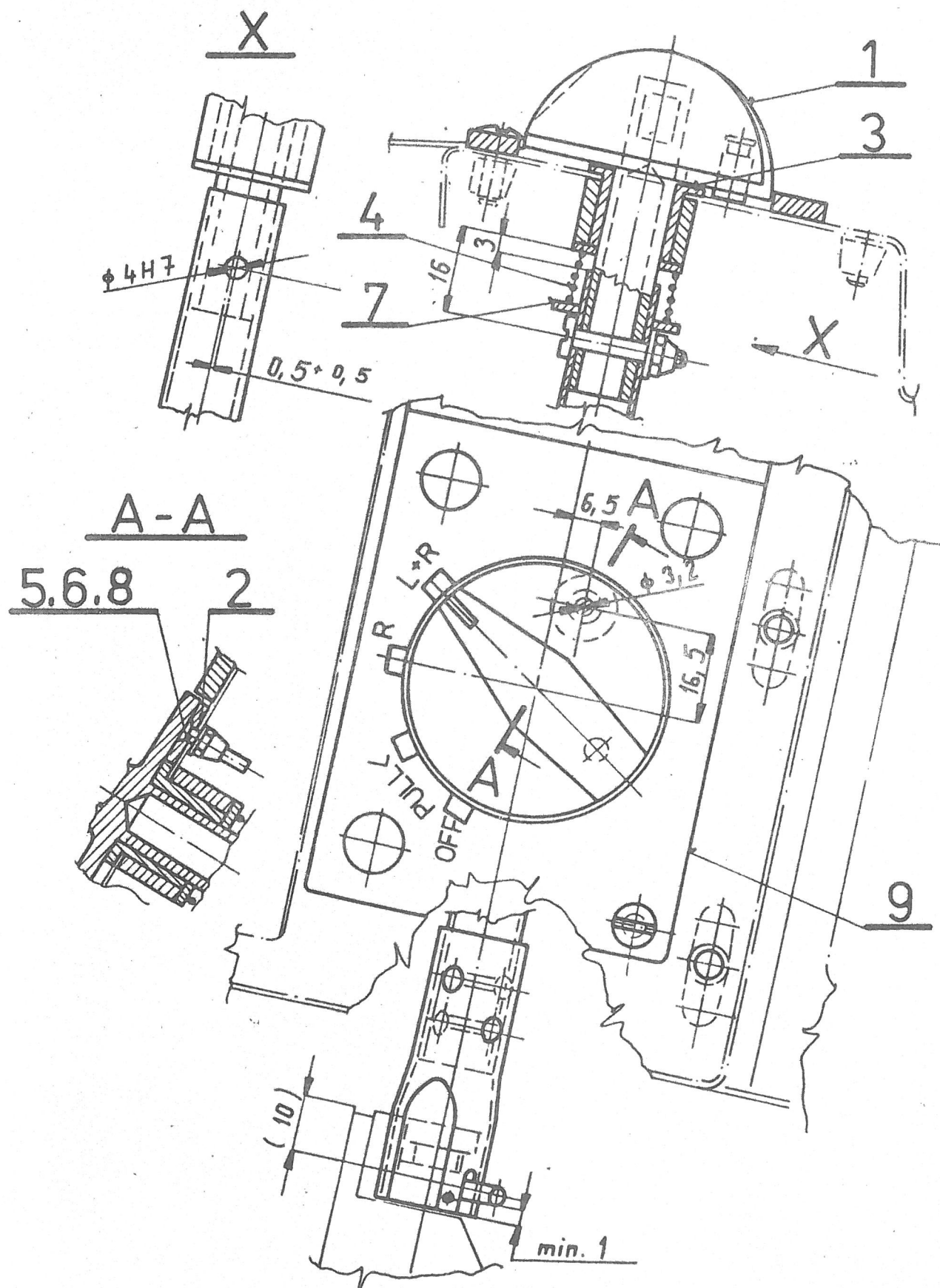
4.2..Procedure : Follow the Figure on the page No.3 of this Appendix.

- Remove the fuselage bottom cover beneath the cockpit (See App. No. 7).
- Take out the cotter pin located under the valve shaft pin.
- Screw off the front central panel (with circuit - switches and the fuel selector knob) located between seats.
- After partial lifting the front central panel disengage the fuel selector control tube.
- Remove the screw connecting the knob shaft with the tube.
- Shift out the tube (do not lose the released bushing and washer) and shorten it by 3 mm.
- Remove the original knob with the shaft.
- Bore the hole ϕ 3,2 in the panel sheet according to the relevant sketch.
- Mount the washer (Item 2), the screw (Item 5) and the nut (Item 6) with the washer (Item 8) through the hole.
- Put the original bushing on the new knob shaft and insert the subassembly into the panel hole.
- Then shift the original bushing and the washer on the shaft, put on the tube at the distance of 3mm from the washer and drill together the new hole ϕ 4 mm 16 mm distant from the washer and about 0,5 mm misaligned to the axis. Observe the exact position of the tube and the knob.
- Shift on the spring (Item 4), the washer (Item 7) and screw together the tube with the knob shaft.
- Set the panel with the new control in the original position and slide the tube in the fuel selector knob shaft.
- Check the knob for correct position and free motion at lifting from the release-catch - the spring must return the knob to the lower position (except of the "CLOSED" position).
- Remove 3 lamps of the placard lighting and then remove the placard.
- Screw the new placard (Item 9) on the panel, so that notice "PULL" is located between the position "L" and "OFF". Mount the placard lighting lamps.

- Install the whole panel with circuit switches and repeat checking the knob for free vertical motion.
- Install the new fuselage bottom cover (made of aluminium sheet) under the cockpit in accordance with the procedure given in the Appendix No.7.

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5. Installation of the placard with baggage shelf loading limitations.
- 5.1. The material necessary for one aircraft:
1 pc of the placard Drwg. No. 850-440.2
- 5.2. Procedure :
Remove the protective paper from the self-adhesive placard and stick the placard on the baggage compartment floor dose to the identification table.

6. Application of the protective coat onto the composite parts of engine cowls and fuselage panels to ensure their fire resistance.

6.1. The material necessary for one aircraft :

The WIEDOFLUGAT N 56 582/T 508 Paint - white (water thinned)	- 0,3 kg
The 4232-0303 Protective Varnish (polyurethane, clear)	
+ the Hardening Agent N39/1327	- 0,2 kg
+ the Thinning Agent N39/3091	- 0,2 kg

The supplier : COURTAULOS AEROSPACE, Coatings Div.P.O.BOX 940,
40709 Hilden, Germany

Storage life : 12 months at the temperature range from
+5°C up to +35°C

6.2. Procedure :

Apply the protective coat onto the engine cowls composite parts from the inside and onto the fuselage body side covers in the area behind the exhaust from the outside in accordance with the sketch on Page No. 3 of this Appendix.

The composite surface is to be clean and without any grease evidences. Degreasing the new parts is not required. Parts, which were already used, must be carefully degreased and dried. Roughen the surface folds with the glass paper and carefully remove arisen dust with the brush, the wet rag and with the compressed air.

If some formerly produced parts are coated with the ALUXAL, remove it with the thinning agents and then with the glass paper.

The paint is to be applied in 2 continuous layers (one layer thickness is cca. 125 μ m). The second layer is to be applied not earlier than 4 hours after the first application at the room temperature about 23°C. The layer is not sticky after 8 hours. The layer is chemically resistant in 7 days after the coat application. Do not dry it at the elevated temperature. Estimated consumption of paint for 1 layer is 0,3 l/m².

Both layers thickness is to be in dry condition at lesst 250 μ m and their weight about 300 g/m².

To protect the coat against the oil and fuel effects spray it with the protective varnish. Do not apply the protective varnish sooner than after 24 hours of drying the basic coat.

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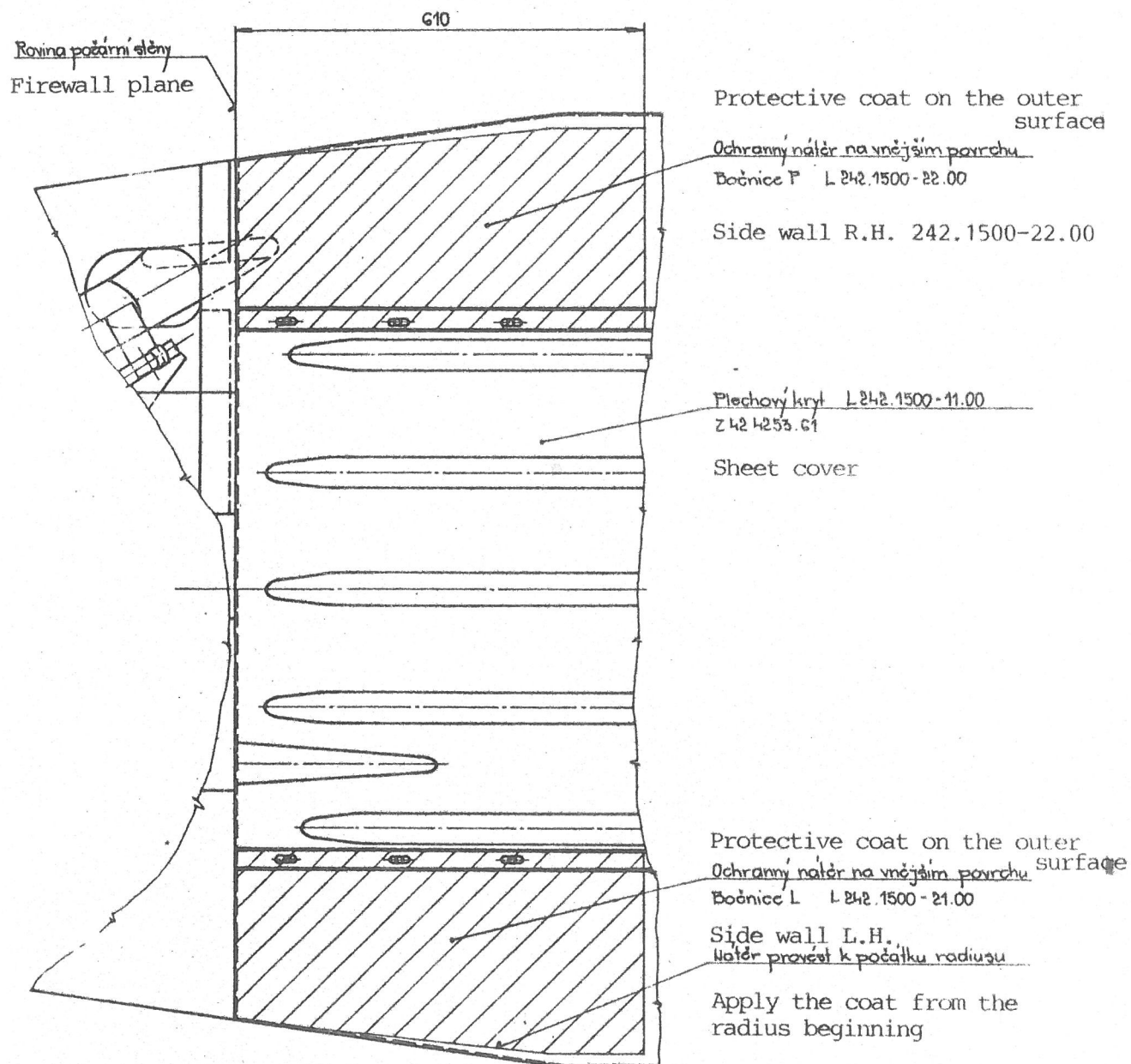
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After 24 hours spray the coat with the thin film of the clear, polyurethane varnish. The varnish is to be mixed with the hardening agent in the weight and the volume ratio 5 : 2.

Before spraying dilute the varnish with 20 % of above-mentioned thinning agent. Spraying is performed in two layers : The first layer should be continuous, but very thin and shall be dried 16 hours at least. By three days at latest spray the second thin layer and dry it 24 hours. This layer is chemically resistant after 7 days. Total theoretical consumption for both layers is about $0,051/m^2$. It cannot be dried at the elevated temperature. Both layers thickness in dry condition is about $25\mu m$ and their weight about $30 g/m^2$.

To identify that the protective coat was applied, mark the inside upper and lower part of the engine cowls with the letter W (using the black colour) in the height of 60 mm.



7. REPLACEMENT OF THE FUSELAGE BOTTOM COMPOSITE WITH THE SHEET COVER.

7.1. THE MATERIAL NECESSARY FOR ONE AIRCRAFT :

Item 1 : Bottom sheet cover	1 pc
Item 2 : Front angle	1 pc
Item 4 : Strap - front	1 pc
Item 5 : Strap - side	2 pcs
Item 6 : Strap - rear	1 pc
Item 7 : Sealing	1 pc
Item 11: Strap plate	1 pc
Item 12: Sealing	1 pc
Item 13: Seal - bordering	1 pc
Item 14: Nut M4 ONL 3244	2 pcs
-Rivet 2,6x6 ČSN 02 2320.0	6 pcs
-Rivet 2,6x6 ČSN 02 2304.0	27 pcs
-Rivet 2,6x7 ČSN 02 2304.0	8 pcs
-Rivet 2,6x8 ČSN 02 2304.0	4 pcs

7.2. PROCEDURE :

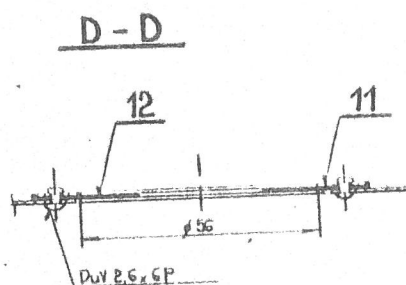
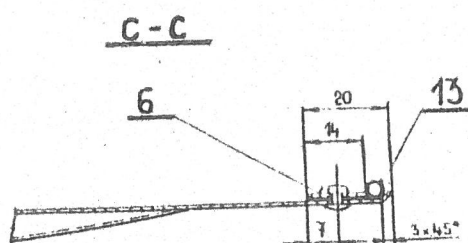
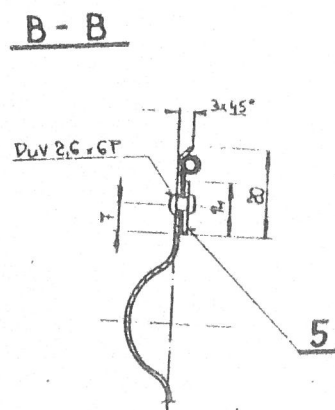
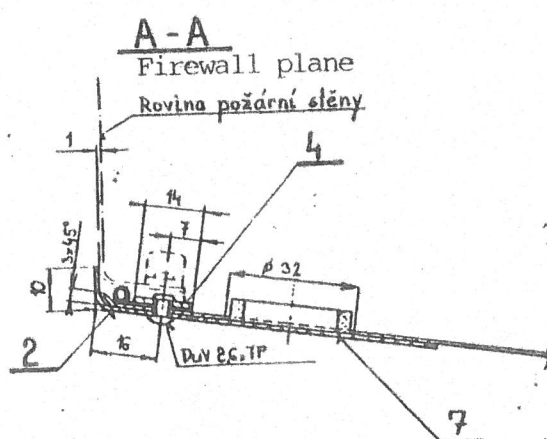
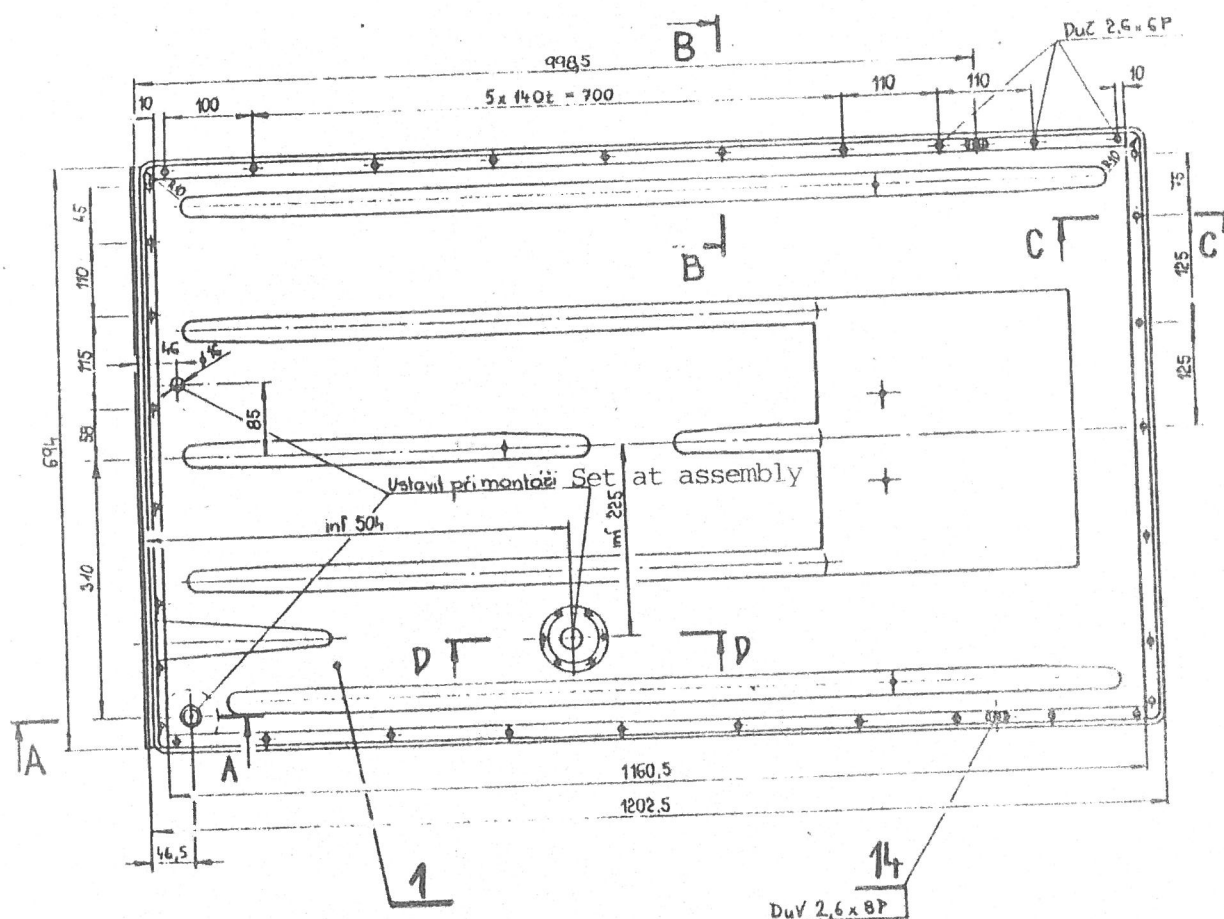
- A. Remove the bottom composite cover Drwg. No. L 242.1500-10.00 from the fuselage.
- B. Trim the sheet cover (Item 1) along the periphery into a shape of the original laminated plastic cover and then form the border in the height 3 mm and at an angle 45° by hammering the sheet cover periphery. (See the sectional view B-B on the page No.2 of this Enclosure).
- C. Assemble the bottom cover (in accordance with the page 2 of this Enclosure) as follows:
 - Adjust the straps length (Items 4,5,6) as required and create radii R 10 at straps (Items 4 and 6) according to the Drawing.
 - Adjust the seal length (Item 13) and stick it on the Item 1 using the chlor-rubber-based adhesive.
 - Rivet on Items 2,4,5,6.
 - Fit the assembled cover (1) to the body and mark centres of the holes determined for the fuel drain, the aircraft support and the Pitot system sludge valve. Mill out the relevant holes according to the Drawing.
 - Re- set Item 1 on the body and bore holes \varnothing 4,3 (determined for screws) in accordance with the nuts rivetted on the aircraft body and according to the holes in laminated plastic covers at the main landing gear.
 - Place the sealing (Item 12) and rivet the strap plate (Item 11) onto the fuel drain holes.
 - Rivet nuts (14) onto the screw holes which were bored in accordance with the laminated plastic covers at the main landing gear.
 - Glue on the sealing (Item 7) from the outside using the chlor-rubber-based adhesive.
- D. Then spray the bottom cover with the priming paint and with the outer coating paint.
- E. Fit the cover on the nuts on the aircraft body.

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8. Installation of the drain valves into the oil and the fuel systems.

8.1. The material necessary for one aircraft :

Item 1	Drain valve	L 242.7100-04.00	1 pc
Item 2	Coupling - complete	L 242.7100-10.00	1 pc
Item 3	Coupling	L 242.7100-00.21	1 pc
Item 4	Hose	13x780 MON 1818.2	1 pc
Item 5	Sealing ring	14x18 ČSN 02 9310.3	1 pc
Item 6	Wire - galvanized	0,8 PN 22-151-77	1 pc
		L = 800	
Item 7	Fuel filter cup	L 242.7213	1 pc
Item 8	O - ring	10x6 ČSN 02 9280.2	2 pcs
			(substitute)

8.2. Procedure :

Follow the sketch on the page No.2 of this Enclosure.

- Remove the hose located between the oil separator and the elbow under the engine oil sump left side.
- Install the coupling - complete (Item 2), the coupling (Item 3) and the hose (Item 4) on the elbow.
- Screw on the drain valve (Item 1) with the sealing ring.
- Lock all nuts mutually with the wire (Item 6).
- Loosen the stirrup under the fuel filter cup (on the firewall) and remove the cup.
- Put the filter in the cup with the valve (Item 7) and attach the cup to the fuel filter body using the stirrup. Properly tighten the knurled screw.

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