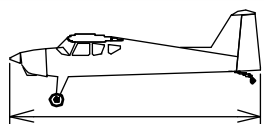


# MISS MORVA

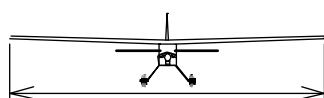
TOWING MACHINE



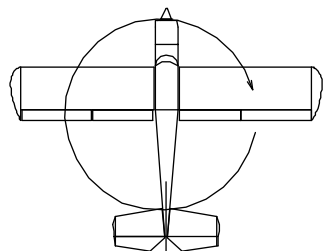
Order N°: 02046.1



1960 mm



2420 mm

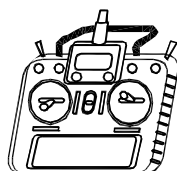


99,5dm<sup>2</sup>  
73-85,4 g/dm<sup>2</sup>

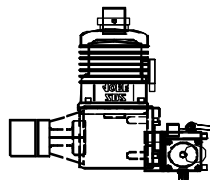


7,5 - 8,5 kg

Radio system you'll need :



6-channel  
with  
8-10 servos



30 - 55 ccm



NACA 4412

*Není-li uvedeno jinak, všechny  
neoznačené míry jsou v milimetrech  
UNLES STATED, ALL DIMENSIONS  
ARE IN MILIMETERS*

Manufactured by:

**TOPMODEL CZ**

679 05 HABRŮVKA 100 - CZECH REPUBLIC

[www.topmodelcz.cz](http://www.topmodelcz.cz)

e-mail:[info@topmodelcz.cz](mailto:info@topmodelcz.cz)

Part No.	Part name	Material, dimensions	Loose	In bag
	building plan	A1	01	-
1	fuselage	balsa- plywood assembly	01	-
1-2	elevator & rudder servo tray	plastic 3 x 62 x 80 mm	-	03
1-21	servo tray screw	wood screw 2,9 x 9,5 mm		12
1-22	servo holder	polyurethan 20 mm	-	06
1-23	servo strap	fiberglass 1,5x14x64 + screw M3x25	-	03 + 06
1-3	tank holder	plywood 3x100x180 mm	-	01
1-4	RX holder	plywood 3x55x112 mm	-	01
1-5	fuselage cover	plastic 3x172x200	-	01
1-51	fixing fuselage cover	dowel $\phi$ 4x30, hatch latch	-	03 + 02
2	wing	balsa assembly	02	-
24	wing joiner	alu tube $\phi$ 35, length 630 mm	01	-
2-1	aileron	balsa assembly	02	-
2-11	flap	balsa assembly	02	-
2-21	centering pin	alu tube $\phi$ 12 mm l = 320 mm	-	02
2-23	wing end plates	plastic 6 mm	02	-
2-3	hook	$\phi$ 3 mm	-	02
2-4	ailerons & flaps servo tray	plastic 3 x 62 x 80 mm	-	04
2-41	servo tray screw	wood screw 2,9 x 9,5 mm	-	16
2-42	servo holder	polyurethan 20 mm	-	08
2-43	servo strap	fiberglass 1,5x14x64 + screw M3x25mm	-	04 + 08
2-5	aileron & flap pushrod	threaded rod M3, length 48 mm, carbon tube $\phi$ 5/3 L=25	-	04 + 04
2-6	clevis	metal M3 + nut M3	-	08 + 08
2-8	aileron horn	fiberglass plate 2 mm	-	02
2-81	flap horn	fiberglass plate 2 mm	-	02
2-82	flap hinge	fiberglass plate 1,5 mm	-	12
2-83	flap hinge	fiberglass plate 2 mm	-	04
2-84	shaft hinge	MPJ 4820	-	06
2-85	backlash washer	fiberglass plate 1 mm	-	12
3	horizontal stabilizer	balsa assembly	02	-
3-3	elevator joiner	alu tube $\phi$ 12/10 mm , length 290 mm	-	01
3-31	centering pin	dowel $\phi$ 5 mm x 30 mm	-	02
3-4	elevator fixing	screw M3 x 12mm	-	02
3-5	elevator pushrod	threaded rod M3, length 180 mm, carbon tube $\phi$ 5/3 L=138	-	02+02
3-6	clevis	metal M3 + nut M3+ball link M3		02+02+02
3-8	elevator horn	fiberglass plate 2 mm	-	02
4	vertical tail	balsa assembly	01	-
4-5	rudder pushrod	threaded rod M3, length 67 mm, carbon tube $\phi$ 5/3 L=43 mm	-	01+01
4-6	clevis	metal M3 + nut M3	-	02+02
4-8	rudder horn	fiberglass plate 2 mm	-	01
6	canopy	plastic 1mm	03	-
6-1	canopy fixing	screw $\phi$ 2,2x6,5mm	-	14
7	stickers		01	-
8-2	wheel axle	MPJ 2872	-	02
8-3	wheel fixing	wheel collar	-	02
9	engine cowl	fiberglass	01	-
9-0	engine cowl fixing	wood screw 2,9 x 9,5 mm	-	05
9-21	throttle linkage	fiberglass $\phi$ 2 mm, length 330 mm	01	-
9-22	clevis	metal M2 + MPJ 2012	-	02+02
10	main gear	aluminium 4 mm	01	-
10-2	landing gear fixing	screw M4 x 16 mm + blind nut + washer	-	03 + 03 + 03
10-3	tailwheel	with shock absorber, steerable, wheel $\phi$ 35 mm	-	01
11	hinge	MS124024	-	15

Položka	Název dílu	Materiál, rozměr	Volně / ks	Balíček/ ks
	montážní návod		01	-
1	trup	balsa konstrukční	01	-
1-2	držák serv SOP + VOP	plast 3 x 62 x 80	-	03
1-21	upevnění držáku	vrut $\phi$ 2,9 x 6,5	-	12
1-22	aretače serva	polyuretan 20mm	-	06
1-23	upevnění serva	sklotextit 1,5x14x64 + šroub M3x25	-	03+06
1-3	deska nádrže	Př. 3x100x180	-	01
1-4	držák přijímače	Př. 3x55x112	-	01
1-5	kryt trupu	plast 3x172x200	-	01
1-51	upevnění krytu	buk $\phi$ 4x30, zámeček	-	03+02
2	křídlo	balsa konstrukční	02	-
24	spojka křídla	dural $\phi$ 35mm L = 630mm	-	01
2-1	křídélko	balsa konstrukční	02	-
2-11	vztlaková klapka	balsa konstrukční	02	-
2-21	aretační trubka	dural $\phi$ 12 mm L =325 mm	-	01
2-3	zajištění křídla	háček $\phi$ 3mm	-	02
2-4	držák serv křídélka a klapky	plast 3 x 62 x 80	-	04
2-41	upevnění držáku	vrut $\phi$ 2,9 x 6,5	-	16
2-42	aretače serva	polyuretan 20mm	-	08
2-43	upevnění serva	sklotextit 1,5x14x64 + šroub M3x25	-	04+08
2-5	táhlo křídélka a klapky	M3 L = 48mm, uhlík $\phi$ 5/3 L=25	-	04+04
2-6	koncovka táhla	kovová M3, matice M3	-	08+08
2-8	páka křídélka	sklotextit 2 mm	-	02
2-81	páka klapky	sklotextit 2 mm	-	02
2-82	závěs klapky	sklotextit 1,5mm	-	12
2-83	závěs klapky	sklotextit 2mm	-	04
2-84	čep závěsu	MPJ 4820	-	06
2-85	distanční podložka	sklotextit 1mm	-	12
3	výškovka	balsa konstrukční	01	-
3-3	spojka výškovky	dural $\phi$ 12mm l=290 mm	-	01
3-31	aretační kolík	buk $\phi$ 5x 30mm	-	02
3-4	zajištění výškovky	šroub m3x12mm	-	02
3-5	táhlo výškovky	M3 L =155+ 180 mm, uhlík $\phi$ 5/3 L=138 + 157mm	-	01+01+01+01
3-6	koncovka táhla	kovová M3, matice M3, MPJ 2450	-	02+02+02
3-8	páka VOP	sklotextit 2 mm	-	02
4	směrovka	balsa konstrukční	01	-
4-5	táhlo směrovky	M3 L = 67mm, uhlík $\phi$ 5/3 L = 43mm	-	01+01
4-6	koncovka táhla	kovová M3, matice M3	-	02+02
4-8	páka SOP	sklotextit 2 mm	-	01
6	kabina	folie 1mm	03	-
6-1	upevnění kabiny	vrut $\phi$ 2,2x6,5	-	14
7	obtisky		05	-
8-2	hřídel kola	MPJ 2872	-	02
8-3	zajištění kola	MPJ	-	02
9	motorový kryt	laminát	01	-
9-0	uchycení krytu	vrut $\phi$ 2,9 x 9,5	-	05
9-21	táhlo motoru	laminát $\phi$ 2 L= 330mm	-	01
9-22	koncovka táhla	vidlička kov. M2, MPJ 2012	-	02+02
10	podvozek	dural 5 mm	01	-
10-1	uchycení podvozku	šroub M4x14, nárazecí matice	-	03+03
10-3	ostruha	komplet s kolem $\phi$ 35mm	-	01
10-31	páka ovládání ostruhy	sklotextit 2mm, vrut $\phi$ 2,9x18	-	01+01
11	závěsy křidélek	MS 124024	-	15

**RECOMMENDED EQUIPMENT:**

		Pieces		Item No <a href="http://www.topmodelcz.cz">www.topmodelcz.cz</a>
Transmitter	7 channel			
Receiver	10 channel			
Servo	<a href="#">HS - 5625MG digi</a>	3	for ailerons & tow hook	<a href="#">1HI3200</a>
	<a href="#">HS - 5645MG digi</a>	3	for flaps & rudder	<a href="#">1HI3210</a>
	<a href="#">HS - 6635HB digi</a>	2	for elevator	<a href="#">1HI3275</a>
	<a href="#">HS-422</a>	2	for engine + 1 for choke	<a href="#">1HI3075</a>
Engine	<a href="#">MVVS 50 IRS ICU-L</a>	1		<a href="#">3005L</a>
	<a href="#">DLA 56</a>		alternative engine	<a href="#">2DLA0056</a>
Muffler	<a href="#">Compact exhaust for MVVS</a>	1	for MVVS engine	<a href="#">3208I</a>
	<a href="#">Silencer PSA-DLE 55</a>		for DLA engine	<a href="#">K10350</a>
Spinner:	<a href="#">Fiberglass spinners Ø80mm</a>	1		<a href="#">020CT80A</a>
Wheels	<a href="#">Airtop pneumatic wheels Ø100 mm</a>	1 pair		<a href="#">10210060</a>
Wheel cover	<a href="#">Wheel covers Tractor</a>	1 pair		<a href="#">02095-8</a>
Fuel tank	<a href="#">Fuel Tank Petrol w. Fittings 500 ml</a>	1		<a href="#">7BA2050</a>
Fuel tube	<a href="#">Tygon Fuel Tubing for Petrol 3/6 mm</a>	1		<a href="#">7BA2055</a>
Servo cable	<a href="#">Twisted cable - Large</a>	5,1m		<a href="#">8GR3009</a>
Connector	<a href="#">Connector MPX 6 plug</a>	2		<a href="#">1M60500</a>
Connector	<a href="#">Connector MPX 6 socket</a>	2		<a href="#">1M60501</a>
	<a href="#">MPX 6 connector holder</a>	2		<a href="#">Nes001</a>
Shrink tube	<a href="#">Thermo-Shrinkable insulation</a>	0,7m		<a href="#">9001</a>
Tow hook	<a href="#">Remote tow hook (plane)</a>	1		<a href="#">066RTH</a>

**ATTENTION:**

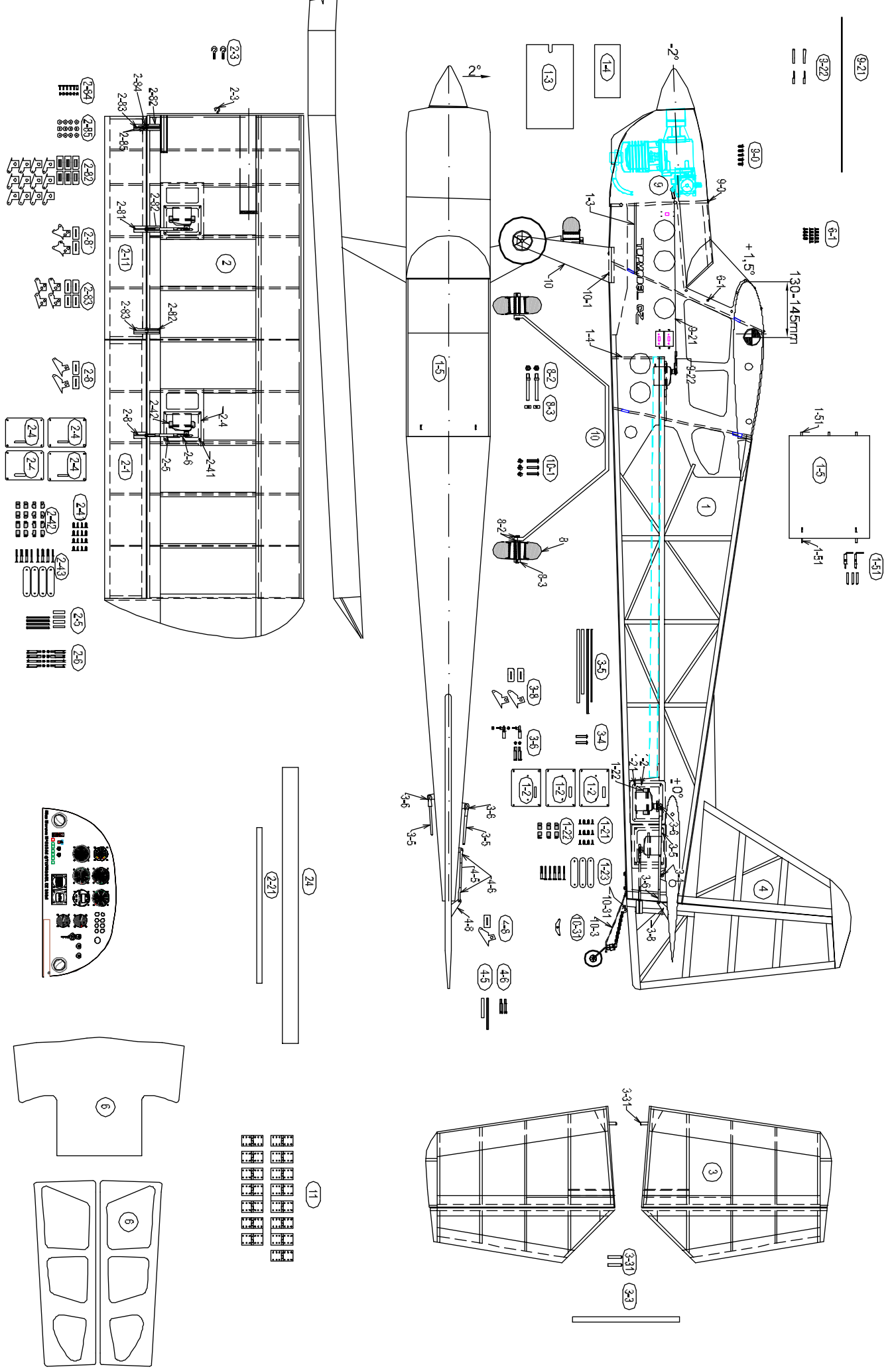
This model construction kit is not a toy and is not suitable for children under the age of 14.

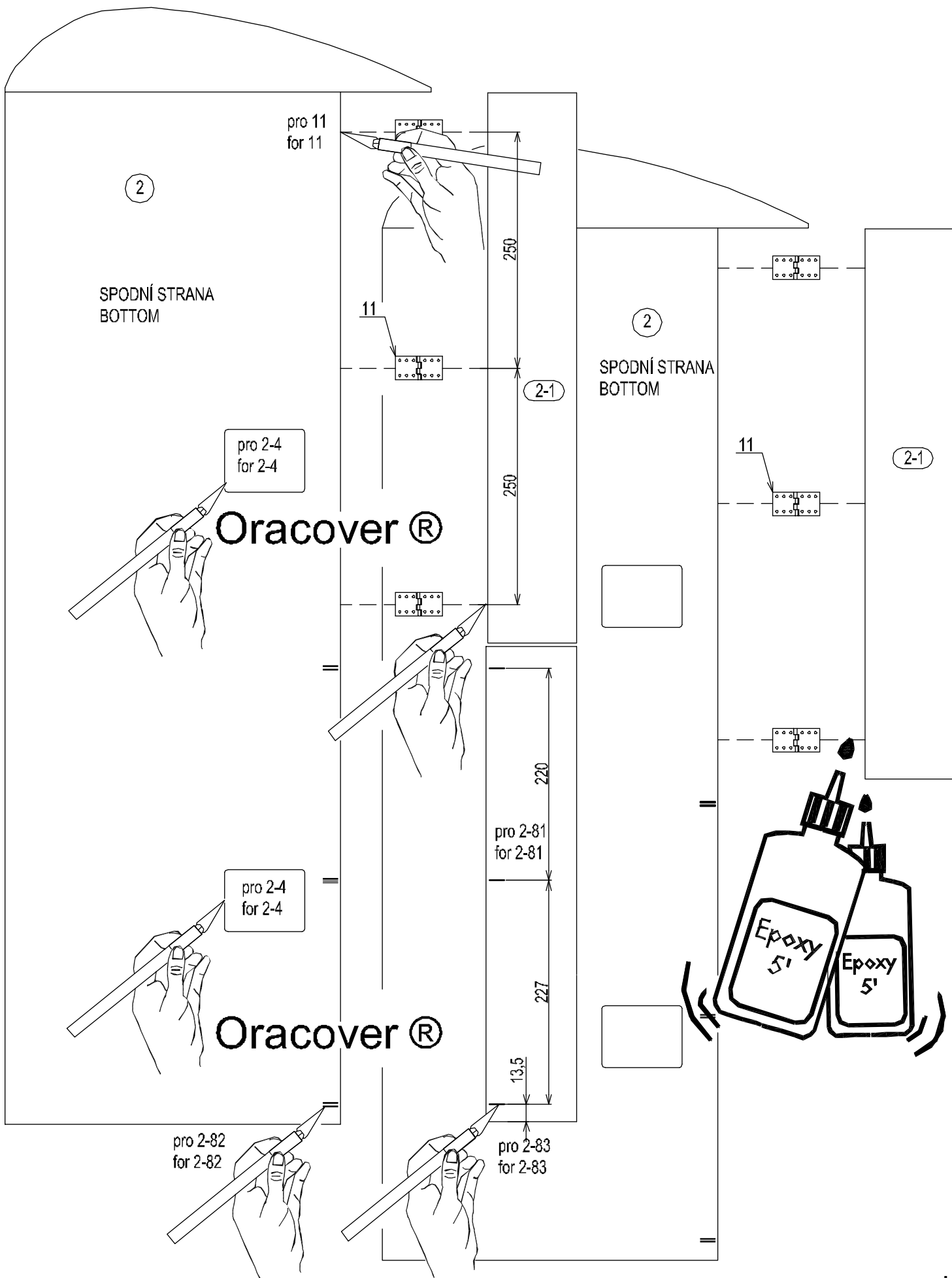
Incorrect use of this material could cause material damage or personal injury. You are fully responsible for your actions when you use this model.

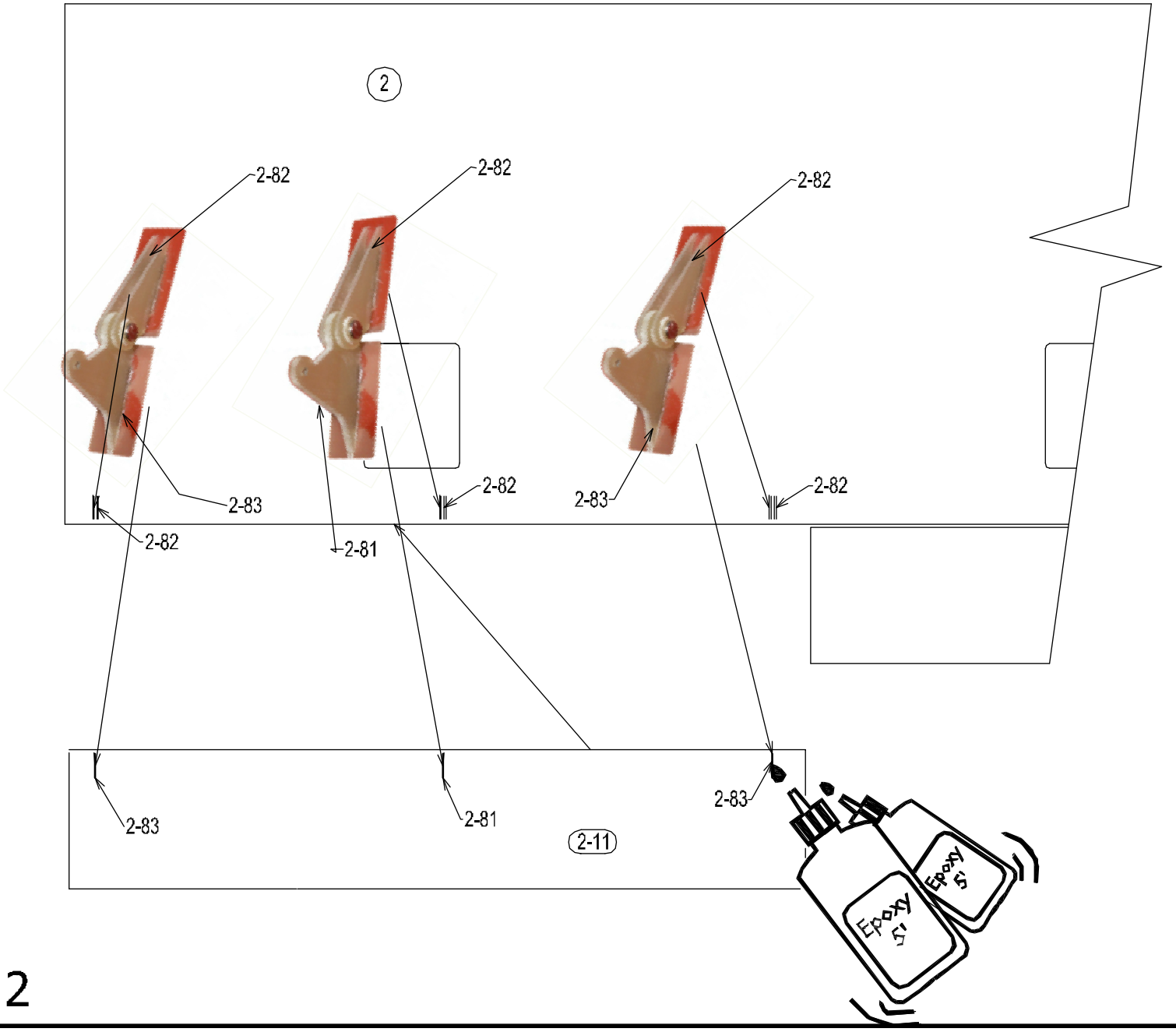
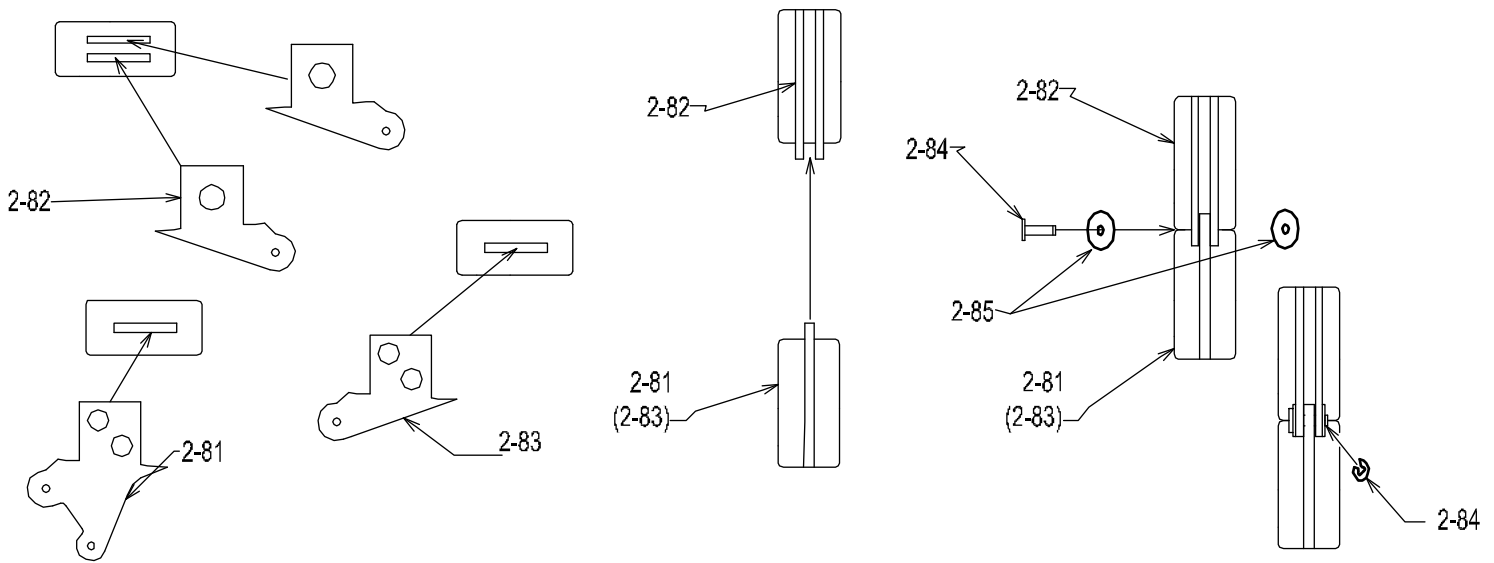
Fly at a safe distance from occupied zones. Be sure that no one else is using the same frequency as you.

**DOPORUČENÉ PŘÍSLUŠENSTVÍ :**

		kusů		objednáací číslo <a href="http://www.topmodelcz.cz">www.topmodelcz.cz</a>
Vysílač	7 kanál			
Přijímač	10 kanál			
Servo	<a href="#">HS - 5625MG digi</a>	3	pro křídélka a vlečný háček	<a href="#">1HI3200</a>
	<a href="#">HS - 5645MG digi</a>	3	pro vztlakové klapky a směrovku	<a href="#">1HI3210</a>
	<a href="#">HS - 6635HB digi</a>	2	pro výškovku	
	<a href="#">HS-422 ECO</a>	2	motor a sytič	<a href="#">1HI3075</a>
Motor	<a href="#">MVVS 50 IRS ICU-L</a>	1		<a href="#">3005L</a>
	<a href="#">DLA 56</a>		alternativní motor	<a href="#">2DLA0056</a>
Výfuk	<a href="#">Kompaktní tlumič pro MVVS</a>	1	pro motor MVVS	<a href="#">3208I</a>
	<a href="#">PSA-DLE 55</a>		pro motor DLA	<a href="#">K10350</a>
Kužel	<a href="#">Laminátový kužel Ø80mm</a>	1		<a href="#">020CT80A</a>
Kola	<a href="#">Airtop pneumatická kola Ø100 mm</a>			<a href="#">10210060</a>
Nádrž	<a href="#">Nádrž 500 ccm benzin</a>	1		<a href="#">7BA2050</a>
Palivová hadička	<a href="#">Had.benzin žlutá Tygon 3/6</a>	1		<a href="#">7BA2055</a>
Kryty kol	<a href="#">Kryty kol Tractor</a>	2	pro kolo φ100mm	<a href="#">02095-8</a>
Konektor	<a href="#">MPX 6 zástrčka</a>	2		<a href="#">1M60500</a>
Konektor	<a href="#">MPX 6 zásuvka</a>	2		<a href="#">1M60501</a>
	<a href="#">Držák konektoru MPX 6</a>	2		<a href="#">Nes001</a>
Kabel serva	<a href="#">Kabel kroucený tlustý</a>	5,1m		<a href="#">8GR3009</a>
Bužírka	<a href="#">Teplem smršťitelná bužírka</a>	0,7m		<a href="#">9001</a>
Vlečný háček	<a href="#">Vypínací háček do vlečné</a>	1		<a href="#">066RTH</a>







Pozn.: zobrazena je levá montáž serva  
 Note: on the picture is assembly of left servo

pro servo: křídélek, klapek, VOP, SOP  
 - 4x levá + 3x pravá montáž  
 for servos: ailerons, flaps, elevator,  
 rudder - 4x left + 3x right

1-22  
 2-42

2x Ø3,2mm

6 otvorů Ø3,2 zhloubit pro hlavy šroubů  
 6 holes to recess for head of screws

1-23  
 2-43

1-22  
 2-42

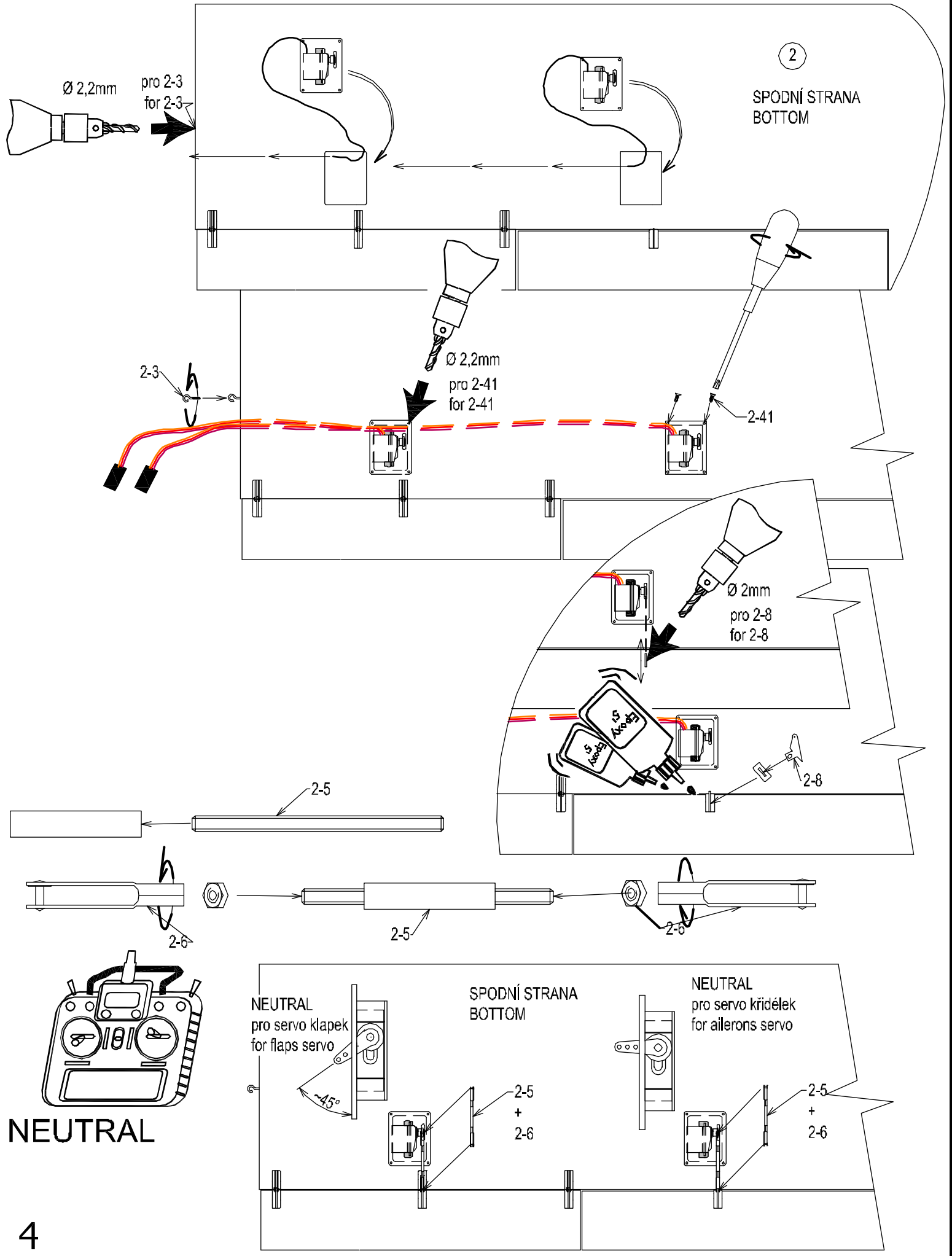
1-2  
 2-4

1-23  
 2-43

1-2  
 2-4

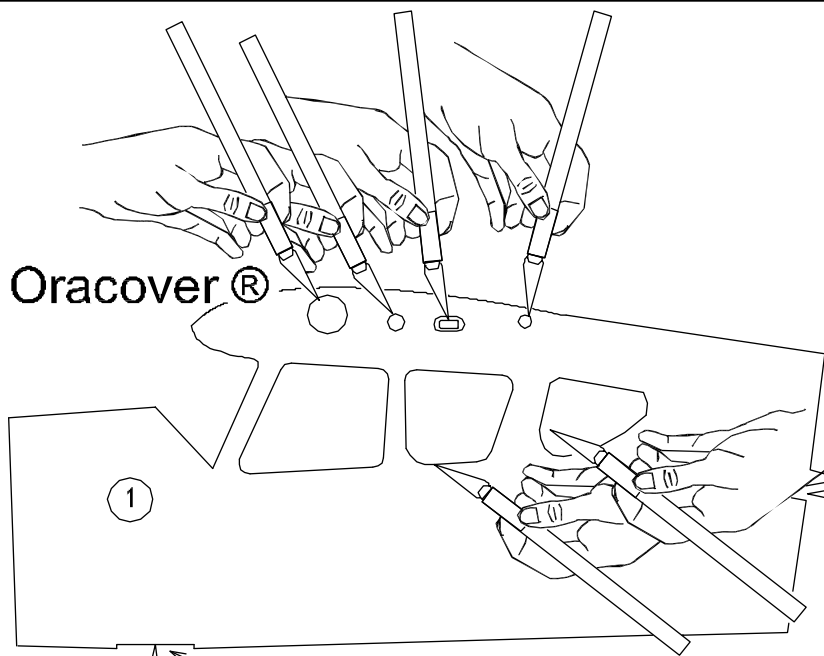
- L - pro servo křídélek , for ailerons servo ~ 700mm
- L - pro servo klapek, for flaps servo ~ 250mm
- L - pro servo VOP , for elevator servo ~ 900mm
- L - pro servo SOP , for rudder servo ~ 950mm



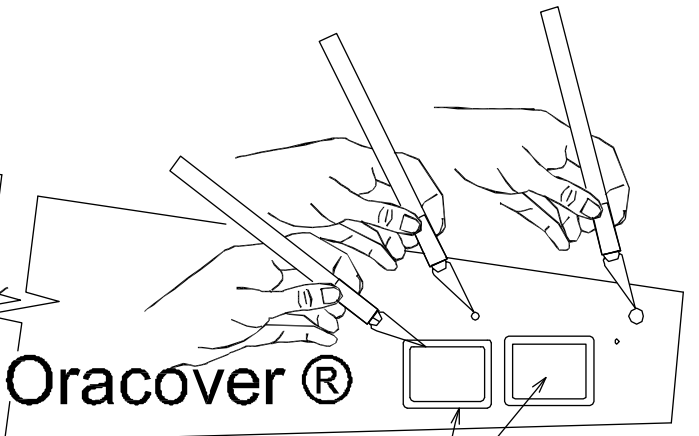


NEUTRAL

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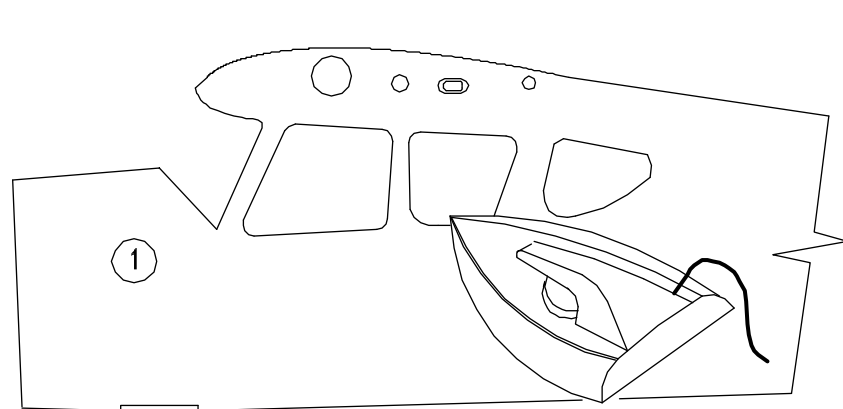
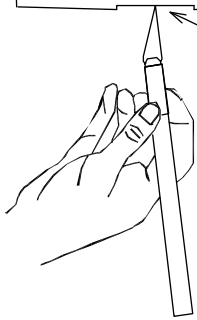


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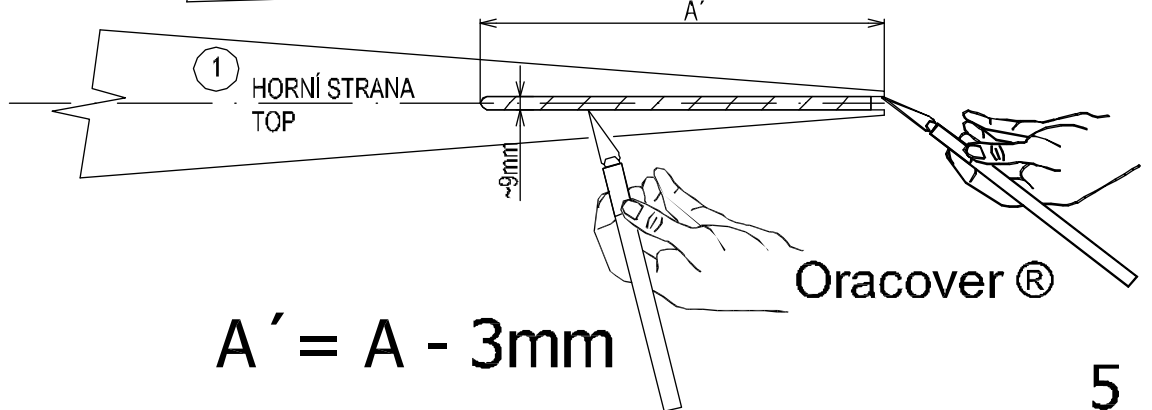
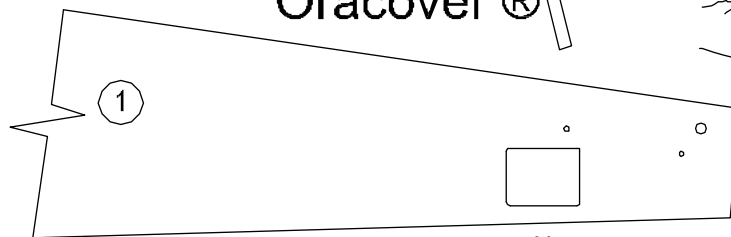
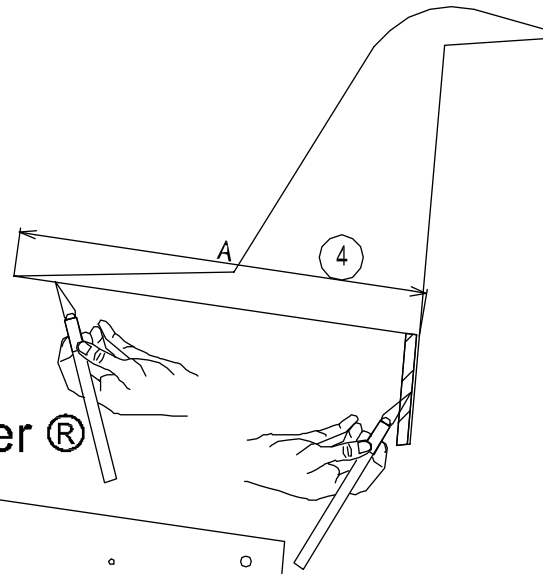


levá+pravá - pro VOP  
left+right - for elevator

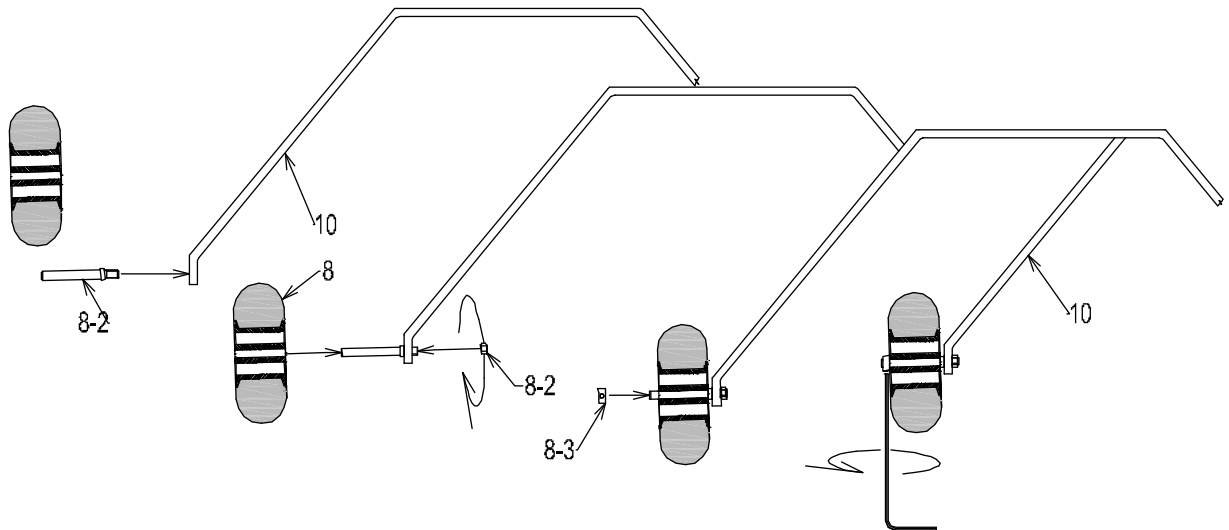
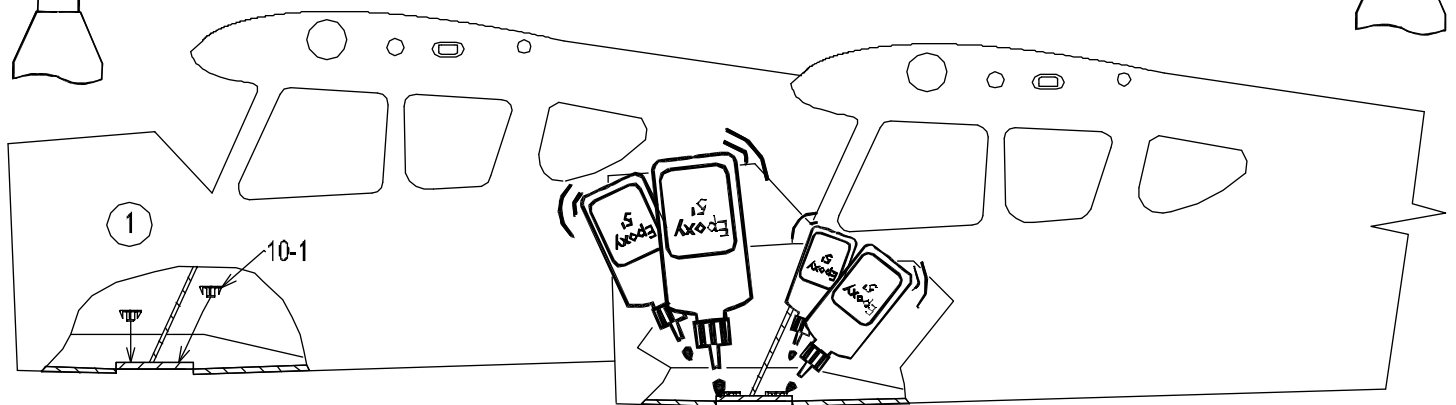
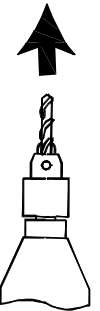
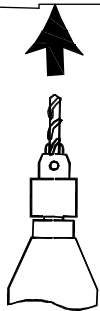
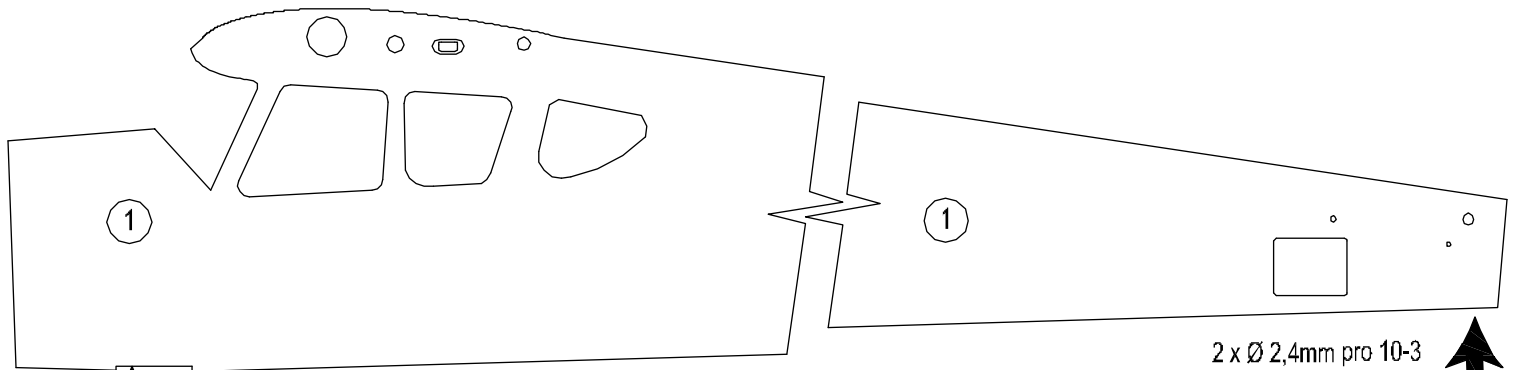
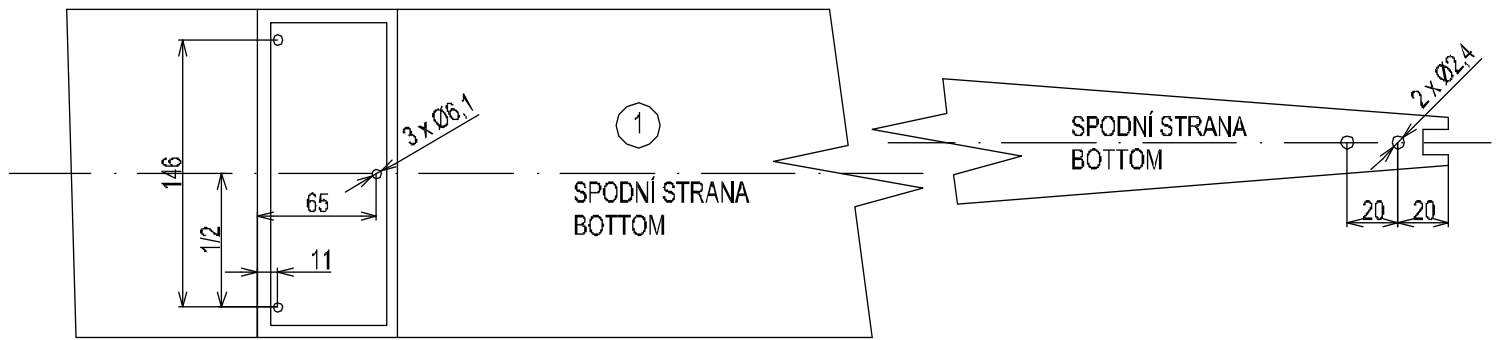
pravá str. pro směrovku  
right- for rudder

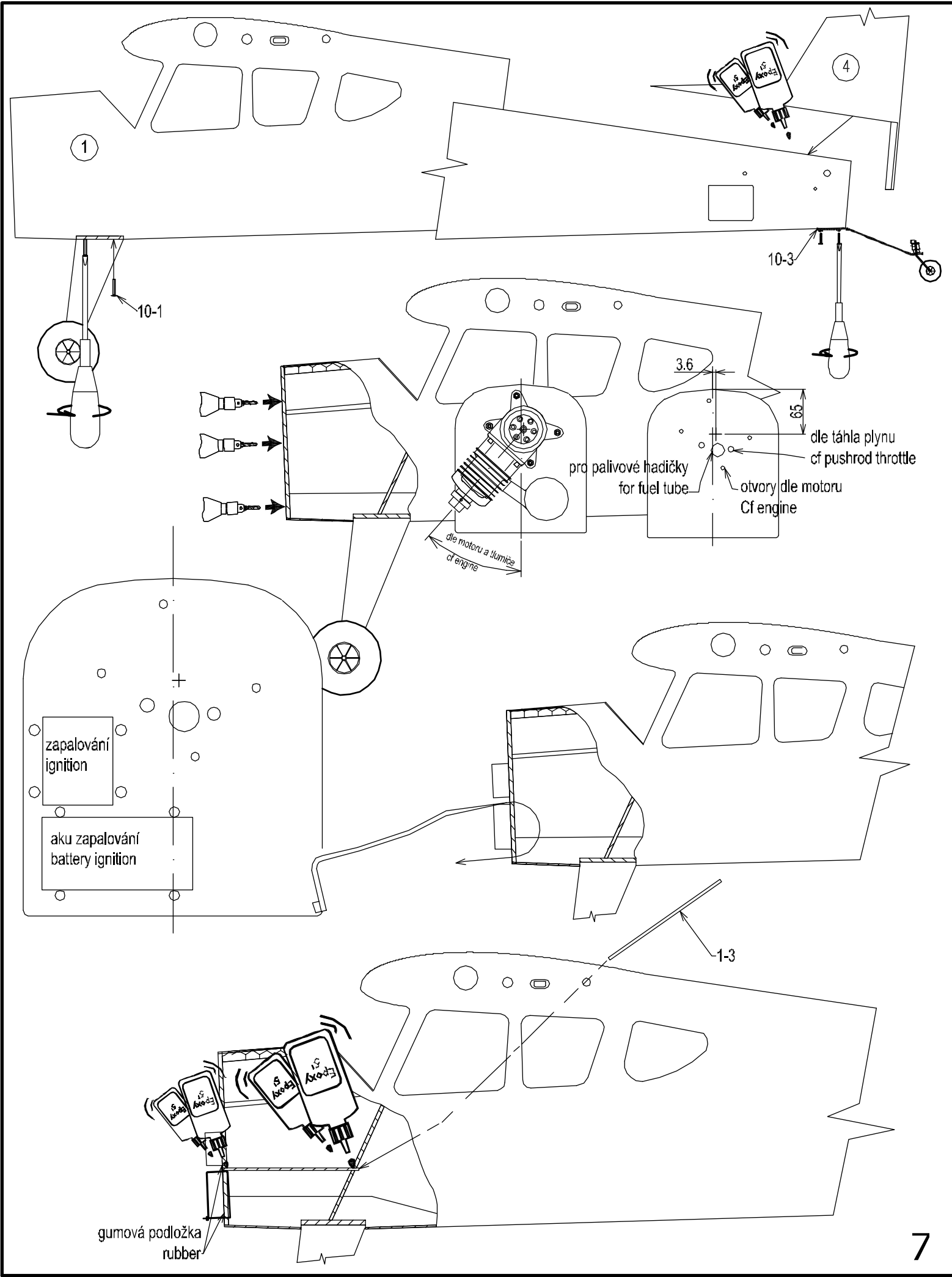


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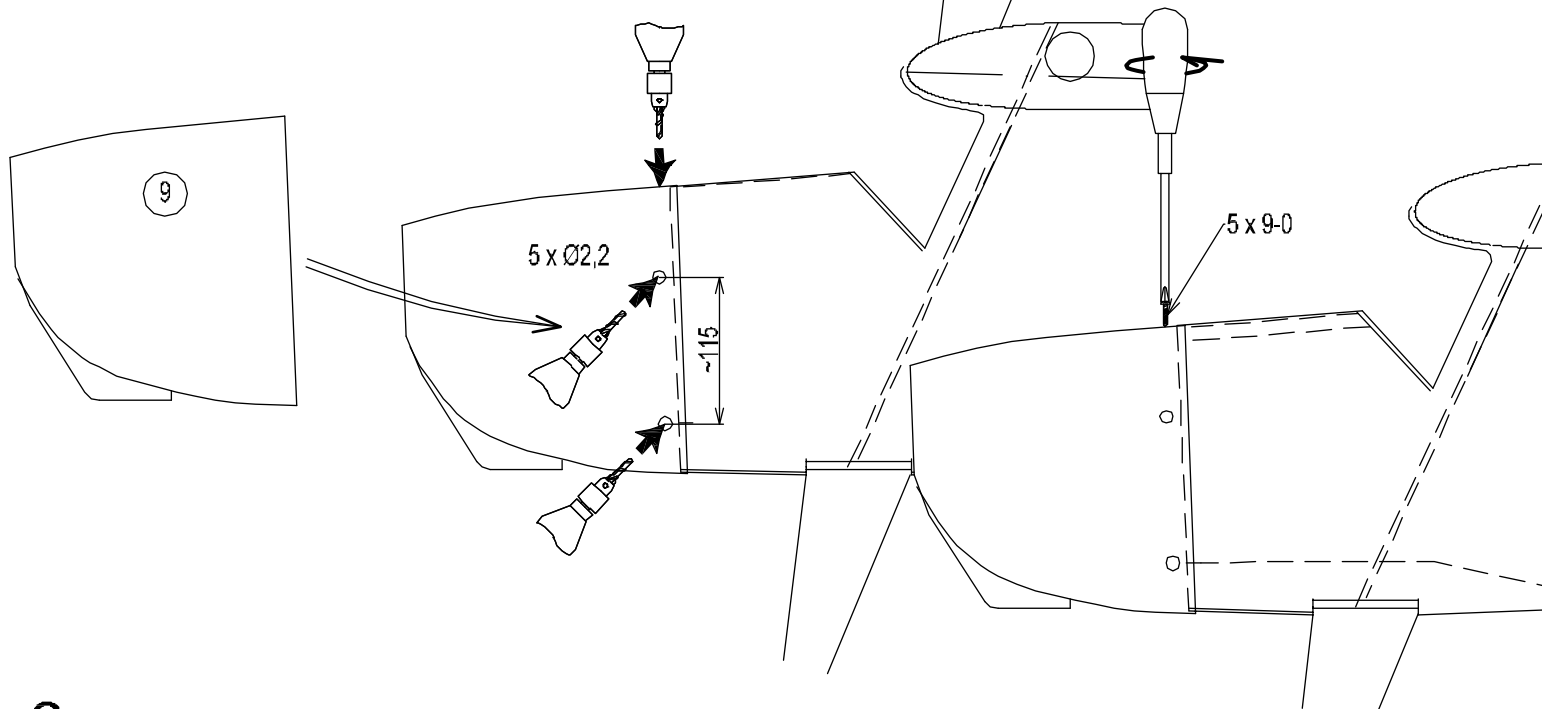
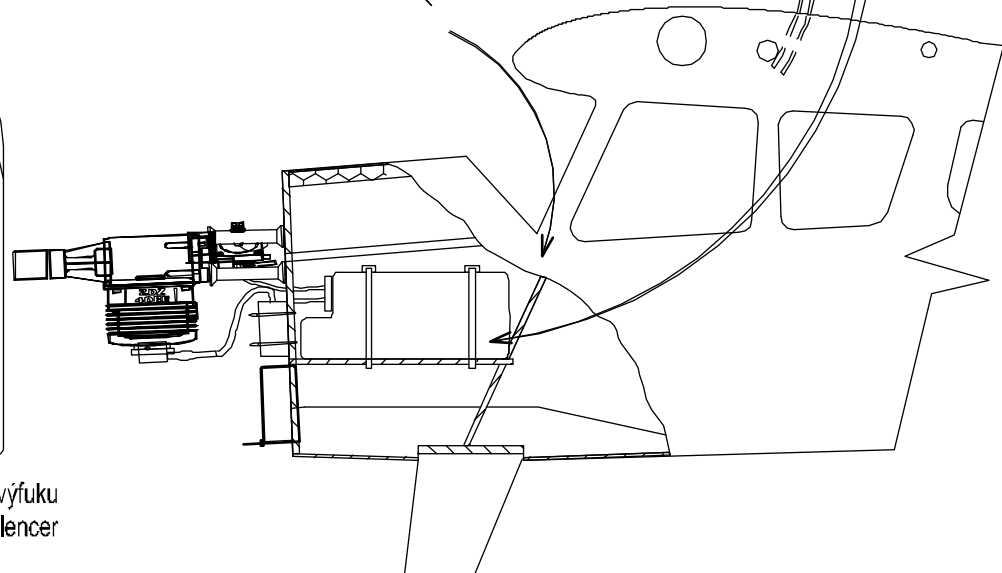
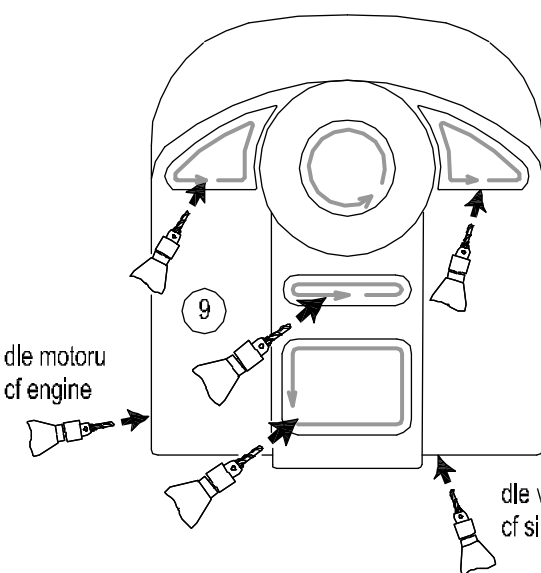
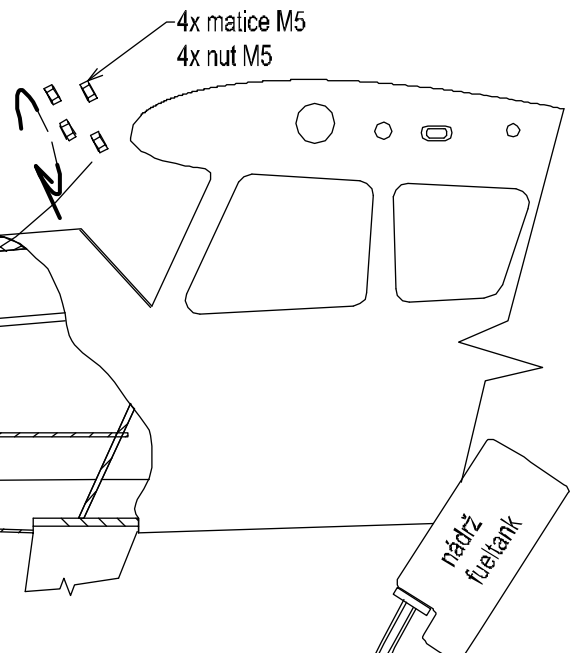
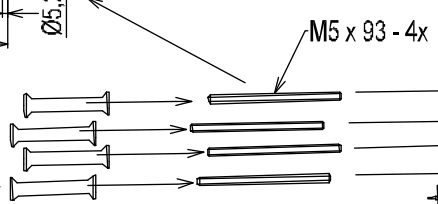
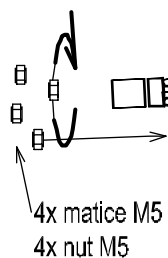
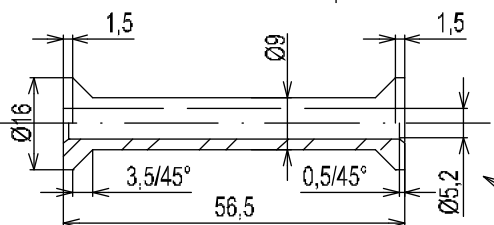


$$A' = A - 3\text{mm}$$

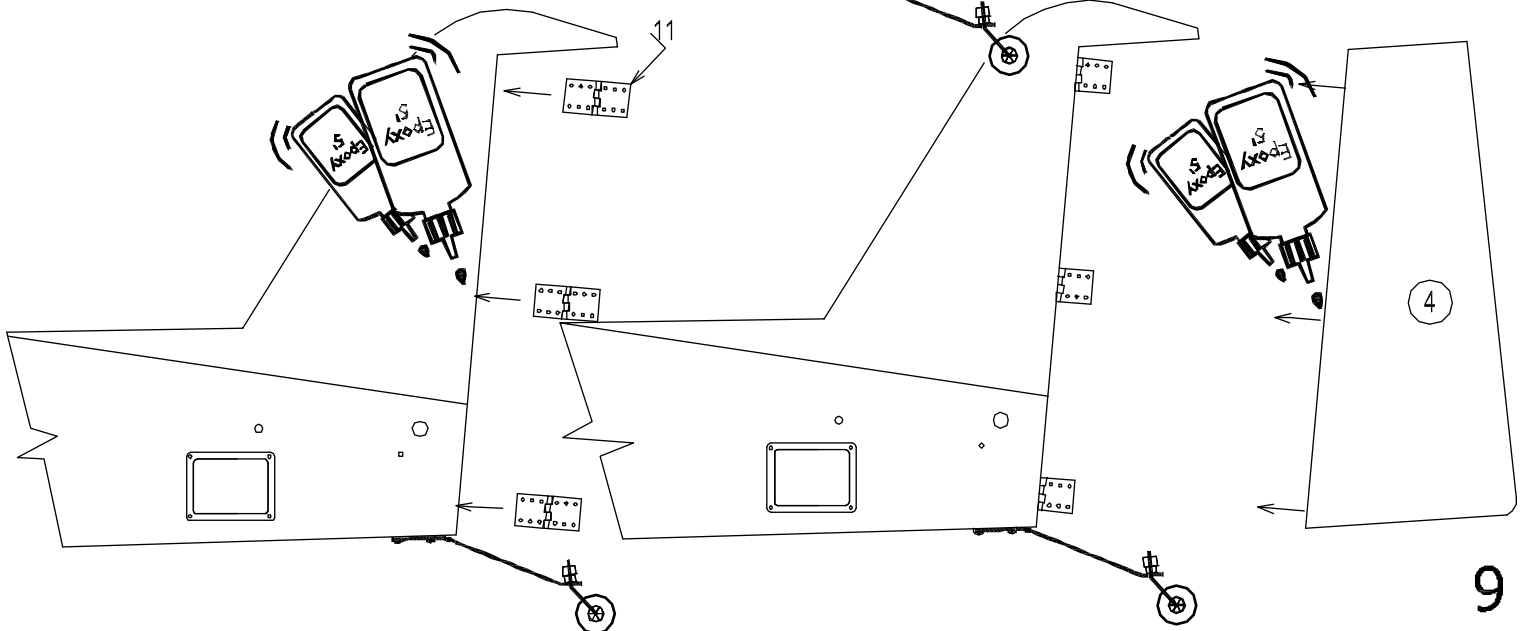
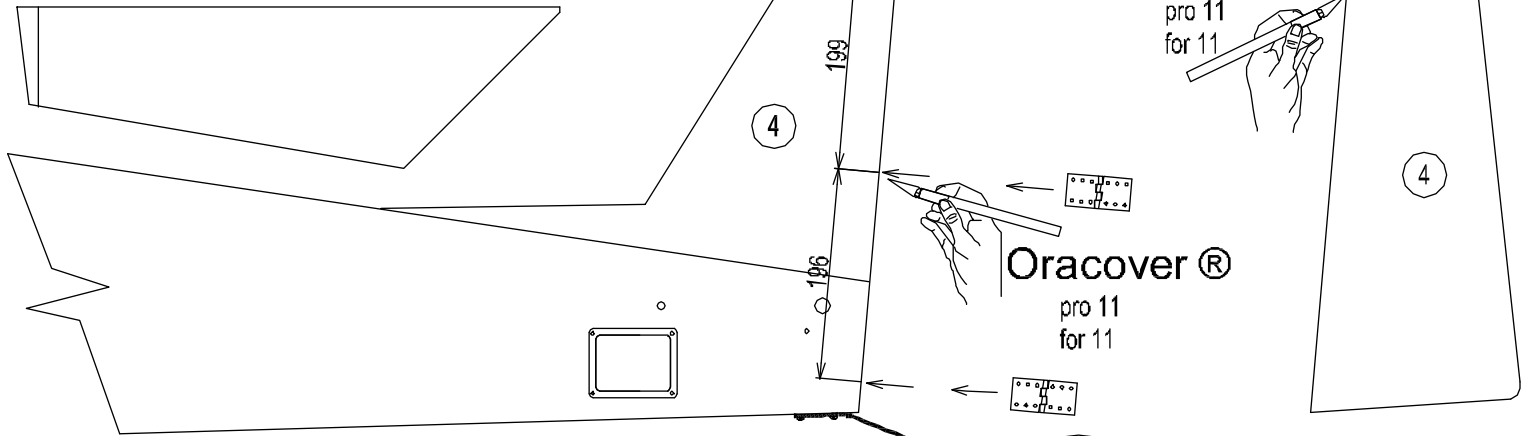
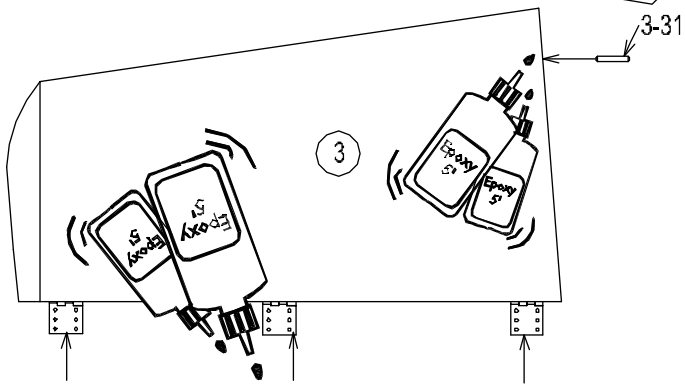
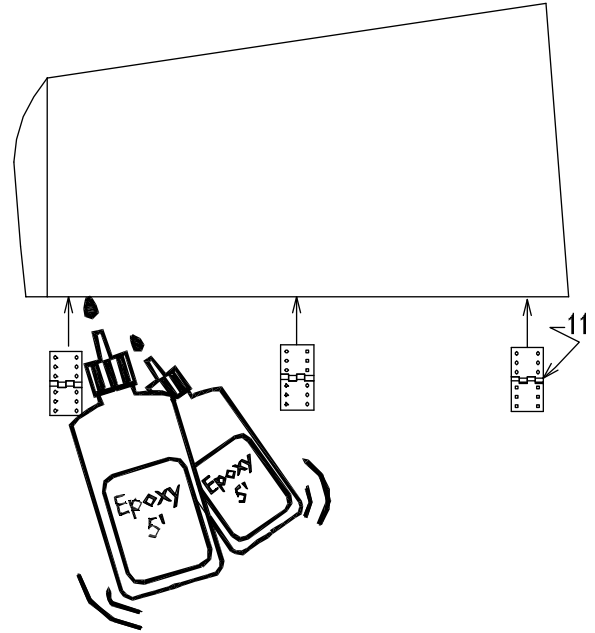
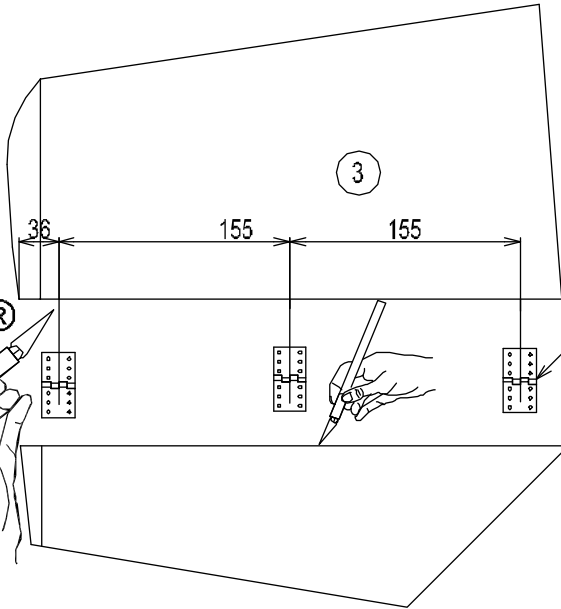




pro ZDZ 40 - dural - 4 ks  
for ZDZ 40 - aluminium - 4 pcs



Oracover®  
pro 11  
for 11



3-6

serva výškovky  
elevator servos

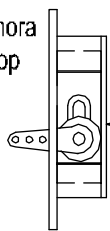
servo výškovky  
elevator servo

servo směrovky  
rudder servo

Na serva pohled shora  
elevators servos -top

NEUTRAL  
pro serva VOP  
for elevators servo

servo výškovky  
elevator servo

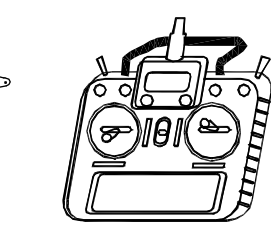


pravé  
right

levé  
left

1-21

Ø 2mm  
pro 4-8  
for 4-8



NEUTRAL

1

SPODNÍ STRANA  
BOTTOM

NEUTRAL

