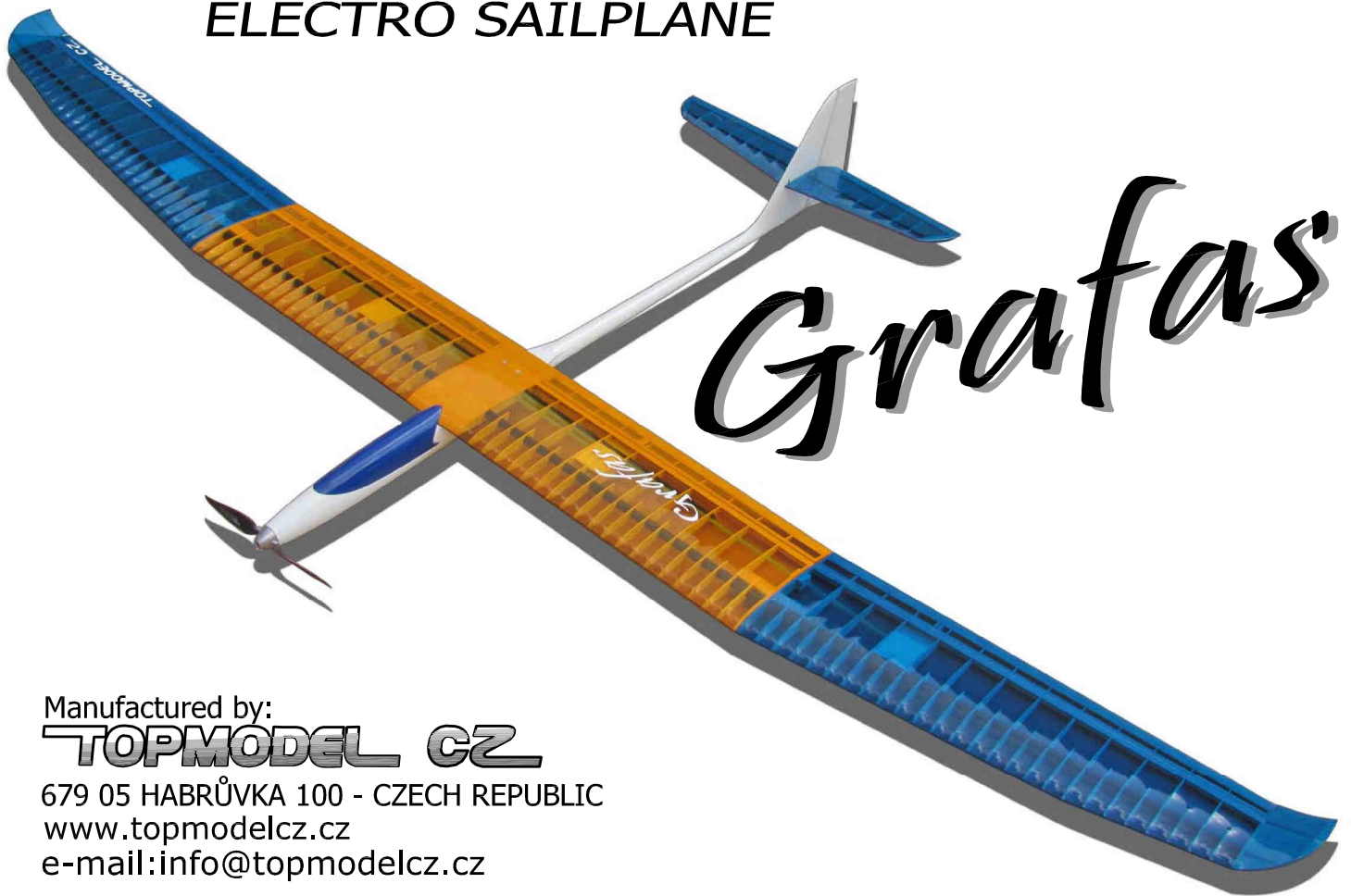


## ELECTRO SAILPLANE



# Grafas

Manufactured by:

**TOPMODEL CZ**

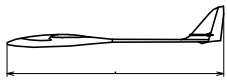
679 05 HABRŮVKA 100 - CZECH REPUBLIC

www.topmodelcz.cz

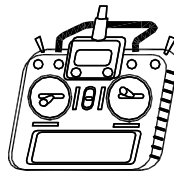
e-mail: info@topmodelcz.cz

Order N°: 02091

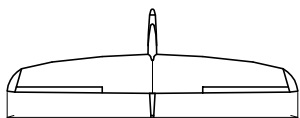
Radio system you'll need :



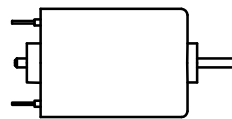
1535mm



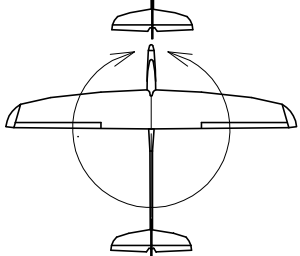
5channel  
with  
6 servos



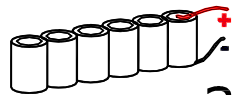
3070mm



MVVS 4,6/860 sport



70,4dm<sup>2</sup>  
27-31,25g/dm<sup>2</sup>



3S-4S Lixx 2-3,2Ah



2 - 2,5 kg



MH 32

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

Part #	Part name	Material, dimensions	Loose	In bag
	building instruction		01	-
1	fuselage	fibreglass	01	-
1-1	engine mount	fibreglass 3 mm	-	01
1-2	servo tray	plywood 4 x 53 x 47 mm	-	01
1-21	servo mount	polyurethan	-	02
2	wing	balsa assembly	03	-
2-1	aileron	balsa	02	-
2-11	flap	balsa	02	-
24	wing joiner	fibreglass Ø 8 x 130 mm	-	02
2-2	wing fixing screw	screw M 5 x 20 mm	-	02
2-21	centering pin	fibreglass Ø 3 x 25 mm	-	02
2-21	centering pin	fibreglass Ø 6 x 65 mm	-	01
2-3	captive nut	M5	-	02
2-31	nut mount	plywood 3 x 23 x 53 mm	-	01
2-4	servo mount	polyurethan 13mm	-	08
2-41	wing servo cover	ABS plastic	-	04
2-5	aileron-flap pushrod	piano wire M2	-	04
2-6	clevis	MPJ 2110	-	04
2-8	aileron horn	fibreglass plate 1,5 mm	-	02
2-81	flap horn	fibreglass plate 1,5 mm	-	02
3	horizontal stabilizer	balsa assembly	02	-
3-21	centering pin	fibreglas Ø 3 x 70 mm	-	01
3-3	elevator joiner	fibreglass Ø 4 x 150 mm	-	01
3-41	elevator servo cover	sticker Ø 50 mm	-	01
3-5	elevator link	piano wire M2 L= 60mm	-	01
3-6	clevis	MPJ 2110, nut M2, MPJ 2406	-	01+01+01
3-8	elevator horn	fibreglass 2 mm	-	01
4	fin	balsa assembly	01	-
4-3	closing strip	balsa 5 mm	-	01
4-5	rudder link	cable set	-	01
4-6	clevis	MPJ 2110	-	02
4-7	cable coupler	MPJ 2050	-	02
4-8	rudder horn	fibreglass plate 1,5 mm	-	02
6	canopy	fibreglass	01	-
6-2	canopy fixing	wood screw Ø2,9x6,5 mm	-	01
7	stickers		02	
11	pinned hinge	MPJ 2502	-	03

#### RECOMMENDED RC EQUIPMENT:

Radio : 5 channel + 7 channel (receiver)  
 Servos : 5x HS 82MG ( for ailerons, elevator and flaps ), 1x Topmodel MS2414 ( for rudder )  
 Motor : MVVS 4,6/860 sport  
 Controller: 60A ( JETI SPIN 66, Xreg 60 with switch BEC )  
 Spinner: TURBO ø 40 mm - order No.0201559  
 Prop: Aeronaut CAM Carbon 12,5/6,5"  
 Twisted cable - Large- ~ 2,3 m  
 Shrink insulation 1.6mm- ~ 0,6 m  
 Connector MPX 6 plug + socket - 2 pair  
 Connector CANON 15 - 1 pair

#### 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 person 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.  
 Before first take-off check up please if model aeroplane parts aren't crooked.  
 The reparation is possible through the use of hot-air dryer.

Položka	Název dílu	Materiál, rozměr	Voln / ks	Balí ek/ ks
	montážní návod		01	-
1	trup	laminát	01	-
1-1	motorová pépážka	sklotextit 3 mm	-	01
1-2	držák serva ocasních ploch	p ekližka 4 x 53 x 47 mm	-	01
1-21	držák serva VOP	polyuretan 13mm	-	02
2	k ídlo	balsa konstruk ní	03	-
2-1	k idélko	balsa	02	-
2-11	vztlková klapka	balsa	02	-
24	spojka k ídla	laminát Ø 8 x 130 mm	-	02
2-2	uchycení k ídla	šroub M 5 x 20 mm	-	02
2-21	areta ní kolík	laminát Ø 3 x 25 mm	-	02
2-21	areta ní kolík	laminát Ø 6 x 65 mm	-	01
2-3	uchycení k ídla	matice M5	-	02
2-31	podložka matice	p ekližka 3 x 23 x 53	-	01
2-4	držák serva	polyuretan 13mm	-	08
2-41	krytka serva	ABS folie	-	04
2-5	táhlo k idélka a klapky	ocel	-	04
2-6	koncovka táhla	MPJ 2110	-	04
2-8	páka k idélka	sklotextit 1,5 mm	-	02
2-81	páka klapky	sklotextit 1,5 mm	-	02
3	VOP	balsa konstruk ní	02	-
3-21	areta ní kolík	laminát Ø3mm L = 70mm	-	01
3-3	spojka VOP	laminát Ø4mm L = 150mm	-	01
3-41	krytka serva výškovky	samolepka Ø 50 mm	-	01
3-5	táhlo VOP	ocel M 2mm L = 60 mm	-	01
3-6	koncovka táhla	MPJ 2110, matice M2, MPJ 2406	-	01+01+01
3-8	páka	sklotextit 2 mm	-	01
4	sm rovka	balsa konstruk ní	01	-
4-11	pr chodka táhla	plast Ø3/2mm L = 40mm	-	02
4-3	steven	balsa 6	-	01
4-5	lanko sm rovky	MPJ 2302	-	01
4-6	koncovka táhla	MPJ 2110	-	02
4-7	spojka lanka	MPJ 2050	-	02
4-8	páka sm rovky	sklotextit 1,5 mm	-	02
6	kabina	laminát	01	-
6-2	uchycení kabiny	vrut Ø2,9x6,5	-	01
7	obtisky		02	-
11	záv sy kormidel	MPJ 2502	-	03

#### DOPORU ENÉ P ÍSLU NSTVÍ:

RC souprava : 5 kanál + 7 kanál p íjíma

Serva : 5x HS 82MG ( pro k idélka, klapky a VOP ), 1x Topmodel MS 2414 ( pro sm rovku )

Motor : MVVS 4,6/860 sport

Regulátor: 60A (Spin 66, Xreg 60 se spínaným BEC )

Kužel: TURBO Ø40mm - [0201559](#)

Listy: Aeronaut CAM Carbon 12,5/6,5“

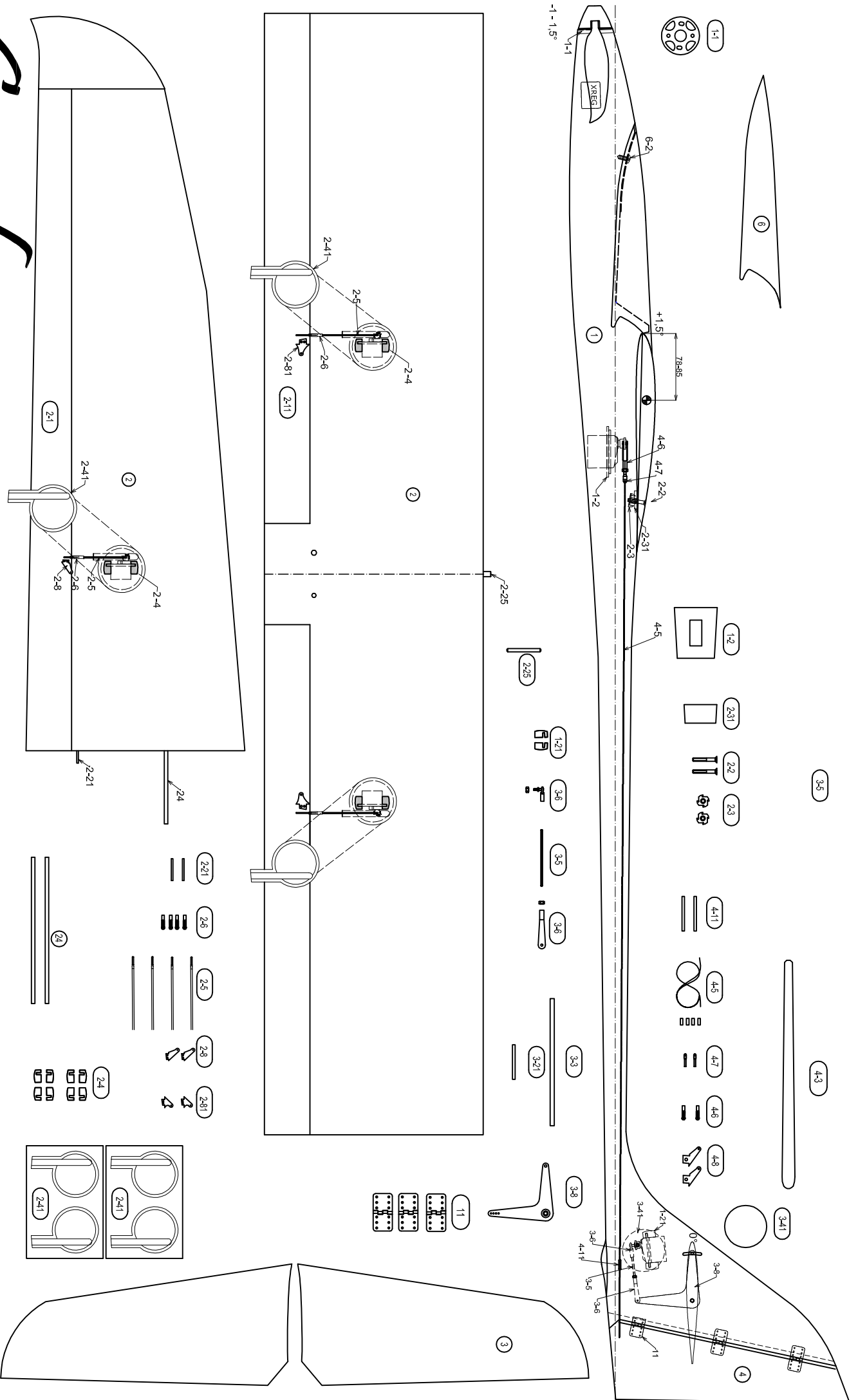
Kroucený kabel – cca 2,3 m

Smrš ovací bužírka Ø 1,6 mm – cca 0,6 m

Konektor MPX 6 – 2 páry

Konektor CANON 15 – 1 pár

**Před prvním startem zkontrolujte jestli nejsou díly modelu zkroucené. Náprava je možná pomocí horkovzdušné pistole.**

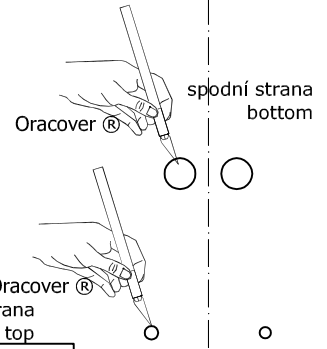
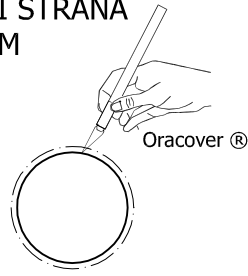


**Grafas**

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 www.topmodelcz.cz e-mail: info@topmodelcz.cz

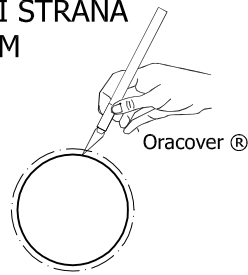
SPODNÍ STRANA  
BOTTOM

②



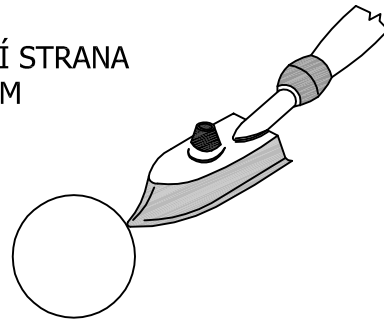
SPODNÍ STRANA  
BOTTOM

②



SPODNÍ STRANA  
BOTTOM

②

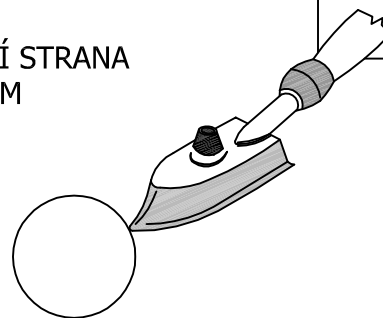


SPODNÍ STRANA  
BOTTOM



SPODNÍ STRANA  
BOTTOM

②



2

SPODNÍ STRANA  
BOTTOM

krok 1.  
step 1.



krok 2.  
step 2.



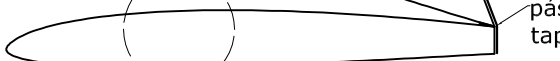
2-11

1/2  
1/2

krok 1.  
step 1.



krok 2.  
step 2.



páska  
tape

páska 2  
tape

2-25

2-25

2

VRCHNÍ STRANA  
TOP

1/2  
1/2

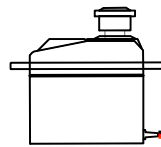
2-1

2-21

2

pro servo klapek  
for flaps servo

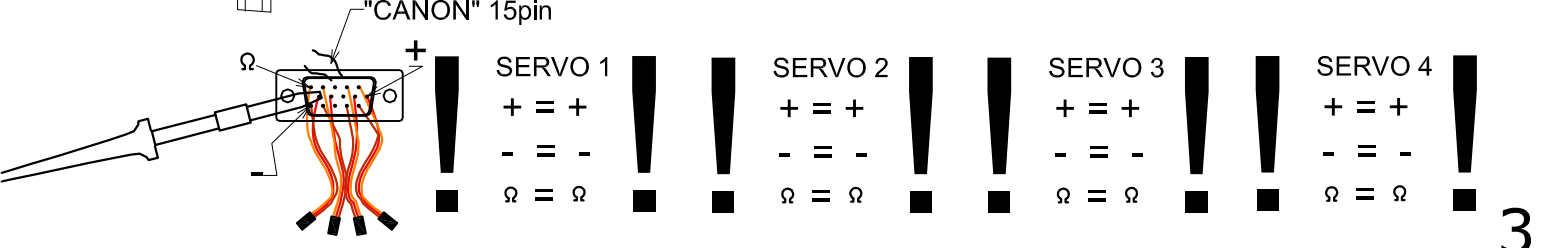
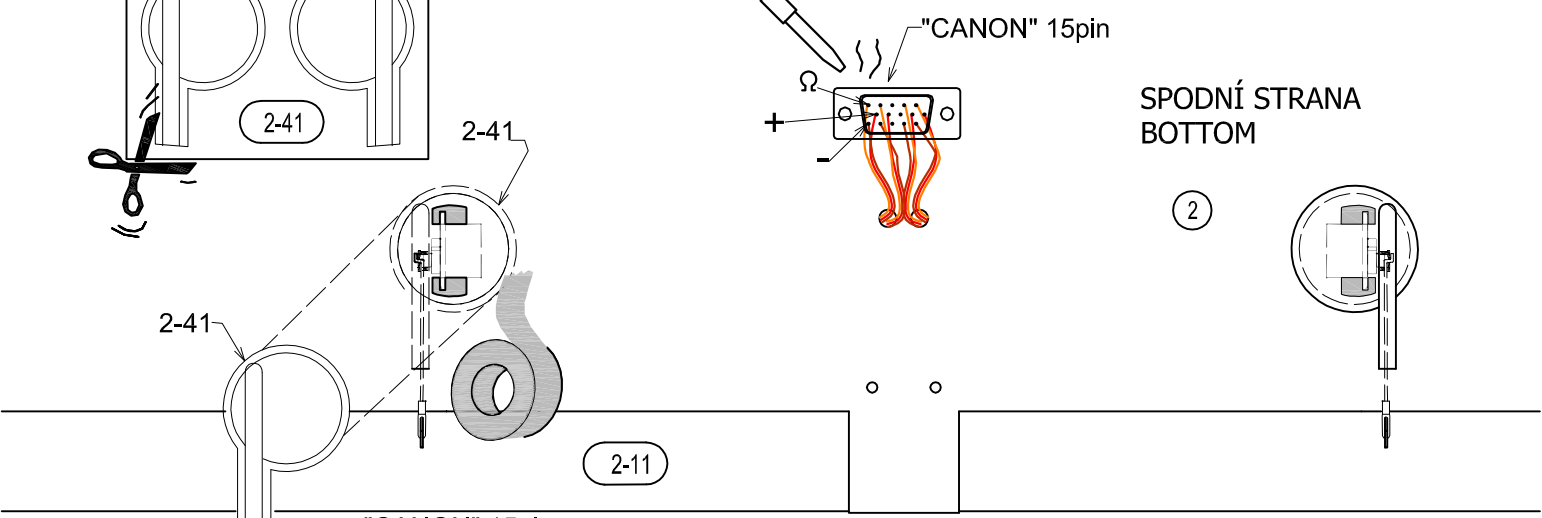
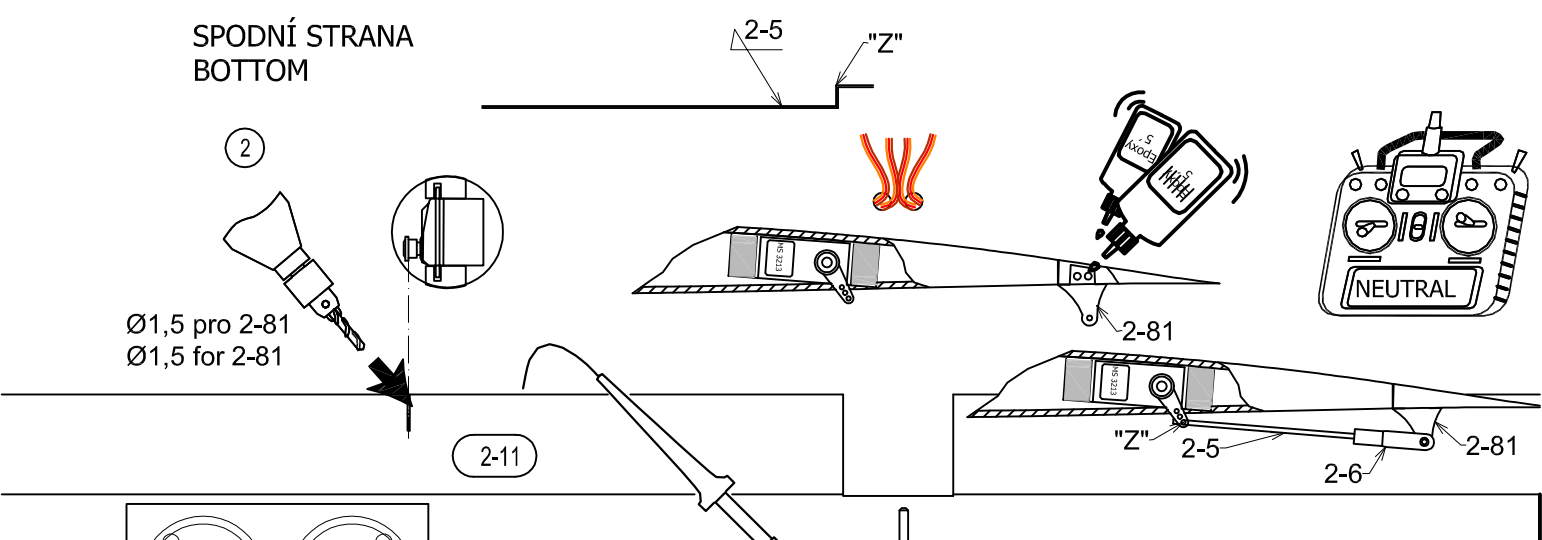
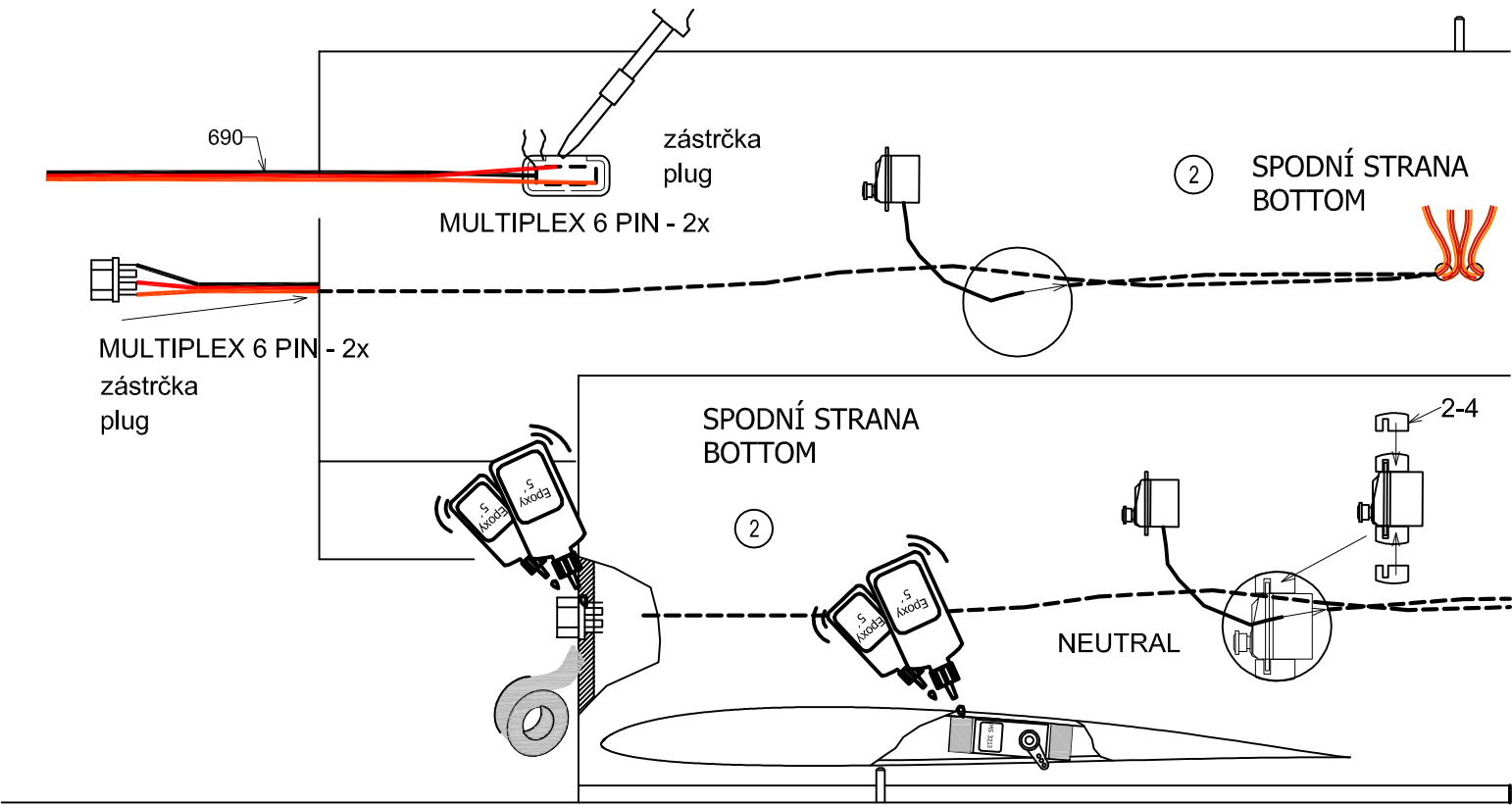
~290mm - 2x



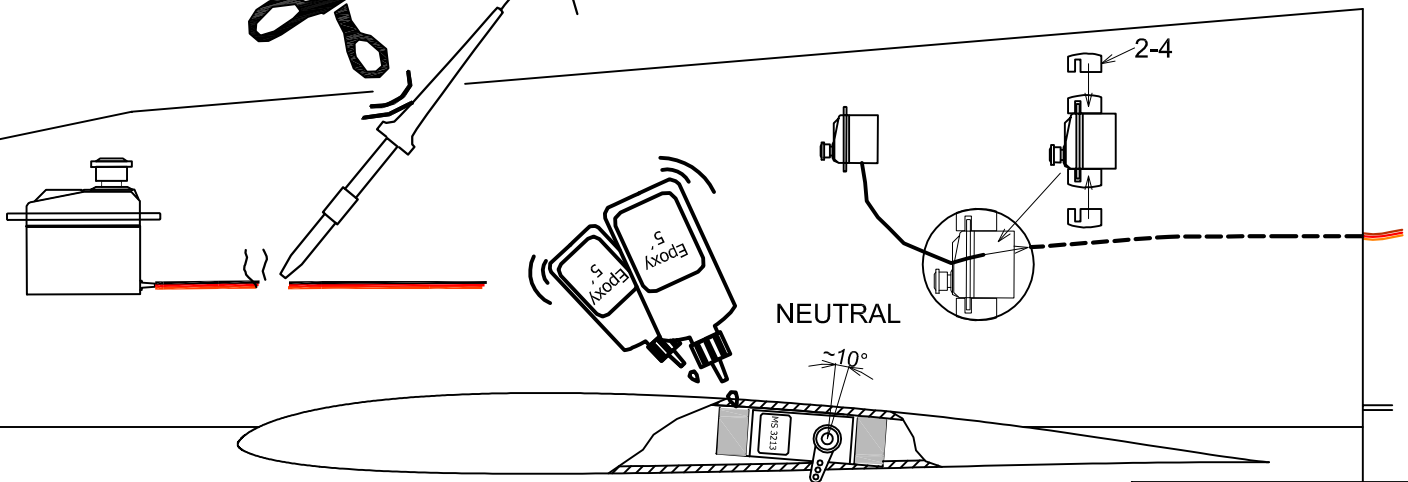
pro servo křídélek  
for aileron servo

~690mm - 2x





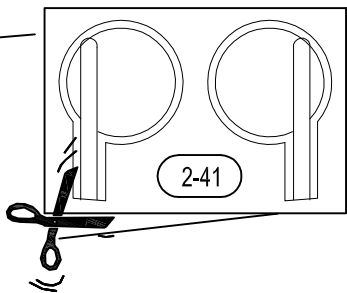
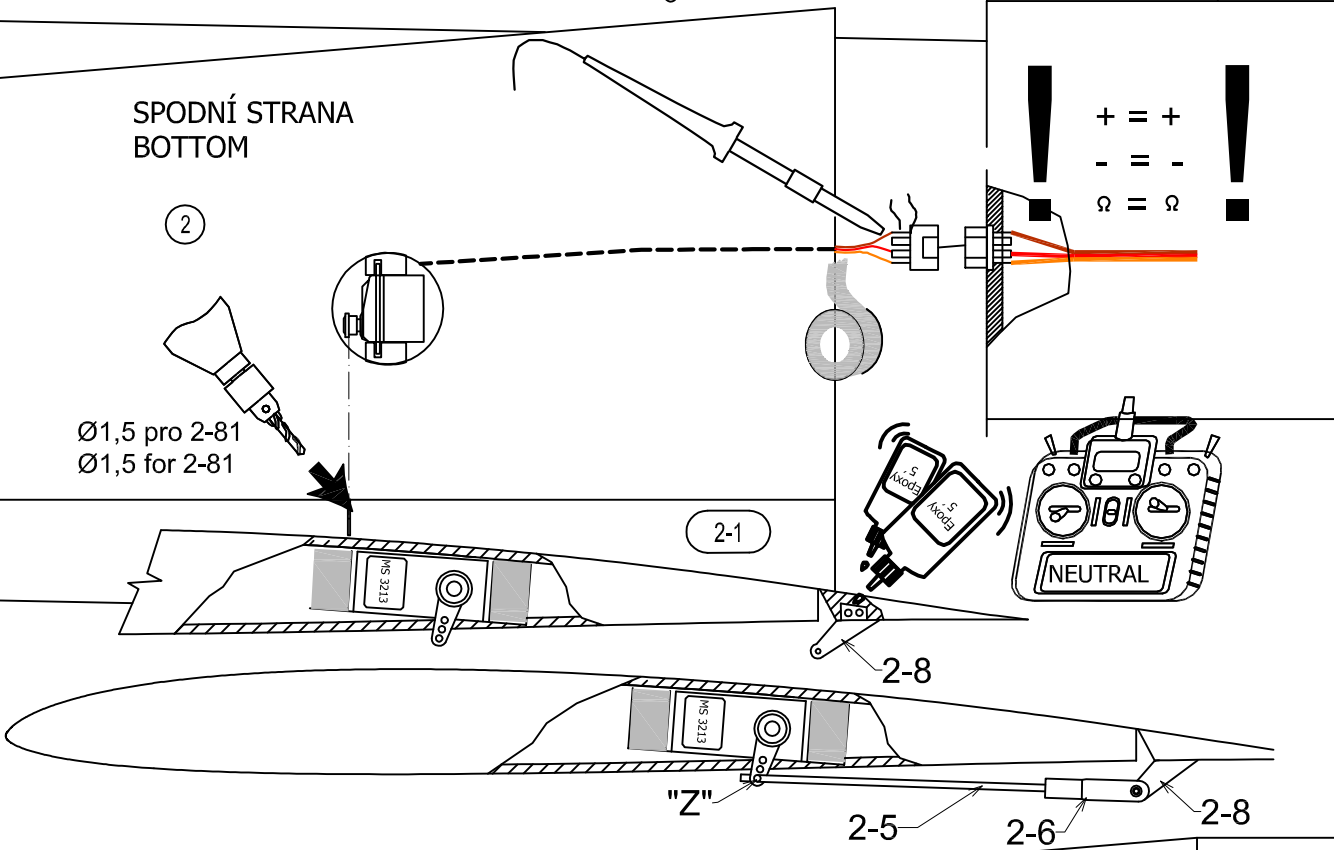
pro servo křídělek  
for aileron servo



SPODNÍ STRANA  
BOTTOM

②

Ø1,5 pro 2-81  
Ø1,5 for 2-81

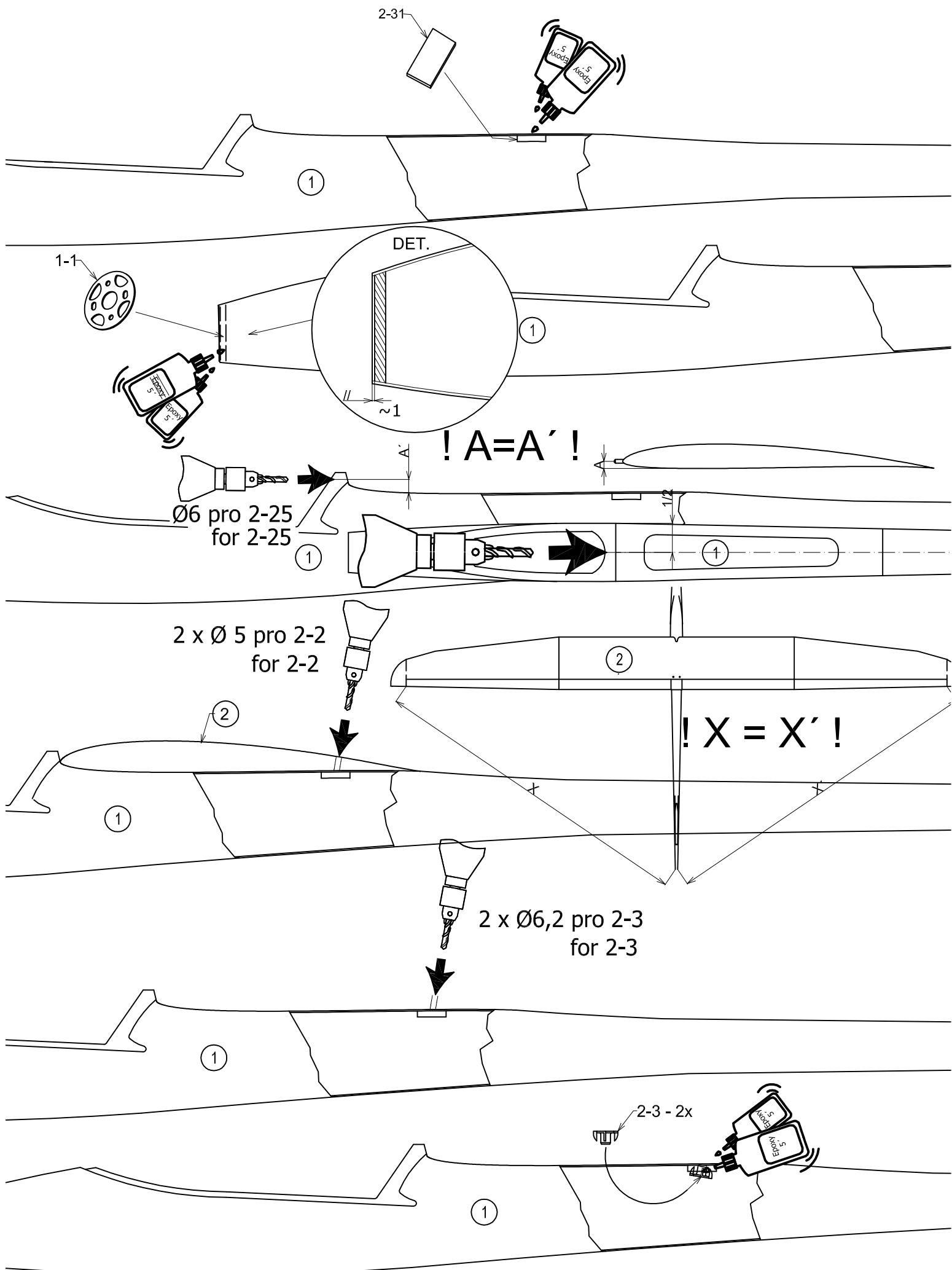


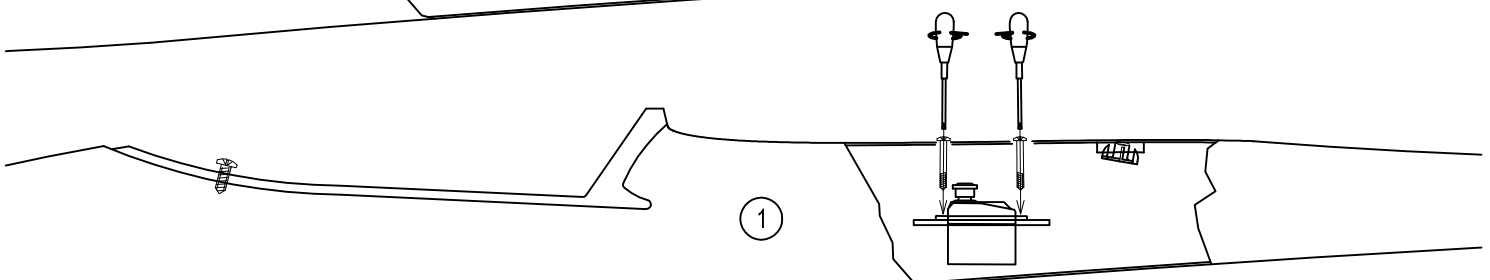
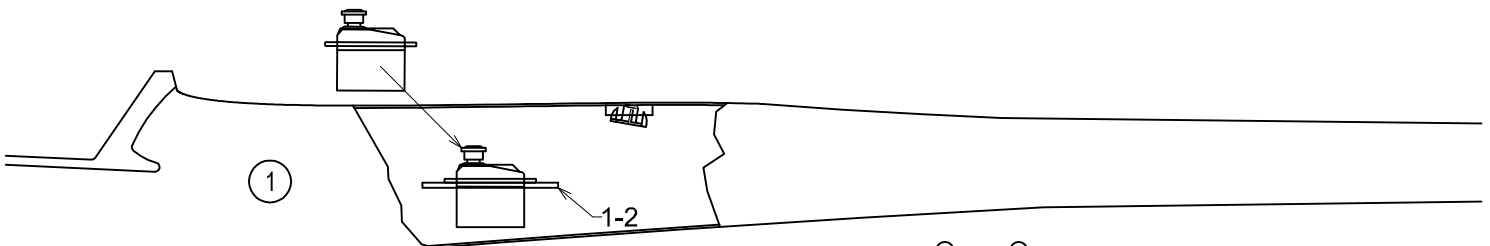
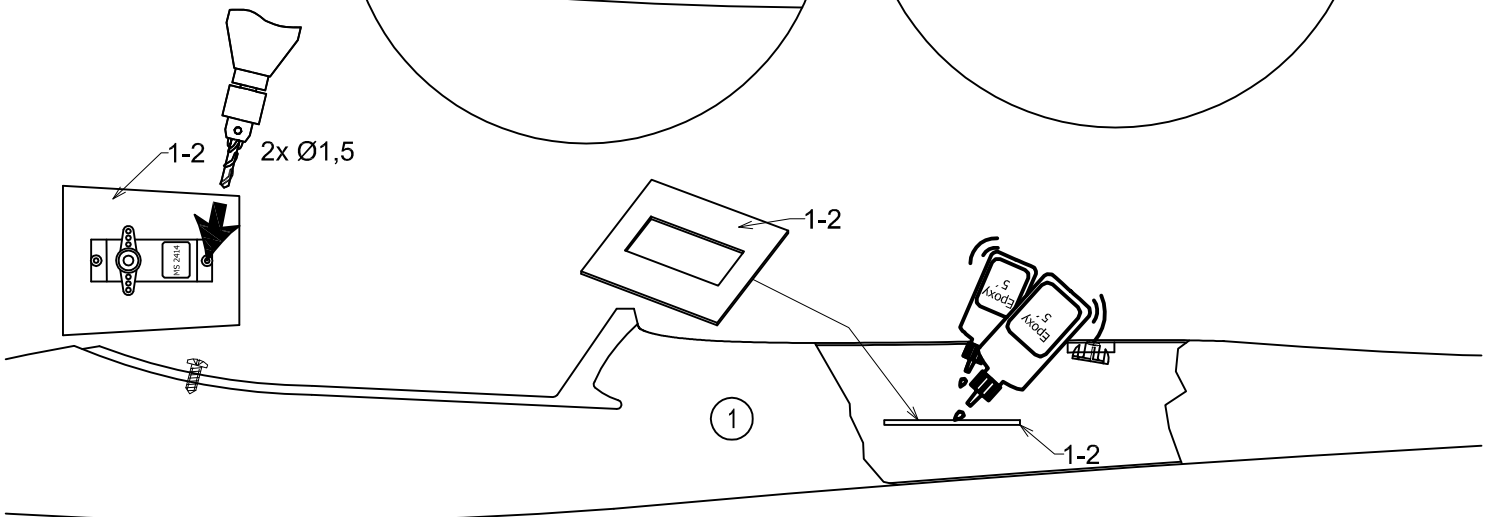
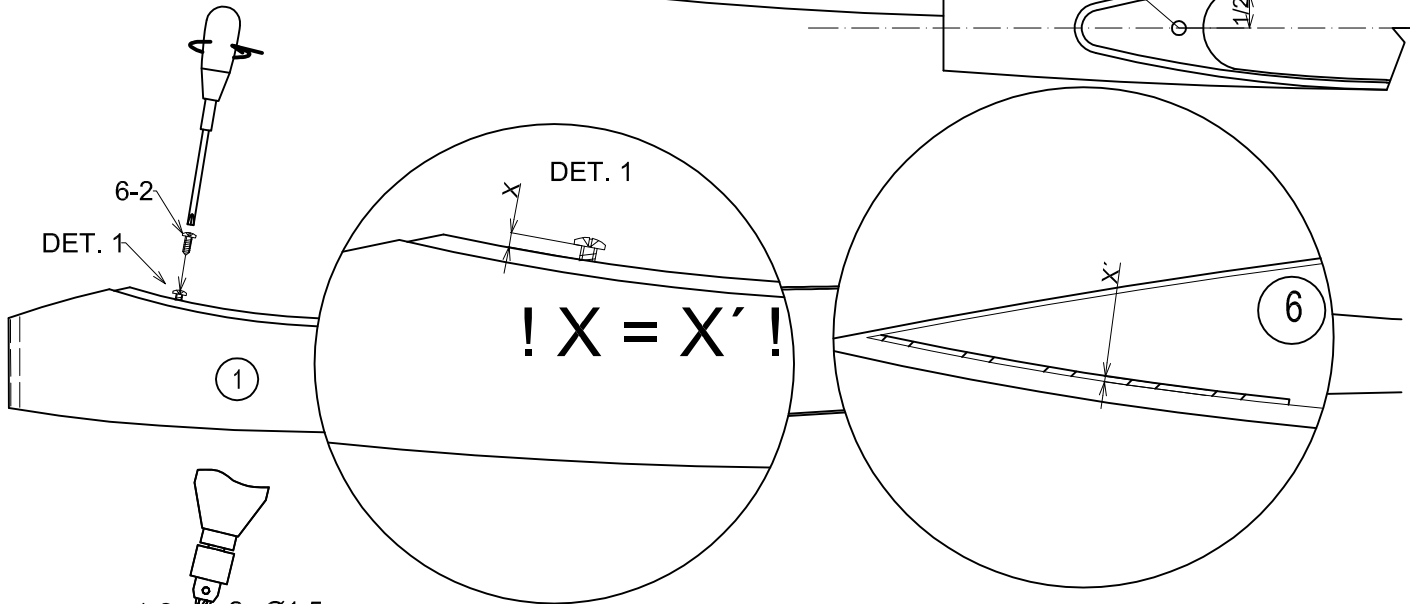
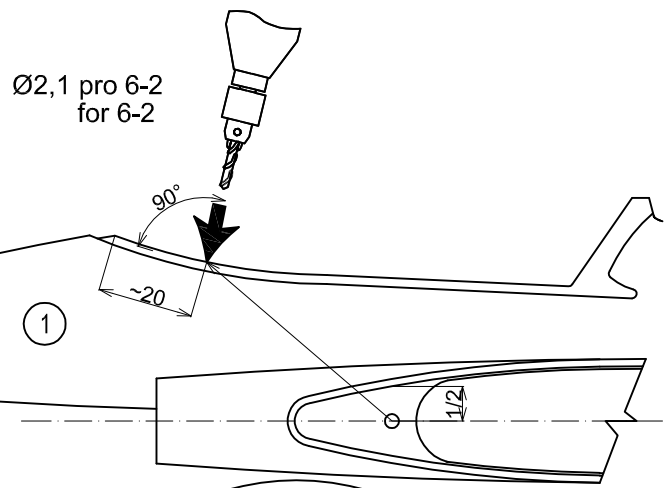
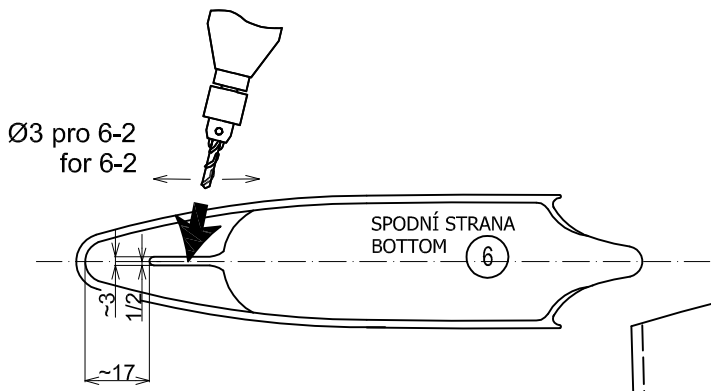
2-41

SPODNÍ STRANA  
BOTTOM

②

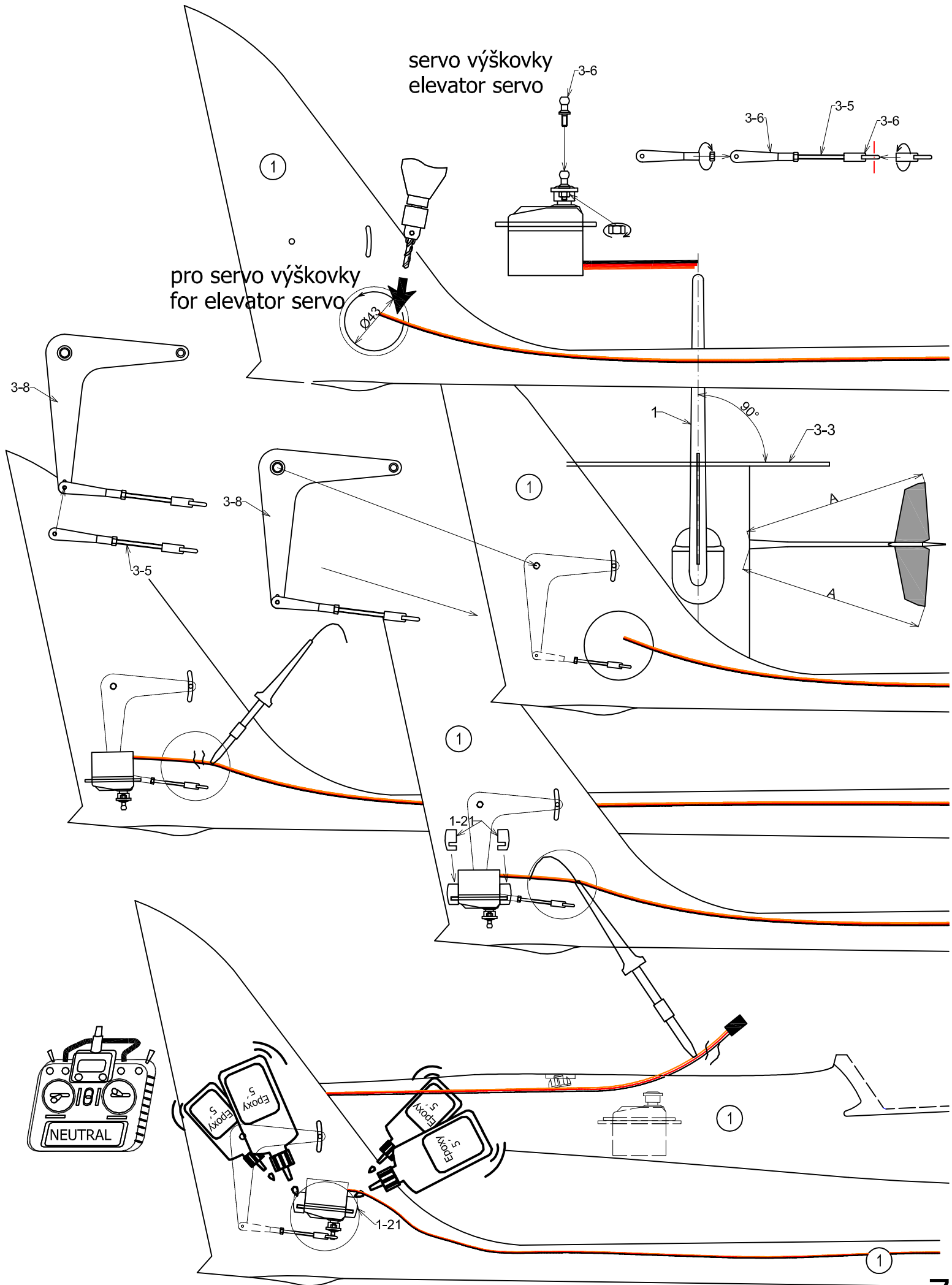


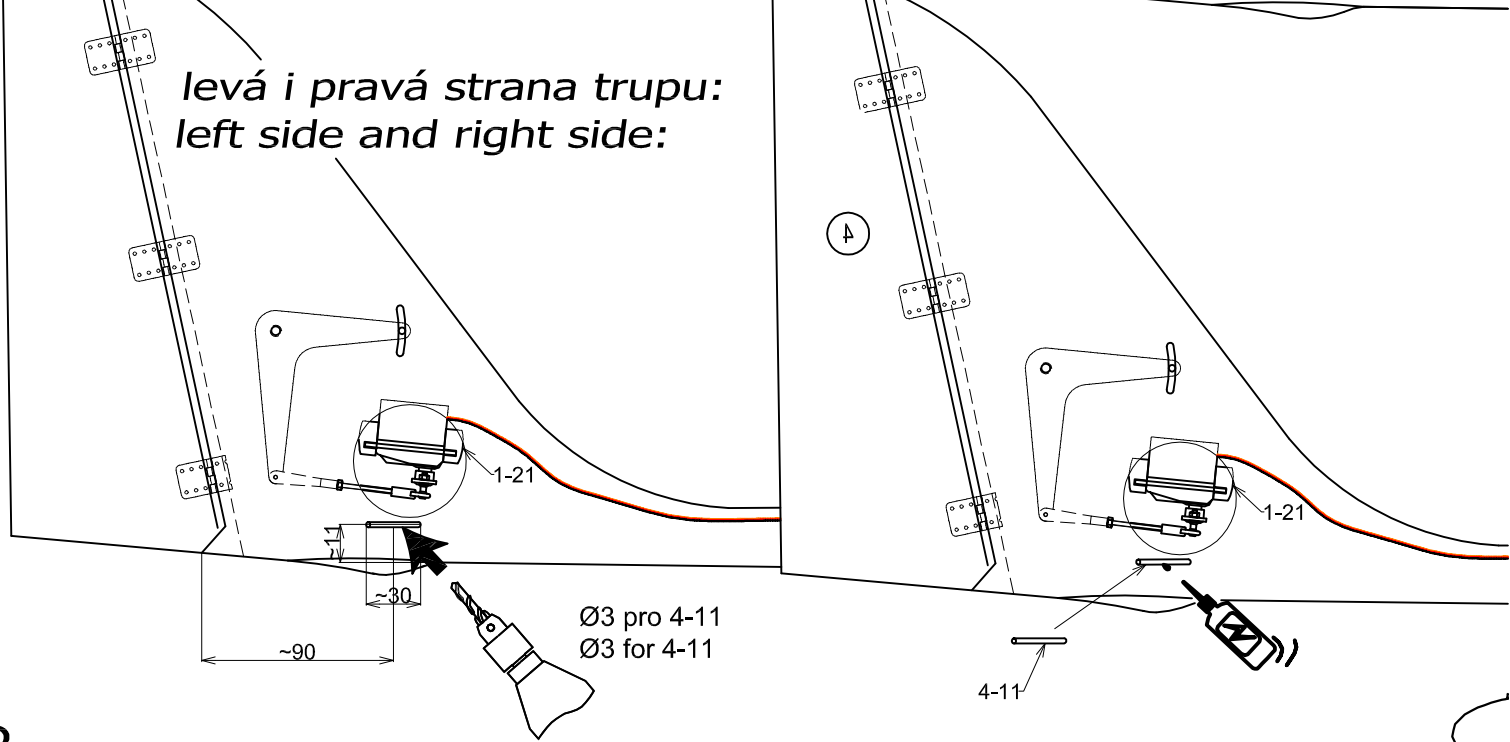
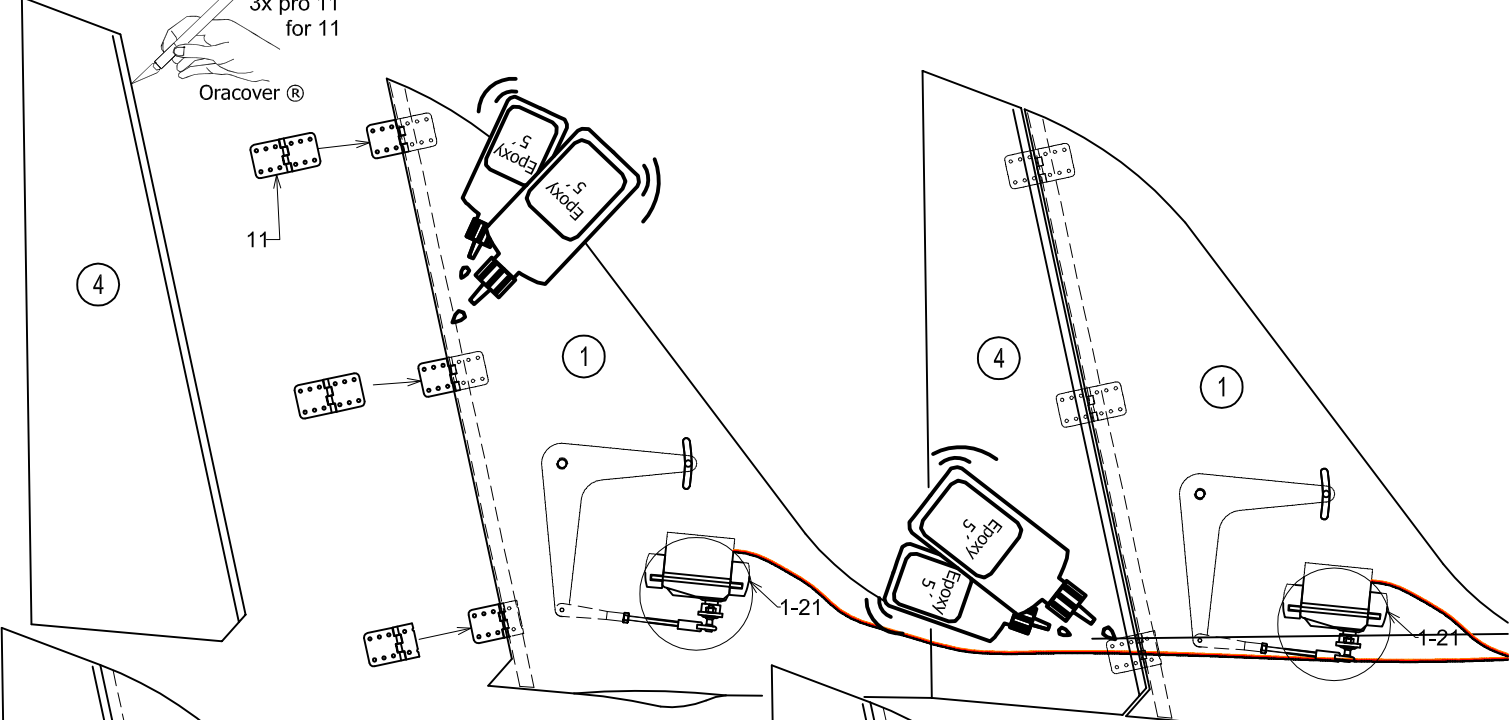
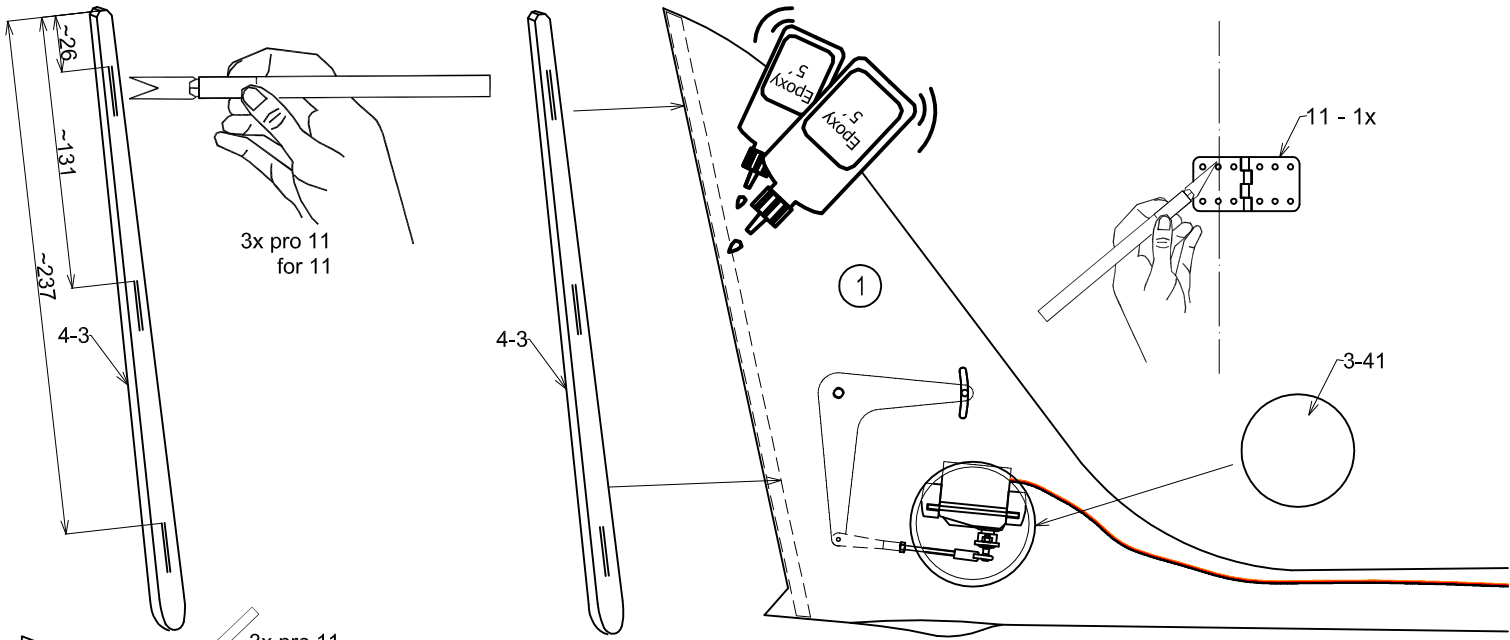




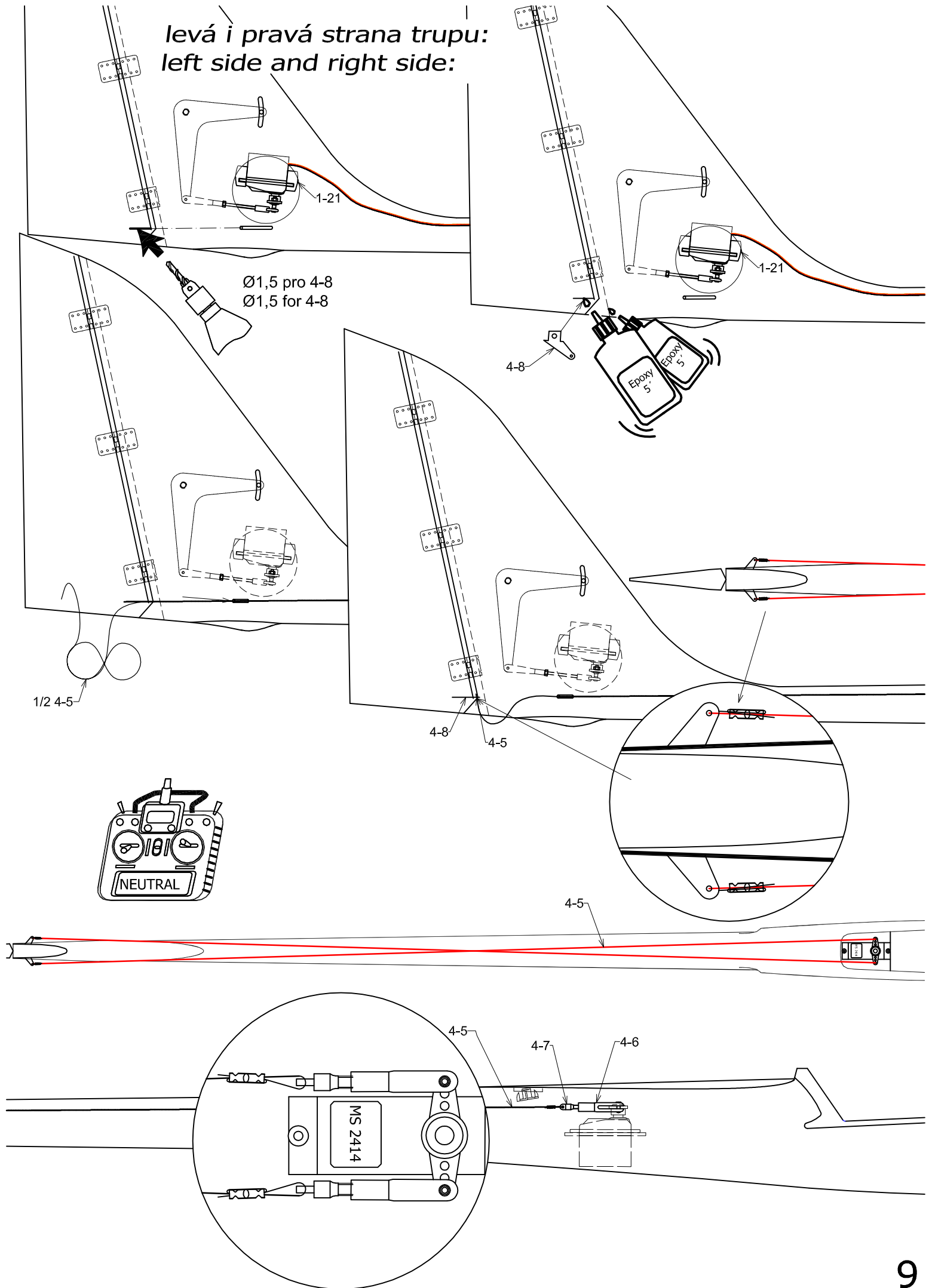
servo výškovky  
elevator servo

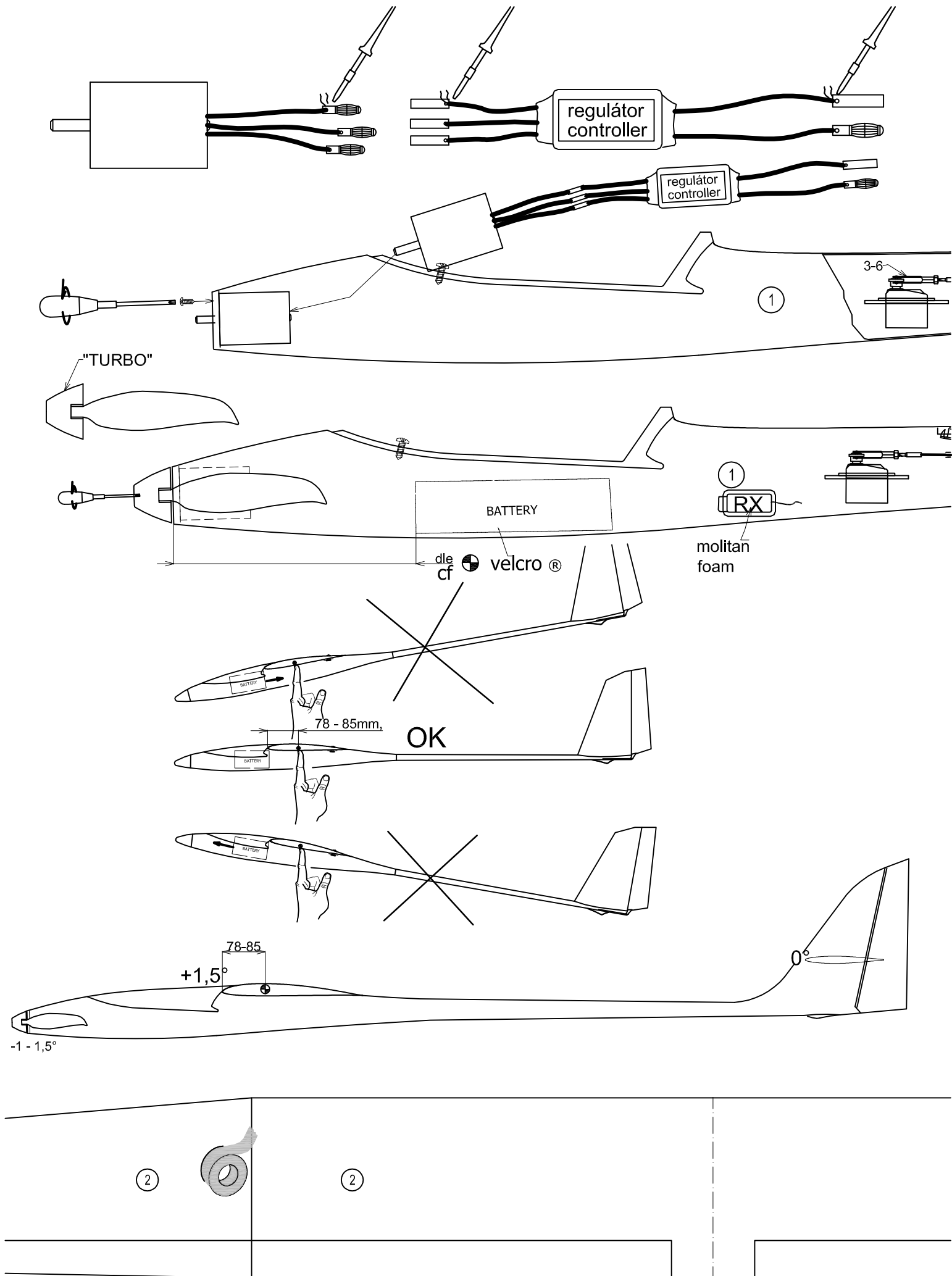
pro servo výškovky  
for elevator servo

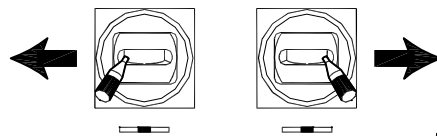
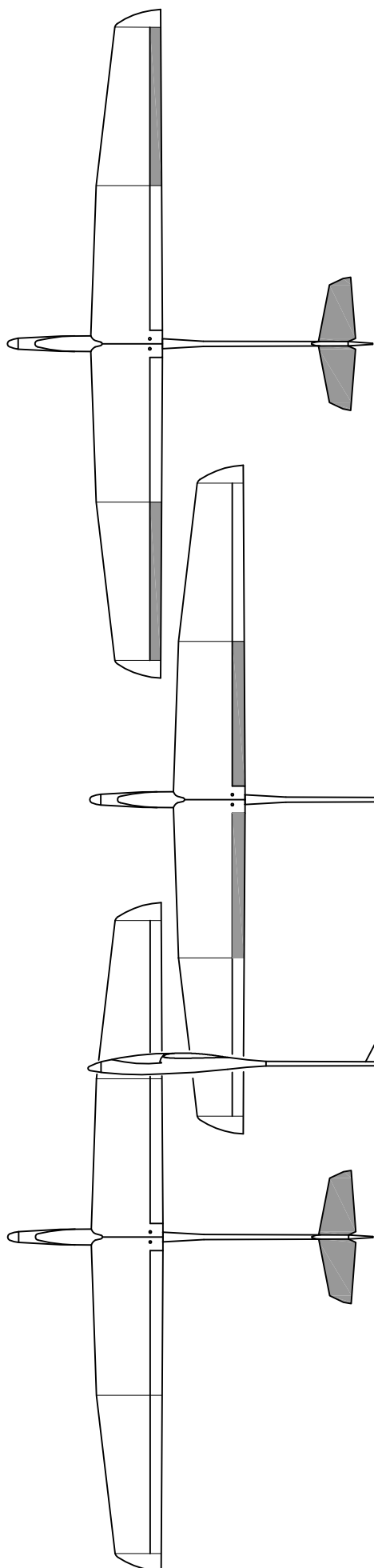




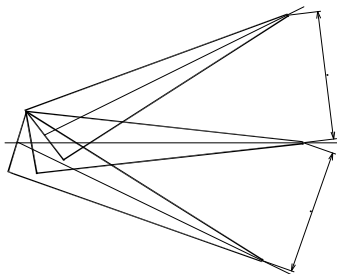
levá i pravá strana trupu:  
left side and right side:







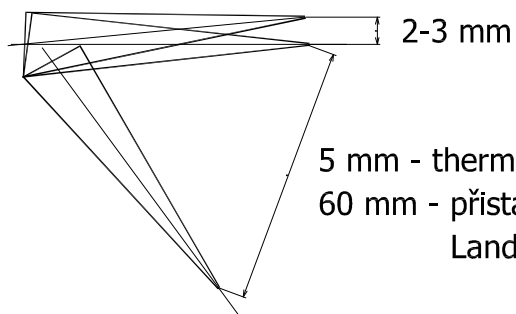
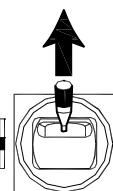
↑ Přistání - 15-18 mm  
Landing



20-25

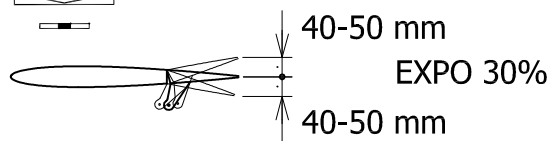
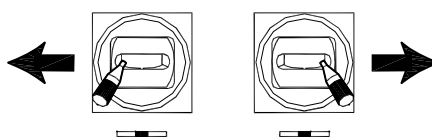
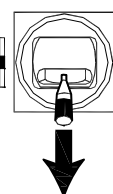
EXPO 25%

9-11 mm



2-3 mm

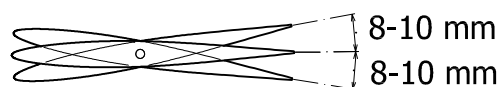
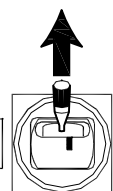
5 mm - thermik  
60 mm - přistání  
Landing



40-50 mm

EXPO 30%

40-50 mm



8-10 mm

8-10 mm

EXPO 20%

