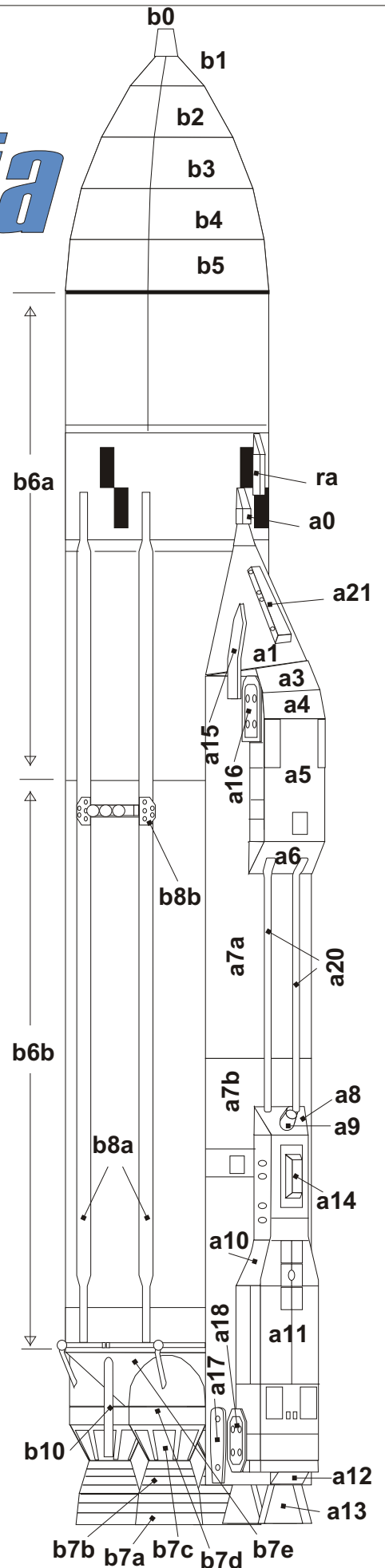
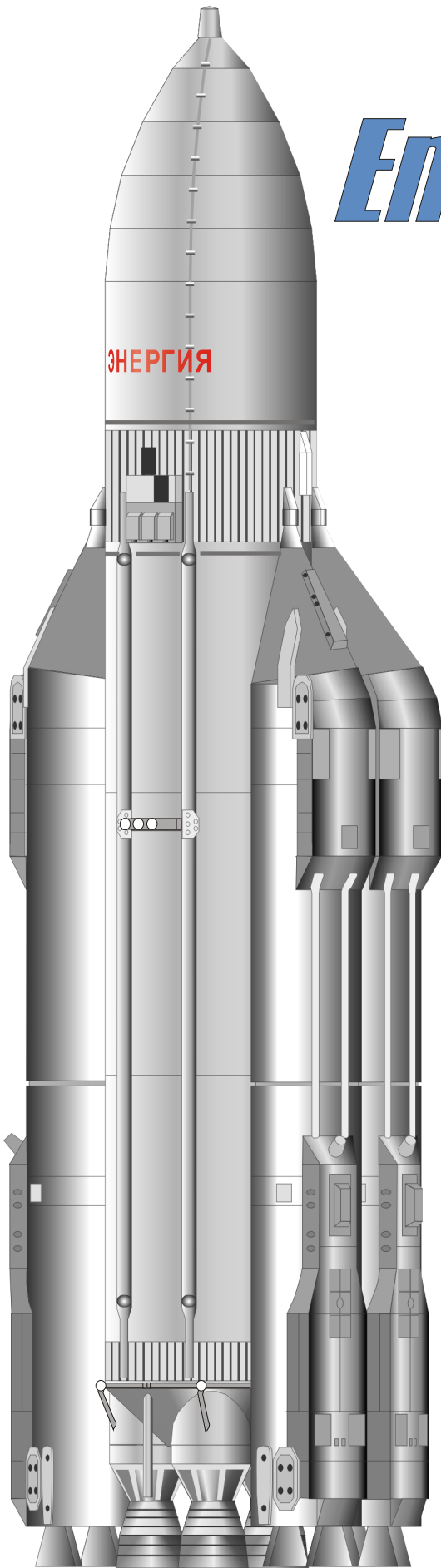
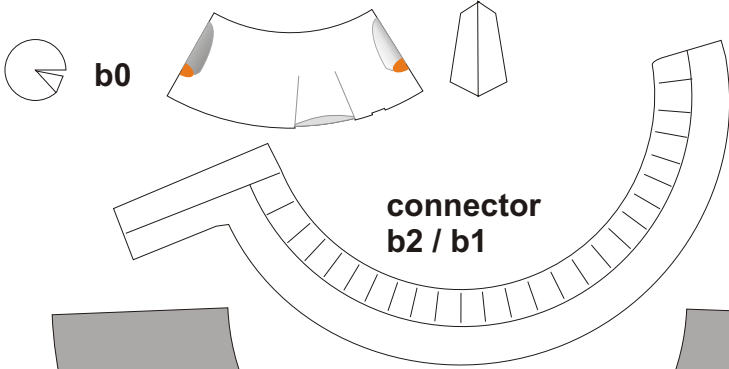


Energia

1:96 scale
rev. 4



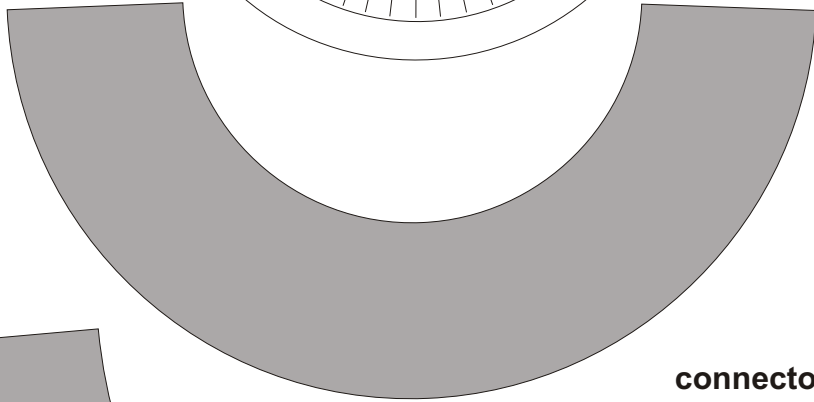
10 cm



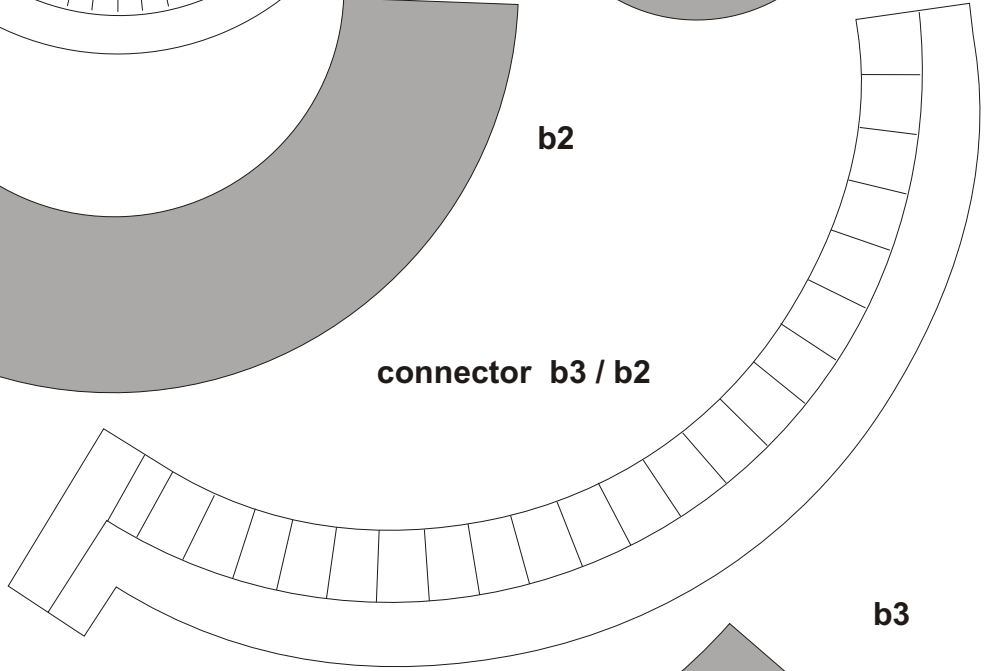
b0

connector
b2 / b1

b1

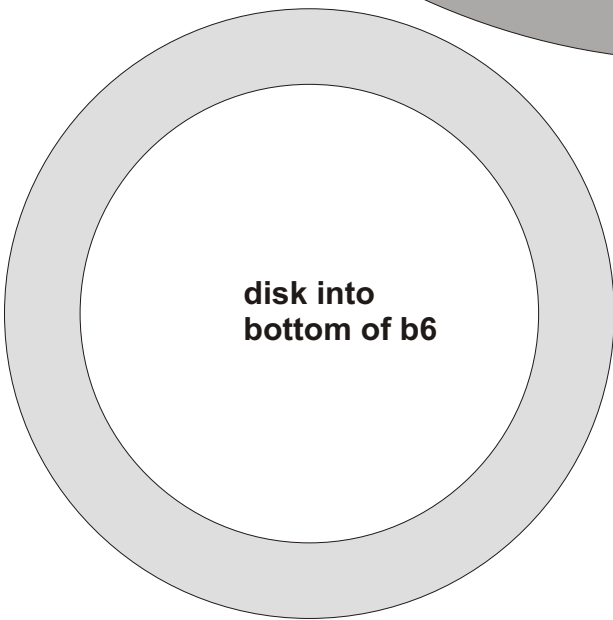


b2

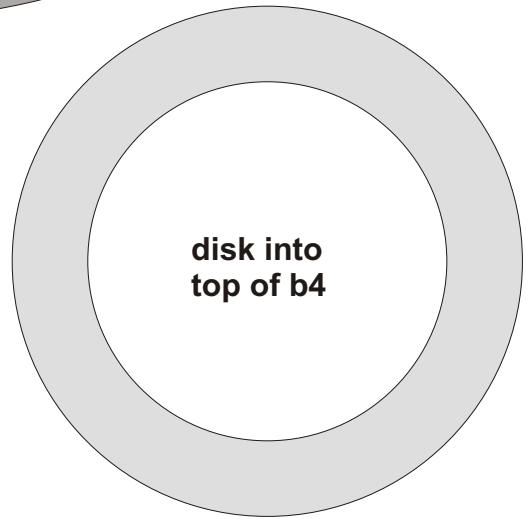


connector
b3 / b2

b3

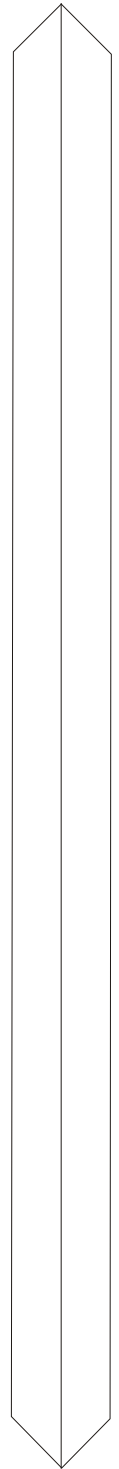
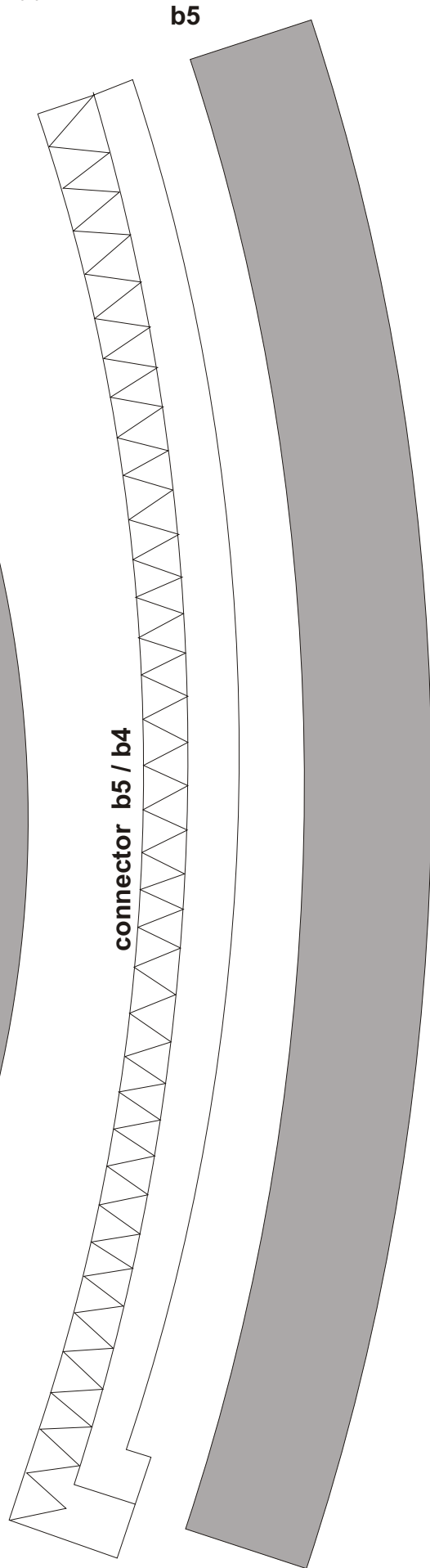
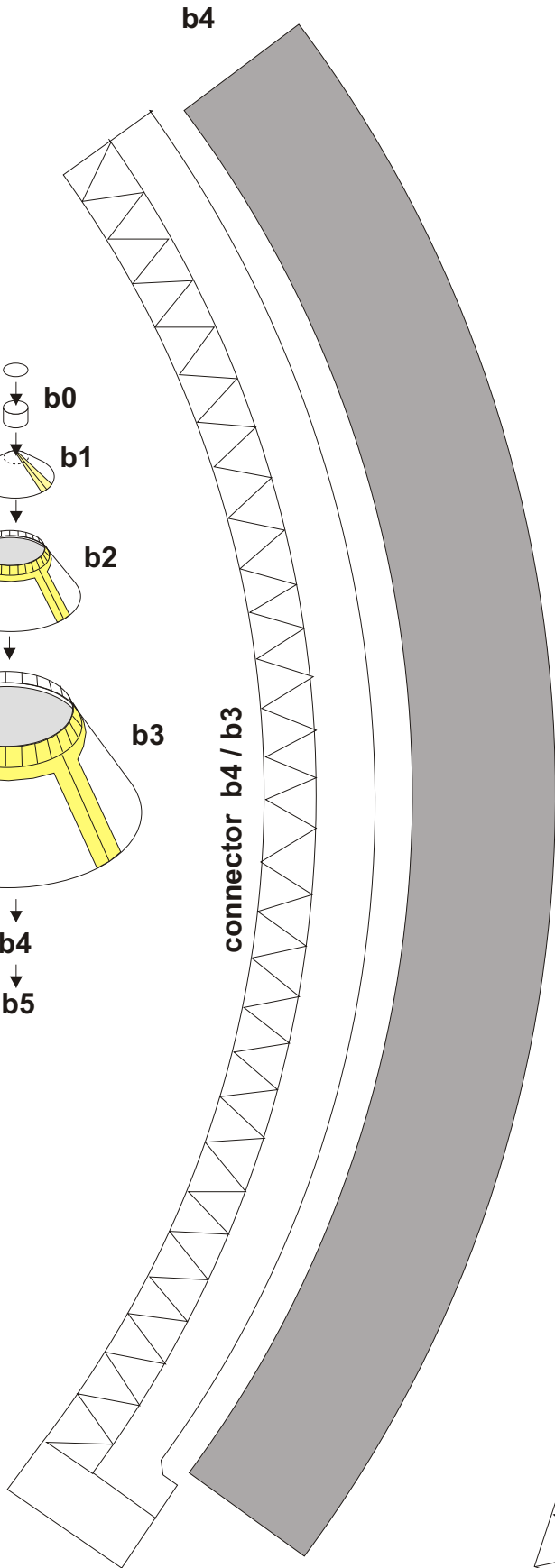
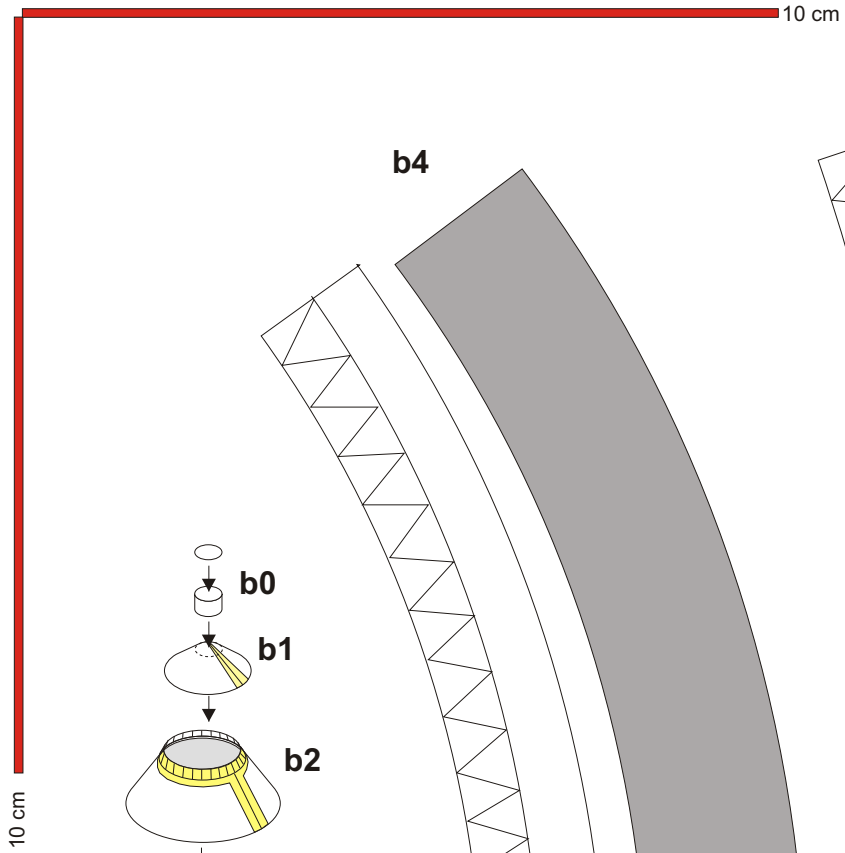


disk into
bottom of b6



disk into
top of b4

10 cm

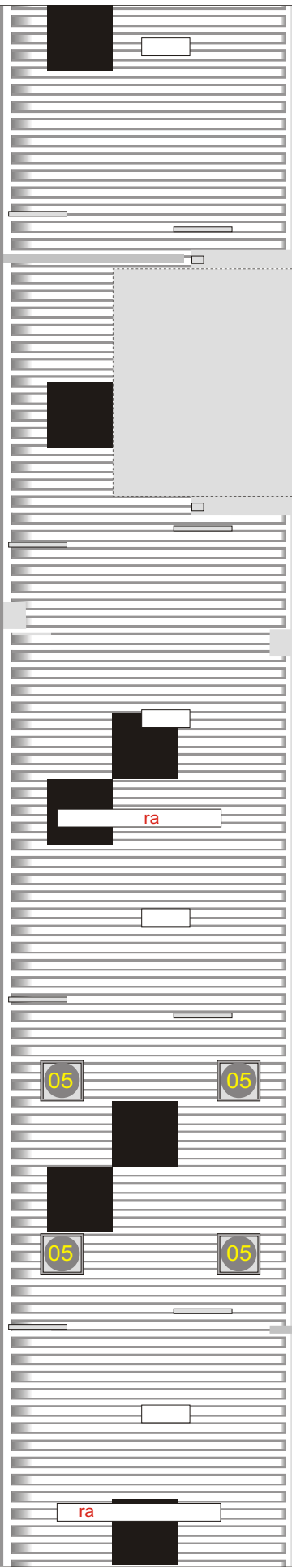


ЭНЕРГИЯ

01

02

11K25.Ц0000A60-0
N П11507СЛ



b8a

b8a

03

04

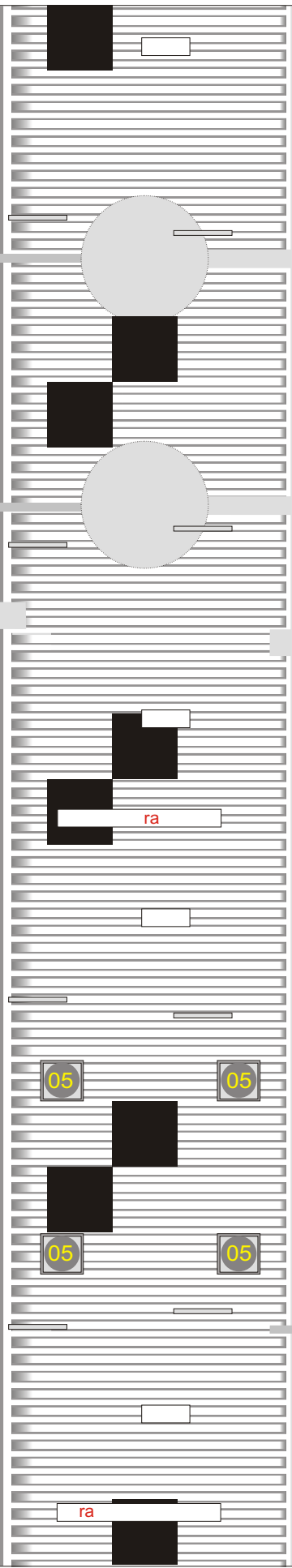
ЭНЕРГИЯ

01

01-B

02

11K25.Ц0000A60-0
N П11506СЛ



b8a

b8a

03

ra

05

05

05

05

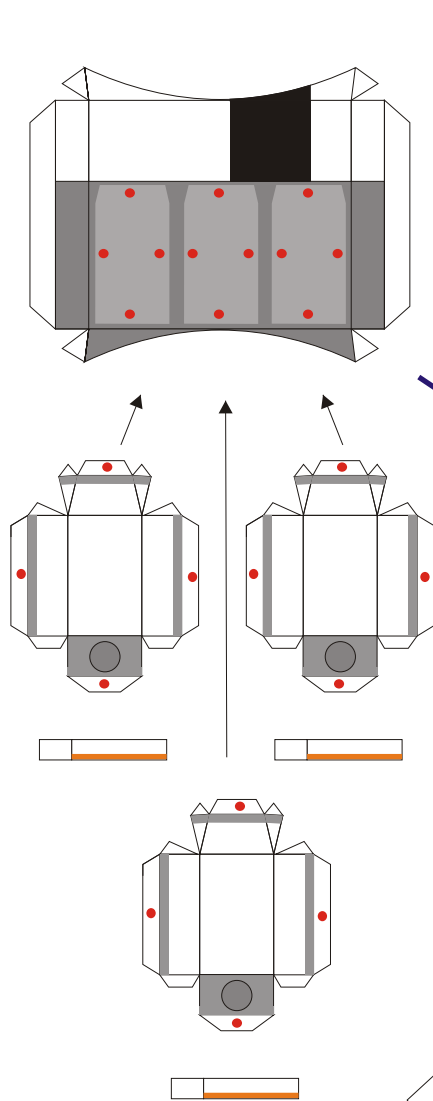
04

ra

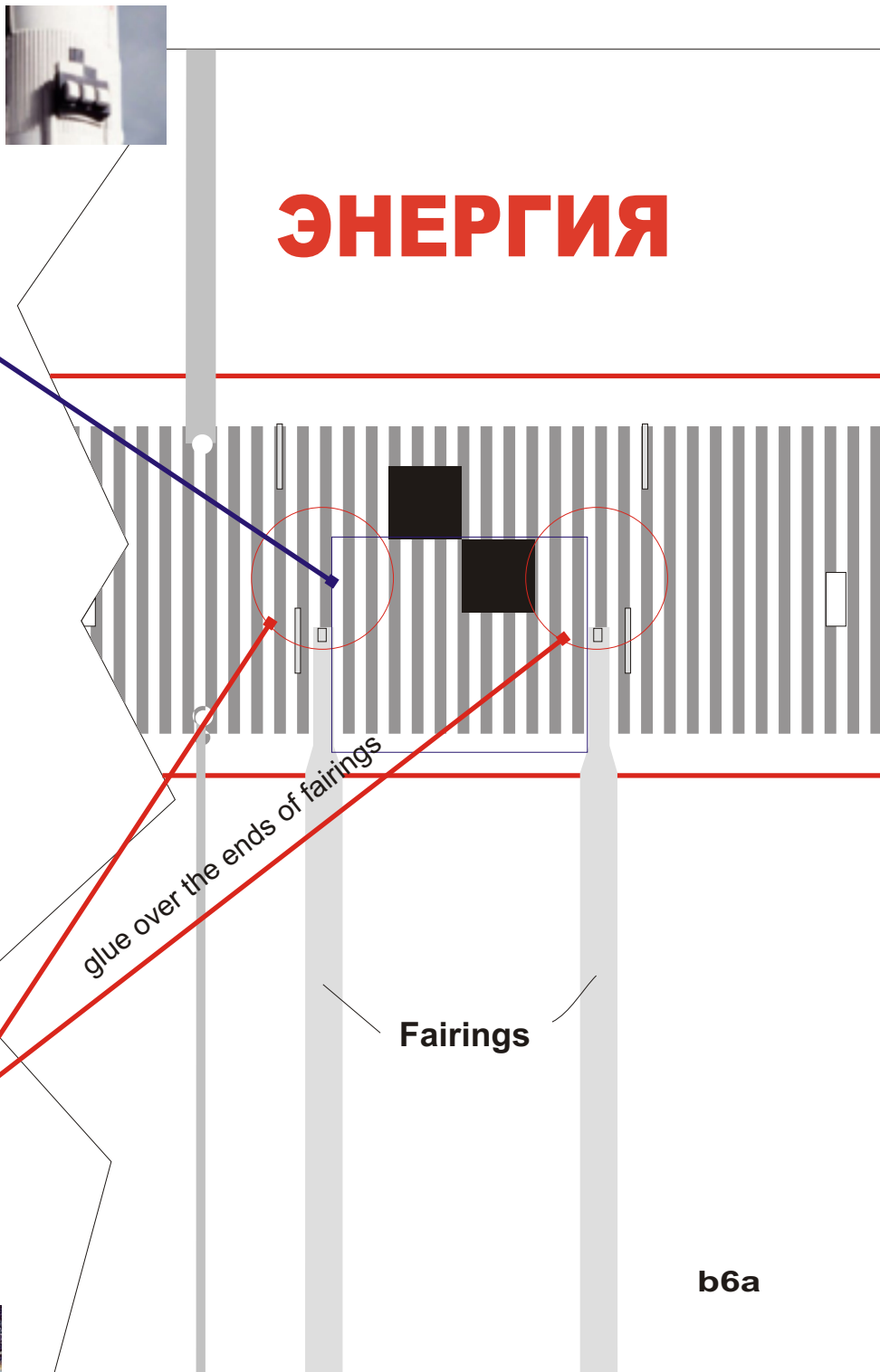
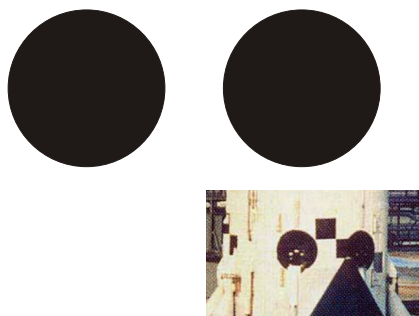
Additional details
for two versions of Energia

- 1 - first launch
- 2 - second launch

2 Buran - Energia



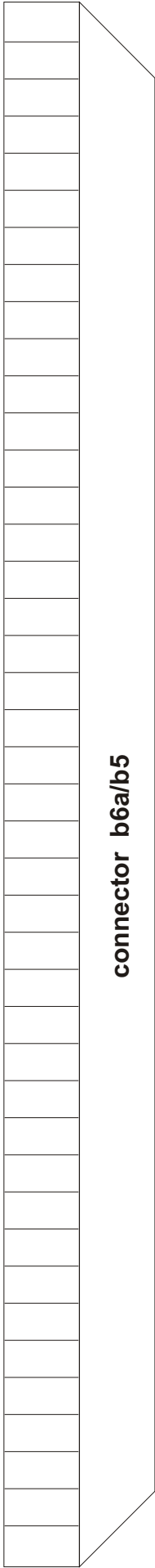
1 Polyus - Energia



Print on cardstock Body of B

10 cm

10 cm



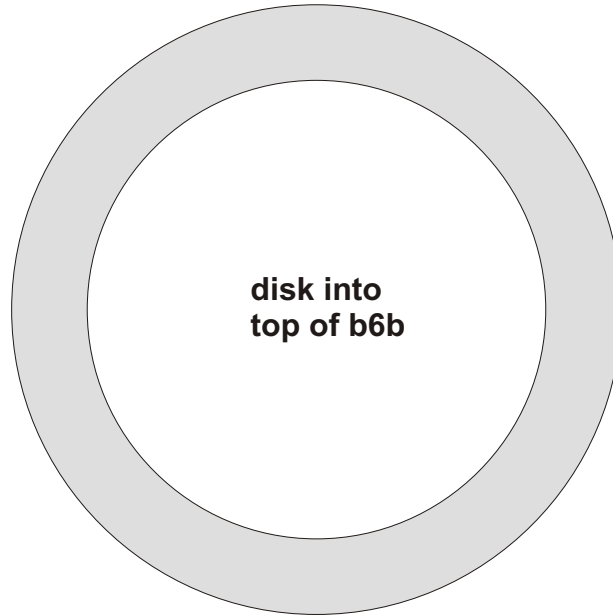
connector b6a/b5



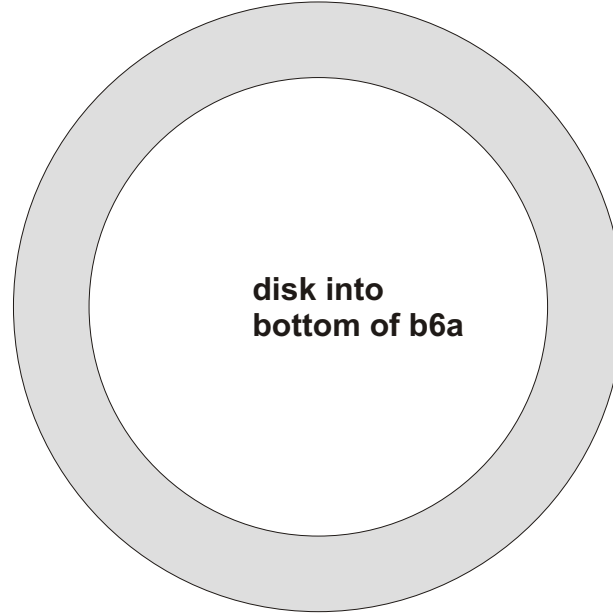
supporting ring for disk



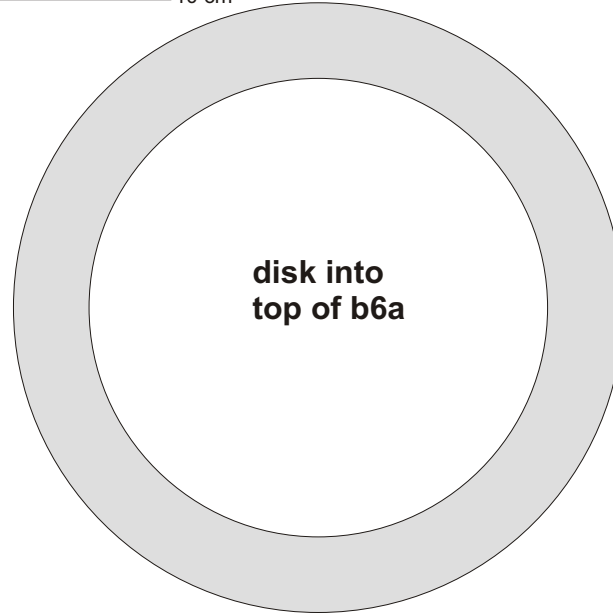
supporting ring for disk



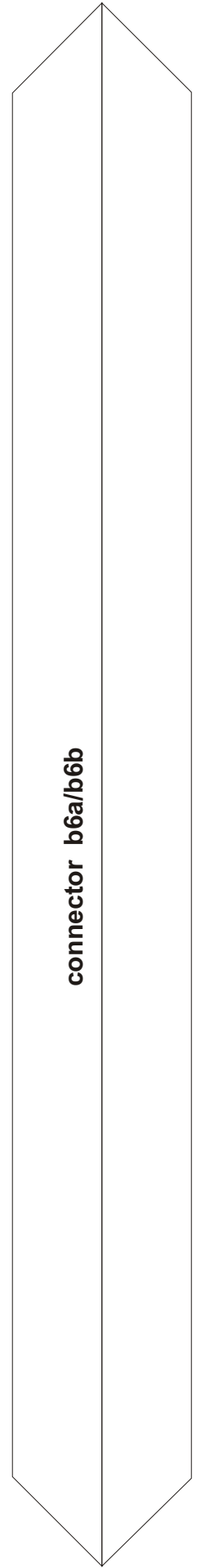
disk into
top of b6b



disk into
bottom of b6a

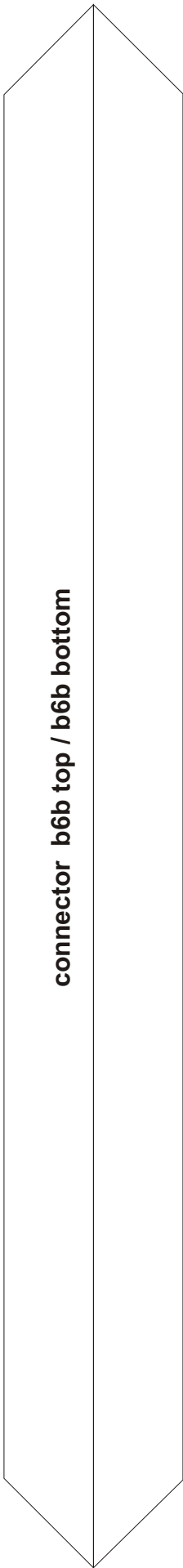
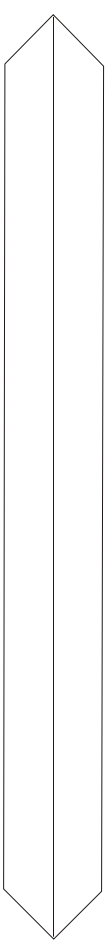


disk into
top of b6a

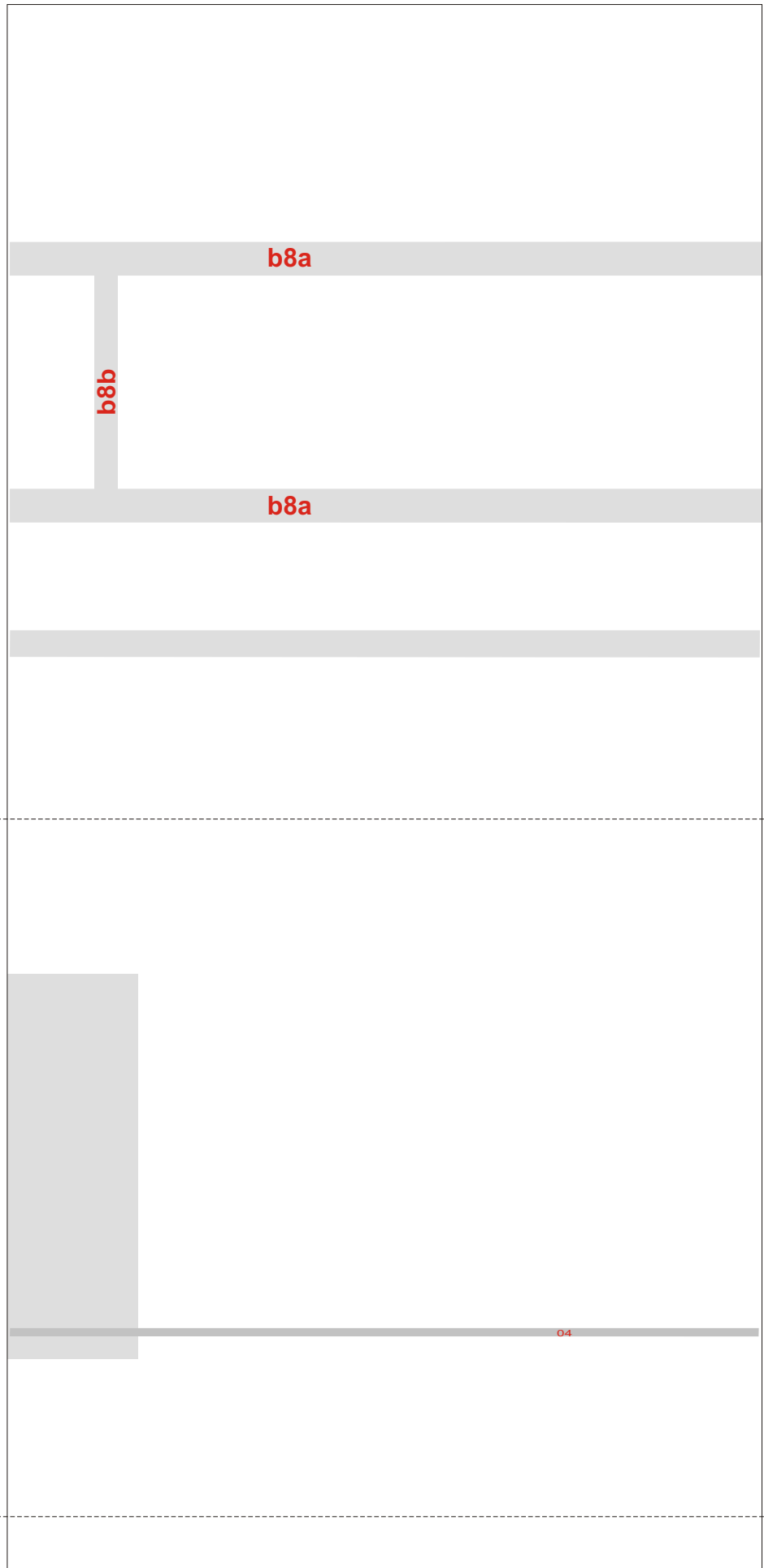


connector b6a/b6b

10 cm



connector b6b top / b6b bottom

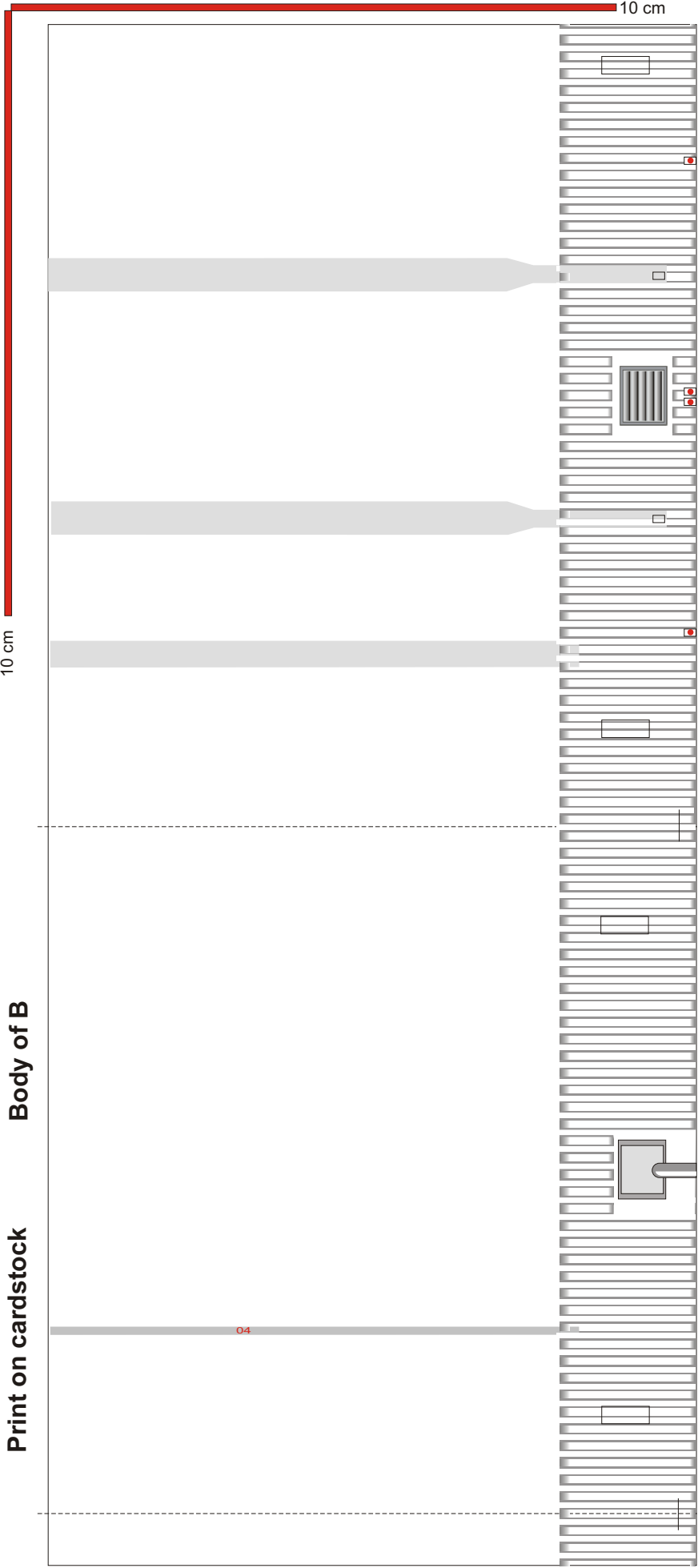


b8a

b8b

b8a

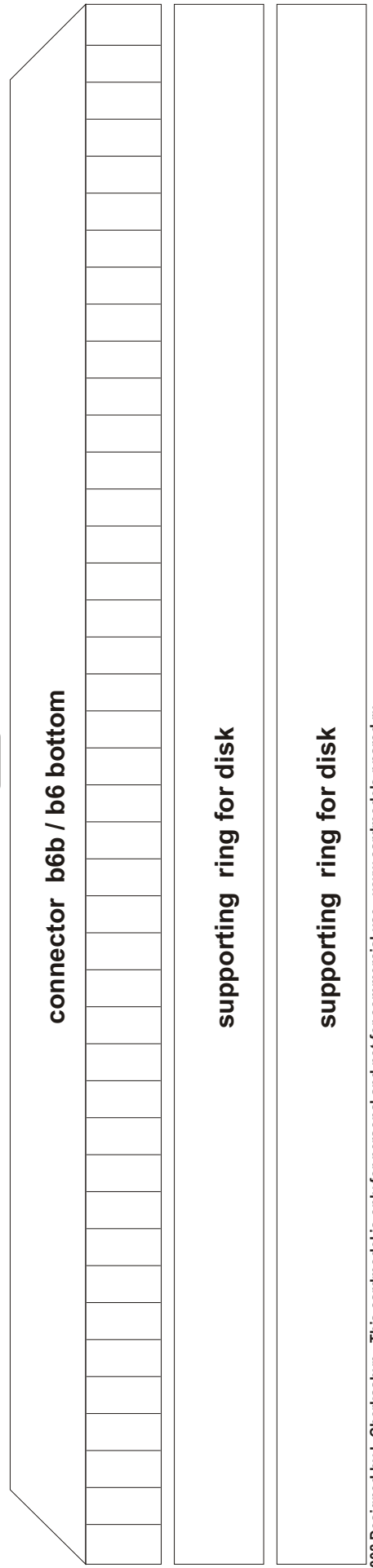
b4



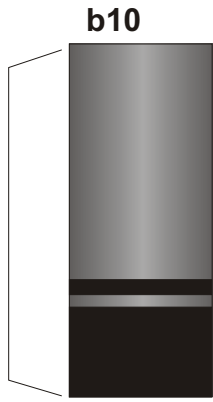
glue part 7
from p.27

b6b bottom

base lines for assembling pairs of blocks A

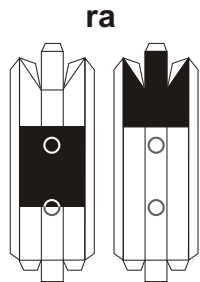
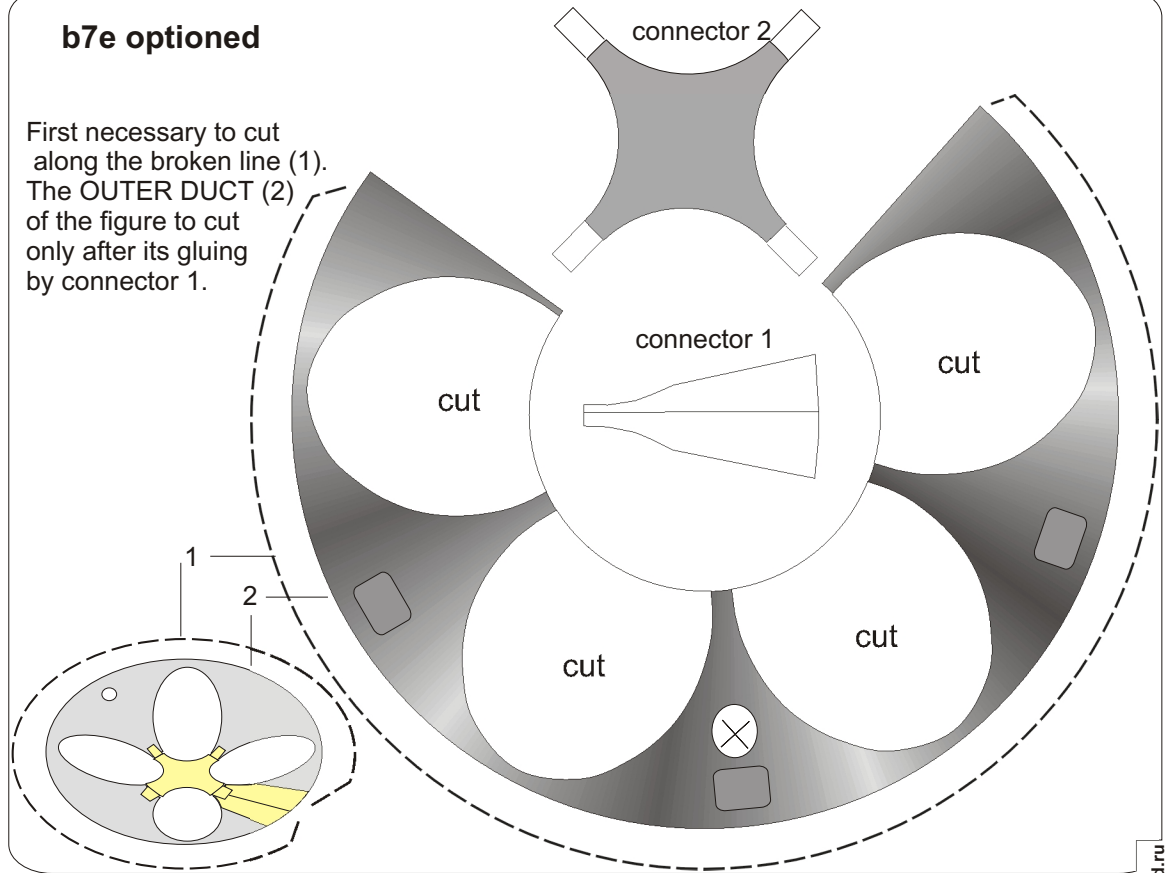


10 cm

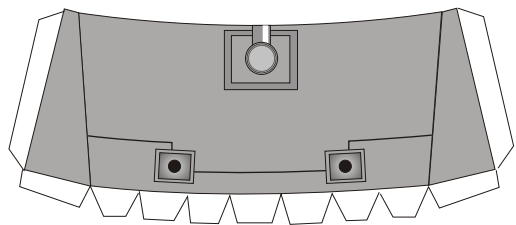
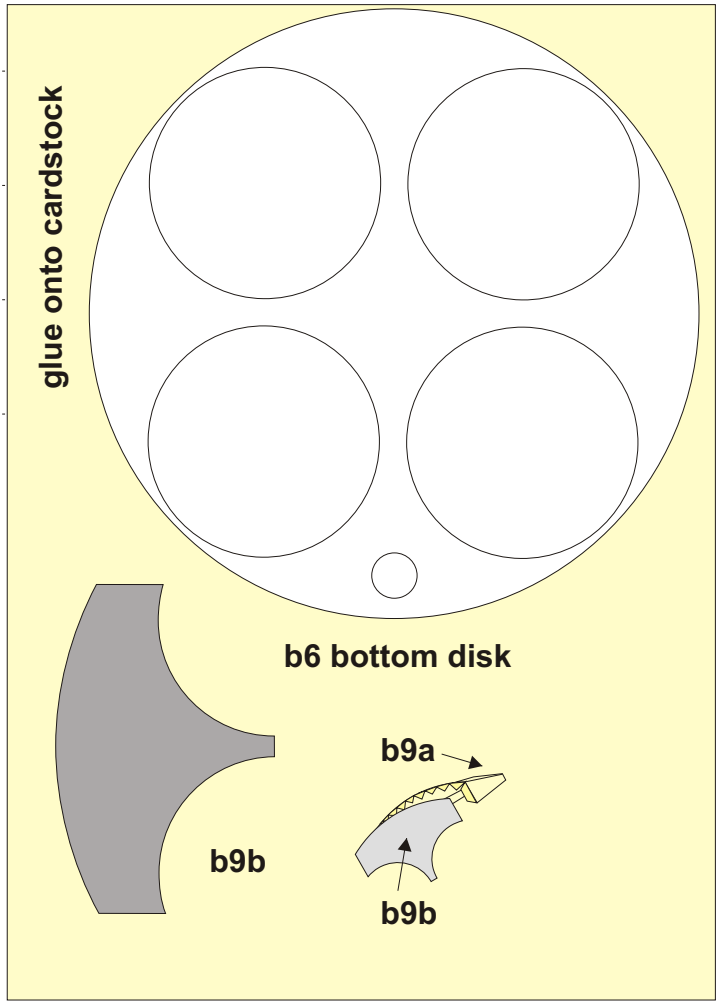
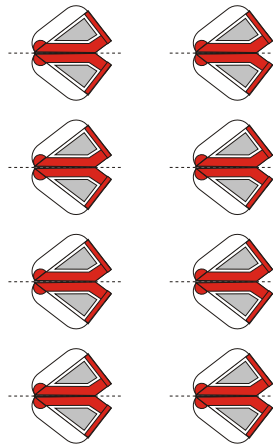


b7e optional

First necessary to cut along the broken line (1). The OUTER DUCT (2) of the figure to cut only after its gluing by connector 1.

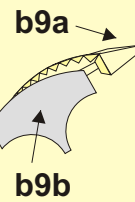


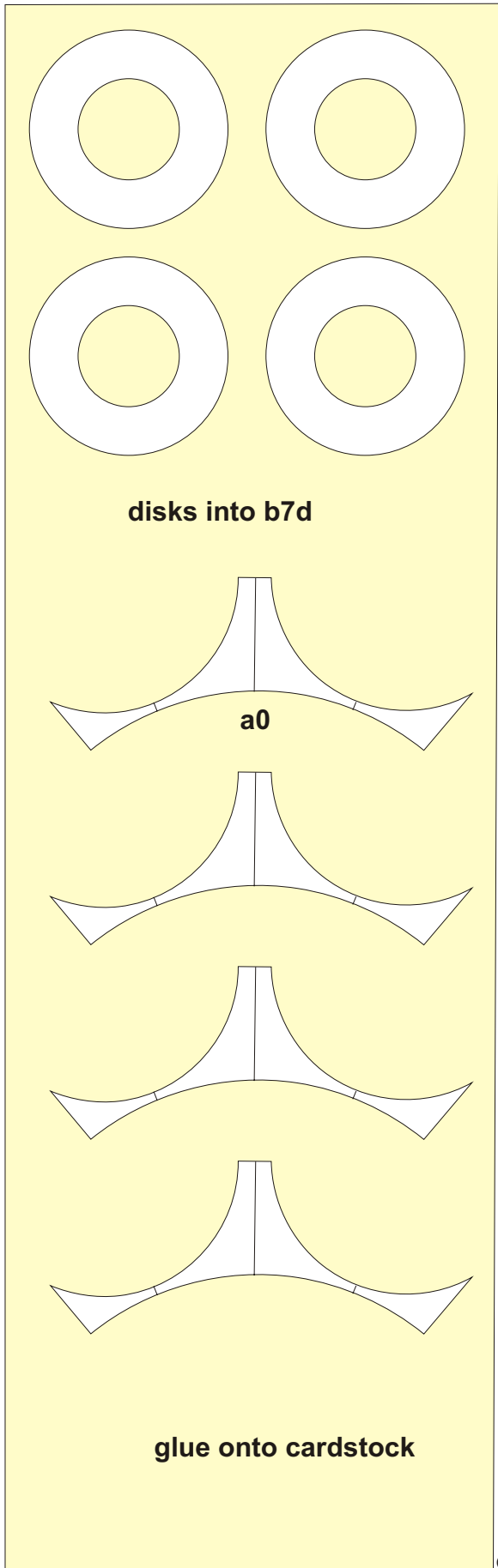
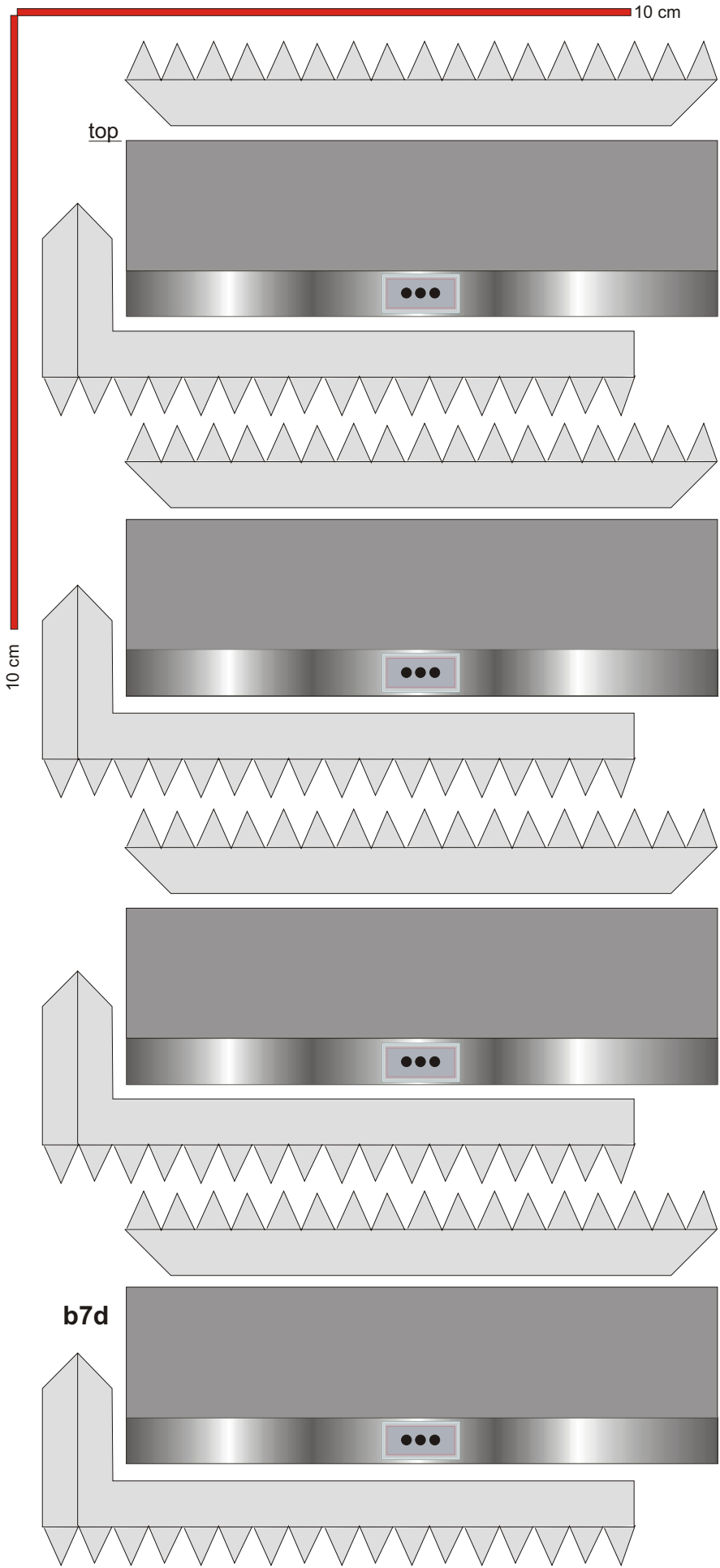
b22



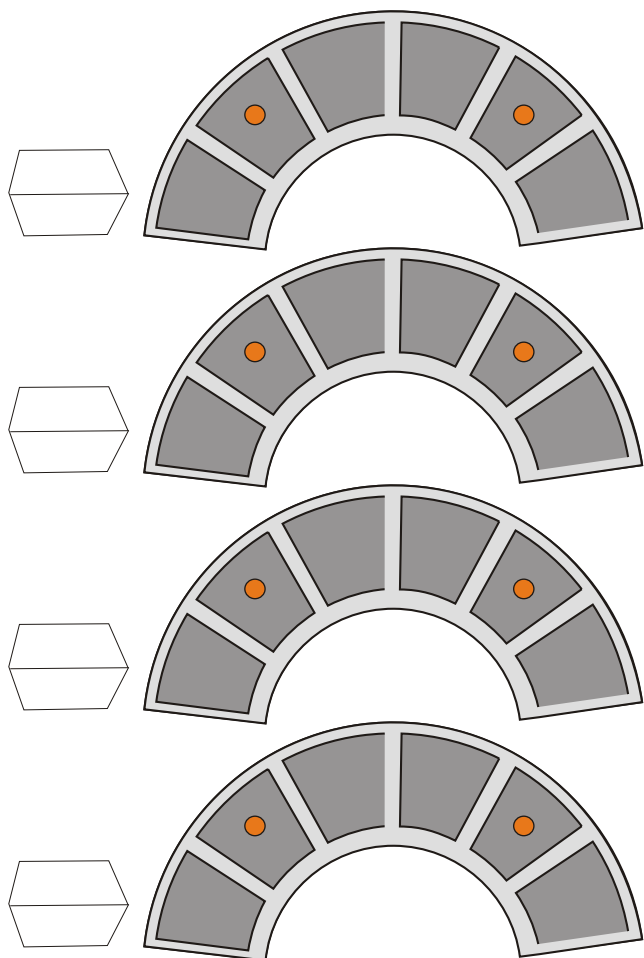
b9a

b9b

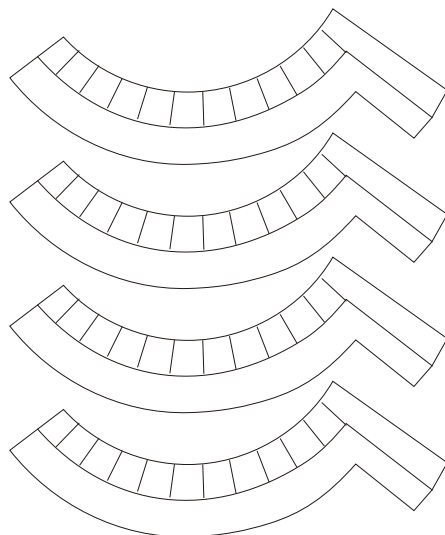




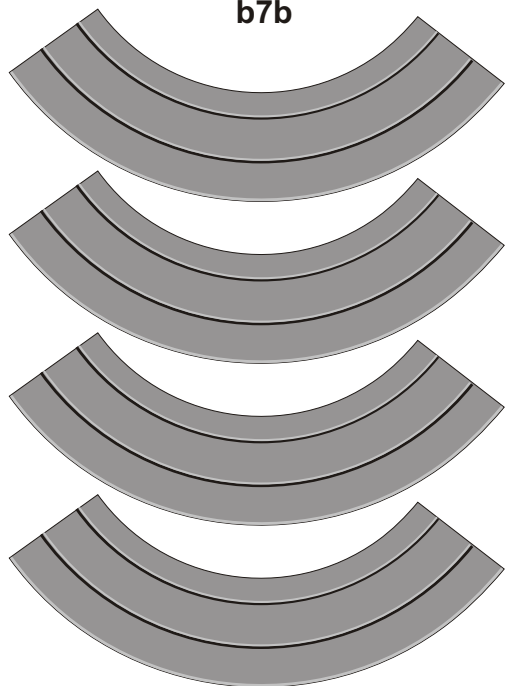
b7c



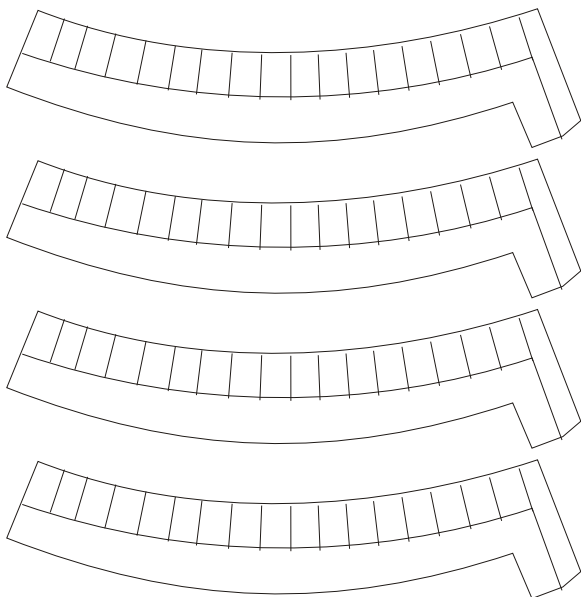
connectors b7b / b7c



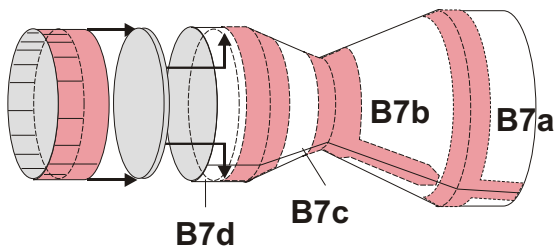
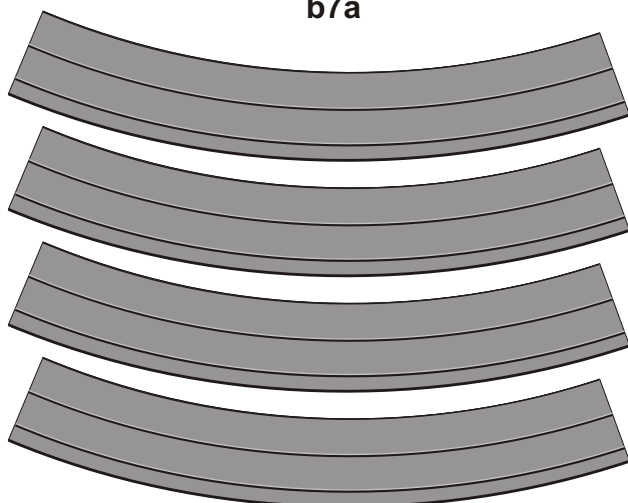
b7b

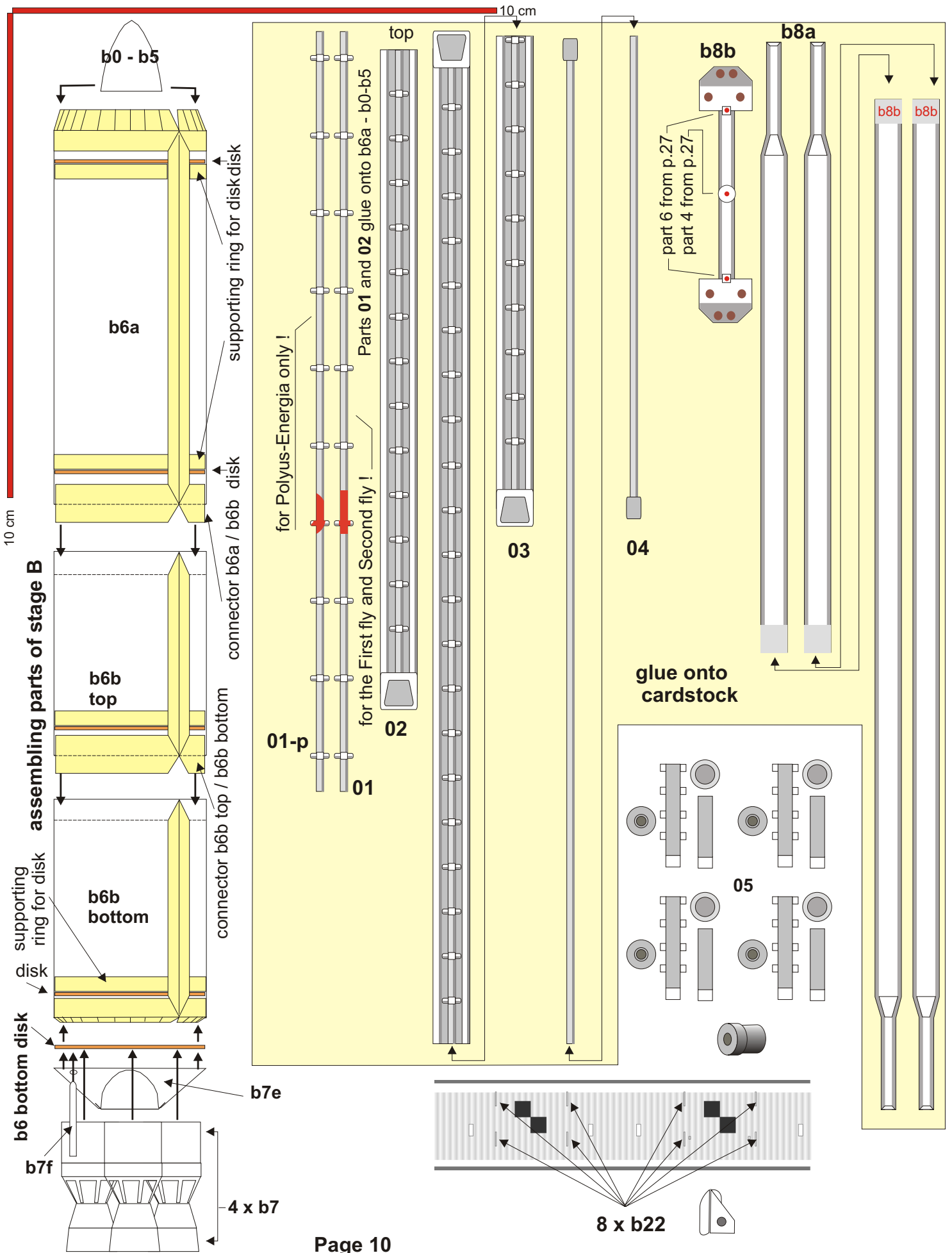


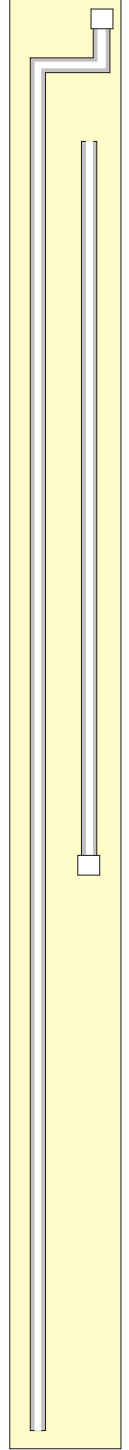
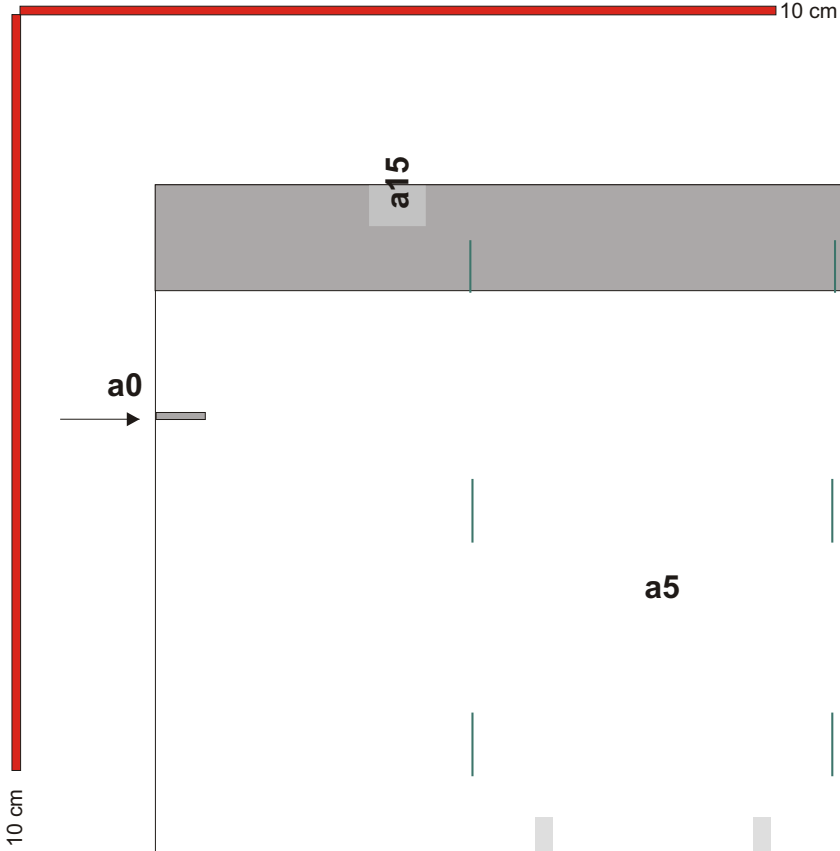
connectors b7a / b7b



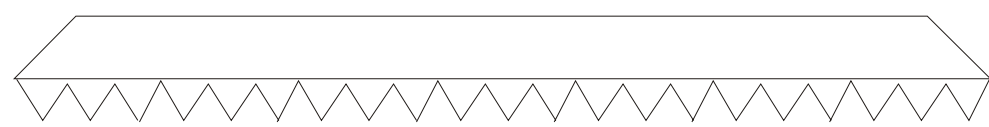
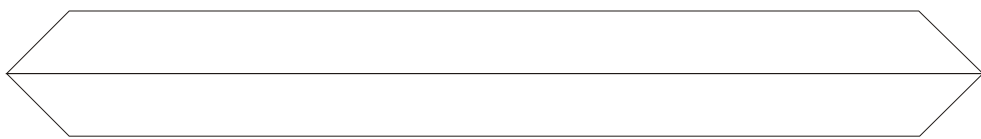
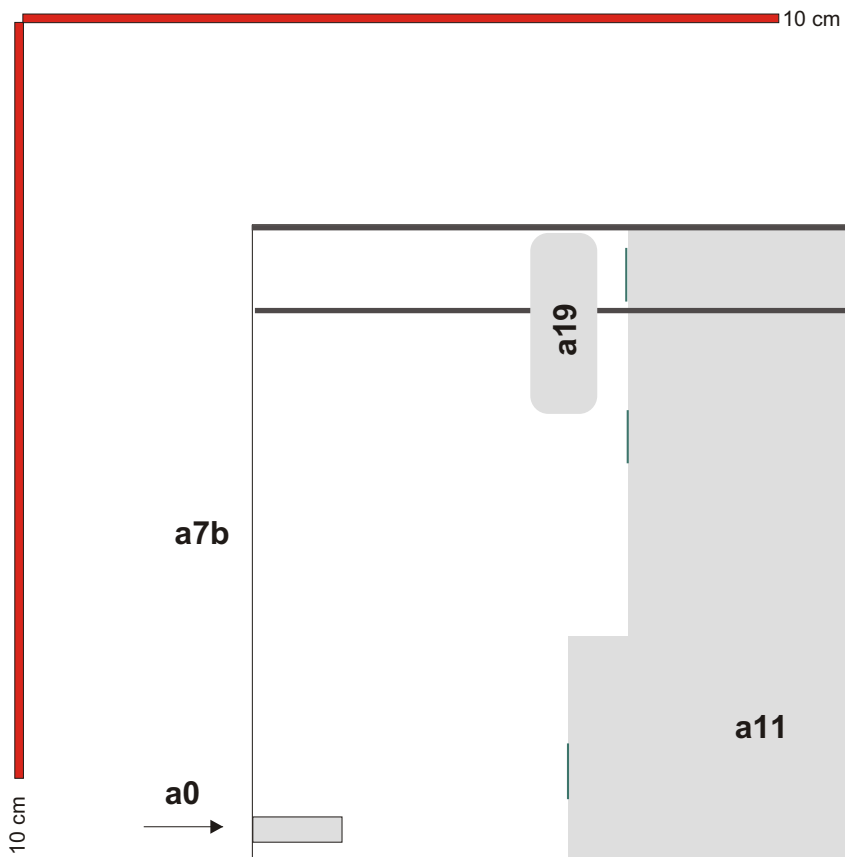
b7a



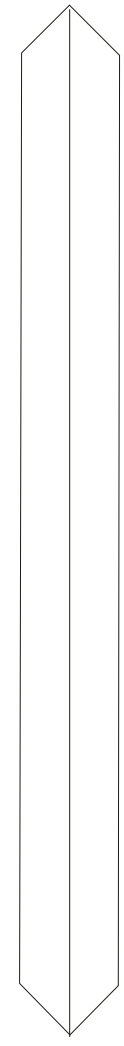


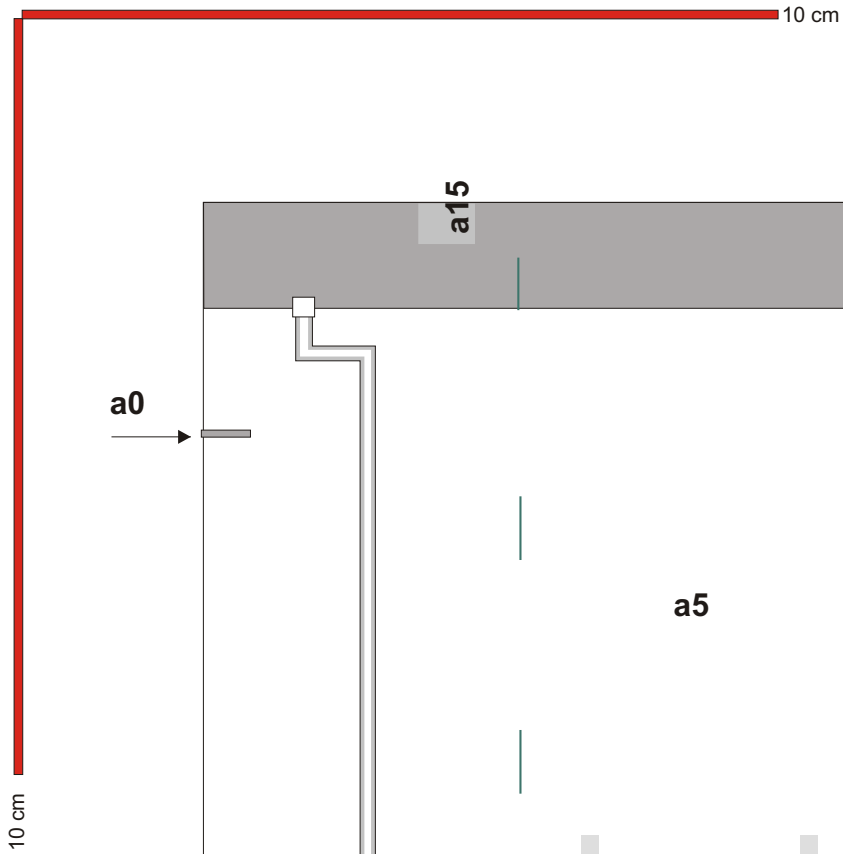


A1

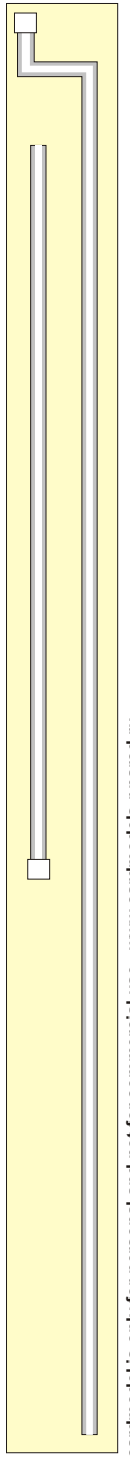
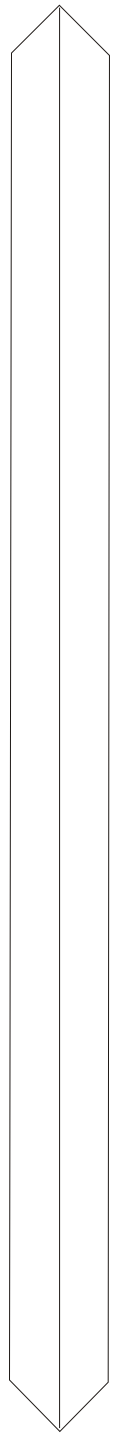


— slots

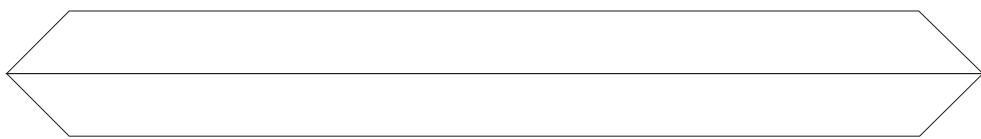
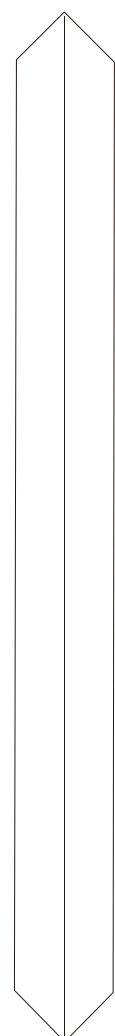
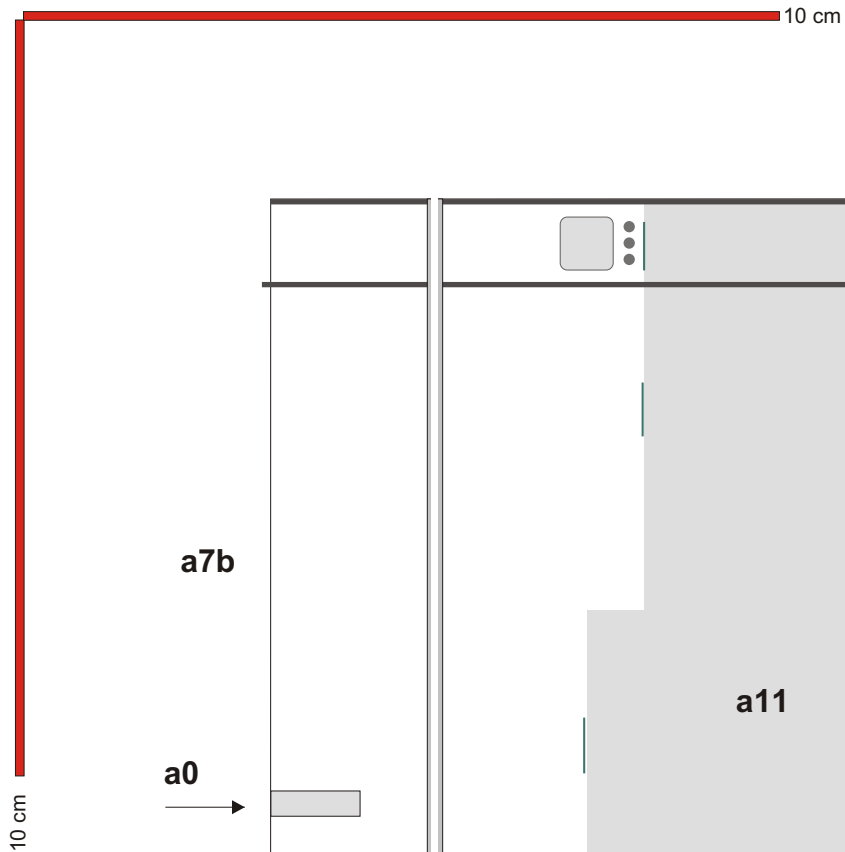




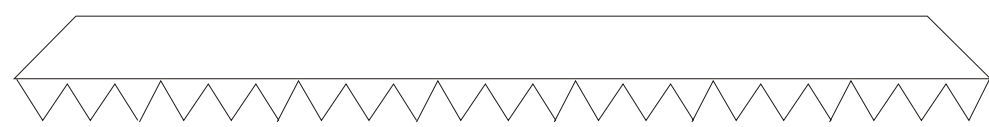
— slots



A2

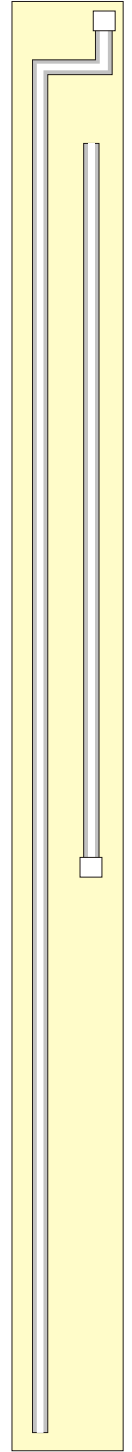
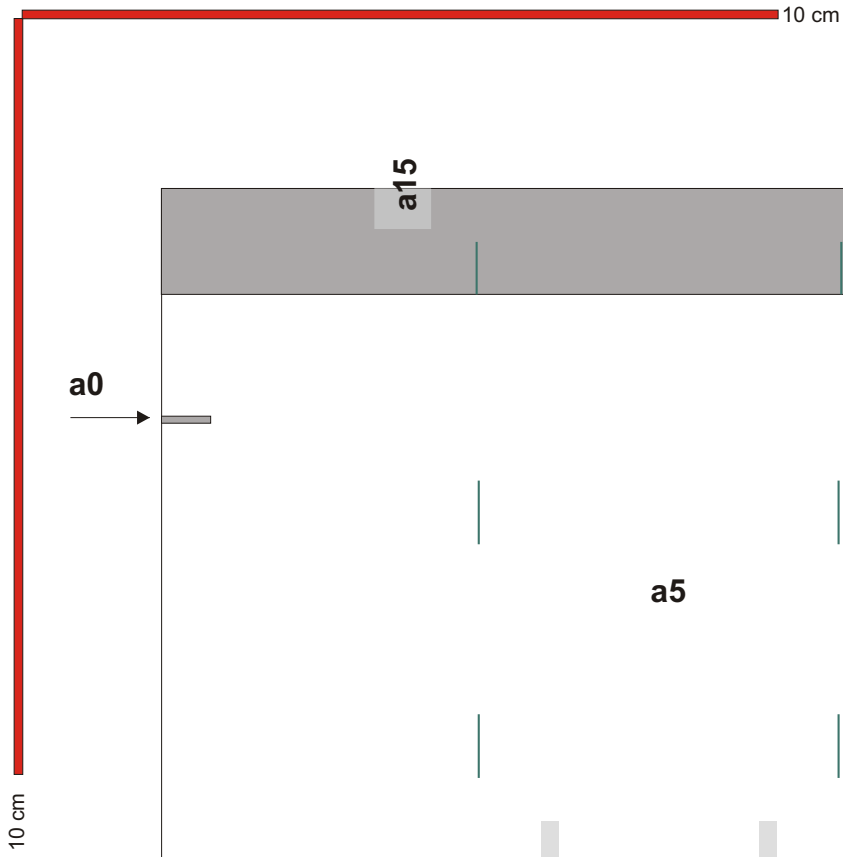


connector a7a / a7b

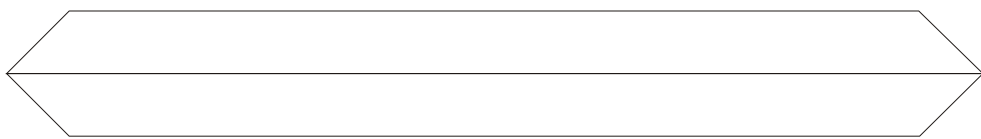
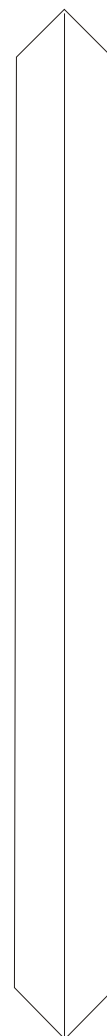
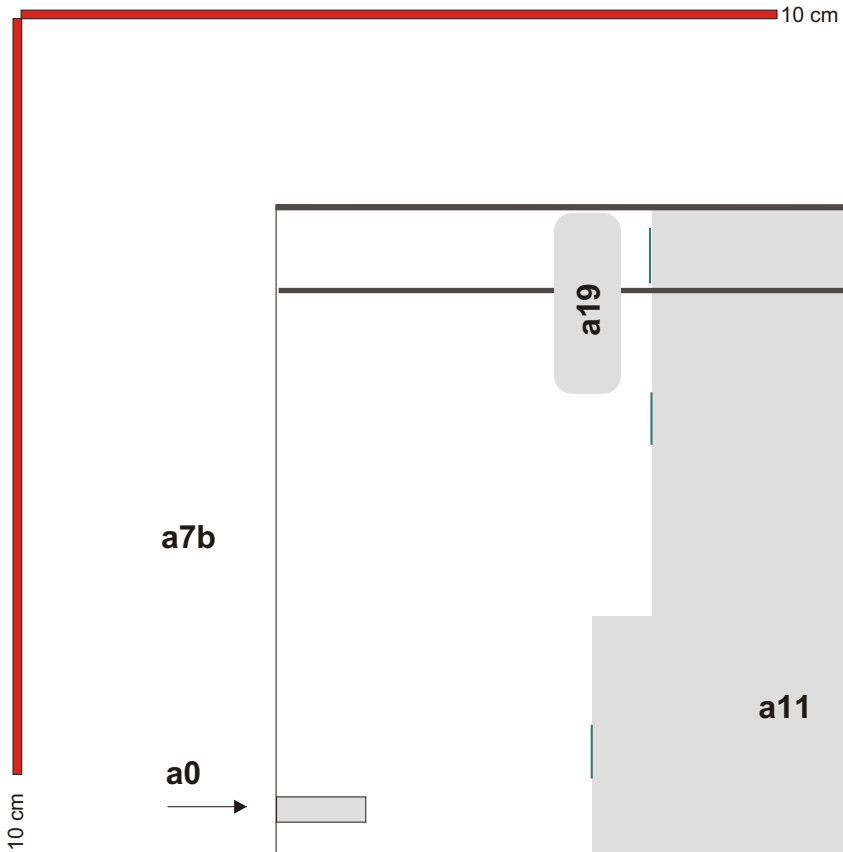


— slots

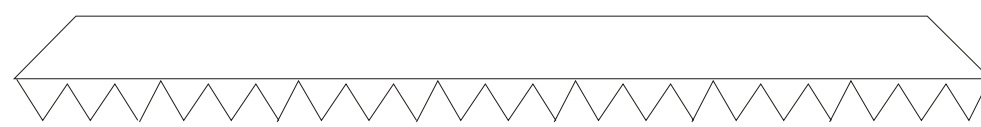




A3

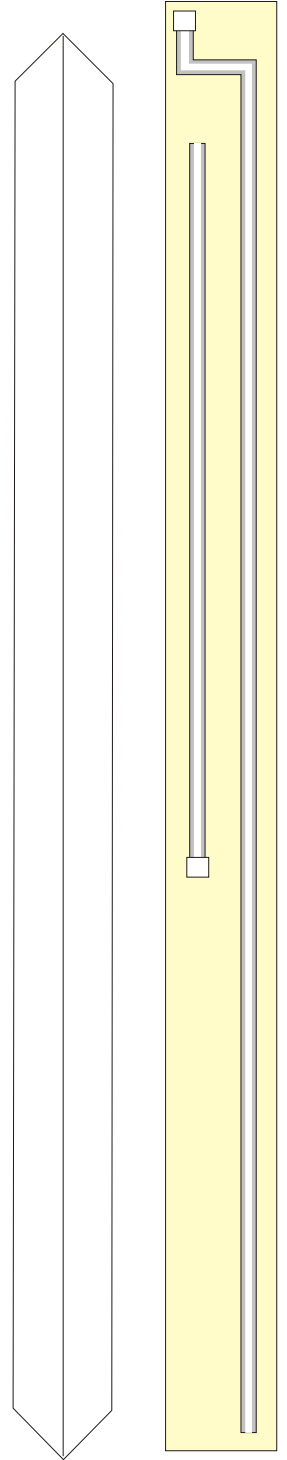
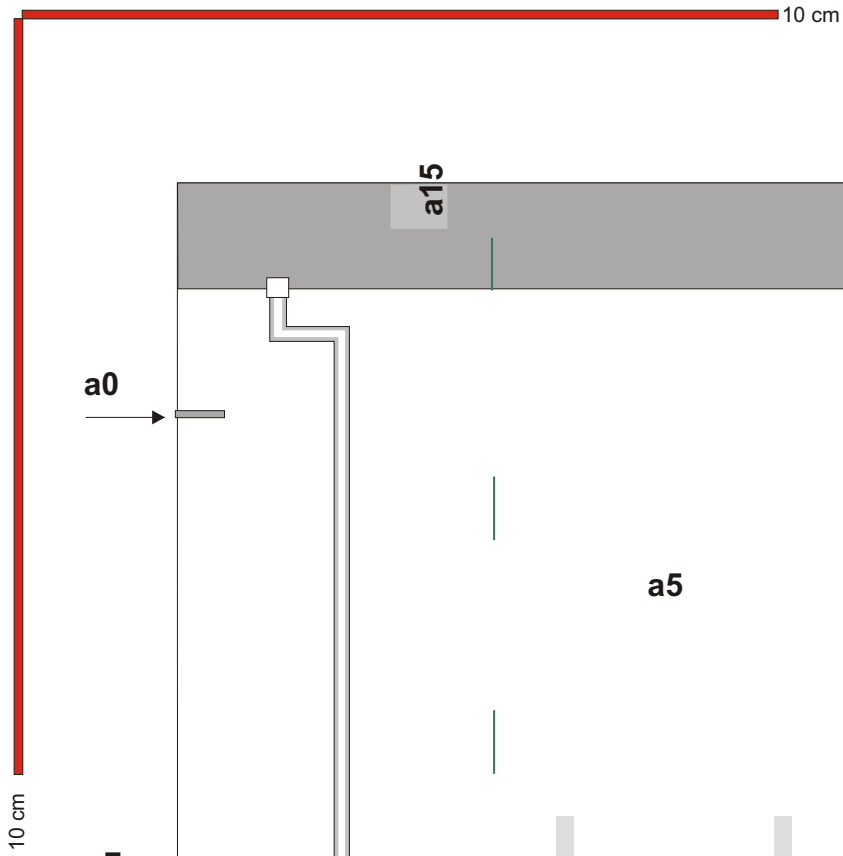


connector a7a / a7b

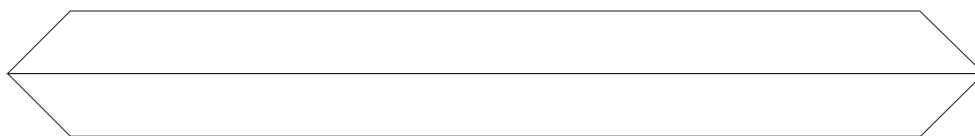
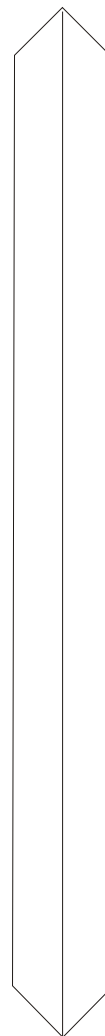
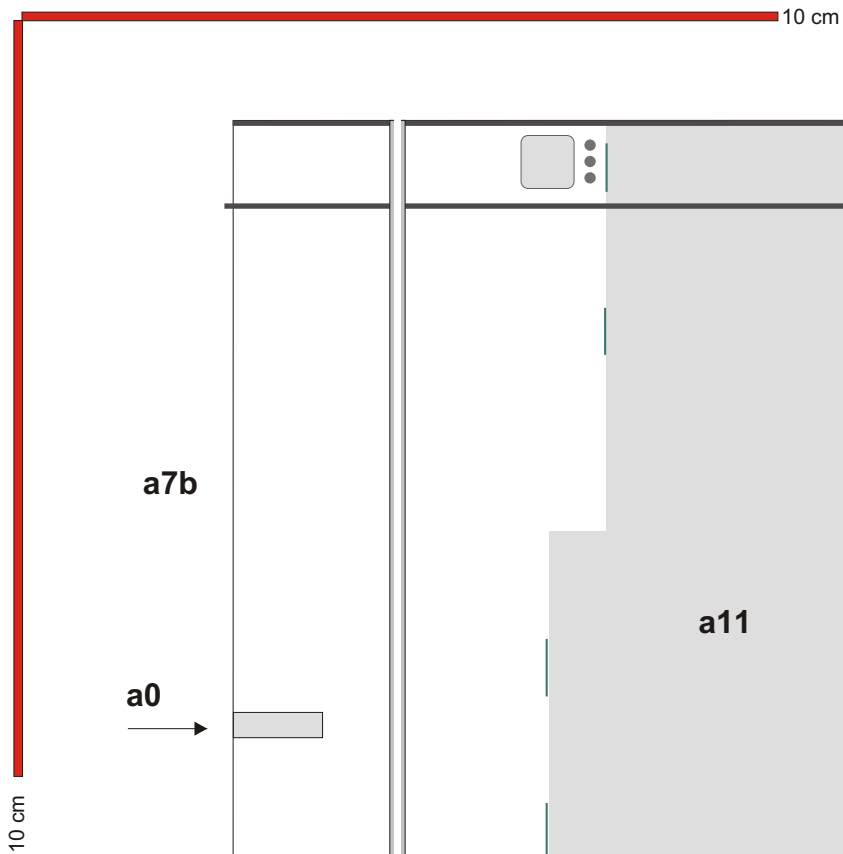


— slots

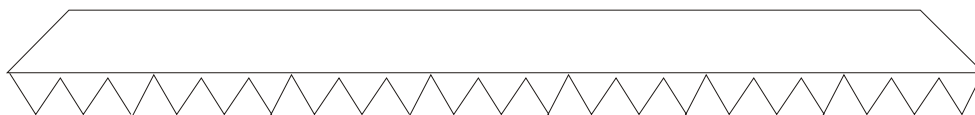
A3



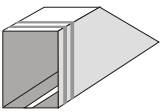
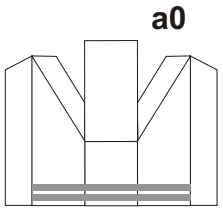
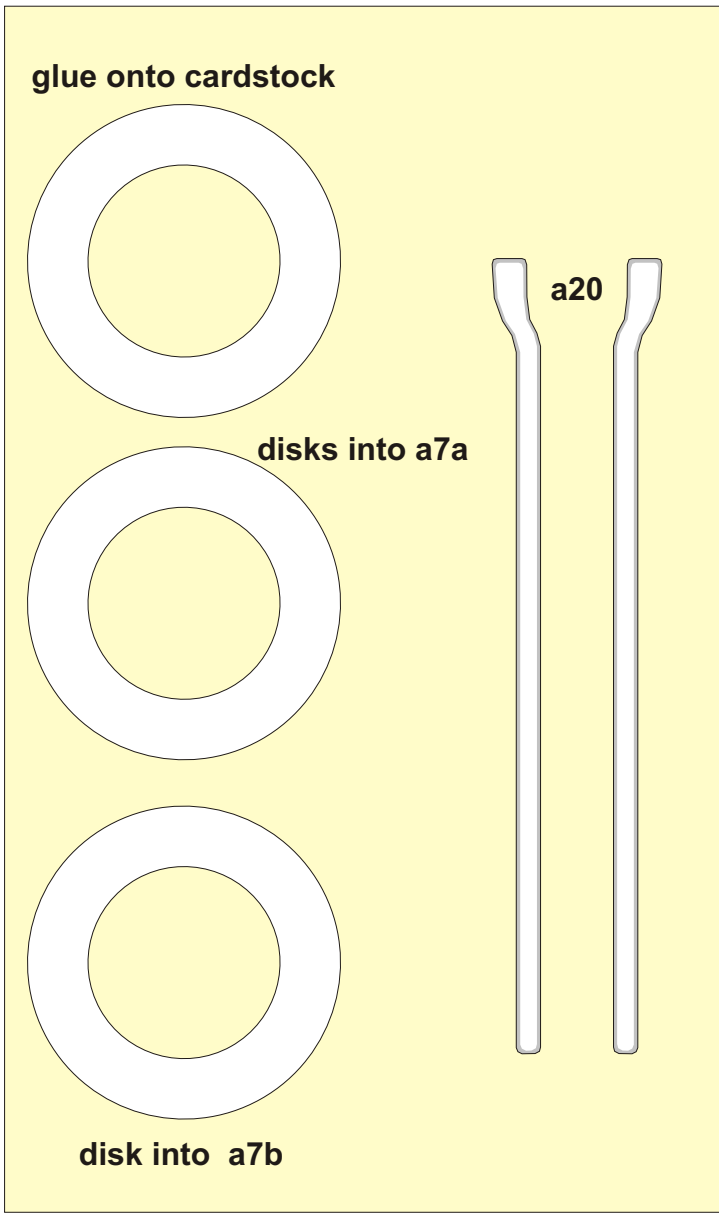
A4



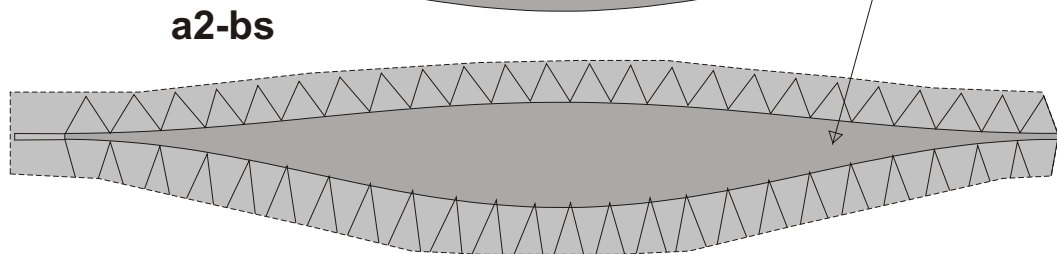
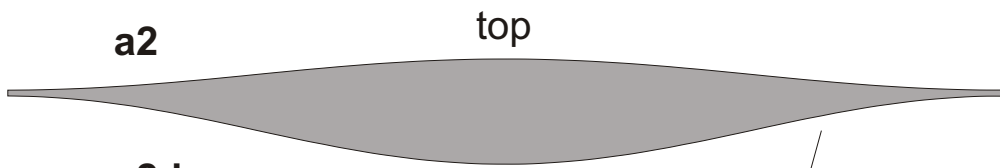
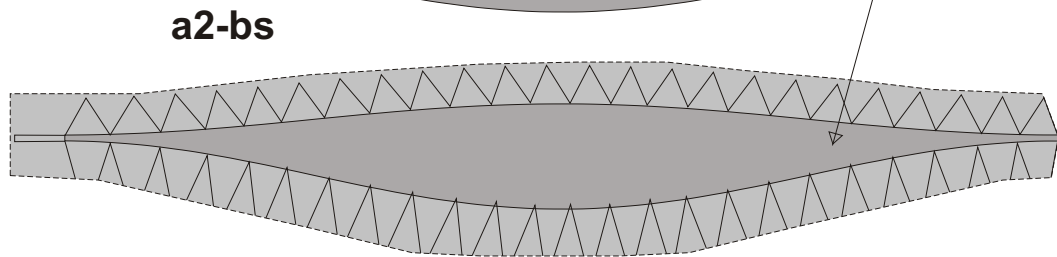
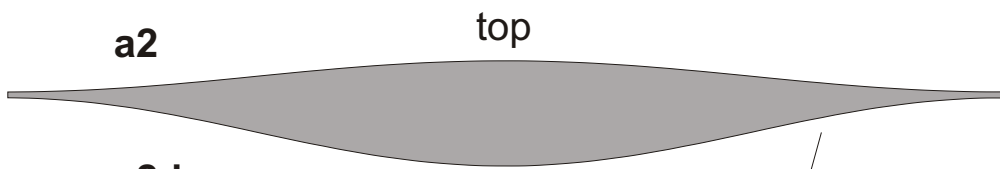
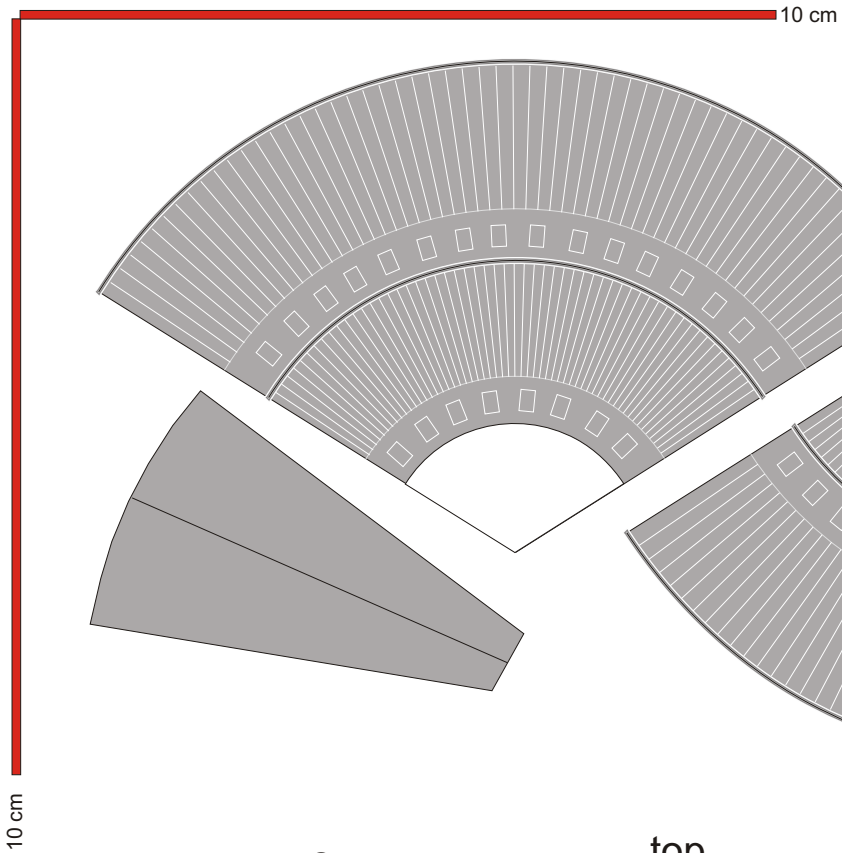
connector a7a / a7b



— slots

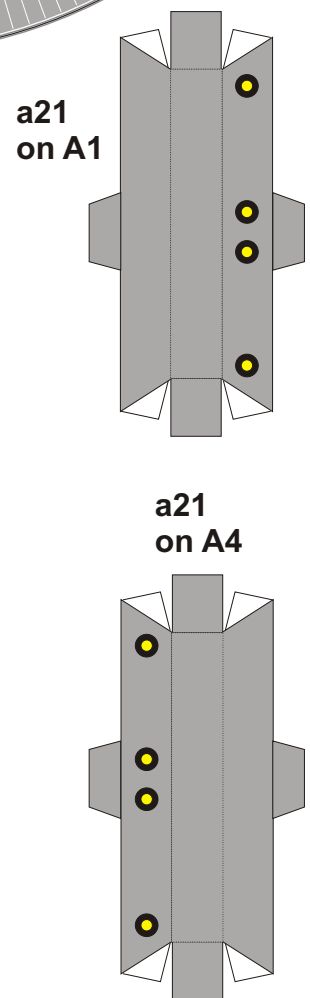
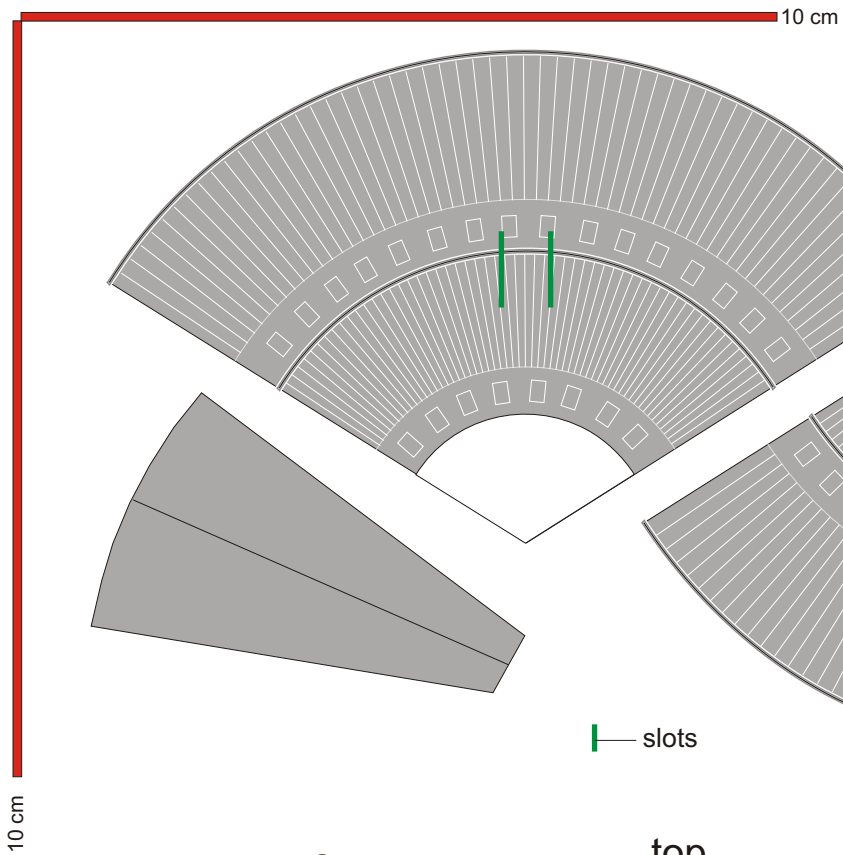


Details for stage A
Print 4 copies



Top cones of bustiers A2 & A3

Glue part a2 onto a2-bs and immediately (before glue dry up) roll as semitubes. Take it by hard cylinder on soft (porous) surface from back side. Then glue a2 as a tube. Cut tothing only on dry one.

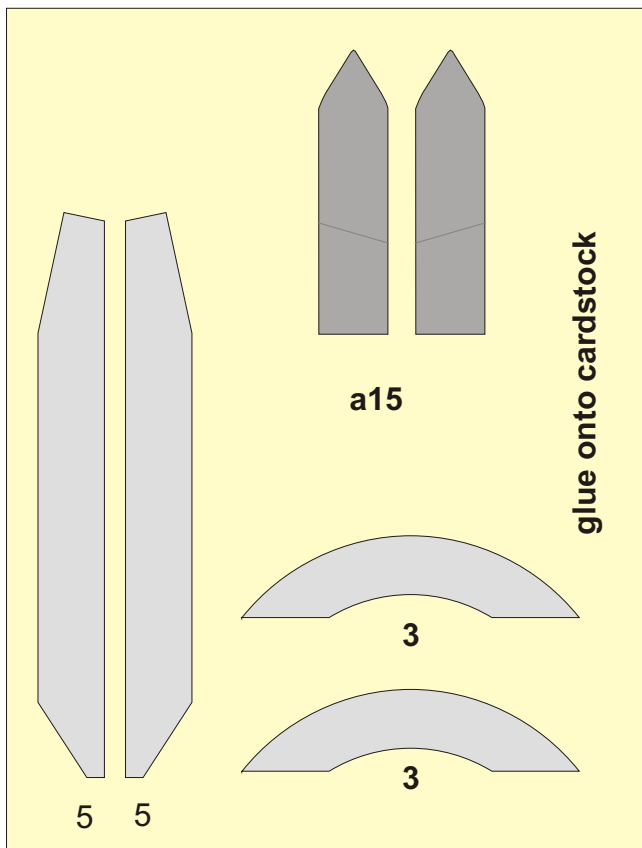
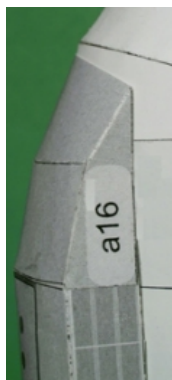
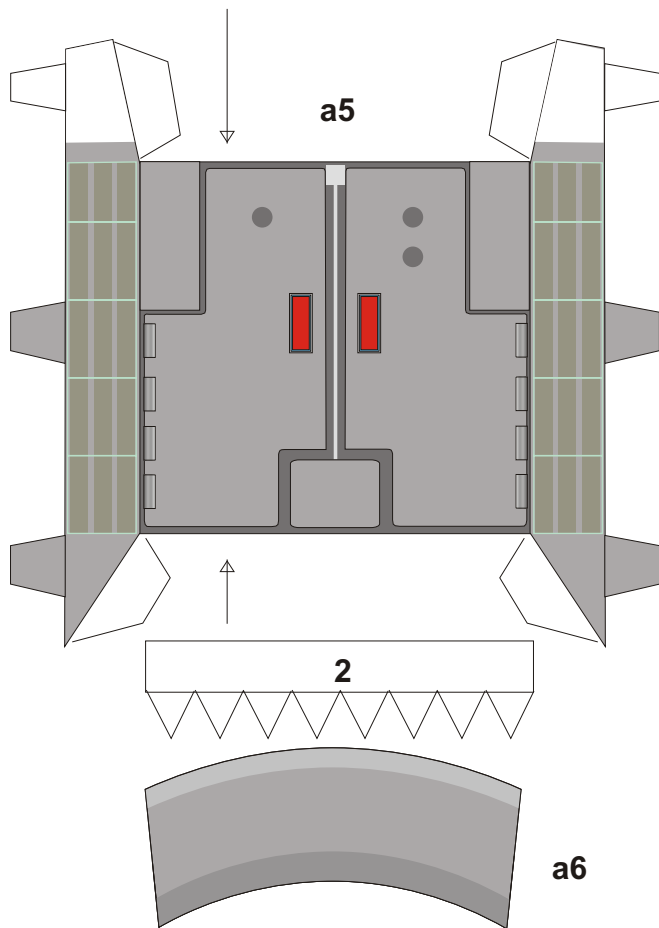
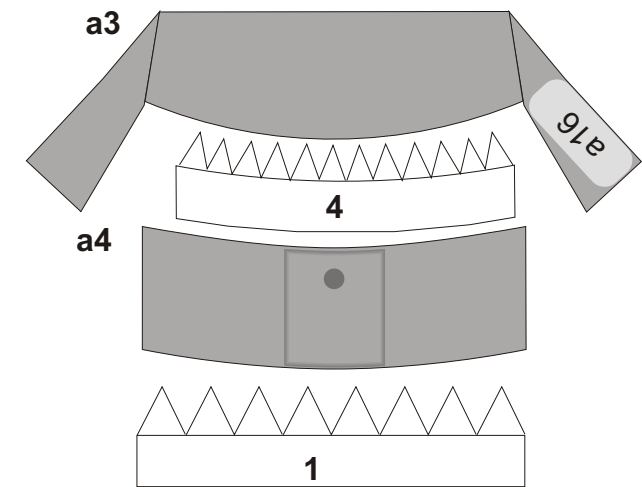


Top cones of busters A1 & A4

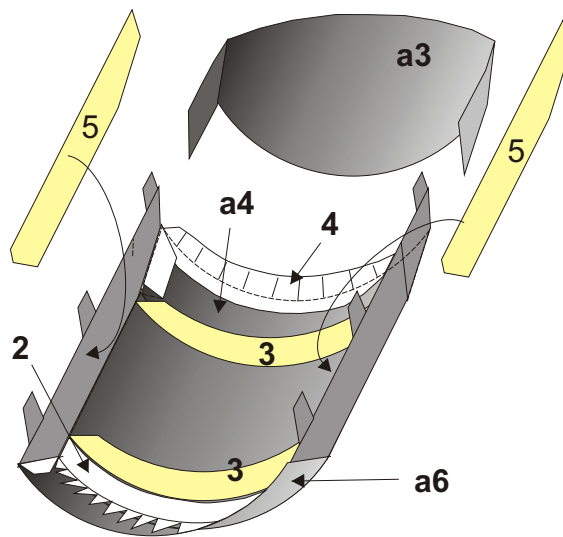
Glue part a2 onto a2-bs and immediately (before glue dry up) roll as semitubes. Take it by hard cylinder on soft (porous) surface from back side. Then glue a2 as a tube. Cut tothing only on dry one.

10 cm

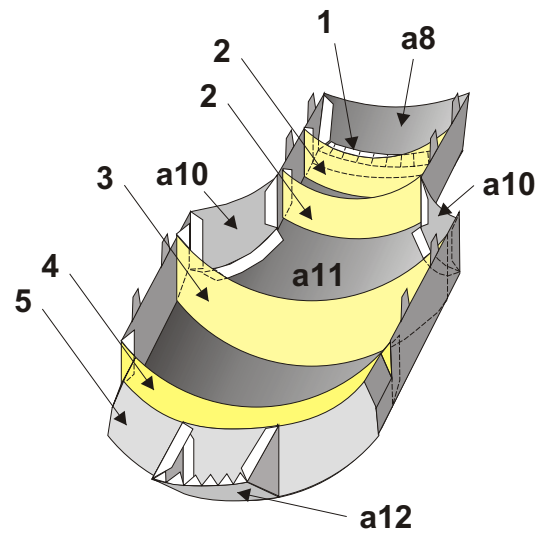
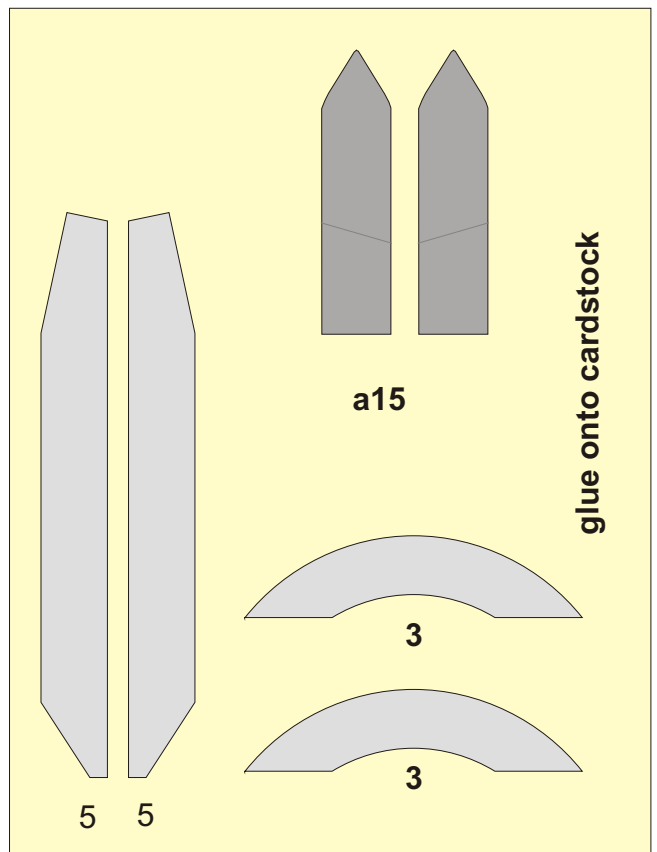
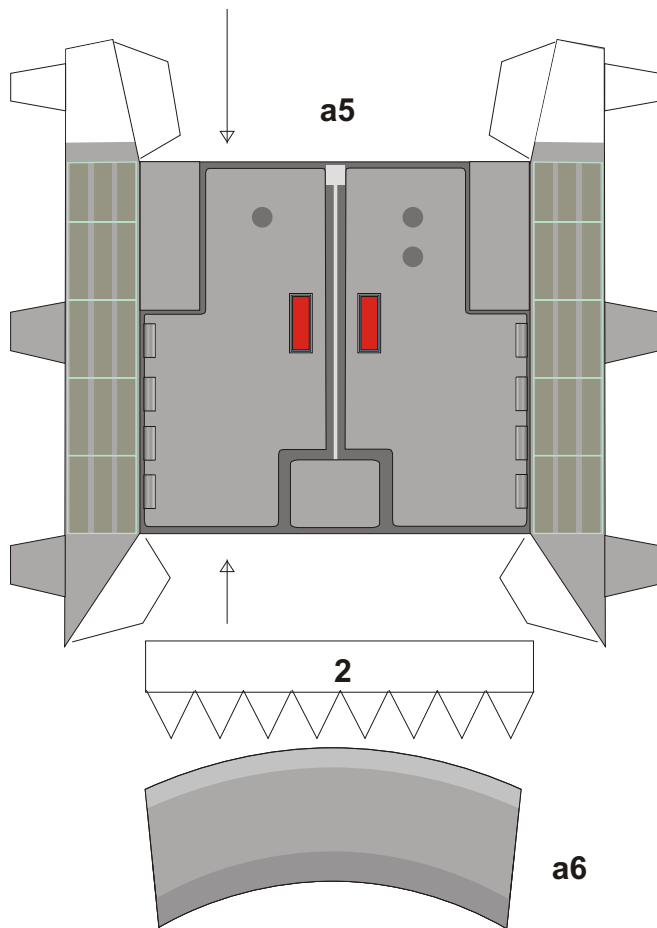
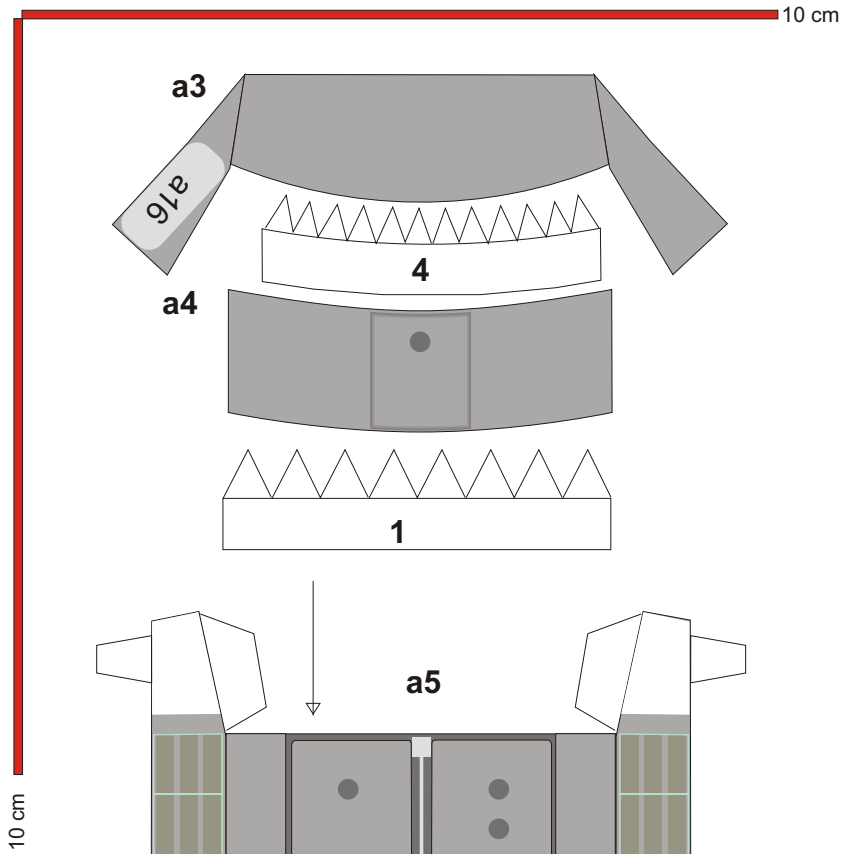
10 cm



glue onto cardstock



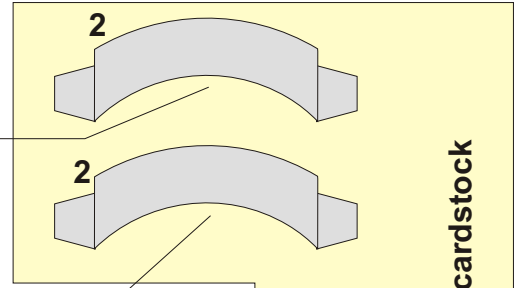
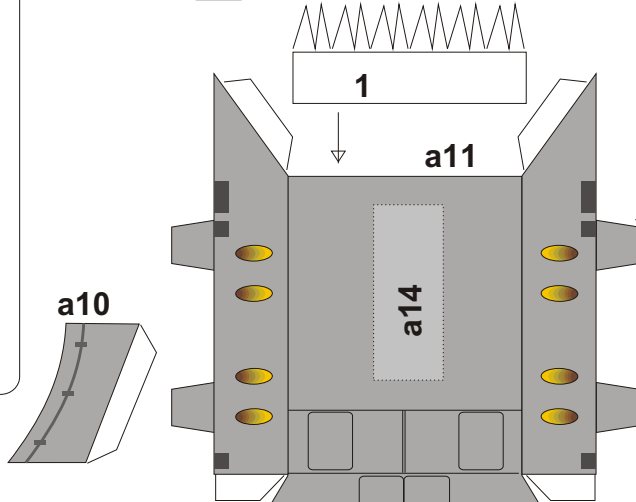
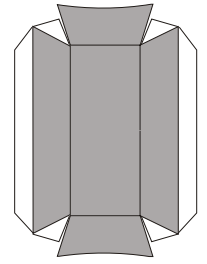
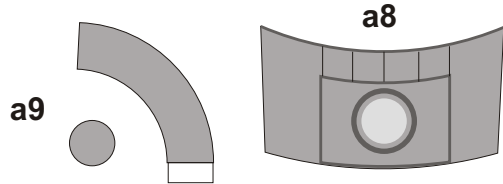
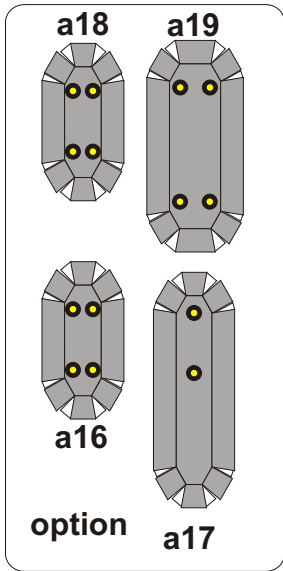
assembling of top part of saving system



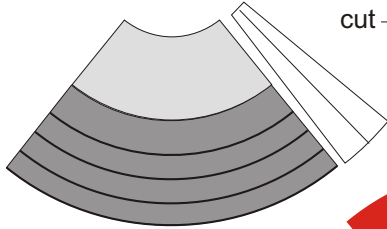
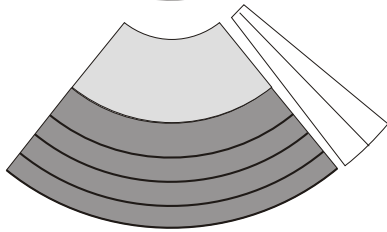
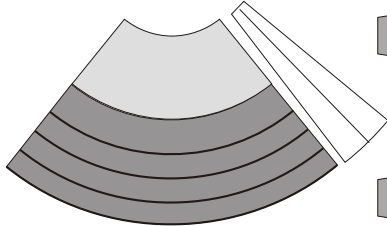
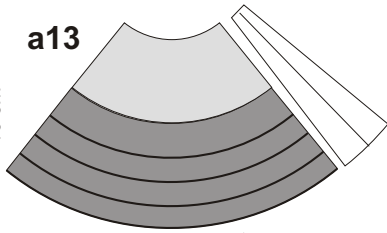
assembling of bottom part of saving system (see p.23)

10 cm

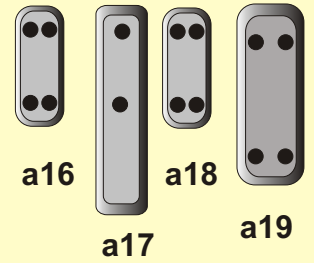
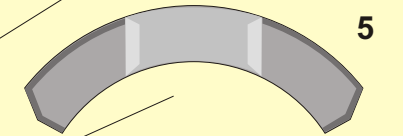
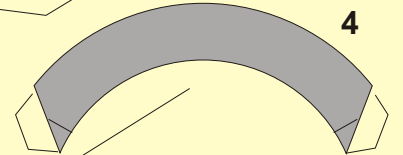
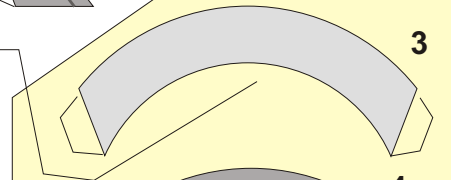
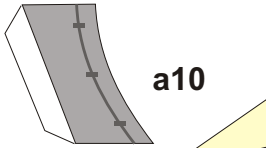
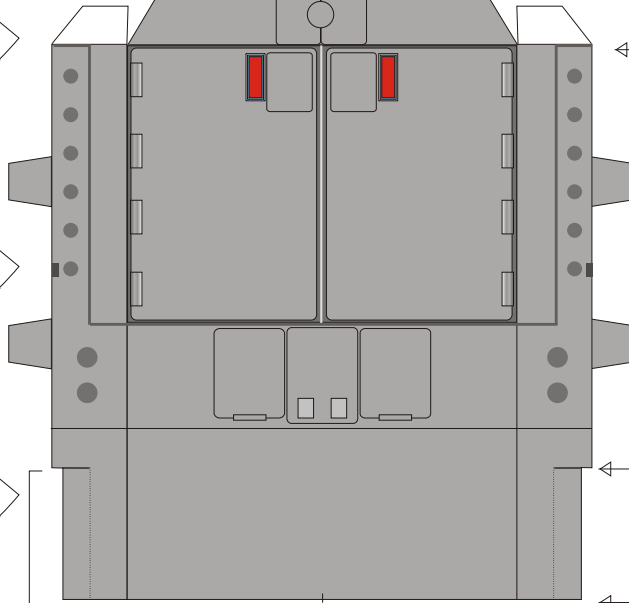
10 cm



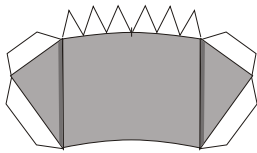
glue onto cardstock



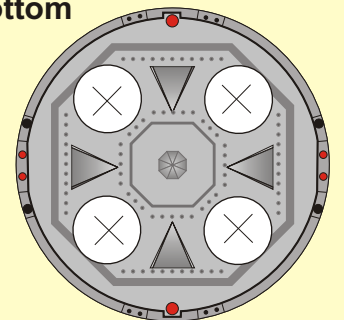
cut



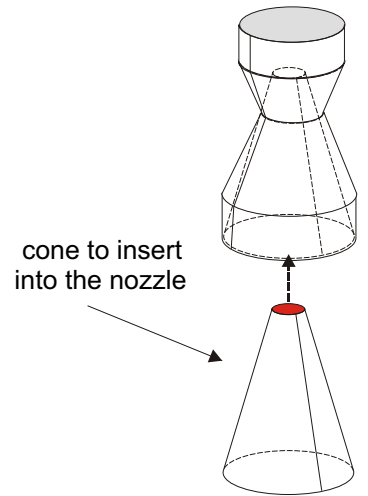
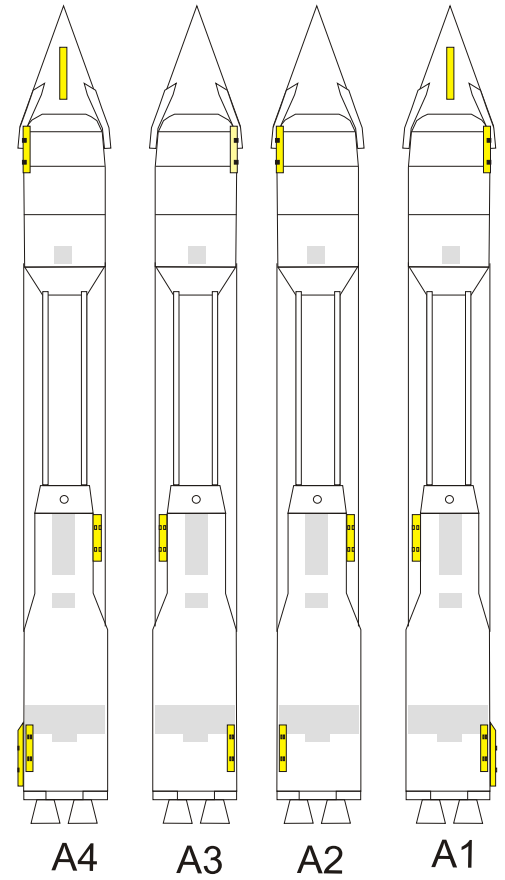
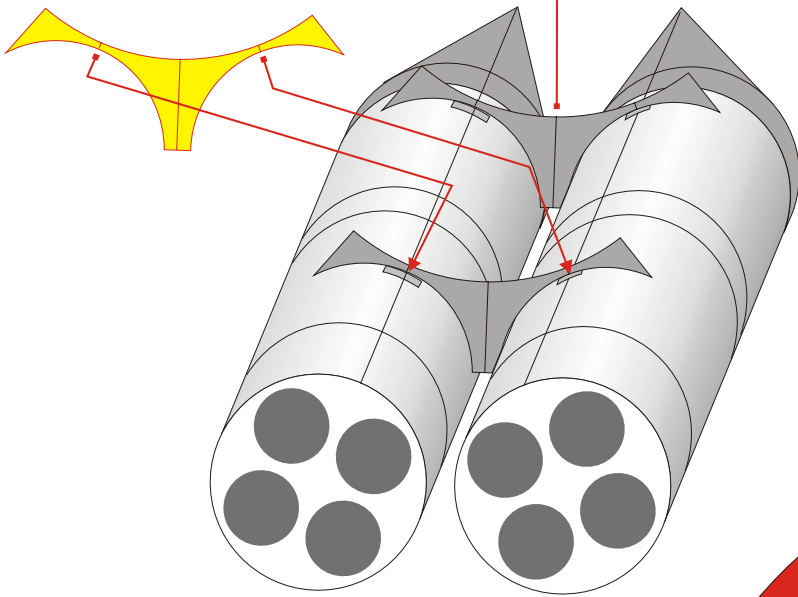
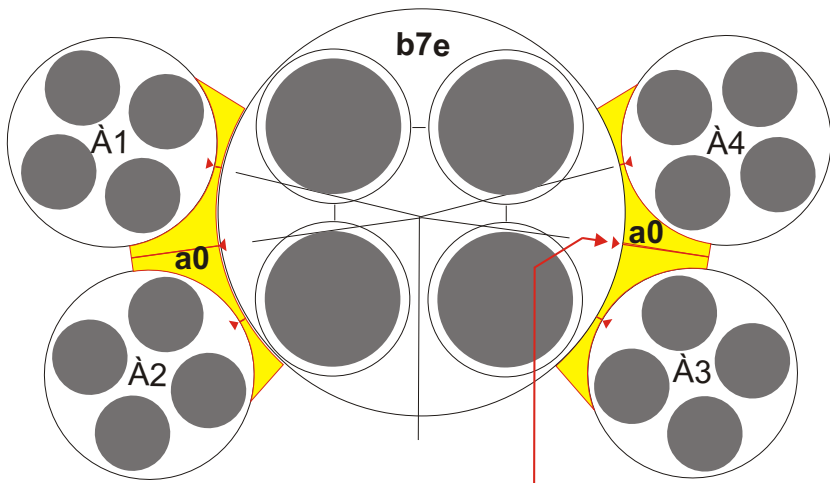
a12



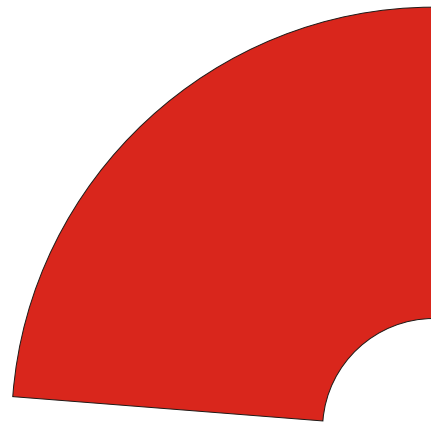
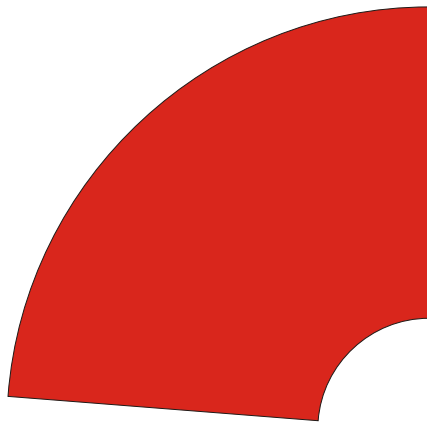
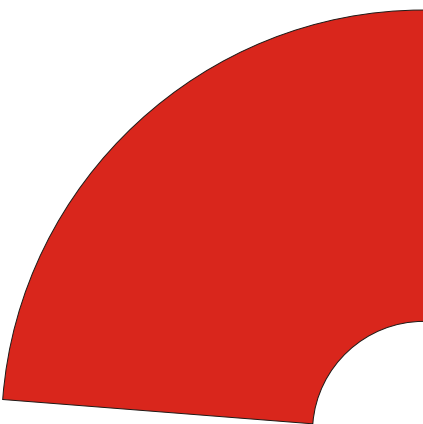
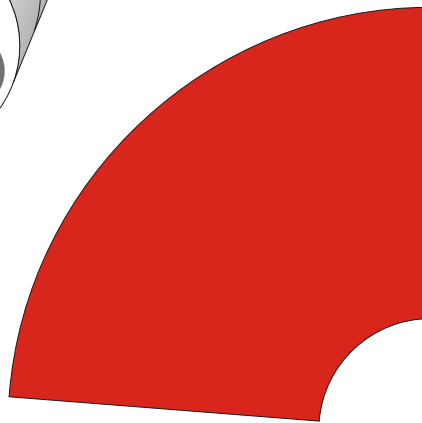
a7 bottom disk

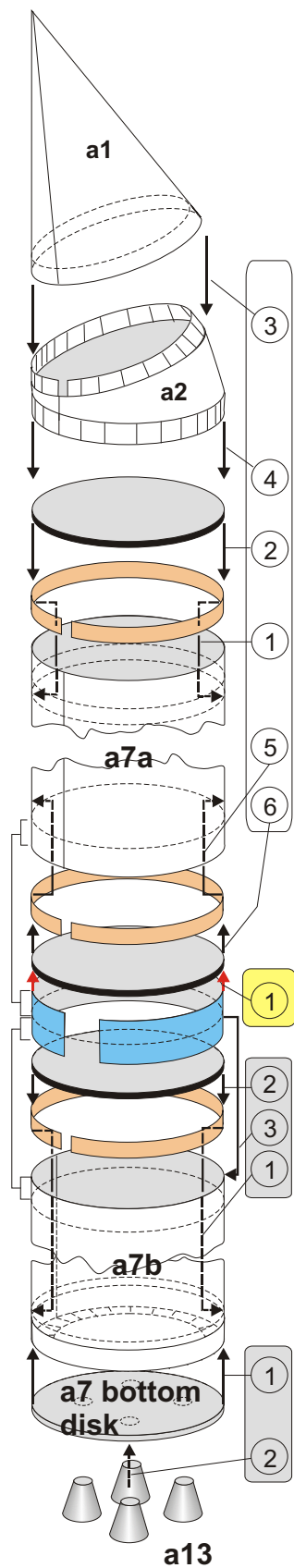


assembling A to B






Glue parts a0 to A using markers "a0" on A, then glue pairs of blocks A on B, using markers "a0" on B. Ends of the nozzles of all blocks - in common plane.





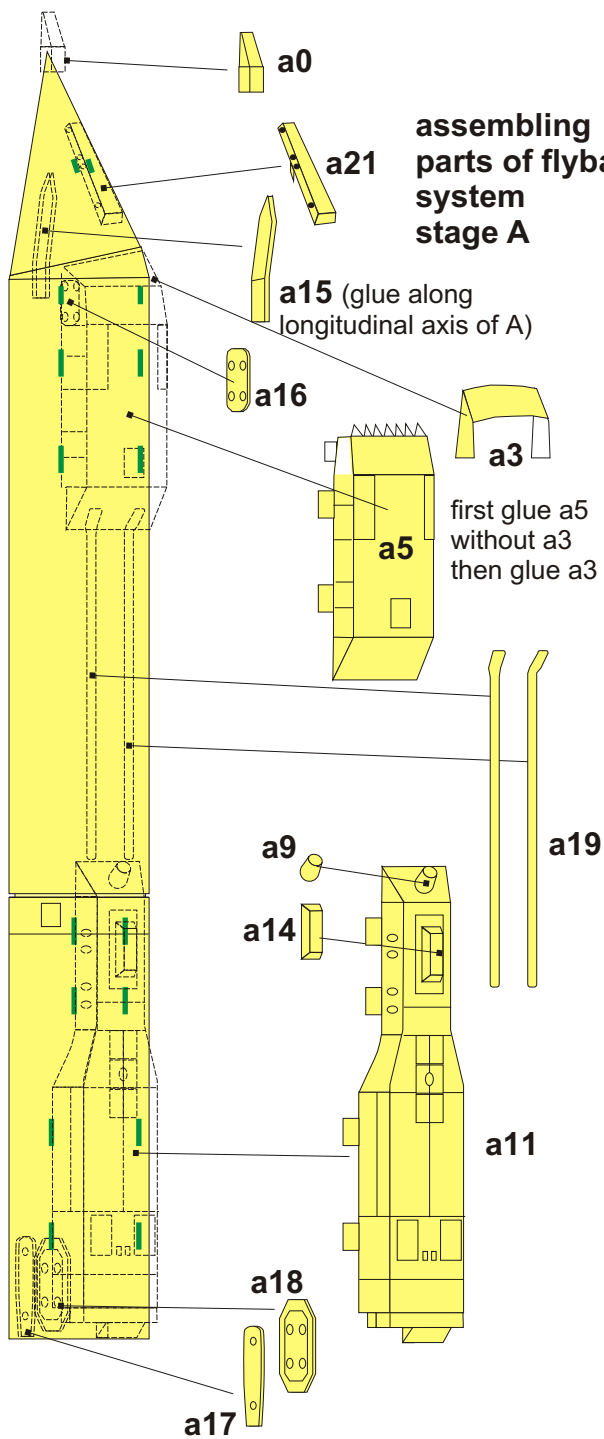
assembling supports for payload on body of stage B

steps of assembling parts of body stage A

 supporting rings
 connecting ring
 slots

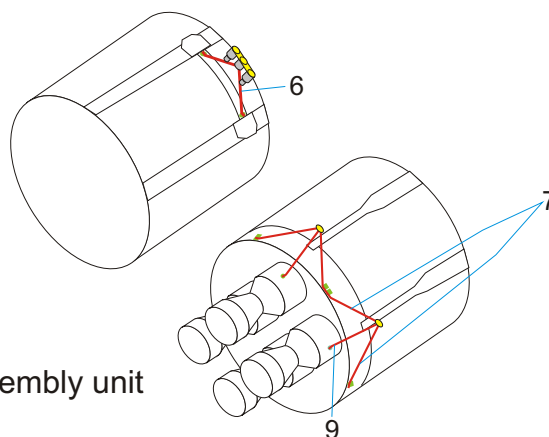
last step of assembling body of stage A

assembling parts of flyback system stage A



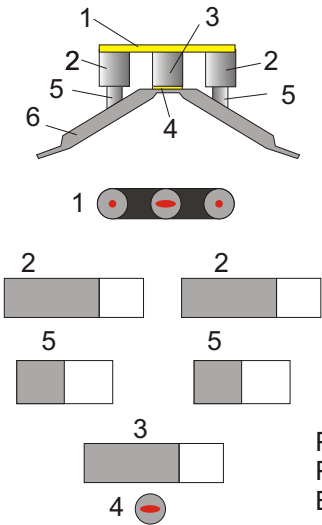
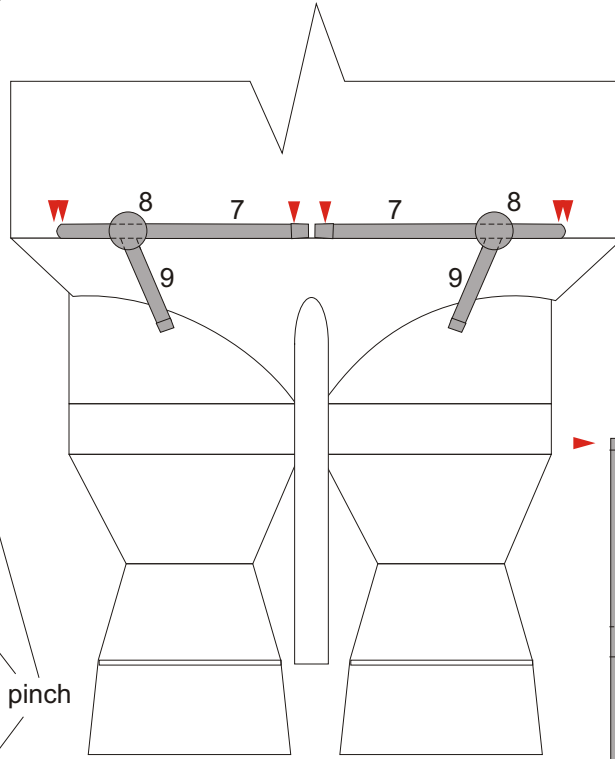
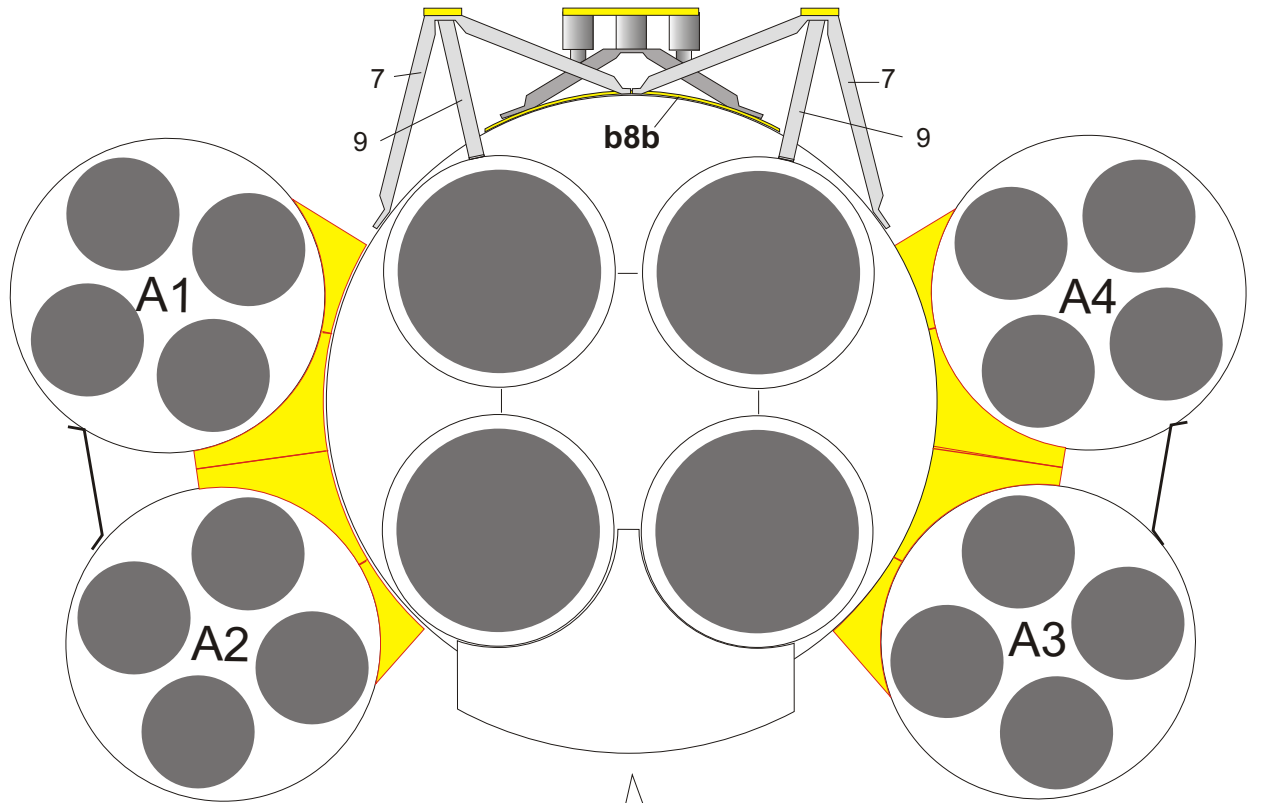
top assembly unit

bottom assembly unit



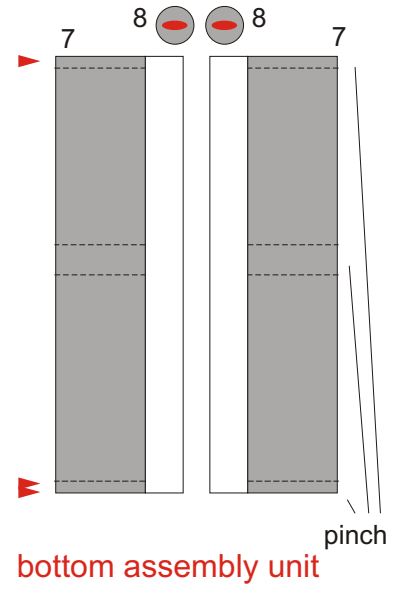
Template for assembling of Stages A & B and payload assembly units

10 cm



top assembly unit

Parts 2 and 3 are tubes d=4 mm
 Parts 5 and 6 are tubes d=2 mm
 Bottom ends of tubes 5 cut under angle 30-40 degree



bottom assembly unit