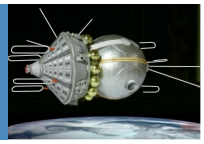
Cardmodels-R



# Soyuz 7K-L1 "Zond"

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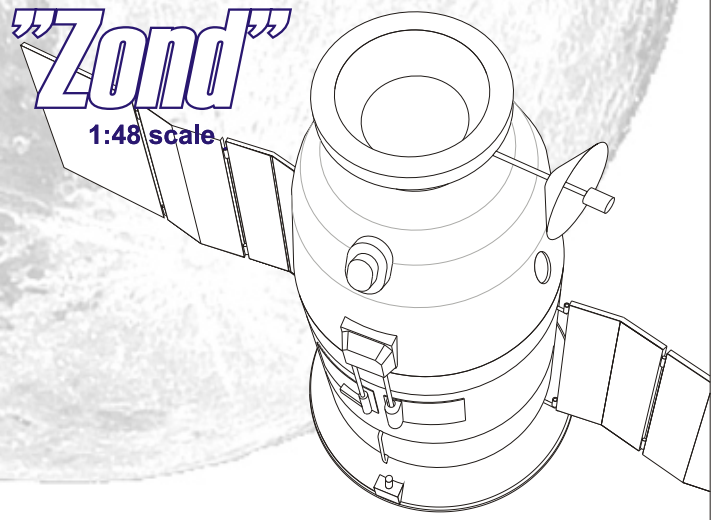
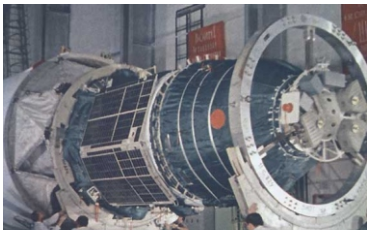
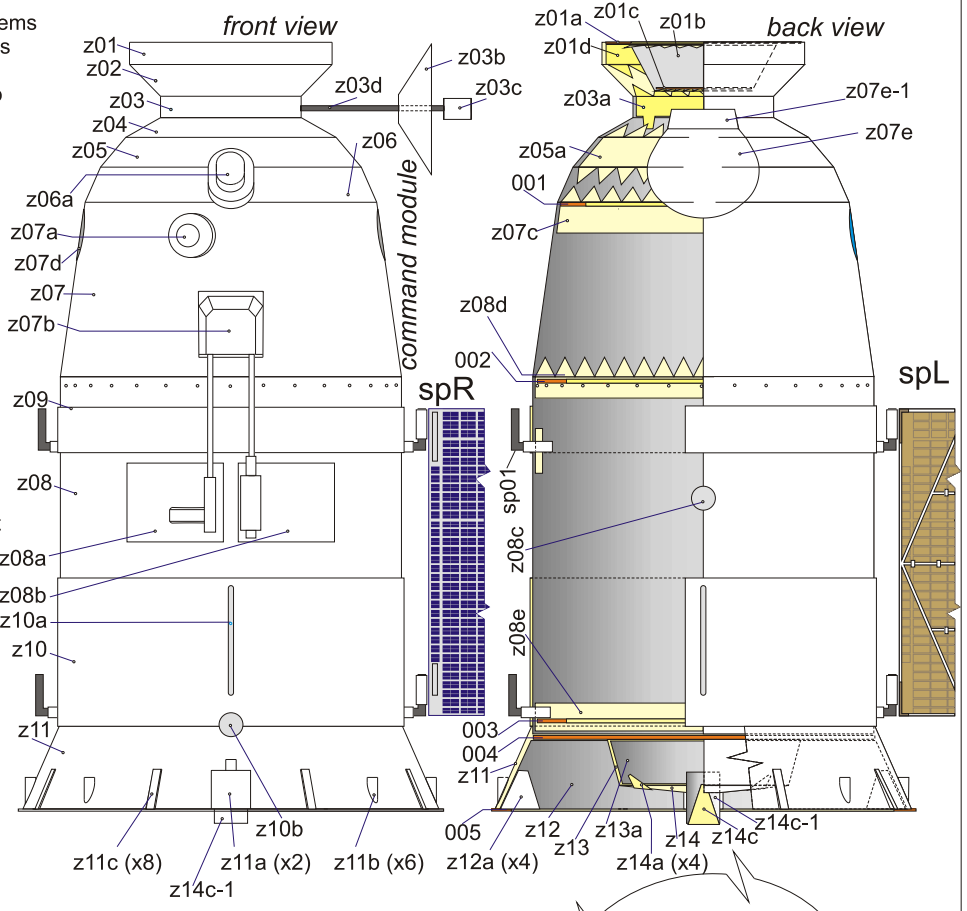
1:48 scale

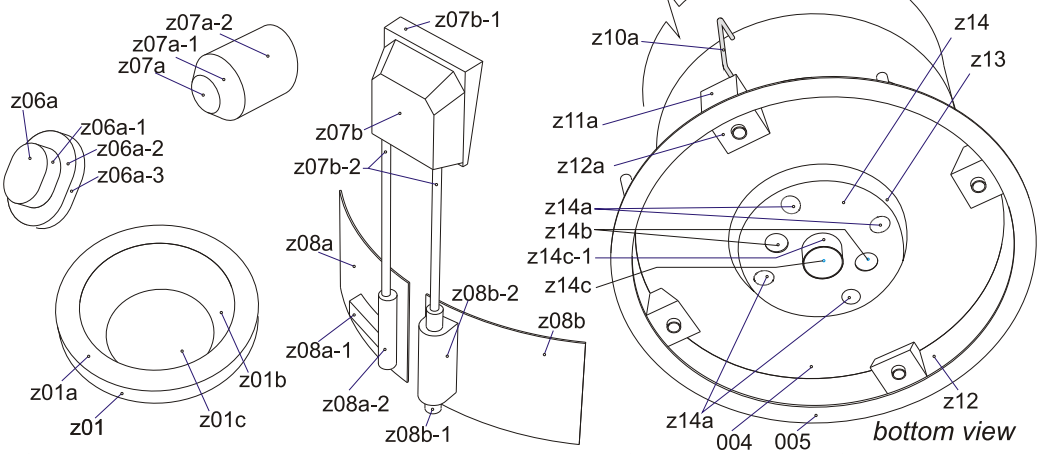


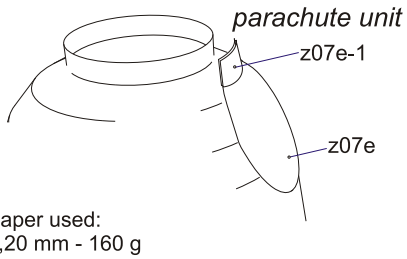
The Soyuz 7K-L1 "Zond" spacecraft was designed to launch men from the Earth to circle the Moon without going into lunar orbit in the context of the Soviet manned moon-flyby program in the Moon race.
It was based on the Soyuz 7K-OK with several components stripped out to reduce the vehicle weight. The most notable modifications included the removal of the orbital module and a reserve parachute; and the addition of the gyro platform and star navigation sensors for the far space navigation. The spacecraft was capable of carrying two cosmonauts.
All L1/Zond spacecraft made only unmanned flights from 1967–70 (from Zond 4 to Zond 8), and four of these five Zond flights suffered malfunctions.
Test flights conducted around the Moon showed problems using their star sensors for navigation. These problems caused ballistic reentry due to the failed guidance.
One direct descent re-entry was performed on a steep ballistic trajectory with deceleration of up to 20 Gs and splashed down in the Indian Ocean.
Three others performed a maneuver known as "skip reentry" to shed velocity. One of those also performed an unsafe (for humans) descent of up to 20 Gs of deceleration, the other suffered main parachute failure, and only one flight - Zond 7 - would have been safe for cosmonauts.
Zond 5 launched on September 1968 and became the first spacecraft to circle the Moon and return to land on Earth. On September 18, the spacecraft flew around the Moon. The closest distance was 1,950 km. High-quality photographs of the Earth were taken at a distance of 90,000 km. A biological payload of two Russian tortoises, wine flies, meal worms, plants, seeds, bacteria, and other living matter was included in the flight. This spacecraft was planned as a precursor to a manned lunar spacecraft.
After the successful US Apollo 8 manned flight around the Moon, the Soviet manned moon-flyby missions lost political motivation. The first manned flight of the L1/Zond spacecraft with Alexey Leonov and Valery Bykovsky planned for the end of 1970 was cancelled. In addition, the Proton booster was far from being man-rated and its poor launch record made it undesirable for manned flights.

*https://en.wikipedia.org/wiki/Soyuz_7K-L1*





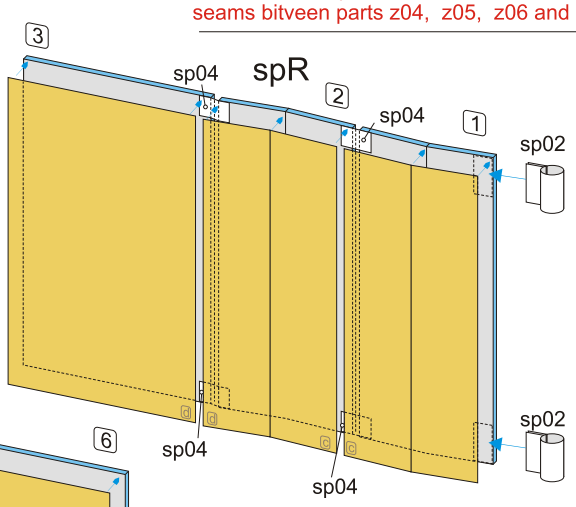


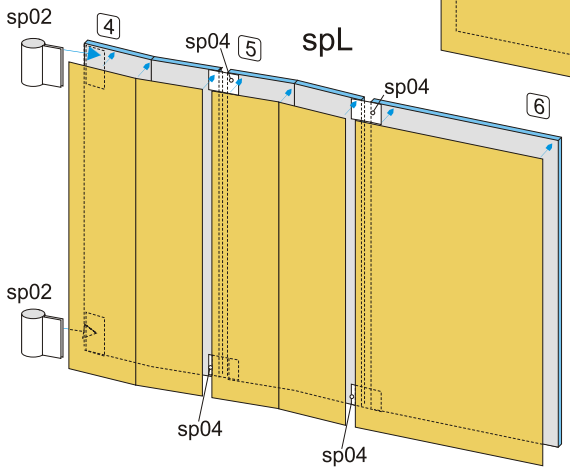


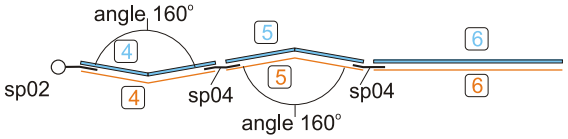
Paper used:
0,20 mm - 160 g

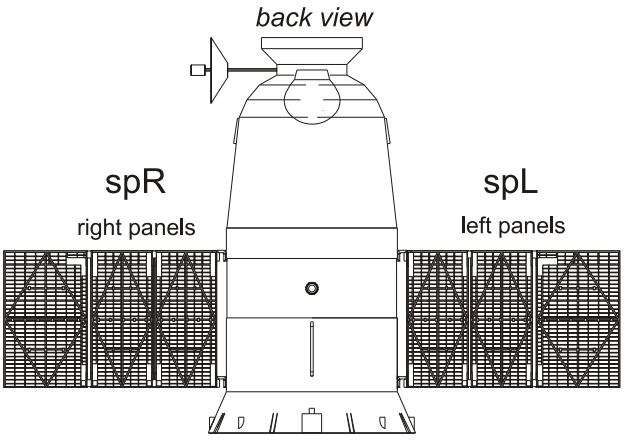
# Assembly of solar panels

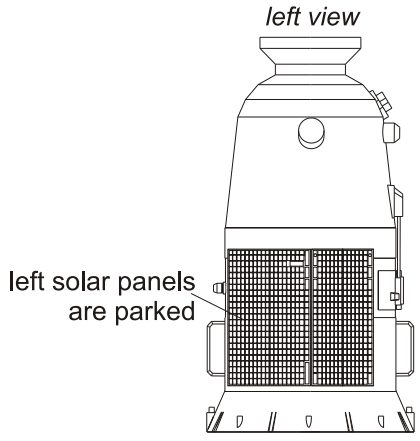
While assembling command module
need to carefully combine the transverse
seams bitveen parts z04, z05, z06 and z07

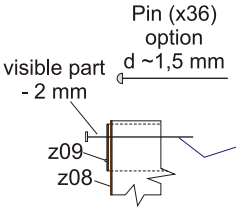


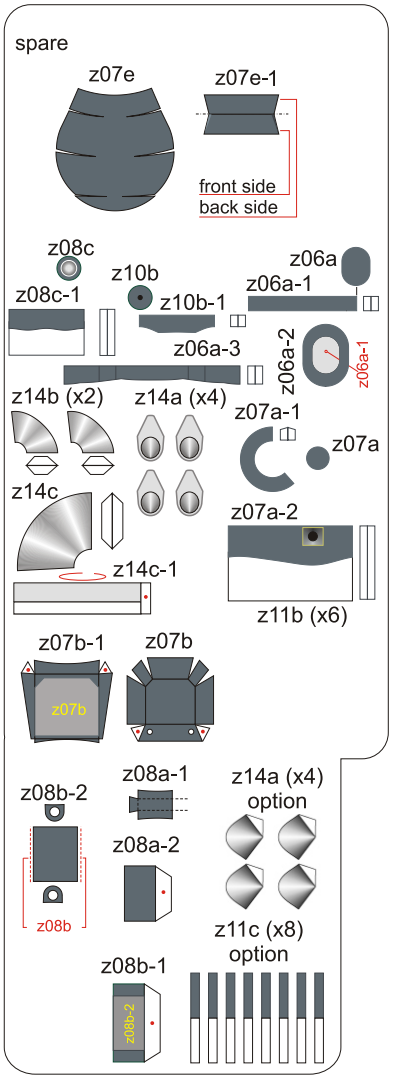



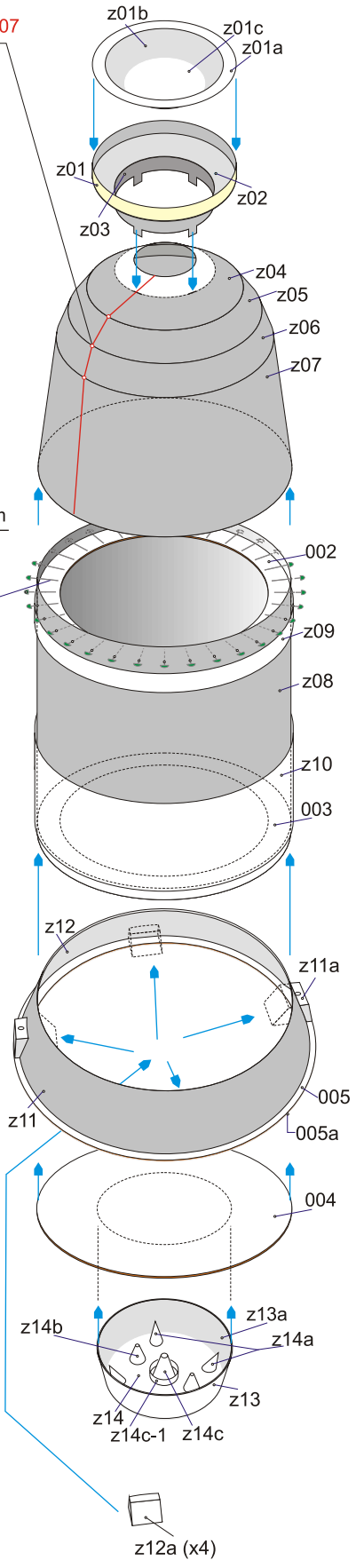



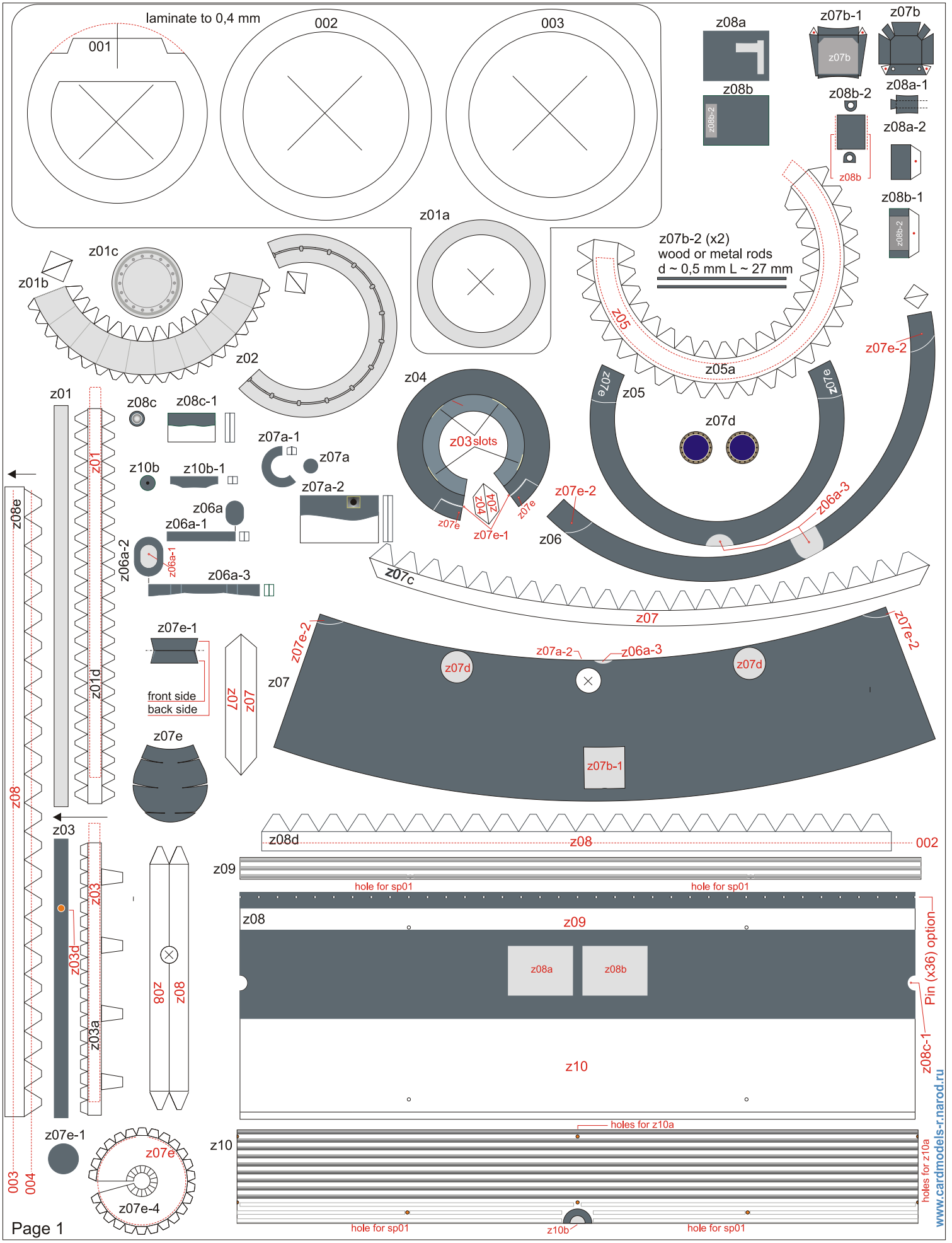




laminate to 0,4 mm
001
002
003
z08a
z08b
z07b-1
z07b
z08b-2
z08a-1
z08a-2
z08b-1
z01a
z01c
z01b
z02
z07b-2 (x2)
wood or metal rods
d ~ 0,5 mm L ~ 27 mm
z05
z05a
z07e-2
z04
z03 slots
z07e
z07e-1
z07d
z01
z08c
z08c-1
z07a-1
z07a
z10b
z10b-1
z07a-2
z06a
z06a-1
z06a-2
z06a-3
z06
z07c
z07
z08e
z01d
front side
back side
z07
z07e
z08
z08d
z09
hole for sp01
z03
z03d
z03a
z10
holes for z10a
z10b
z07e-4
Pin (x36) option
z08c-1
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