

TOWED 23x152MM ANTI-AIRCRAFT
TWIN-BARRELED AUTOCANNON

ZU-23-2

HISTORICAL BRIEF
AND TECHNICAL BACKGROUND



Photo: Watson @ reibert.info

ZU-23-2 Zenitnaya Ustanovka 23-2

The ZU-23-2, officially "Zenitnaya Ustanovka 23-2," is a Soviet-designed, towed twin-barreled 23mm anti-aircraft autocannon. Introduced in the early 1960s, it quickly became a ubiquitous light air defense system globally, valued for its simplicity, ruggedness, and effectiveness.

Primarily designed to engage low-flying aircraft and helicopters at altitudes up to 2.5 km and ranges up to 2 km, its dual 23mm 2A14 autocannons are also potent against lightly armored ground vehicles and infantry. Each gun is fed by an ammunition belt, contributing to an impressive combined rate of fire of up to 2,000 rounds per minute. The ZU-23-2 can be rapidly deployed from its towed position (on a wheeled carriage) to a stable firing platform by extending its wheels.

Weighing approximately 950 kg, the ZU-23-2's relatively light design facilitates easy manual towing or mounting on various platforms, from trucks and pick-ups (often called "technicals") to armored personnel carriers like the MT-LB. This exceptional adaptability has ensured its extensive use in conventional armies and asymmetric conflicts worldwide. Its combat effectiveness is further boosted by a range of ammunition types, including Armor-Piercing Incendiary (API) and High-Explosive Incendiary – Tracer (HEI-T) rounds.

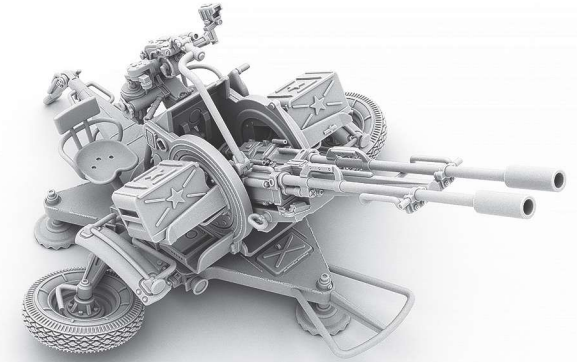
Despite its age, the ZU-23-2 remains widely deployed by numerous nations and continues to see active service in modern conflicts, underscoring its enduring utility and versatility.

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TOWED 23X152MM ANTI-AIRCRAFT
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ZU-23-2



1:72

3D-PRINTED
SCALE MODEL KIT

Model №: K38-M001

ASSEMBLY INSTRUCTIONS

K38-M001

IMPORTANT RECOMMENDATIONS BEFORE STARTING WORK WITH THE MODEL:



ATTENTION: This model is not a toy and contains very small, fragile parts. Keep out of reach of children and pets.



SAFETY: We recommend using personal protective equipment (gloves, safety glasses) when working with small parts and chemicals.



ASSEMBLY: Use quality cyanoacrylate-based glue for bonding parts. Gel-type cyanoacrylate "super glue" is the optimal choice.



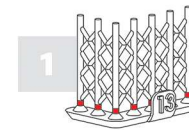
MATERIALS AND TOOLS: When working with the model, use only high-quality modeling tools, paints, and chemicals.



TEMPERATURE: Avoid heating the model above +55°C (130°F) to prevent deformation.

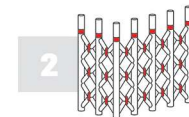


MOISTURE: Do not leave the model in water or a humid environment for extended periods.



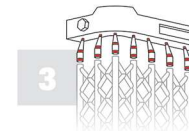
1

Remove the base of the supports with sharp modelling nippers. If necessary, use a modelling saw.



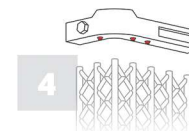
2

Remove the main support array by splitting the cross connections and removing the main supports.



3

Remove the remaining supports in several steps, moving closer to the base of the tips on the part.

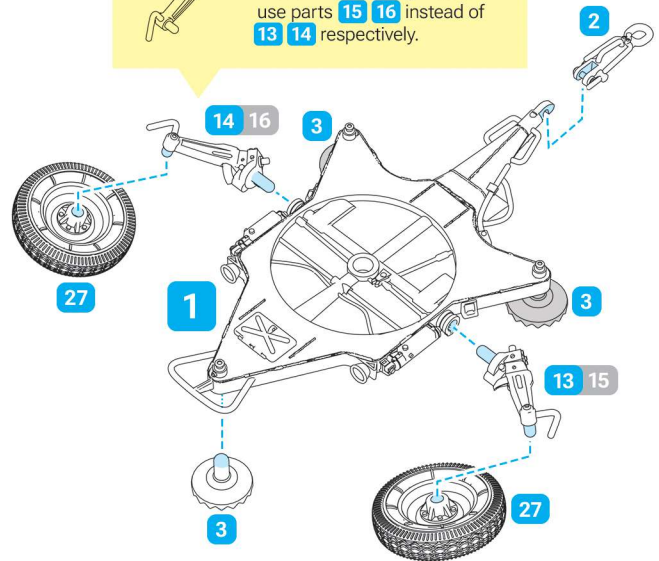


4

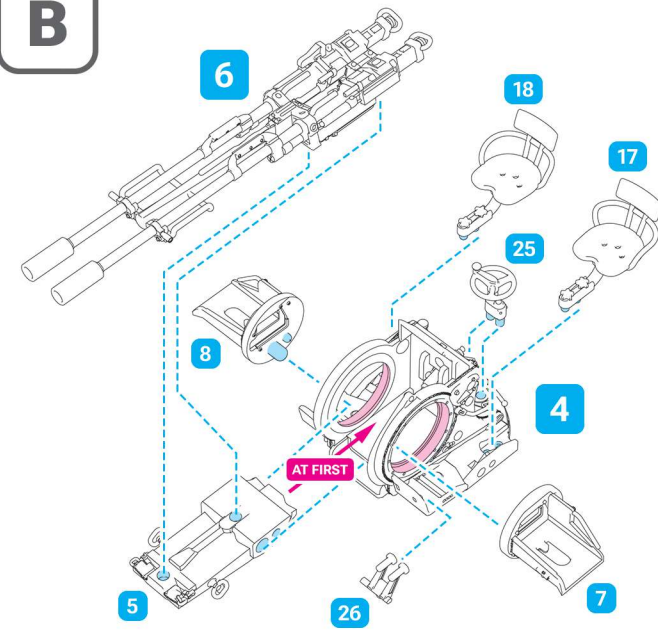
If necessary, use a file or a suitable mini-drill bit to clean the joint between the tips and the part.

A

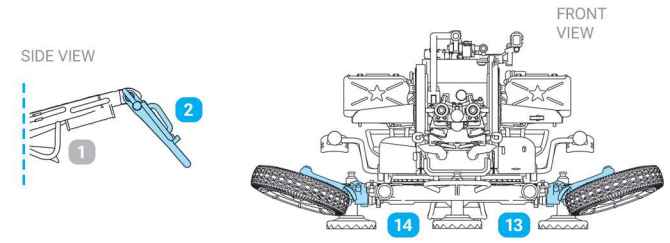
IMPORTANT:
If you are assembling the model in the towing mode, use parts **15 16** instead of **13 14** respectively.



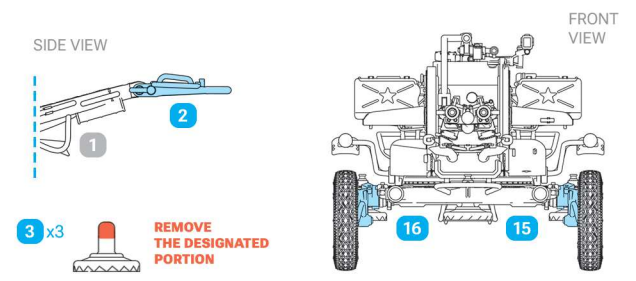
B



**ASSEMBLY OPTION №1
COMBAT MODE**

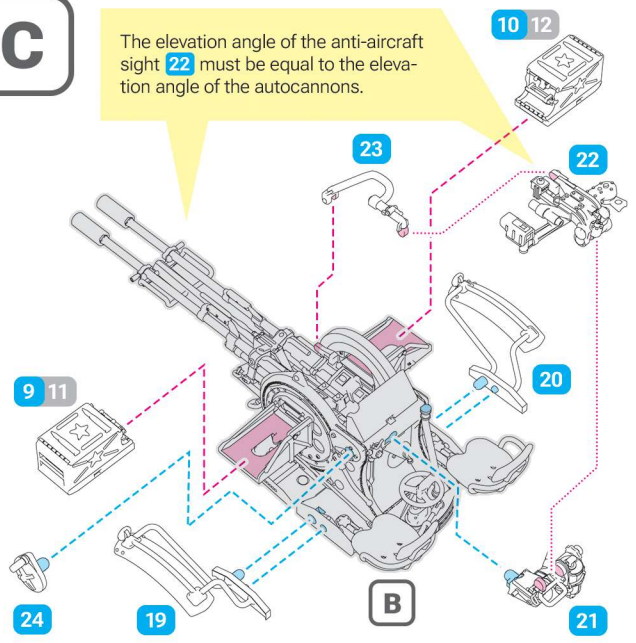


**ASSEMBLY OPTION №2
TOWING MODE**

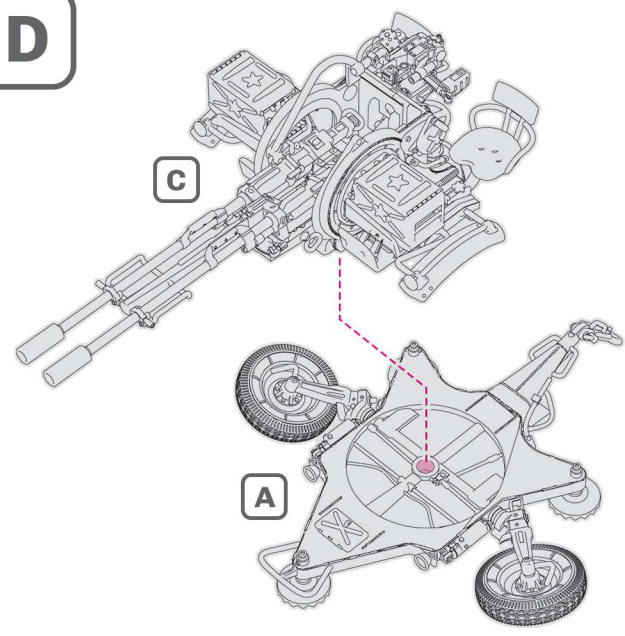


C

The elevation angle of the anti-aircraft sight **22** must be equal to the elevation angle of the autocannons.

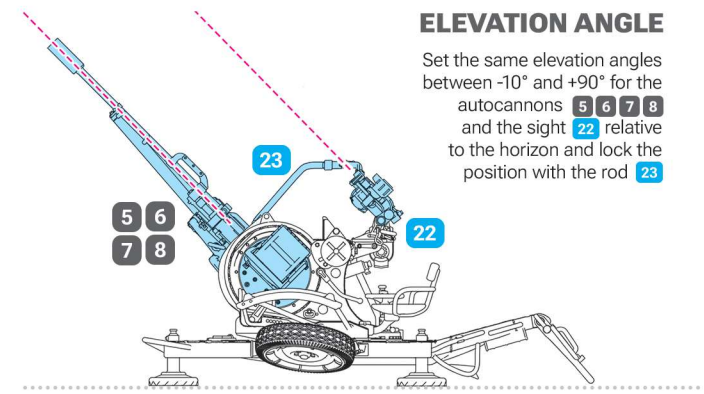





D



ELEVATION ANGLE

Set the same elevation angles between -10° and $+90^\circ$ for the autocannons **5 6 7 8** and the sight **22** relative to the horizon and lock the position with the rod **23**



- 13** — part number, or **9 11** assembly option
- 3** ↔ **4** — install the corresponding part on the opposite side
- A** or  — group of assembled parts / sub-assembly
-  — assembly with glue, or  without glue