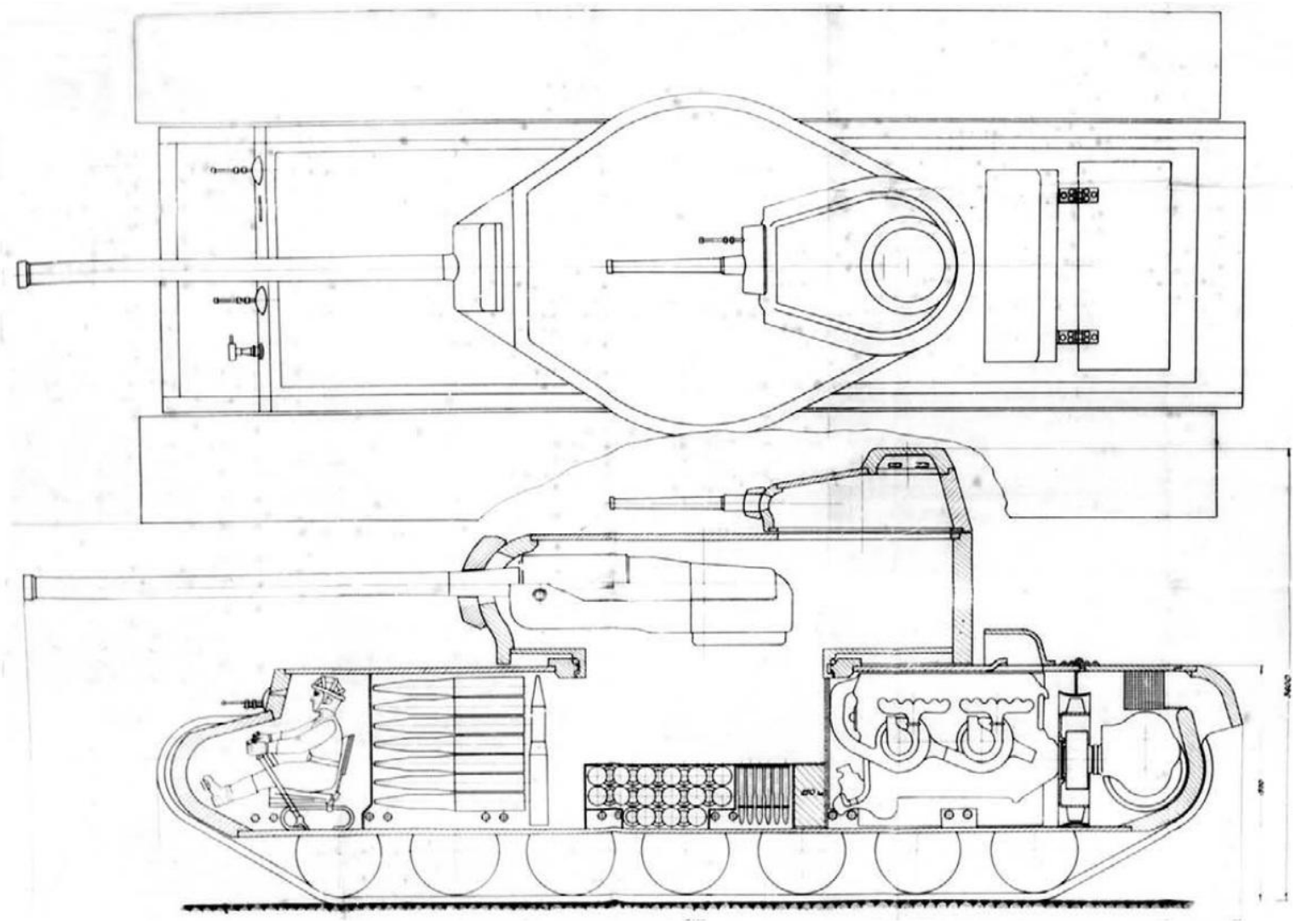
RTM

Object 224:

KV-4 Super Heavy Breakthrough Tank

Strukov's Design

1/35



HISTORY:

The KV-4 (Object 224) by Strukov emerged from an intense design competition at the Leningrad Kirov Plant's SKB-2 bureau in spring 1941, as Soviet engineers raced to counter rumors of a massive 90-tonne German heavy tank. Under the leadership of J.Y. Kotin, over 20 proposals flooded in, pushing the boundaries of armor, firepower, and layout. While Nikolai L. Dukhov's design ultimately took first place for its practicality, engineer N.I. Strukov submitted a bold and distinctive entry that stood out for its innovative turret arrangement.

Strukov's proposal featured a more compact hull than many, but with a towering height of 3.8 meters due to its unique stacked turret configuration. The main turret — rhomboid-shaped with rounded edges formed from stamped steel plates — housed the powerful 107 mm ZiS-6 gun, while a smaller secondary turret mounting a 45 mm 20-K cannon sat directly atop it, creating a "second floor" effect. This arrangement helped shorten the overall hull compared to battleship-style layouts, though it significantly increased the vehicle's silhouette. The tank was estimated at around 92 tonnes, protected by up to 130 mm of frontal armor and powered by a massive 1,200 hp M-40 diesel engine that promised a theoretical top speed of up to 50 km/h. It carried a crew of six and included additional armament such as DT machine guns and even a flamethrower in some configurations.

Strukov's design reflected creative problem-solving within the fierce competition, emphasizing a balance of heavy firepower and a relatively efficient hull layout with seven torsion-bar-sprung road wheels per side, stepped frontal plates, and standard KV-style rear engine placement. However, like the rest of the KV-4 entries, it remained purely on paper. The German invasion in June 1941 abruptly ended all development work, shifting factory priorities to existing KV production and evacuation. Strukov's proposal, which received no formal placement or prize in the competition, survives today only as a single known blueprint — a fascinating footnote in the story of Soviet super-heavy tank experimentation.

This scale model kit revives N.I. Strukov's overlooked vision, depicting one of the more unconventional KV-4 concepts from a brief but explosive period of wartime ingenuity.

Note: While designing this kit we tried to stay as close as possible tot he only availible sketch. Missing details were copied from 1941 LKZ KV-1 tanks, T-220 prototypes and KV-3 blueprints, as these vehicles fit the KV-4 design timeframe. The secondairy turret has been reshaped (rounded) somewhat when compared to the original design, this was done because the 45mm turret ring diameter of the side view did not match the top view (Our kit matches the side view). One front facing hull MG was replaced by a pistol port because two MG mounts would not fit. However the kit includes spare MG mounts to use if you decide to place it anyway.

(Special thanks to Pavel 'Carpaticus' Alexe at tanks-encyclopedia.com.)

Attention!

Read before construction:

This model is produced using resin 3D printing technology. As such the assembly process deviates from regular plastic kits.

Assembly Instructions:

Inspect Parts: Check all parts for completeness. Resin parts are printed with support structures that must be removed.

Remove Supports: Carefully cut or snap off support structures using a hobby knife or clippers. Trim any remaining nubs with a knife or sandpaper for a smooth finish. Heating the parts in warm water will help this process.

Test Fit: Dry-fit parts to ensure proper alignment before gluing.

Glue Parts: Apply a small amount of superglue to join parts. Hold pieces together for 10-20 seconds to bond. Use tweezers for small parts.

Reshape (if needed): If parts are slightly warped, soak them in warm (not hot) water for 30-60 seconds to soften, then gently reshape and hold until cool.

Sand and Smooth: Sand support scars, layerlines or rough areas with fine sandpaper for a polished look.

Prime and Paint: Apply a primer to the model before painting to ensure better paint adhesion.

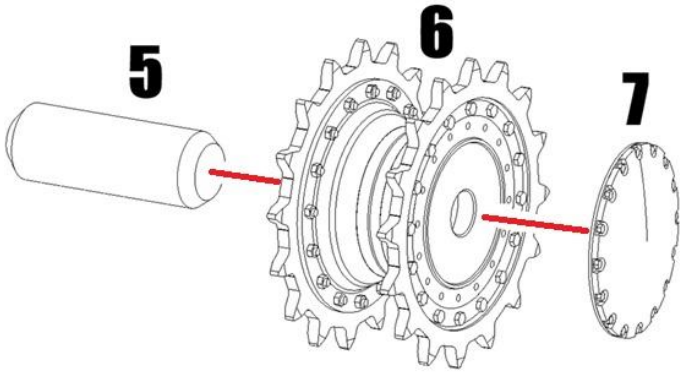
RTM models are produced with empty weld seams and no casting/metal texture. This is done to give the modeller total freedom to sculpt such textures. It is expected that the modeller will apply these textures himself. As such this model is for experienced modellers.

For this particular kit extra attention is needed on the rear hull and rear turret surfaces. This is where most supports were located and should be made smooth using puty and sanding. Tip: Use a ruler to inspect the surface for warping/irregularities

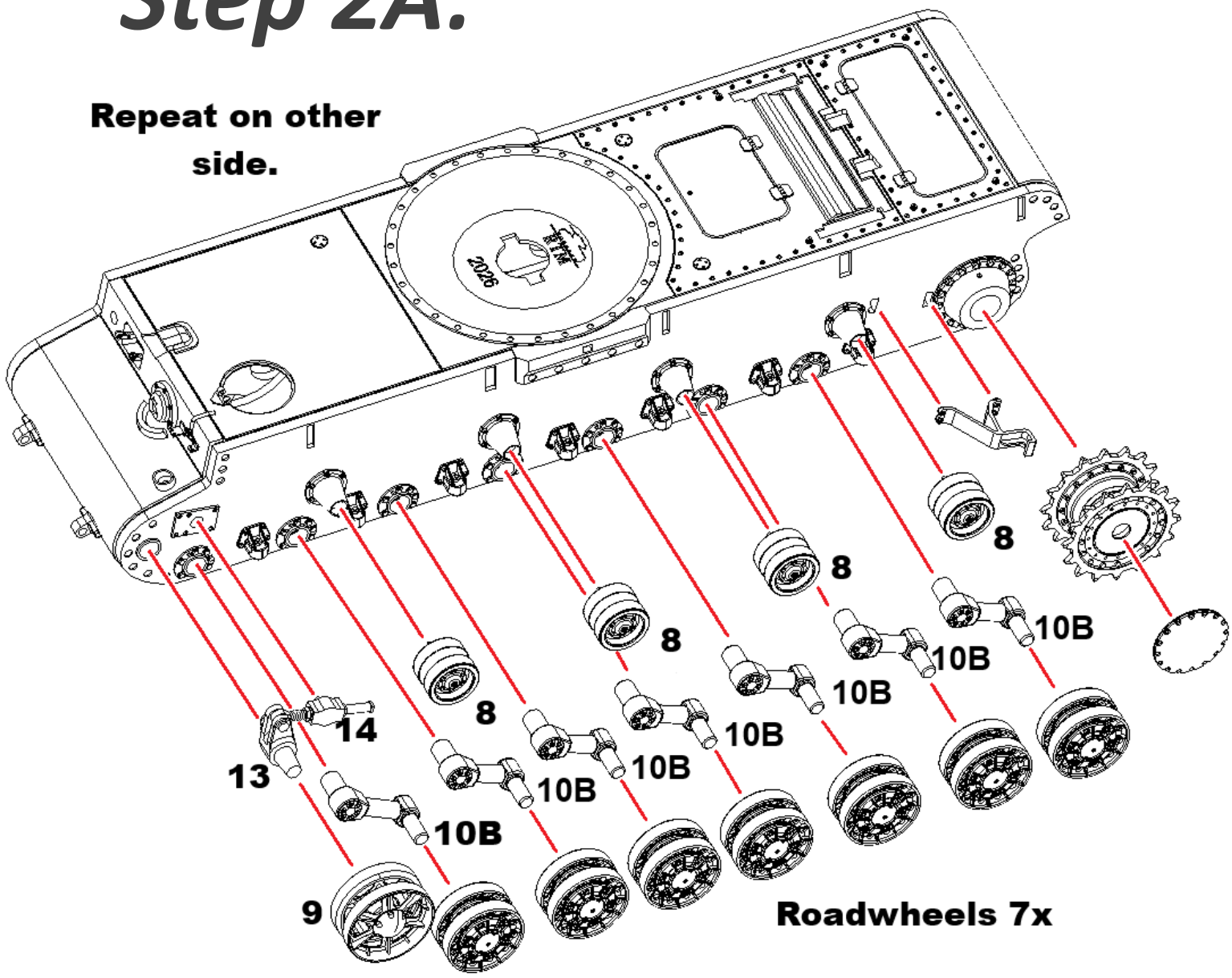
The tracks are fully workable but should be sanded slightly to remove any connection points or layer lines.

No tools, paints or glue is included in the kit!

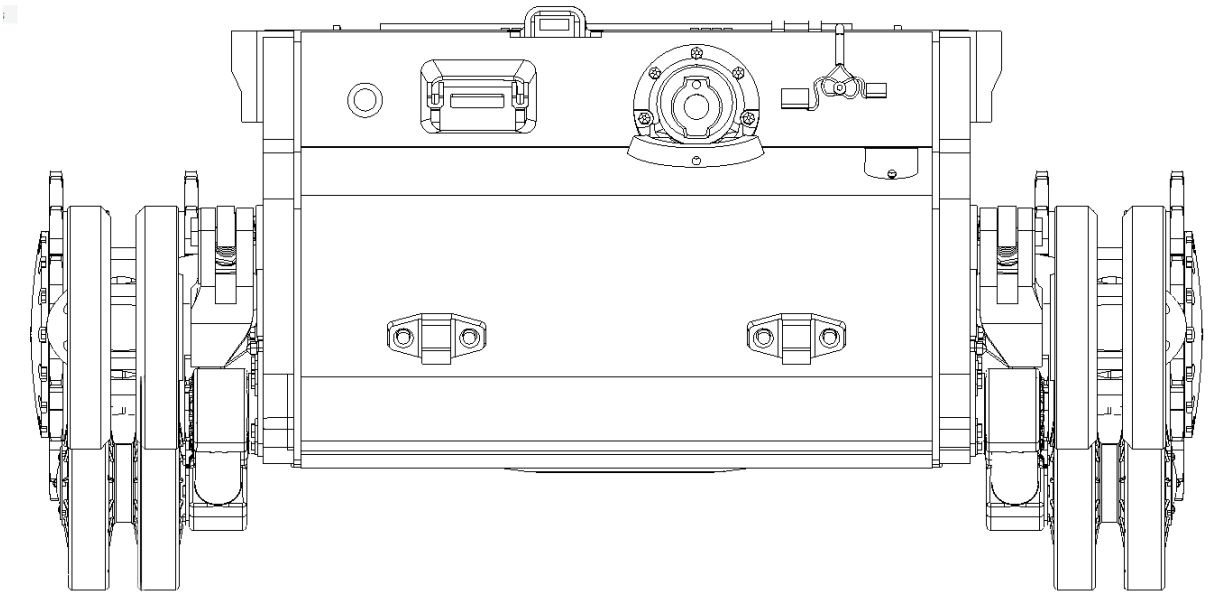
Step 1: (2x)



Step 2A:

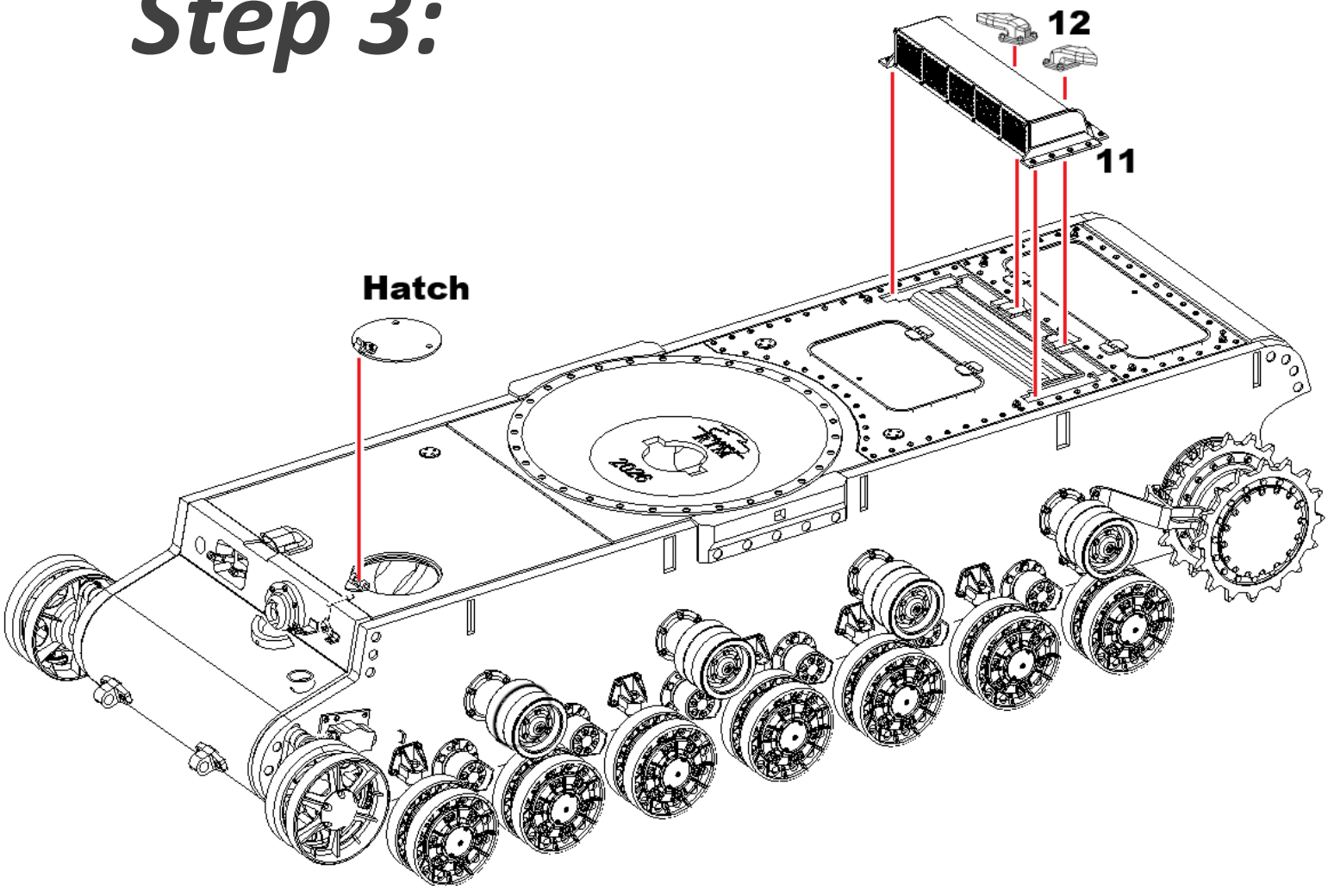


Step 2B:

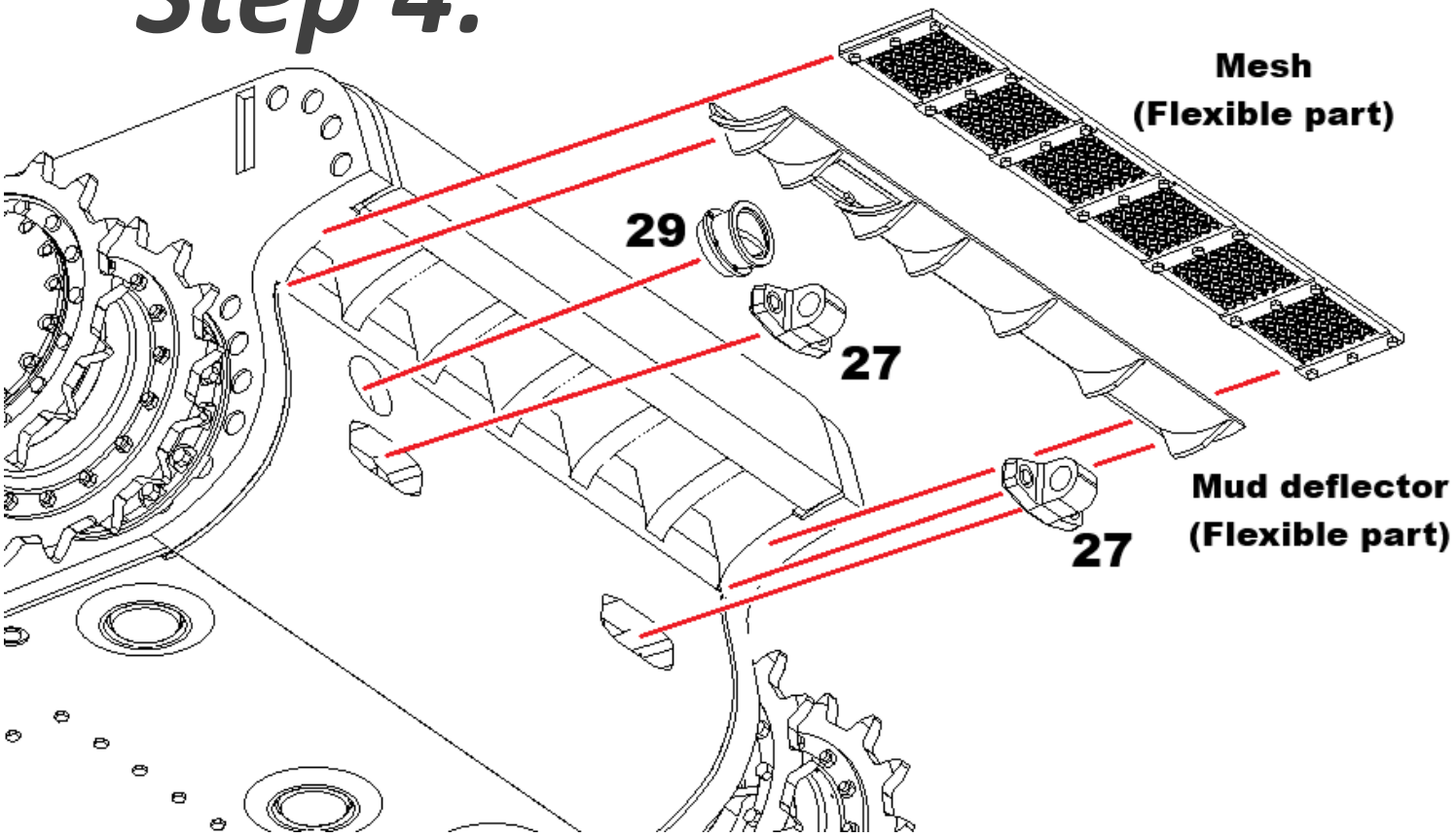


Make sure to align all wheels!

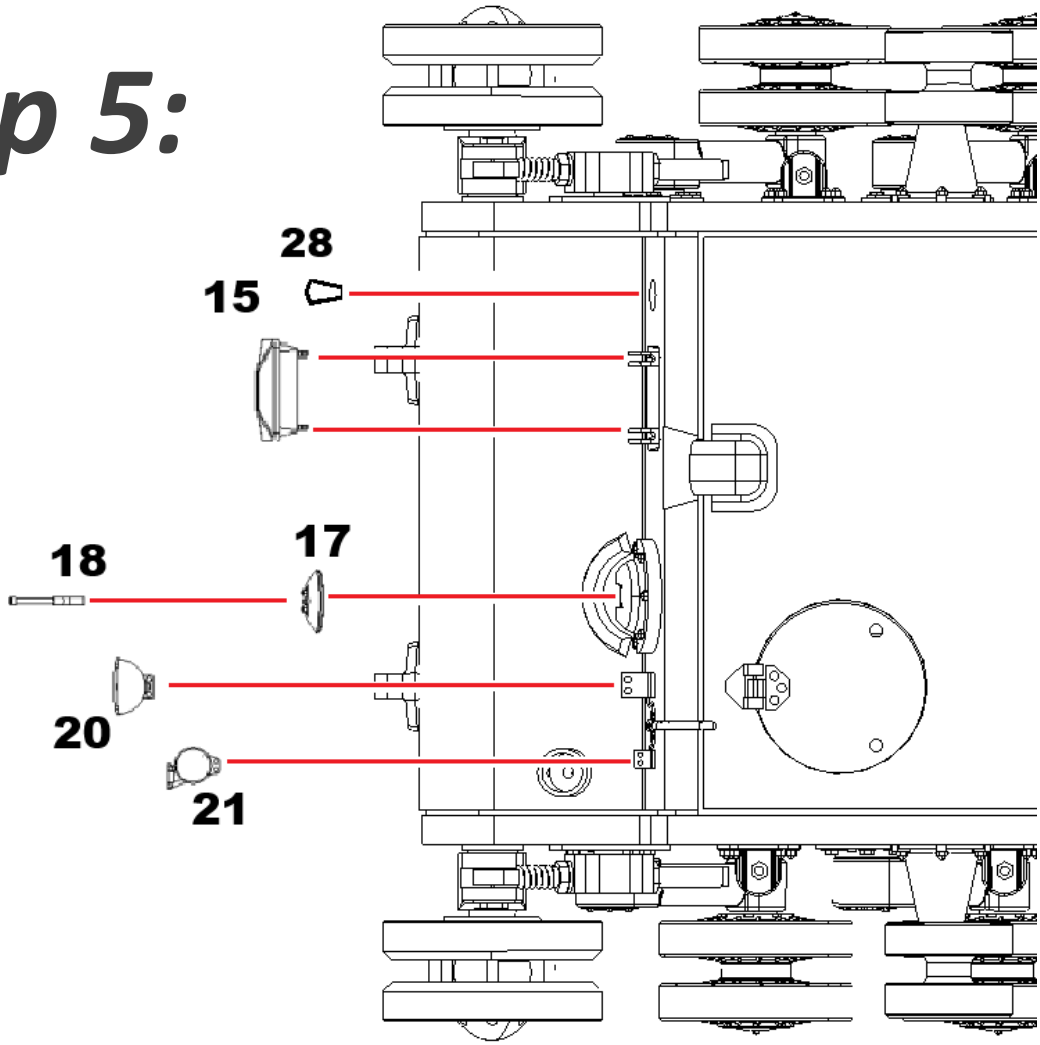
Step 3:



Step 4:

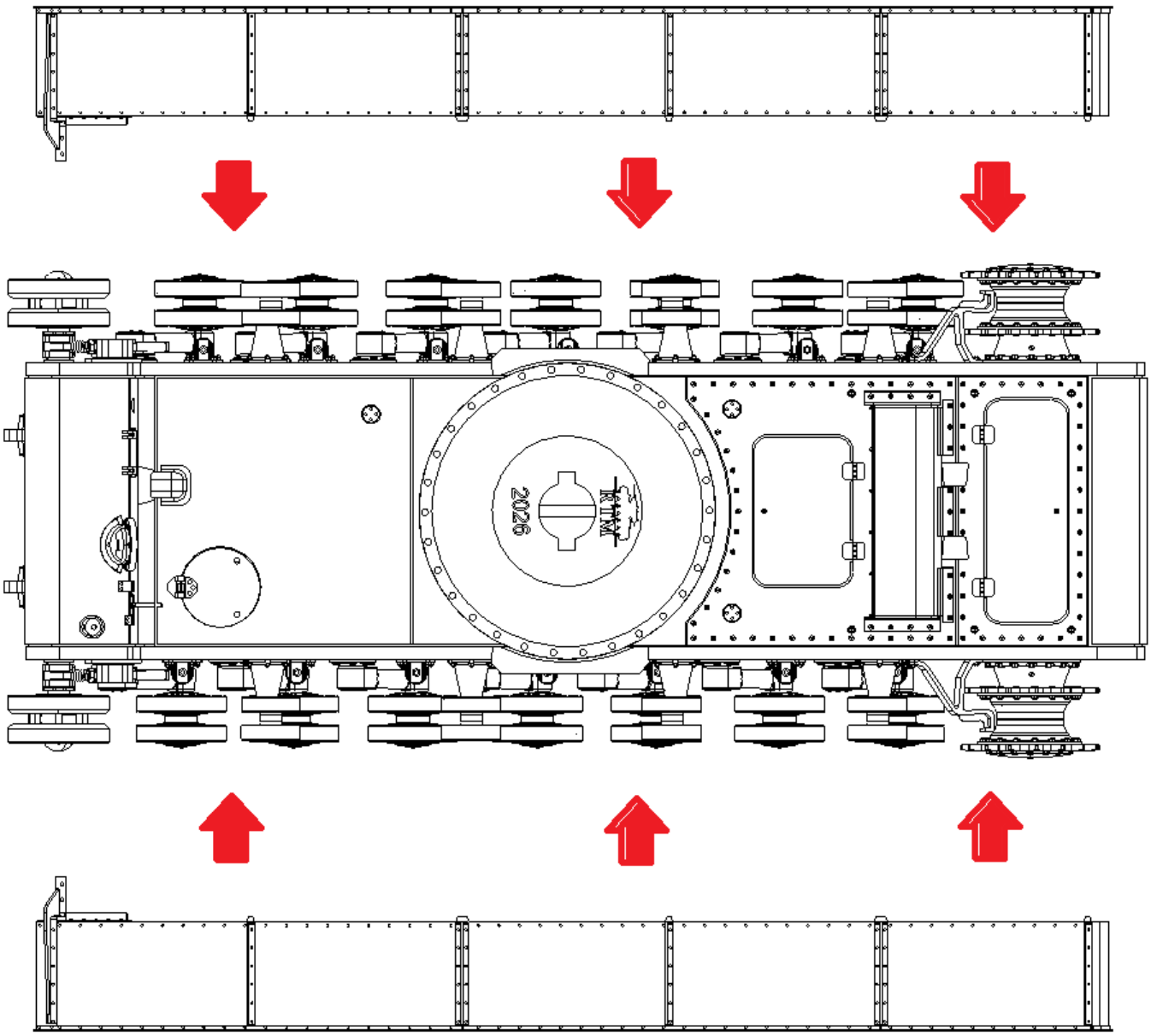

Mesh
(Flexible part)
29
27
Mud deflector
(Flexible part)
27

Step 5:


28
15
18
17
20
21

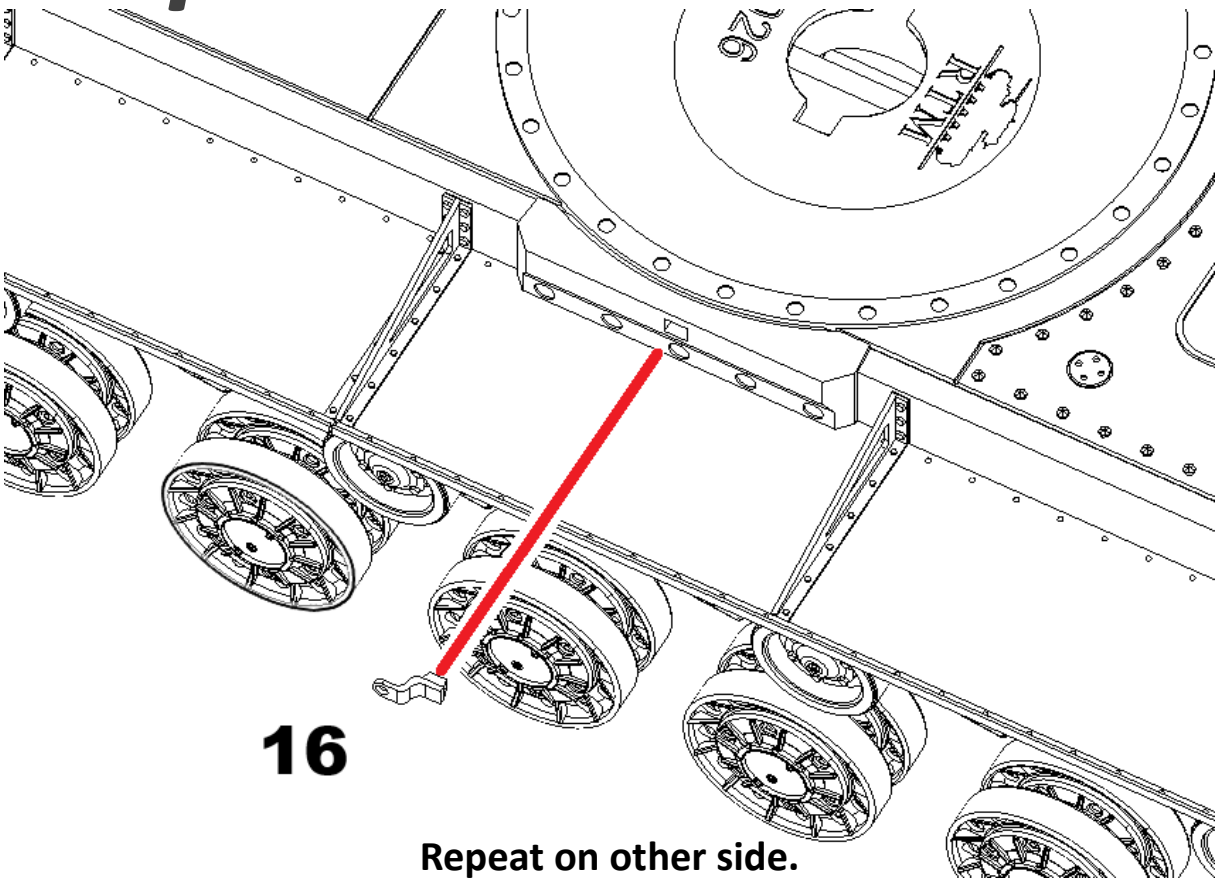
Step 6:

Attach the fenders to the hull individually. Don't glue them together before placement, as this might cause misalignment.



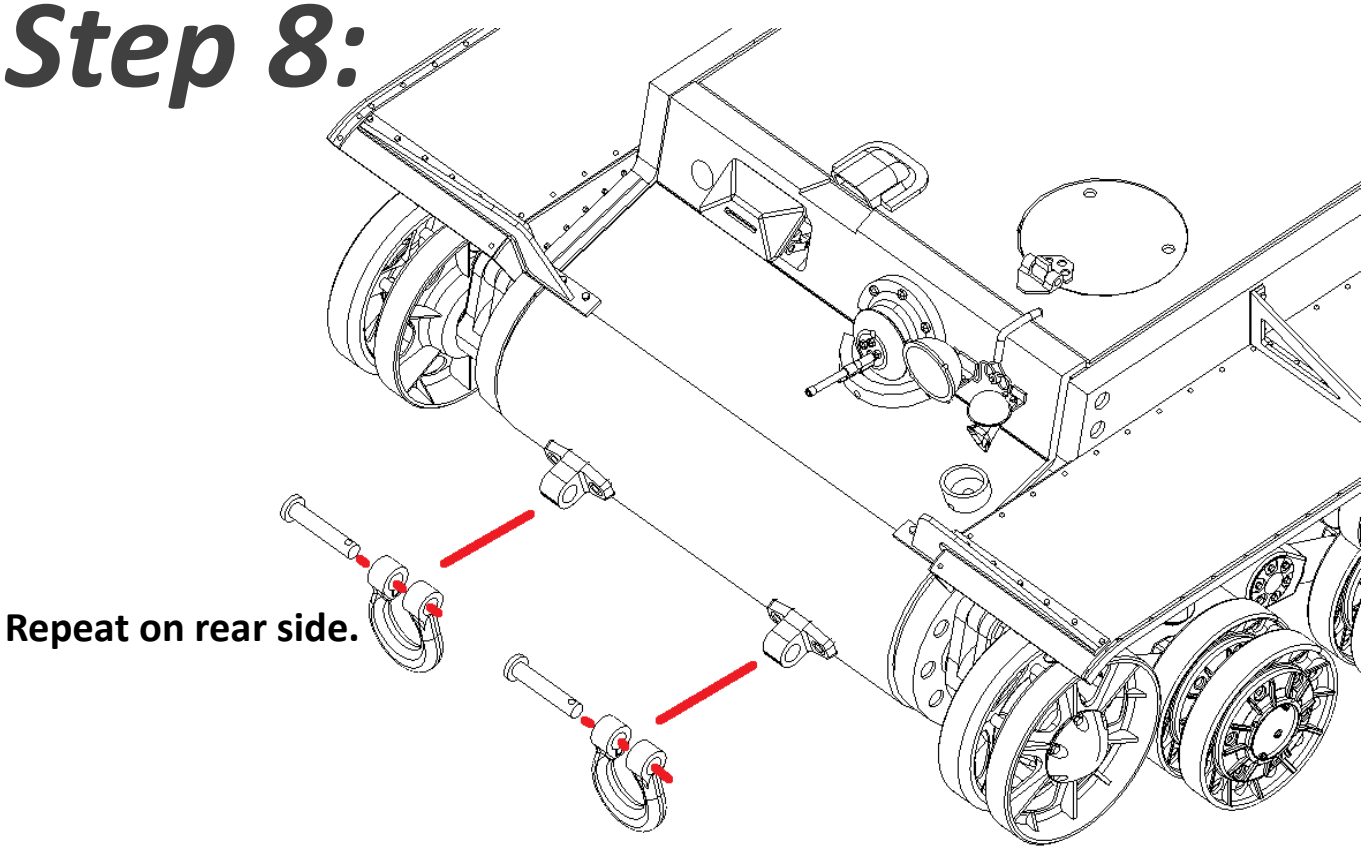
(The fenders are made of flexible resin. Battle damaged or bent fenders can be simulated by bending and curing them with UV light.)

Step 7:



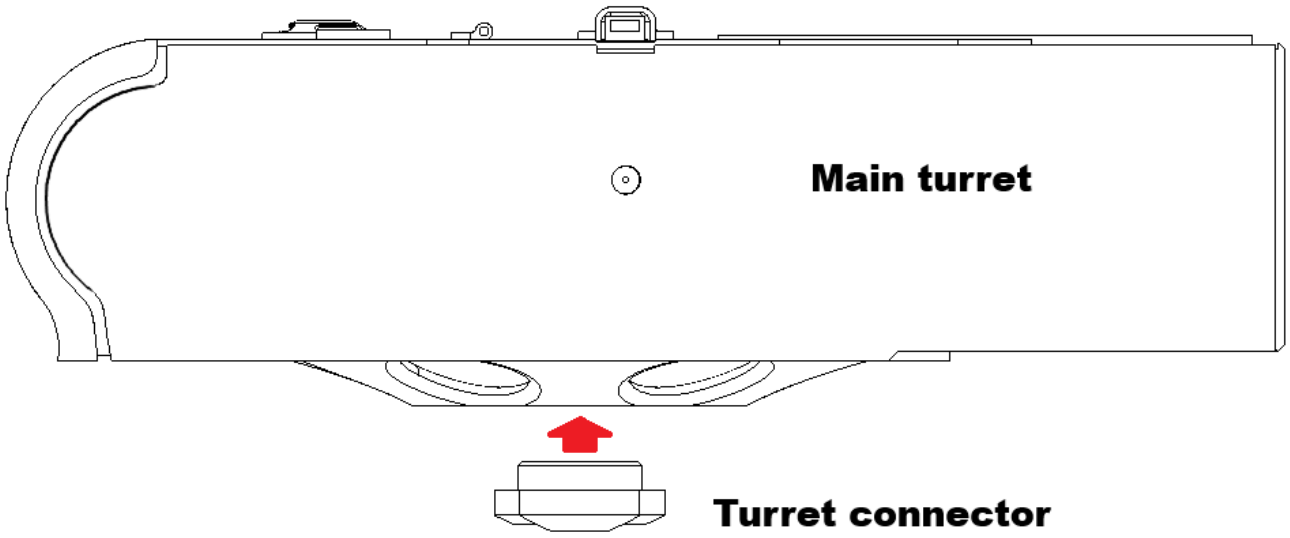
Repeat on other side.

Step 8:



Repeat on rear side.

Step 9:



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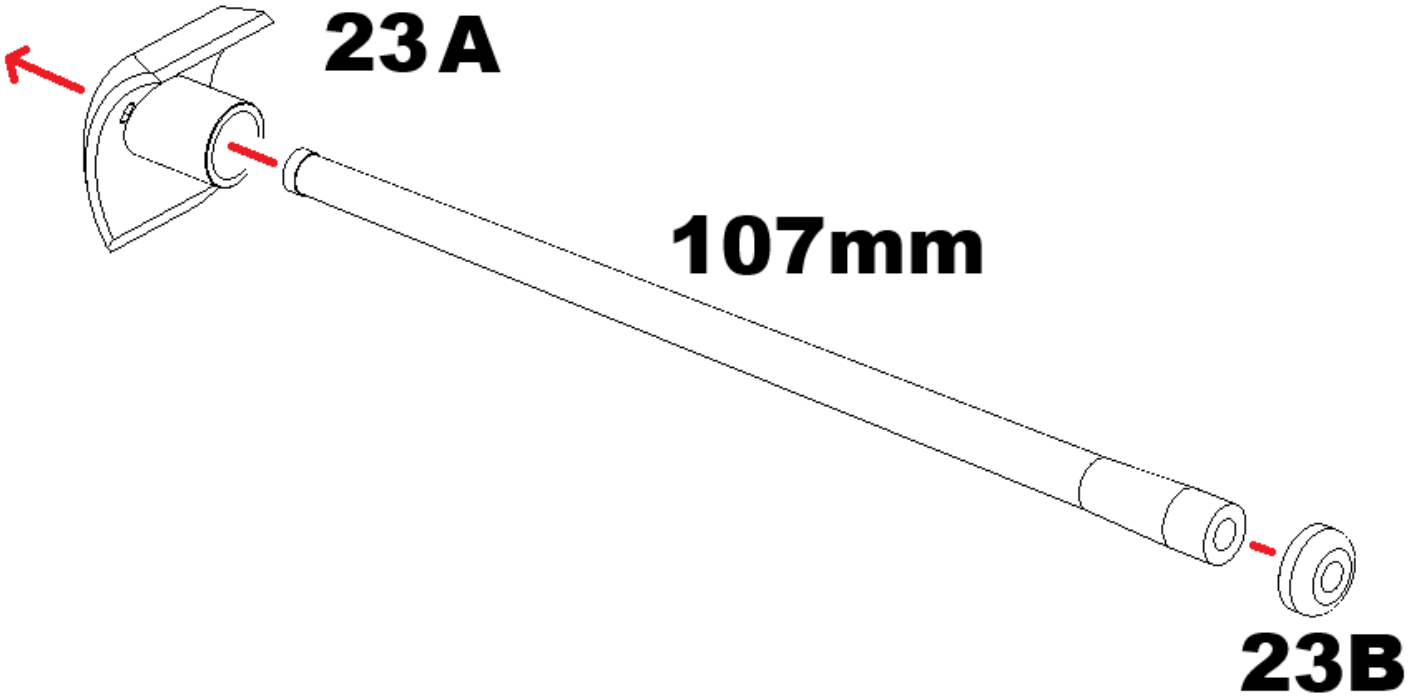

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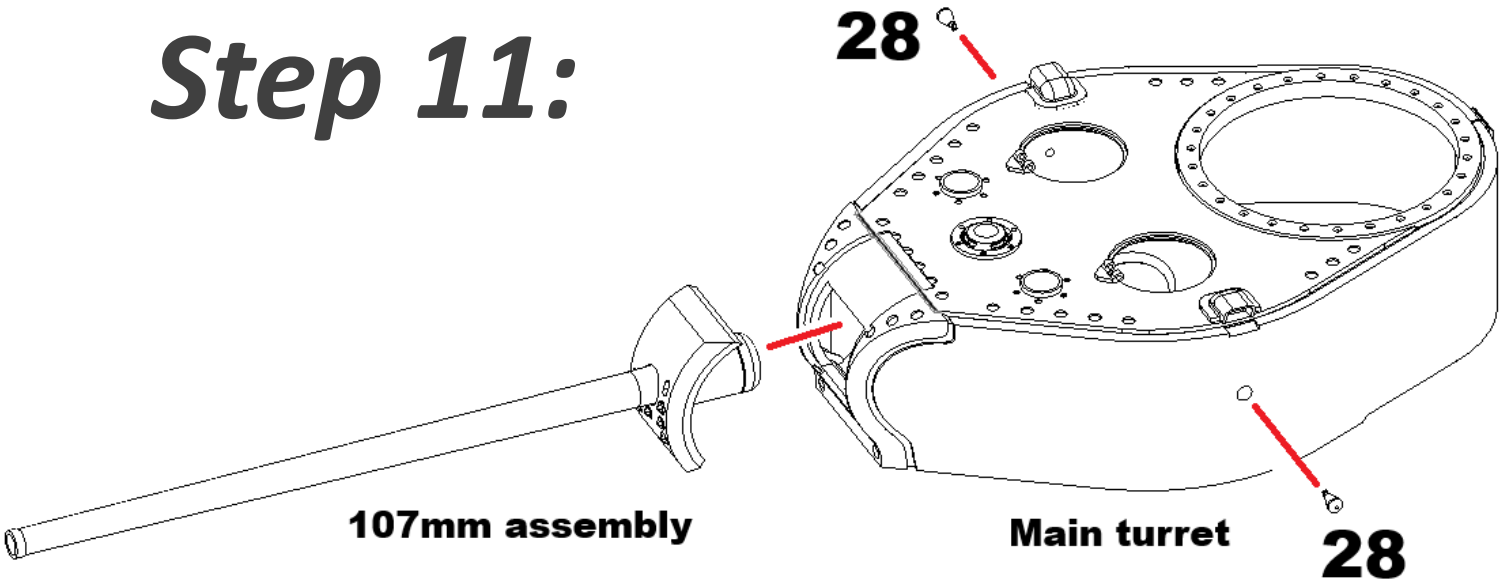

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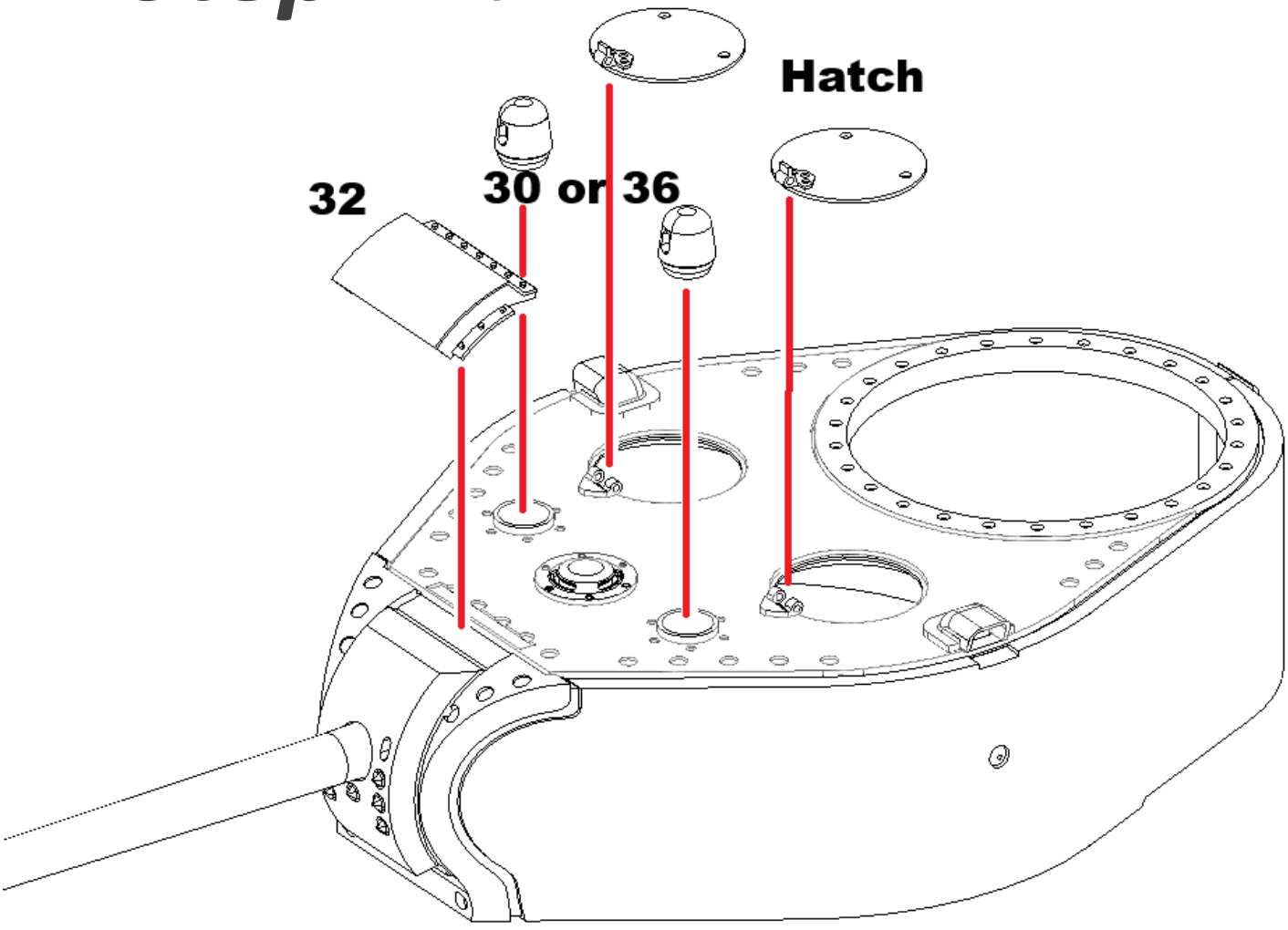
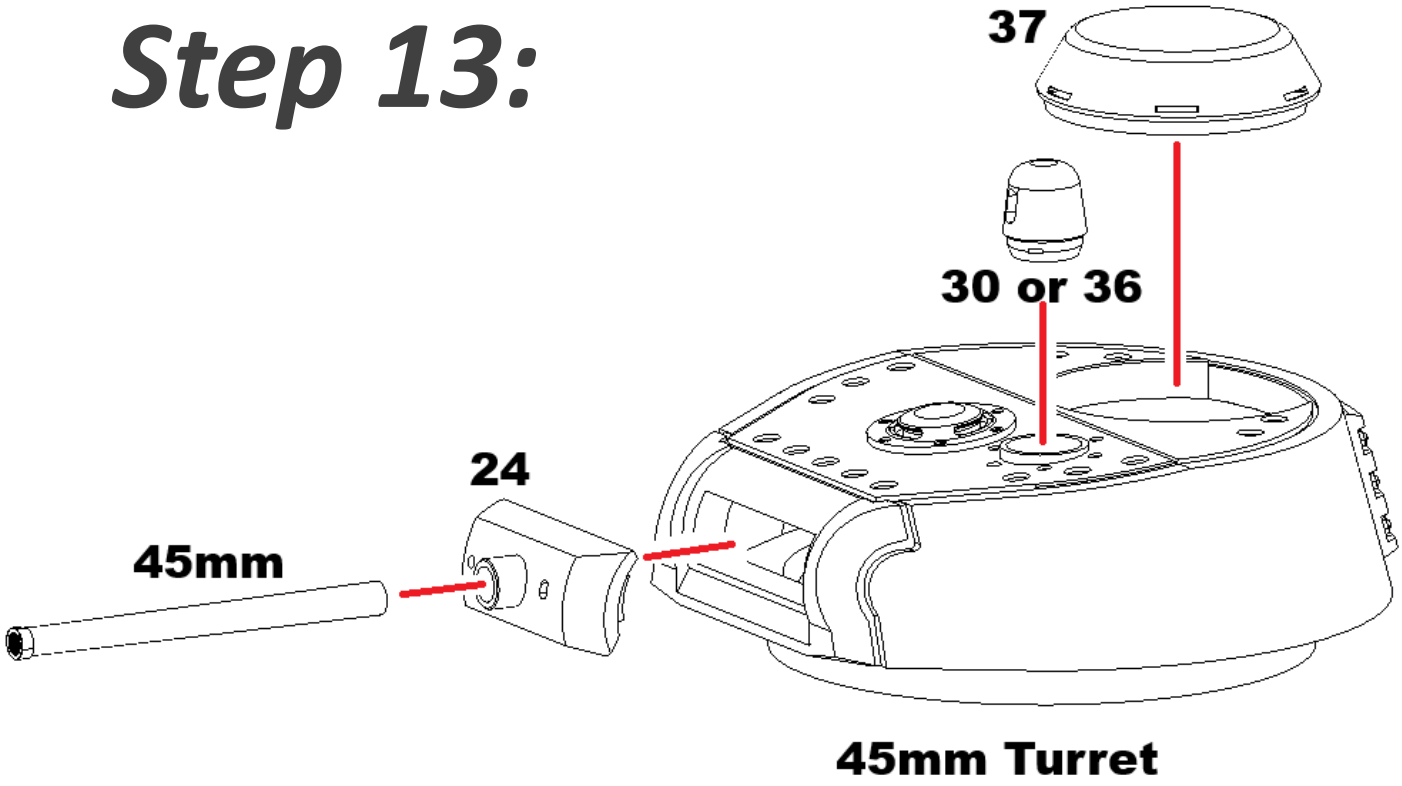
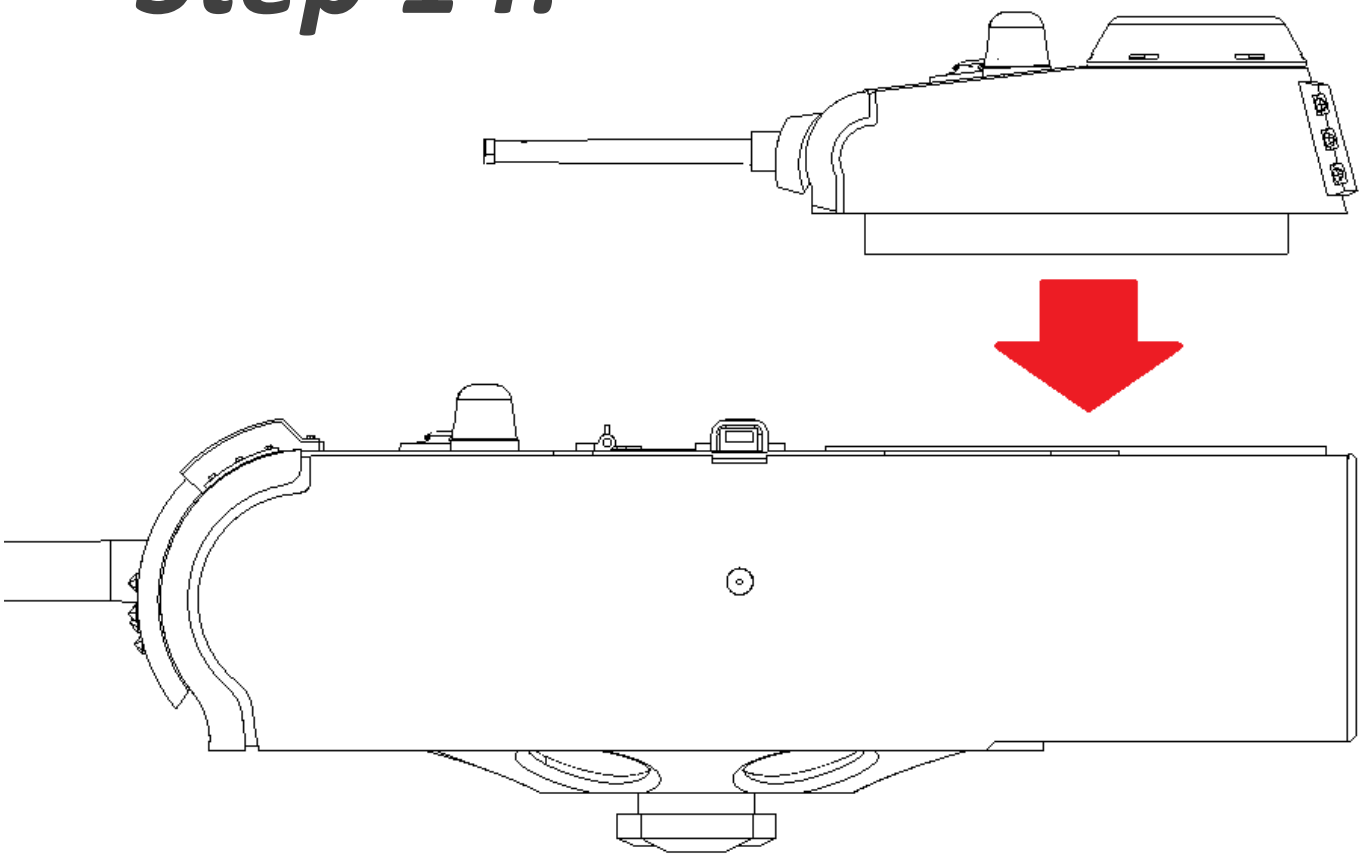


Step 13:



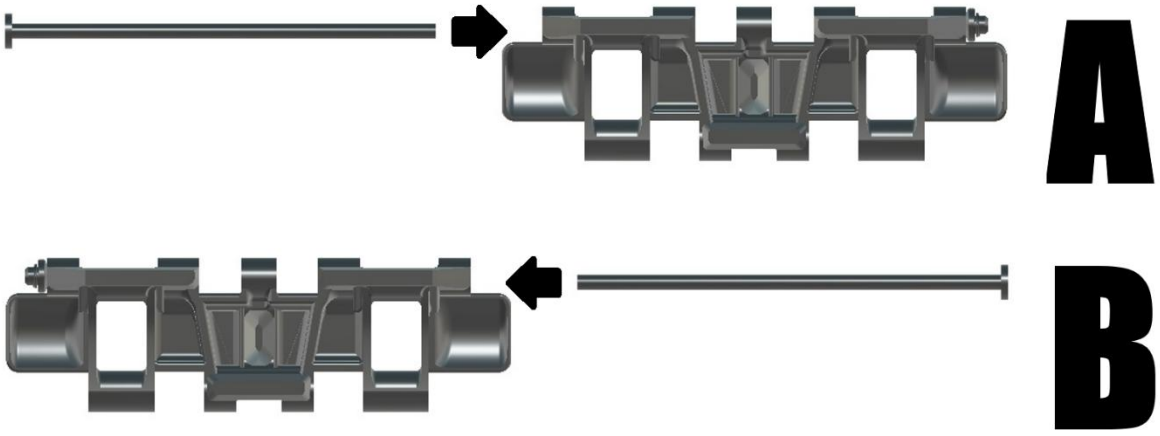
45mm Turret

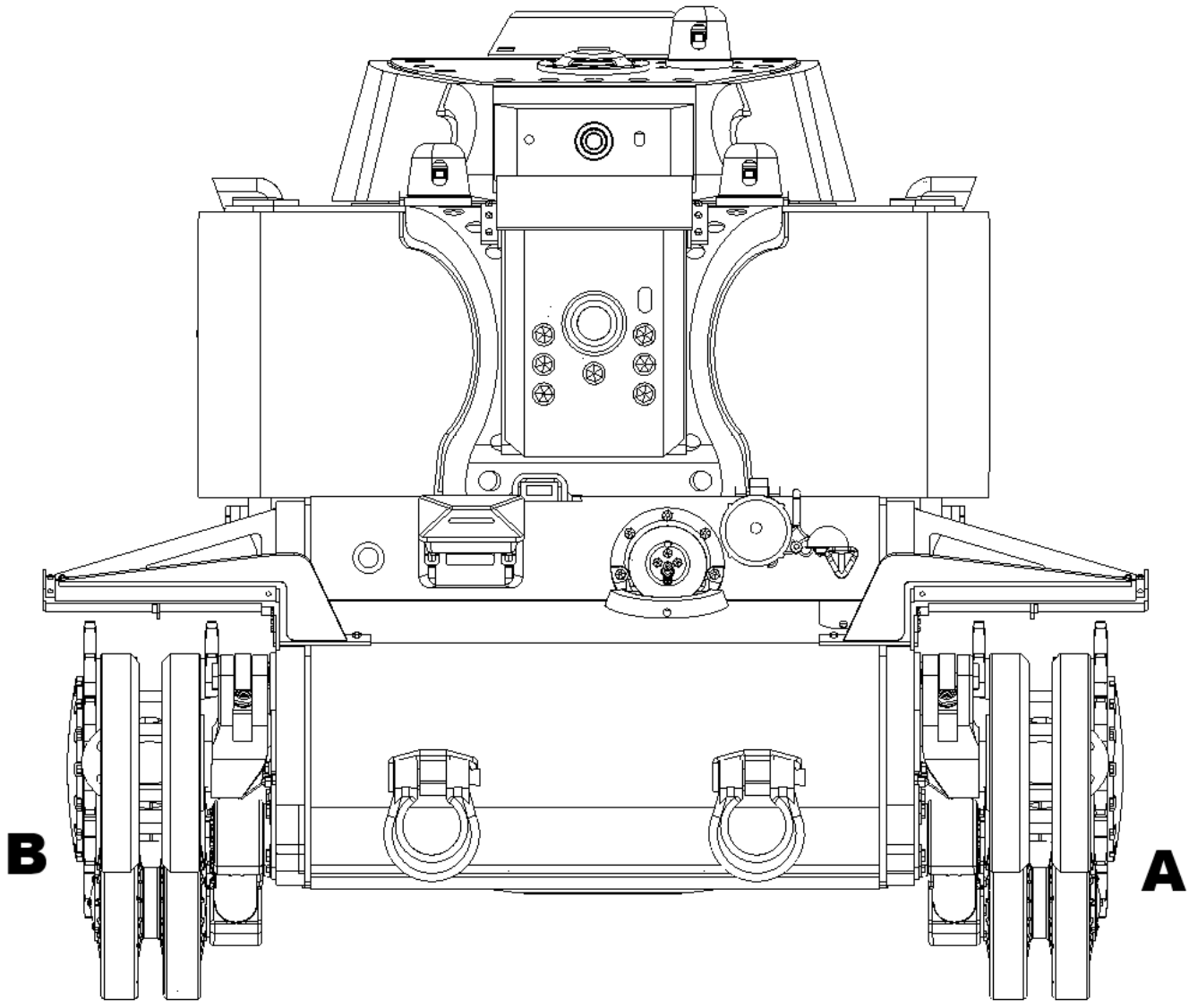
Step 14:



Step 15:

+/-90 links on each side. Add more for a sagging effect.





This kit includes ammo, extra track links and towing cables. Use these to customize your model.

Visit ResinTechModels.com for more products like KV road wheels, fuel cans and stowage boxes.