

GAU-8 AVENGER

1:12 Scale Model Kit

MODEL KIT

MojoModelworks.com

Notes on: Printing,
Assembly & Finish

GAU-8 Avenger 30mm Autocannon

The GAU-8/A Avenger is a 30mm hydraulically driven seven-barrel Gatling-style autocannon developed by General Electric and used primarily on the A-10 Thunderbolt II aircraft. Designed for tank-busting and ground attack missions, it fires armor-piercing depleted uranium or high-explosive rounds at a staggering rate of 3,900 rounds per minute. The gun and its ammo drum form the core of the A-10's design, with the aircraft essentially built around the weapon to maximize accuracy and survivability in low-altitude combat scenarios. Weighing over 600 pounds unloaded and stretching over 19 feet with its drum, the GAU-8 uses a dual hydraulic motor system for power and is fed by a linkless ammunition feed system that returns spent casings to the drum. Its massive firepower and precision have made it one of the most iconic and effective aircraft guns in military history, capable of destroying armored vehicles with pinpoint accuracy while enduring heavy battlefield punishment.

Technical Specifications

Manufacturer: General Electric

Model: GAU-8

Cost: \$200,000

Technical specifications:

Length: 19' 10.5" (6.06 meters) **Width:** 17.2" (.437meters)

Weight: 1,830 lbs (830 kilograms) unloaded, 4,029lbs (1,827kg) Fully Loaded

Recoil Force: Approximately 10,000–13,000 pounds-force (lbf)(or about 44–58 kilonewtons)

Effective Firing Range: 4,000 ft (1,220m)

Maximum Firing Range: Over 12,000 ft (3,660m)

Cartridge: 30x173mm

Caliber: 30mm

Barrels: 7

Rate of Fire: 3,900rpm

Muzzle Velocity: 3,324ft/s (1,101 m/s)

Action: Electrically controlled, hydraulic-driven rotary gatling

Integrated Weapon Delivery System: Fairchild Republic A-10 Thunderbolt II

Date Deployed: 1977

-Tech info from General Dynamics, Wikipedia, NMUSAF

Working With Resin *Resin dust is an irritant. Wear appropriate PPE when sanding resin!*

Cleaning Parts

This model is 3D printed in UV sensitive resin. It has been rinsed, cleaned, rinsed again and then given a final cure before shipping. You may clean the parts again to remove any oils from your fingers if you wish. If you choose to clean the parts use light soap or mild de-greaser in luke warm (not hot) water.

Warped Parts

Occasionally a part may be slightly warped. It is simple to fix by running the part under hot water; once it had softened, you can bend it carefully back into shape. Once the part is straight hold it in place under cold water to set the shape.

Surface Prep

Like styrene models the surface of some resin pieces may need some smoothing or sanding. There are no mold lines with 3D printed parts but there may be small dimples to smooth. To do this, simply use fine grit sandpaper and smooth any imperfect surfaces. I also recommend a filler putty like Tamiya Putty, Perfect Plastic or Mr. Surfacer, if needed, to fill small imperfections.

Glue

To glue resin, you should use Cyanoacrylate (Super Glue). You can sand the join area first to give it some tooth and a stronger bond if desired. For an extra strong bond- 2 part epoxy can be used on large pieces. You may also choose to drill small holes and pin pieces together though on the TIE Bomber model I have not found this necessary.

Assembly Symbols



Glue



No Glue



Choice

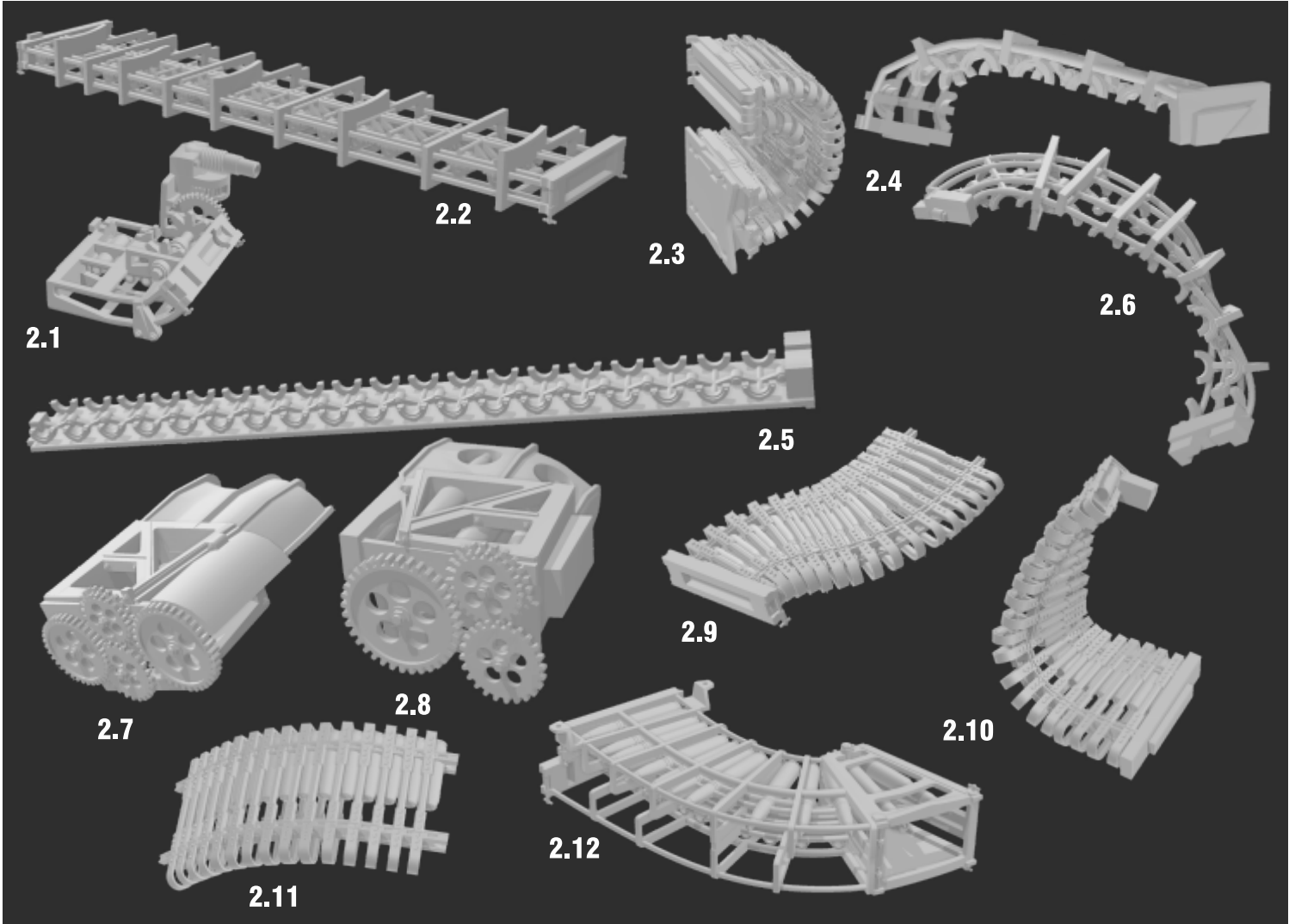
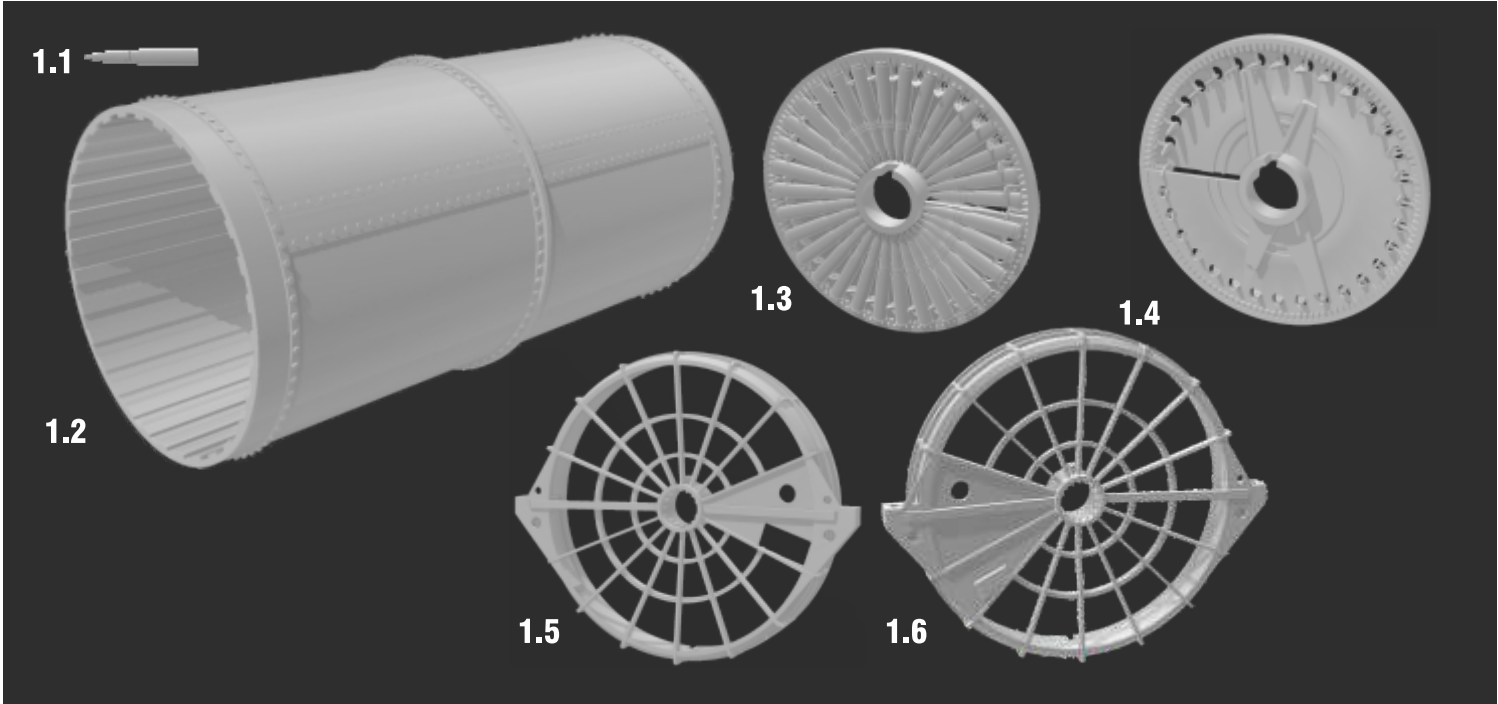


Attention!

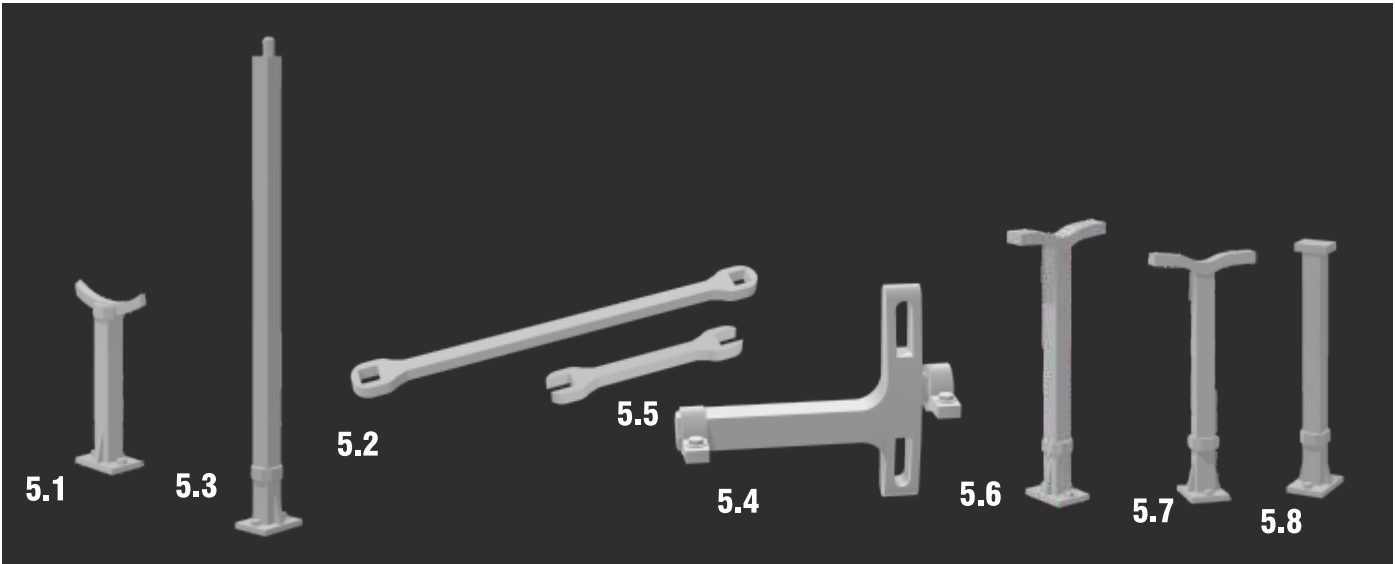
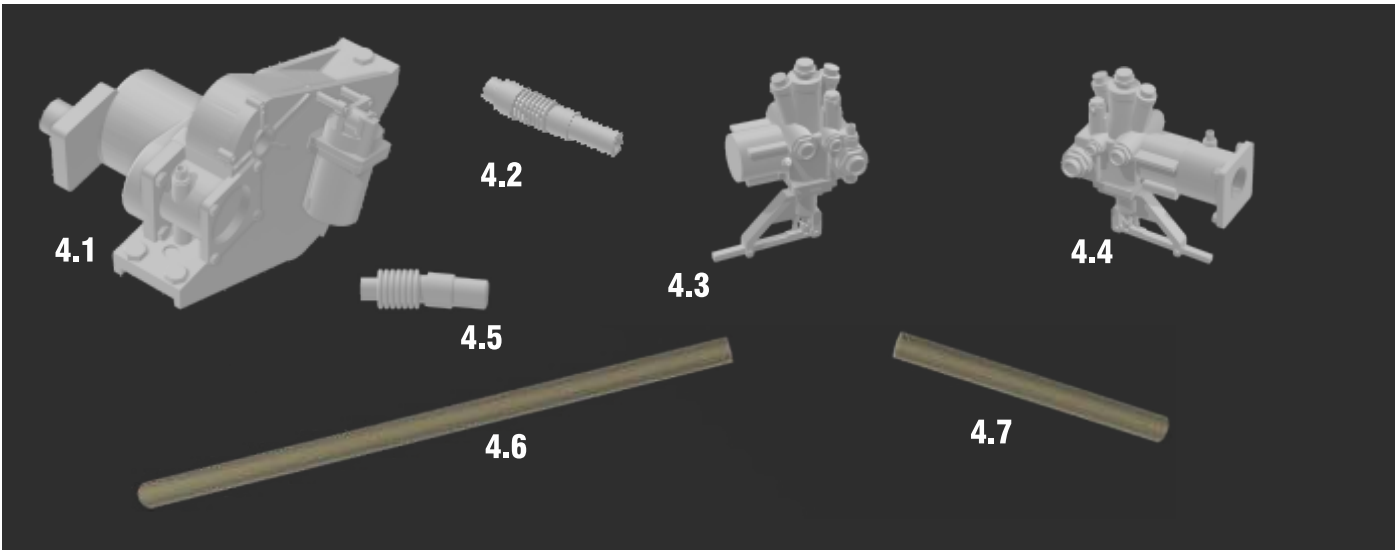
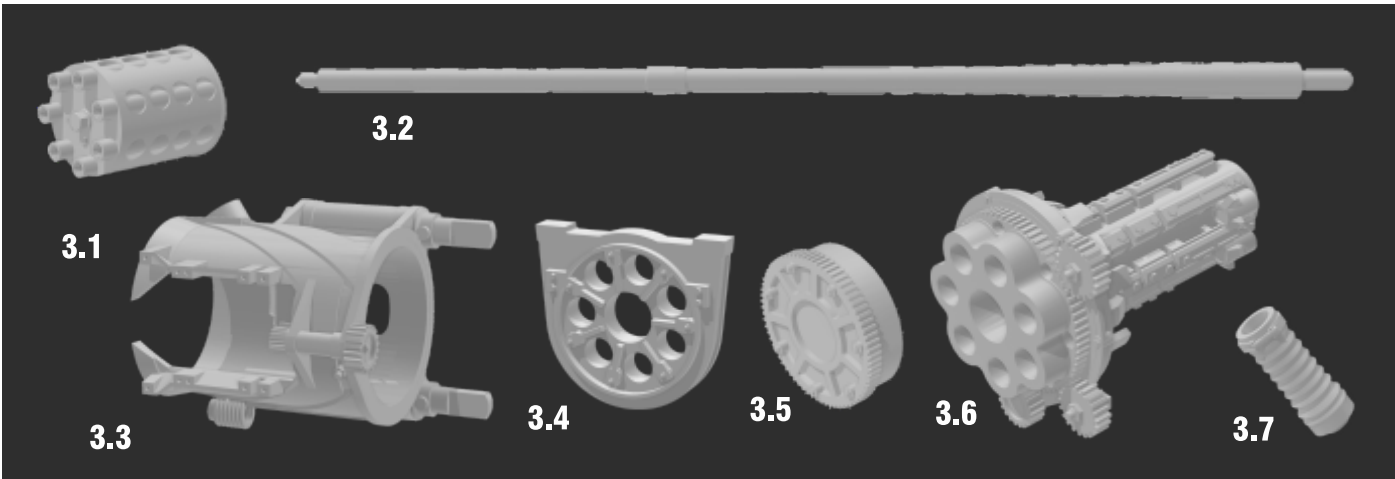
Parts List

Ammo Drum	1.1- 30mm Round (x12)
	1.2 Ammo Drum
	1.3 Front Drum Insert
	1.4 Rear Drum Insert
	1.5 Ammo Drum Front Cover
	1.6 Ammo Drum Rear Cover
Ammo Feed	2.1 Ammo Feed Bottom Drive
	2.2 Bottom Straight Chute
	2.3 Infeed & Outfeed
	2.4 Bypass Chute Rear
	2.5 Bypass Chute Side
	2.6 Bypass Chute Front
	2.7 Aft Ammo Feed Unit
	2.8 Ammo Exit Unit
	2.9 Flexible Belt Infeed
	2.10 Flexible Belt Outfeed Rear
	2.11 Flexible Belt Outfeed Front
	2.12 Rigid Ammo Chute
Gun	3.1 Barrel Clamp
	3.2 Barrel (x7)
	3.3 Gun Housing
	3.4 Mid Barrel Support
	3.5 Rear Spur Gear
	3.6 Rotor Assembly
	3.7 Exhaust Clamp
Hydraulics	4.1 Accessory Drive Gearbox
	4.2 Drive Shaft Boot (x2)
	4.3 Hydraulic Drive Motor Aft
	4.4 Hydraulic Drive Motor Fore
	4.5 Drive Shaft Front (60mm rod)
	4.6 Drive Shaft Rear (30mm rod)
Stand	5.1 Mid Barrel Leg
	5.2 Drum Leg Bracket (x2)
	5.3 Drum Leg (x4)
	5.4 Gun Housing Bracket
	5.5 Gun Leg Bracket
	5.6 Gun Left Leg
	5.7 Gun Right Leg

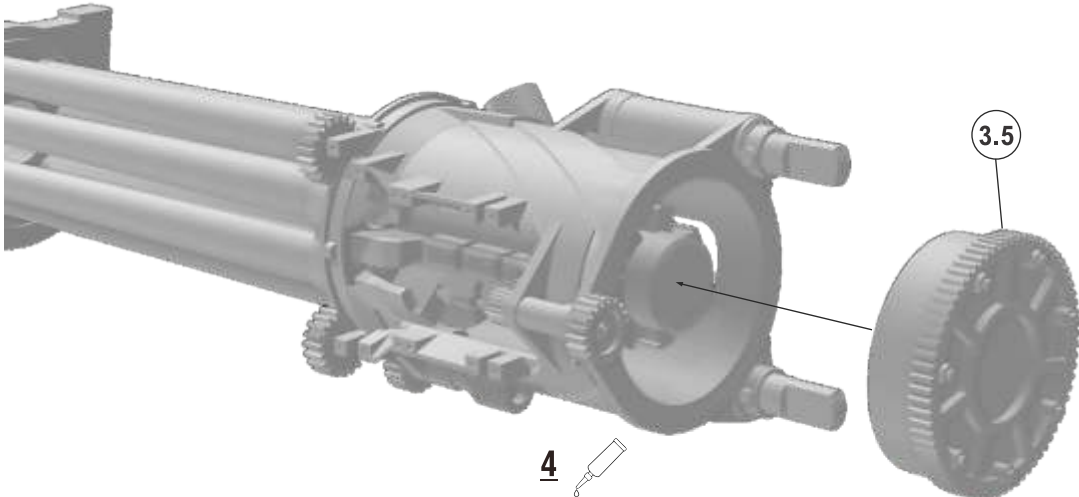
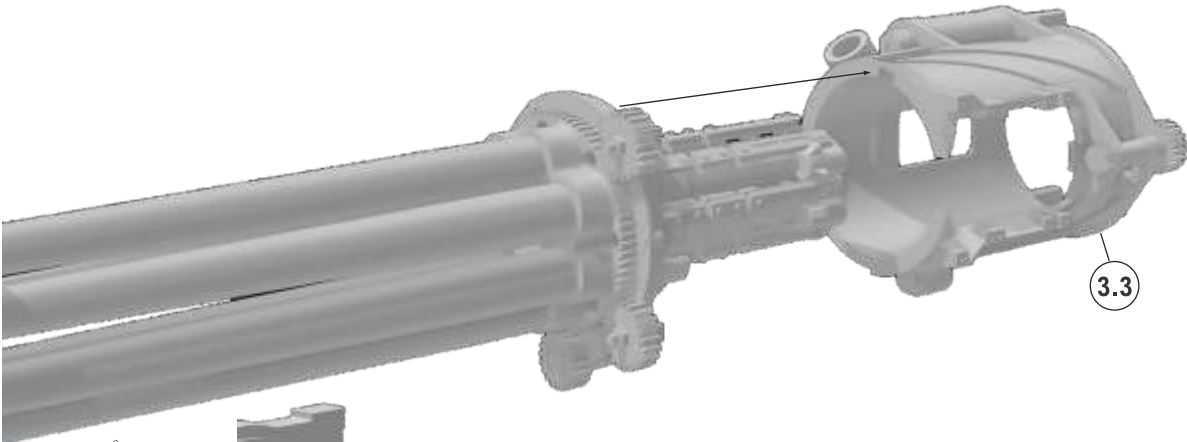
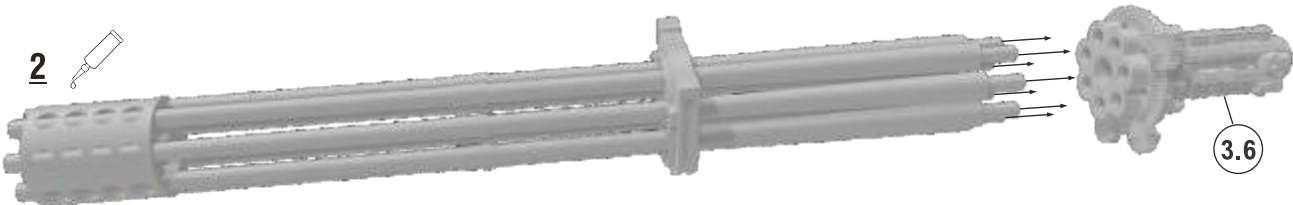
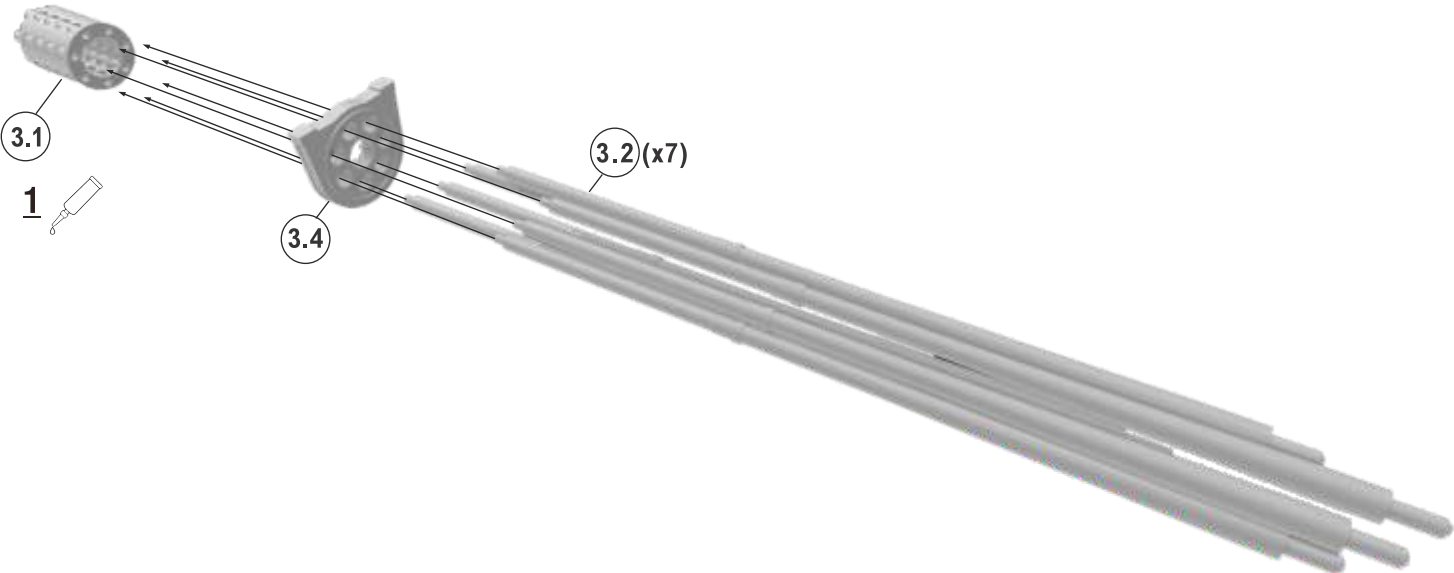
Parts Diagrams



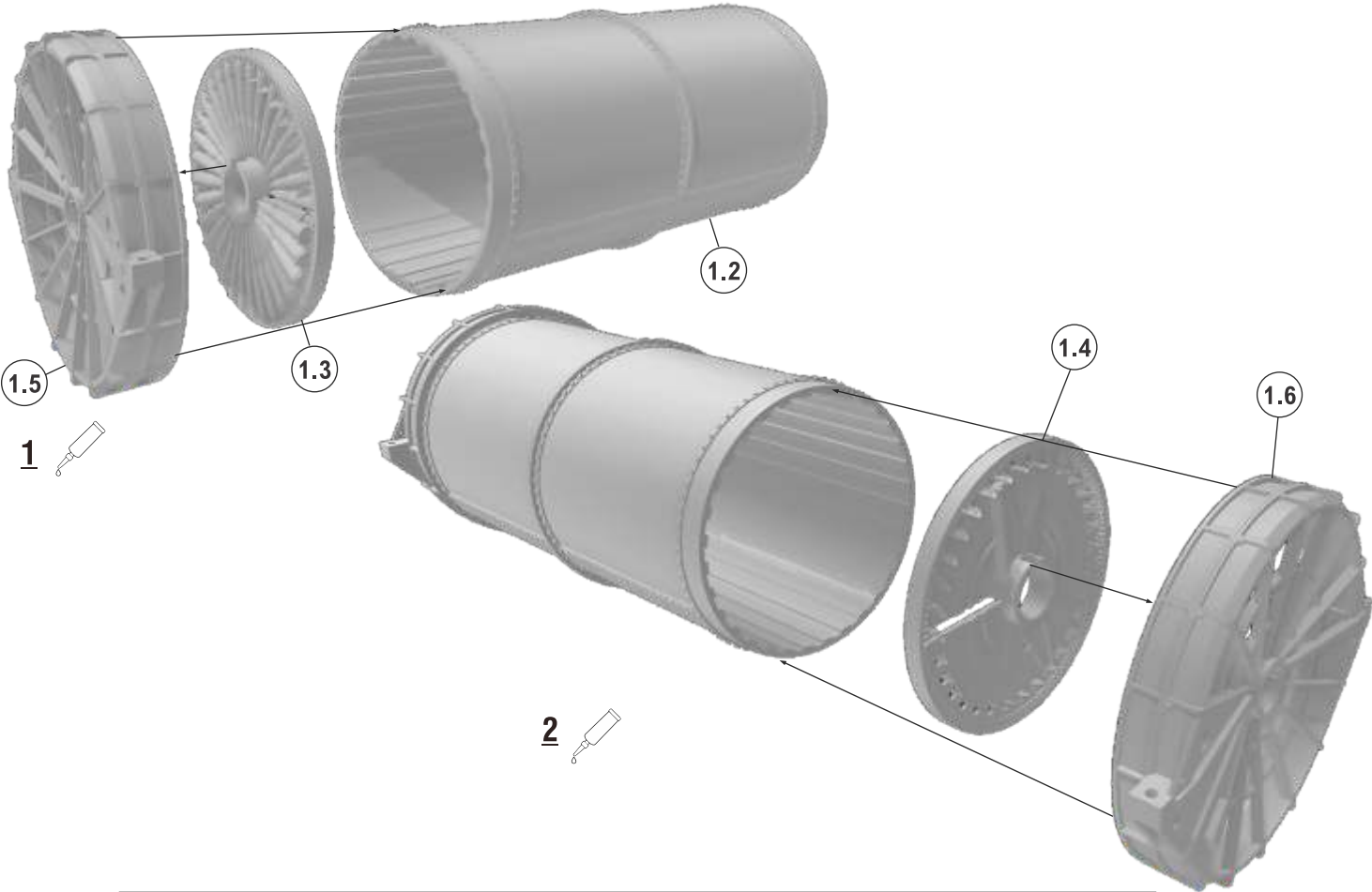
Parts Diagrams Continued



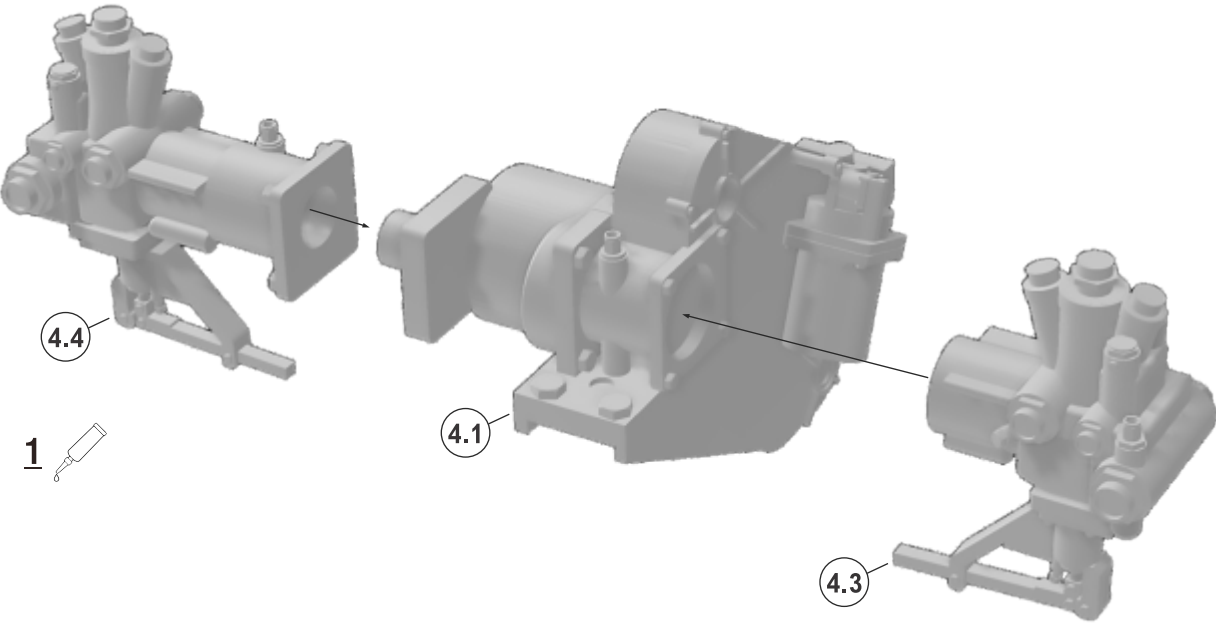
1 Gun Assembly



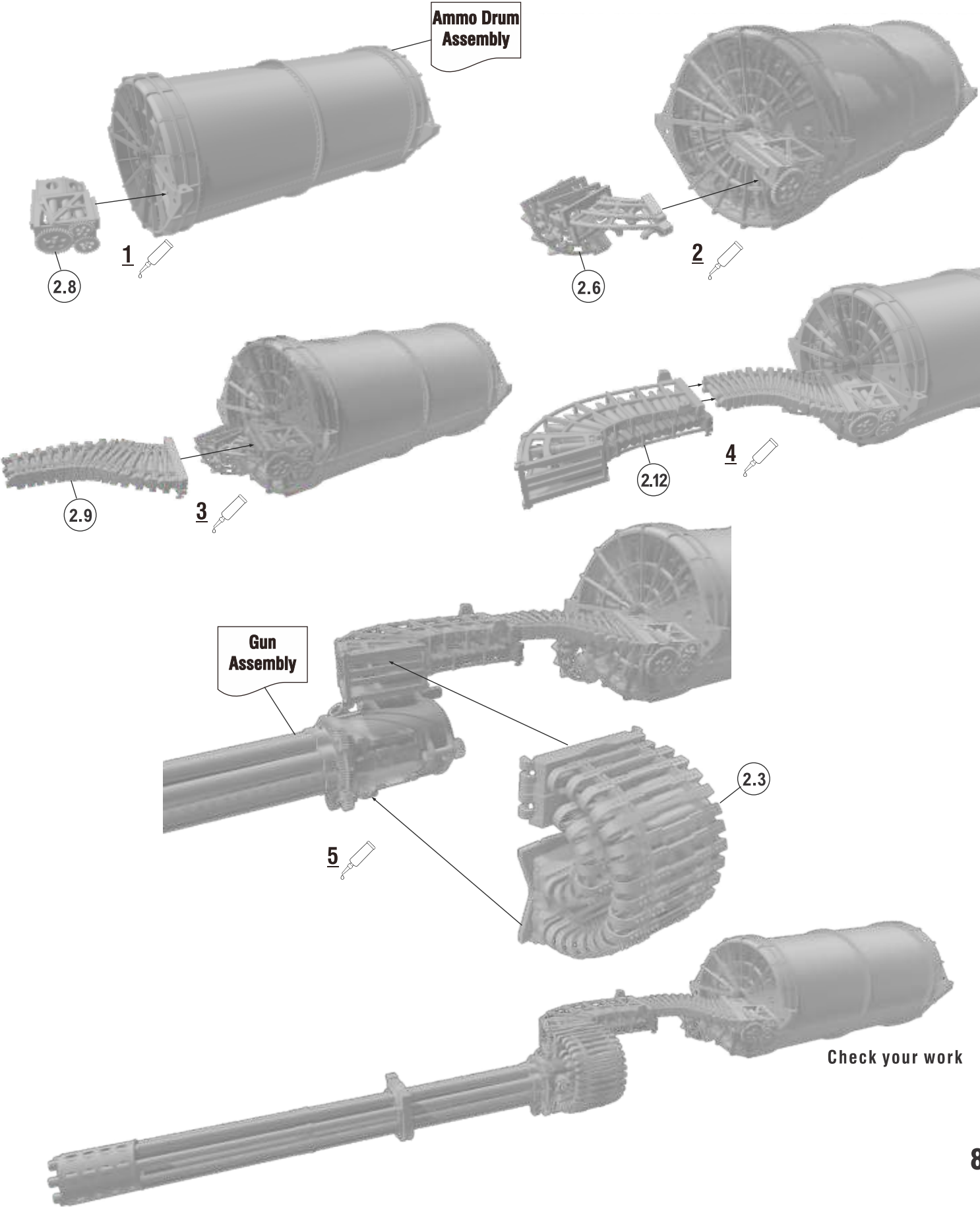
2 Ammo Drum Assembly



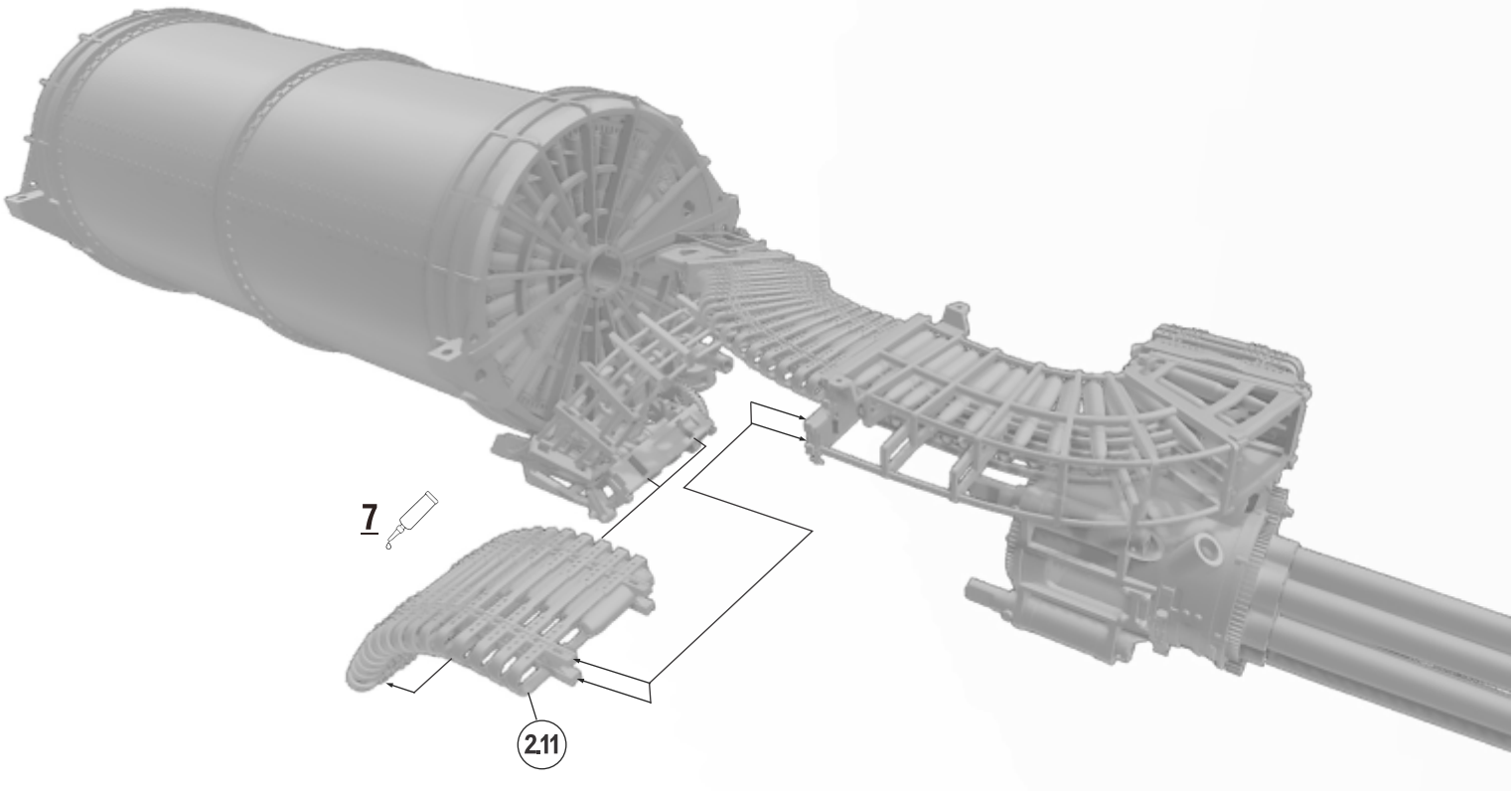
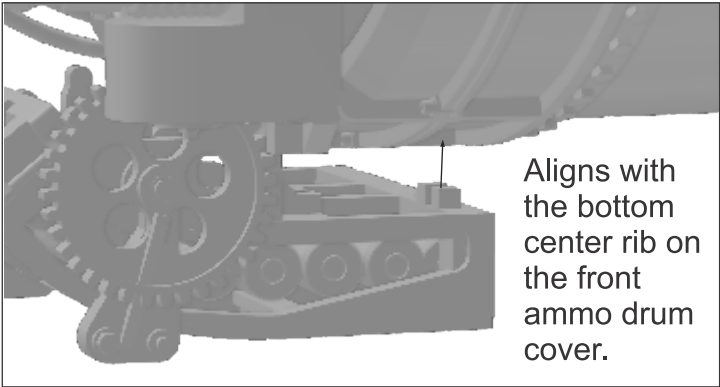
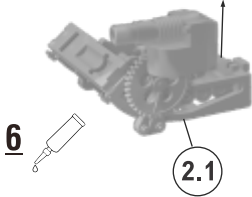
3 Hydraulic Drive Assembly



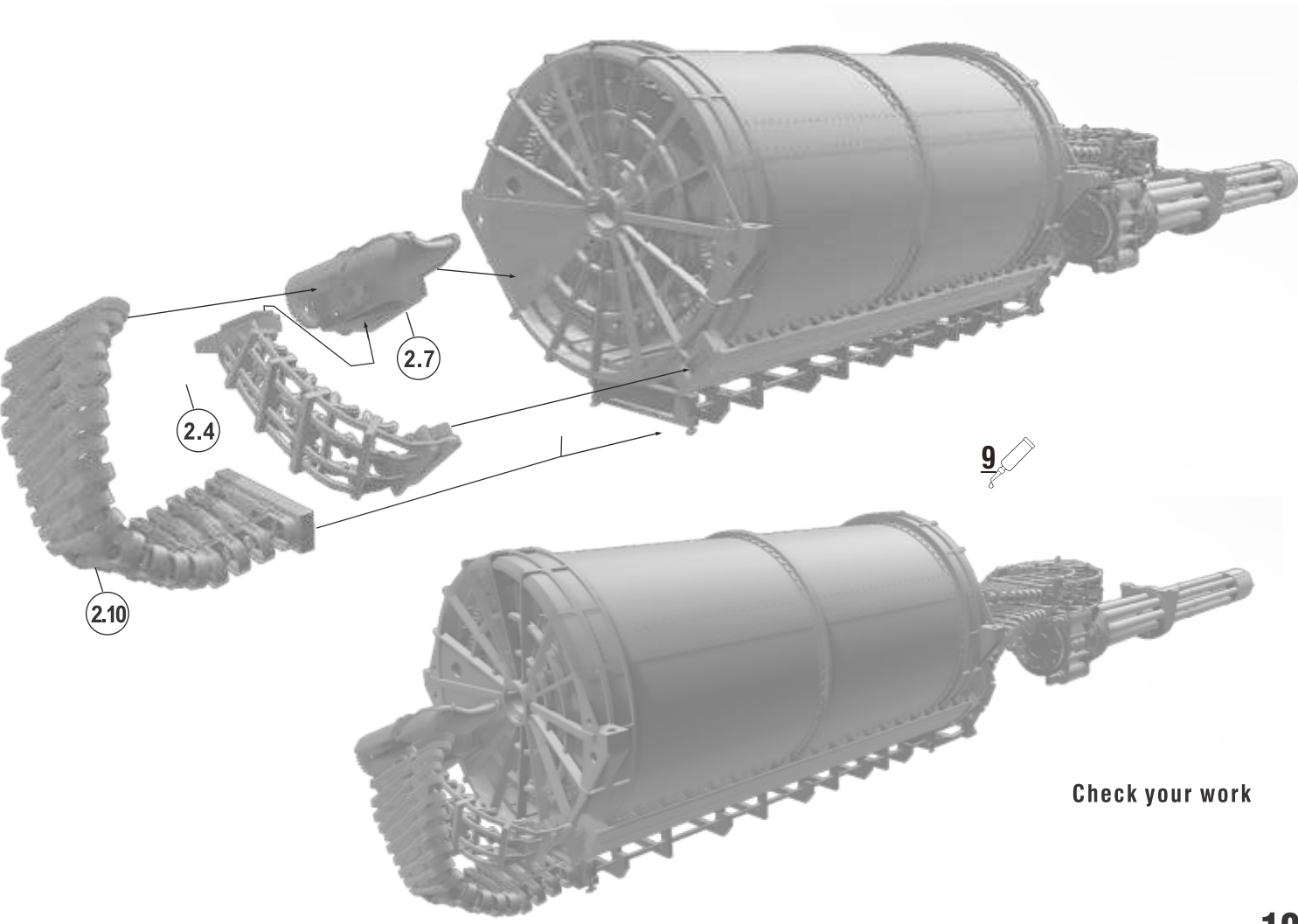
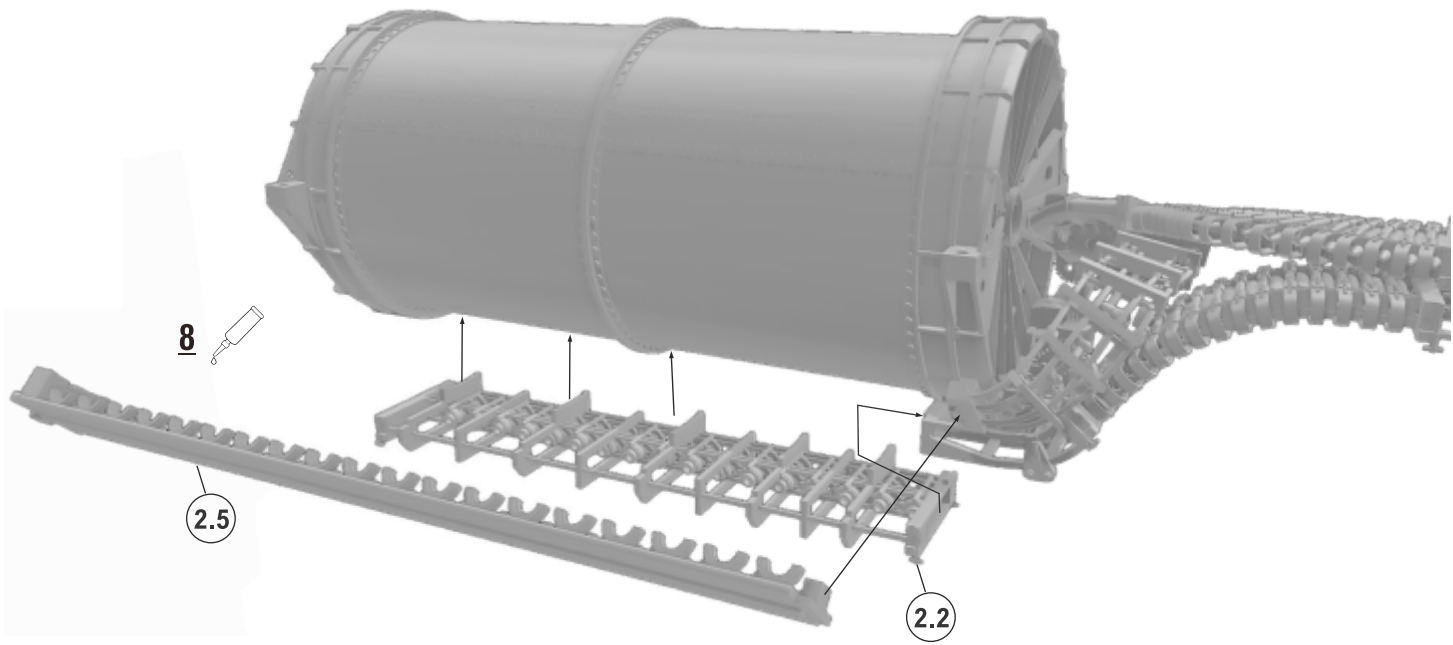
4 Ammo Feed Assembly



4 Ammo Feed Assembly Continued



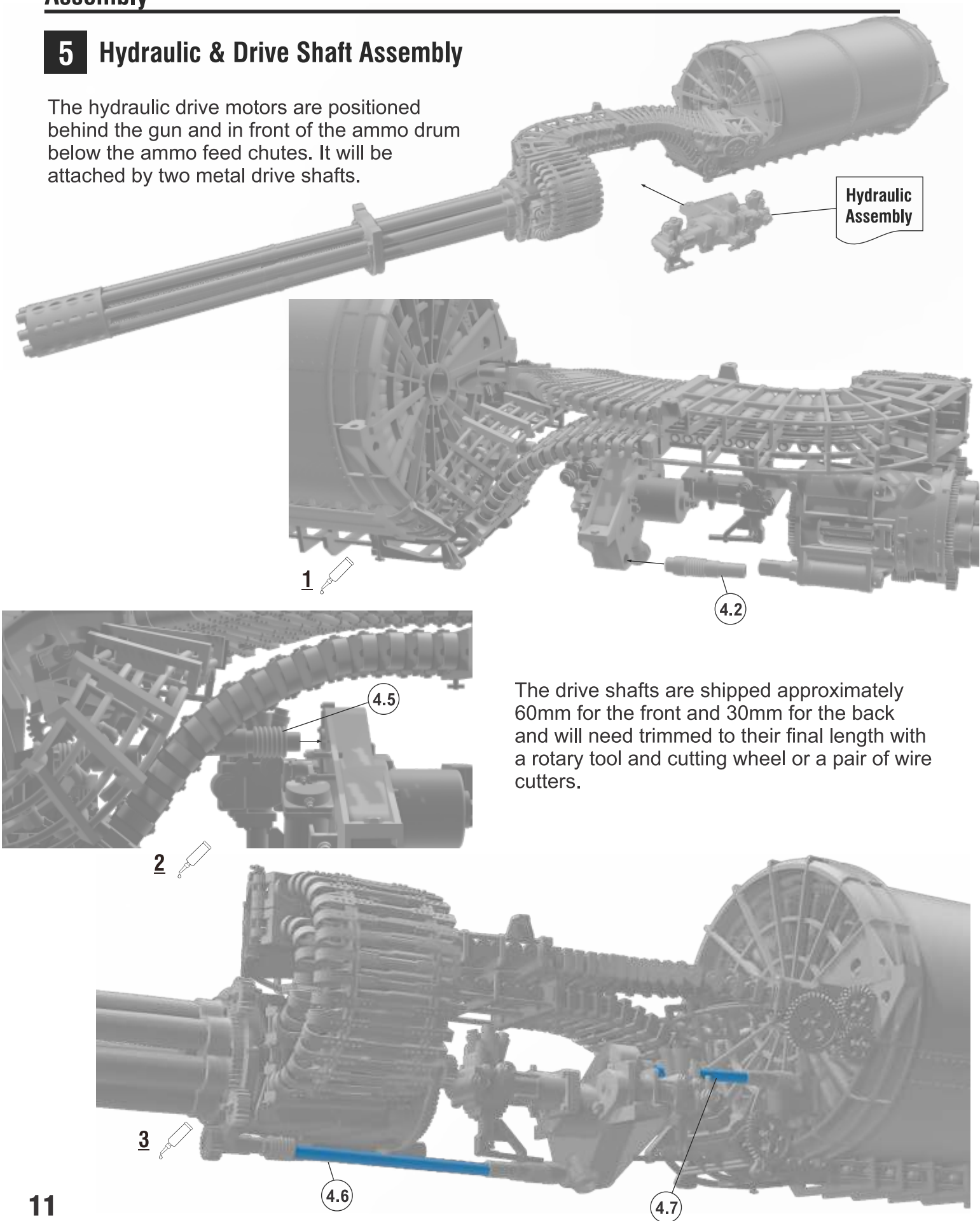
4 Ammo Feed Assembly Continued



Check your work

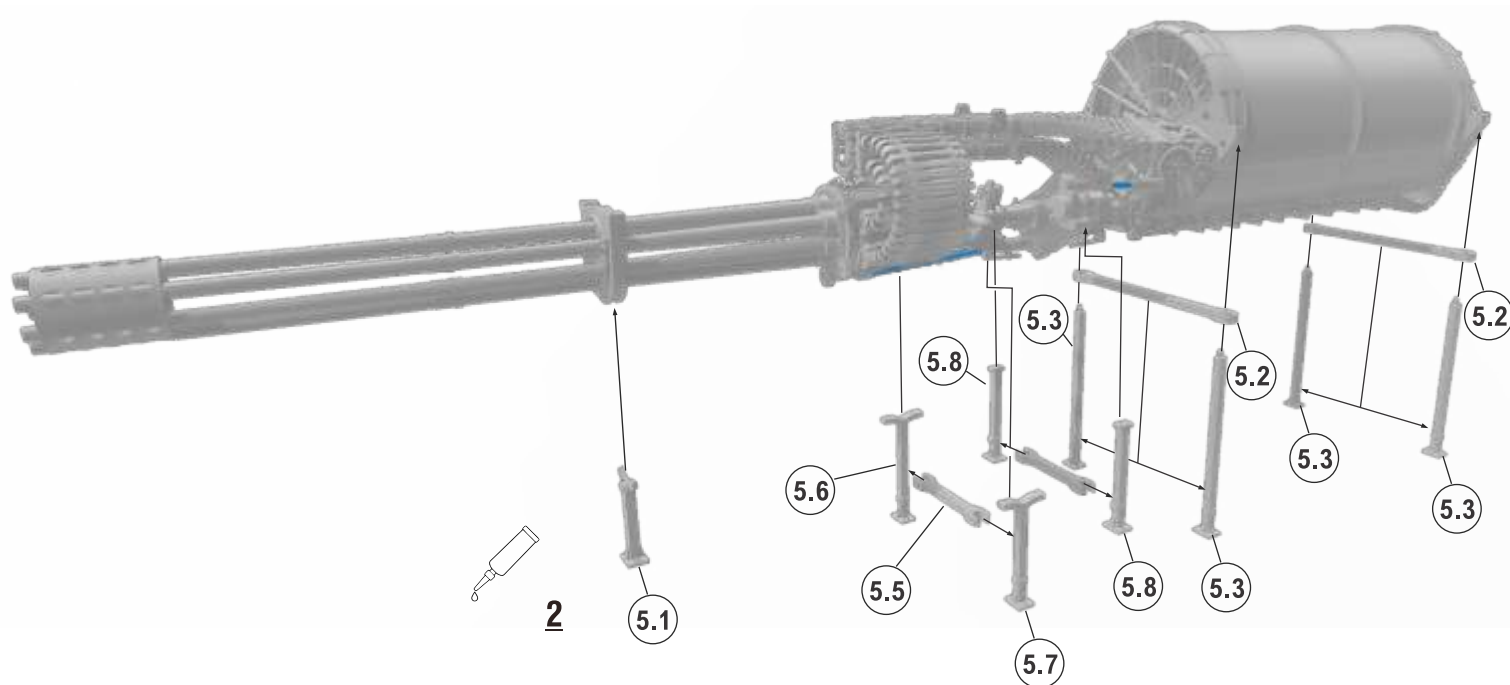
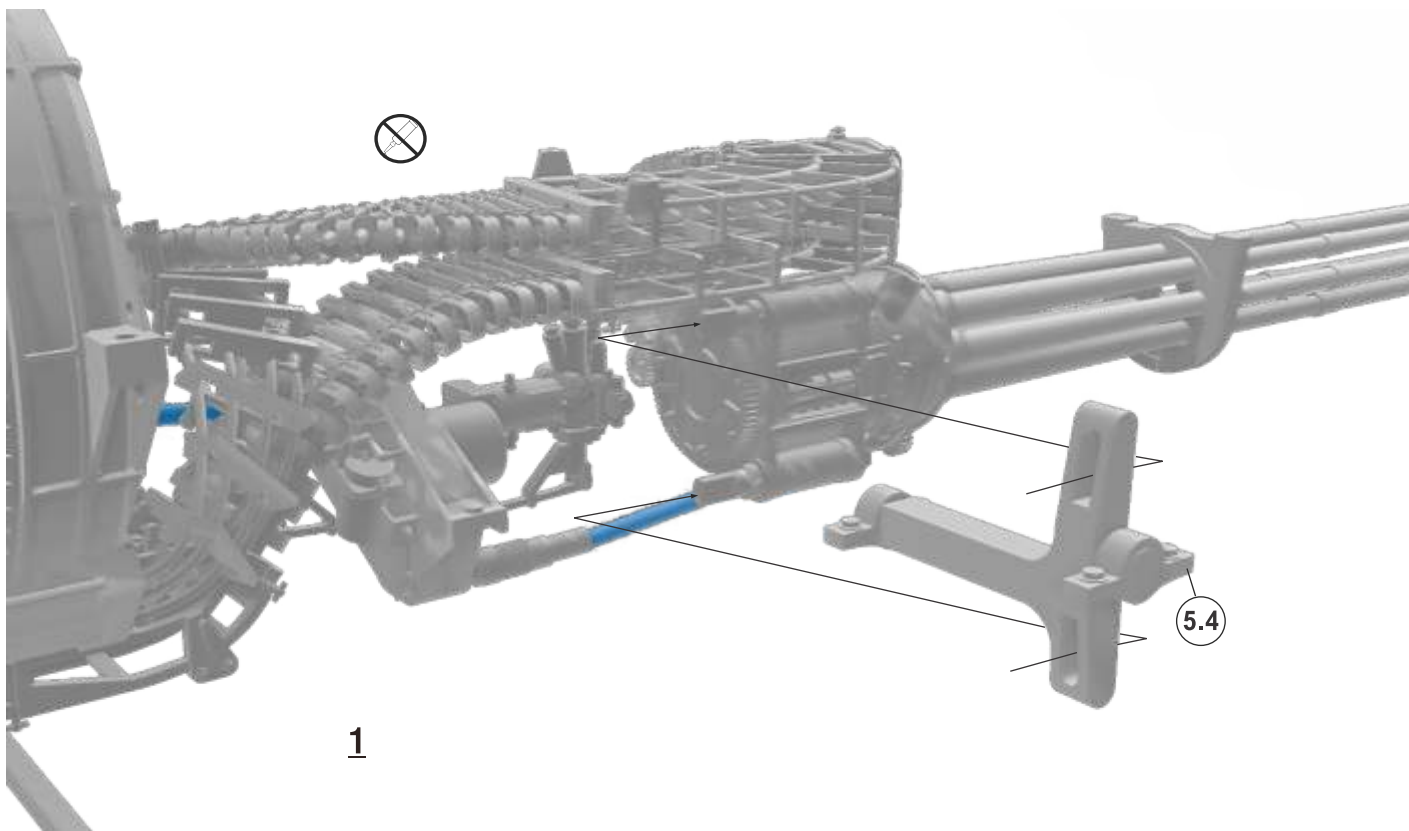
5 Hydraulic & Drive Shaft Assembly

The hydraulic drive motors are positioned behind the gun and in front of the ammo drum below the ammo feed chutes. It will be attached by two metal drive shafts.



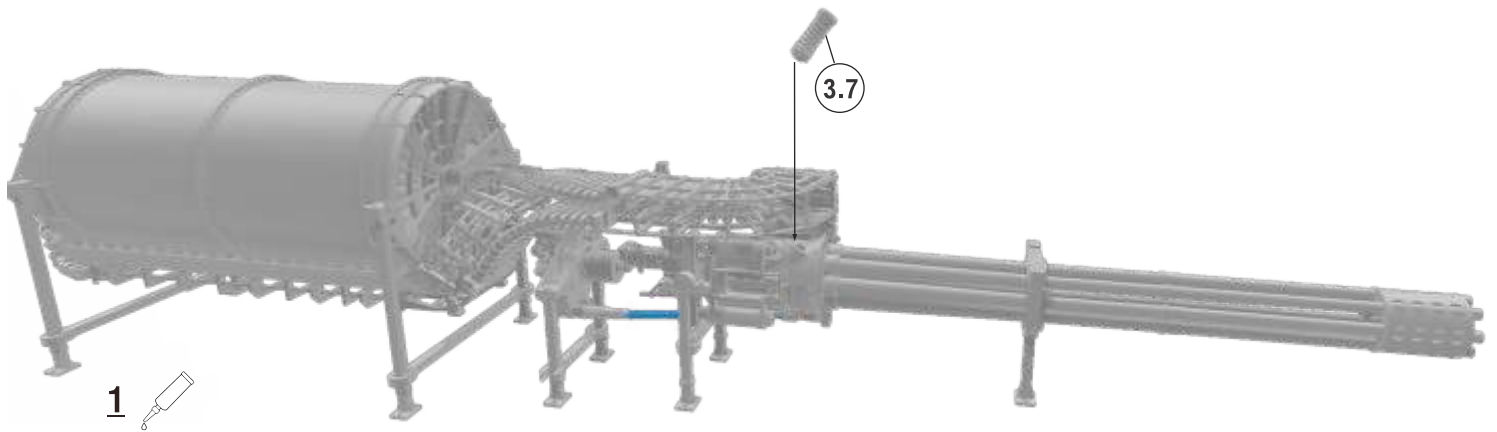
The drive shafts are shipped approximately 60mm for the front and 30mm for the back and will need trimmed to their final length with a rotary tool and cutting wheel or a pair of wire cutters.

6 Stand Assembly

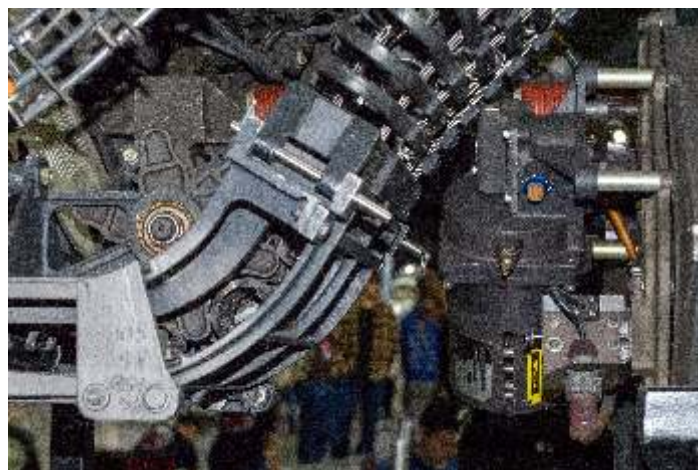


Assembly

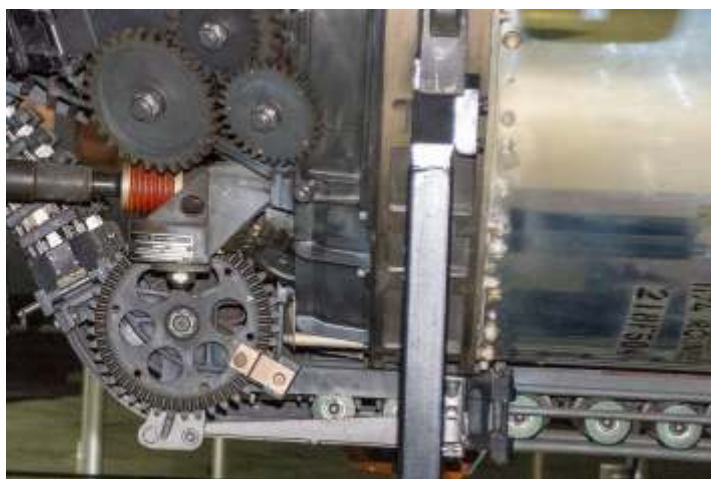
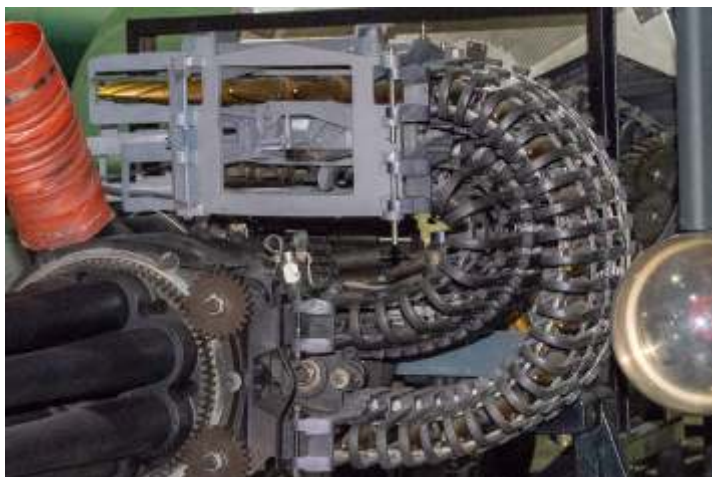
7 Last Piece!



Color Reference

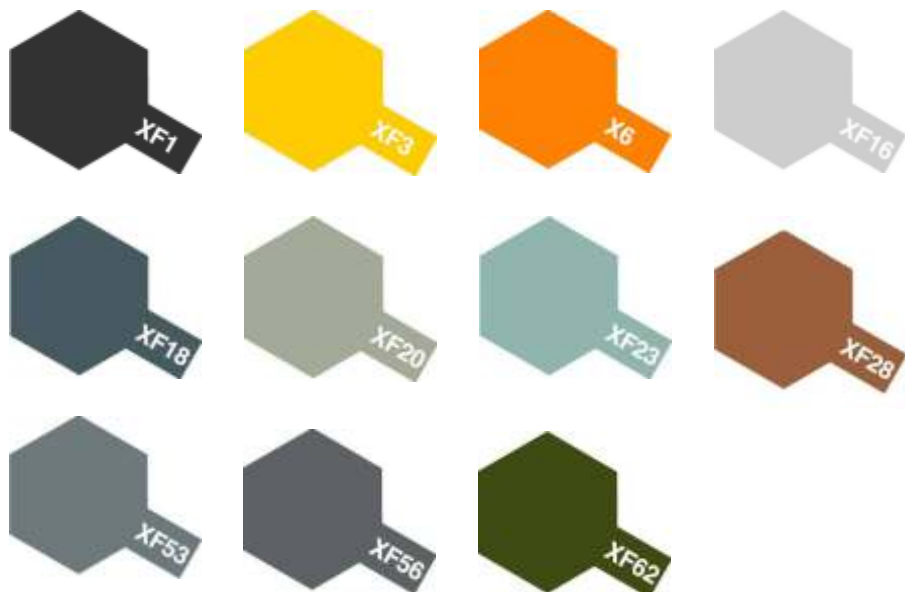


Color Reference

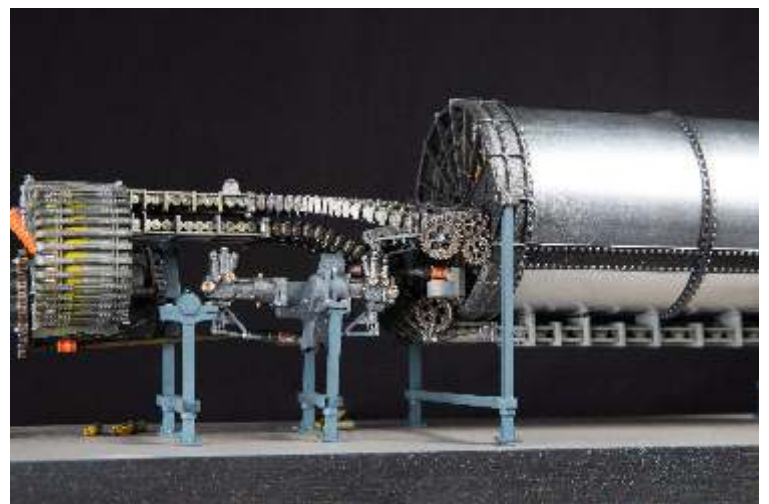
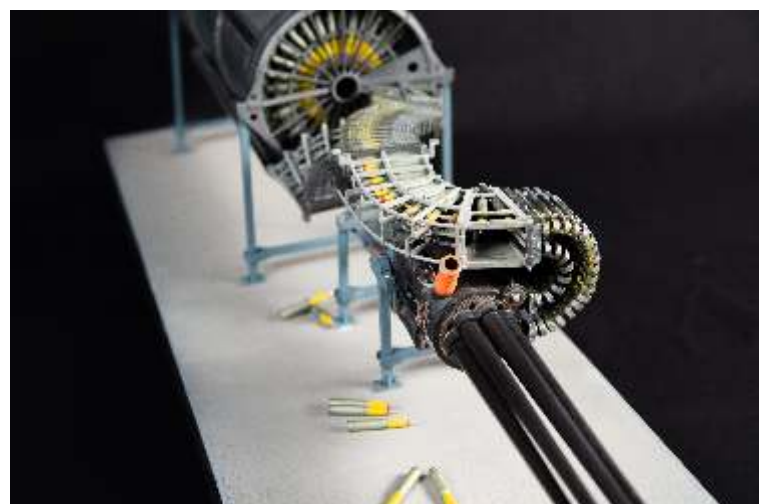
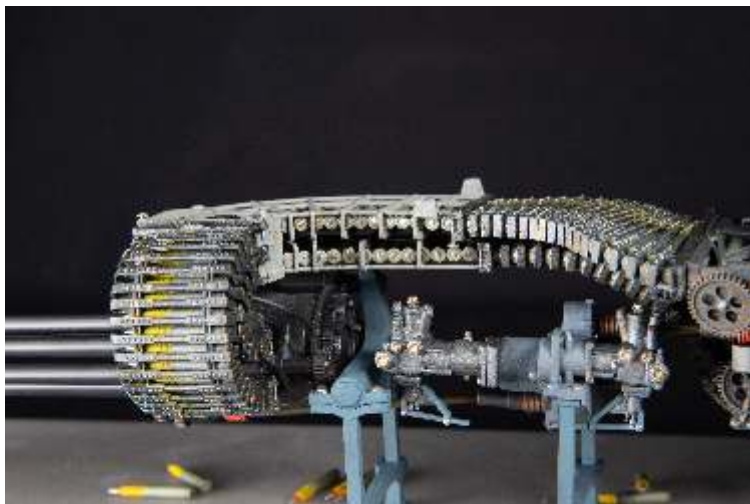
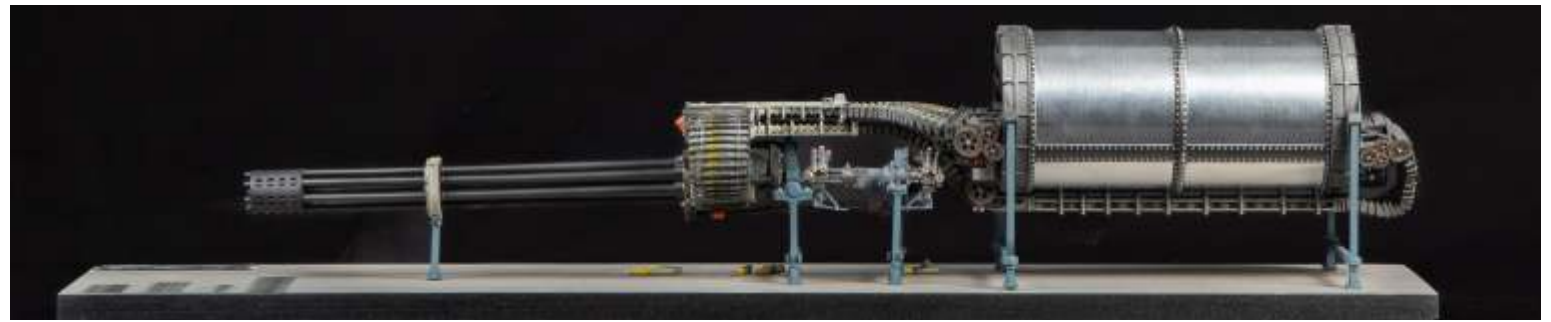


Color Chart

*Approximate color in Tamiya Acrylic paints



**Use whatever brand of paint you like this is what I have and a starting point for your own research.*





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