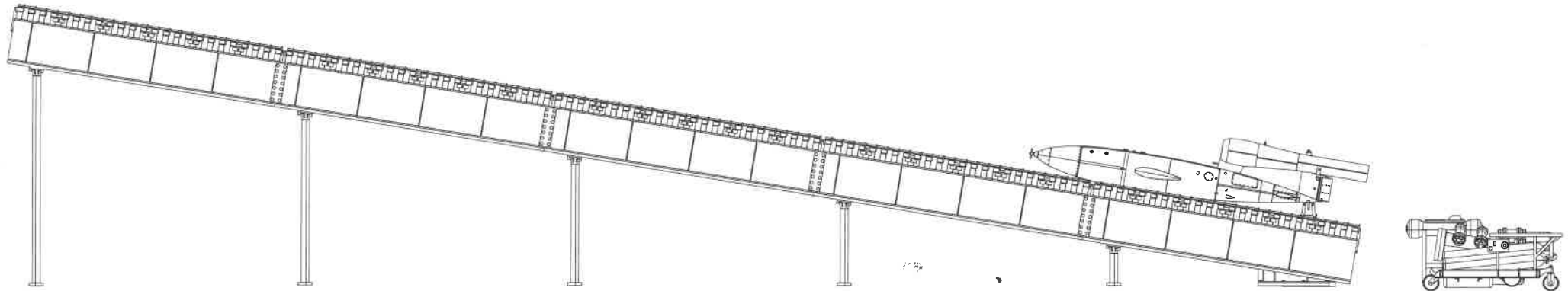


# V-1 FLYING BOMB LAUNCH SITE



The Fi-103A, or Vergeltungswaffen-1 ("Vengeance Weapon 1") flying bomb was developed by Germany during World War II. Tested at the Peenemünde-West facility, the V-1 was the only production aircraft to be powered by a pulsejet. The first of the "V-weapons" to become operational, the V-1 flying bomb entered service in June 1944 and was used to strike London and south-eastern England from launch facilities in northern France and the Low Countries. When these facilities were overrun, V-1s were fired at Allied port facilities around Antwerp, Belgium. Due to its high speed, few Allied fighters were capable of intercepting a V-1 in flight.

The airframe was originally constructed entirely of welded sheet steel, but when it went into full production, plywood was used to construct the wings. The flying bomb was directed to its target by a simple guidance system that relied on gyroscopes for stability, a magnetic compass for heading, and a barometric altimeter for altitude control. A vane anemometer on the nose drove a counter which determined when the target area was reached and triggered a mechanism to cause the bomb to dive.

While many of the V-1's early test flights had commenced from German aircraft, the weapon was intended to be launched from ground sites using ramps fitted with steam or chemical catapults. These sites were rapidly constructed in northern France in the Pas-de-Calais region. While V-1 production was spread across Germany, many were built by the forced labor of prisoners at the notorious underground "Mittelwerk" plant near Nordhausen.

Over 30,000 V-1s were produced during the war with around 10,000 fired at targets in Britain. Of these, only 2,419 reached London, killing 6,184 people and injuring 17,981. Antwerp, a popular target, was hit by 2,448 weapons between October 1944 and March 1945. A total of around 9,000 were fired at targets in Continental Europe. Though V-1s only struck their target 25% of the time, they proved more economical than the Luftwaffe's bombing campaign of 1940/41. Regardless, the V-1 was largely a terror weapon and had a little overall impact on the outcome of the war.

The V-1 launch site centered around the Walter WR 2.3 Schlitzrohr Schleuder catapult. The prerequisites for the site were modest - a concrete platform for attaching the catapult and supporting the gas generator trolley, and concrete pilings for the catapult support. The gas generator trolley was fueled with a volatile mixture of T-stoff (hydrogen peroxide) and Z-stoff (sodium permanganate), which created a pulse of high-pressure gas that pushed a piston down the circular tube at the center of the catapult. This piston was attached to a small frame under the belly of the V-1 missile, accelerating the missile down the ramp where its pulse jet engine ignited. The launch was controlled remotely from a nearby bunker via the launch device mounted aside the rear port fuselage of the missile, which included a variety of electrical connectors, safe and arming connections, and other necessary triggering devices.

# READ BEFORE ASSEMBLY

## CAUTION

- Read carefully and fully understand the instructions before commencing assembly. A supervising adult should also read the instructions if a child assembles the model.
- When assembling this kit, tools including knives used. Extra care should be taken to avoid personal injury.
- Keep out of reach of small children. Children must not be allowed to suck any part, or pull vinyl bag over their heads.



Be Careful



Instant Glue  
for Metal



Apply Decal

## PAINTS REQUIRED

Color info and profiles by Mig Jimenez

A.MIG-0221 RLM 65 Hellblau

A.MIG-0233 RLM 71  
Dunkelgrün

A.MIG-0083 Pale Grey

A.MIG-0230 Camo Green

A.MIG-0425 Olive Drab  
Dark Base

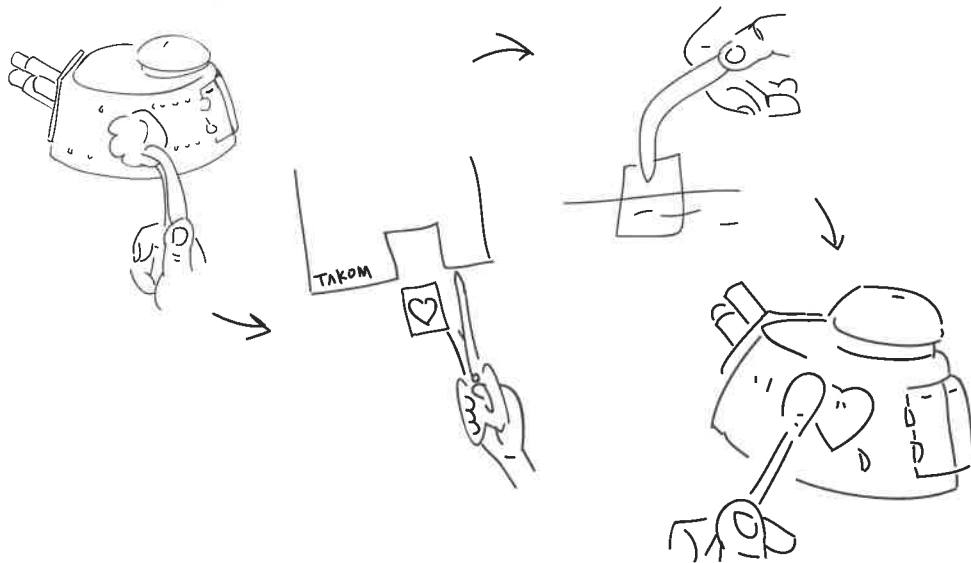
A.MIG-0018 Ral 7028  
Dunkelgelb (Midi war)

A.MIG-0082 Ral 6003  
Olivgrün Opt.2

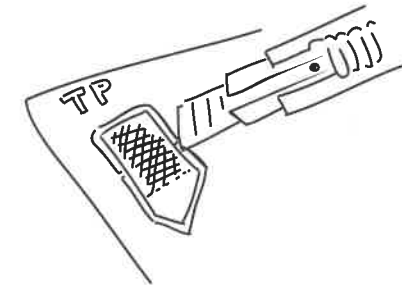
A.MIG-0218 RLM 66  
Schwarzgrau

## APPLYING DECALS

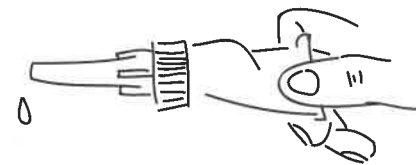
1. Clean the model surface with a wet cloth.
2. Cut out each decal design from sheet, and dip it in tepid water for 15~20 sec.
3. Hold the backing sheet edge and slide decal onto the model.
4. Move decal into position by wetting decal with finger.
5. Press decal gently down with a soft cloth until excess water and air bubbles are gone.



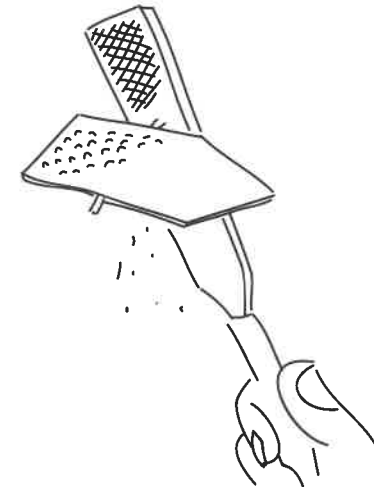
## REMOVING PE



Be careful not to hurt when removing PE parts.

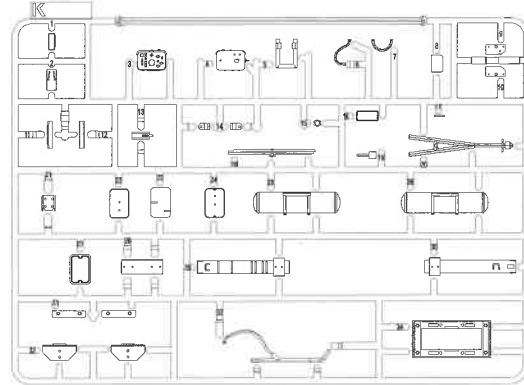
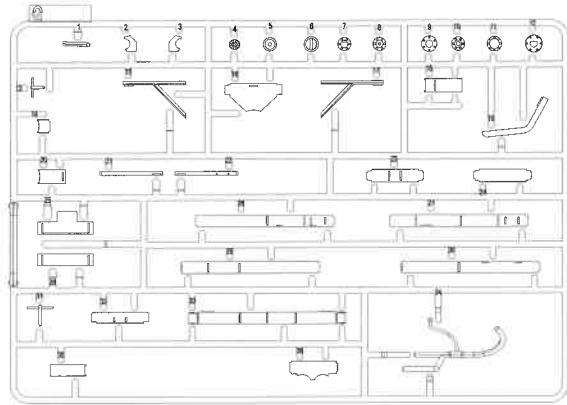
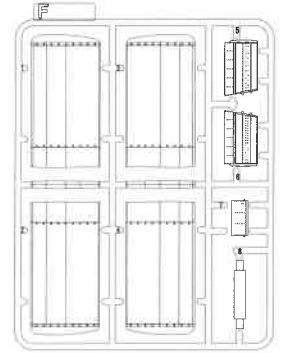
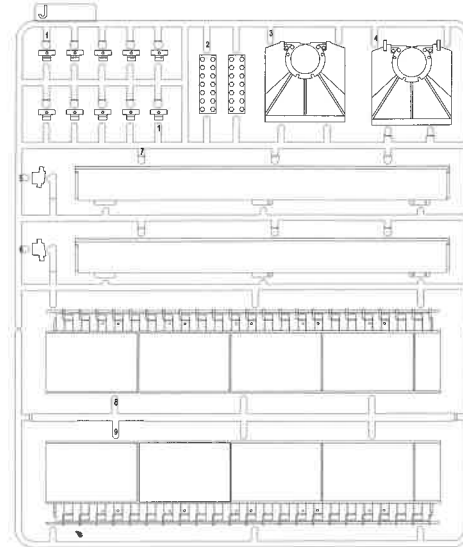
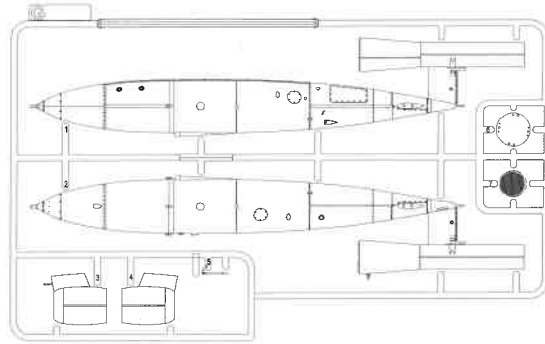
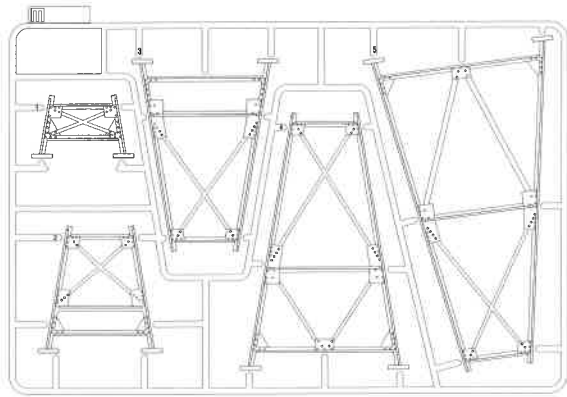


Secure using instant glue (not included).

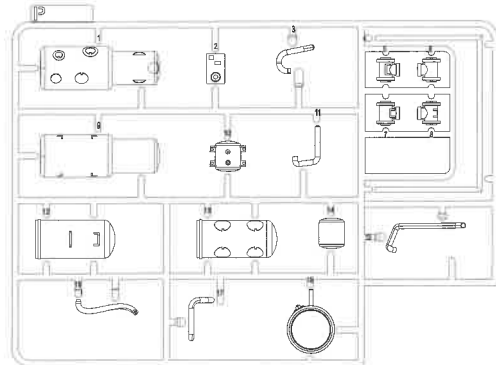
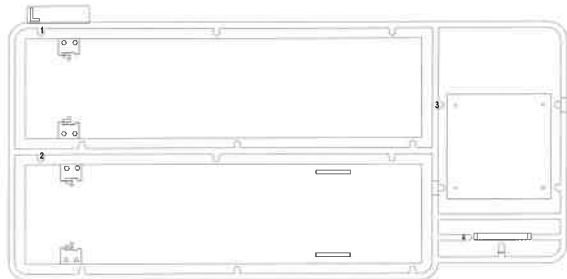


Finish using file.

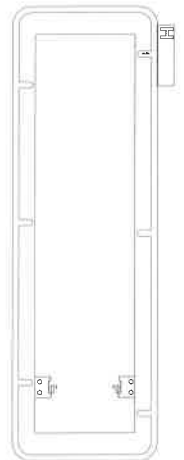
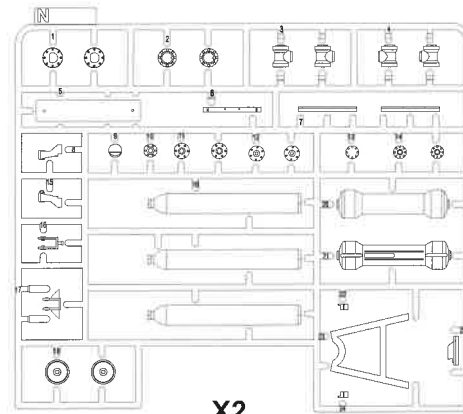
# PARTS



X5



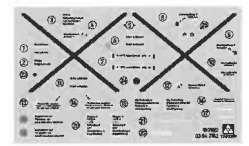
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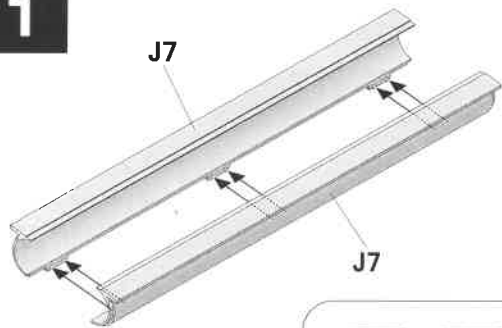
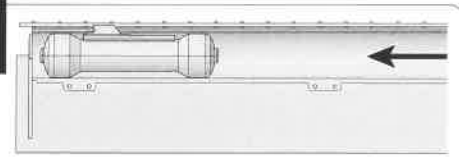
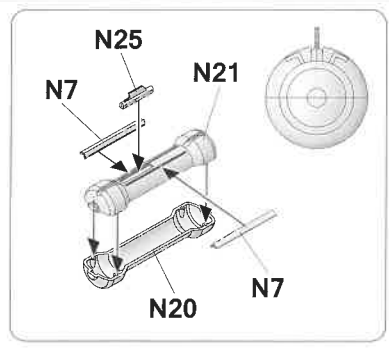
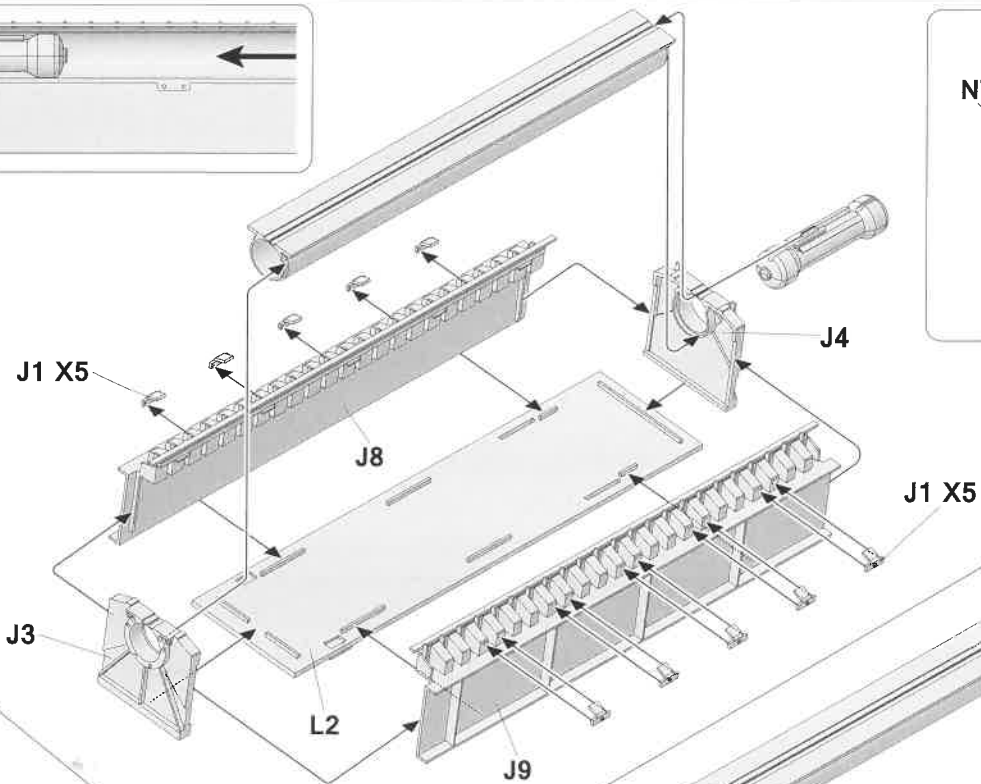
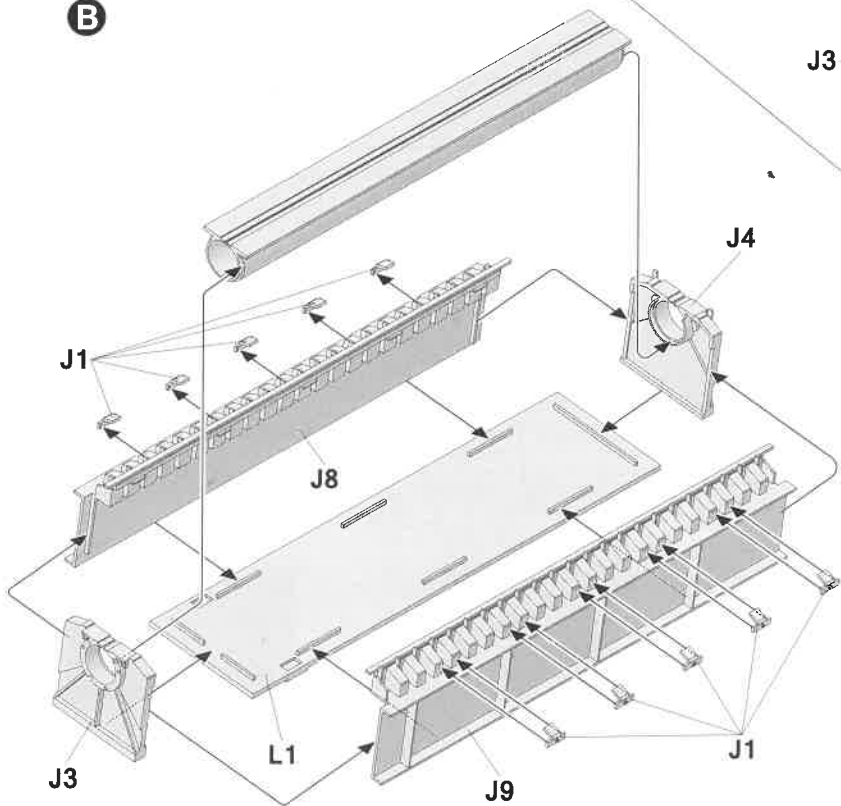
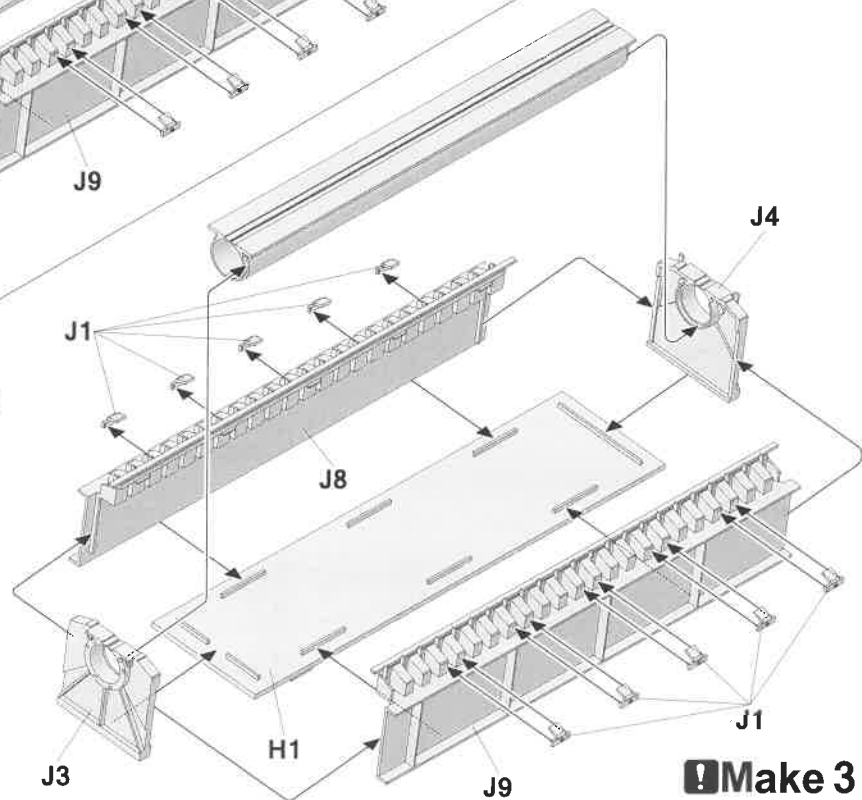
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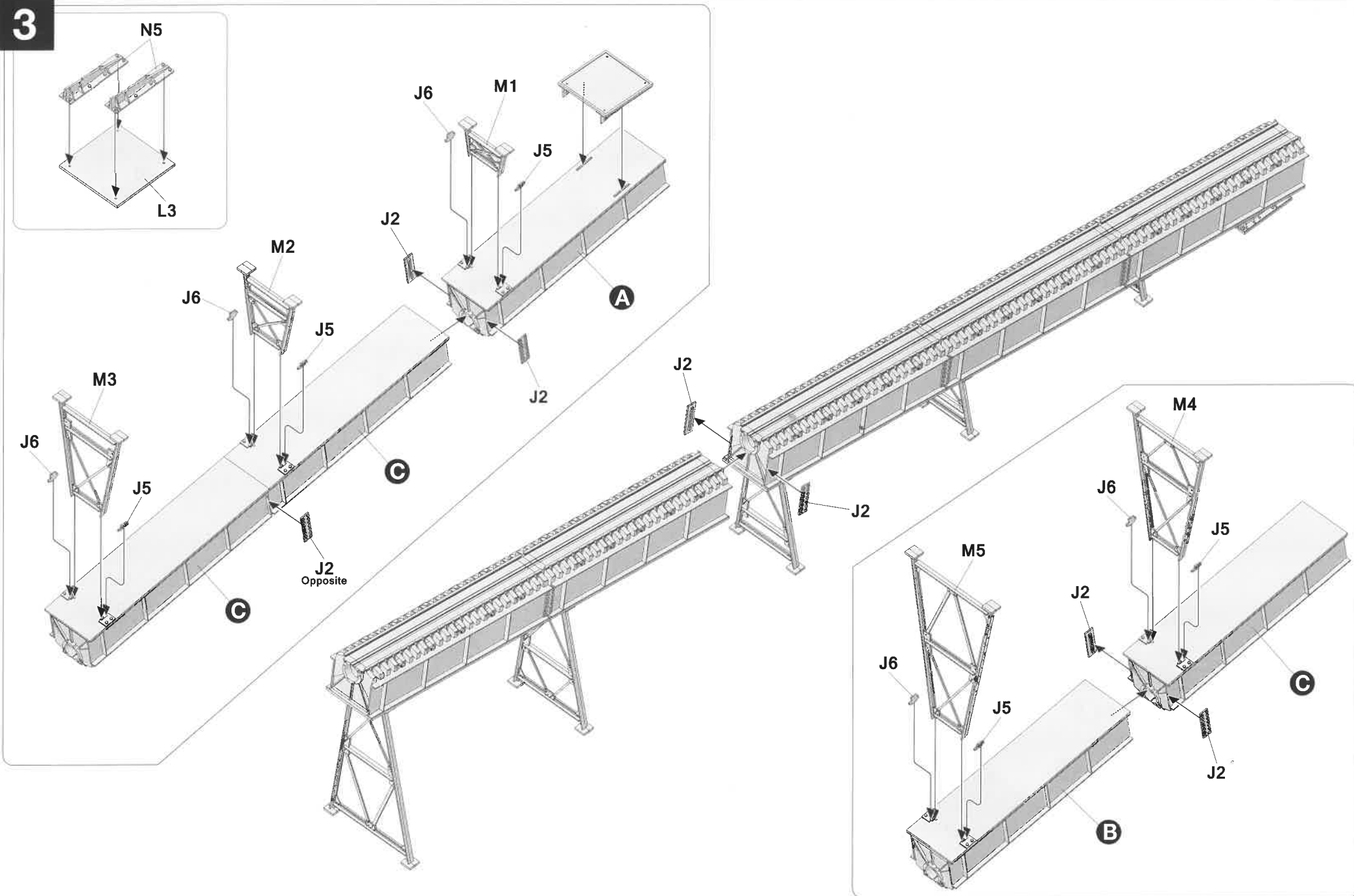
TP



Decal

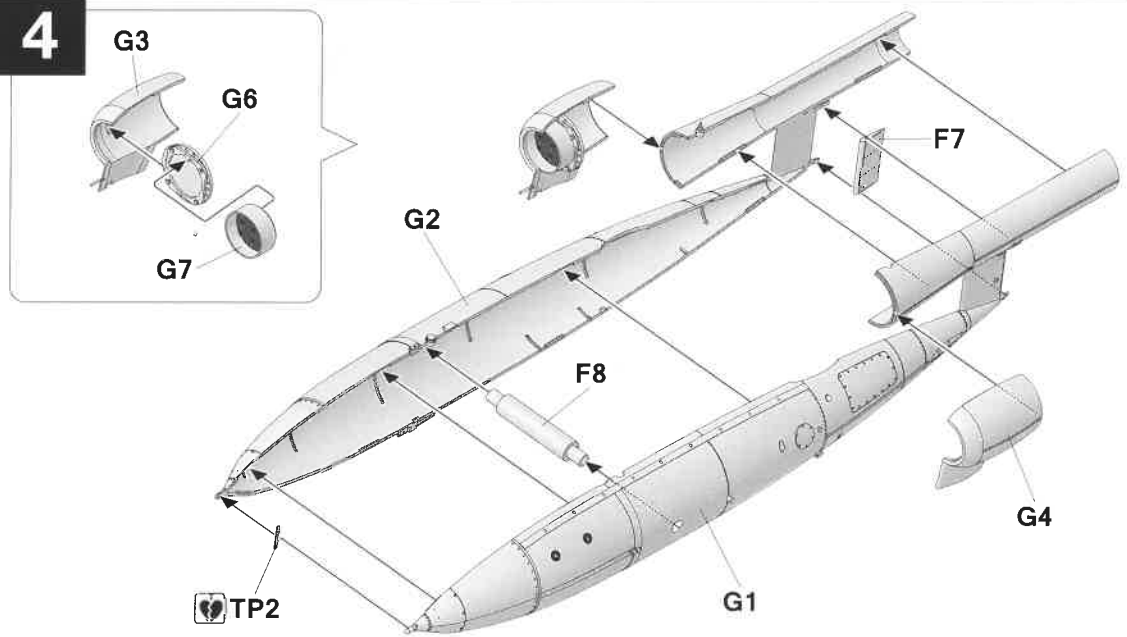
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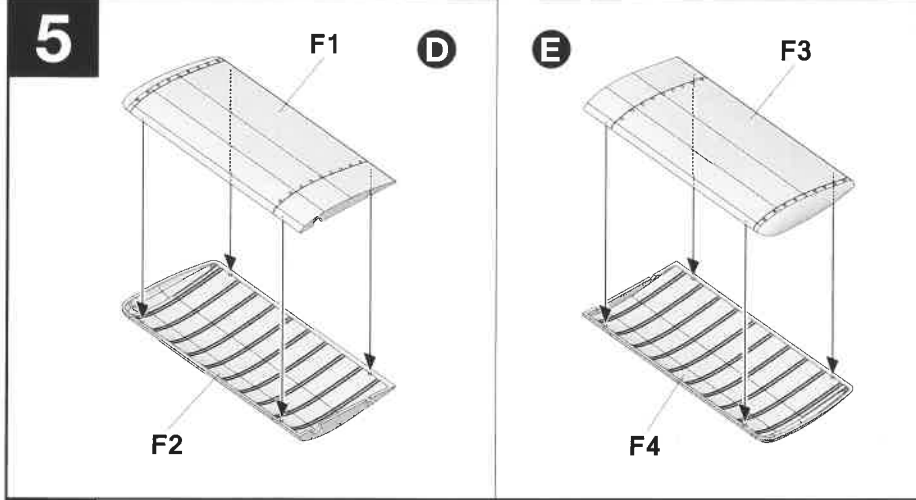


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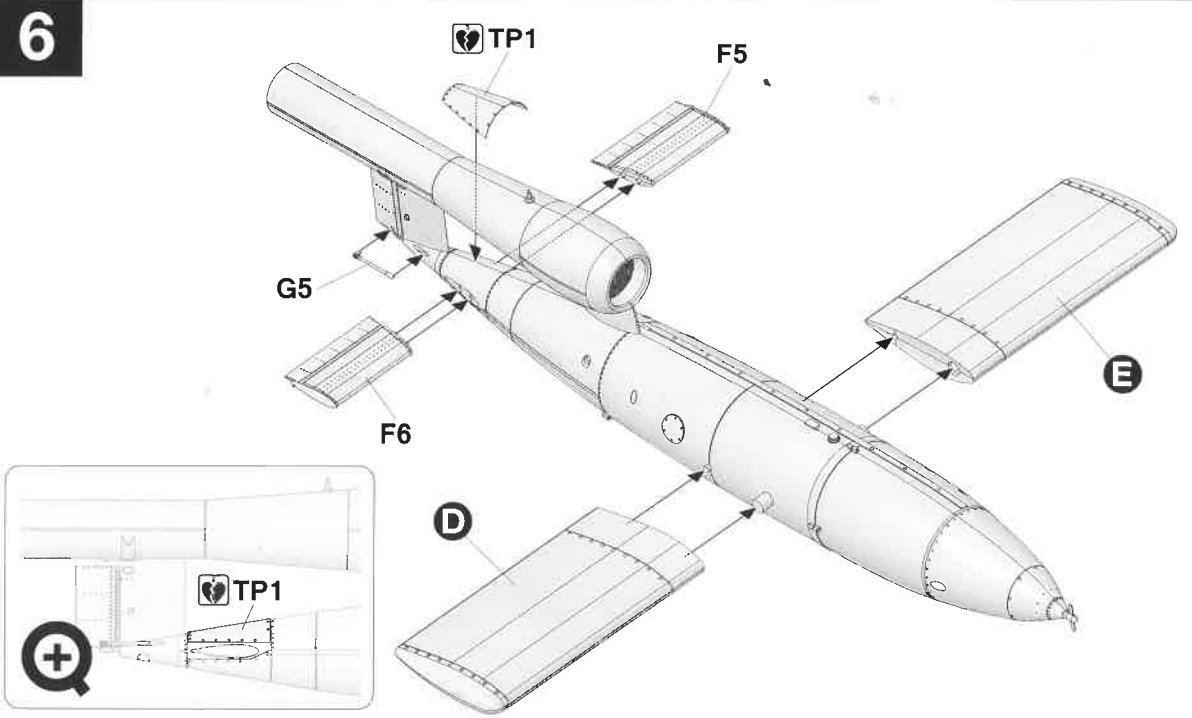
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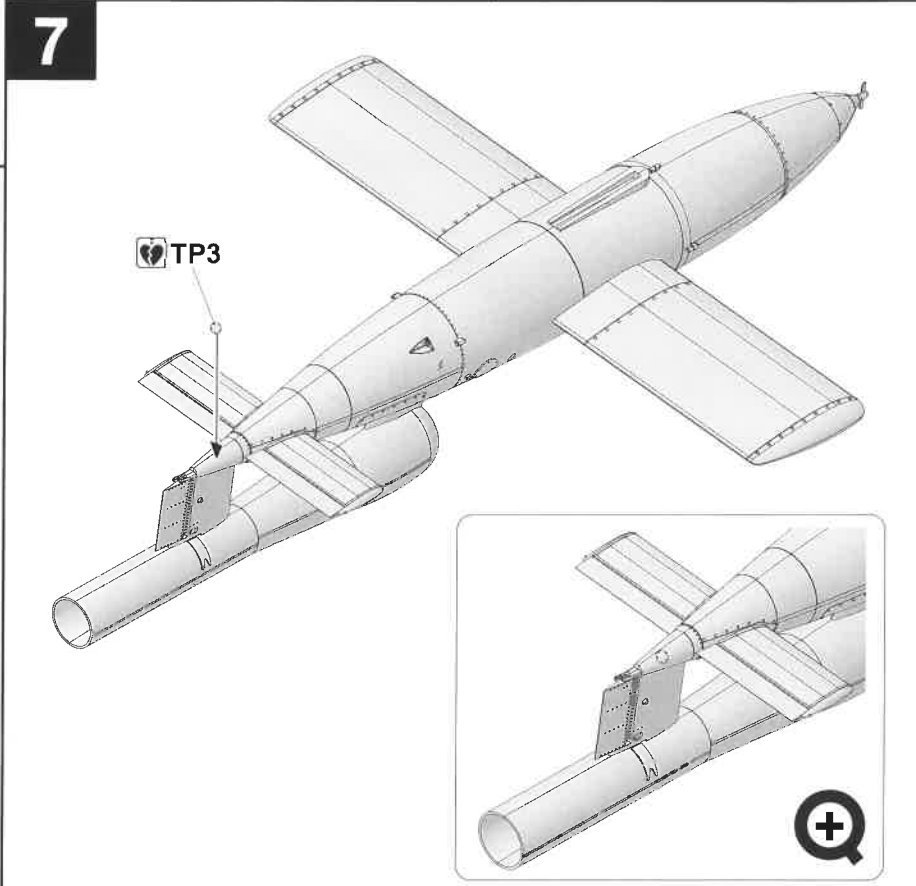
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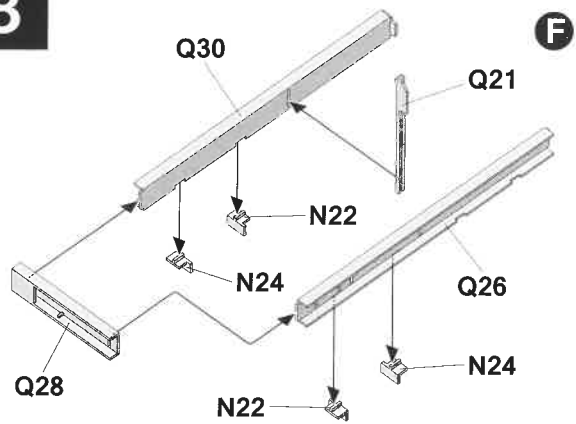
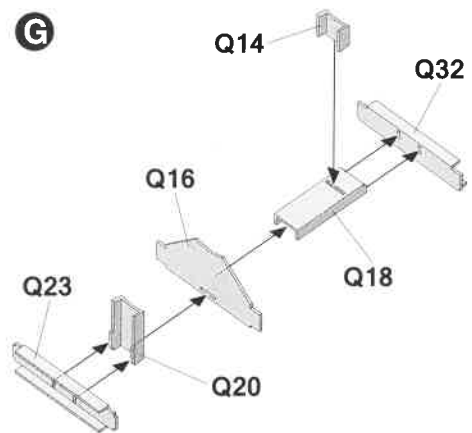
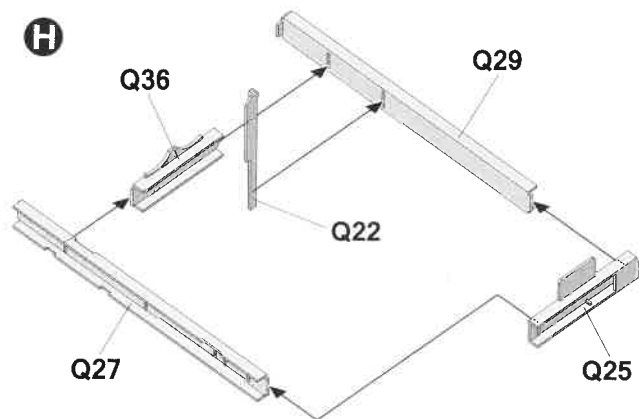
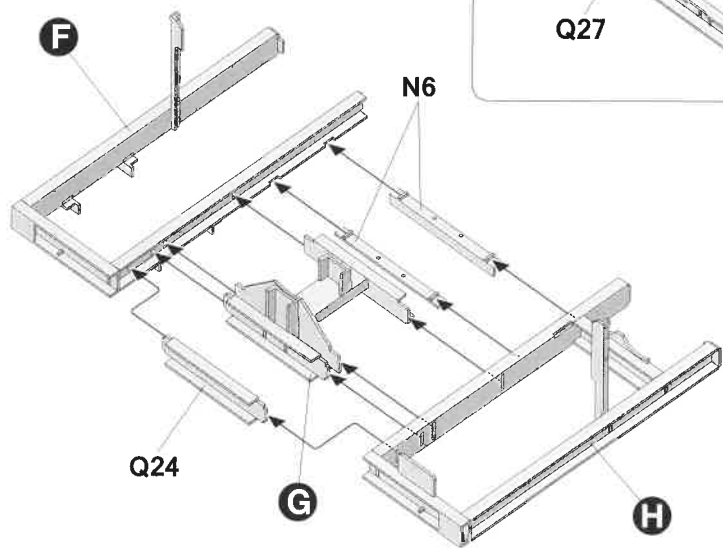
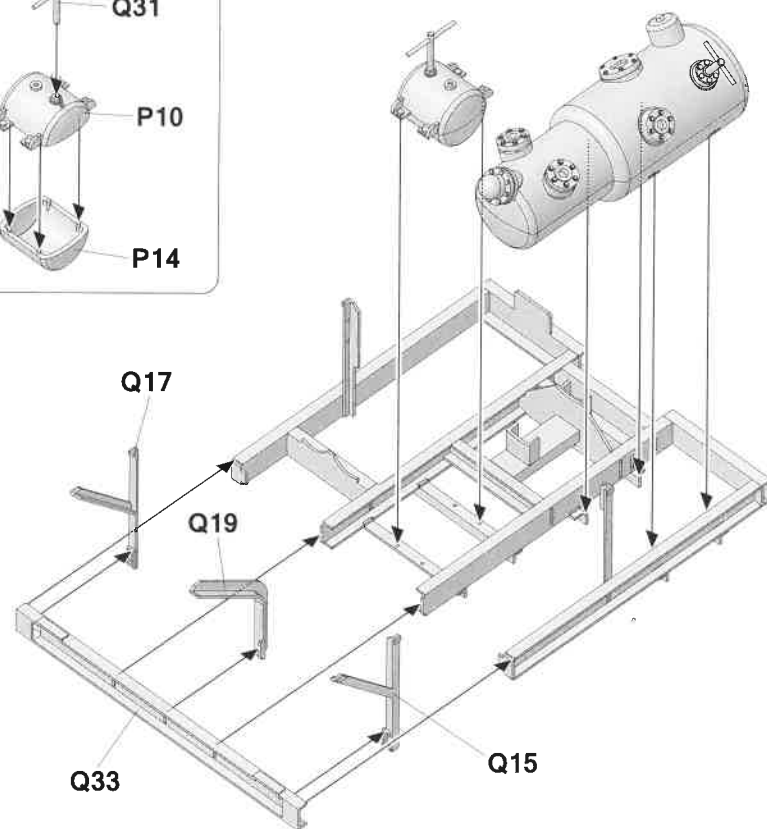
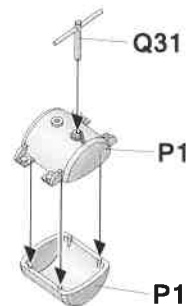
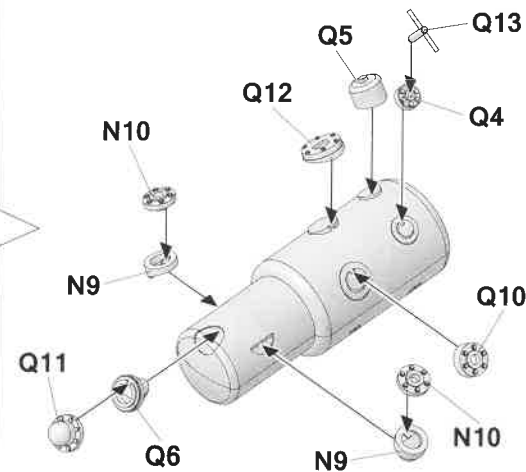
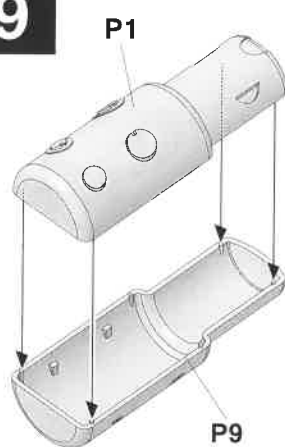


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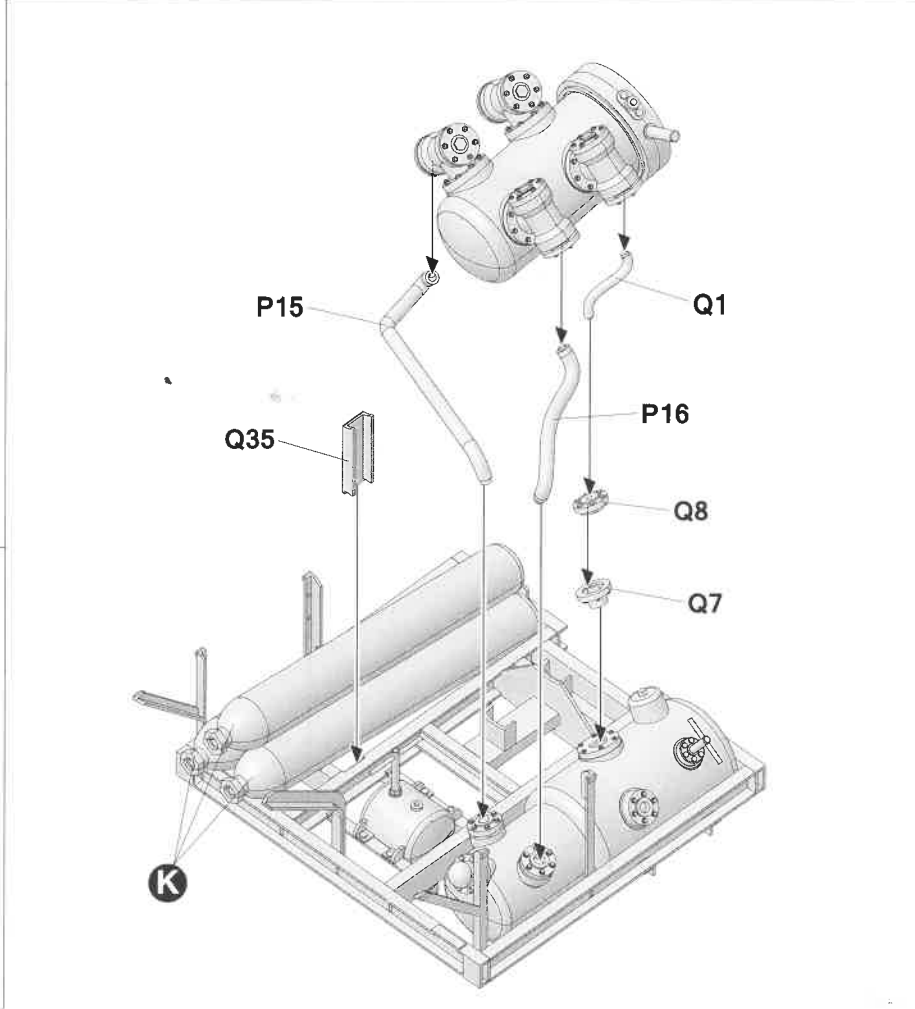
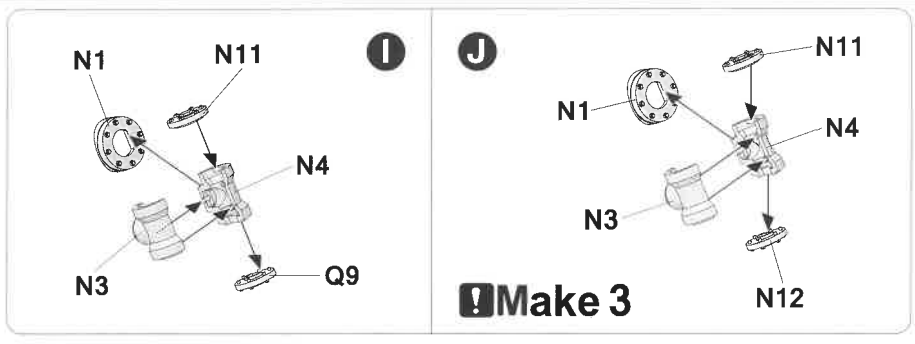
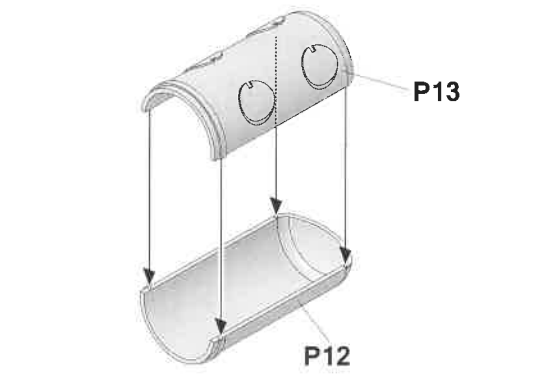
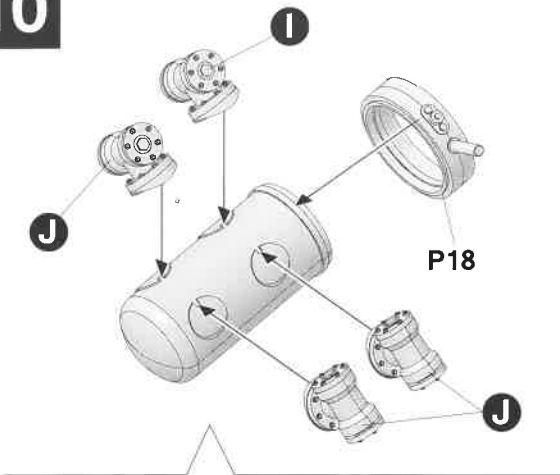


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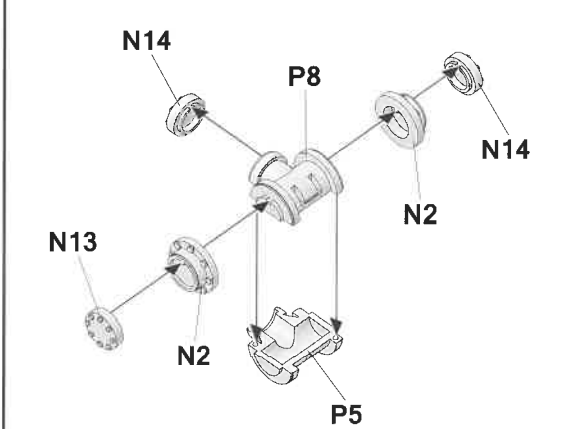
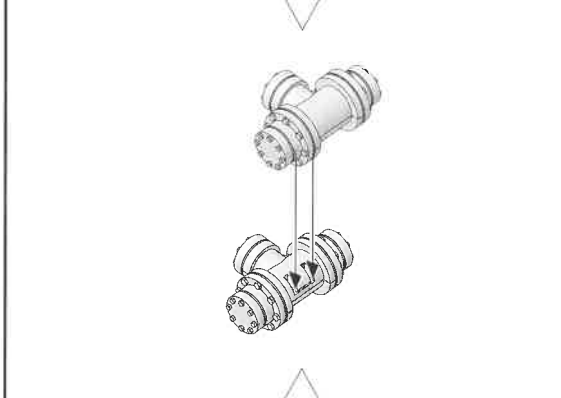
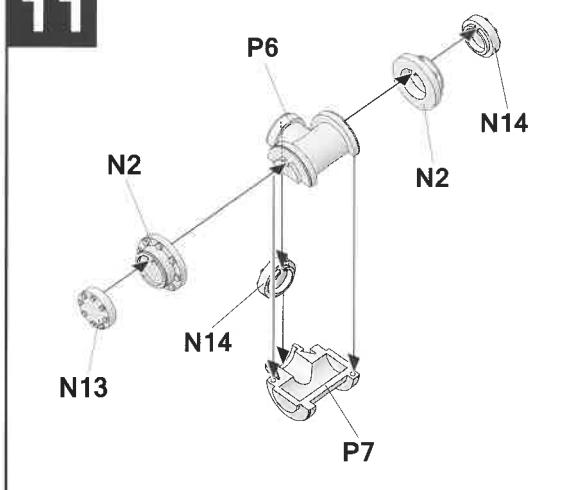


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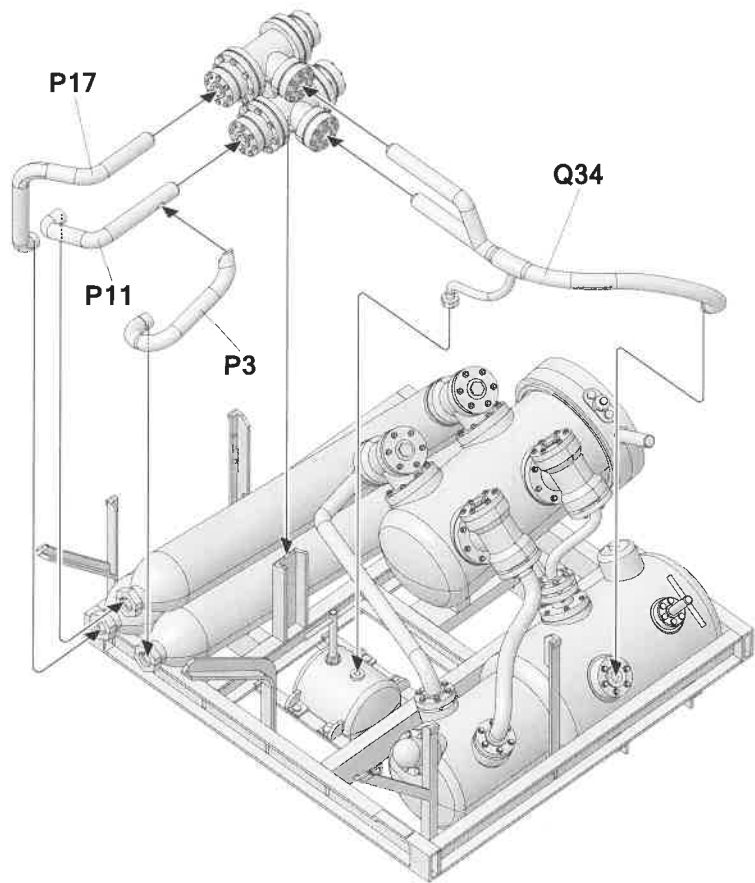


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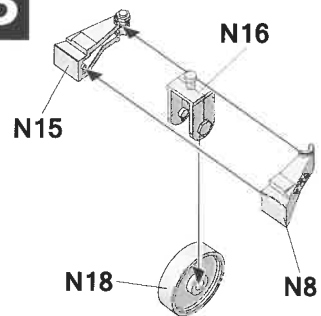




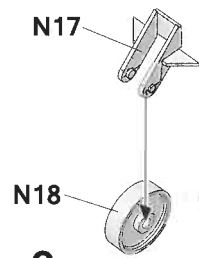
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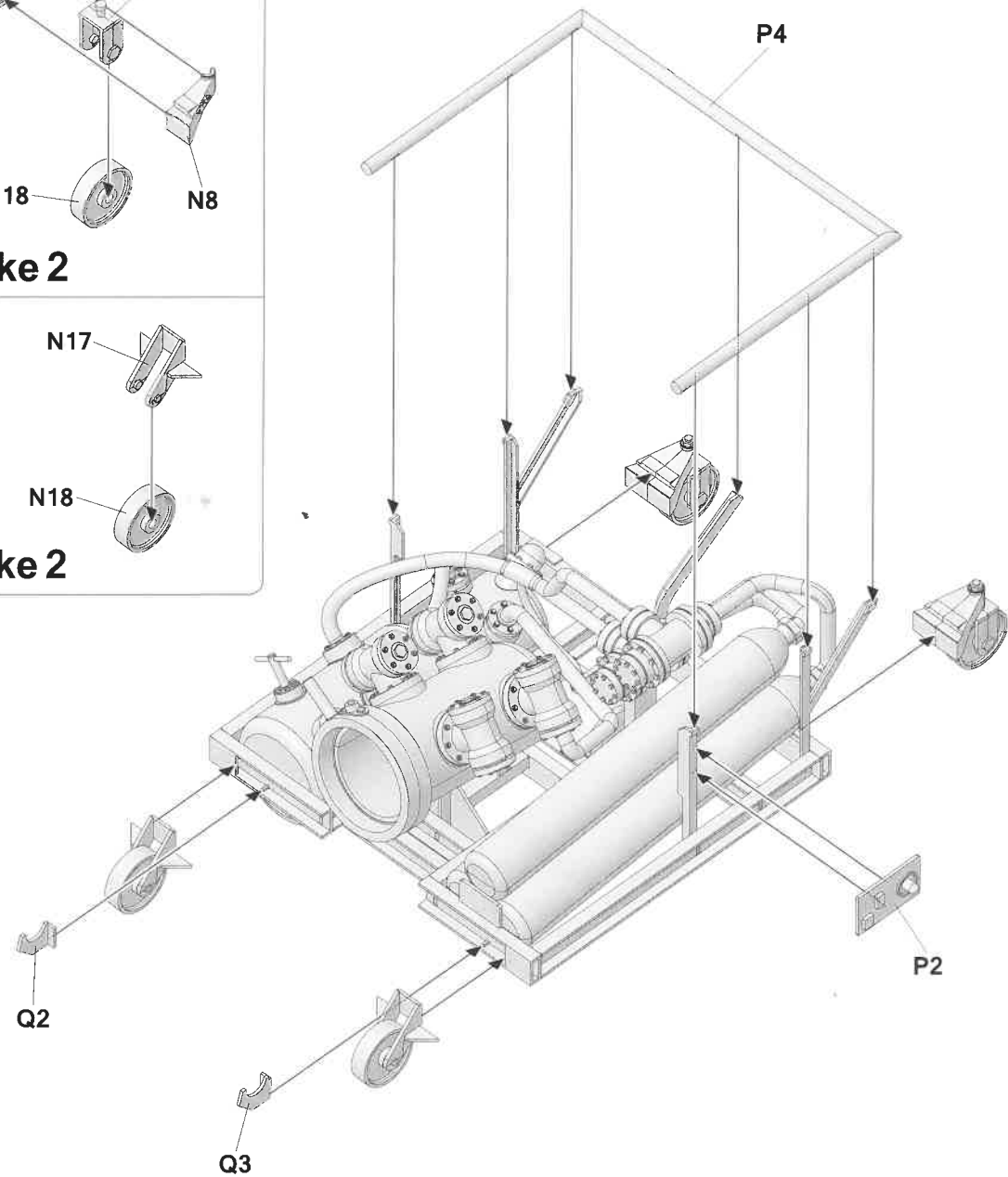
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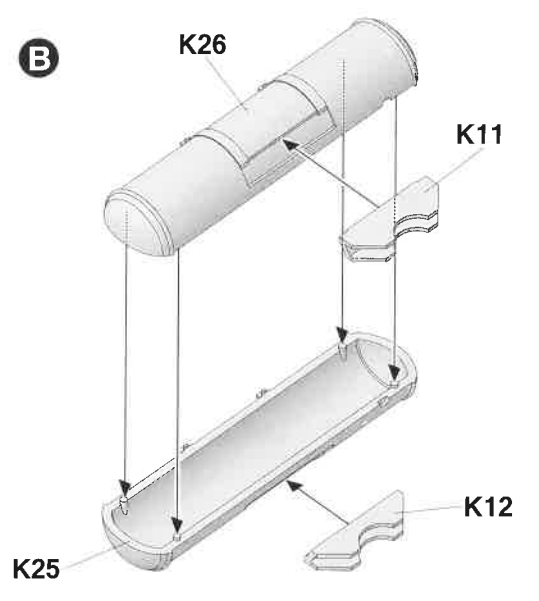
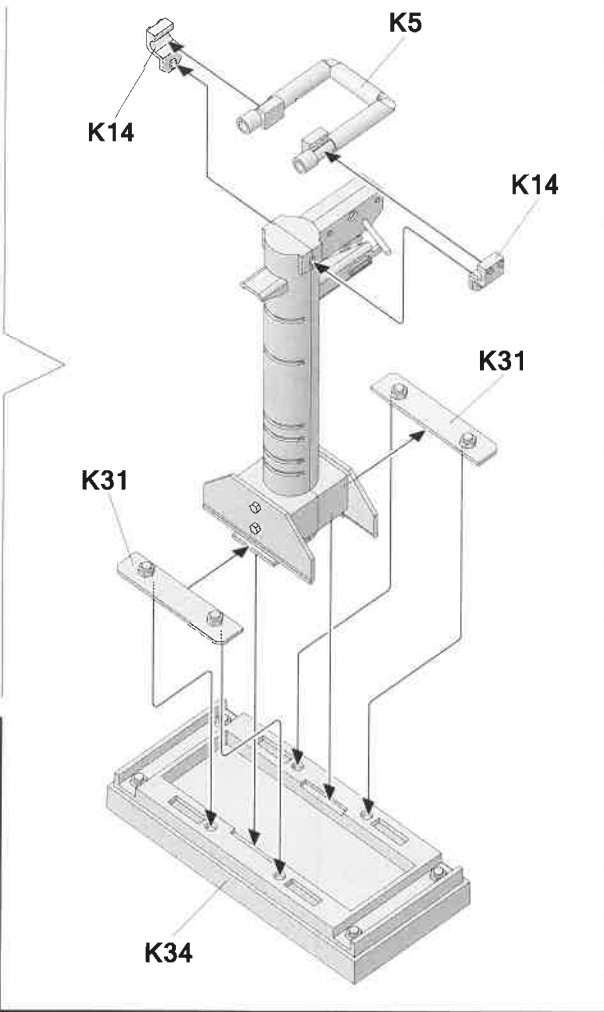
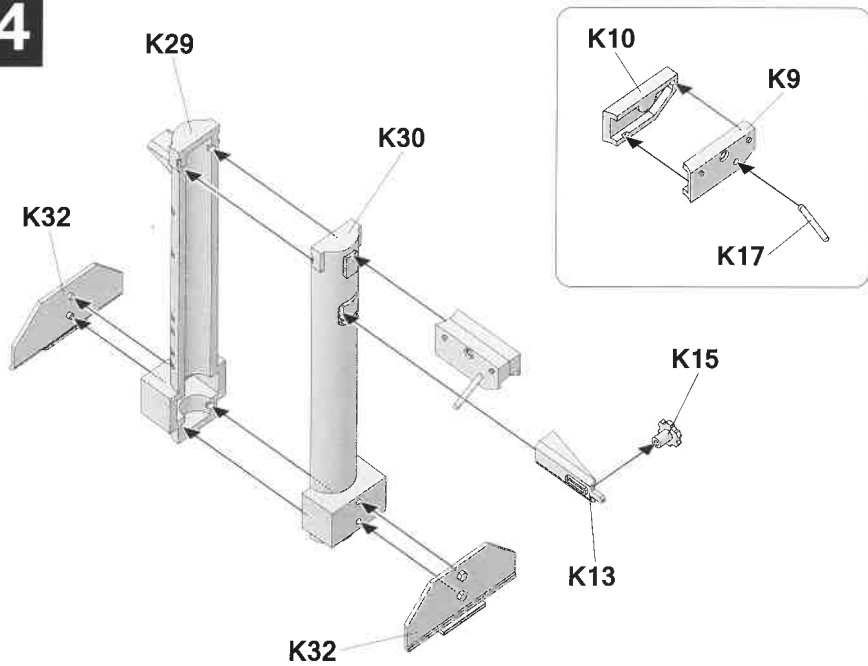
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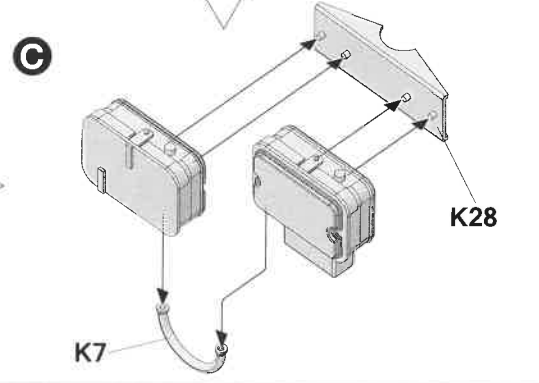
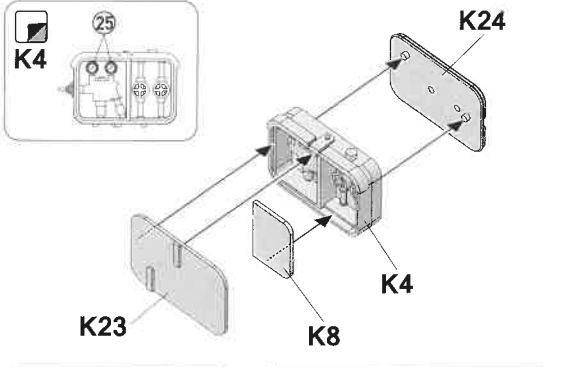
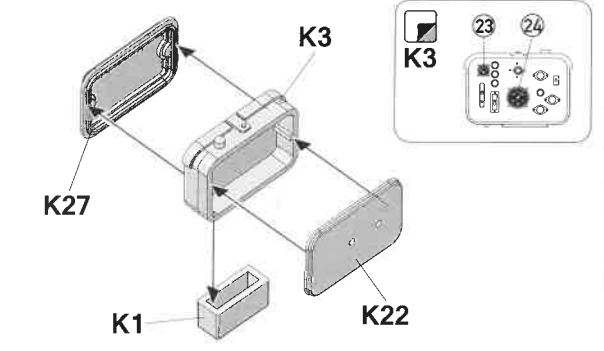
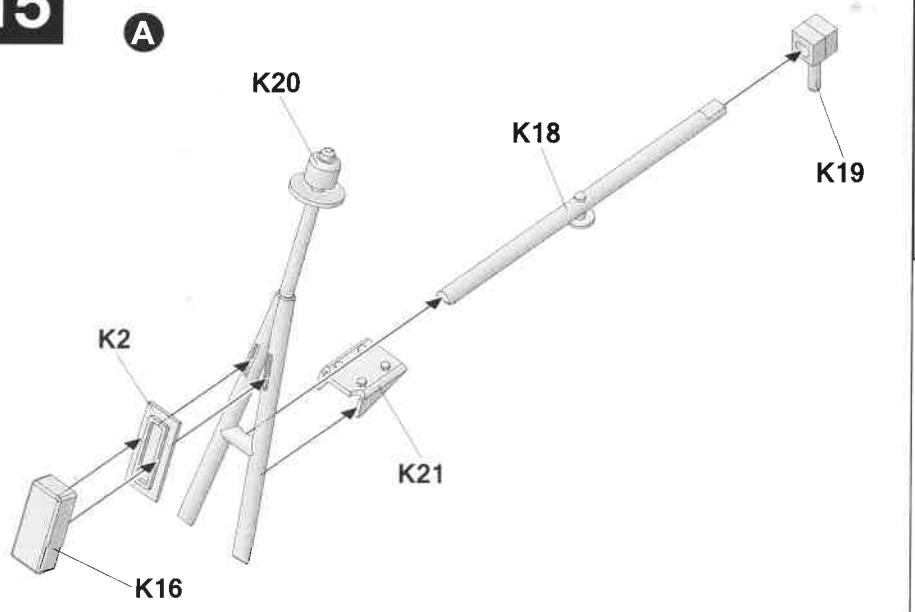
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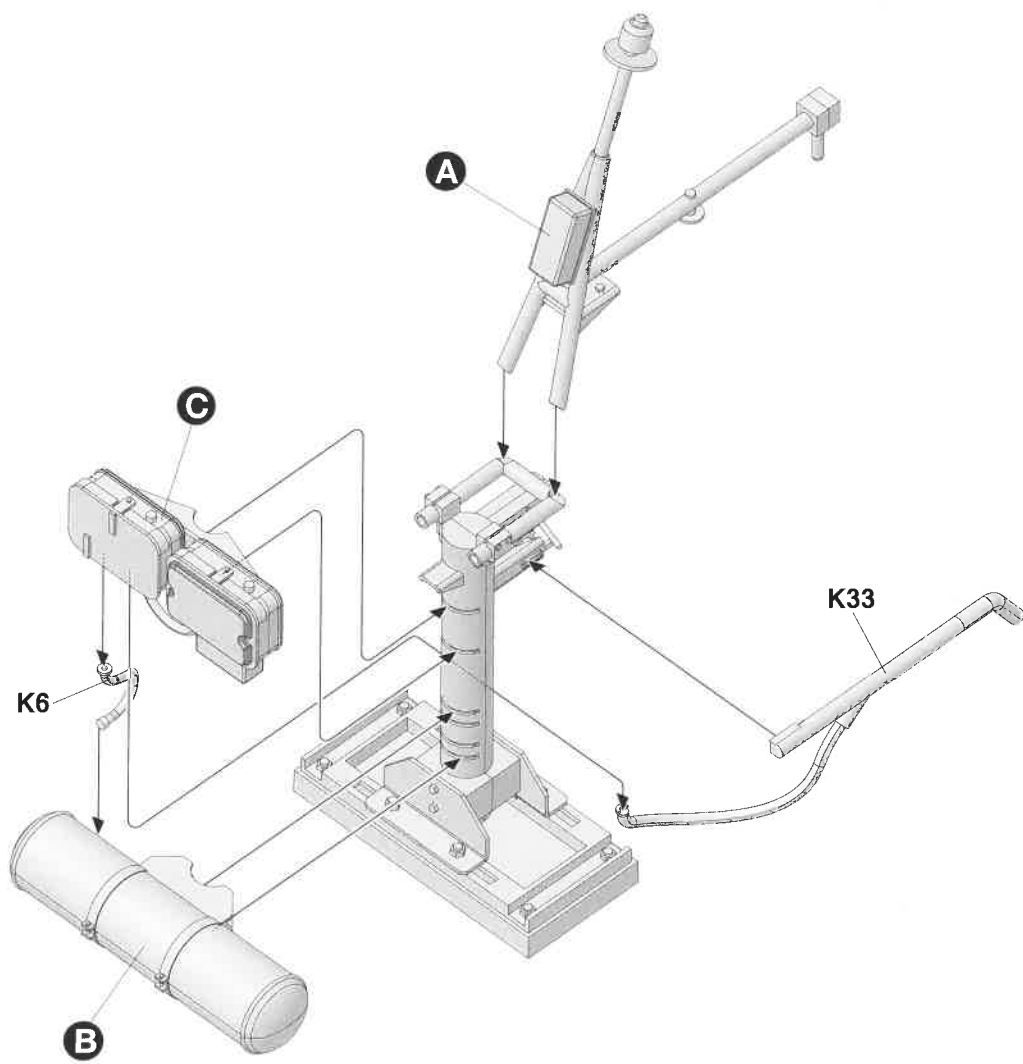
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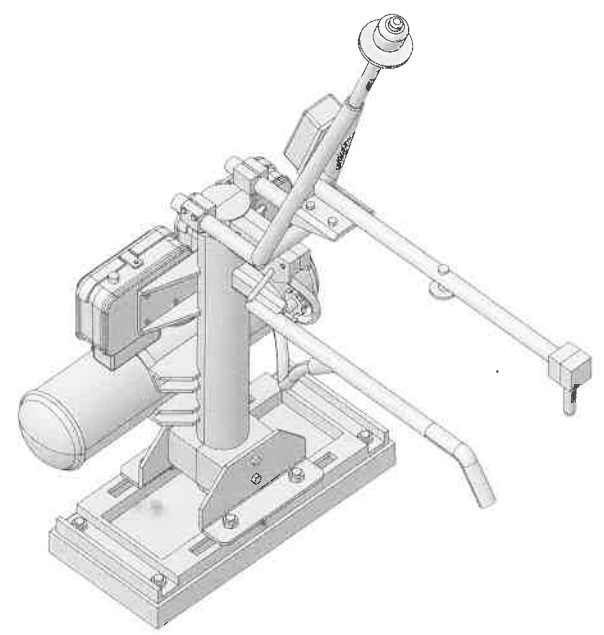
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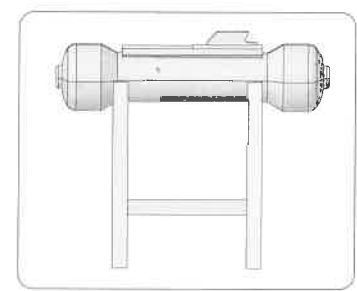
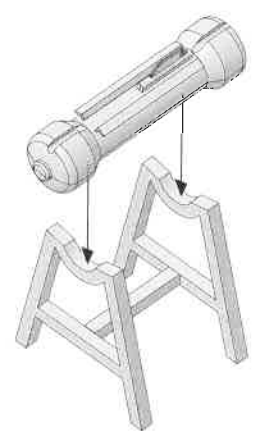
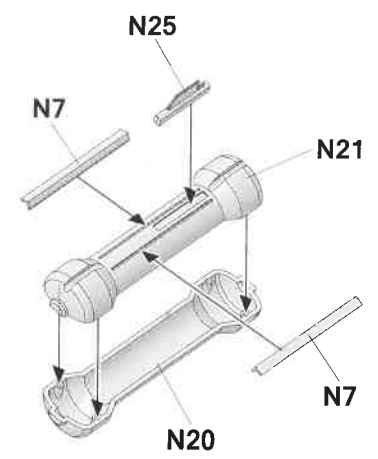
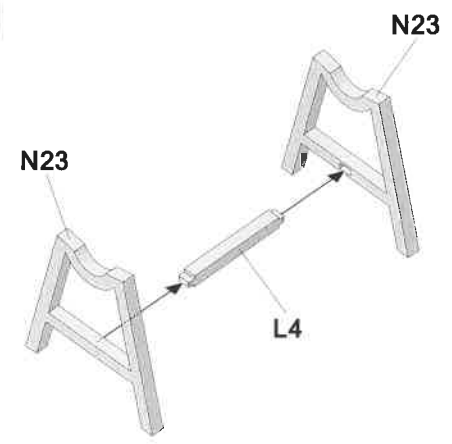
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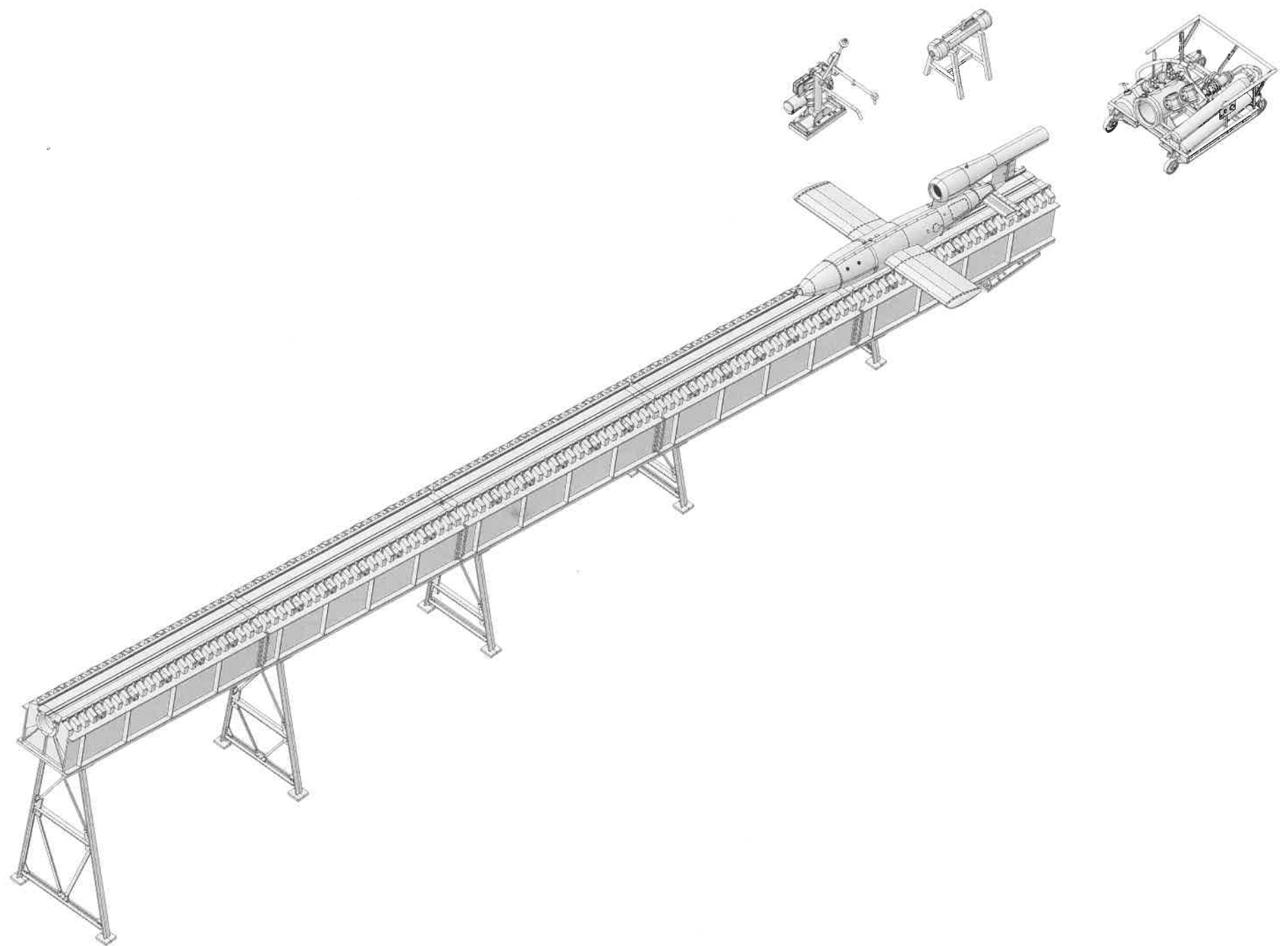


17



18





03.03.2152



TAKOM

# V-1 FLYING BOMB LAUNCH SITE



by MIG Jimenez  
www.ammo.es

03.03.2152



TAKOM

# V-1 FLYING BOMB LAUNCH SITE



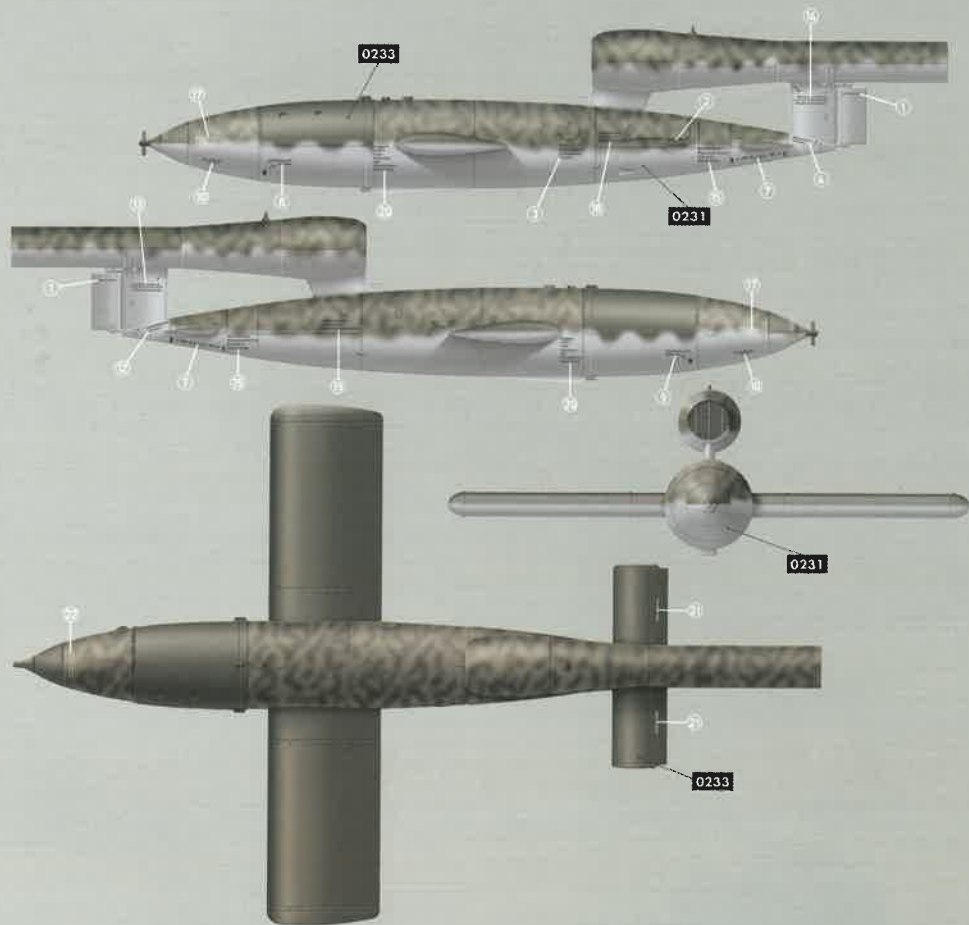
by MIG Jimenez  
www.ammo.es

Painting and Marking Guide

TAKOM Ref: 2152

Fisk Regiment 133 (W), France,  
Summer 1944

A.MIG-0211 Panel Wash A.MIG-0233 Chipping



WEATHERING STEPS WITH AMMO PRODUCTS

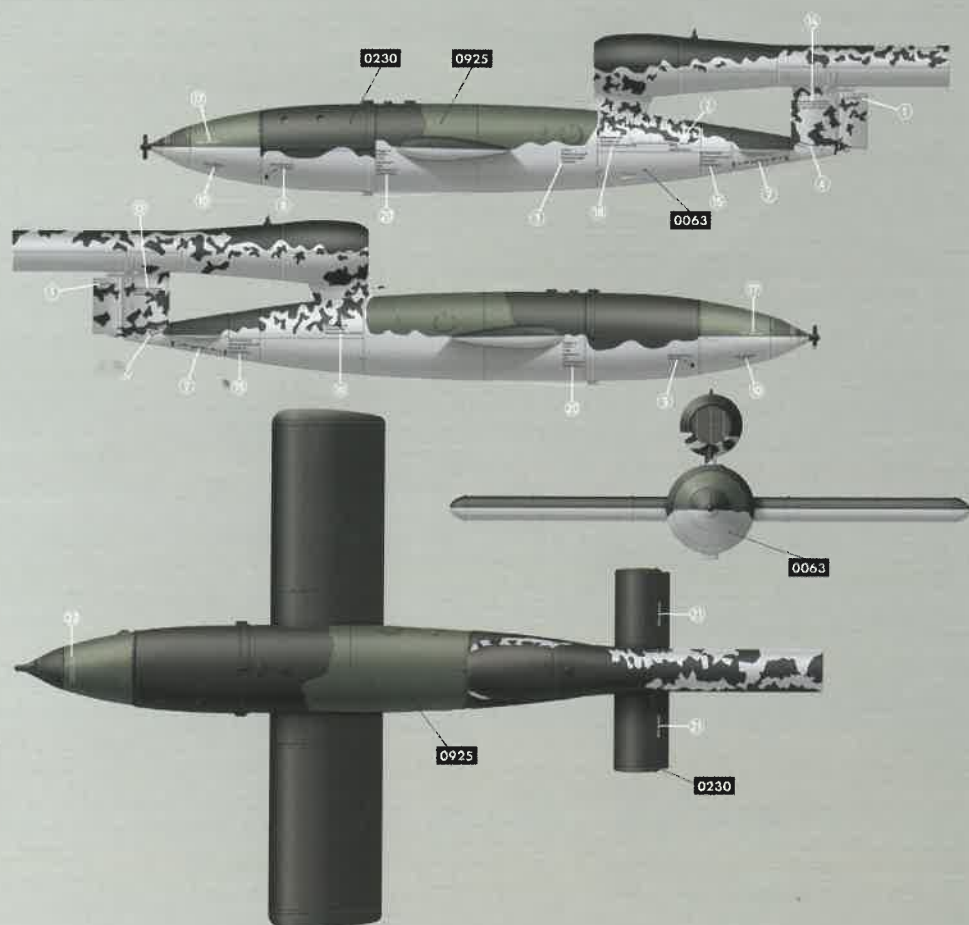
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|---|-----------------------------------|
| 1 PANEL LINE WASH<br>A.MIG-1614 PLW Neutral Brown | 2 CHIPPING<br>A.MIG-0044 Chipping |
|---|-----------------------------------|

Painting and Marking Guide

TAKOM Ref: 2152

Fisk Regiment 133 (W), France,  
Summer 1944

A.MIG-0920 Panel Wash A.MIG-0230 Chipping A.MIG-0925 Panel Wash



WEATHERING STEPS WITH AMMO PRODUCTS

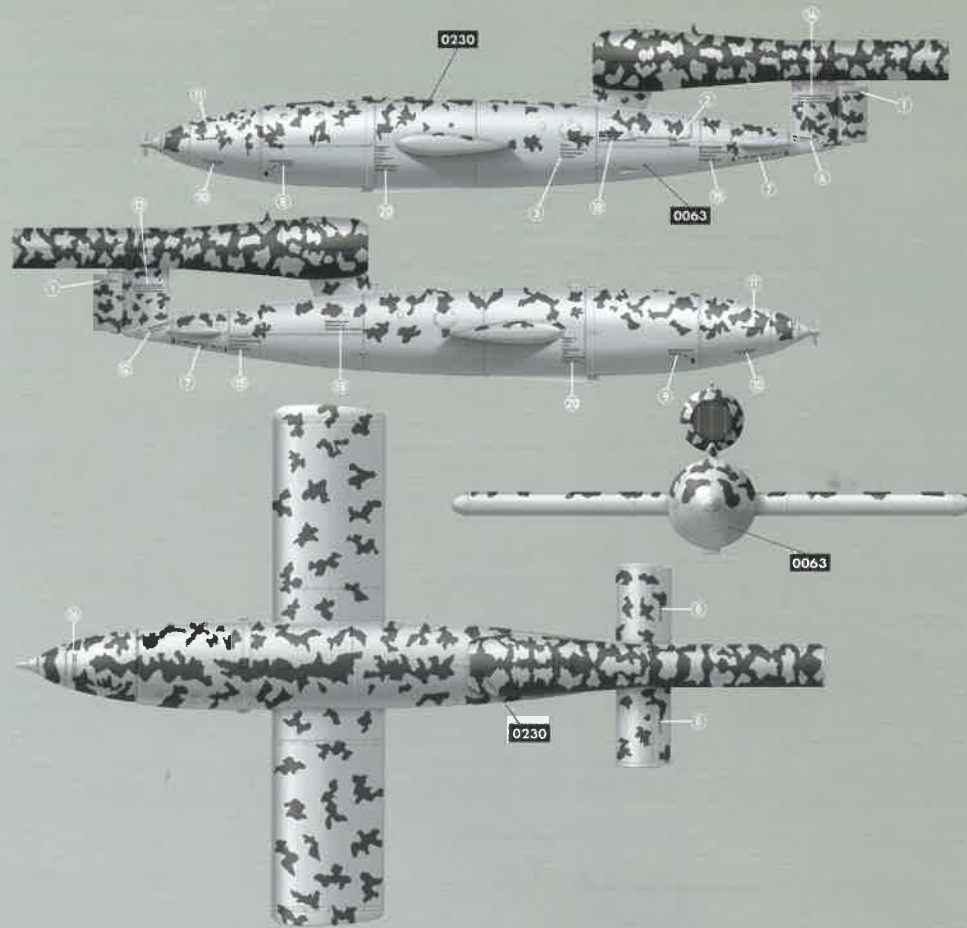
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|---|-----------------------------------|

Painting and Marking Guide

TAKOM Ref: 2152

Unknown Luftwaffe Flugplatz, France,  
Summer 1944

AMMO-093 Panel Line Wash  
AMMO-0250 Chipping



WEATHERING STEPS WITH AMMO PRODUCTS

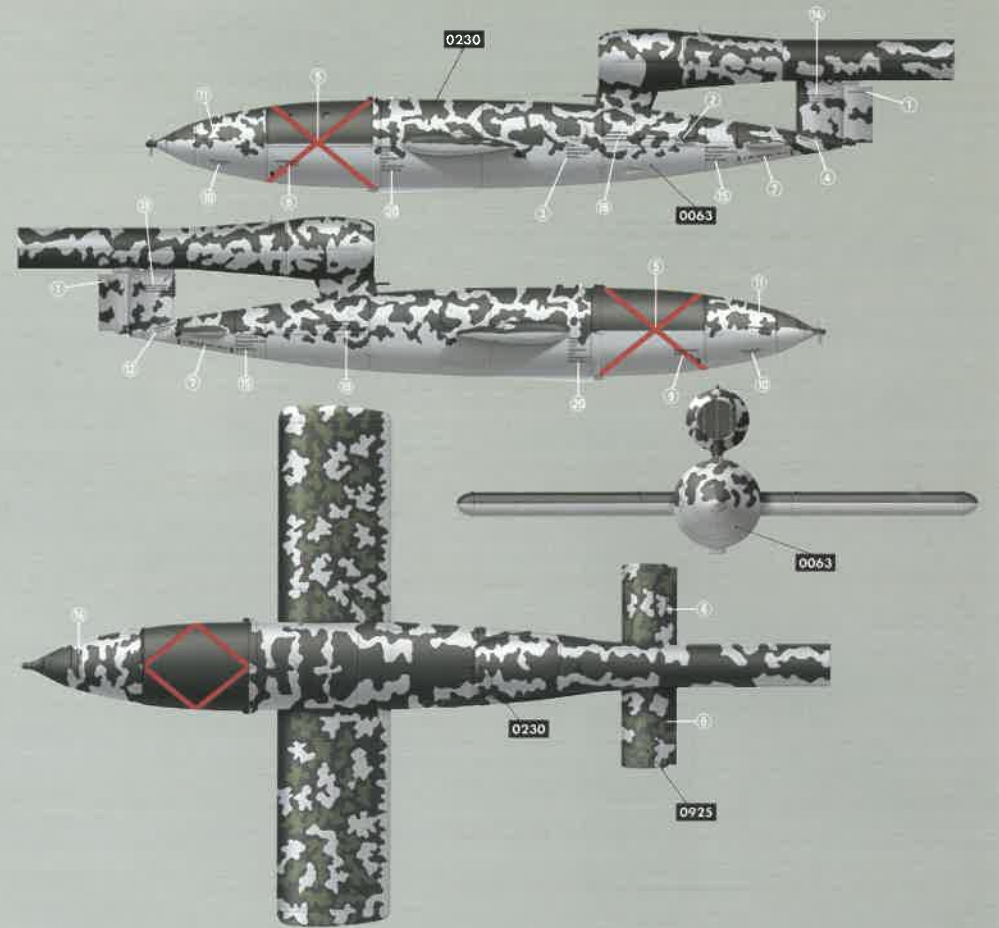
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Painting and Marking Guide

TAKOM Ref: 2152

Hol Regiment 153 (W), France,  
Summer 1944

AMMO-093 Panel Line Wash  
AMMO-0230 Chipping  
AMMO-0925 Panel Line Wash Dark Blue



WEATHERING STEPS WITH AMMO PRODUCTS

- |  |                                  |
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|--|----------------------------------|



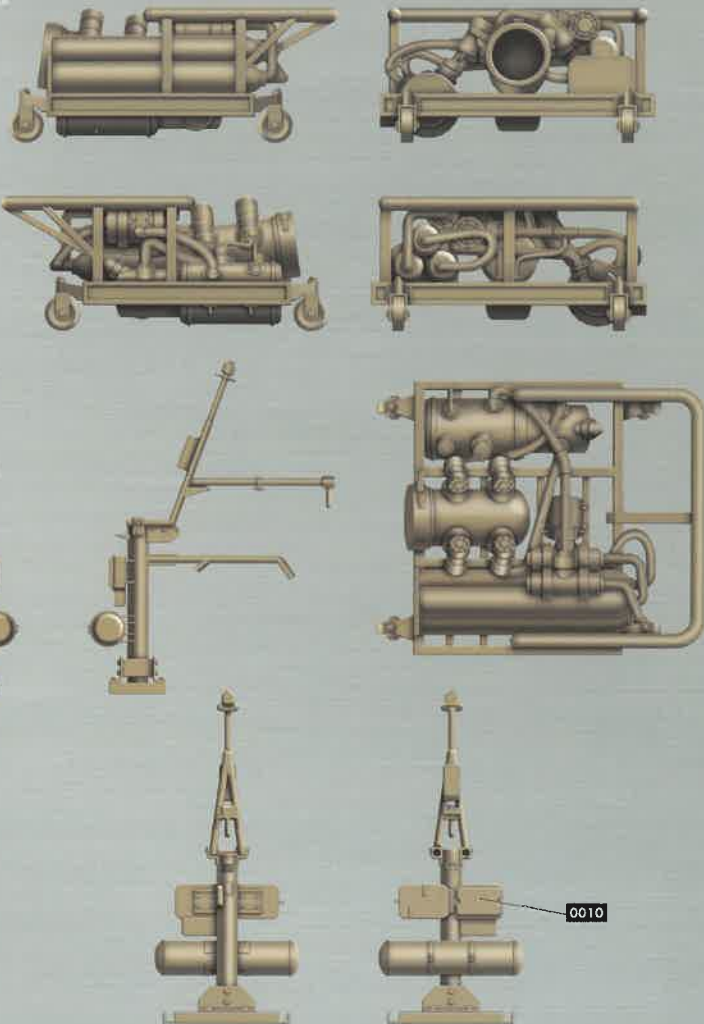
# V-1 FLYING BOMB LAUNCH SITE

## Painting and Marking Guide

TAKOM Ref. 2152

Dampferzugtröley und Anlassergest  
Starter Device

A.MIG-0210



### WEATHERING STEPS WITH AMMO PRODUCTS

<b>1 GENERAL WASH</b> A.MIG-1000 Brown Wash for German Dark Yellow	<b>3 STREAKING</b> A.MIG-1203 Streaking Grime	<b>5 DUST</b> A.MIG-3011 Airfield Dust Pigment
<b>2 FILTER</b> A.MIG-1511 Brown for Dark Yellow	<b>4 RUST</b> A.MIG-1254 Streakingbrusher Rust	<b>6 OIL</b> A.MIG-1408 Fresh Engine Oil

# V-1 FLYING BOMB LAUNCH SITE

## Painting and Marking Guide

TAKOM Ref. 2152

Waller Schützrohrschleuder WR 2.3 Launch  
Ramp and Steam Launch Piston

A.MIG-0902

A.MIG-0010

A.MIG-0218



### WEATHERING STEPS WITH AMMO PRODUCTS

<b>1 GENERAL WASH</b> A.MIG-1000 Brown Wash for German Dark Yellow	<b>3 STREAKING</b> A.MIG-1203 Streaking Grime	<b>5 DUST</b> A.MIG-3011 Airfield Dust Pigment
<b>2 FILTER</b> A.MIG-1511 Brown for Dark Yellow	<b>4 RUST</b> A.MIG-1254 Streakingbrusher Rust	<b>6 OIL</b> A.MIG-1408 Fresh Engine Oil

