

## Churchill Mk IV AVRE

ω/SBG BRIDGE

In search for a possible second landing zone for the invasion of Western Europe in August 19 of 1942, an allied force of six thousand consisting of mostly the Canadian 2nd infantry division landed on the small port town of Dieppe in Northern France. The rocky nature of the beach and tall sea walls hindered the advancing forces. Advancements of arriving armored vehicles were possible by having the Royal Engineers destroying the seawall. The armored vehicles were eventually blocked by the concrete obstacles at the edge of the town. Ultimately, the entire operation failed.

The failure at Dieppe reflected the need of landing troops for specialized equipment to conquer the topographic obstructions and the Atlantic walls constructed by Nazi Germany. In March of 1943, under the direction of Chief of the Imperial General Staff, Major General Percy Hobart, commander of the 79th armored division, purposely assembled a unit to operate various special engineering vehicles.

As an infantry support, the Churchill possessed excellent cross country capability. Due to its spacious interior, the Churchill was selected as a platform for modifications. To counter the bunkers and blockades, the Churchill's original gun was replaced with a 290mm howitzer. Post modification Churchills were designated the Churchill AVRE, (Armored Vehicle Royal Engineers). Further variants with different functions were later developed.

Among the variants, one of which, the Churchill AVRE, had a SBG (Small Box Girder bridge) situated in the front of its hull and deployed by a hand cranked wench. The SBG was capable of letting armored vehicles or infantry to cross a 30 ft wide trench or seawall up to 14 ft tall. The Churchill AVRE saw action on Gold, Juno, and Sword beaches during the Normandy invasion.

1942年8月19日、カナダ第2歩兵師団を主力とする6,000人を超える連合軍は、西ヨーロッパ侵攻の実現可能性を探るためフランス北部の港町ディエップに上陸しました。海岸は大粒の砂利と高い防波堤に覆われており、上陸部隊の進行を妨げました。到着した装甲車両の前進は、王立工兵隊が防波堤を爆破することで可能になりました。最終的に、装甲車両は街の端にあるコンクリート防壁によって阻まれディエップを占領する作戦は失敗に終わりました。

ディエップの戦いの失敗は、地形の障害やナチス・ドイツによって建設された「大西洋の壁」を含む地形障害を突破するため、上陸部隊への特別な装備の必要性を反映していました。1943年3月、イギリス総参謀長は王立工兵隊のパーシー・ホバート少将が指揮する第79機甲師団を、様々な特殊工兵車両を運用するための部隊に再編制するよう指示しました。

チャーチル戦車は、優れたオフロード性能と広い室内スペースにより、主な改造対象として選ばれました。掩蔽壕や障害物に対抗するため、チャーチル戦車は元の主砲を口径290mmの迫撃砲に置き換えました。改造された車両は、チャーチル AVRE(Armored Vehicle Royal Engineers)と呼ばれました。チャーチルAVREをベースに、機能の異なる様々なバリエーションの工兵戦闘車が開発されました。

1930年代に設計されたSBG(Small Box Girder bridge)ブリッジは、戦闘車両の車体前方に設置されました。戦場では、手動ウィンチで展開されるブリッジにより、装甲車両または歩兵が幅30フィートの塹壕を横断したり、高さ14フィートまでの防波堤を登ったりすることができます。このようなSBGブリッジの使用は、ノルマンディー上陸作戦の際にゴールド、ジュノー、ソードのビーチでも活躍しました。

為了驗證在西歐登陸開闢第二戰場的可行性，1942年8月19日，以加拿大第二步兵師為主力，由六千多人組成的盟軍地面部隊在法國北部海港小鎮迪耶普登陸。迪耶普海灘滿布的卵石與高聳海堤，阻礙了登陸部隊的行動。由皇家工兵部隊炸開海堤，讓抵達海堤的戰車部隊能夠繼續前進，最終戰車受阻於市區邊緣的反戰車混凝土障礙物，佔領迪耶普的行動以失敗告終。

迪耶普戰役的失敗，反應出登陸部隊需要能夠克服地形障礙，乃至納粹德國構築的「大西洋長城」的特殊器材。1943年3月，英國總參謀長指定由具有皇家工兵資歷的珀西·霍巴特少將指揮的第七十九裝甲師，重組成一隻操作各種特殊工程車輛的部隊。

邱吉爾步兵戰車由於具有良好的越野性能、寬闊的車內空間，於是被選中為重點改裝的對象。為了對抗碉堡與路障，邱吉爾戰車以290mm口徑的迫擊砲取代了原本的火砲，經過改裝後的車輛被稱做邱吉爾皇家工程戰鬥車輛。再以邱吉爾皇家工程戰鬥車輛為基礎，發展出各種功能不同的次型。

1930年代設計出的小型突擊橋(SBG)，被安裝在工程戰鬥車輛車體前方。在戰場上突擊橋藉由手搖絞盤釋放以後，能夠讓履帶車輛或步兵跨過三十英尺寬的壕溝，或是攀上十四英尺高的海堤。諾曼地登陸時在黃金、朱諾、寶劍這幾個海灘，都能見到這種小型突擊橋的使用。

### Illustration: 圖示說明



### Method For Applying Decals:

1. Clean Model Surface With Wet Cloth.
2. Cut Out Of Decal Sheet And Dip Them In Warm Water For 15 Seconds.
3. Place it on proper position on model.
4. Slide off base paper leaving decals On Model With Wet Finger Tip.
5. Move Decals To Exact Position, Push Out Excess Water Under Decal With Soft Cotton Cloth.
6. When Decals Get Dry Then Complete.

### 水貼紙使用說明:

1. 將模型表面擦乾淨
2. 將貼紙剪下泡入溫水中浸泡約15秒
3. 將泡濕之貼紙取出置於欲貼處旁
4. 用指尖輕推貼紙表面使其滑出底紙
5. 將貼紙調整至適當位置並輕擦拭水份
6. 待其自然乾燥後即完成

### Color list: 塗料表

Color	Brand	GSI Creos			Humbrol	AV Vallejo	Lifecolor
		Hobby Color	Mr.Color	Mr.Color Spray			
Black	黑	H2	C2	S2	21	70861	LC00
Dark green No.24 B.S.381 深綠		H330	C330		75		UA085
Duck egg green 鴨蛋綠		H74	C26		23	71009	UA085
Flat black 消光黑		H12	C33	S33	33	70950	LC00
Flat white 消光白		H11	C62	S62	34	70919	LC01
Khaki green 卡其綠		H80	C54		159		UA221
Red brown 紅褐		H47/H406	C41	S41	160	71019	UA085
Sail color 帆布		H85	C45		28	72149	UA099
Steel 黑鐵		H18	C28	S28	53	77712	LC76
Tire black 輪胎黑		H77	C137		85	70950	LC02
Wood brown 木棕		H37	C43		186	70876	UA85

# Variants of Infantry Tank "Churchill"

Shin.veda  
上田 信

## 3 inch gun carrier Mk.I

It was built to defend mainland United Kingdom against invasion of Nazi Germany.



24 were built with 3-inch anti-aircraft gun Mk.III.

## Churchill Mk.IV(NA)



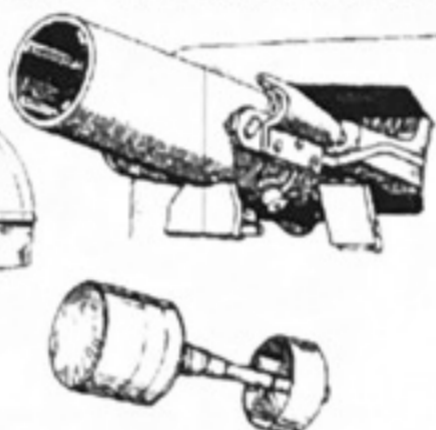
Retrofitted with 75 mm tank gun of M4 Sherman tank to provide better fire power. 120 were modified in maintenance facilities located in North Africa. Used in Italian Campaign.

## Churchill AVRE

Armored vehicle used by the Corps of Royal Engineers.

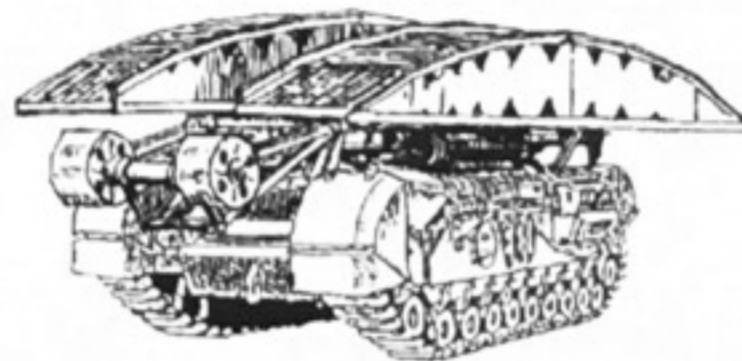


290 mm Petard Mortar



18 kg mortar rounds was used to demolish structures.

## Bridge Layer Tank

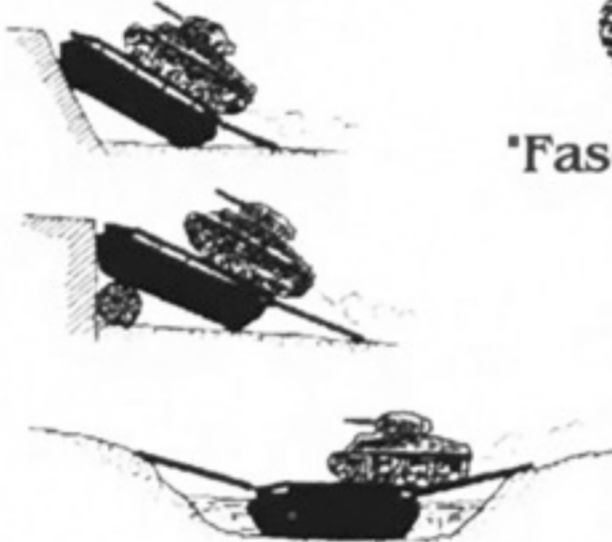


Mounted with 30 ft Tank Bridge No.2.

## 'ARK' Armored Ramp Carrier



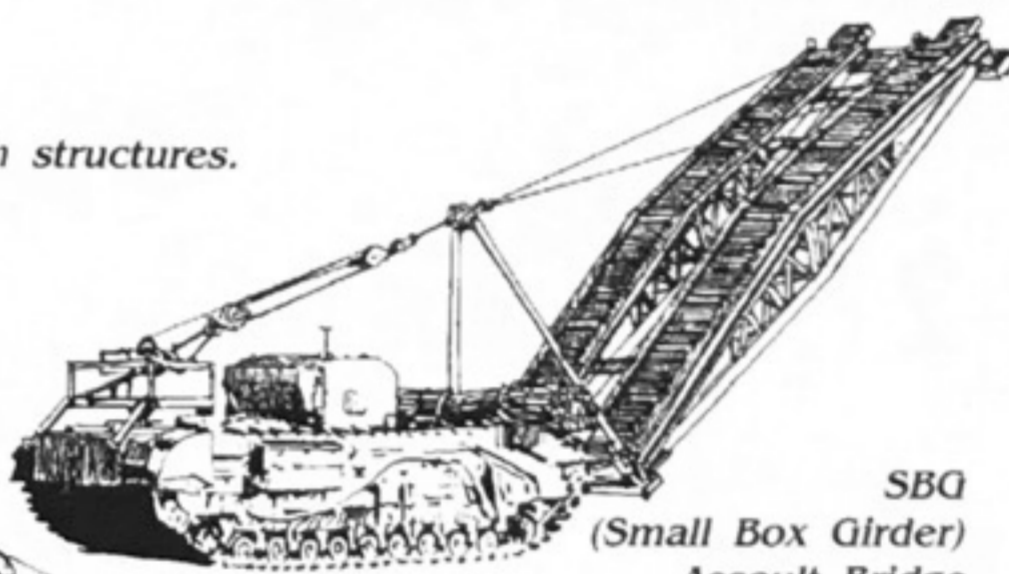
'ARK' Ramp Carrier Usage Examples



## 'Fascine'

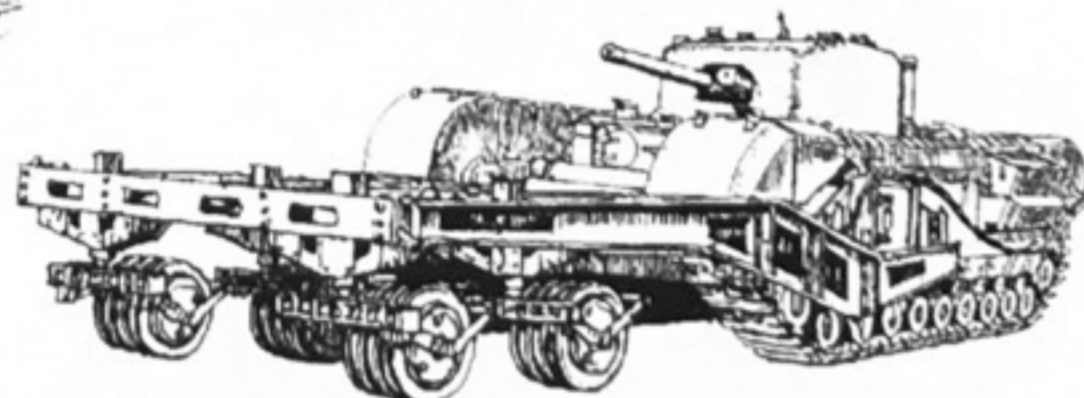
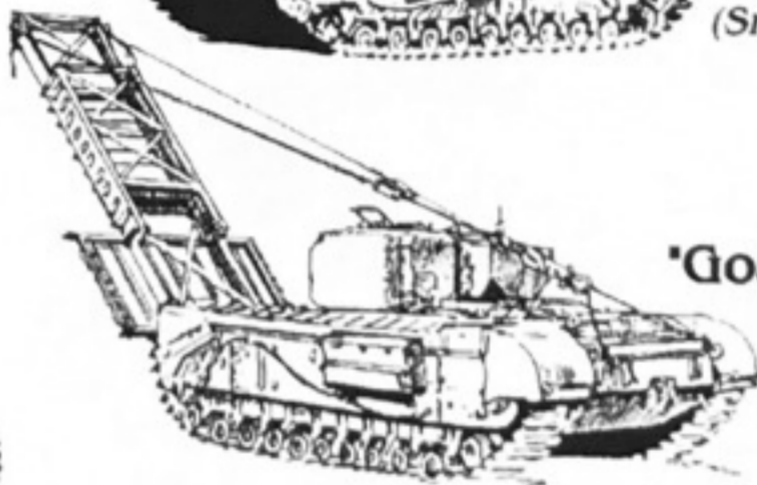


A bundle of wooden poles or rough brushwood tied together with wires was released to fill a ditch or form a step.



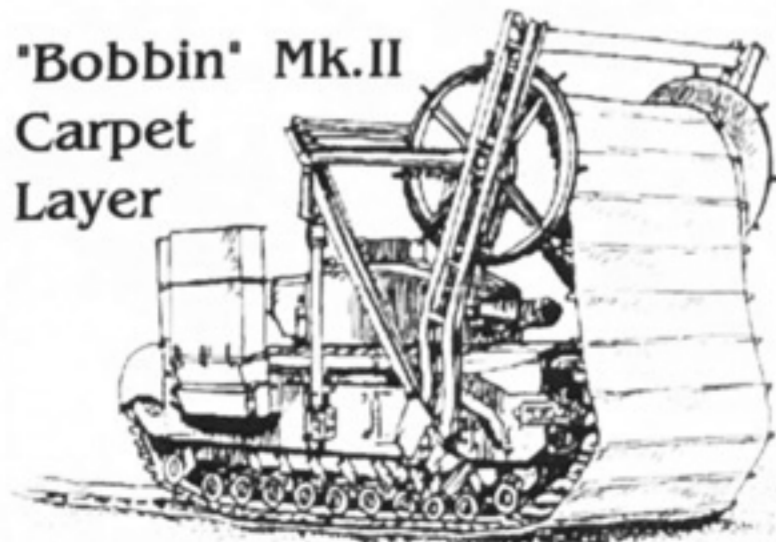
SBG (Small Box Girder) Assault Bridge

## 'Goat' Demolition Charge Layer



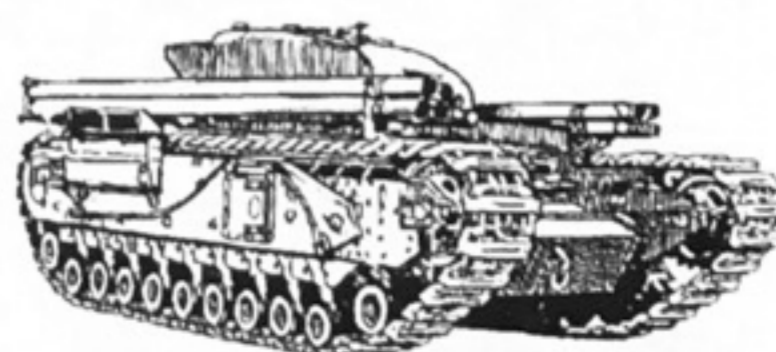
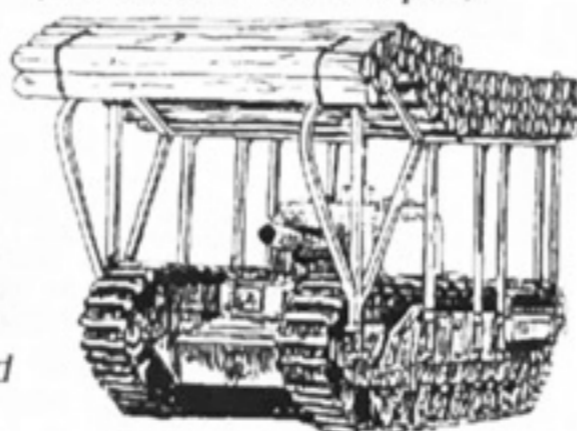
AMRCR Mine-clearing Roller

## 'Bobbin' Mk.II Carpet Layer



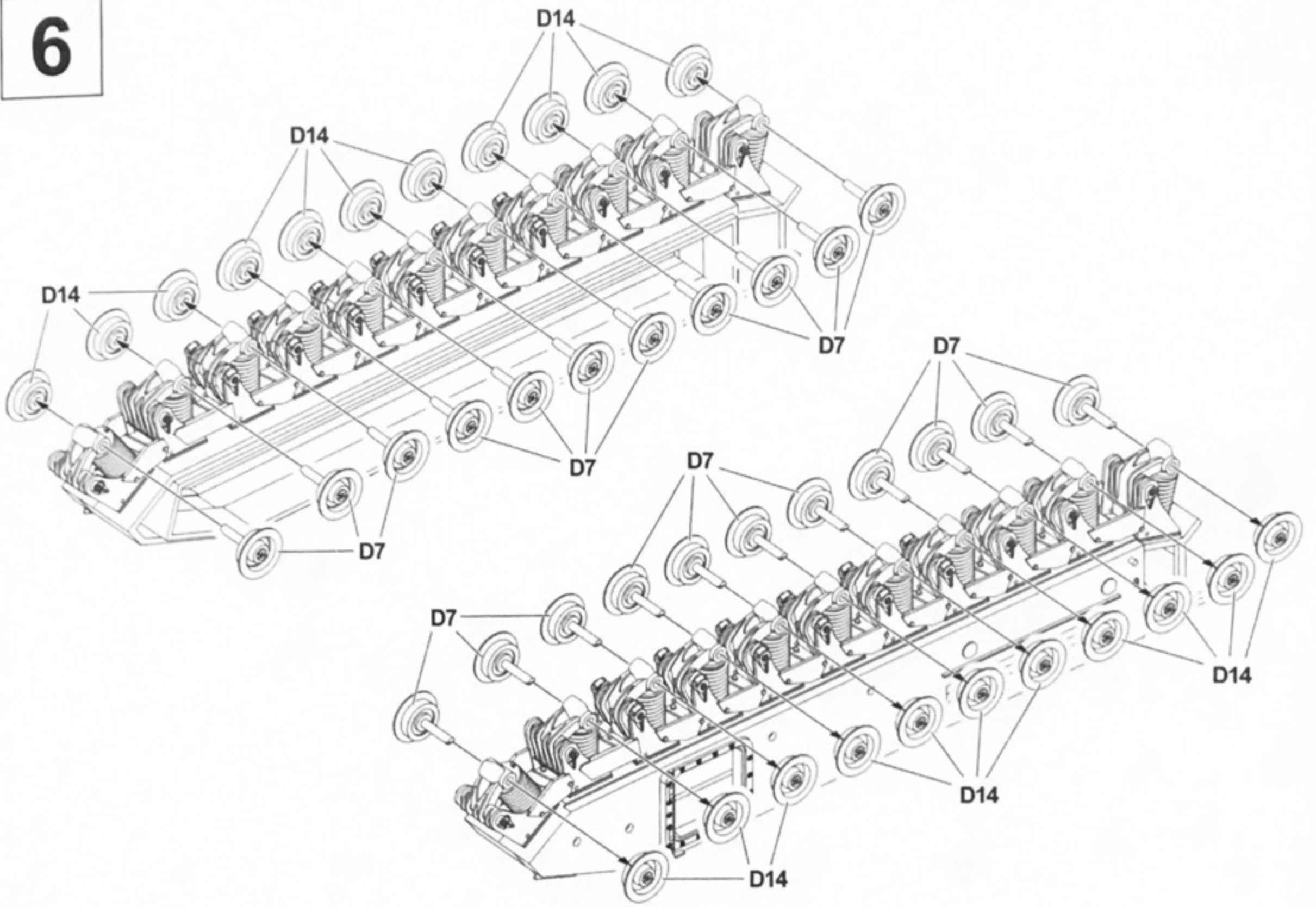
Canvas carpet was laid on soft ground to create a path for vehicles.

## Log Carpet Layer (Wooden Pole Carpet)

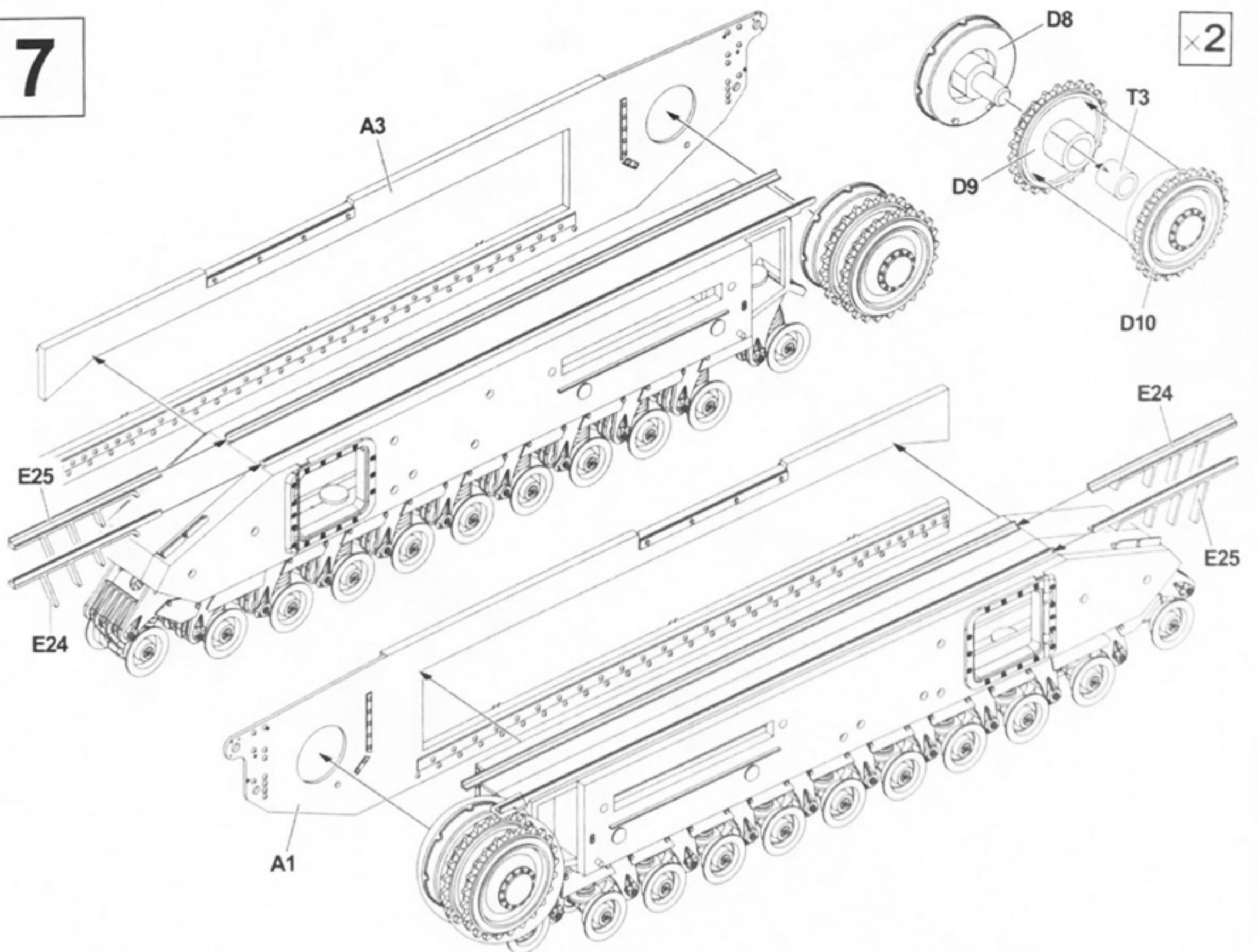


'Snake' Mine-clearing Line Charge Device Carrier

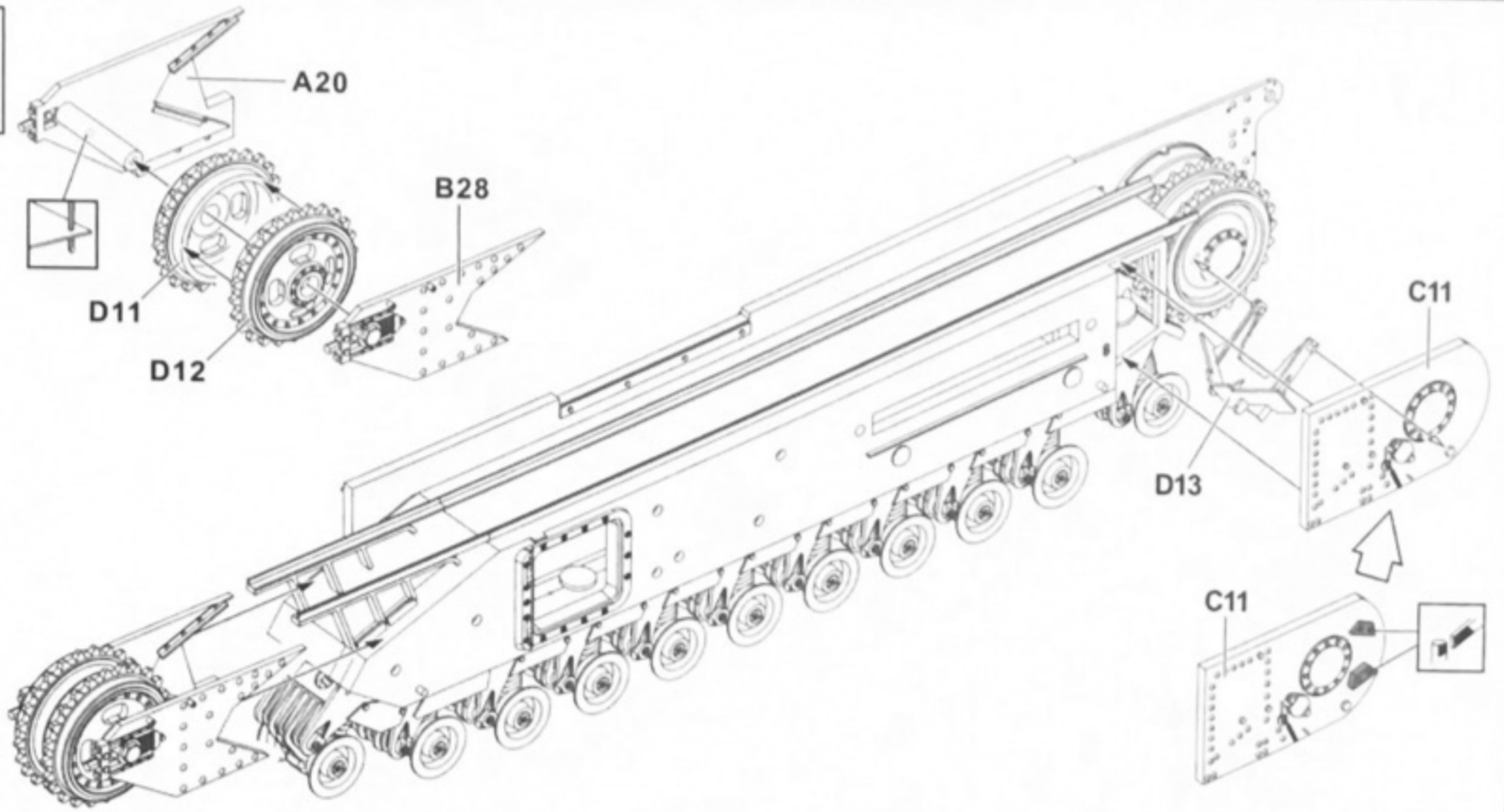
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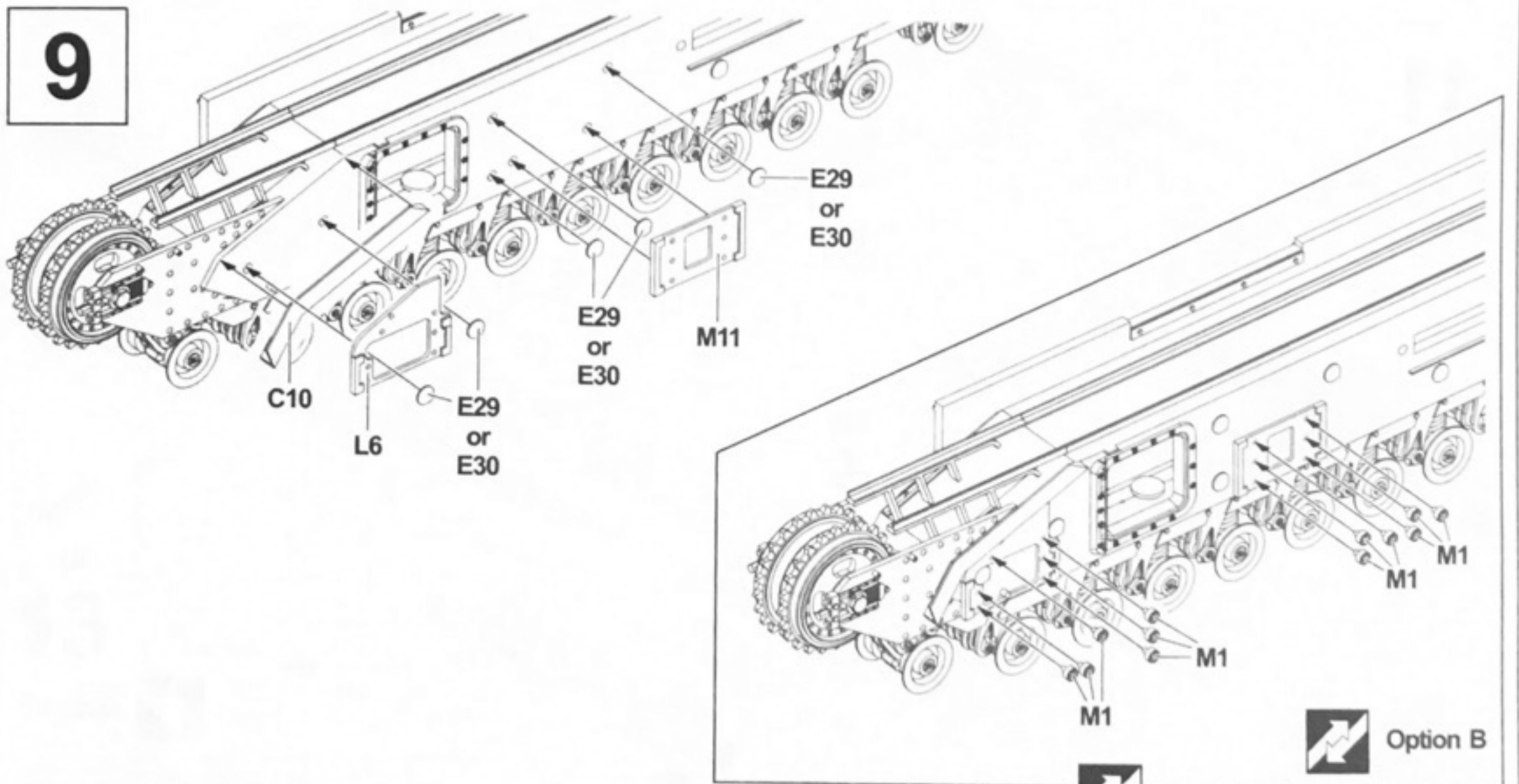
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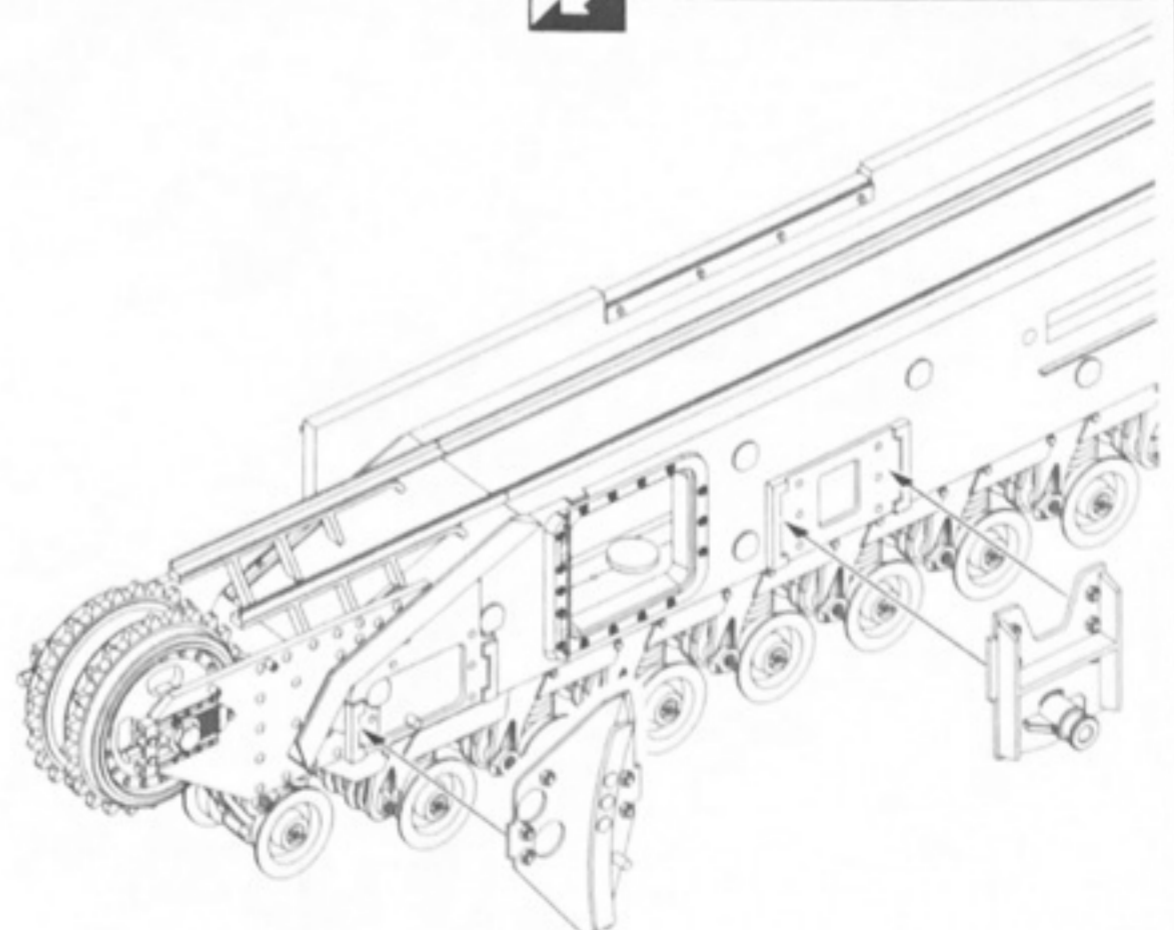
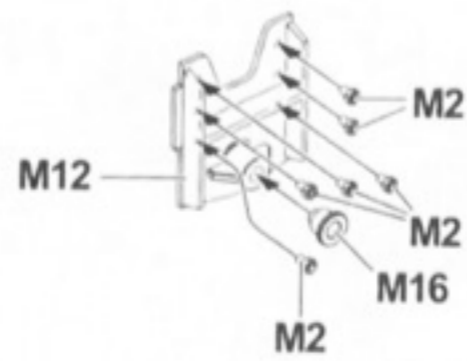
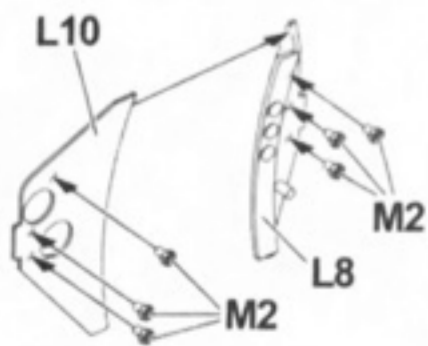
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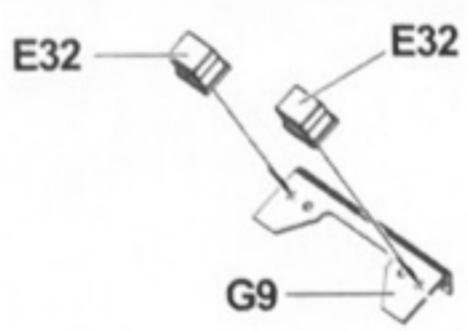
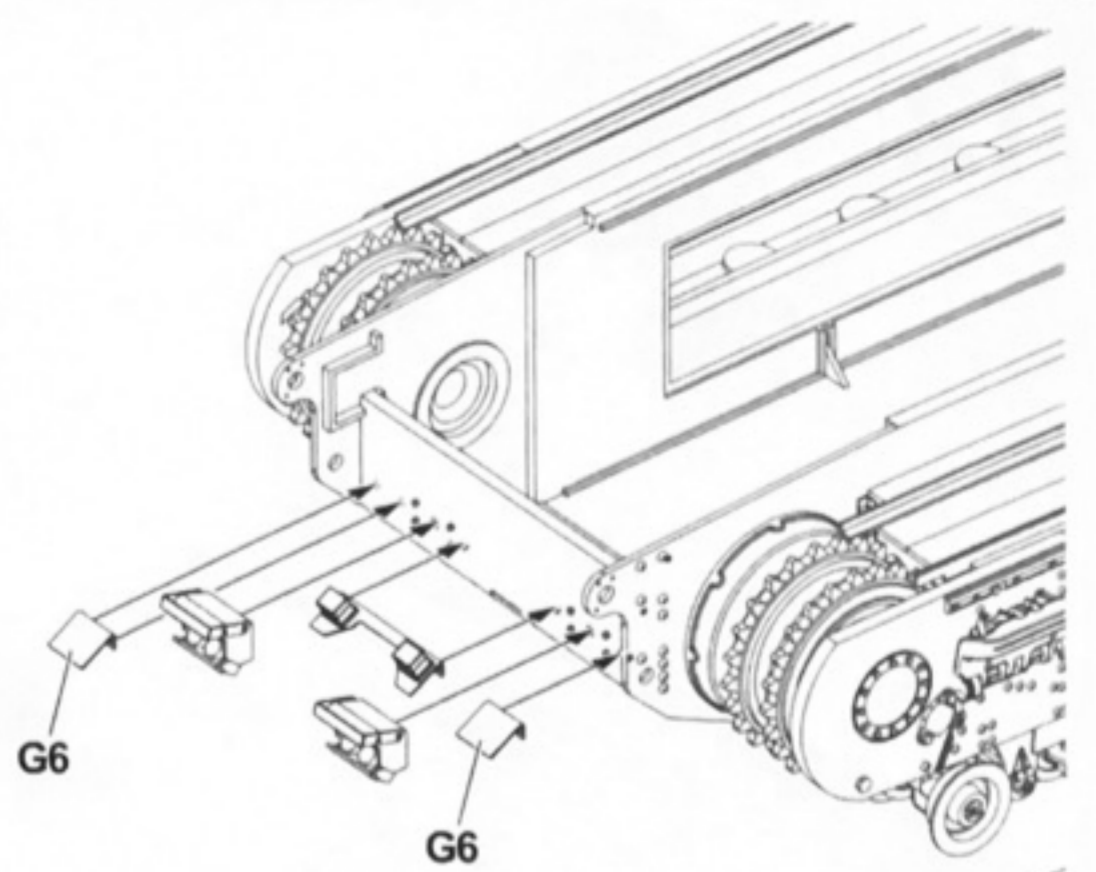
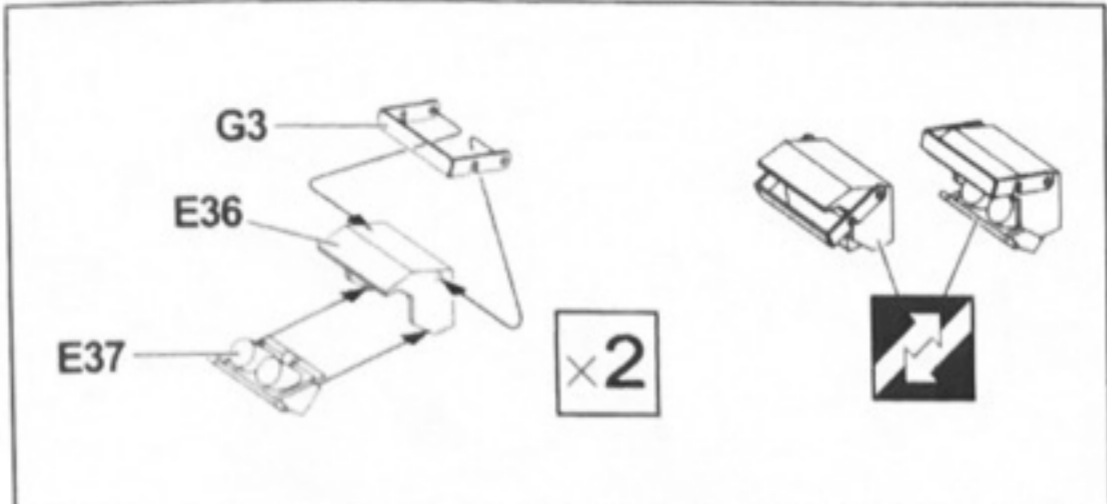
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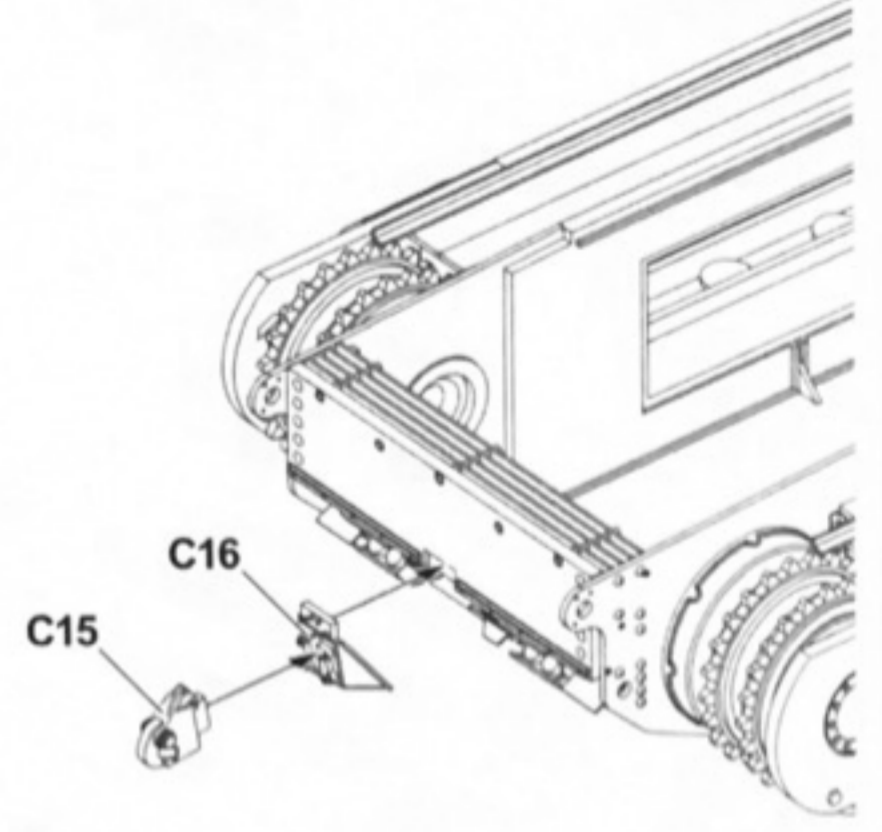
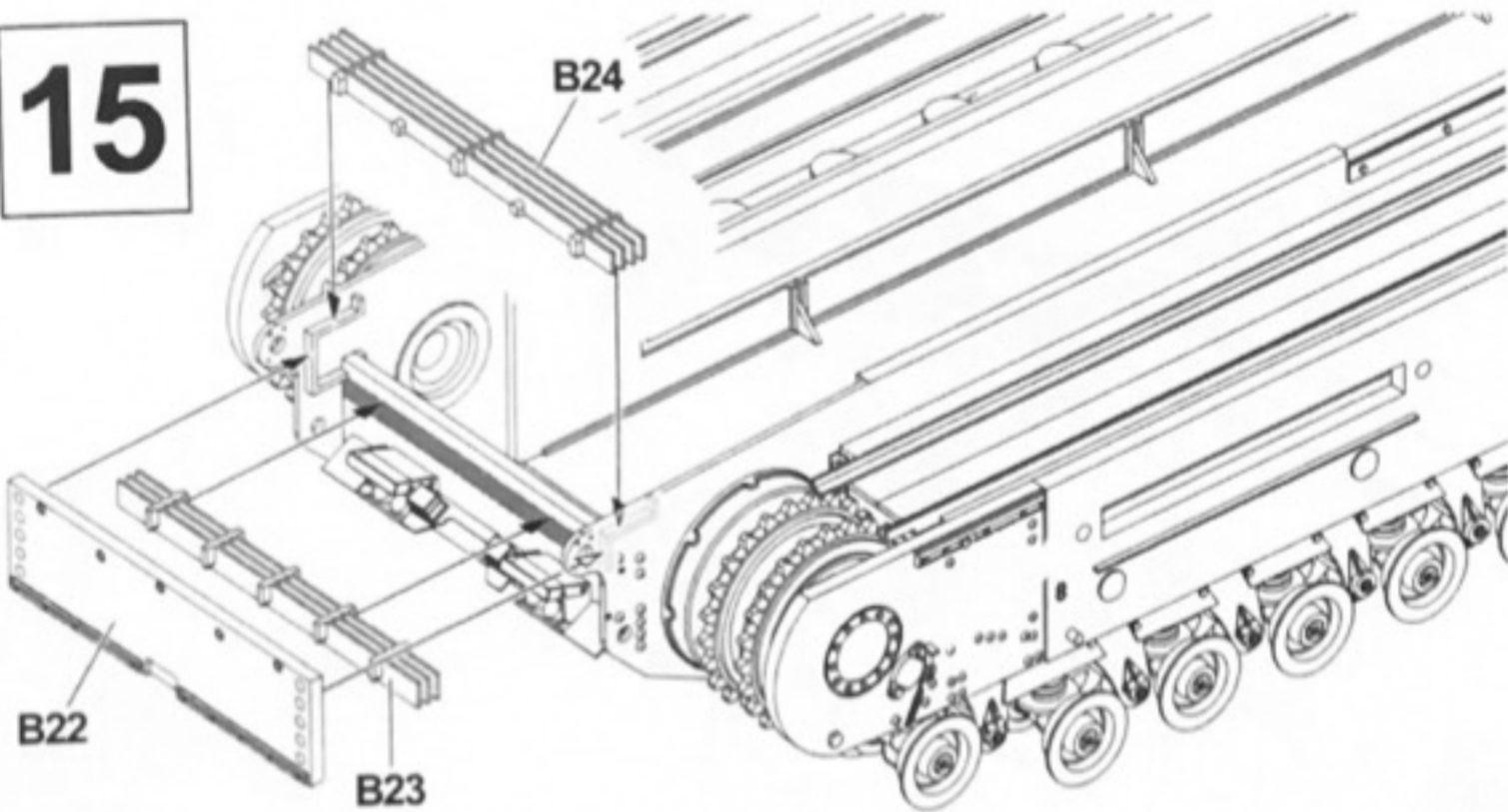

 Option A  
 Option C



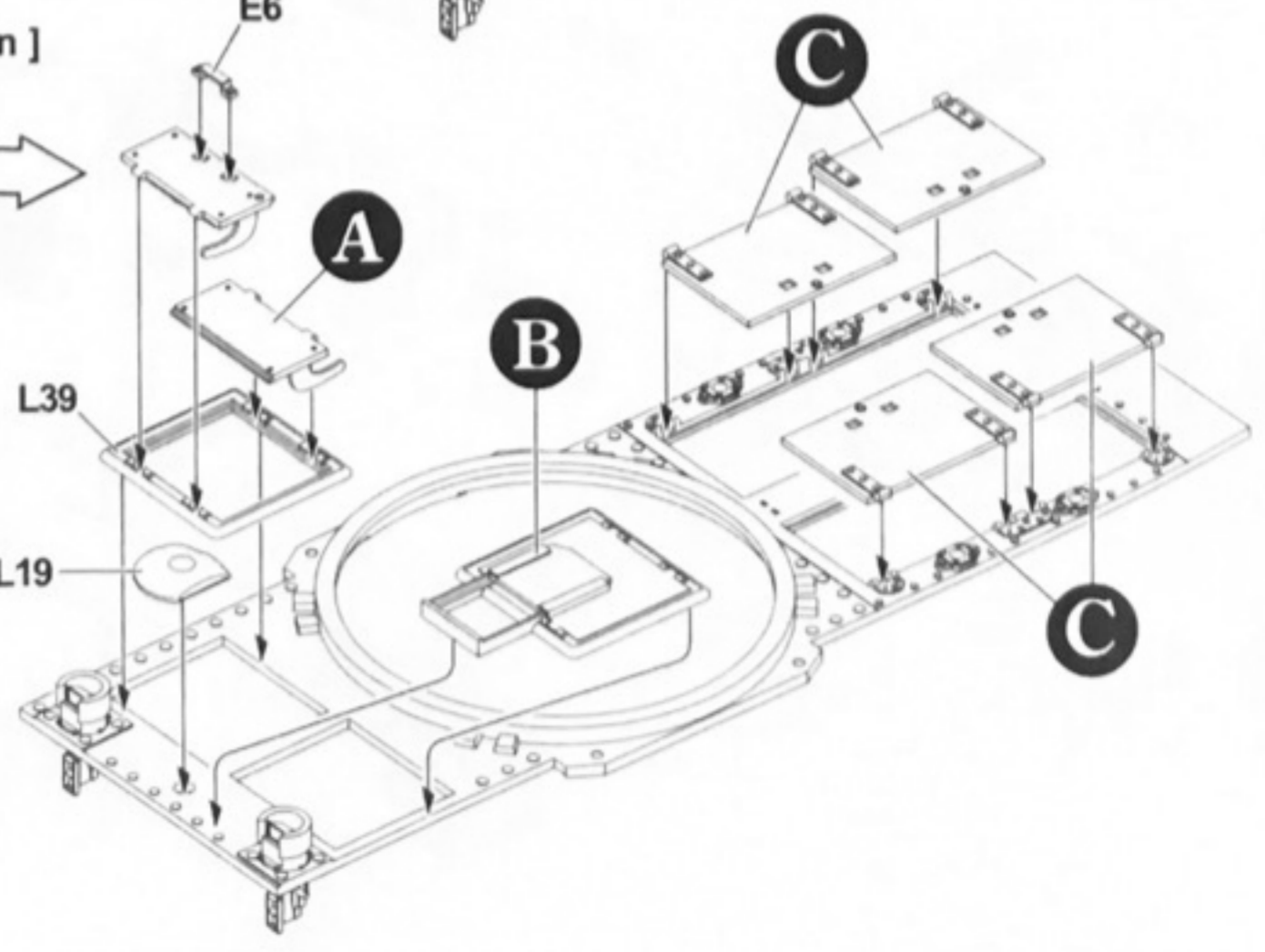
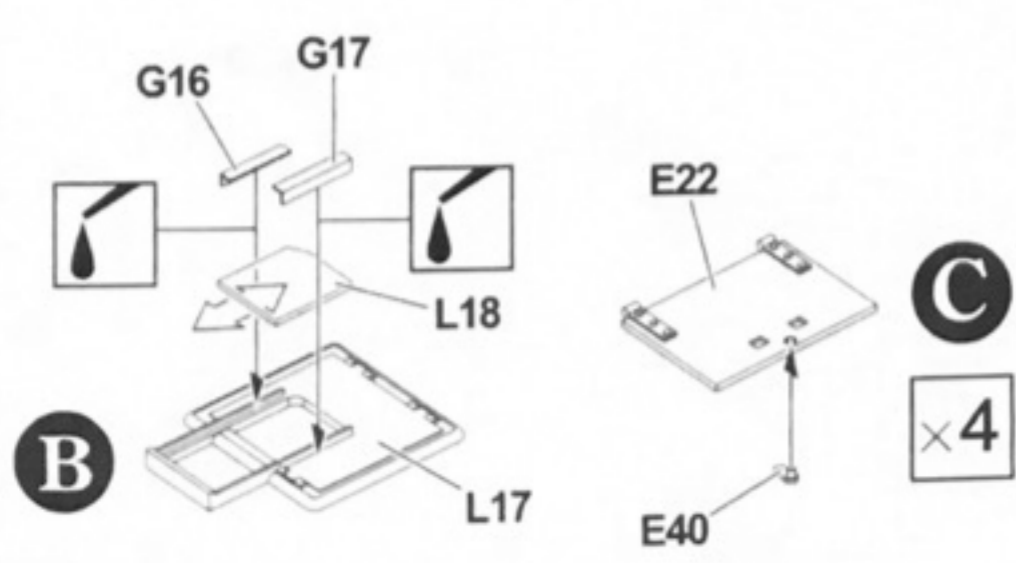
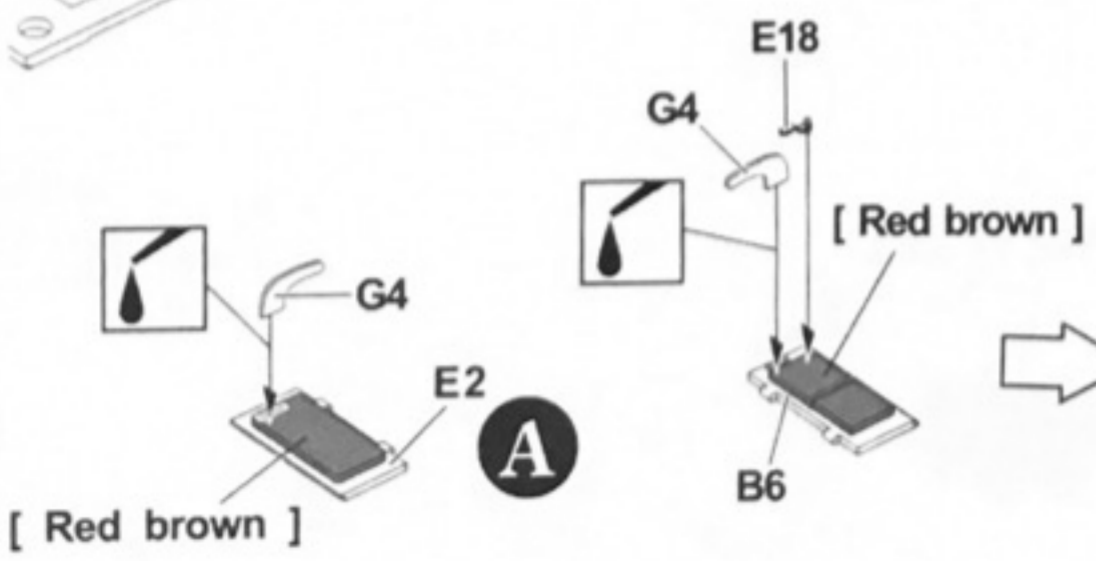
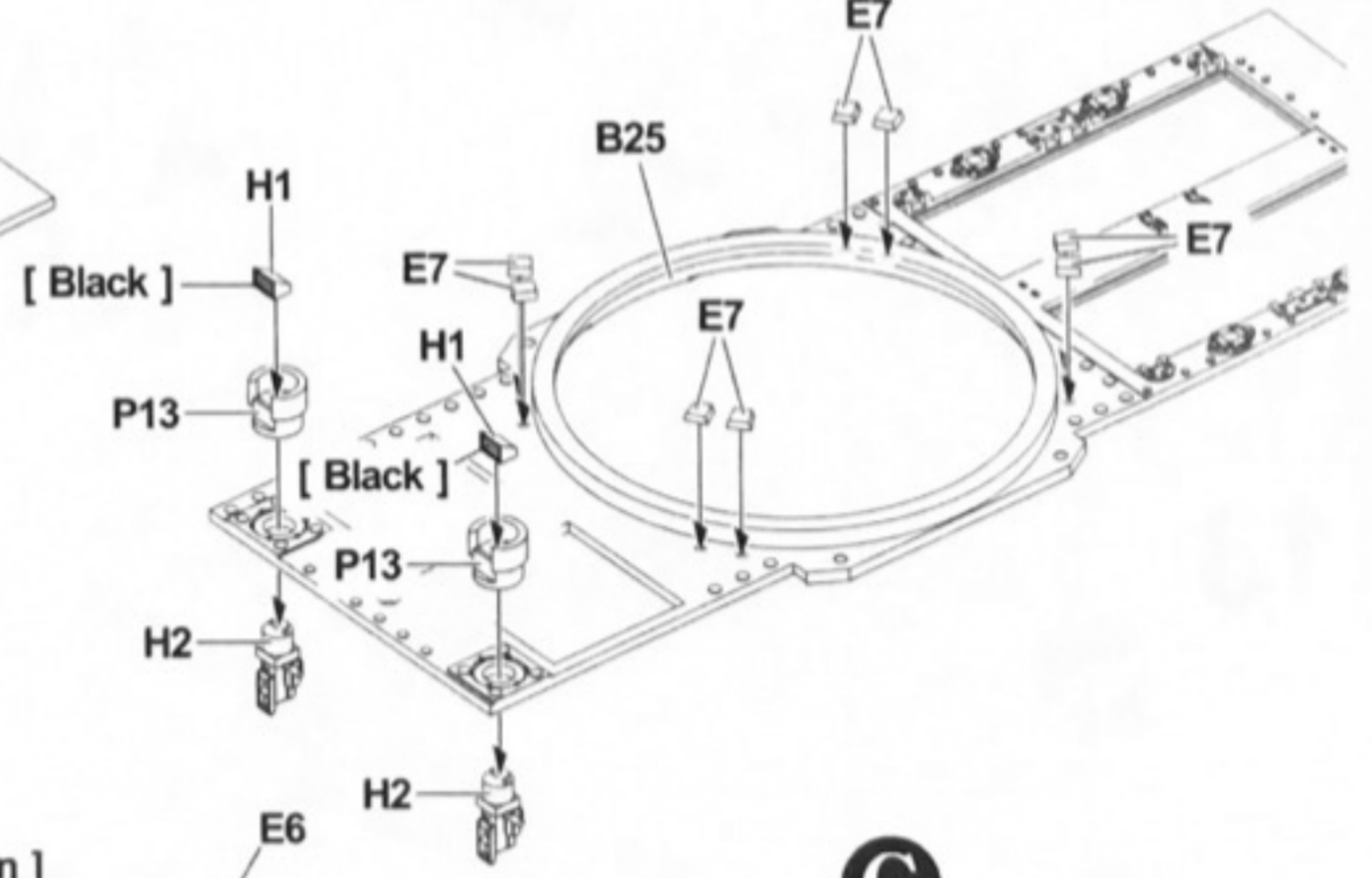
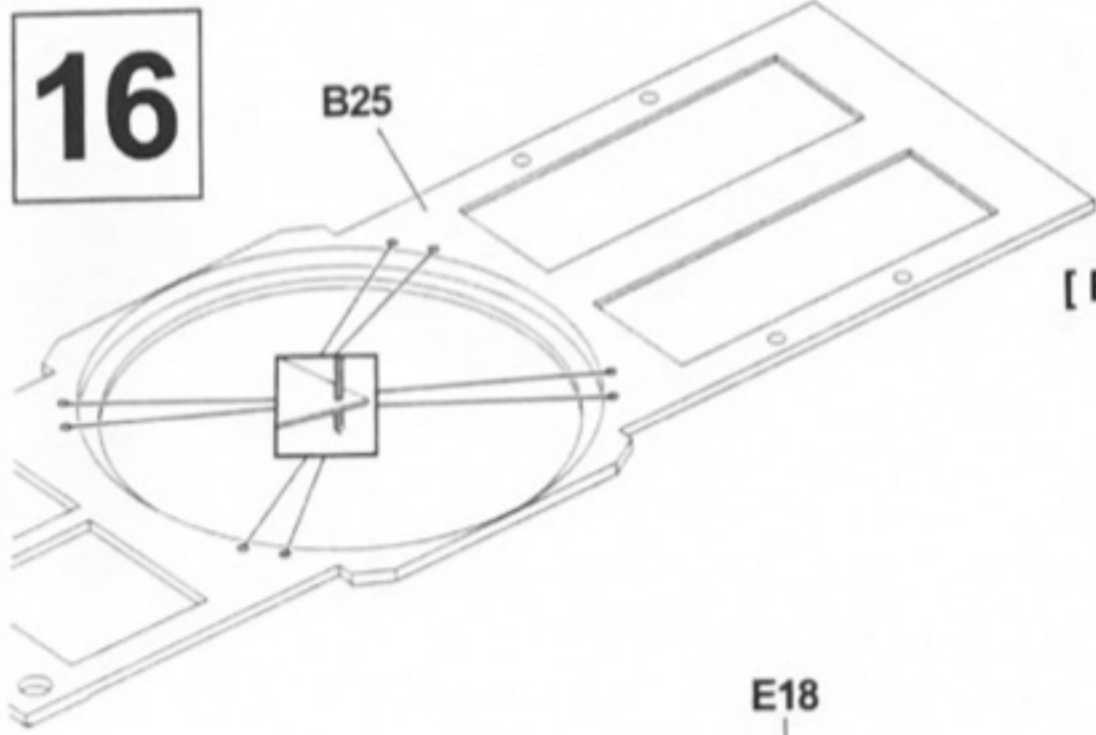
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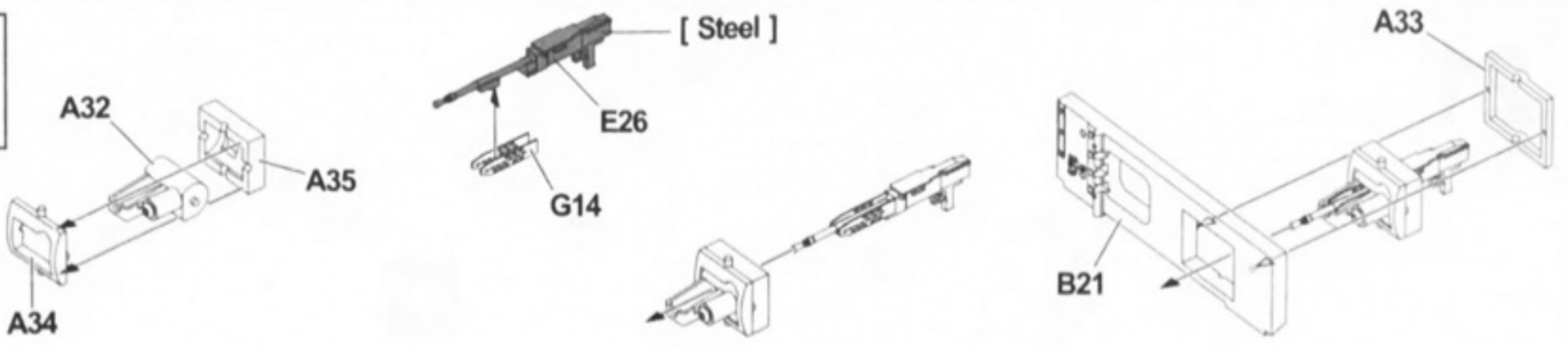
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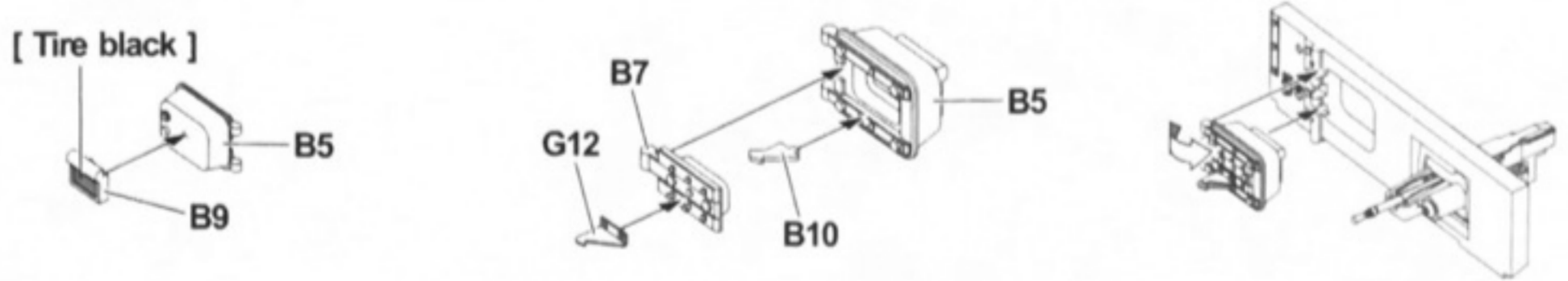
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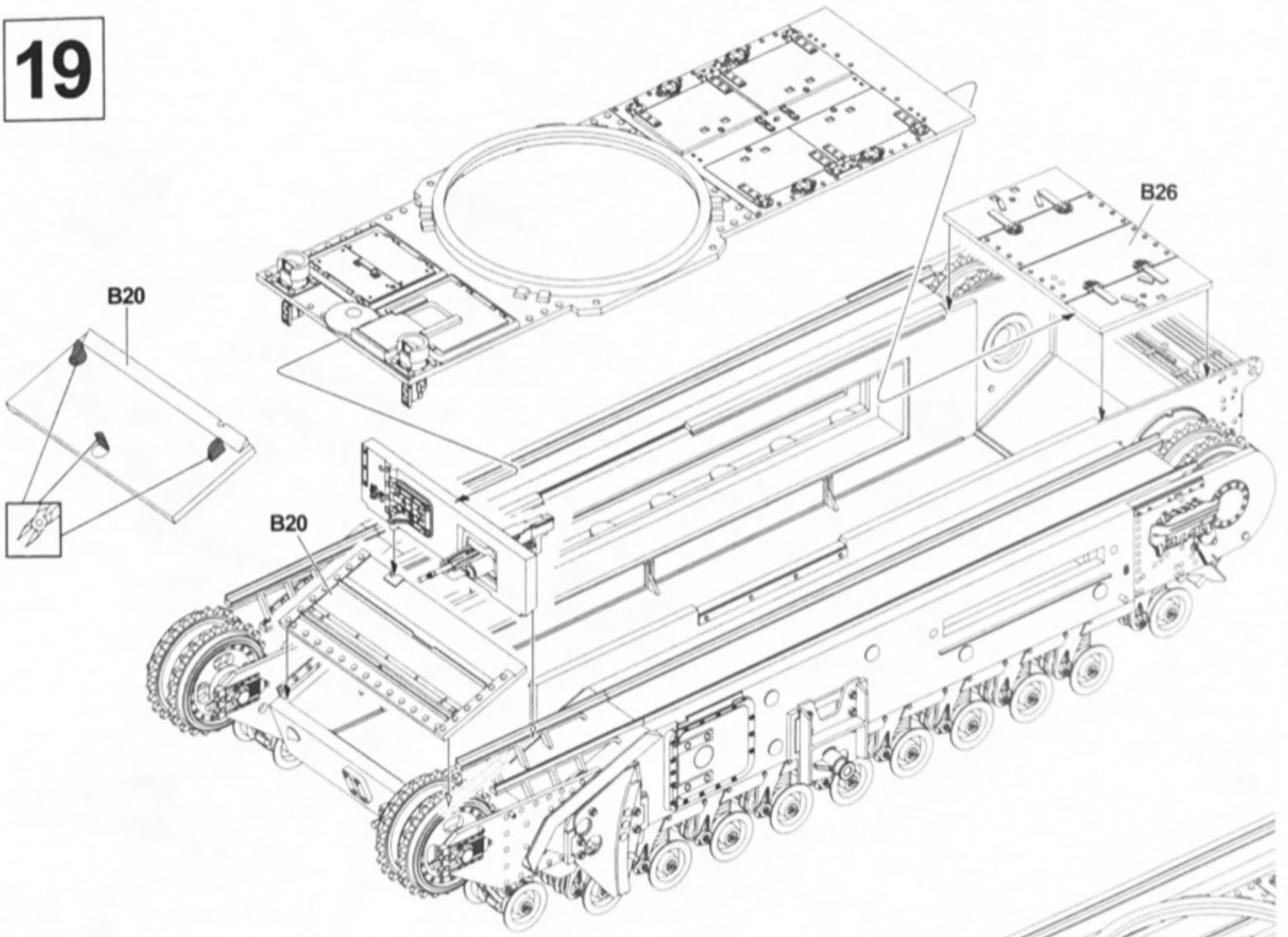
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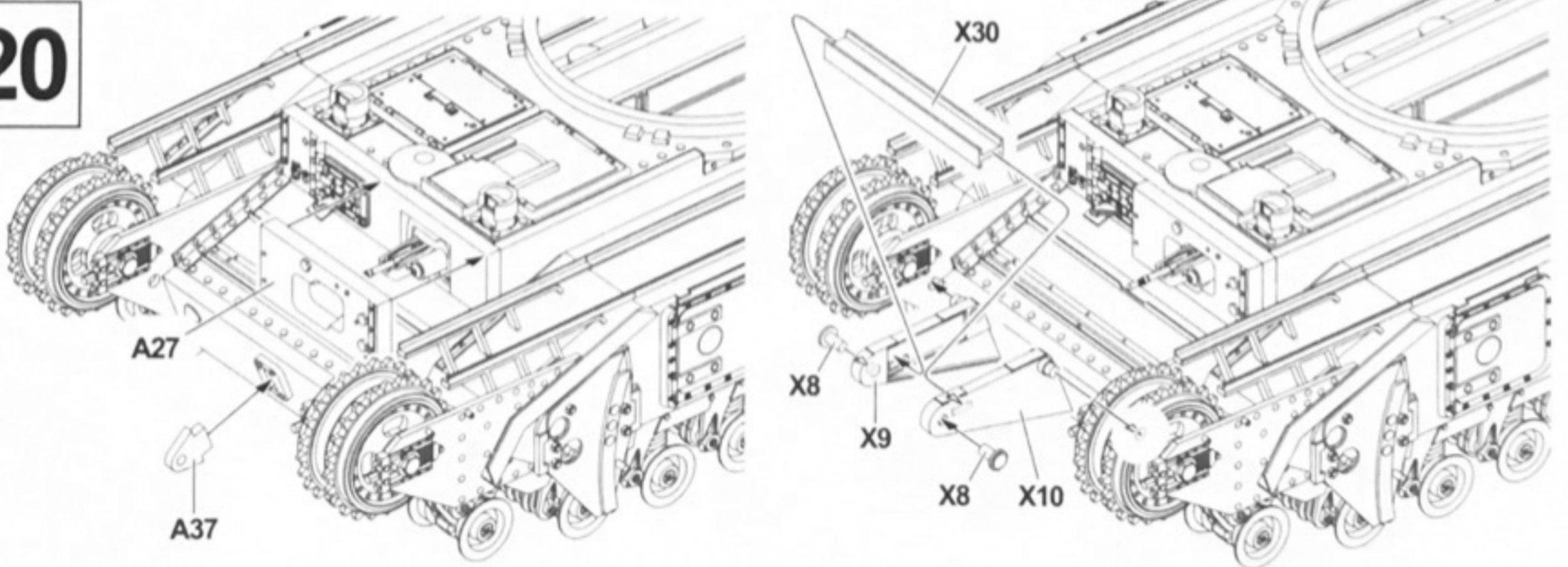
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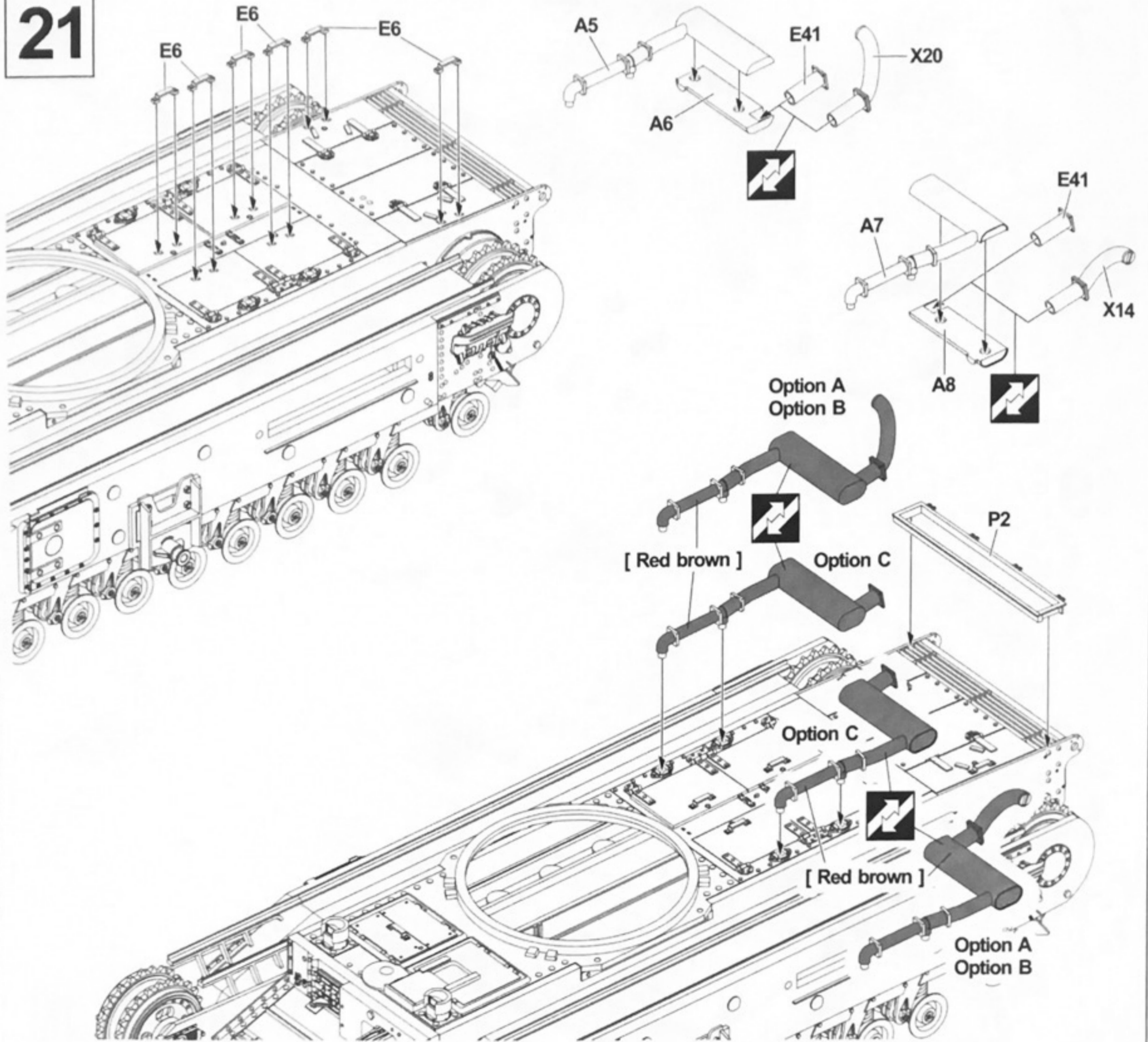
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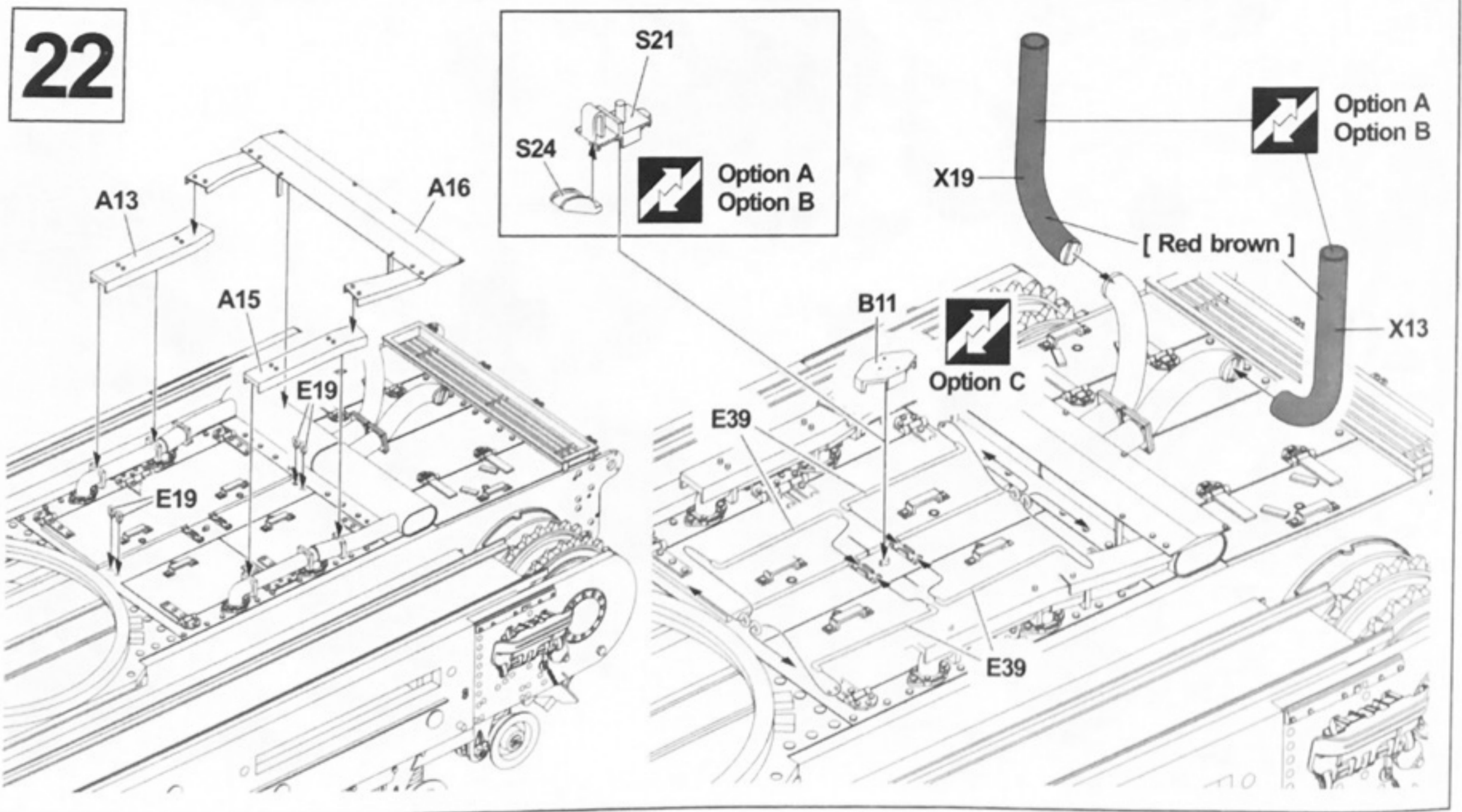
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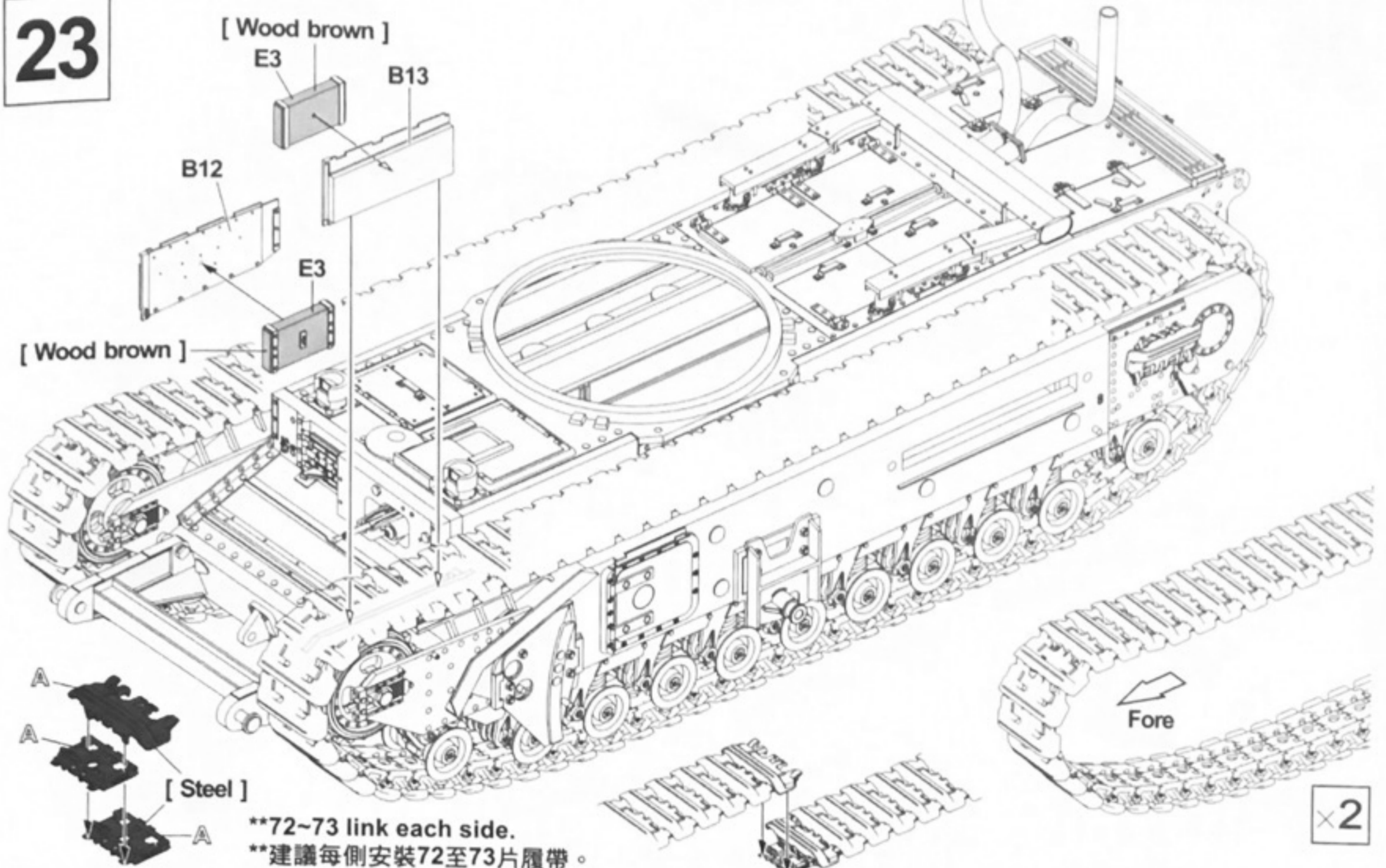


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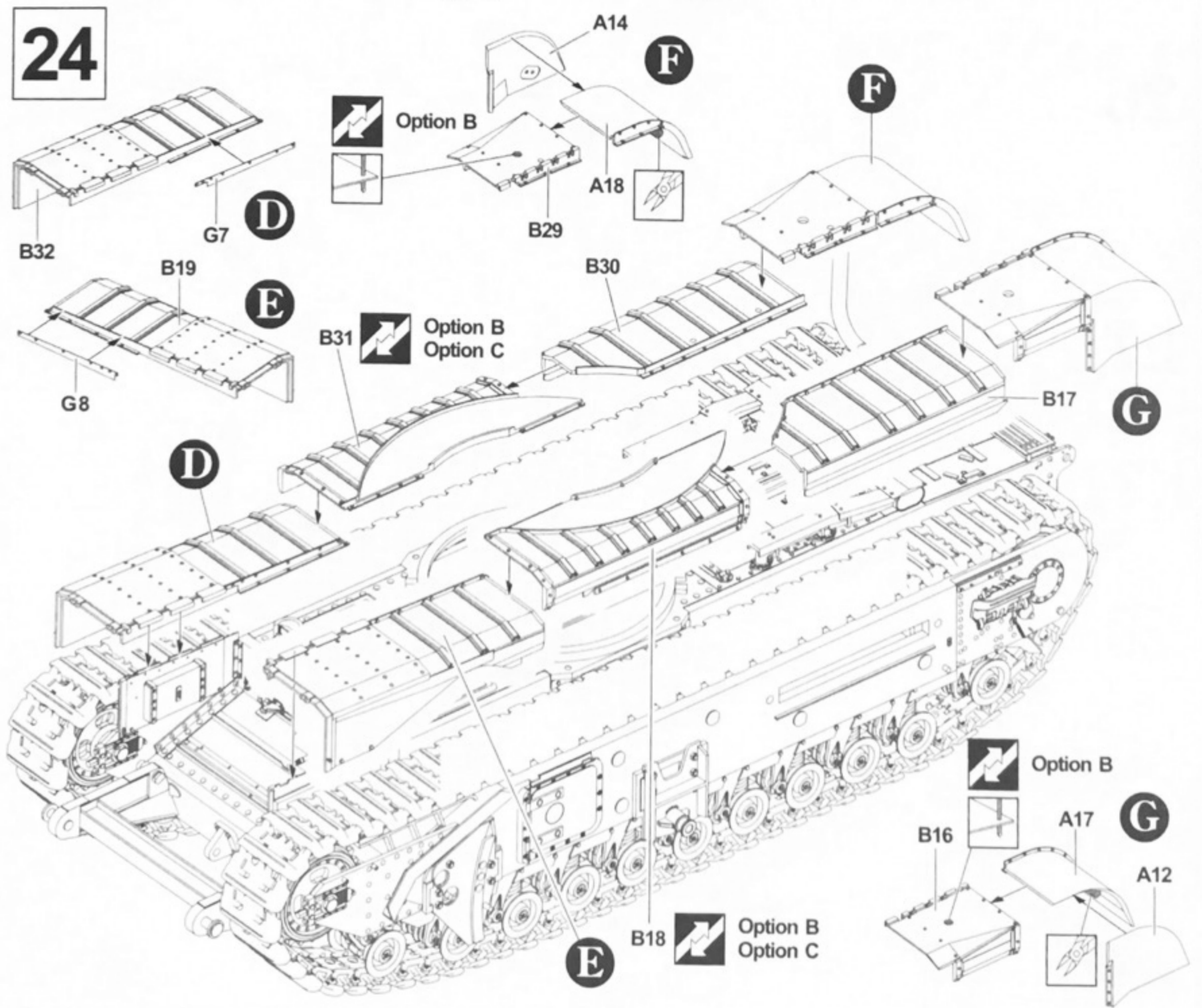




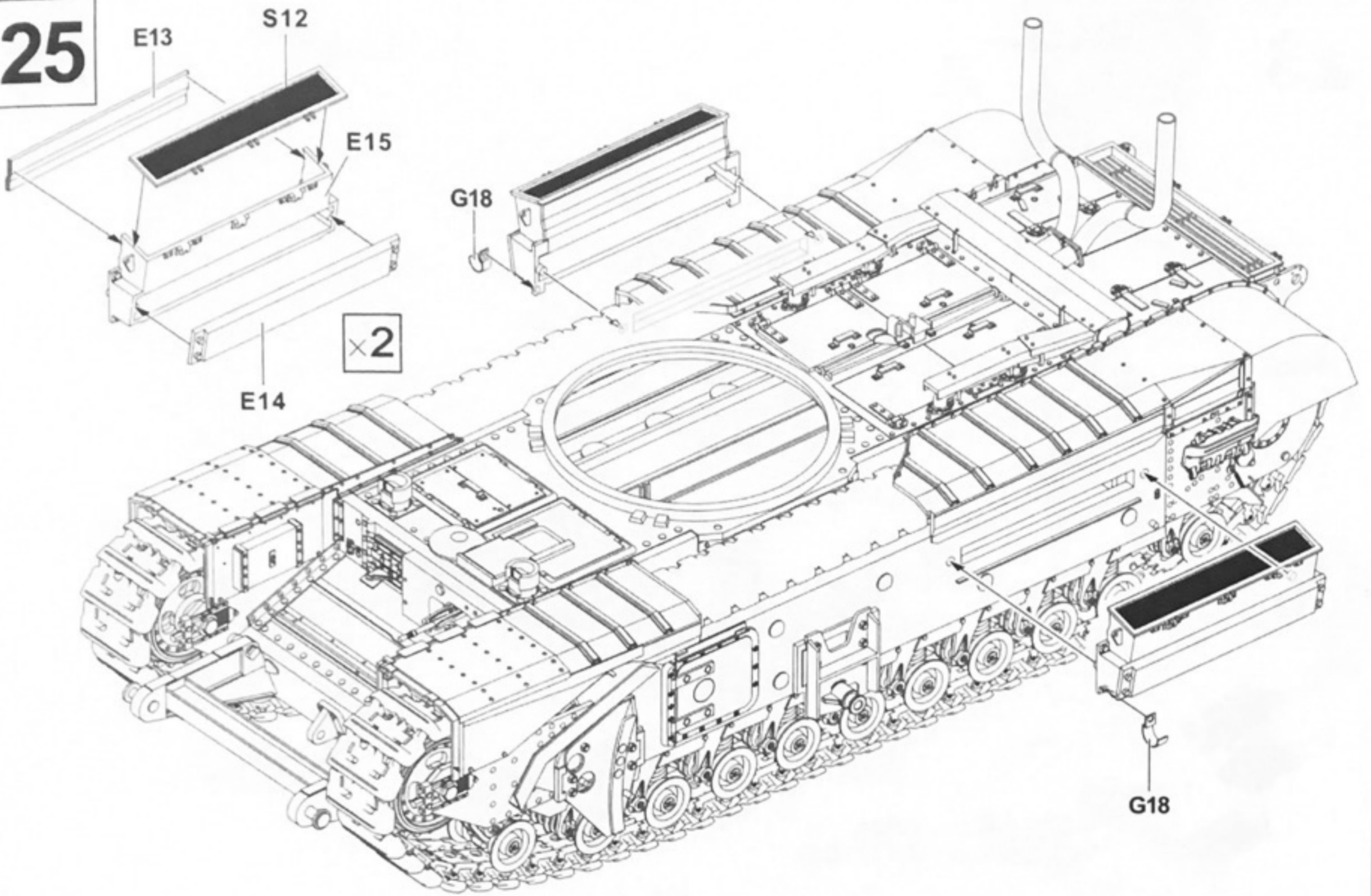
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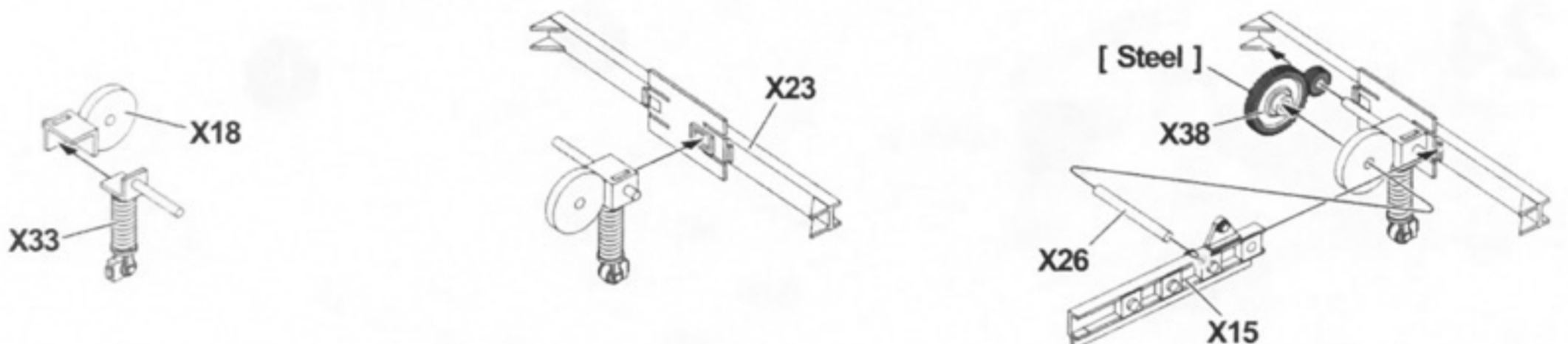
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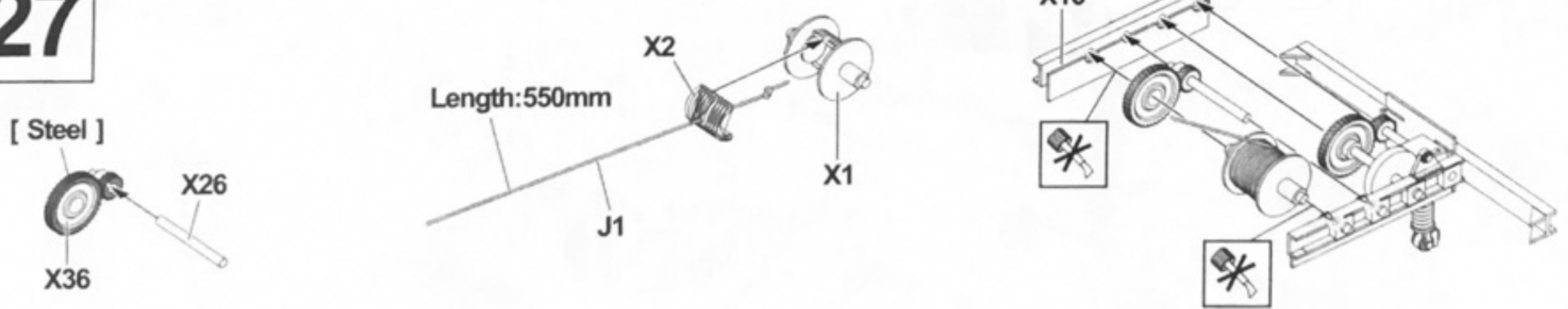
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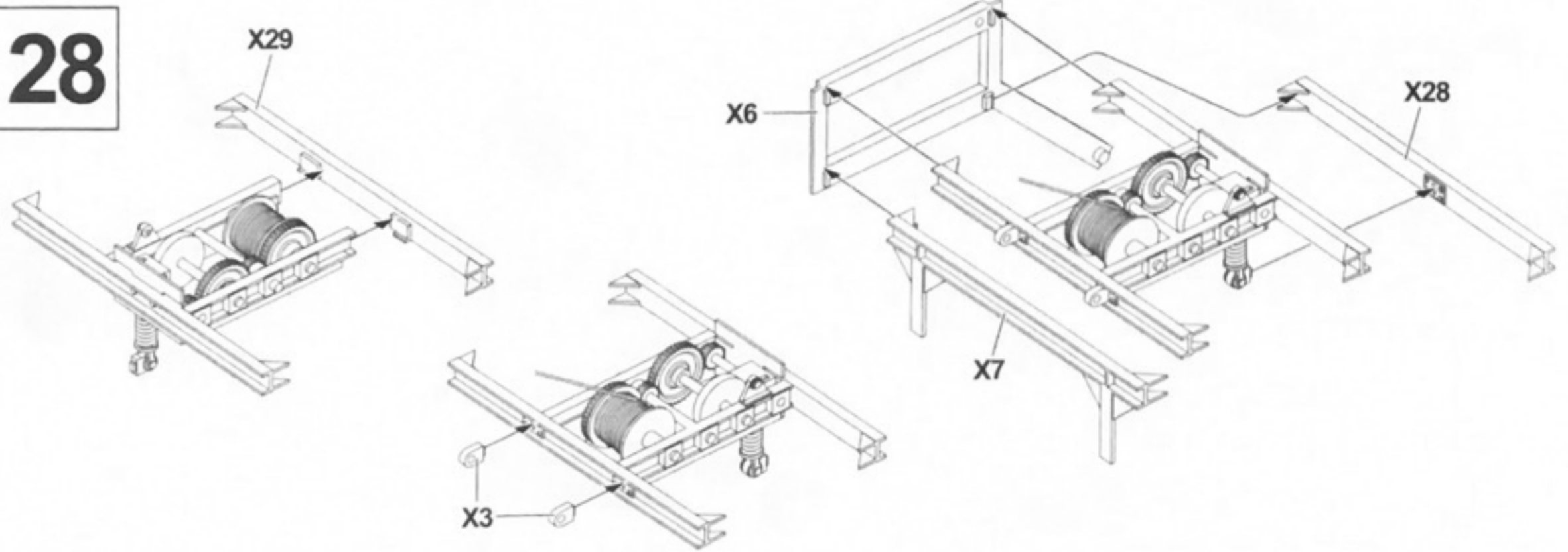
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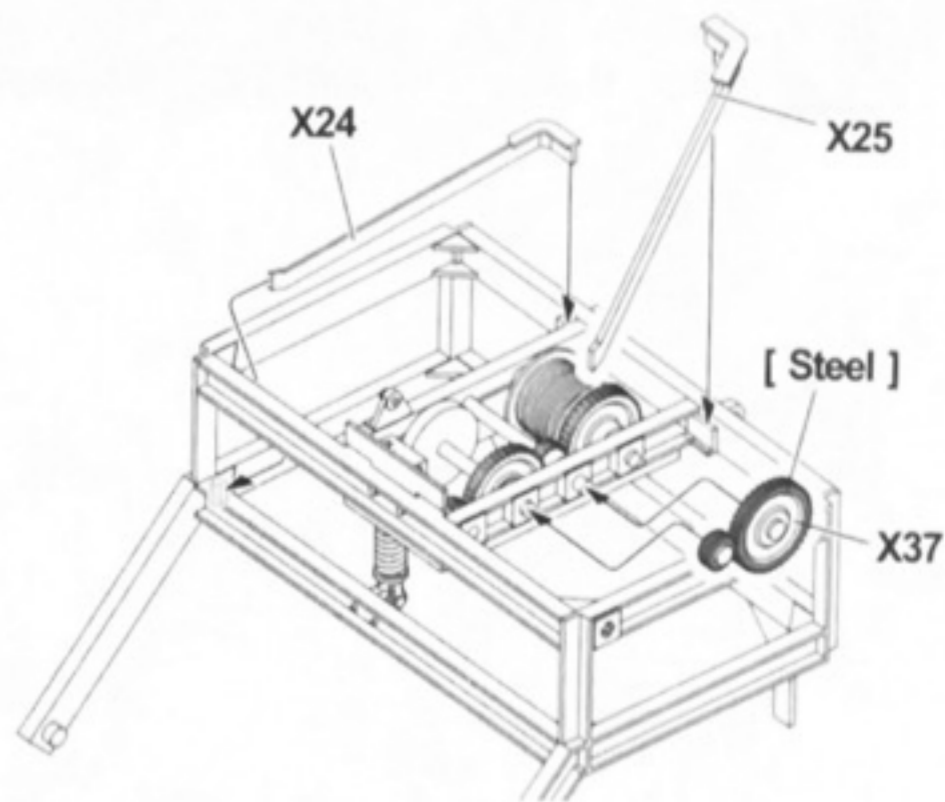
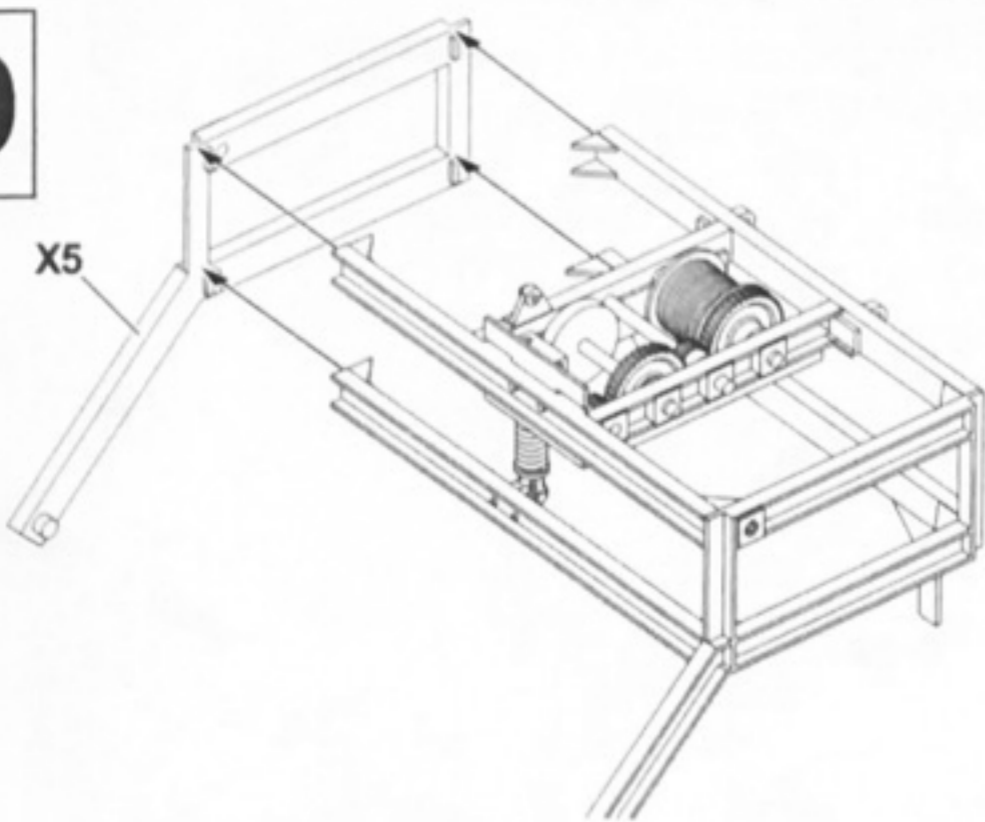
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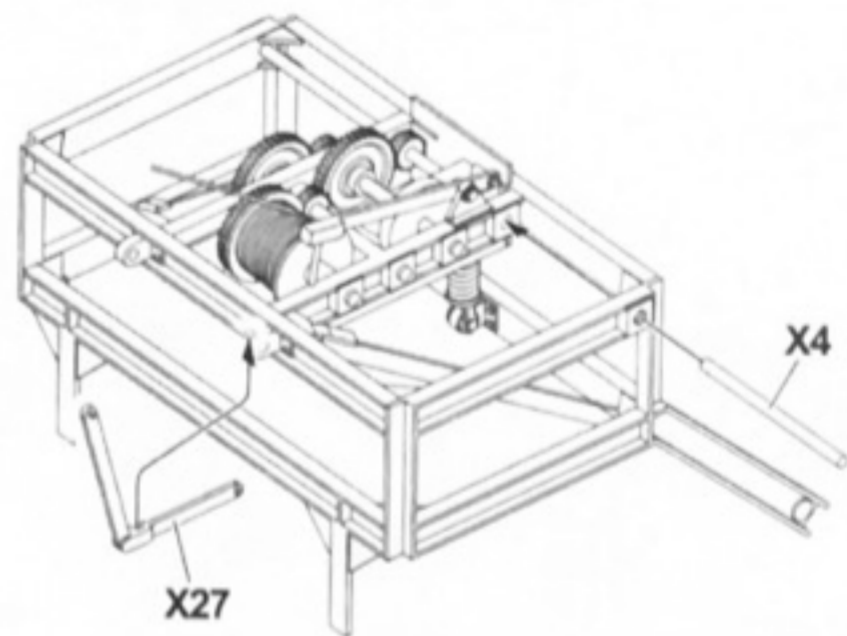
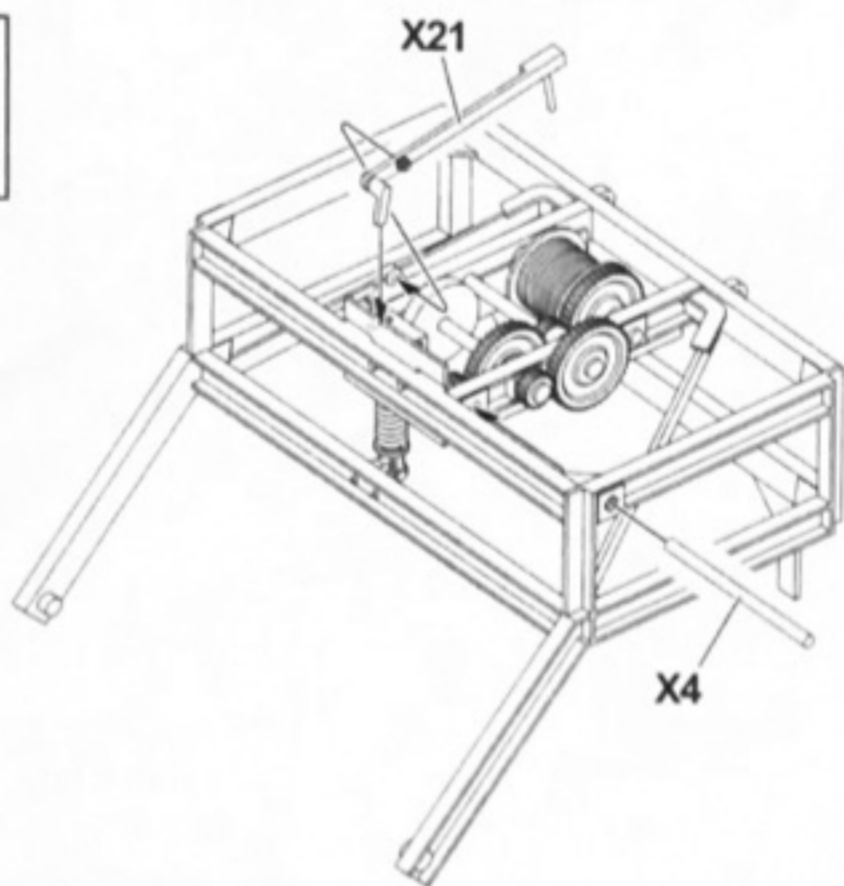
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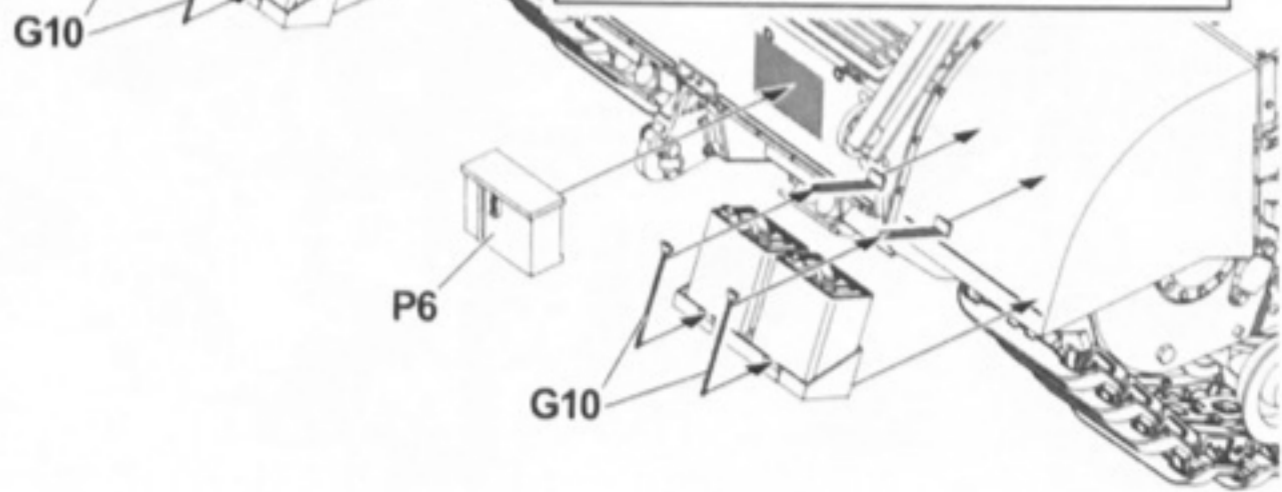
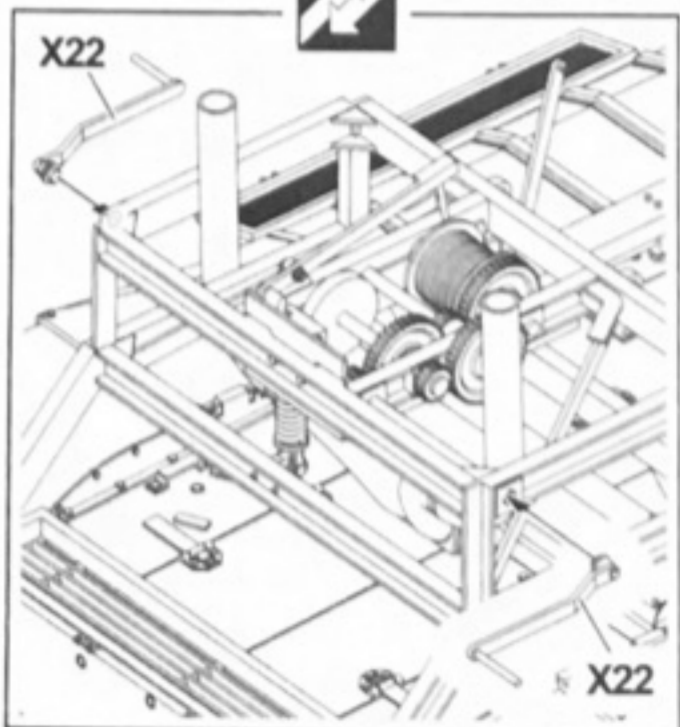
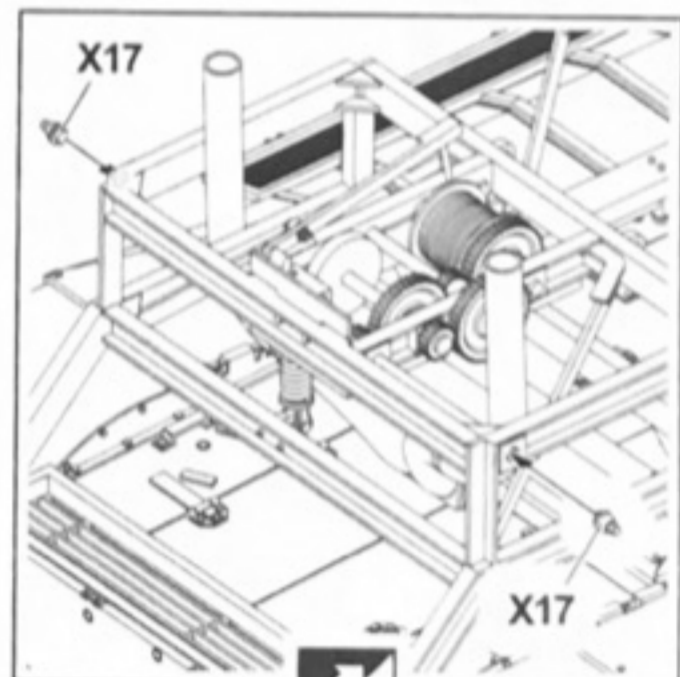
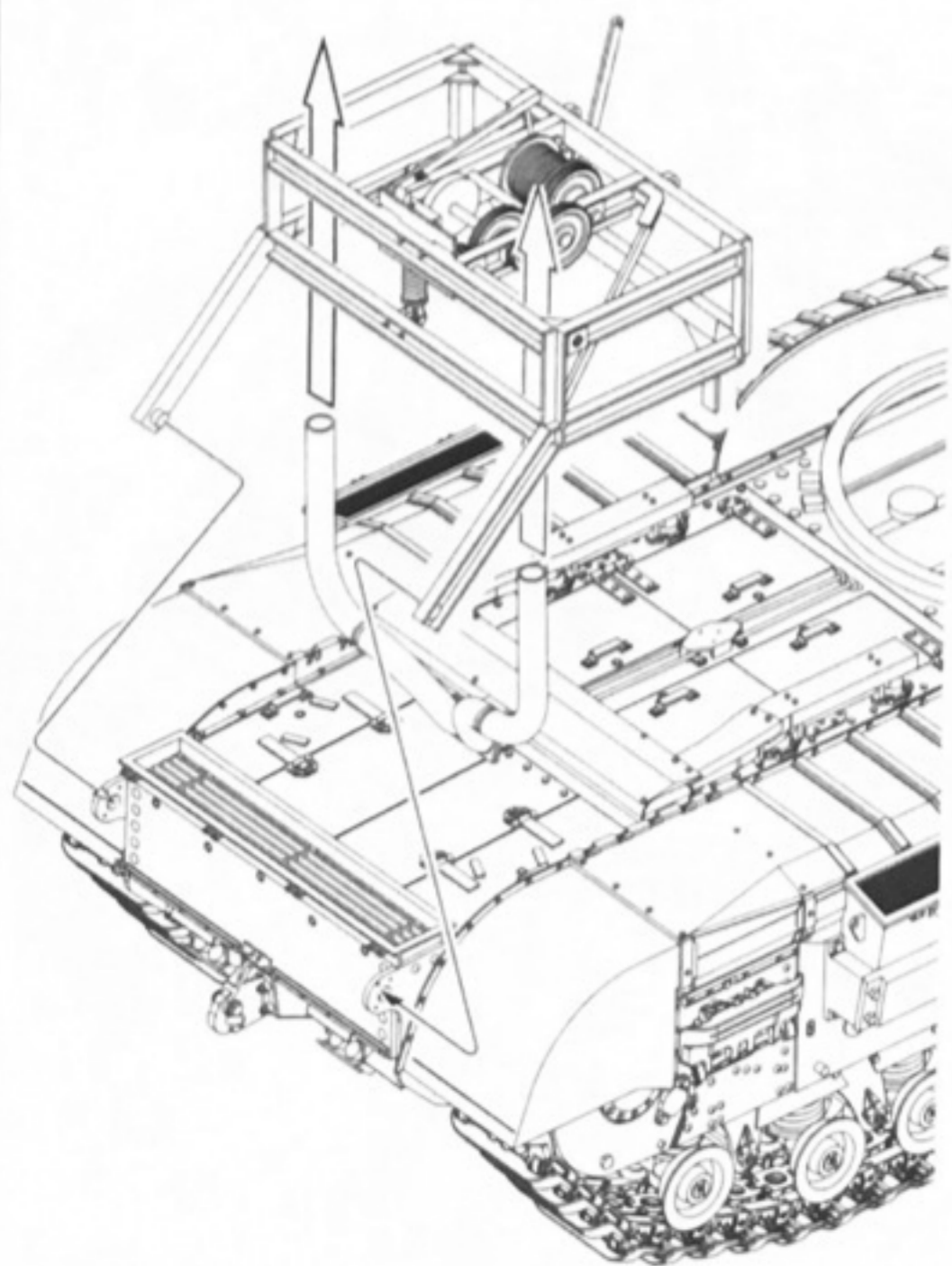
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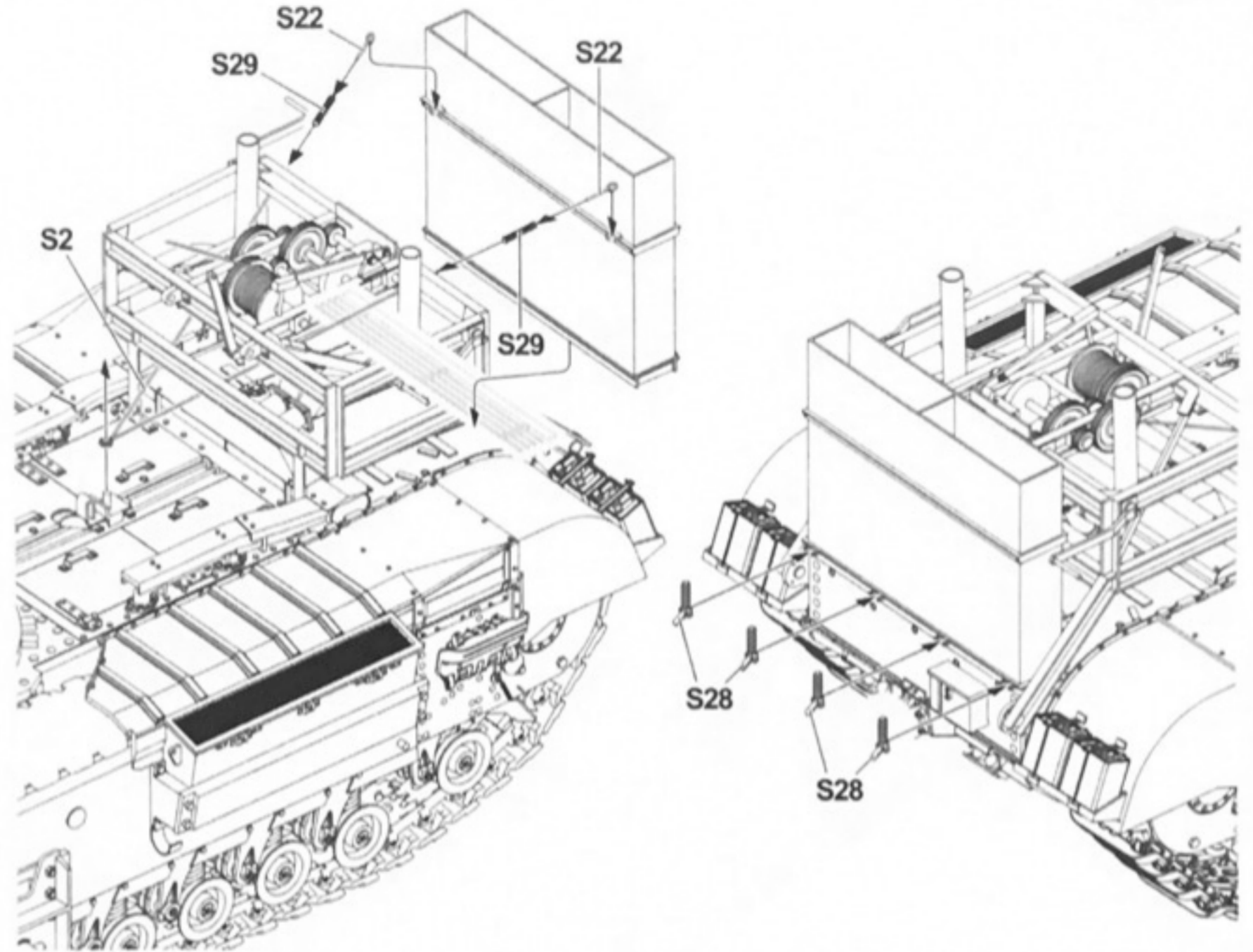
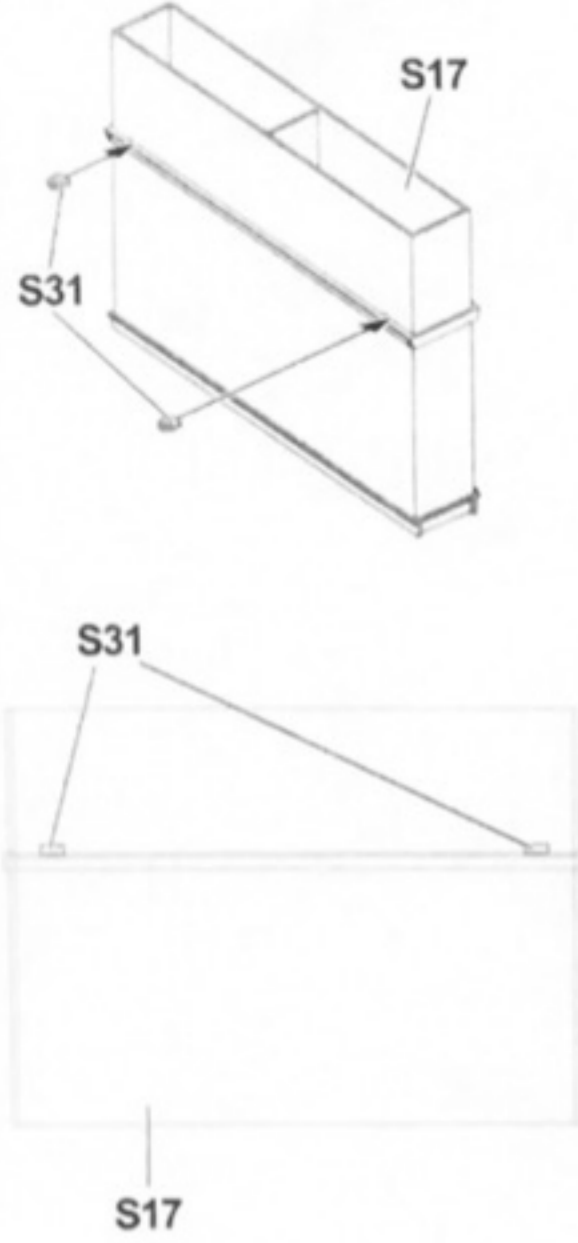
# 32



Option A  
Option B



please trim the length of S2 moderately and then assemble it.  
請酌量修剪零件S2的長度後再完成組裝



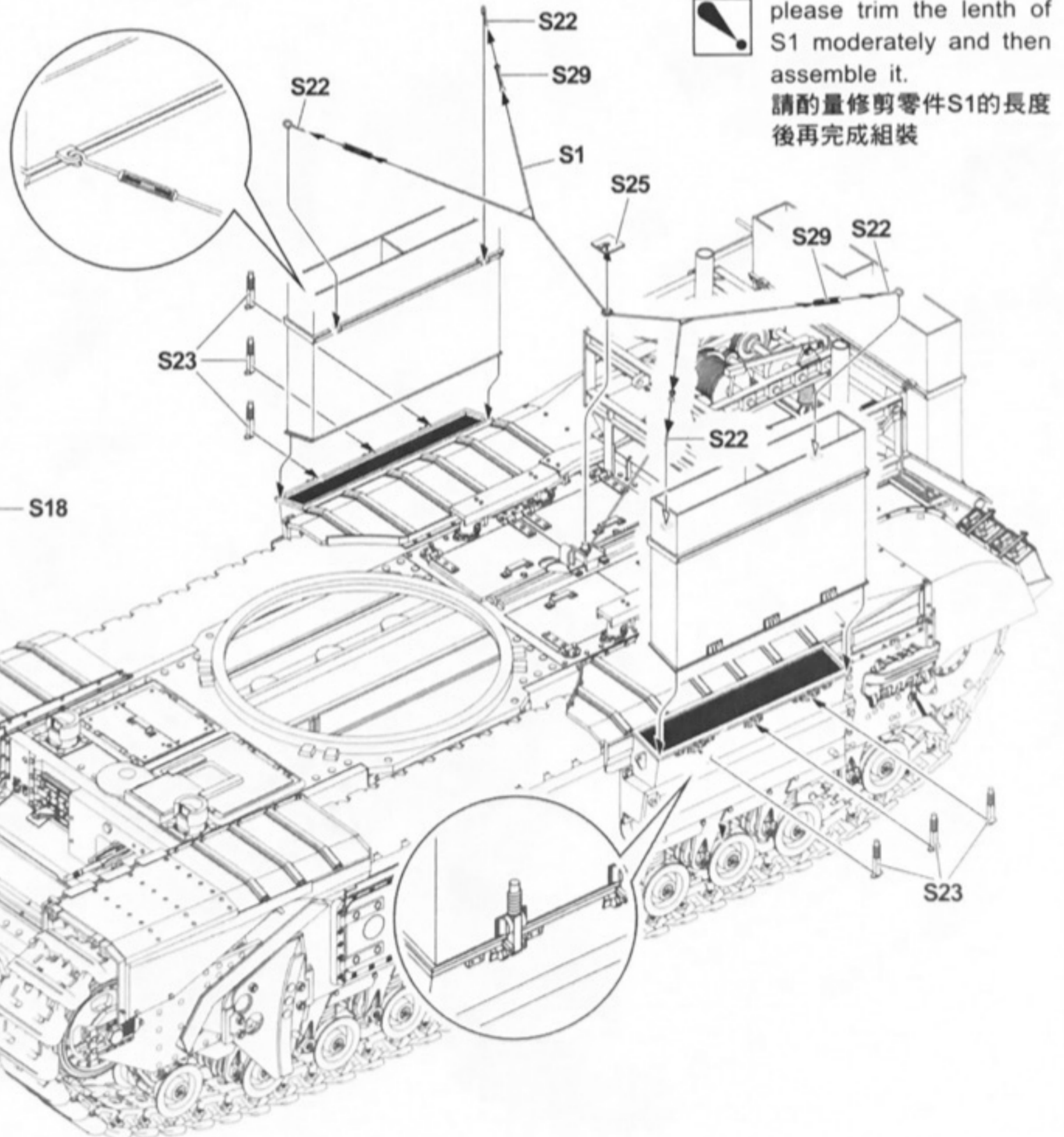
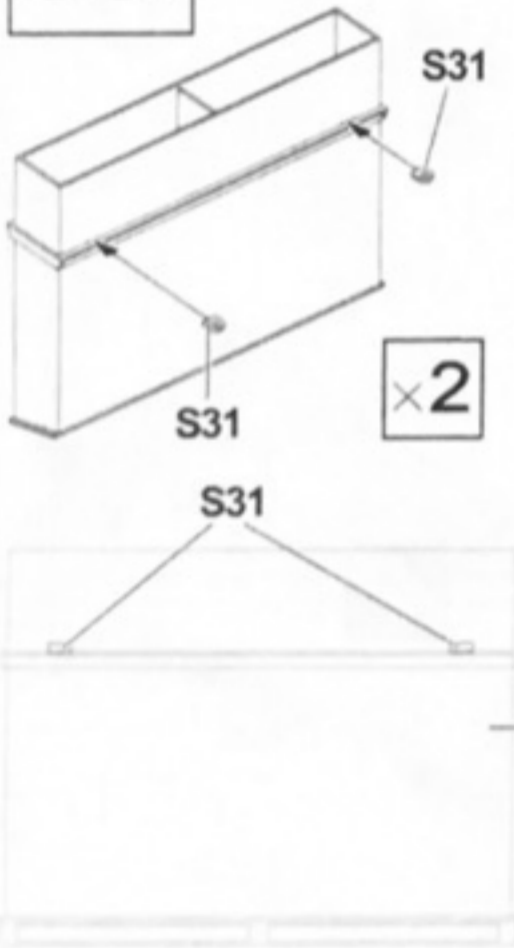
# 33A



Option A



please trim the length of S1 moderately and then assemble it.  
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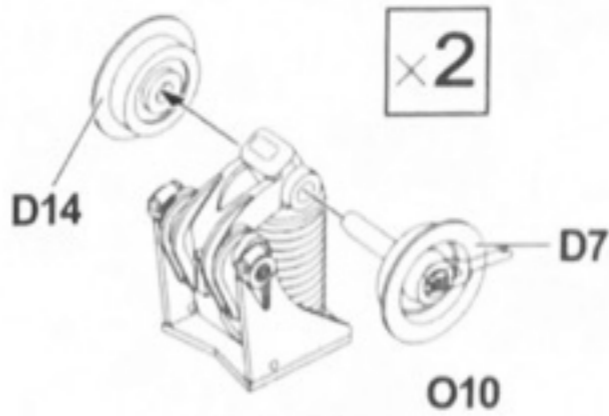
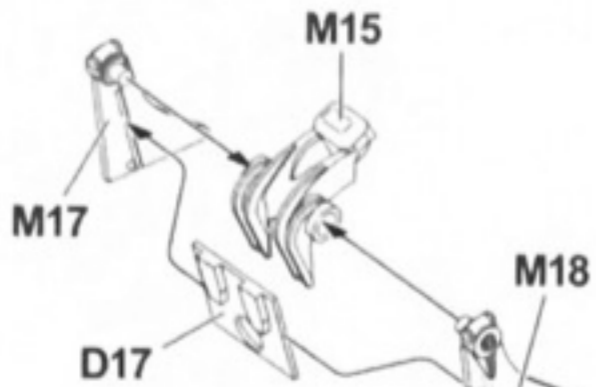
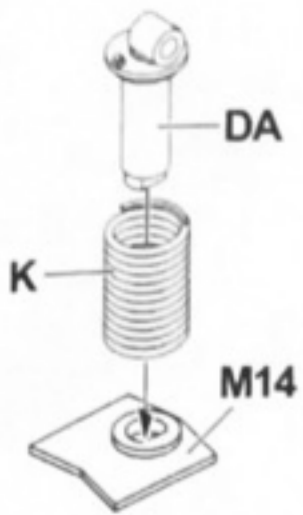


33<sub>B</sub>

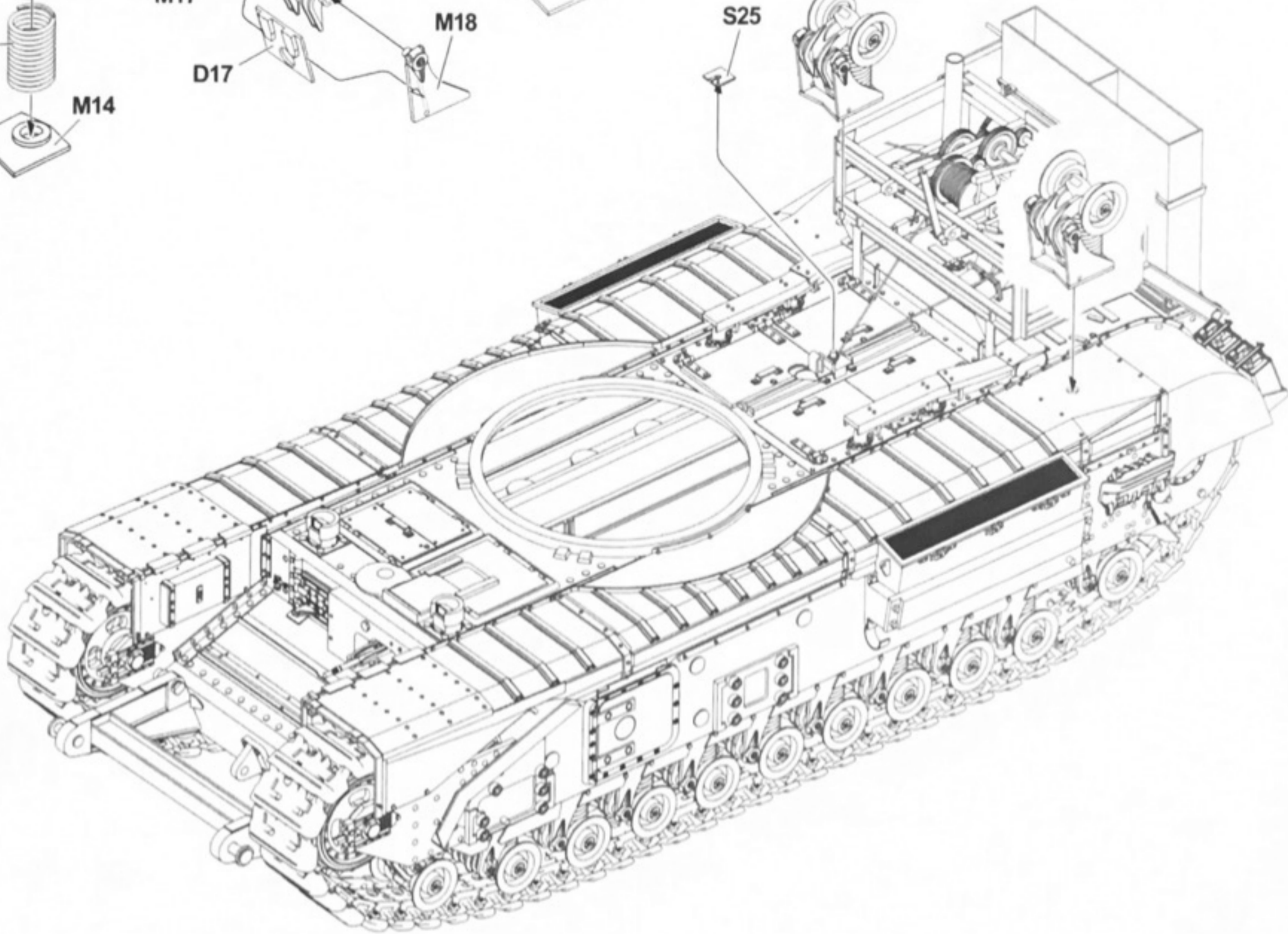


Option B

×2



S25

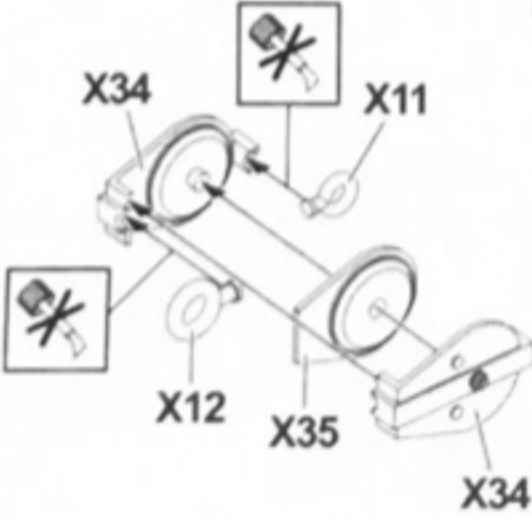


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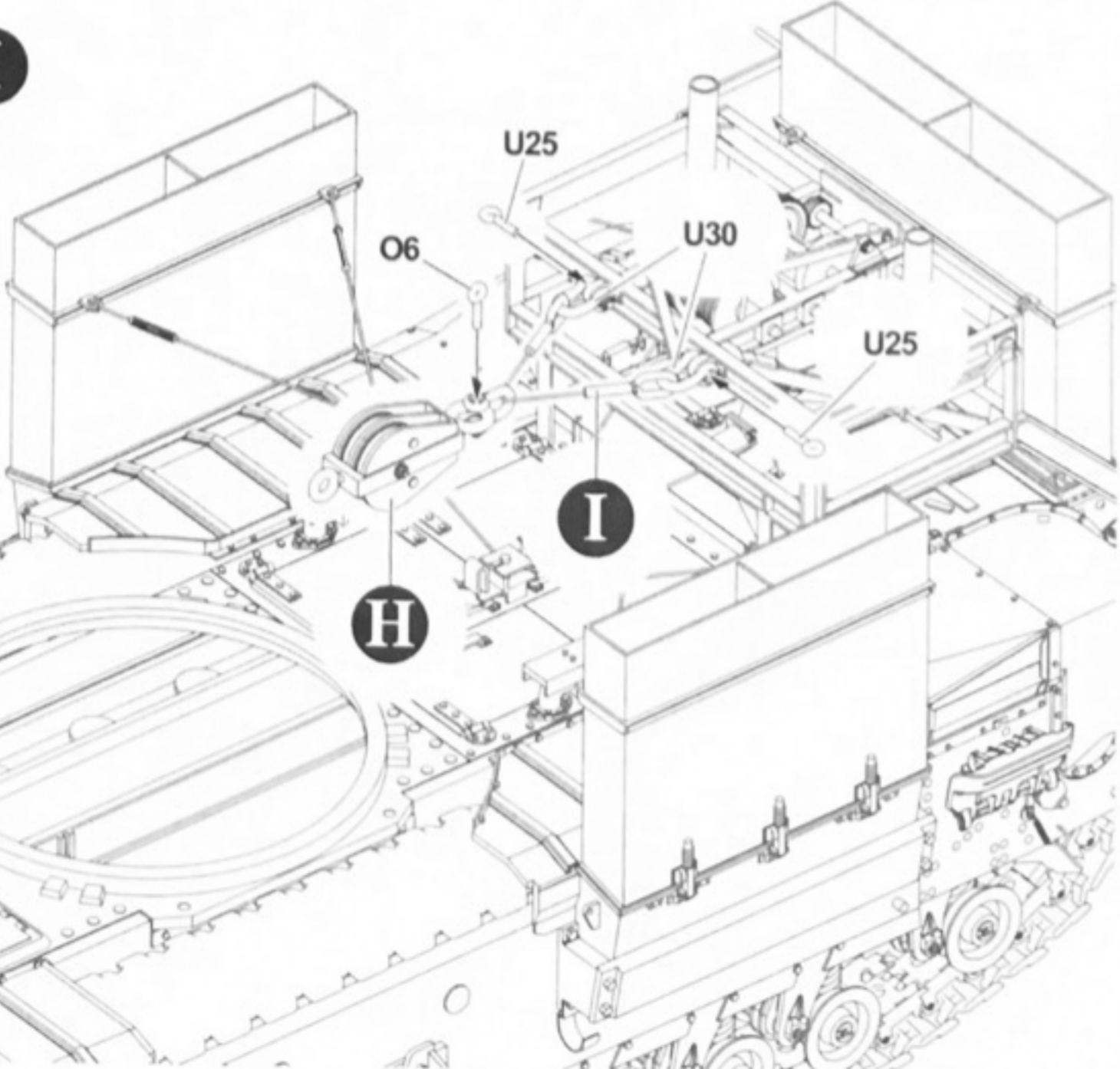
I

Length: 45mm

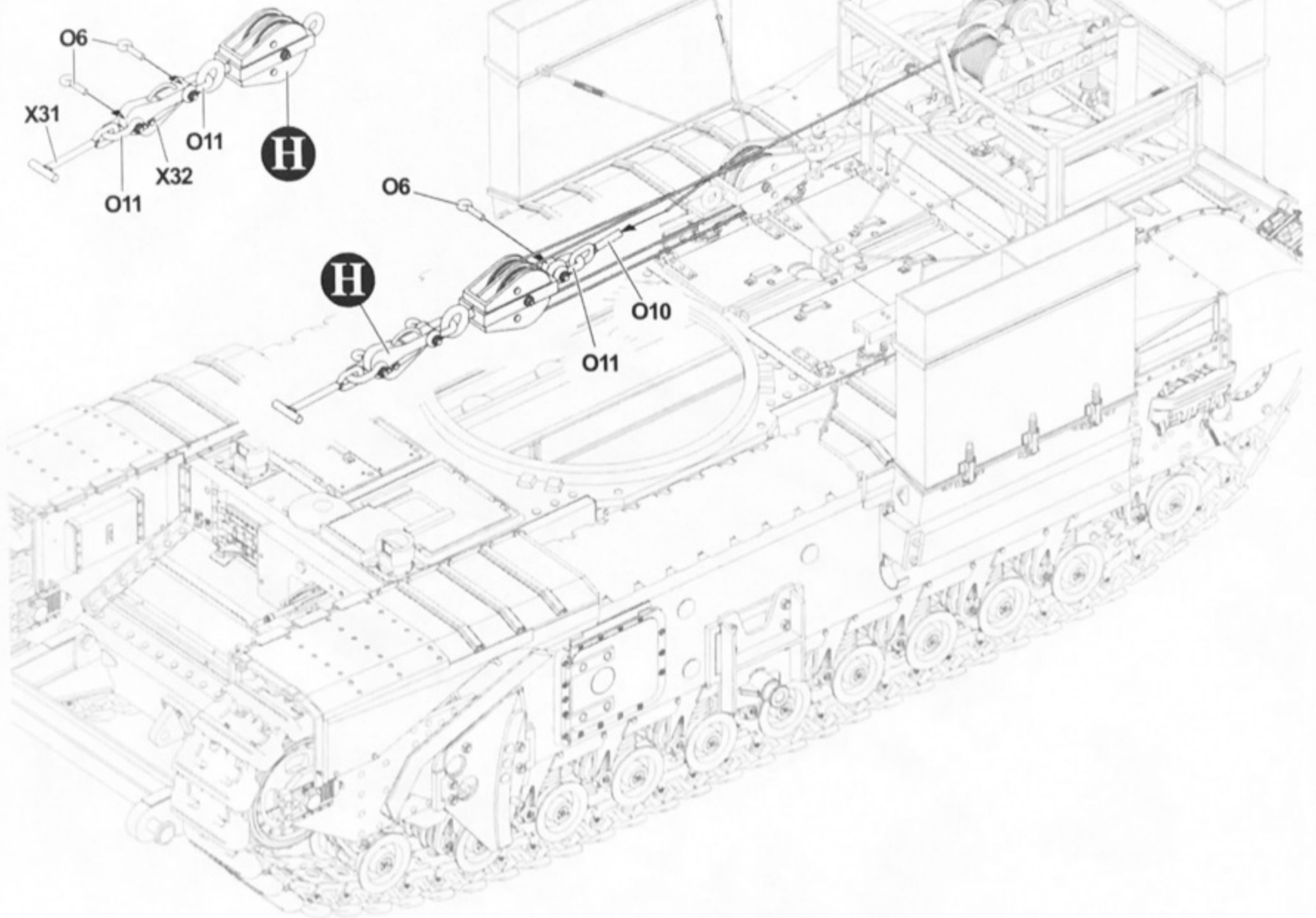


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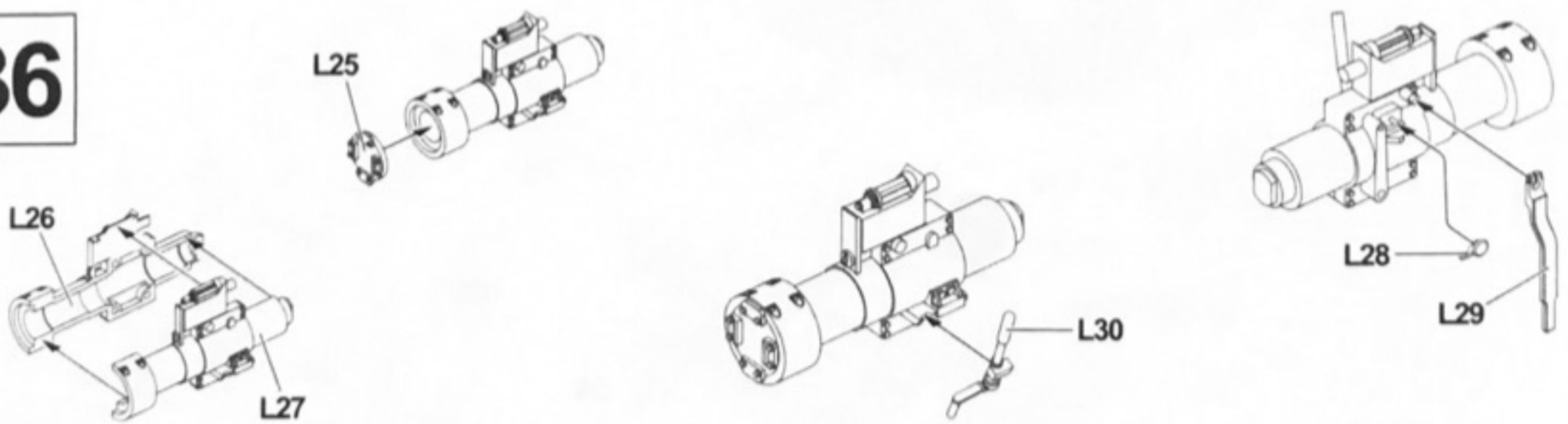
×2



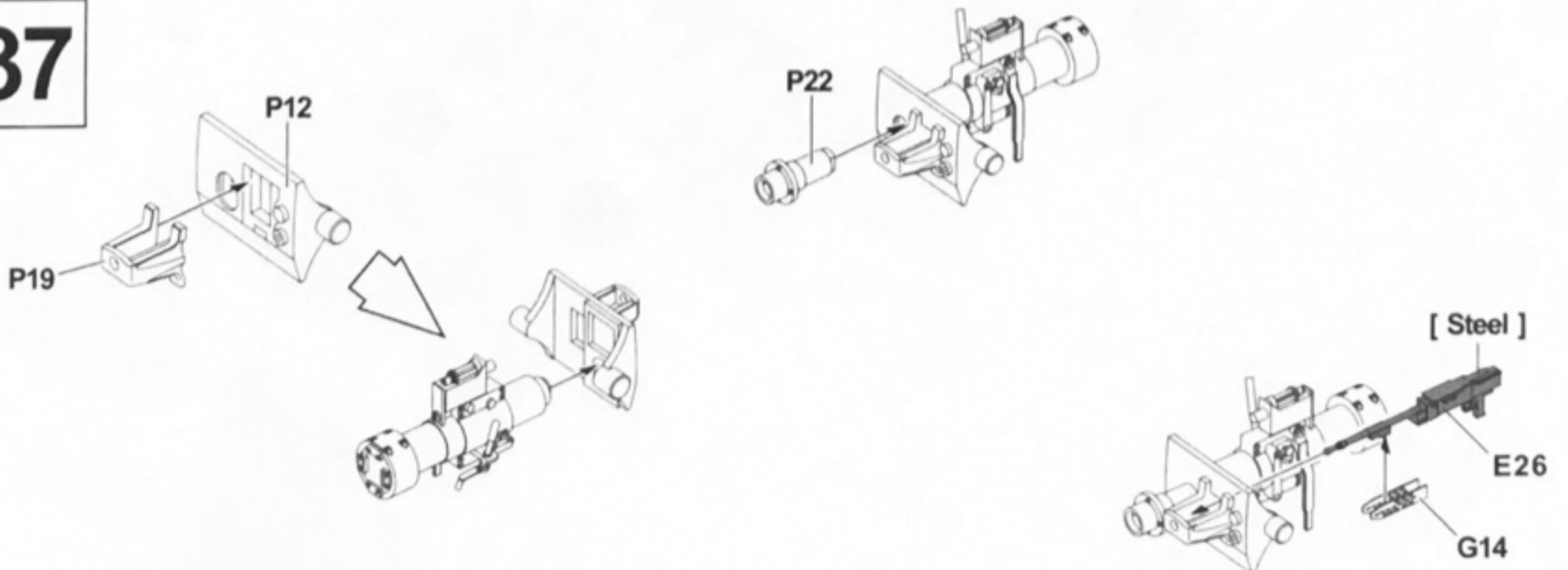
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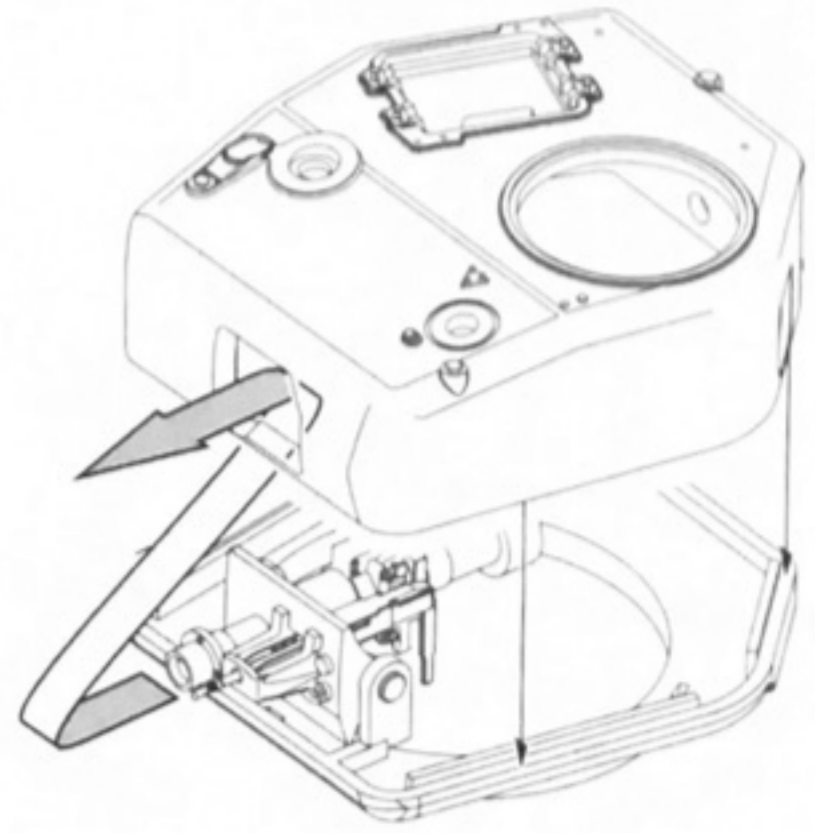
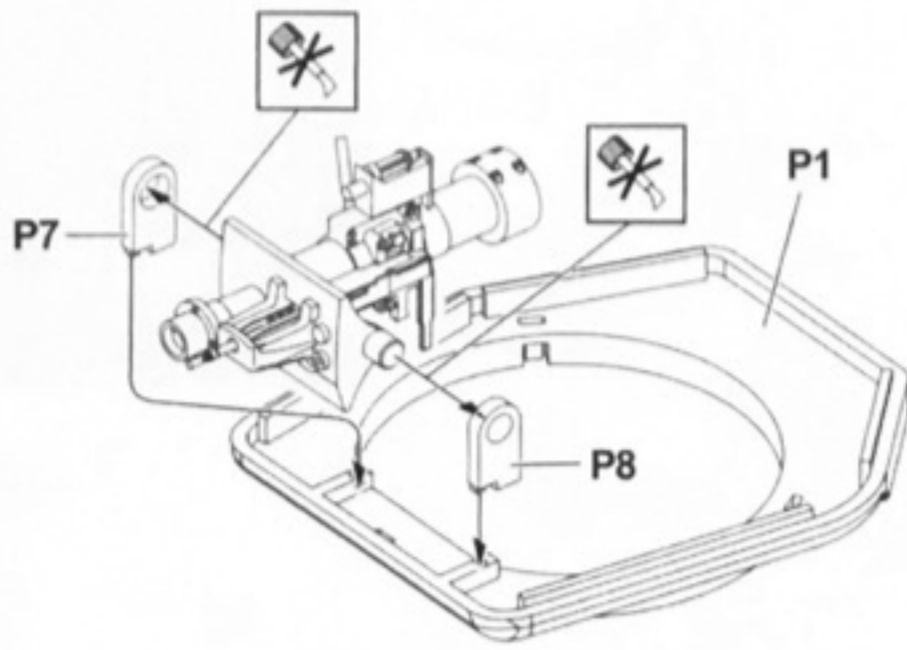
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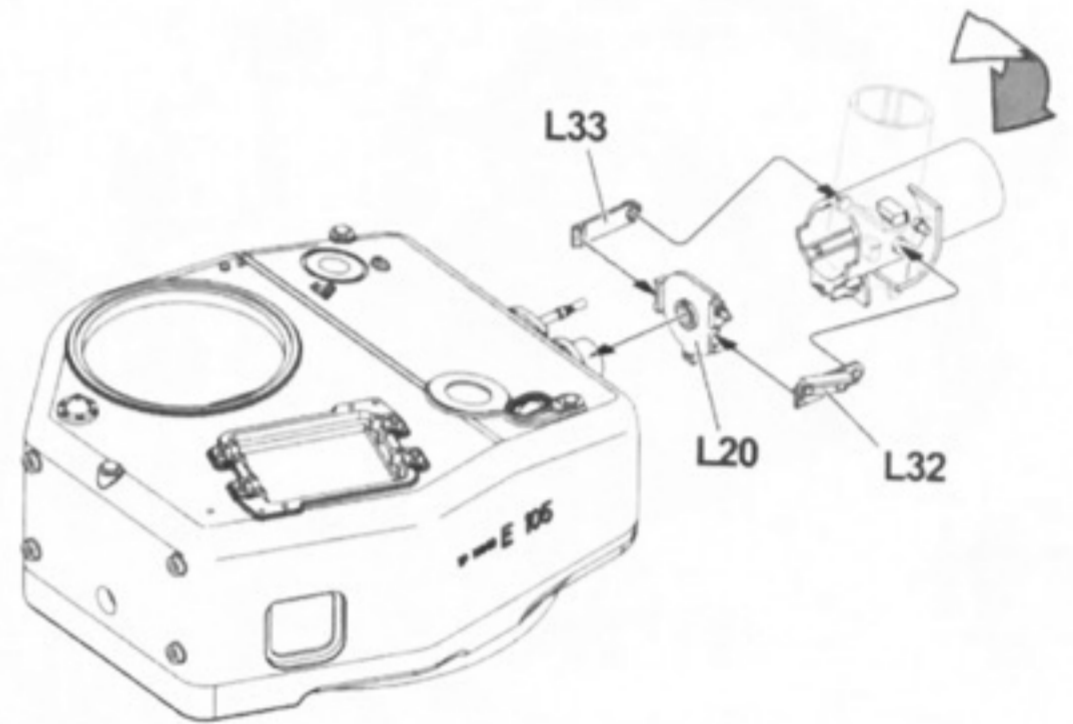
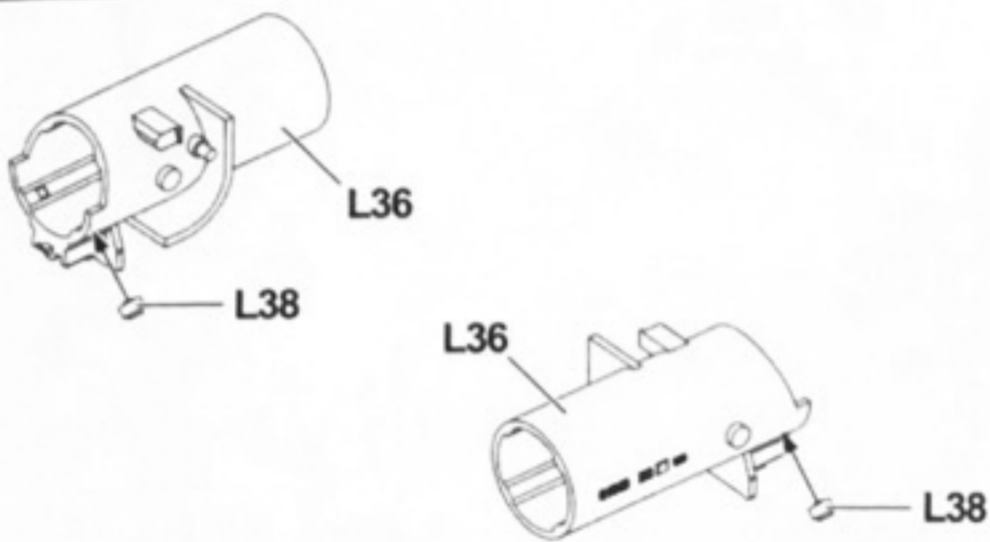
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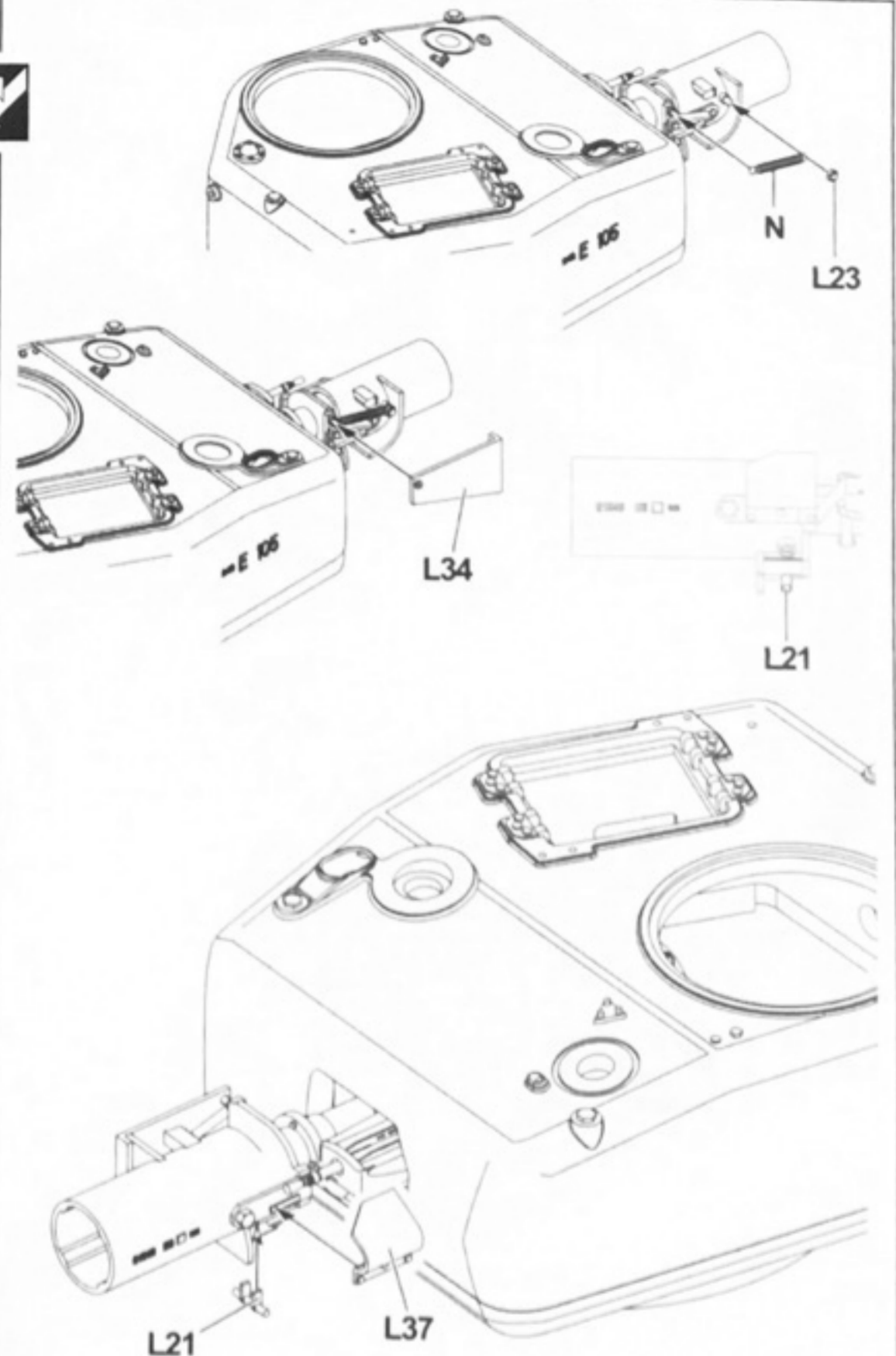
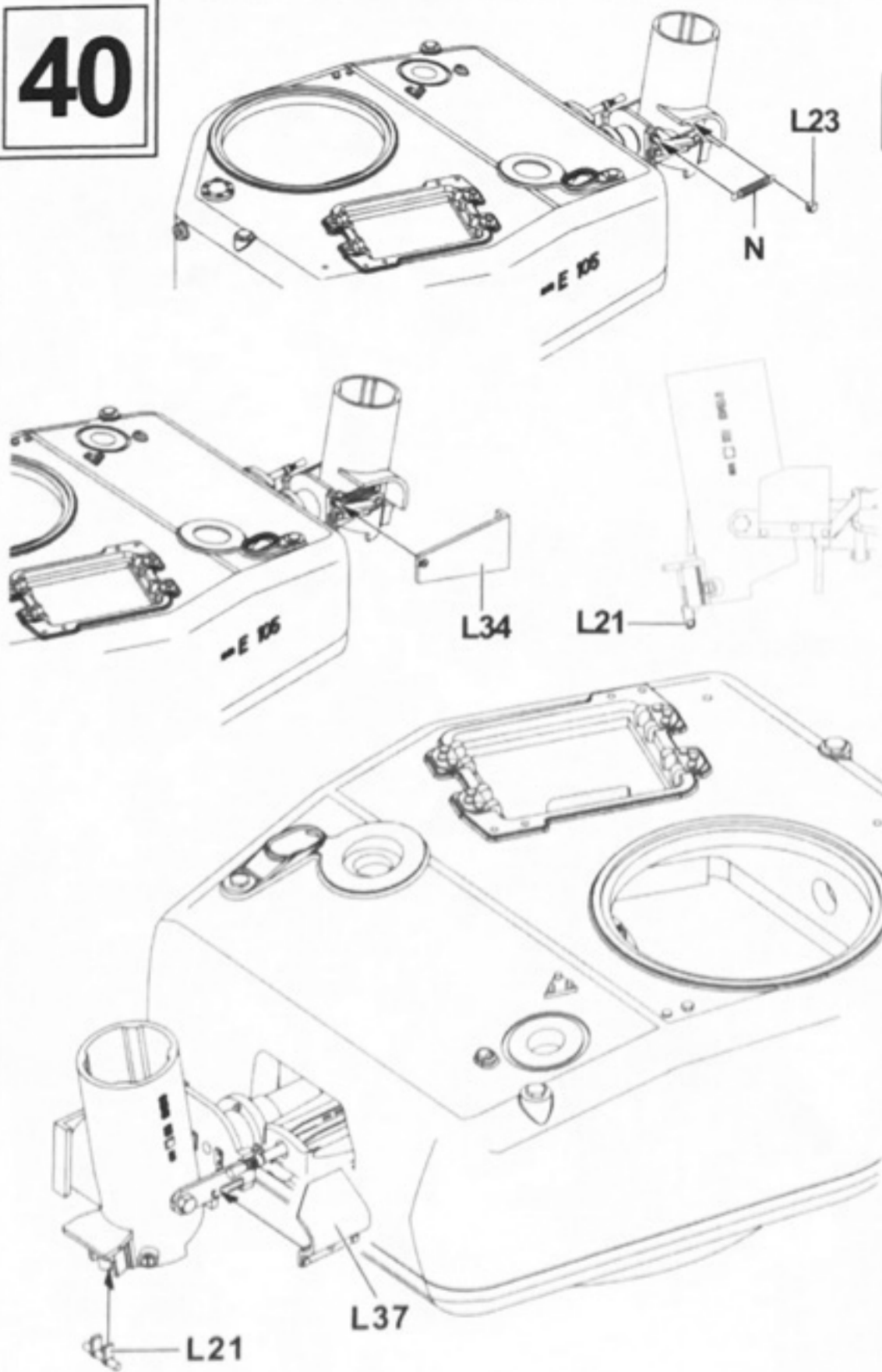
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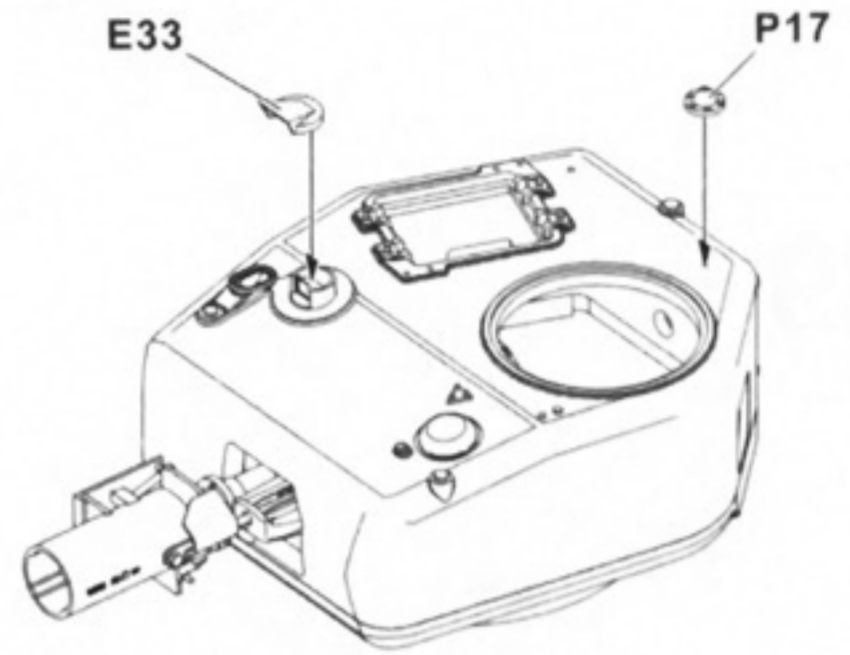
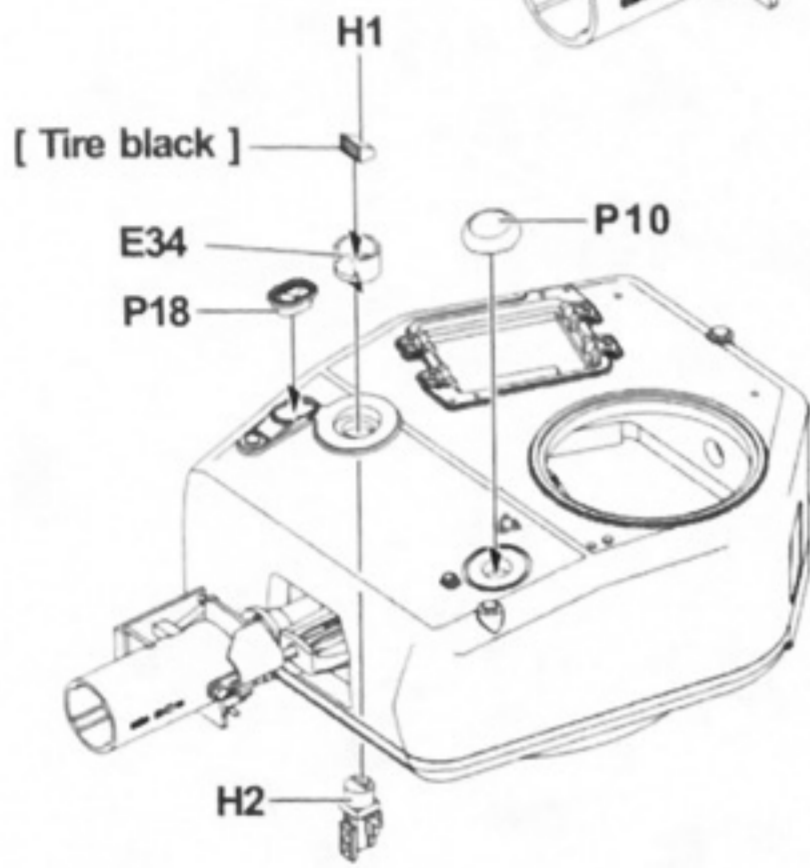
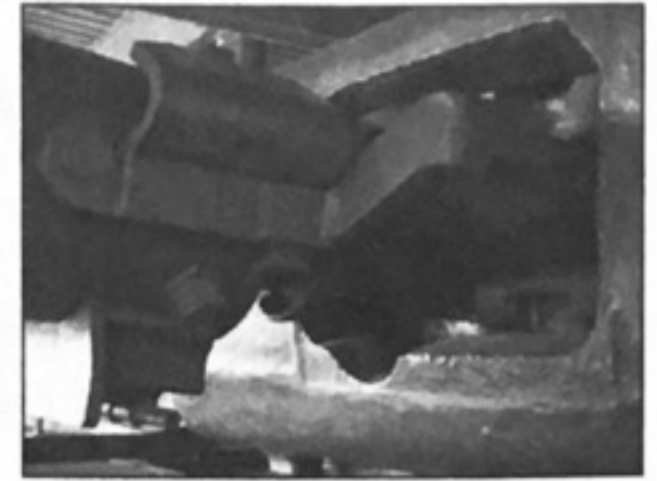
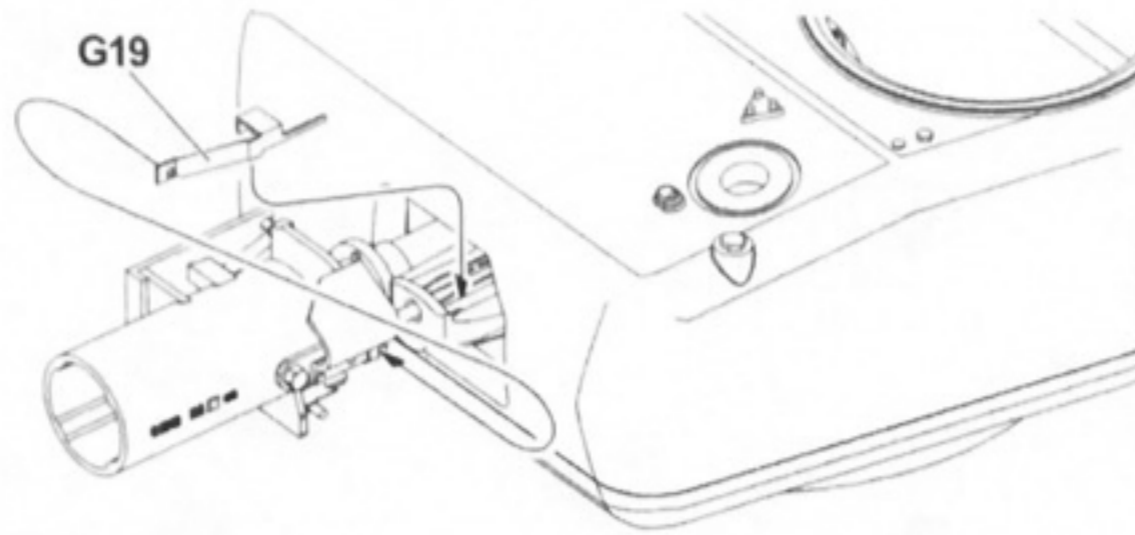
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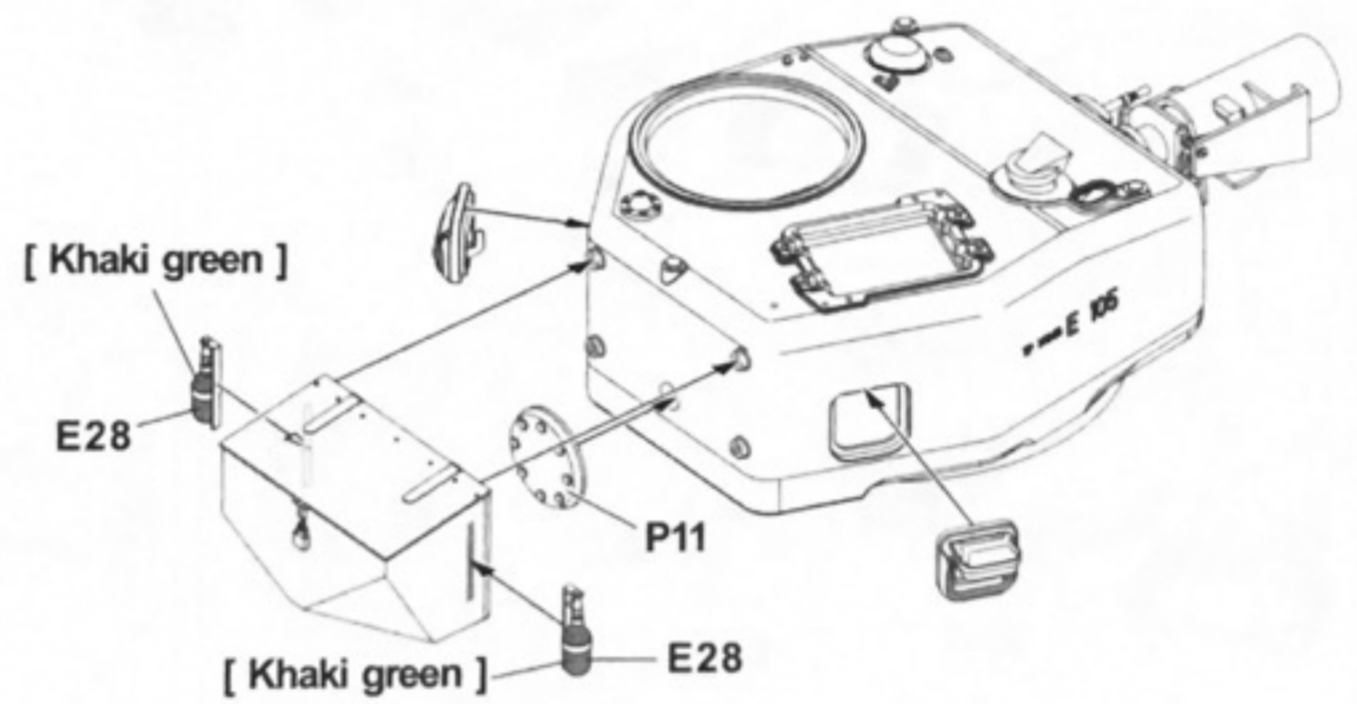
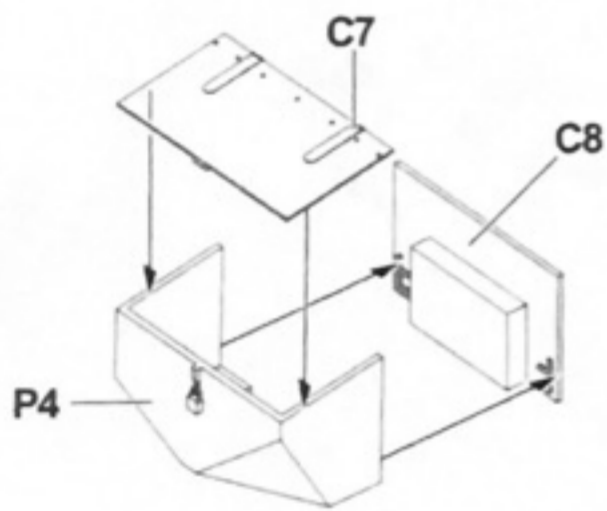
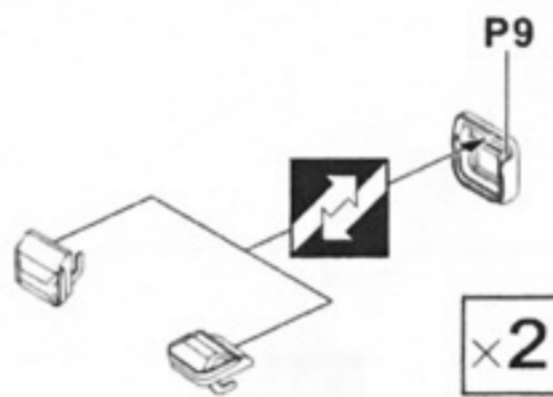
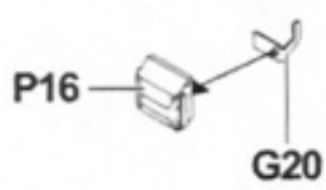
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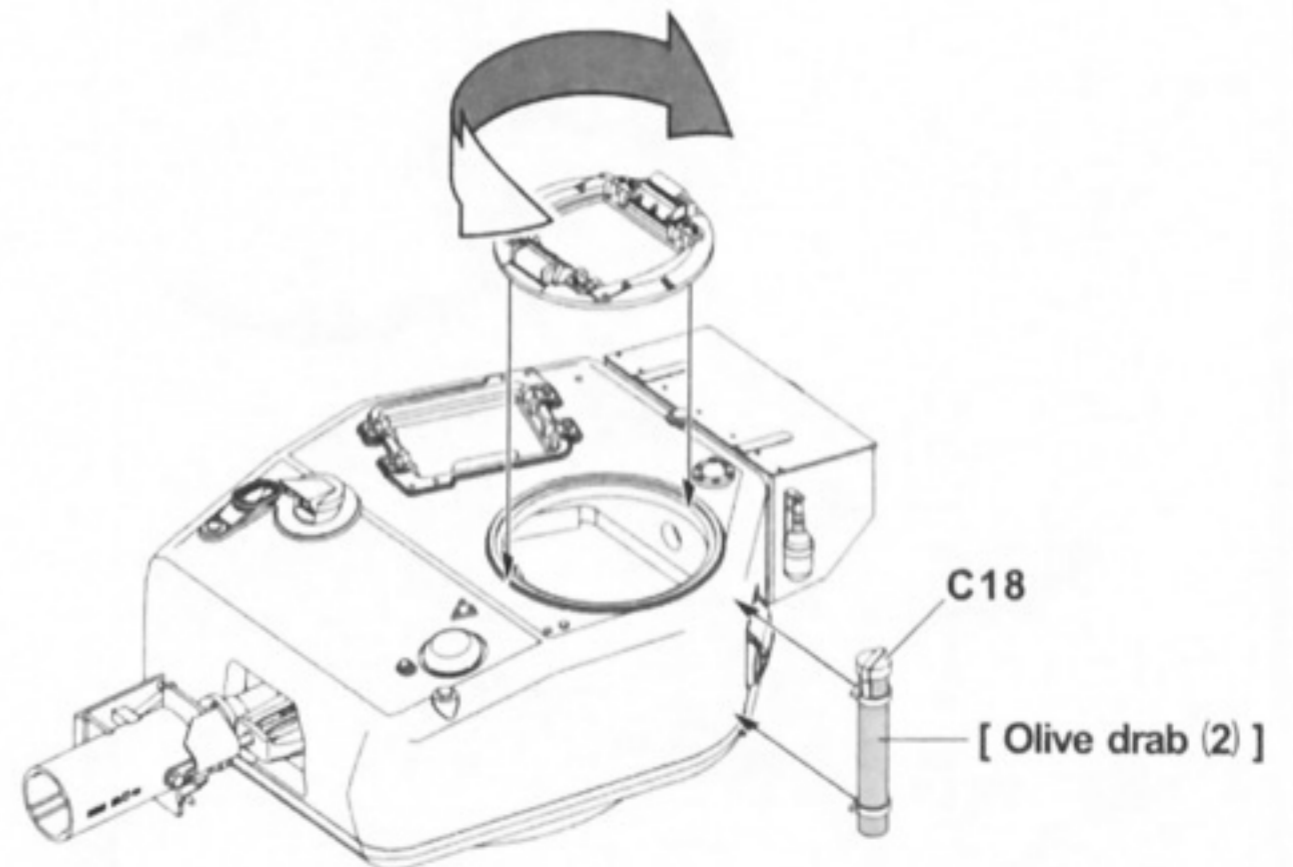
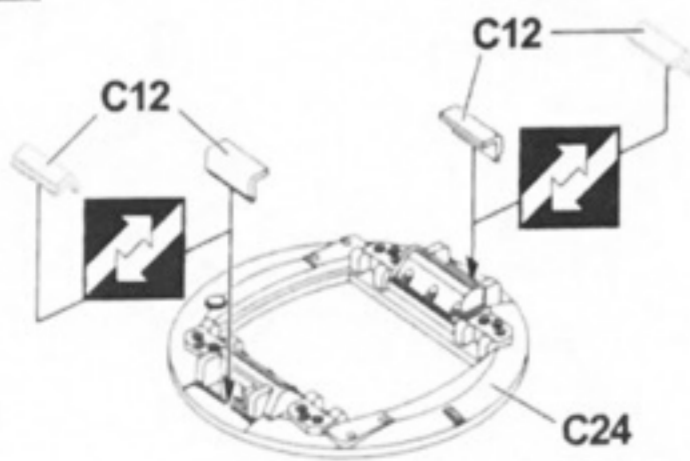
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42

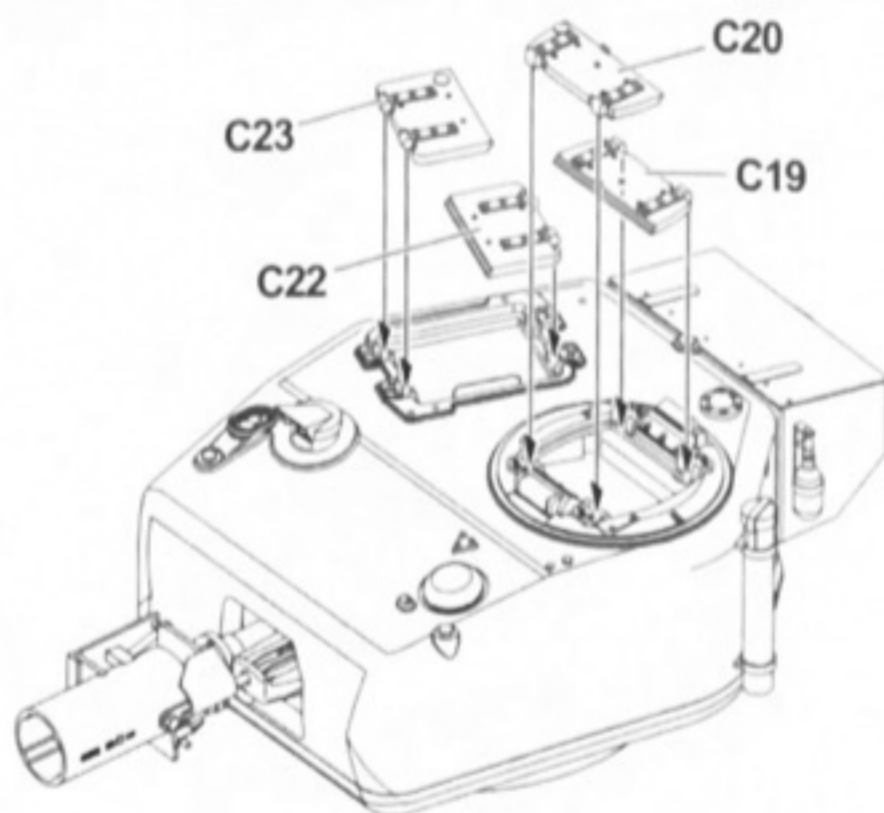
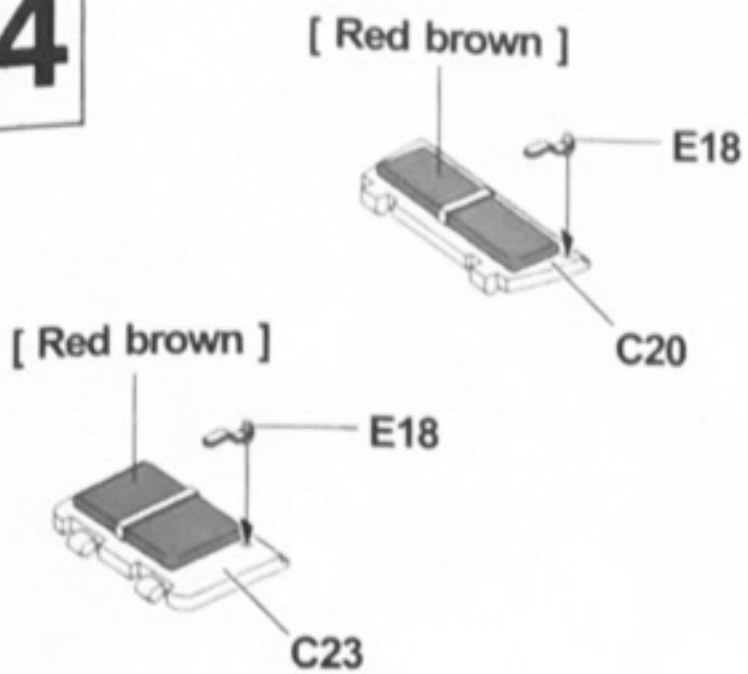


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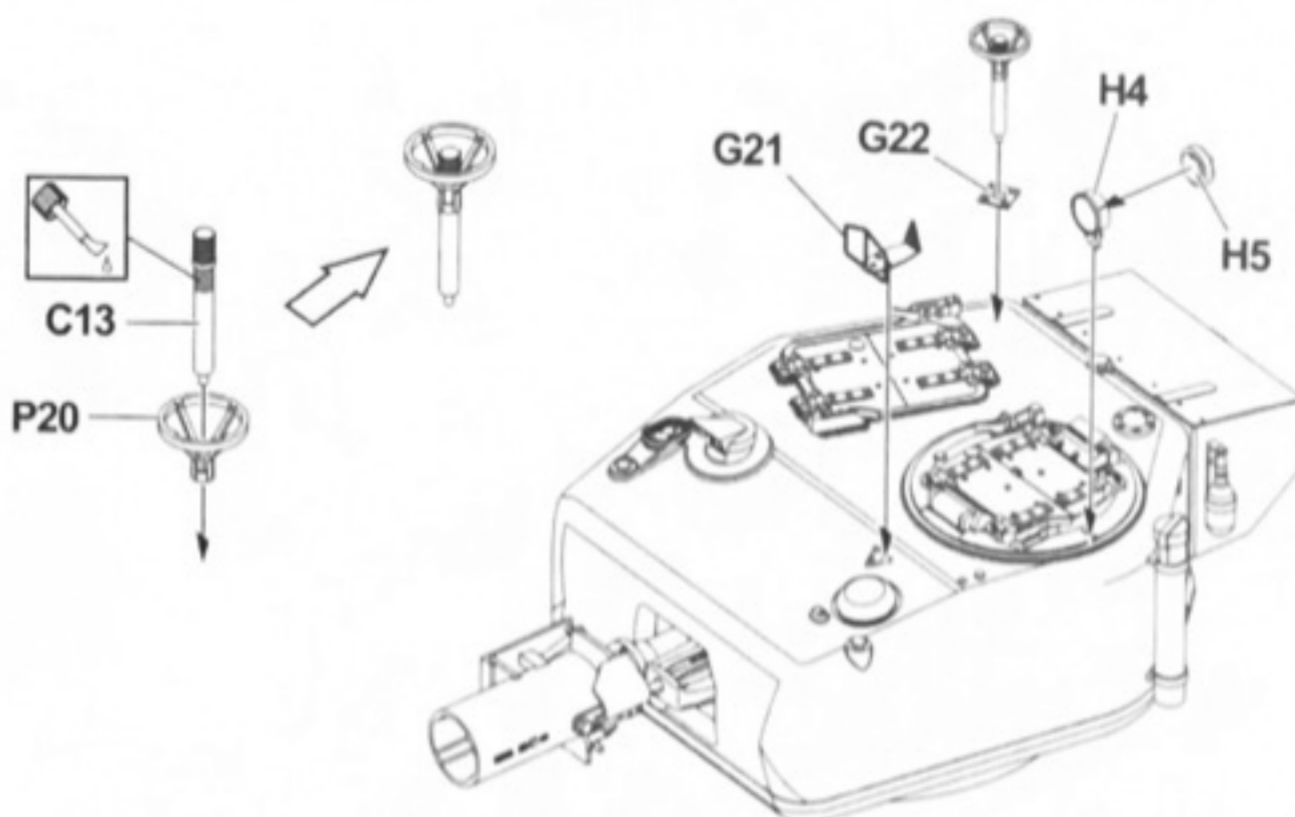
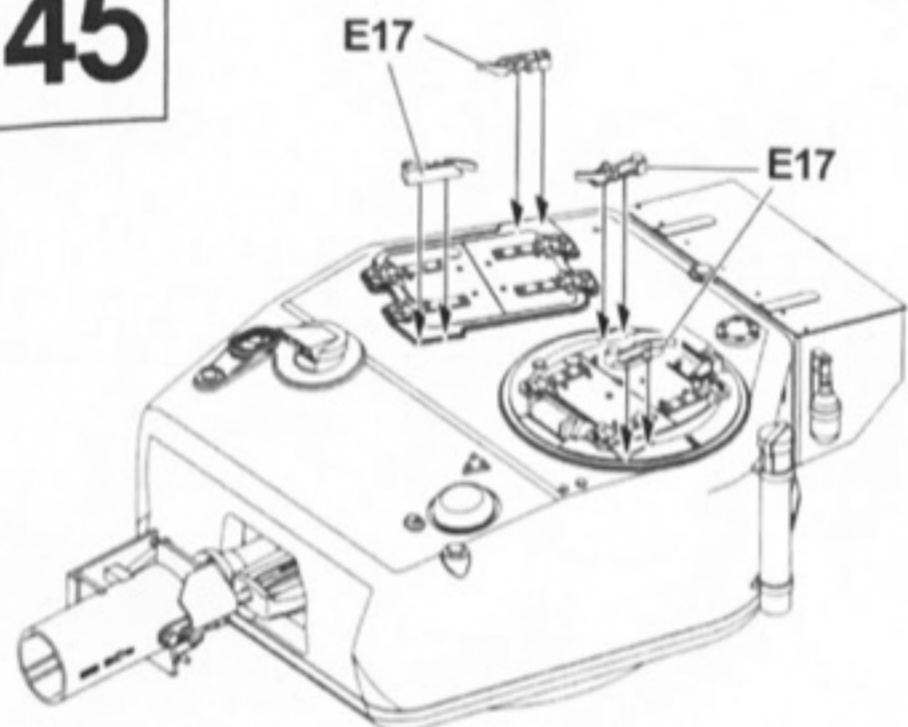




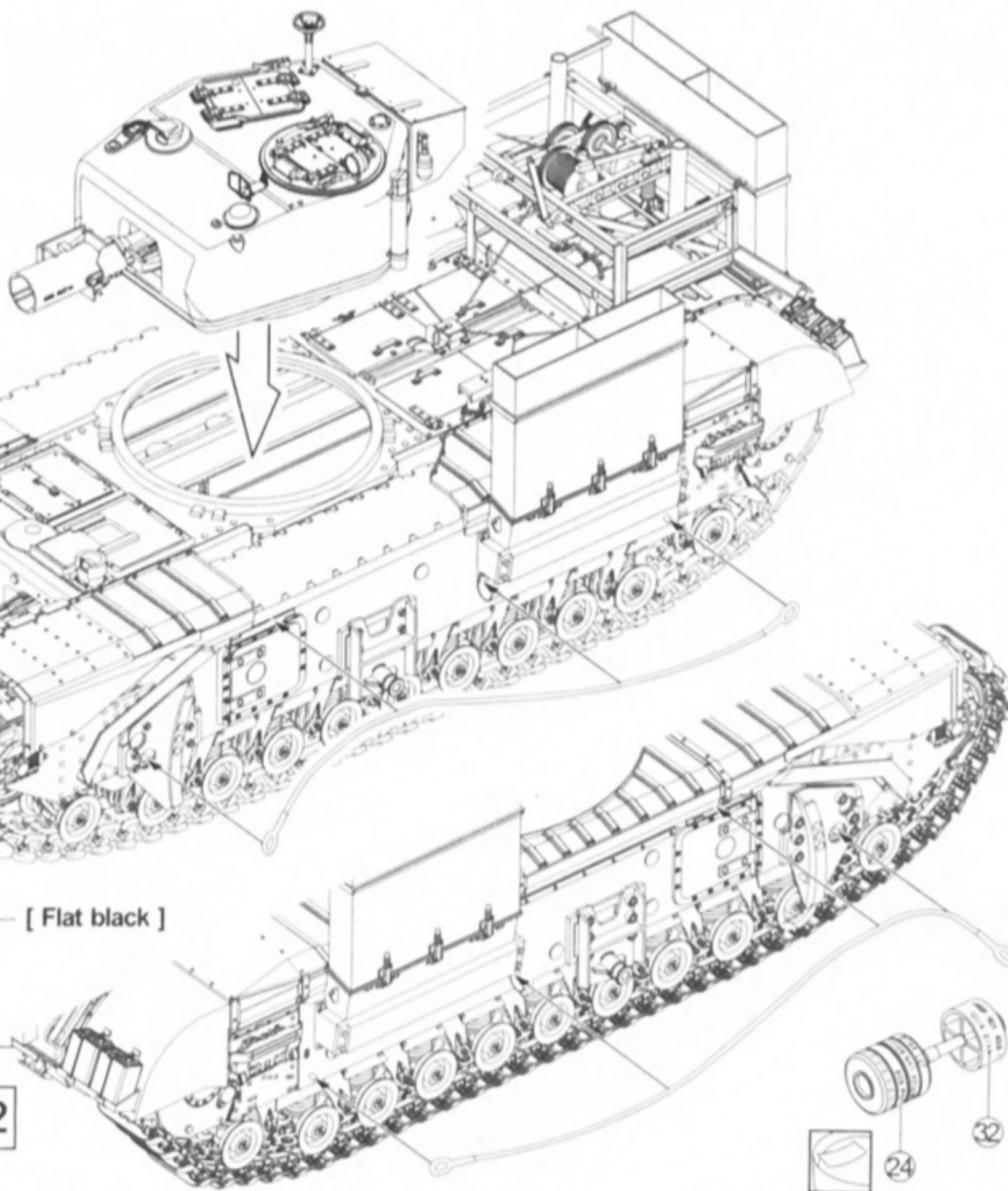
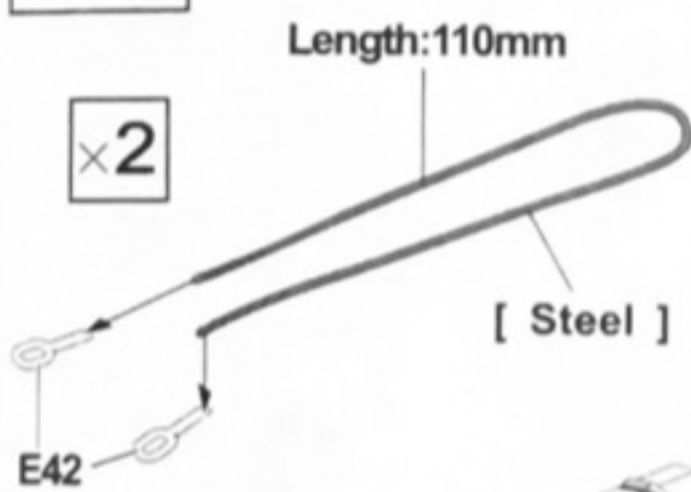
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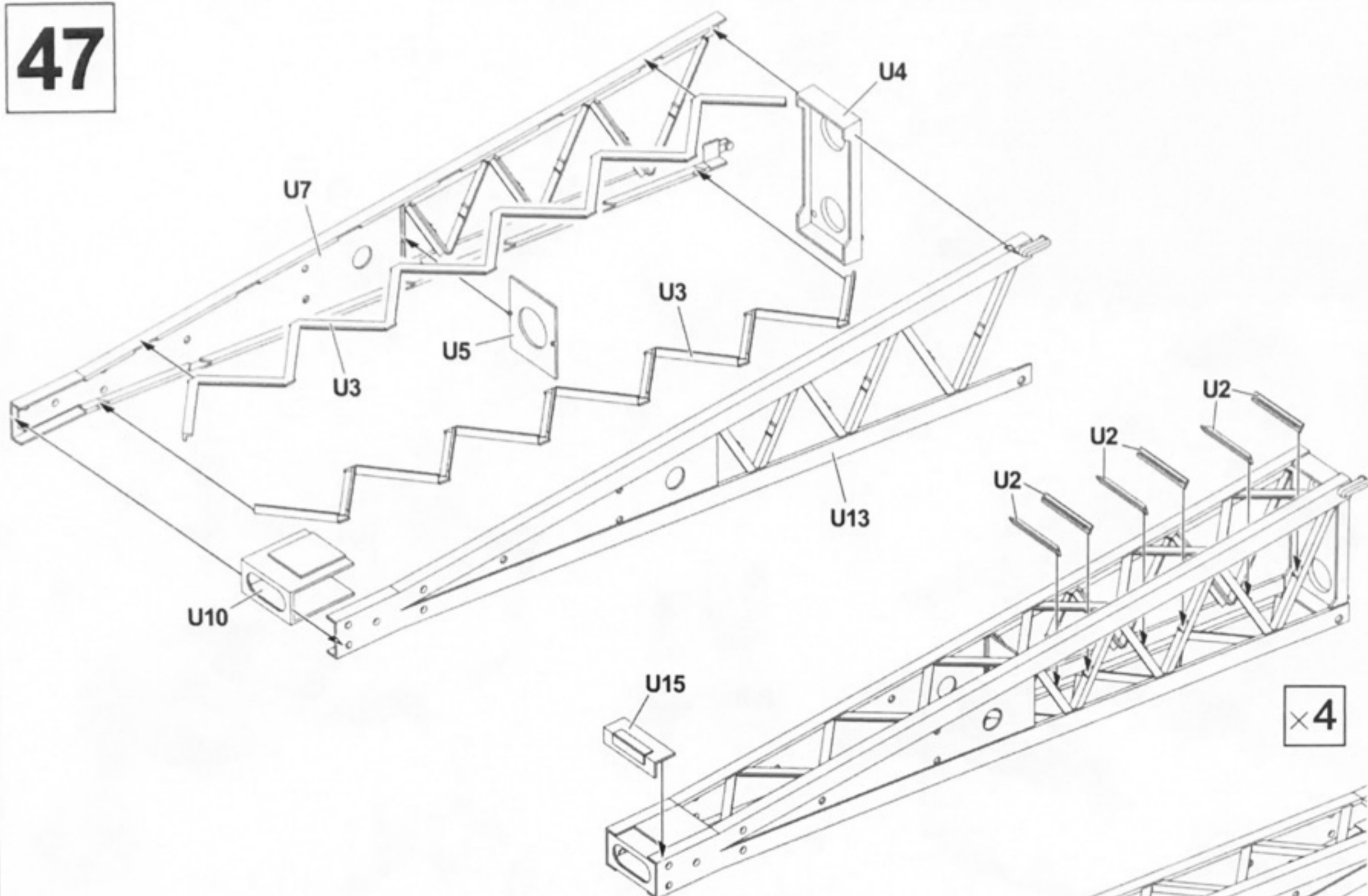
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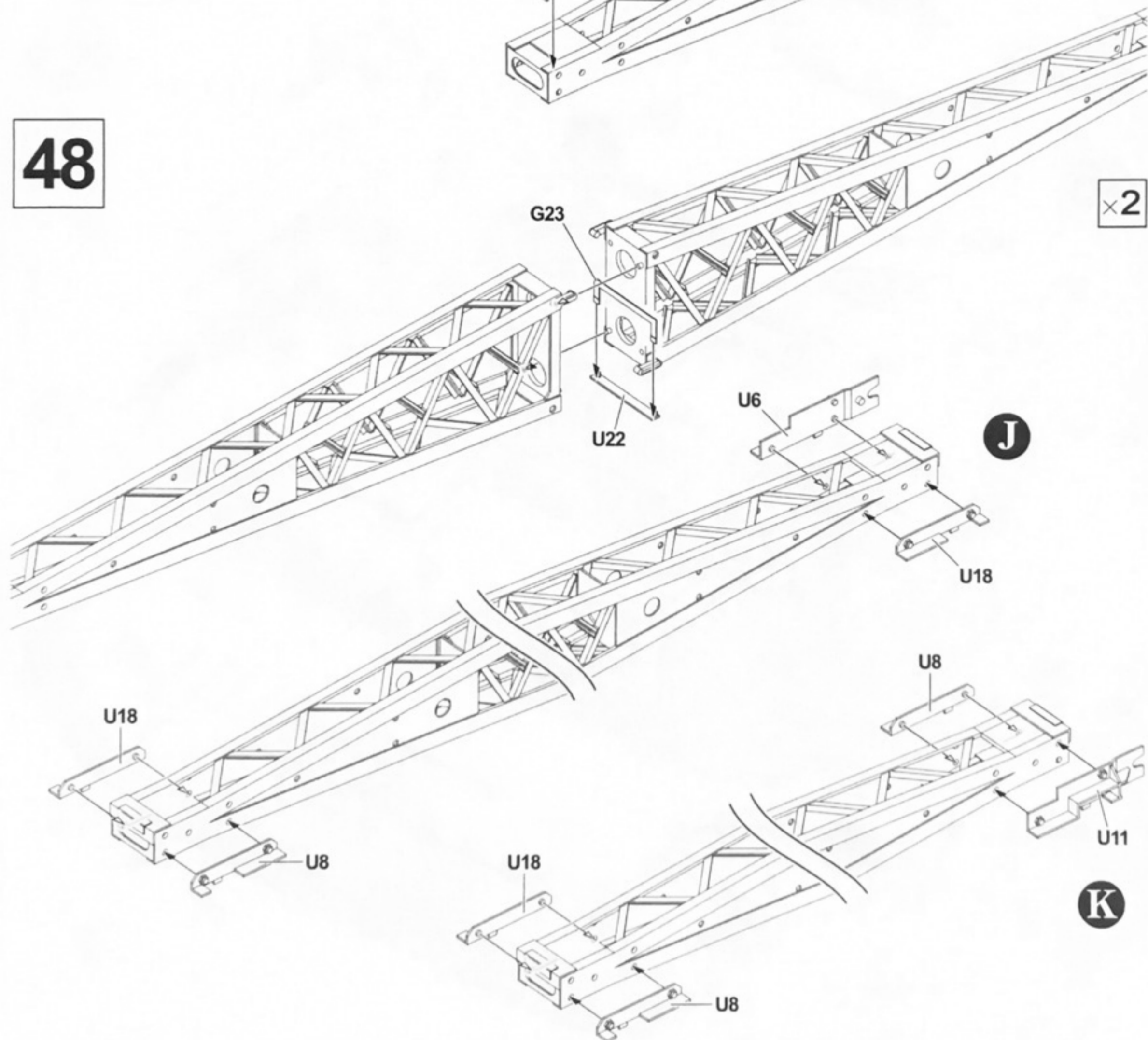
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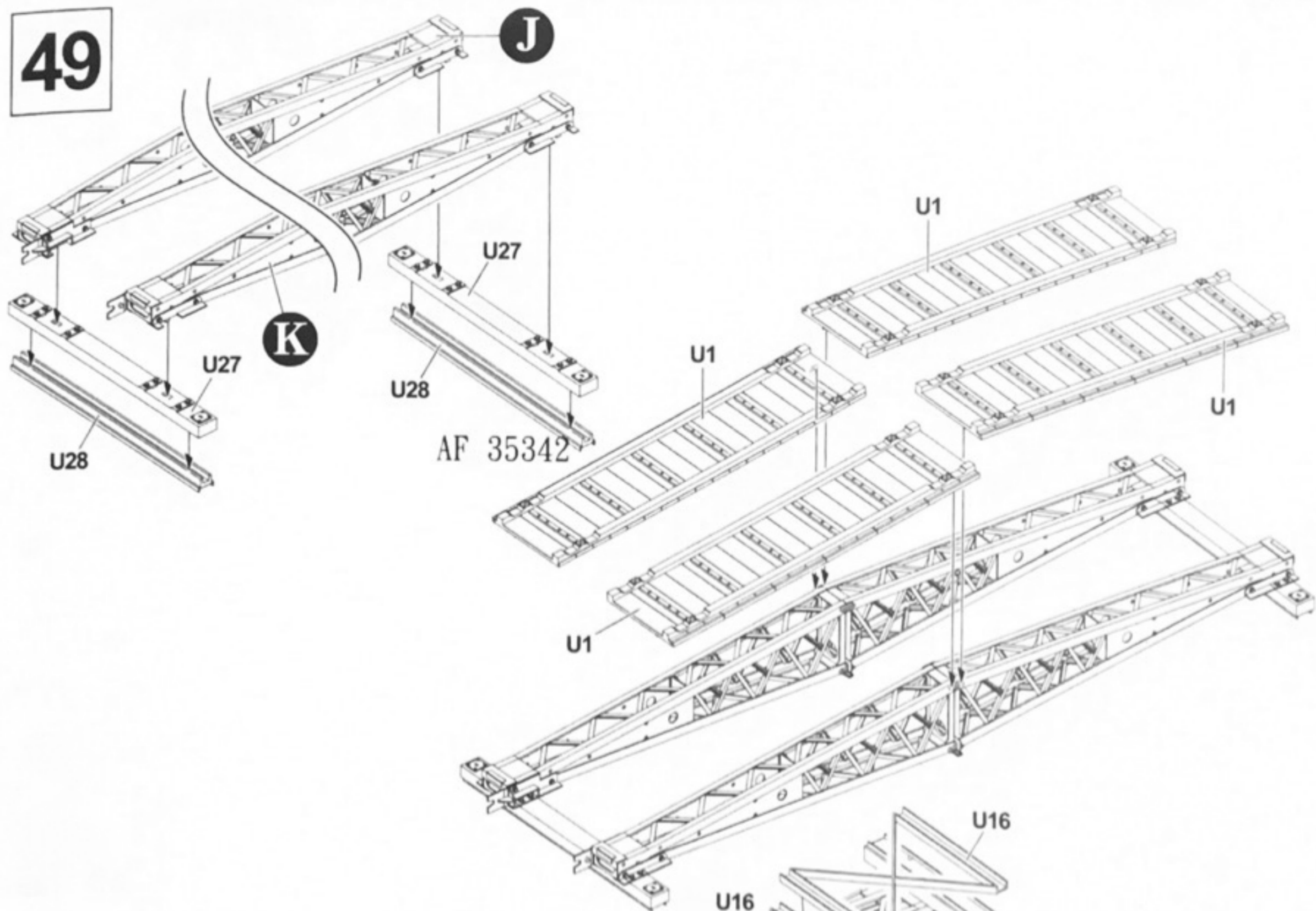
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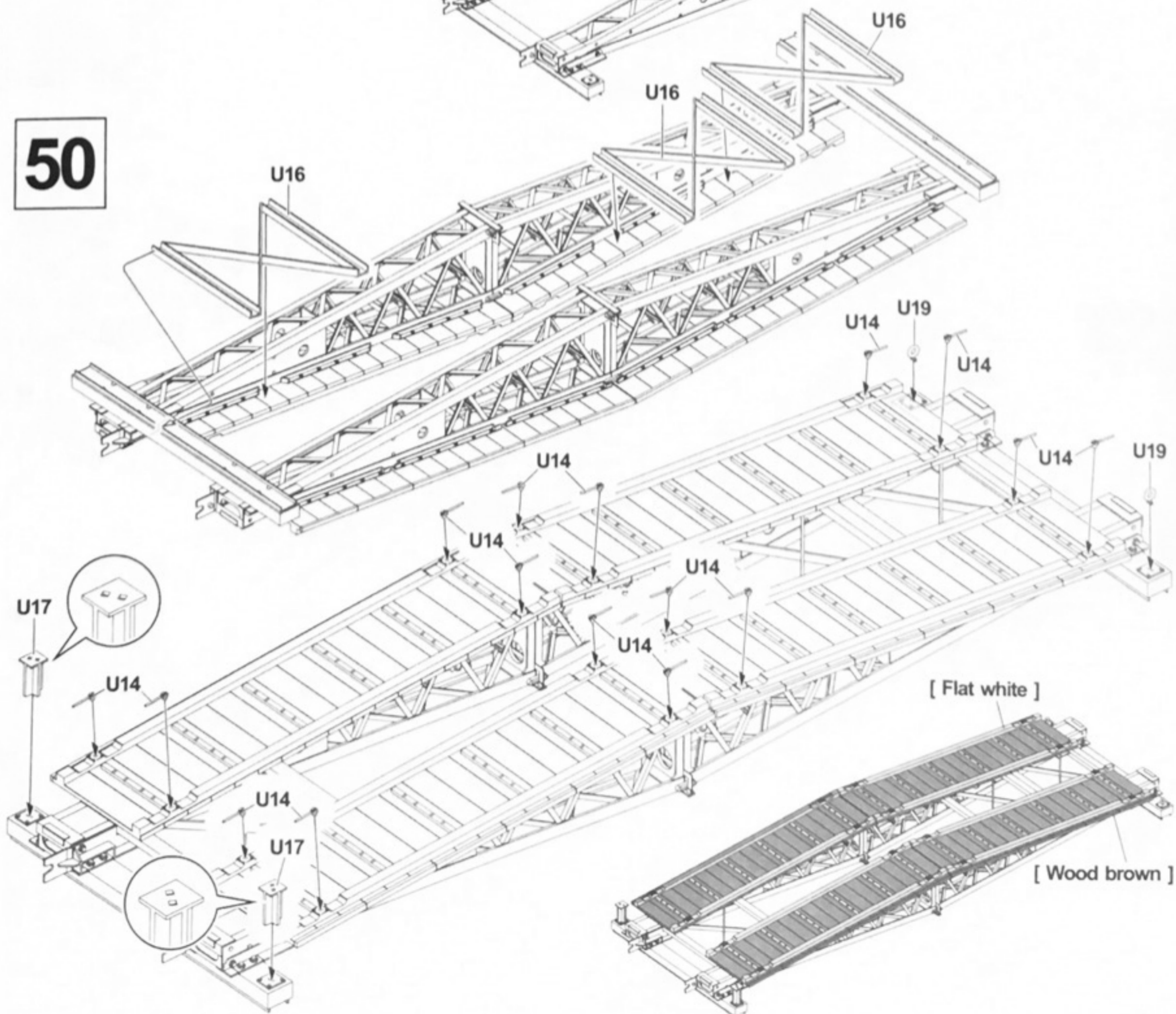
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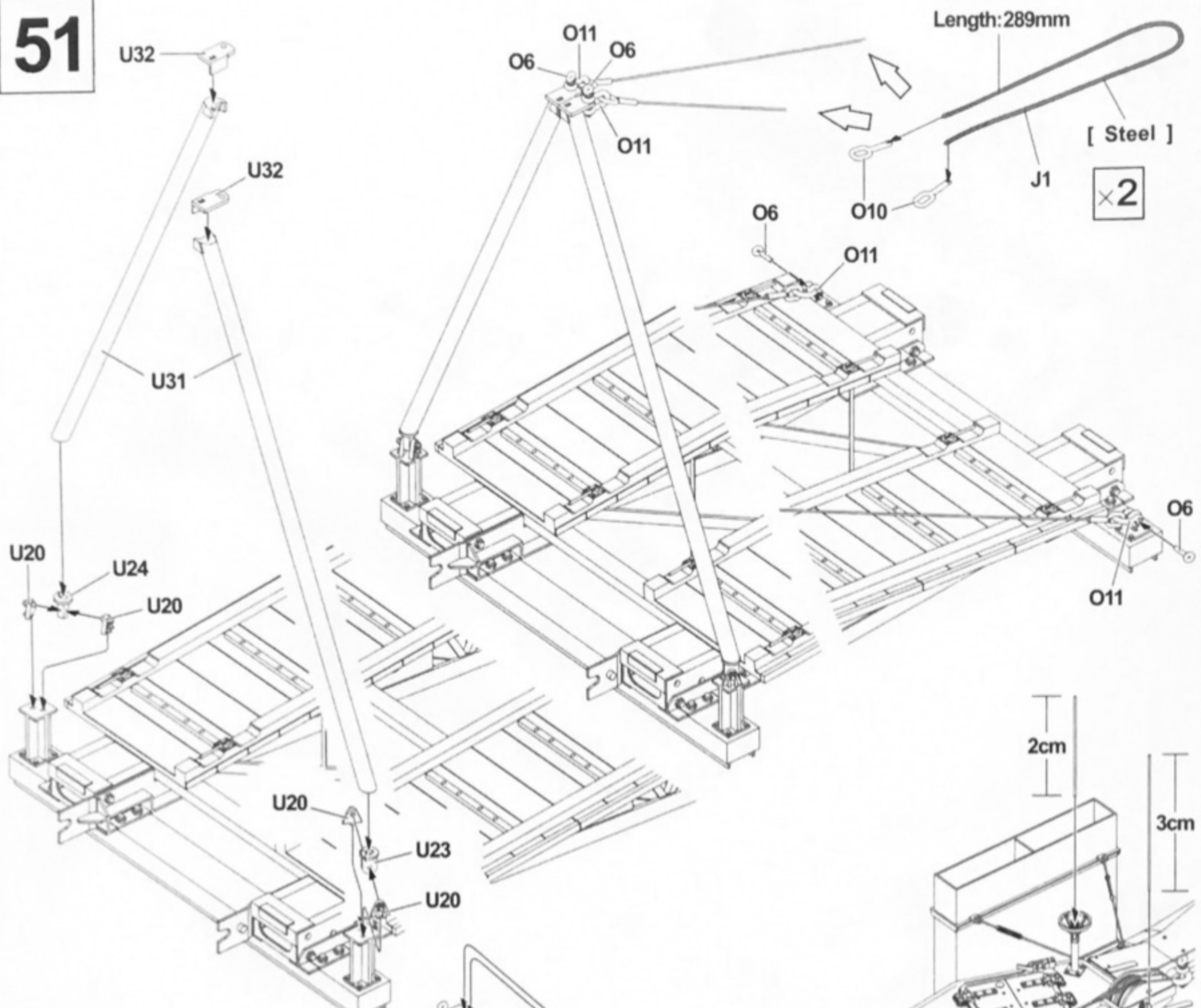
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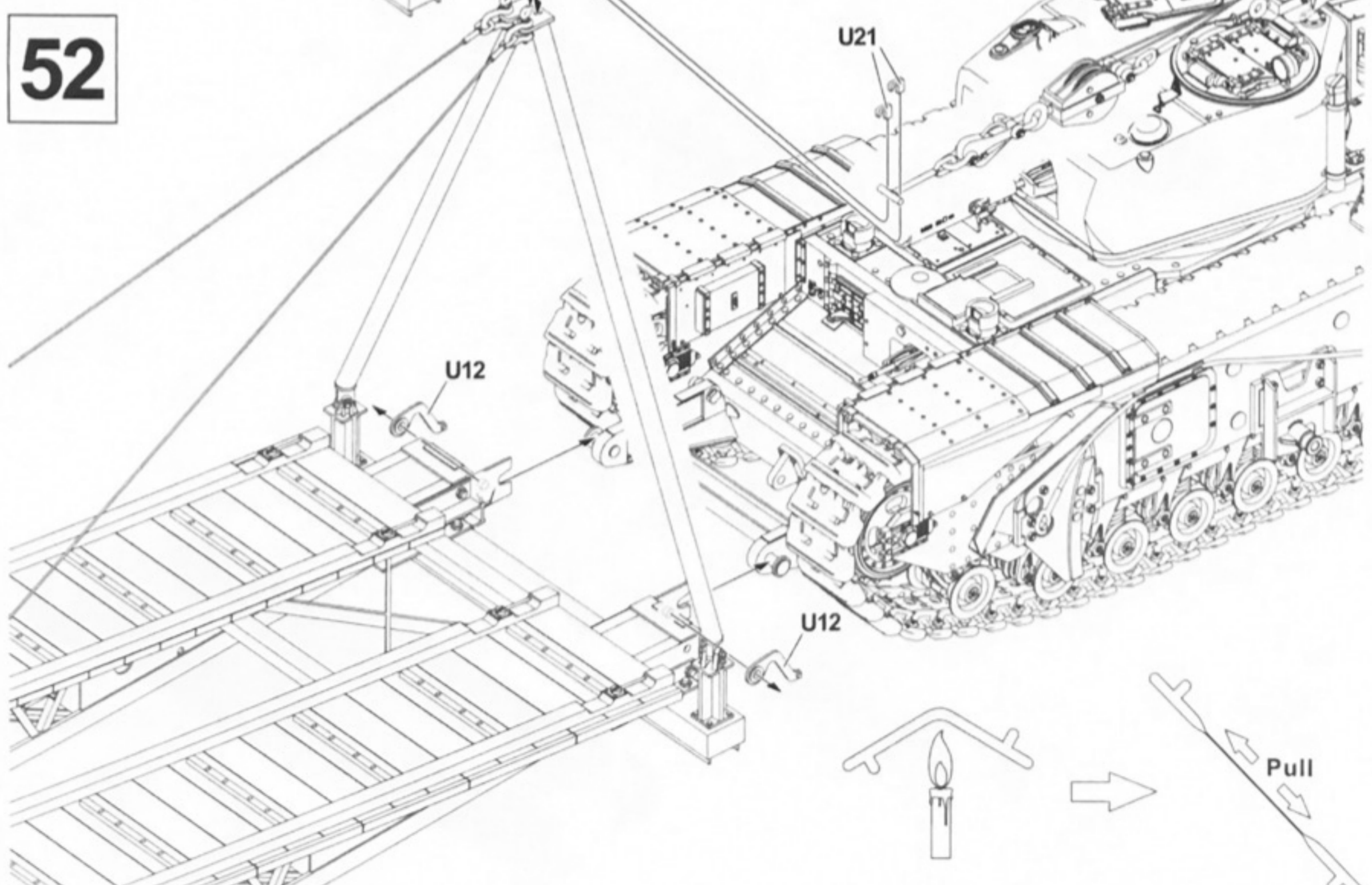
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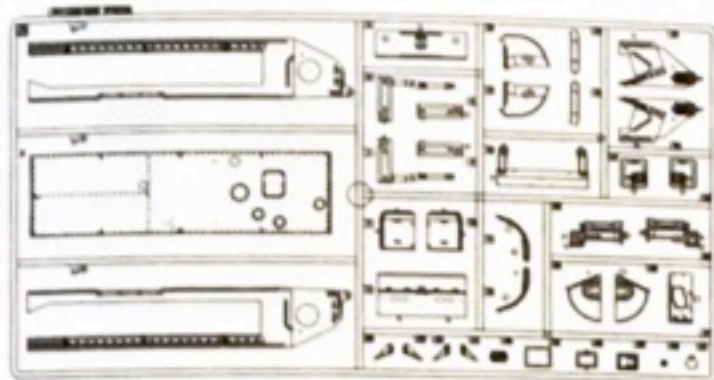


52



# PARTS LIST 零件表

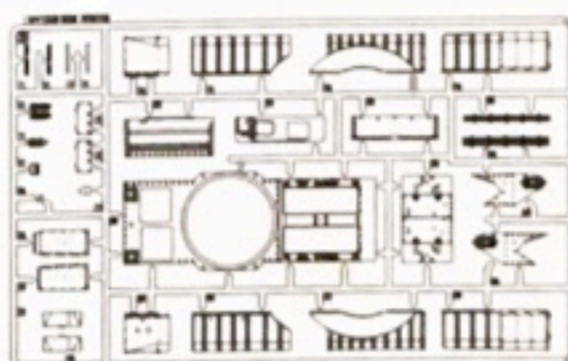
**A X1** AF 35153



**A X5** AF 35183



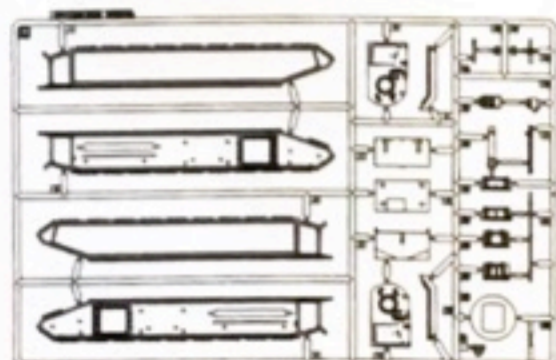
**B X1** AF 35153



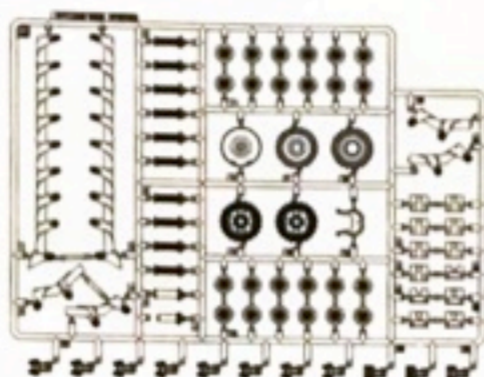
**E X2** AF 35153



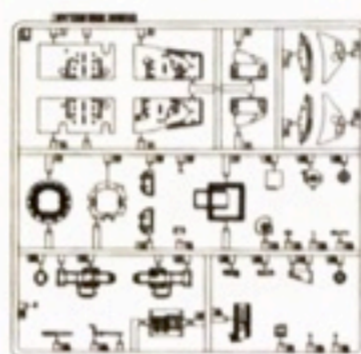
**C X1** AF 35153



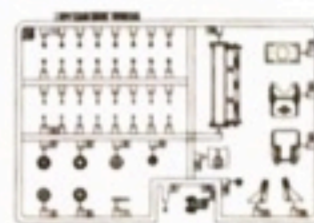
**D X2** AF 35153



**L X1** AF 35167

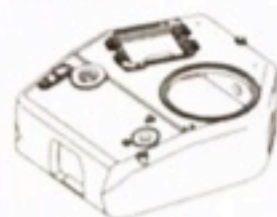


**M X2** AF 35167

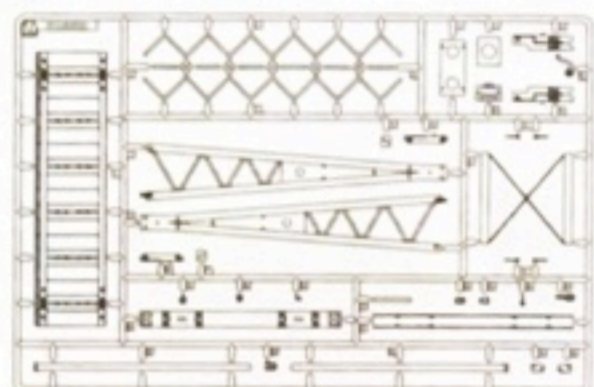


**O X1**

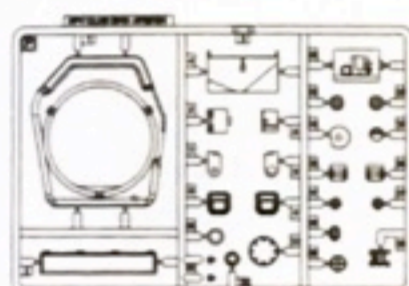
AF 35154



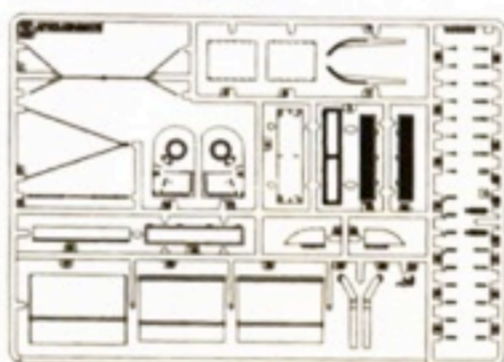
**U X4** AF 35342



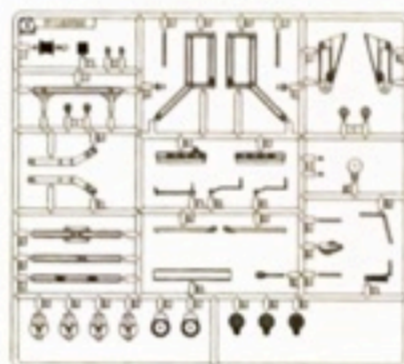
**P X1** AF 35154



**S X1** AF 35176



**X X1** AF 35342



**O X1** AF 35395

**H X1**

AF 35153



**G X1**

AF 35342



**K X24**

AF 35153



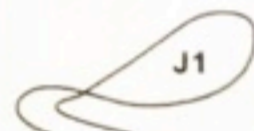
**N X1**

AF 35167



**J X1**

AF 35342



## Instructions:

If for some reason, you are not fully satisfied or have questions concerning our product; Please use the form provide, and send it to our nearest representative or mail it directly to our office.

We will deal with that A.S.A.P.

限臺灣地區使用 For Taiwanese use only!



**AF 35342**  
零件補充申請表

申請人  
姓名 地址 電話

- AF 35153-A — NTS 280
- AF 35183-A — NTS 470
- AF 35153-B — NTS 280
- AF 35153-C — NTS 240
- AF 35153-D — NTS 320
- AF 35153-E — NTS 210
- AF 35324-G — NTS 280
- AF 35153-H — NTS 120
- AF 35288-J — NTS 160
- AF 35153-K — NTS 120
- AF 35167-L — NTS 280
- AF 35167-M — NTS 320
- AF 35167-N — NTS 60
- AF 35154-O — NTS 150
- AF 35154-P — NTS 200
- AF 35176-S — NTS 320
- AF 35243-U — NTS 800
- AF 35243-X — NTS 350
- +郵寄費 — NTS 80

(請填)總計NT\$ \_\_\_\_\_

零件補充原因:(請於□打√)

原包裝即□遺失或□毀損,

製作途中□遺失或□毀損,

其他原因 \_\_\_\_\_

總代理:戰鷹企業有限公司收本公司將儘速為您處理。  
請將本表與該部品相同金額之郵政匯票一同寄至。



**AF 35342**  
Parts Replacement Form

- AF 35153-A
- AF 35183-A
- AF 35153-B
- AF 35153-C
- AF 35153-D
- AF 35153-E
- AF 35324-G
- AF 35153-H
- AF 35288-J
- AF 35153-K
- AF 35167-L
- AF 35167-M
- AF 35167-N
- AF 35154-O
- AF 35154-P
- AF 35176-S
- AF 35243-U
- AF 35243-X

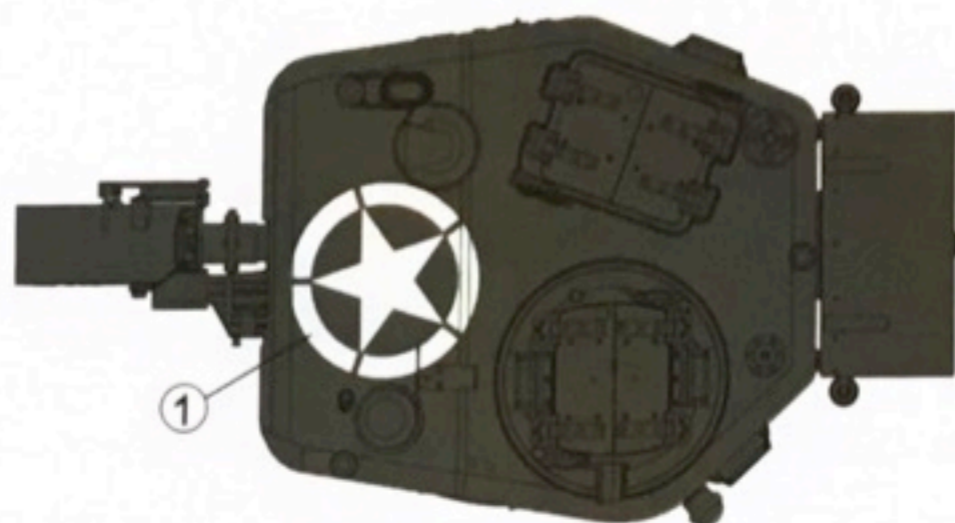
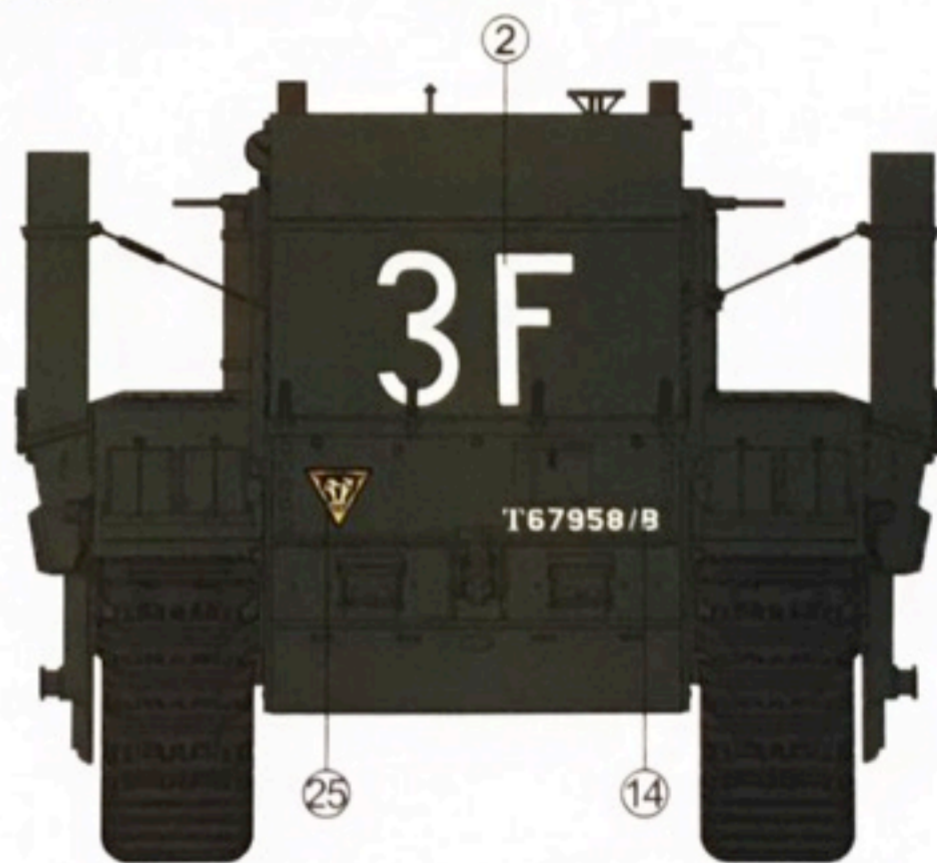
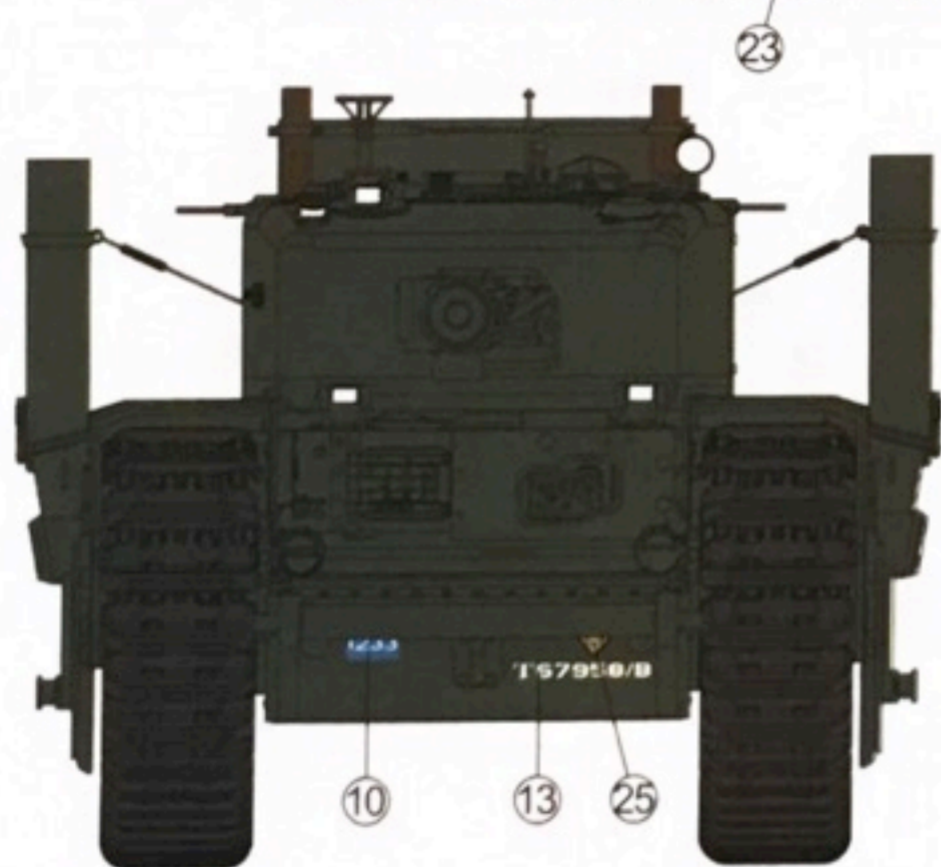
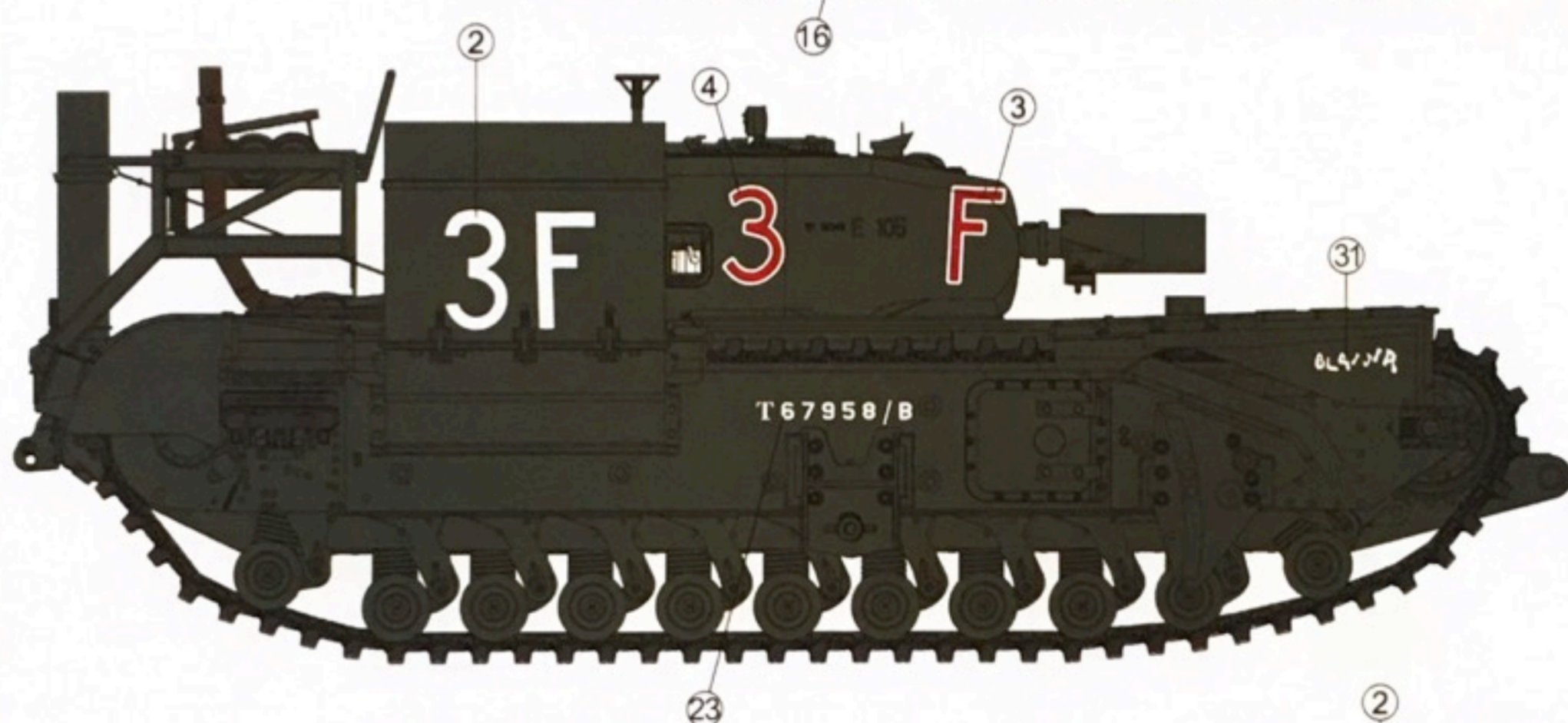
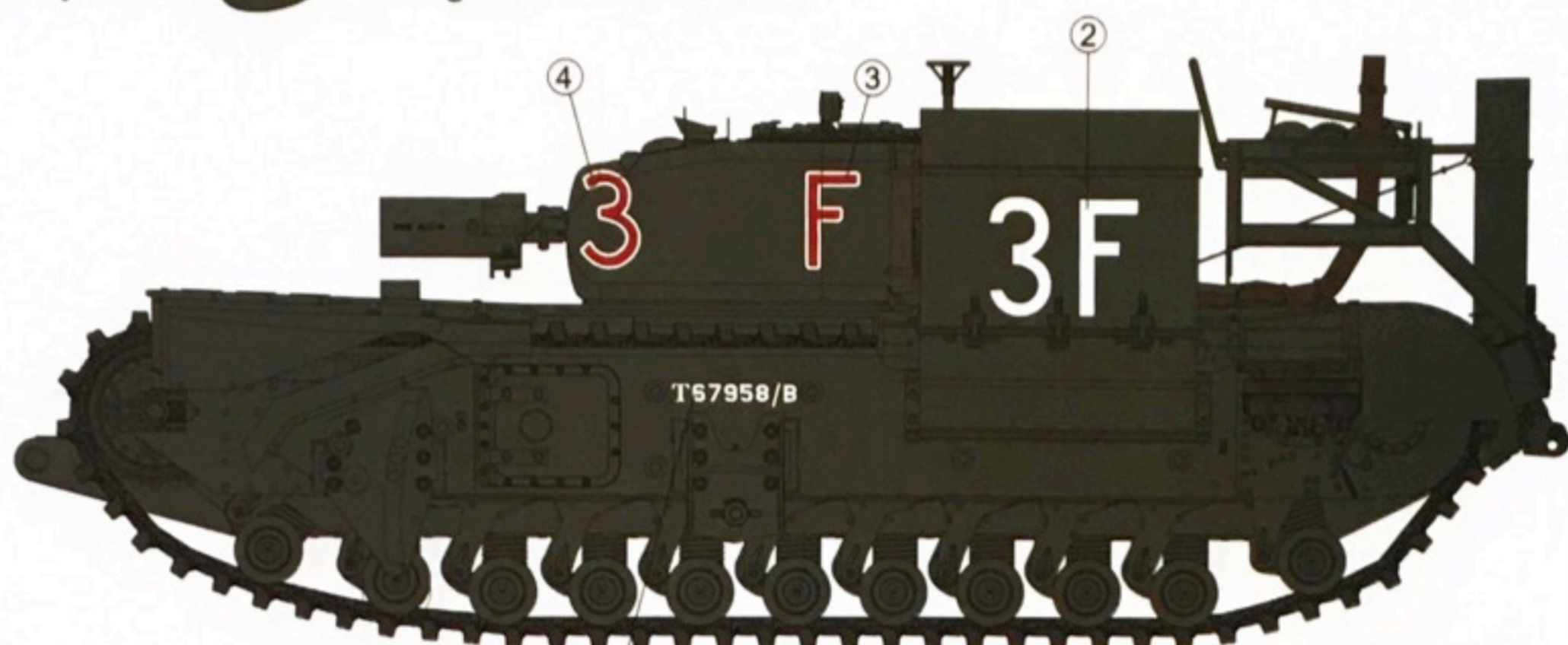
Reason for replacement:  Missing  
 Broken

Signature: \_\_\_\_\_



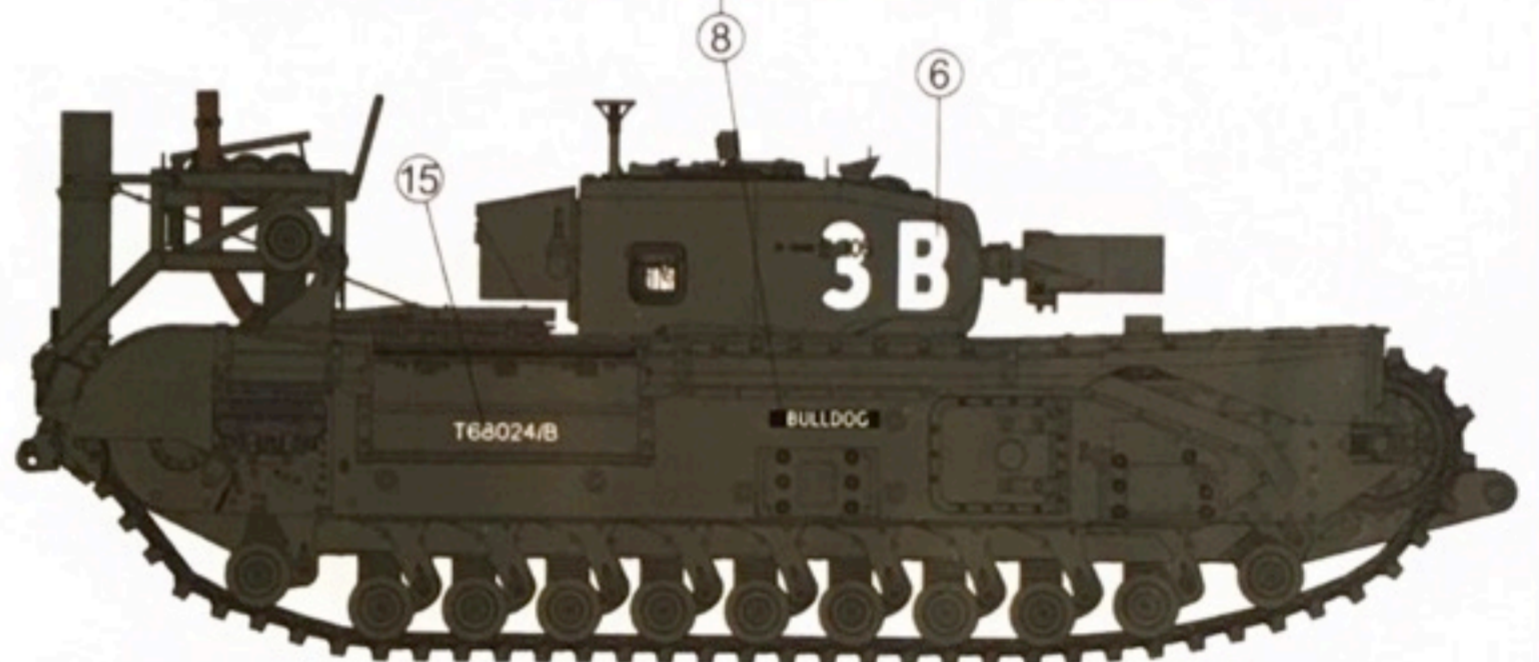
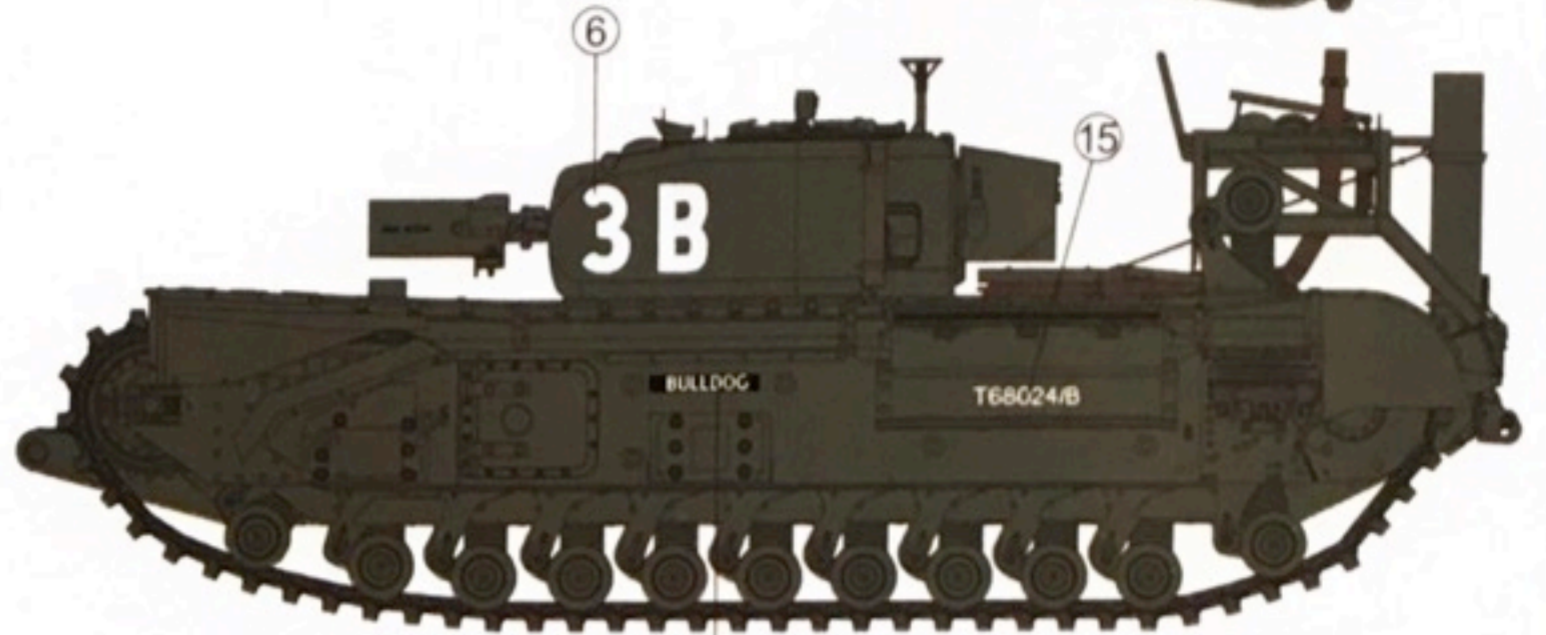
A 5th Assault Regiment, Royal Engineers, 79th Armoured Division.  
 第79装甲師皇家工兵第5突擊團。

 Body Color:  Dark green No.24 B.S.381



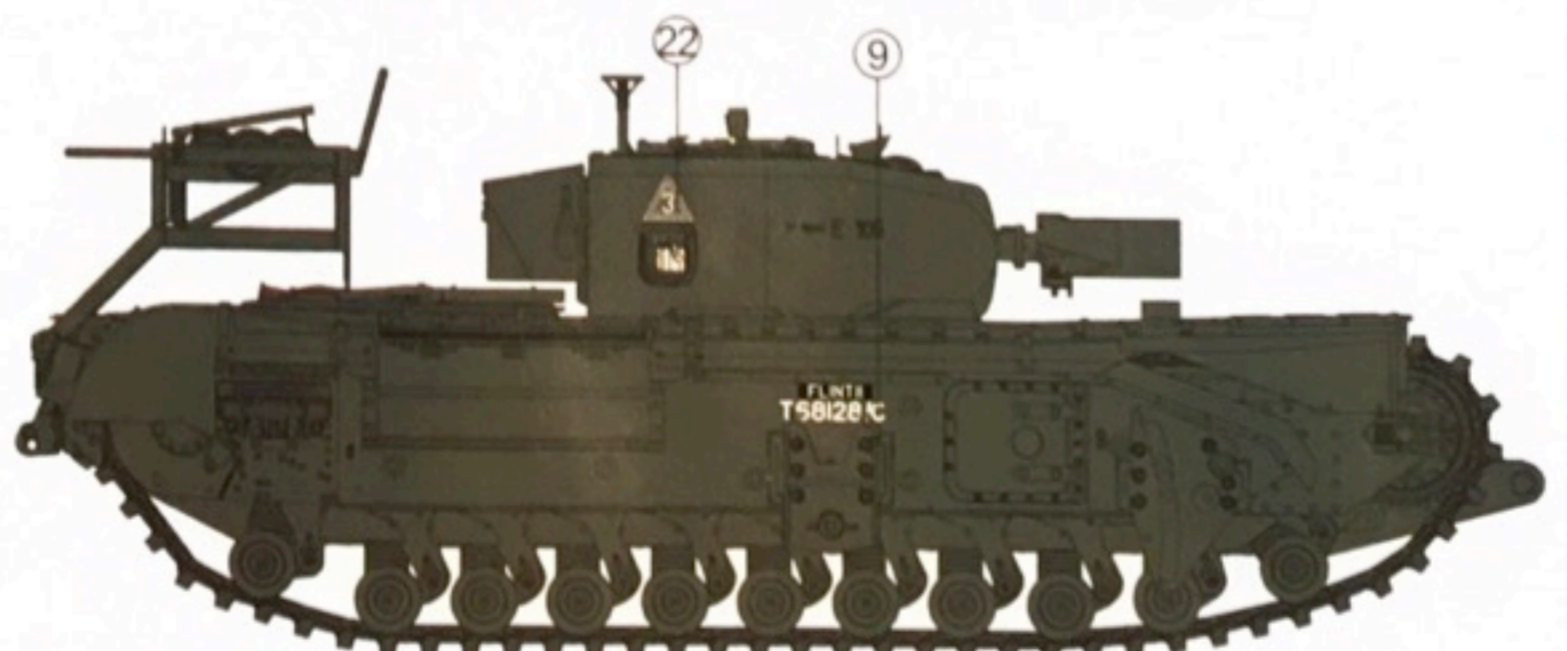
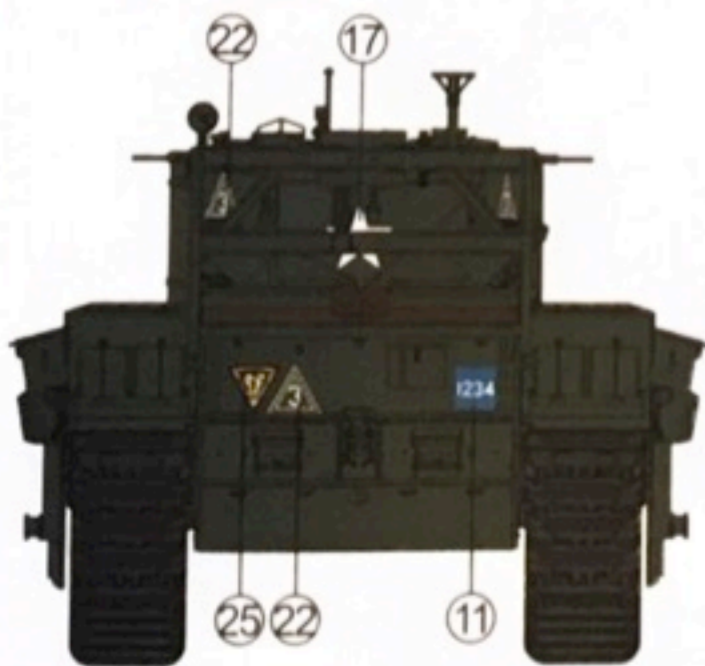
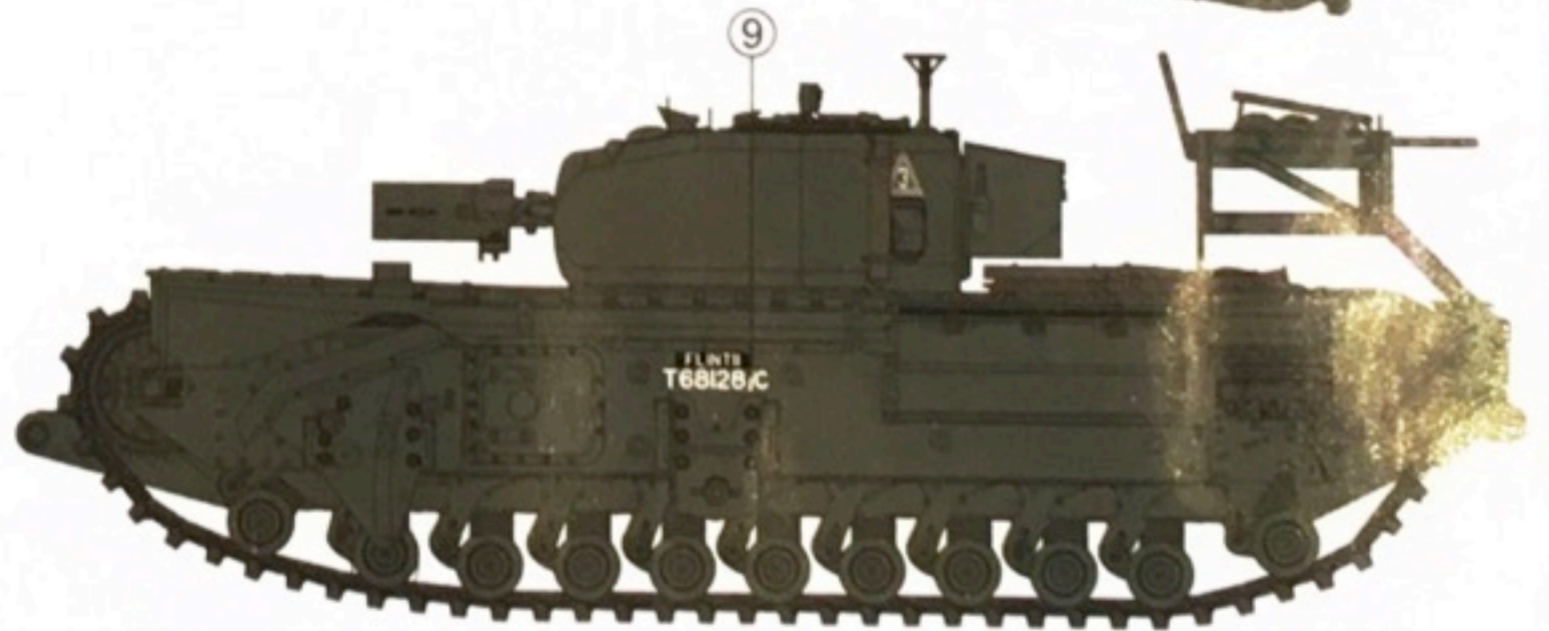
**B** 77th Assault Squadron, 5th Assault Regiment, 79th Armoured Division.  
 第79装甲師，第5突擊團，第77突擊中隊。

 Body Color:  Dark green No.24 B.S.381



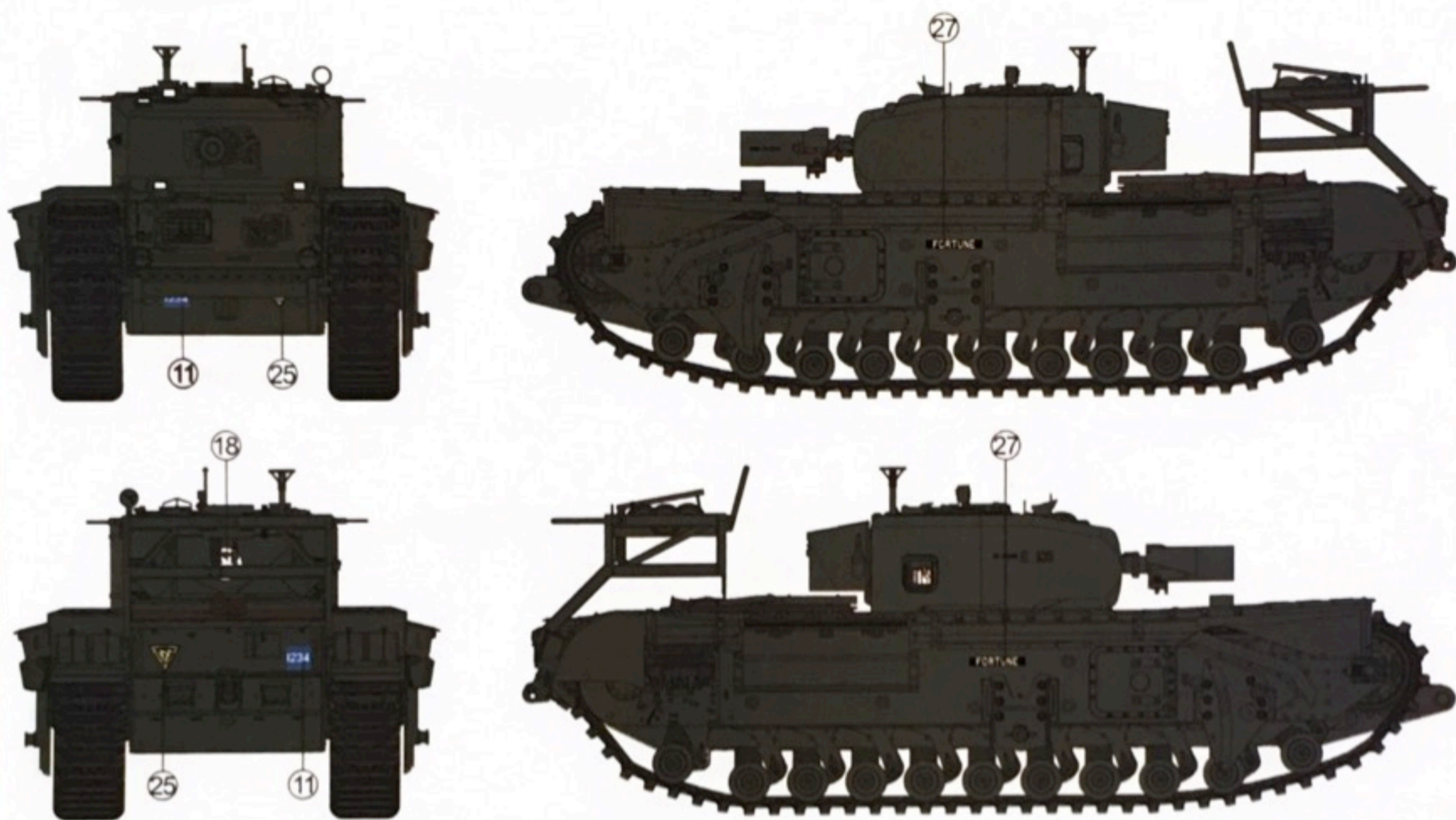
**C** 81st Assault Squadron, 6th Assault Regiment, 79th Armoured Division.  
 第79装甲師，第6突擊團，第81突擊中隊。

 Body Color:  Dark green No.24 B.S.381



**D** 6th Assault Regiment, 79th Armoured Division, November 1944.  
 第79装甲師，第6突擊團，1944年11月。

 Body Color:  Dark green No.24 B.S.381



**E** 222nd Assault Squadron, 42nd Assault Regiment, 79th Armoured Division.  
 第79装甲師，第42突擊團，第222突擊中隊。

 Body Color:  Dark green No.24 B.S.381

