

Sd.Kfz. 164 Nashorn

8.8cm PaK43/1 auf Geschutzwagen III und IV (Sf)

Altmarkische Kettenwerke GmbH started to develop a new track based self-propelled gun platform in September 1941. This self-propelled gun combined engine and driving system from Panzer III Ausf. J, and suspension system from Panzer IV. The engine was relocated to middle section so the gun can be placed to the rear. Also the Panzer IV chassis was extended for adequate weight distribution.

Under instruction from higher level, the 8.8cm Pak 43 was installed onto this platform in 1942, as an anti-armour self-propelled gun. Thin armour plates were installed to provide limited protection to personnel, due to limited capability from suspension system. The prototype was delivered in February 1943, and mass production products were introduced in May, designated as Sd.Kfz.164, nicknamed Hornisse. By early 1944, further modifications were incorporated to the hull. This new model nicknamed Nashorn.

Although there are numbers of shortcomings to Hornisse and Nashorn, such as open compartment and thin armour plates (only 10mm thick), which can only prevent damage from light weapons and shrapnel, also was lack of machine gun installed, yet with formidable firepower, they could easily destroy any Allied tanks in action. They are, therefore, regarded as successful anti-armour weapons. Production started from 1943 to March 1945, and they saw action to the end of WWII.

1941年9月、アルケット社は新しい自走砲のベースとなる車台の開発に着手した。この新型車台は、III号戦車J型のエンジンと走行装置、IV号戦車のサスペンションを組み合わせており、エンジンを車体の中央に載せたことで砲架を後部に据えることが可能になり、また、車体はIV号戦車のものよりも延長されたため、理想的な重量配分が実現していた。

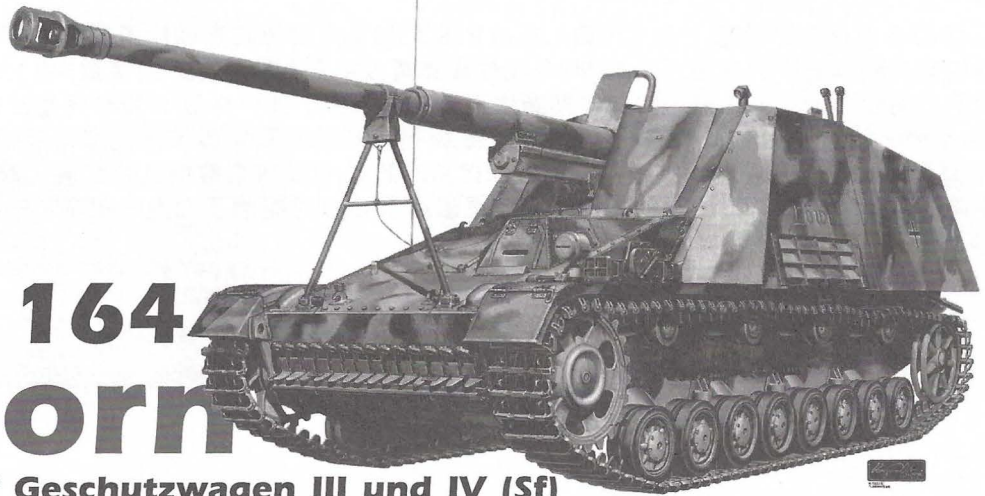
1942年総統より、この新型車台に8.8cm対戦車砲Pak43を搭載した対戦車自走砲の開発指示がなされた。強力な攻撃力を備えた反面、サスペンションの能力の関係で、乗員を保護する防御には、薄い装甲が張られた限定的なものにならざるを得なかった。試作車が1943年2月に完成、Sd.kfz.164として5月より量産が開始され、「ホルニッセ(スズメバチ)」の名称が与えられた。1944年の初頭までに、車体にさらに改良が施され名称も「ナースホルン(サイ)」と改められた。

ナースホルンは、開放式の戦闘室、軽火器の攻撃や弾片から身を守るのが精一杯な10mm厚の薄い装甲、機銃を装備していない等、多くの問題点を抱えてはいたものの、その恐るべき砲威力によって、あらゆる連合軍戦車を破壊することが可能であった。そのため、ナースホルンは対戦車兵器の傑作として高い評価を得ているのである。1943年から1945年の3月まで生産が行われ、第二次大戦の終結まで戦いつづけたのだった。



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Due to the rise in global instability and uncertainty in the post-Cold War world, the US Army established the Stryker Brigade Combat Team (SBCT). The SBCT is a highly computerized light armored unit composed with wheeled armored combat vehicles and HMMWVs, which is able to meet the requirement of rapid deployment and maneuverability.

Mowag Motorwagenfabriken of Switzerland started to develop the Piranha series armored wheeled vehicles since 1972, the vehicles are available in many different variants. The Piranha was introduced into US military services when USMC ordered a batch of Piranha in 1983. The Piranha III was introduced in 1996, it is able to accommodate a selection of weapons, from 7.62 mm machine guns to 105 mm guns, in the meantime it can keep total weight under 20 tons, make it transportable in a C-130 aircraft. The US Army appreciate such potential, therefore select the Piranha III as a platform for next generation Army armored wheeled vehicles.

This new wheeled armored combat vehicle, Stryker, is named for two American servicemen who posthumously received the Medal of Honor. The Stryker series adopt modulization design concept, so that different body and arm arrangements can use the same chassis, and such modification can be carried out in the field, which gives the commander extensive flexibility on application and deployment.

The Mobile Gun System (MGS) is SBCT's backbone of anti-armour and breaking through heavily defended areas in the enemy lines. Delivered to the US Army in July 2006, the MGS equips with a 105mm gun and employs four types of 105mm tactical ammunition, takes up to 18 rounds, to support the infantry elements.

冷戦の終結に伴い、世界各地で地域紛争や内戦勃発といった新たな脅威が発生するようになると、アメリカ陸軍はSBCT(ストライカー戦闘旅団)を編成し、この状況に対応することとした。SBCTとは、装輪式装甲車とHMMWV(高機動多用途装輪車両)で構成された、高度にコンピューター化された部隊であり、状況に即応した迅速な展開行動が可能である。

1972年、スイスのモワグ社が、装輪式装甲車ピラニアシリーズの供給を開始した。様々なバリエーション展開が可能なピラニアは1983年にアメリカ海兵隊が発注したことで米軍に導入が始まった。1996年に導入されたピラニアⅢは、7.62mm機銃から105mm砲まで搭載火器の選択ができ、どの場合でも総重量は20ト以下に抑えられるのでC-130輸送機への搭載が可能であった。そのため次世代の新型装輪式装甲車のベースとしてピラニアⅢが選択されたのである。

新型装輪装甲車ストライカーの名称は、戦死後に議会名誉勲章を受章した二人の米軍兵士の名前をとって名づけられた。ストライカーシリーズは、共通のシャーシに異なる車体や武装を換装して搭載することができるよう設計されており、その転換作業は前線においても可能である。これにより、部隊の運用に高い柔軟性を持たせることに成功している。

MGS(モバイルガンシステム)は、対戦車戦闘や、敵の強固な防御線を突破する作戦において、SBCTの要となる存在である。MGSは、105mm砲を装備し、4種類の戦術的砲弾を18発搭載、歩兵部隊支援をその任務としており、2006年7月からアメリカ陸軍に配備されている。

1941的9月,德國的阿爾克特公司著手設計一種履帶型自走砲的載台,這種自走砲整合了原有的III號戰車J型的引擎與駕駛系統,配合上IV號戰車的懸吊系統,並將引擎至於車體中段,空出後方空間來搭載火炮,同時延長IV號戰車底盤讓重量能有較理想分布。

1942年這個載台被指示用來搭載8.8cm Pak 43做為反戰車自走砲使用,在顧及懸吊的承受能力下,自走砲僅能提供乘員輕薄裝甲的保護。1943年2月試作車完成,5月正式進入量產,並被賦與Sd.Kfz.164的型號,同時也被暱稱為”胡蜂”(Hornisse)。1944年初新生產的車體進行了部分修改,希特勒將修改後的自走砲改命名為”犀牛”(Nashorn),在1943年中首度投入戰鬥的胡蜂,與稍後登場的犀牛,僅管戰鬥室均採開頂的設計,四周的裝甲也嫌薄弱,厚度僅及10mm,僅能防禦輕兵器與砲彈碎片的殺傷,也沒有車載機槍的配置,但憑藉強大的火力,與實戰的驗證中能夠輕易擊破戰場上出現的任何一種盟軍戰車,如此依然證明了它是一種成功的反裝甲利器,由1943年生產至1945年3月,並一直使用至大戰結束。

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 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.

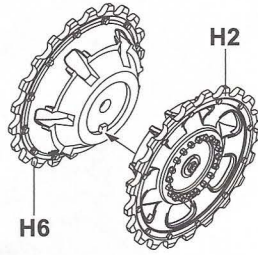
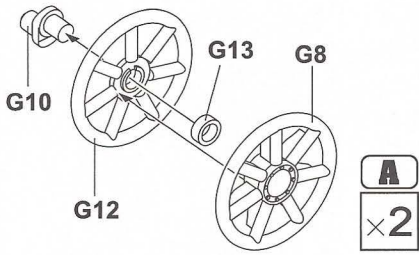
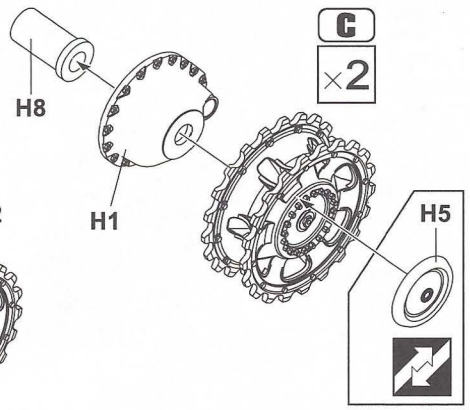
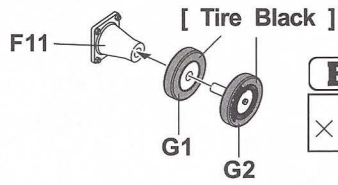
水貼紙使用說明:

1. 將模型表面擦乾淨
2. 將貼紙剪下泡入清水中約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

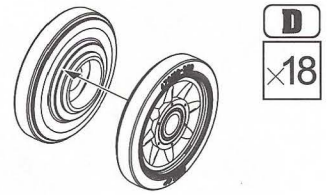
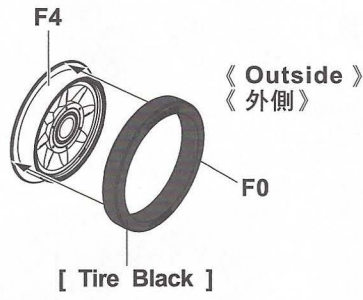
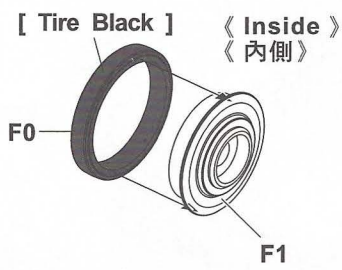
Color list: 塗料表

Color	Brand	GSI Creos (Gunze Sangyo)			Humbrol	Revell	Life Color
		Hobby Color	Mr. Color	Mr. Color Spray			
German gray	德國灰	H-32	C-40	J-40	92	79	UA073
Metallic green	亮綠	H-89	C-77	J-77	131	364	
Dark yellow	深黃	H-79	C-39	J-39	83	16	UA081
Steel	黑鐵	H-18	C-28	J-28	53	91	LC76
Tire black	輪胎黑	H-77	C-137		85	302	LC02
Red brown	紅褐	H-47	C-41	J-44	160	383	UA082
Silver	銀	H-8	C-8	J-8	11	90	LC74
Red	紅	H-3	C-3	J-3	19	31	LC56
Bright blue	寶藍	H-15	C-65	J-65	14	51	LC60
Wood brown	木棕	H-37	C-43	J-43	34	05	UA085/ UA125
Flat white	消光白	H-11	C-62	J-62	34	05	LC01

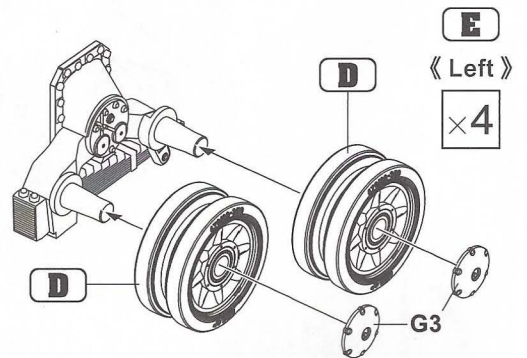
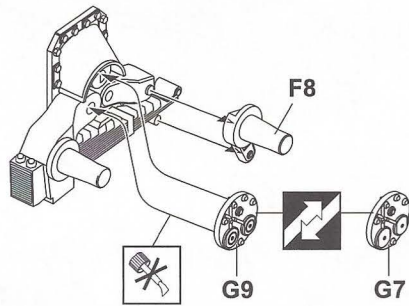
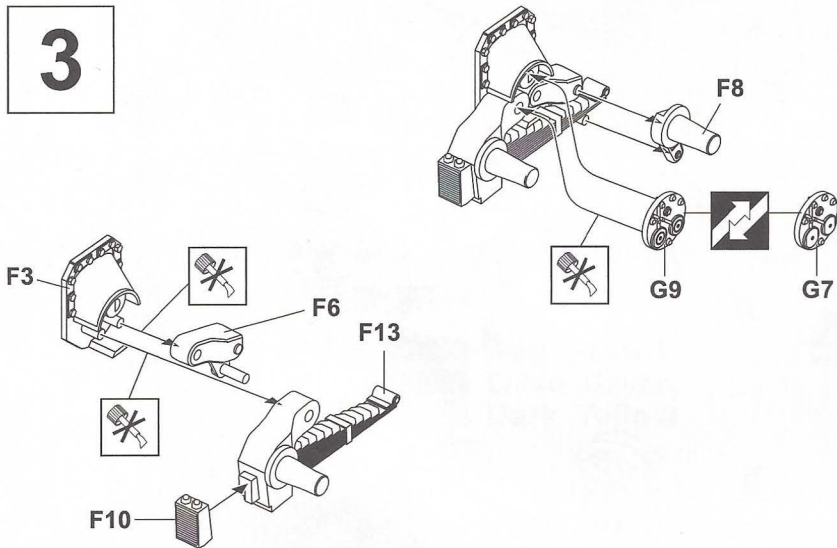
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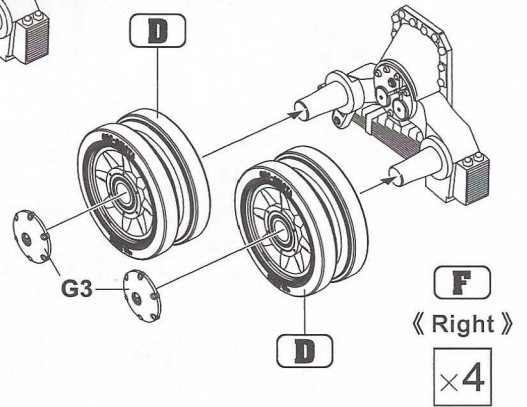
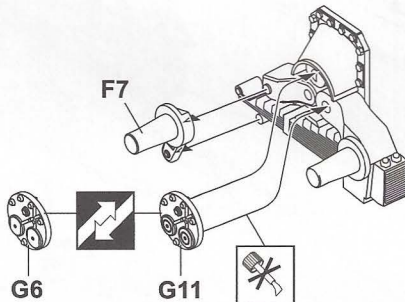
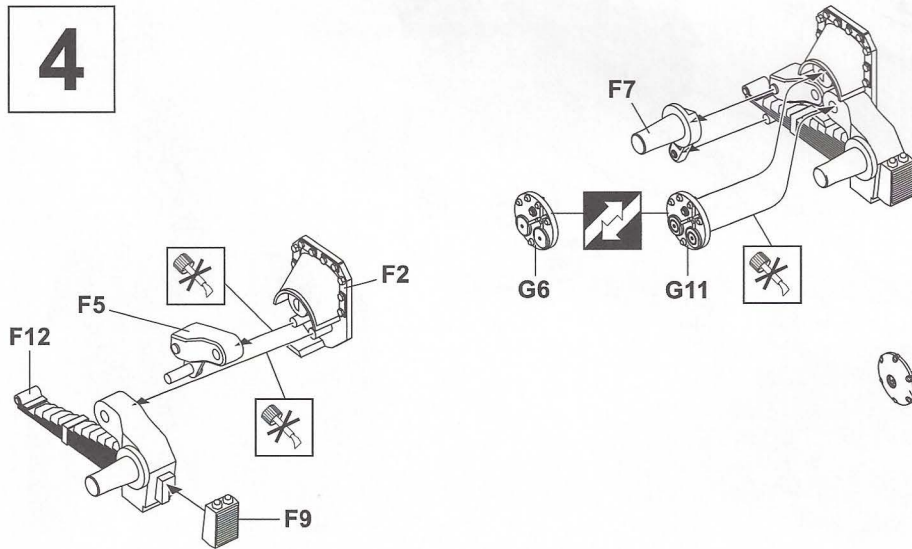
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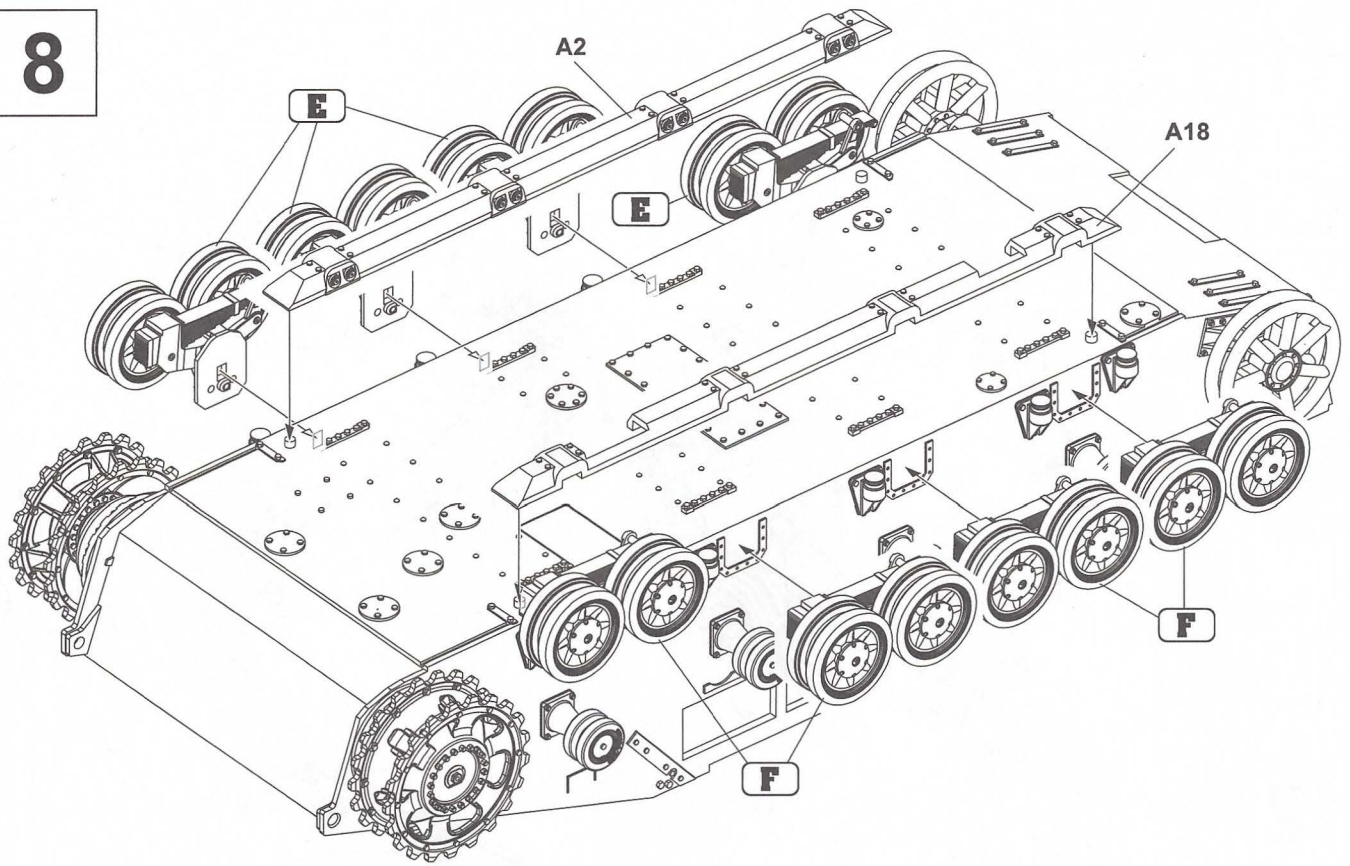
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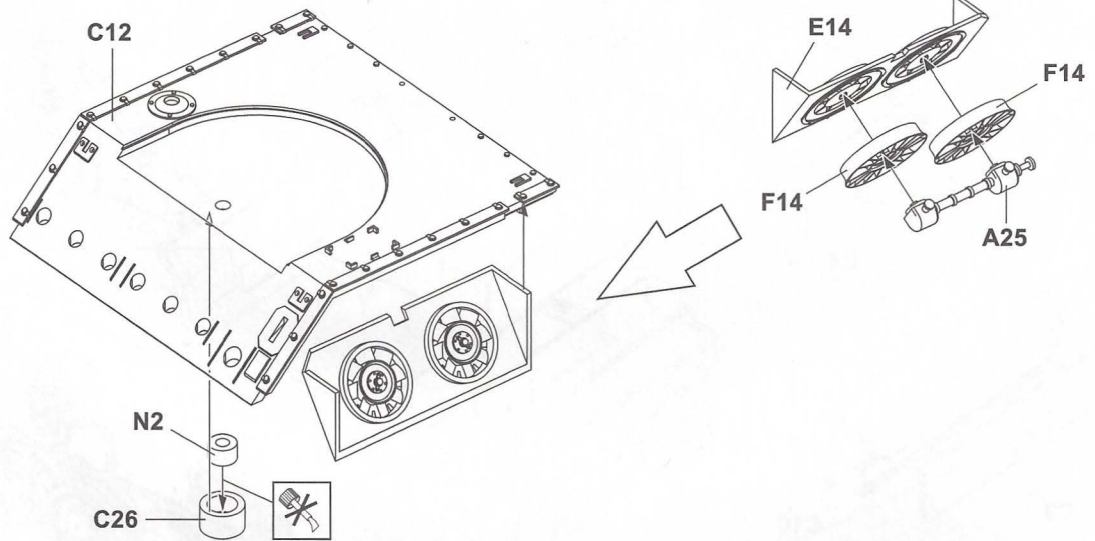
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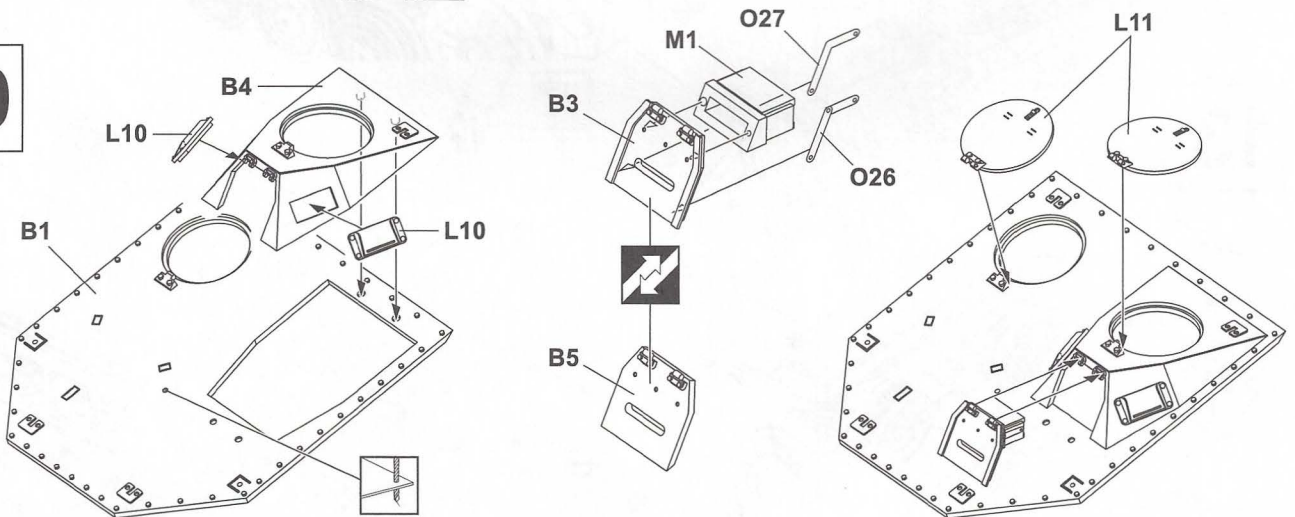
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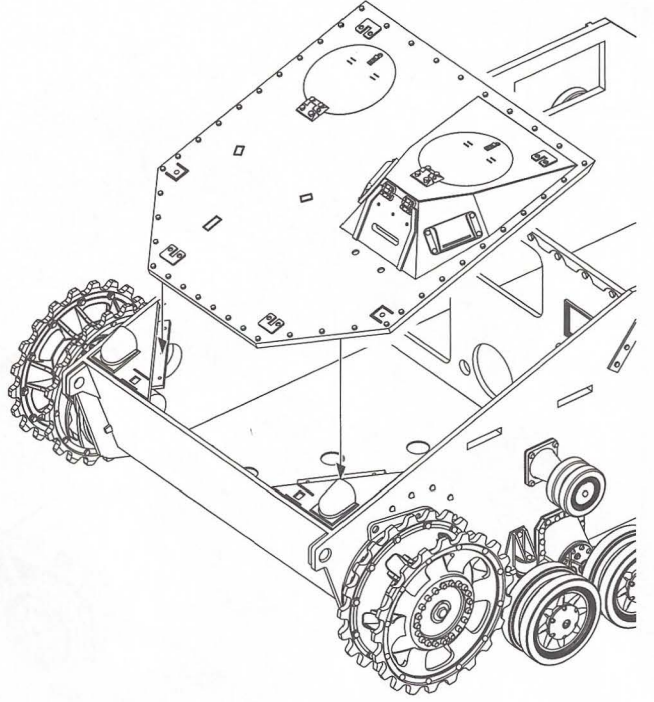
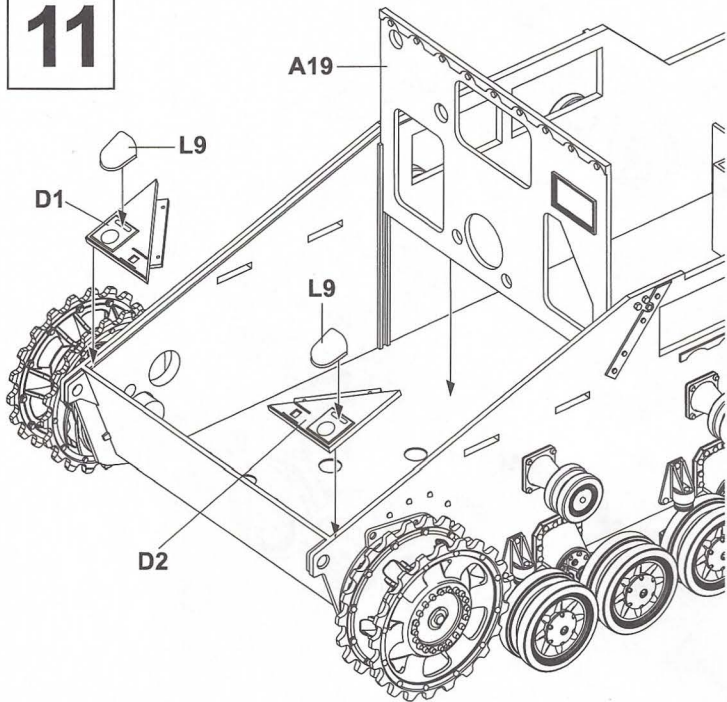
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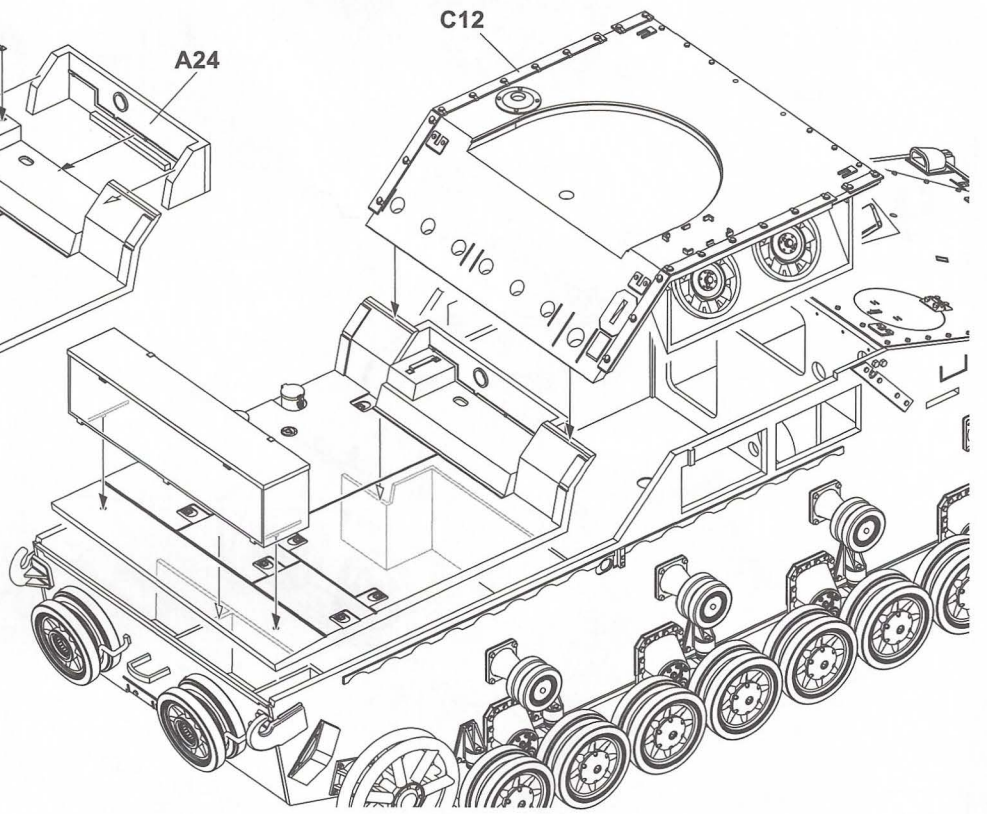
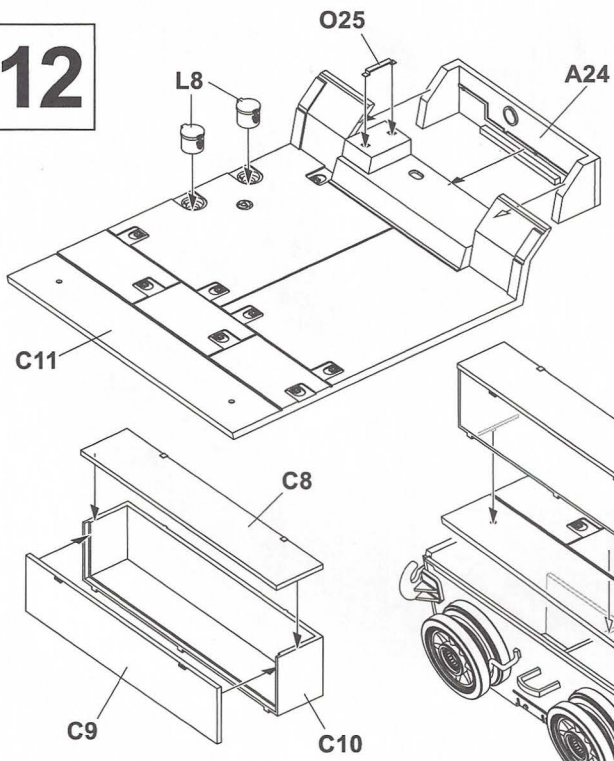
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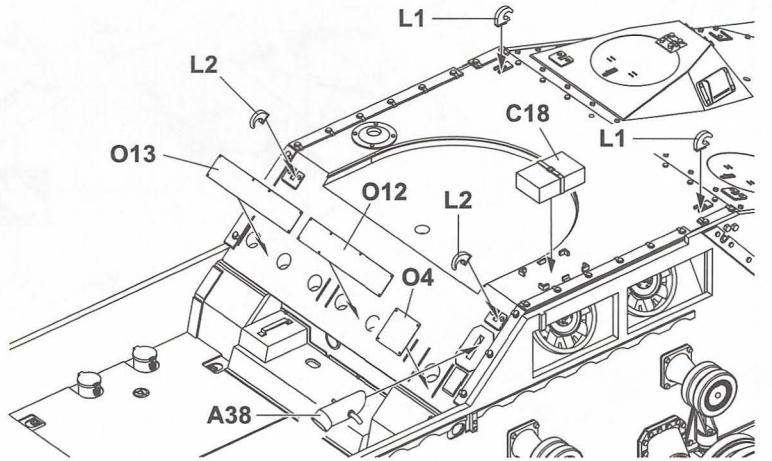
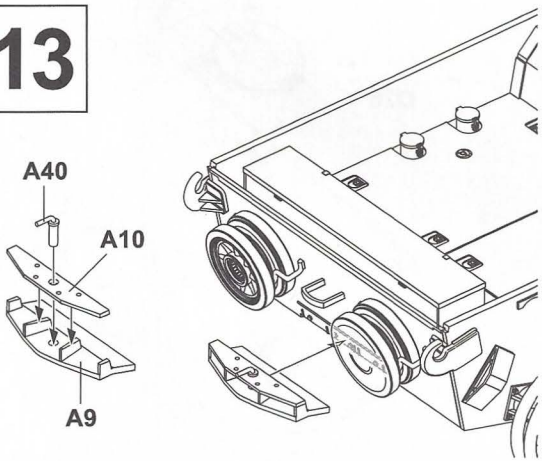
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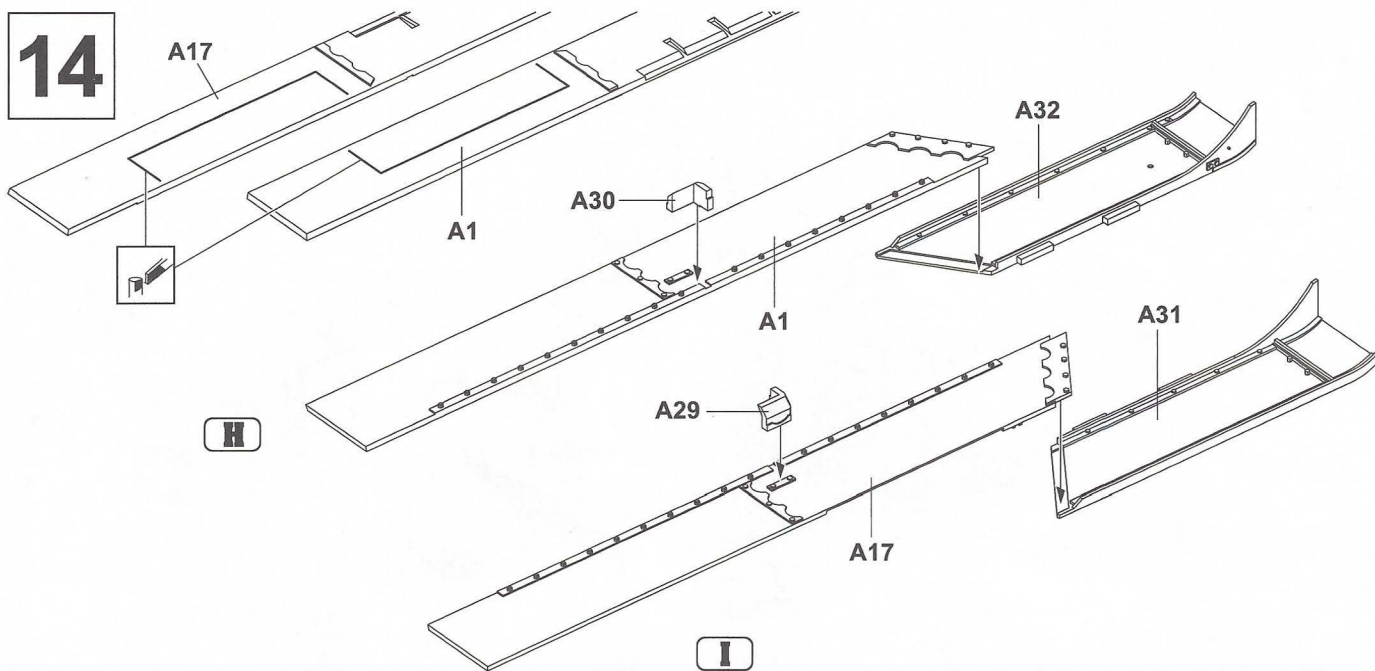
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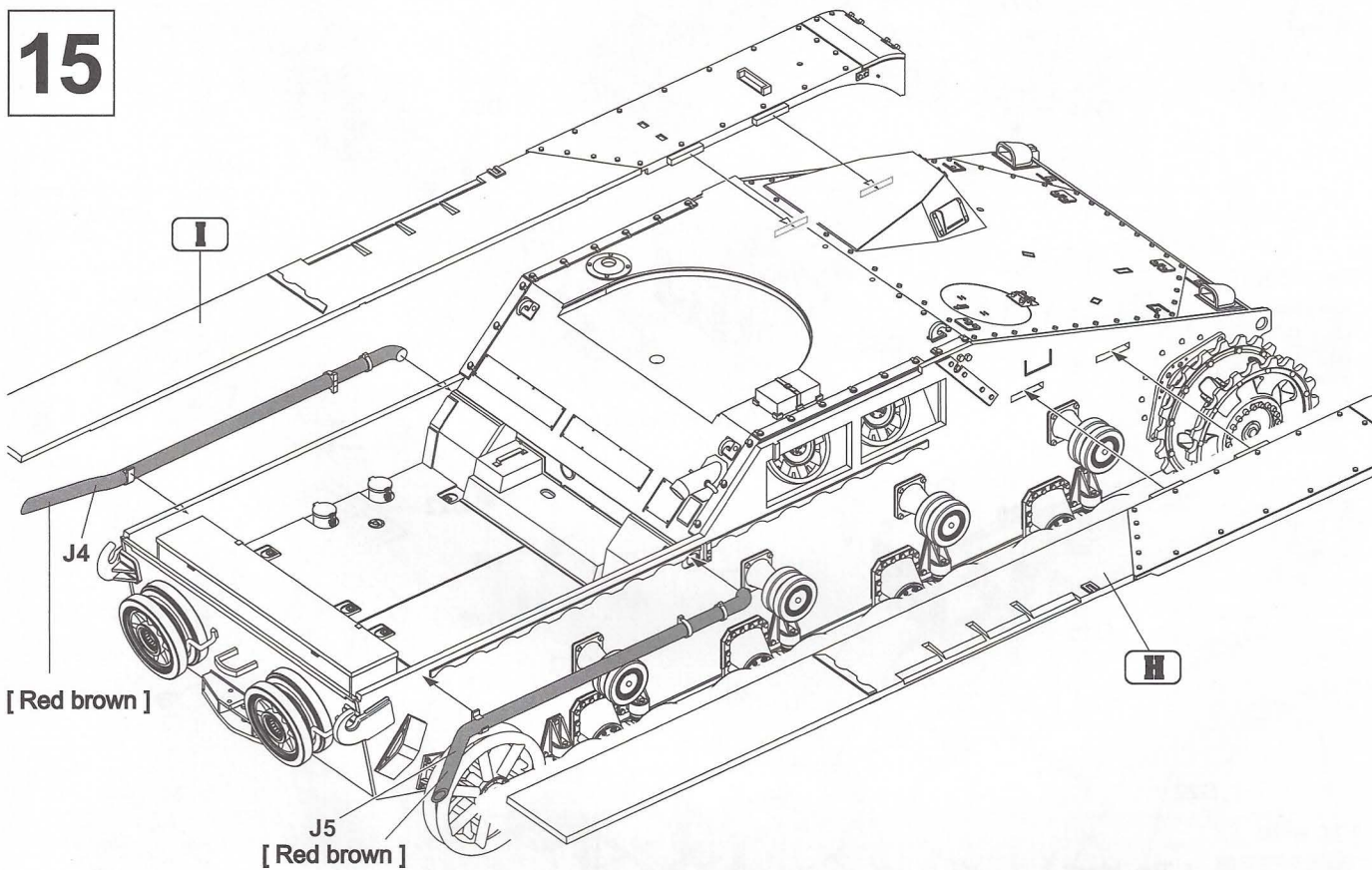
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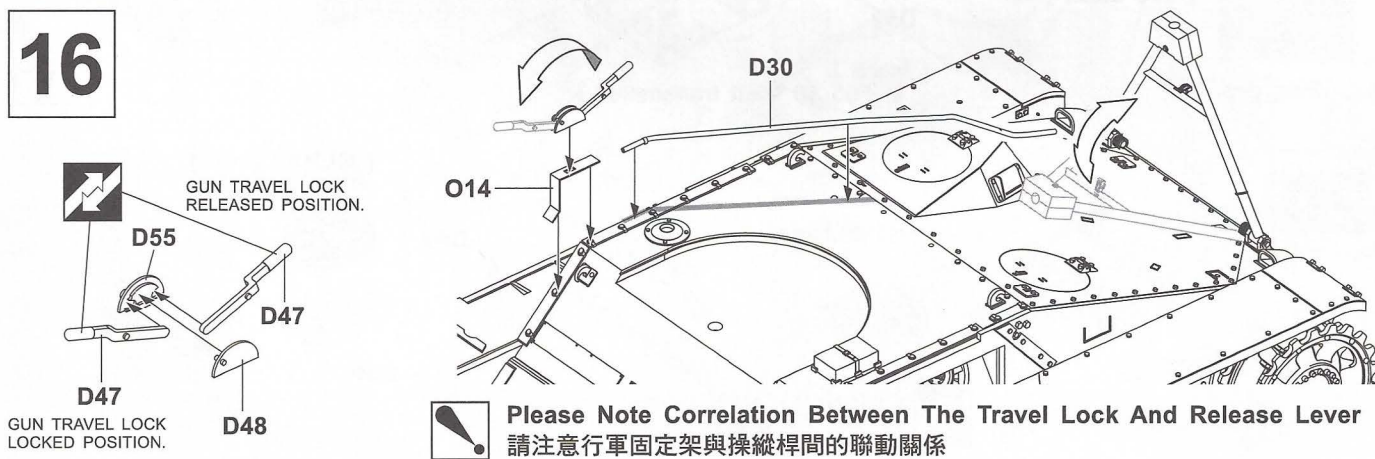
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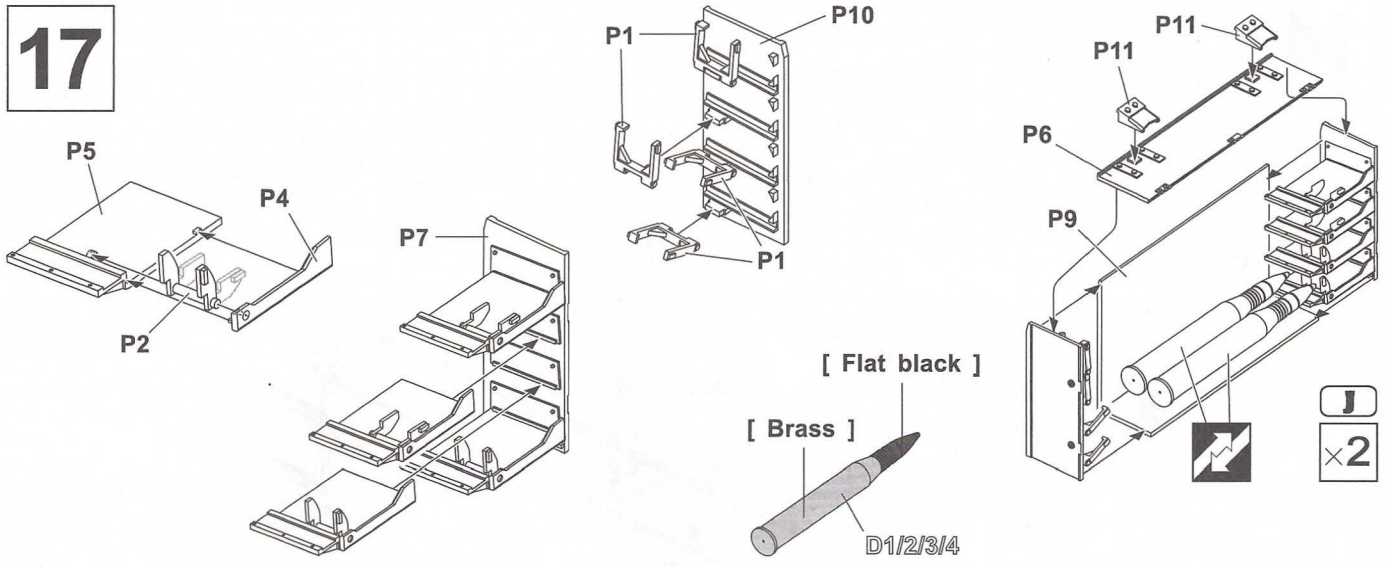
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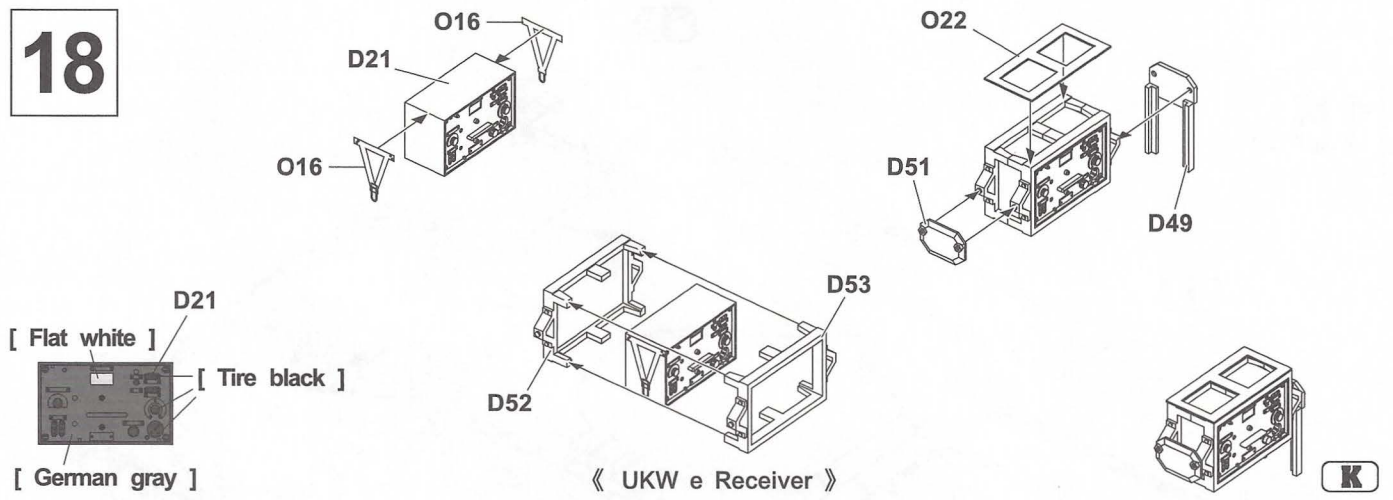
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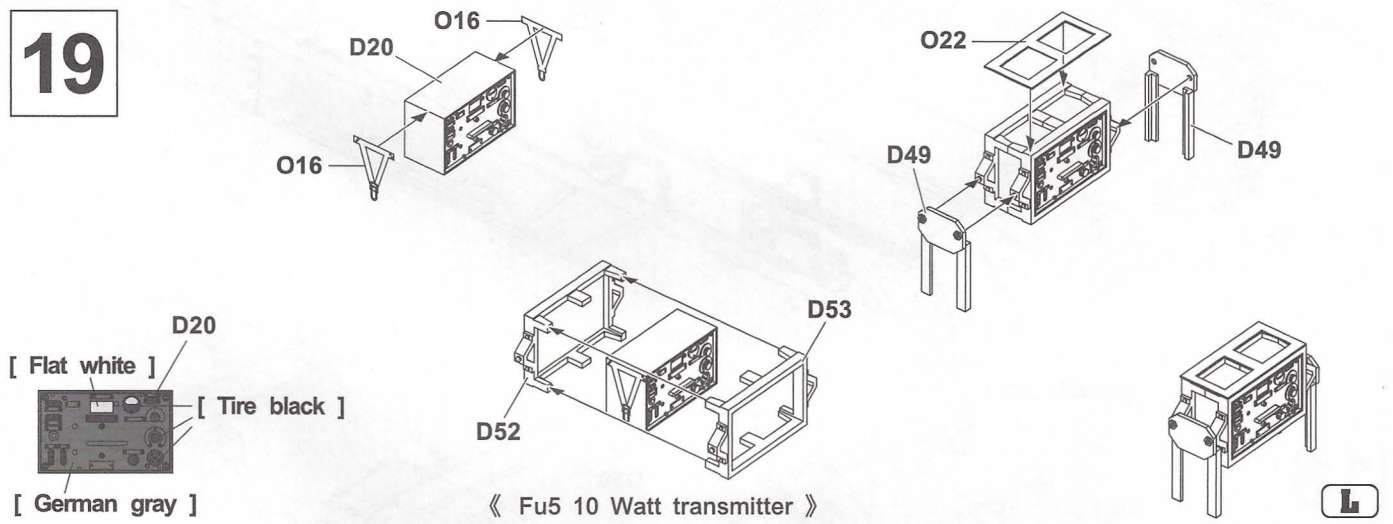
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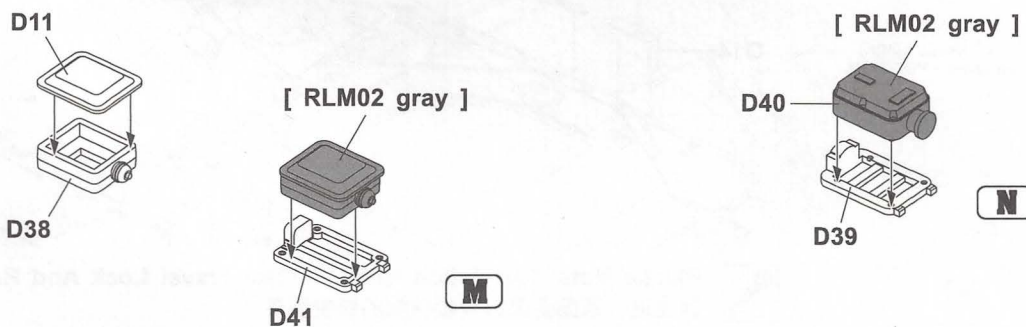
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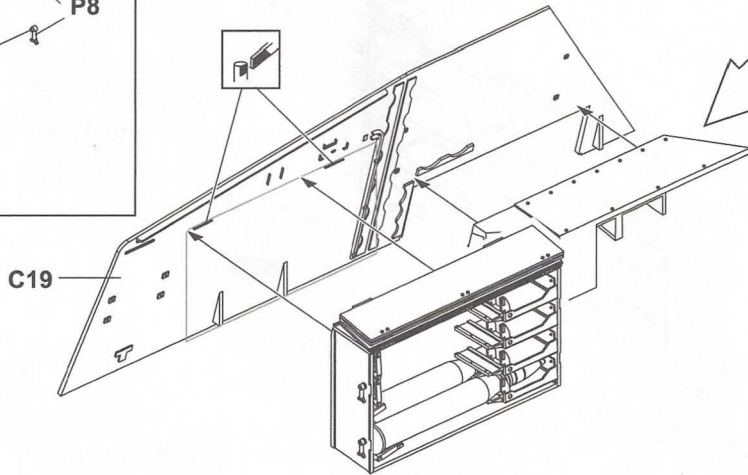
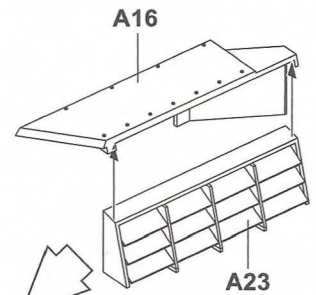
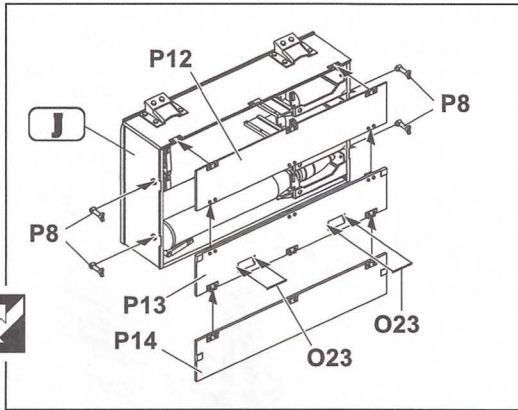
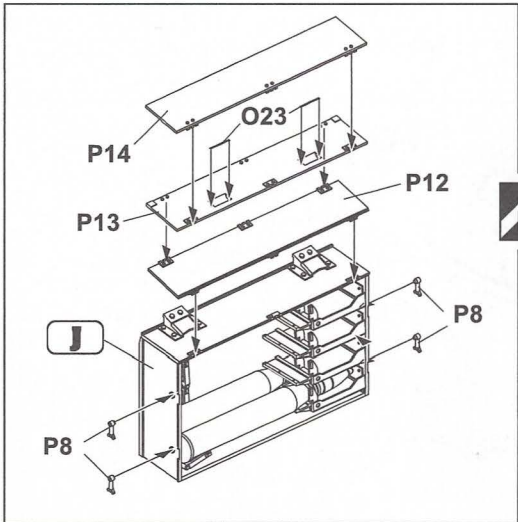
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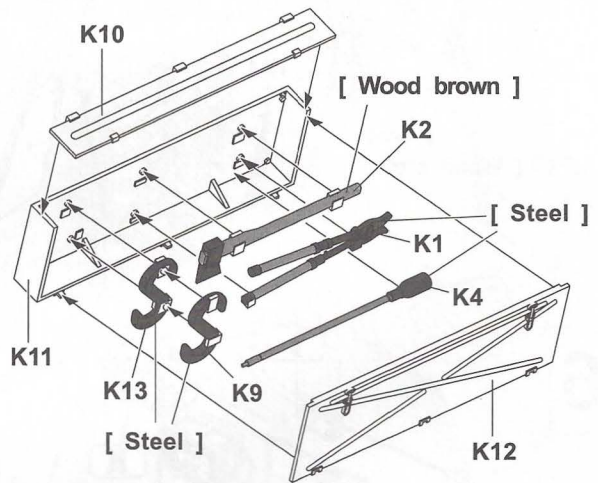
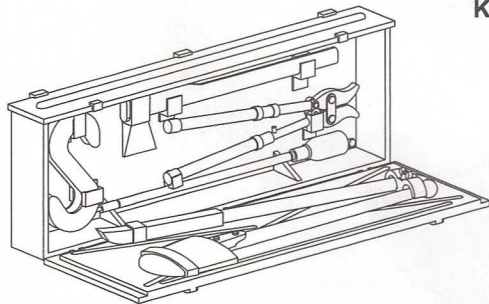
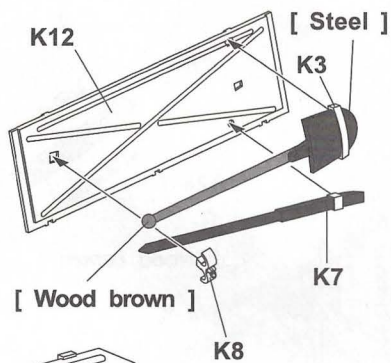
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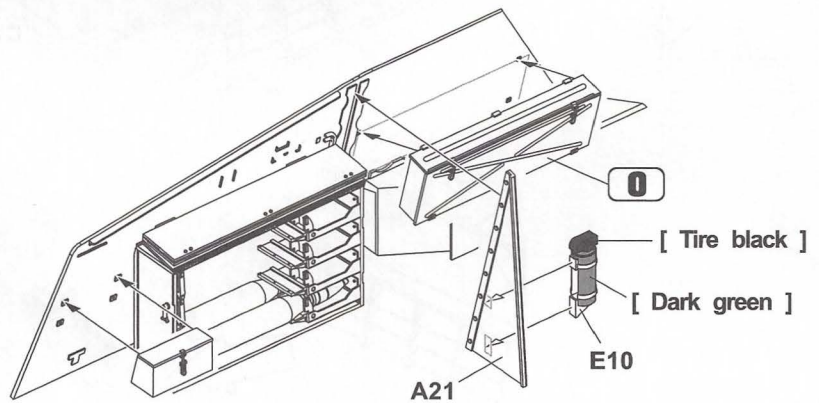
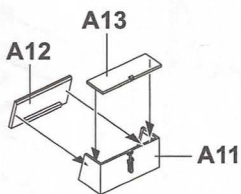


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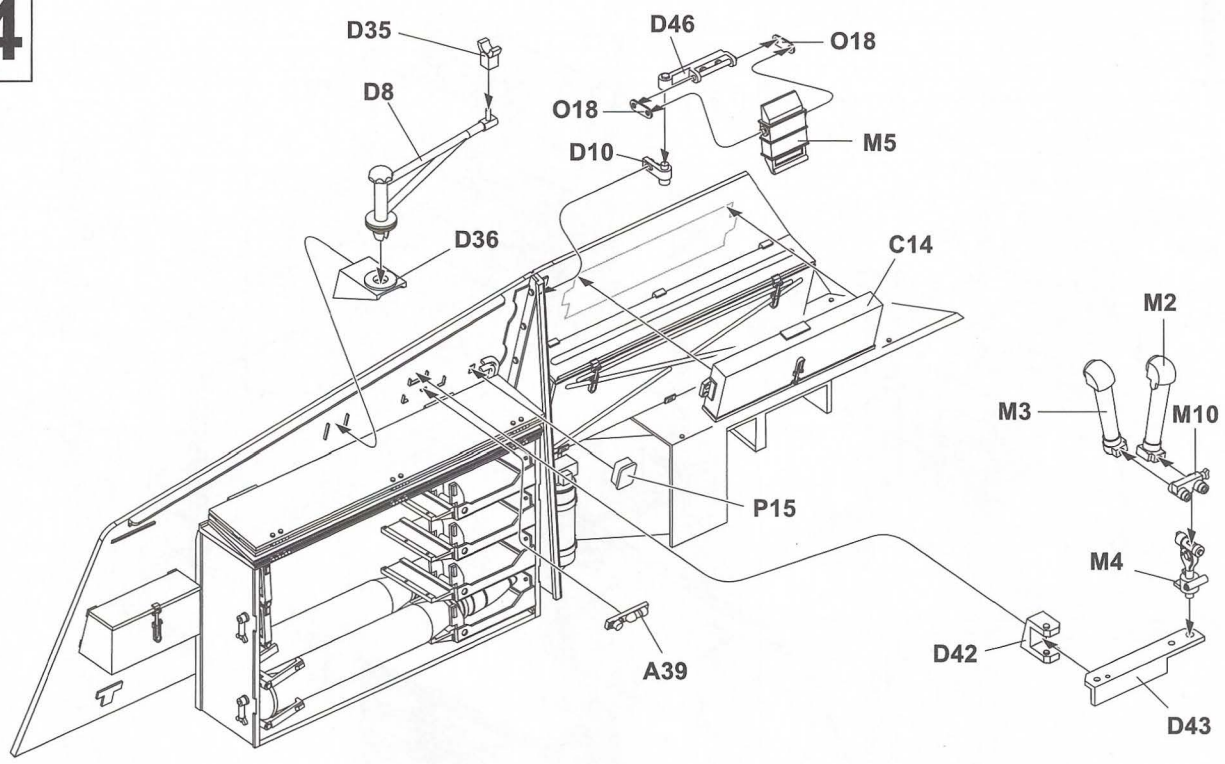


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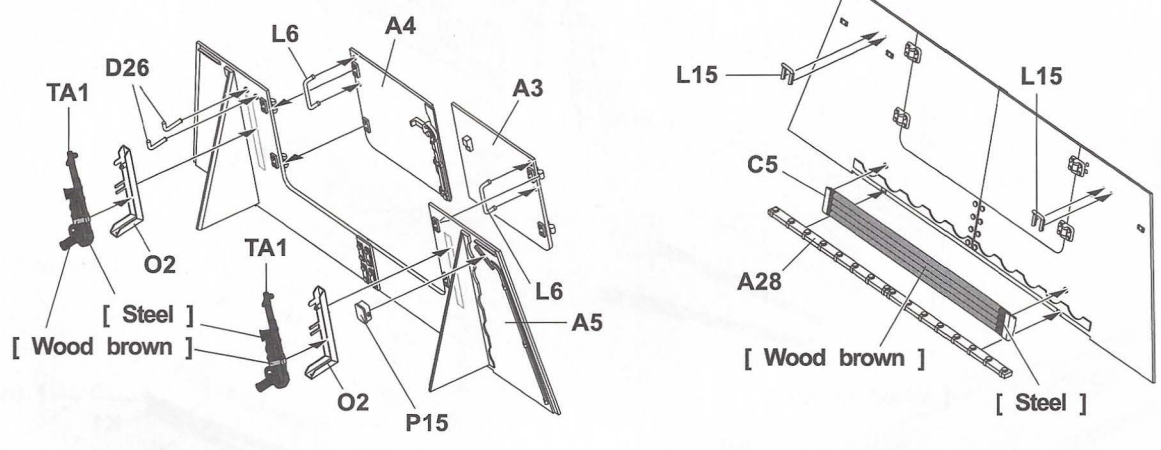
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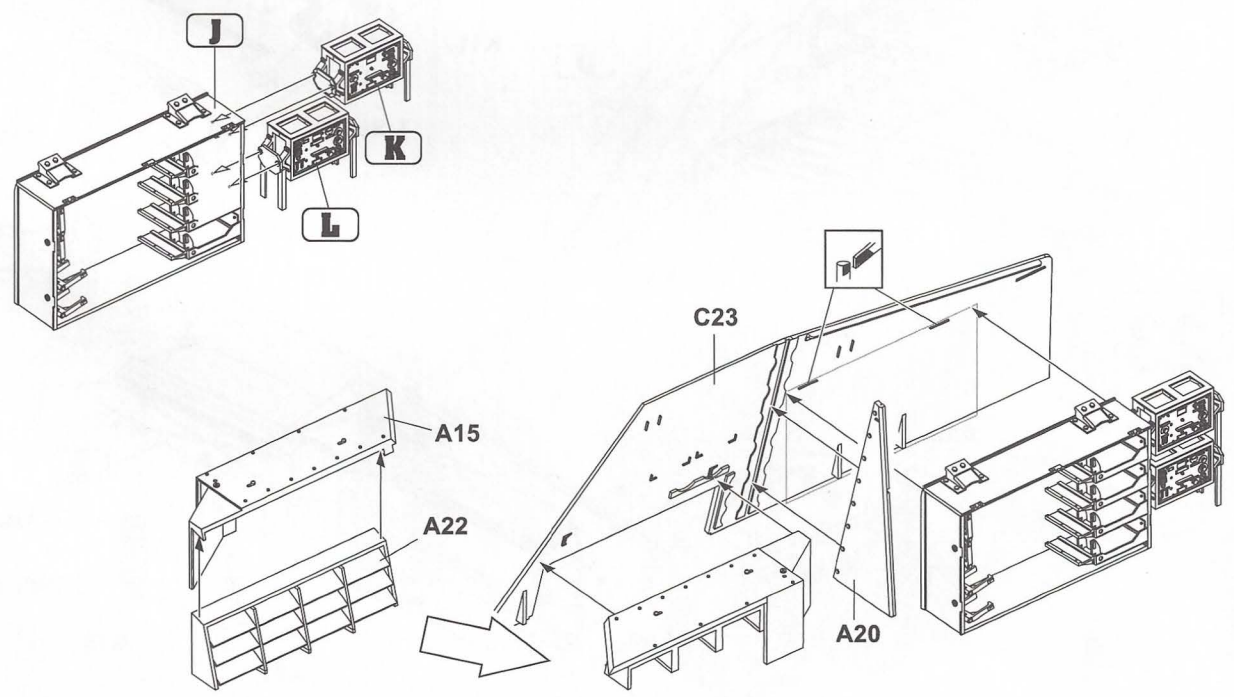
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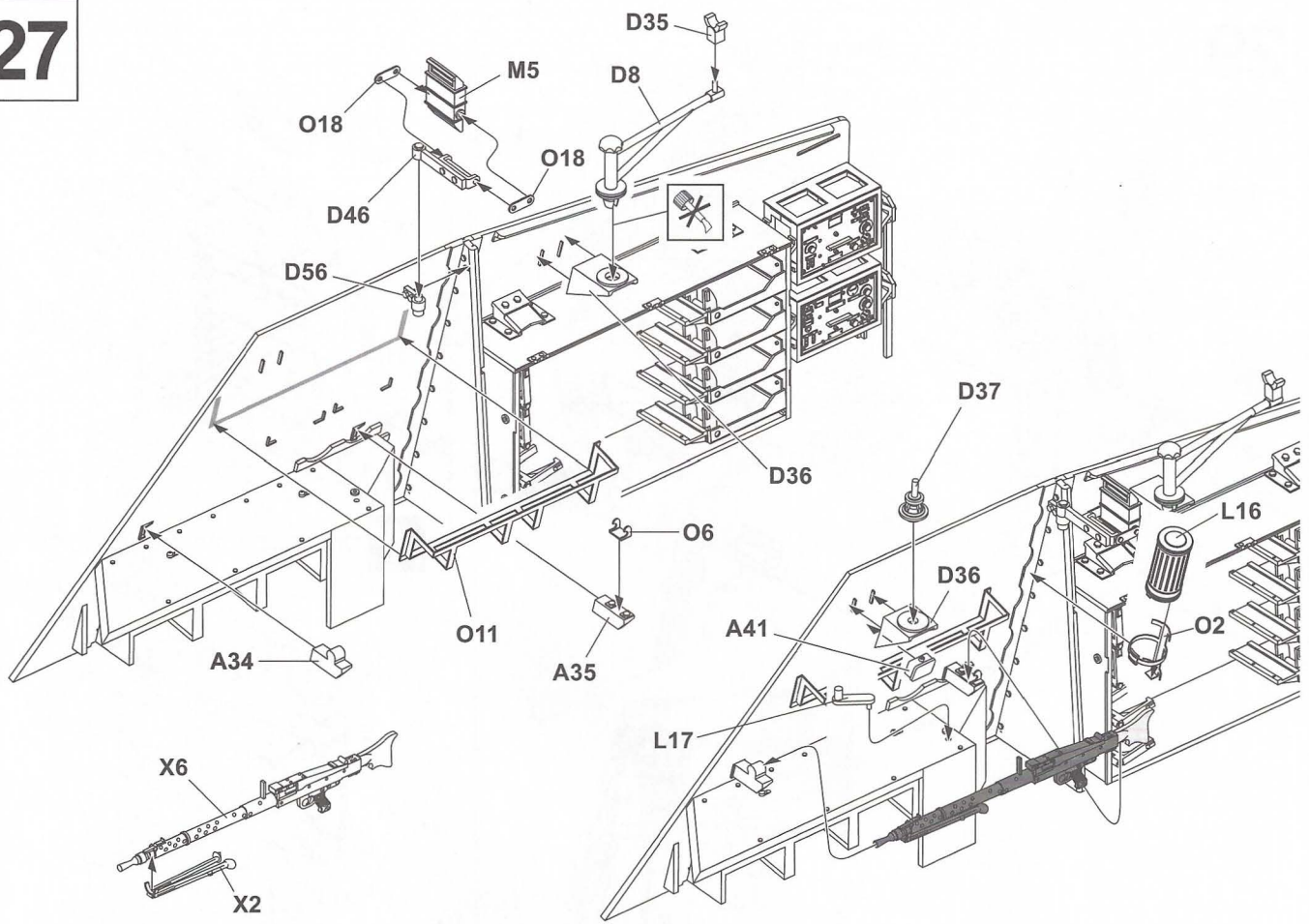
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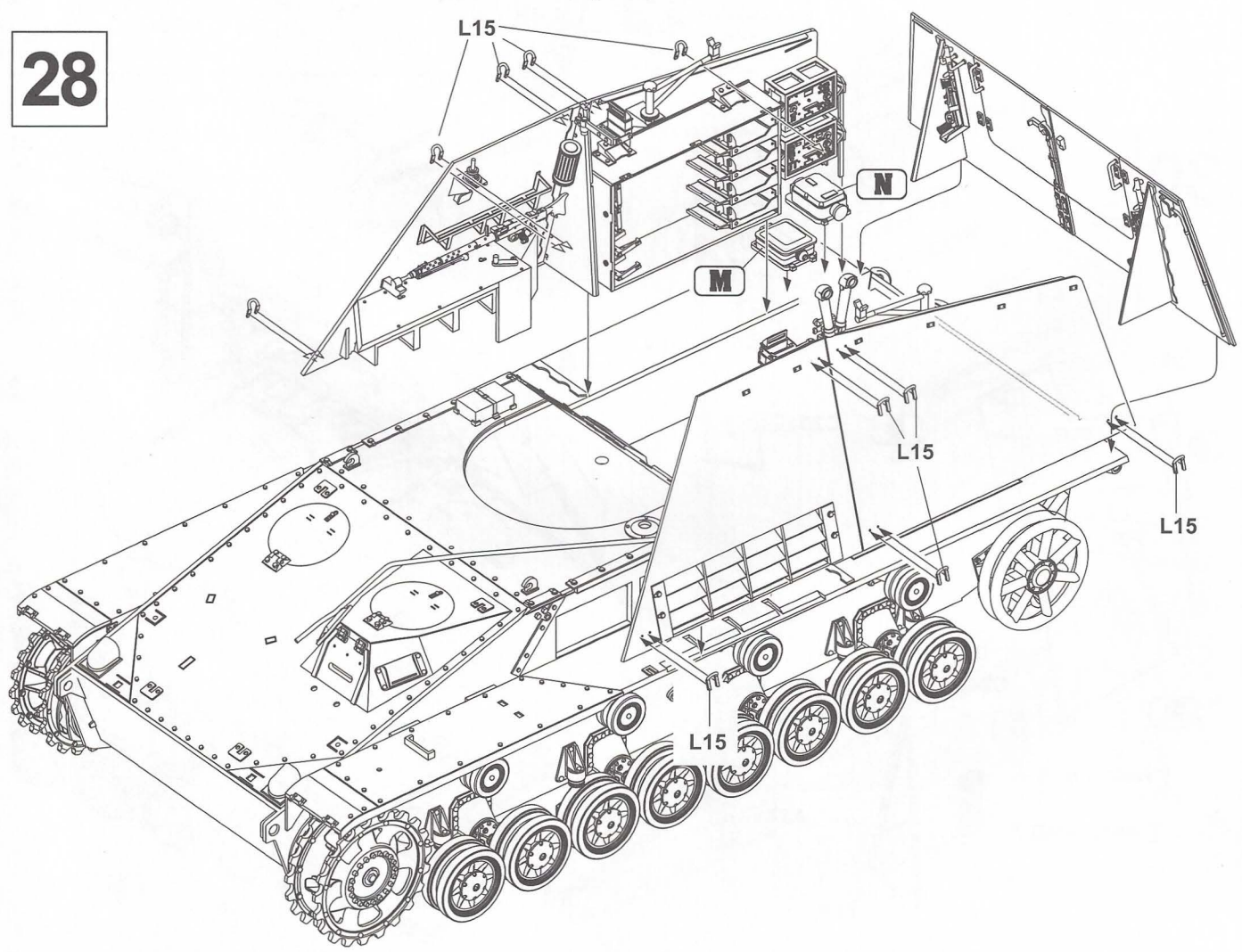
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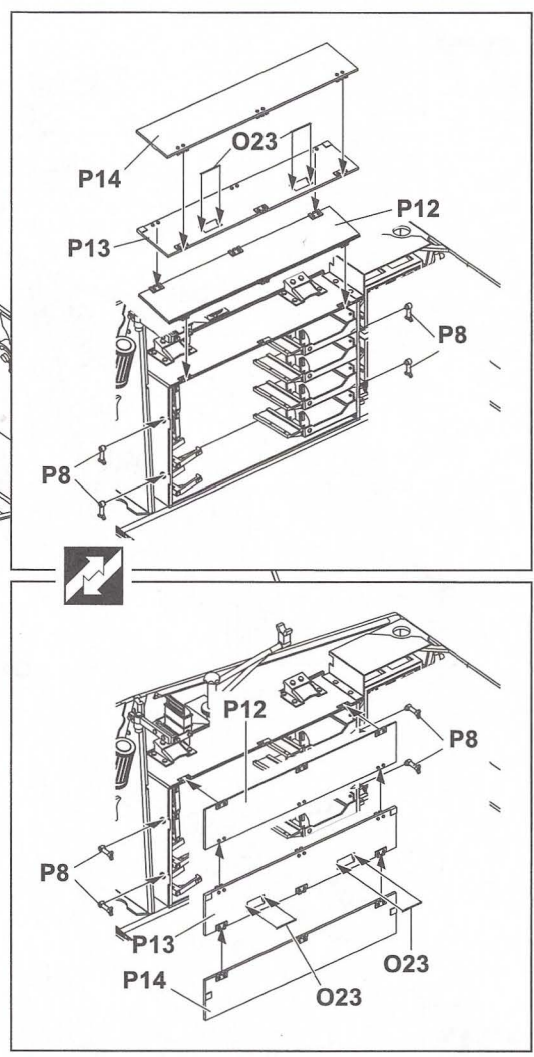
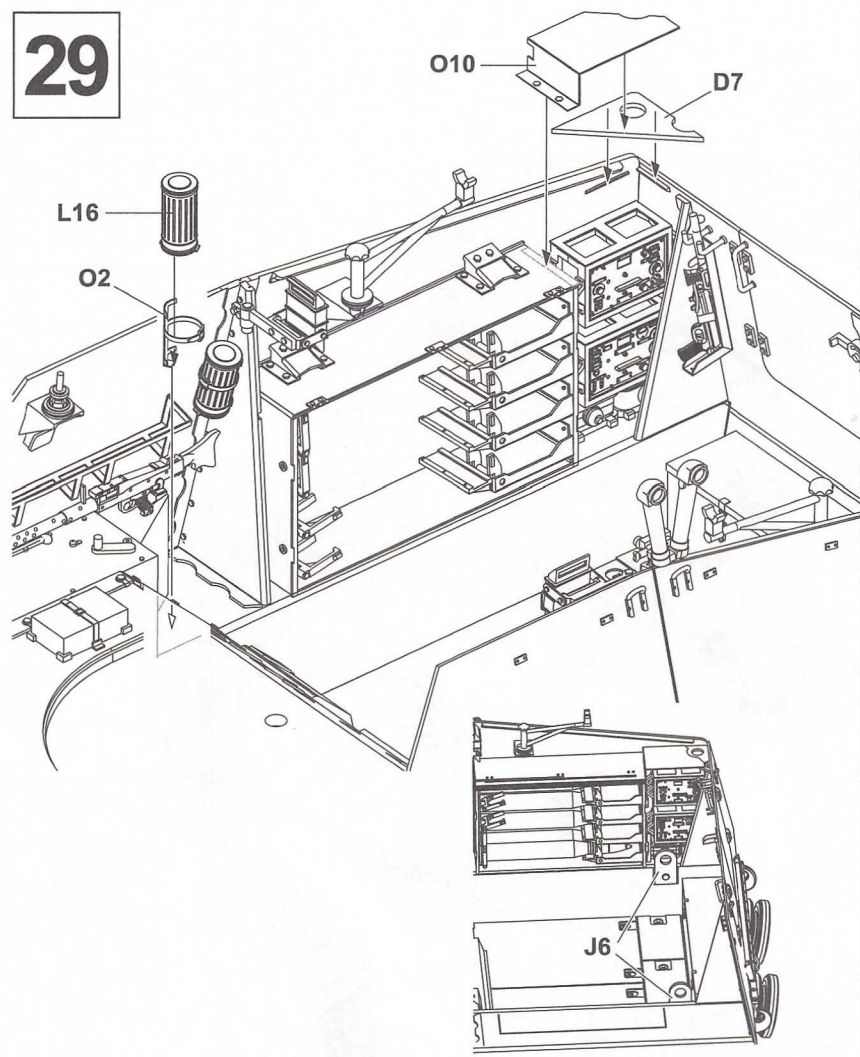
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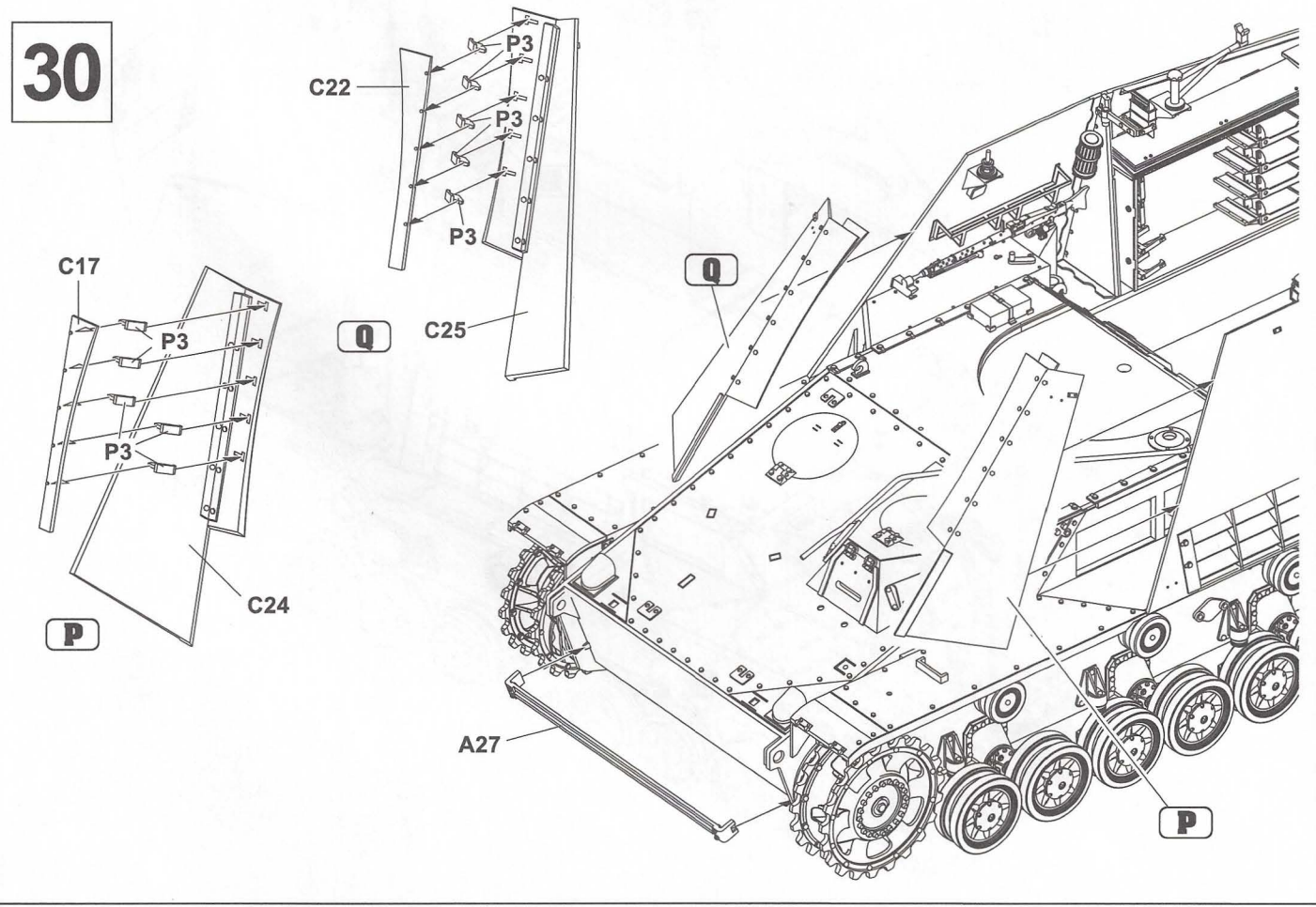
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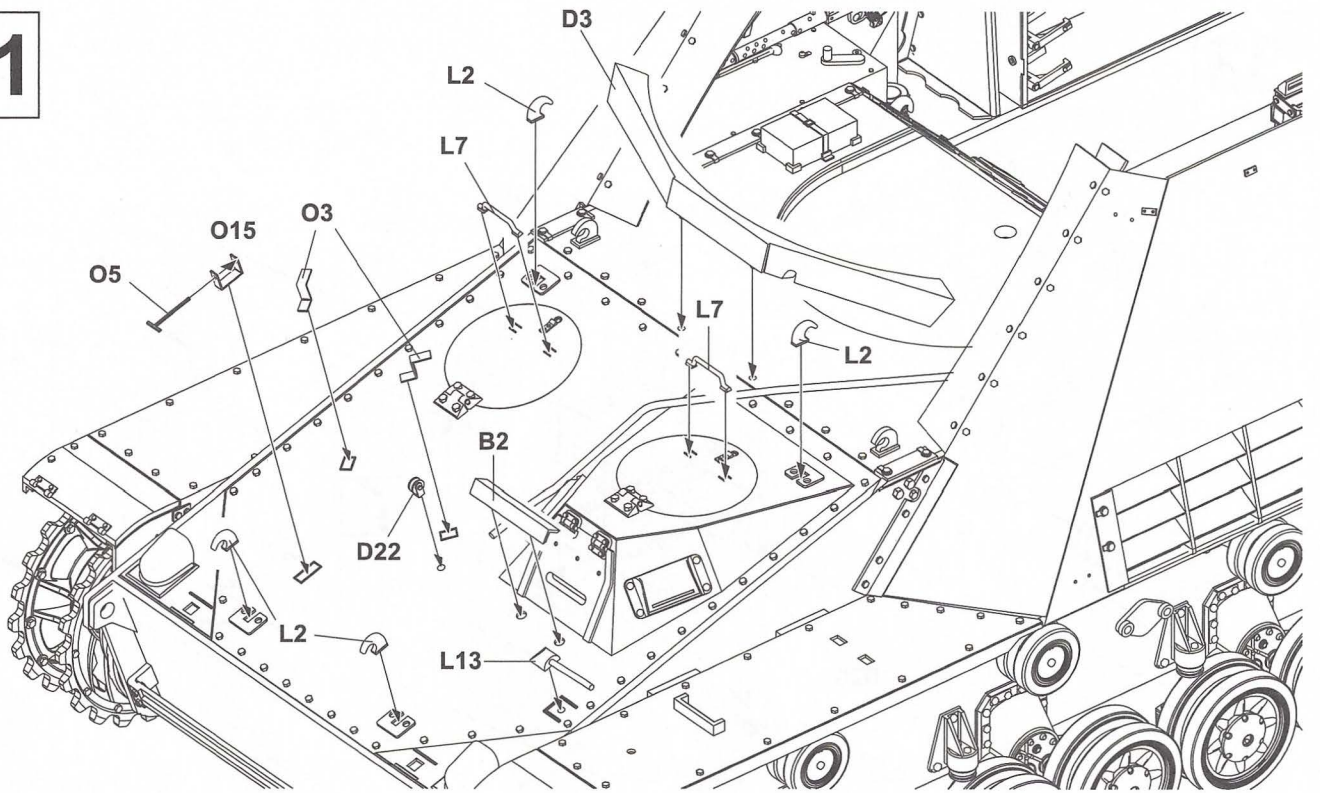
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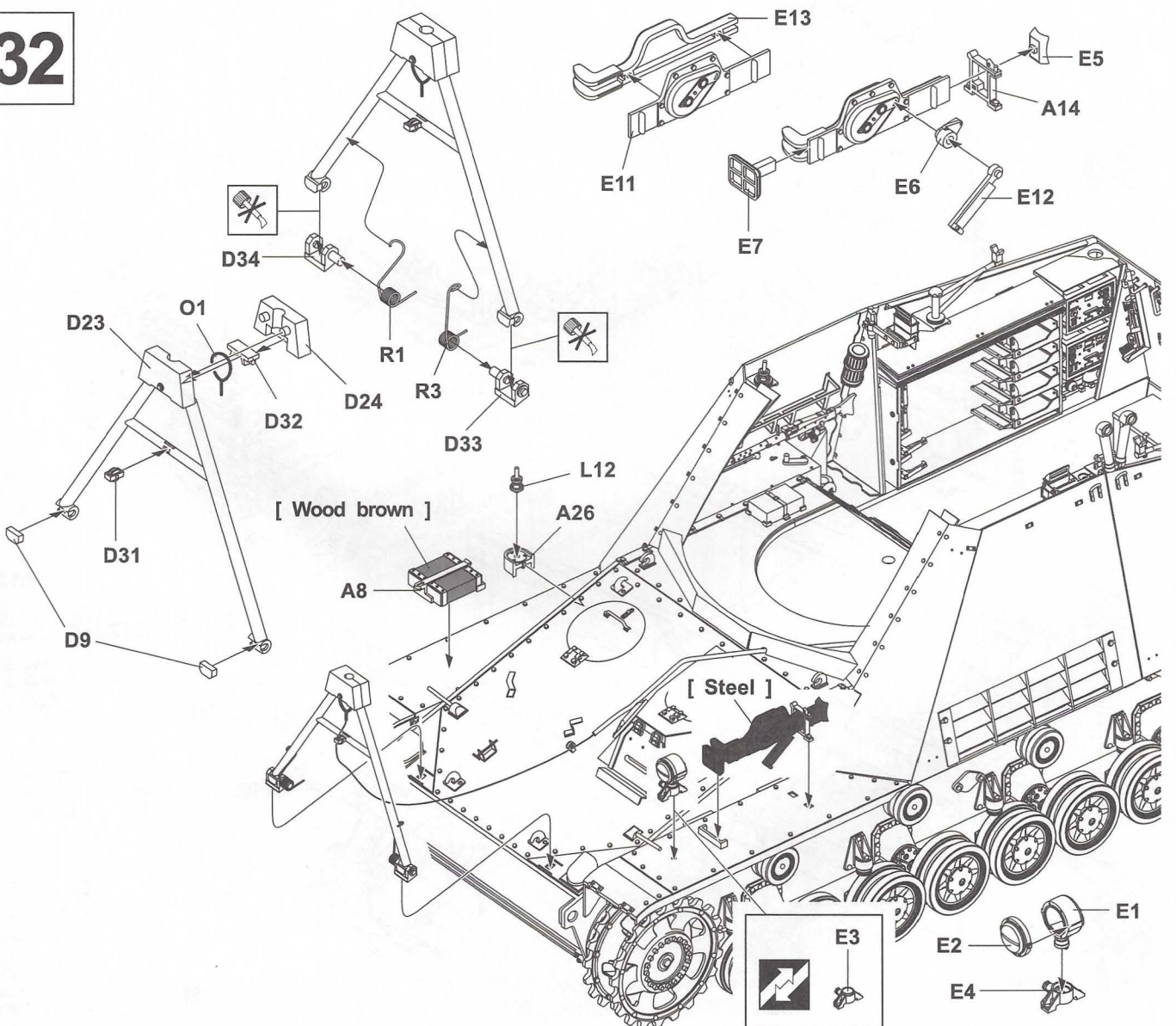
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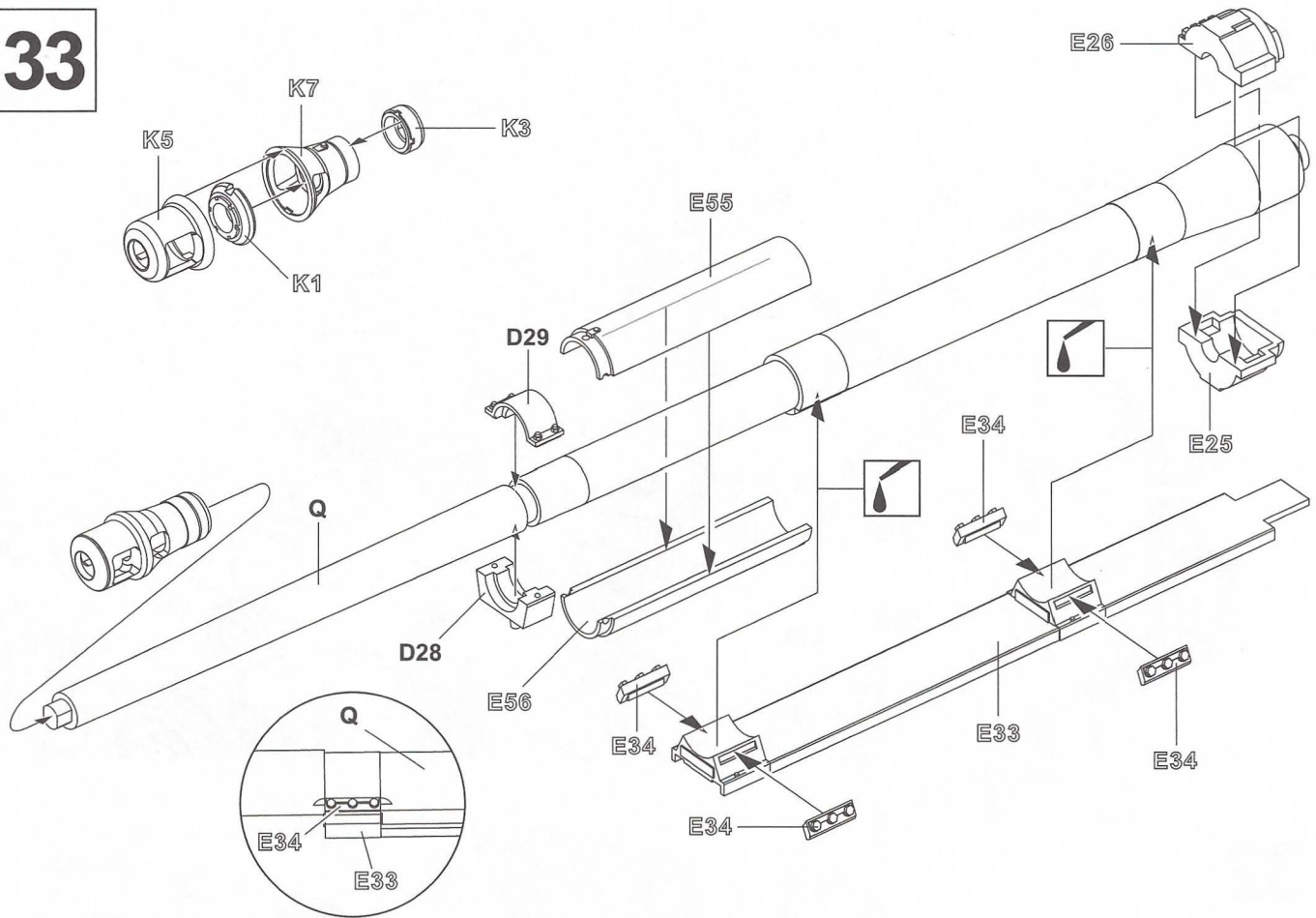
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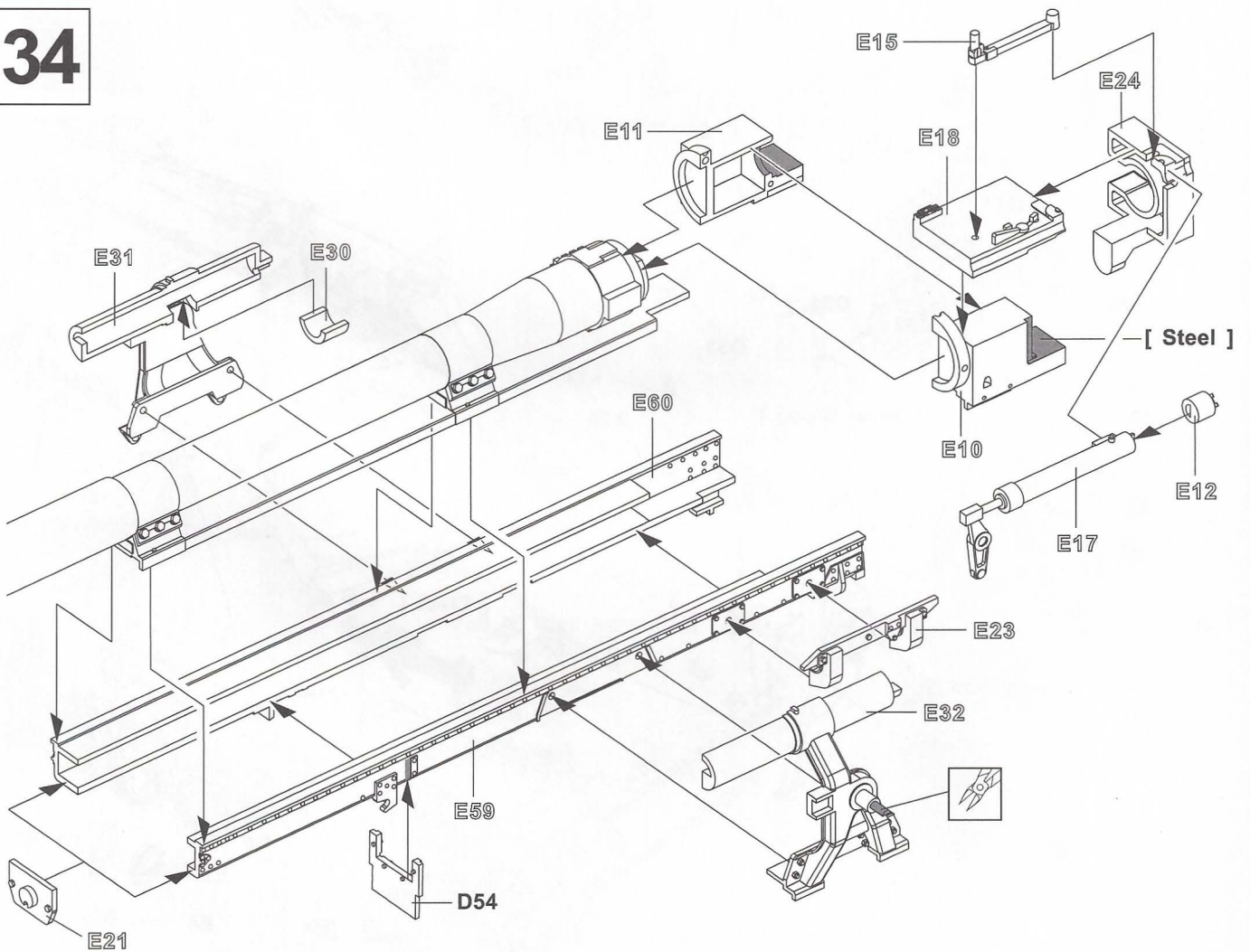
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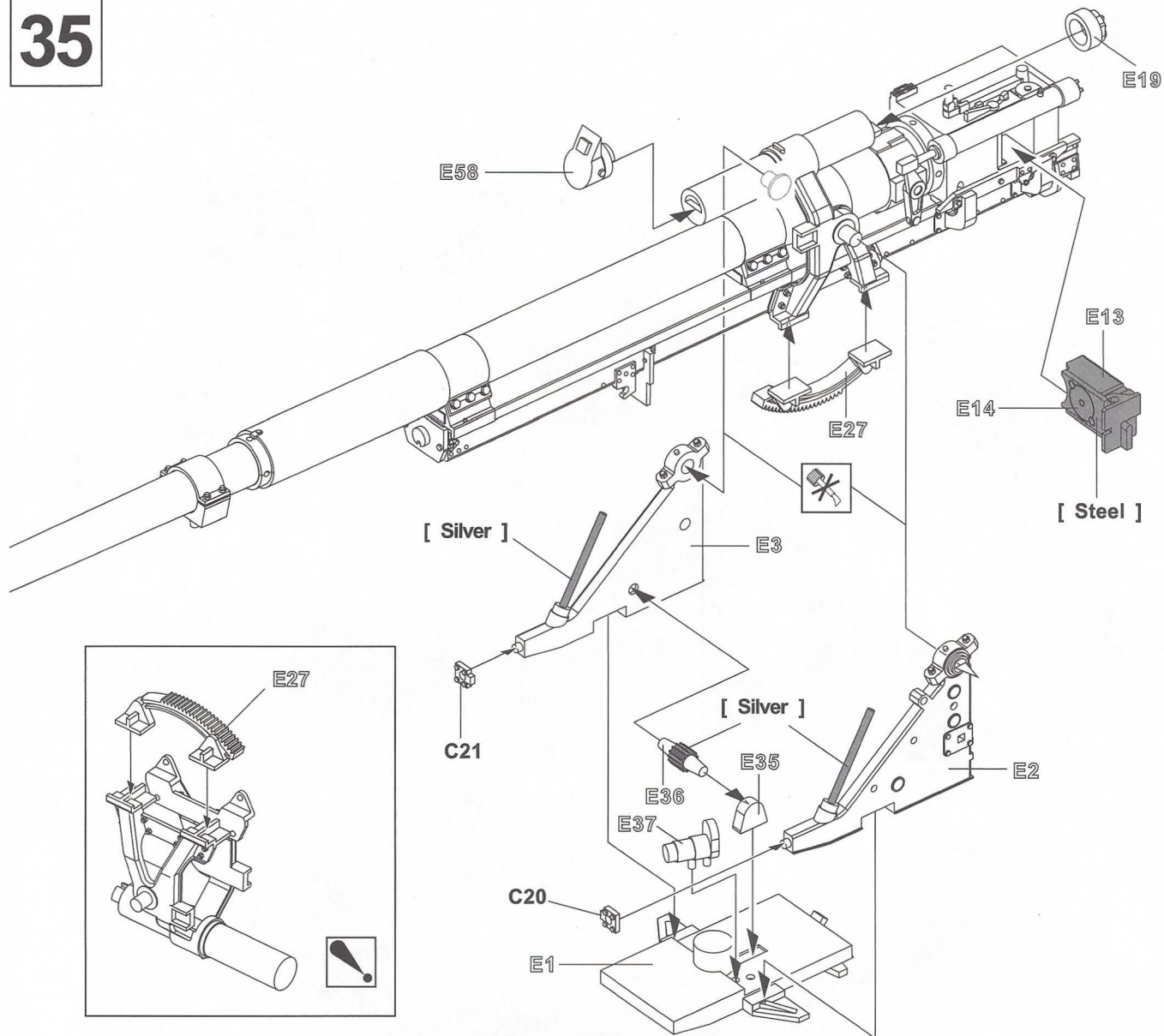
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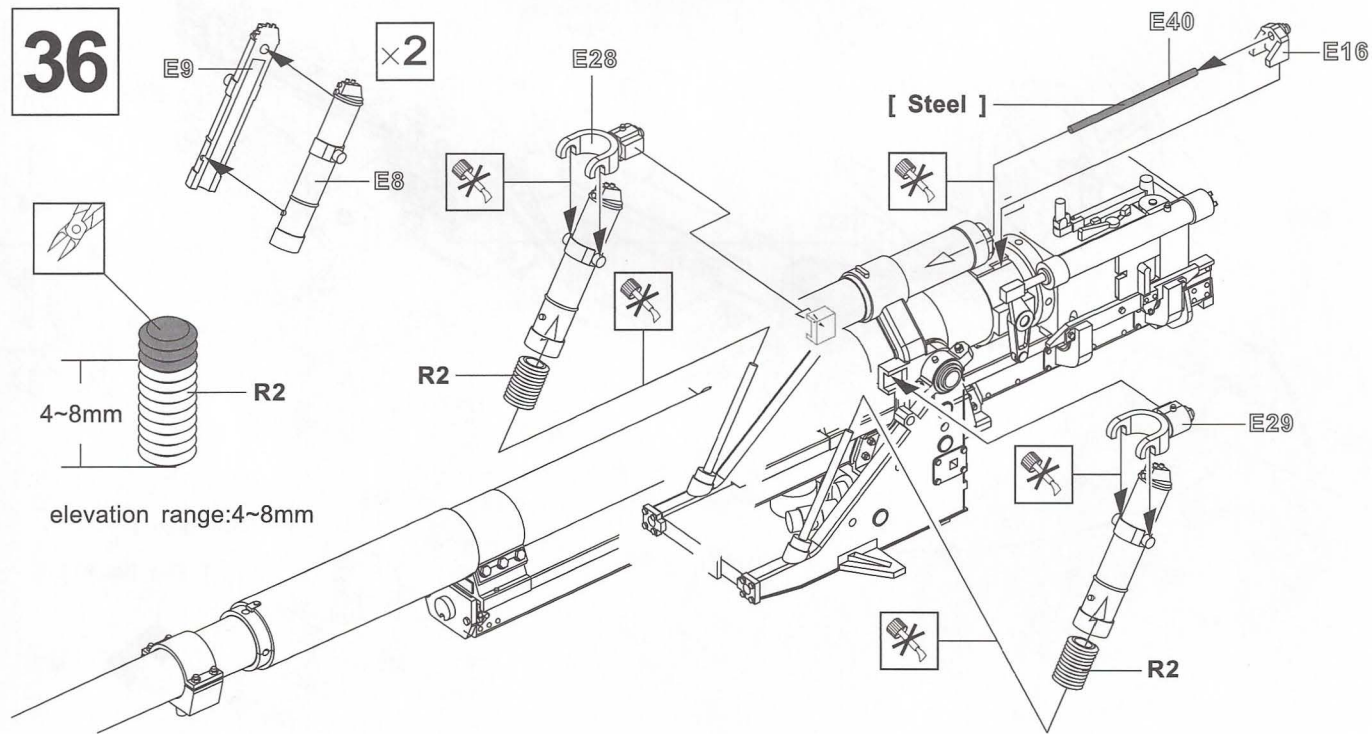
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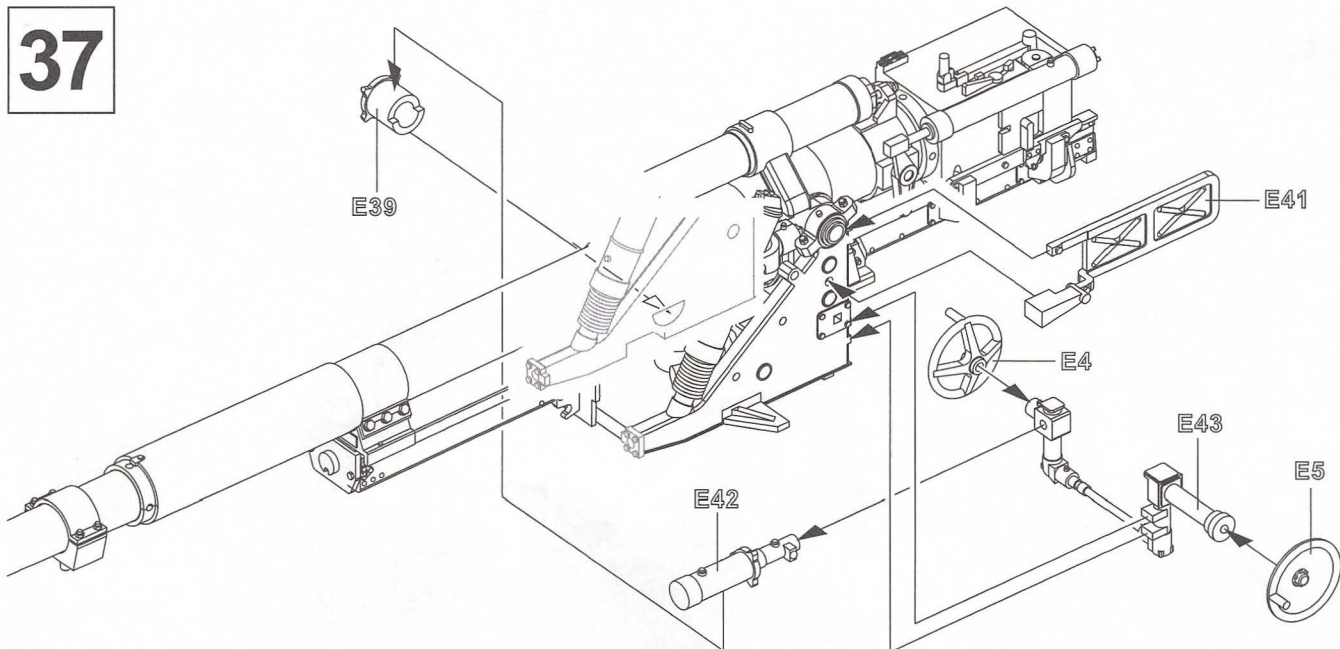
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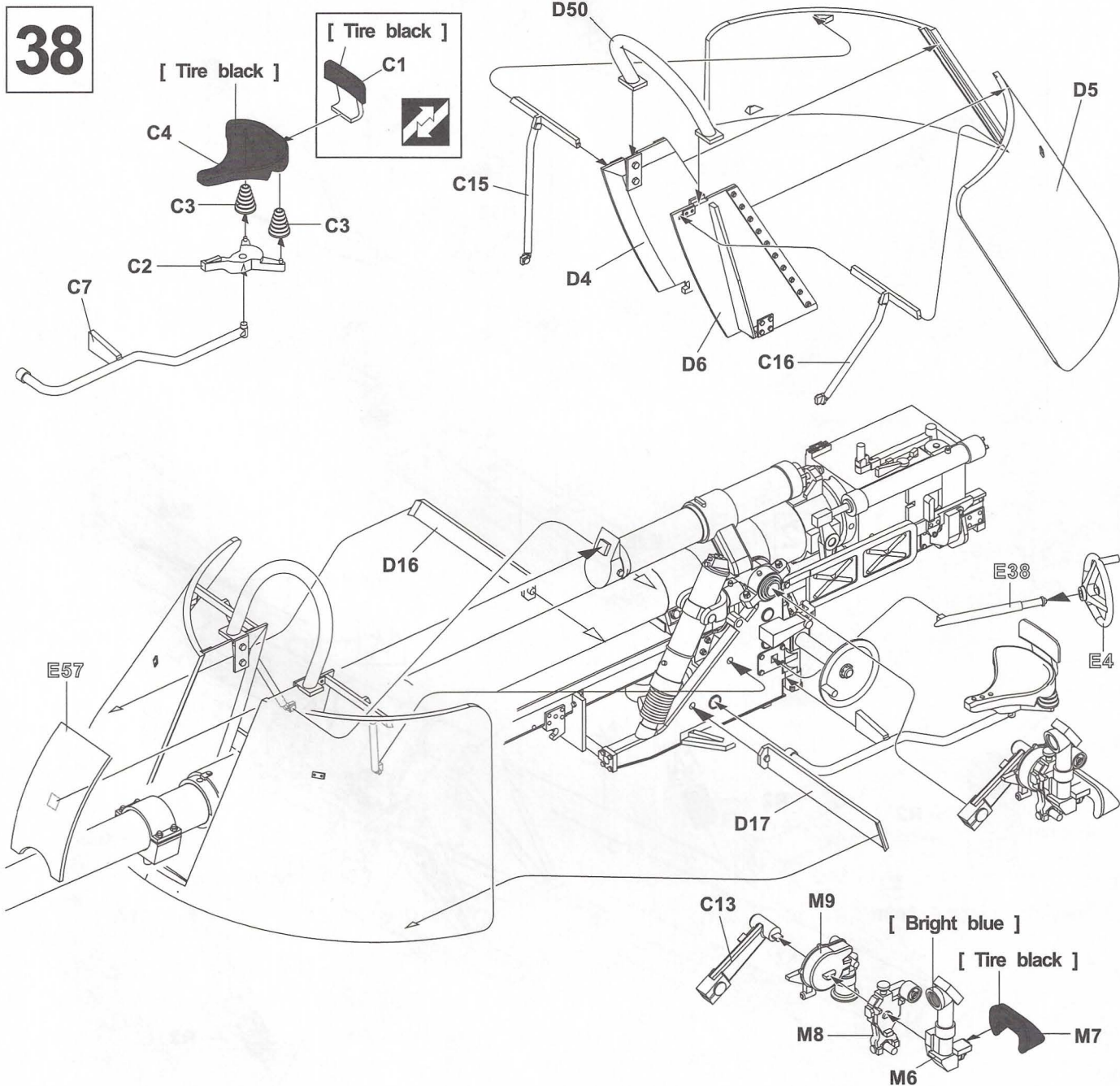
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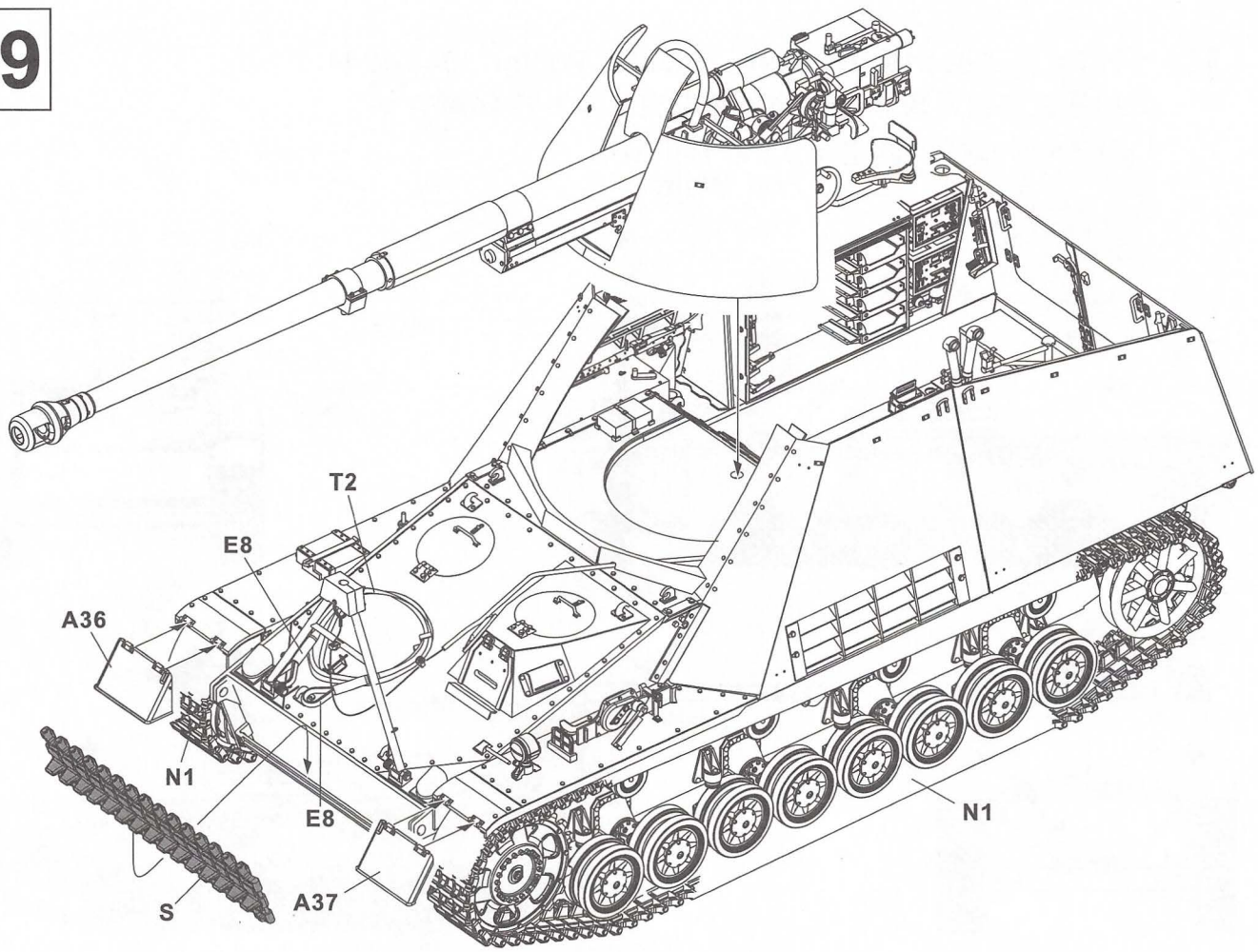


37



38

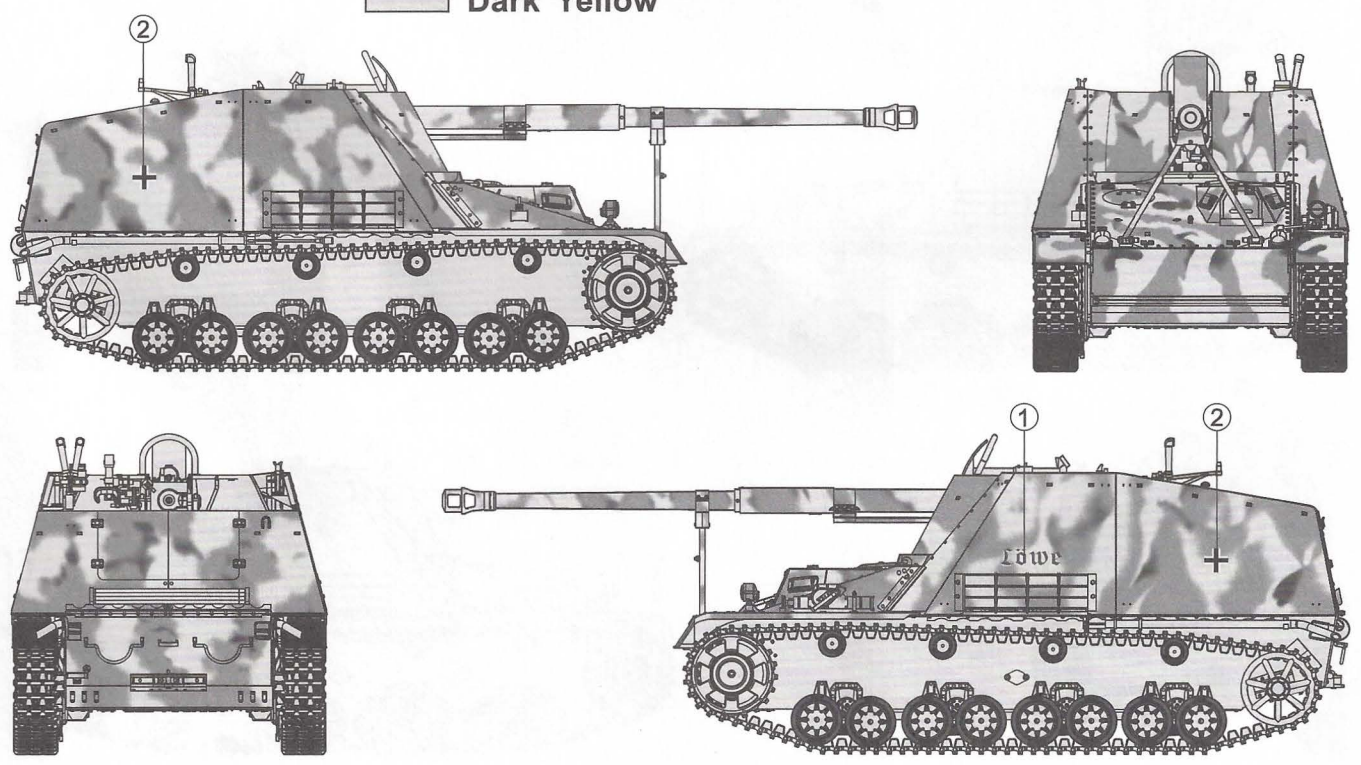




A s.H.Pz.Jg.Abt 655, Eastern Front, Summer 1943.

655重戦車驅逐營, 東部戰線, 1943年夏

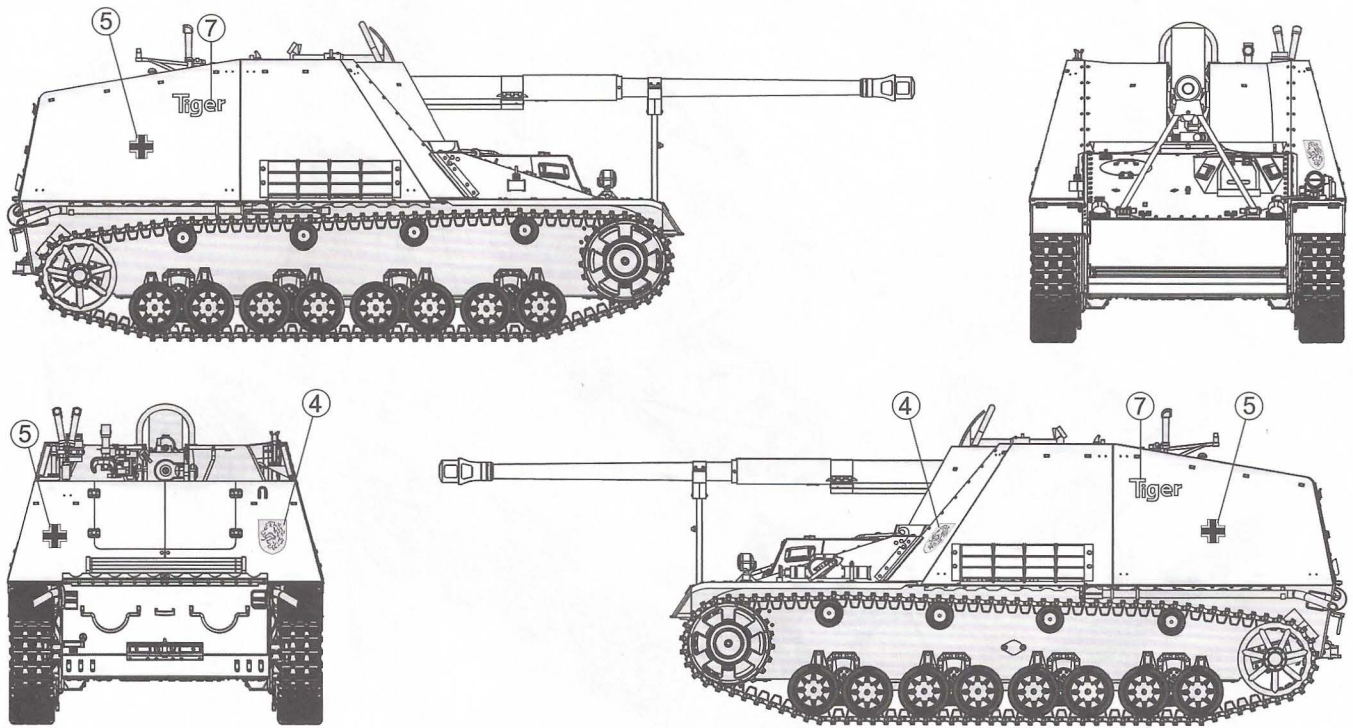
Body Color: Red Brown
 Olive Green
 Dark Yellow



B s.H.Pz.Jg.Abt.519, Witebsk, Russia, Winter 1943-1944.

519重戰車驅逐營,俄羅斯維捷布斯克,1943-1944年冬

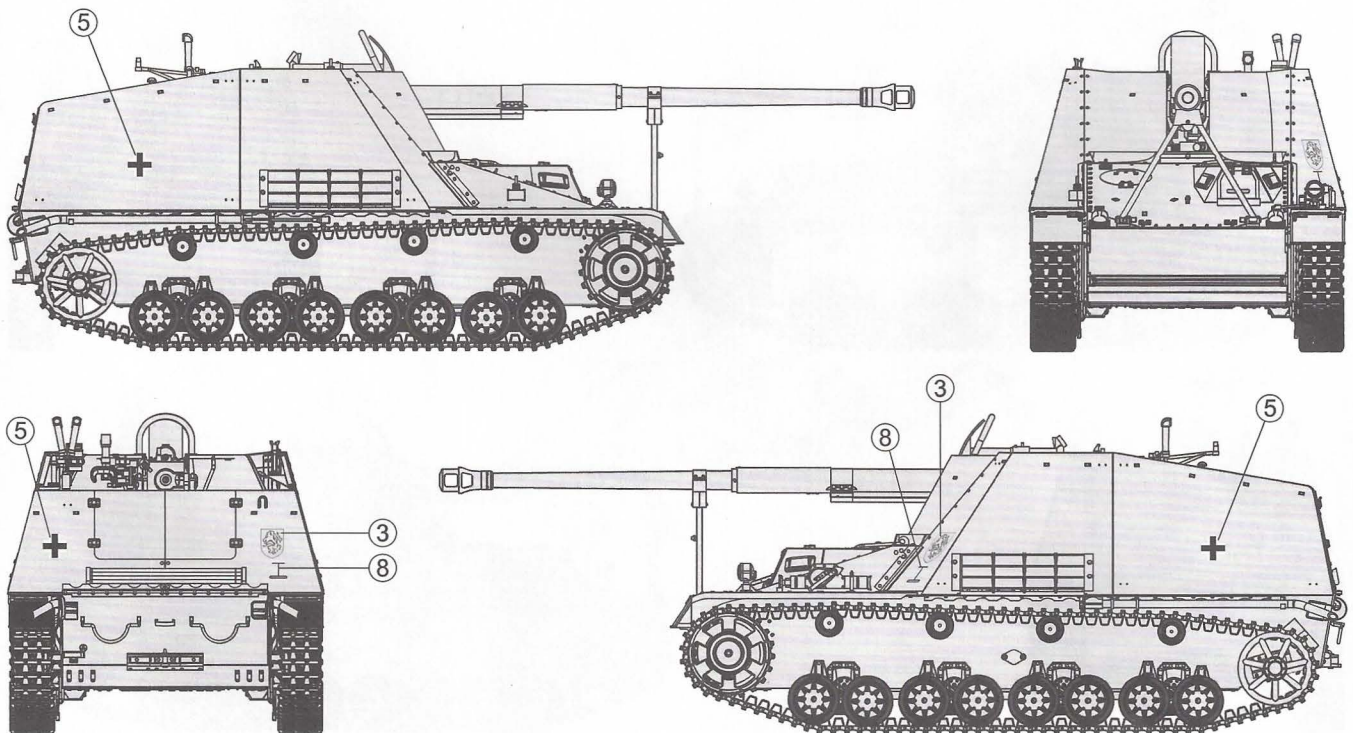
Body Color: Dark Yellow
 Flat White



C s.H.Pz.Jg.Abt.519, Belarus, Early Summer 1944.




519重戰車驅逐營,白俄羅斯,1944年初夏

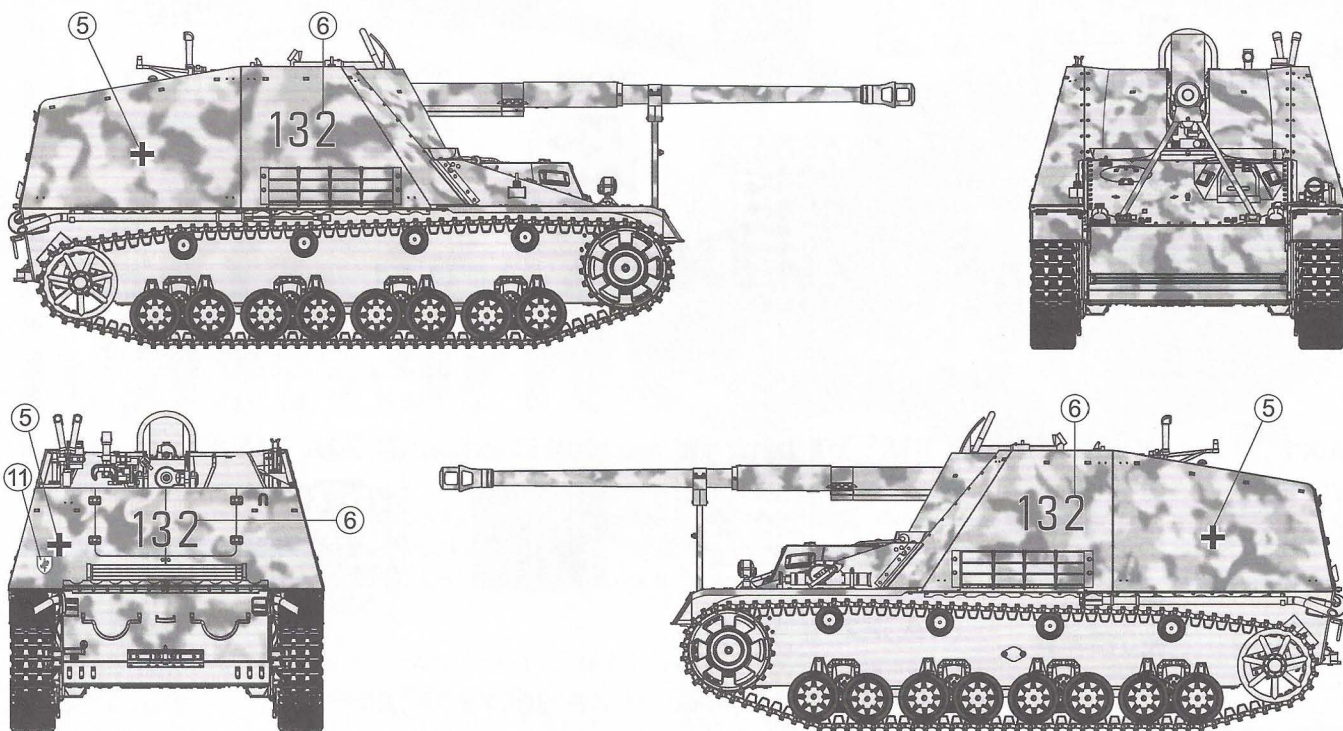
Body Color: Dark Yellow



D s.H.Pz.Jg.Abt. 88, Brody, Ukraine, Summer 1944.




88重戰車驅逐營,烏克蘭布羅迪,1944年夏

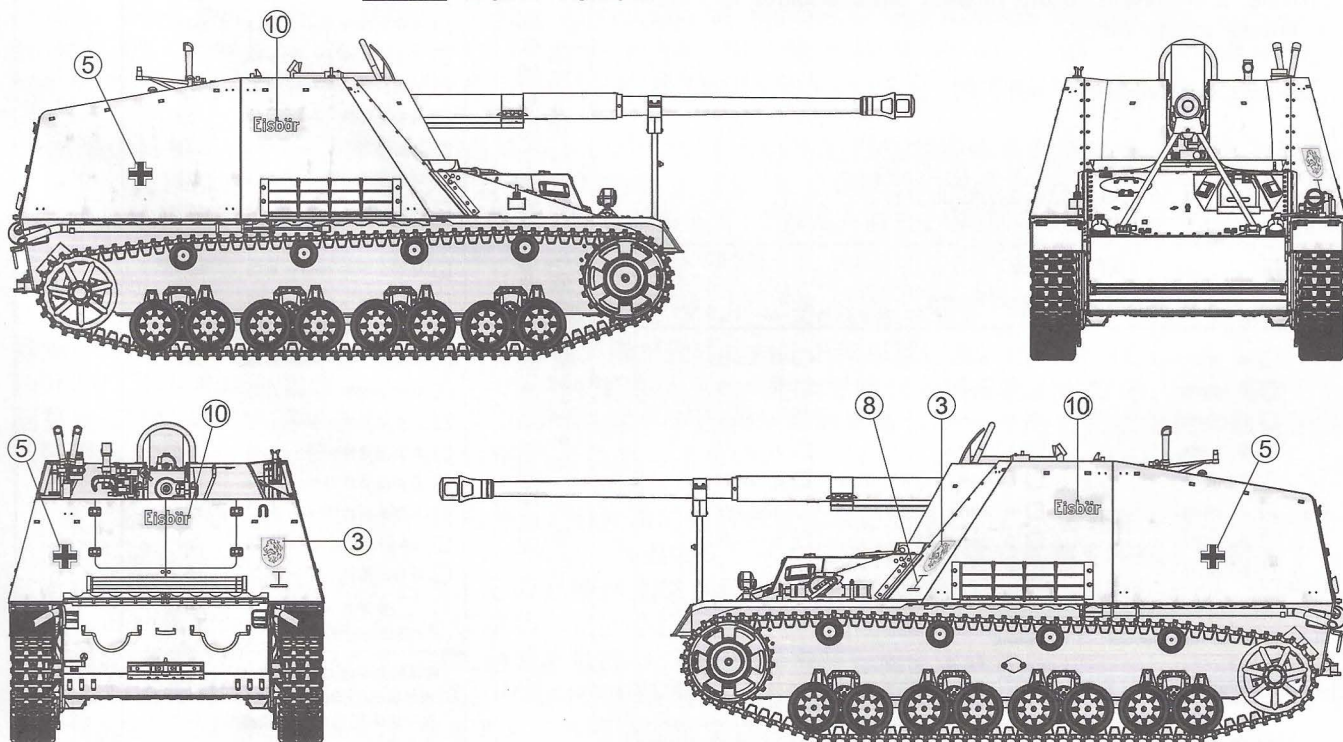
Body Color:  Red Brown
 Olive Green
 Dark Yellow



E s.H.Pz.Jg.Abt. 88, Brody, Ukraine, Summer 1944.

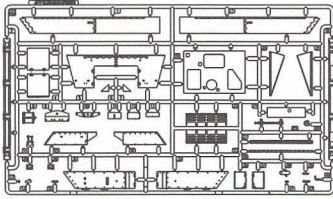
88重戰車驅逐營,烏克蘭布羅迪,1944年夏

Body Color:  Red Brown
 Olive Green
 Dark Yellow

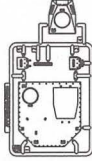


PARTS LIST 零件表

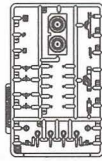
(A)X1



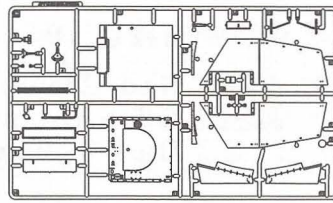
(B)X1



(E)X1

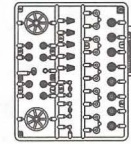


(C)X1

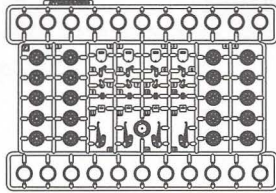


(N)X2

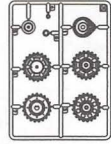
(G)X2



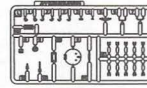
(F)X2



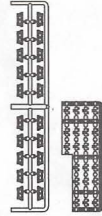
(H)X2



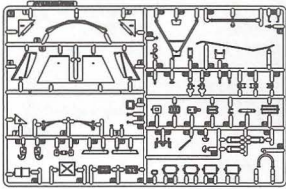
(L)X2



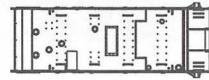
(S)X1



(D)X1



(I)X1



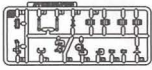
(R)X1



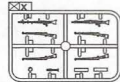
(Q)X1



(M)X1



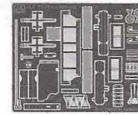
(X)X1



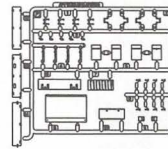
(T)X1



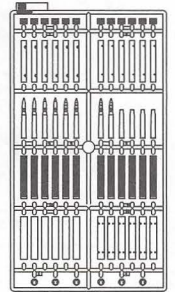
(O)X1



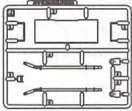
(P)X2



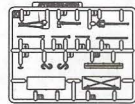
(D)X1



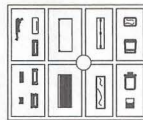
(J)X1



(K)X1



(TA)X2



AF 35079 (K)X1



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.



AF 35164 Parts Replacement Form

- | | | |
|----------------------------------|----------------------------------|-----------------------------------|
| <input type="checkbox"/> A parts | <input type="checkbox"/> I parts | <input type="checkbox"/> Q parts |
| <input type="checkbox"/> B parts | <input type="checkbox"/> J parts | <input type="checkbox"/> R parts |
| <input type="checkbox"/> C parts | <input type="checkbox"/> K parts | <input type="checkbox"/> S parts |
| <input type="checkbox"/> D parts | <input type="checkbox"/> L parts | <input type="checkbox"/> X parts |
| <input type="checkbox"/> E parts | <input type="checkbox"/> M parts | <input type="checkbox"/> Z parts |
| <input type="checkbox"/> F parts | <input type="checkbox"/> N parts | <input type="checkbox"/> TA parts |
| <input type="checkbox"/> H parts | <input type="checkbox"/> O parts | <input type="checkbox"/> D parts |
| <input type="checkbox"/> G parts | <input type="checkbox"/> P parts | |

Reason for replacement: Missing

Signature: _____

Broken

限臺灣地區使用 For Taiwanese use only!



AF 35164 零件補充申請表

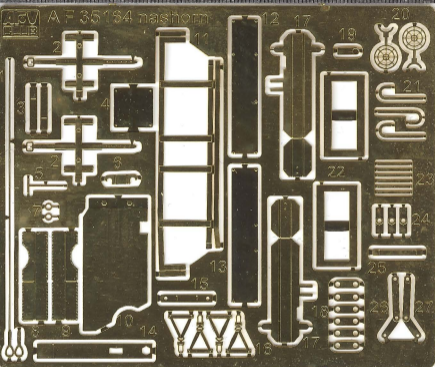
申請人
姓名 地址 電話


- | | |
|----------------------------------|----------|
| <input type="checkbox"/> A 部品零件 | NT\$ 240 |
| <input type="checkbox"/> B 部品零件 | NT\$ 200 |
| <input type="checkbox"/> C 部品零件 | NT\$ 200 |
| <input type="checkbox"/> D 部品零件 | NT\$ 200 |
| <input type="checkbox"/> E 部品零件 | NT\$ 240 |
| <input type="checkbox"/> F 部品零件 | NT\$ 180 |
| <input type="checkbox"/> G 部品零件 | NT\$ 120 |
| <input type="checkbox"/> H 部品零件 | NT\$ 120 |
| <input type="checkbox"/> I 部品零件 | NT\$ 200 |
| <input type="checkbox"/> J 部品零件 | NT\$ 120 |
| <input type="checkbox"/> K 部品零件 | NT\$ 120 |
| <input type="checkbox"/> L 部品零件 | NT\$ 120 |
| <input type="checkbox"/> M 部品零件 | NT\$ 80 |
| <input type="checkbox"/> N 部品零件 | NT\$ 250 |
| <input type="checkbox"/> O 部品零件 | NT\$ 180 |
| <input type="checkbox"/> P 部品零件 | NT\$ 180 |
| <input type="checkbox"/> Q 部品零件 | NT\$ 280 |
| <input type="checkbox"/> R 部品零件 | NT\$ 80 |
| <input type="checkbox"/> S 部品零件 | NT\$ 60 |
| <input type="checkbox"/> X 部品零件 | NT\$ 120 |
| <input type="checkbox"/> Z 部品零件 | NT\$ 180 |
| <input type="checkbox"/> TA 部品零件 | NT\$ 120 |
| <input type="checkbox"/> D 部品零件 | NT\$ 80 |
| +郵寄費 | NT\$ 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 客服部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

10 20 30 40 50 60 70 80 90 100 110 120



Löwe ^① + ^② + +  ^③
 ^④  ^⑤ + + +  ^⑥
 132 132 132 ^⑦
 Tiger Tiger ^⑧ I I ^⑨
 Eisbär ^⑩ Eisbär Eisbär Eisbär



AF 35164 Sd.Kfz.164 Nashorn Late Production
PRINTED IN TAIWAN
2010



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