



M42A1 DUSTER

EARLY TYPE

During the WWII, the US Army normally used half-track as the platform for self-propelled anti-aircraft firepower. It is not until late stage that the Army commenced to use M24 tank chassis carrying twin Bofors 40 mm guns. Designated as M19, it was accepted in June 1944, yet too late to enter WWII, and production units were reduced. The M16 only saw services in the Korean War from 1953.

The M24 family, including M19, ceased to produce in 1945 after the end of WWII. Therefore in August 1951, the US Army approved Cadillac Motor Car Division to work on a new self-propelled anti-aircraft tank, using M41 light tank chassis carrying newly developed M2A1 twin Bofors 40 mm guns. By the end of 1951 the prototype was completed. The fire control radar was deleted due to cost and production schedule issues. The new model was accepted in October 1953 and designated as M42.

The M42 adopts an open-topped traversing turret and optical sight. Each gun maintained a rate-of-fire of 240 rounds per minute, which is sufficient to against subsonic aircraft and ground targets. A new fuel injection system was installed since February 1956, which increased operation range by 20%. This new model was known as M42A1.

The M42A1 showed inadequacy to against burgeoning jet aircraft targets, and by 1963 all M42A1s retired from the US Army (saved a few units) and were transferred to National Guard units. By 1964 US military combat deployment in Vietnam were ramping up, and the M163 (designed to replace M42A1) was still insufficient in quantity. Therefore M42A1s were recalled and 3 Air Defense Artillery (ADA) battalions were activated. The first M42A1 ADA battalion arrived in Vietnam in 1965. The air threat posed by North Vietnam never really materialized, and M42 were increasingly involved in ground support missions such as perimeter defense and convoy escort. The rapid firing 40mm guns could devastate massed infantry attacks from NVA with ease. The M42A1 saw services in Vietnam up to 1972, till the withdrawal of the US Army. The US Army maintained National Guard M42 units until the system was retired in 1988.

第二次大戦の期間、米陸軍の対空自走砲は、M15やM16などハーフトラックをベースとしたもののみで、新たにM24戦車の車体にボフォース40mm連装砲を搭載したタイプの開発が始まったのは、大戦の末期になってからであった。この車輛は1944年6月にM19対空自走砲として正式採用されたが、第二次大戦中の配備には間に合わず、生産数量は削減されてしまった。そのため、1953年に勃発した朝鮮戦争に投入された対空自走砲は、ハーフトラックベースの車輛のみであった。

1945年、第二次大戦の終結とともに、M19を含むM24戦車系車輛の生産は中止された。そのため、米陸軍は1951年、キャデラック社に対し、M41軽戦車の車体をベースに、新たに開発されたM2A1ボフォース40mm連装砲を搭載した新型対空自走砲の開発を指示した。1951年末までに試作車が完成、このとき同時に開発していた射撃統制レーダーは、コストと生産スケジュールの問題によって取りやめとなった。この新型対空自走砲は、1953年10月米陸軍に正式採用され、M42の名称が与えられたのであった。

M42は、オーブントップの旋回砲塔に光学式照準器を装備、搭載した2門の40mm機関砲はそれぞれ毎分240発の発射速度を持ち、亜音速の航空機や、地上の目標に対して有効であった。1956年2月、エンジンに新式の燃料噴射装置が取り付けられたことで、航続距離が20%増加、この新エンジン搭載車輛は、M42A1の型式名称で呼ばれることとなった。

航空機の発達に伴い、高速化したジェット機に対しては、M42A1の対空能力が不十分なことが明らかとなると、米陸軍は1963年までに、ごく少数を残して、ほぼ全てのM42A1を退役させ、州兵部隊に配備したのだった。しかし1964年、米軍のベトナムへの展開が増強されるようになると、M42A1の後継車輛であったM163は絶対的に数量が不足していた。そのため、3つの防空砲兵大隊にM42A1が再配備されることとなったのである。M42A1を装備した最初の部隊がベトナムに到着したのは1966年であった。実際には北ベトナム軍による空襲がほとんど無いという状況で、M42は陣地防御や輸送車輛部隊の護衛といった対地支援任務に大いに活躍する事となる。発射速度の高い40mm機関砲は、人海戦術によるベトナム歩兵の突撃に対して驚異的な破壊力を発揮したのだった。M42A1は米軍が撤退する1972年まで、ベトナムで戦いそして米国内の州兵部隊に配備されていた車輛が退役したのは、1988年のことであった。

美軍在二次大戰期間參與作戰的對空自走砲，均以半履帶車輛底盤為載台，至大戰末期為了提高自走砲的機動性能與火力，開始著手將M24輕戰車的底盤搭載上雙聯裝的波佛斯40mm火炮。這款自走砲於1944年六月制式化，並被命名為M19。但隨著大戰進入尾聲，削減了生產數量的M19並未參與戰鬥，直到數年後的韓戰爆發才真正的投入戰場。

由於包括M19在內的M24家族的車輛在1945年大戰結束後即已陸續停止生產，因此1951年八月美國陸軍批准通用汽車公司旗下的凱迪拉克汽車分公司，利用當時正處於開發中途的M41輕型坦克底盤，研製一款搭載波佛斯M2A1 雙聯裝40mm高射砲的對空自走砲。年底前完成了自走砲的試作車，但基於生產時程與成本的考慮，原本設計中的射控雷達稍後被取消，1953年十月獲得陸軍採用，正式被命名為M42。

M42採用無頂蓋的敞開式砲塔，光學式瞄準具，砲塔能做360°的旋轉。每門火炮每分鐘能射擊120發砲彈，對於次音速低空飛行器與地面輕裝甲車輛及掩體等目標的攻擊尚稱有效。1956年二月為發動機增設了燃油噴射系統，因此而增加了20%的續航距離，經此改裝後的型號成為M42A1。

由於飛行器的高速化，M42A1在防空的能力上已顯得不足，除了少數單位之外，M42A1已從1963年自美國陸軍中汰除轉交由國民兵來使用。但緊接著1964年美國以軍事力量介入越戰，此時原本欲取代M42負擔低空防禦的M163對空自走砲編裝數量尚嫌不足。使得陸軍只能再次召回M42A1，並組成三個防空砲兵營，首支M42A1防空砲兵營於1966年開赴越南。由於越戰期間地面部隊遭遇來自空中威脅的機會並不多，因此M42多運用於火力基地及車隊行進中的防護任務上，其雙聯裝的波佛斯40mm砲所擁有的火力對越共的人海戰術有相當的嚇阻能力。M42A1持續在越南服役至1972年美軍撤離越南為止，回到美國本土的M42A1，繼續在國民兵部隊中使用至1988年除役。

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.

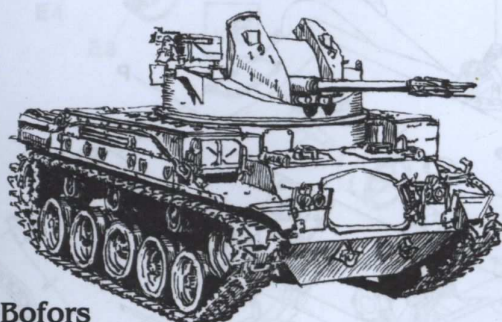
水貼紙使用說明:

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	Gunze Sangyo			Humbrol	Revell	Lifecolor
		Hobby Color	Mr.Color	Mr.Color Spray			
Black	黑	H2	C2	J2	21	7	LC52
Brass	黃銅	H9	C9	J9	54	92	LC75
Bright blue	寶藍	H93			73		LC06
Green	綠	H6	C6	J6	3		LC63
Green FS34092	綠	H302	C302		149		UA08
Olive drab(2)	橄欖綠	H78	C38	J38	66	46	UA106
Orange	橘	H14	C59		18	30	LC55
Red	紅	H3	C3	J3	19	31	UA90
Sand	沙						LC74
Silver	銀	H8	C8	J8	11	90	LC76
Steel	黑鐵	H18	C28	J28	53	91	LC65
Tan	黃褐	H27	C44				UA301
Tar black	瀝青	H12	TC12	J33	33	8	LC02
Tire black	輪胎黑	H77	C33+C62		85	302	LC02
Wood brown	木棕	H37	C43		169		UA301
Olive drab 2314	橄欖綠2314		TC09				
RLM80 Olive green	橄欖綠		C120				UA138

40mm anti-aircraft gun



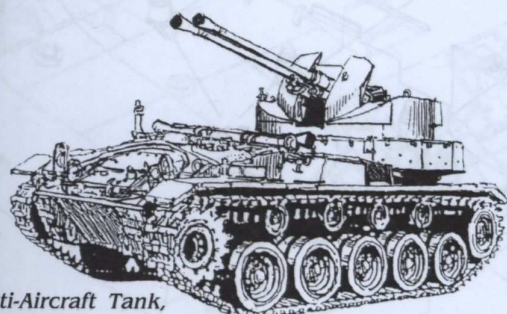
M42 Bofors

Developed to replace M19, adopting M41 chassis; AA guns mounted on the turret.



M42 in Vietnam war

Participated in North Vietnam airborne missions. (B-52 bombing offensive and M42 continuous fire power support were the most feared by North Vietnam Squadron Leaders /Officers)

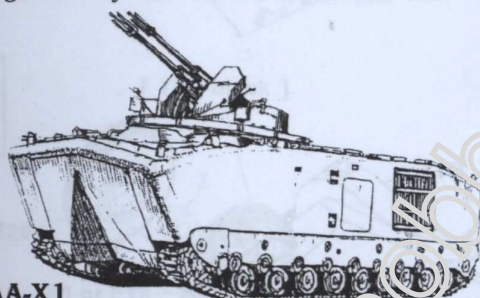
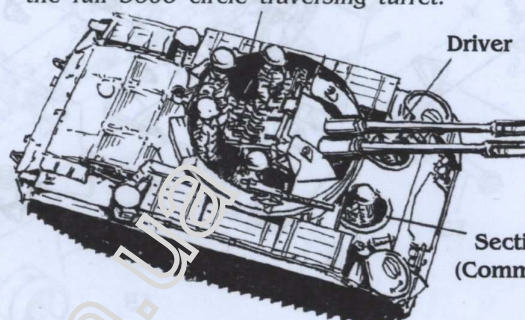


M19

M19 Anti-Aircraft Tank, adopting M24 Chaffee chassis and twin 40mm Bofors guns. They saw combat in Korean War.

M42 personnel arrangement

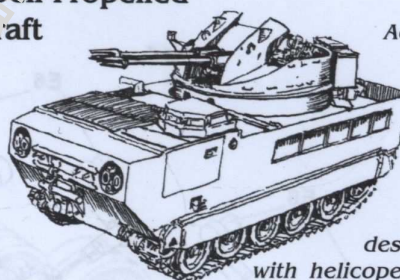
Squad leader, gun pointer and cannoneers standby in the full 360o circle traversing turret.



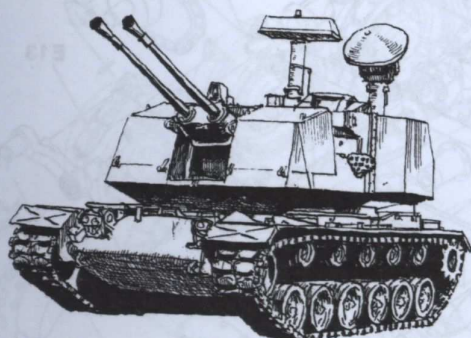
LVT-AA-X1

An experimental vehicle, combining LVT-4S and M42 hull & turret. Yet by this time US has dominated air supremacy, therefore development on anti aircraft became lukewarm.

XM166 Self-Propelled Anti-Aircraft system

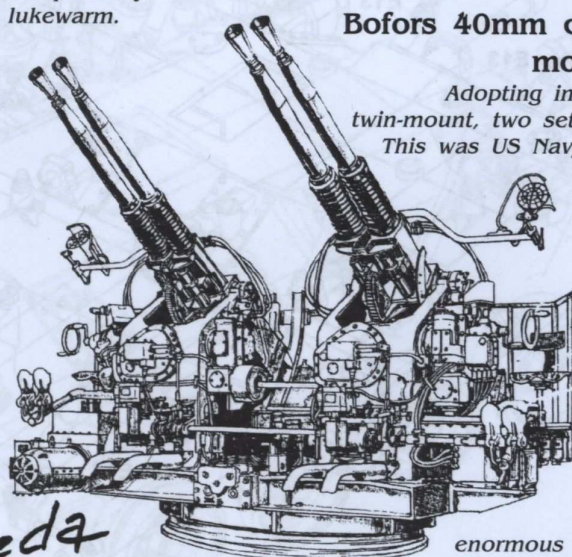


Adopting M548 40mm Anti-Aircraft guns, XM166 was an experimental vehicle, designed to deal with helicopters and tanks.



M247 Sergeant York

Developed in 1970s, based on the M48 Patton tank, with new twin radar-directed Bofors 40 mm rapid-fire guns. It is found insufficient to confront fast jets, hence cancellation of the project.



Bofors 40mm quadruple mount guns

Adopting improved and twin-mount, two sets as a unit. This was US Navy's standard anti-aircraft weapon, in WWII.

By using proximity fuse, rate of fire can go up to 640 round per minute.

This system provided

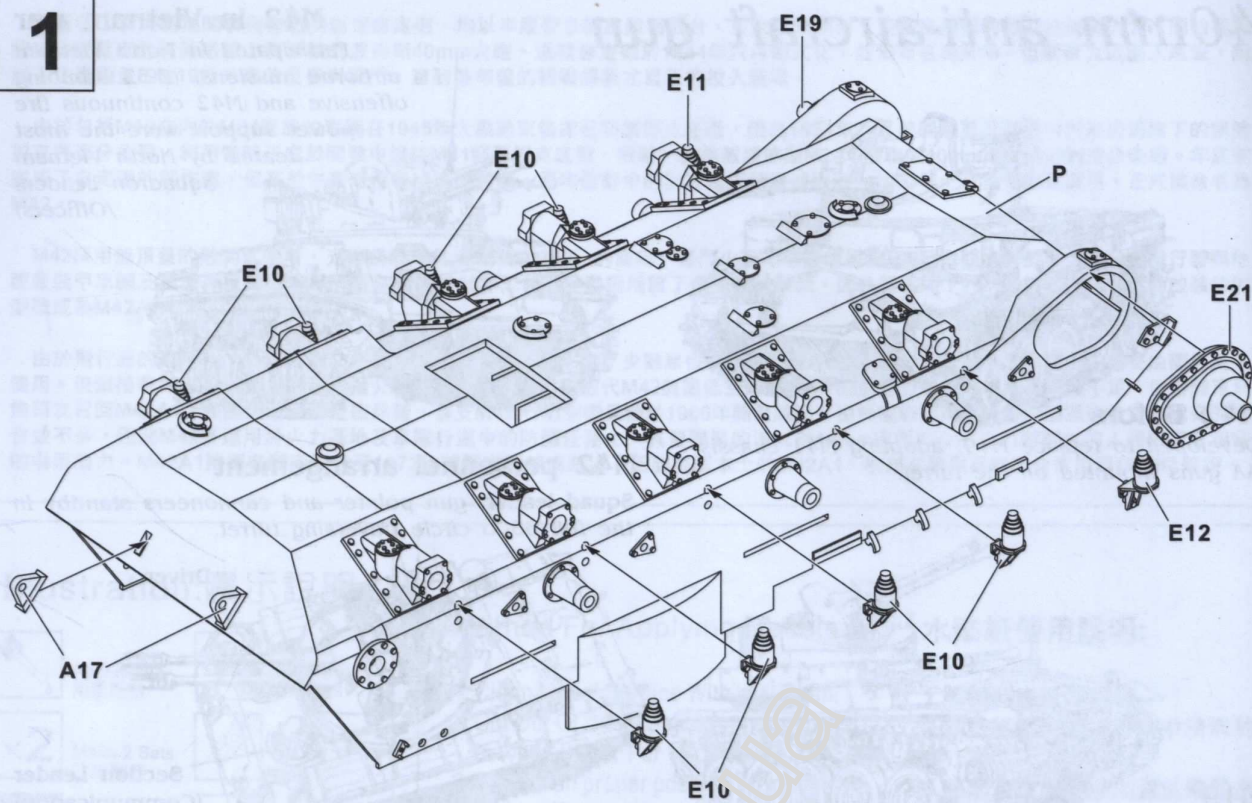
enormous contribution in the Pacific Theater.

It equips with water-cooling system.

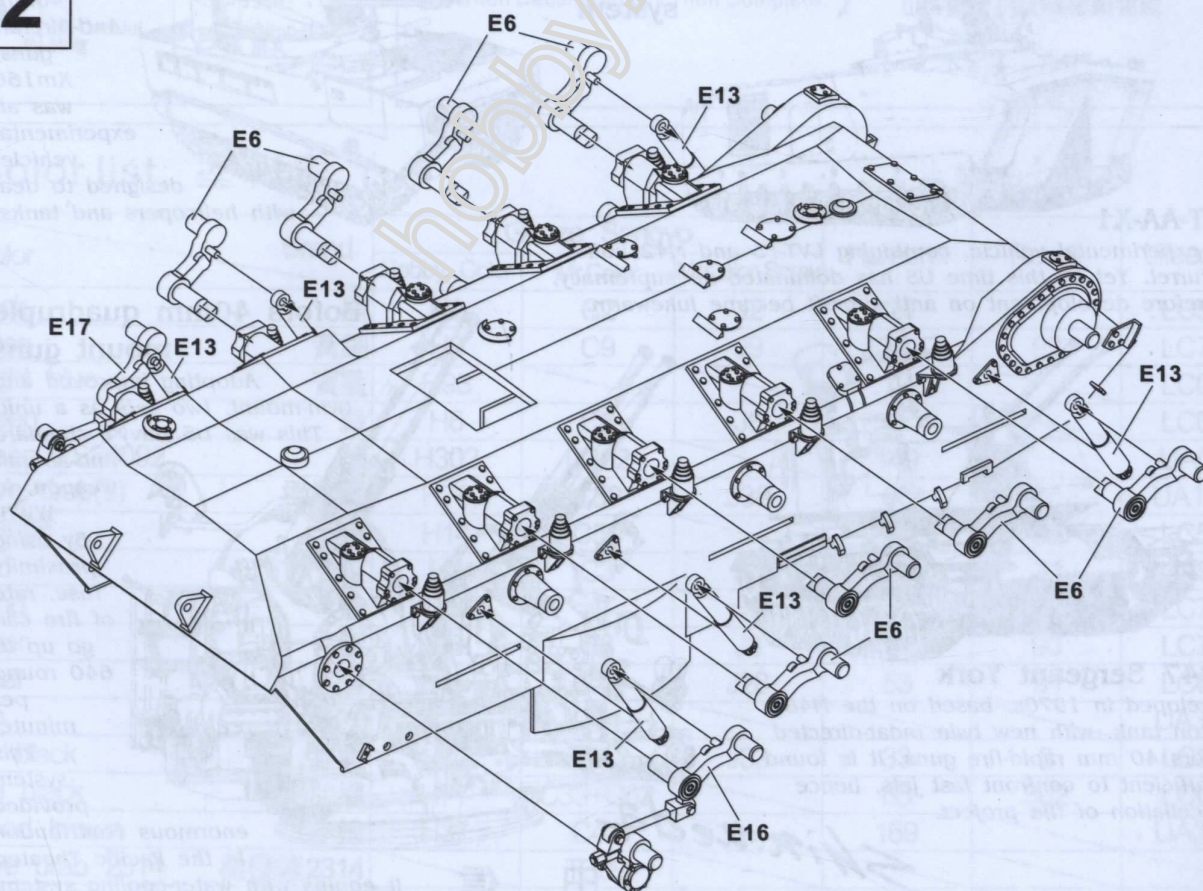
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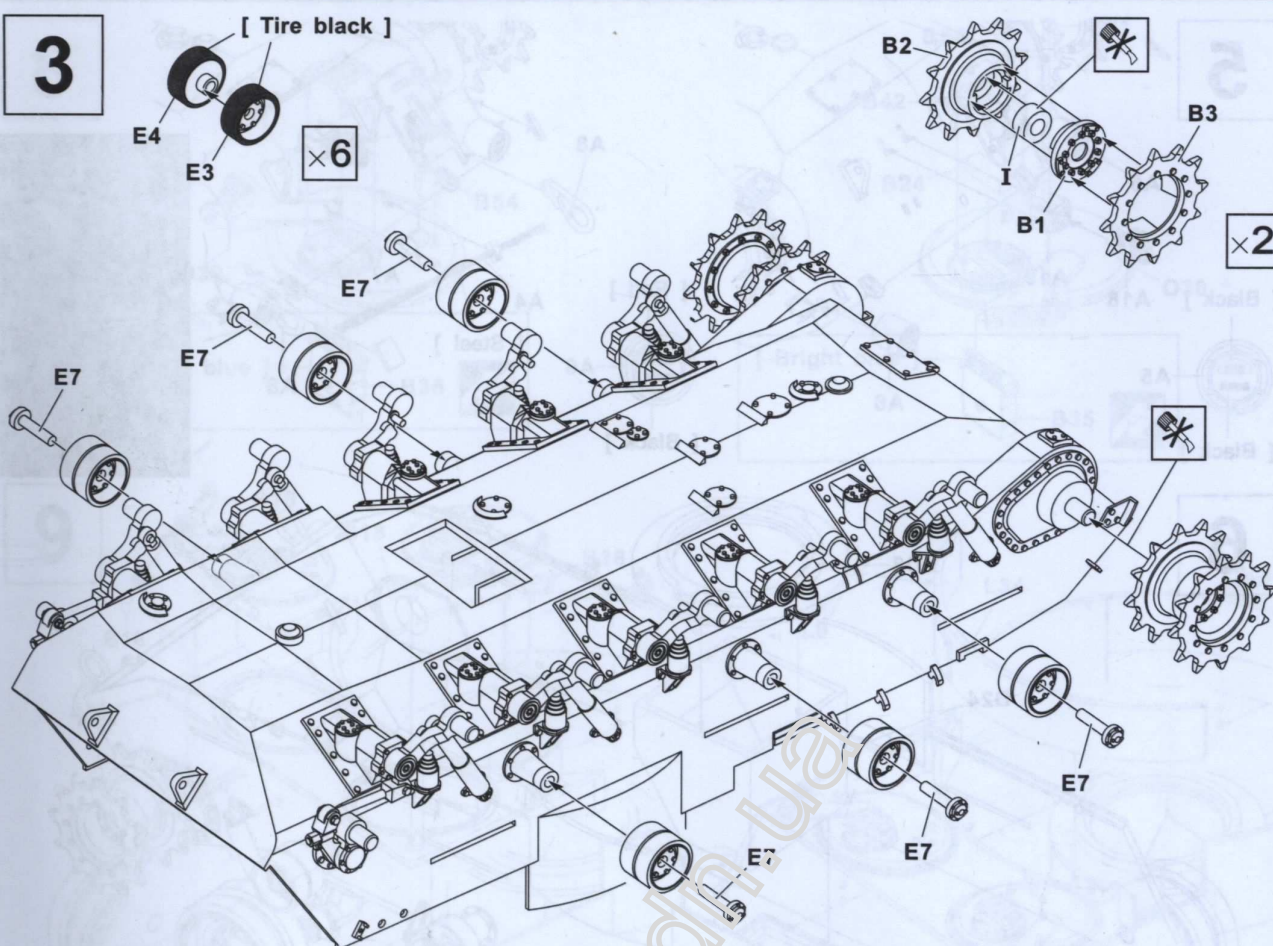
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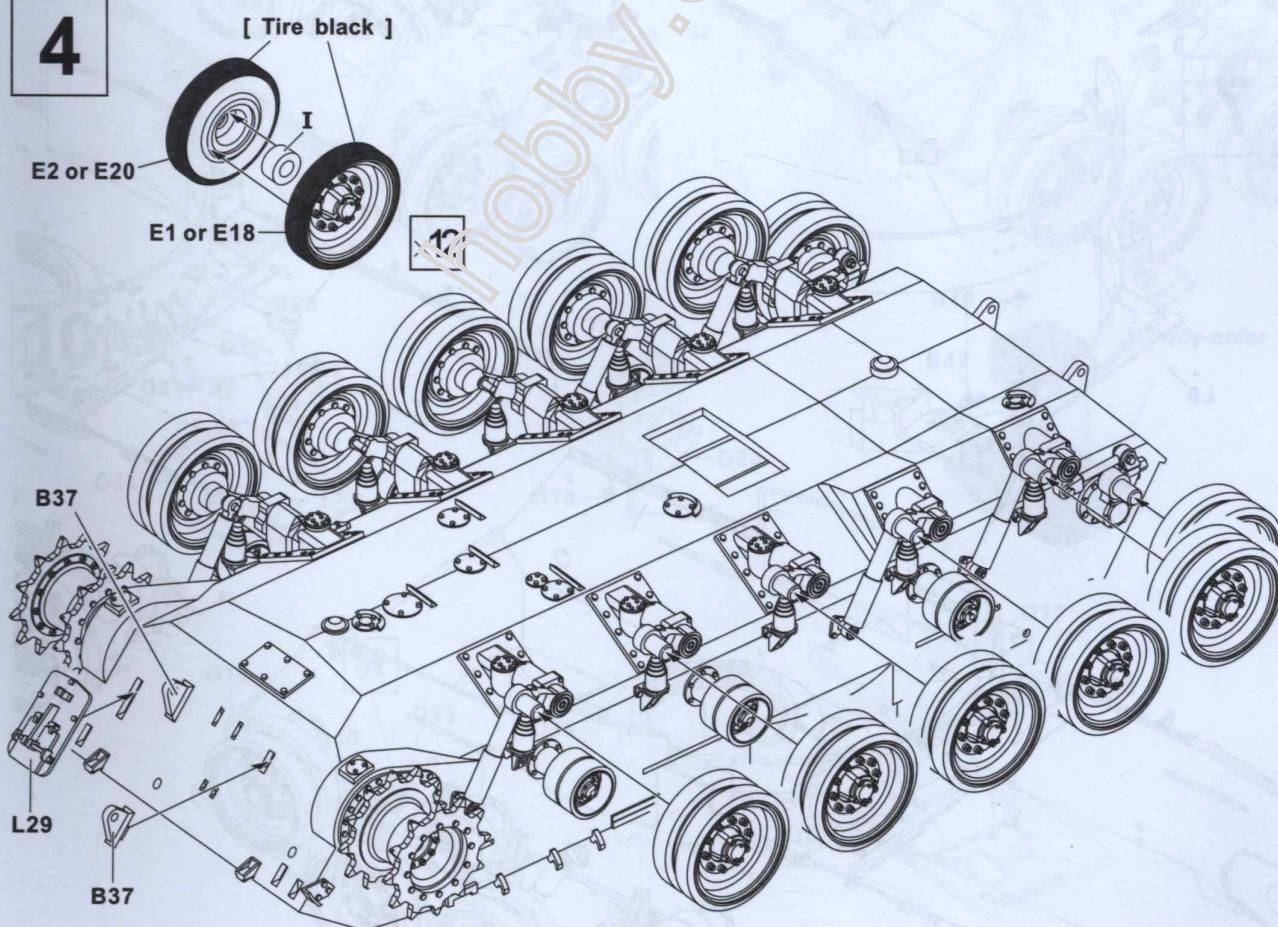
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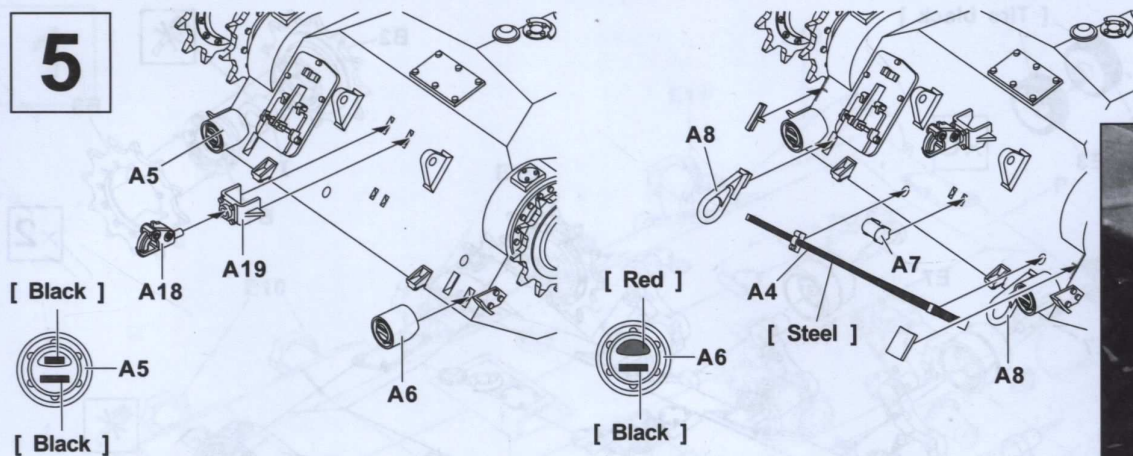
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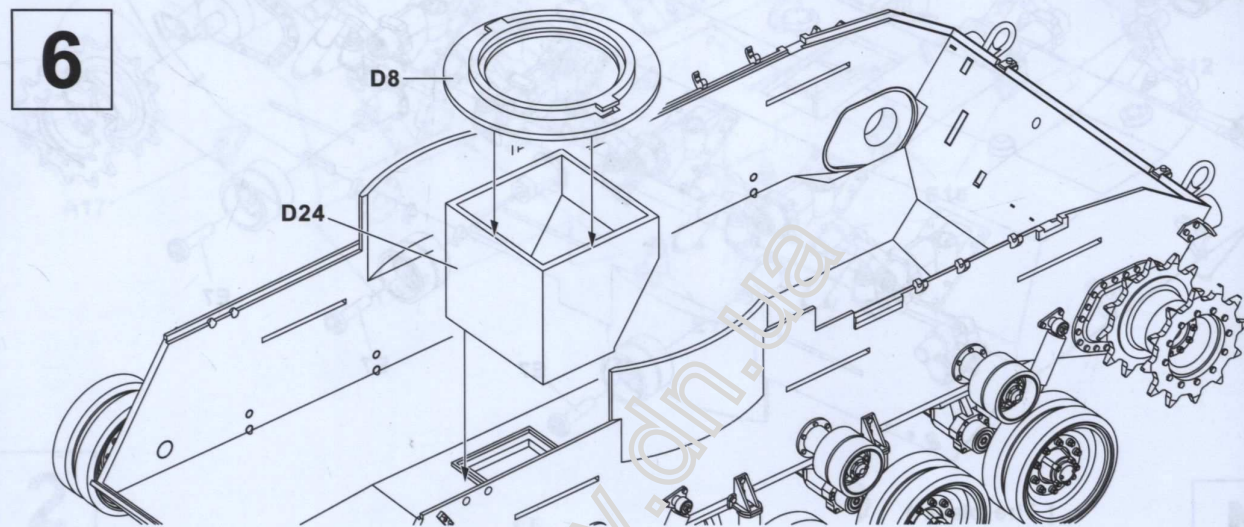
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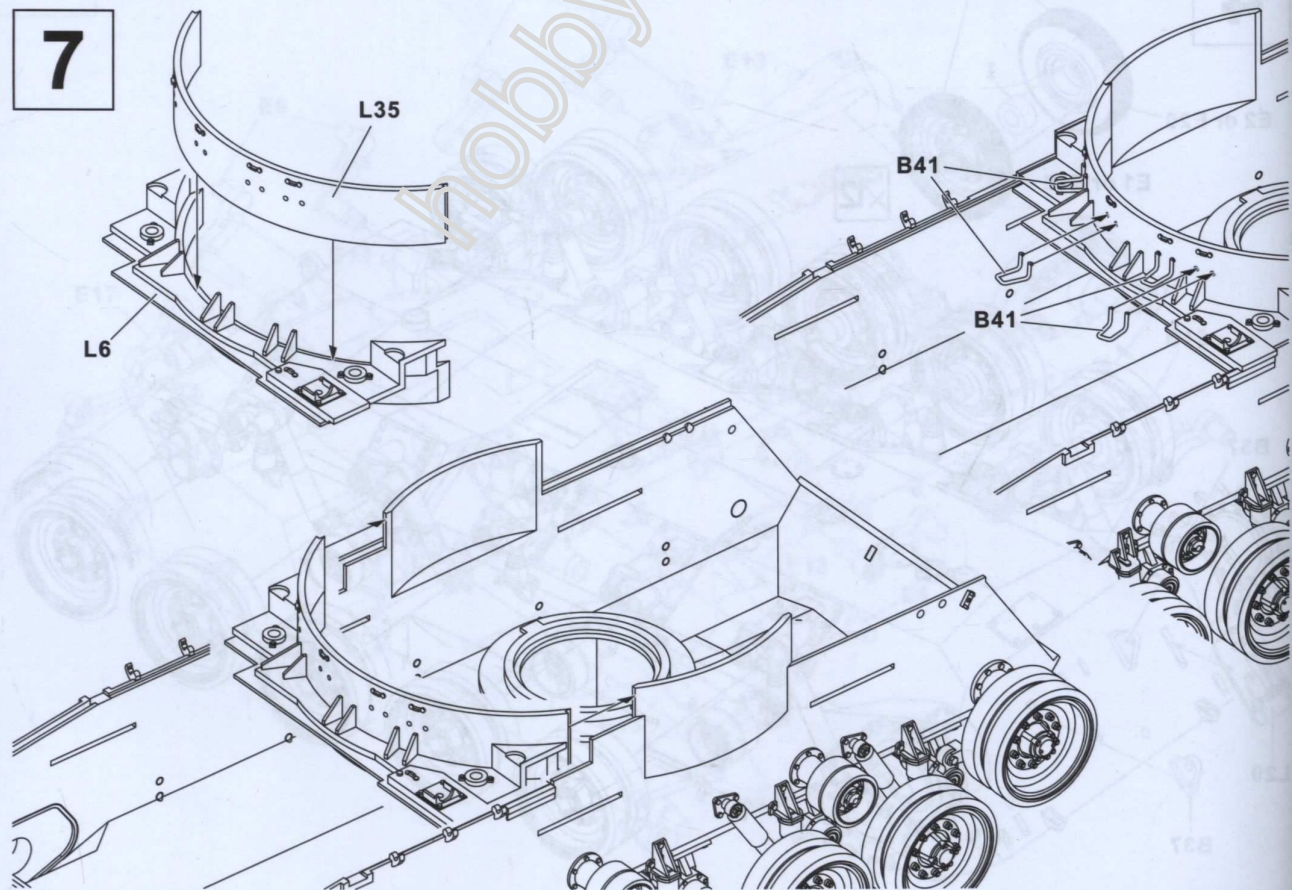
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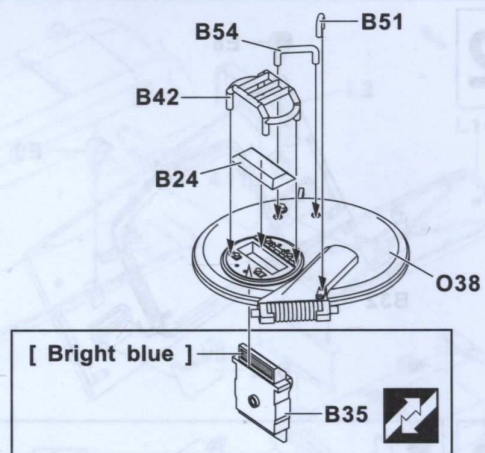
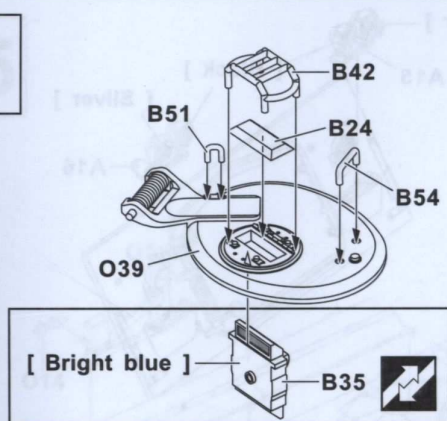
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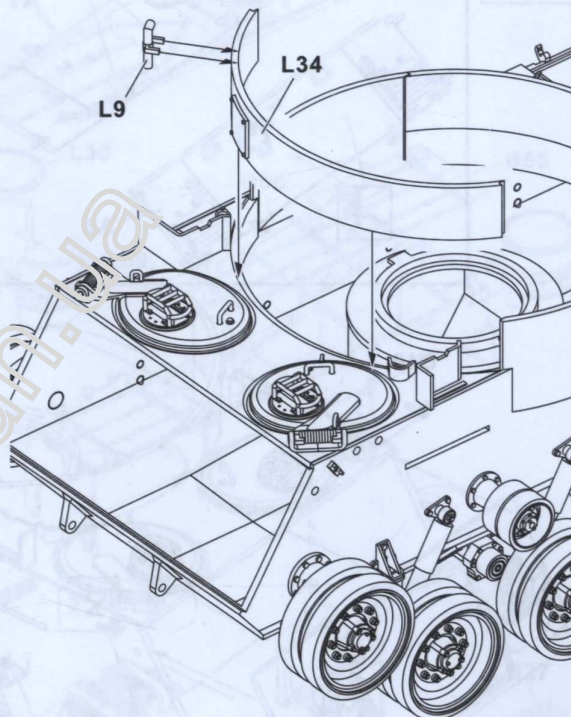
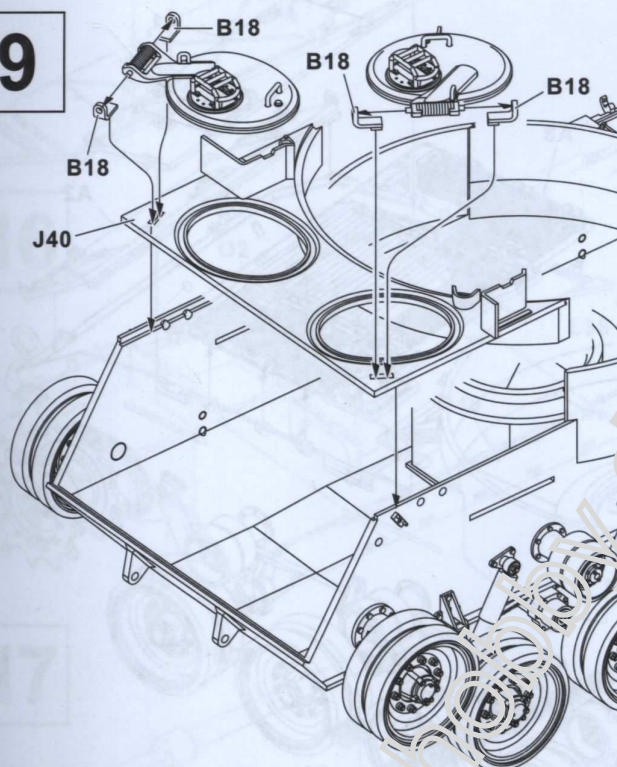
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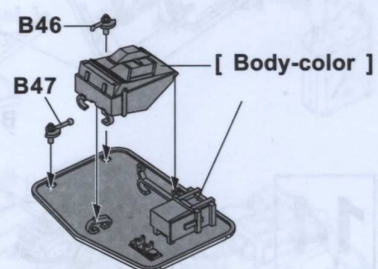
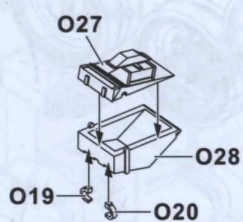
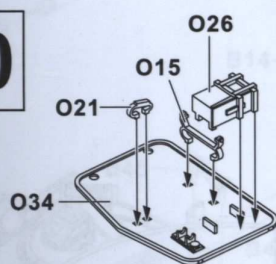
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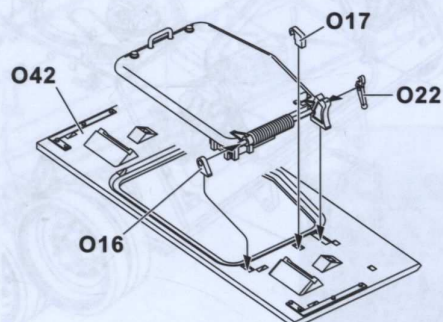
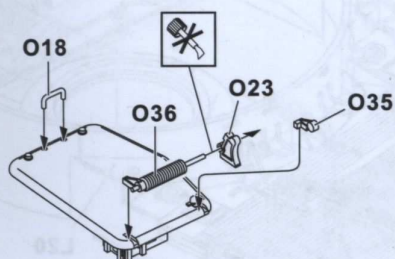
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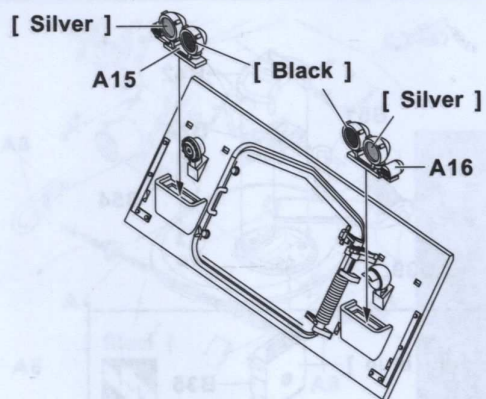
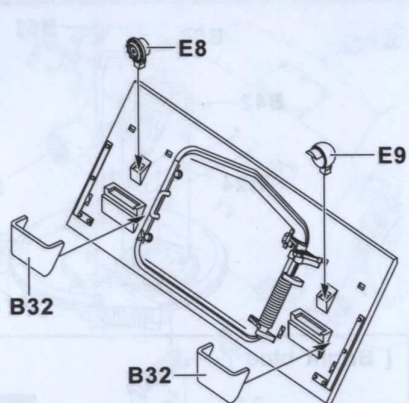
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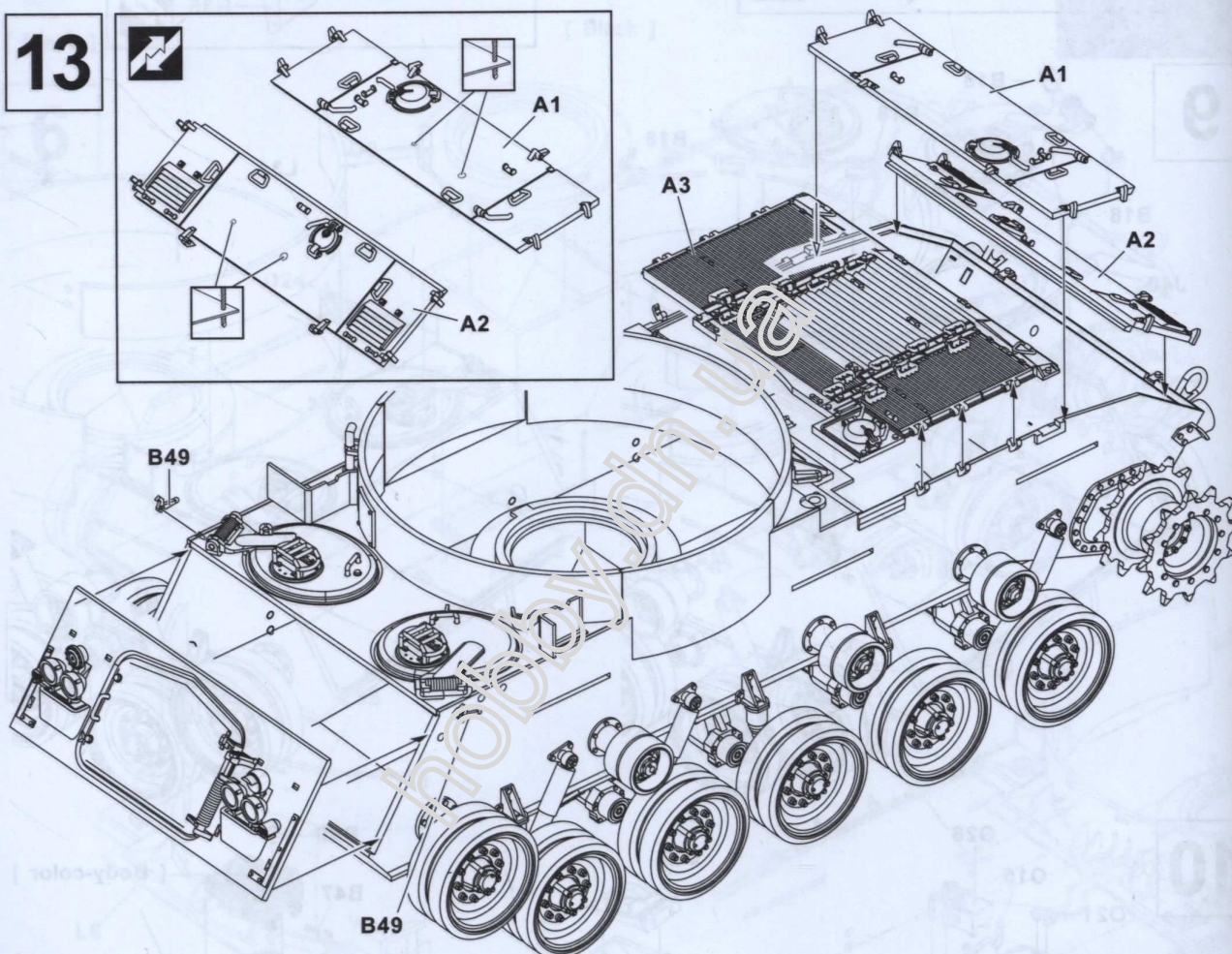
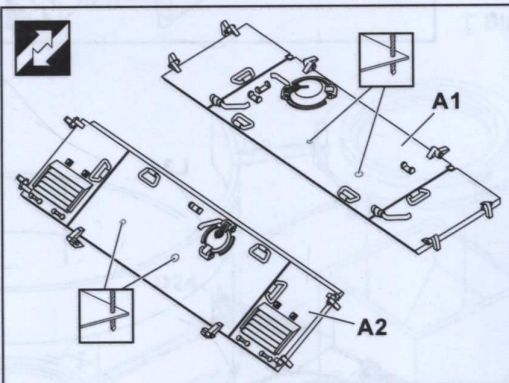
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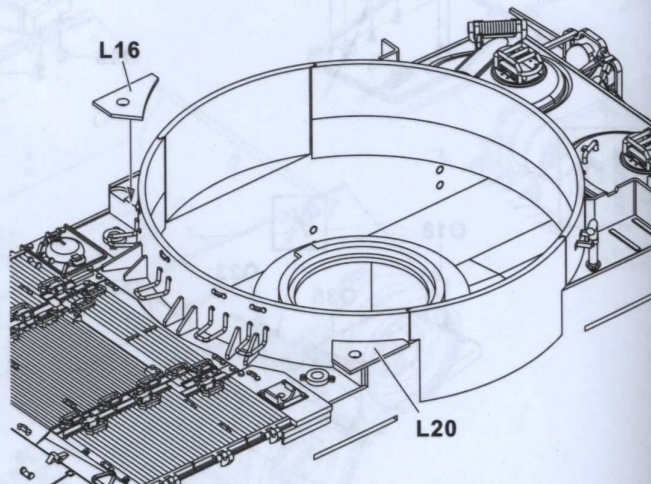
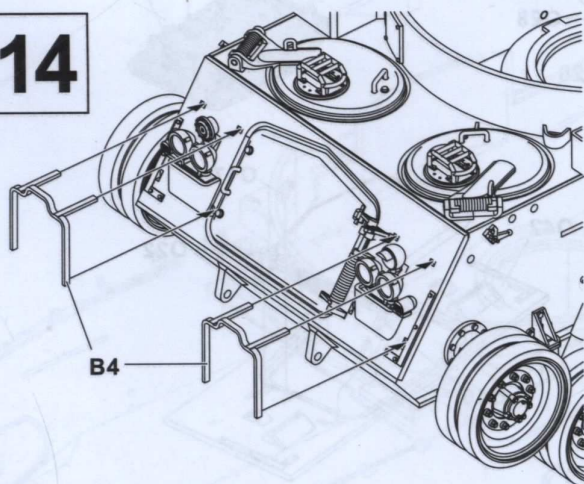
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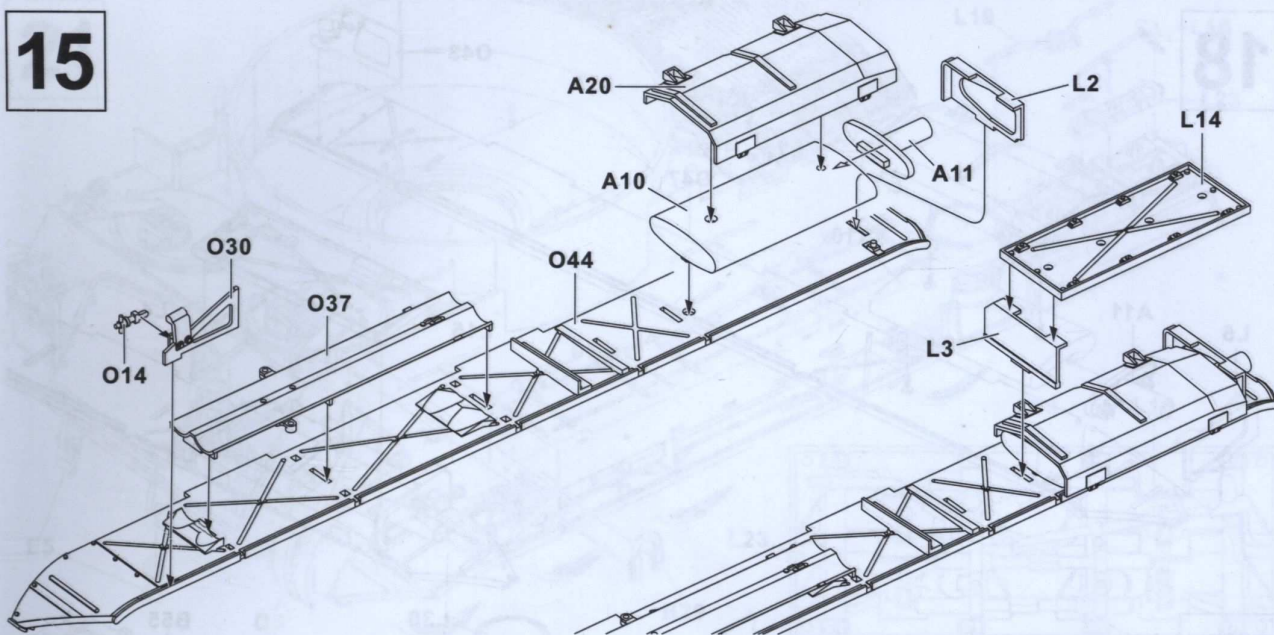
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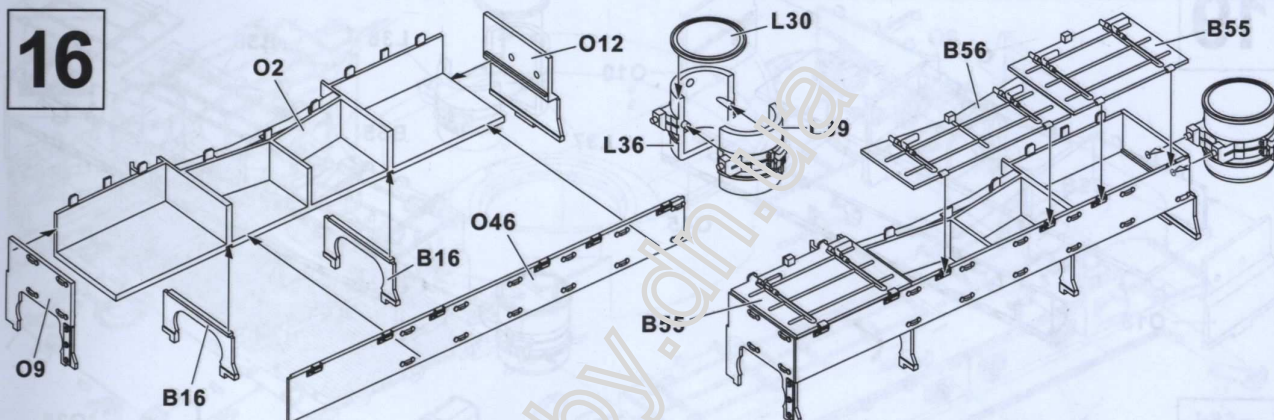
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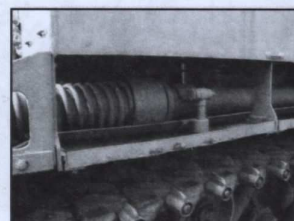
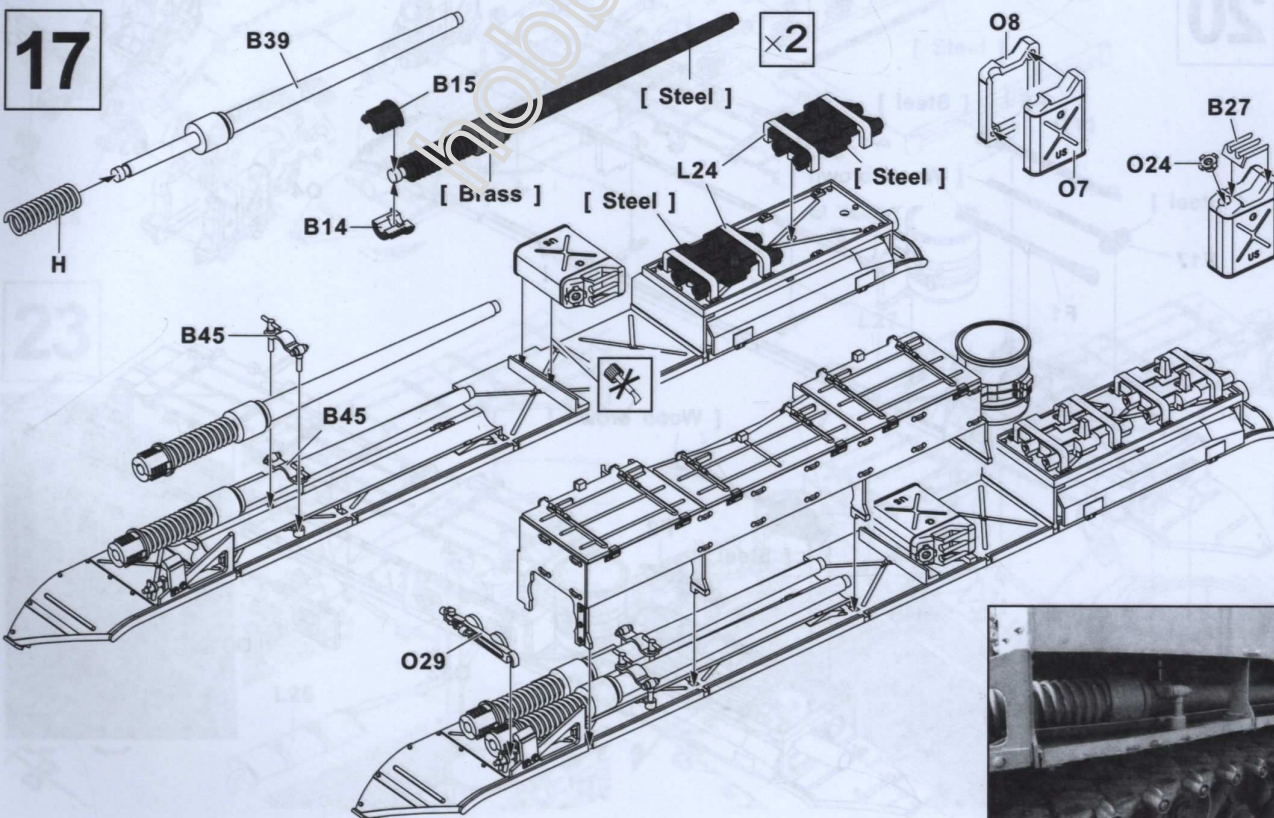
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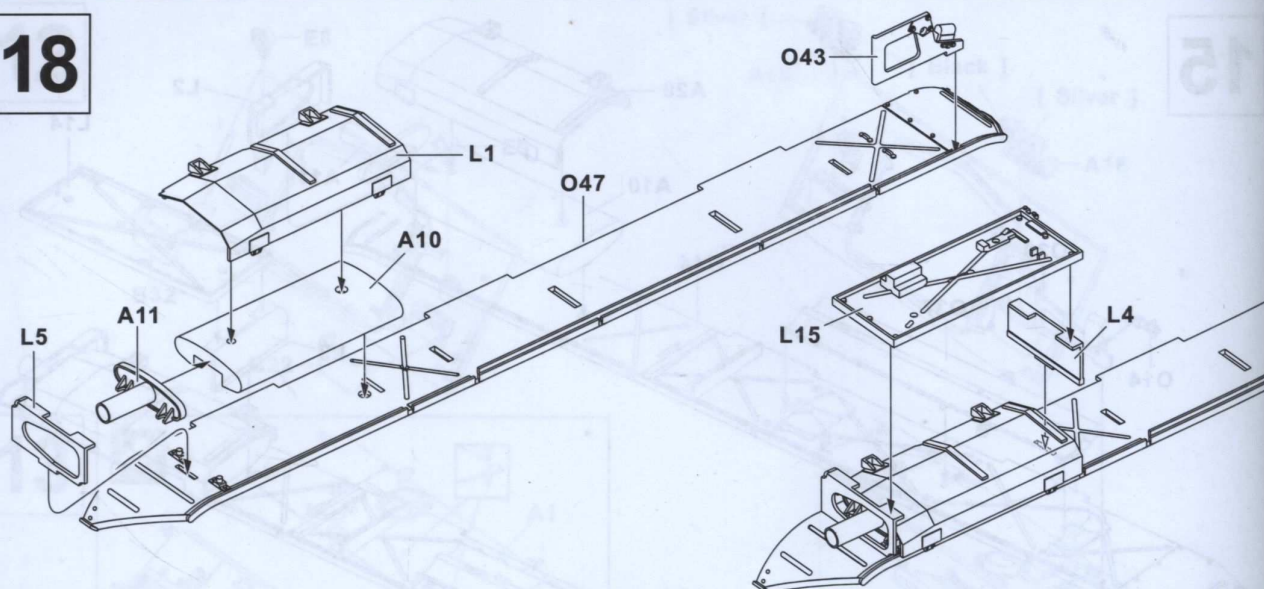
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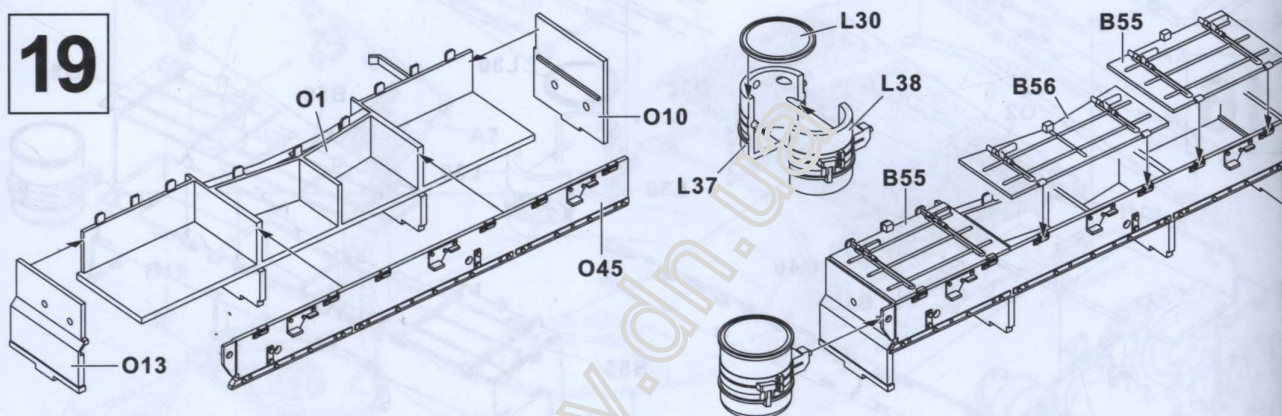
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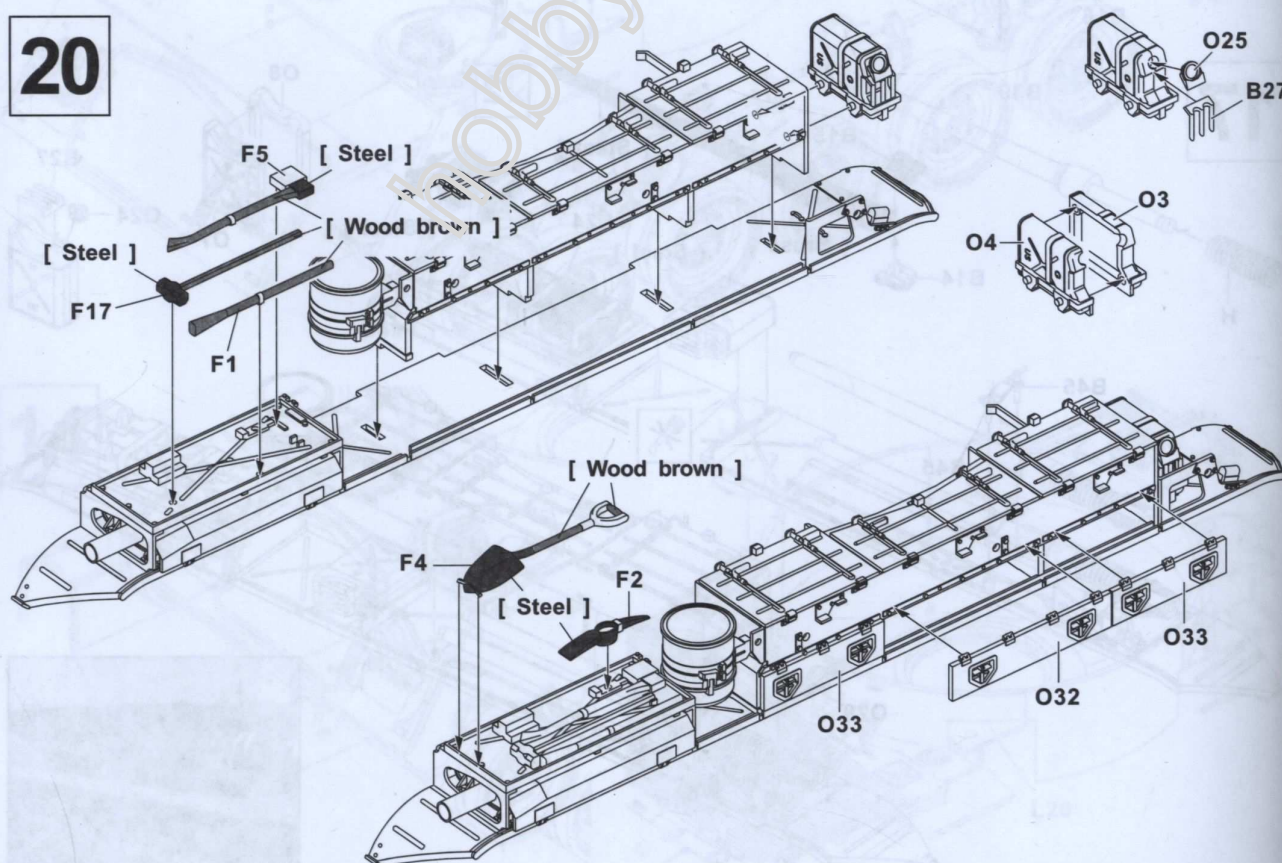
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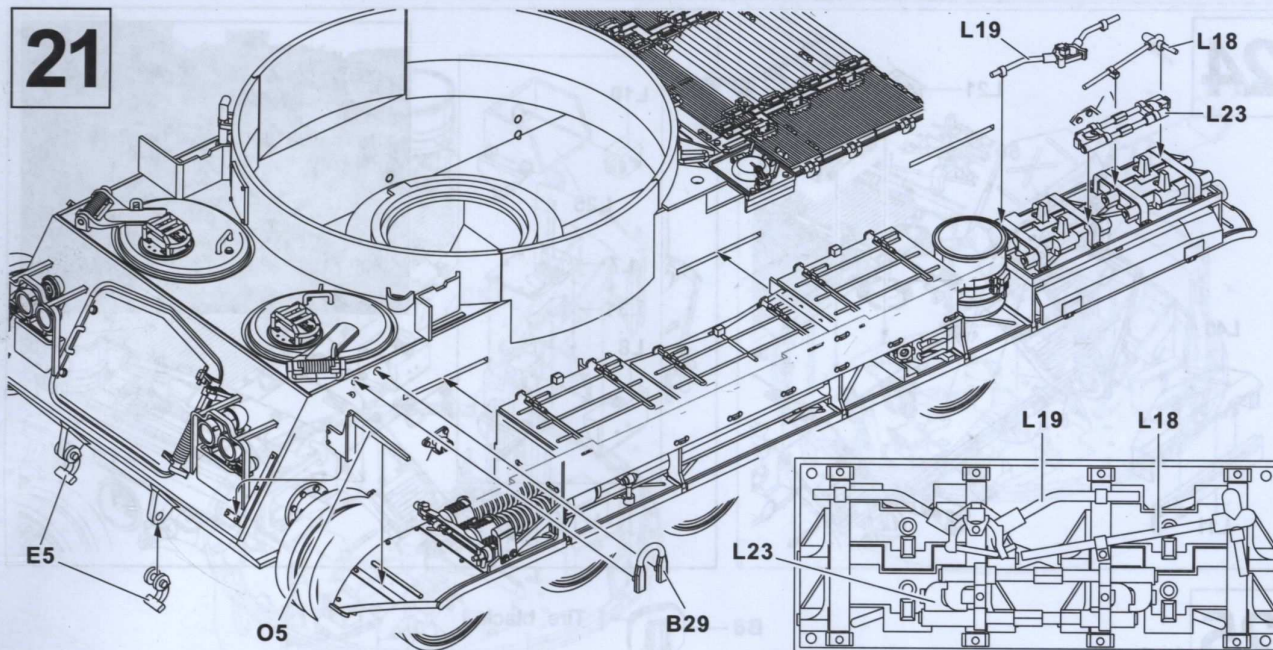
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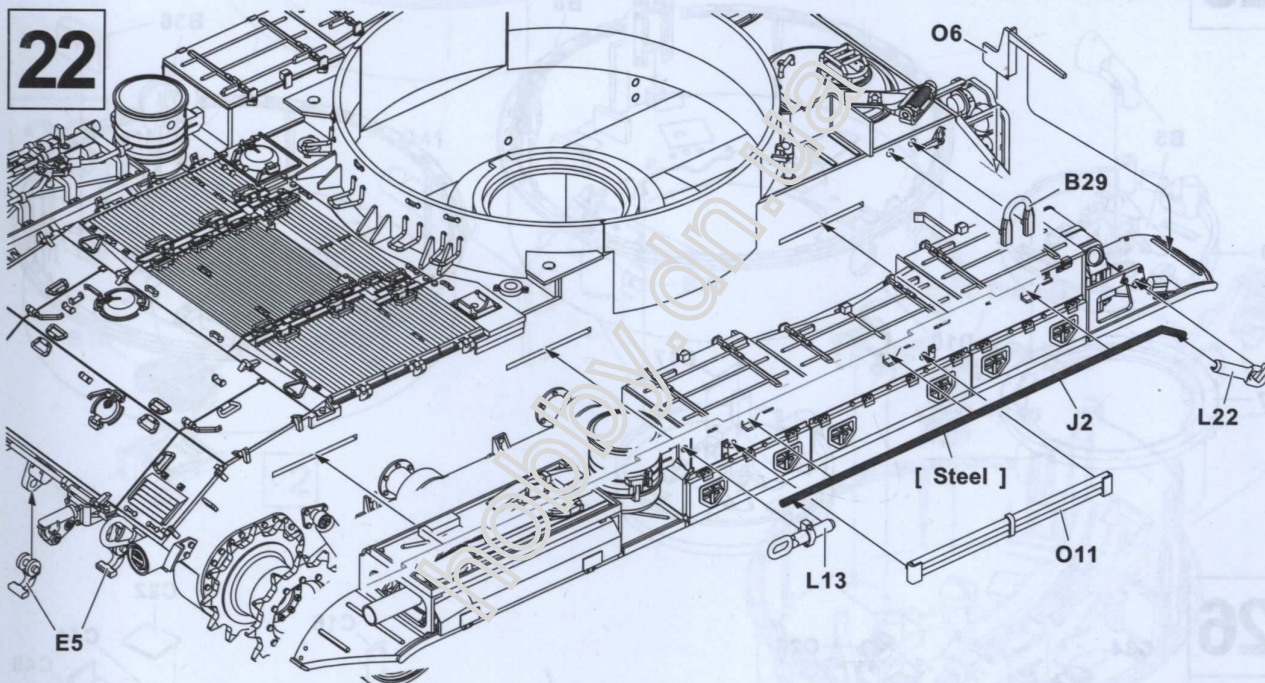
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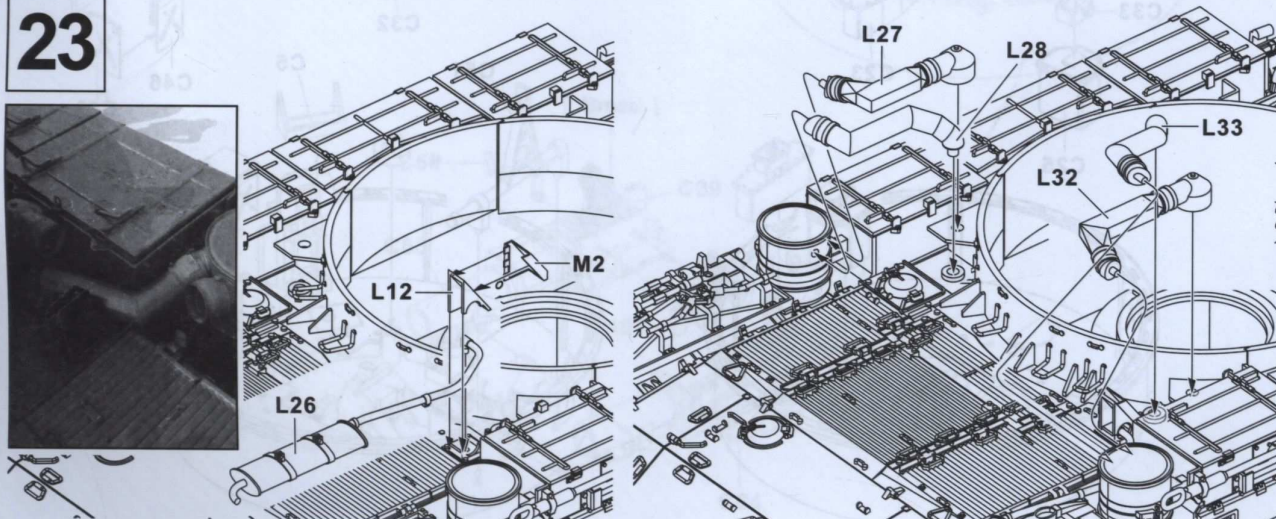
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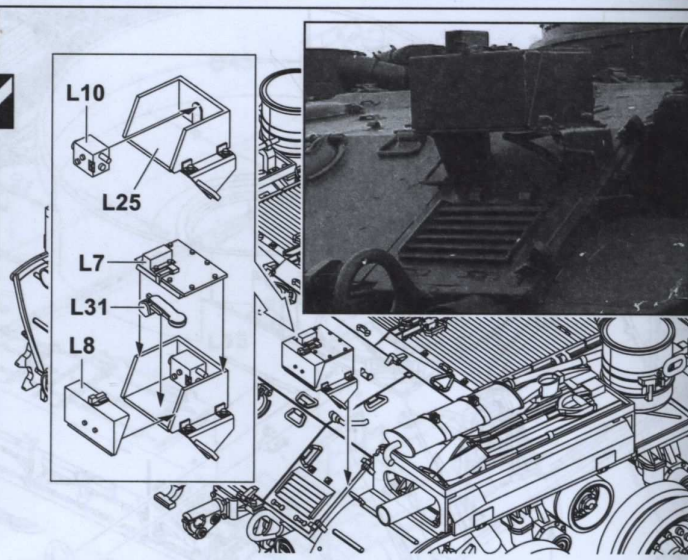
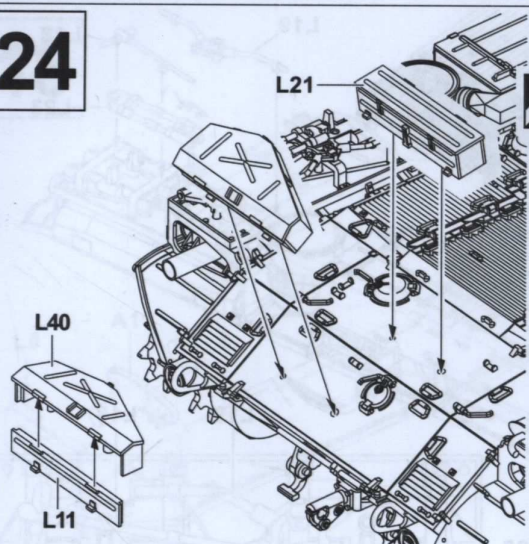
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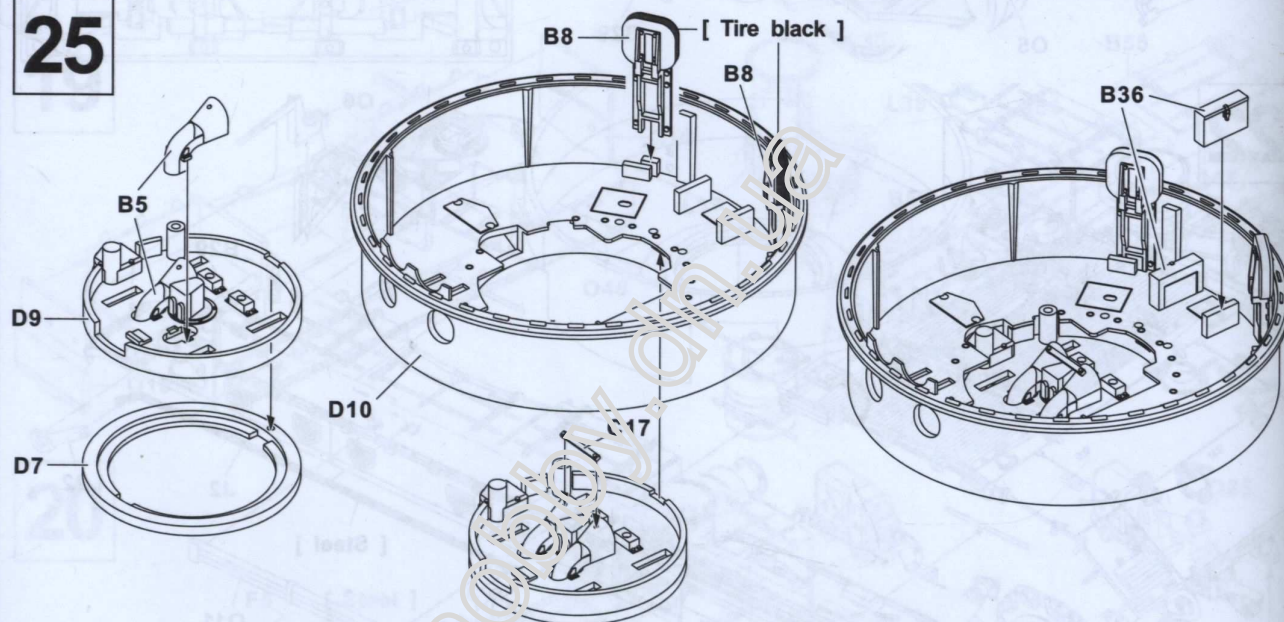
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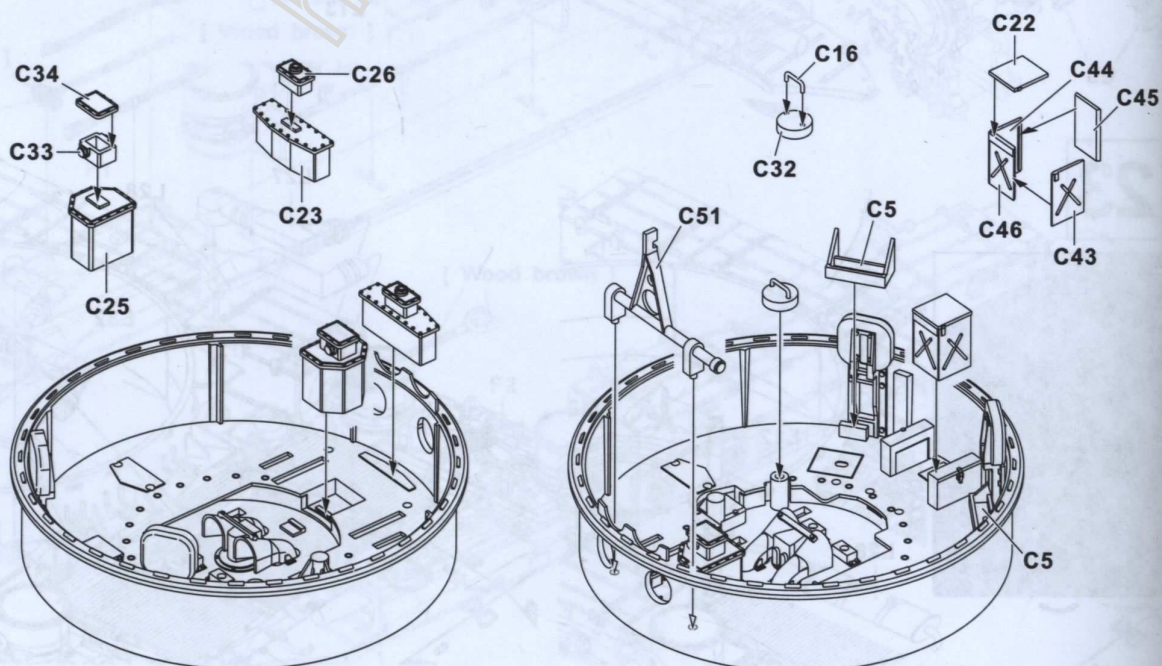
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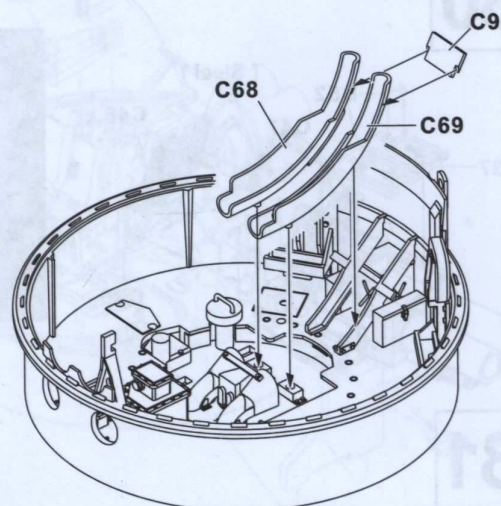
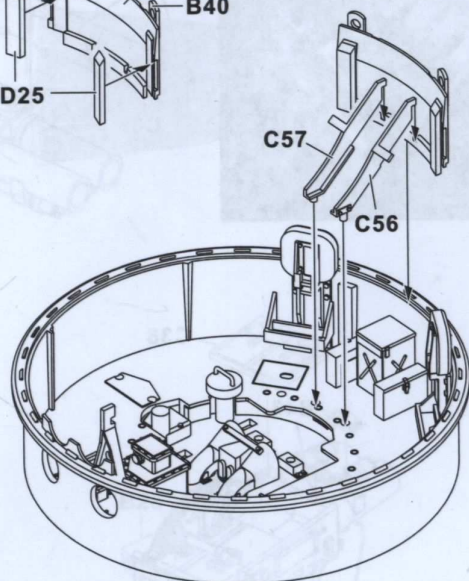
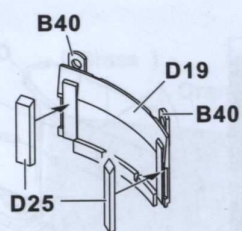
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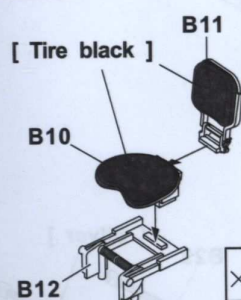
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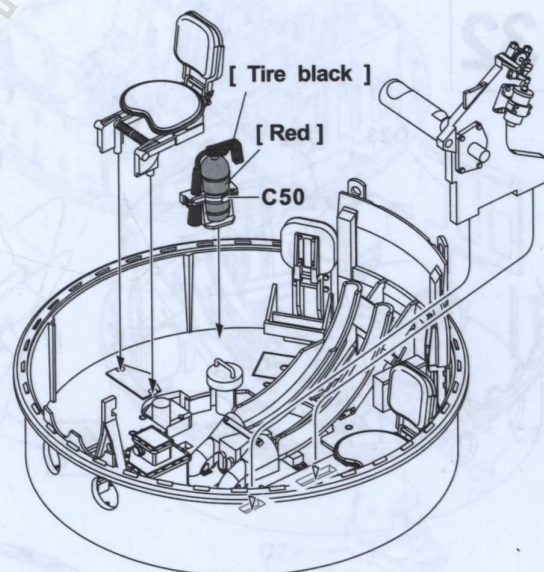
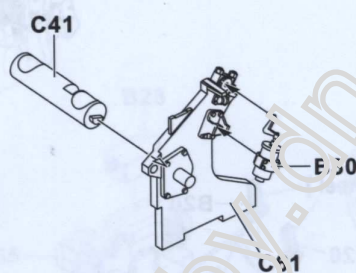
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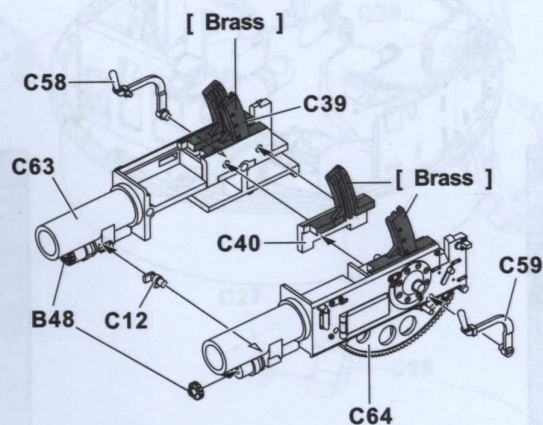
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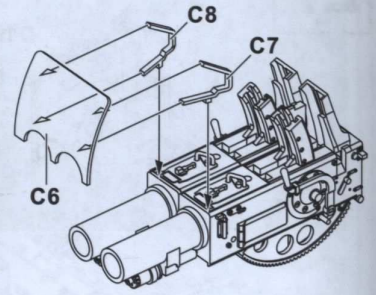
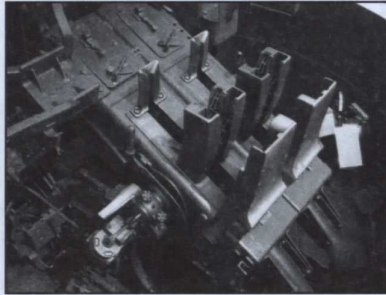
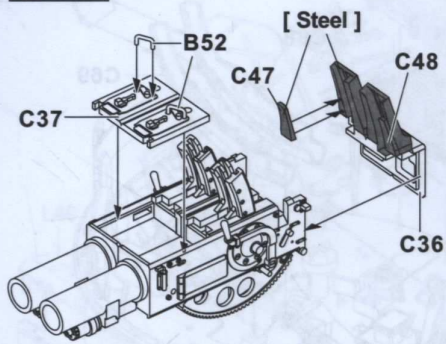
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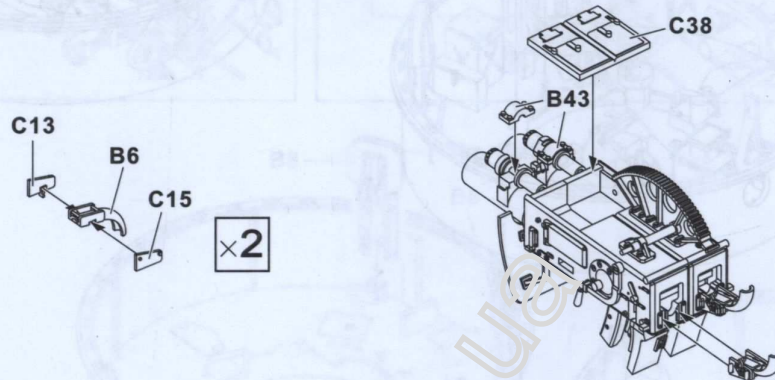
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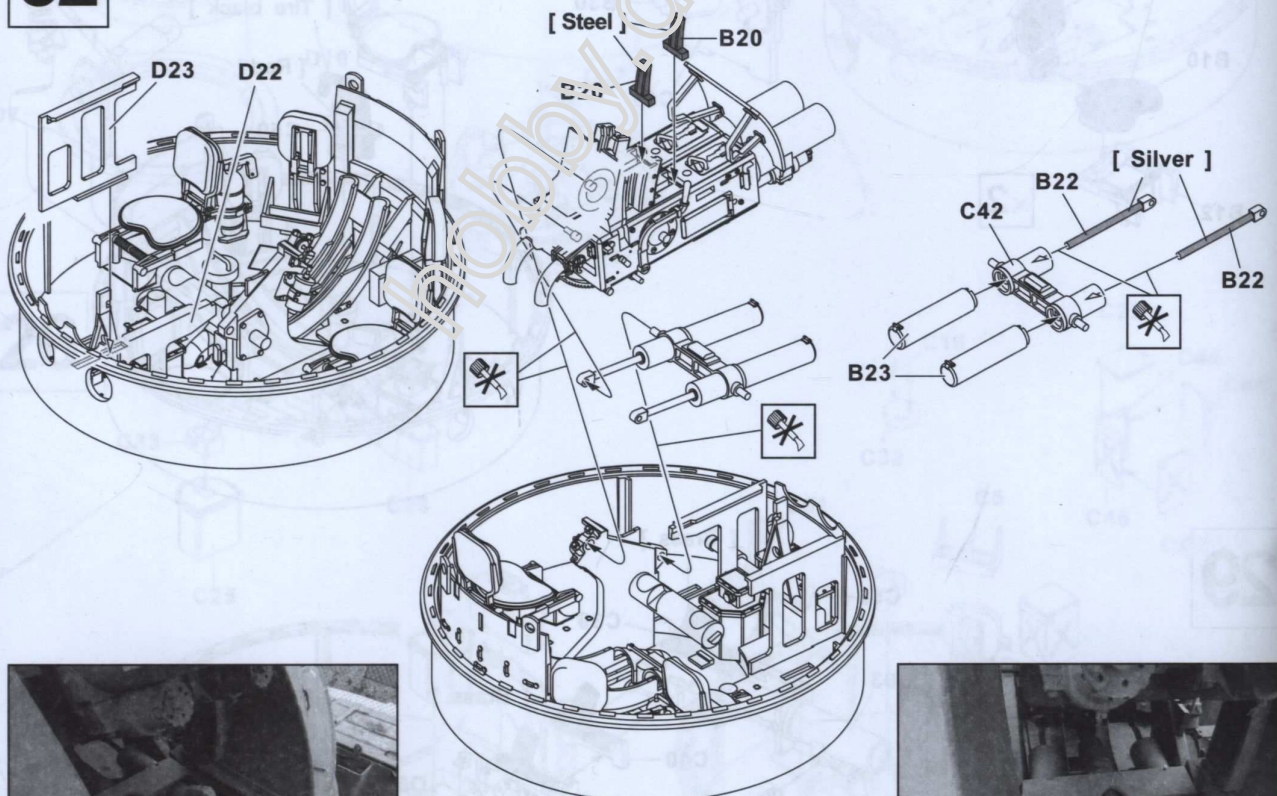
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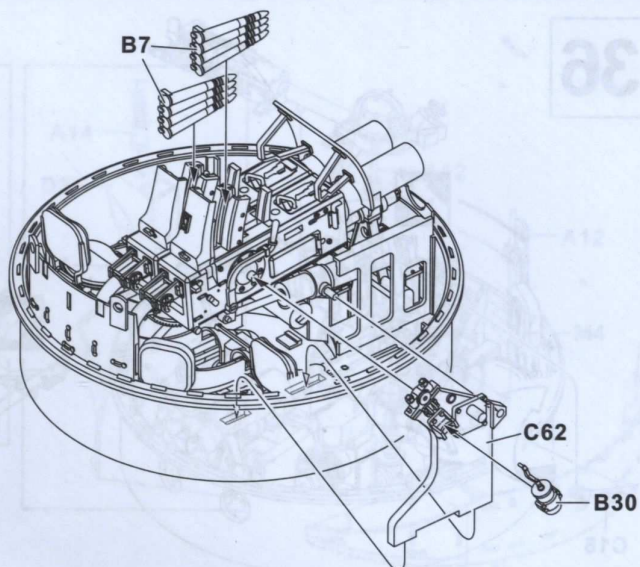
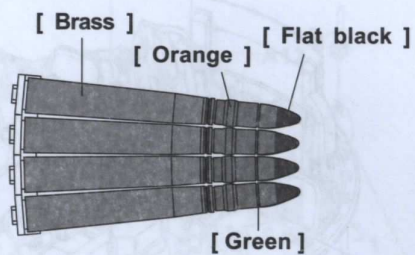
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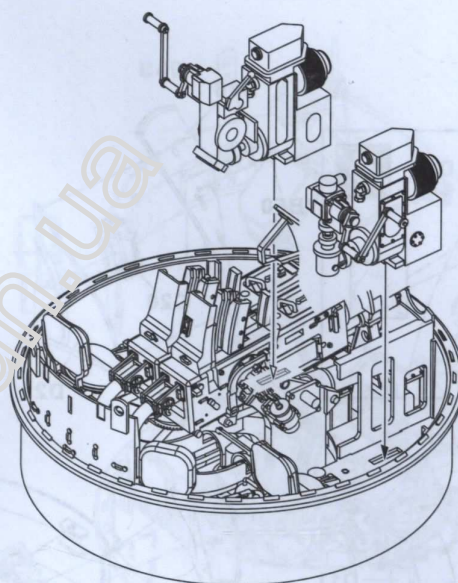
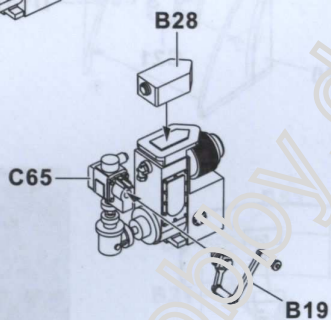
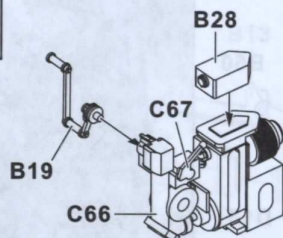
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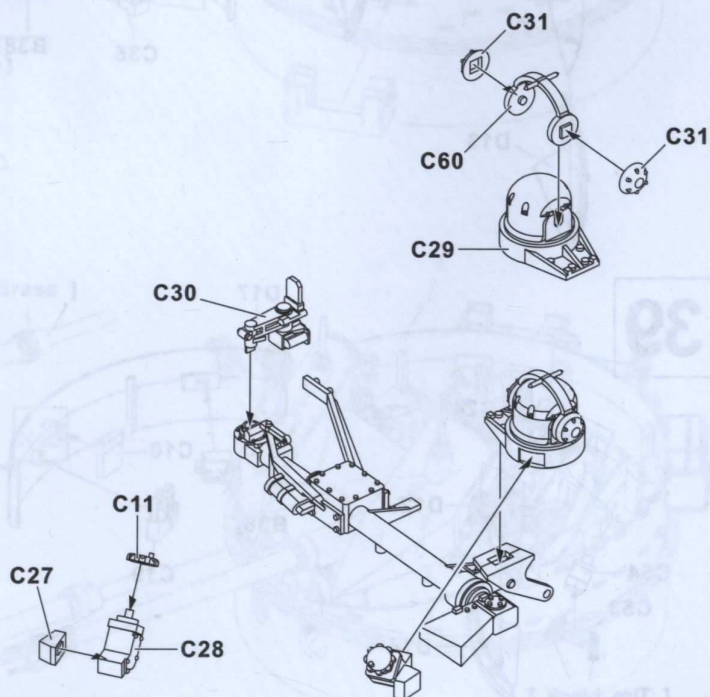
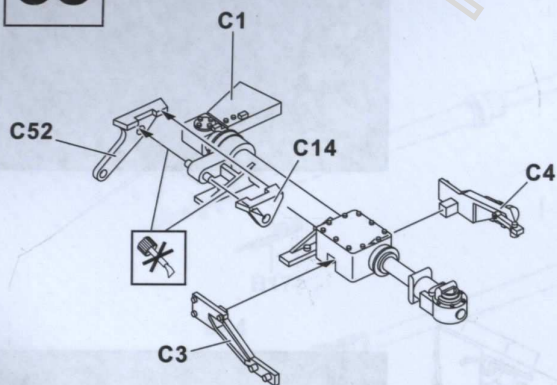
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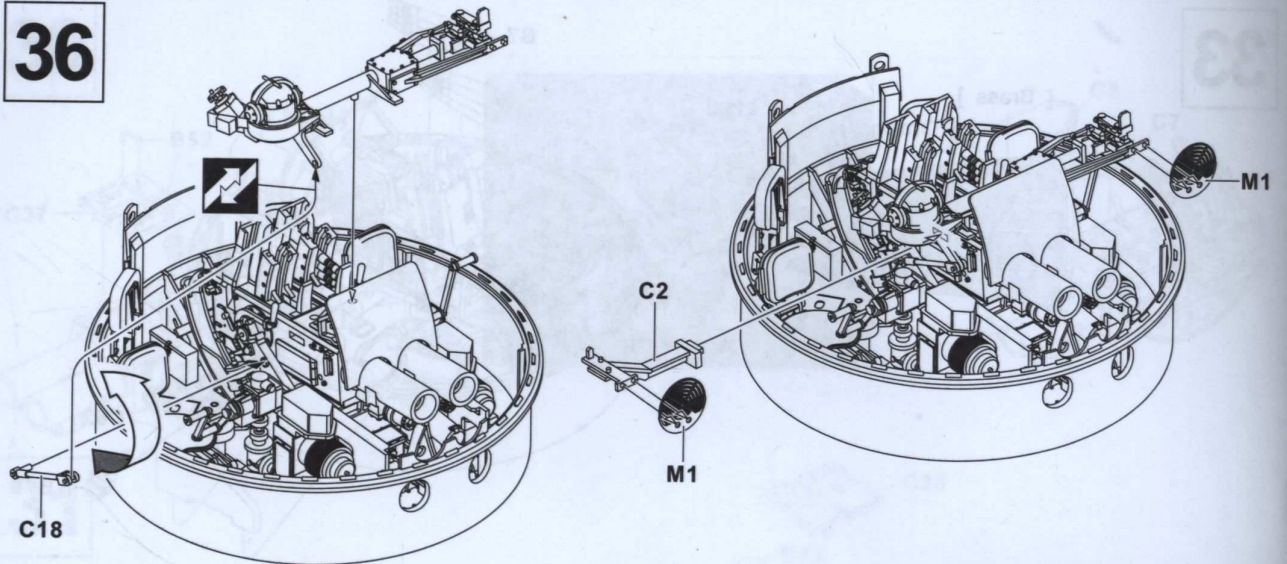
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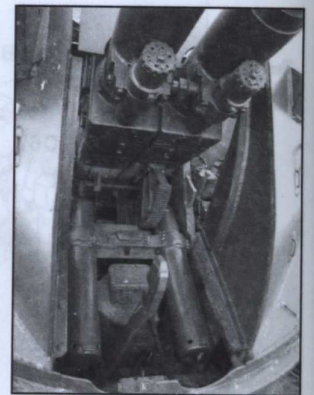
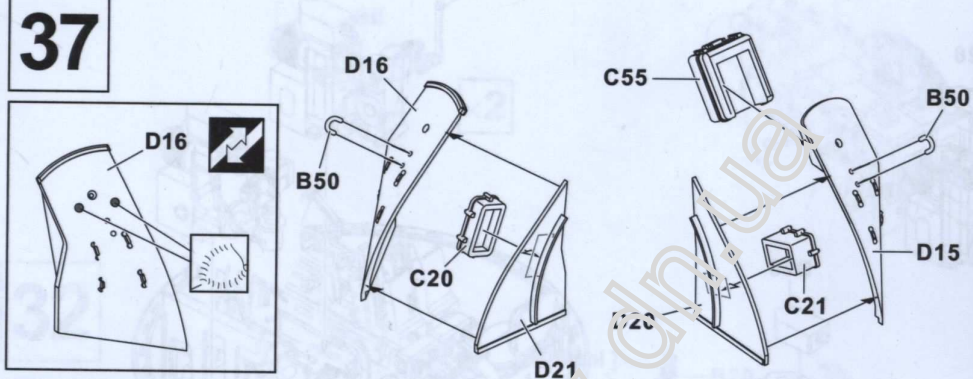
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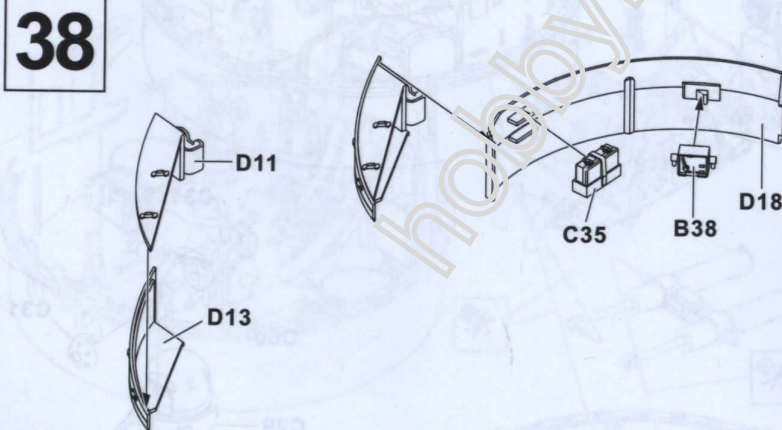
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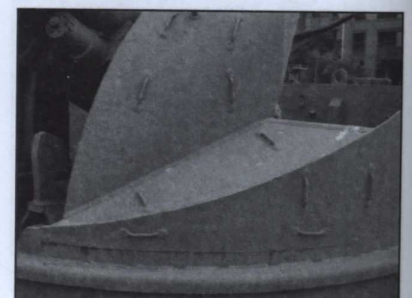
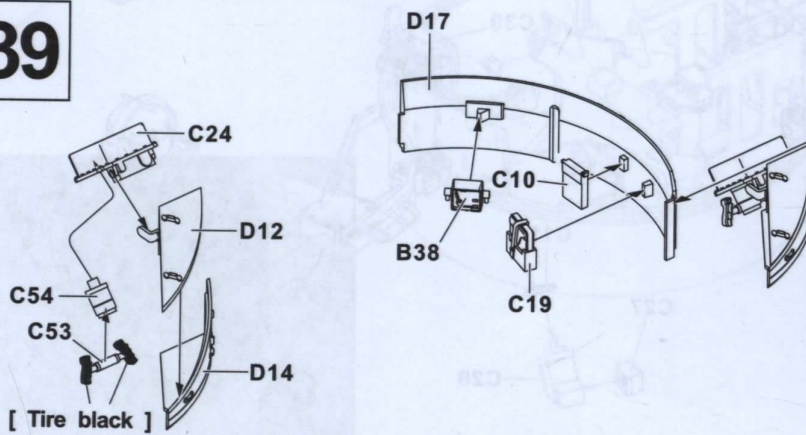
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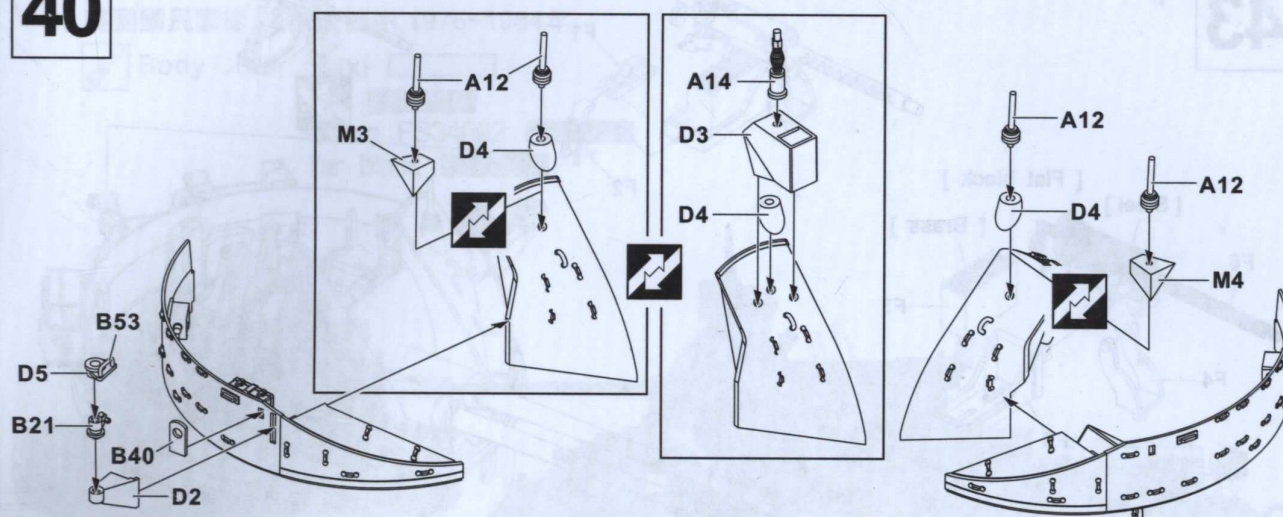
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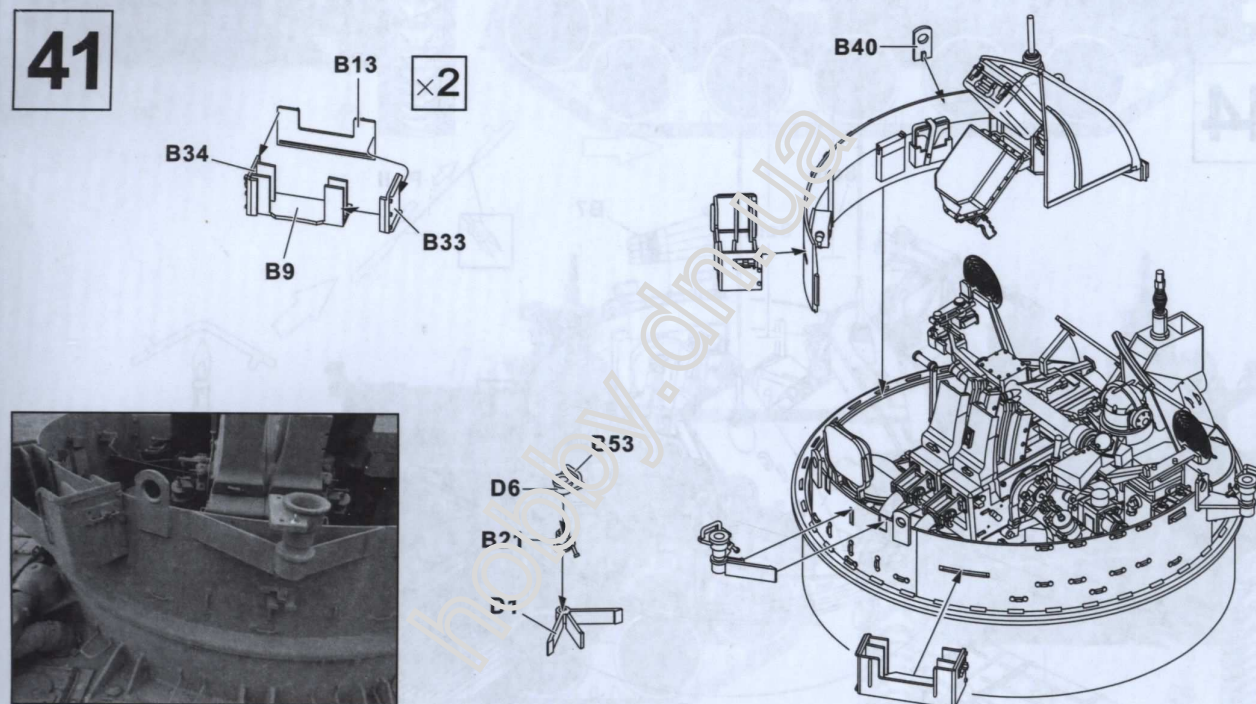
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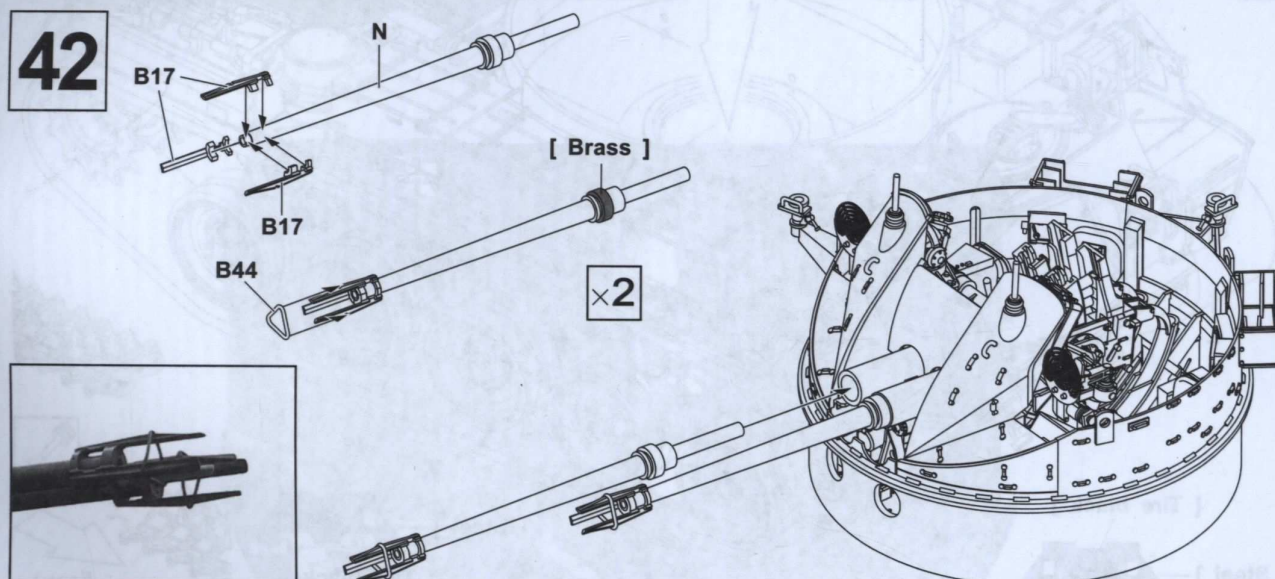
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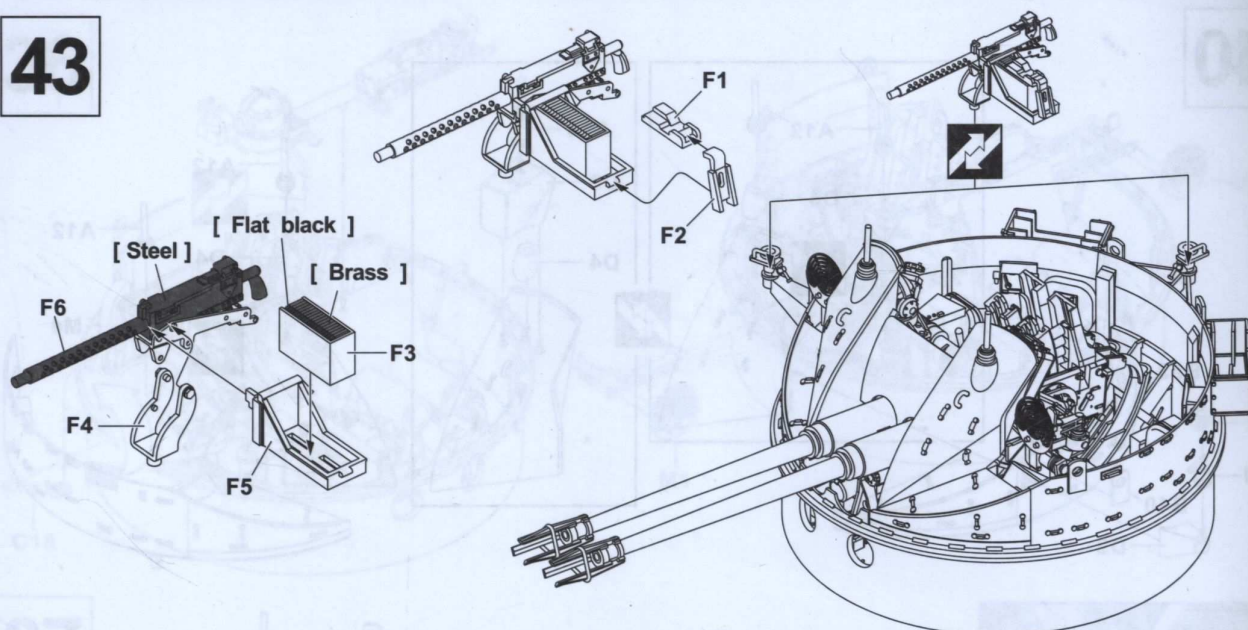
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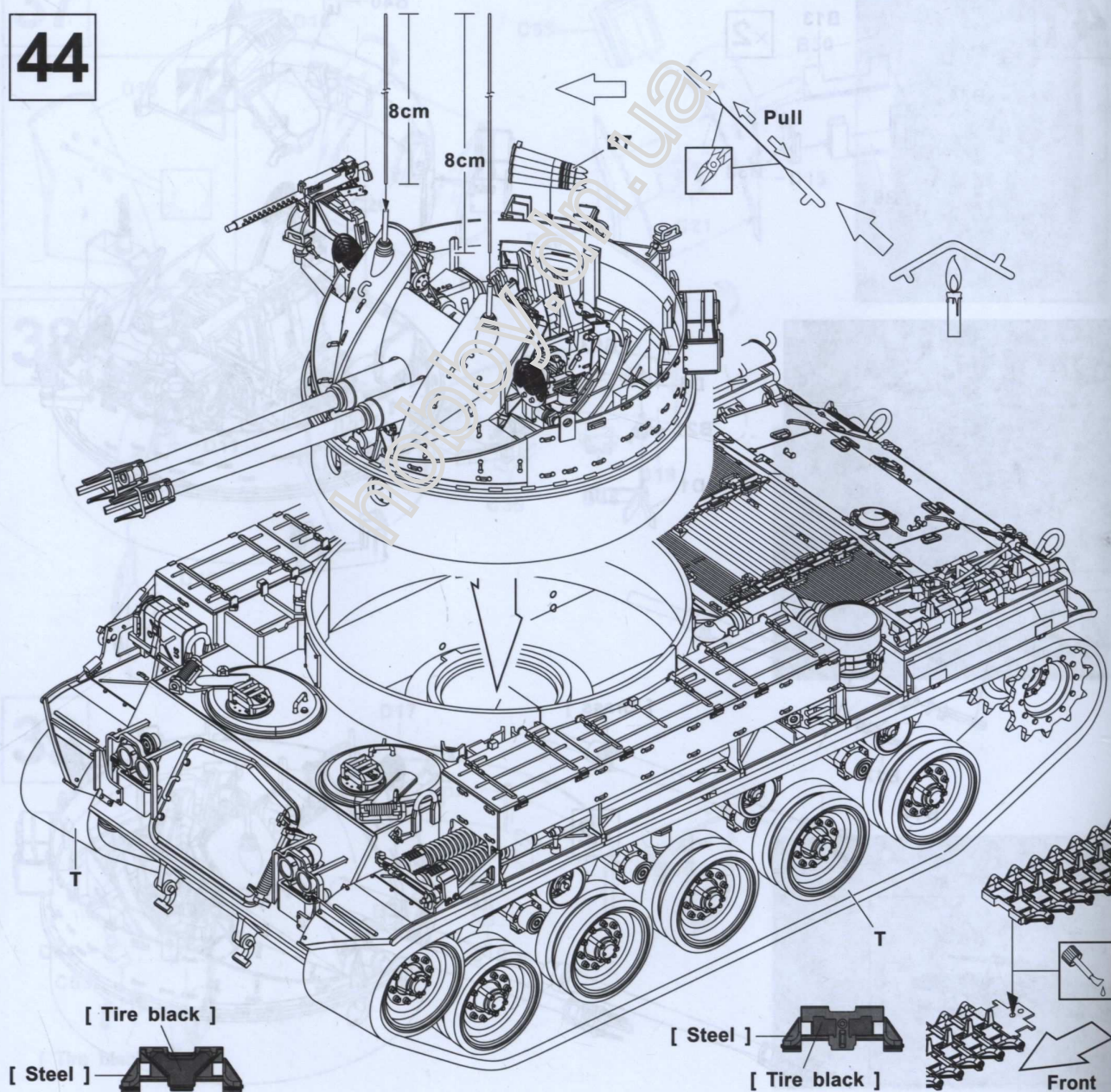
42



43

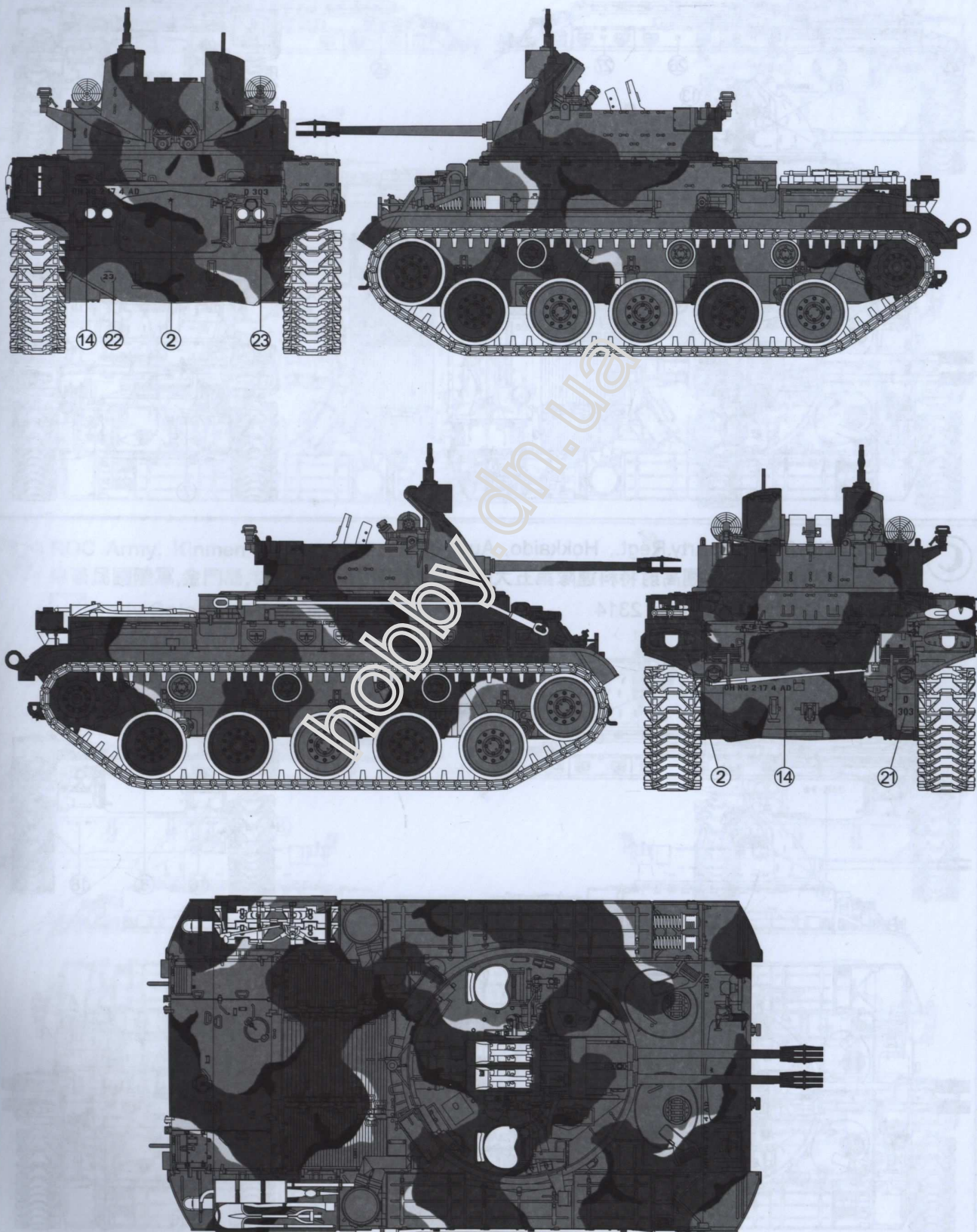


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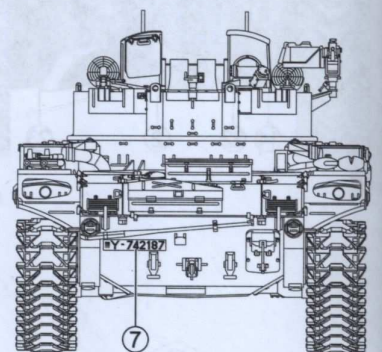
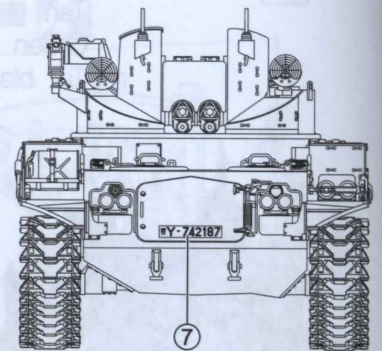
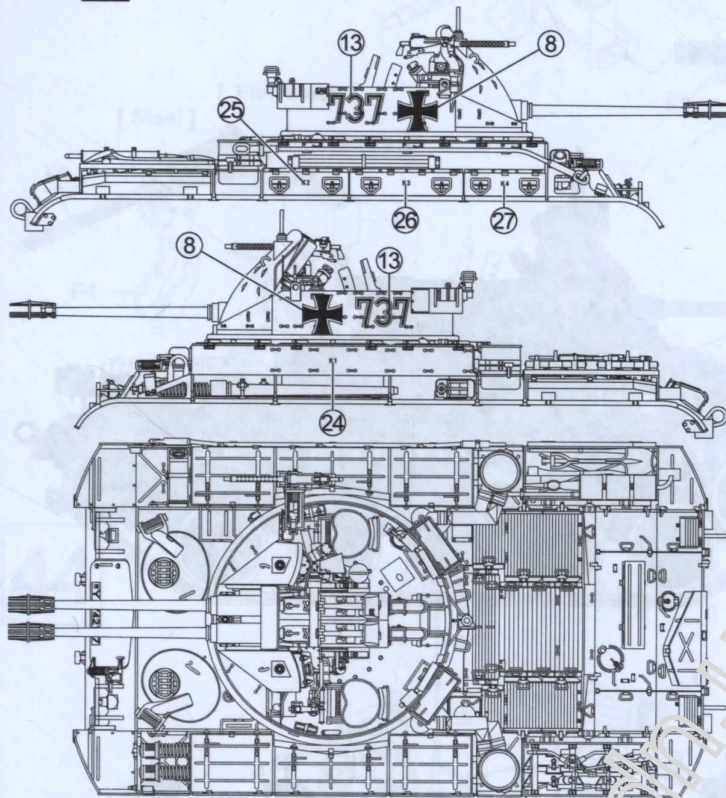
A U.S. National Guard, Ohio, 1976~1984
美國國民警衛隊, 俄亥俄州, 1976~1984年

Body Color: Sand
Tan
Green FS34092
Tar black




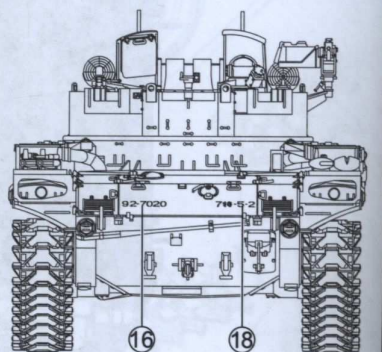
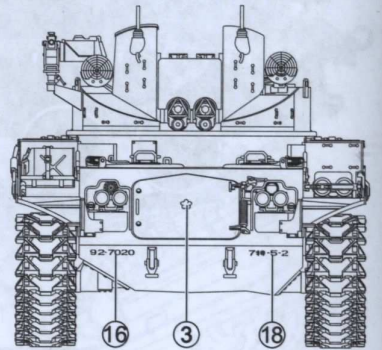
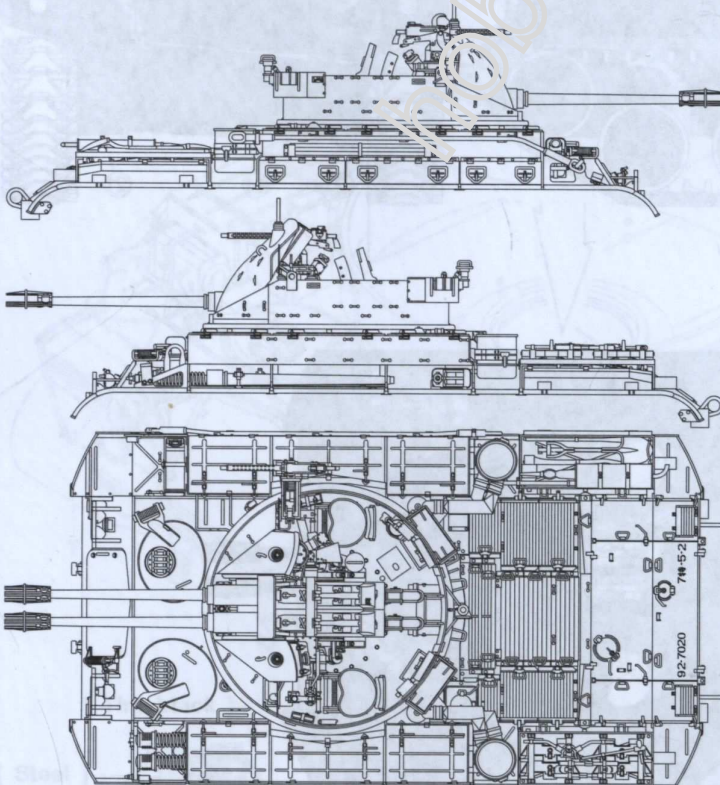
B German Army, 1961
西德陸軍, 1961年

 Body Color: Olive drab(2)




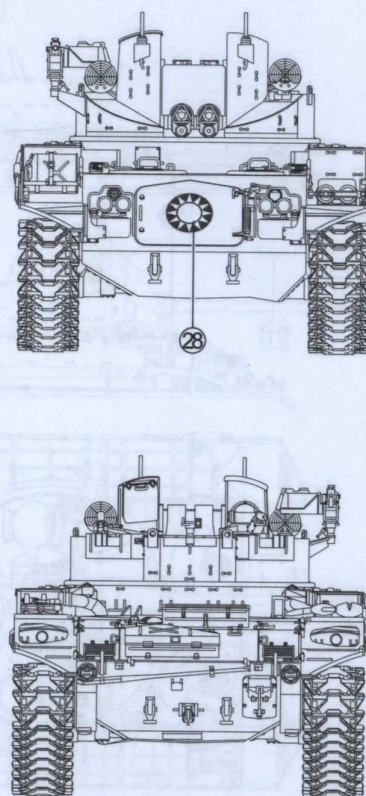
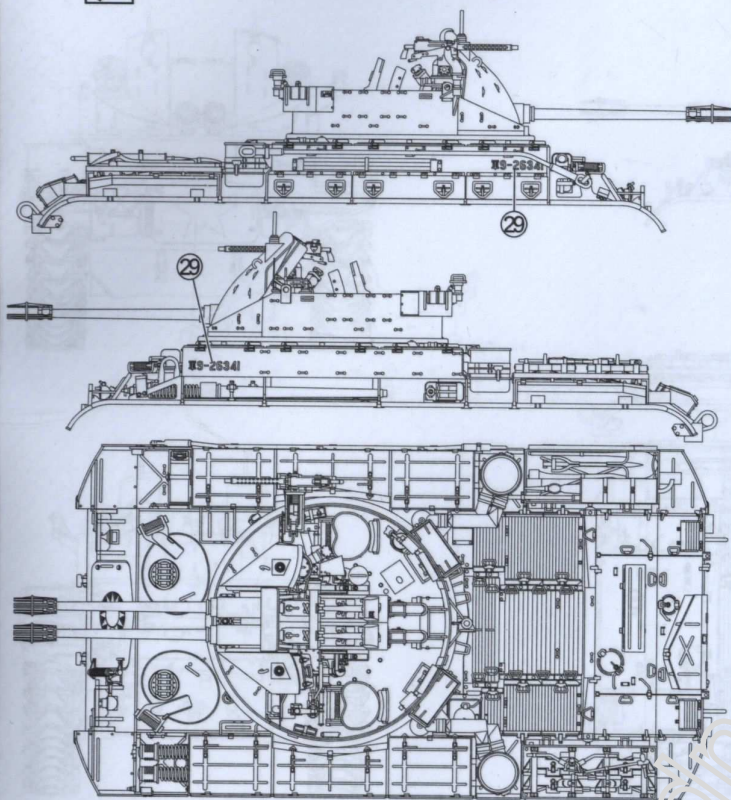
C JGSDF, 5th Bn., 7th Arty.Reg., Hokkaido, Aug 1979
日本陸上自衛隊, 第七師團高射特科連隊 第三大隊, 北海道, 1979年8月

 Body Color: Olive drab 2314




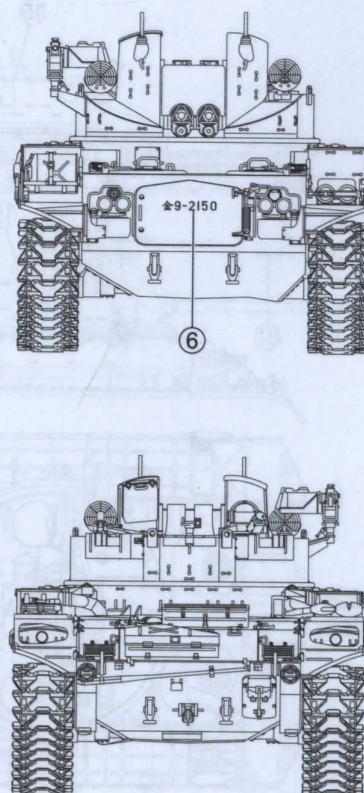
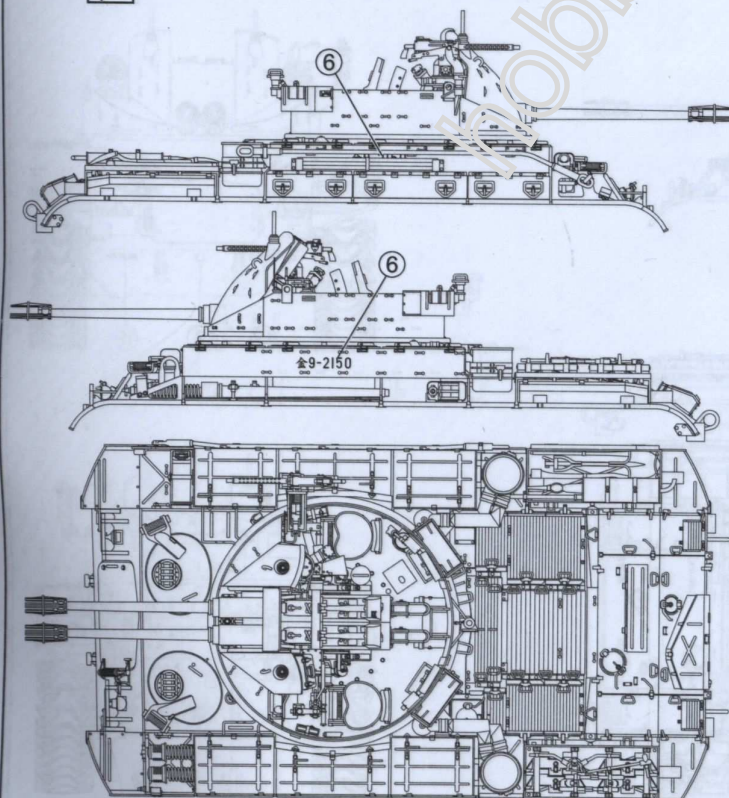
D ROC Army,
中華民國陸軍

 Body Color: RLM80 Olive green




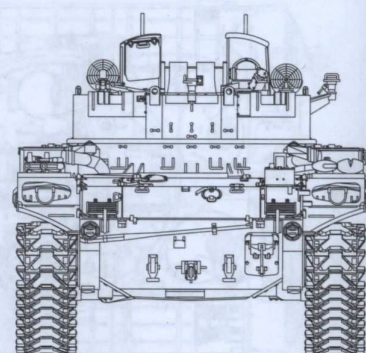
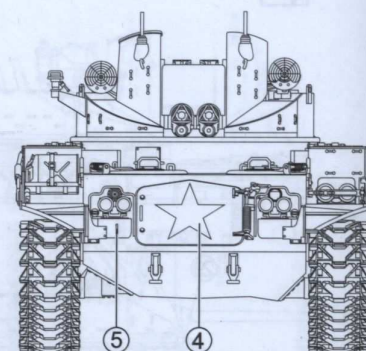
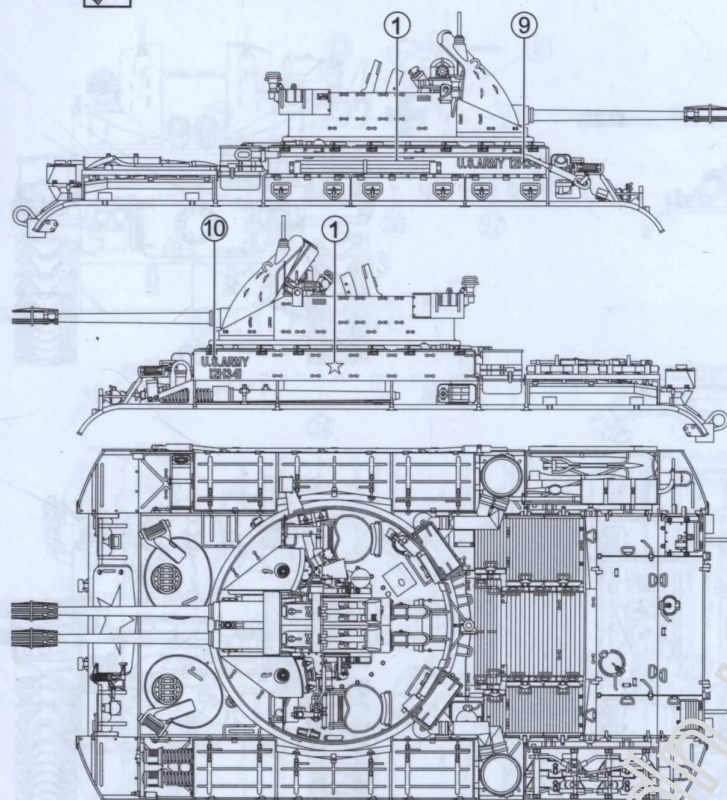
E ROC Army, Kinmen Island, 1960
中華民國陸軍,金門島,1960年

 Body Color: RLM80 Olive green




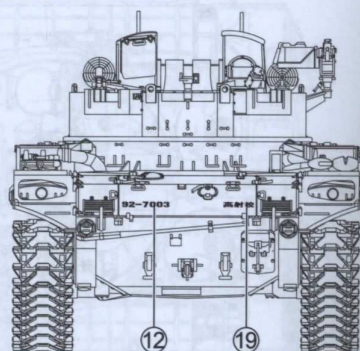
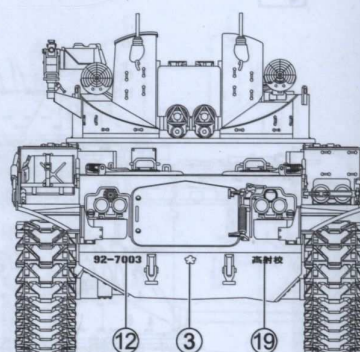
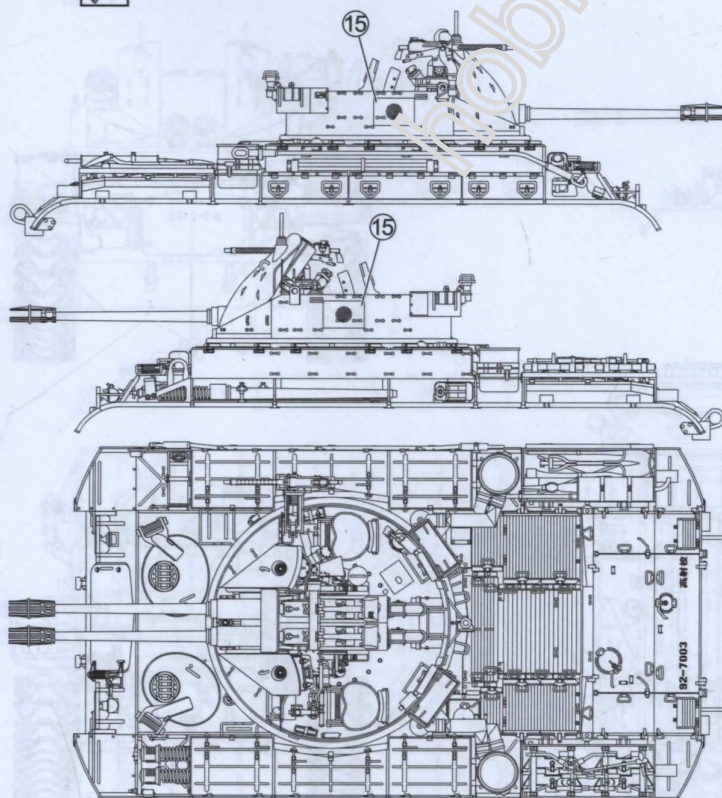
F U.S. Army, Fort Bliss, Texas, 1967
美國陸軍, 德州布利斯堡, 1967年

 Body Color: Olive drab(2)




G JGSDF Air Defence Artillery School, Chiba Prefecture, 1970s
日本陸上自衛隊高射學校, 千葉縣, 1970年代

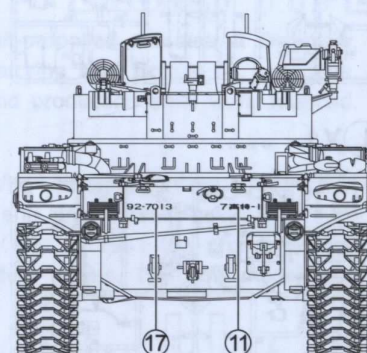
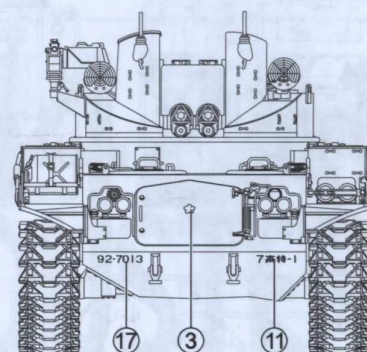
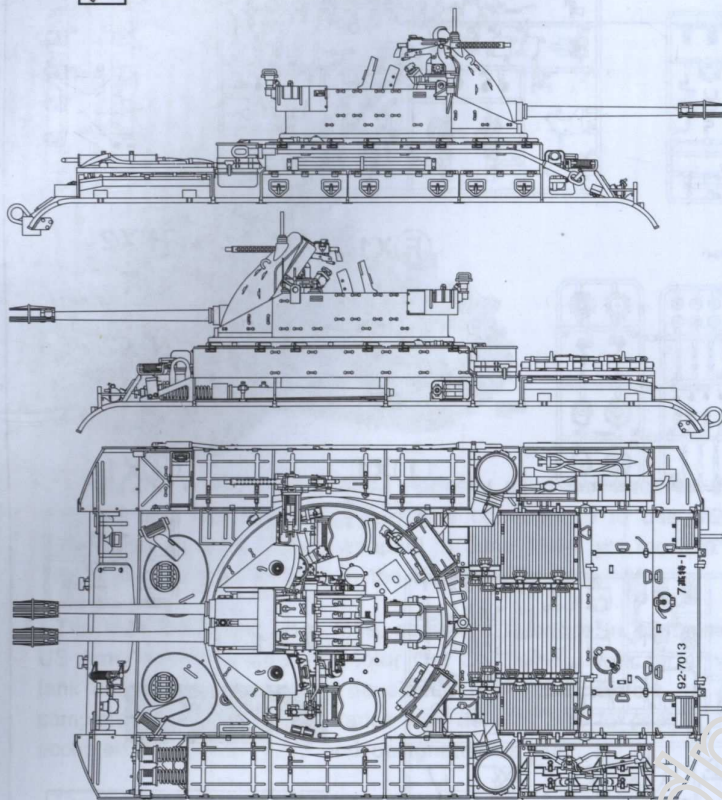
 Body Color: Olive drab 2314



H


JGSDF, 7th Arty.Regt.
日本陸上自衛隊,第七師團高射特科連隊

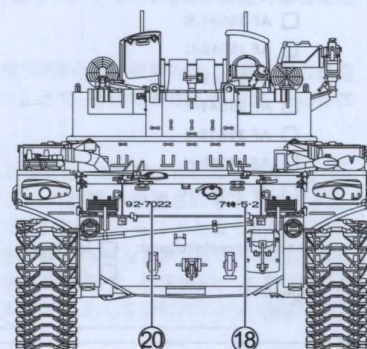
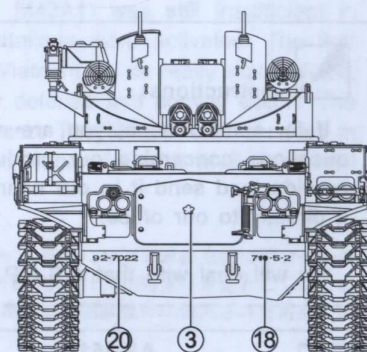
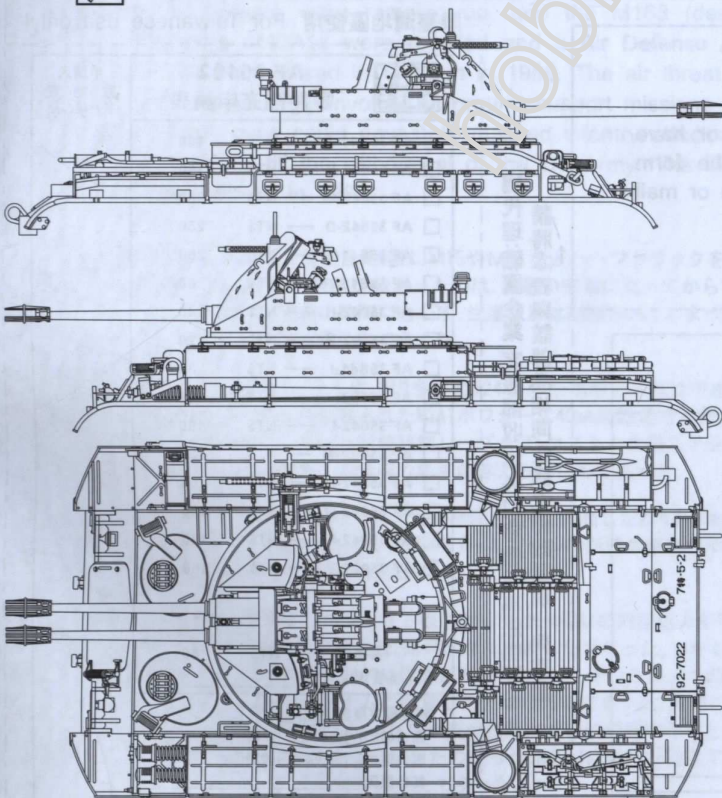
 Body Color: Olive drab 2314



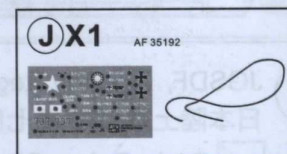
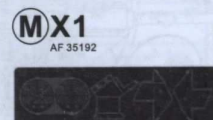
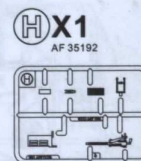
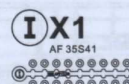
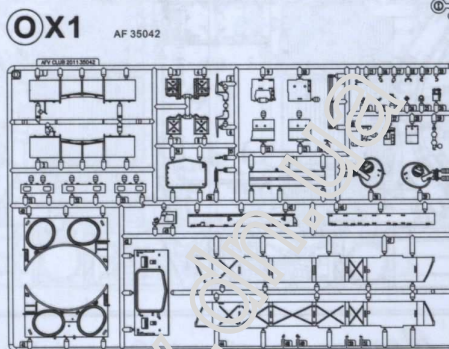
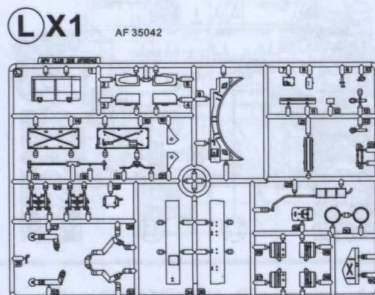
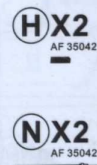
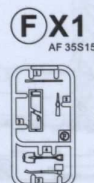
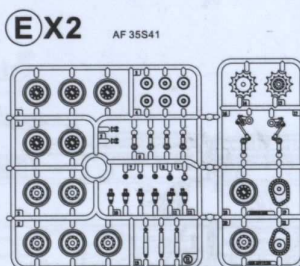
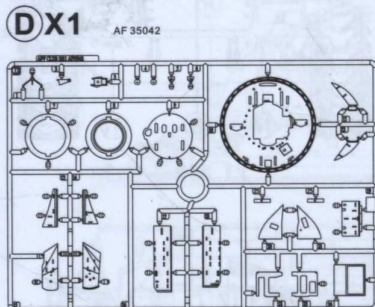
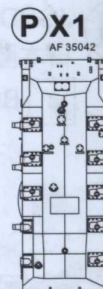
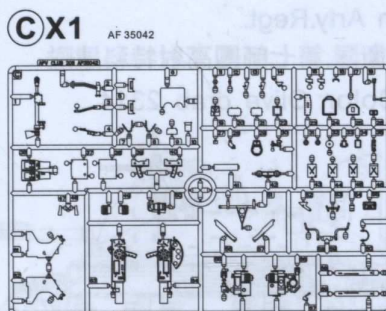
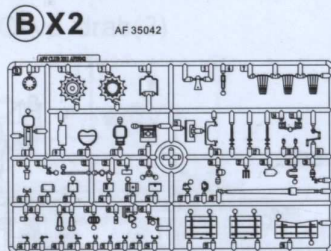
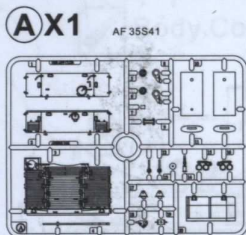
I

JGSDF, 7th Arty.Regt.
日本陸上自衛隊,第七師團高射特科連隊

 Body Color: Olive drab 2314



PARTS LIST 零件表



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 35192 Parts Replacement Form

- | | |
|-------------------------------------|-------------------------------------|
| <input type="checkbox"/> AF 35S41-A | <input type="checkbox"/> AF 35S41-I |
| <input type="checkbox"/> AF 35S41-B | <input type="checkbox"/> AF 35192-J |
| <input type="checkbox"/> AF 35042-C | <input type="checkbox"/> AF 35042-L |
| <input type="checkbox"/> AF 35042-D | <input type="checkbox"/> AF 35192-M |
| <input type="checkbox"/> AF 35S41-E | <input type="checkbox"/> AF 35042-N |
| <input type="checkbox"/> AF 35S15-F | <input type="checkbox"/> AF 35042-O |
| <input type="checkbox"/> AF 35042-H | <input type="checkbox"/> AF 35042-P |
| <input type="checkbox"/> AF 35192-H | <input type="checkbox"/> AF 35041-T |

Reason for replacement: ☐ Missing
☐ Broken

Signature: _____

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AF 35192 零件補充申請表

申請人
姓名 地址 電話

- | | |
|-------------------------------------|----------|
| <input type="checkbox"/> AF 35S41-A | NT\$ 160 |
| <input type="checkbox"/> AF 35042-B | NT\$ 180 |
| <input type="checkbox"/> AF 35042-C | NT\$ 250 |
| <input type="checkbox"/> AF 35042-D | NT\$ 250 |
| <input type="checkbox"/> AF 35S41-E | NT\$ 200 |
| <input type="checkbox"/> AF 35S15-F | NT\$ 80 |
| <input type="checkbox"/> AF 35042-H | NT\$ 40 |
| <input type="checkbox"/> AF 35192-H | NT\$ 120 |
| <input type="checkbox"/> AF 35S41-I | NT\$ 80 |
| <input type="checkbox"/> AF 35192-J | NT\$ 160 |
| <input type="checkbox"/> AF 35042-L | NT\$ 180 |
| <input type="checkbox"/> AF 35192-M | NT\$ 120 |
| <input type="checkbox"/> AF 35042-N | NT\$ 160 |
| <input type="checkbox"/> AF 35042-O | NT\$ 280 |
| <input type="checkbox"/> AF 35042-P | NT\$ 180 |
| <input type="checkbox"/> AF 35041-T | NT\$ 160 |

+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。