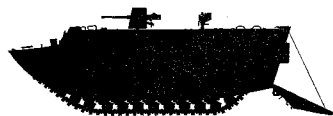
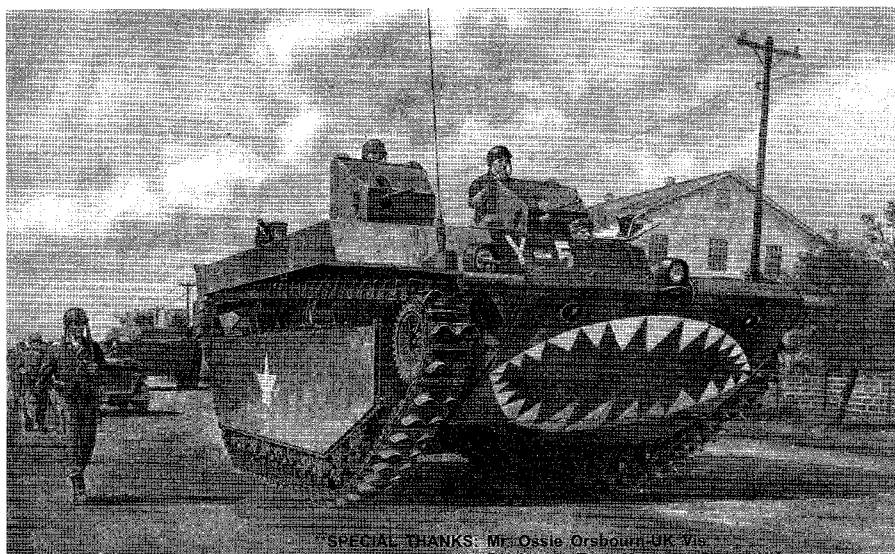


LVT-4



Water Buffalo



SPECIAL THANKS: Mr. Ossie Orsbourn UK via
Bovington Tank Museum, Dorset-UK
Patton museum of cavalry armor, Fort Knox-USA
Saumur tank Museum, Saumur- France

The LVT (Landing Vehicle Tracked) was firstly developed in 1935, known as "Alligator", originally from a civilian rescue vehicle. The Alligator was intended to operate in southern Florida where hurricanes often caused disasters. The Alligator could be used in the areas that inaccessible to both traditional cars and boats.

After WWI, USMC has been studying amphibious warfare and considered landing on Pacific islands would be likely. Yet general use personnel landing vehicle (LCVP) was not suitable for amphibious warfare in rocky coral reef islands. A special platform will be needed. The Christie amphibian tank was put in test in 1924 firstly, followed by numerous modifications, yet it was never able to satisfy USMC due to poor performance in seaworthiness. At the same time, USMC was attracted by a report on Life Magazine on Donald Roebbling's Alligator and Mr. Roebbling was persuaded to work on a military version, with enhanced vehicle and tracks, as a private venture.

As the war in Europe and Asia getting worse, the Congress approved funds on this project. After numerous modifications, the project was accepted as LVT-1 and started to mass-produce in July 1941. At the same time, a further modified model, LVT-2, was under development. It has front drive sprockets, torsilastic suspension and larger compartments to accommodate personnel. LVT-2 was nicknamed as Water Buffalo.

Because the engine was located to the rear, personnel and material had to load / unload on sides. A new version, LVT-4 came with modifications - the engine was moved forward and a large ramp door was added to the rear, allowing troops to exit from the rear of the vehicle. Small vehicles and cannons can be loaded / unloaded through ramp. The LVT-4 was the most produced model among LVT family. It took part in the Battle of Saipan, and saw actions in all following battles in the Pacific, as well as river crossing operations in Europe, such as Operation Plunder, crossing the Rhine River.

LVT (装軌式上陸用車両)の最初の開発は、1935年の「アリゲーター」の名称を持つ民間の救助車両にさかのぼる。南フロリダ地方を襲うハリケーンによる被災地で車両はおろか、ボートによる救助ですら困難な状況での使用を目的としたものであった。

第一次世界大戦終結後、敵地への上陸作戦について研究をはじめた米海兵隊は、太平洋の島々における上陸戦闘を想定した。しかし、通常の兵員輸送艇(LCVP)は、硬い珊瑚礁の海岸への上陸戦闘には不向きであったので、特殊な「プラットホーム」が必要であった。1924年、戦車設計で名を馳せるクリスティーによる水陸両用戦車のテストが開始されたが、幾度もの改造にもかかわらず、耐航性の低さのために米海兵隊を満足させることはできなかった。1937年、米海兵隊は雑誌ライフ誌上で紹介された「ドナルド・レーブリング氏のアリゲーター」に注目した。軍用タイプの開発を説き伏せられたレーブリング氏は限られた予算の下で、車体や履帯の強化型の試作を自費で行ったのだった。

ヨーロッパ、アジアの情勢が悪化すると、議会はLVT開発計画に理解を示すようになる。多くの変更を経て、LVT-1として採用が決まり、1941年7月に量産が開始された。それと並行して、改良型であるLVT-2の開発が進められた。LVT-2は、前部に起動輪を持ち、トーションビーム式サスペンションを装備、兵員を多数搭載するための大きな戦闘室を持っていた。LVT-2は、「水牛」の愛称で呼ばれることとなる。

エンジンが後部に位置していたため、兵員や物資は、側壁を乗り越えての乗降を強いられた。新型のLVT-4では、エンジンが前部に移動し、兵員が車輛の後部から下車できるよう、後部に大きな乗降扉が設置された。この扉によって、小型の車輛や火炮も乗降が可能であった。LVT-4は、LVTシリーズの中で最も多く生産された。サイパン上陸戦から戦闘に投入され、以降の太平洋でのすべての戦闘に参加した。また、ヨーロッパでの戦闘においても、ライン河を渡るプランダー作戦のような渡河作戦に投入されたのだった。

履帶型的兩棲登陸車輛最早出現於1935年，這種供民間所使用的車輛被暱稱為「鱷魚」。開發這種兩棲登陸車輛最初是為了飽受颶風肆虐的佛羅里達州南部，在船隻、車輛難以到達的地區進行救災的工作。

美國海軍陸戰隊在一次大戰結束後設想未來在太平洋島嶼間可能進行的戰爭型態，評估一般的人員運輸艇(LCVP)在礁石嶙峋的珊瑚礁地形中將無法接岸，若要在島嶼進行登陸作戰，需倚賴特殊載具方能落實。1924年時以克里斯蒂的水陸坦克進行測試，其後經過數度的改進，但它在海面航行時的表現始終無法令陸戰隊滿意。此時的「鱷魚」在經過兩年的測試與改良後，「生活」雜誌對「鱷魚」做了一次專題報導，這篇報導引來了海軍陸戰隊的興趣，在預算短缺的情況下，說服了「鱷魚」的設計者羅布林，以自費的方式將原本的車體與履帶強化，試製成軍用型。

隨著亞洲與歐洲局勢的惡化，國會此刻同意撥款挹注測試車的發展，在進行了多項改善措施之後，測試尚稱滿意，於是在1941年7月開始進行量產，軍方賦予的型號為LVT-1。後繼型號LVT-2在LVT-1量產的同時展開設計，驅動輪改為前置，垂直懸吊也改為扭力彈簧，並將車體放大以容納更多的兵員，外型上與LVT-1有了不小的改變，也得到了「水牛」這個暱稱。

因為引擎後置的影響，LVT-1/2在兵員、物資的乘降卸載時都必需翻越車身兩側方能進行。為了增加運用時的效率，修改LVT-2的設計將引擎改為前置，車身後方增設跳板，如此便能夠輕易地裝載小型車輛與火炮，經過改良後的型號為LVT-4，也是LVT家族中生產數量最為龐大的一支，在1944年的塞班島戰役中LVT-4初次登場，並歷經了其後的太平洋各個島嶼登陸的戰火洗禮，乃至歐洲戰場中盟軍橫渡萊茵河都能看見LVT-4活躍的身影。

Illustration:圖示說明



Agglutinate
用膠黏合



No Agglutinate
不用黏合



Make 2 Sets
二組製作



Be Careful
注意



Optional
選擇使用



Open Hole
鑽孔



File Hole
把孔填平



Cut Off
切除

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

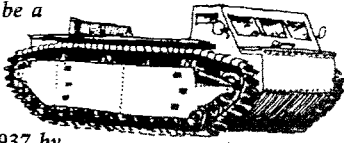
Color list: 塗料表

| Color | Brand | Gunze Sangyo | | | Humbrol | Revell | Lifecolor |
|---------------------|-------|--------------|----------|----------------|---------|--------|-----------|
| | | Hobby Color | Mr.Color | Mr.Color Spray | | | |
| Olive drab(2) | 橄欖綠 | H78 | C38 | J38 | 66 | 46 | UA106 |
| Steel | 黑鐵 | H18 | C28 | J28 | 53 | 91 | LC76 |
| Silver | 銀 | H8 | C8 | J8 | 11 | 90 | LC74 |
| Brass | 黃銅 | H9 | C9 | J9 | 54 | 92 | LC75 |
| Red | 紅 | H3 | C3 | J3 | 19 | 31 | LC56 |
| Tire black | 輪胎黑 | H77 | C33+C62 | | 85 | 302 | LC02 |
| Tan | 黃褐 | H27 | C44 | | | | LC65 |
| Orange | 橘 | H14 | C59 | | 18 | 30 | LC55 |
| Steel red | 赤鐵 | H38 | | | 160 | 383 | LC01 |
| Bright blue | 寶藍 | H13 | | | 73 | | LC06 |
| Red brown | 紅褐 | H47 | C41 | J41 | 160 | 383 | |
| Flat white | 消光白 | H11 | C62 | J62 | 34 | 05 | LC01 |
| Dark gray(1) | 深灰 | H82 | C31 | J31 | 87 | | LC19 |
| Sand FS30277 | 沙黃 | | | | 187 | | UA19 |
| Earth brown FS30099 | 土褐 | | | | | | UA87 |
| Green FS34079 | 綠 | H309 | C309 | | 195 | | UA52 |

LVT family in WWII

Roebling's Alligator 1937

The Alligator amphibian tractor, which originally intended to be a hurricane rescue device, was invited in 1937 by



Donald Roebling. It was adopted by USMC as the prototype for LVT. The "Alligator" was dubbed due to its amphibian capability.

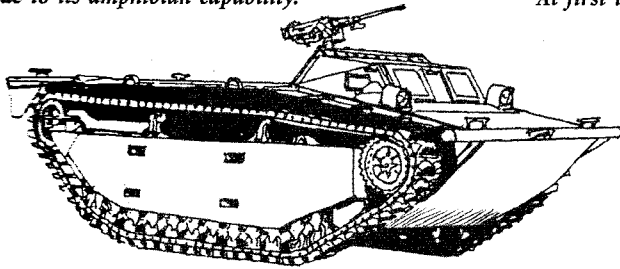
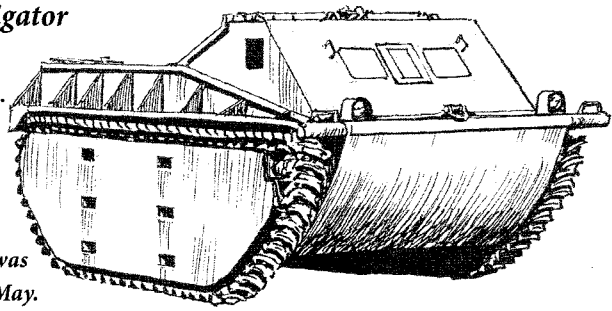
LVT-1 Alligator

Delivered in January 1941.

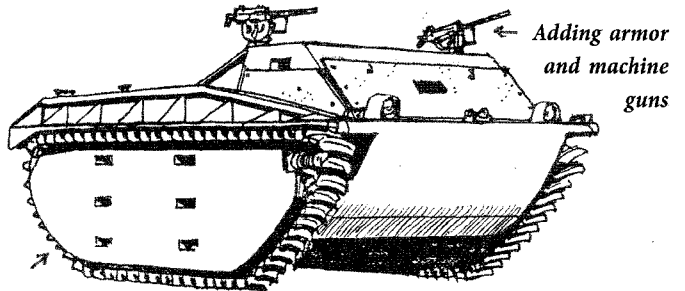
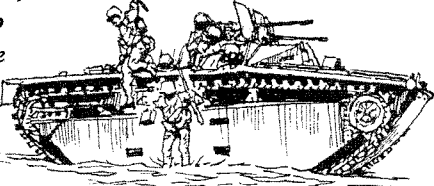
A Marine Corps Amphibian Tractor

Detachment was activated in May.

At first it was developed for material transportation. It saw services in Guadalcanal and Solomon Islands from 1942.



LVT-2 Water buffalo Mass production started in June 1942, yet only saw service in the Battle of Tarawa due to delayed employment. Developed based on LVT-1, the infantry can jump from the vehicle to join combat.

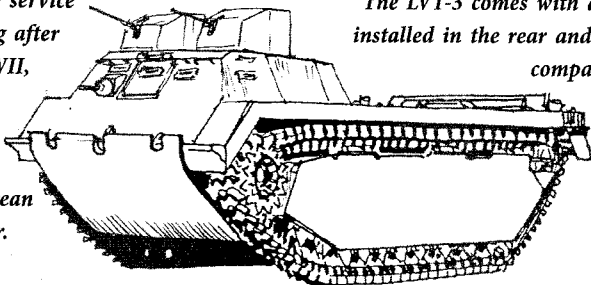


LVT-1 in the beginning of Battle of Guadalcanal, November 1943.

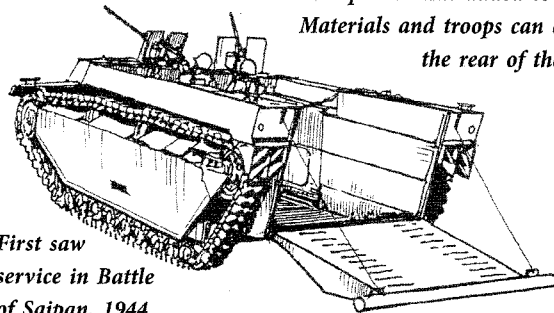
LVT-3 Bushmaster First used in Okinawa in April 1945, the LVT-3 was developed along with LVT-4. Too late to see WWII, the LVT-3 still

saw service long after WWII, up to the Korean War.

The LVT-3 comes with a ramp installed in the rear and ample compartment space.



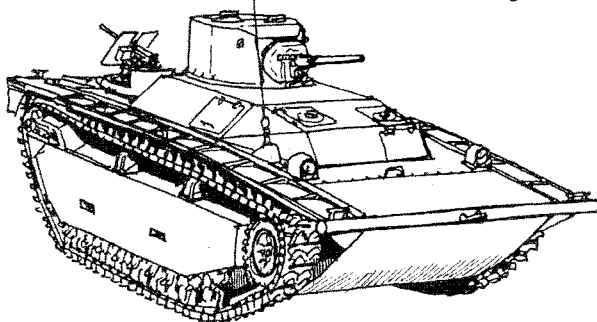
LVT-4 The engine was moved forward and a large ramp door was added to the rear. Materials and troops can exit from the rear of the vehicle.



First saw service in Battle of Saipan, 1944. It was by far the most numerous version of the LVT

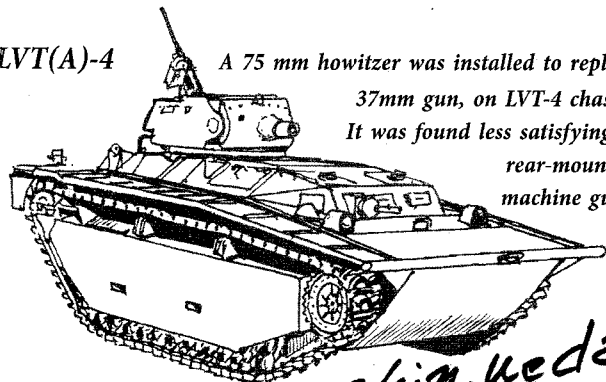
■ Amtank LVT(A)-1 1944

It was fitted with a turret with a 37 mm gun, also carried two rear-mounted machine guns.



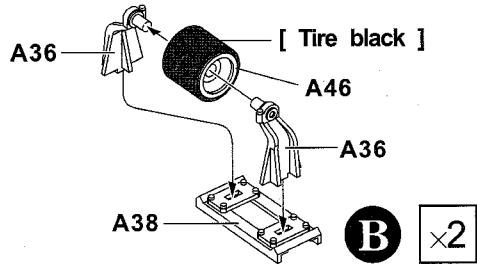
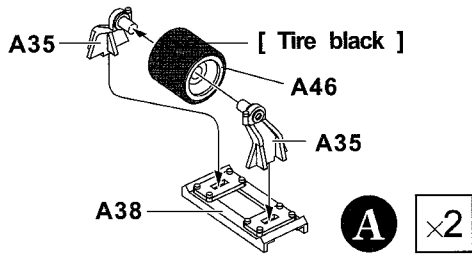
Fire support vehicle used by Out Rap, converted from LVT-2

LVT(A)-4 A 75 mm howitzer was installed to replace 37mm gun, on LVT-4 chassis. It was found less satisfying to rear-mounted machine guns.

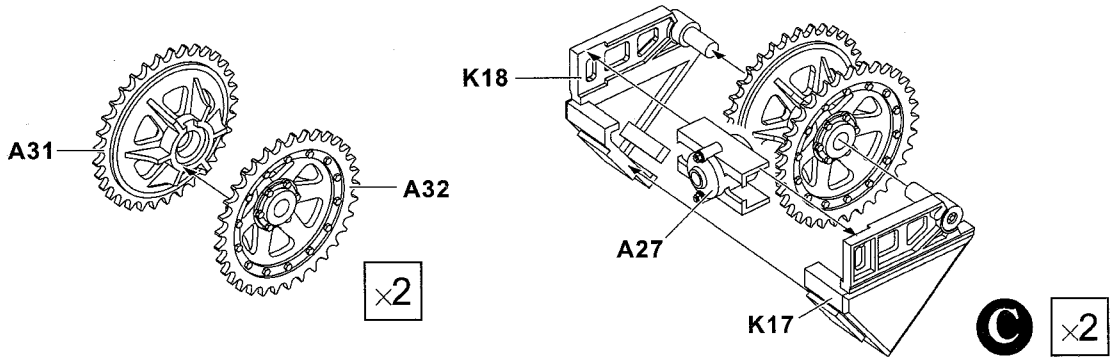


Shin. Ueda
上田 信

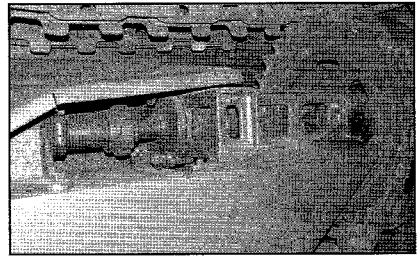
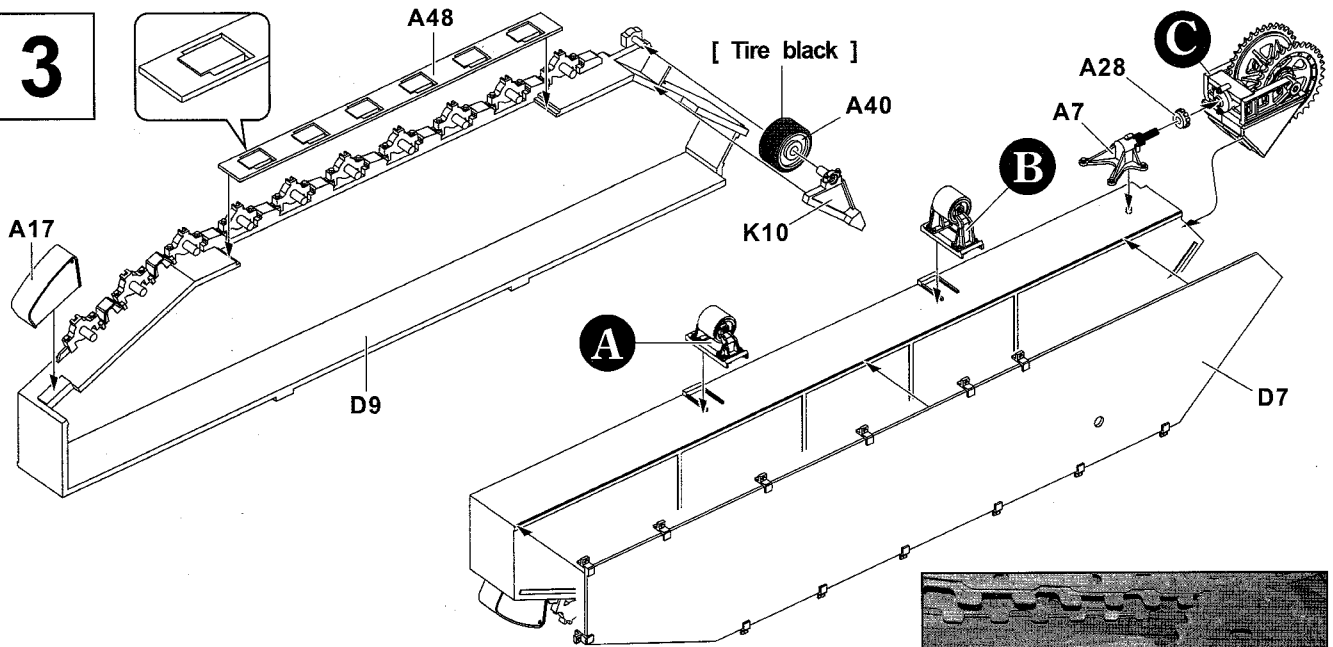
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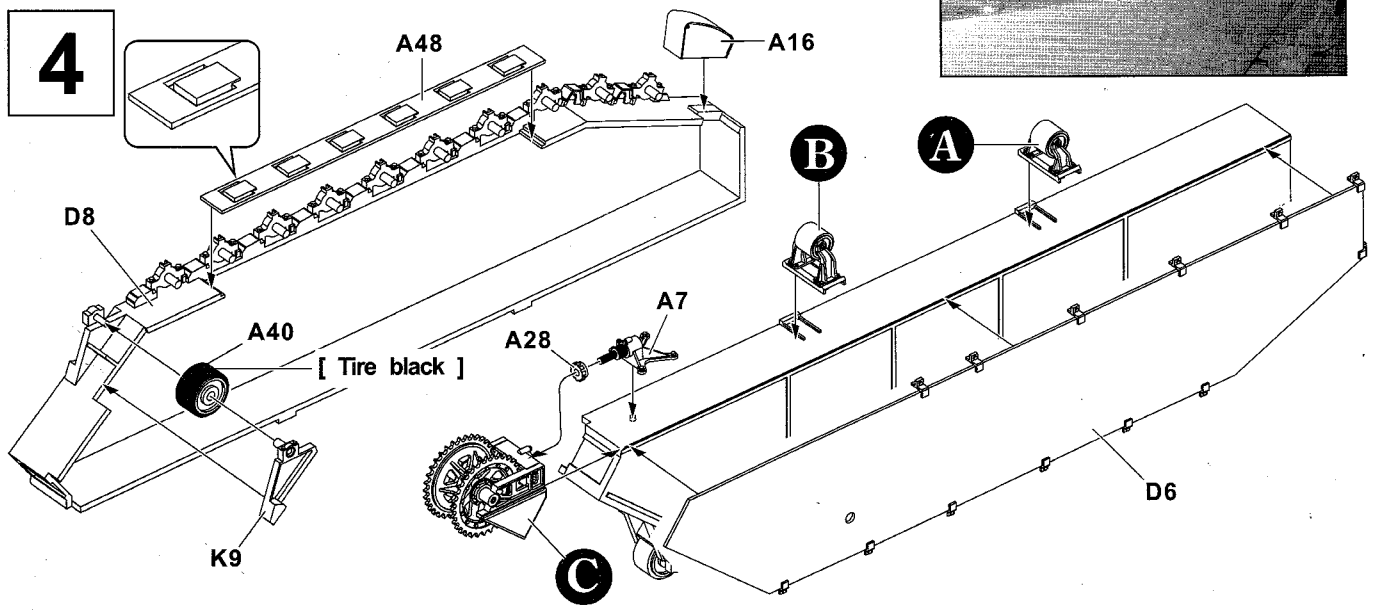
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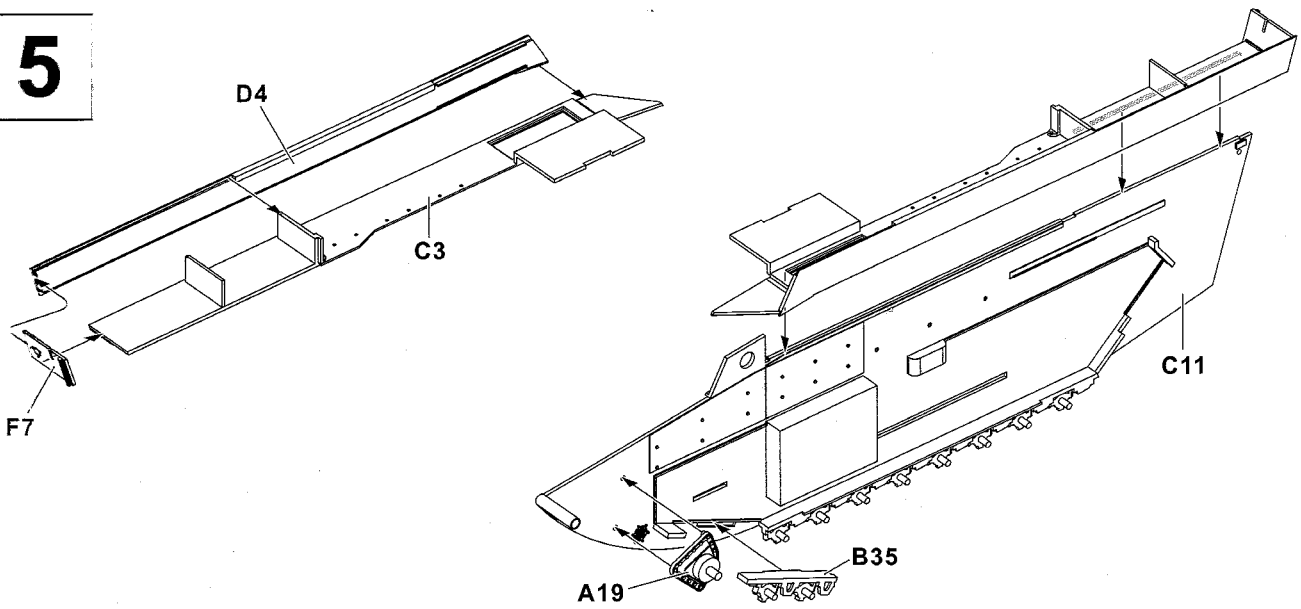
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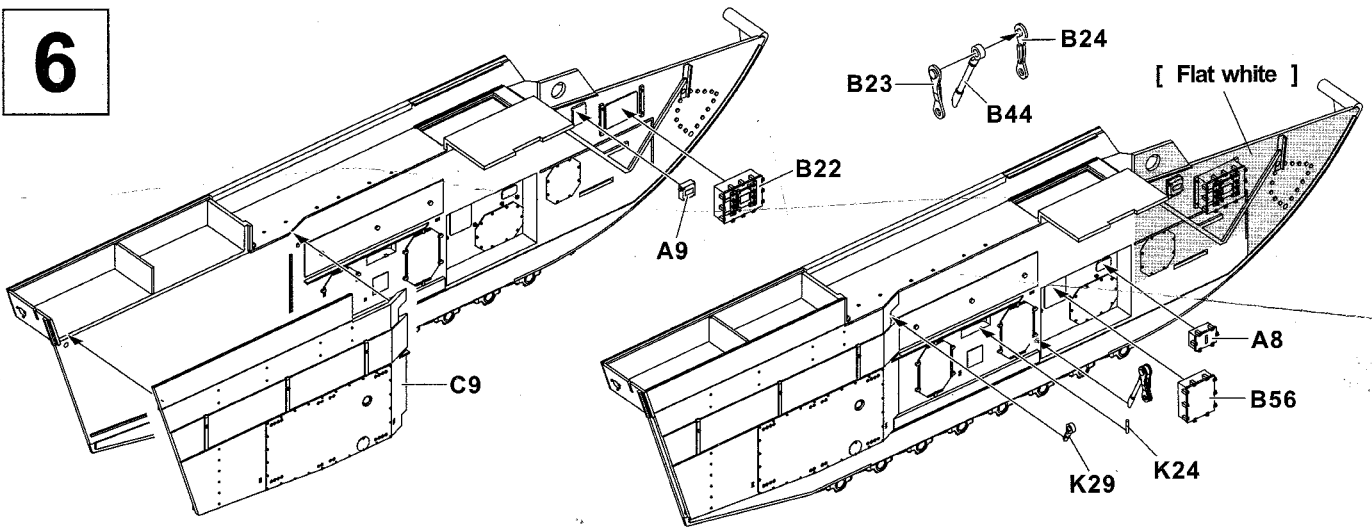
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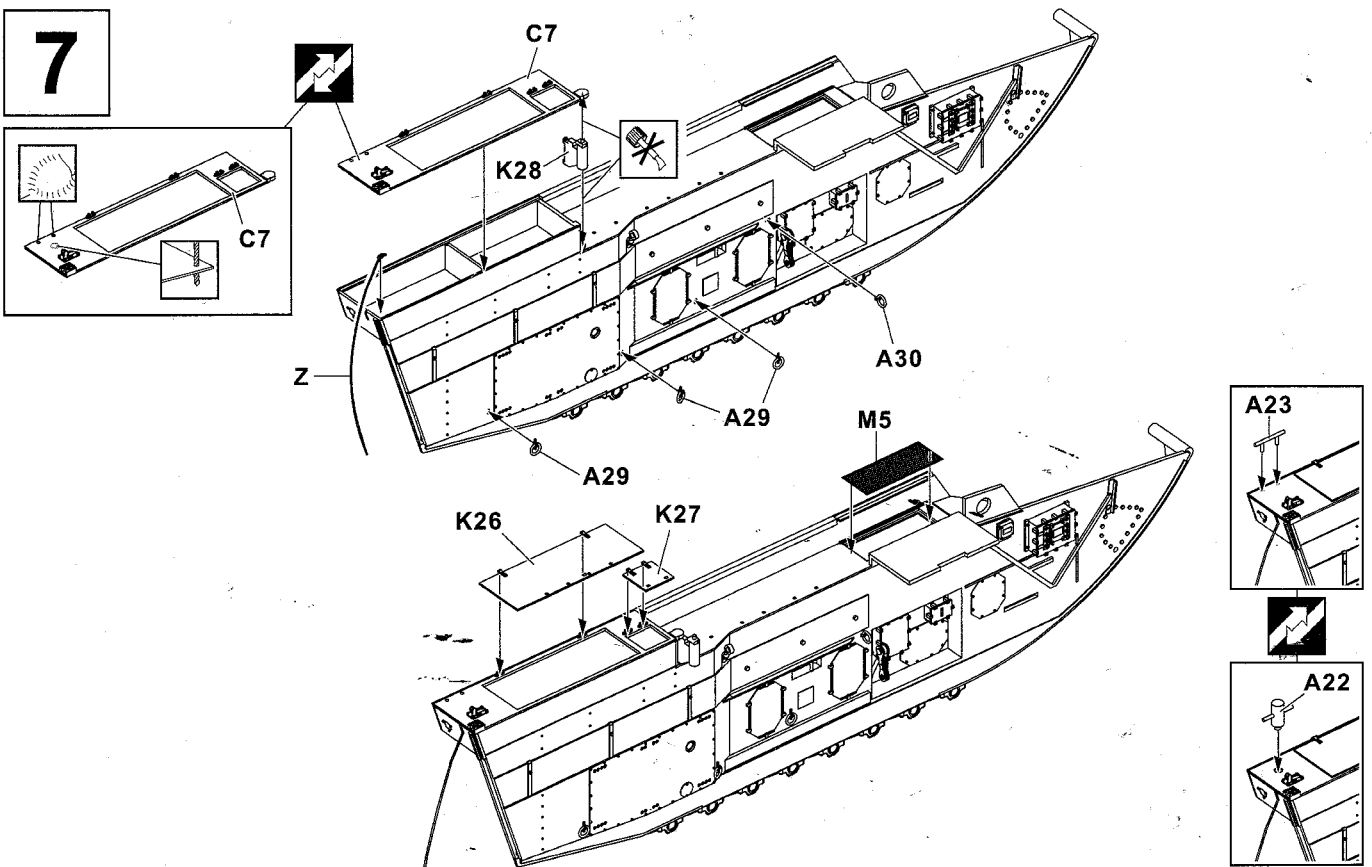
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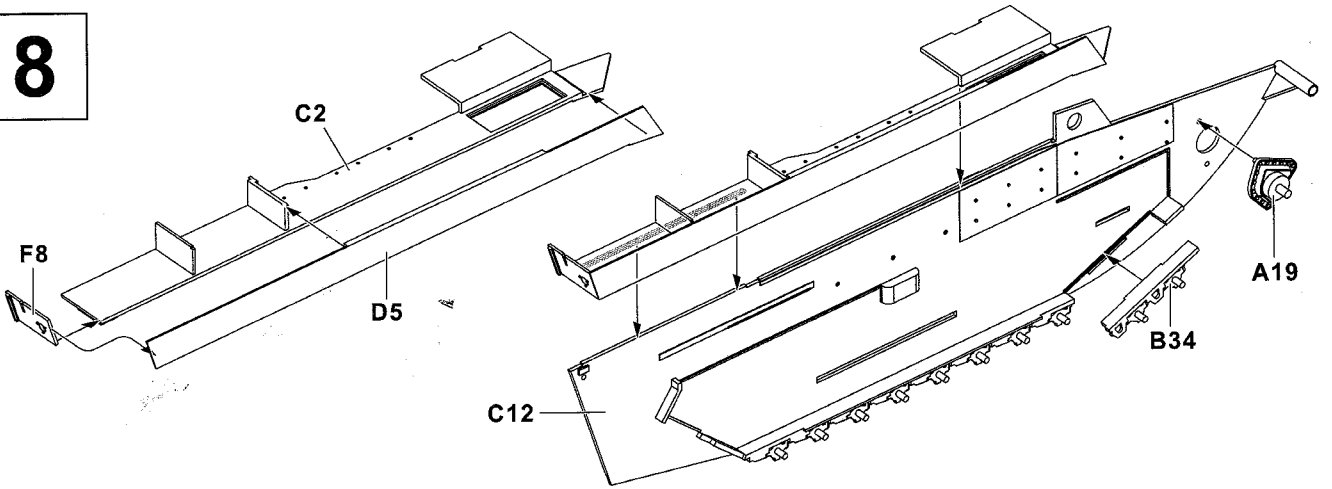
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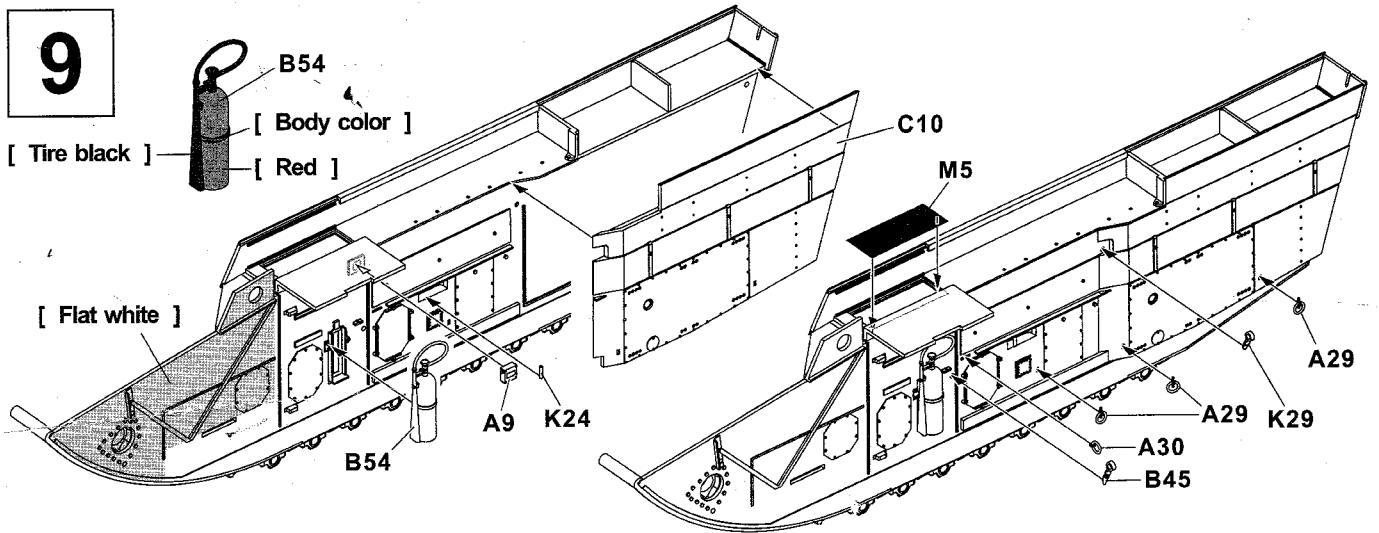
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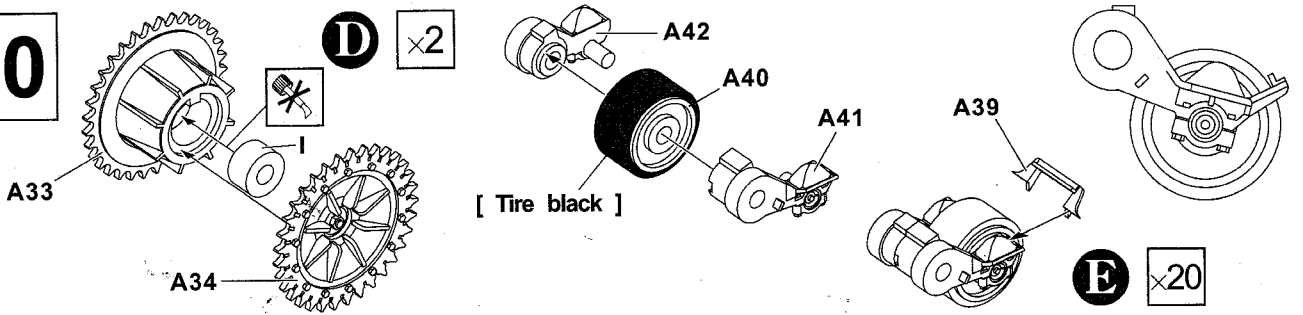
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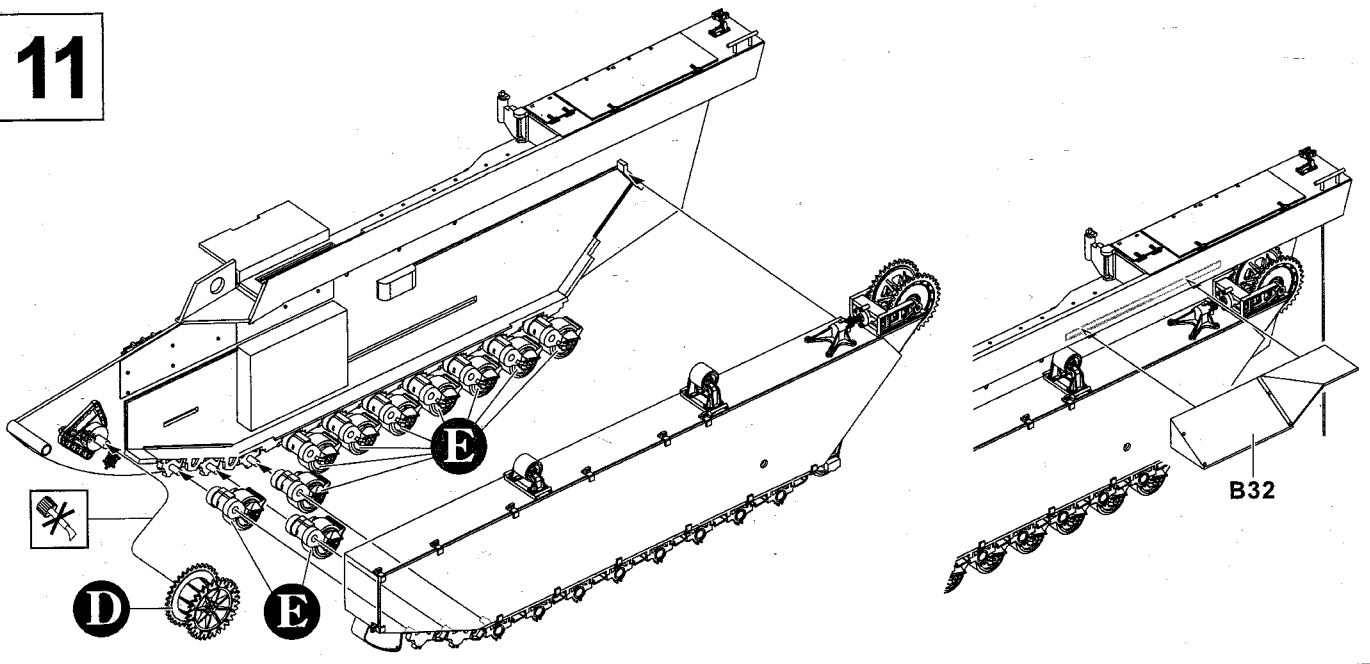
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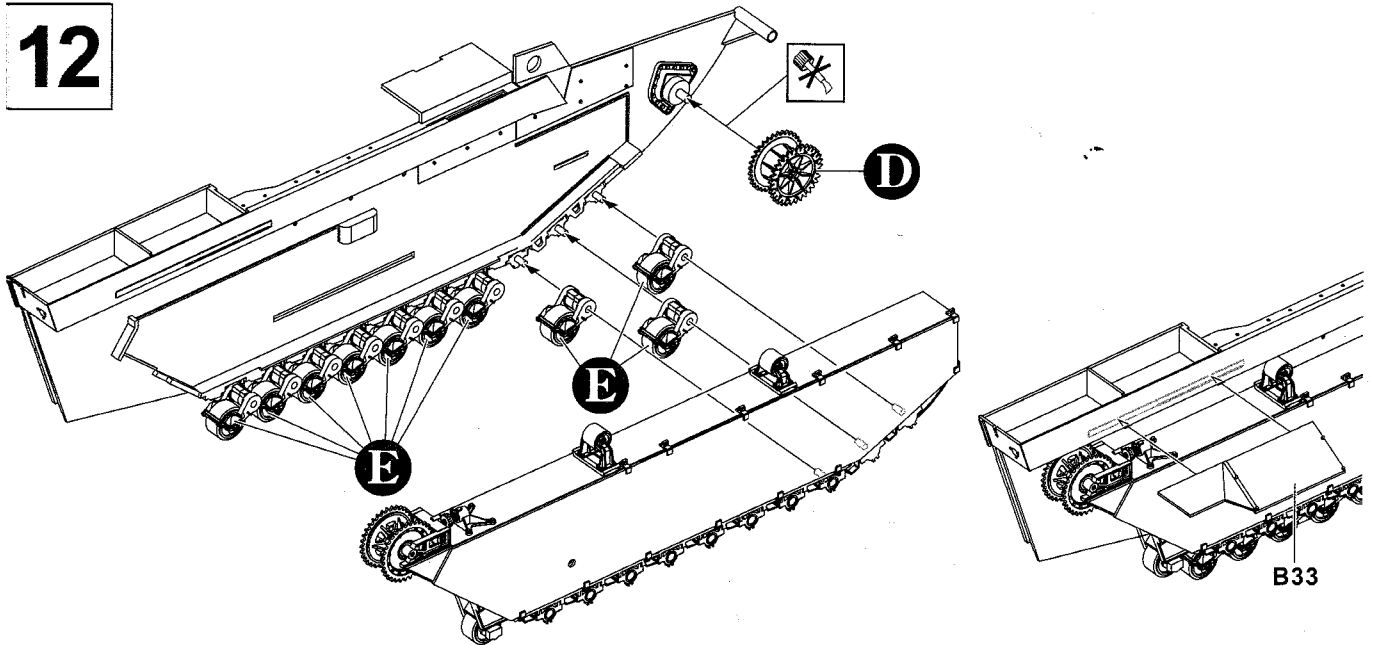
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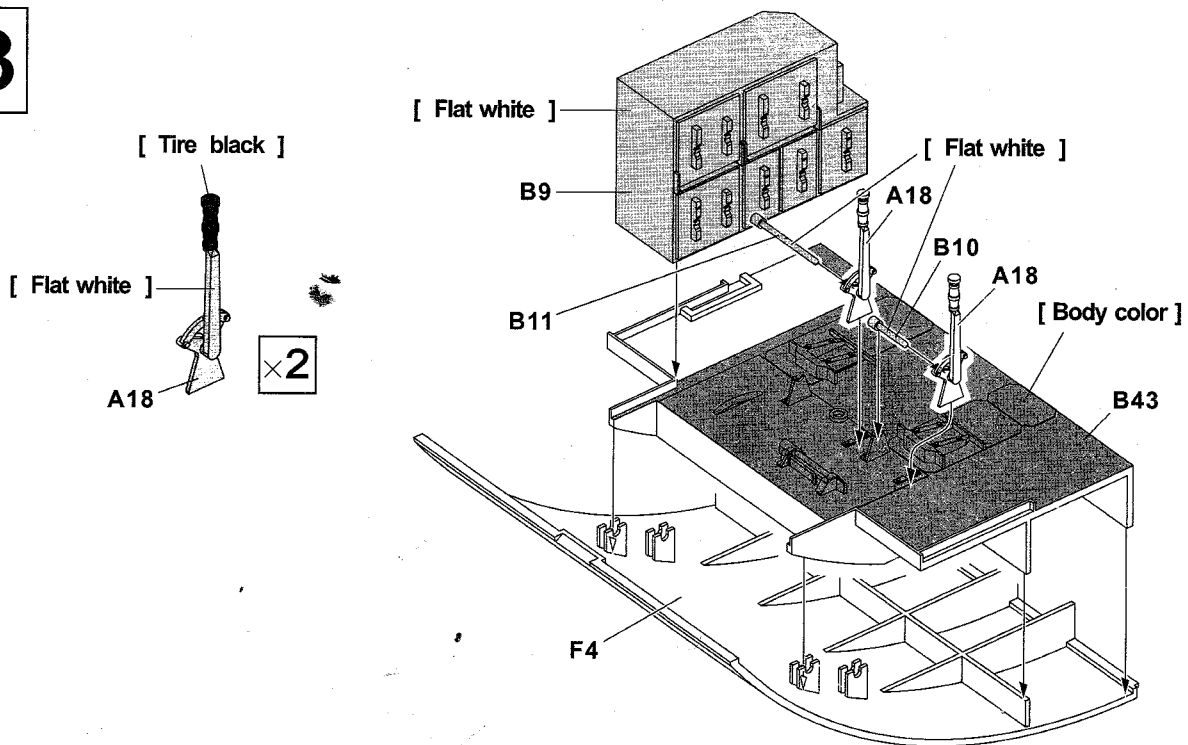
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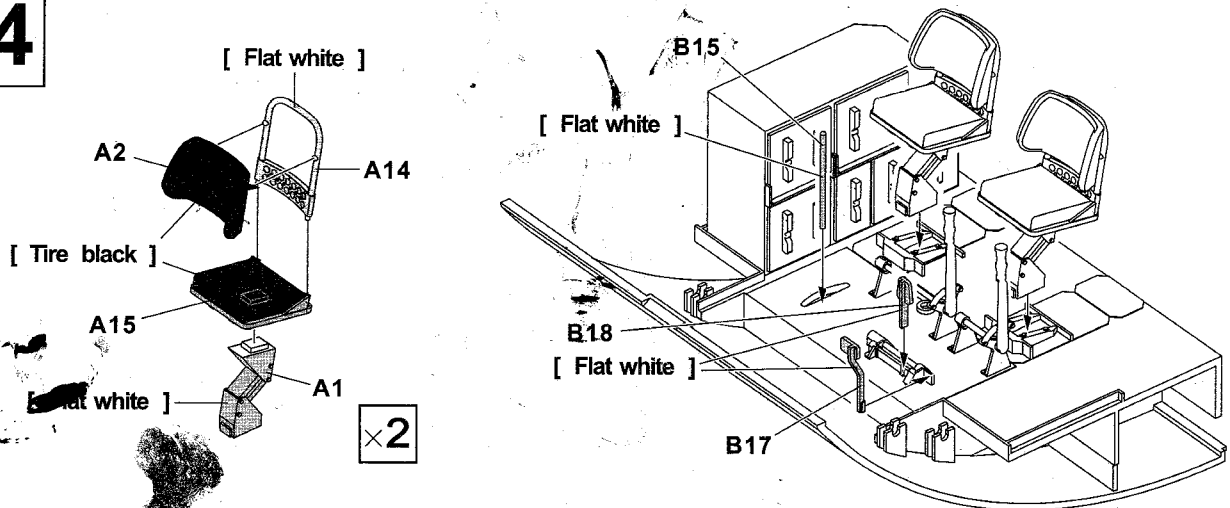
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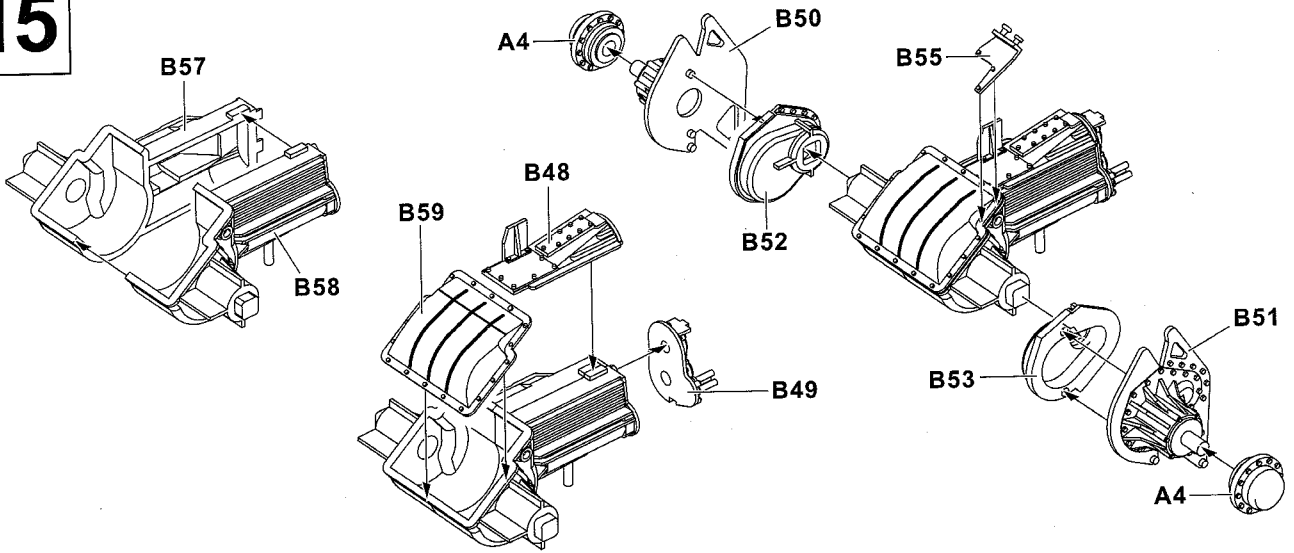
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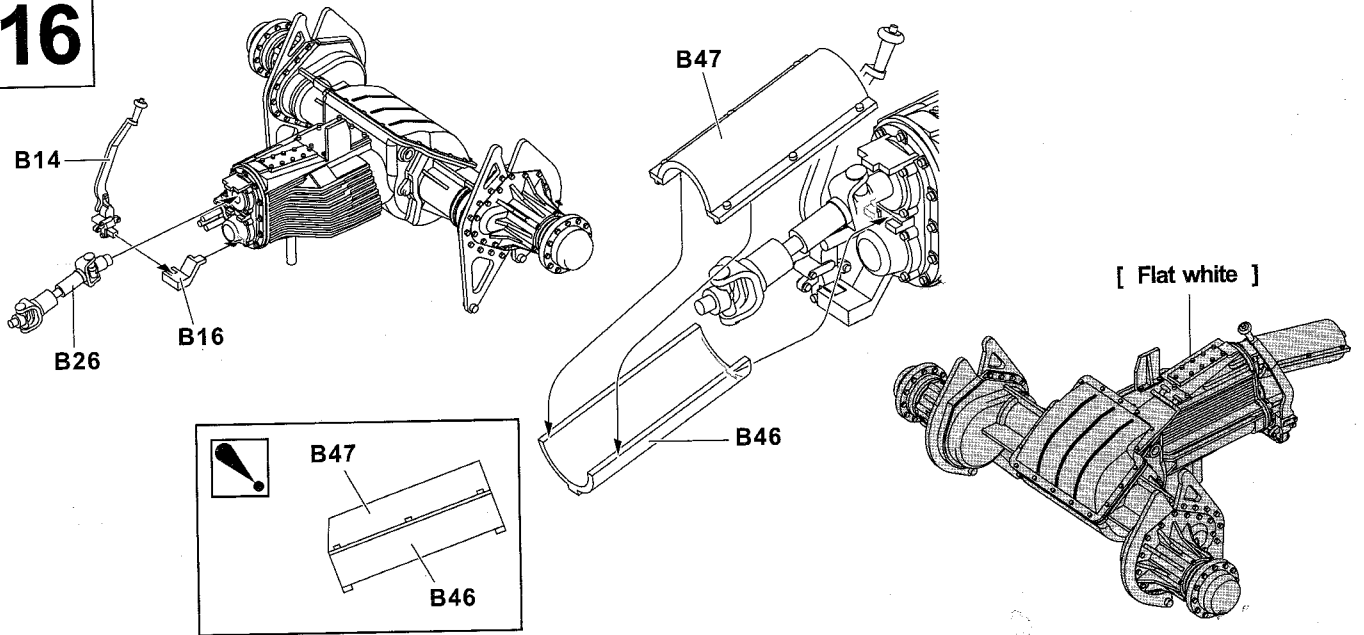
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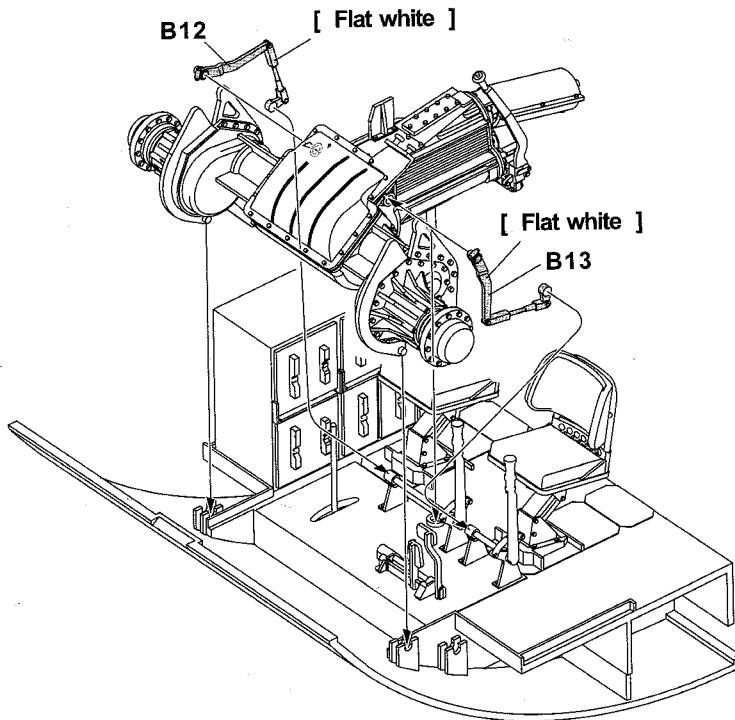
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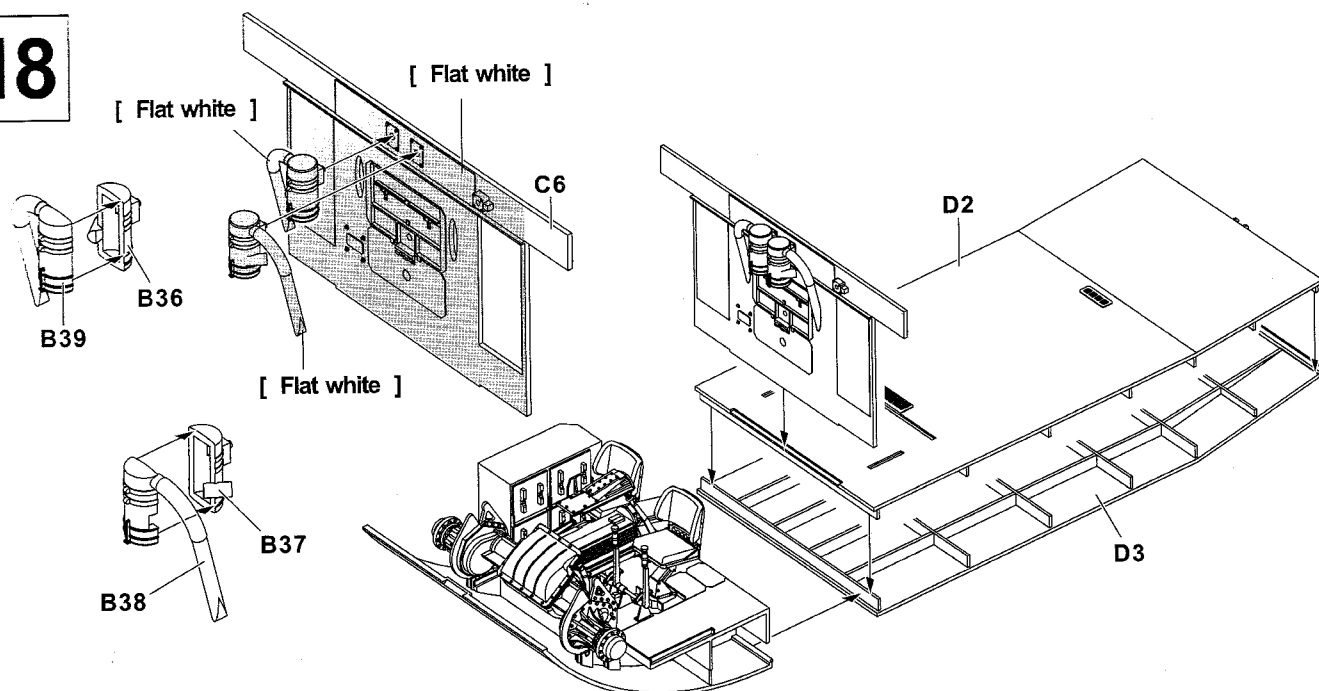
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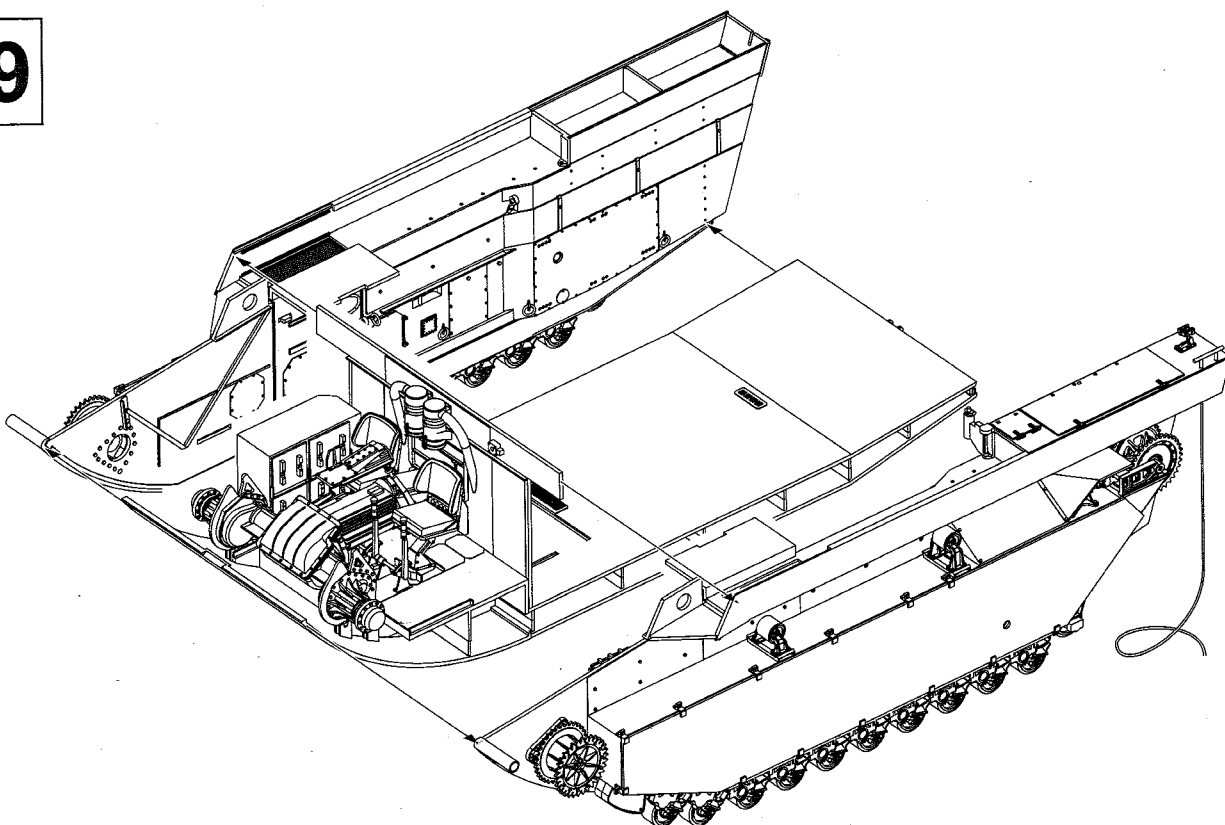
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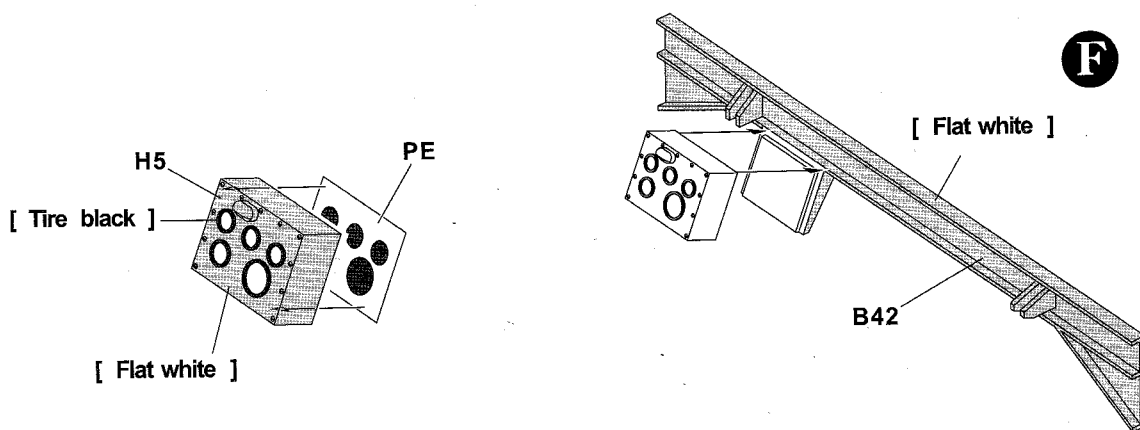
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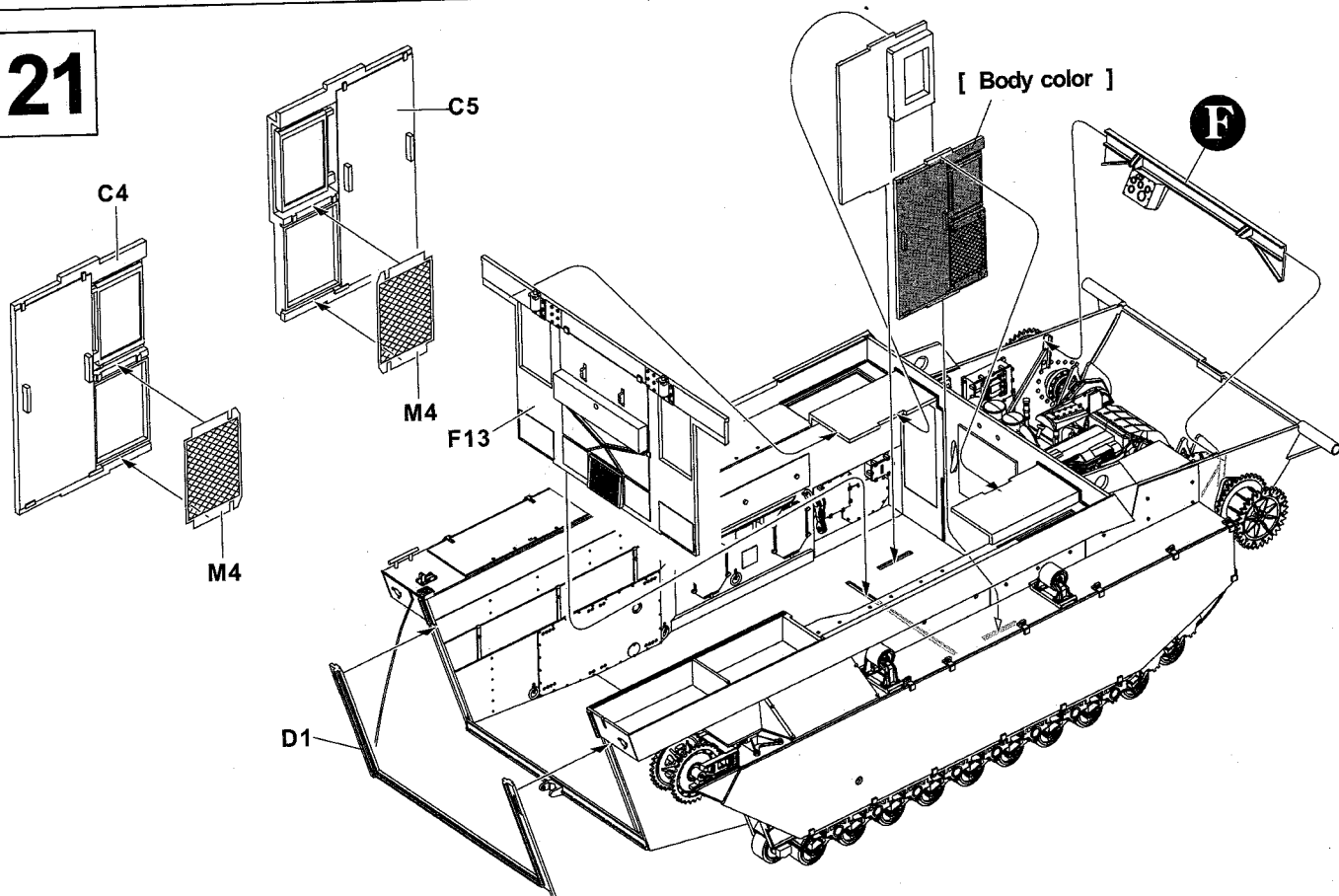
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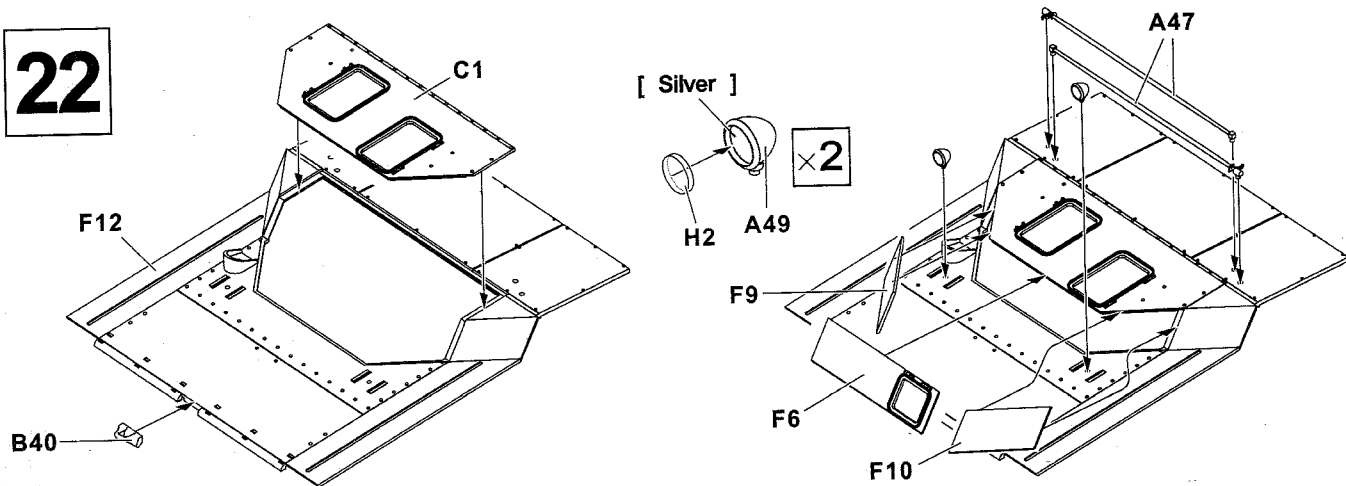
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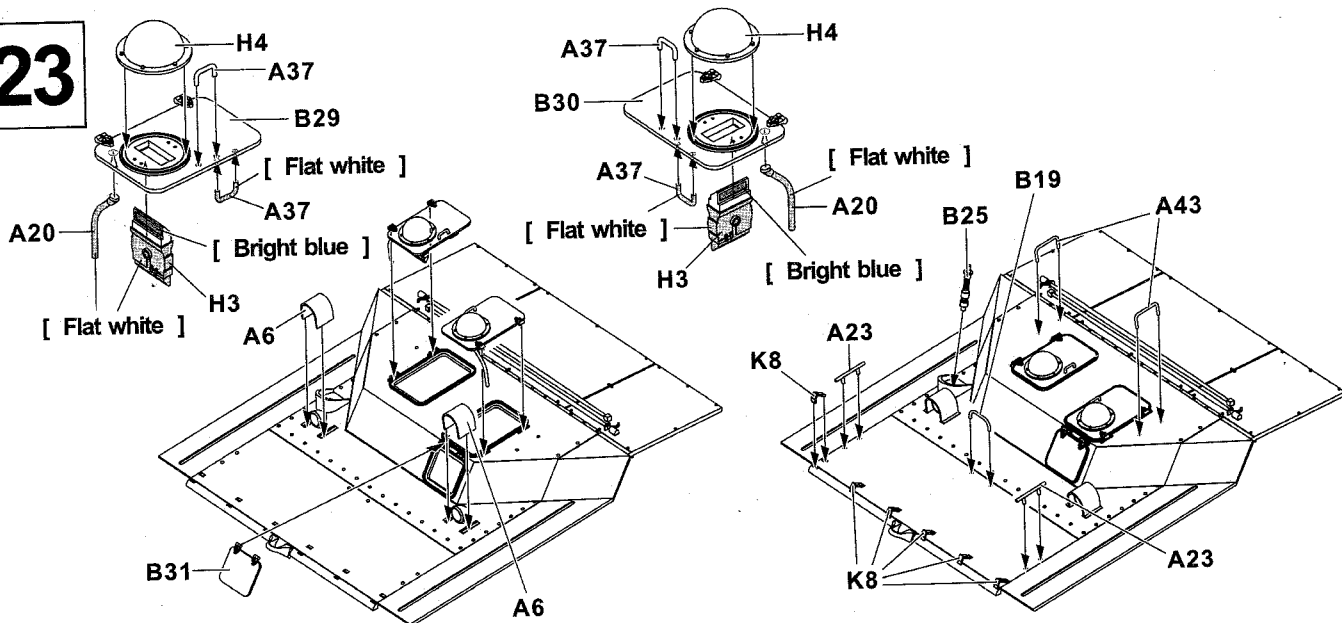
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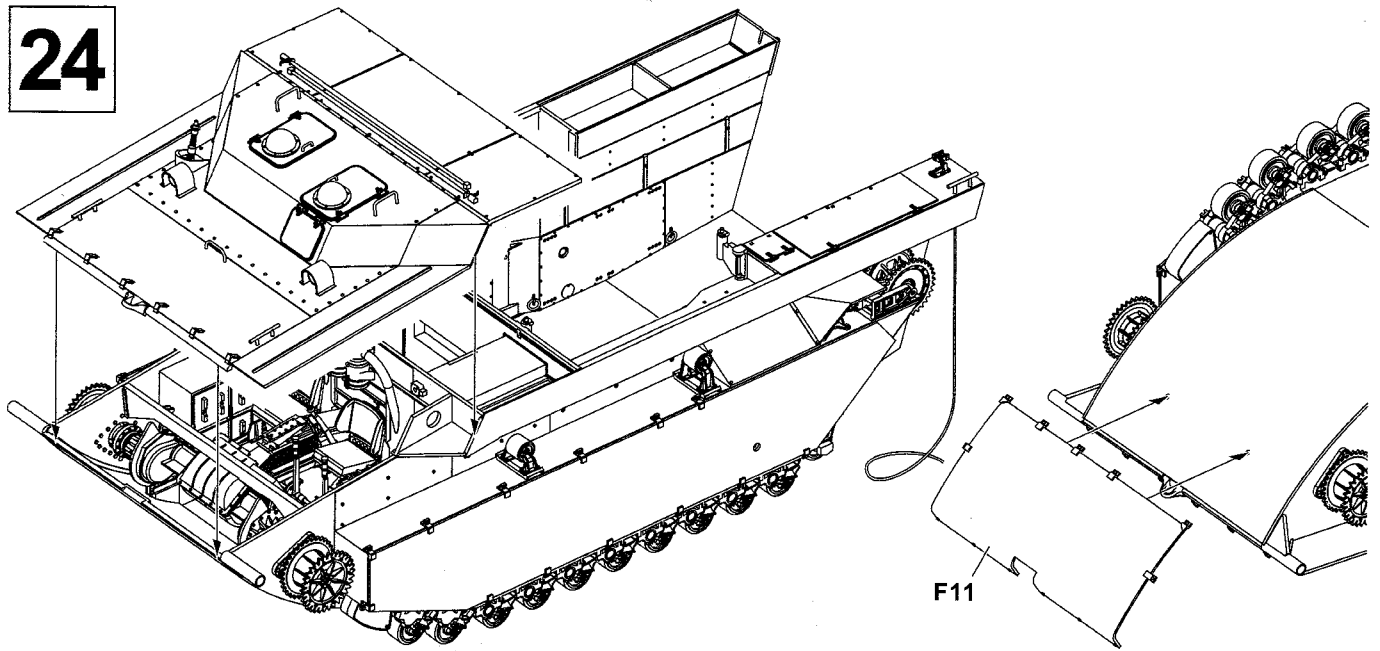
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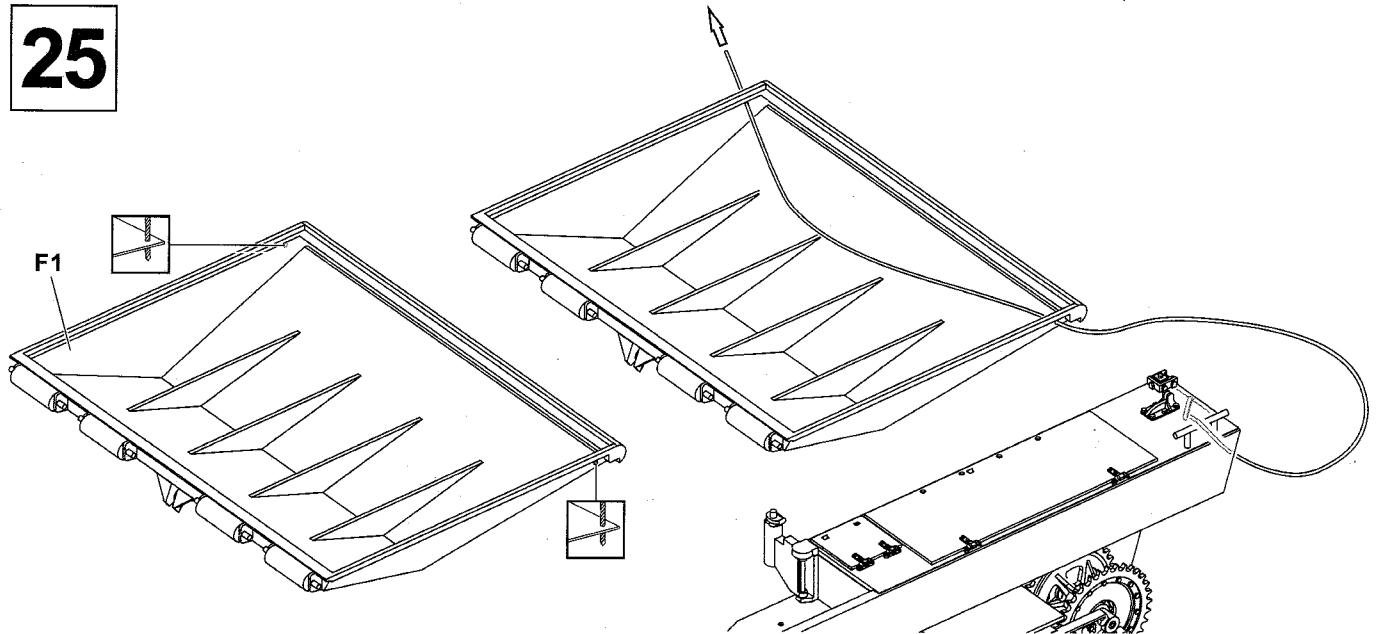
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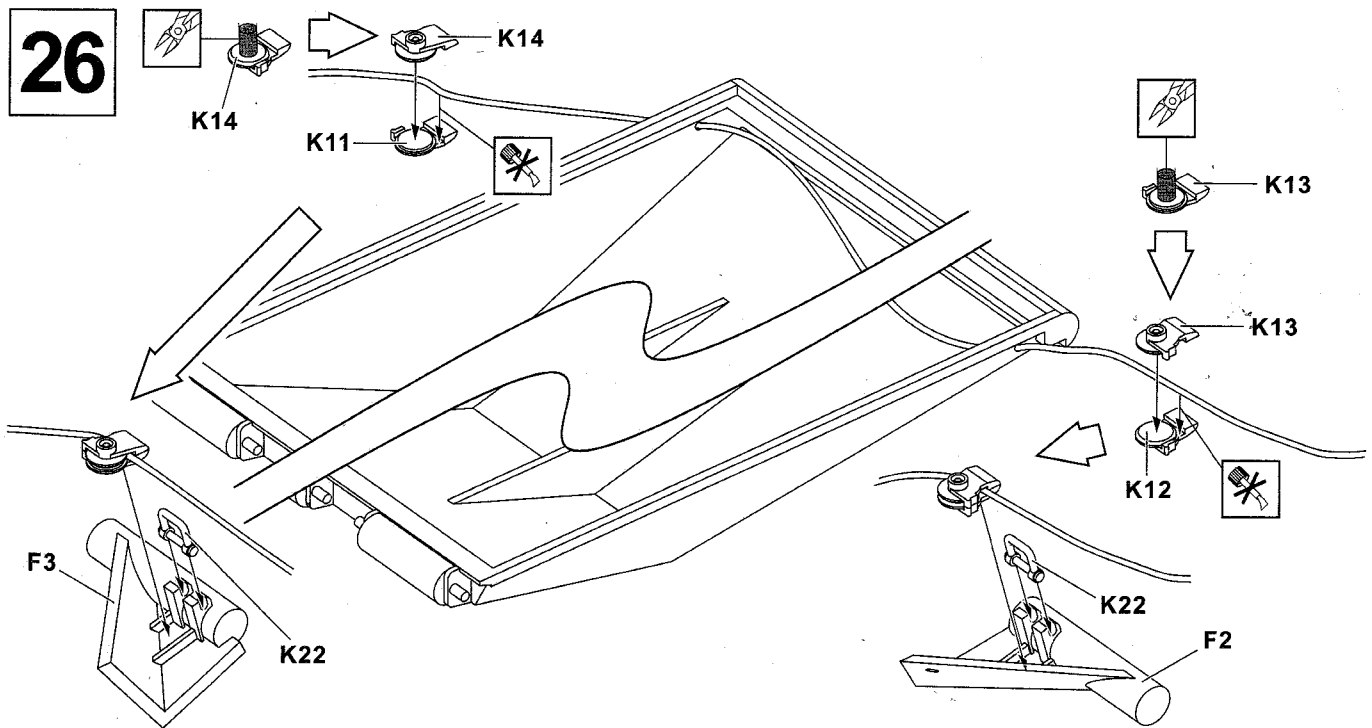
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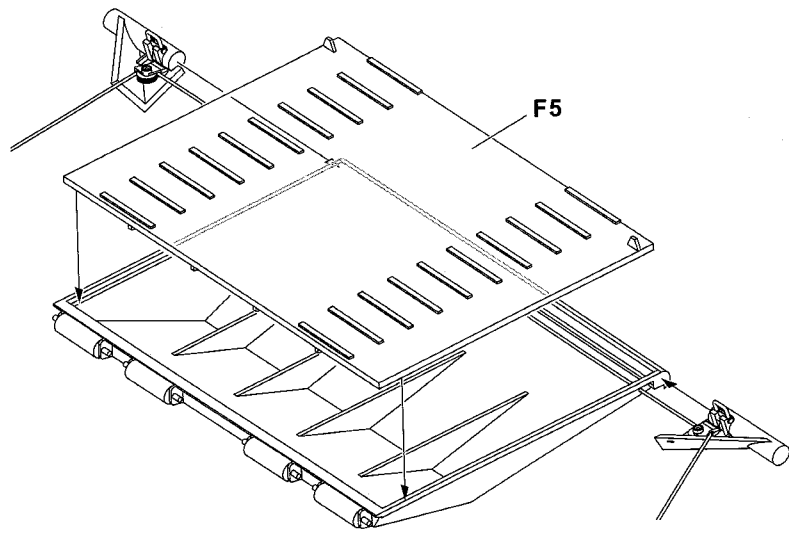
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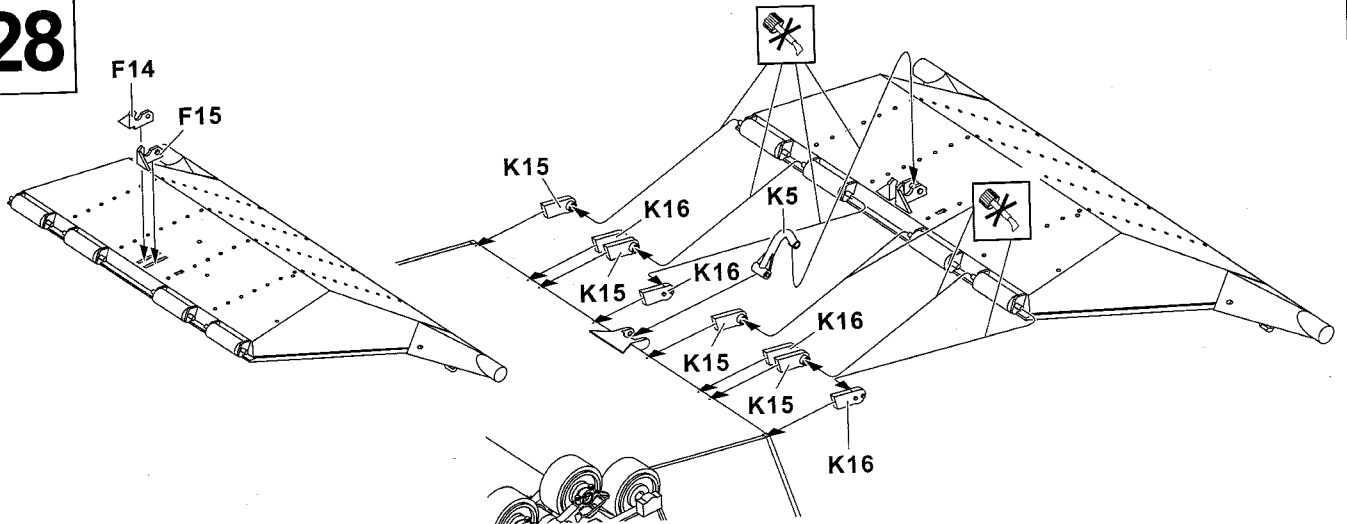
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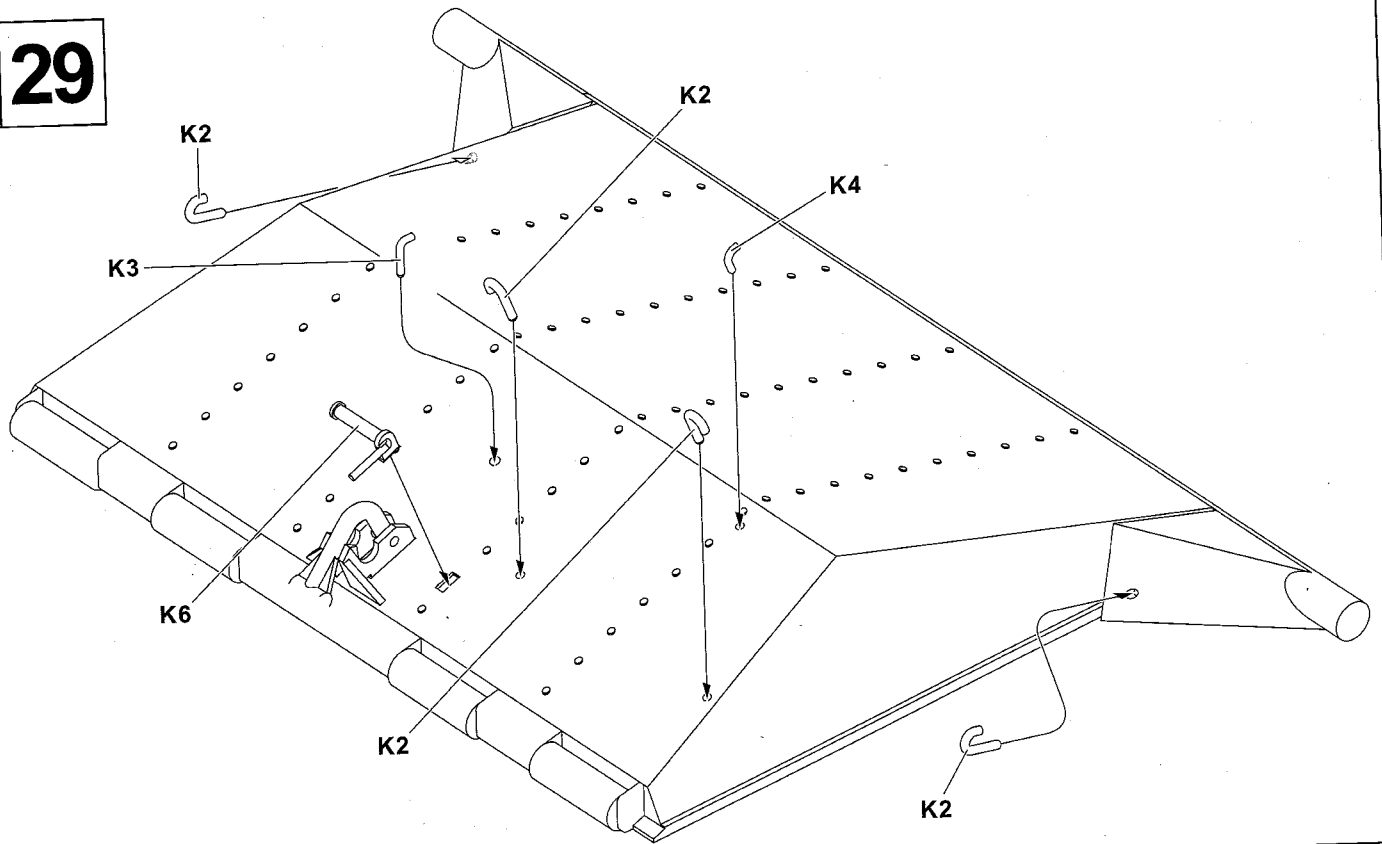
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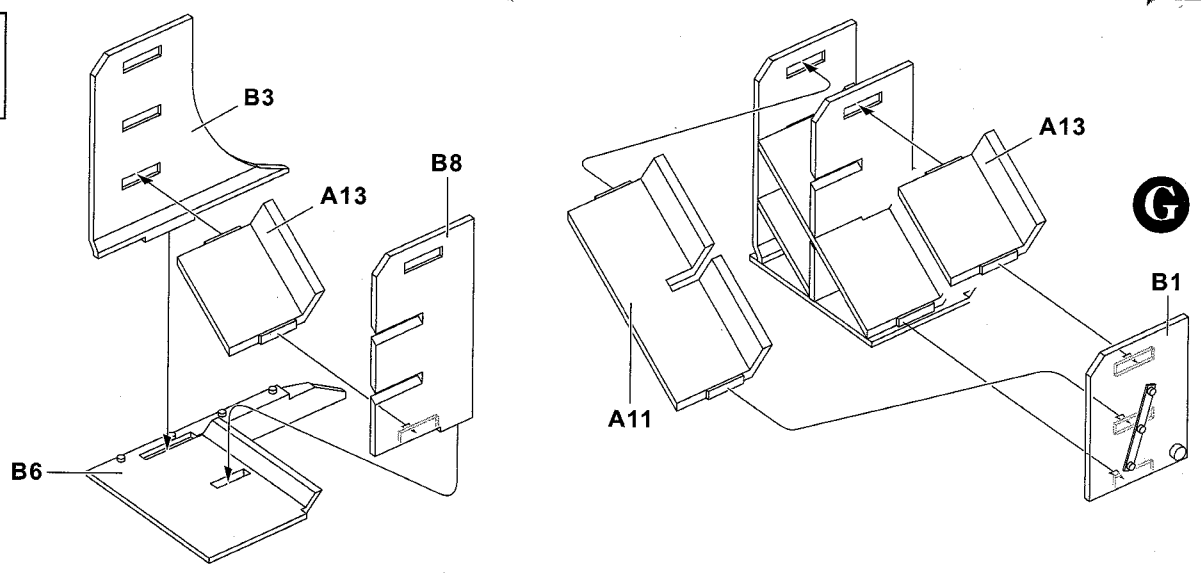
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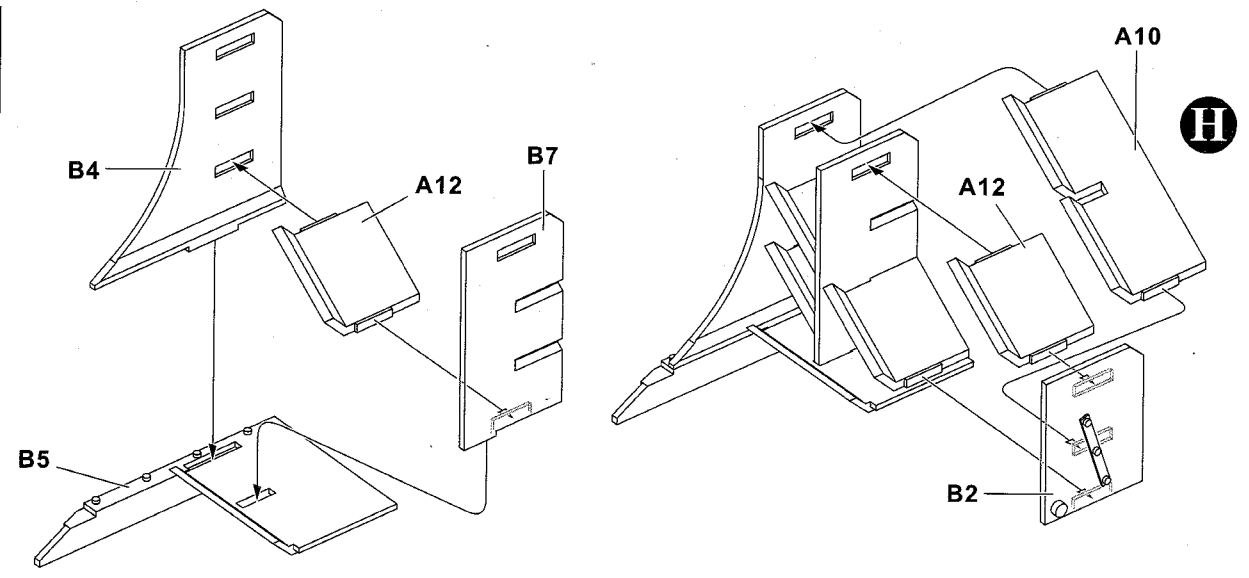
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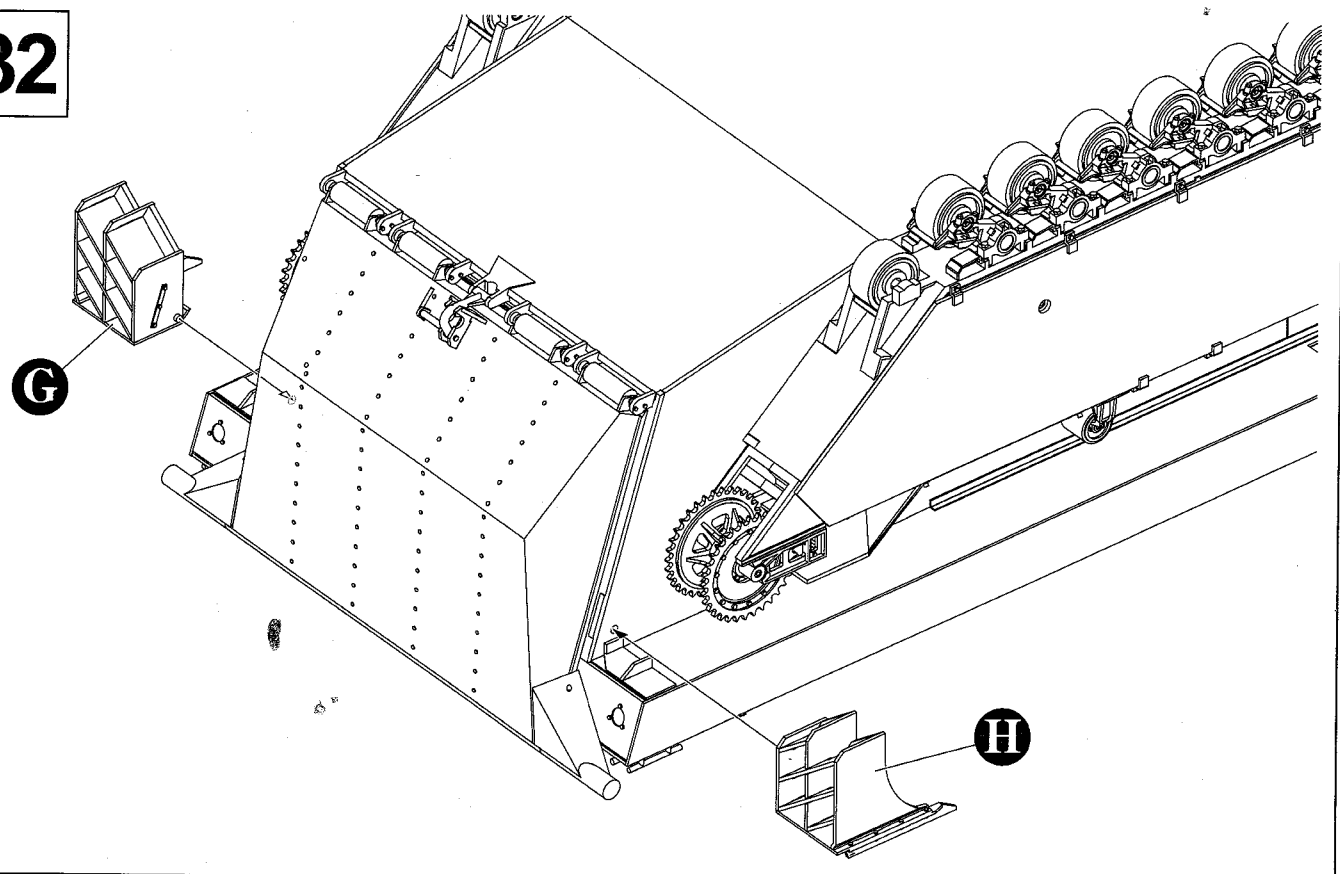
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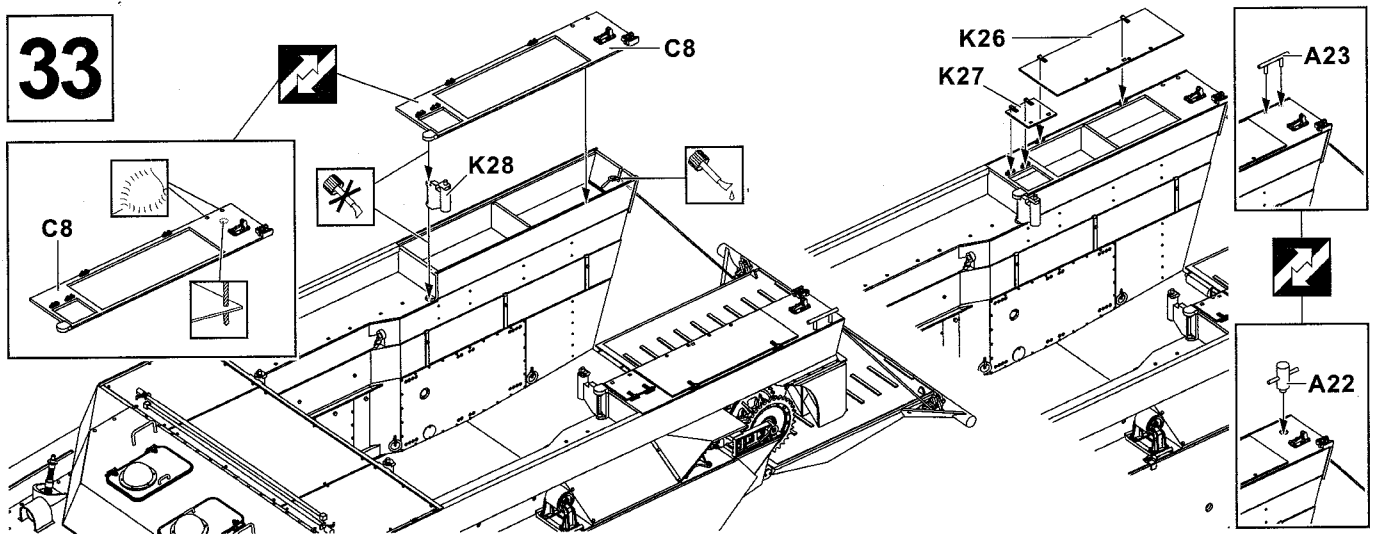
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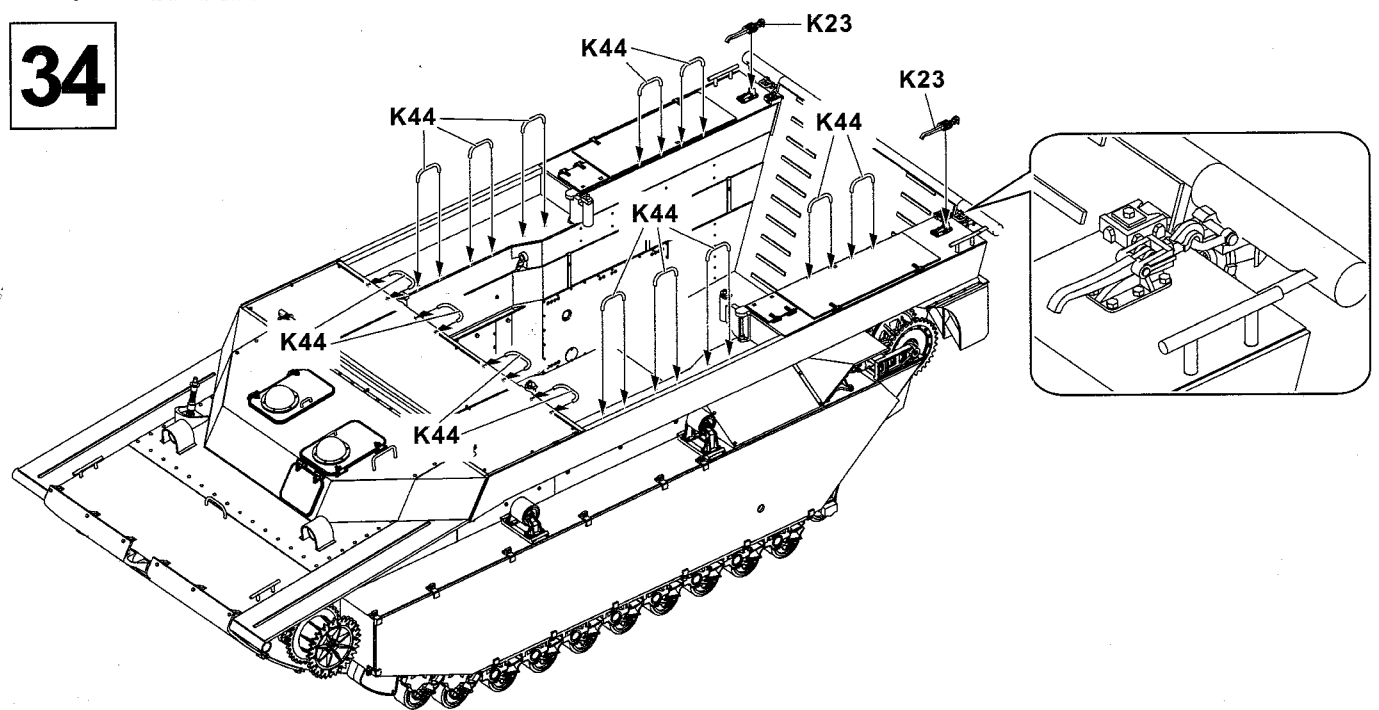
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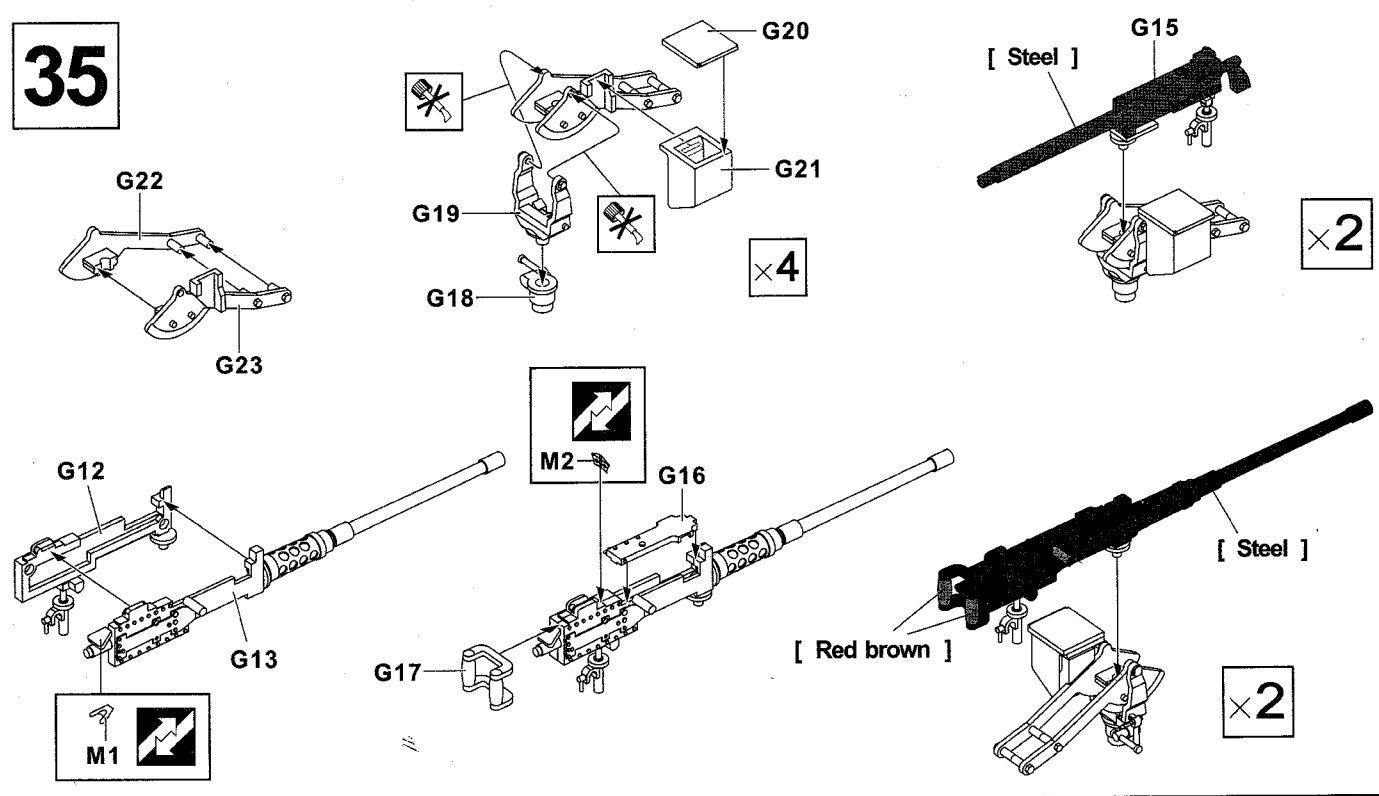
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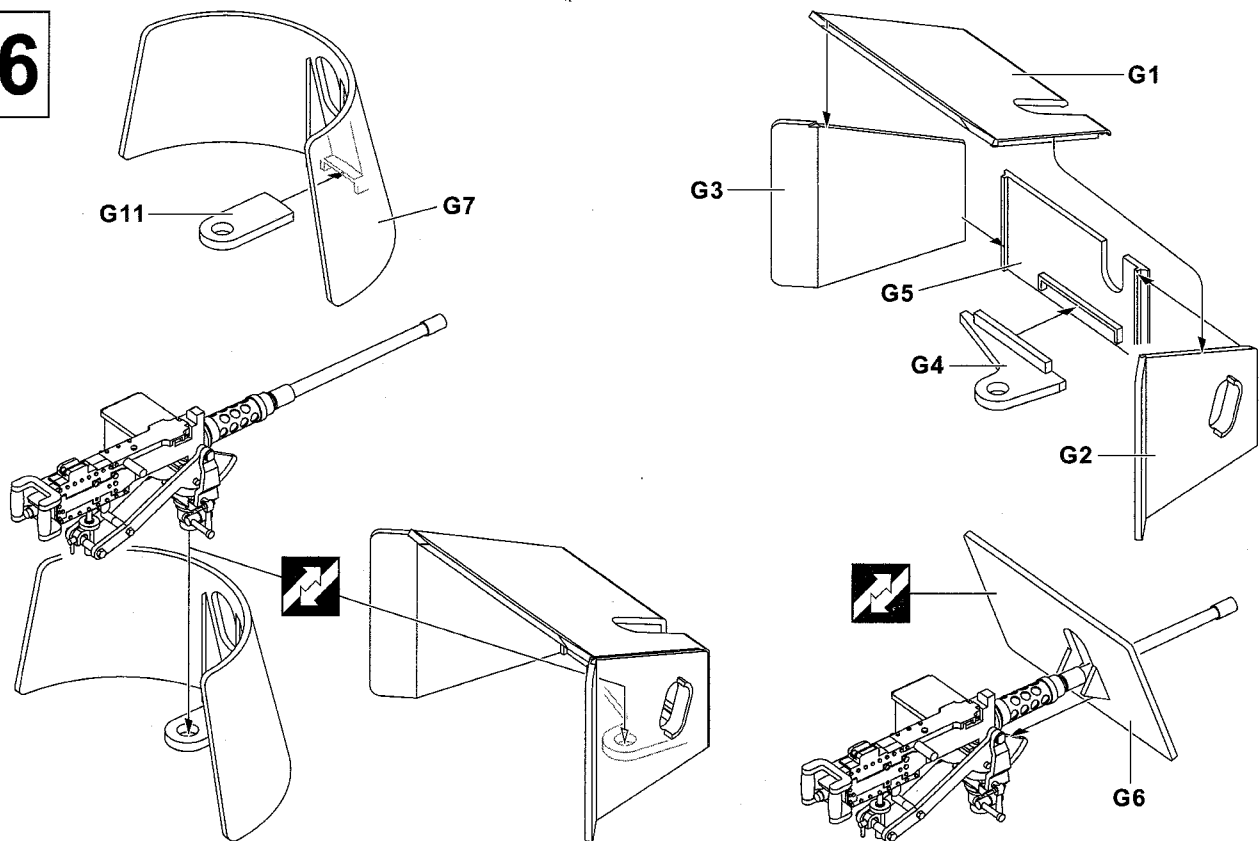
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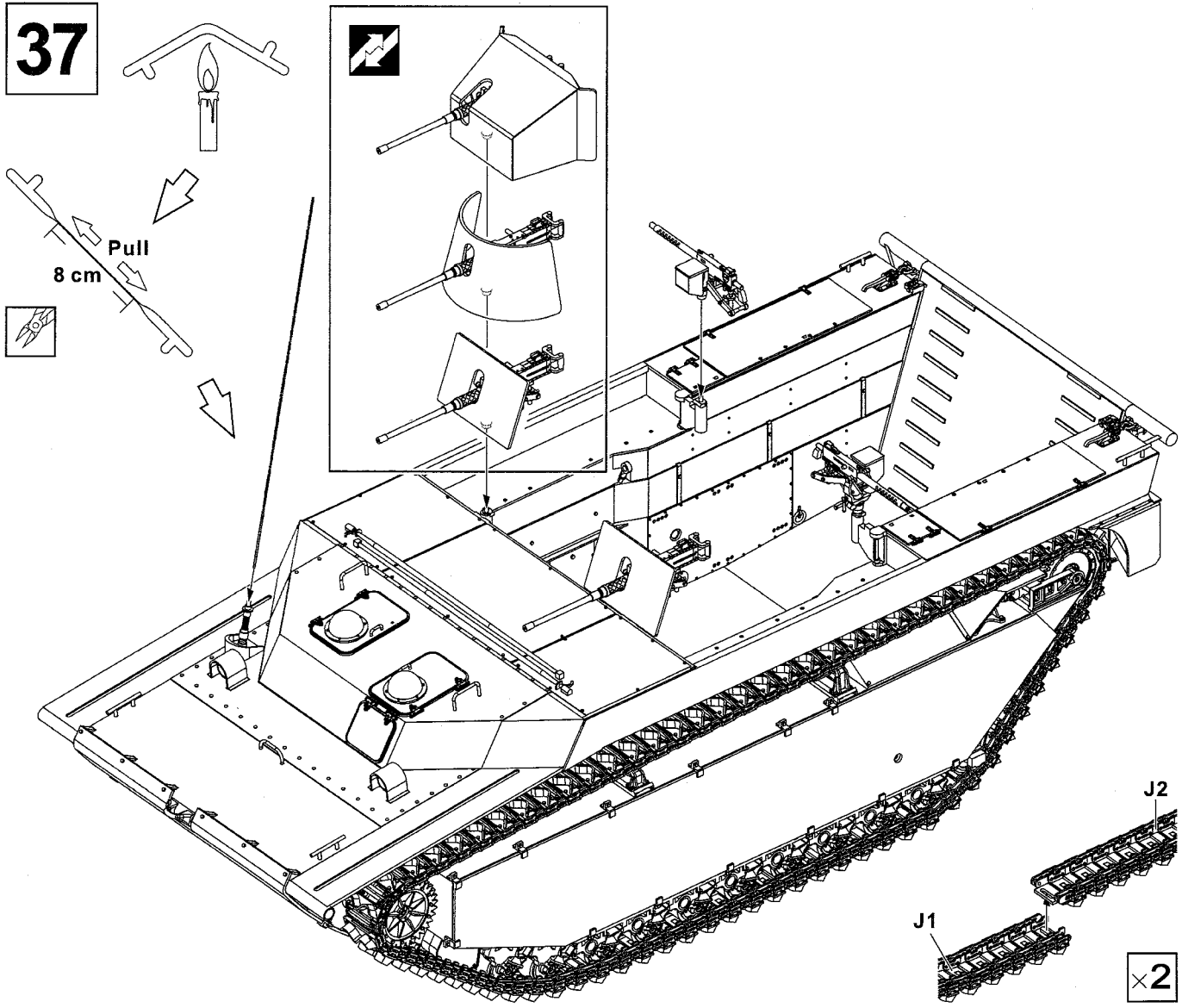
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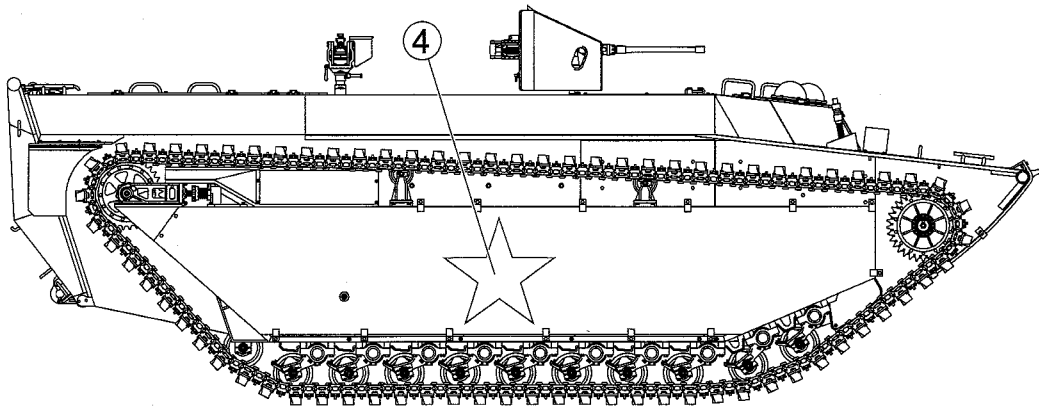
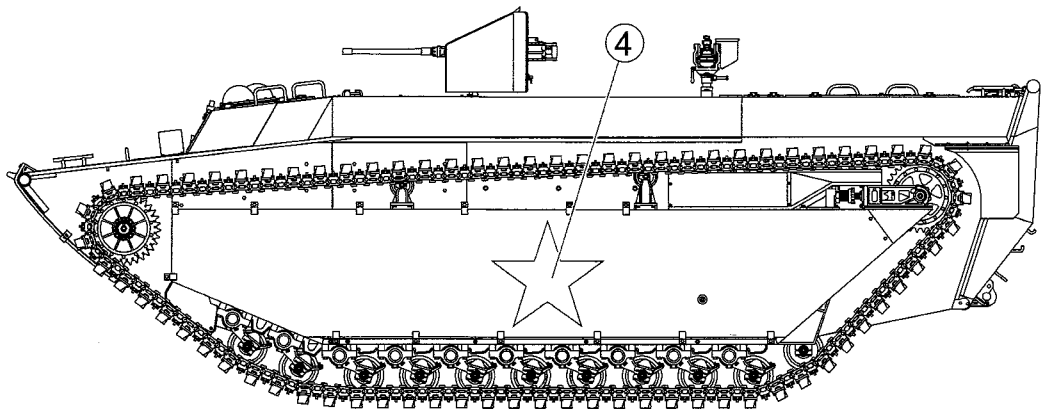
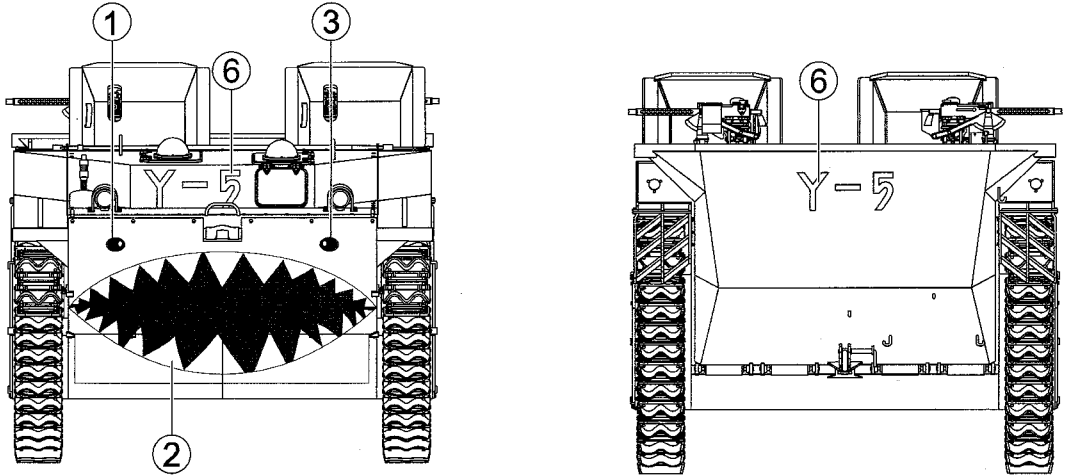


A

U.S. Army, Manila, Philippine, Feb. 1945

美國陸軍,菲律賓馬尼拉,1945年2月

Body Color: Olive drab(2)

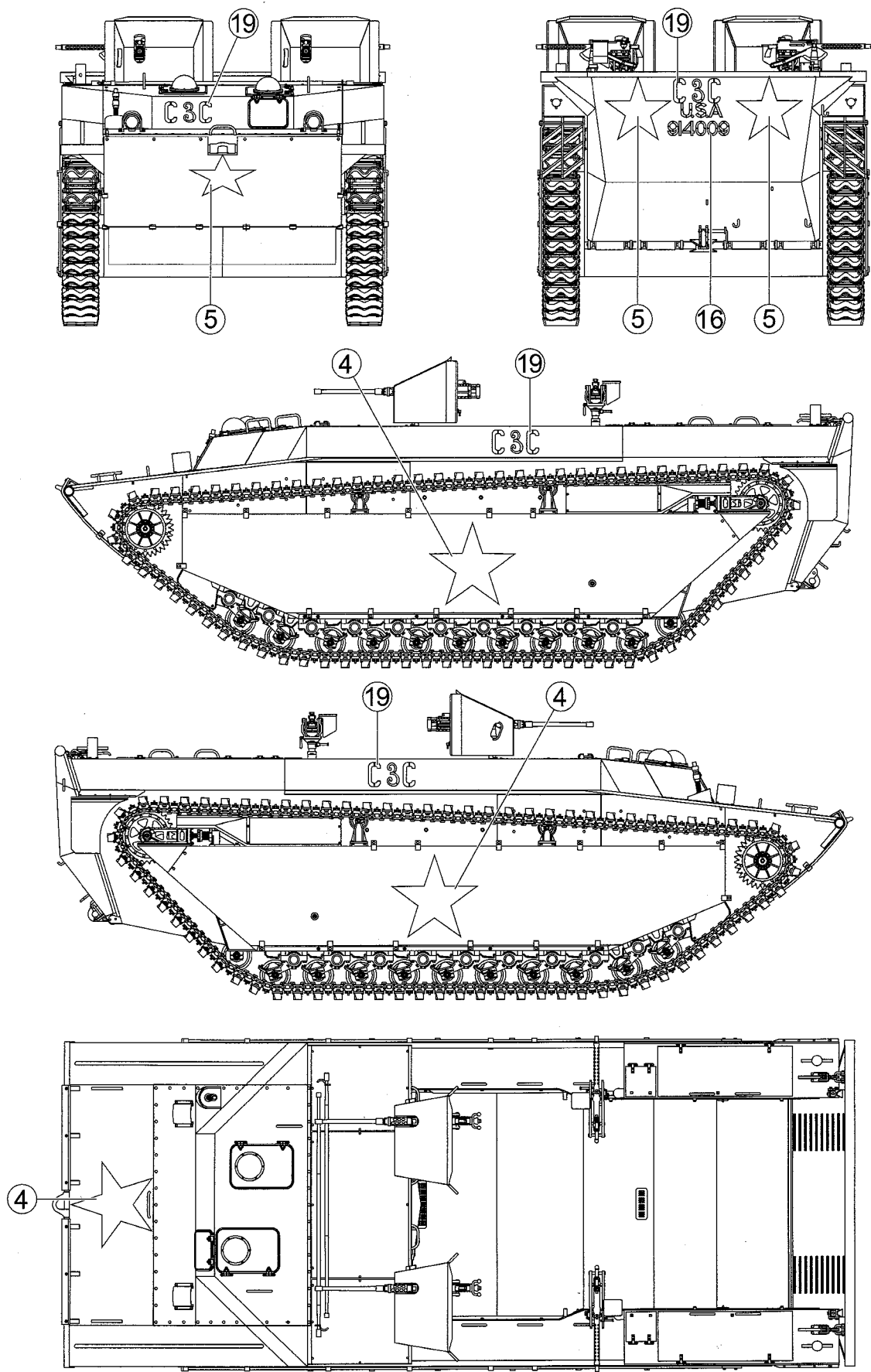


B

U.S. Army, 351st Infantry Regiment, 88th Infantry Division,
Northern Italy, Apr. 1945

美國陸軍第88步兵師第351團, 義大利北部, 1945年4月

 Body Color: Olive drab(2) 

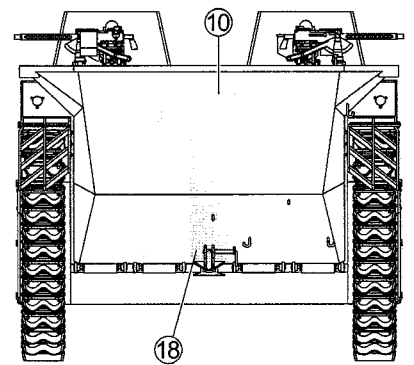
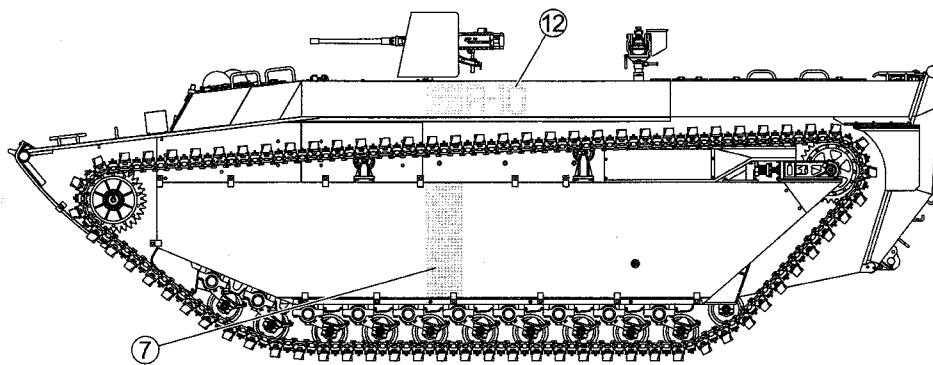
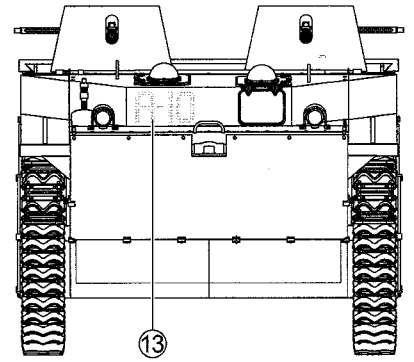
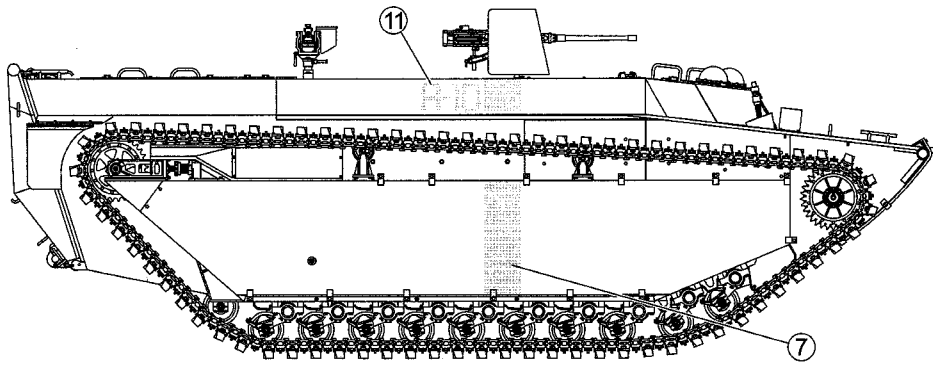


C

U.S. Marine, Iwo Jima, Feb. 1945

美國海軍陸戰隊, 硫磺島, 1945年2月

Body Color: Dark gray(1)

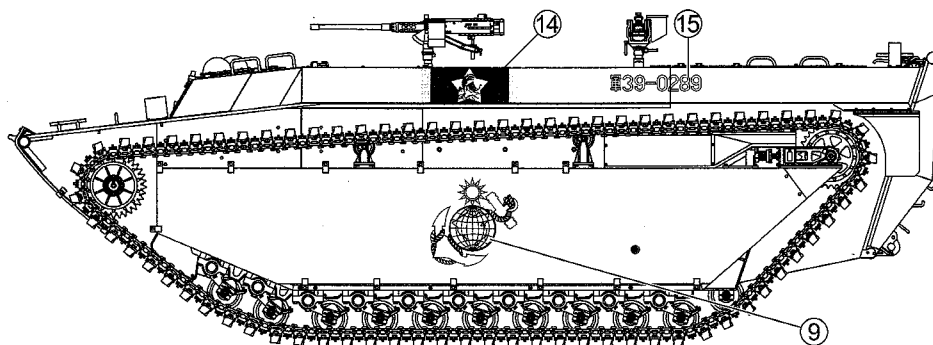
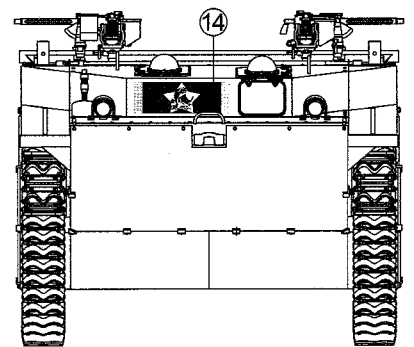
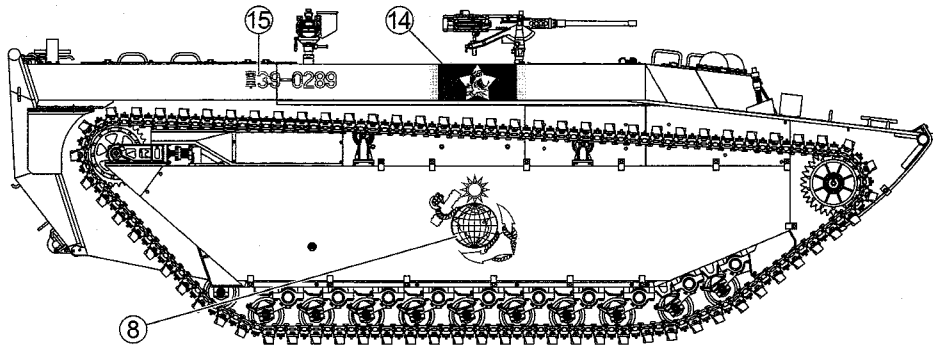


D

R.O.C. Marine Corp, Oct. 1961

中華民國海軍陸戰隊六五特遣部隊, 1961年10月

Body Color: Green FS34079

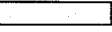



E

U.S. Army 7th Infantry Division, Okinawa, Apr. 1945

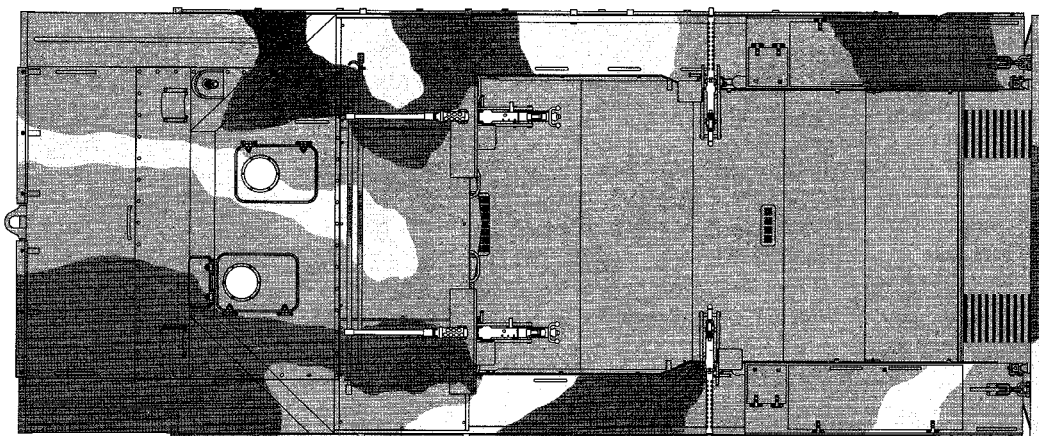
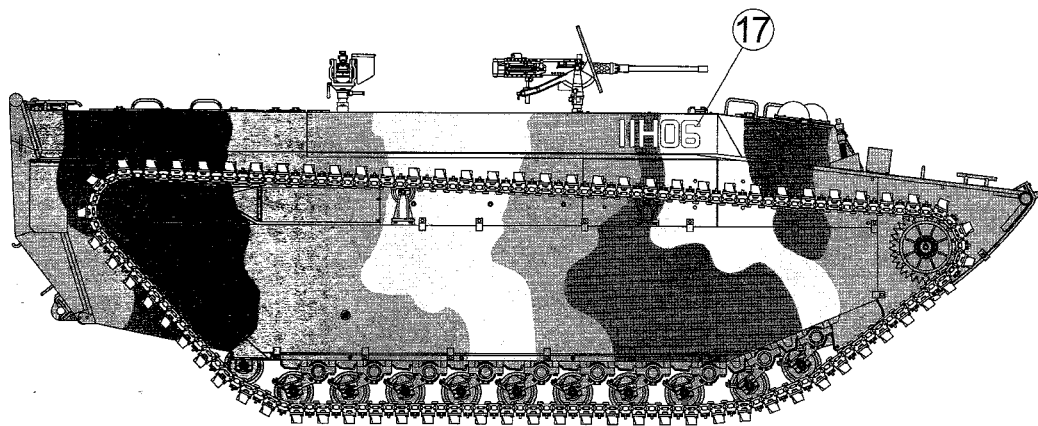
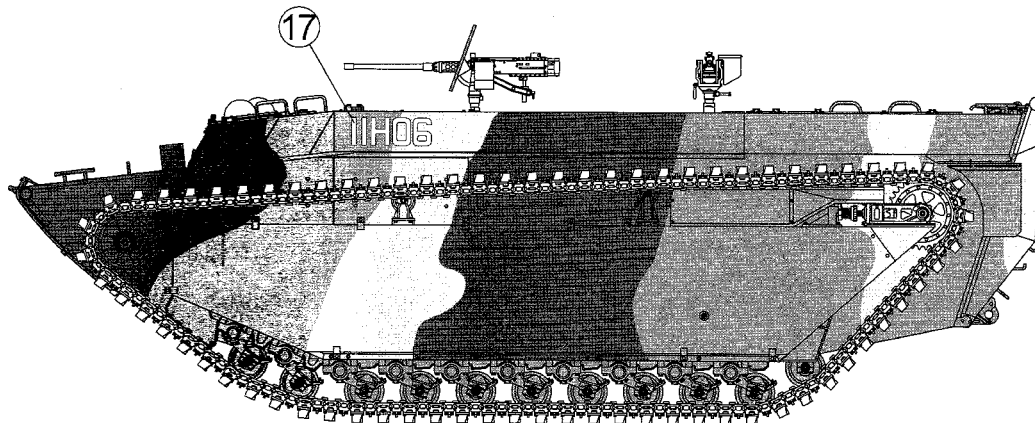
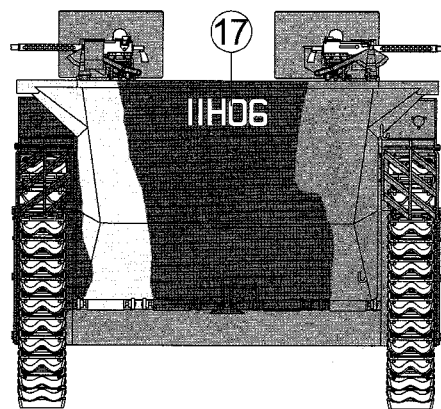
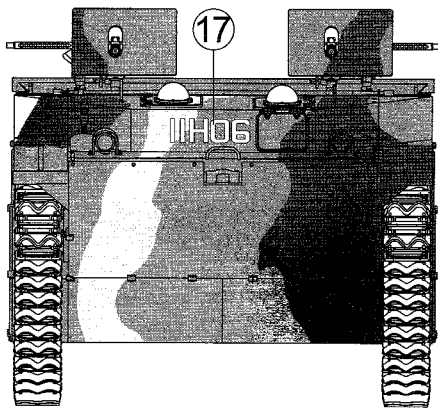
美國陸軍第七步兵師,琉球大島(沖繩島),1945年4月



Body Color: Sand 

Olive drab(2) 

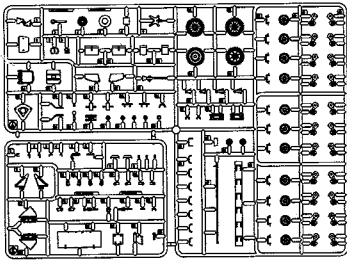
Earth brown 



PARTS LIST 零件表

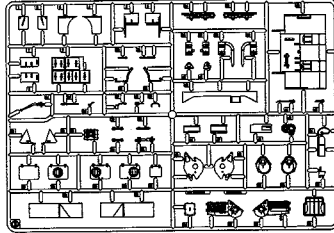
(A) (K)

AF 35198



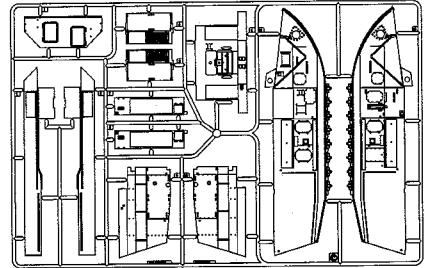
(B)

AF 35198



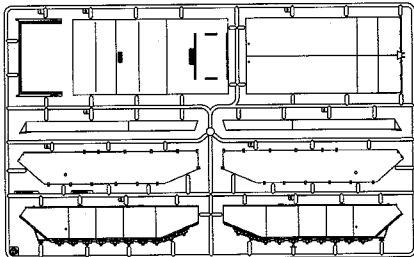
(C)

AF 35198



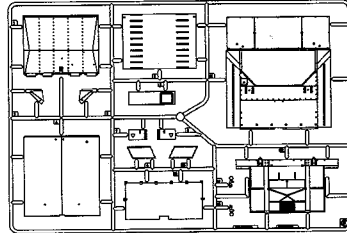
(D)

AF 35198



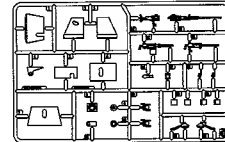
(F)

AF 35205



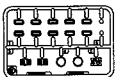
(G)

AF 35198



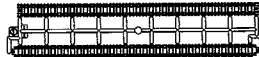
(H)

AF 35198



(J)

AF 35198



(I)

AF 35S15



(M)

AF 35205



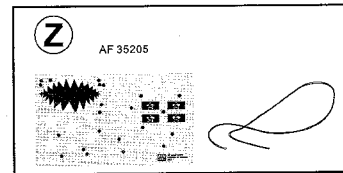
(PE)

AF 35205



(Z)

AF 35205



| | | | |
|--------------------|----------------|----------------|-----------------|
| (A) (K) — 2 | (D) — 1 | (H) — 1 | (PE) — 1 |
| (B) — 1 | (F) — 1 | (I) — 1 | (M) — 1 |
| (C) — 1 | (G) — 2 | (J) — 2 | (Z) — 1 |



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 35205 Parts Replacement Form

- | | |
|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> AF 35198-A、K | <input type="checkbox"/> AF 35198-H |
| <input type="checkbox"/> AF 35198-B | <input type="checkbox"/> AF 35S15-I |
| <input type="checkbox"/> AF 35198-C | <input type="checkbox"/> AF 35198-J |
| <input type="checkbox"/> AF 35198-D | <input type="checkbox"/> AF 35205-M |
| <input type="checkbox"/> AF 35205-F | <input type="checkbox"/> AF 35205-PE |
| <input type="checkbox"/> AF 35198-G | <input type="checkbox"/> AF 35205-Z |

Reason for replacement: Missing
 Broken

Signature: _____

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AF 35205 零件補充申請表

申請人
姓名 地址 電話

- | | |
|---------------------------------------|----------|
| <input type="checkbox"/> AF 35198-A、K | NT\$ 400 |
| <input type="checkbox"/> AF 35198-B | NT\$ 200 |
| <input type="checkbox"/> AF 35198-C | NT\$ 250 |
| <input type="checkbox"/> AF 35198-D | NT\$ 250 |
| <input type="checkbox"/> AF 35205-F | NT\$ 250 |
| <input type="checkbox"/> AF 35198-G | NT\$ 240 |
| <input type="checkbox"/> AF 35198-H | NT\$ 120 |
| <input type="checkbox"/> AF 35S15-I | NT\$ 20 |
| <input type="checkbox"/> AF 35198-J | NT\$ 280 |
| <input type="checkbox"/> AF 35205-M | NT\$ 180 |
| <input type="checkbox"/> AF 35205-PE | NT\$ 60 |
| <input type="checkbox"/> AF 35205-Z | NT\$ 250 |

+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 _____

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