



AUSTRALIAN ARMY M113A1 APC WITH T50 TURRET

VIETNAM WAR



**SPECIAL THANKS: Mr. Jason Miller

In 1958, the Australia government planned to modernize its army. In doing so, the Australian Army became more compatible with the United States military in terms of its organization and equipment. A procurement of track-type armor personnel carriers to replace the wheeled FV603 was part of the plan. Such transport was required in order to have amphibious capabilities that were adaptable to tropical environments and deployable by air. In 1962, the Australian Army acquired a small number of FV432 from the United Kingdom as well as M113's from United States for the purposes of evaluation.

The trial of the two vehicles was conducted in the heat and humidity of Queensland. The FV432 was equipped with an NBC (Nuclear, Biological, and Chemical) ventilation system providing filtered air into the cabin. In comparison, the M113 lacked a similar system and therefore posed tremendous physiological burdens to the crews inside. However, at the end of the contest, the M113 was ultimately selected due to its lighter weight (aluminum constructed hull vs. all steel of the FV432) and because it required less preparation time for amphibious operations. The Australian Army proposed a modification to the FMC (Food Machinery and Chemical Corporation) to manufacture an improved cabin ventilation system for the M113 suitable to the Australia environment.

Orders of the M113A1 were delivered beginning in 1964. In addition to the standard personnel carriers variants also included command vehicles and ambulances that were assigned to numerous cavalry regiments. In 1965, Australia deployed its M113 to Vietnam following a request for increased military assistance by the South Vietnamese government. Experience in Vietnam soon revealed the vulnerability of the commander while manning the machine gun. Additional armor protection was needed. Initially a makeshift shield and mount system, designed by South Vietnamese, were retrofitted. By 1966, a 74C turret, which boasted two M1919A4 Browning machine guns were installed. The Australian M113 once again saw an update on the turret to a T50 type, although the same space restrictions existed, the T50 turret was up gunned to two M2 Browning machine guns. To improve on the space issue, one machine gun was later relocated outside of the turret. In July of 1969, additional armor were welded to the both sides of the lower hull to protect against mines and in August of 1970, more plate was welded to the entire chassis.

Between 1965 and 1972, the M113 was the most deployed armor fighting vehicle by the Australian Army in Vietnam with approximately 200 M113s of all variants sent before they pulled out of Vietnam in May of 1972.

Text Edited by
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1958年、オーストラリア政府は軍隊の近代化を計画しました。この計画の目的は、オーストラリア軍が組織と装備の面で米軍と協力する際に、より理想的な協調と互換性を実現できるようにすることでした。この計画には、過去に使用されたFV603装甲車両に代わる装甲兵員輸送車の購入が含まれていた。このような車両は、水陸両用機能を備え、熱帯環境に適応し、空運で展開できる必要がありました。1962年、オーストラリア陸軍はテストのために英国と米国から少数のFV432およびM113装甲車両を購入しました。

2車両のテストは、気候が高温多湿のクイーンズランド州で実施されました。FV432にはNBC換気システム(核、生物学、化学的保護機能)が装備されているため、ファンで車内にろ過された空気を供給します。対照的に、M113の内部は換気が悪く、その暑い環境は乗組員の体に大きな負担をかけました。しかし、最終的には、M113はボディが軽く、水陸両用の切り替え時間が短いため、FV432よりもオーストラリア陸軍のニーズに適しているとされ採用されました。しかし、オーストラリア陸軍はM113メーカーである(FMC)に、車の換気システムを改善し、オーストラリア専用のモデルを設計するように依頼しました。

オーストラリアは、ディーゼルエンジンを搭載したM113A1の購入を決め、1964年より順次納品された。その中にはコマンド車両や救援車両などの特殊車両を含み、全て騎兵連隊に編入しました。1965年、オーストラリアは南ベトナム政府に軍事援助の強化を要請され、オーストラリアのM113をベトナムに配置しました。ベトナムの戦場での経験から、M113の車長が機銃を使用する場合、適切な保護装甲が必要であることがすぐにわかりました。1965年8月、陸軍はベトナムの地元の兵器工場で製造された機銃防盾をM113に増設しました。保護対策を改善するために、M113には1966年から74C機関銃塔が設置され、2基のM1919A4ブローニング機関銃が装備されていました。機関銃塔の防御力は充分でしたが、内部が非常に狭かったです。1968年、オーストラリアのM113はT50機関銃塔に置き換え、やはり2丁の機関銃を装備することでスペースを空けるために、後期は1丁の機関銃を砲塔の外に移しました。地雷に対する耐性を高めるため、オーストラリアのM113は、1969年7月以降、シャーシの両側に追加の装甲が溶接されています。1970年8月以降、この追加の装甲は車両の下側にも追加されました。

1965年から1972年の間に、M113はオーストラリア陸軍がベトナムの戦場で最も配備された装甲車両となりました。1972年5月にベトナムから撤退するまで、さまざまなタイプの約200両のM113が投入されました。

1958年澳洲為其陸軍展開了新一輪現代化計畫，這個計畫的目的地是期望讓澳洲部隊在組織與裝備上，在與美軍配合時能達到更理想的協調與兼容。計畫中包含購置履帶式裝甲運兵車，來取代過去使用的FV 603輪型裝甲車。這種車輛將被要求具備兩棲能力、適應熱帶環境，並能夠利用空運來進行佈署。1962年時，澳洲皇家陸軍分別向英國與美國少量購入FV432與M113兩型裝甲車進行測試。

測試在氣候溼熱的昆士蘭省進行，由於FV432具有核生化的防護能力，由風扇供應車內經過過濾的空氣。相較之下M113的車內通風不良，襖熱的環境給予乘員沉重的身體負擔。但是最終測試的結果，M113以較輕盈的車身與較短的兩棲準備時間，比FV432更適合澳洲的需求，因而在測試中勝出。但澳方向M113的製造商食品機械化學公司(FMC)要求改善車內的通風系統，為澳洲設計專用的車款。

澳洲訂購使用柴油引擎的M113A1於1964年起陸續交貨，其中也包含了指揮車、救濟車等特種車輛，均被撥入了騎兵團中運用。1965年南越政府要求澳大利亞為其擴大提供軍事援助，隨即澳洲的M113便投入了越南戰場。越南戰場的經驗迅速表明，澳洲M113在車長使用機槍射擊時，需要充分的裝甲保護。1965年8月，陸軍為M113增設了由越南本地兵工廠生產的機槍防盾。為了改進保護措施，1966年起M113安裝了74C型機槍塔，配備了兩挺M1919A4勃朗寧機槍。機槍塔提供了全方位的保護，但內部卻也非常狹窄。1968年澳洲M113更換為T50型機槍塔，同樣在配備兩挺機槍後有空間狹窄的問題，但能夠安裝火力較大的M2勃朗寧機槍。為了騰出空間，後期將一挺機槍安置於機槍塔之外。為了增加對地雷的抗炸能力，1969年7月起澳洲M113在底盤兩側焊上額外的裝甲。1970年8月之後，車輛的底面也增設了這種額外的裝甲。

在1965至1972年間，M113成為澳洲皇家陸軍在越南戰場上使用數量上最為龐大的裝甲車輛。1972年5月撤出越南前，約有200輛各型M113家族車輛投入使用。

Illustration:圖示說明



Method For Applying Decals:

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

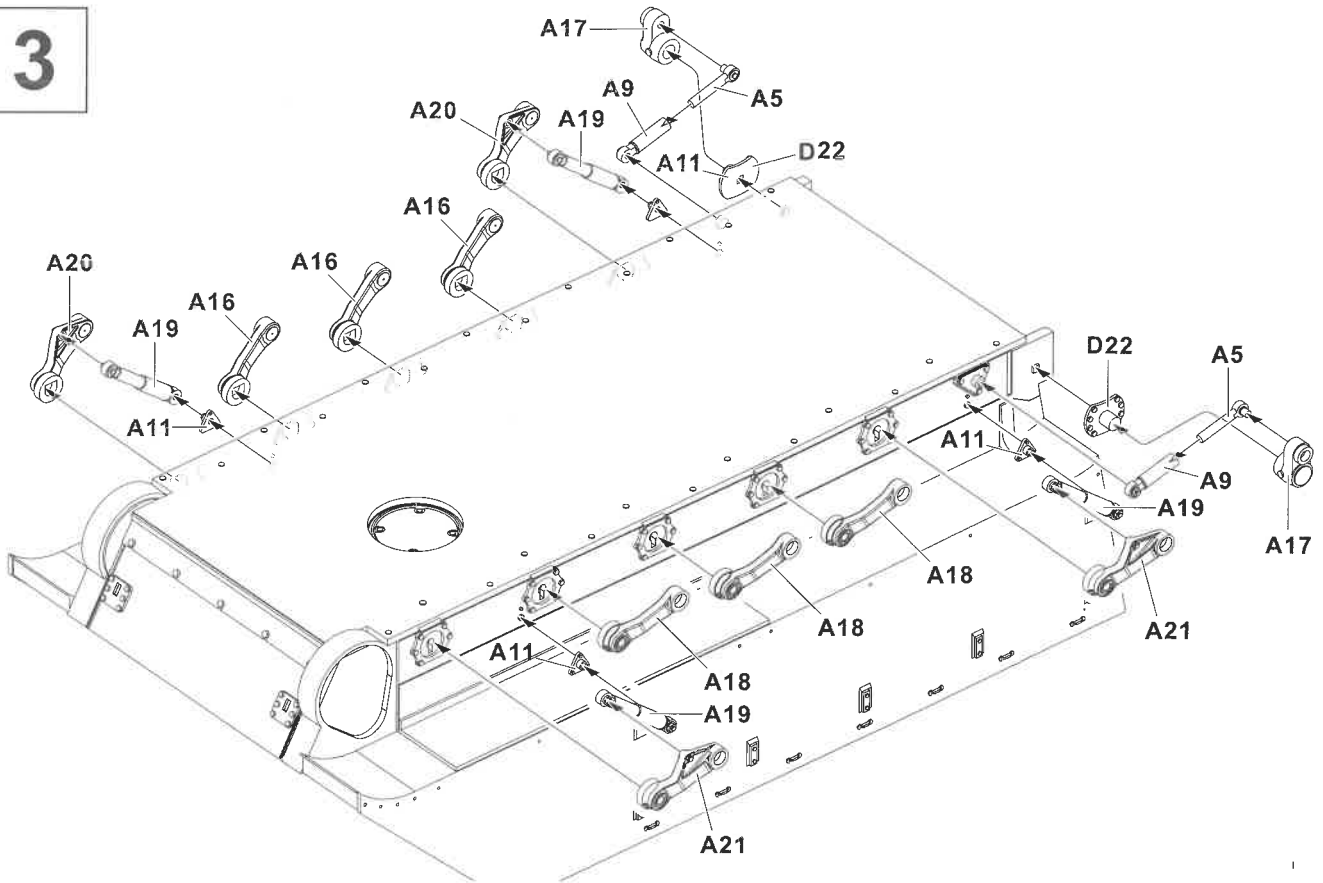
水貼紙使用說明:

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

Color list: 塗料表

Color	Brand	GSI Creos			Humbrol	AV Vallejo	Lifecolor
		Hobby Color	Mr.Color	Mr.Color Spray			
Black	黑	H2	C2	S2	21	70861	LC52
Duck egg green	鴨蛋綠	H74	C26		23	71009	UA96
Field green	原野綠	H340	C340		105	71093	UF02
Flat white	消光白	H11	C62	S62	34	70919	LC01
Olive drab FS34087	橄欖褐	H304	C304		155	71043	UA03
Sail color	帆布	H85	C45		28	72149	UA099
Silver	銀	H8	C8	S8	11	70997	LC74
Steel	黑鐵	H18	C28	S28	53	77712	LC76
Tire black	輪胎黑	H77	C137		85	70950	LC02
Wood brown	木棕	H37	C43		186	70876	UA85

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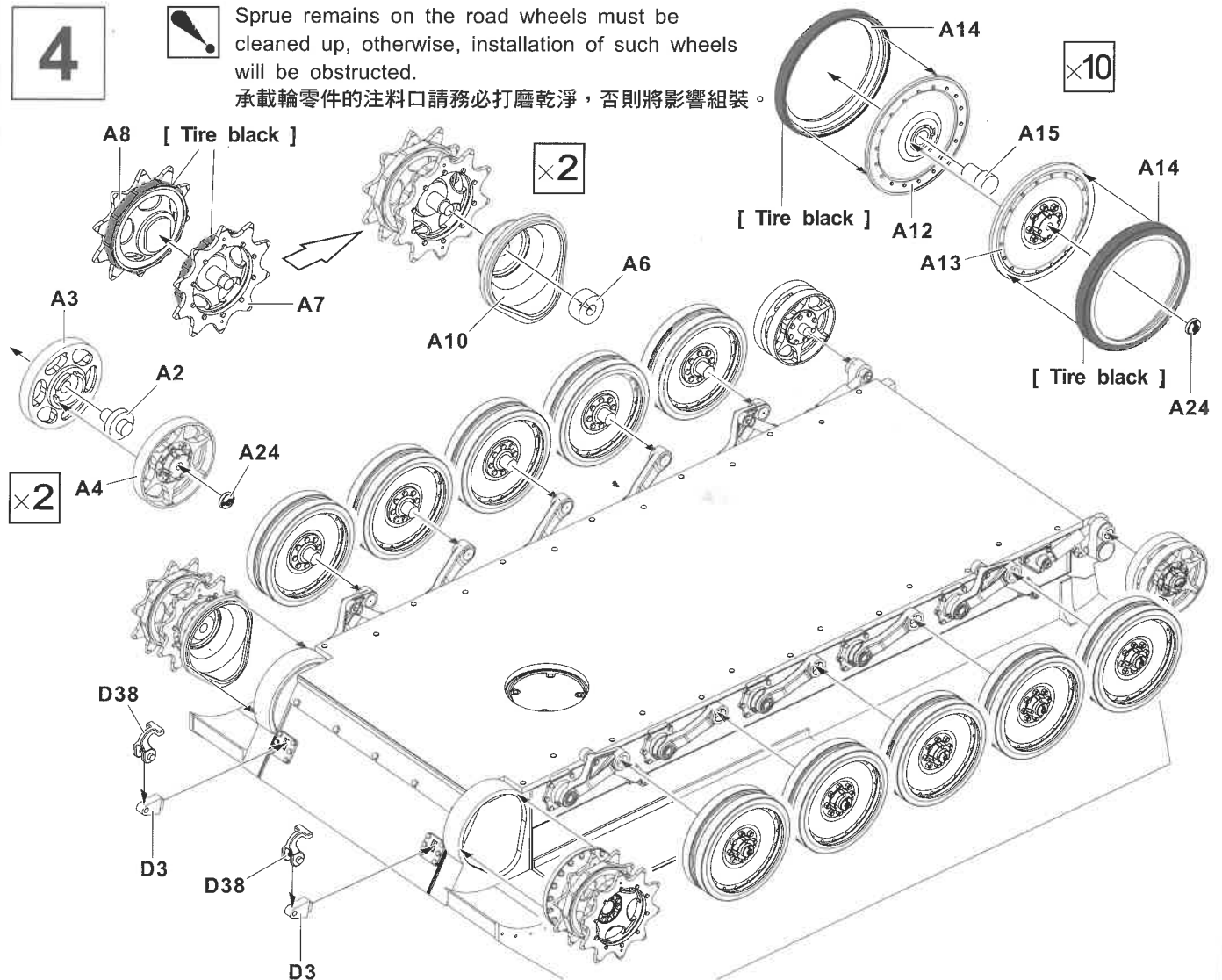


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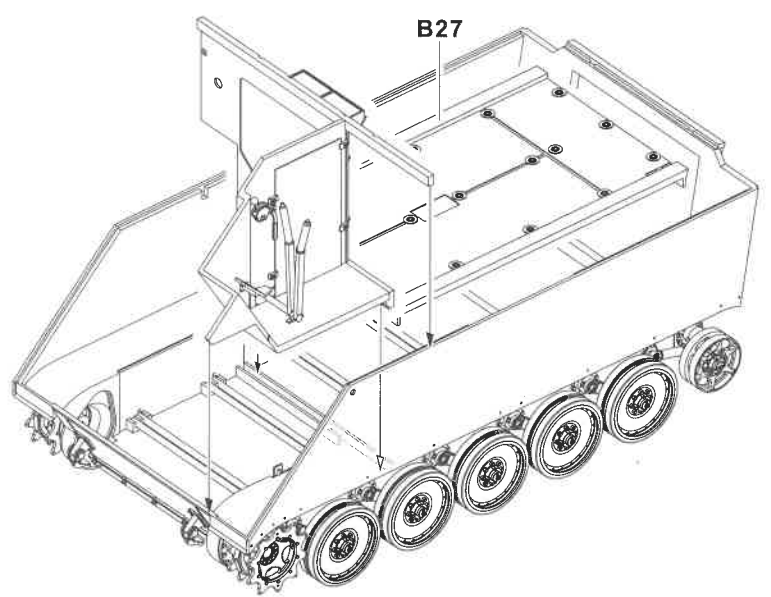
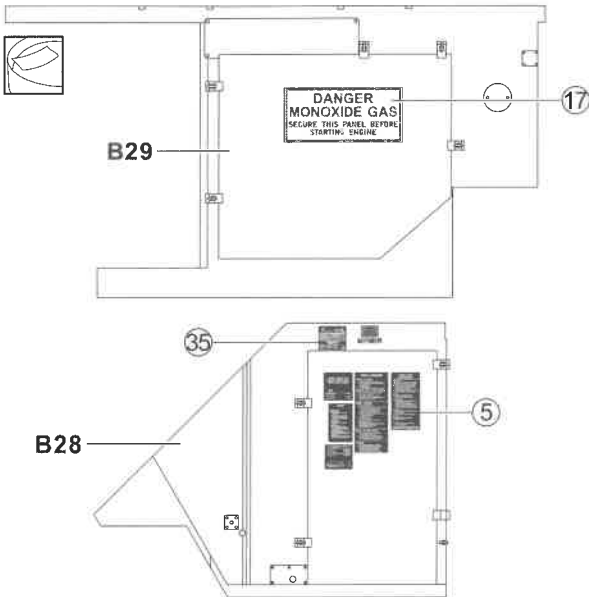
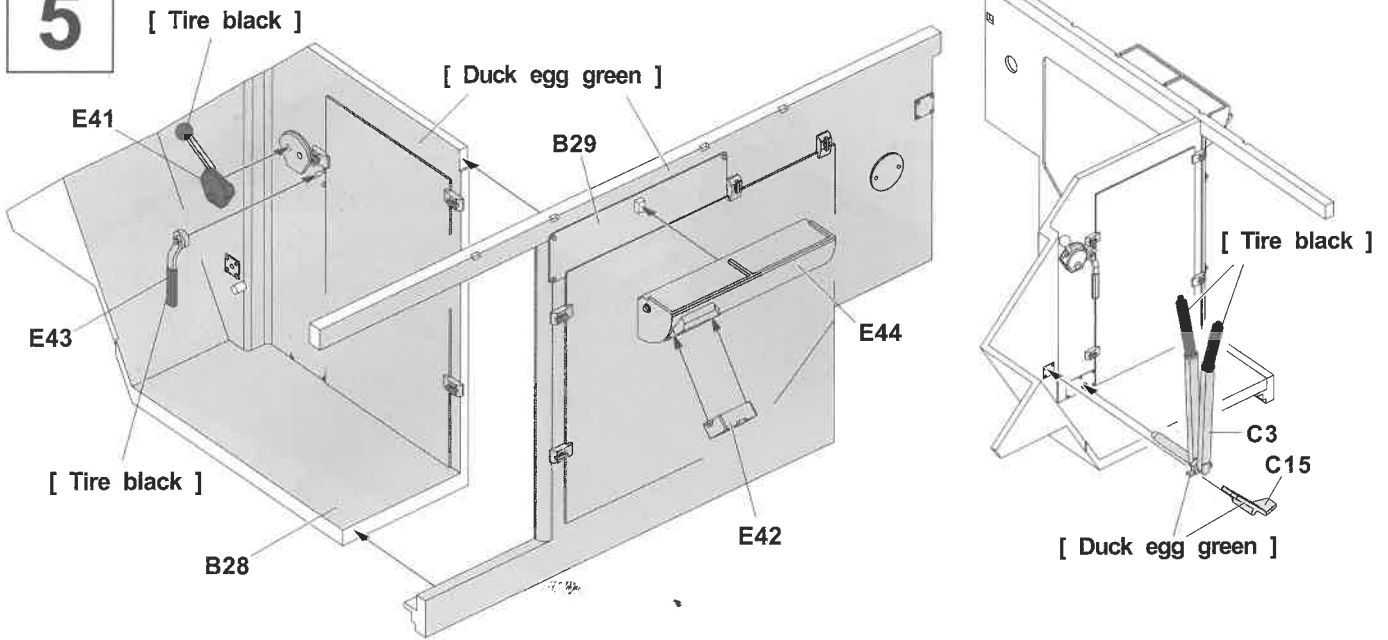


Sprue remains on the road wheels must be cleaned up, otherwise, installation of such wheels will be obstructed.

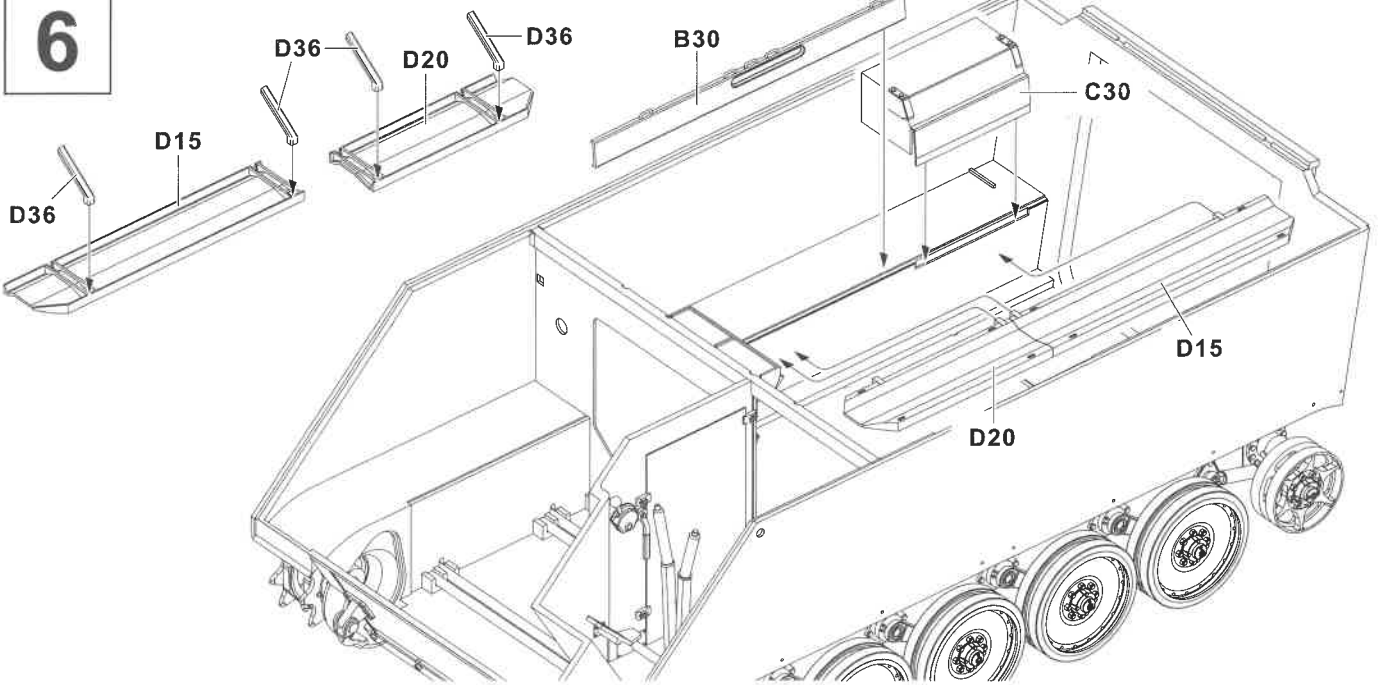
承載輪零件的注料口請務必打磨乾淨，否則將影響組裝。



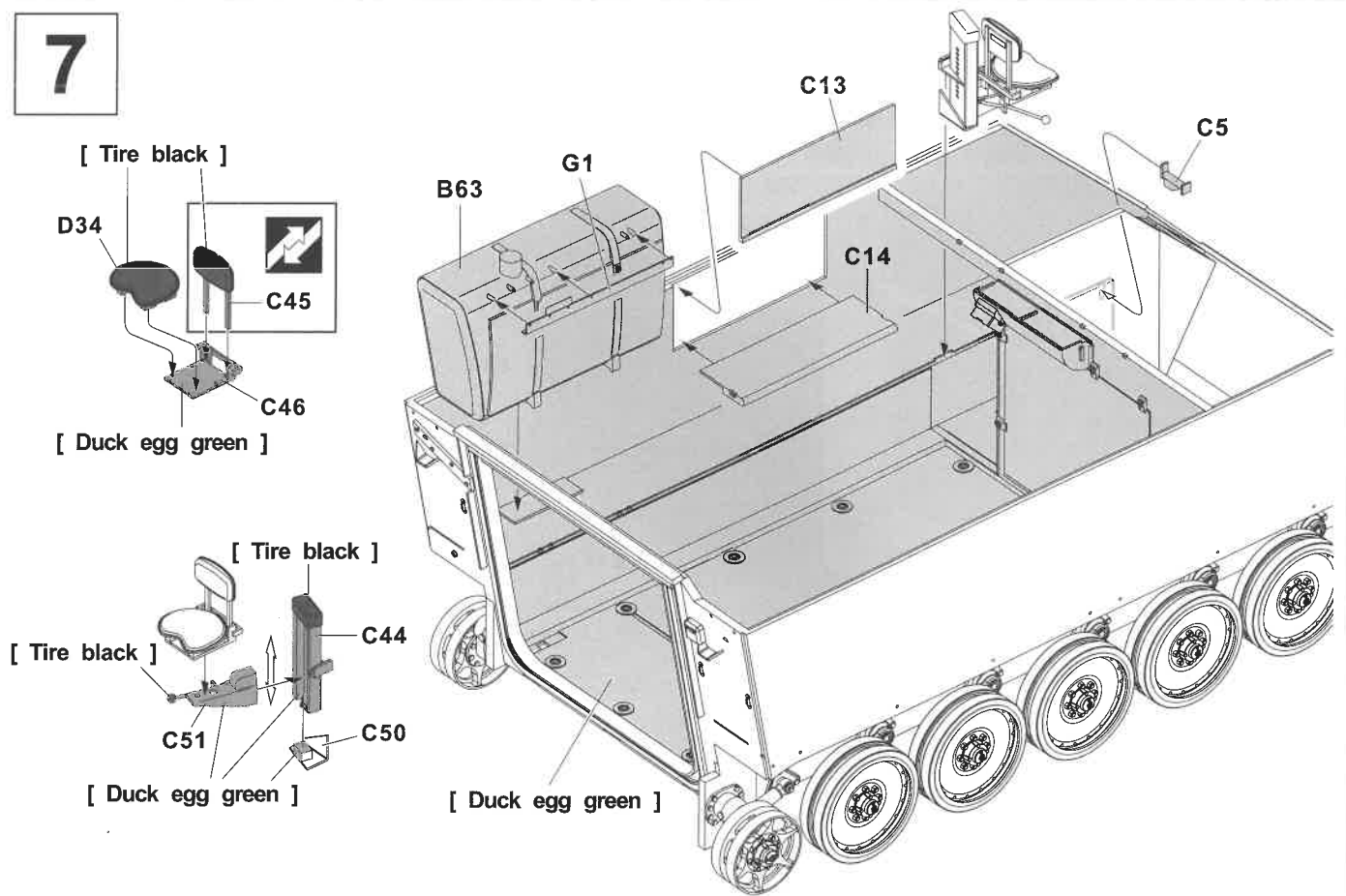
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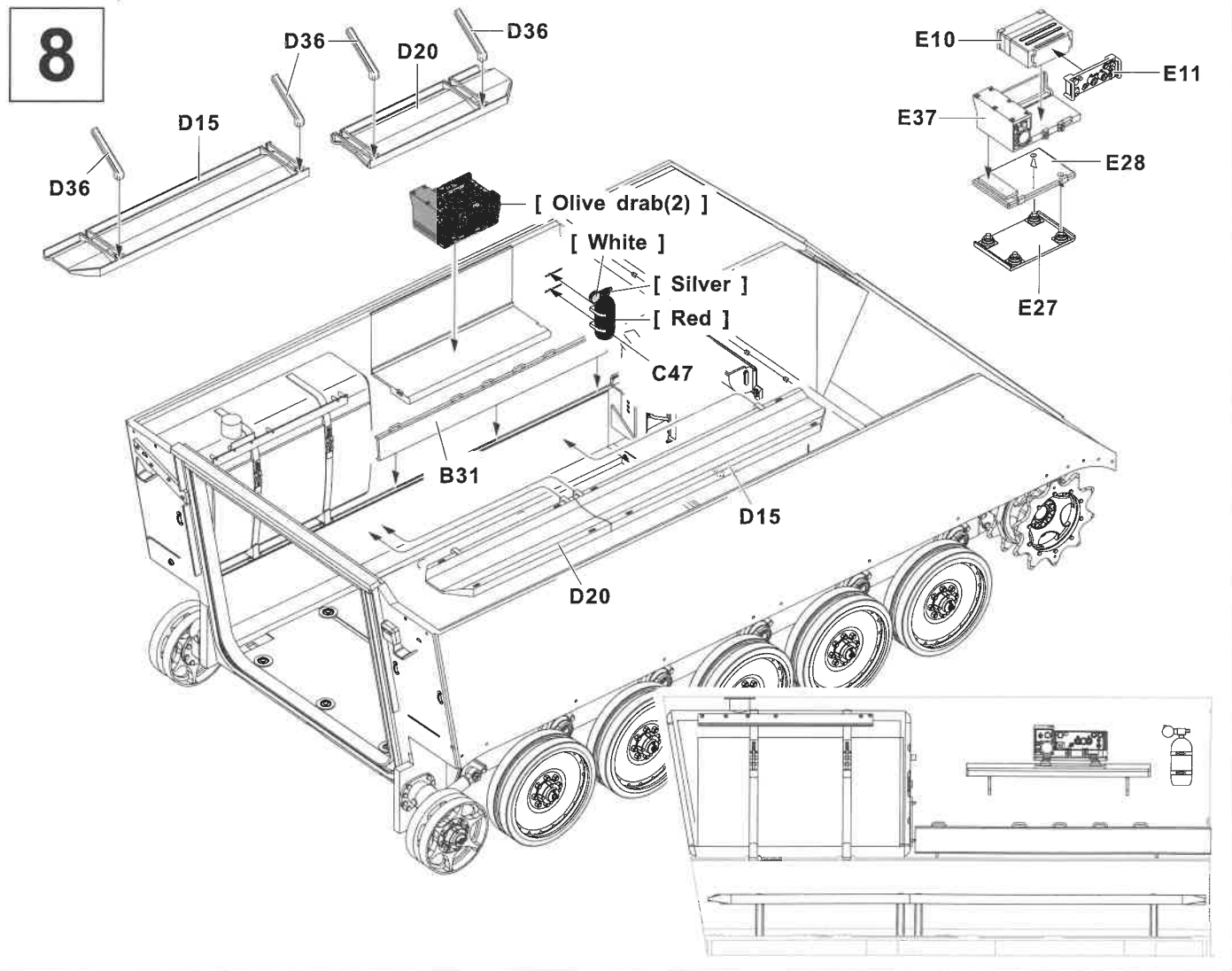
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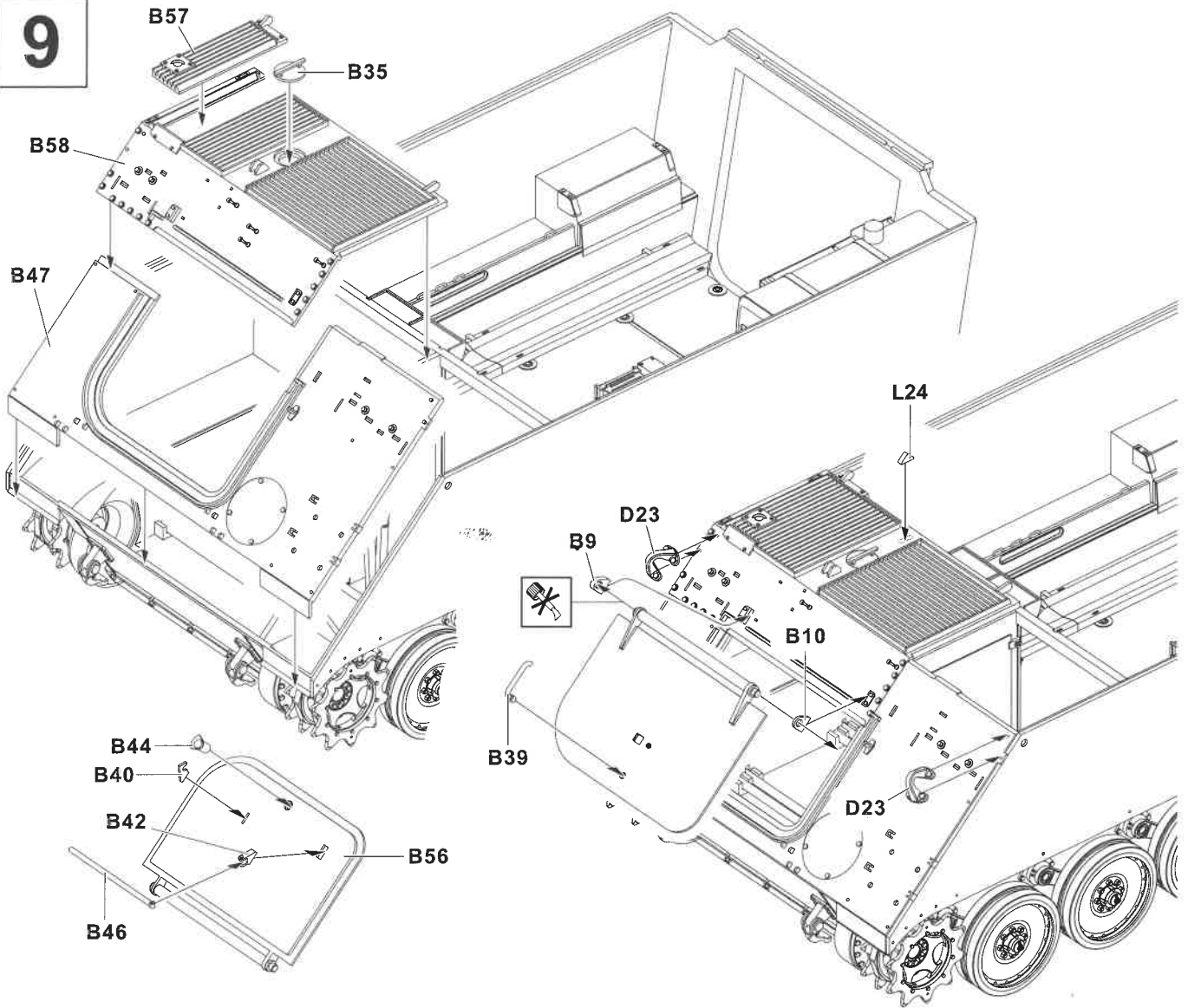
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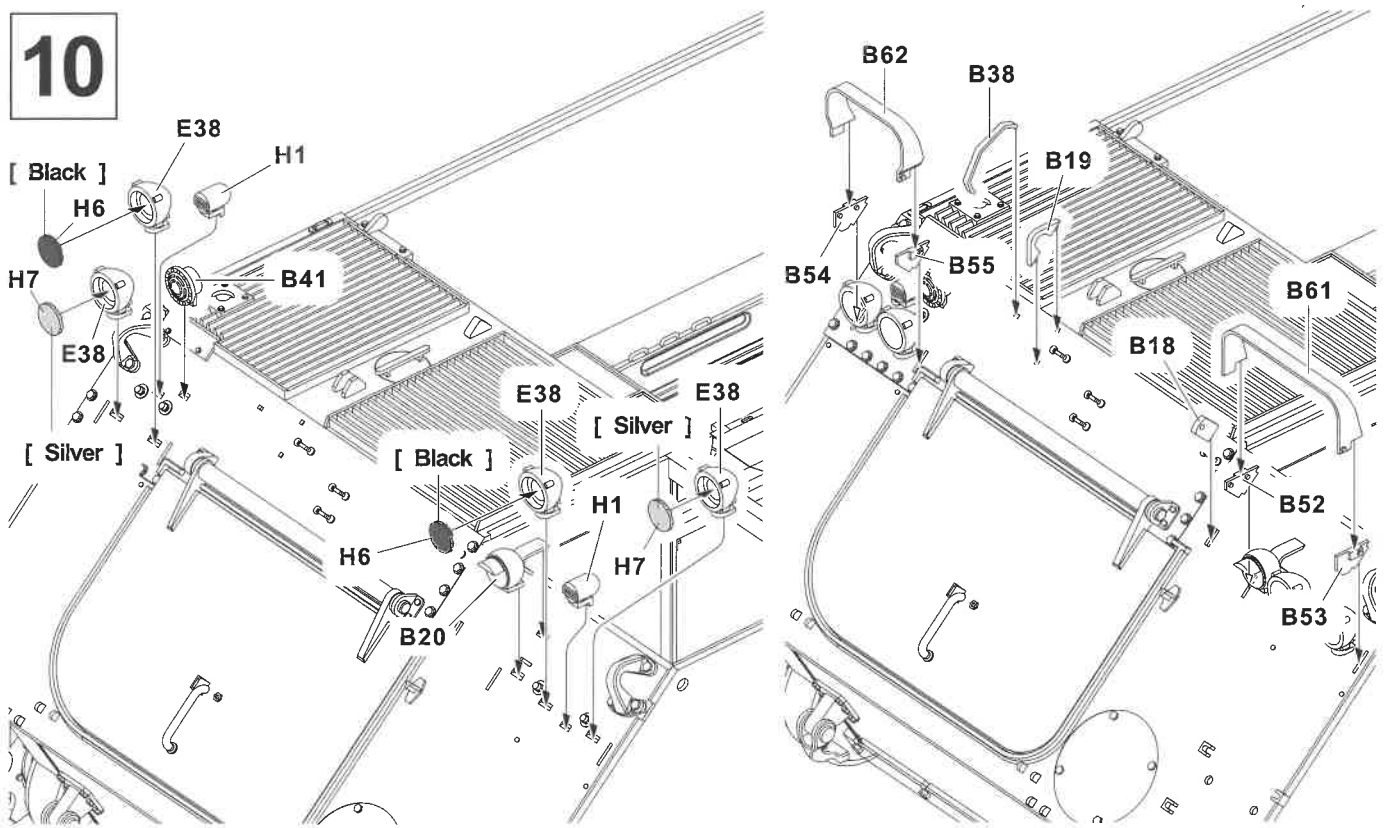
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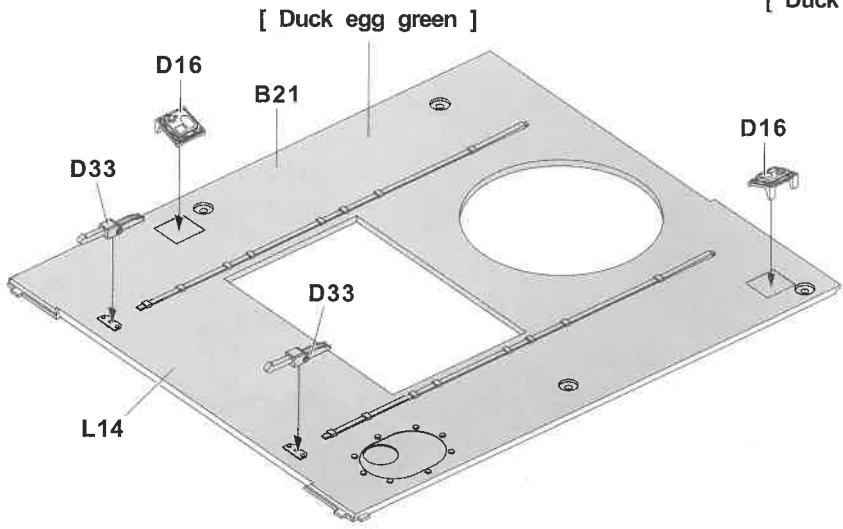
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[Flat white]
D16  ×2
[Tire black]
[Duck egg green]

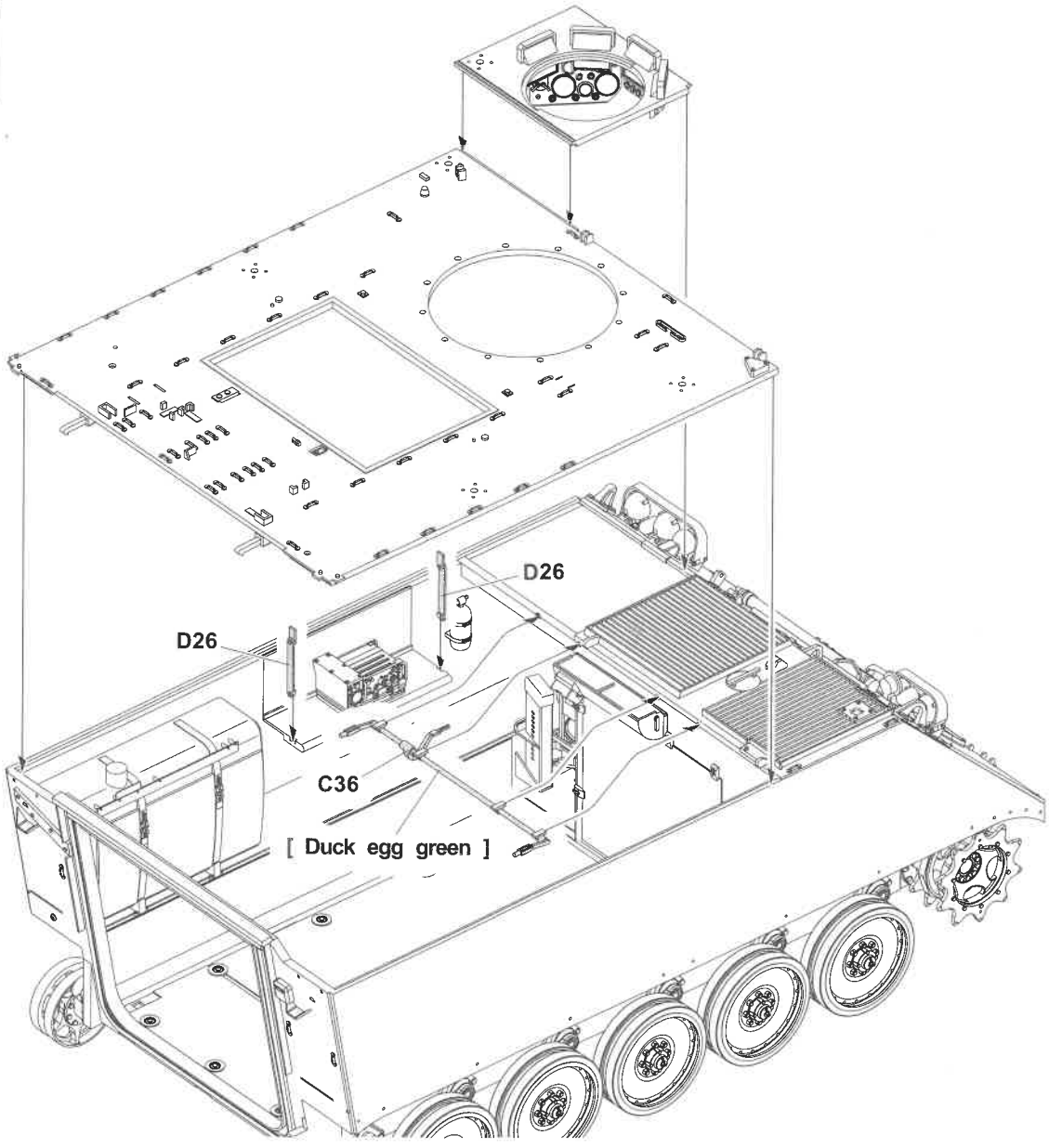
[Tire black]
[Red]
H8 
[Silver]
[Duck egg green]

[Duck egg green]
C48  34 36 38
[Tire black]
[Silver] [Tire black]
37 47

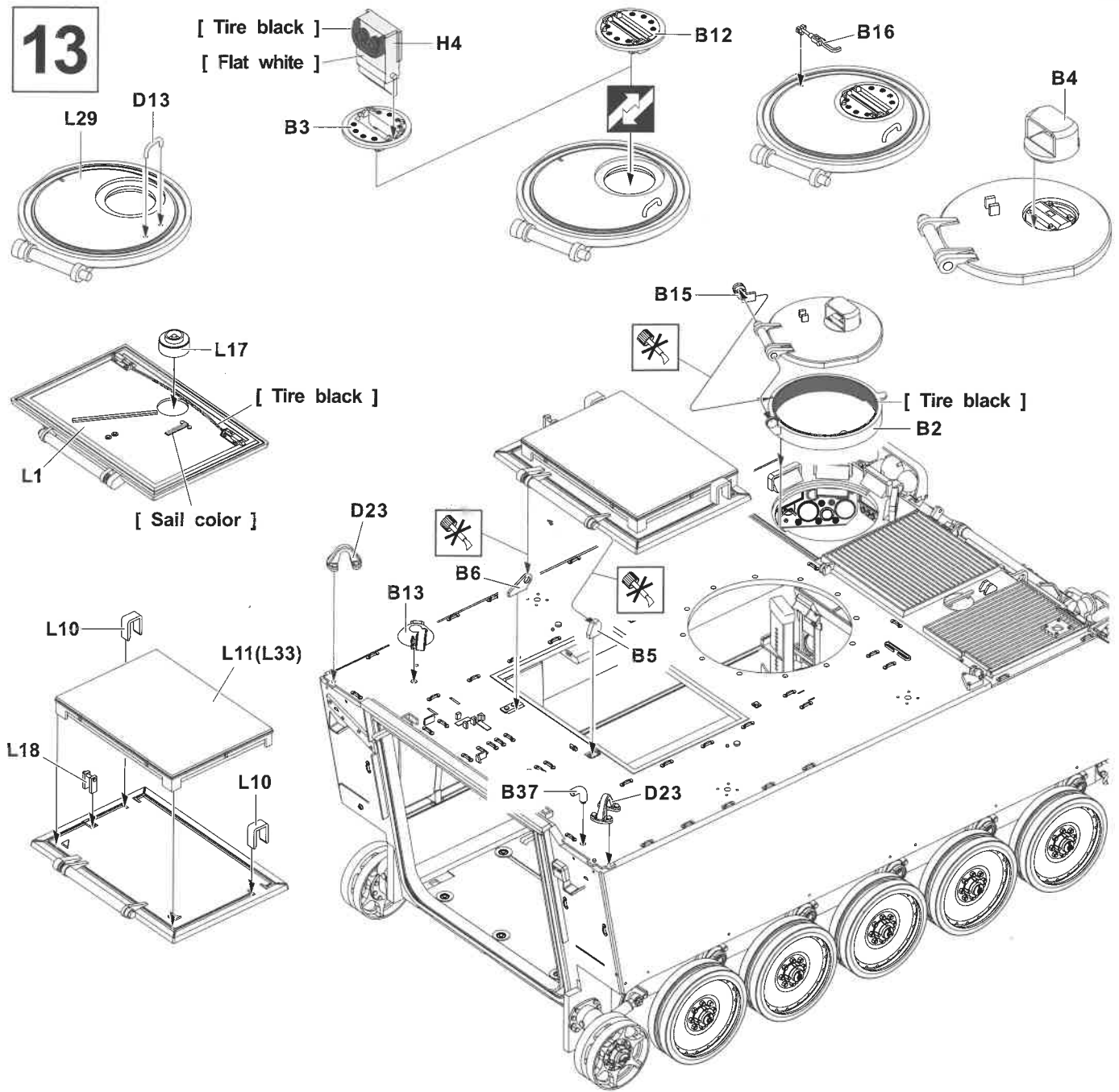
[Duck egg green]
[Tire black]
[Silver] H5 H5 C48
L13 H8



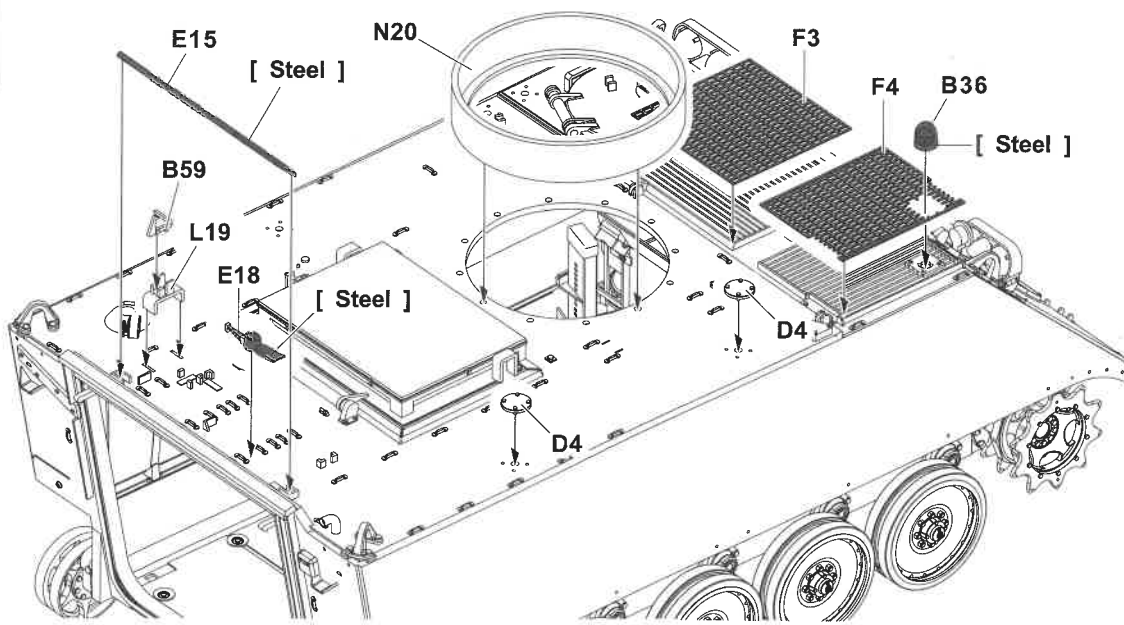
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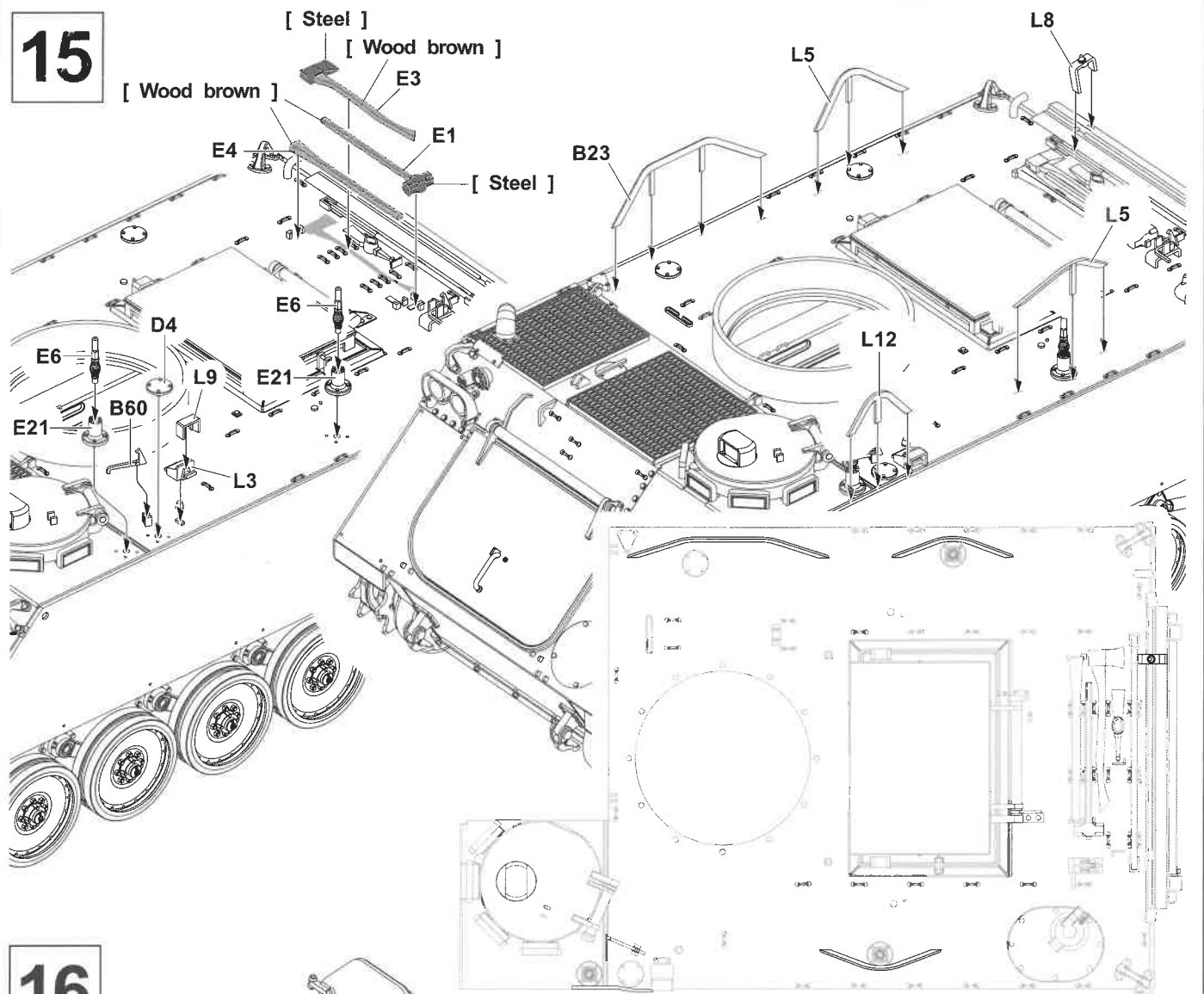
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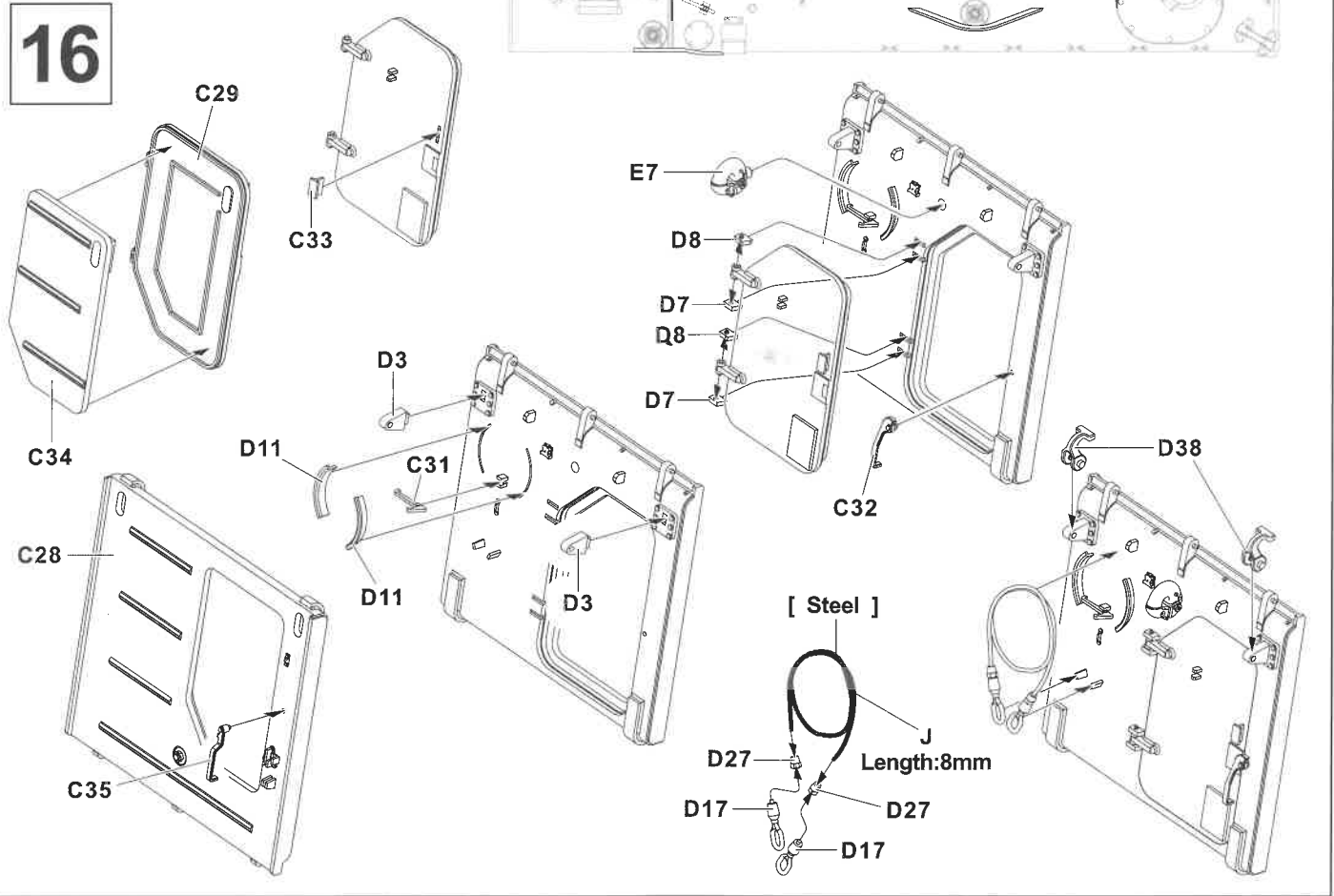
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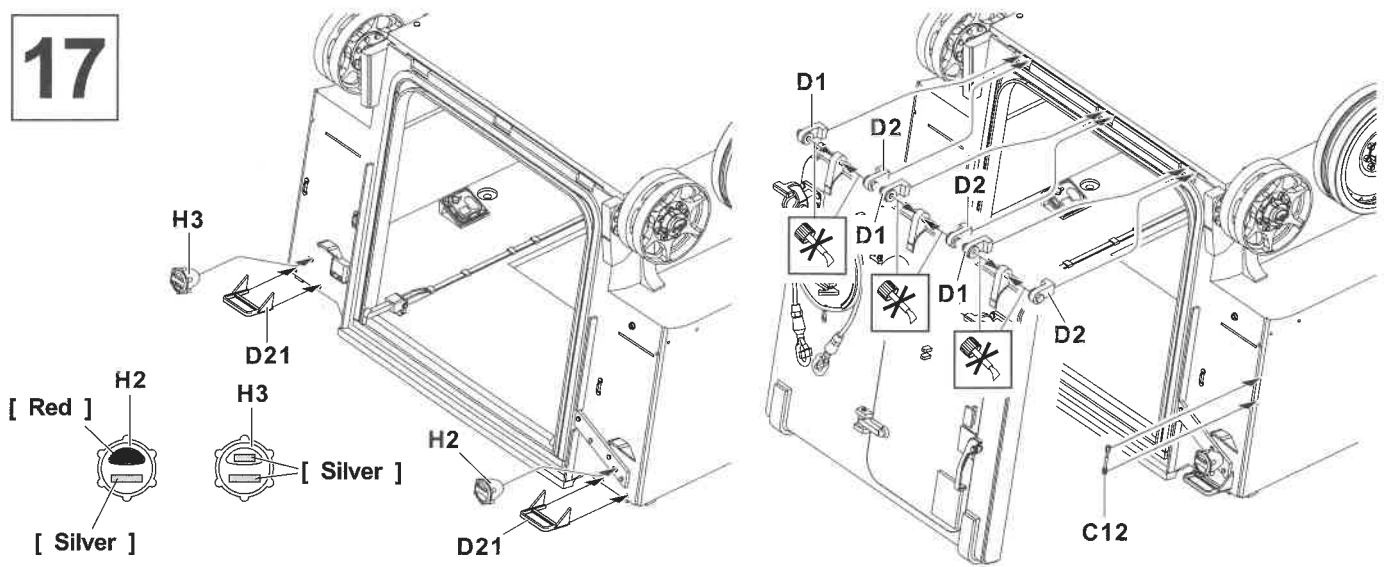
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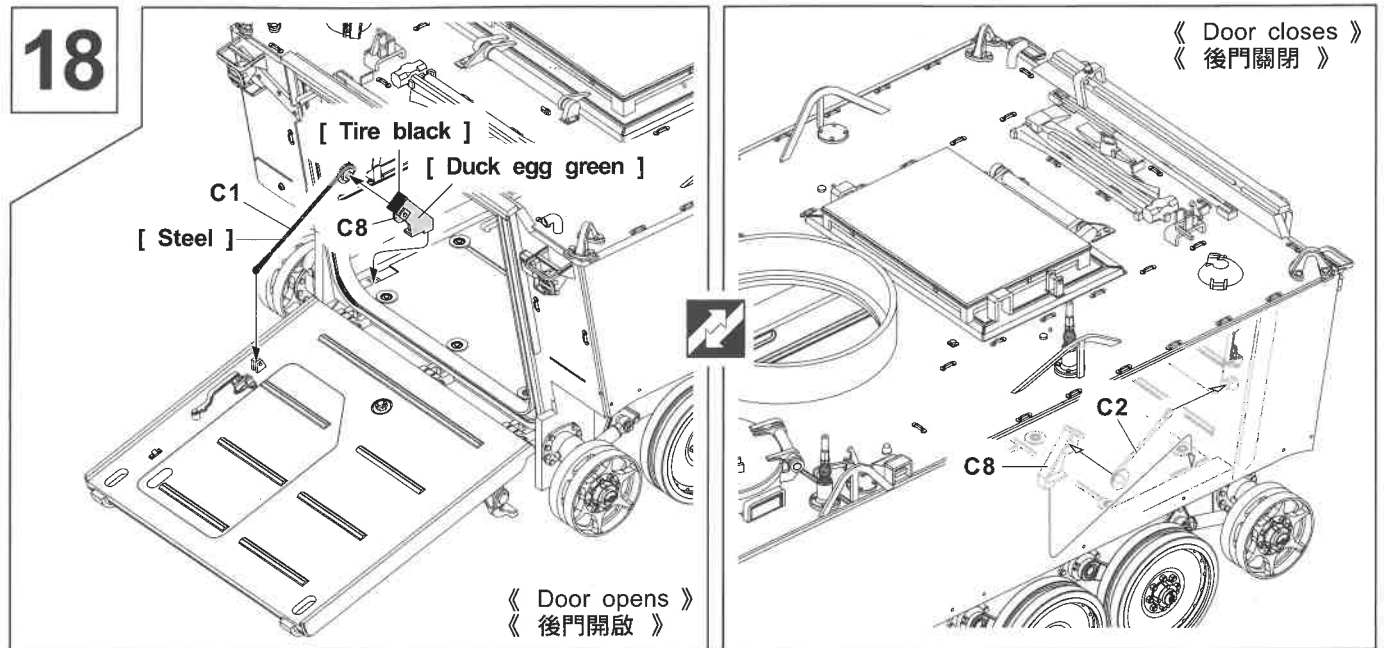
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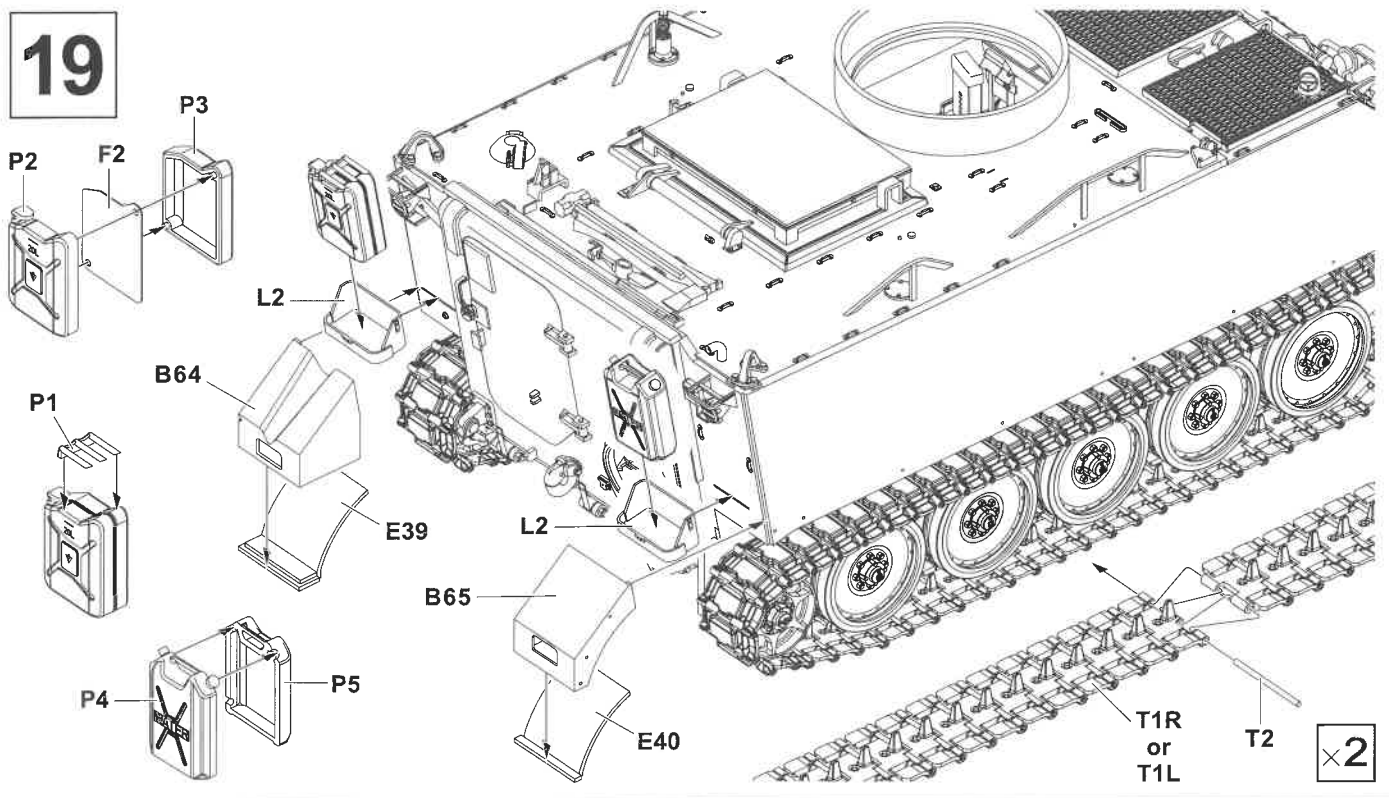
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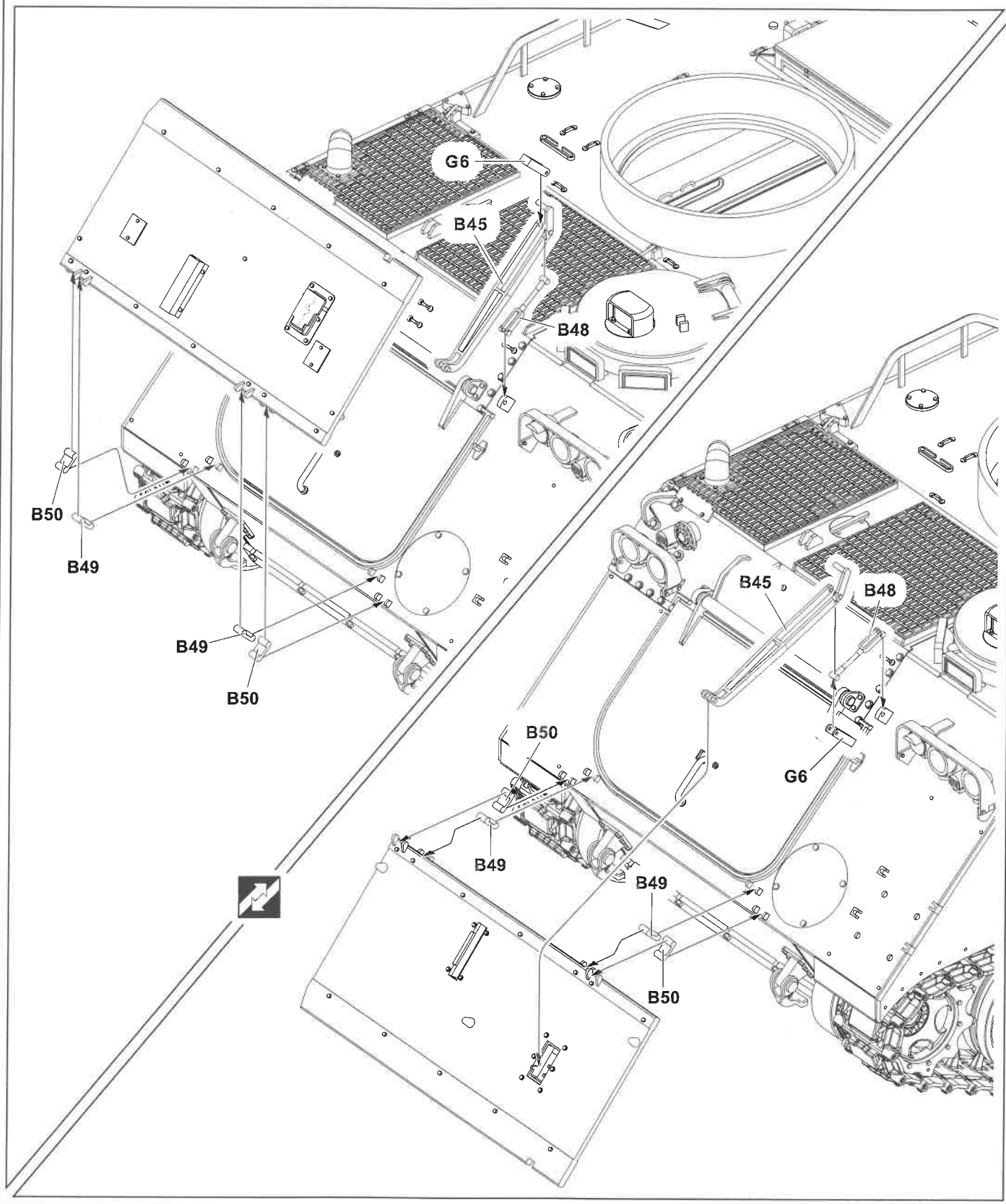
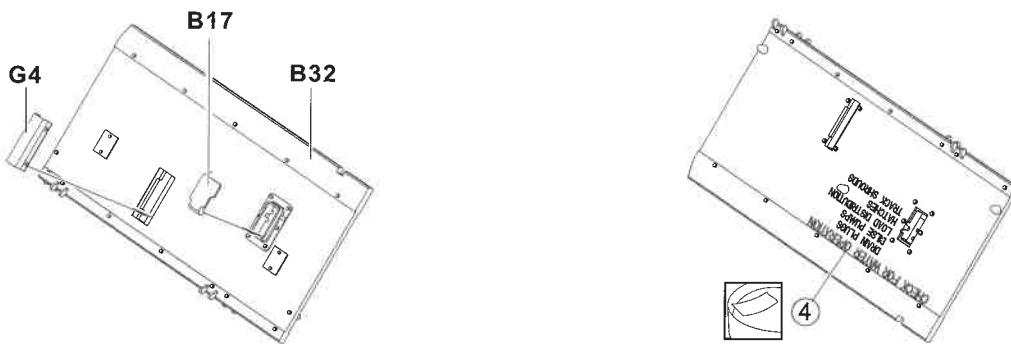
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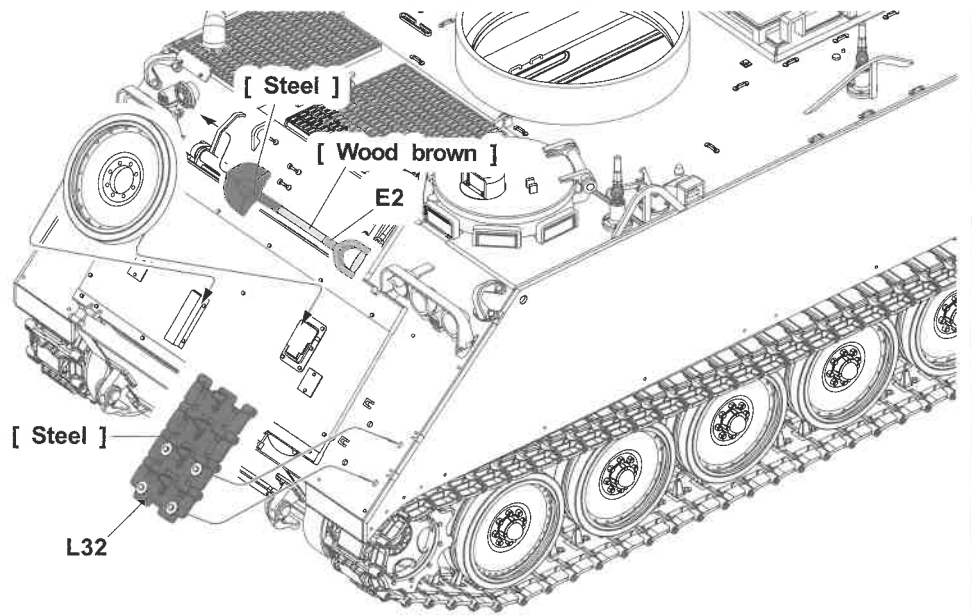
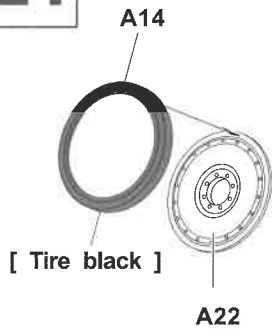
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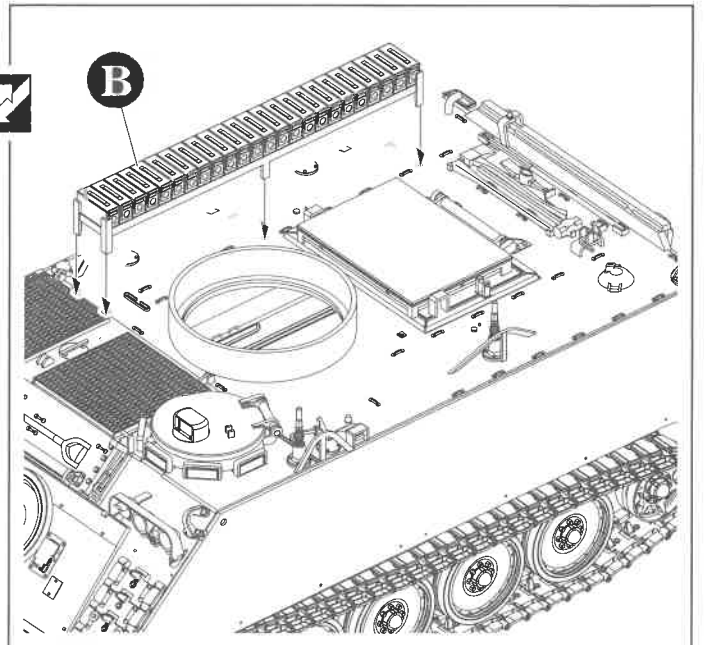
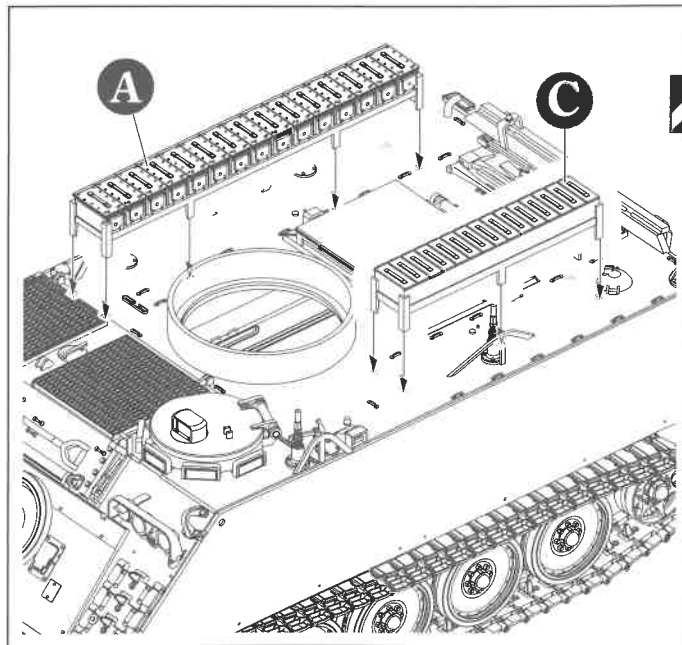
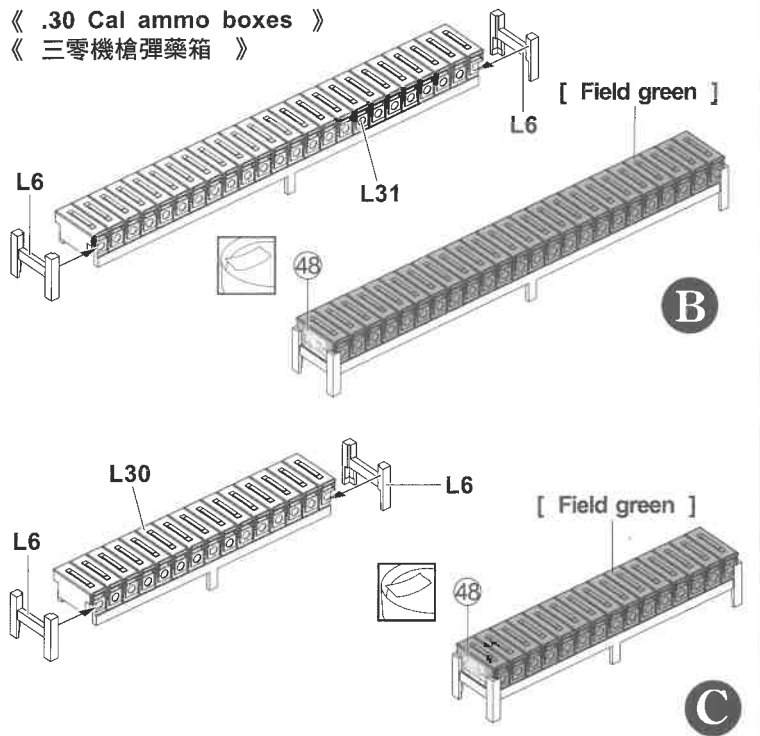
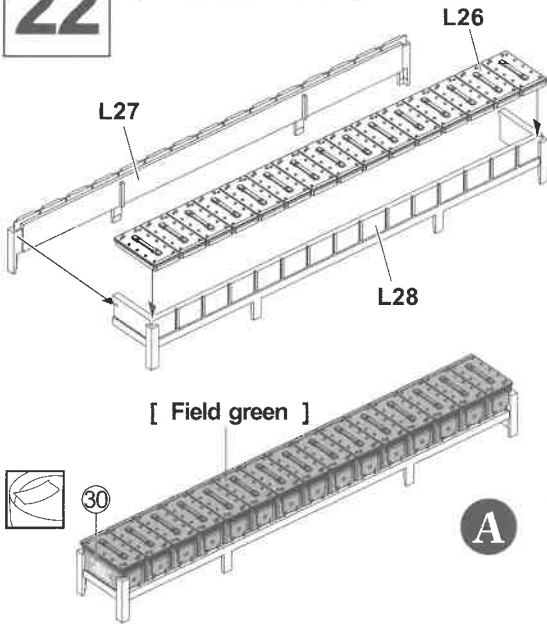
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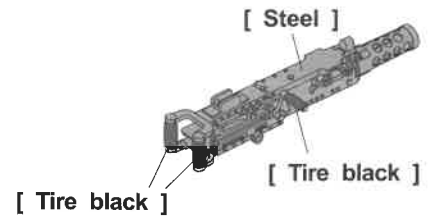
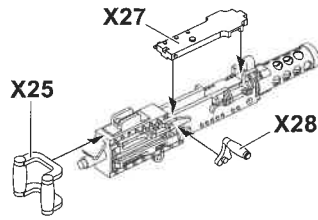
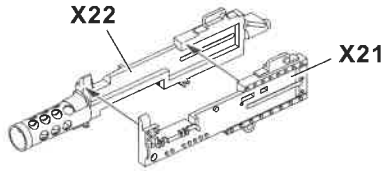
《 .50 Cal ammo boxes 》
《 五零機槍彈藥箱 》

《 .30 Cal ammo boxes 》
《 三零機槍彈藥箱 》

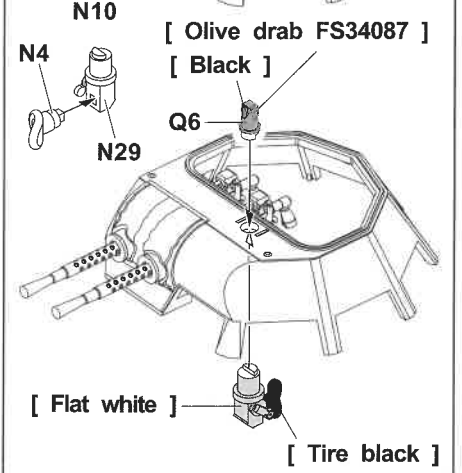
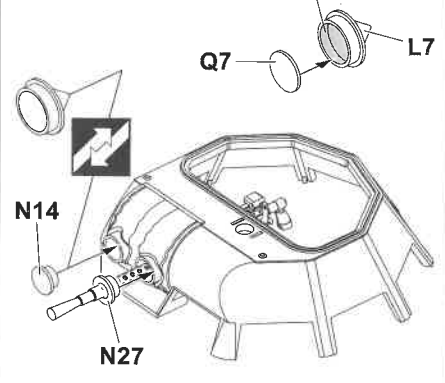
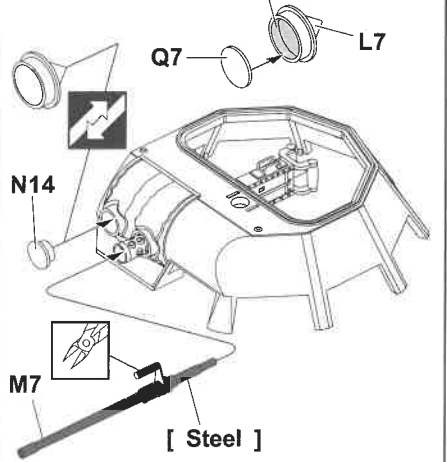
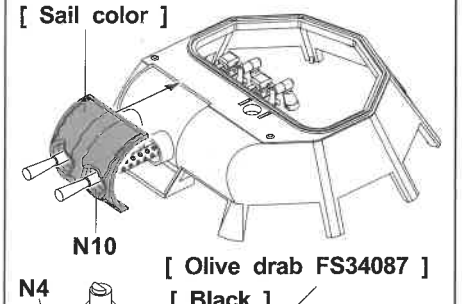
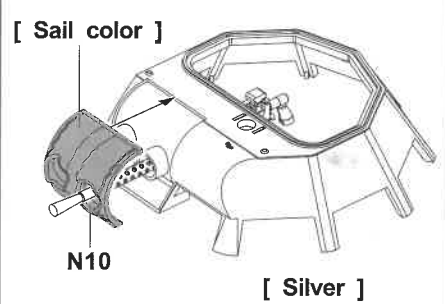
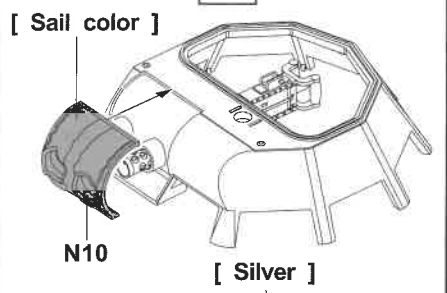
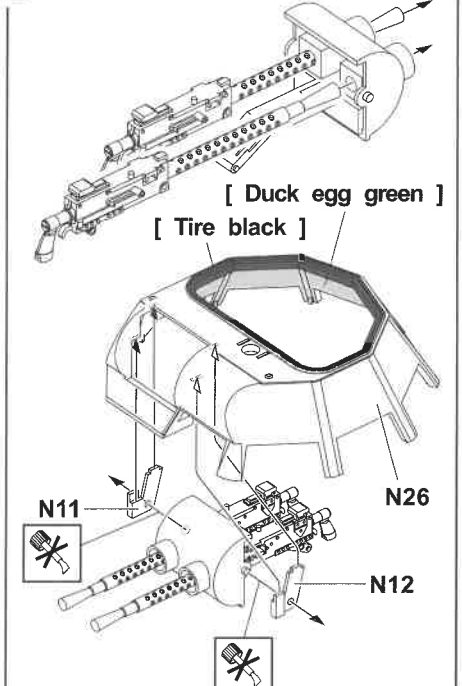
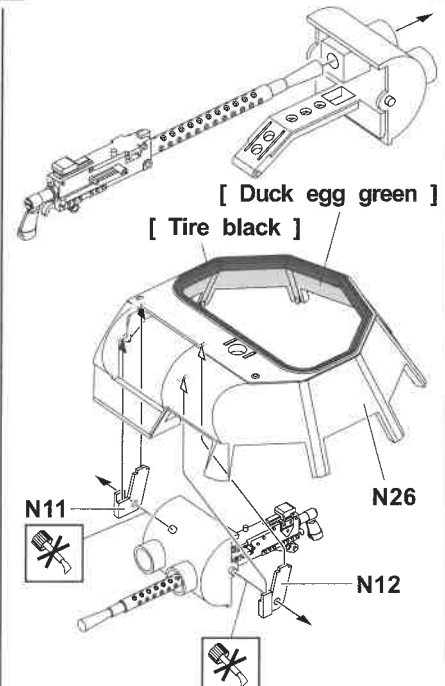
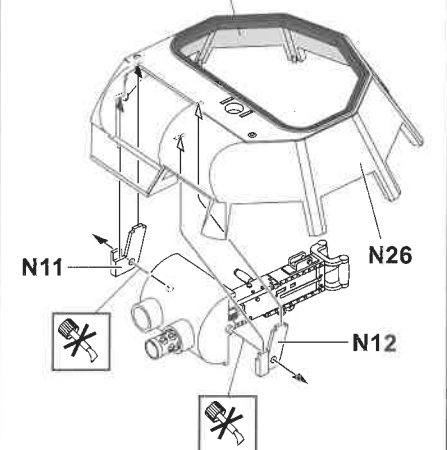
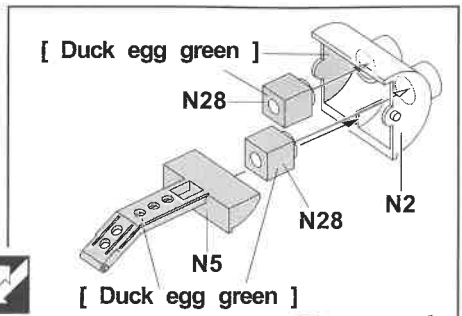
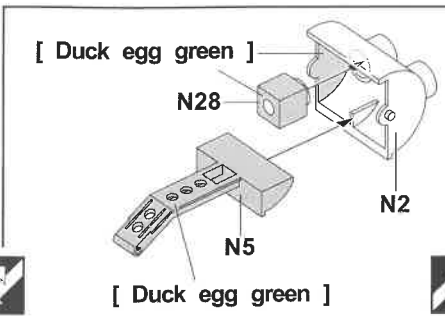
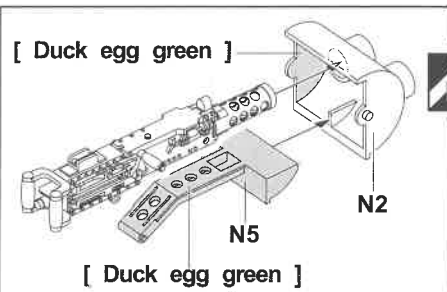
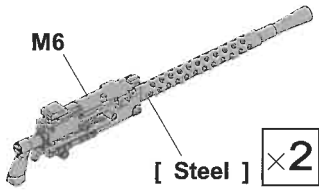


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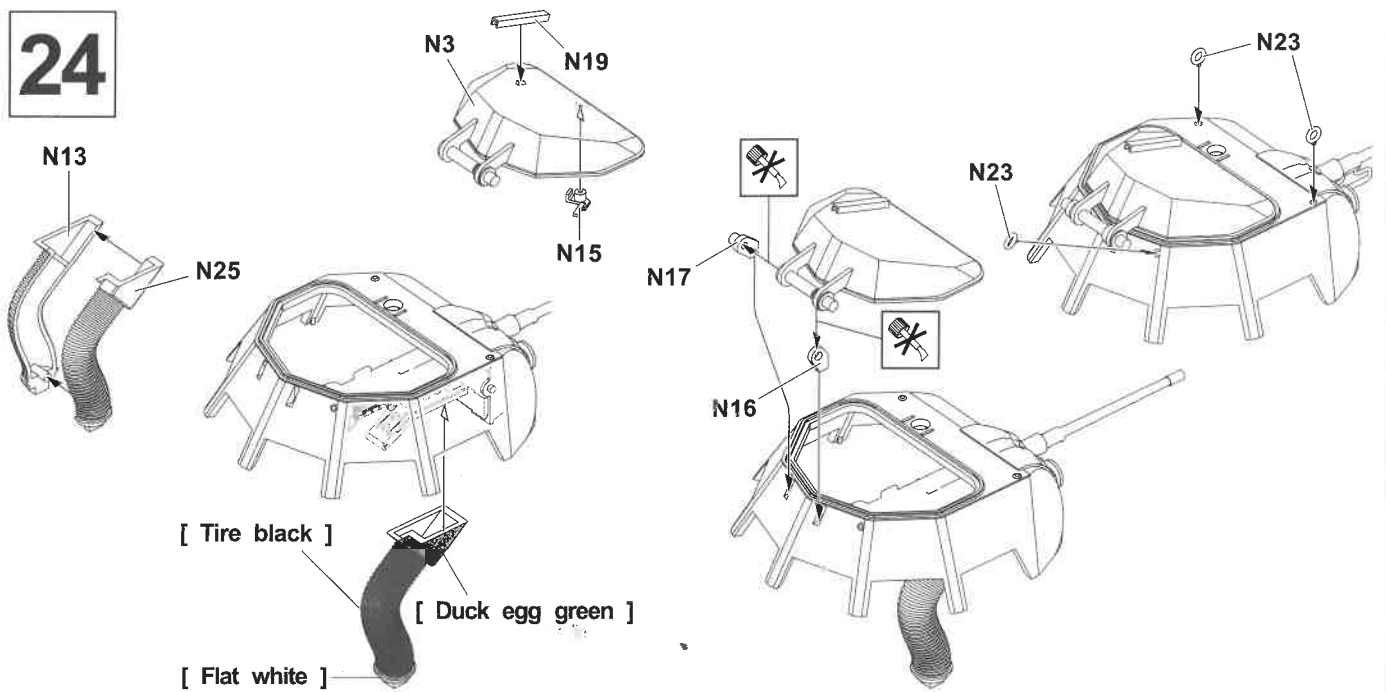
《 M2, .50 Cal machine gun 》



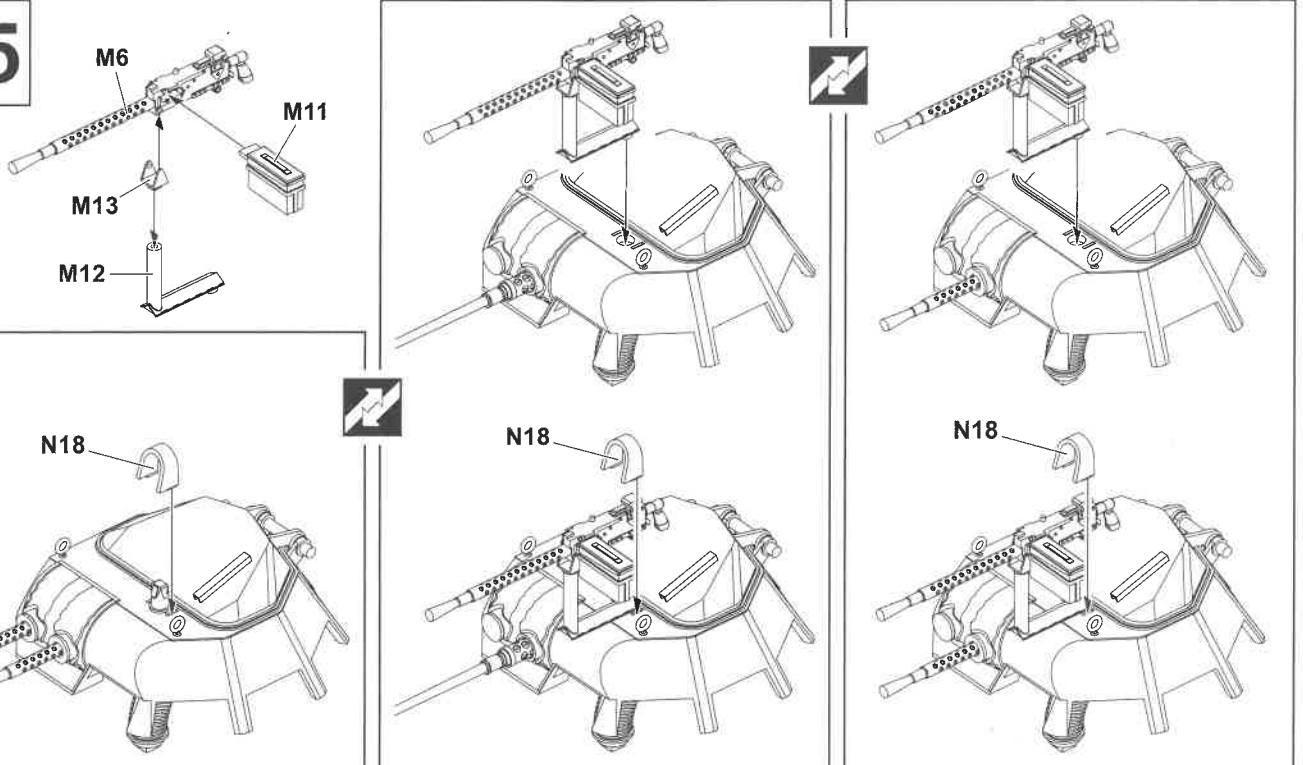
《 M1919, .30 Cal machine gun 》



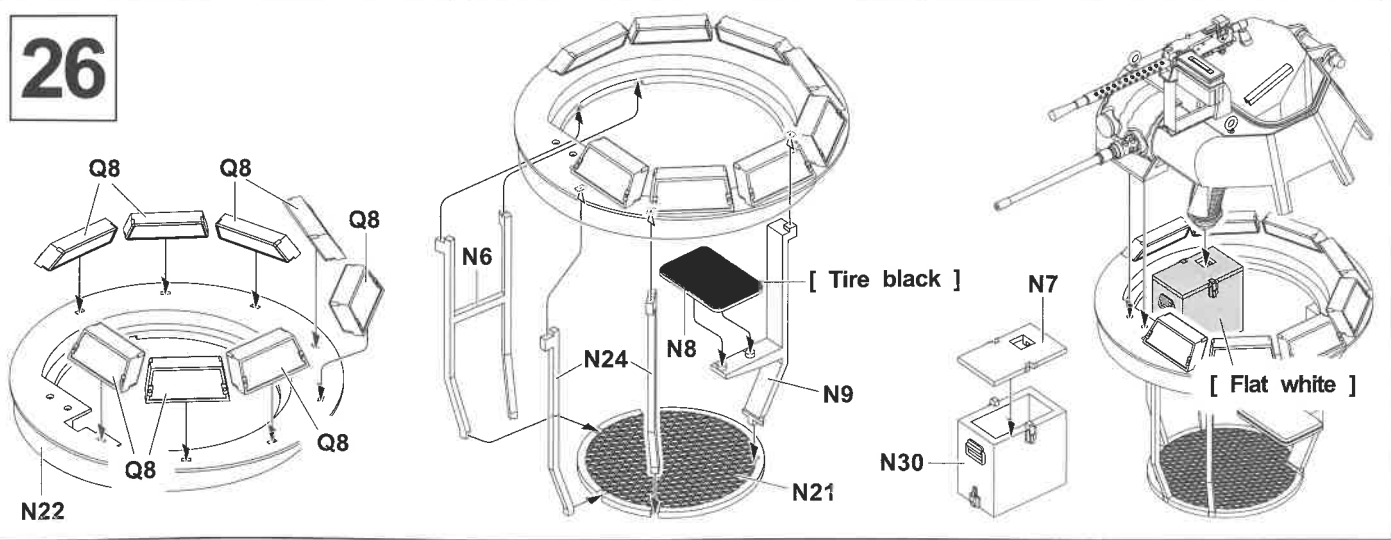
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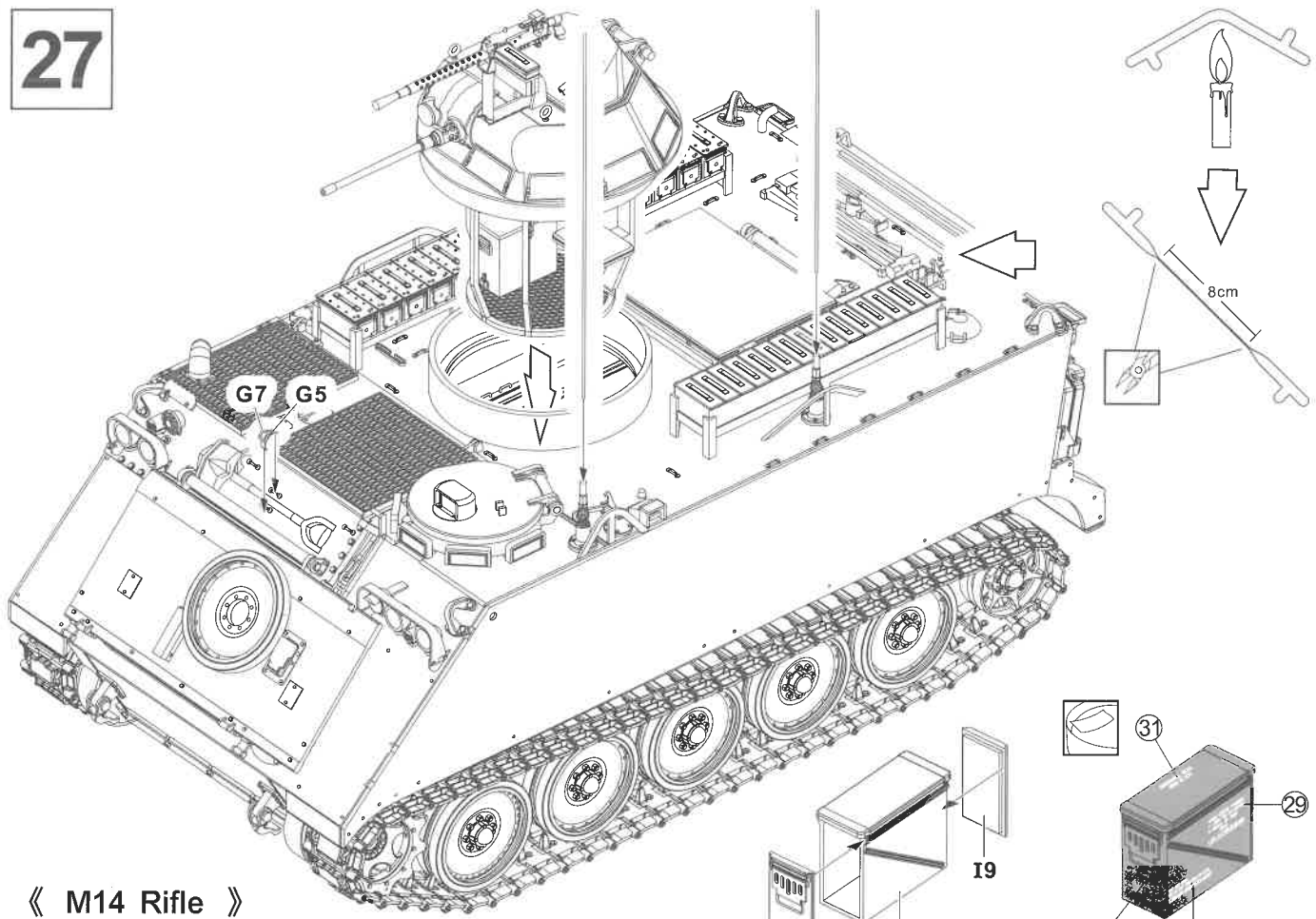


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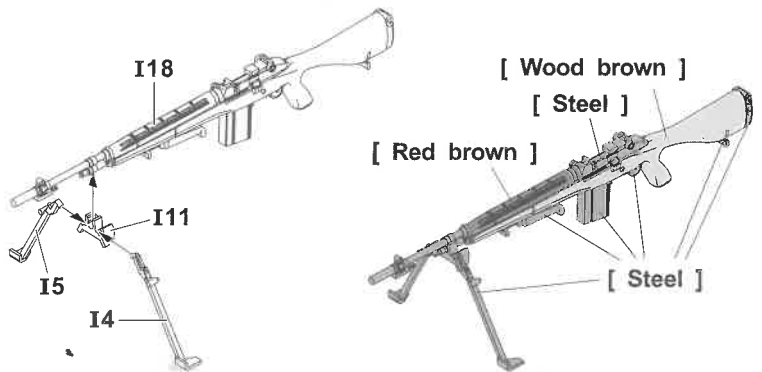




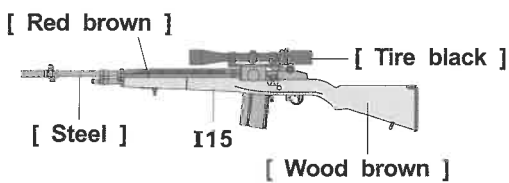
《 M14 Rifle 》



《 M14E2 Light Machine Gun 》



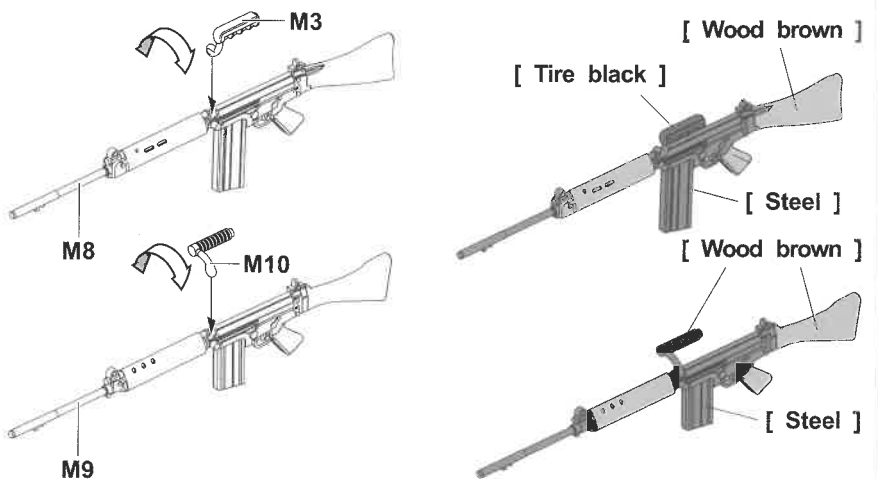
《 M21 Sniper Weapon System 》



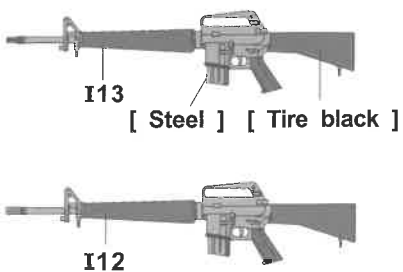
《 XM177 Submachine Gun 》



《 L1A1 Self-loading rifle 》

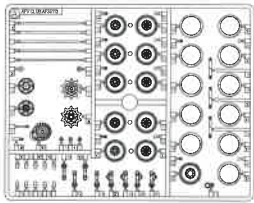


《 M16A1 Assault Rifle 》

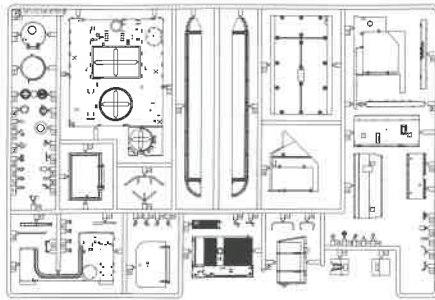


PARTS LIST 零件表

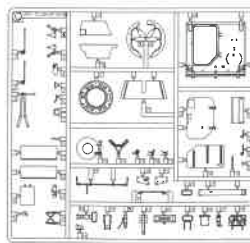
A X2 AF 35113



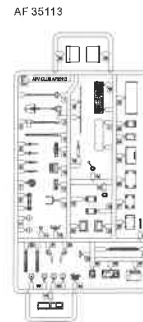
B X1 AF 35113



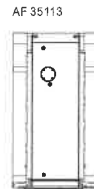
C X1 AF 35113



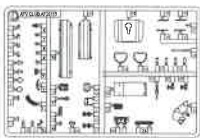
E X1 AF 35113



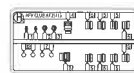
K X1 AF 35113



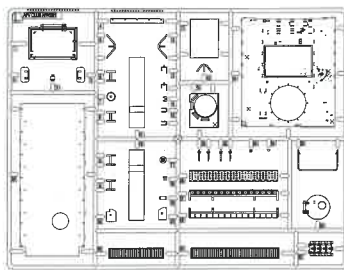
D X2 AF 35113



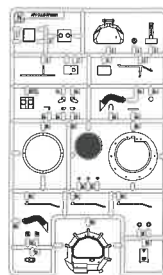
H X1 AF 35113



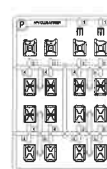
L X1 AF 35291



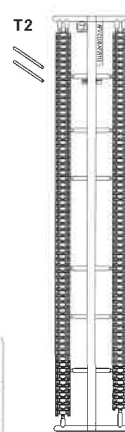
N X1 AF 35291



P X1 AF 35291



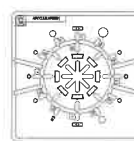
T X1 AF 35113



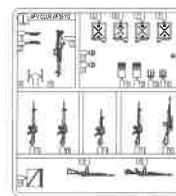
M X1 AF 35291



Q X1 AF 35291



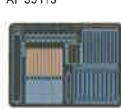
I X2 AF 35113



F X1 AF 35291



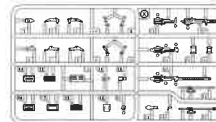
G X1 AF 35113



J X1 AF 35291



X X1 AF 35246



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.

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AF 35291 零件補充申請表

申請人姓名 地址 電話

- AF 35113-A ——— NT\$ 380
- AF 35113-B ——— NT\$ 360
- AF 35113-C ——— NT\$ 270
- AF 35113-D ——— NT\$ 280
- AF 35113-E ——— NT\$ 300
- AF 35291-F ——— NT\$ 200
- AF 35113-G ——— NT\$ 200
- AF 35113-H ——— NT\$ 180
- AF 35113-I ——— NT\$ 280
- AF 35291-J ——— NTS 160
- AF 35113-K ——— NTS 180
- AF 35291-L ——— NTS 240
- AF 35291-M ——— NT\$ 150
- AF 35291-N ——— NT\$ 200
- AF 35291-P ——— NT\$ 120
- AF 35291-Q ——— NT\$ 150
- AF 35113-T ——— NT\$ 280
- AF 35246-X ——— NTS 180

+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 _____

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



AF 35291 Parts Replacement Form

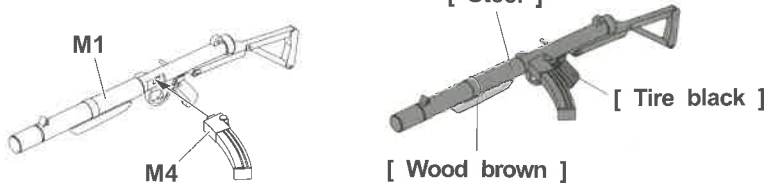
- AF 35113-A
- AF 35113-B
- AF 35113-C
- AF 35113-D
- AF 35113-E
- AF 35291-F
- AF 35113-G
- AF 35113-H
- AF 35113-I
- AF 35113-J
- AF 35113-K
- AF 35291-L
- AF 35291-M
- AF 35291-N
- AF 35291-P
- AF 35291-Q
- AF 35113-T
- AF 35246-X

Reason for replacement: Missing

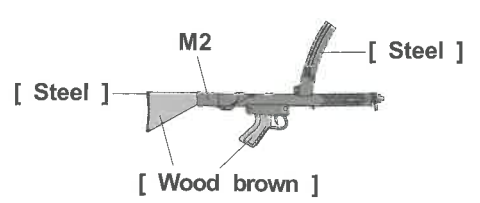
Broken

Signature: _____

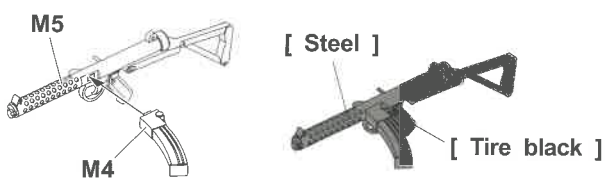
《 L34A1 Sterling SMG 》



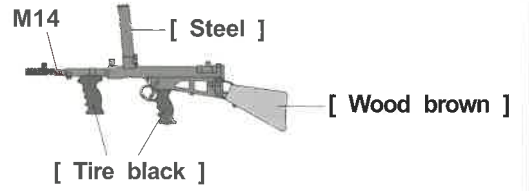
《 F1 Submachine gun 》



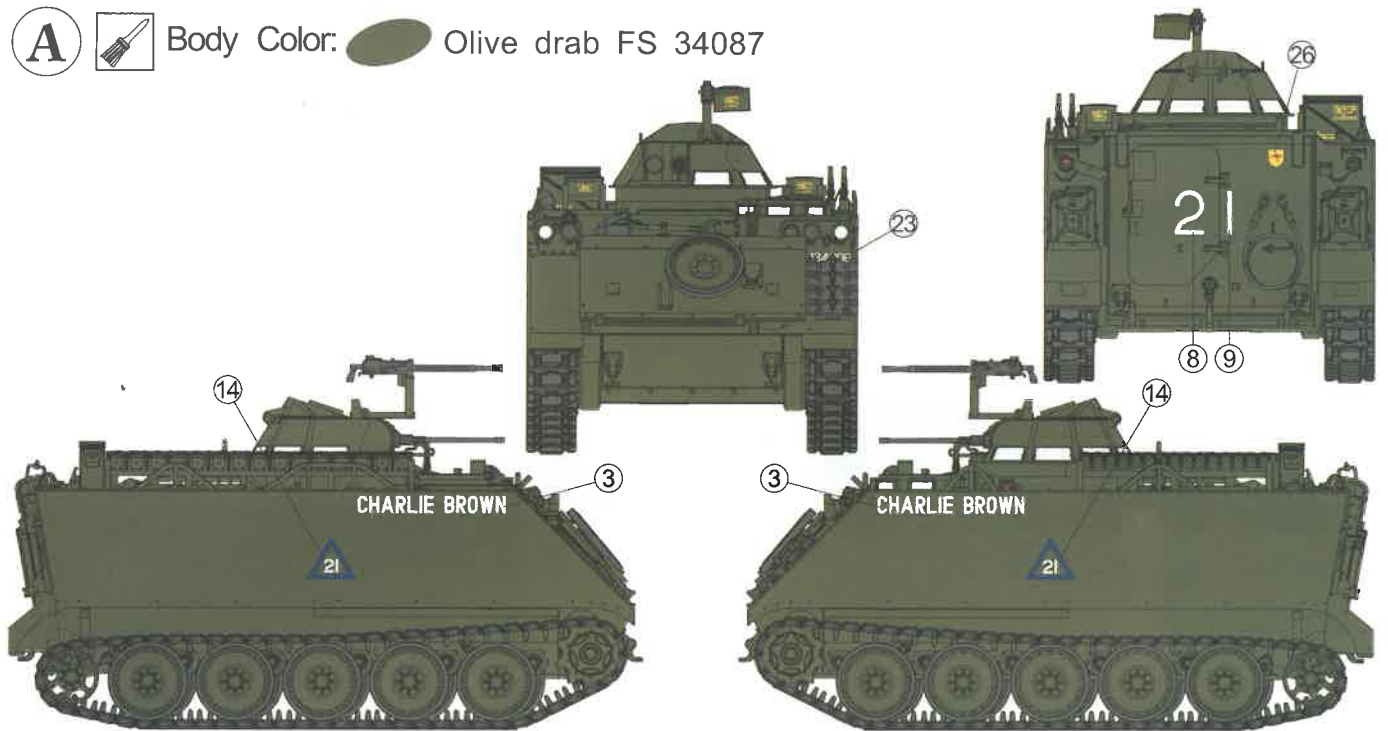
《 L2A1 Sterling SMG 》



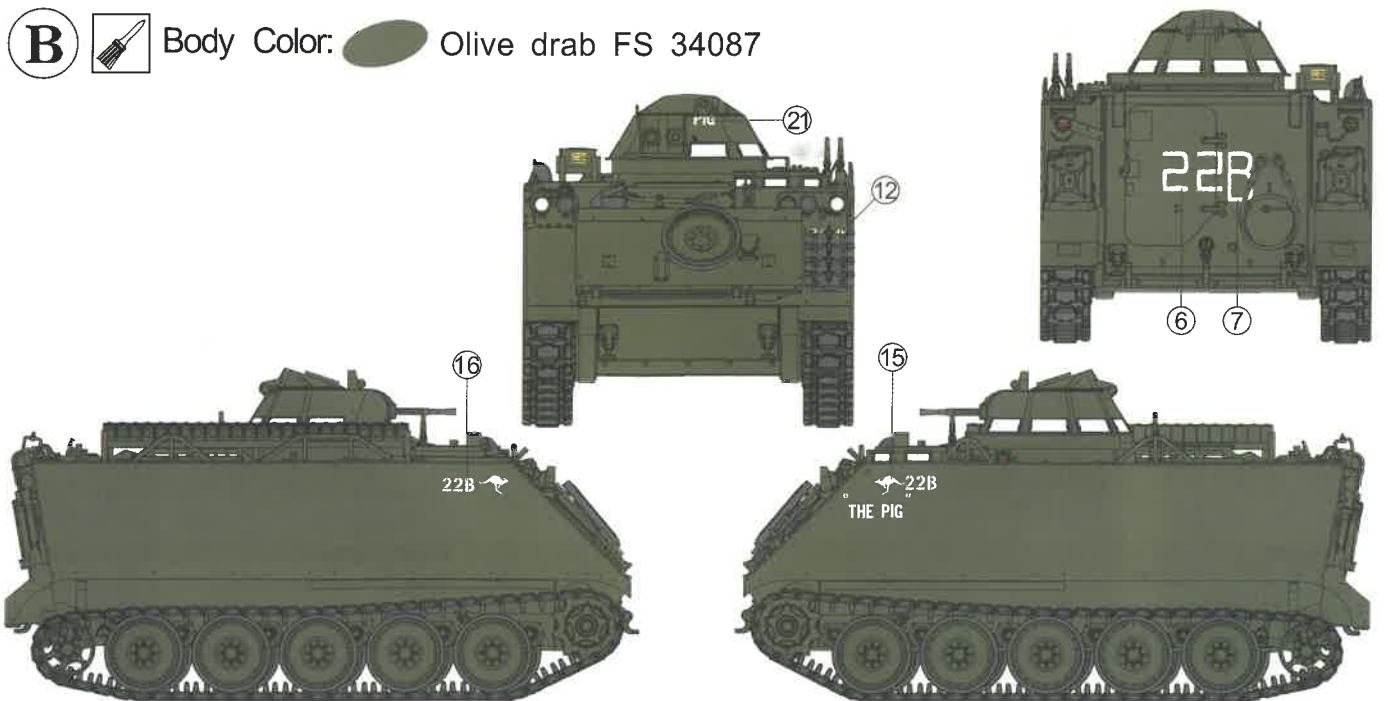
《 Owen gun 》



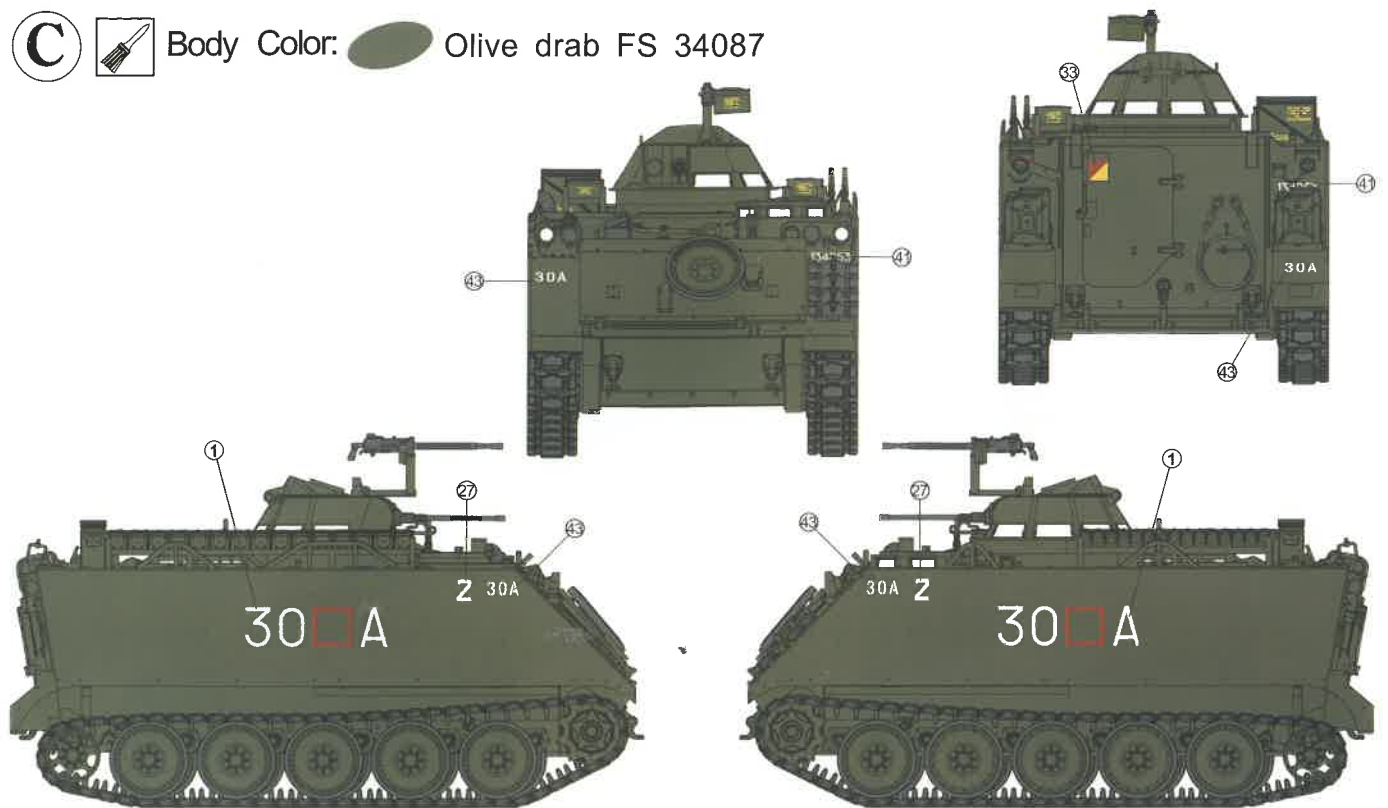
A  Body Color:  Olive drab FS 34087



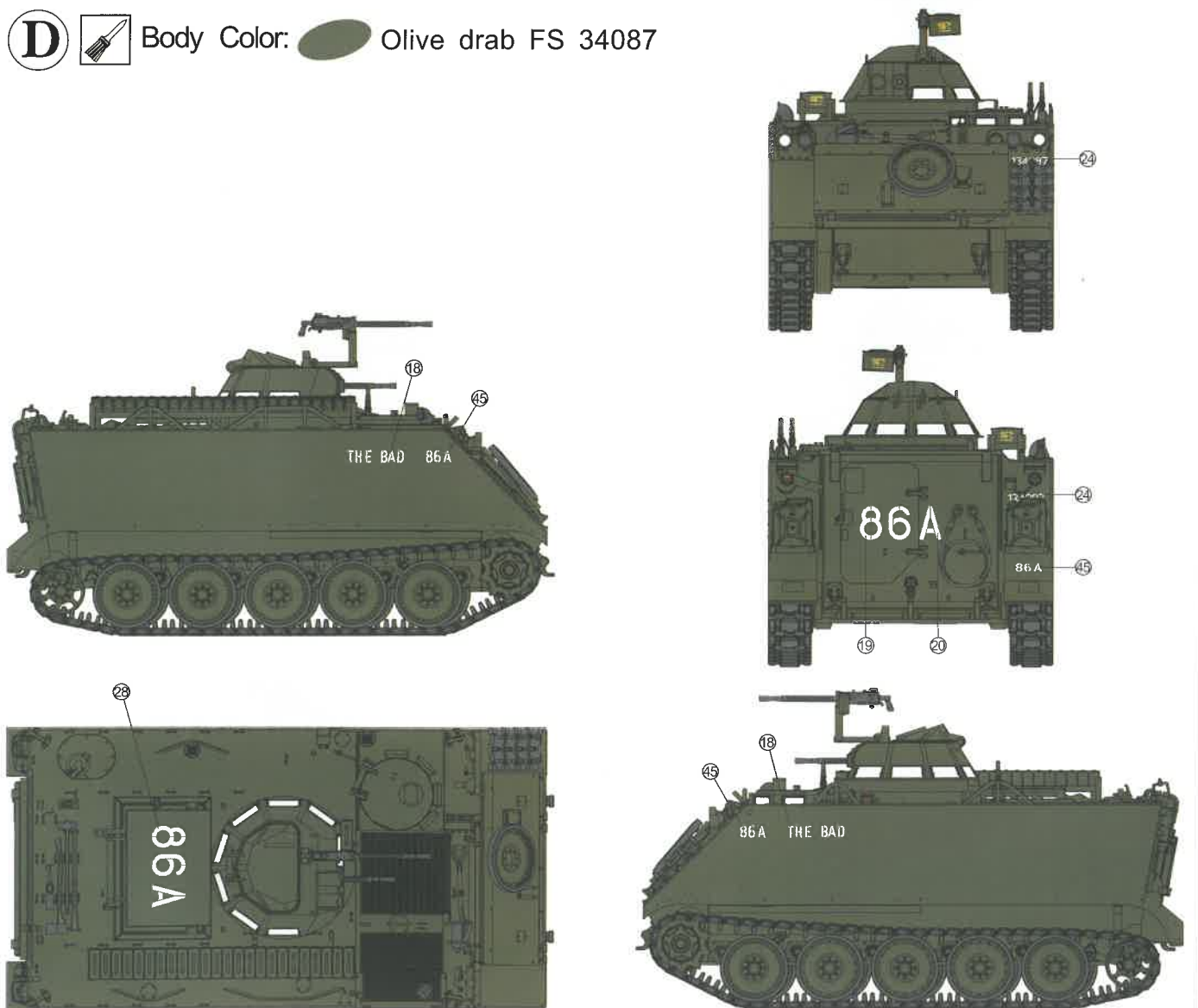
B  Body Color:  Olive drab FS 34087



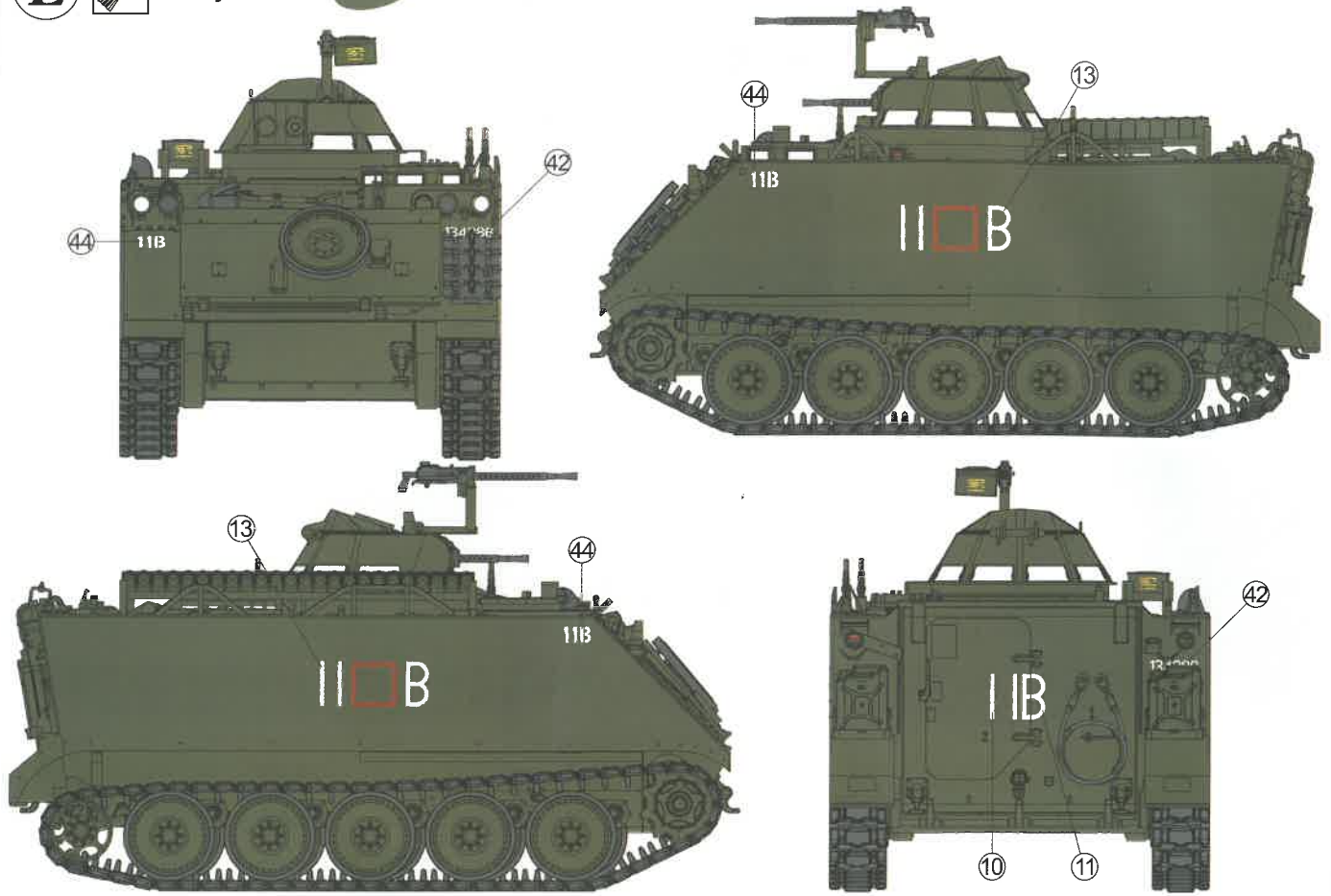
C  Body Color:  Olive drab FS 34087



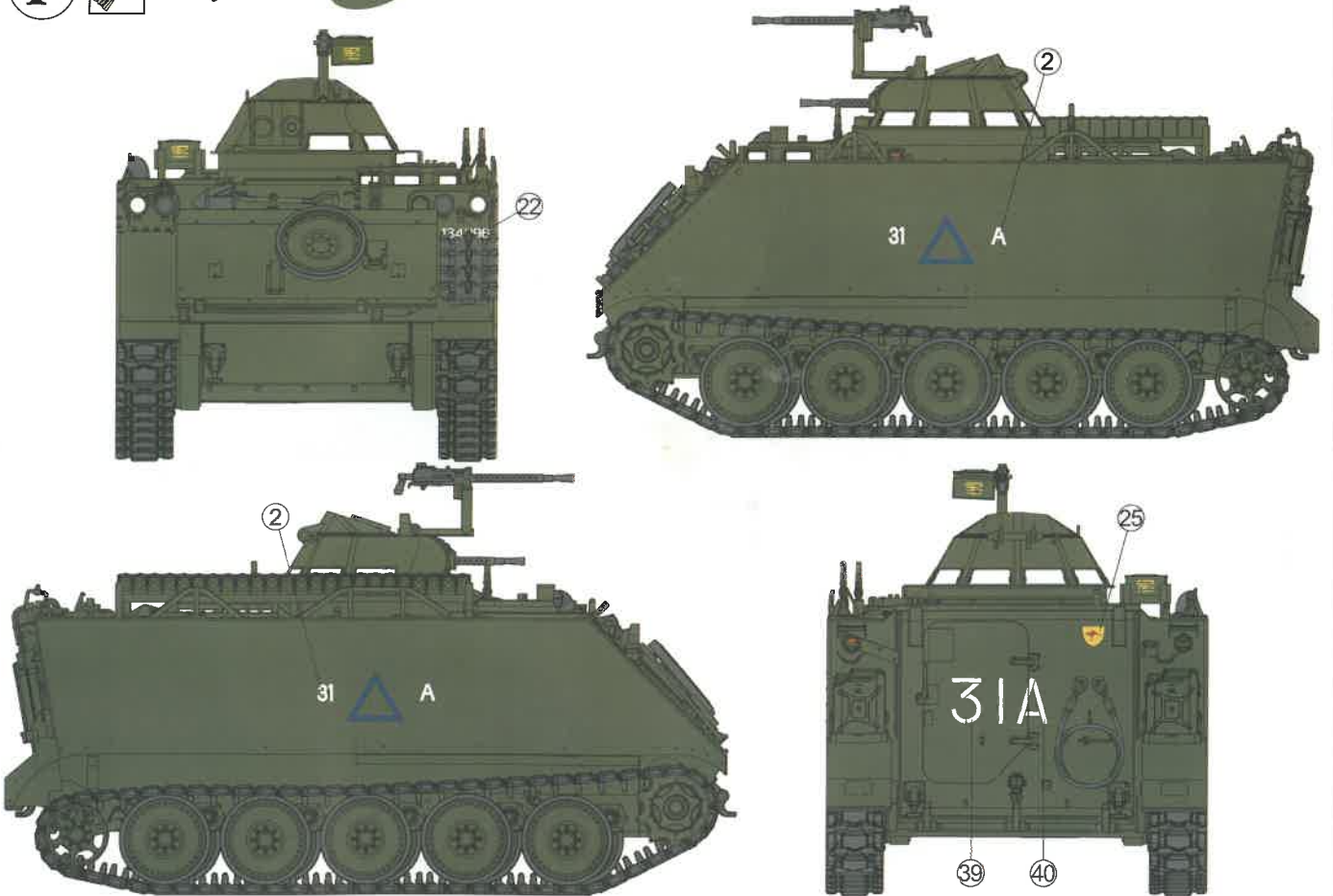
D  Body Color:  Olive drab FS 34087



E  Body Color:  Olive drab FS 34087



F  Body Color:  Olive drab FS 34087



30 □ A △ △ CHARLIE BROWN 2 | 2E !B | E 3
CHARLIE BROWN

30 □ A 86 A 22B 22B THE PIG PIG

11 □ B 86 A THE BAD THE BAD

11 □ B 30A 30A 30A 86A 86A 86A 11B 11B 11B