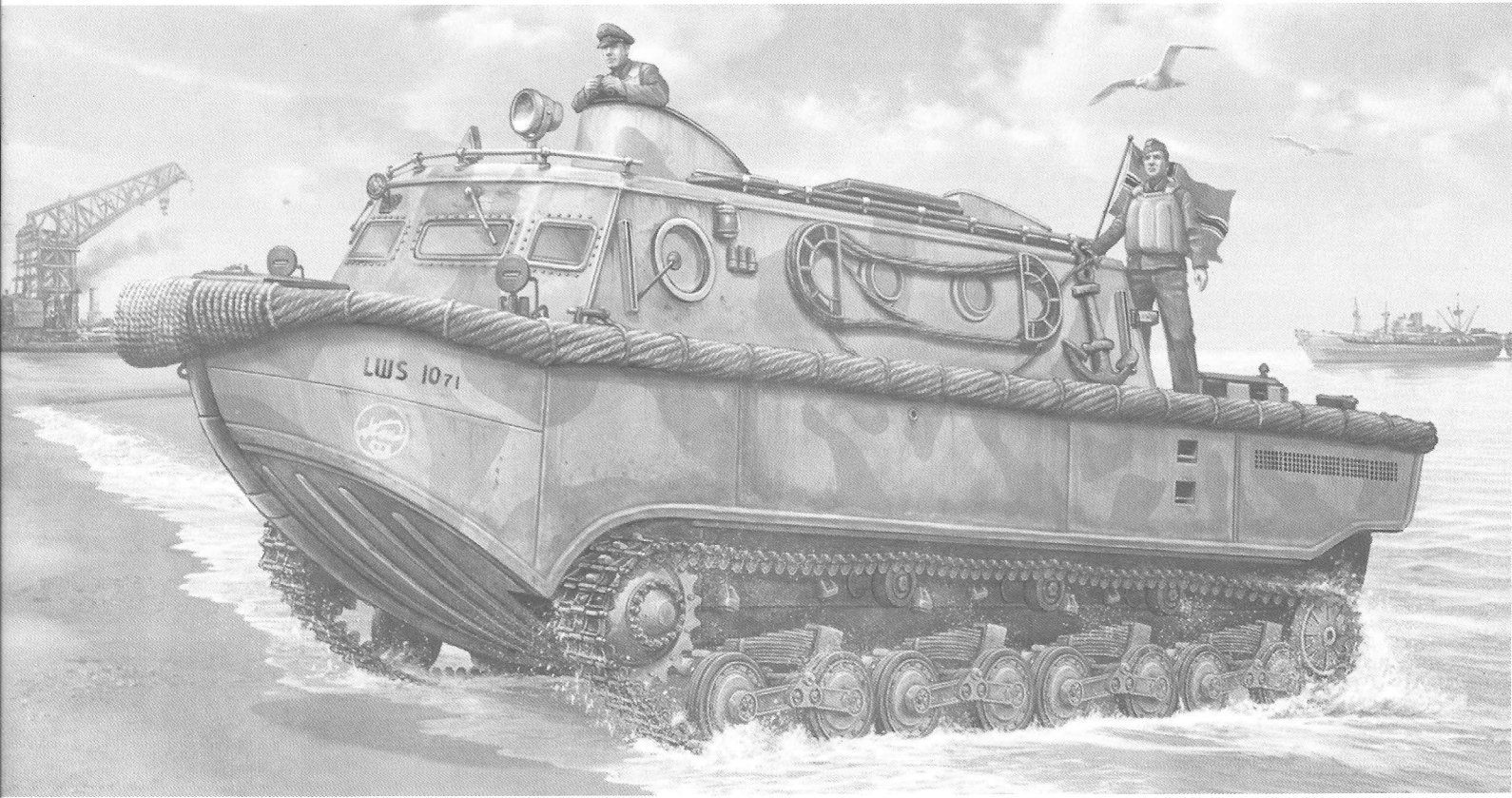


Bronco Models

LAND-WASSER-SCHLEPPER (MIDDLE PRODUCTION)

德軍水陸兩棲運輸車(中期生產型)

1/35 SCALE



In 1936, Rheinmetall-Borsig AG received an order from the German army general staff to develop a fully-tracked amphibious tractor. After working with various other firms, the Land-Wasser-Schlepper was built. Powered by a Maybach HL120 V12 engine, the LWS could achieve 35km/hr on road and 12km/hr in water. The total weight was 17 tons and up to 20 soldiers could be accommodated. The normal function of LWS was as a tug boat to be used during amphibious landings. In this role the LWS would tow an 18,000 kg capacity floating trailer. This trailer could carry supplies and equipment, including vehicles as large as the SdKfz.9 half-track. The trailer could be towed on shore by the LWS and maneuvered for unloading. Development of the LWS proceeded quite slowly until 1940, when Operation SEELOWE (Invasion of England) was being planned. The seven pre-production LWS vehicles were extensively tested for amphibious assault across the English Channel. However testing showed that they could only be used in calm in-shore waters. The lack of armor protection was also a concern. When SEELOWE was canceled early in 1941 the LWS project was also ended. The LWS did serve in Russia and was employed during river crossings.

Information by Phil Greenwood

Im Jahre 1936 erhielt die Rheinmetall-Borsig AG eine Anweisung der deutschen Wehrmacht zur Entwicklung einer amphibischen Vollketten Zugmaschine. Bis zur Planung der Invasion von England 1940 (Operation Seelöwe), gingen die Arbeiten nur schleppend voran. Dann folgten rasche und ausgiebige Tests der seit Kriegsbeginn existierenden Vorserienfahrzeuge. Mit der Absage der England-Invasion sank aber wieder das Interesse an den LWS. Die vorhandenen Muster wurden zur Eroberung von Inseln im Baltikum sowie in Russland eingesetzt. Vom technischen Standpunkt gesehen war der Land-Wasser-Schlepper trotz seiner plumpen Form und fehlenden Panzerung/Bewaffnung ein effektives und durchdachtes Fahrzeug. Der Einsatz war allerdings auf ruhige Gewässer oder küstennahe Regionen beschränkt. Die dreiköpfige Besatzung konnte 20 Passagiere befördern. Außerdem waren 3-achsige flache Anhänger zur Verschiffung von Ladegut bis 18 Tonnen oder z.B. eines SdKfz. 9 verfügbar.

© Michael Knoblich ACADEMY EUROPE

在 1936 年德國萊茵金屬集團收到軍方高層的指示要發展一種全履帶能水陸兩棲的運輸車。經過幾家屬下公司的努力總算成功生產出 LWS。該車由一台與四號坦克相同所使用之梅巴赫 HL120 V12 發動機所推動，陸上速度能達 35km/小時而水上速度則為 12km/小時。全車總重量為 17 噸並可搭乘 20 名兵員。

LWS 的設計主要是作為在登陸行動中拖曳浮艇及運輸裝備之用。直至 1940 年此種水陸兩棲的運輸車的發展仍很緩慢，當進攻英國的“海獅行動”要開展時，德軍手上才只有七台 LWS 可供操作橫渡英倫海峽之用。其經測試後 LWS 被發現並不適合在深水區操作，而且其裝甲薄弱也是其缺點之一。當“海獅行動”後來在 1941 年初被取消時，LWS 的發展也劃上了句號。雖然如此，餘下之 LWS 還是被送往東部戰線使用。

ILLUSTRATION 圖示說明:

CORRECT METHOD FOR APPLYING DECALS: HINWEISE ZUM ANBRINGEN DER DECALS : 正確使用水貼紙方法:

1. Clean model parts surface with wet cloth. Entsprechende Stellen am Modell feucht reinigen.
將需要貼上水貼紙之部位表面擦乾淨。
2. Cut out the decal parts and dip them in cold water for 15 ~20 seconds. Decal ausschneiden und für 15-20 Sek. ins Wasser legen.
將所需之貼紙剪下泡在清水裏約15至20秒。
3. Place it on correct position of the model kit. Decal an der richtigen Stelle auflegen.
將濕透之貼紙取出置放於正確之位置旁。
4. Slide off the decal from the base paper on to the model kit surface with a cotton stick. Decal mit Wattestäbchen festhalten und Papier darunter wegziehen.
用棉花棒輕推貼紙表面使其從底紙滑出至模型表面之正確位置。
5. When decal get dry then complete. Decal mit Papiertuch andrücken und trocknen.
待其自然乾透後即完成。

ICON INSTRUCTION: 圖標說明:



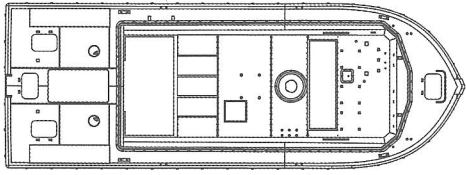
COLOR SUGGESTION: FARBTABELLE: 塗裝指引:

Color 塗料表	Gunze Sangyo	Hobby Color	Humbrol	Tamiya
Red Brown Rot Braun 紅褐色	H-47	C-41	160	XF-64
Silver Silber 銀色	H-8	J-8	11	X-11
Flat White Matt Weiss 消光白	H-11	C-62	34	XF-2
Dark Yellow Dunkel Gelb 深黃	H-78	C-38	66	XF-62
Dark Green Dunkel Grün 深綠	H-36	C-17	30	XF-61
Tire Black Reifen Schwarz 輪胎黑	H-77	C-137	85	XF-1
Steel Metall/Stahl 黑鐵色	H-18	C-28	53	/
Semi-Gloss Black 半光黑色 Schwarz Seidenmatt	/	C-82	/	/
Burnt Iron Metall Bruniert 燒鐵色	H-76	C-61	/	/
Wood Brown Holz Braun 木啡色	H-37	C-43	/	/
Field Grey Feld Grau 原野灰	H-48	C-52	/	XF-65
Flat Black Matt Schwarz 消光黑	H-12	C-33	33	XF-1
Light Grey Hell Grau 淺灰色	H-324	/	147	/
Blue Grey Blau Grau 藍灰色	H-42	/	79	/
Light Green Hell Grün 淺綠色	H-50	/	117	/
Red Rod 紅色	H-3	C-3	19	X-7

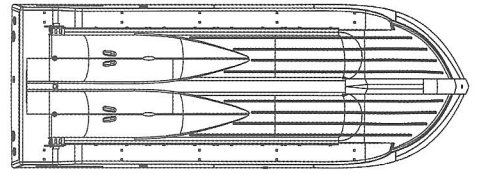
READ BEFORE ASSEMBLING: VOR ZUSAMMENBAU LESEN: 組裝必讀:

- Carefully Study instruction before assembling. Anleitung studieren und verständlich machen. 組裝前請閱讀清楚製作指引。
- Keep plastic model glue and tools away from children. Kleber, Farben, Werkzeuge und Plastiktüten von Kindern fernhalten. 膠水、油漆及工具勿讓小孩接觸。
- Do not use cement or paint near open flame or sparks. Kleber/Farbe nicht in Nähe von offenen Flammen. 膠水及油漆勿接觸火種。
- Do not work in closed room. Nur in ausreichend belüfteten Räumen arbeiten. 勿在密封地方製作模型。

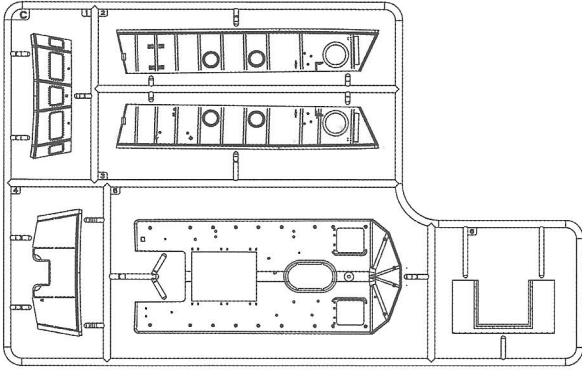
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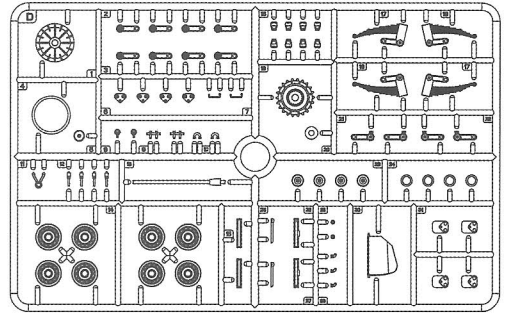
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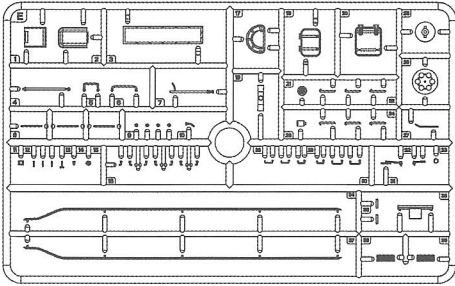
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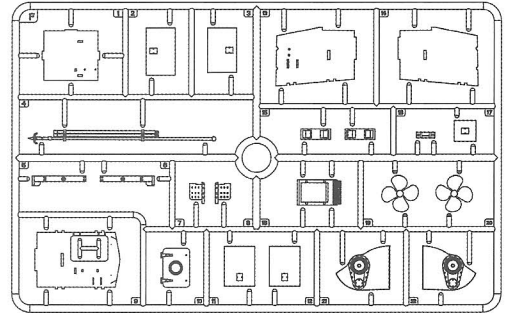
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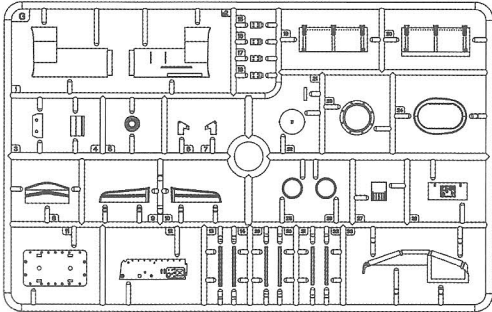
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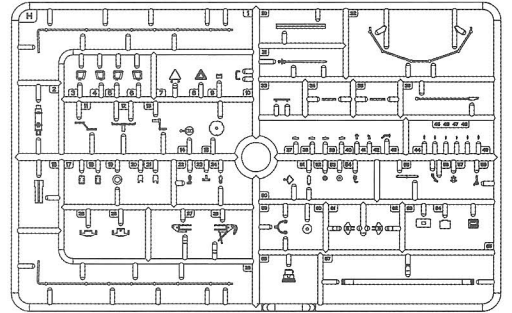
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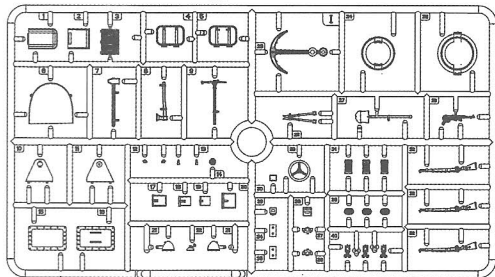
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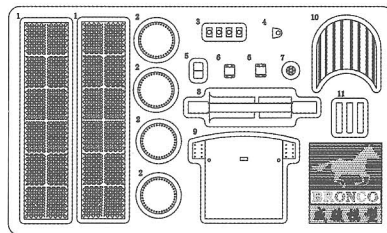
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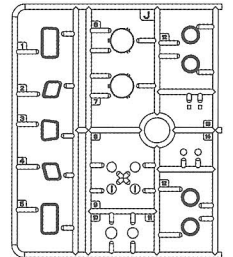
Ⓘ x1



Ⓢ x1



Ⓙ x1



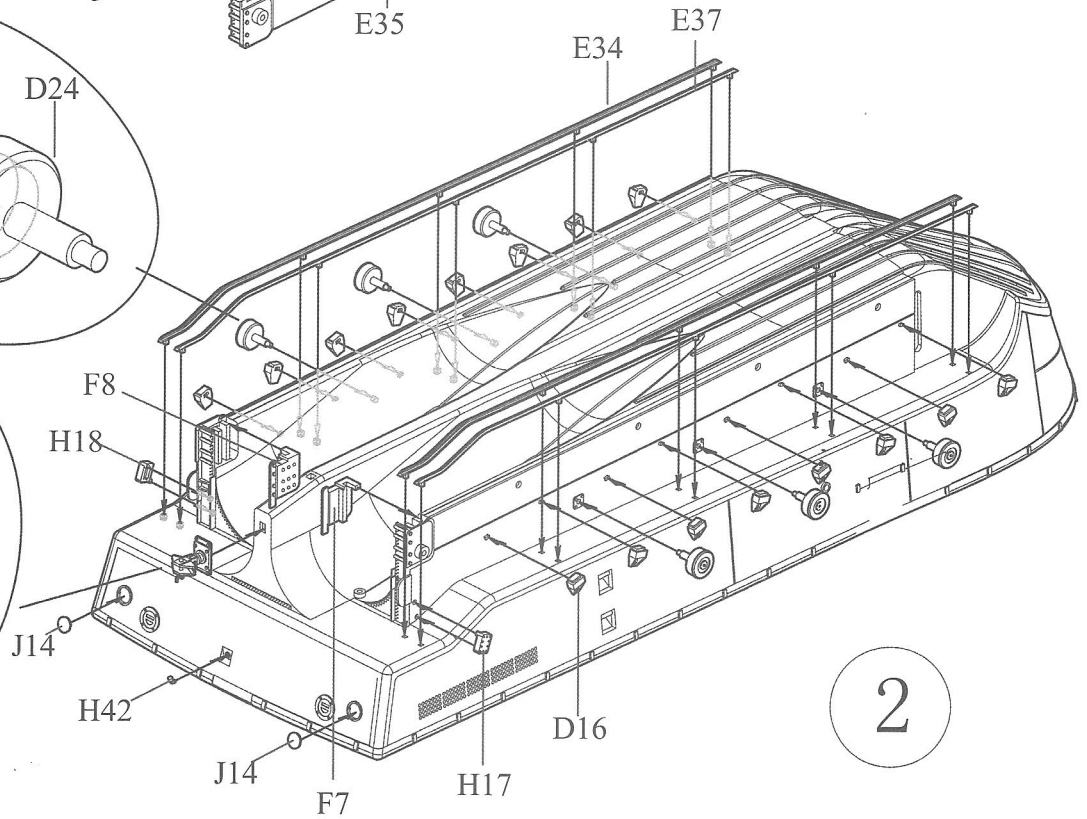
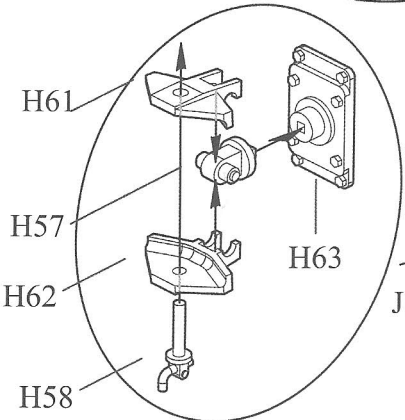
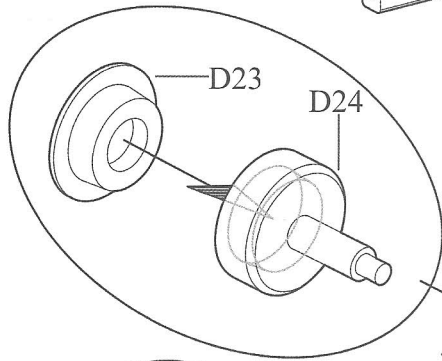
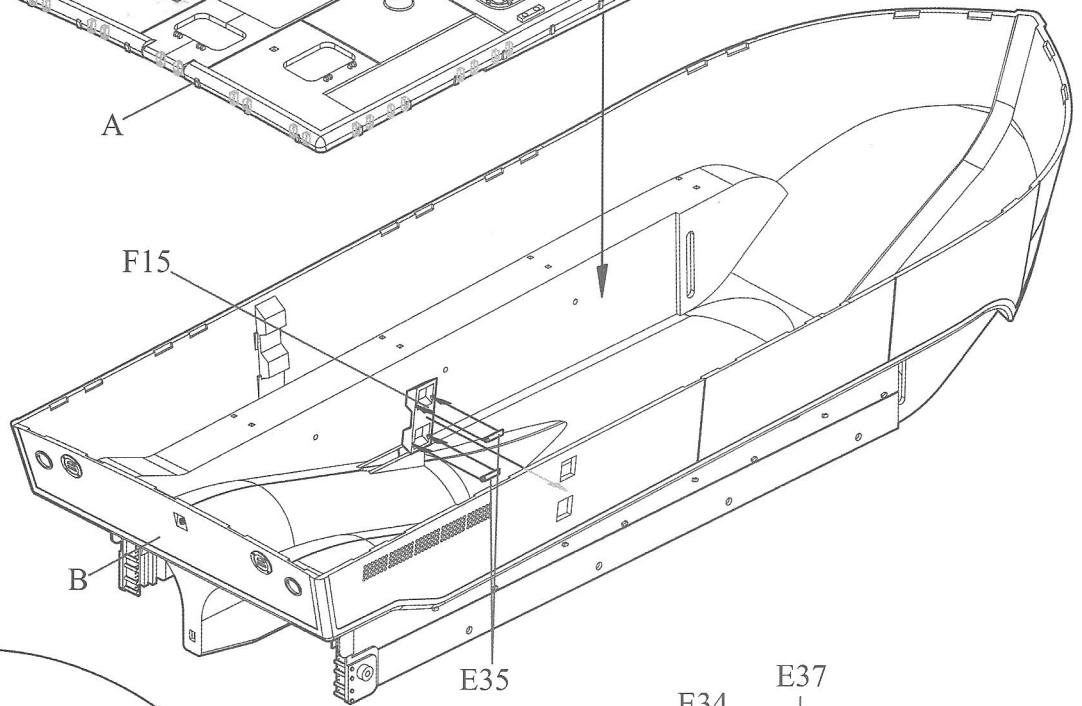
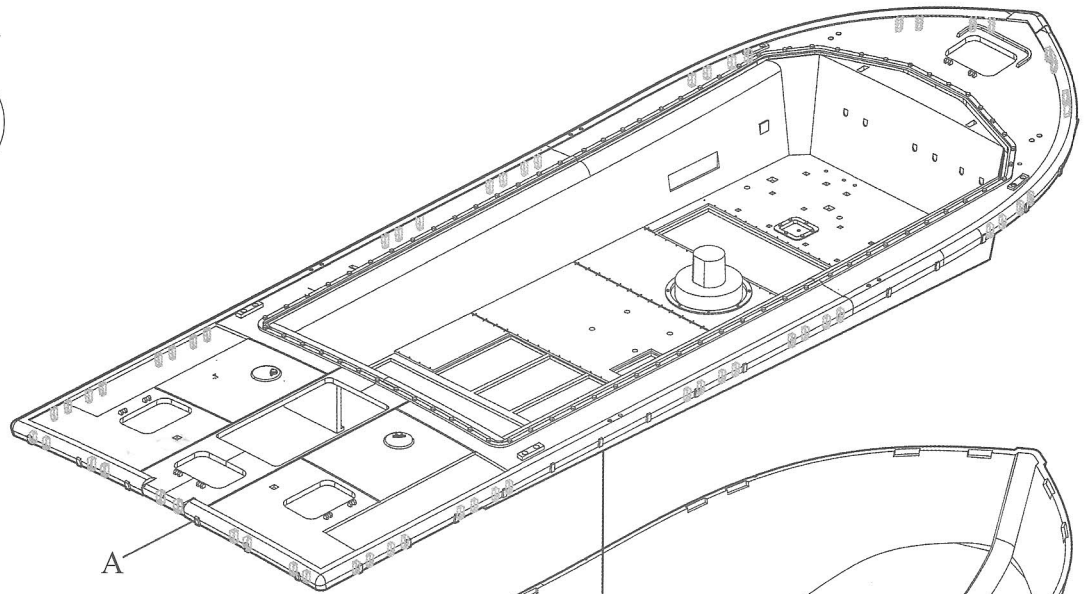
PE part no. 4 not available for this model

No. 4 沒用的 PE 零件

L&F Parts x 25



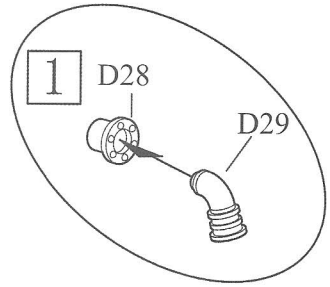
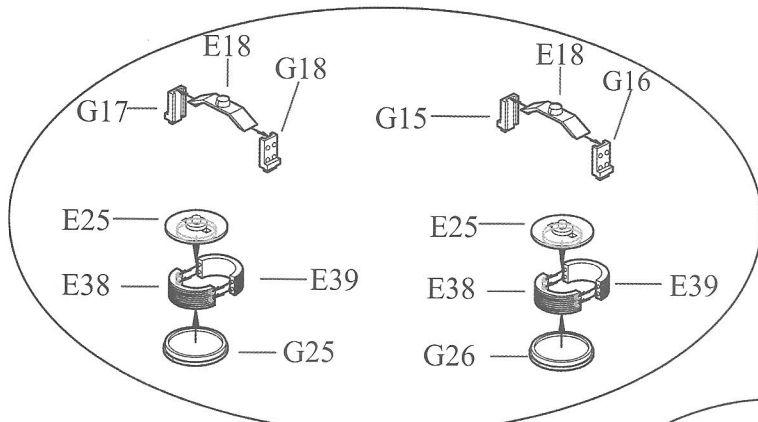
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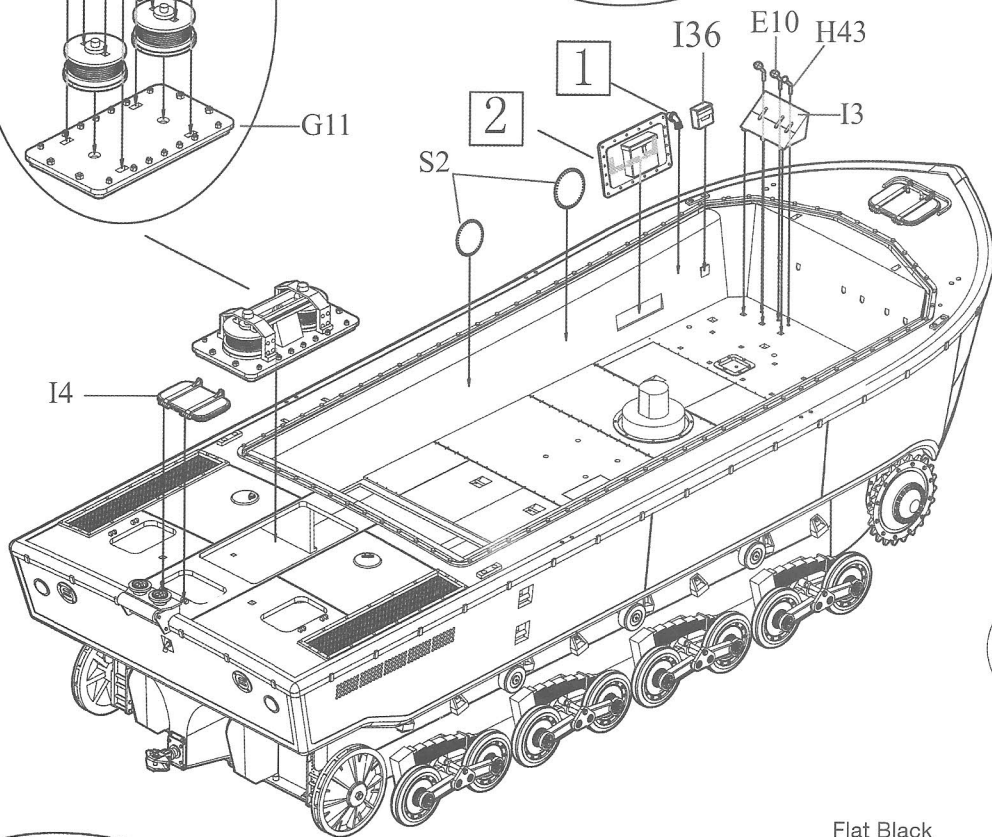
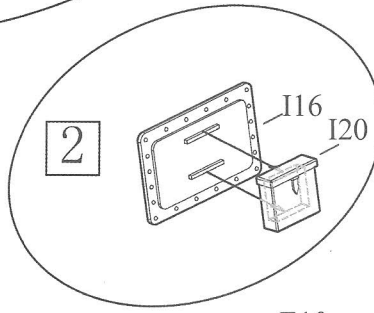
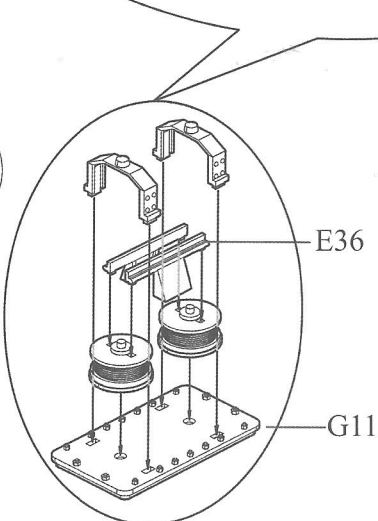
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8

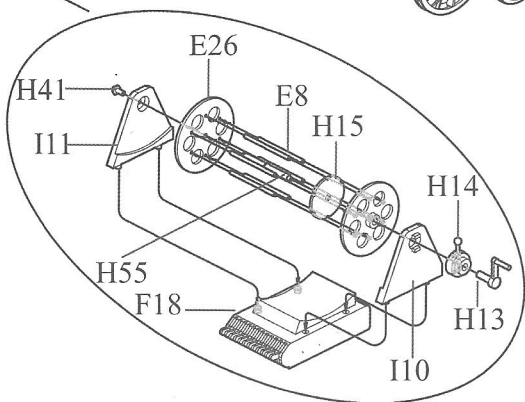


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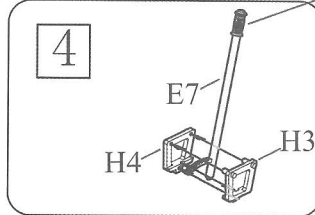
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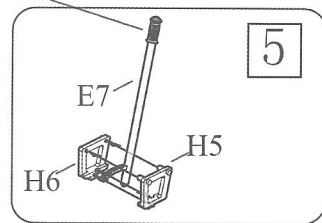


Flat Black
消光黑

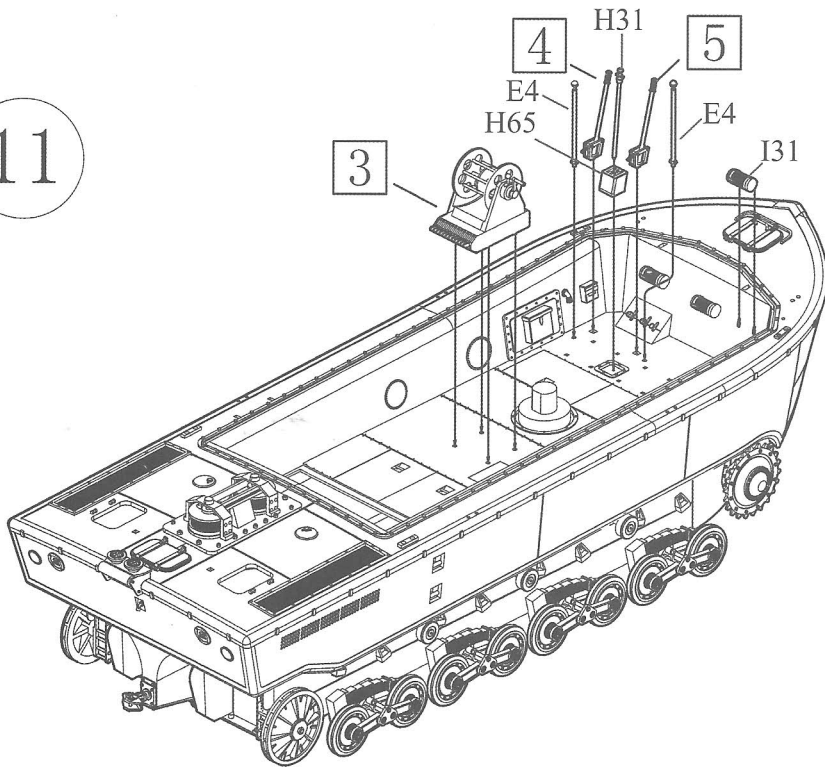
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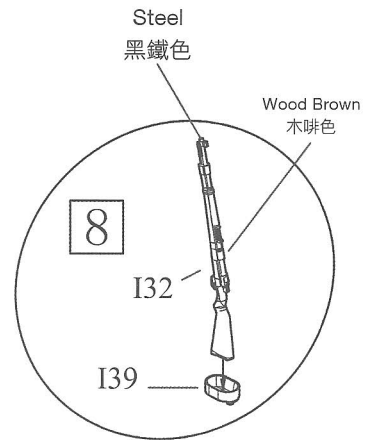
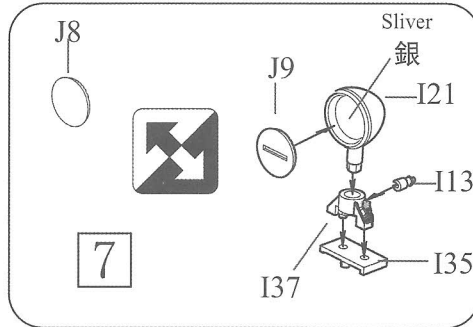
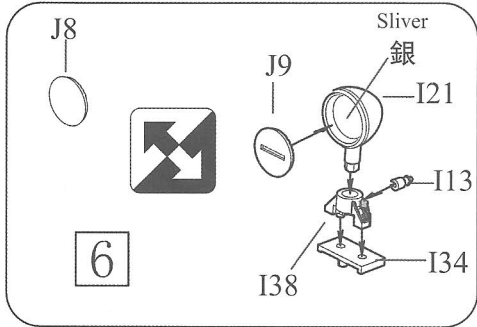
5



11



內構顏色：消光白色
Interior Colour: Flat White



12

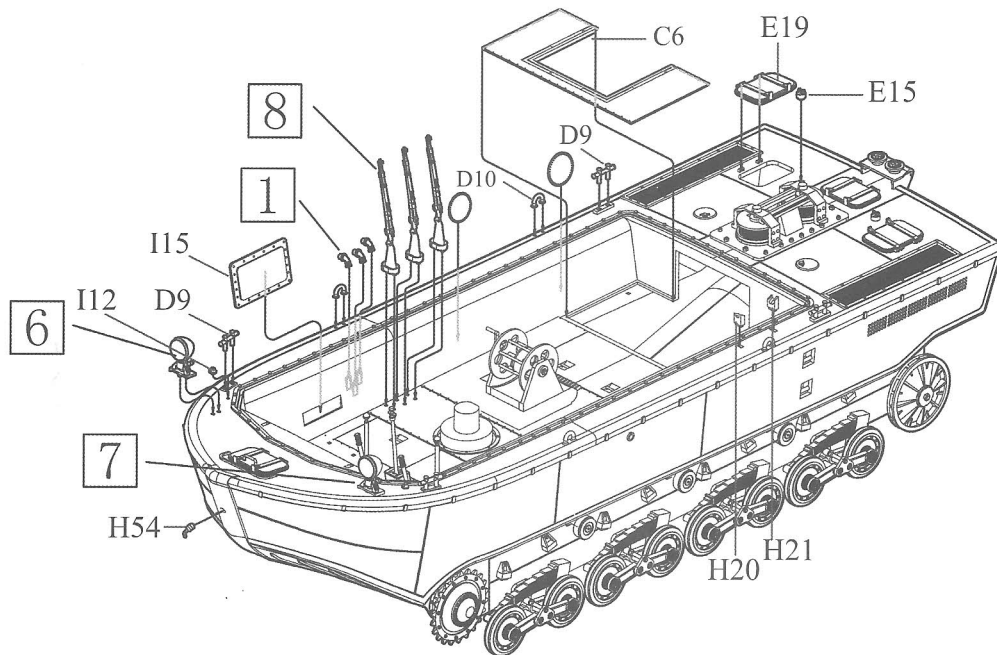
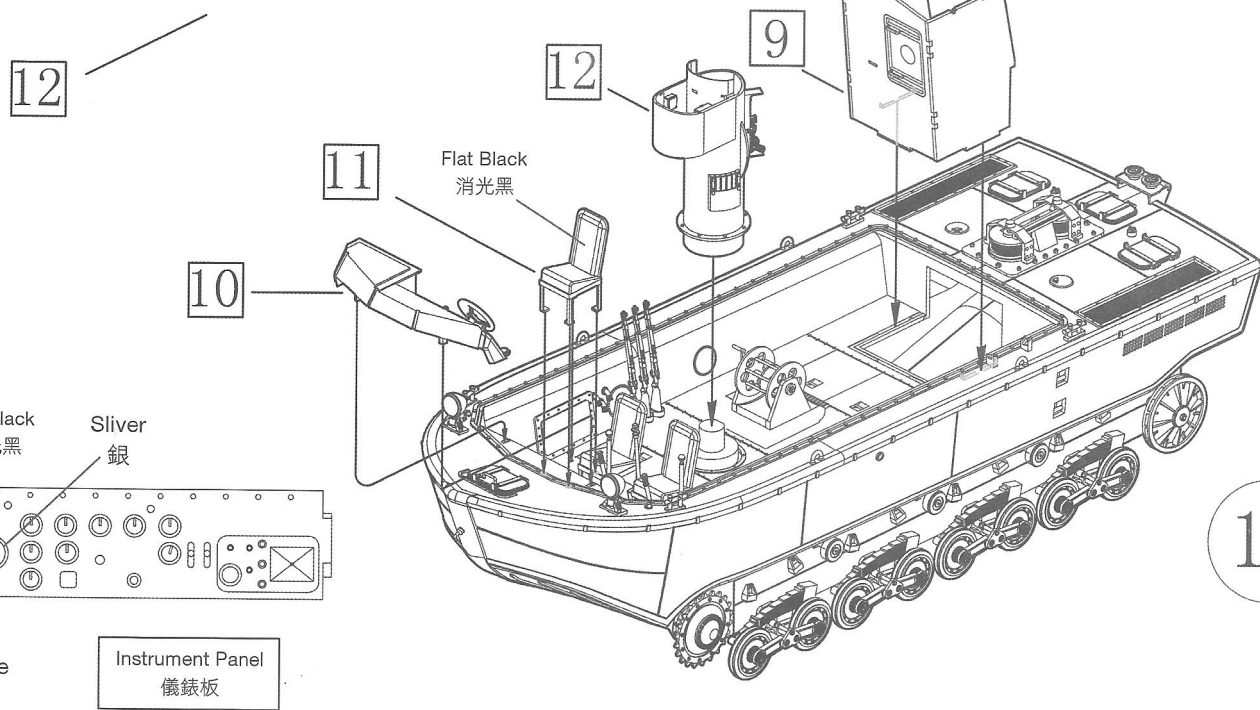
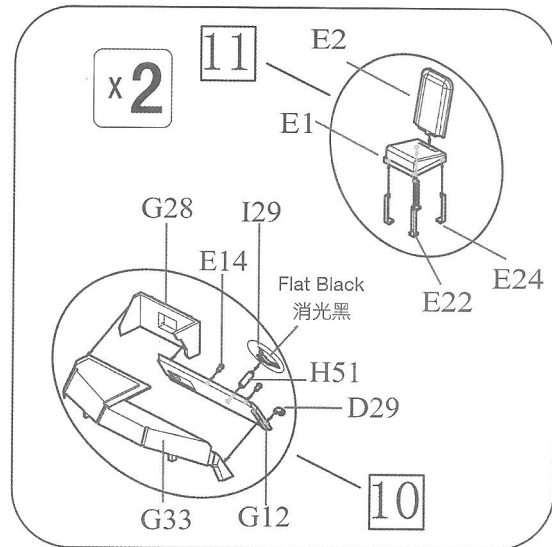
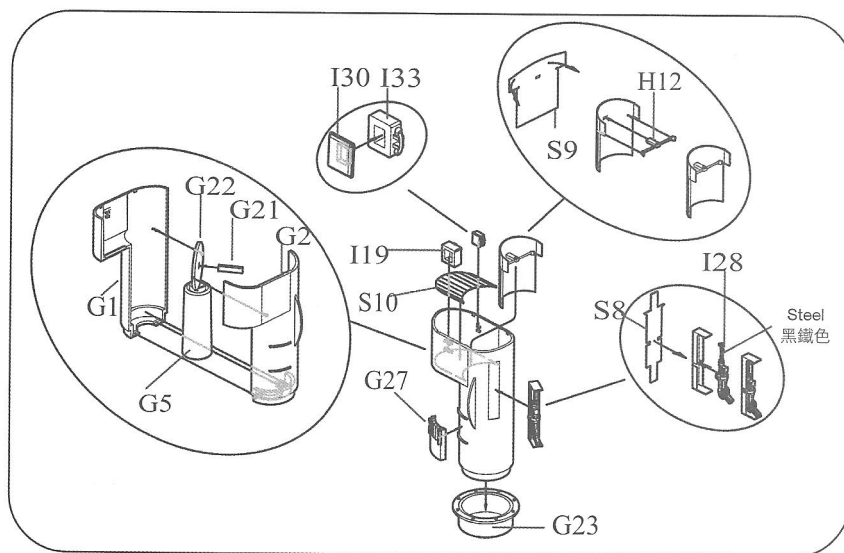
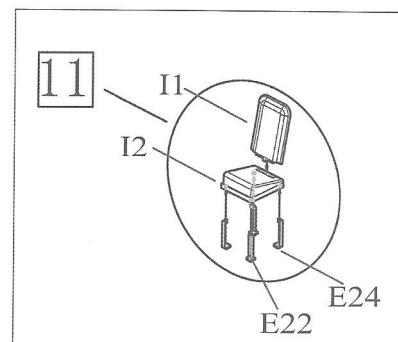
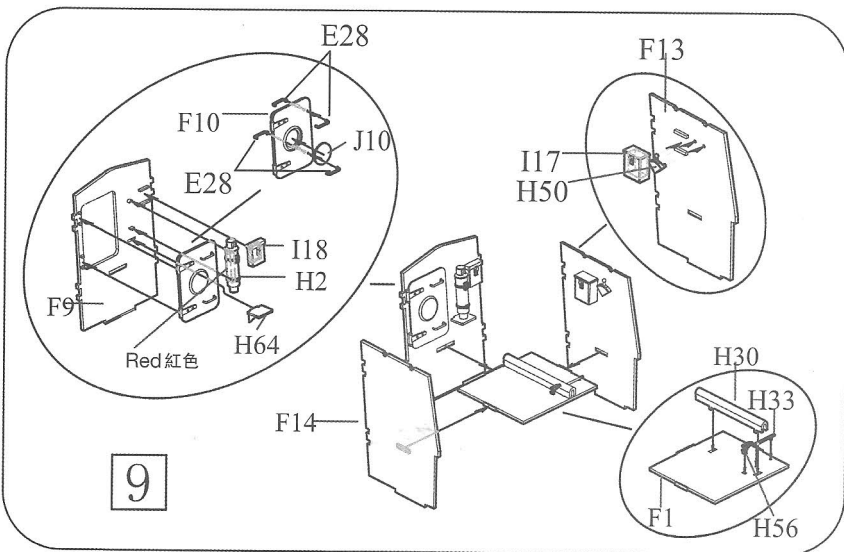
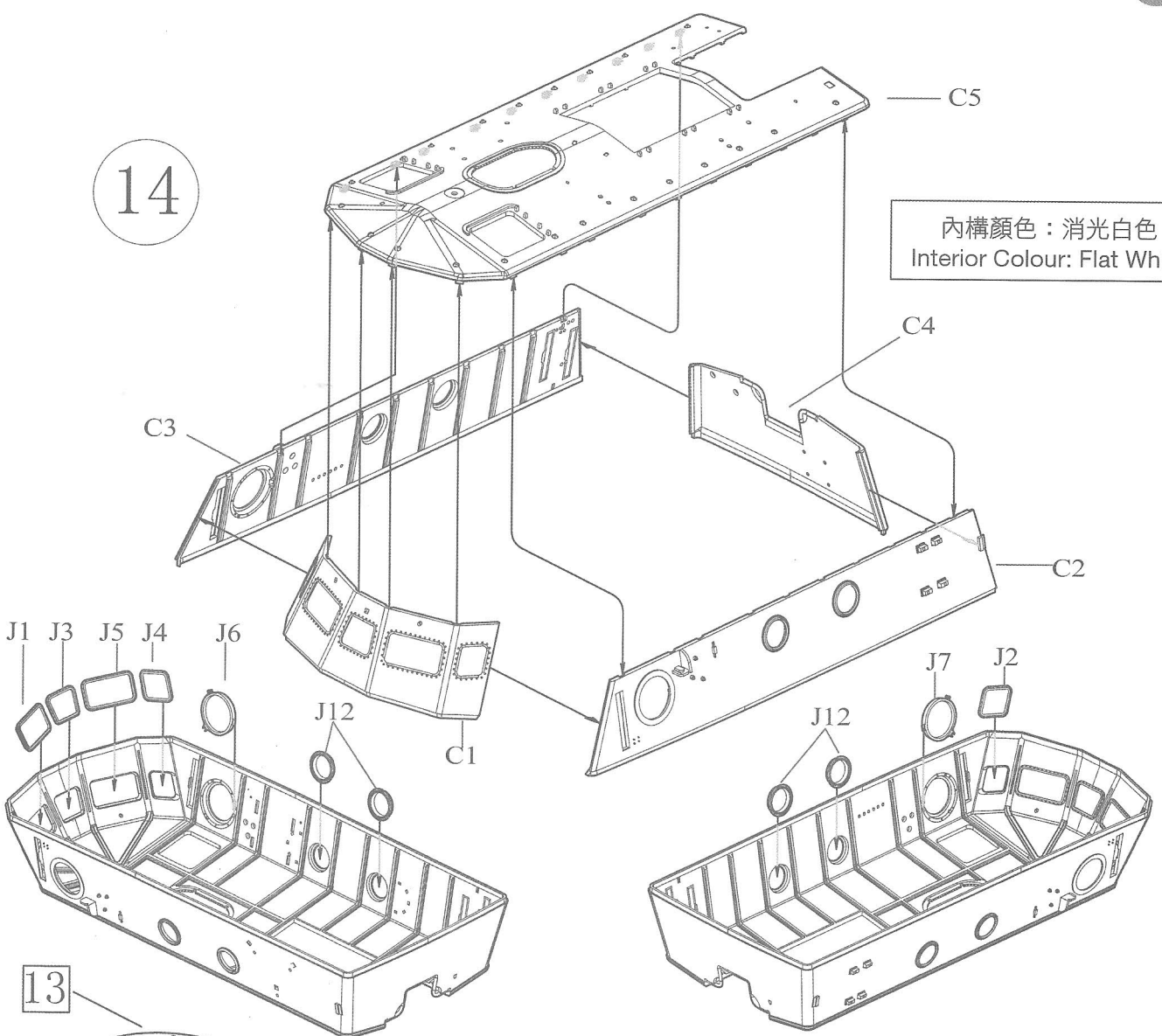


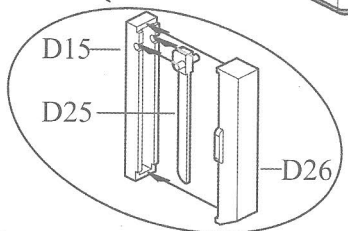
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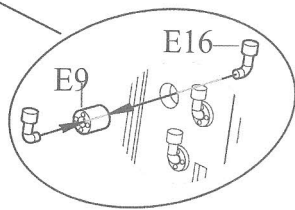
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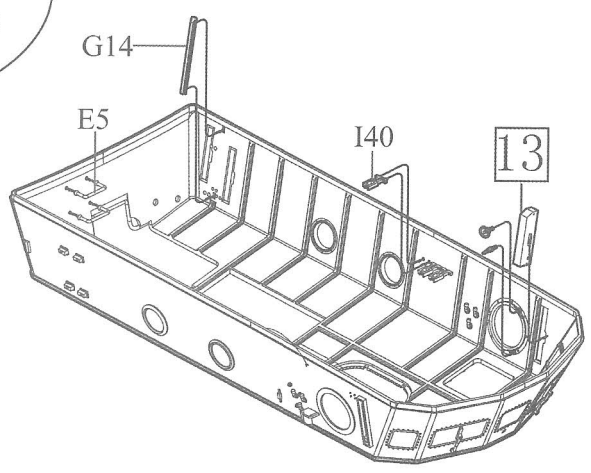
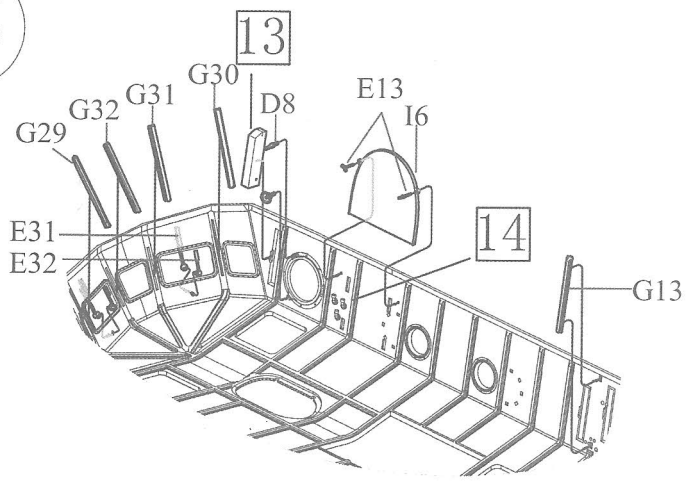
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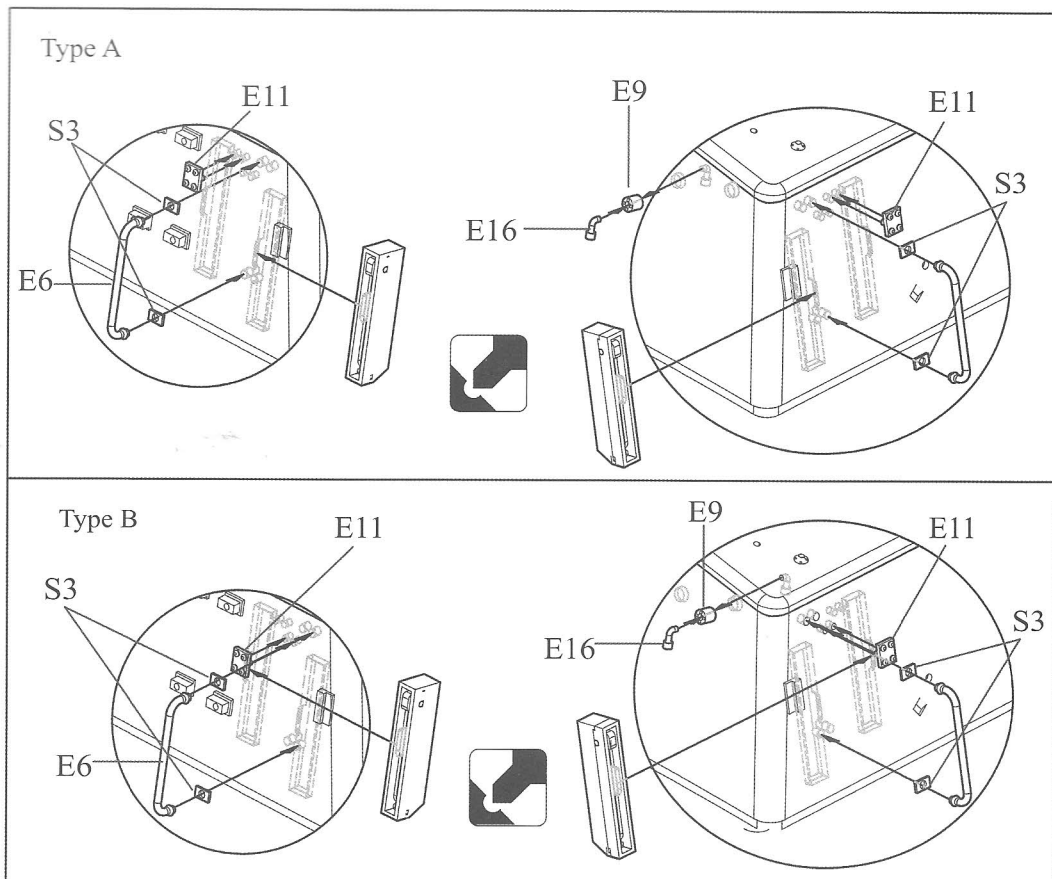


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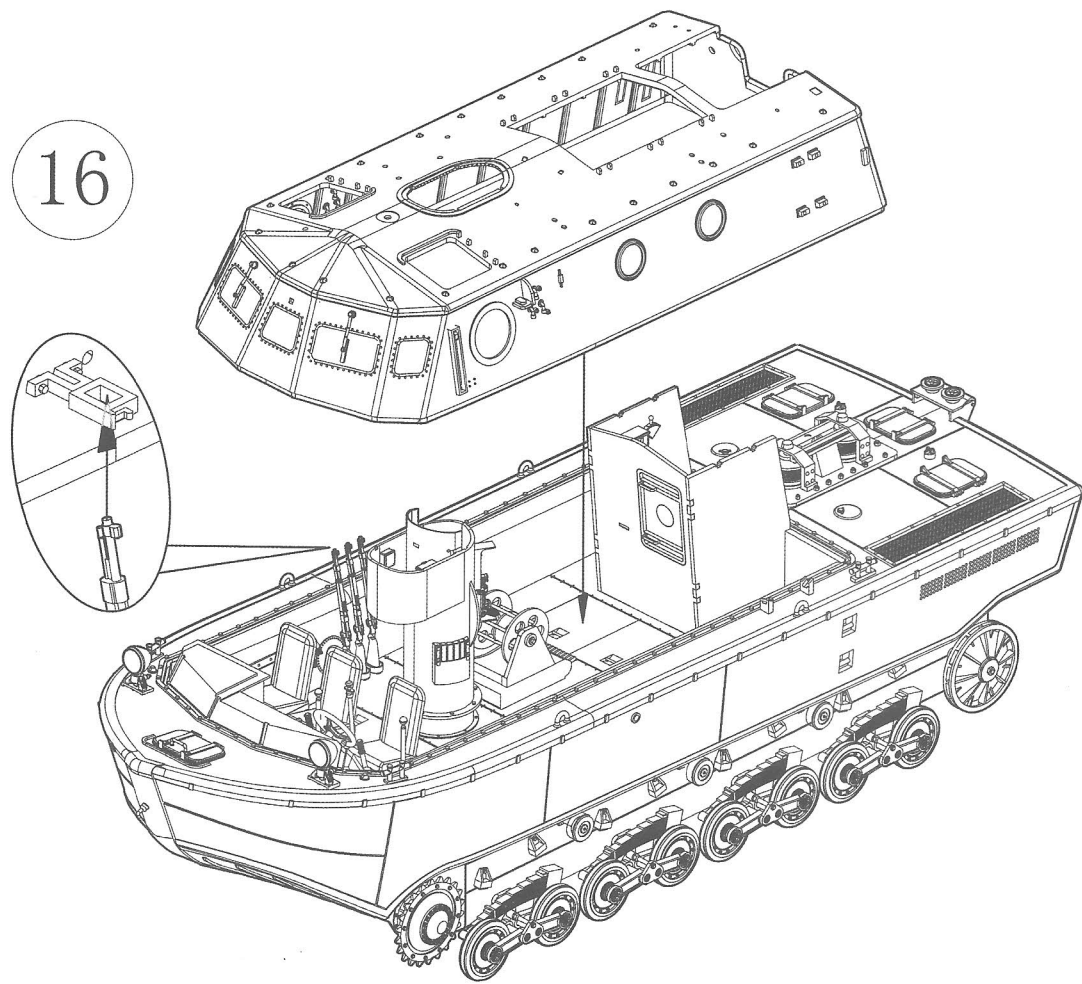


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16



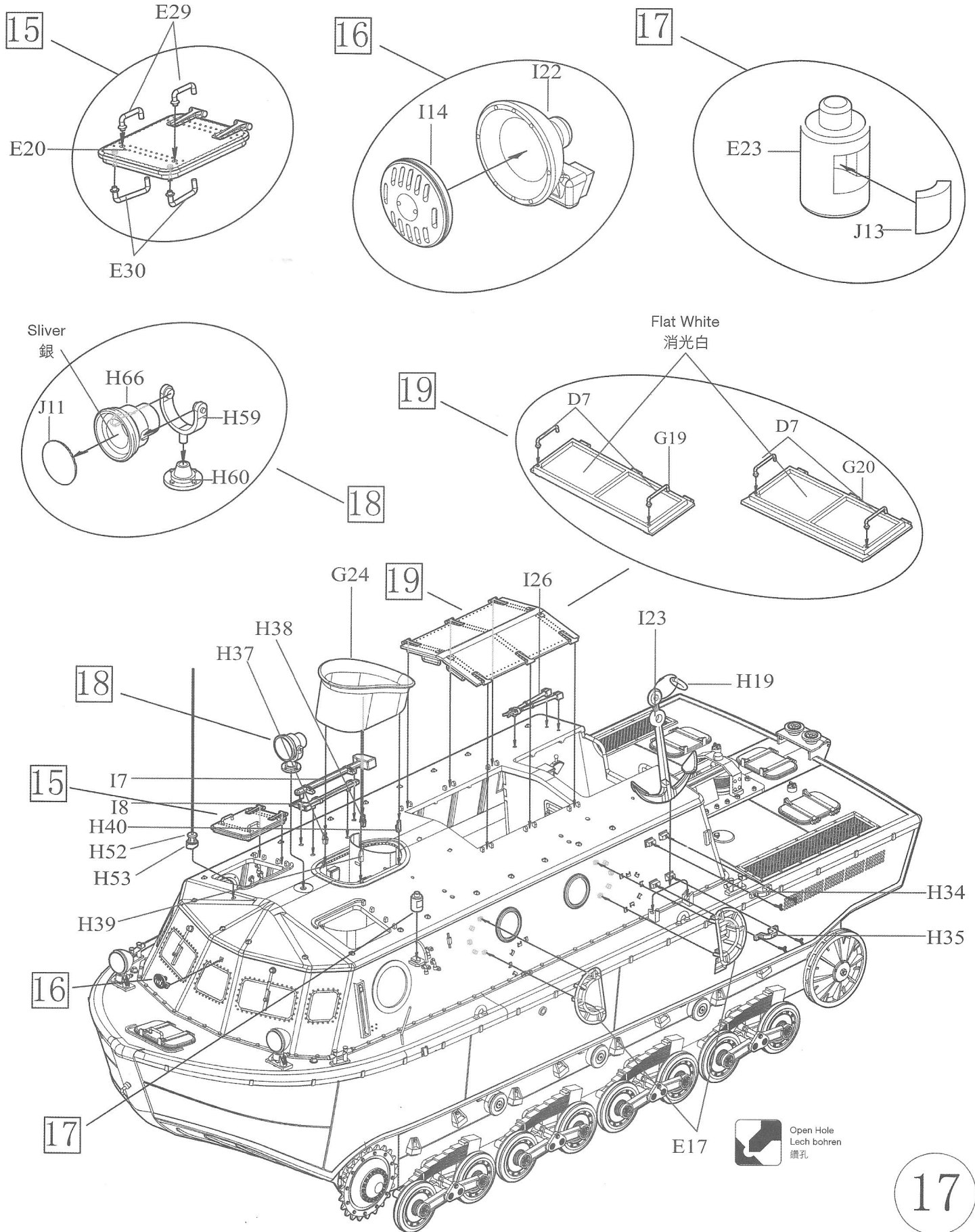
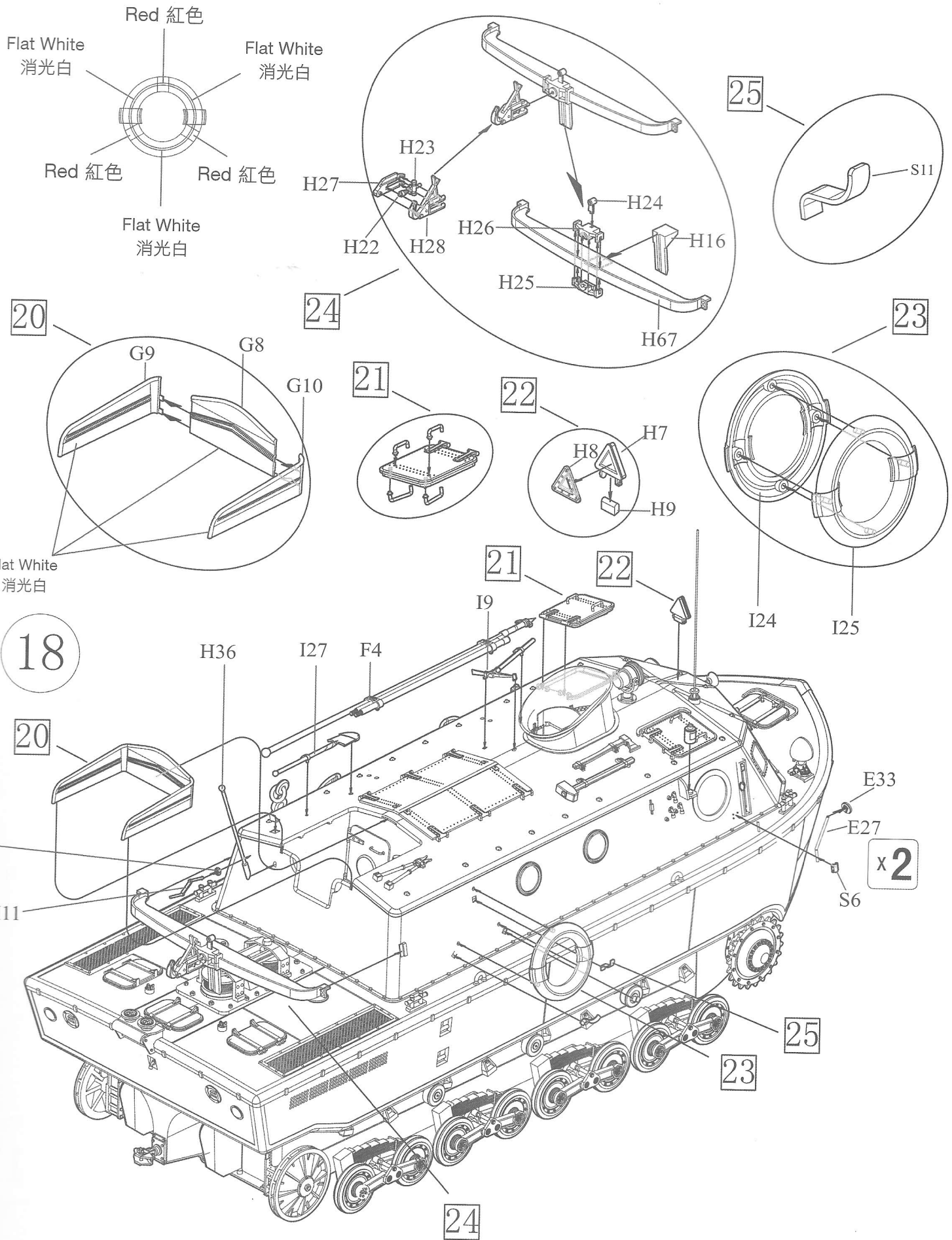
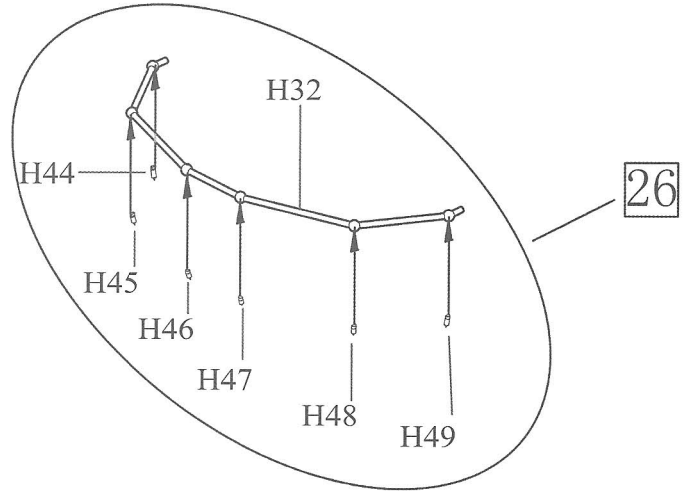


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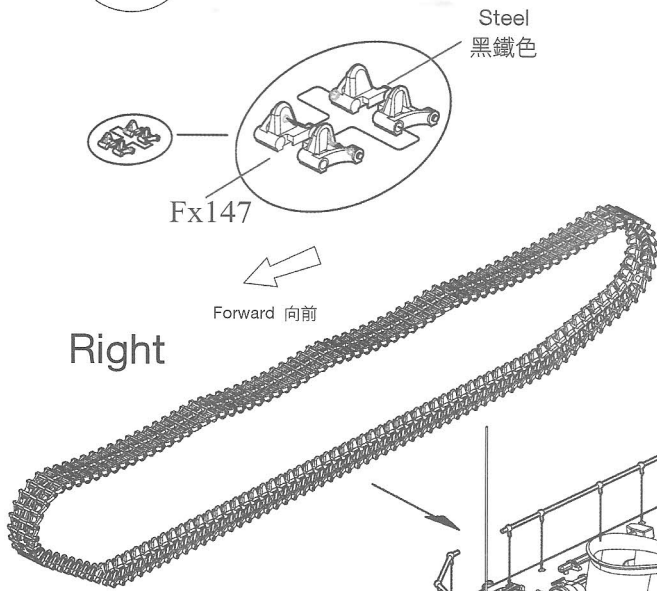


Attention: The track link pins is separated the left and right.
Please use the L parts track link for the left side and the F parts track link for the right side.

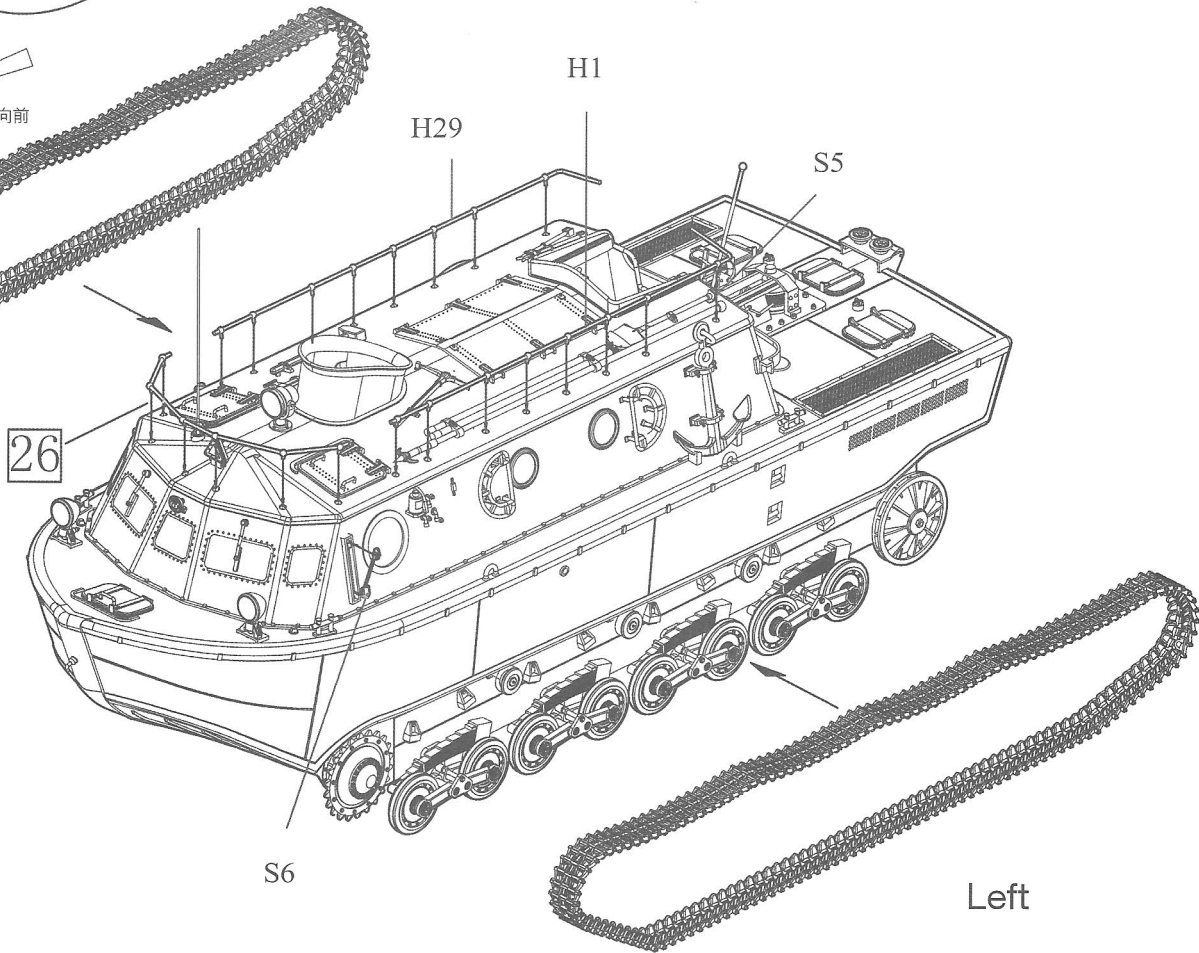
注意：履帶組裝是有分左右兩邊，L 零件是供左邊使用，而 F 零件則供右邊使用。



19



Right



Left

Attention: Workable Track Link 可動式履帶
No need the glue 可不需膠水

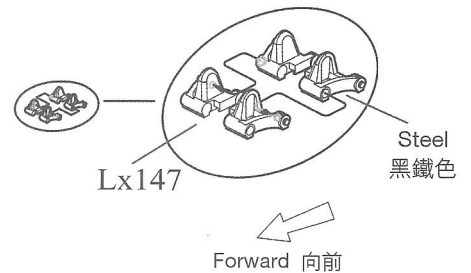
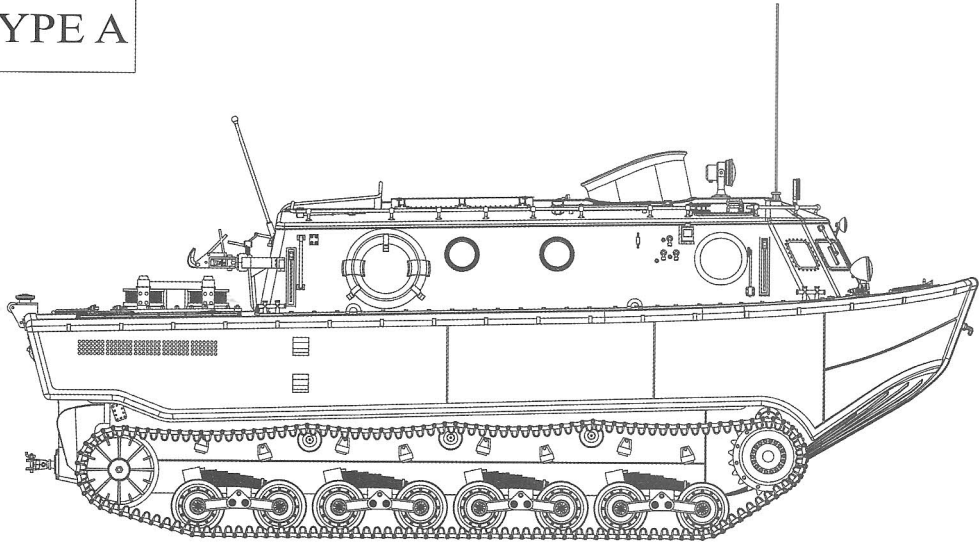
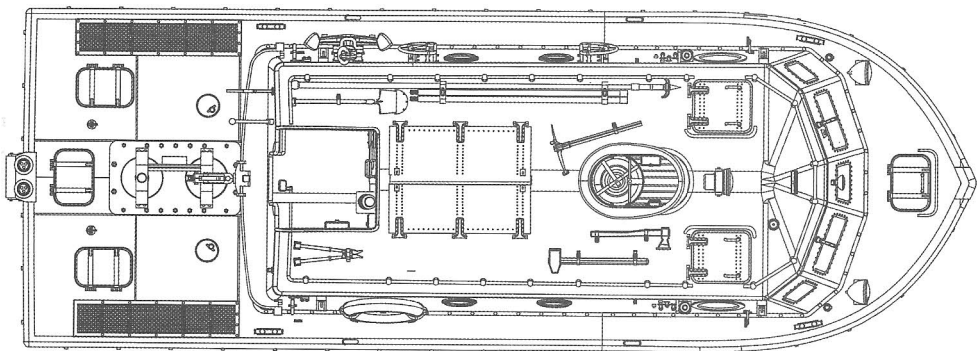
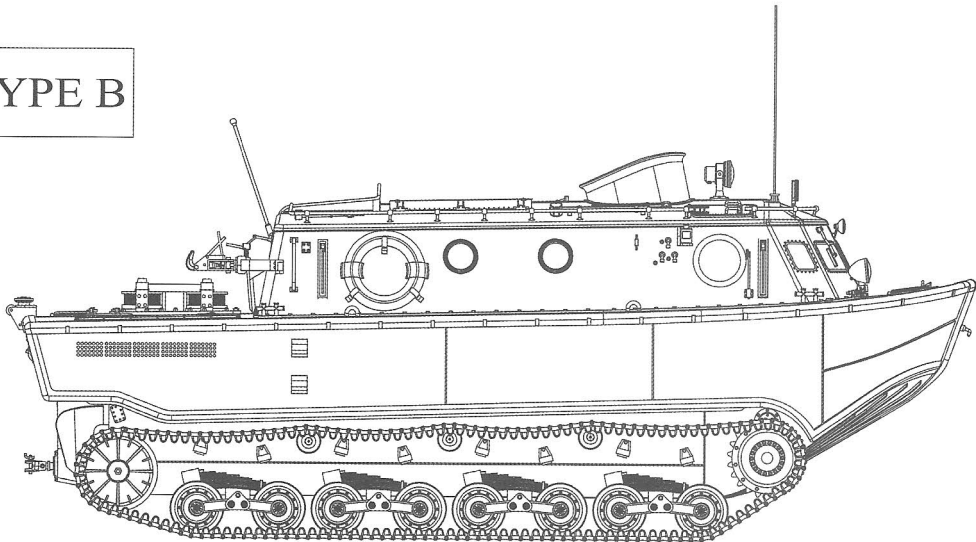


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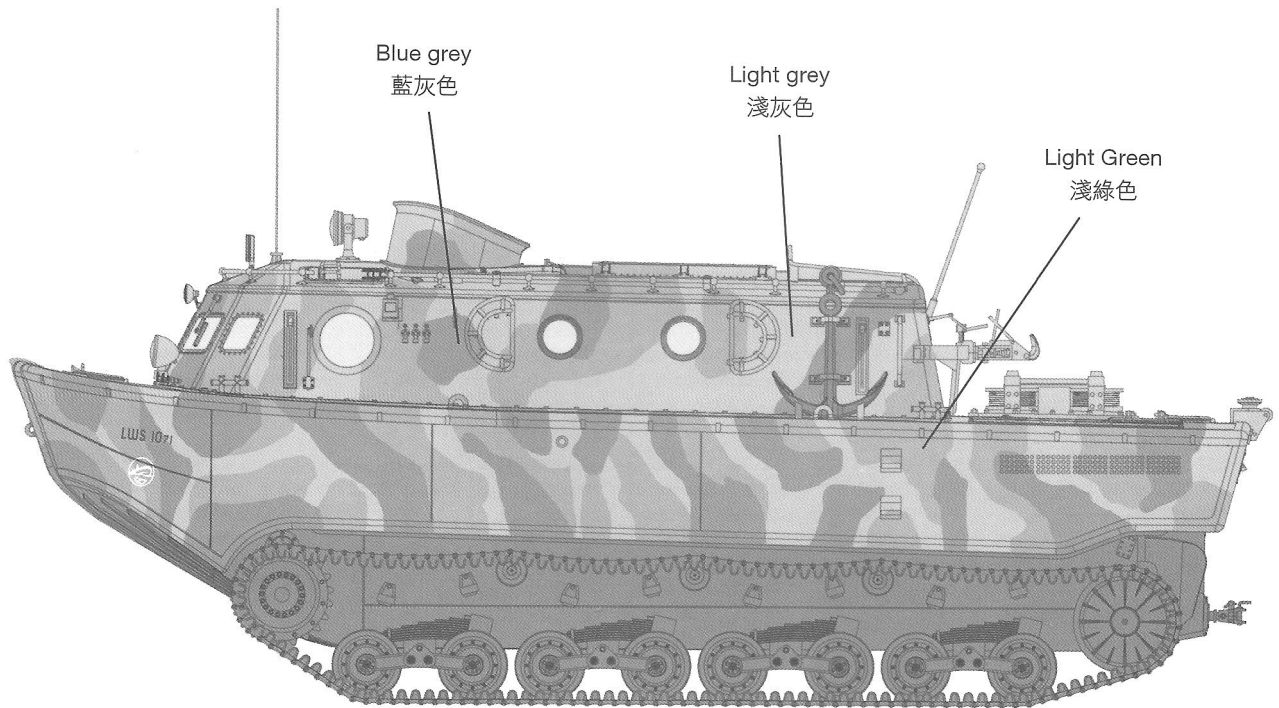
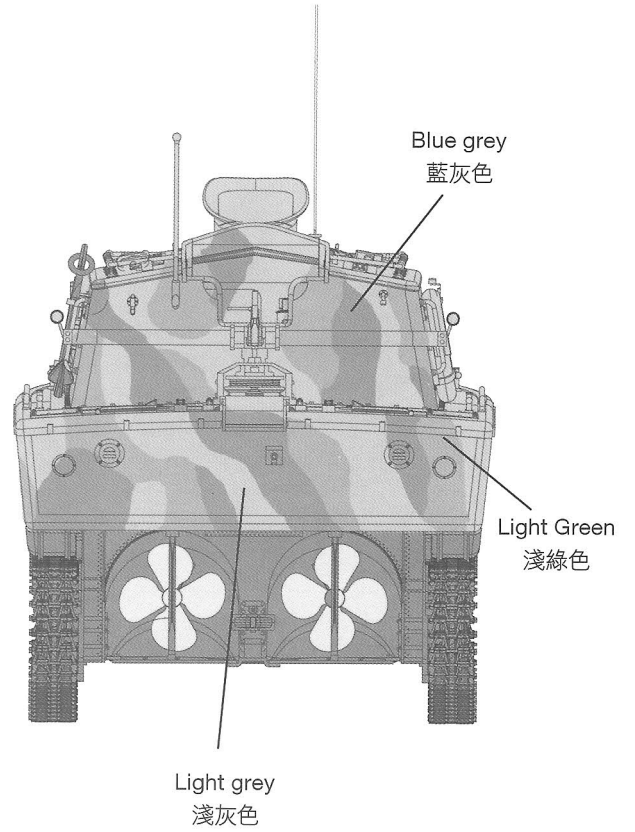
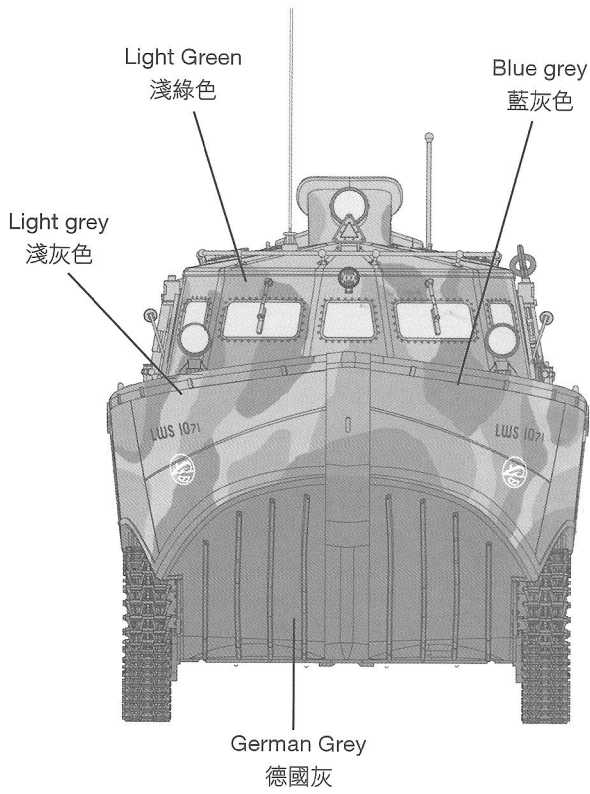
TYPE A



TYPE B



LWS1071 COLOUR GUIDE 塗色指示:

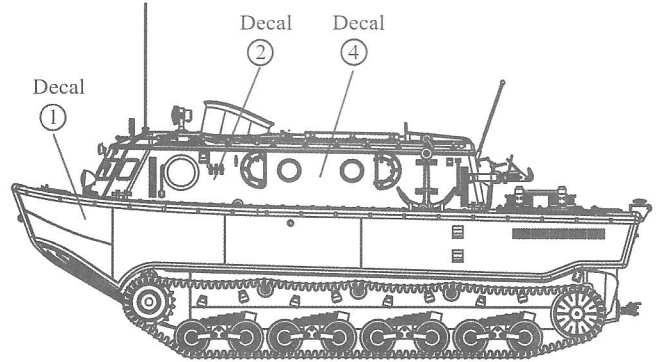
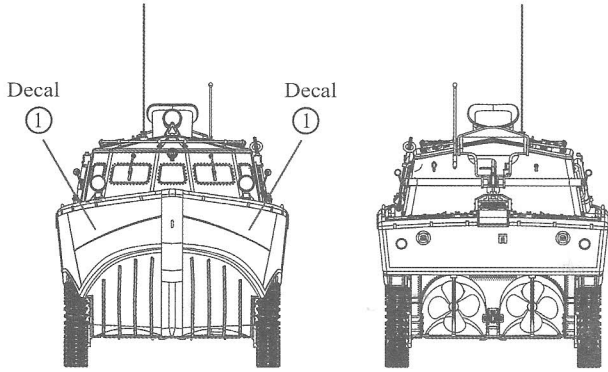


DECAL & COLOUR GUIDE 水貼及塗色指示:

LWS 667

TYPE A

Option 1: LWS 667, Engineer Assault Company 778, Tobruk, N. Africa, May 1942
1942年5月轉到北非托布魯克作戰之第778突擊工兵團屬下車輛

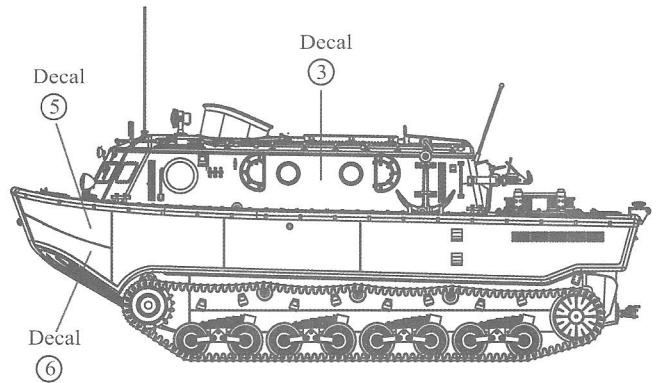
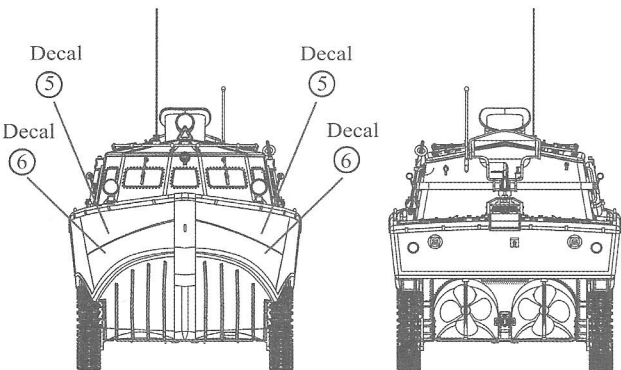


Camouflage Scheme-overall Dark yellow

LWS 1071 Early 早期

TYPE B

Option 2: LWS 1071, Engineer Assault Company 771, Eastern Front, June 1943
1943年6月在東部作戰之第771突擊工兵團屬下之LWS1071號車

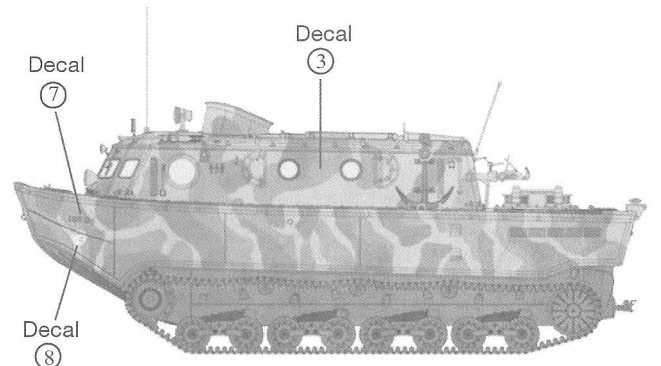
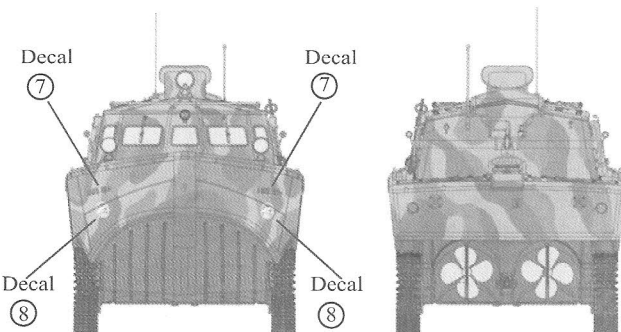


Camouflage Scheme-overall German Grey

LWS 1071 Late 後期

TYPE B

Option 3: Re-painted LWS1071
更改為三色迷彩塗裝之LWS1071號車



Camouflage Scheme-three tone colours:
Light grey, Blue grey, Light Green