

**ACADEMY**  
HOBBY MODEL KITS



1/48th SCALE  
**12703**

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# MH-53E SEA DRAGON

"U.S. NAVY MINE HUNTER & COMBAT TRANSPORT"

## MH-53E 씨 드래곤

"미해군 소해/전투수송 헬리콥터"

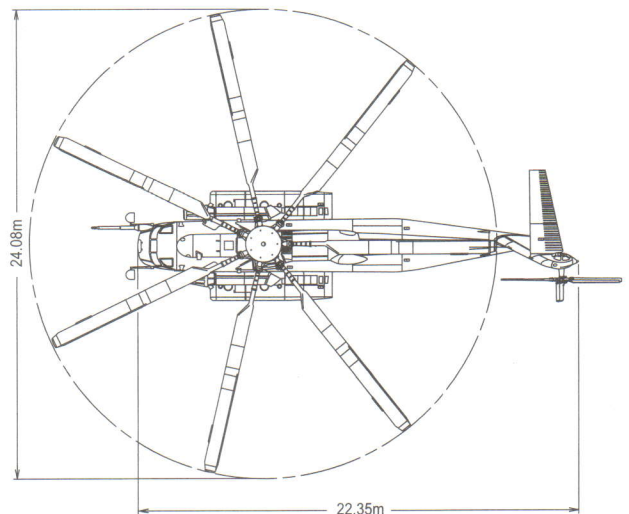
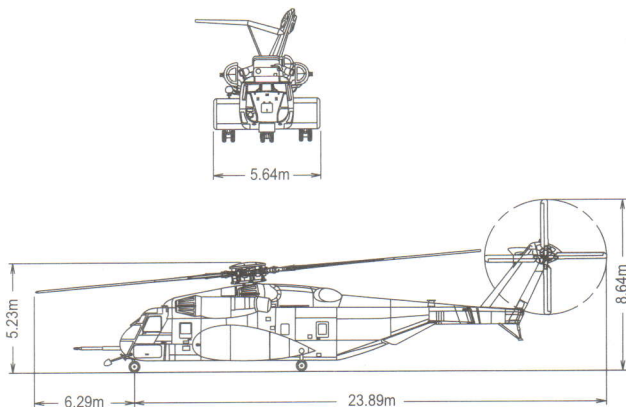


The newest military version of Sikorsky's H-53E/S80 series, the MH-53E Sea Dragon, is the Western world's largest helicopter. The MH-53E is used primarily for Airborne Mine Countermeasures (AMCM), with a secondary job of shipboard delivery. In Iraq it is being used in the combat assault mission. Additional mission capabilities include air-to-air refueling, hover in-flight refueling, search and rescue, and external cargo transport operations, in both land and seaborne environments. The MH-53E was derived from the CH-53E Super Stallion and is heavier and has a greater fuel capacity than its ancestor. The MH-53s can operate from carriers and other warships. Sea Dragon is capable of carrying up to 55 troops or a 16-ton payload 50 nautical miles or a 10-ton payload 500 nautical miles. The MH-53E is capable of towing a variety of mine-sweeping countermeasures systems, including the Mk 105 minesweeping sled, the ASQ-14 side-scan sonar, and the Mk 103 mechanical minesweeping system.

- Contractor: Sikorsky Aircraft Division of United Technologies Corp.
- Date Deployed: First flight: Dec 23, 1981; Operational: June 1986.
- Propulsion: Three General Electric T64-GE-419 turboshaft engines (4,750 shaft horsepower each).
- Length: Fuselage: 73 feet, 4 inches (22.35 meters); Overall: 99 feet 0 inches (30.18 meters).
- Height: 28 feet 4 inches (8.64 meters). ● Rotor Diameter: 79 feet (24.08 meters).
- Weight: Max. Gross weight, w/ external load: 69,750 lbs (31,693 kg) Max. Gross weight, w/internal load: 69,750 lb (31,693 kg)  
Empty weight: 36,745 lb (16,667 kg) Airspeed: Max: 150 knots (278 km/hour).
- Ceiling: 10,000 feet.
- Range: Max: 1050 nautical miles.
- Crew: Two pilots, one aircrewman.
- Load: 55 troops or 32,000 pounds (14,512 kg) cargo.

MH-53E 씨 드래곤은 미국 시코르스키사가 제작한 H-53E/S80 헬리콥터 시리즈의 최신 군용모델로, 서방세계에서 만들어진 헬리콥터 중에선 최대 크기를 자랑하는 기종이다. MH-53E의 주된 용도는 해상구역의 소해(掃海:기뢰제거)작업이지만, 부차적으로 함선의 물자보급에도 빈번히 사용되고 있으며, 이라크 전에서는 전투공격 임무에 투입되기도 했다. 뿐만 아니라 비행 중 기체 상호 간의 공중급유, 정지비행 상태의 공중급유, 조난탐색 및 구조, 지상 및 해상지역의 기체외부 화물탑재 운송 등의 임무에도 사용 가능하다. MH-53E 씨 드래곤은 CH-53E 슈퍼 스탈리온에서 개량, 발전된 기종이며, 원형기에 비해 중량이 많이 늘어나긴 했어도 그 만큼 더 많은 연료를 실을 수 있도록 되어 있다. MH-53E는 항공모함 및 기타 전투함에서 운용이 가능하며, 55명의 병력 혹은 16톤의 화물 탑재 시 약 50해리(92.6km), 10톤의 화물 탑재 시엔 최대 500해리(926km)까지 비행이 가능하다. 또한 MH-53E는 마크105형 소해 슬레드(자기반응식 기뢰 제거용), ASQ-14형 사이드스캔 소나, 마크103형 기계식 소해시스템(계류형 기뢰 제거용) 등 다양한 종류의 기뢰탐지 및 제거 장비를 견인할 수 있다.

- 제조사 : 유나이티드 테크놀로지 사(社)시코르스키 항공기 제작부문
- 배치일자 : 첫 비행 - 1981년 10월 23일 / 운용개시- 1986년 6월
- 동력원 : 제너럴 일렉트릭 T64-GE-419형 터보샤프트 엔진×3기 (엔진 1기당 출력 4,750 축마력)
- 길이 : 동체부분-73피트 4인치(22.35미터) / 전체길이-99피트 0.5인치(30.18미터)
- 높이 : 28피트 4인치(8.64m)
- 로터직경 : 79피트(24.08m)
- 중량 : -최대 이륙중량, 외부화물 탑재시 : 69,750파운드 (약 31,693kg)  
-최대 이륙중량, 기내화물 탑재시 : 69,750파운드 (약 31,693kg)  
-공허중량 : 36,745파운드(약 16,667kg)
- 비행속도 : 최대 150노트(시속 278km)
- 상승고도 : 10,000피트(약 3,048m)
- 항속거리 : 최대 1,050 해리(1944.6km)
- 승무원 : 조종사 2명, 기내요원 1명
- 탑재량 : 병력 55명 또는 화물 32,000파운드(약 14,512kg)



**<READ THIS BEFORE YOU BEGIN>**

- Study the instructions before assembling.
- Do not use too much cement to join parts.
- Open a window or make area well ventilated when cement or paint is in use.
- Check the fit of each piece before cementing into place.
- Never use cement or paint near open flame.
- Tear up and throw away the empty plastic bags to avoid danger of suffocation for little childre

**<ALLGEMEINE HINWEISE>**

- Die Anordnung der Bauteile ist aus den Zeichnungen der Anleitung ersichtlich.
- Die Teile vor dem Verkleben ungeleimt zusammenhalten, um ihren paßsitz zu prüfen.
- Klebstoff nicht zu dick auftragen.
- Klebstoff und Farben niemals in der Nähe einer Flamme verwenden.
- Während der Bemalung mit Spritzpistole oder Pinsel für frische Luftzufuhr, z.B. öffnen des Fensters, sorgen.
- Bausatz von kleinen Kindern fernhalten. Verhüten Sie, daß Kinder irgendwelche Bauteile in den Mund nehmen oder Plastiktüten über den Kopf ziehen.



**<LISEZ CE QUI SUIT AVANT DE COMMENCER LE MONTAGE>**

- Etudier les schémas d'assemblage. - Contrôler que chaque pièce soit bien conforme avant de la coller à sa place.
- N'utilisez pas trop de colle pour réunir les pièces. - Ne faites jamais manipuler la colle ou peinture à proximité d'une flamme.
- Aérer soigneusement la pièce où vous peignez(ouvrir la fenêtre). - Après avoir sorti les pièces du sac en ,pastique, déchirer le sac afin déviter que les enfants ne le mettent sur la tête et ne s'étouffent.

**<組み立てる前に>**

- 組み立てる前に説明書をお読み下さい。 - 部品をランナーから切りはずす時は模型用ニッパーとカッターを使用します。
- 接着剤を少しなめに使うことがきれいに仕上げるコツです。 - 組み立て後の部品やビニール袋は小さな子供の手の届かない安全な所に保管して下さい。
- 接着剤や塗料を使用する時はときどき窓を開けて換気につまじましょう。 - 接着する前に部品を合わせて確かめます。

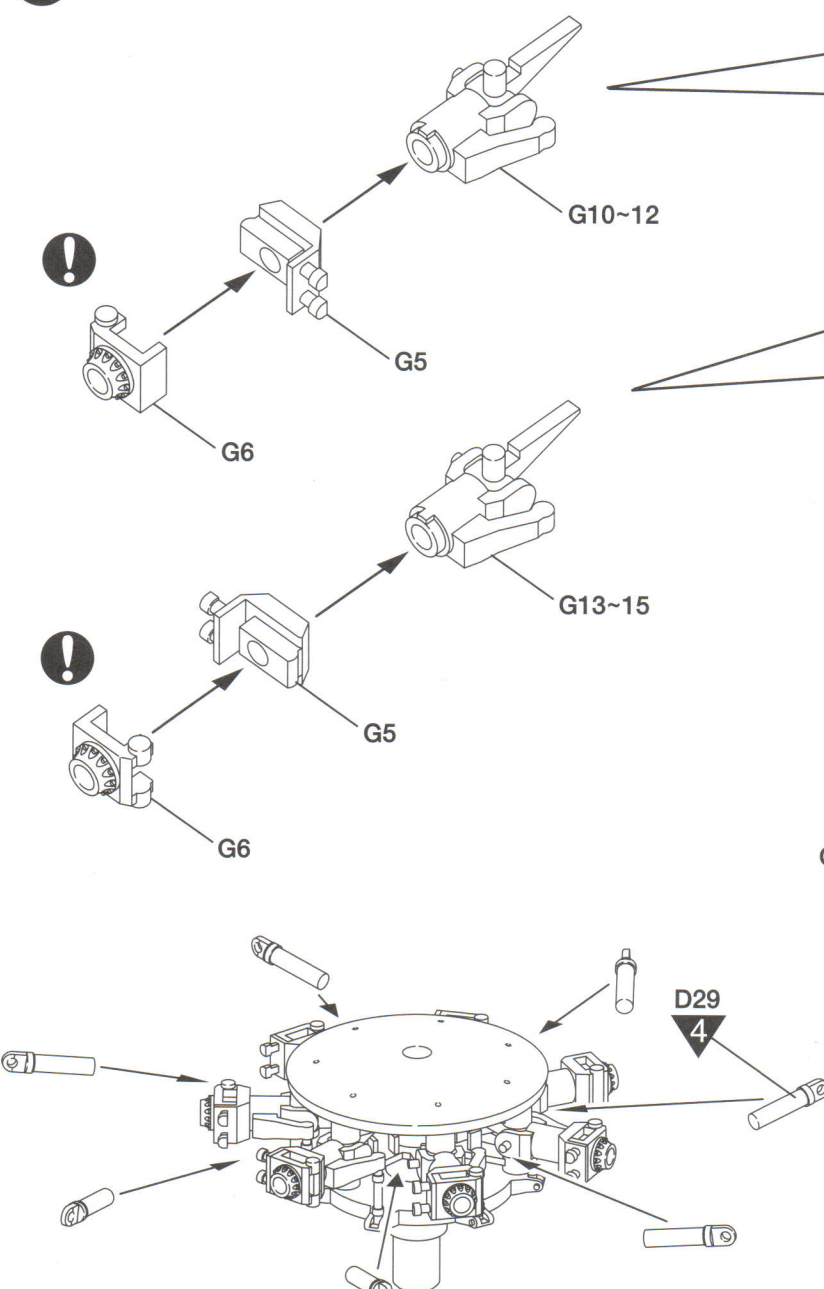
**■조립하기 전에**

- 부품을 조립하기 전에 설명서를 잘 읽어본 후 조립한다.
- 점착하기 전에 부품을 맞추어 확인한 후 조립한다.
- 부품을 자를 때에는 칼이나 니퍼로 깨끗이 잘라준다.
- 에나멜 페인트나 점착제를 사용할 때는 창문을 열어 환기를 시키고 화기를 멀리한다.
- 점착제를 사용할 곳과 사용하지 않는 곳에 주의하고 너무 많이 바르지 않도록 한다.
- 사용 후 남은 부품은 어린 아이들의 손에 닿지 않도록 잘 정리한다.

**STEP 1**

**<Rotor Head Assembly / Flight Position , 로터헤드의 조립 / 펼친 상태>**

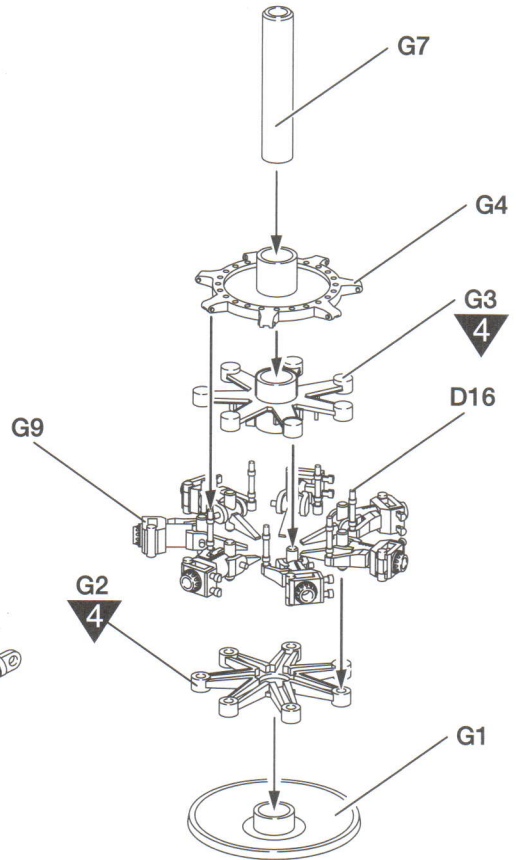
※ Please refer to page 3, 4, 18, and 19 when proceeding assembly with rotor folded.  
 로터를 접은 상태로 조립시엔 3, 4, 18, 19페이지를 참조 하십시오.



※ Careful to directions  
 방향에 주의

G10~15

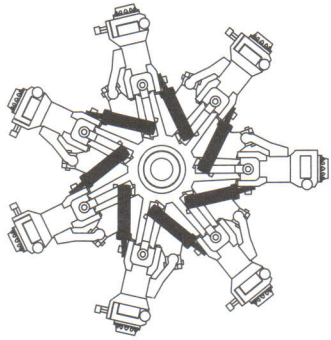
※ Figure is G15  
 그림은 G15의 모습입니다.



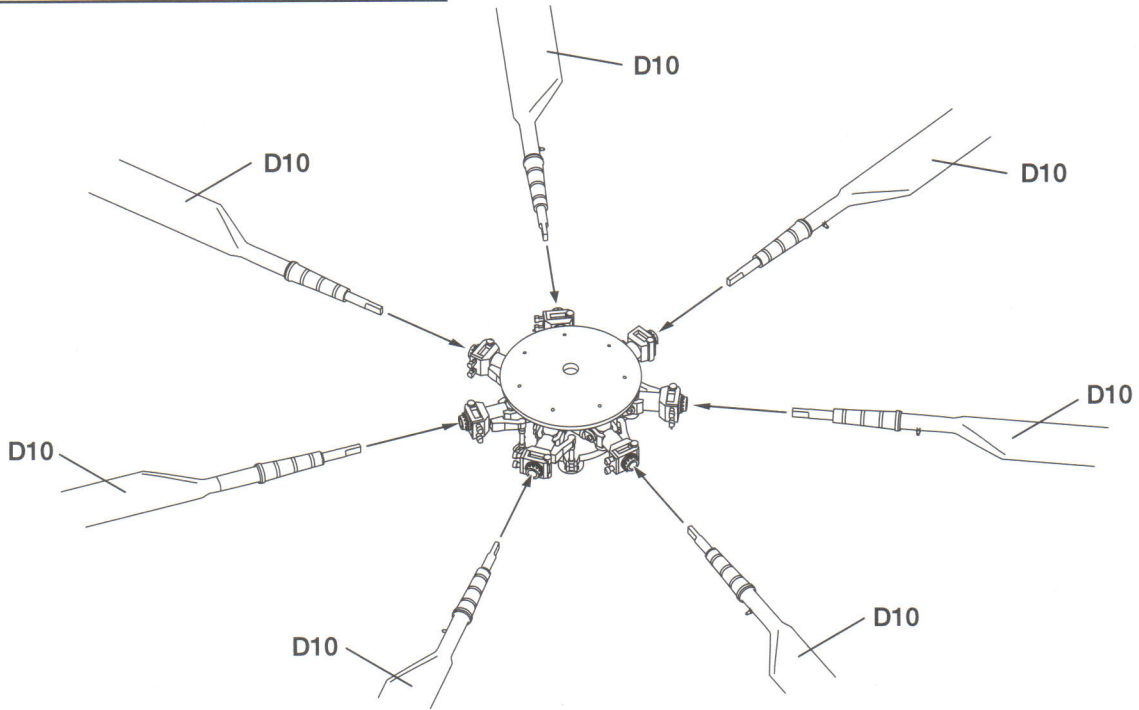
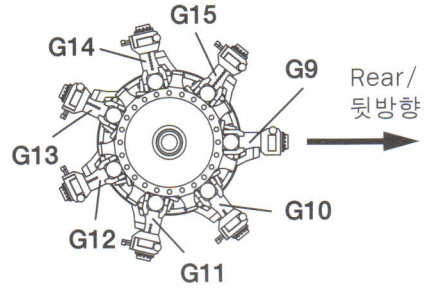
※ Please refer to page 4 for painting in detail.  
 세부색칠은 4페이지를 참조 하십시오.

<b>점착한다</b> Cement parts Coller Kleben Pegar Incollare Colar Kleben	<b>점착하지 않는다</b> Do not cement Ne pas coller Nicht kleben No pegar Non incollare Nao colar Niet kleven	<b>3</b> 수반을 조립한다. Repeat operation Répéter l'opération Vorgang wiederholen Repetir la operación Repeter Repita a operação Herhalen	<b>전사지를 붙인다.</b> Decals Dècalcomanies Abziehbild	<b>9</b> 무게추를 넣는다. Add weight Lester Gewicht	<b>구멍이나 홈을 메워준다.</b> Use filler Mastiquer Schleifen
<b>잘라낸다.</b> Cut away Couper Schneiden Cortar Cortar Snijden	<b>선택한다.</b> Optional parts Choix Auswahlmöglichkeit Eleccion Scelta Opcao Keuze	<b>반대측도 조립한다.</b> Repeat for opposite side Répétition de la page Wiederholung für gegenüberliegende Seite	<b>구멍을 뚫어준다.</b> Make hole Faire un trou Öffnen	<b>주의한다.</b> Be careful Faire attention Hier Vorsicht	<b>색칠 및 전사지 붙이기 번호</b> Numbers of the liste de peintures Lackierschemanummer

※View from Top / 위에서 본 모습



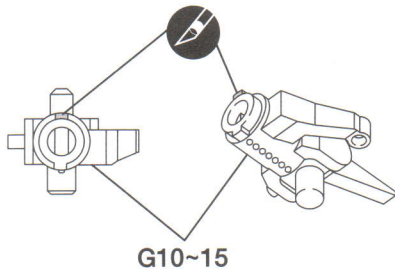
※View from Bottom  
아래쪽에서 본 모습



<Rotor Head Assembly / folded blades , 로터헤드의 조립 / 접은 상태>

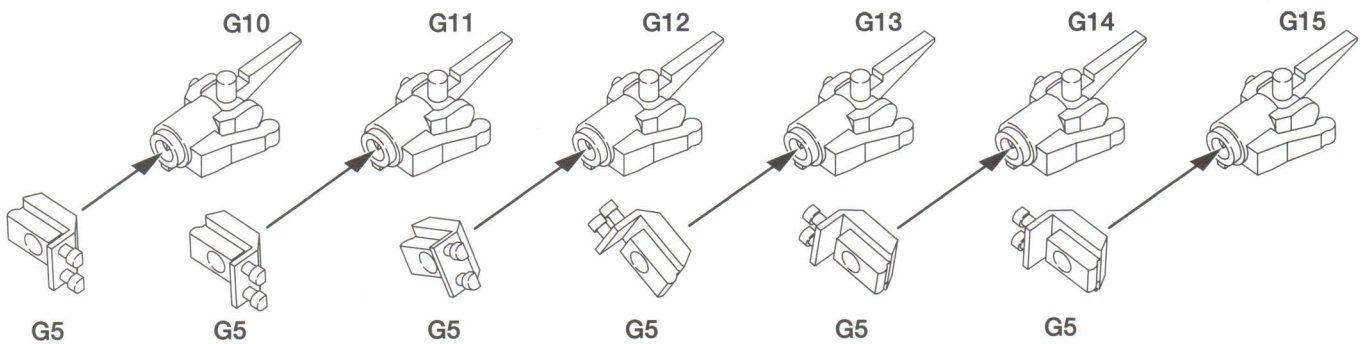


※View from Top / 위에서 본 모습

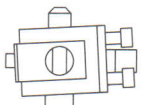


G10~15

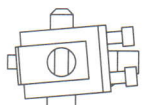
※Figure is G15  
그림은 G15의 모습입니다.



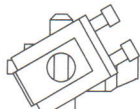
※Direction of G6 / G6부품 접착각도 참조



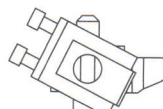
G10



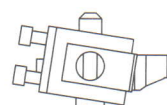
G11



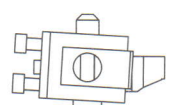
G12



G13

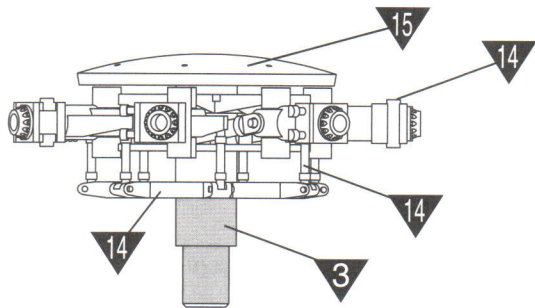


G14



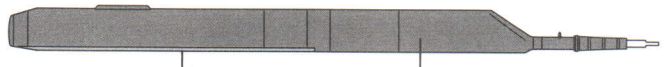
G15

※Painting Guide / 색칠 참조



<Forward Rotor / 주로터 날개>

<View from Top / 위에서 본 모습>



4

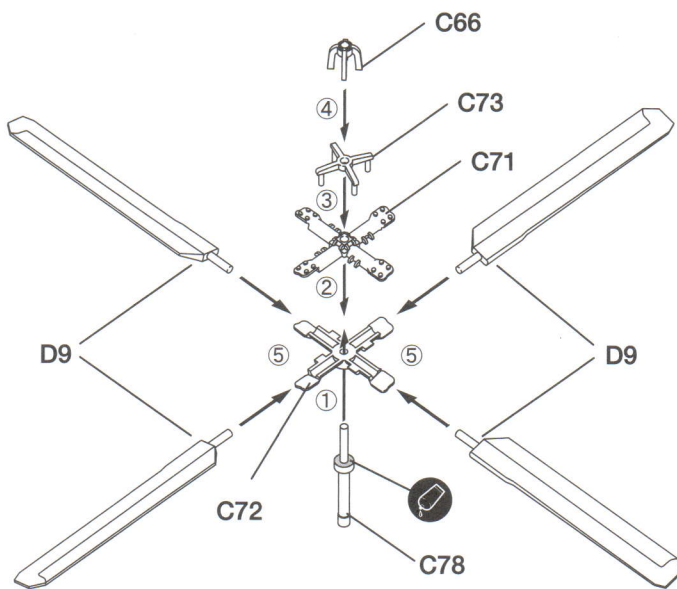
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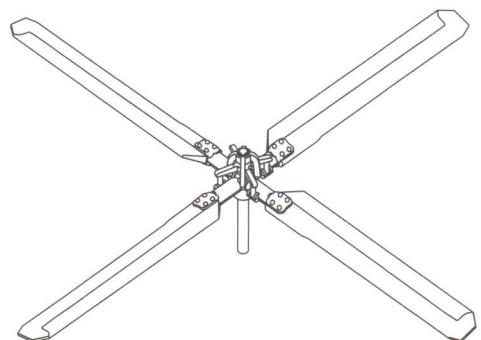
<View from Bottom / 아래쪽에서 본 모습>



<Rotor Assembly Rear / 후방 로터의 조립>

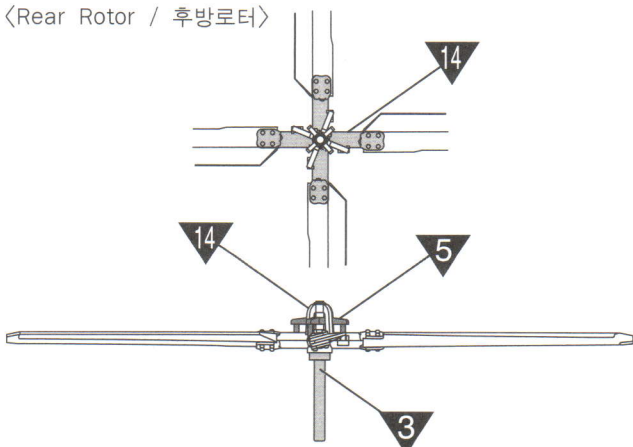


※View from Top / 위에서 본 모습



※Painting Guide / 색칠 참조

<Rear Rotor / 후방로터>



<View from Top / 위에서 본 모습>



4

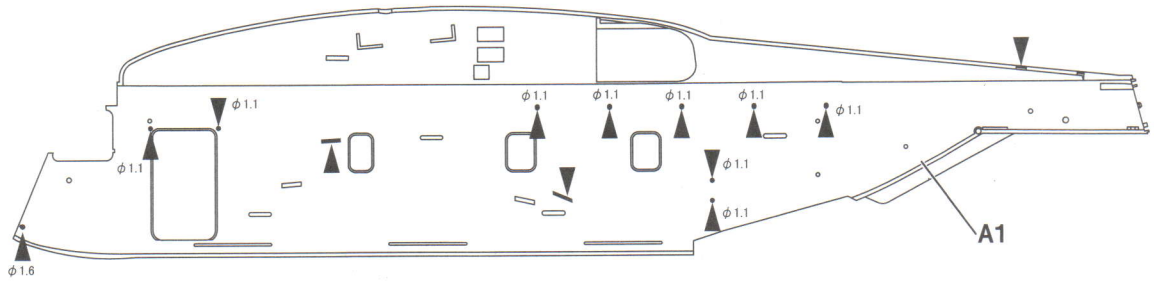
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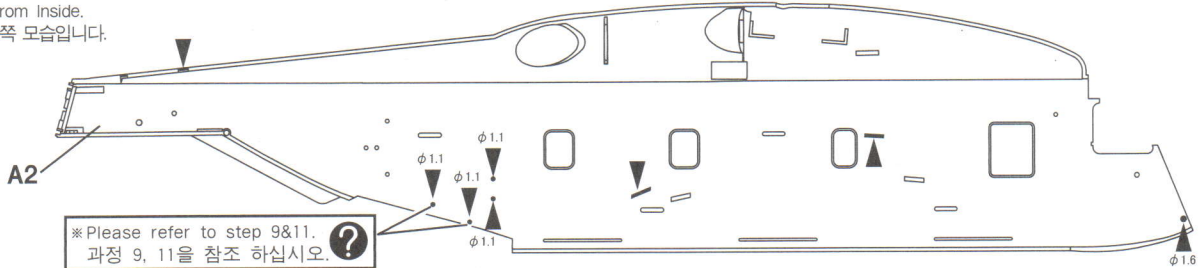
<View from Bottom / 아래쪽에서 본 모습>



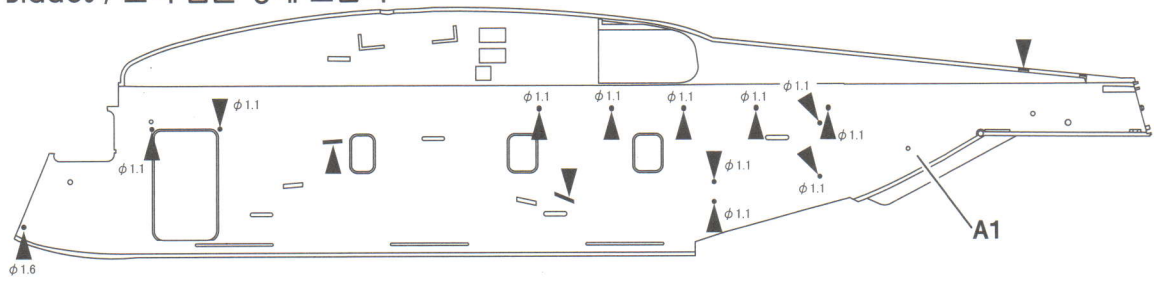
※Flight Position / 로터 펼친 상태 조립시



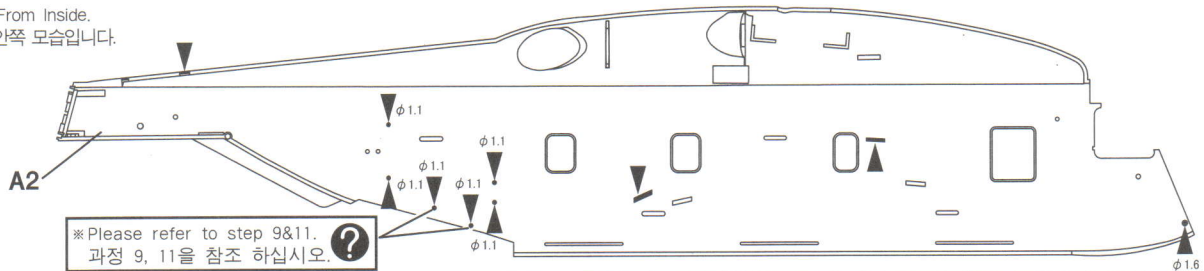
※ View From Inside.  
동체 안쪽 모습입니다.



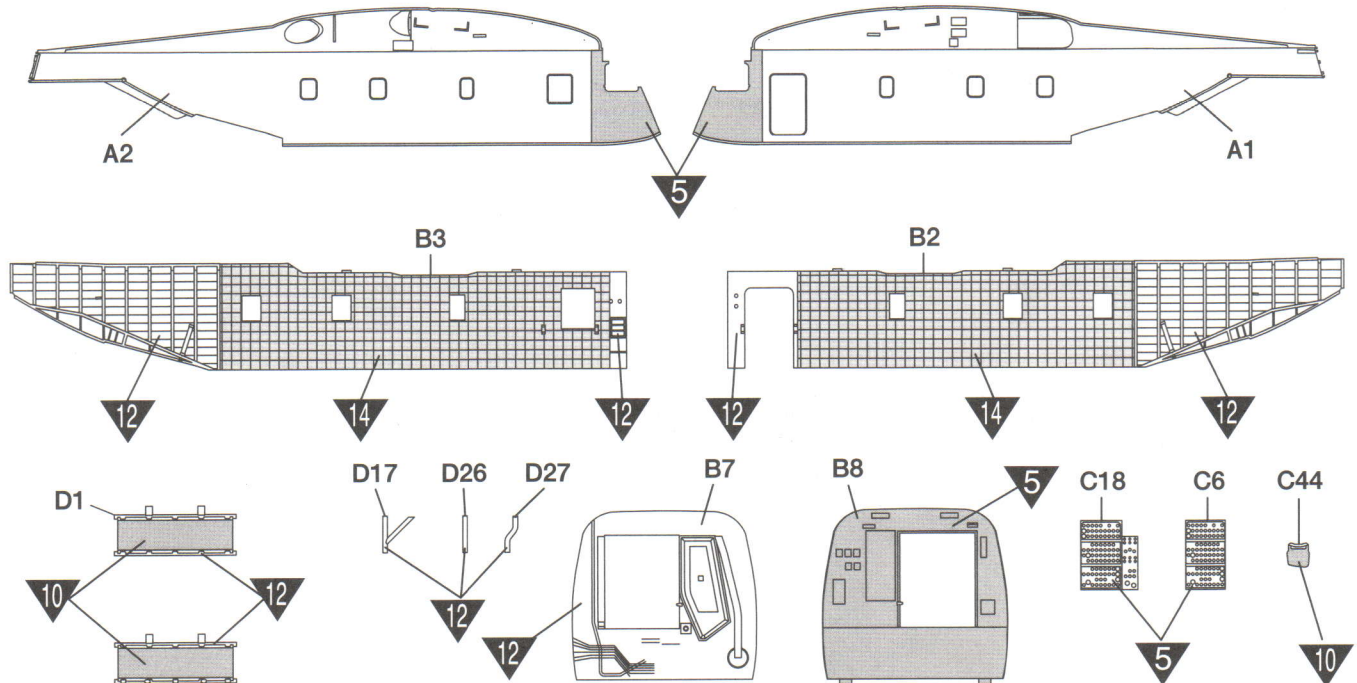
※Folded Blades / 로터 접은 상태 조립시



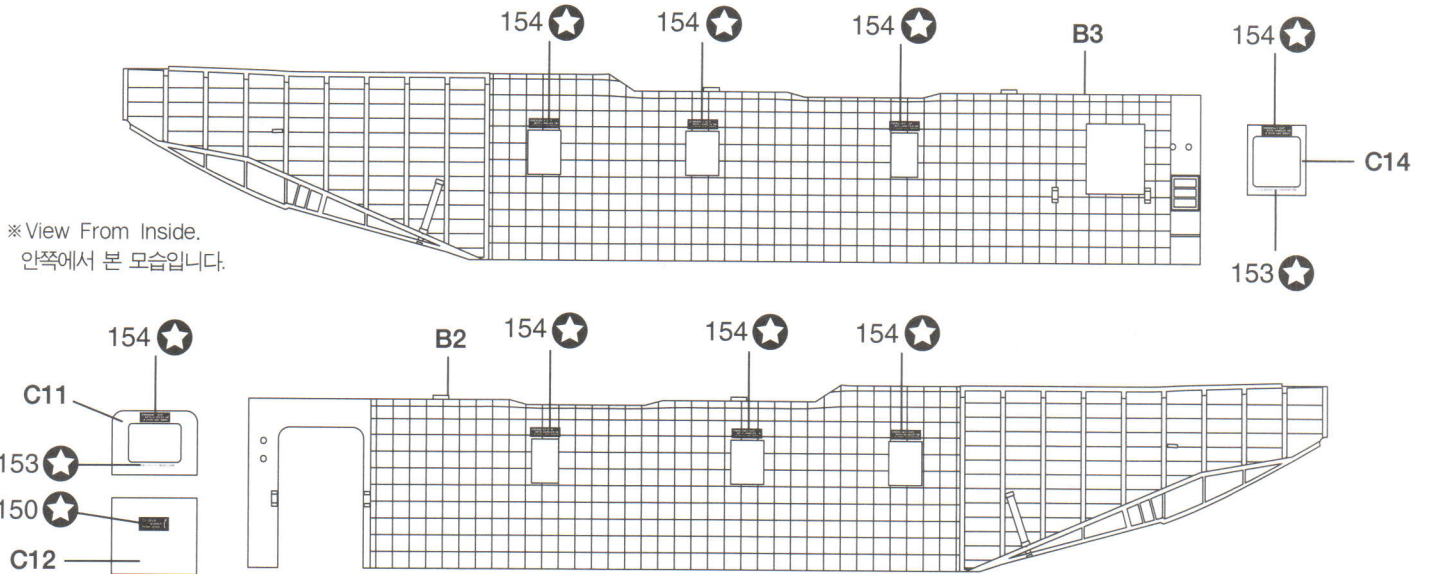
※ View From Inside.  
※ 동체 안쪽 모습입니다.



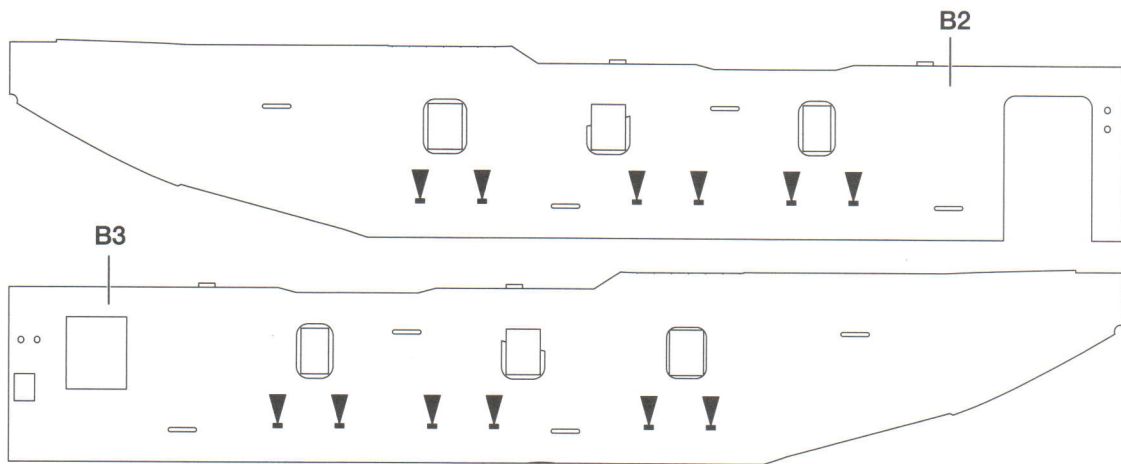
※Interior Painting Instruction / 동체내부 색칠참조



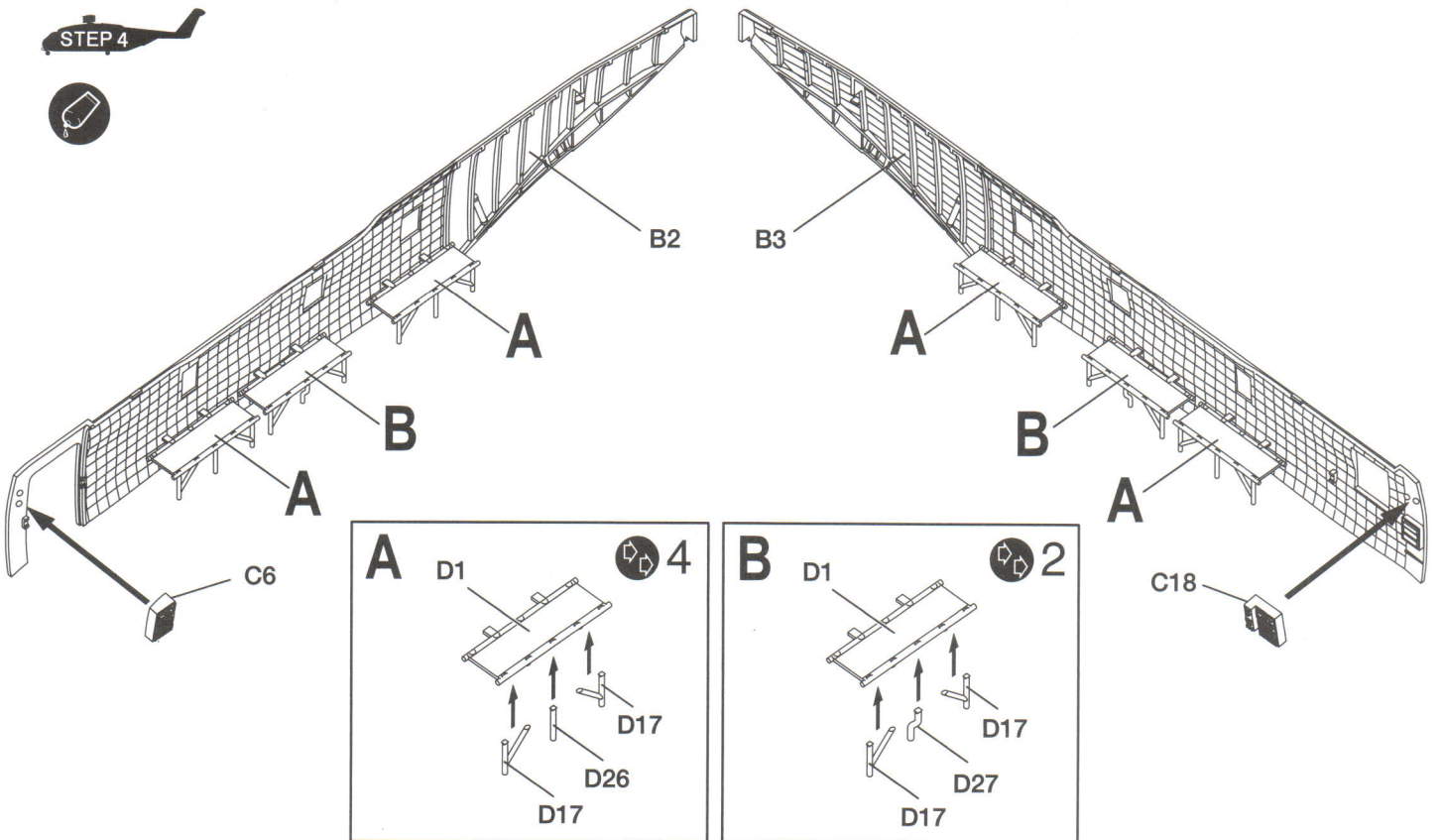
※ Interior Decal placement / 동체내부 전사지 붙이기



※Drill holes in locations shown / ▼표시부분에 구멍을 뚫어 주십시오.

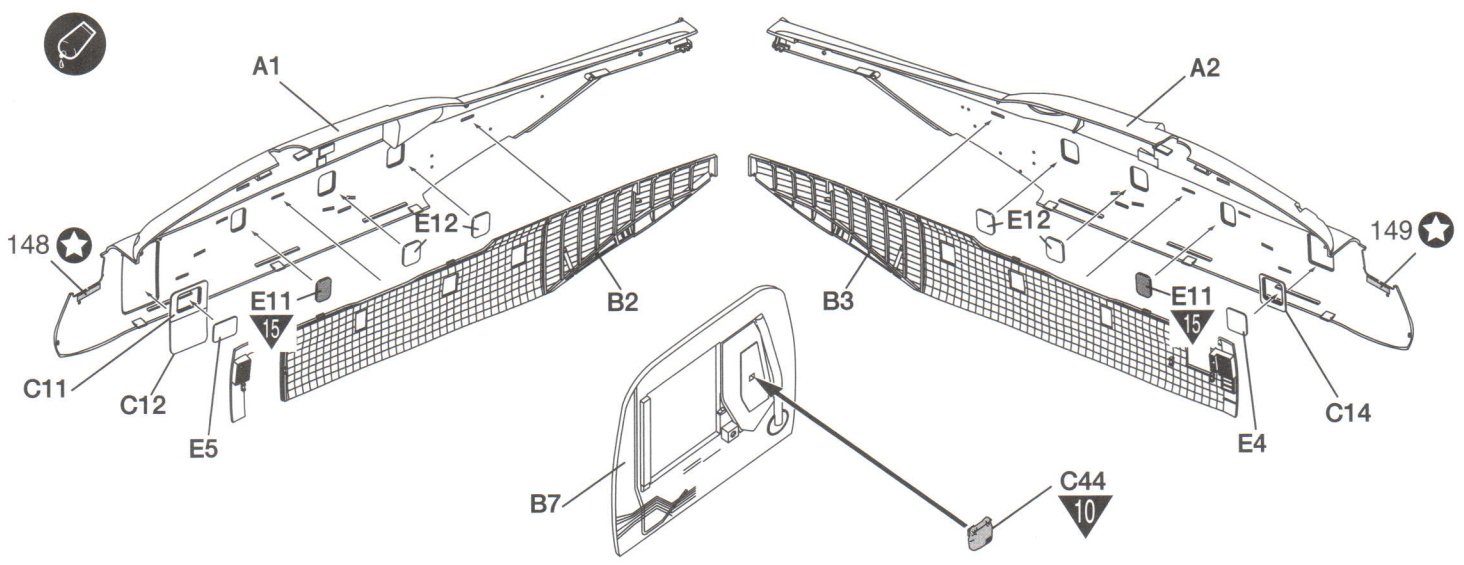


STEP 4



**STEP 5**

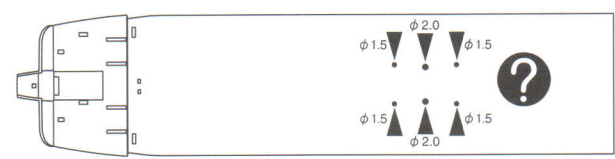
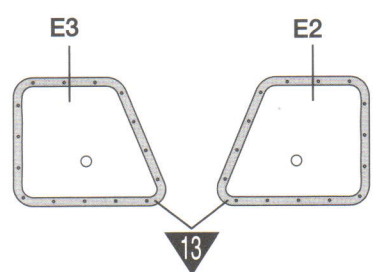
※Please refer to page 10 when proceeding assembly with C11, C12 and C14 open.  
 C11, C12, C14를 열린 상태로 조립시엔 10페이지를 참조 하십시오.



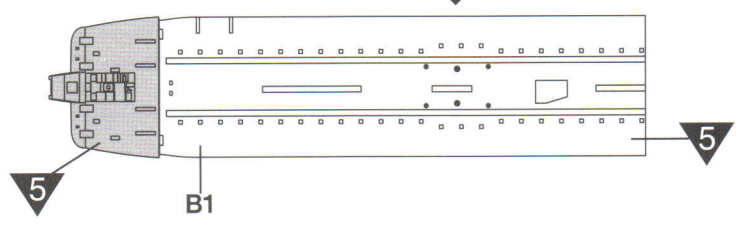
※Drill holes in locations shown / ▼표시부분에 구멍을 뚫어 주십시오.

※Painting Guide / 색칠참조

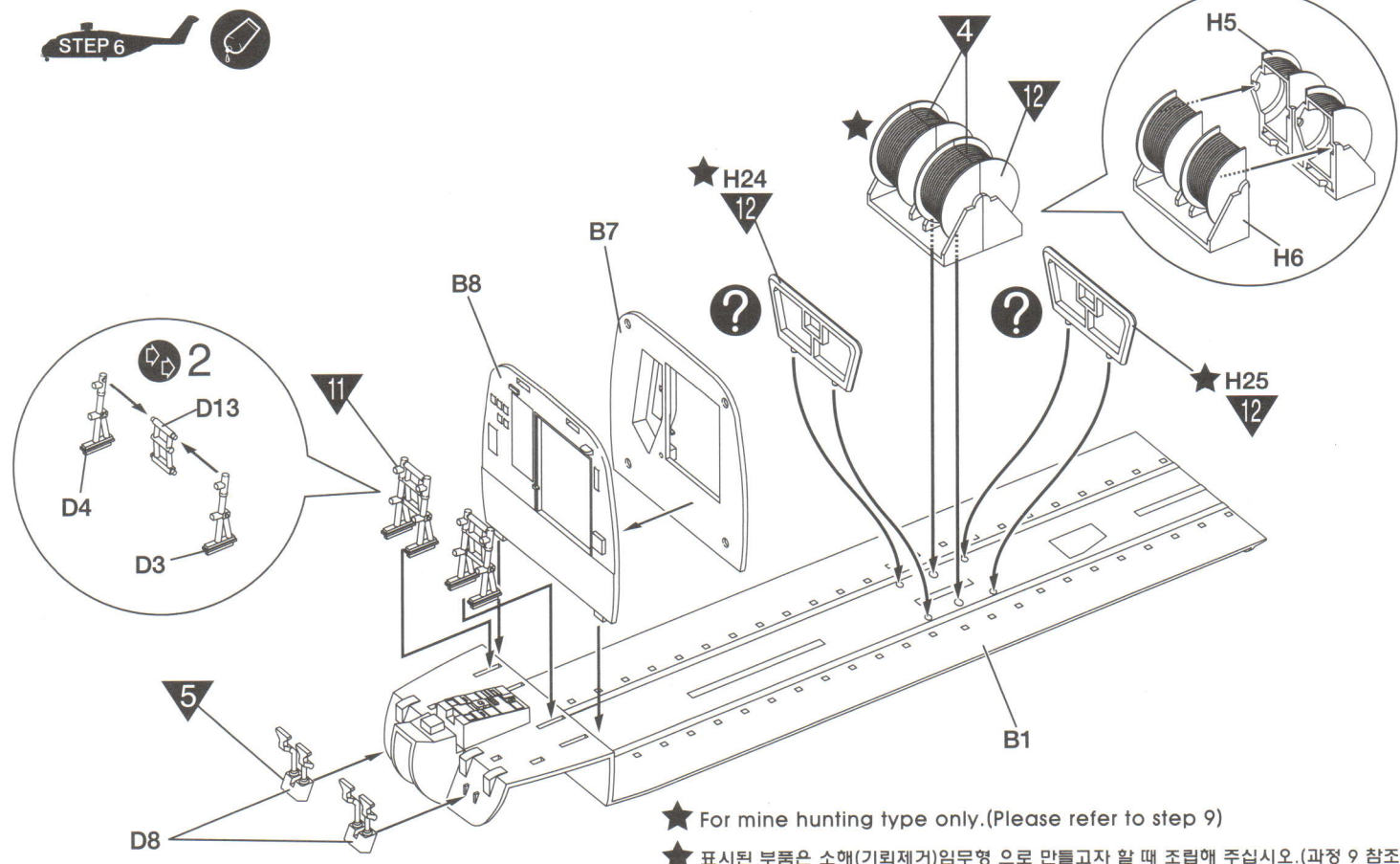
※View From Inside.  
 안쪽에서 본 모습입니다.



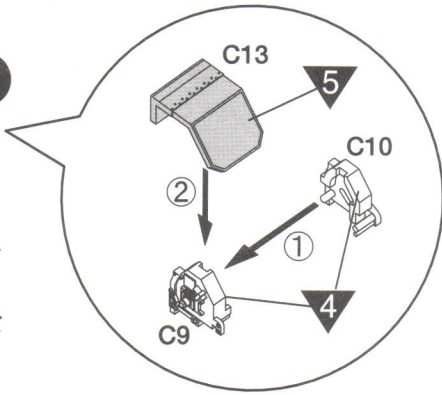
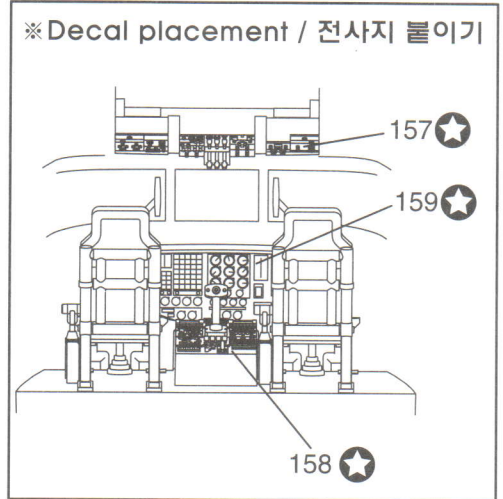
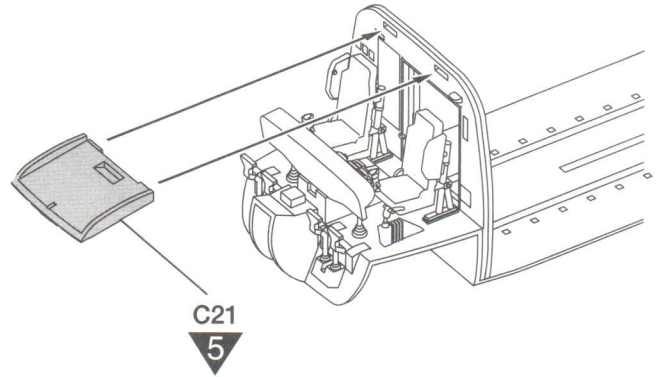
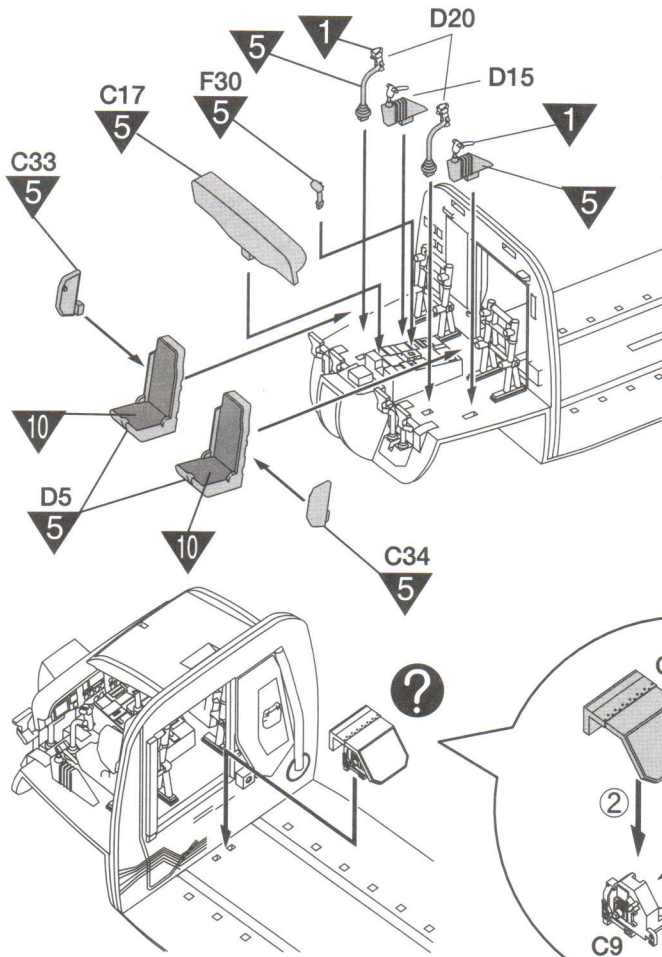
※Please refer to step 6.  
 과정 6을 참조 하십시오.



**STEP 6**

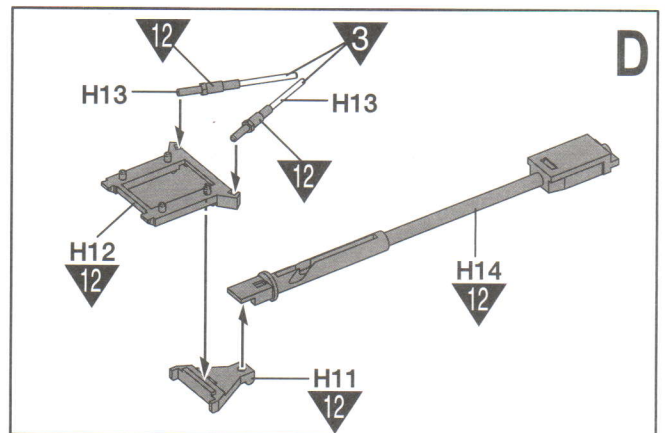
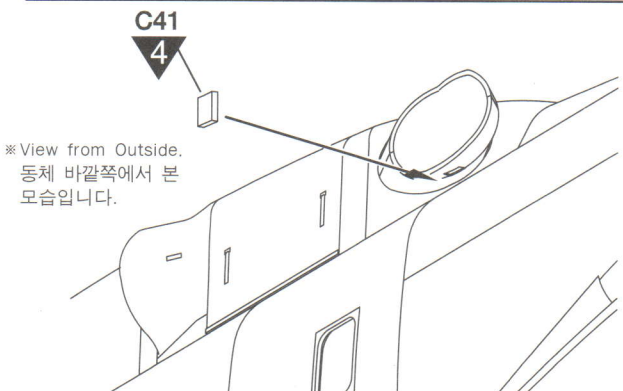
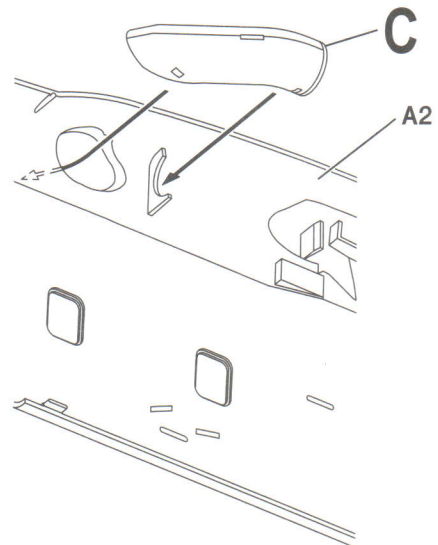
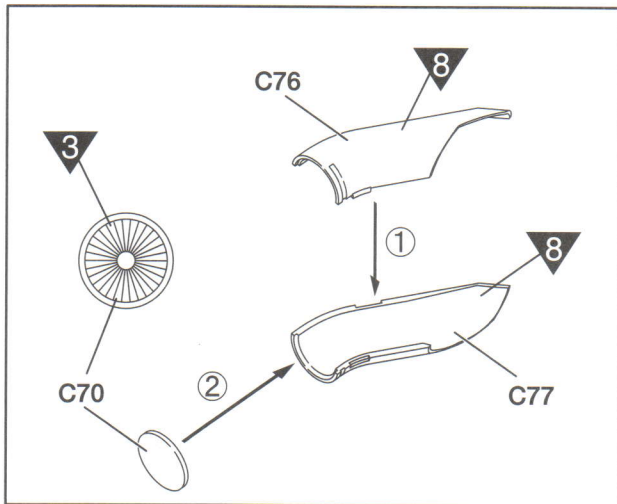


★ For mine hunting type only.(Please refer to step 9)  
 ★ 표시된 부품은 소매(기뢰제거)임무형 으로 만들고자 할 때 조립해 주십시오.(과정 9 참조)



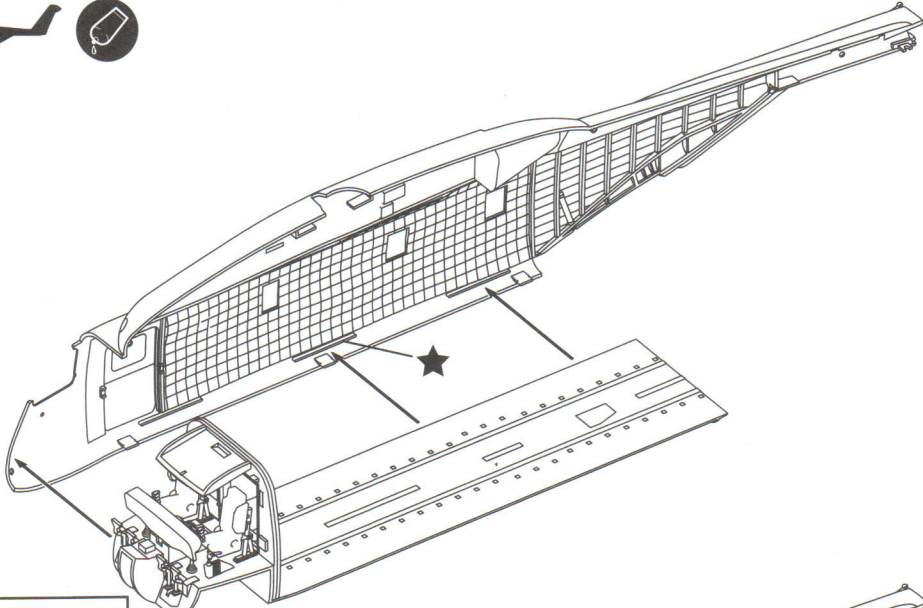
※View from Inside / 동체 안쪽에서 본 모습입니다.

**STEP 7**



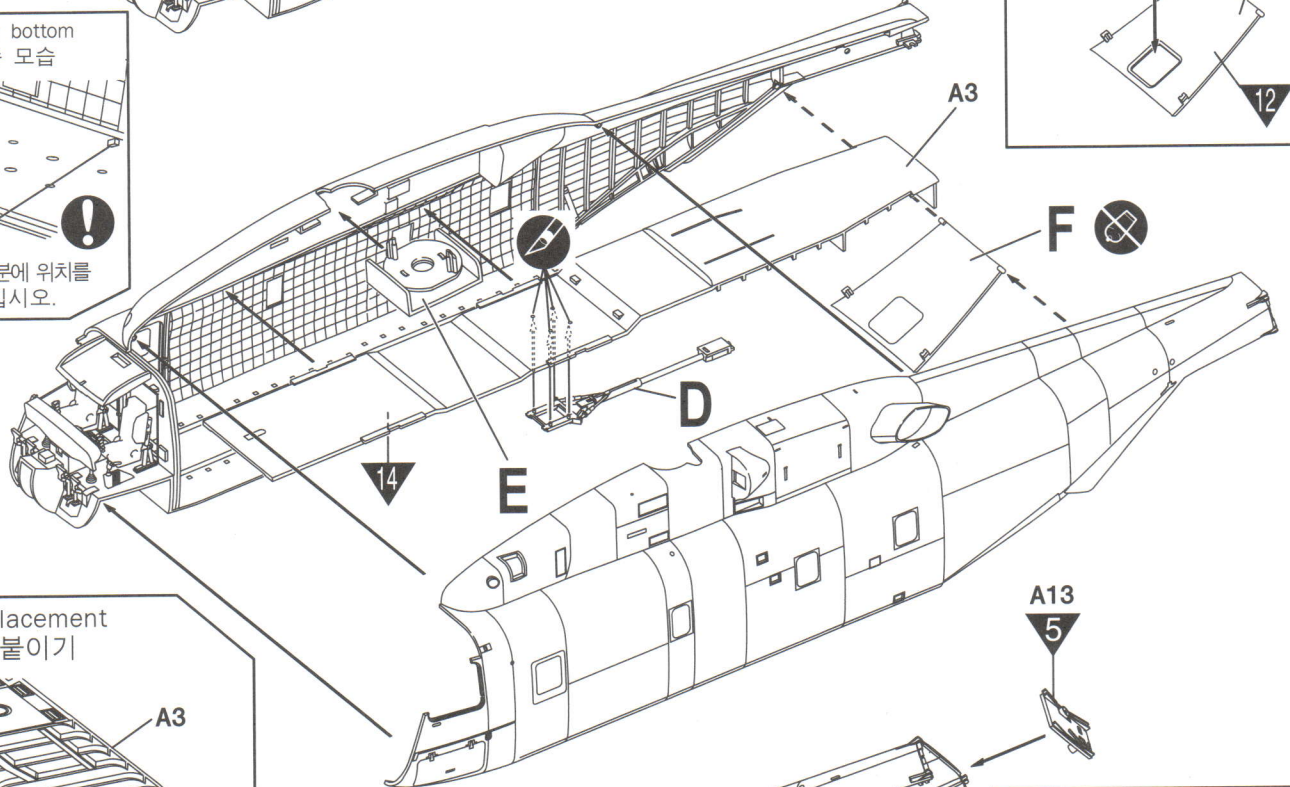
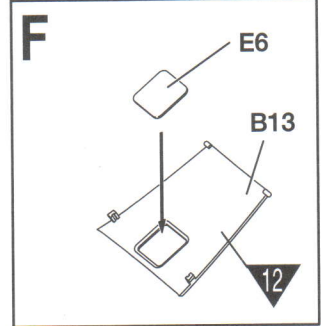
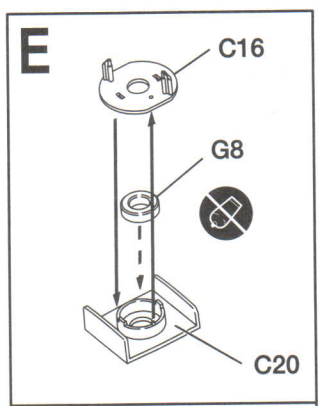


**STEP 8**



※ View from bottom  
바닥면 쪽 모습

※ 돌출턱 부분에 위치를  
맞춰 주십시오.

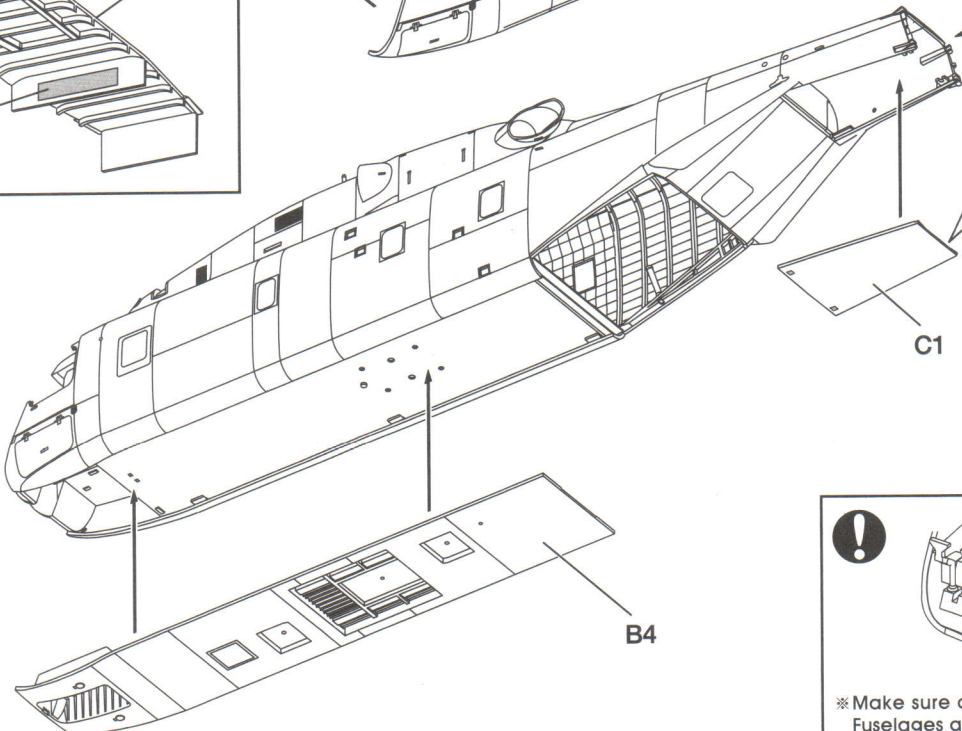


※ Decal placement  
전사지 붙이기

152 ★

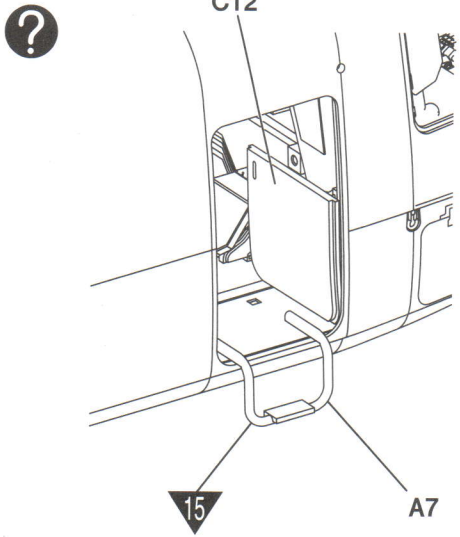


※ Drill holes in locations shown.  
(Please refer to 9&13)  
소매 기뢰제거 임무용으로 조립  
할 때만 구멍을 뚫어 주십시오.  
(과정 9, 13 참조)

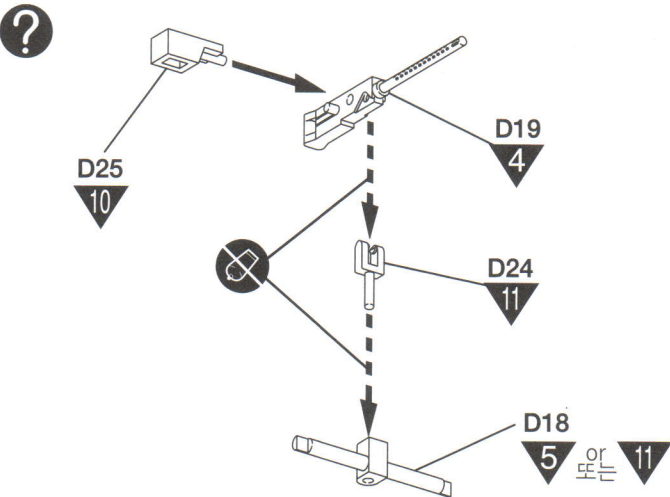
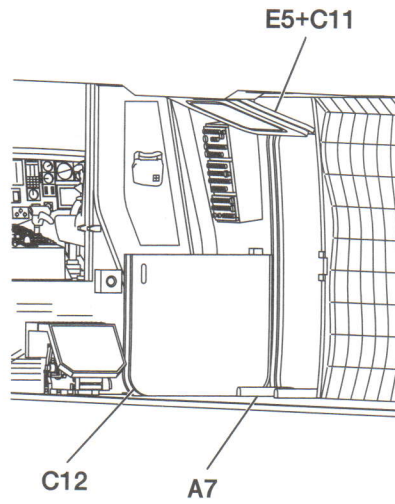


※ Make sure cockpit front & end of  
Fuselages are in Exact Alignment.  
조종석 앞부분과 동체 끝부분의 위치를  
정확히 맞춰 주십시오.

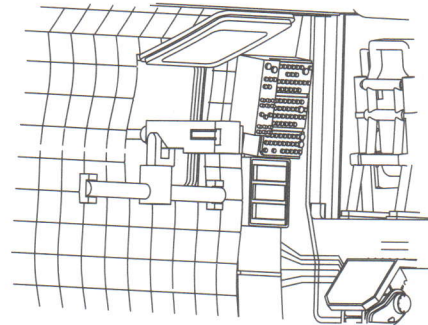
※Option <Door Open>  
선택하십시오.<탑승도어 열린 상태>



※View from Inside / 동체 안쪽에서 본 모습

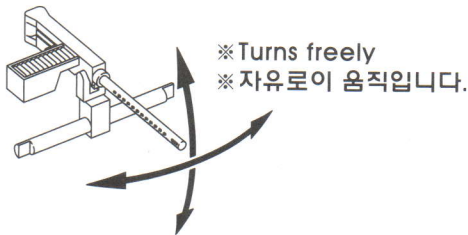
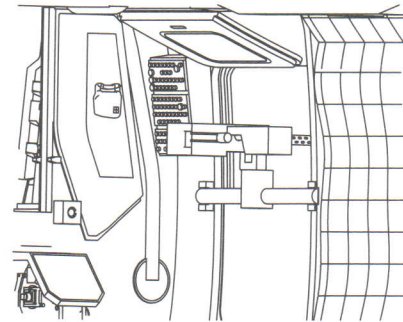


※View from Inside (Left)/ 동체 안쪽에서 본 모습(왼쪽)



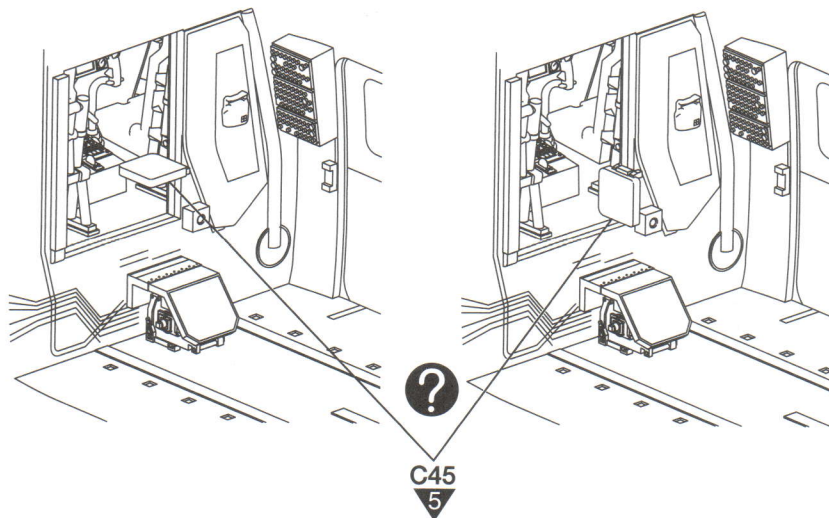
※Do not glue in dotted line  
※점선 표시 부분은 접착하지 마십시오.

※View from Inside (Right)/ 동체 안쪽에서 본 모습(오른쪽)



※Turns freely  
※자유로이 움직입니다.

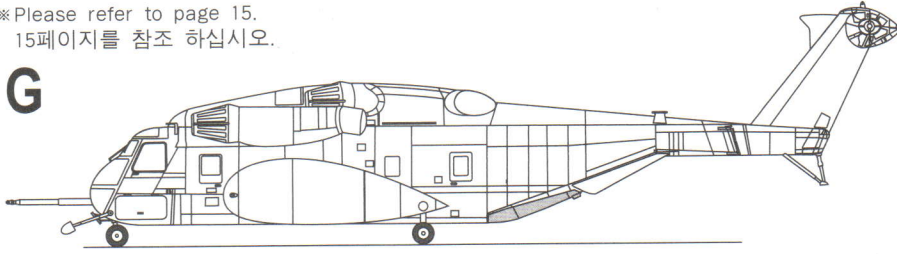
※Option / 조립상태를 선택 하십시오.



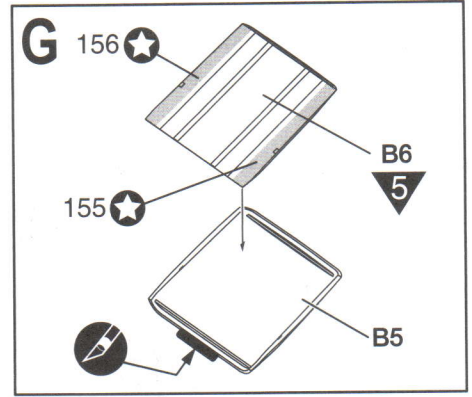
**STEP 9**  

※Please refer to page 15.  
15페이지를 참조 하십시오.

**G**

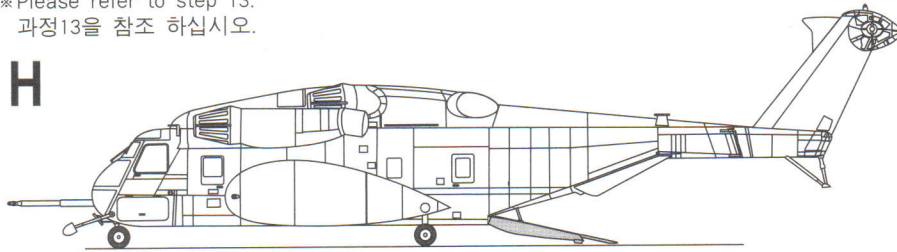


<Combat Transport(ramp closed)/ 전투수송 임무시(후방램프 닫힌상태)>

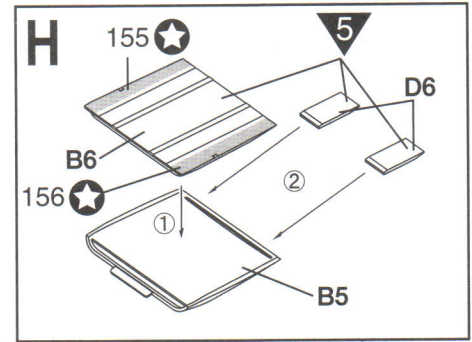


※Please refer to step 13.  
과정13을 참조 하십시오.

**H**

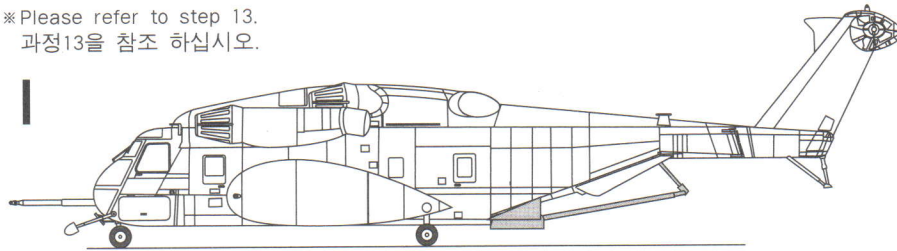


<Combat Transport(ramp open)/ 전투수송 임무시(후방램프 열린상태)>

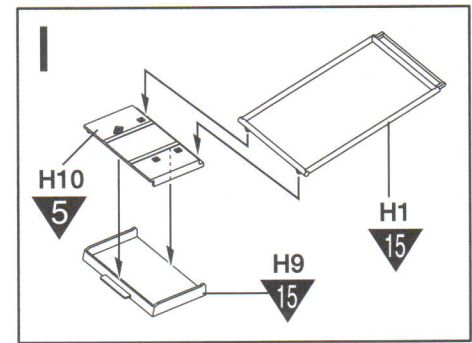


※Please refer to step 13.  
과정13을 참조 하십시오.

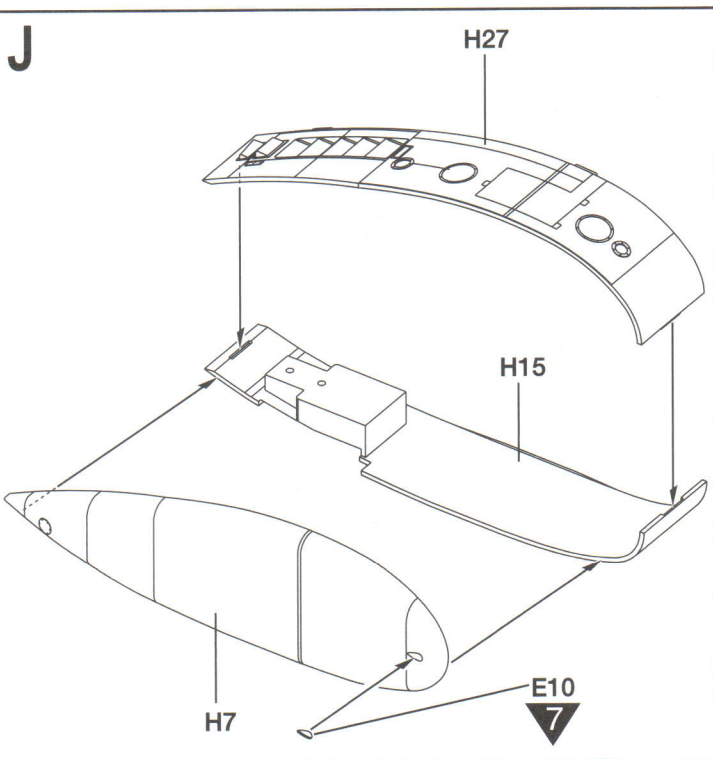
**I**



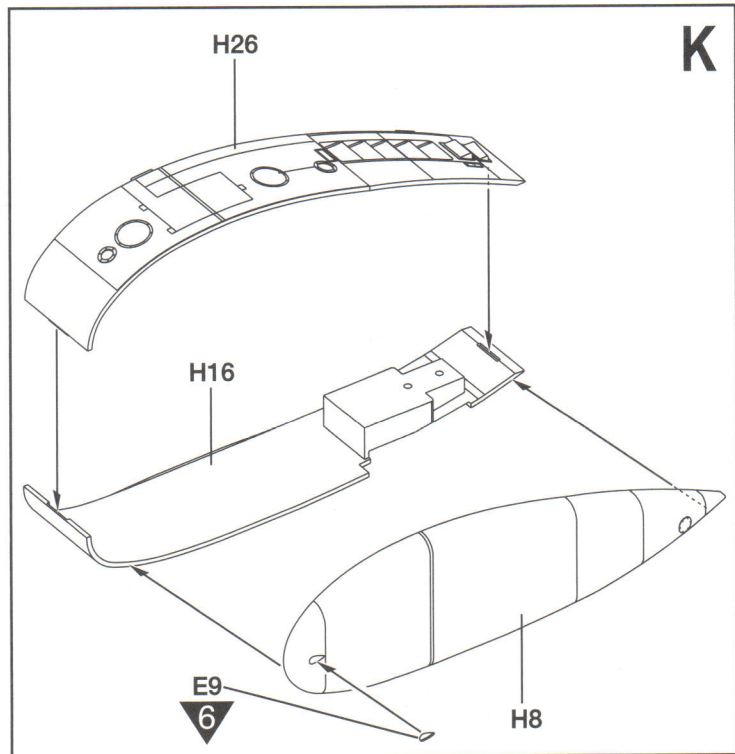
<Mine Hunter/ 소해(기뢰제거)임무시>



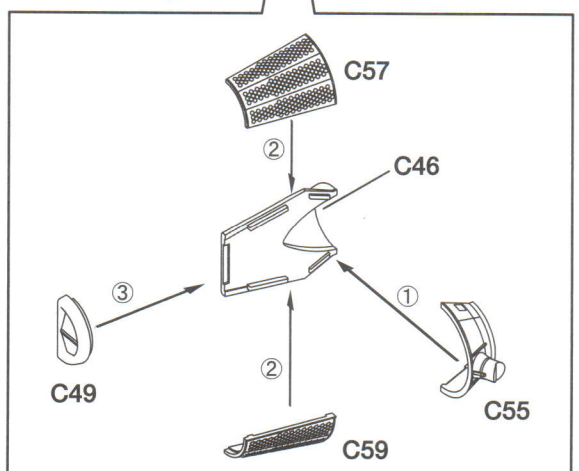
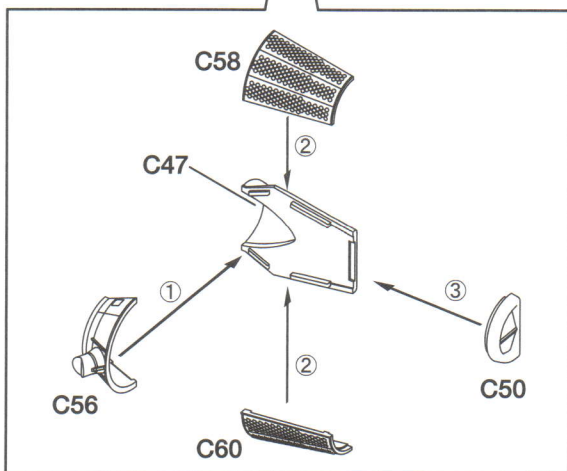
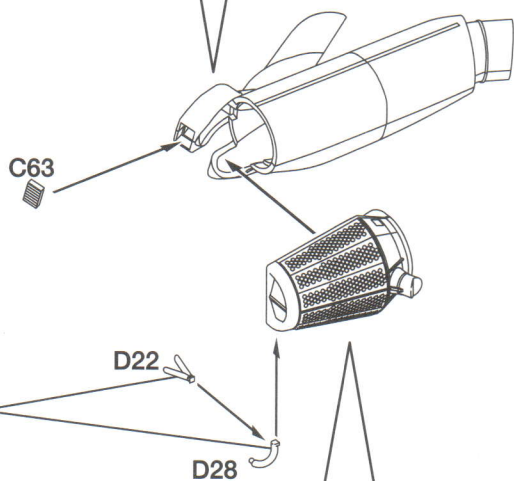
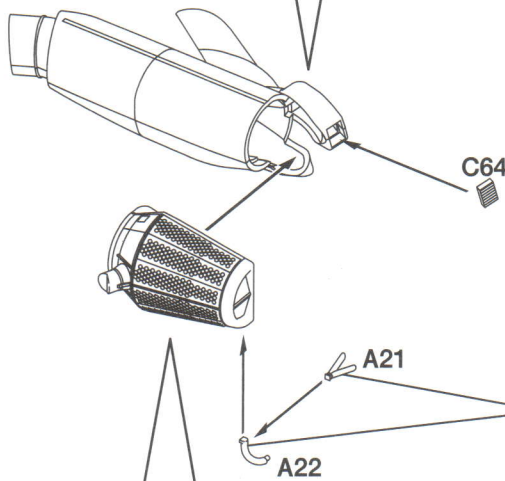
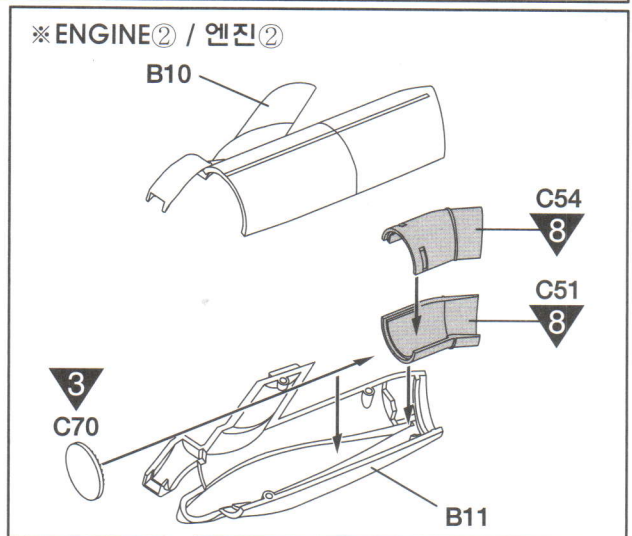
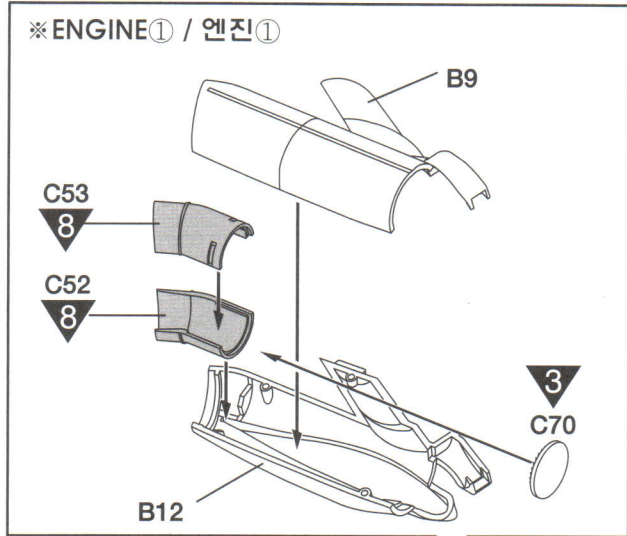
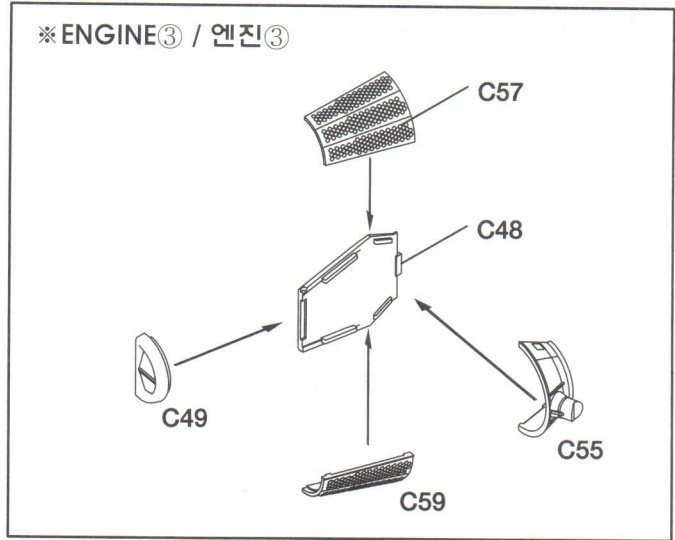
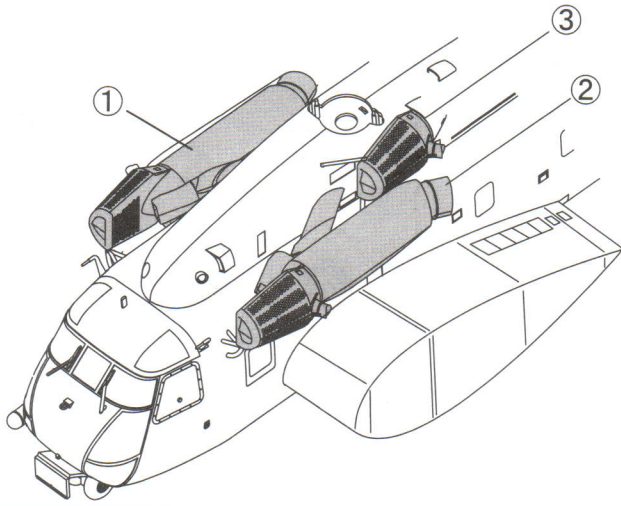
**J**



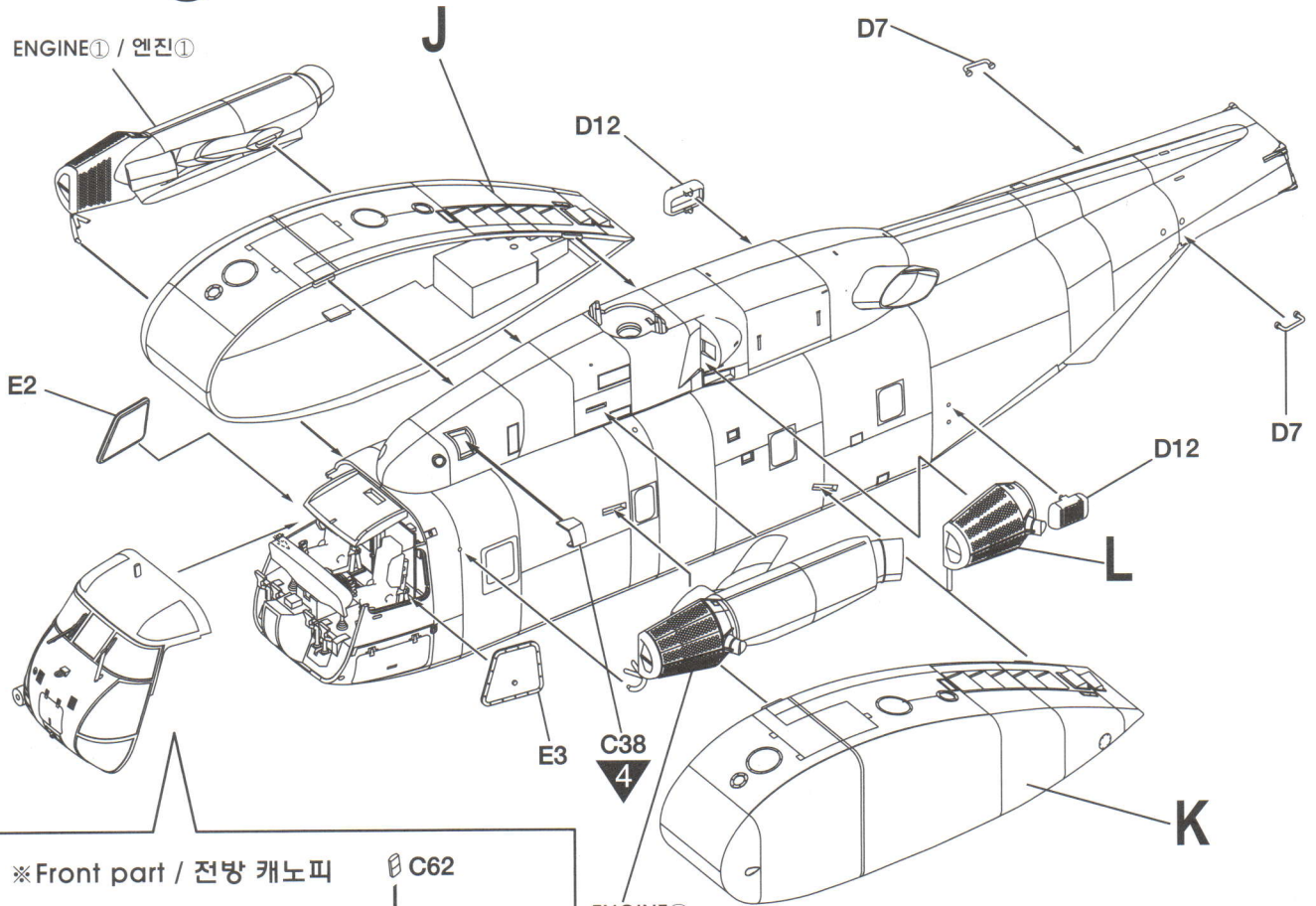
**K**



※ Please refer to page 13.  
13페이지를 참조 하십시오.

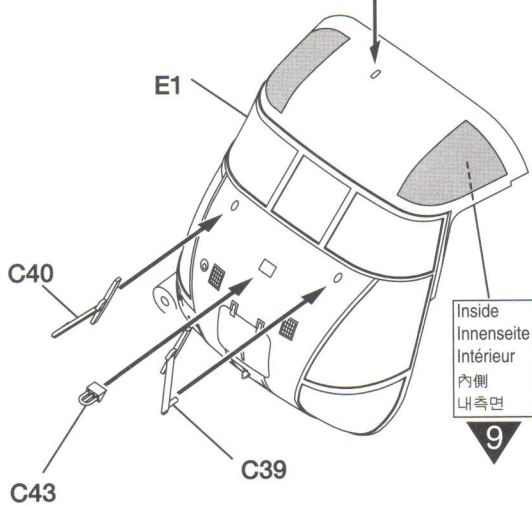


ENGINE ① / 엔진①

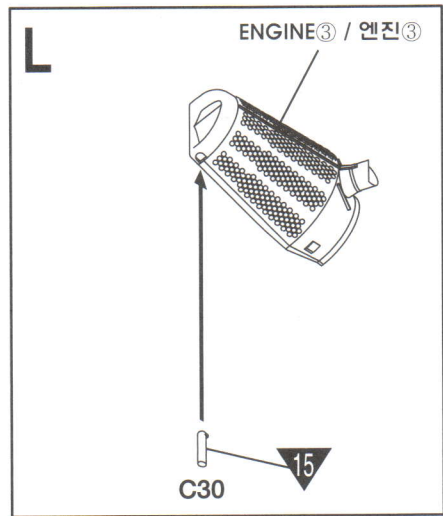


※ Front part / 전방 캐노피

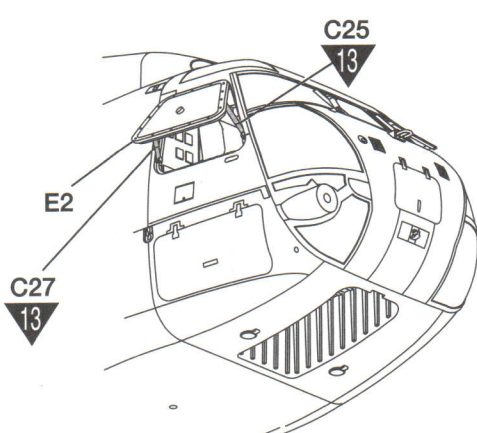
C62



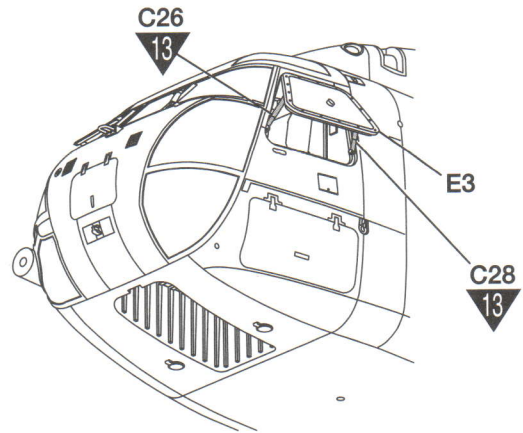
ENGINE ② / 엔진②



※ Option <Window Open> / 선택하십시오 <창문 열린 상태>

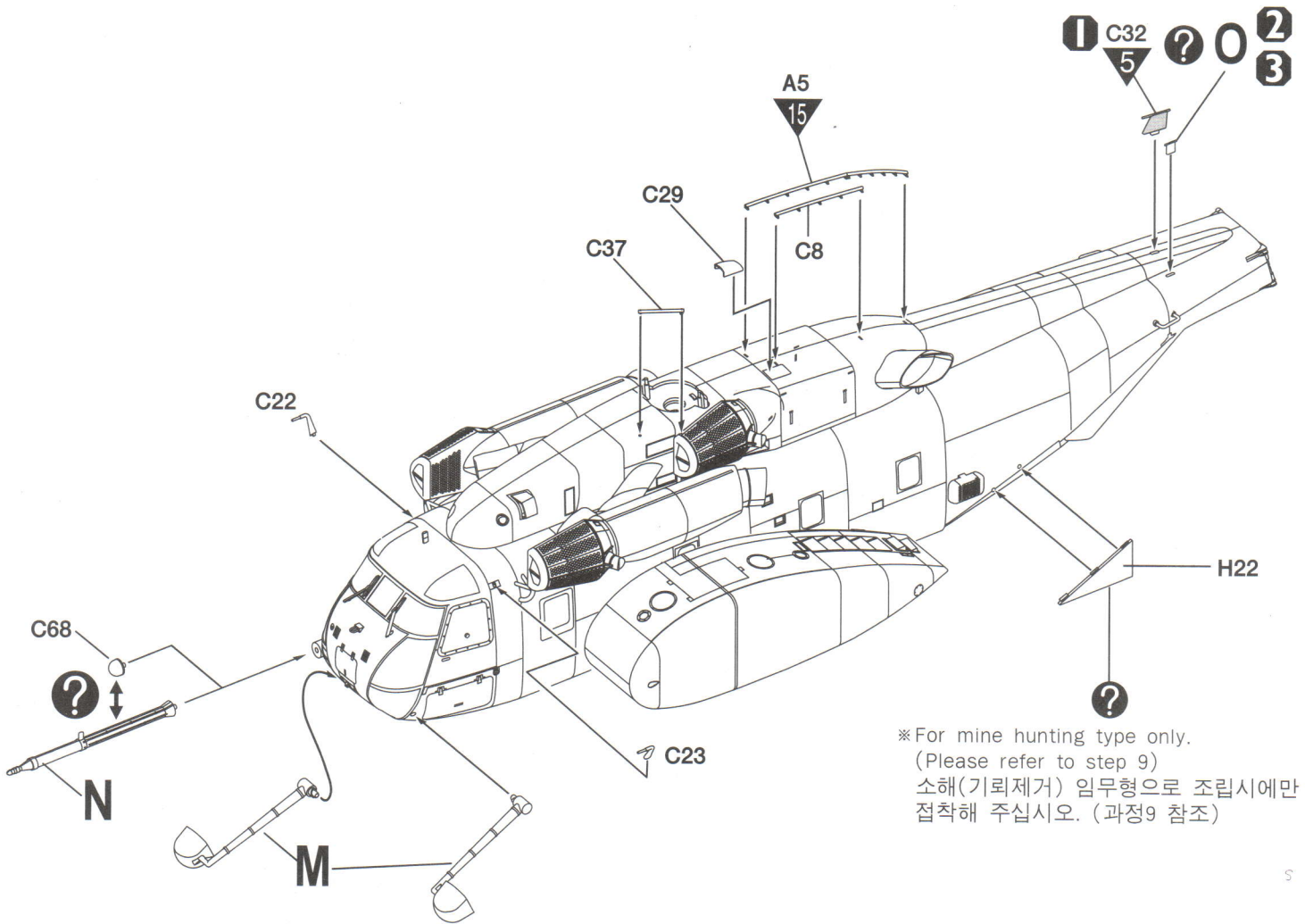


※ View from right / 오른쪽

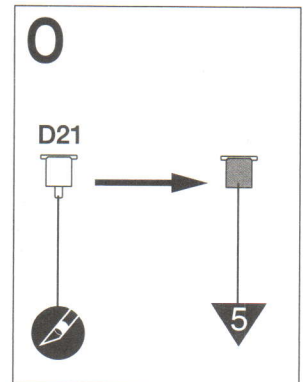
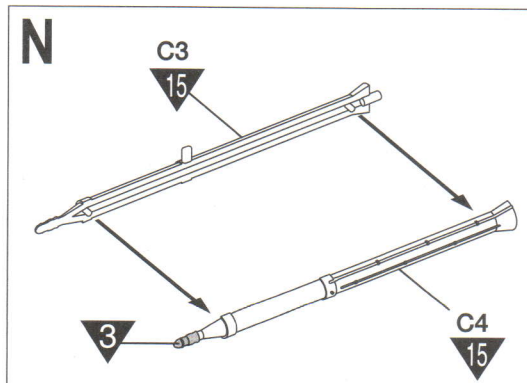
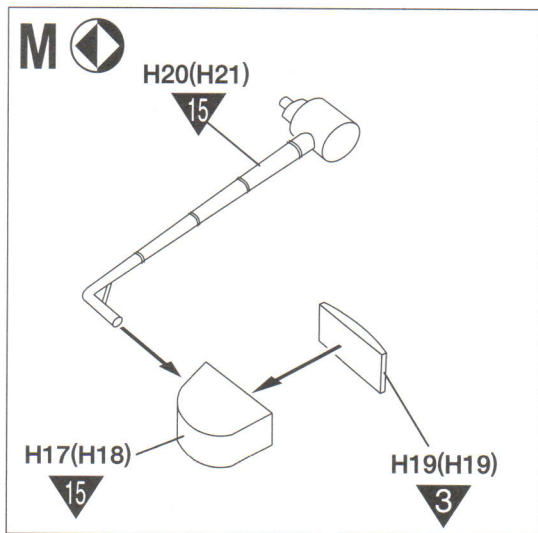


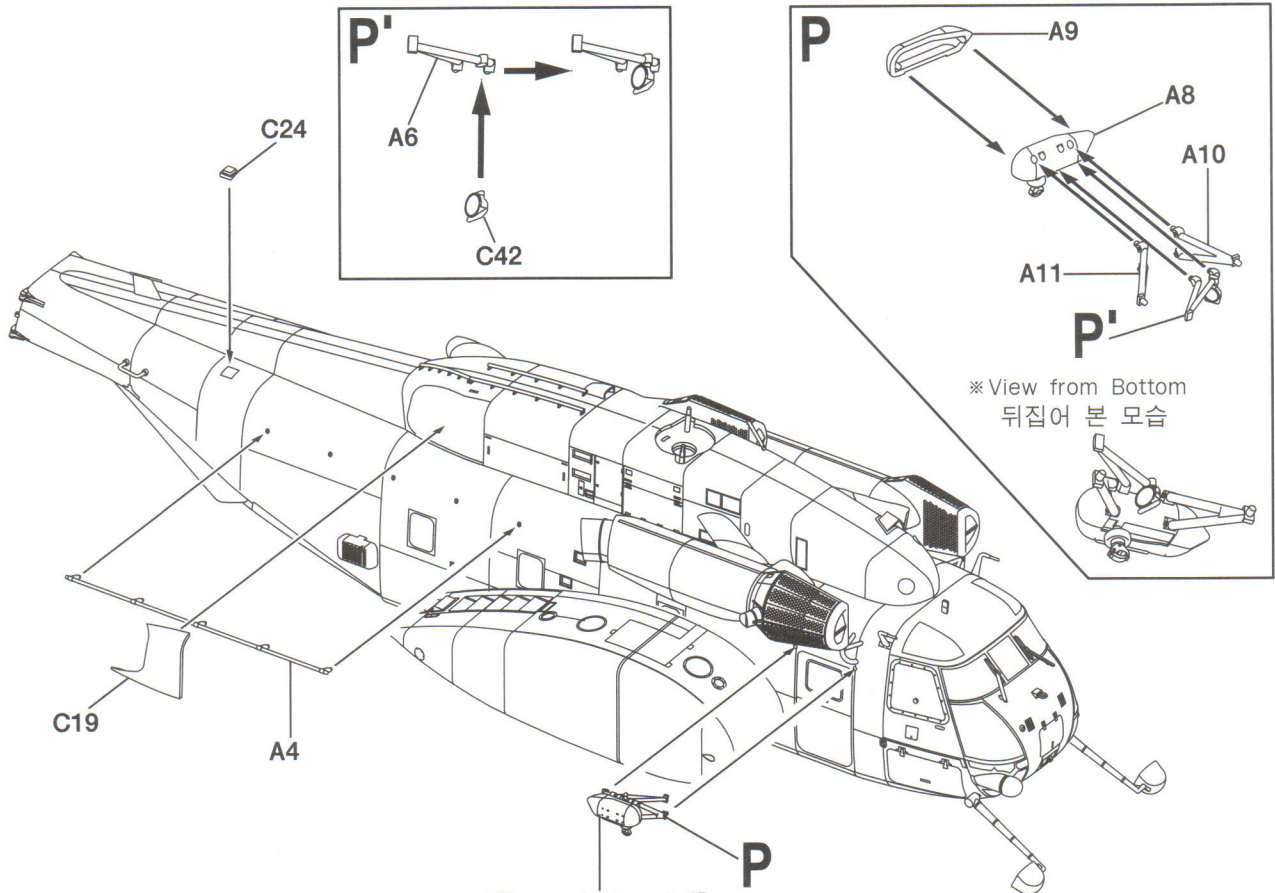
※ View from Left / 왼쪽

※Please cement A5 and C8 just after Decal #145 is placed on the surface of fuselage.  
 우선 동체상면에 전사지 145번을 먼저 붙인 다음, A5, C8부품을 접착해 주십시오.

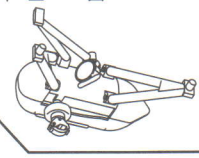


※For mine hunting type only.  
 (Please refer to step 9)  
 소해(기뢰제거) 임무형으로 조립시에만  
 접착해 주십시오. (과정9 참조)

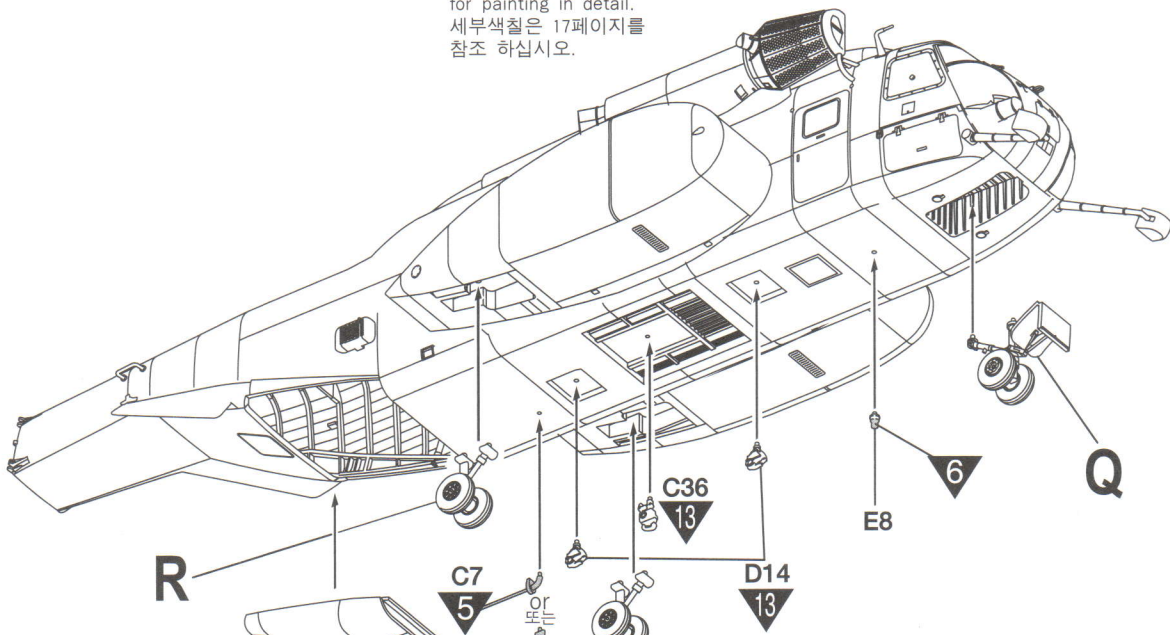




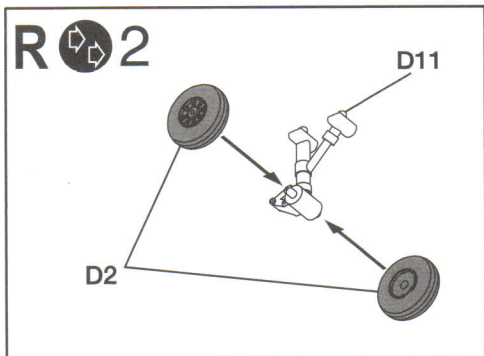
※ View from Bottom  
뒤집어 본 모습



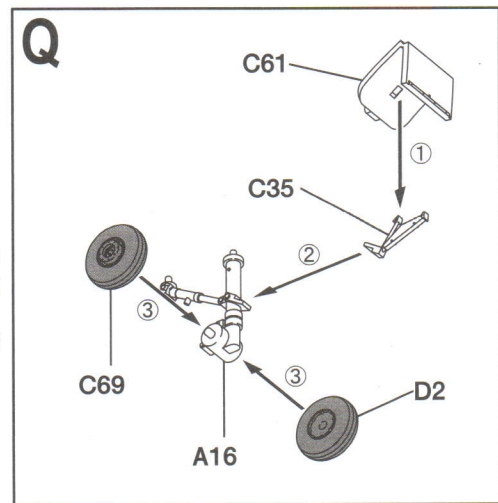
※ Please refer to page 17  
for painting in detail.  
세부색칠은 17페이지를  
참조 하십시오.

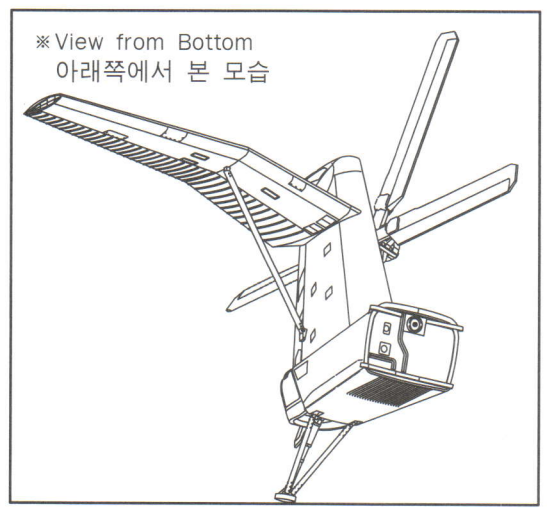
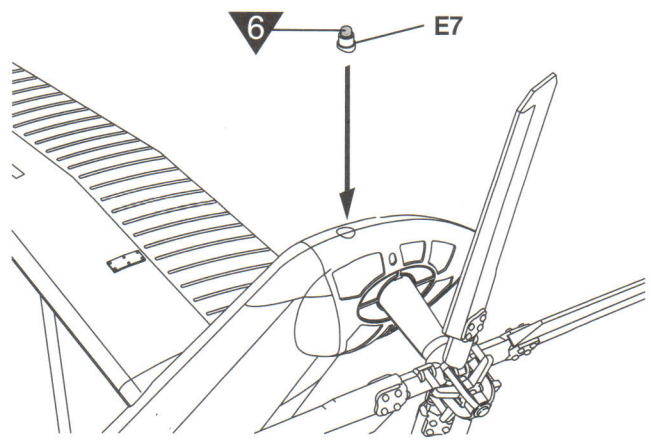
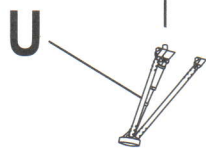
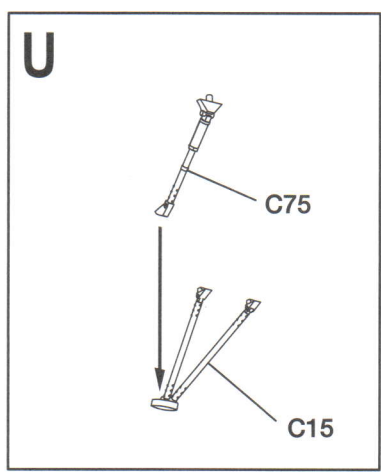
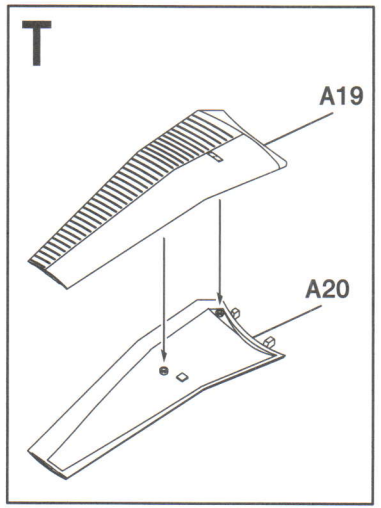
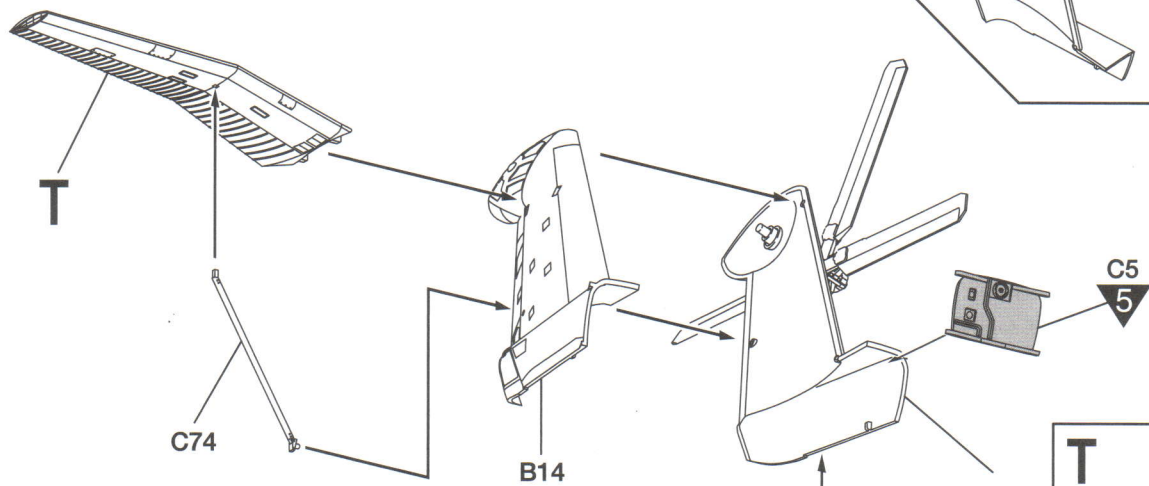
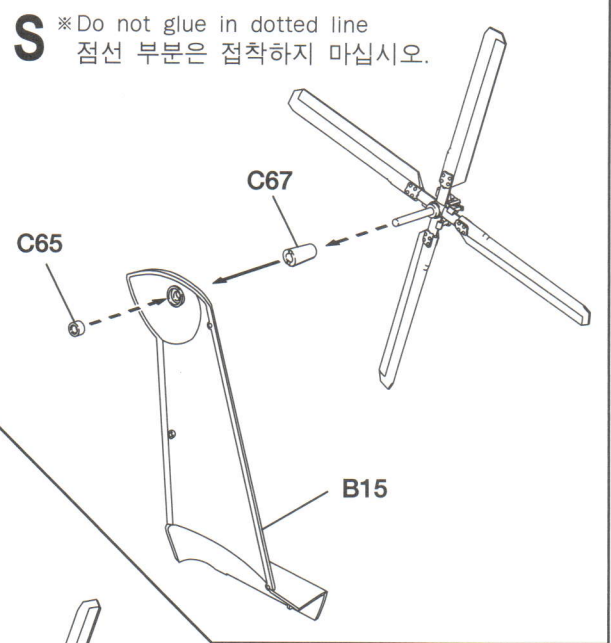
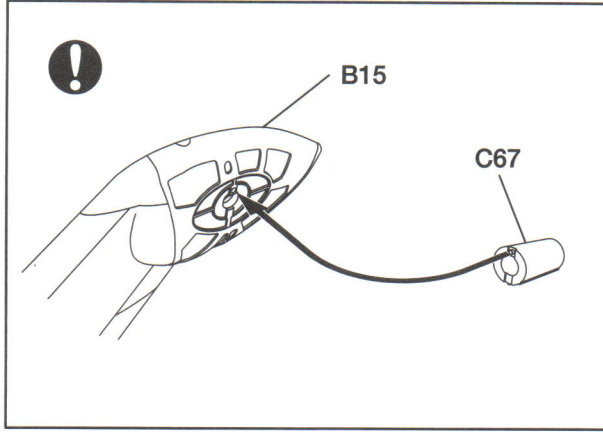


※ Combat Transport  
(ramp closed)  
전투수송 임무시  
(후방램프 닫힌상태)



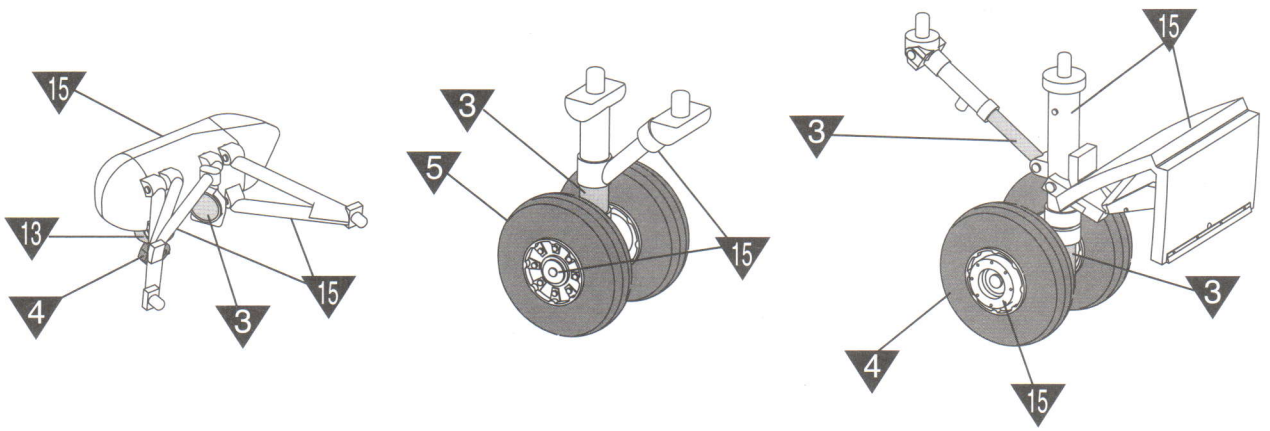
※ Please refer to  
page 17 for painting  
in detail.  
세부색칠은 17 페이지를  
참조하십시오.







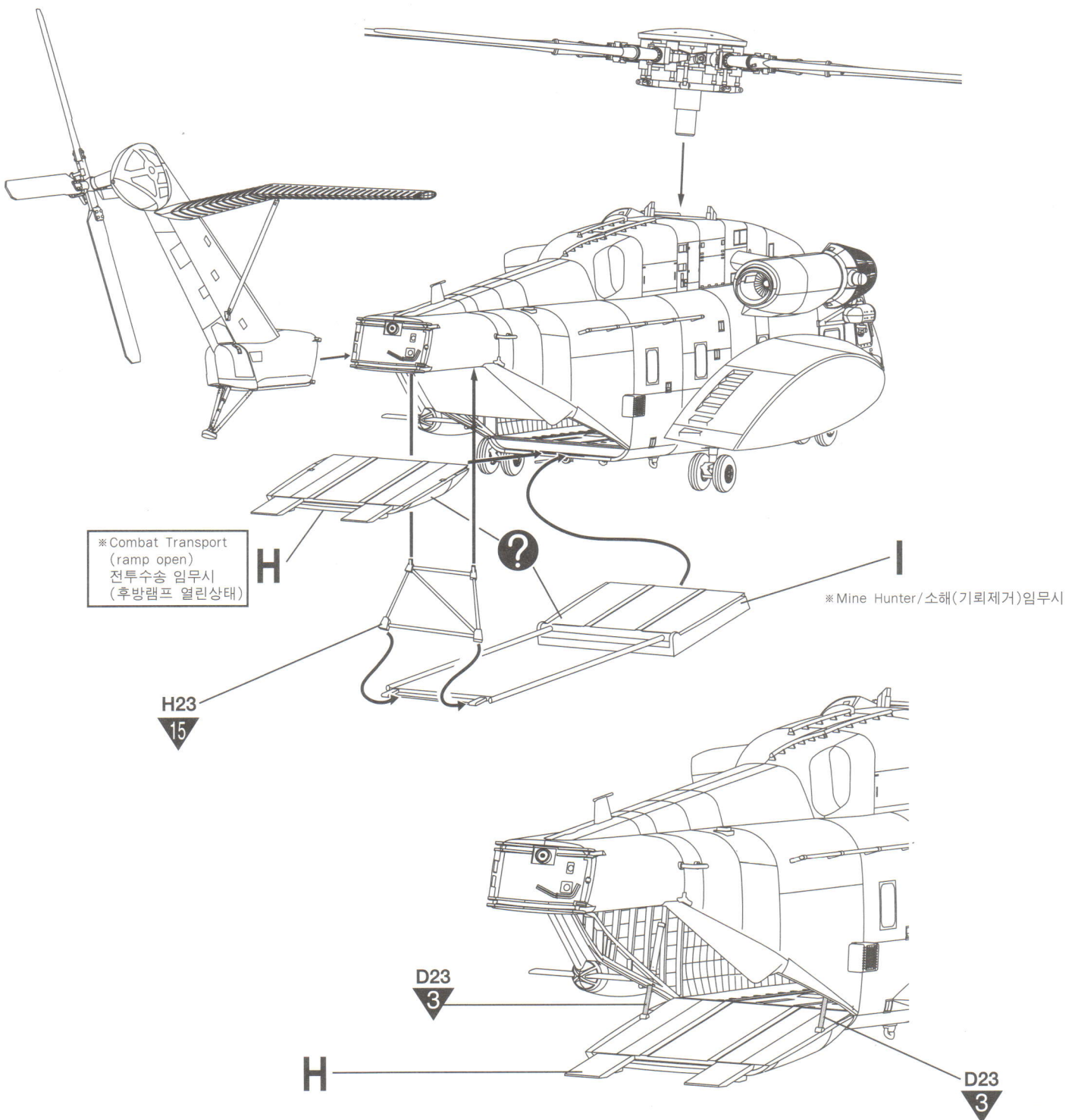
※Color of parts / 부품 색칠 참조



STEP13



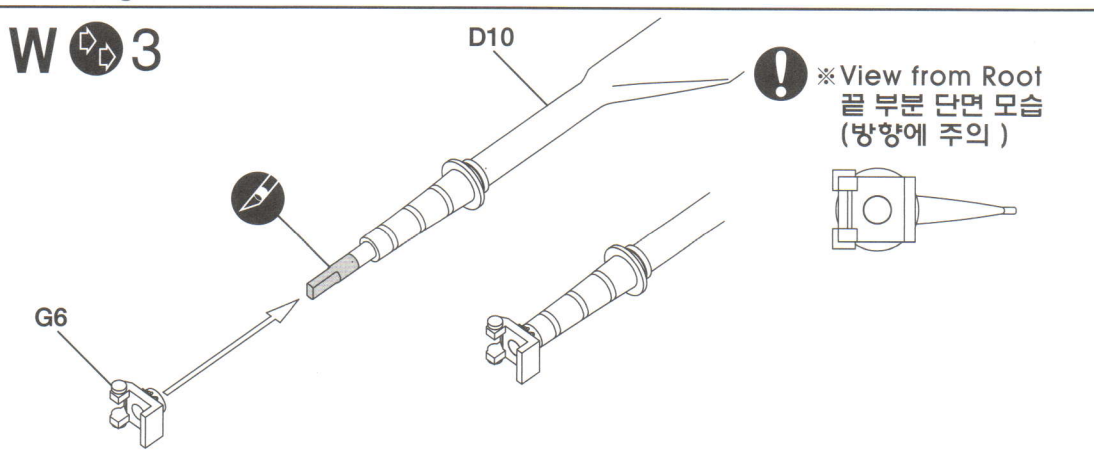
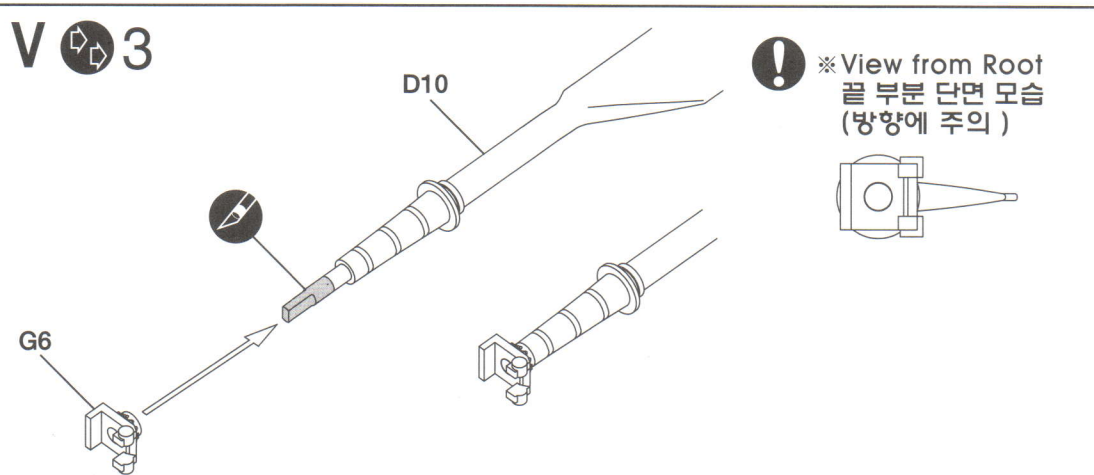
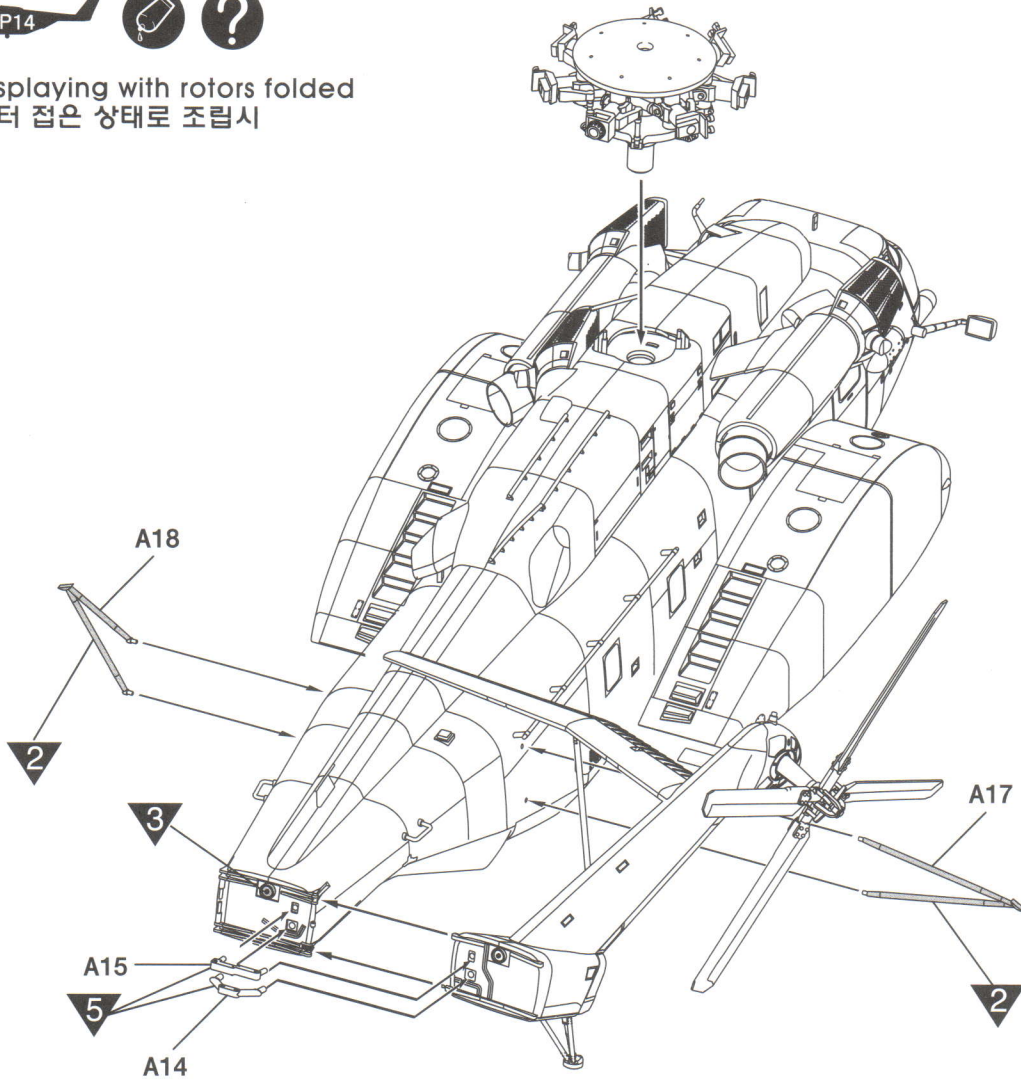
※Displaying with rotors in flight position / 로터 펼친 상태로 조립시

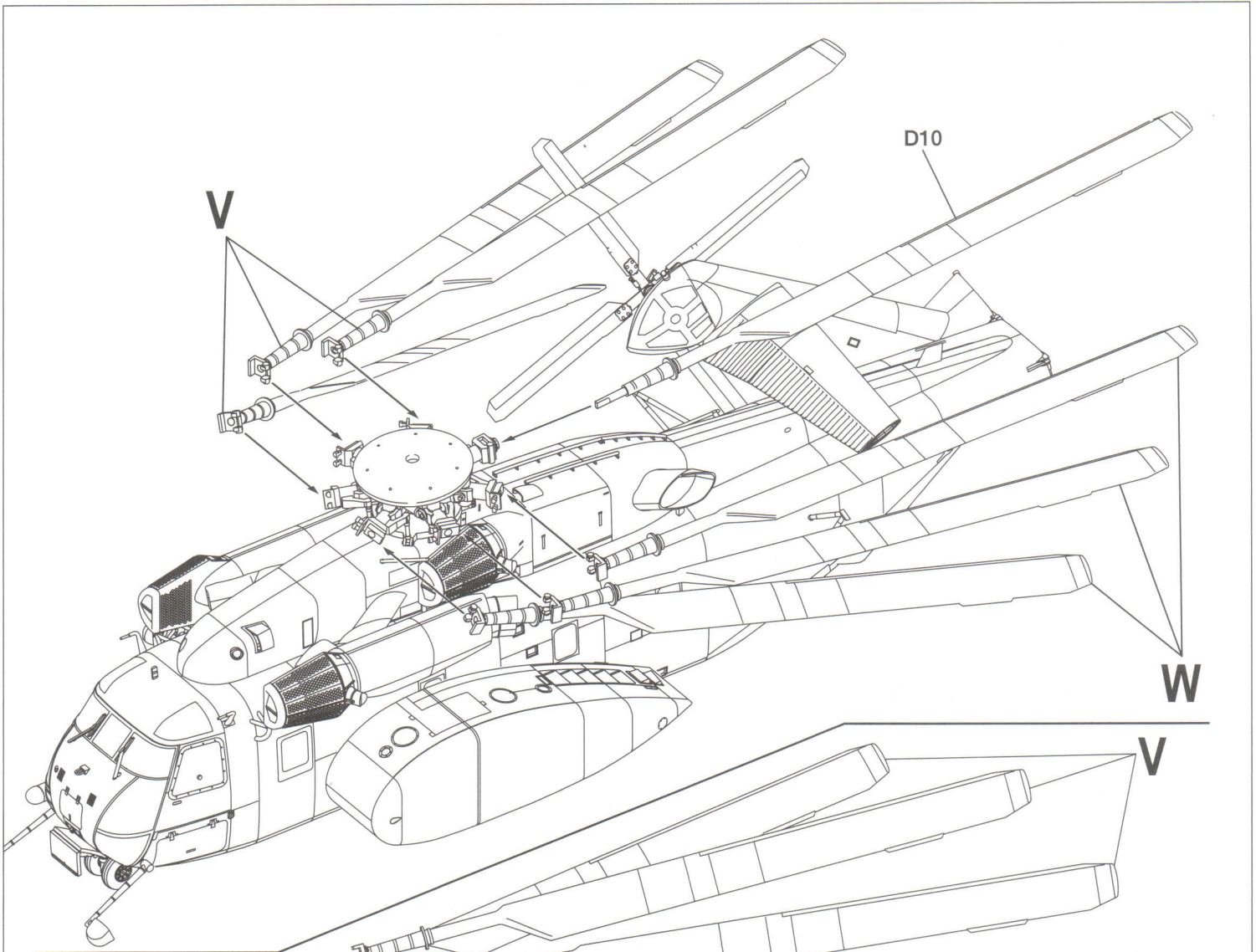


STEP14

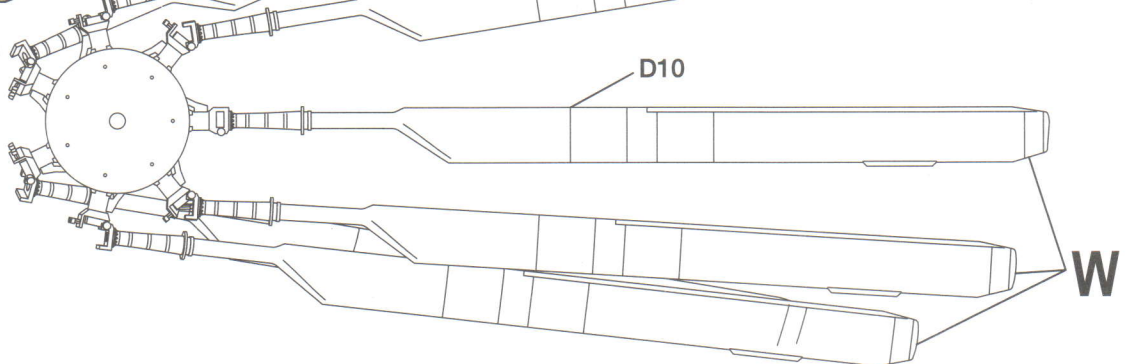


※Displaying with rotors folded  
로터 접은 상태로 조립시

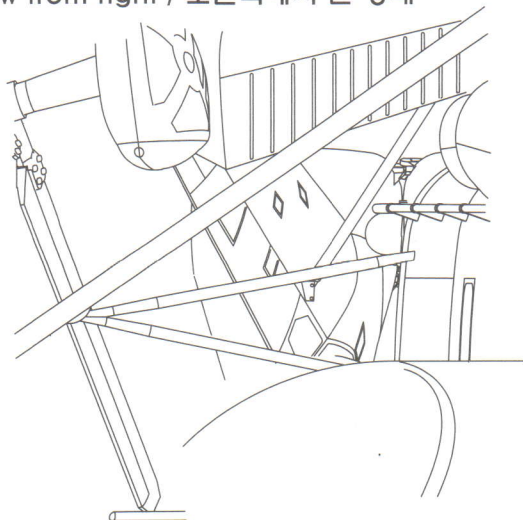




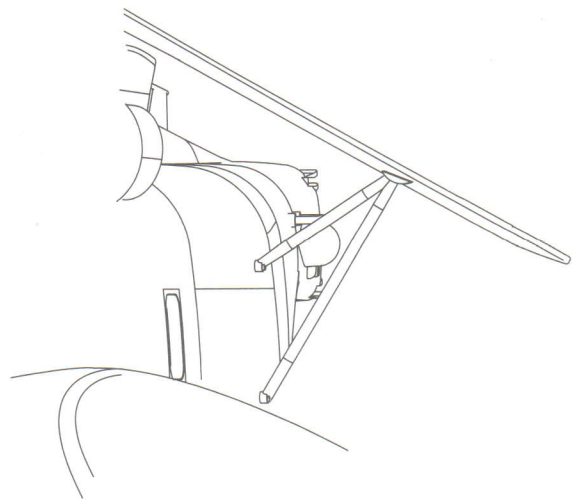
※View from Top  
위에서 본 상태 !



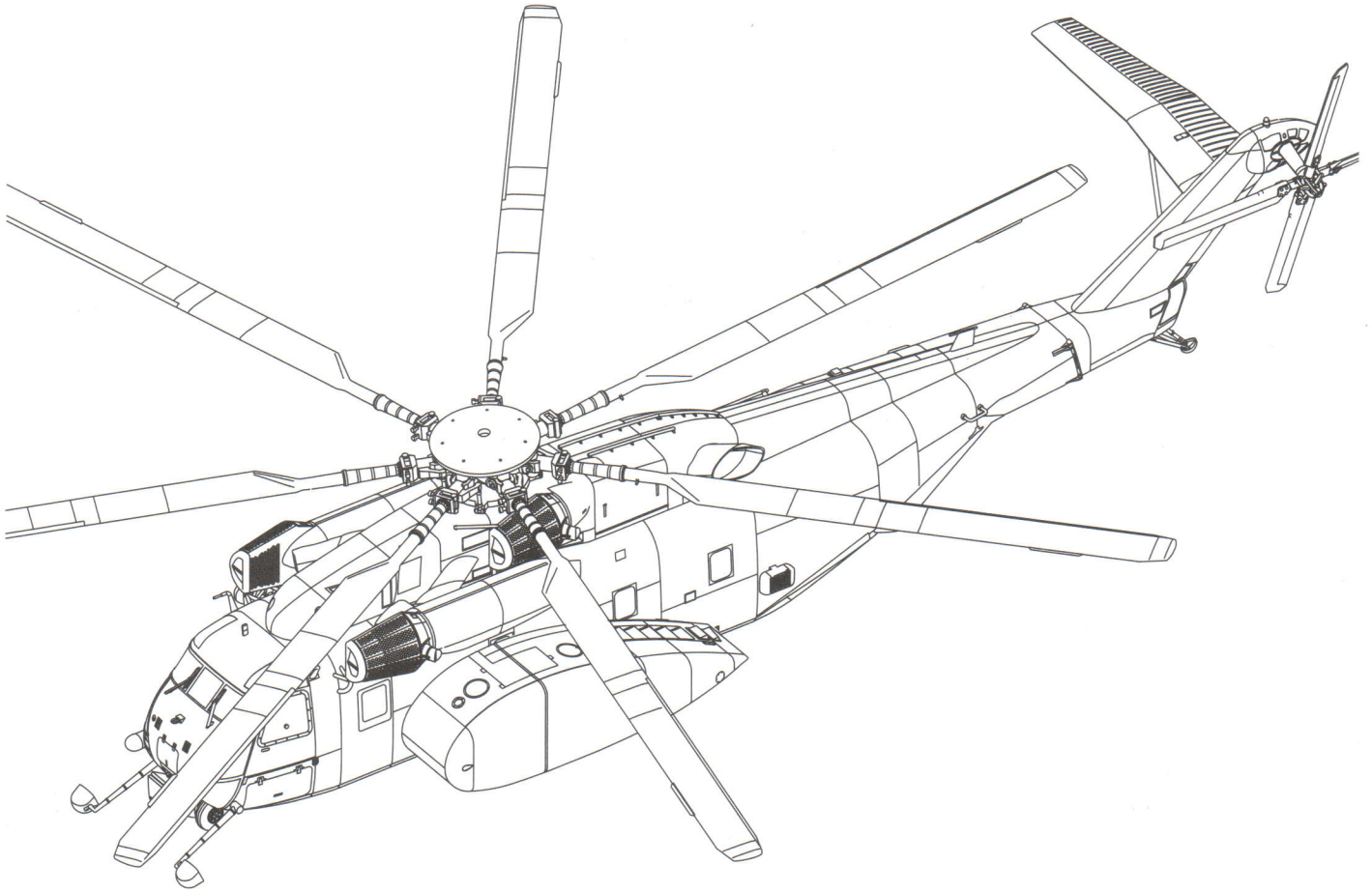
※View from right / 오른쪽에서 본 상태



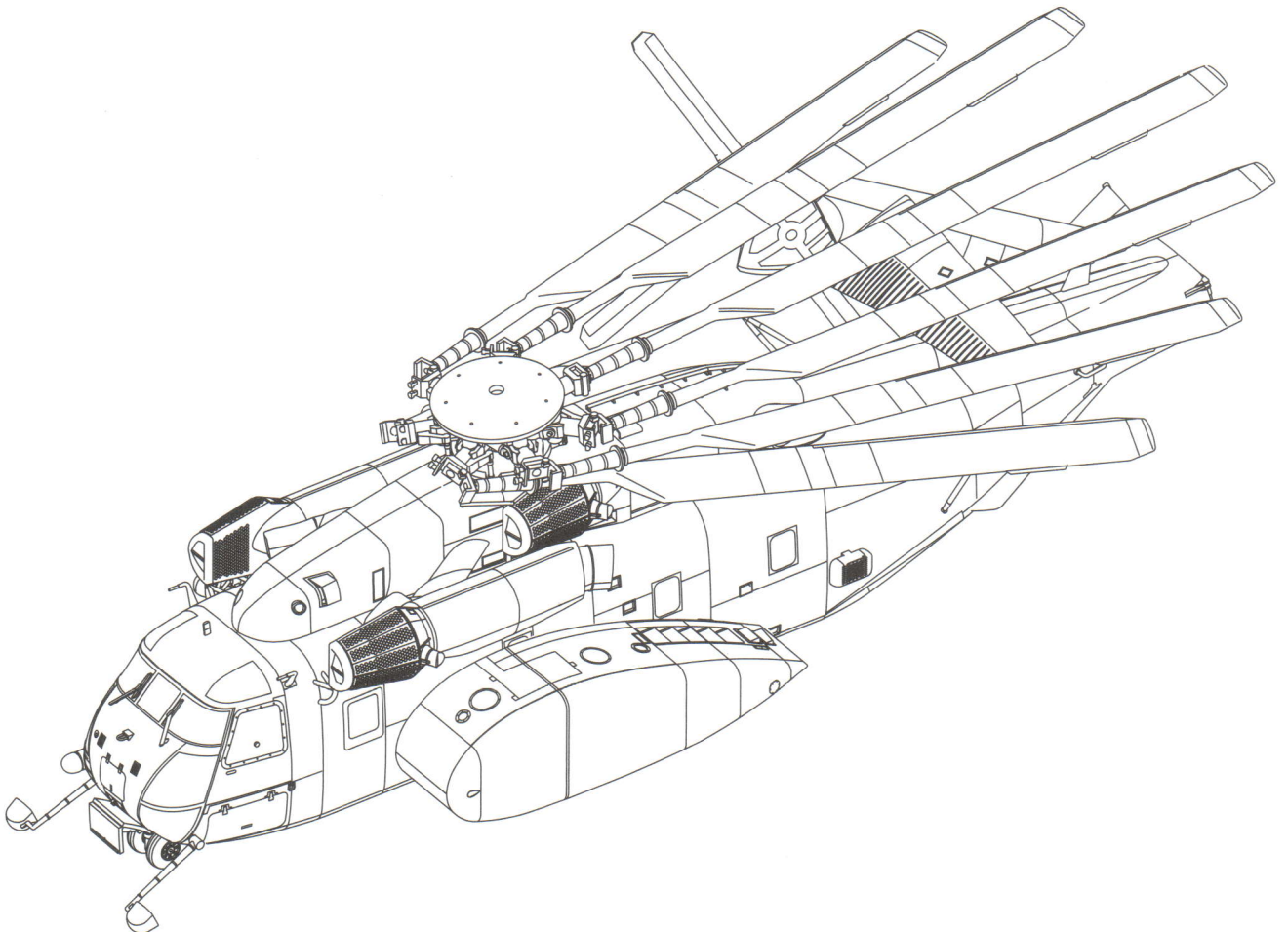
※View from left / 왼쪽에서 본 상태



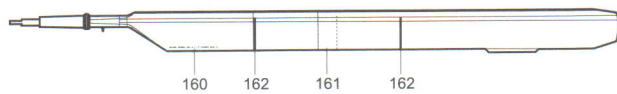
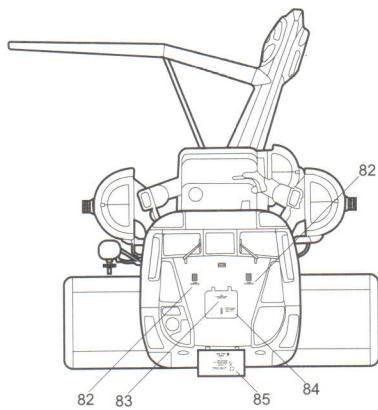
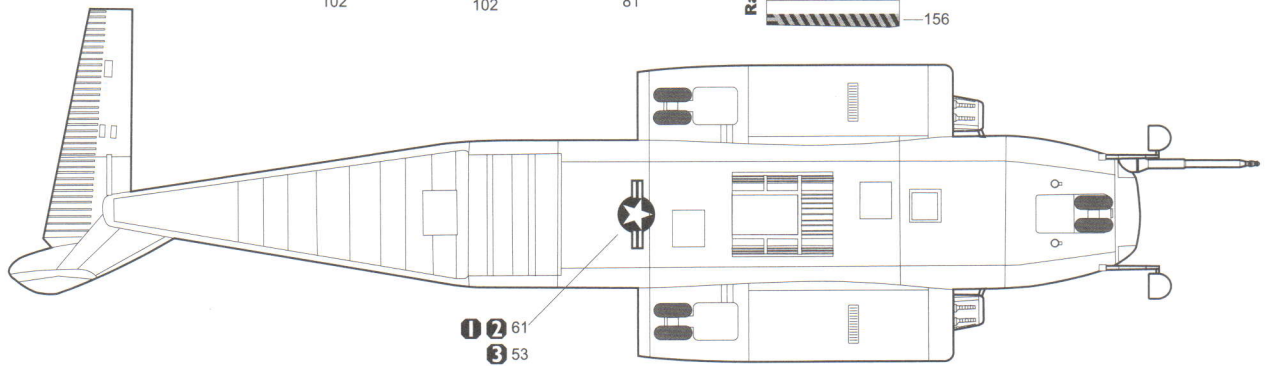
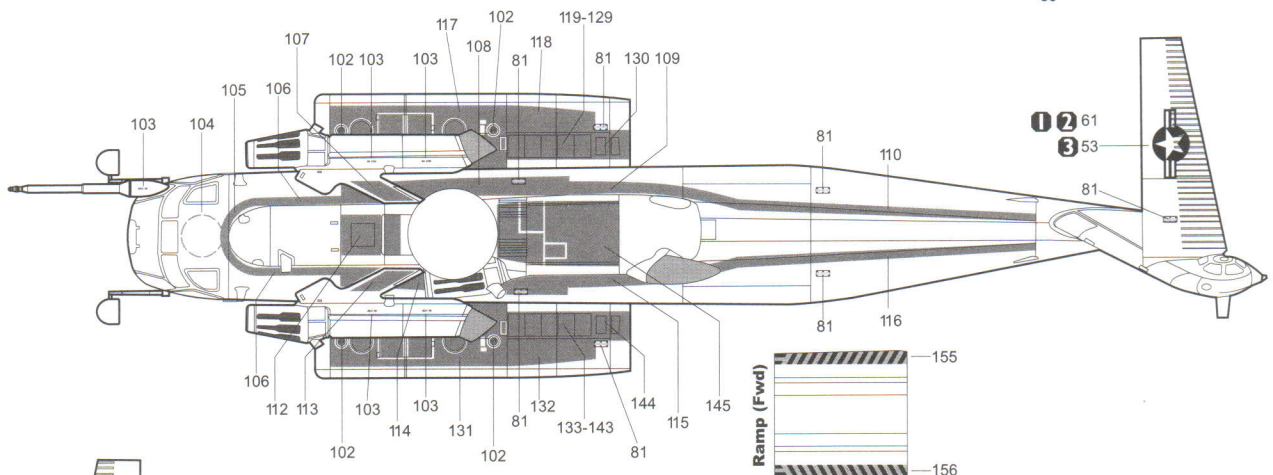
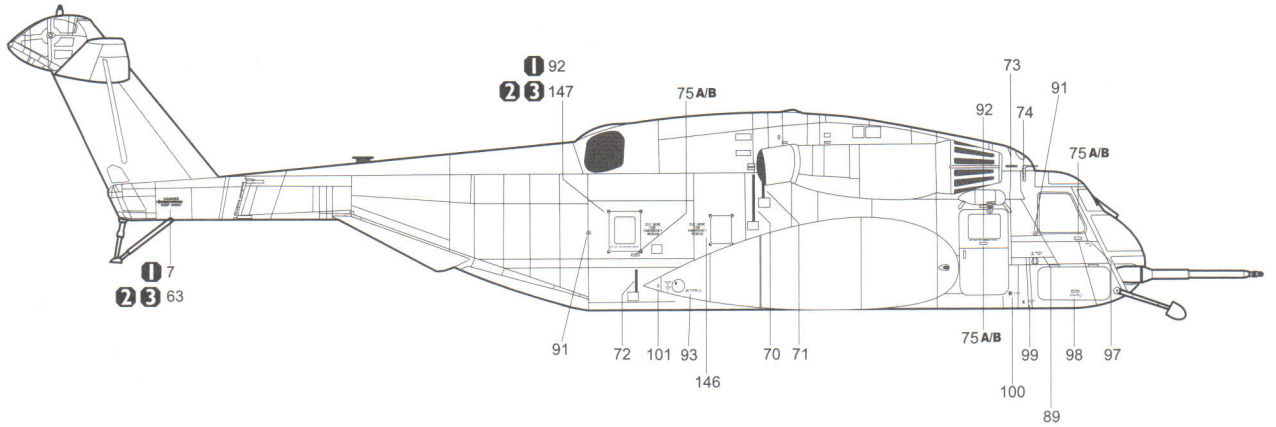
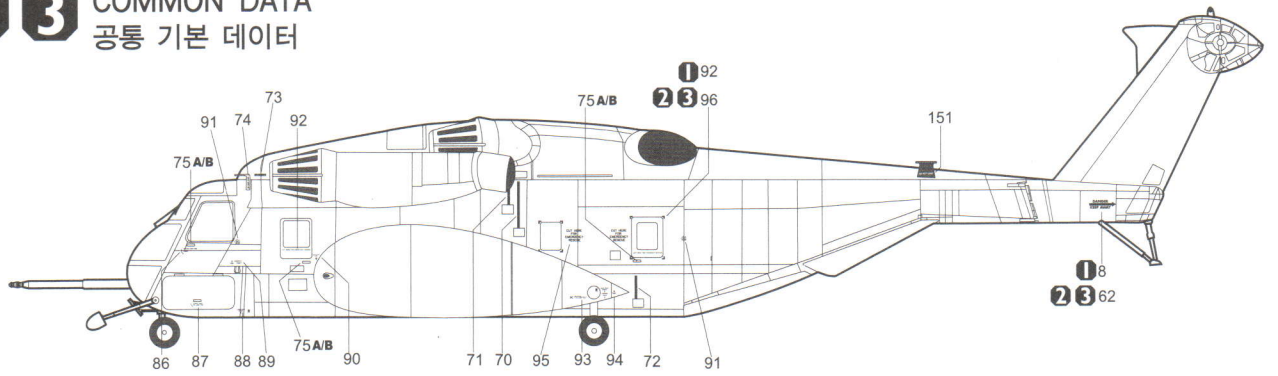
※View from Top / in flight position, 위에서 본 모습 / 로터 펼친 상태(완성)



※View from Top / folded, 위에서 본 모습 / 로터 접은 상태(완성)



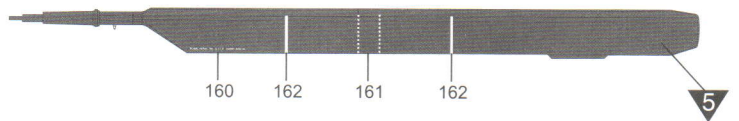
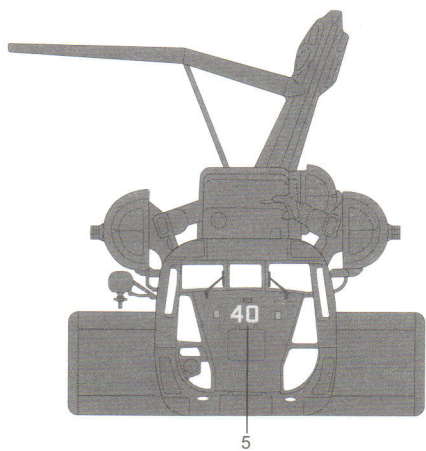
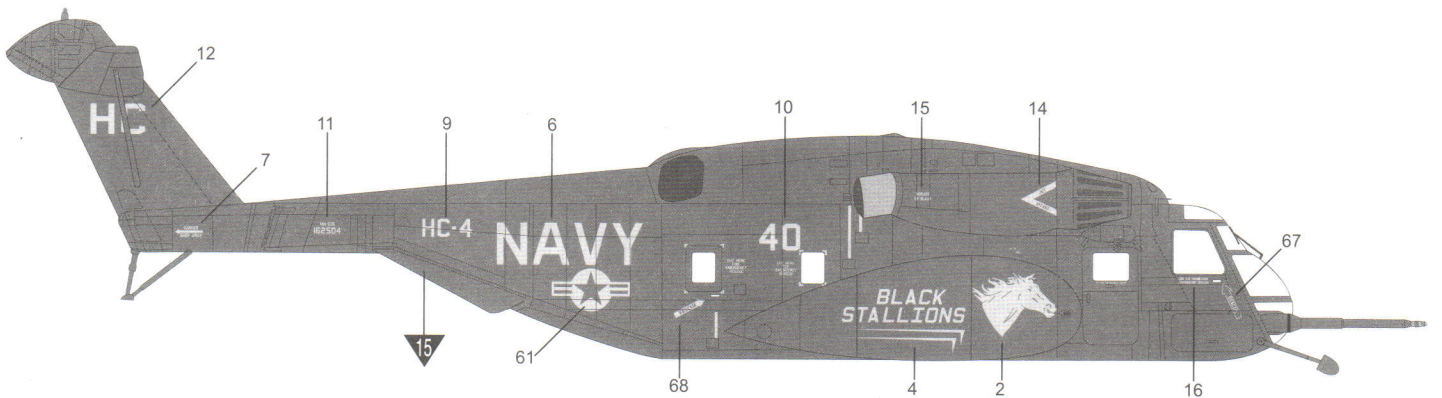
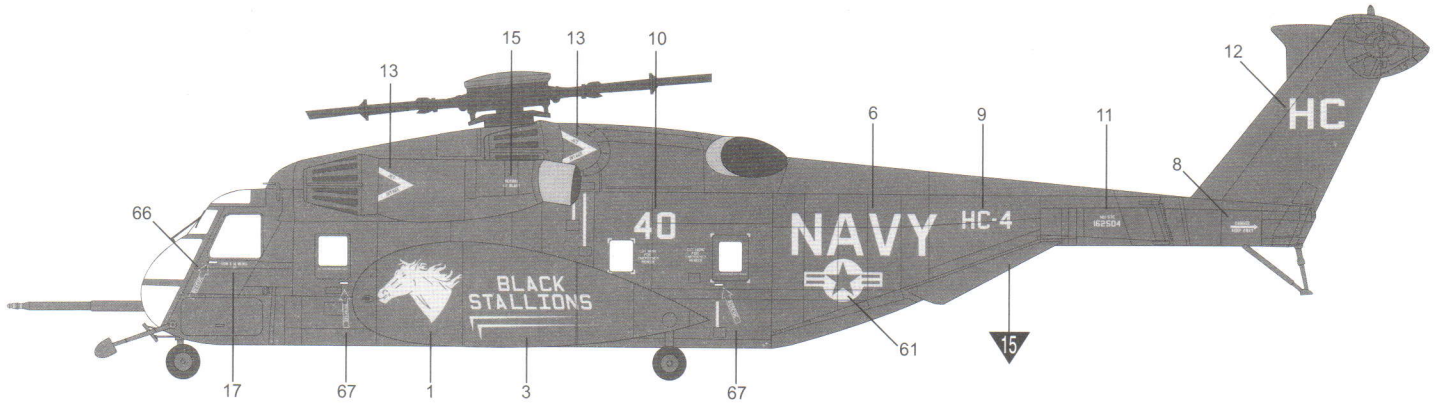
**1 2 3** COMMON DATA  
공통 기본 데이터



These items wrap around trailing edge.

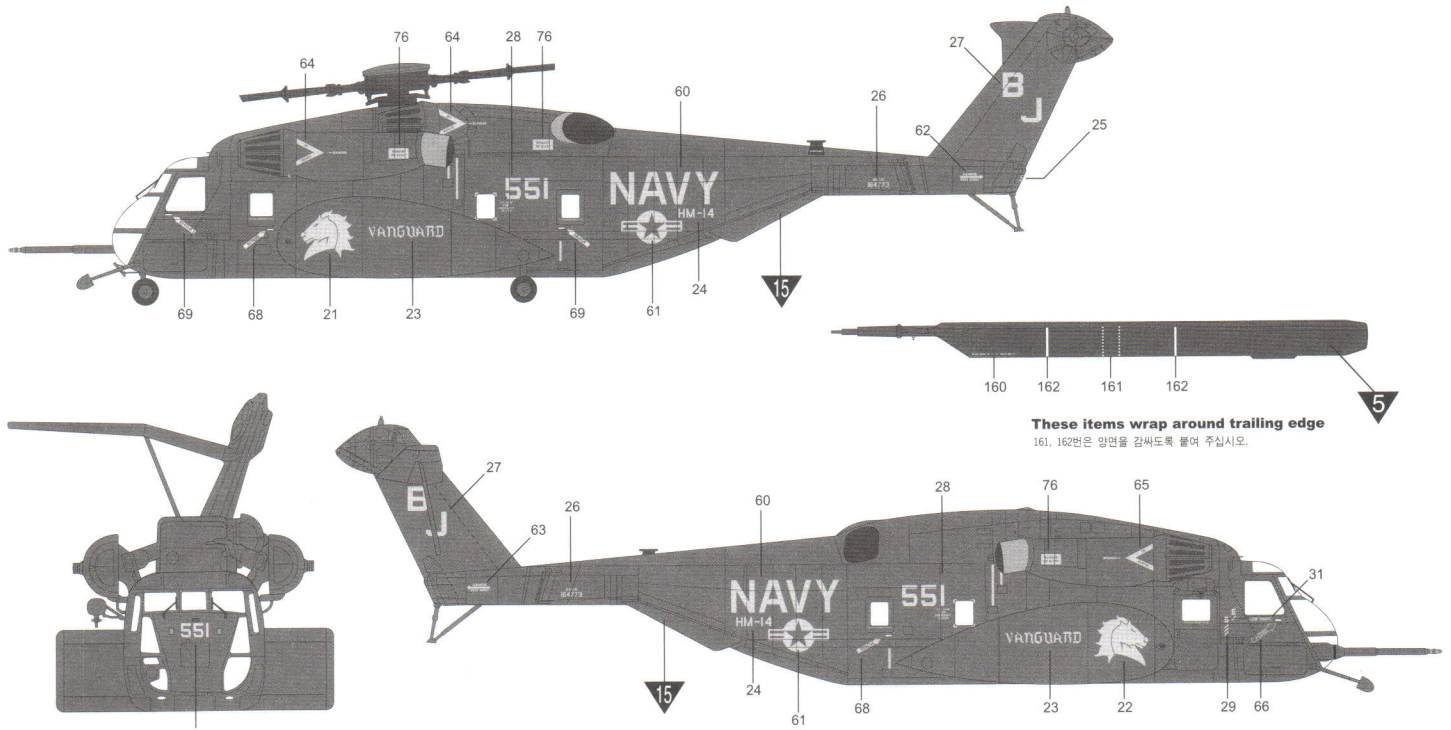
161, 162번은 양면을 감싸도록 붙여 주십시오.

**I Helicopter Combat Support Squadron Four, (HC-4) "Black Stallions", Iraq, 2006**  
 미해군 제4 전투지원헬기비행대 "블랙 스텔리온즈", 2006년 이라크

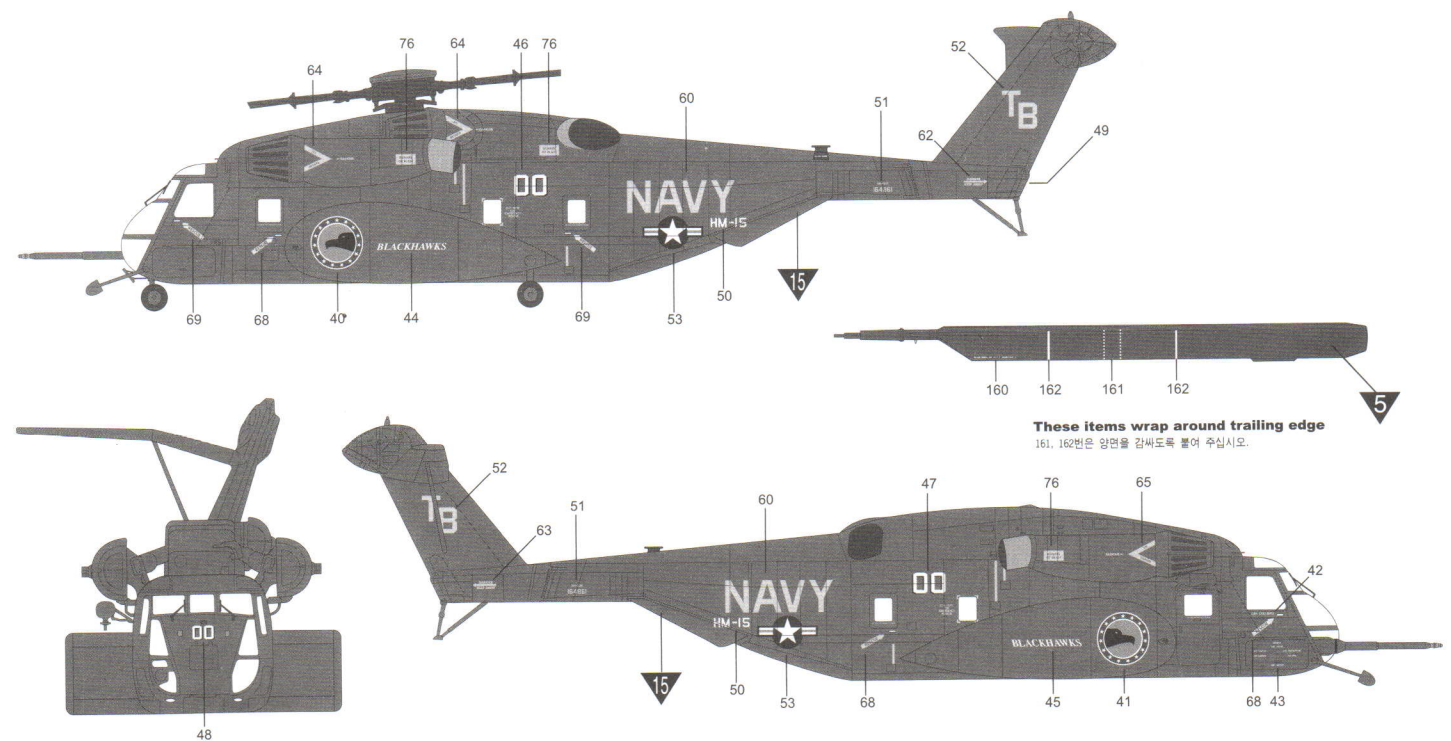


**These items wrap around trailing edge**  
 161, 162번은 양면을 감싸도록 붙여 주십시오.

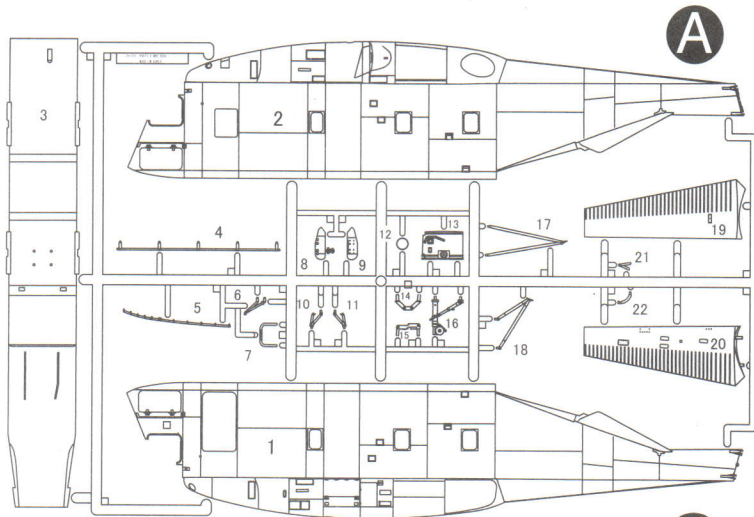
**2 Helicopter Mine Countermeasures Squadron Fourteen, (HM-14) "Vanguard", 2004**  
 미해군 제14 소해헬기비행대 "뱅가드", 2004년



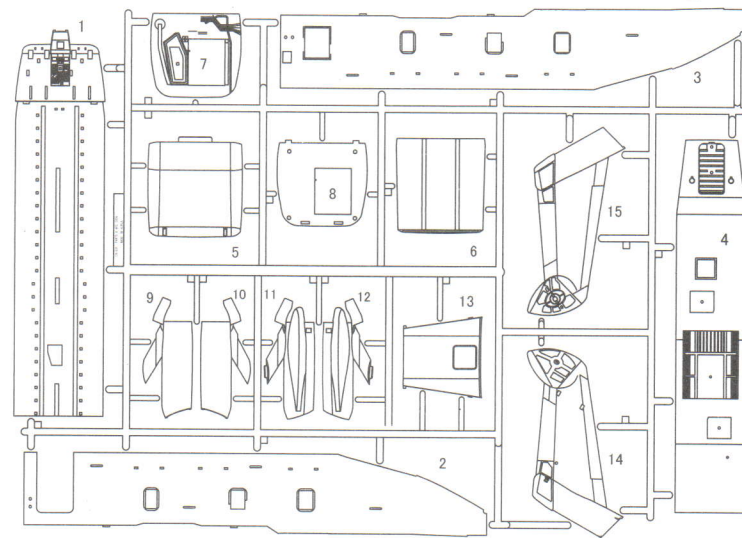
**3 Helicopter Mine Countermeasures Squadron Fifteen, (HM-15) "Blackhawks", 2005**  
 미해군 제15 소해헬기비행대 "블랙호크스", 2005년



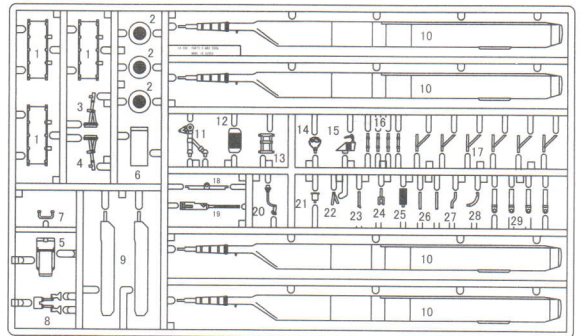
# Parts Locating Diagram 부품도



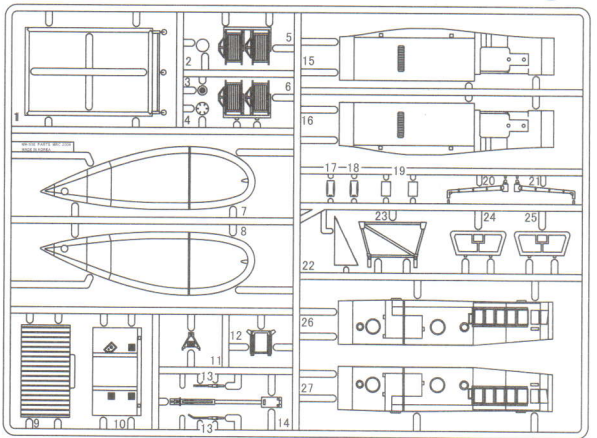
**A**



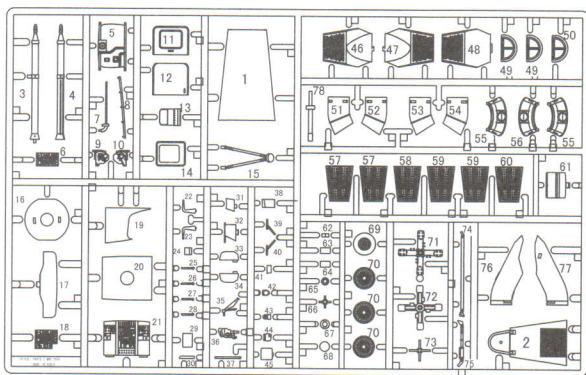
**B**



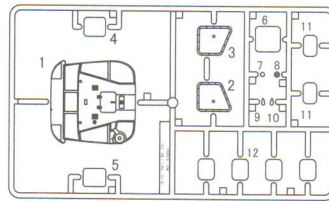
**D** × 2



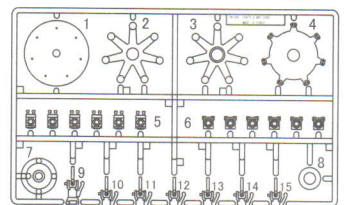
**H**



**C**



**E**



**G**

● Unused Parts : D2 × 1, D10 × 1,  
 불필요 부품 D16 × 1, D22 × 1,  
 D28 × 1, D29 × 1,  
 H2, H3, H4

H1 in painting indication is the number of GSI Creos Aqueous Hobby Color, while ■ is that of Mr. Color.  
 塗料指定の■はGSIクレオス・Mr.カラー、H1は水性ホビーカラーの番号です。  
 H1 bei Bemalungshinweisen ist die Nummer der Aqueous - Hobby - Color von GSI Creos, während ■ den Ton der Farbserie Mr. Color anzeigt.  
 Sur le guide de peinture, H1 correspond au numéro de couleur GSI Creos AQUEOUS HOBBY COLOR, alors que ■ correspond à Mr. COLOR.  
 도료지정 ■은 GSI크레오스 Mr.컬러, H1은 수성아미컬러의 번호입니다.

1 BLACK	2 H2 SCHWARZ	NOIR	ブラック (黒)	유광검정색	9 CLEAR GREEN	133 H94 GRÜN REIN	VERT CLAIR	クリアーグリーン	클리어그린
2 RED	3 H3 ROT	ROUGE	レッド (赤)	유광빨강색	10 OLIVE DRAB FS34087	304 OLIVGRÜN FS34087	GRIS-BRUN OLIVE FS34087	オリブドラブ FS34087	올리브드랍 (군방색) FS34087
3 SILVER	8 H8 SILBER	ARGENT	シルバー (銀)	은색	11 GRAY FS36320	307 GRAU FS36320	GRIS FS36320	グレー FS36320	그레이 FS36320
4 STEEL	23 H18 STAHL	GRIS ACIER	黒鉄色	흑철색	12 GRAY FS36231	317 GRAU FS36231	GRIS FS36231	그레이 FS36231	그레이 FS36231
5 FLAT BLACK	33 H12 MATTSCHWARZ	NOIR MAT	つや消しブラック	무광검정색	13 YELLOW FS13538	329 GELB FS13538	JAUNE FS13538	イエロー FS13538	옐로우 FS13538
6 CLEAR RED	47 H90 ROT, REIN	ROUGE CLAIR	クリアーレッド	클리어 레드	14 GRAYISH BLUE FS36495	337 GRAUBLAU FS36495	BLEU GRIS FS35237	グレイッシュブルー FS35237	그레이쉬 블루 FS35237
7 CLEAR BLUE	50 H93 BLAU, REIN	BLEU CLAIR	クリアー블루	클리어 블루	15 ENGINE GRAY FS34081	301 MASCHINEN GRAU FS34081	GRIS MOTEUR FS34081	グレー FS34081	무광엔진 그레이 FS34081
8 BURNT IRON	61 H76 GEBRANNTES EISEN	GRIS MÉTAL	焼鉄色	번트 아이언					

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