

ACADEMY

HOBBY MODEL KITS

KC-97L

JET BOOSTED TANKER

KC-97L 제트추진 공중급유기

1/72nd SCALE

KC-97L JET BOOSTED TANKER

#1606/FA188

The KC-97G, because of its large airframe, made an excellent in-flight tanker. However, as a new series of jet fighters began emerging into service with much faster speeds, the KC-97G was no longer able to perform refueling procedures. One idea to help the KC-97G was called "tobogganing" which was a technique to refuel jet fighters while the aircraft were diving. Obviously this was not a good nor permanent solution. Some maintenance officers at the 126th air refueling squadron proposed to fit the KC-97G with GE J-47 jet engines to add to their propulsion power. This proved to be an excellent recommendation. With this modification now in place the aircraft was able to fly at 10,000 feet higher altitude and its top speed performance was increased by 50 knots. Other advantages were a fifty percent decrease in the take-off and landing distances, improved safety, and extended service life of its reciprocating main propeller driven engines. Most important was the cost; to refit a KC-97G with these jet engines the cost to the government was only \$38,000 per aircraft. This was such a successful concept that the United States Air Force decided to refit all KC-97G in use with these jet engines and renamed them "KC-97L".

<SPECS. OF GE J-47 ENGINES>

OVERALL LENGTH : 3.662 m DIAMETER : 1.004 m DRY WEIGHT : 1,202 kg THRUST AT TAKE-OFF : 2,720 kg / 7,950 rpm

Der Vorgänger KC-97G war eine exzellente Plattform für die Luftbetankung, jedoch ergaben sich beim Auftanken der immer schnelleren Jets einige Probleme. Die Geschwindigkeit und Gipfelhöhe wurden durch die herkömmlichen Triebwerke zu sehr eingeschränkt. Um diesen Mangel zu umgehen, entwickelten die Piloten der KC-97 Geschwader eine Methode: Man betankte die Jets während eines Sinkfluges. Trotzdem war diese Vorgehensweise keine Lösung auf Dauer. Man einigte sich auf einen Versuch, der von den Wartungsoffizieren des 126. Luftbetankungs-Geschwader vorgeschlagen wurde. Dabei verwendete man die GE J-47 Düsentriebwerke der ausgemusterten KB-50 und montierte diese zusätzlich unter die Tragflächen der KC-97. Nach verschiedenen Test standen die Ergebnisse fest; Die maximale Höhe für Betankungen erweiterte sich um 10000 Fuß und die Höchstgeschwindigkeit um 50 Knoten. Außerdem konnte die Start- u. Landestrecke verkürzt sowie längere Wartungsintervalle der Haupttriebwerke zugelassen werden. Desweiteren beliefen sich die Kosten der Umrüstung auf nur 38000 US\$ pro Flugzeug. Aufgrund dieser hervorragenden Testergebnisse entschied die US Air Force, alle KC-97G mit Düsentriebwerken nachzurüsten. Die so entstandene KC-97L verbesserte die Kapazitäten der amerikanischen Luftbetankungs-Geschwader für viele Jahre.

<TECHN. DATEN DER GE J-47 TRIEBWERKE>

LÄNGE ÜBER ALLES: 3.662m DURCHMESSER: 1.004m LEERGEWICHT: 1,202kg STARTSCHUB: 2,720kg bei 7950U/m

KC-97G는優れた空中給油能力を持った機体であったが、レシプロ機だけにそのスピードと高々度性能が、登場し始めていたセンチュリー・シリーズの新型戦闘機に対しては、不足気味であった。これを補う為、KC-97の飛行隊は、"TOBOGGANING"と呼ばれるダイブしながらの給油法を編み出したが、勿論、これは最終的な解決にならないことは明らかであった。当時126th Air Refueling Squadron(空中給油飛行隊)が退役しつつあったKB-50の補助ジェット・エンジン(GE J-47)をKC-97に装着することを発案し、この計画は126隊の手でテストされた。結果は成功で、ジェット・エンジンを追加したKC-97は、給油高度の10,000フィート増加、飛行速度の50ノット増加、離着陸距離の半減、安全性の向上、レシプロ・エンジンの寿命の延長などを果たした。また、改造費が1機あたり僅かUS\$38,000で済む利点ももたらした。この結果を受けて、空軍では使用中のKC-97Gを総てジェット・エンジン装備のKC-97Lに改造することにしANG(Air National Guard, 州航空隊)全体の空中給油能力も大きく向上した。

<GE J-47エンジンのデータ>

全長3.662m 直径1.004m 最大推力2,720kg/7,950rpm

1950년대에 등장한 KC-97G형 공중급유기는 종합적인 능력 면에서 매우 우수한 성능을 지닌 기종이었으나, 이로부터 차례로 왕복엔진과 프로펠러추진력에 의해 비행하도록 설계되었던 탓에 속도나 고고도 성능 면에선 분명 한계를 지니고 있었다. 게다가, 이른바 '센츄리 시리즈' (CENTURY SERIES; 1950년대부터 등장한 F-100에서 F-106에 이르는 100번 대의 제식번호를 지닌 미공군 전투기들을 가리키는 말)로 불리는 신형의 제트전투기들이 속속 배치되면서, 이런 문제점은 점점 더 심각한 현실로 나타나게 되었다. KC-97의 조종사들은 이런 어려움에 대처하기 위한 방편의 하나로, 기체를 강하시키면서 전투기에 공중급유를 행하는 '터보가닝(TOBOGGANING; 썰매타기)'이란 방식을 새로이 고안해 내기도 했지만, 이는 분명 임시방편일 뿐, 최종적인 해결책은 될 수 없었다. 그러던 중 당시 제126 공중급유비행대에 소속되어있던 정비담당 사관들이, 퇴역이 진행 중이던 KB-50형 공중급유기의 보조추진동력으로 쓰인 바 있는 제너럴 일렉트릭(GE)사제의 J-47형 제트엔진을 KC-97에도 장착해보자는 의견을 제시하였고, 즉시 비행대 자체적으로 테스트가 행해졌다. 그 결과, 급유고도는 증전에 비해 1만 피트, 최고속도는 50노트가 각각 증가하였고, 이착륙거리는 증전의 절반 가량으로 줄어들었을 뿐만 아니라, 기체자체의 안전성 향상과 프로펠러 주엔진의 수명이 연장되는 부수적 효과까지 얻게 되는 등, 결과는 매우 성공적이었다. 또한 개조에 필요한 비용이 기체 1대당 3만8천 달러에 불과하다는 점도 큰 이점이라 할 수 있었다. 이러한 우수한 결과를 만족하게 받아들인 미 공군 당국은 즉시 사용 중이던 모든 KC-97G에 이 제트엔진을 장착할 것을 결정하였고, 이렇게 개조된 기체는 KC-97L형으로 불리며 미국 주(州)방공군(ANG)의 공중급유능력을 크게 향상시키게 되었다.

<J-47형 제트엔진의 기본제원>

전체길이 : 3.622m 직경 : 1.004m 중량 : 1,202kg 이륙중량 : 2,720kg(분당회전수 7,950rpm)

<READ THIS BEFORE YOU BEGIN>

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

<ALLGEMEINE HINWEISE>

- Die Anordnung der Bauteile ist aus den Zeichnungen der Anleitung ersichtlich.
- Die Teile vor dem Verkleben ungekleimt zusammenhalten, um ihren paß 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 Plastikfolie über den Kopf ziehen.

■조립하기 전에

- 부품을 조립하기 전에 설명서를 잘 읽어본 후 조립한다.
- 부품을 지를 때에는 칼이나 나이프로 깨끗이 잘라낸다.
- 접착제 사용 전후 부품에 묻어 있지 않도록 한다.
- 접착제 사용 후 부품은 어둡고 아이들이 손에 닿지 않도록 잘 처리한다.

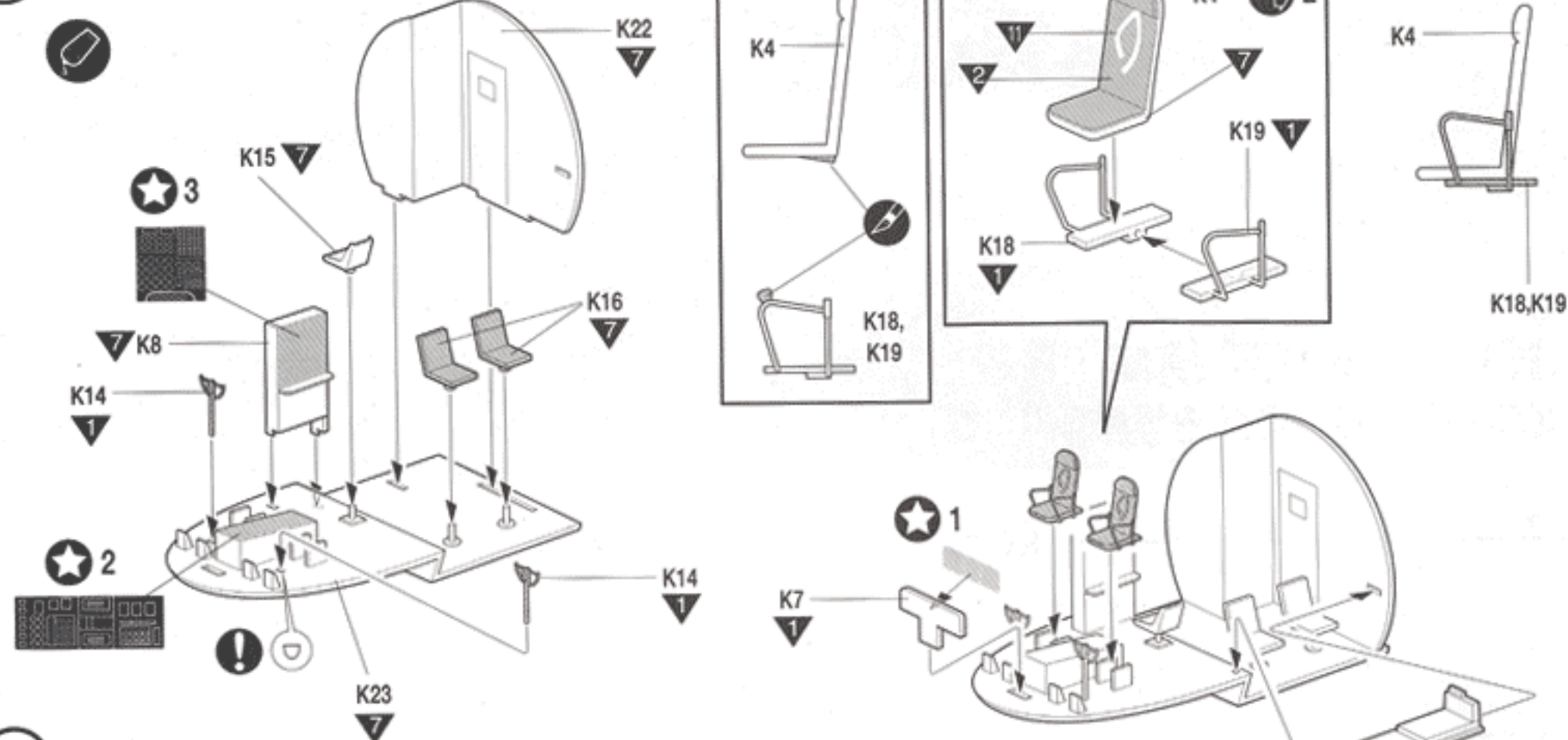
<LISEZ CE QUI SUIT AVANT DE COMMENCER LE MONTAGE>

- Étudier 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 jamais manipuler la colle ou peinture à proximité d'une flamme.
- Aérer soigneusement la pièce où vous peignez (ouvrez la fenêtre). • Après avoir sorti les pièces du sac en plastique, déchirez le sac afin d'éviter que les enfants ne le mettent sur la tête et ne s'étouffent.

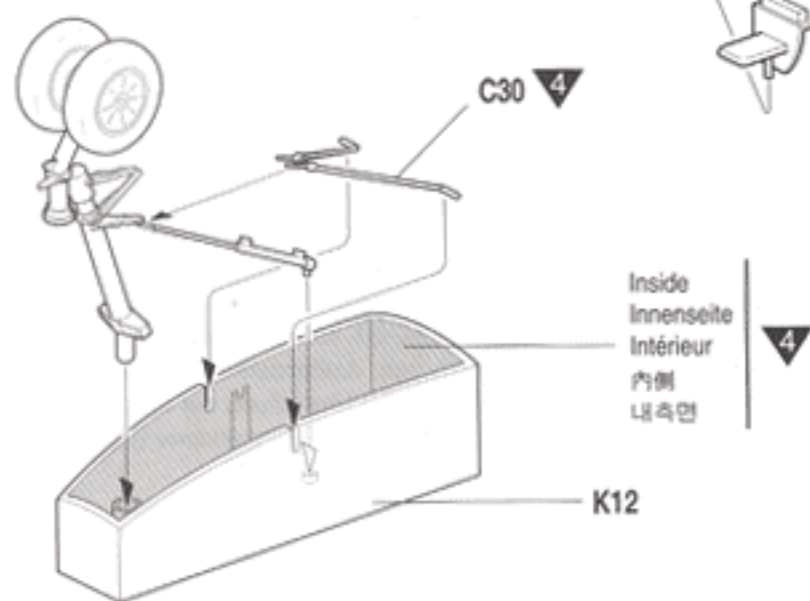
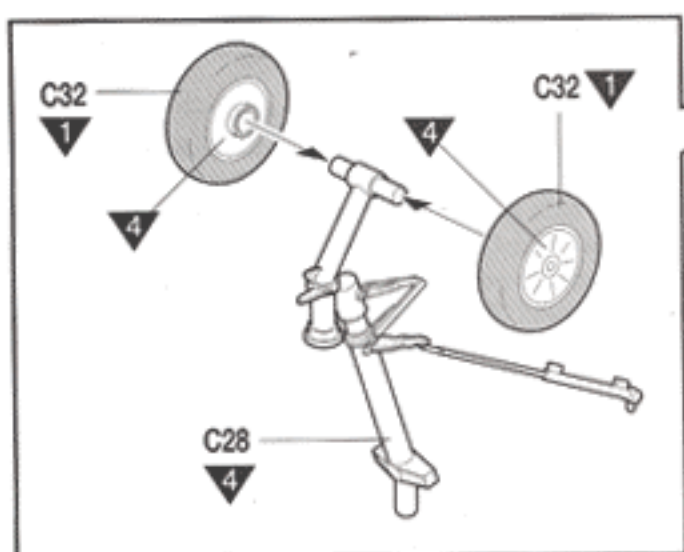
<組み立てる前に>

- 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。
- 接着剤を少し少なめに使うことがきれいに仕上がるコツです。
- 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気をつけましょう。
- 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。

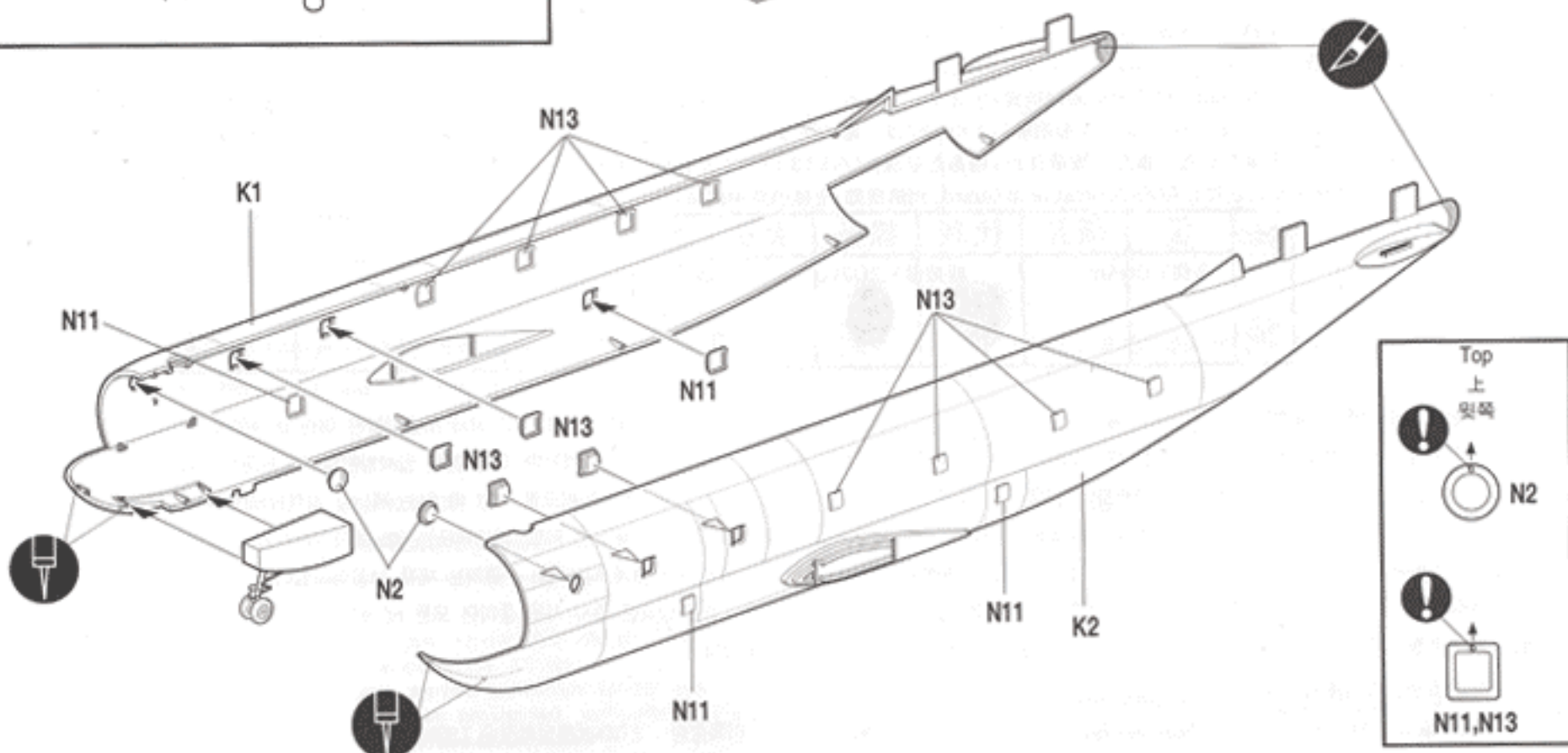
1



2



3





접착한다.
Glue parts
Coller
Kleben
Pegar
Incollare
Colar
Kleben



접착하지 않는다.
DO NOT cement
Ne pas coller
Nicht kleben
No pegar
Non incollare
Nao colar
Niet kleven



3
수반을 반복한다.
Repeat operation
Répéter l'opération
Vorgang wiederholen
Repitir la operacion
Repitersi
Repitir a operacão
Herhalen



전사지를 붙인다.
Decals
Décalcomanies
Abziehbild



9
무게중을 넣는다.
Add weight
Lester
Gewicht



구멍이나 홈을 메운다.
Use filler
Mastiquer
Schließen



잘라낸다.
Cut away
Couper
Schneiden
Cortar
Tagliare
Cortar
Snijden



선택한다.
Optional parts
Choix
Auswahlmöglichkeit
Election
Scelta
Opção
Keuze



반대쪽도 반복한다.
Repeat for opposite side
Répétition de la page
Wiederholung für gegenüberliegende Seite



구멍을 뚫어준다.
Make hole
Faire un trou
Öffnen



주의한다.
Be careful
Faire attention
Hier Vorsicht



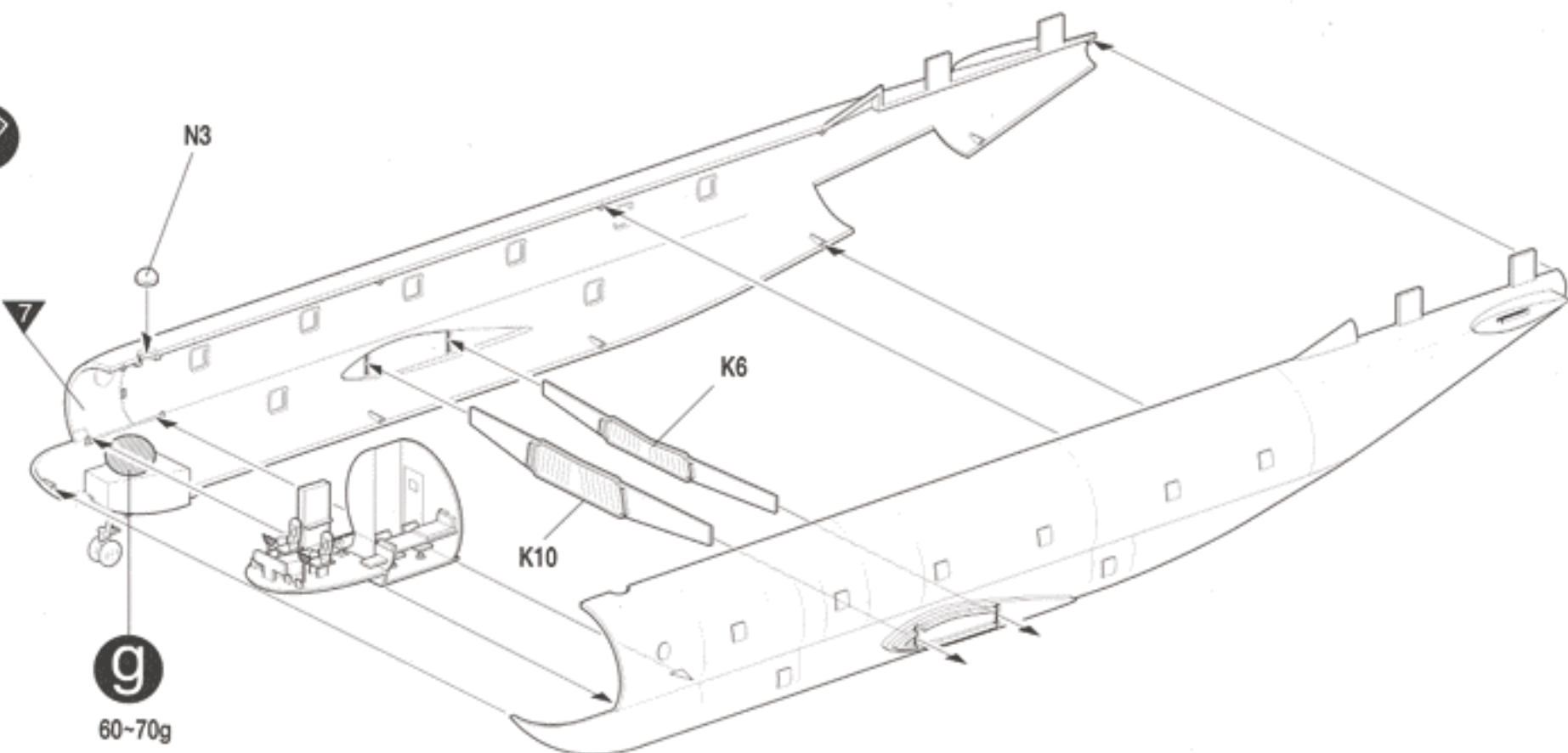
색칠 및 전사지 붙이기 번호
Painting scheme number
Numeros de la lista de pinturas
Lackierschemanummer

4



N3

Inside
Innenseite
Intérieur
내측면

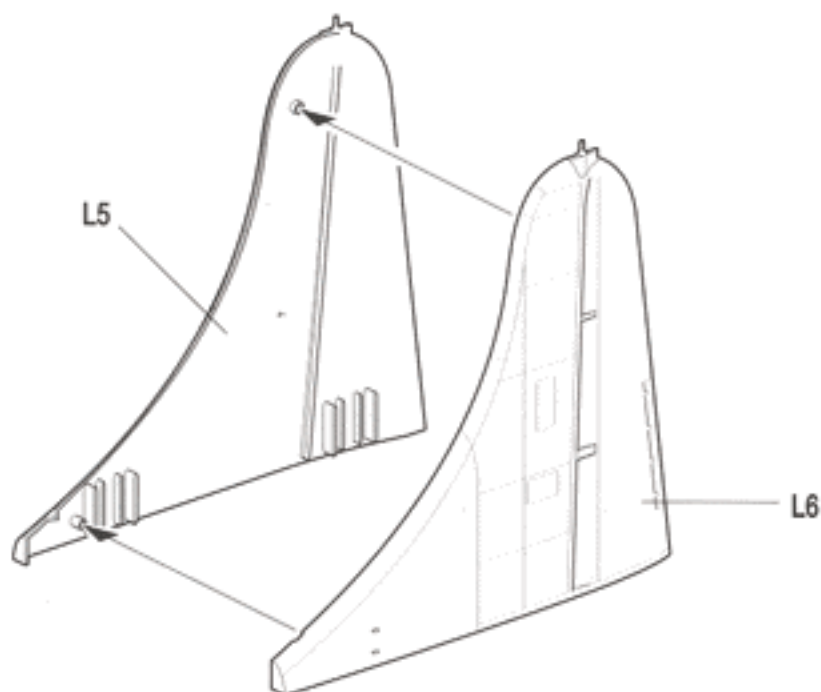


5



L5

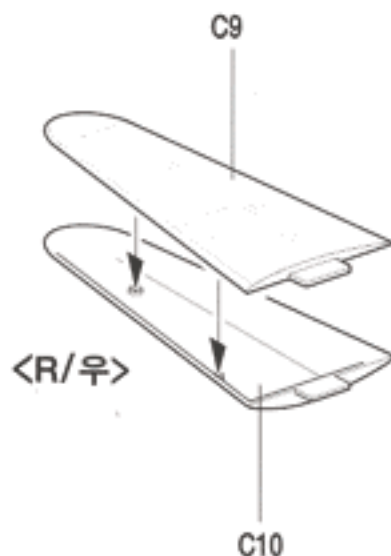
L6



C9

<R/우>

C10



B7

<L/좌>

B8



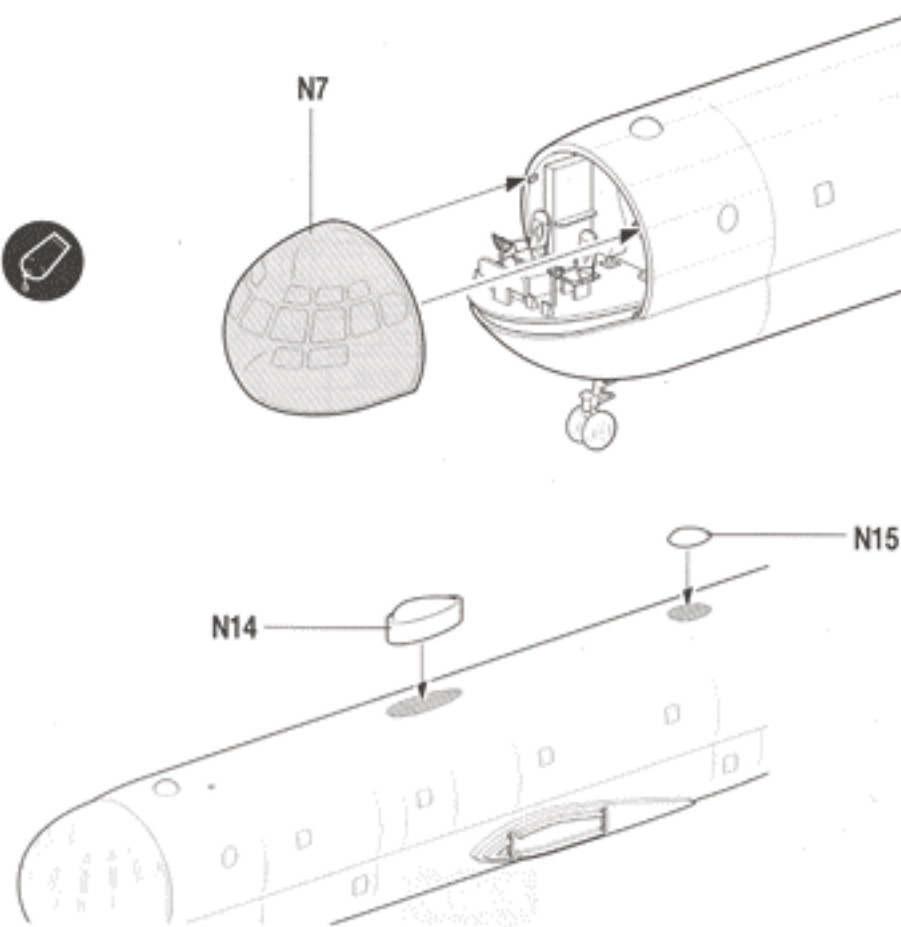
6



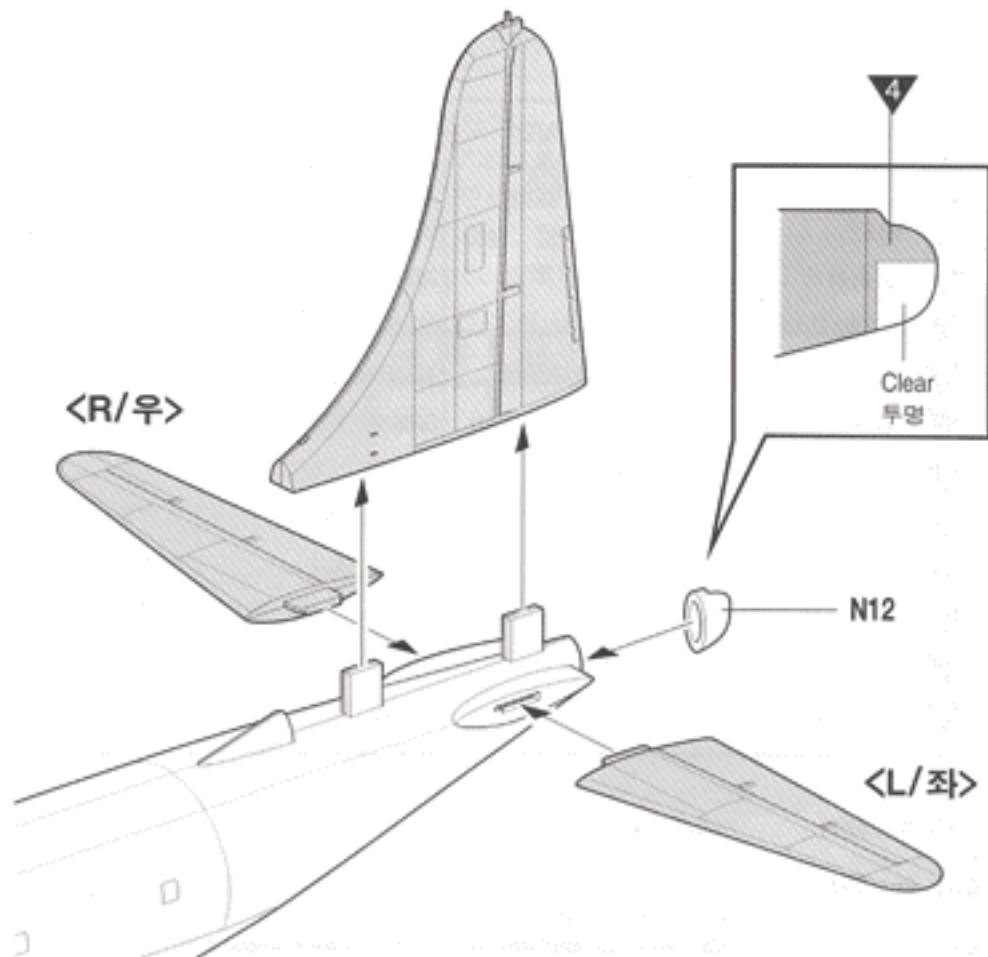
N7

N14

N15



<R/우>



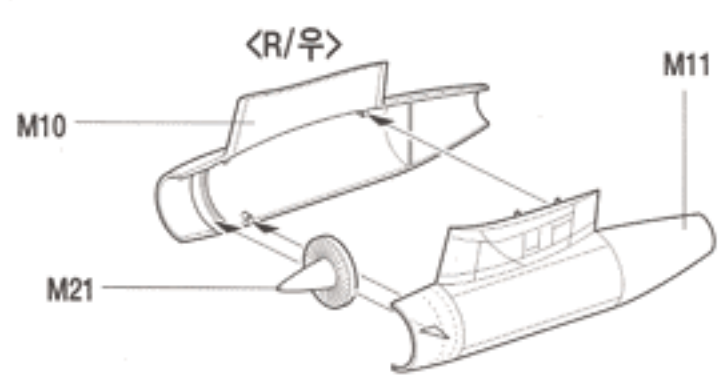
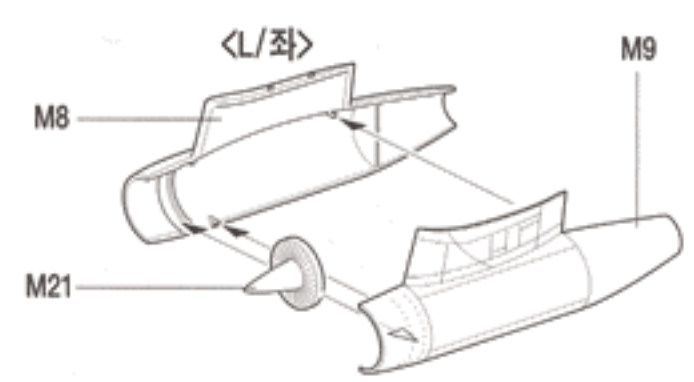
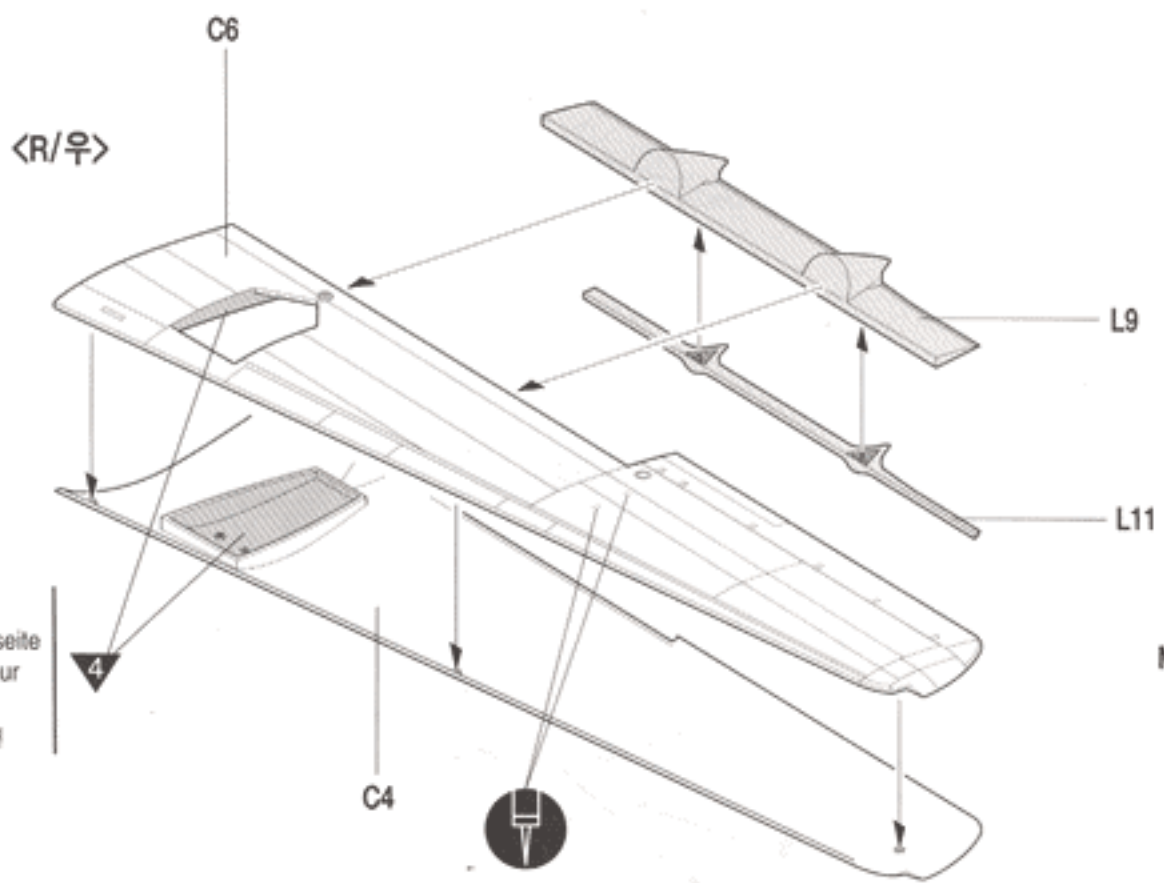
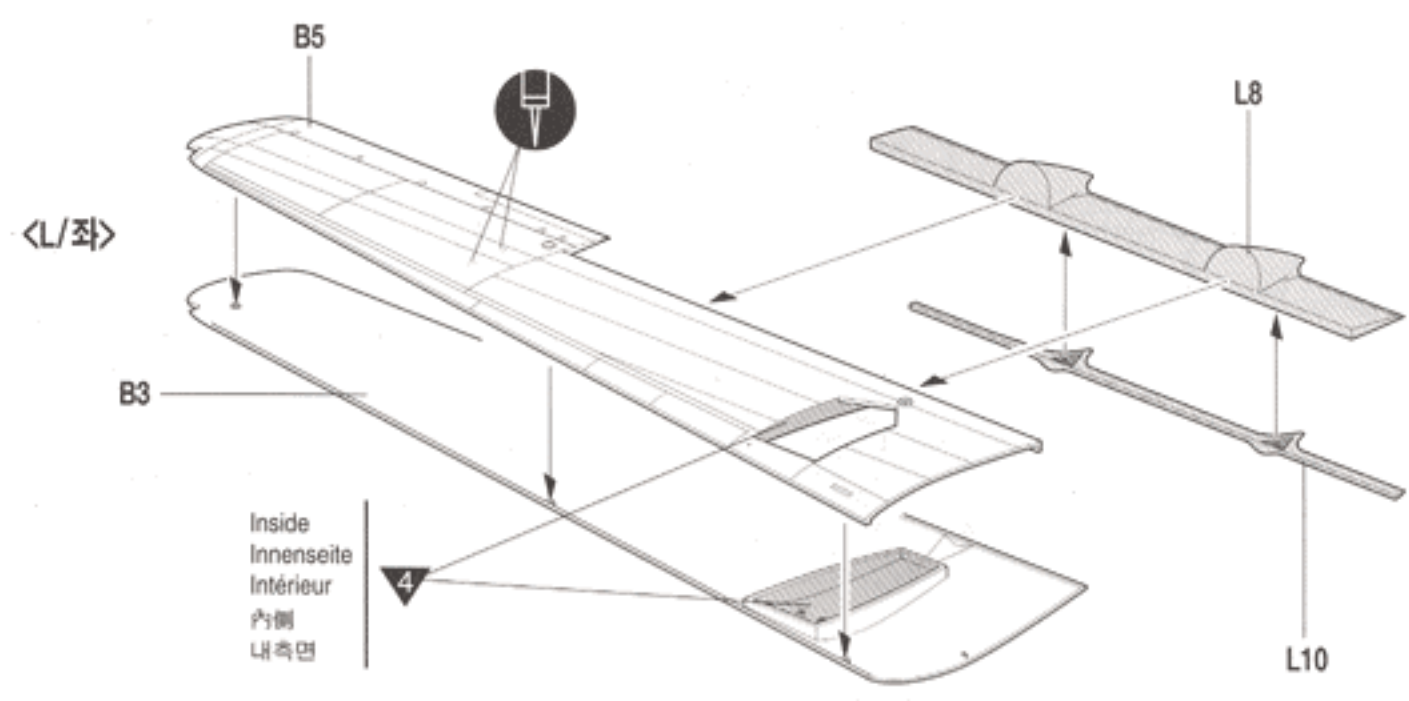
N12

<L/좌>

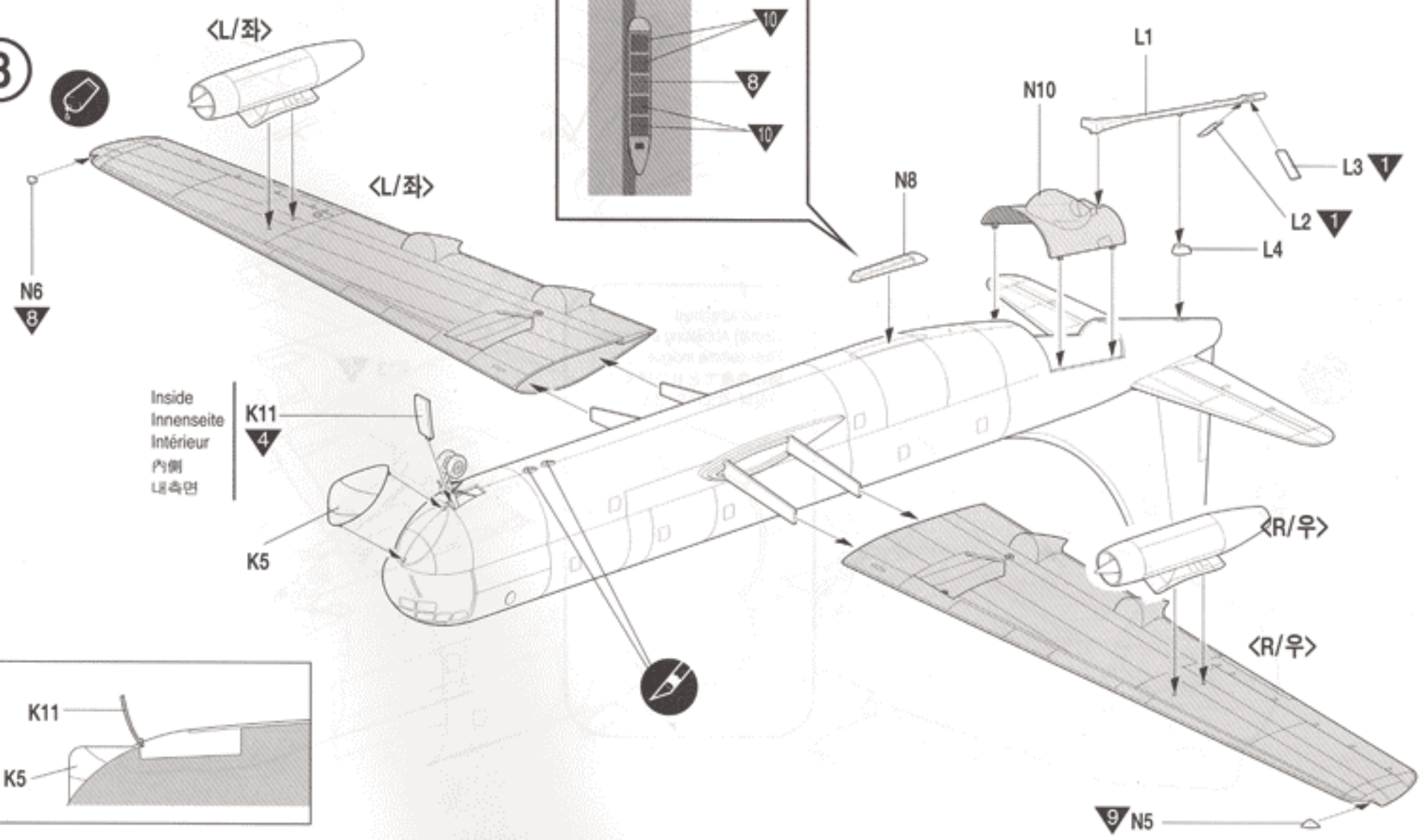
4

Clear
투명

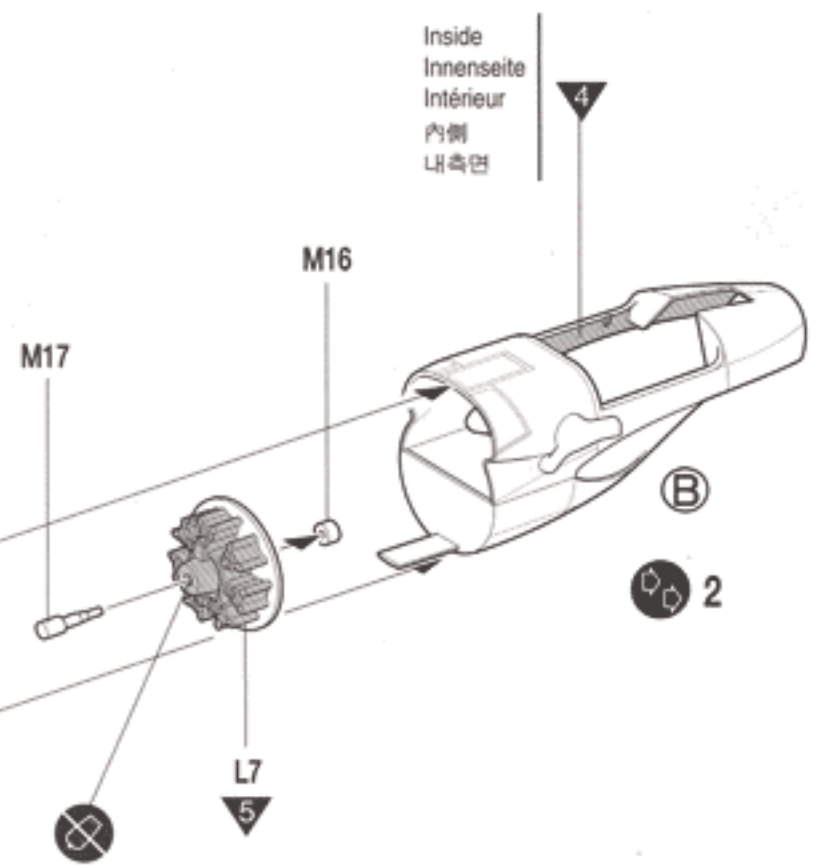
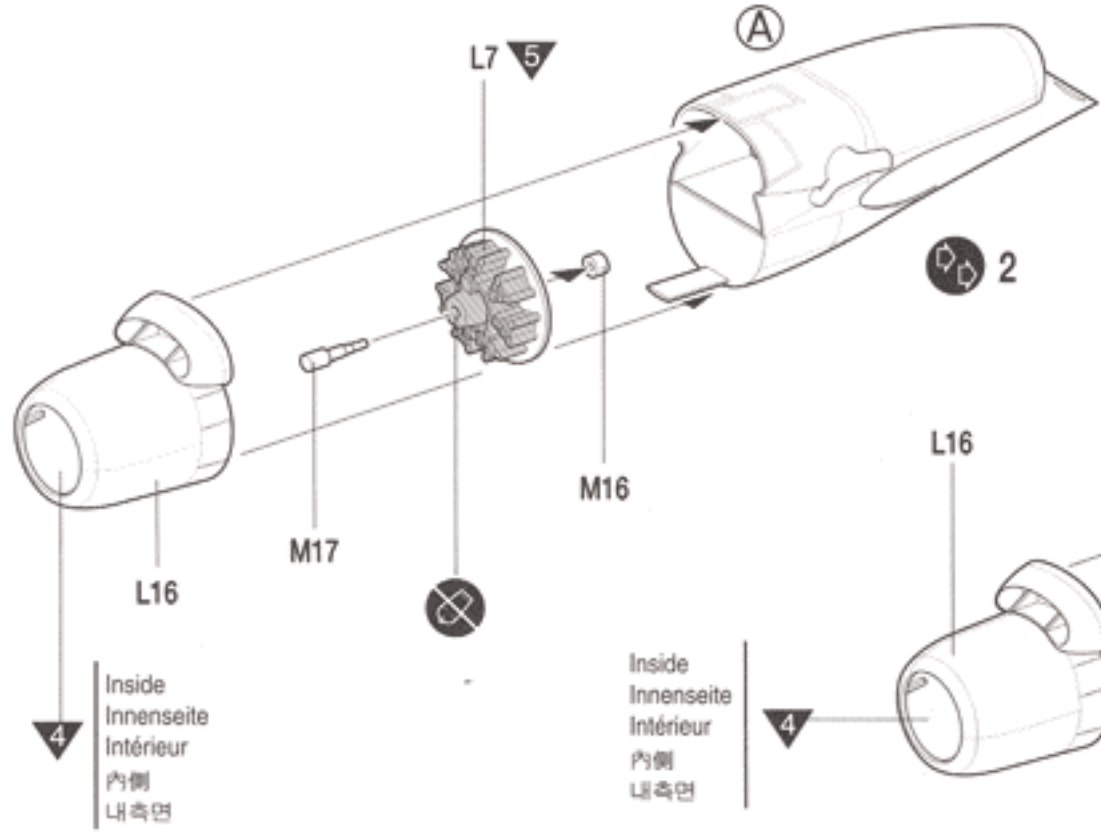
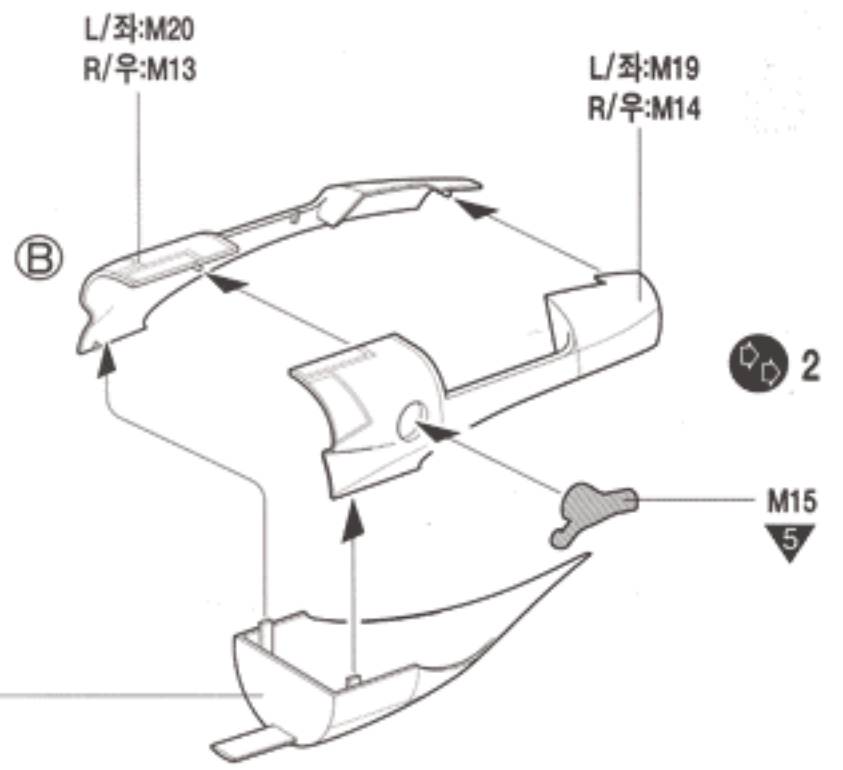
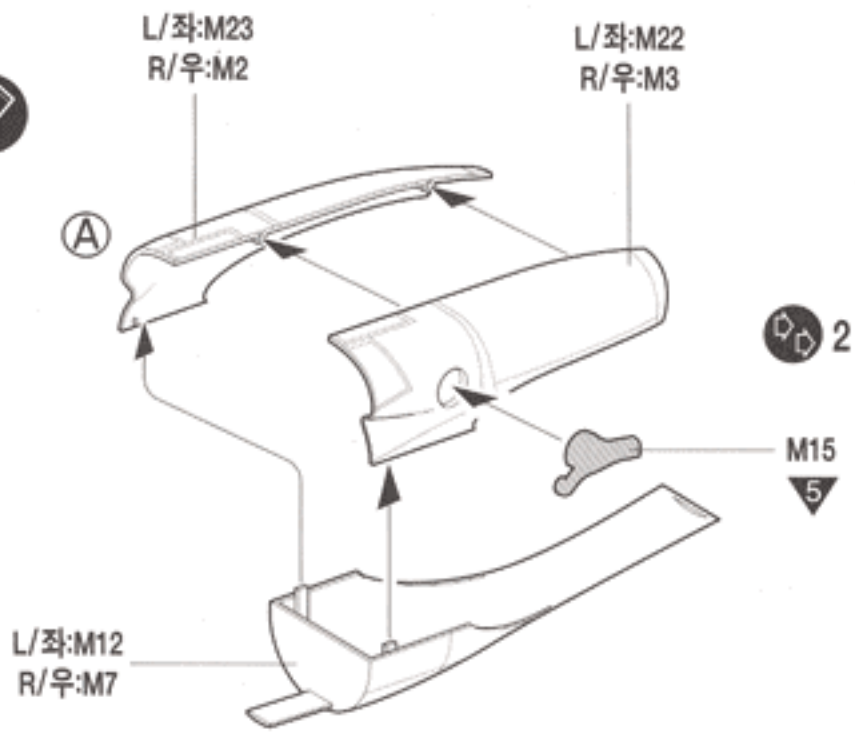
7



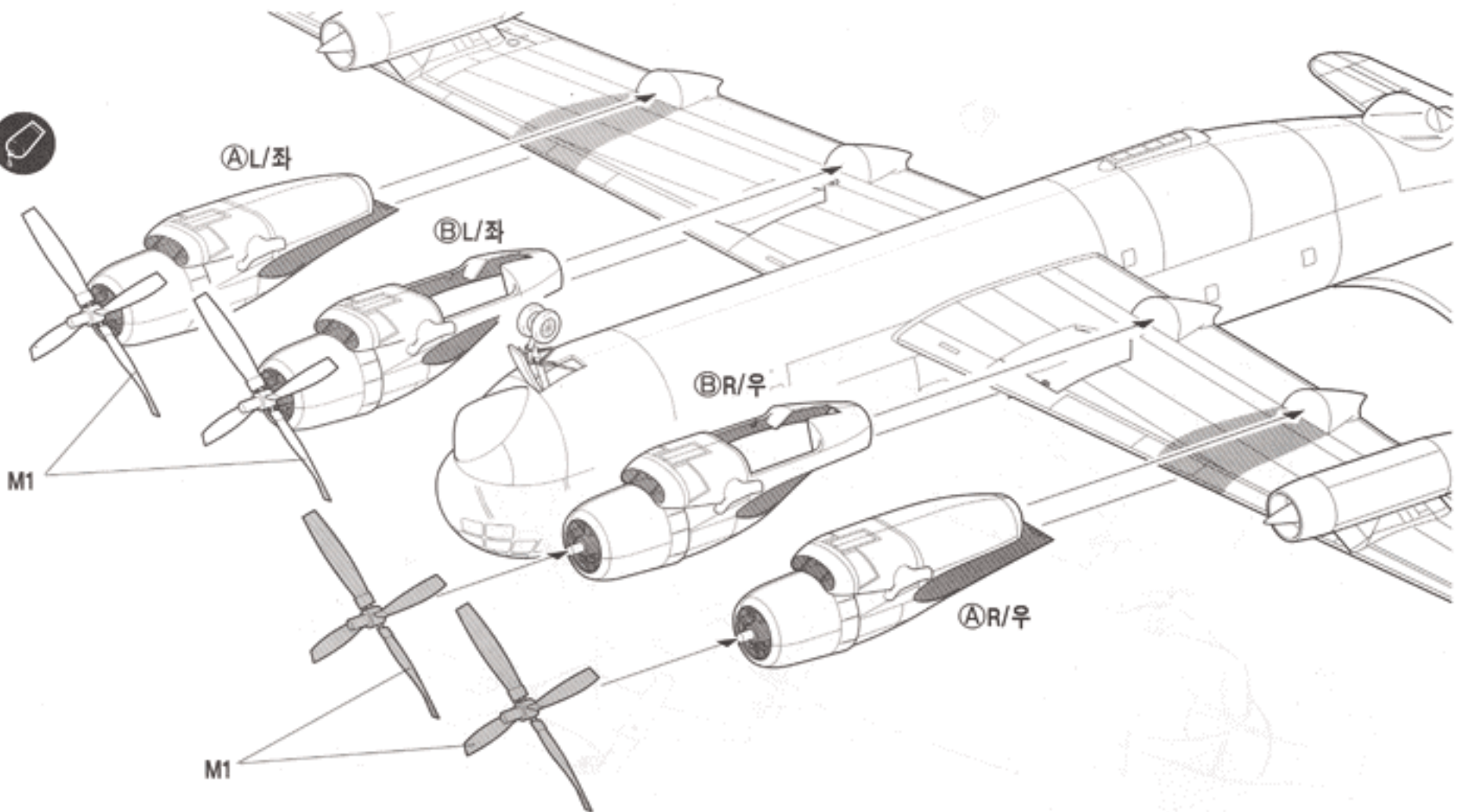
8



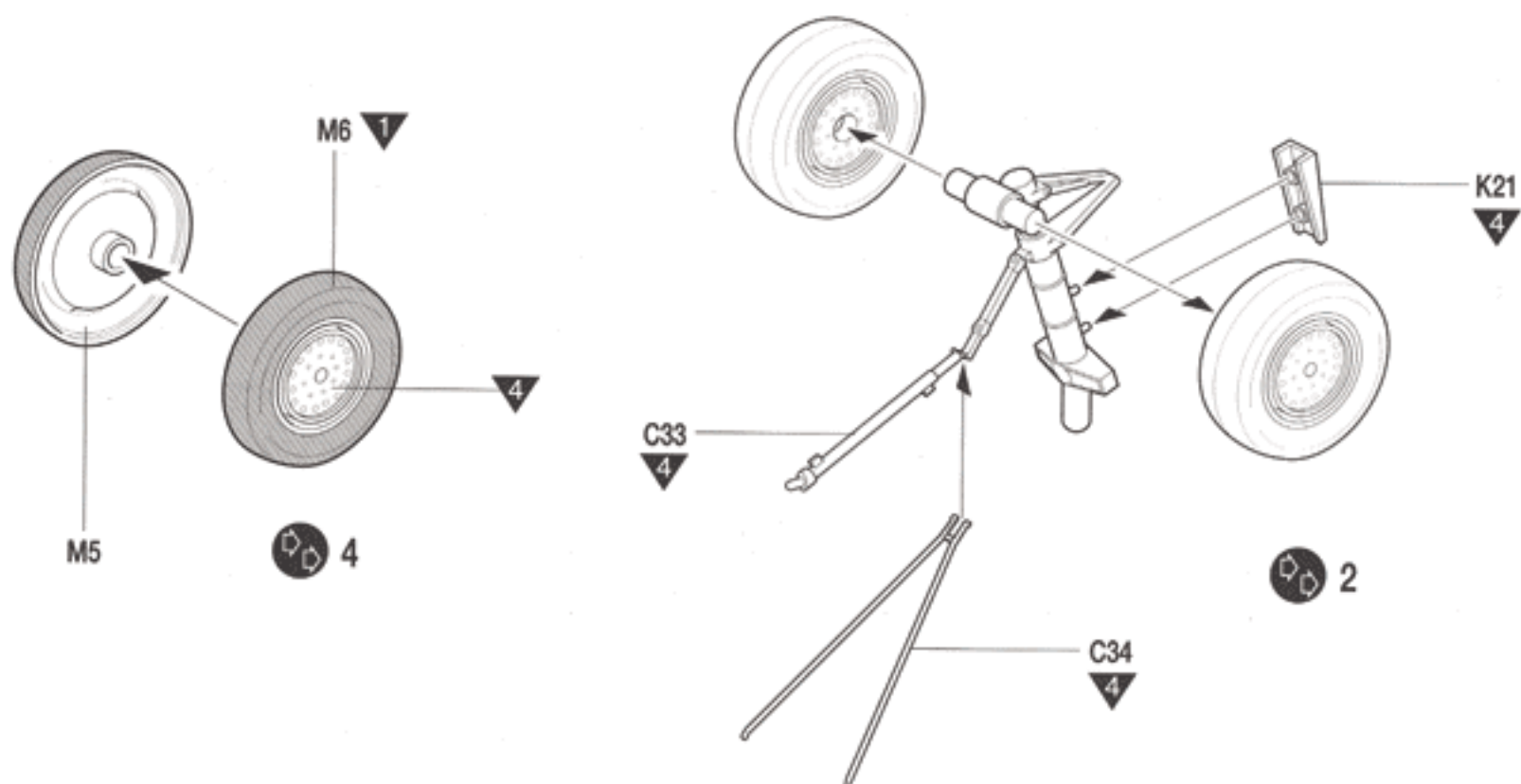
9



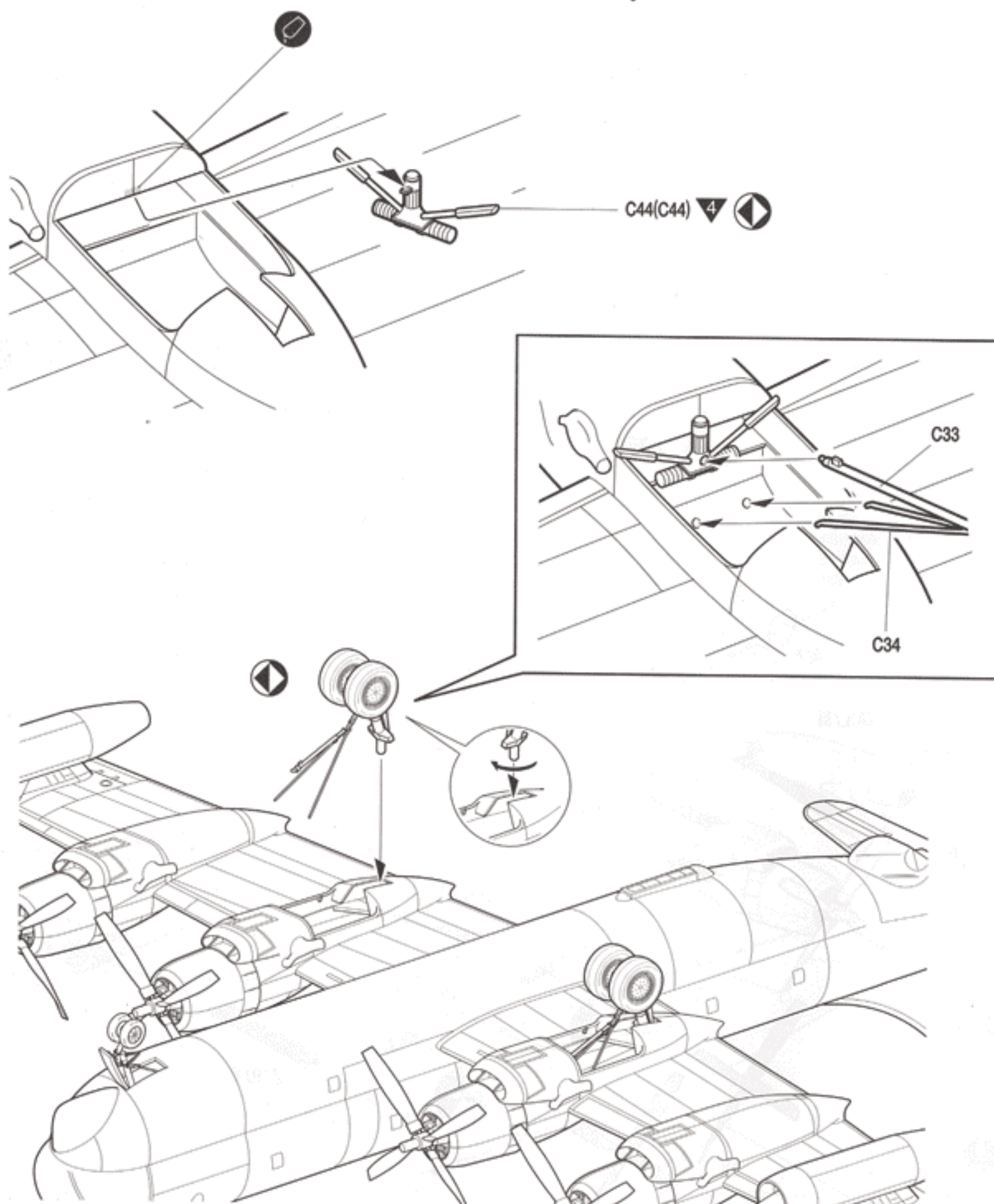
10



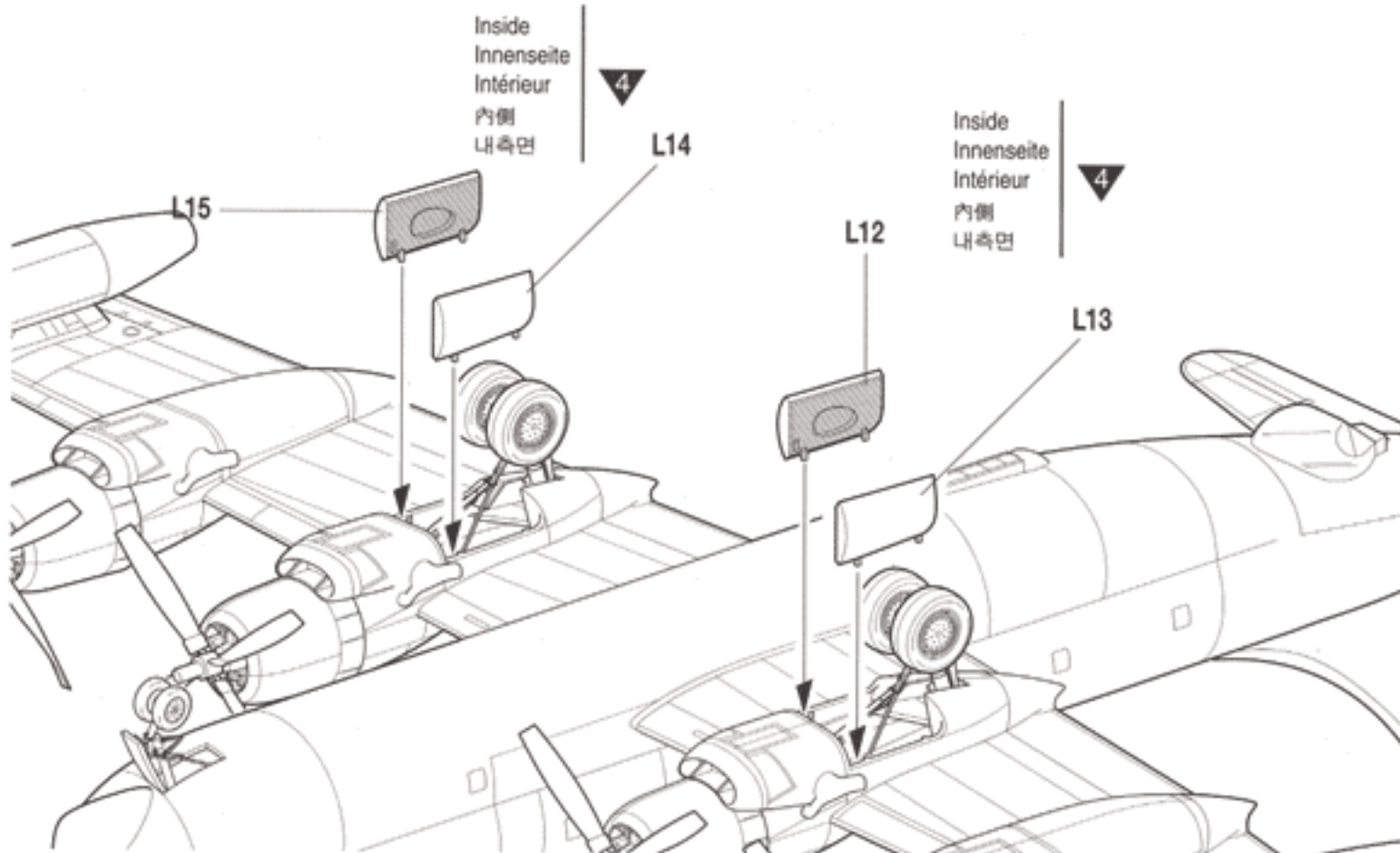
11



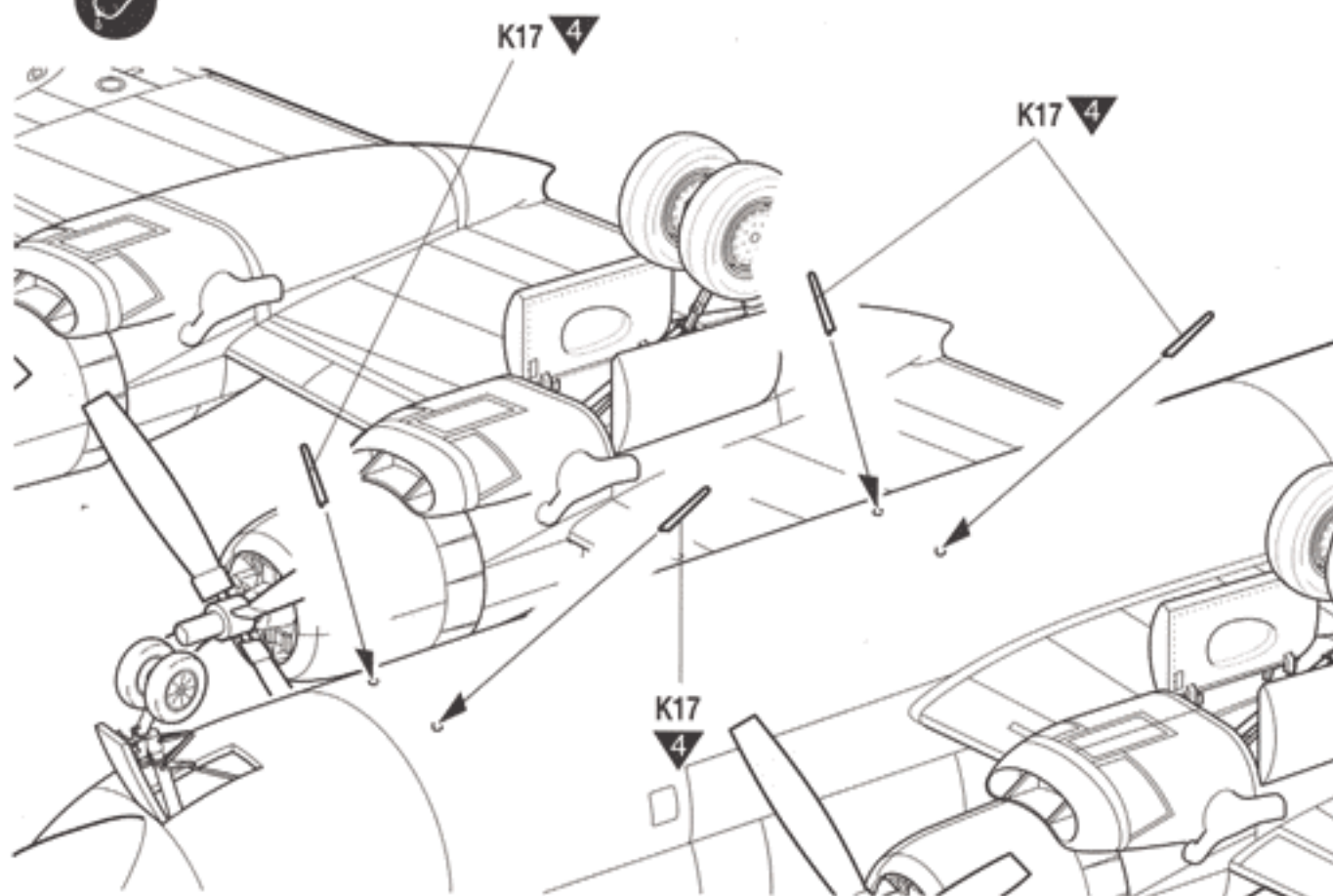
12



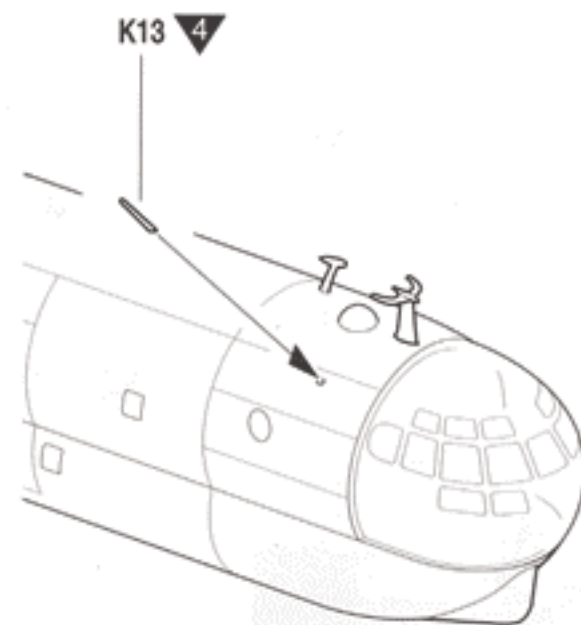
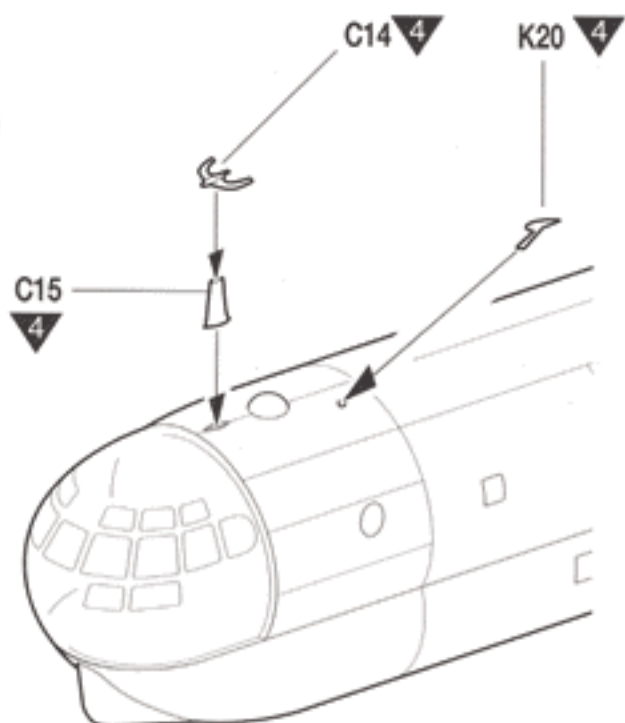
13



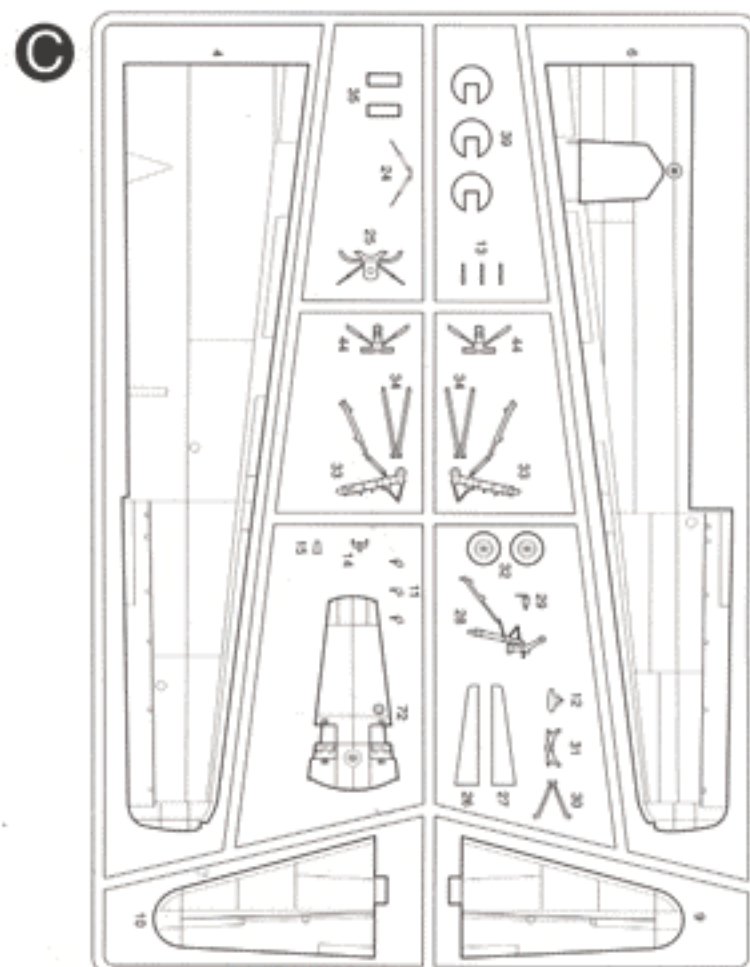
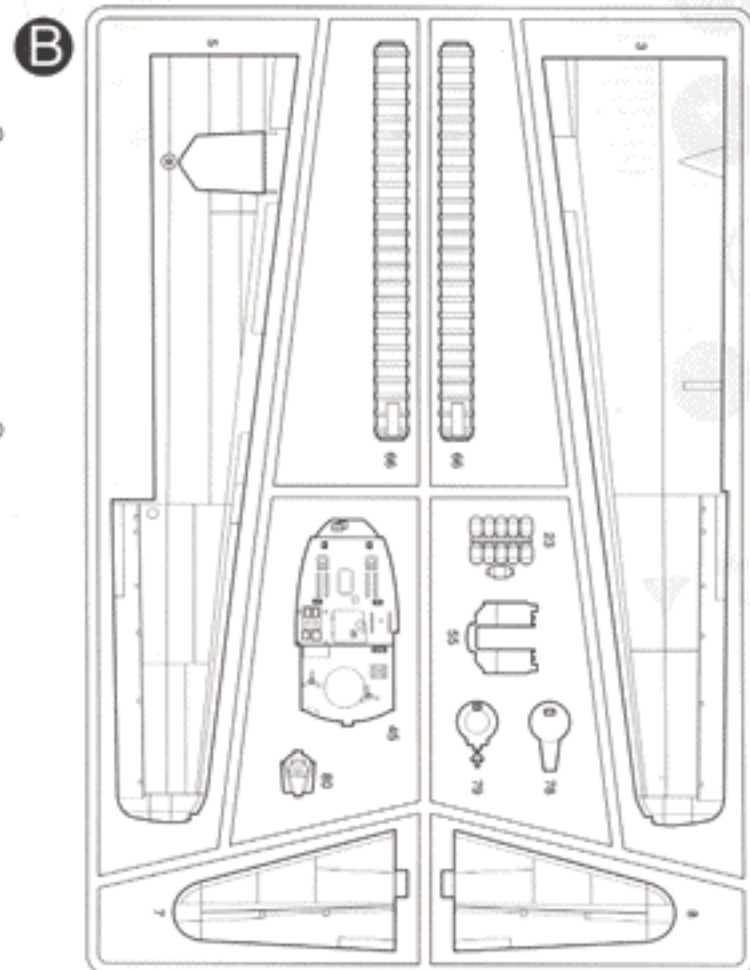
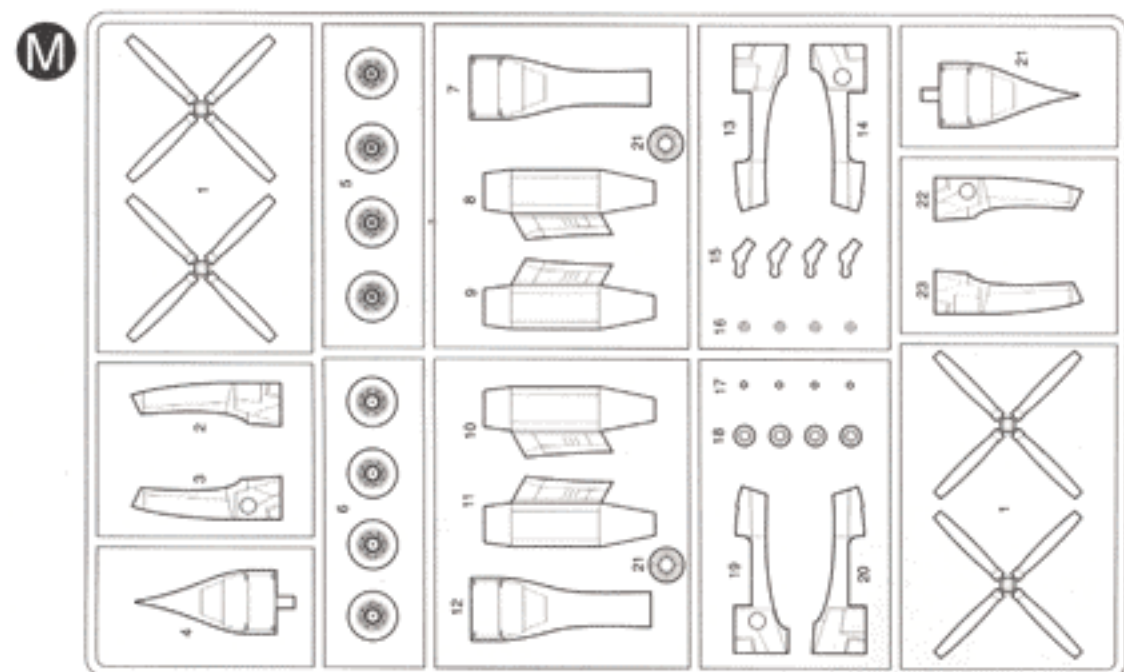
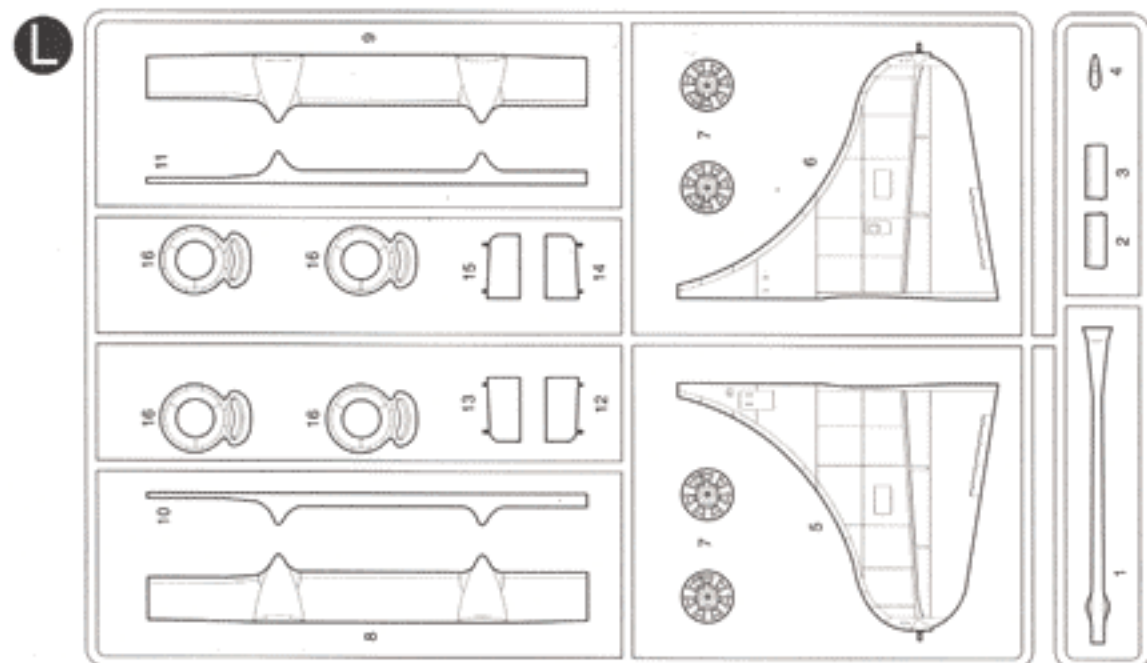
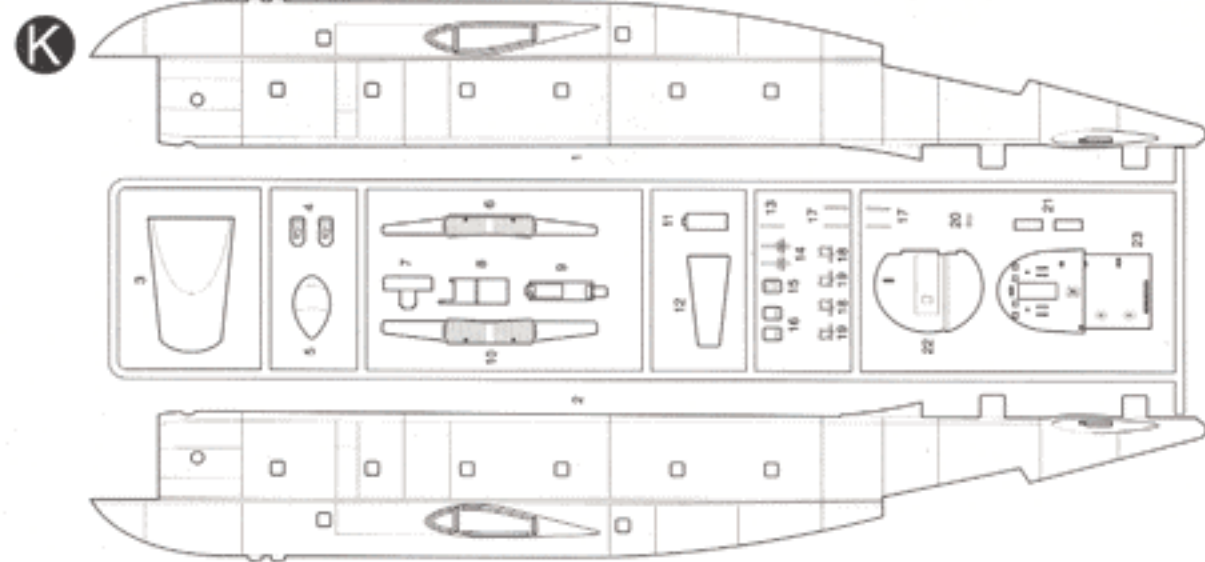
14



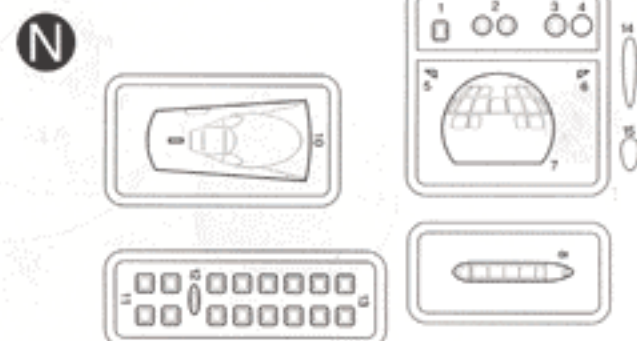
15



Parts Locating Diagram 부품도



1	FLAT BLACK	MATTSCHWARZ	NOIR MAT	つや消しブラック	무광 검정색
2	FLAT ORANGE FS 22246	MATT ORANGE	ORANGE MAT	つや消し オレンジ	무광 오렌지
3	WHITE	WEIß	BLANC	ホワイト	유광 흰색
4	SILVER	SILBER	ARGENT	シルバー	은색
5	METALLIC GRAY	GRAUMETALLIC	GRIS MÉTAL	メタリックグレイ	흑철색
6	FLAT ALUMINUM	MATTALUMINIUM	ALUMINIUM MAT	つや消しアルミ	무광 알루미늄
7	DARK GULL GRAY FS 36231	DUNKEL-MÖWENGRAU	GRIS MOUETTE FONCÉ	ダークガルグレイ	다크 걸그레이
8	CLEAR RED	ROT, REIN	ROUGE CLAIR	クリアーレッド	클리어 레드
9	CLEAR BLUE	BLAU, REIN	BLEU CLAIR	クリアー블루	클리어 블루
10	CLEAR GREEN	GRÜN, REIN	VERT CLAIR	クリアーグリーン	클리어 그린
11	KHAKI	KHAKI	KHAKI	カーキ	카키색
12	AIRCRAFT GRAY FS 16473	FLUGZEUGGRAU	GRIS AVION	エアクラフトグレイ	에어크래프트그레이
13	RADOME TAN FS 33613	FELLBRAUN	MARRON CLAIR RADOME	レードムタン	레이돔탄



■ Unused parts : B23,B45,B55,B66,B78,B79,B80,
Nicht verwenden C11,C12,C13,C24,C25,C26,C27,
Pièces non utilisées C29,C31,C35,C39,C72,
不要部品 K3,M18,N1,N4
불필요 부품

■ 직매점 겸 A/S센터
■ A/S센터
■ 총판점 겸 A/S센터
■ 홈페이지
◆ 고객상담문의

상선교: 742-9293, 대치동: 552-9293, 양재동: 575-9997, 용산: 796-1214
본사: 908-7000(교한147), 동대문: 745-9293, 전호동: 473-9293
노원아카데미: 907-0940, 양천아카데미: 691-7108, 강남아카데미: 522-1577, 강북아카데미: 762-0980,
경기아카데미: (0343)458-5591, 부산아카데미: (051)293-7449, 대구아카데미: (053)744-9293
<http://www.academyhobby.com> <http://www.academy.co.kr>
080-969-7000

ACADEMY
HOBBY MODEL KITS

ACADEMY PLASTIC MODEL CO., LTD.
273-64, Suyu-dong, Kangbuk-gu, Seoul, Korea
TEL: 82-2-908-7000 FAX: 82-2-997-3003

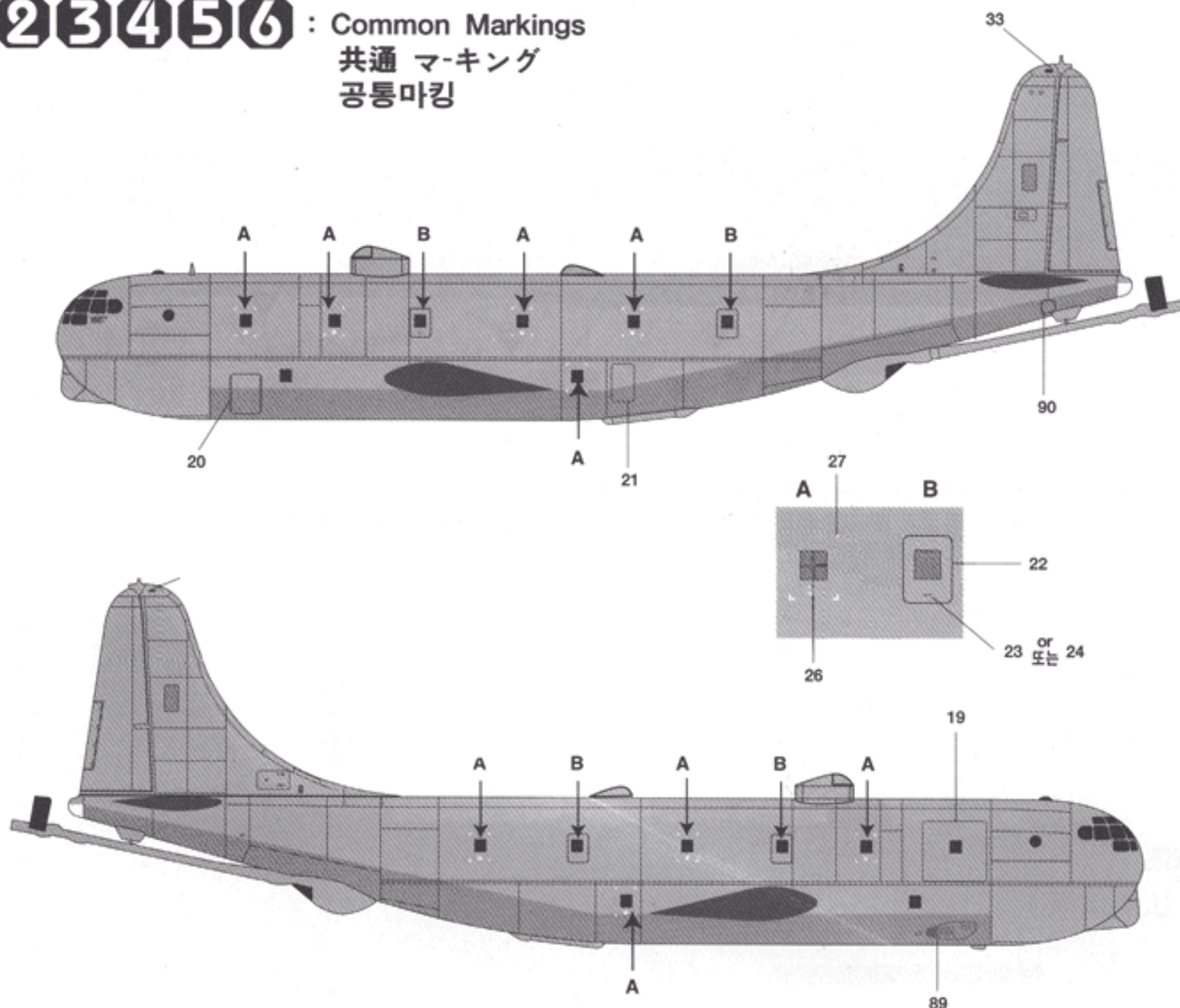
Painting & Decal placement

색칠 및 전사지 붙이기

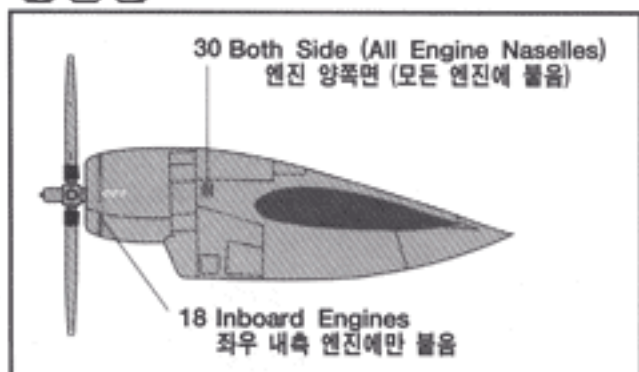
1 2 3 4 5 6 : Common Markings

共通 マーキング

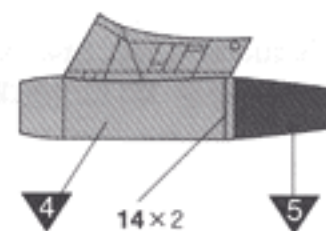
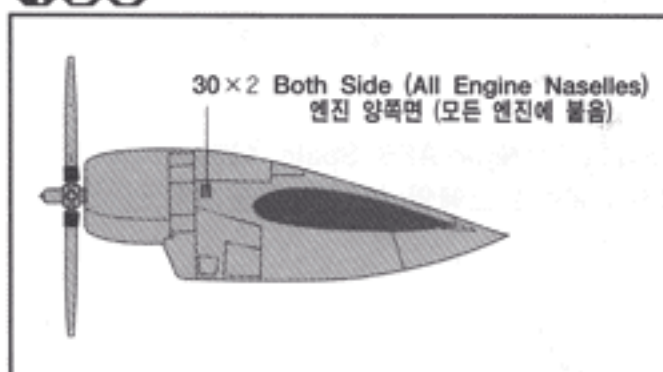
공통마킹



1 2 3



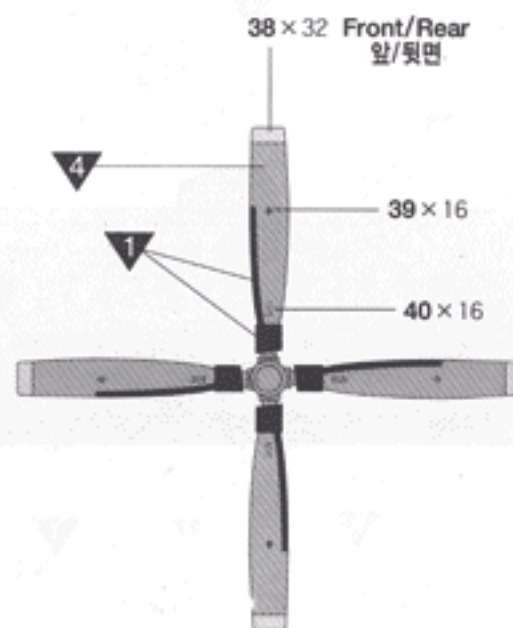
4 5 6



<Front/정면>



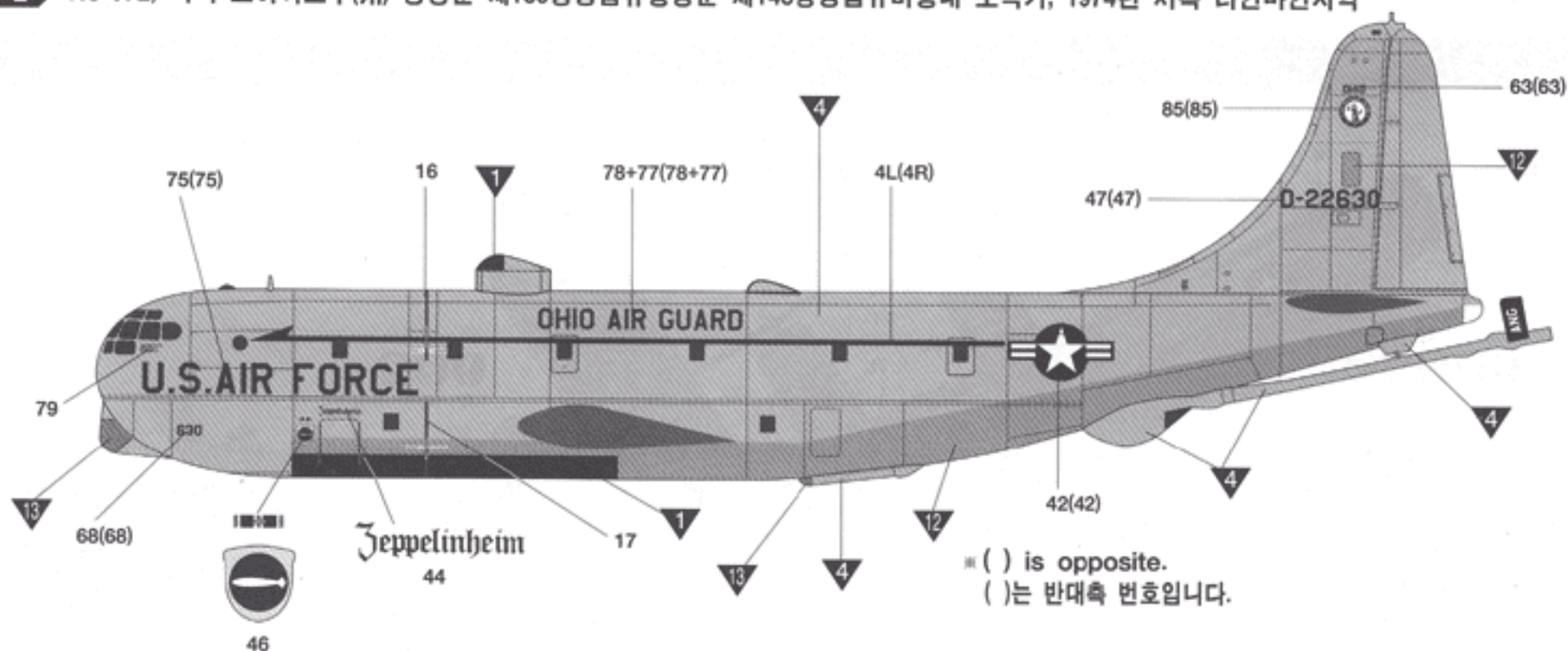
- 1 45+58
- 2 45+59
- 3 45+60
- 4 45+61
- 5 45+62



1

KC-97L, Ohio Air National Guard, 145th ARS, 160th Air Refueling Group, seen at Rhine-Main, W.germany, 1974

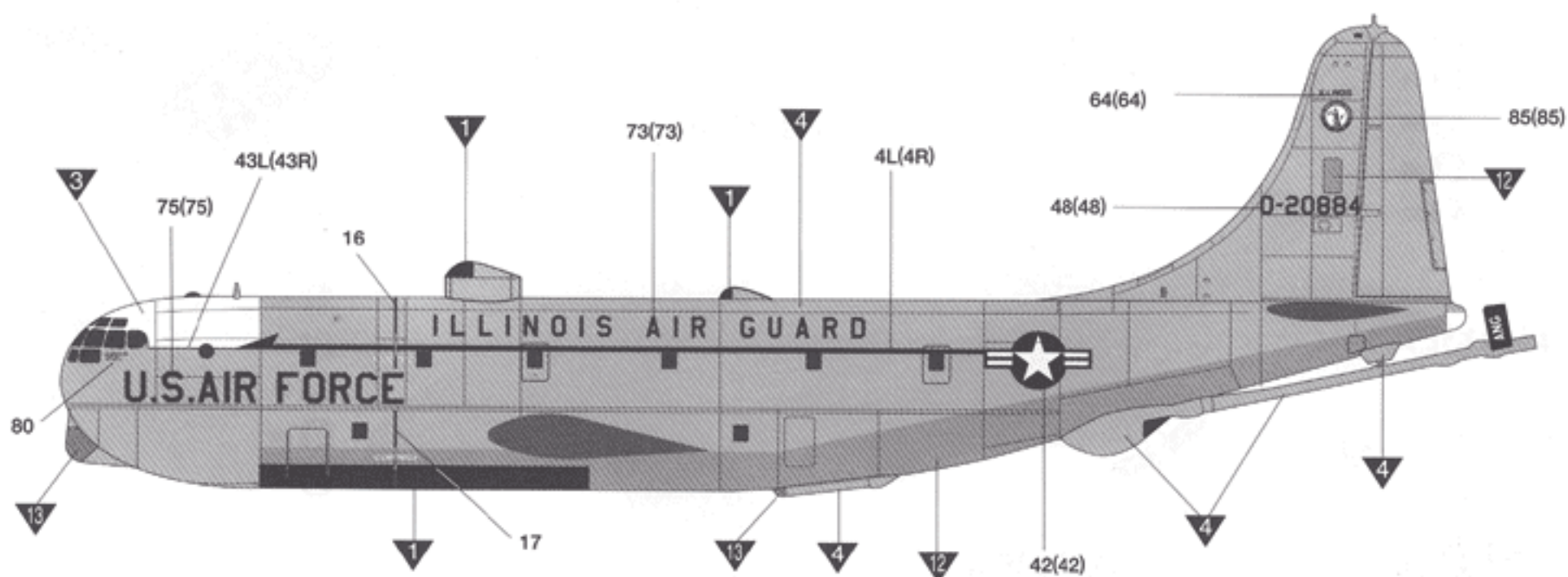
KC-97L, 미국 오하이오주(州) 방공군 제160공중급유항공군 제145공중급유비행대 소속기, 1974년 서독 라인마인지역



2

KC-97L, Illinois Air National Guard, 108th ARS, 160th Air Refueling Group, seen at Rhine-Main, W.germany, 1974

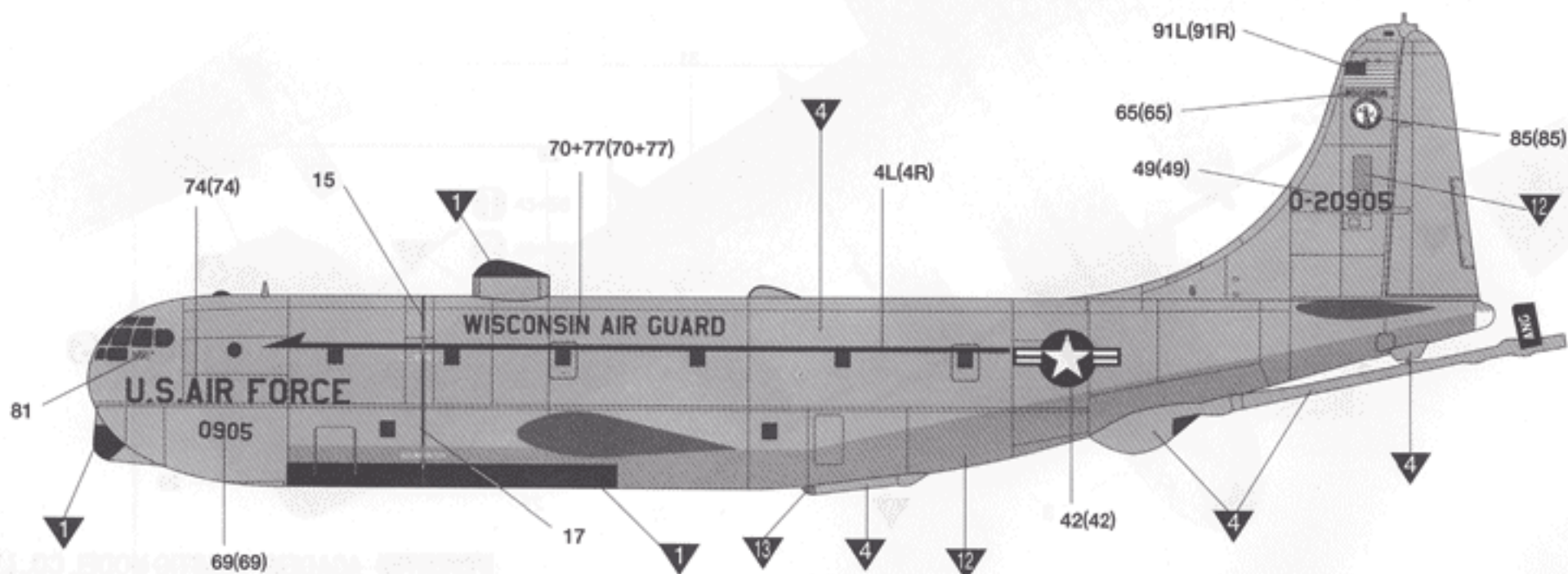
KC-97L, 미국 일리노이주(州) 방공군 제160공중급유항공군 제108공중급유비행대 소속기, 1974년 서독 라인마인지역



3

KC-97L, Wisconsin Air National Guard, 126th ARS, 128th Air Refueling Group, 1976

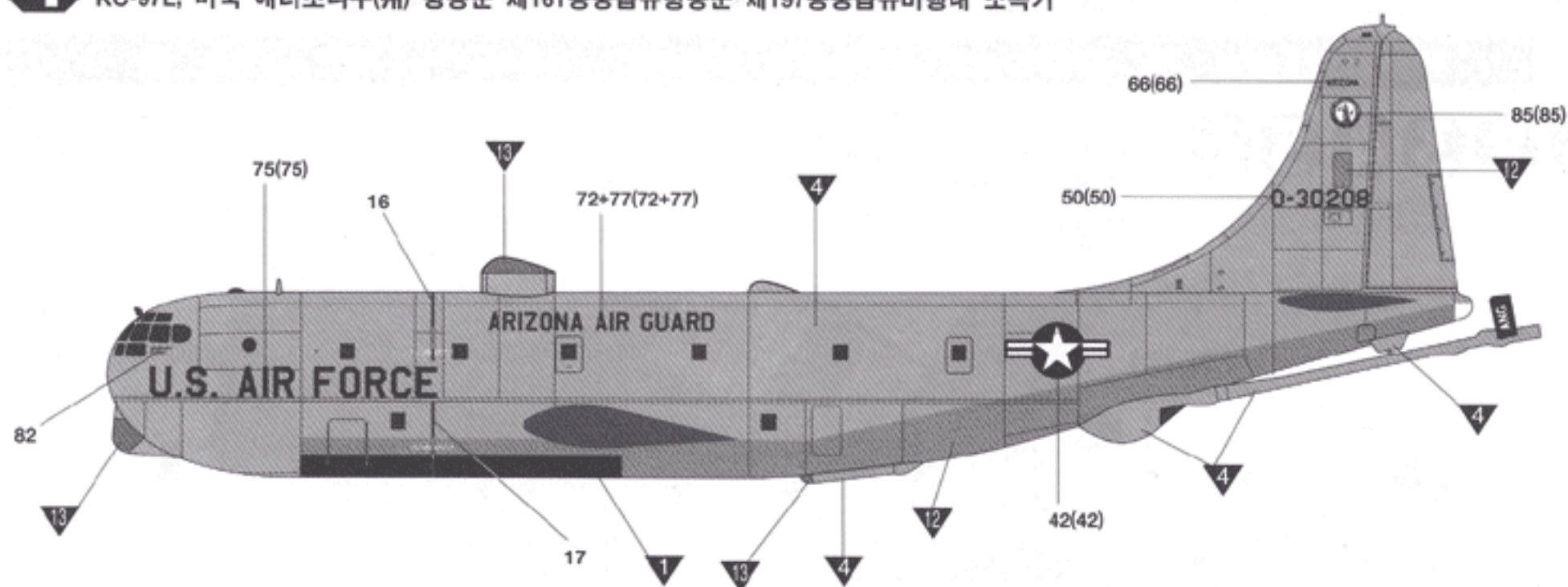
KC-97L, 미국 위스콘신주(州) 방공군 제128공중급유항공군 제126공중급유비행대 소속기, 1976년



4

KC-97L, Arizona Air National Guard, 197th ARS, 161st Air Refueling Group

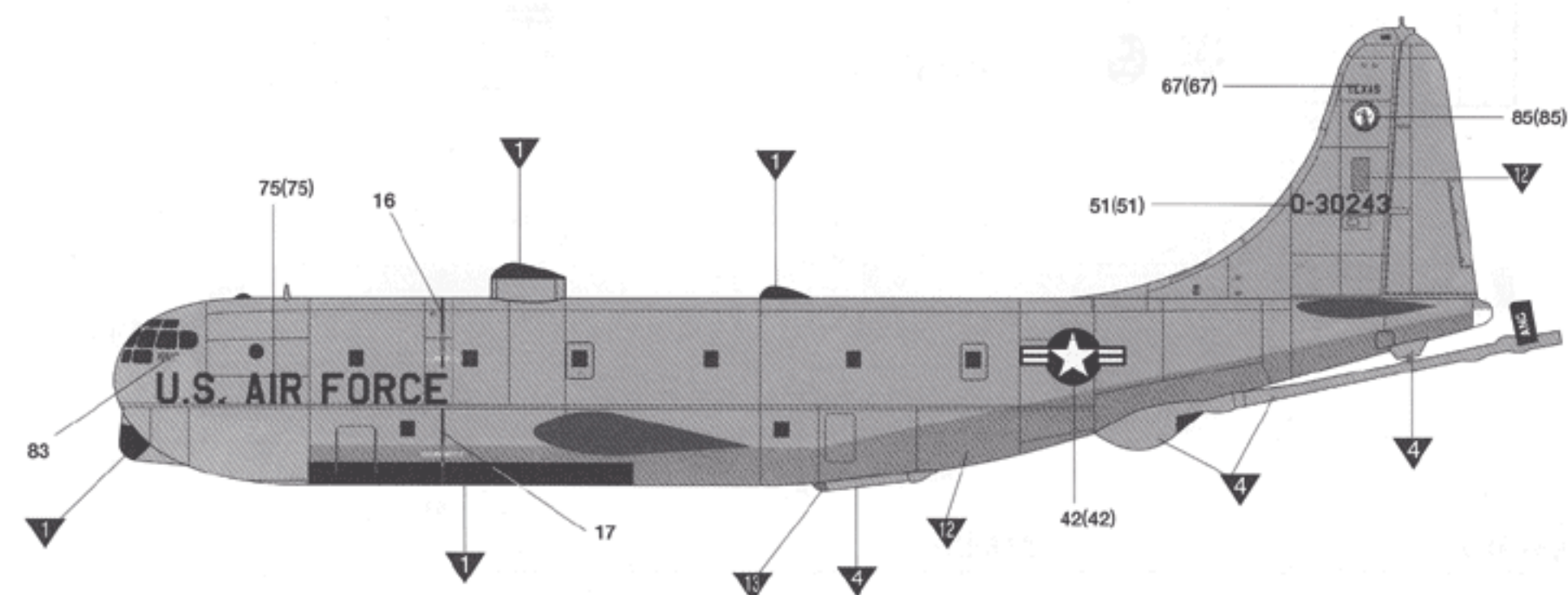
KC-97L, 미국 애리조나주(州) 방공군 제161공중급유항공군 제197공중급유비행대 소속기



5

KC-97L, Texas Air National Guard, 181st ARS, 136th Air Refueling Group

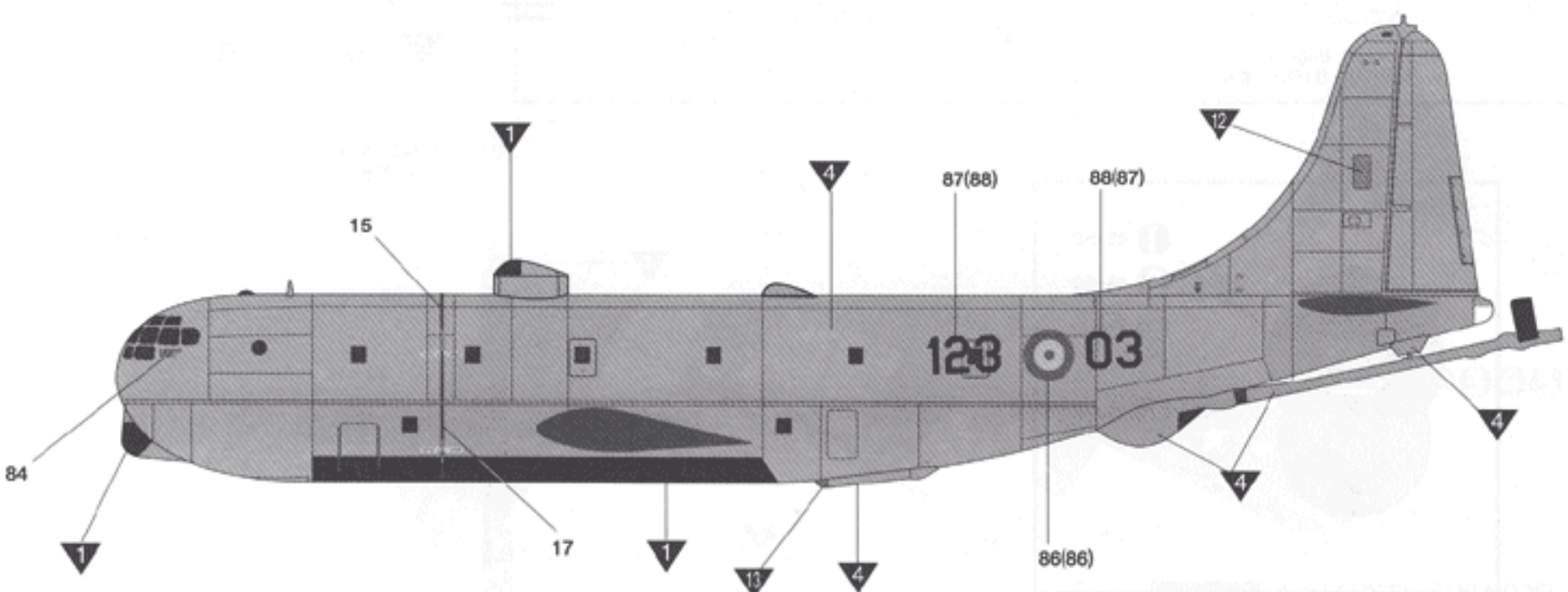
KC-97L, 미국 텍사스주(州) 방공군 제136공중급유항공군 제181공중급유비행대 소속기



6

KC-97L, Esquadron 123, Spanish Air Force, Torrejon AFB, Spain, 1974

KC-97L, 스페인공군 제123비행대 소속기, 1974년 스페인 토레혼 공군기지



- 직매점 겸 A/S센터
- A/S센터
- 총판점 겸 A/S 센터

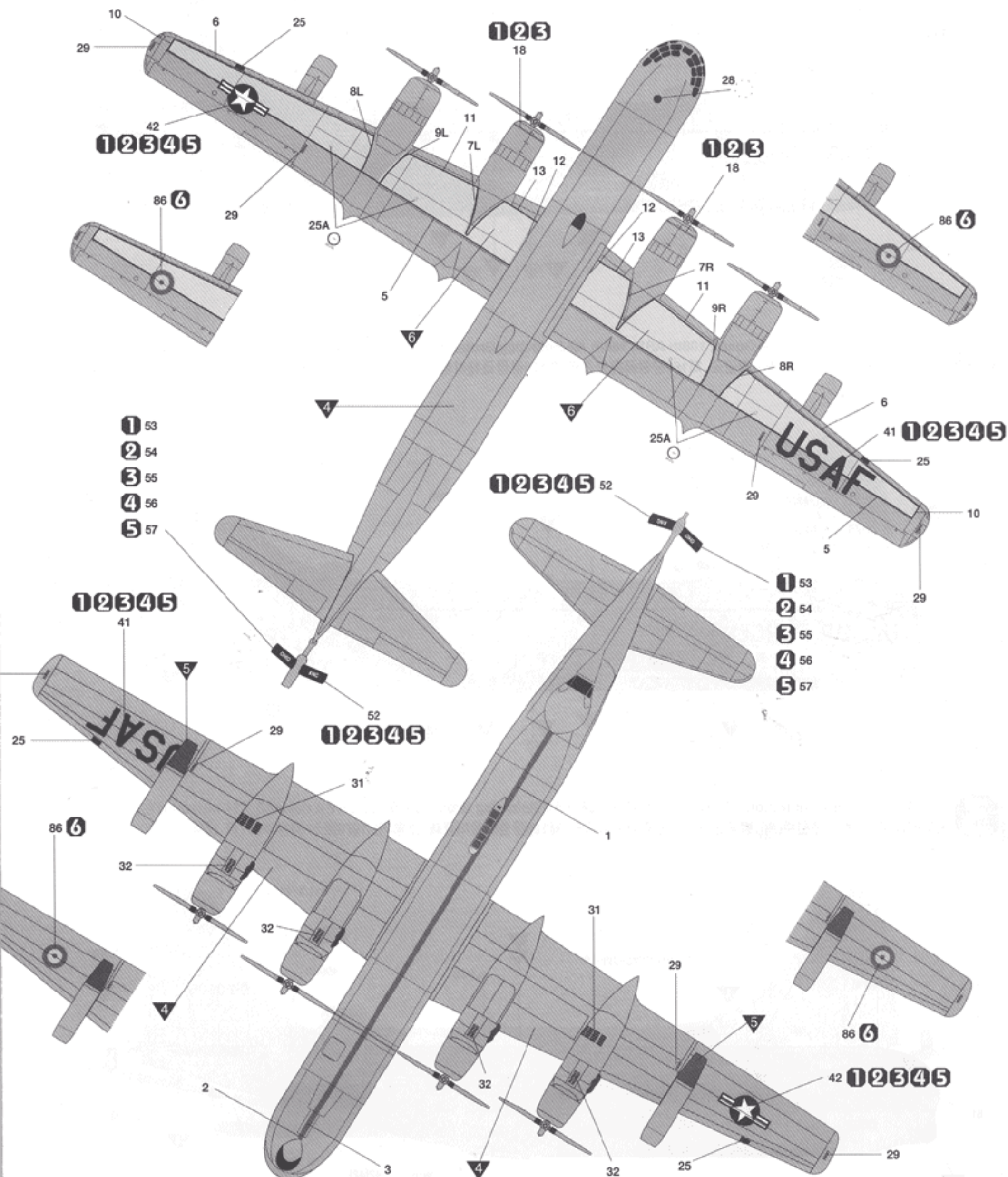
삼선교:742-9293, 대치동:552-9293, 양재동:575-9997, 용산:796-1214
 본사:908-7000 (교환 147), 통대문:745-9293, 천호동:473-9293
 노원아카데미:907-0940, 양천아카데미:691-7108, 강북아카데미:762-0980
 강남아카데미:485-6884, 경기아카데미:(0343)458-5591,
 부산아카데미:(051)293-7449, 대구아카데미:(053)744-9293

- ♣ 고객상담문의 :
- 홈페이지

080-969-7000

<http://www.academy.co.kr>

<http://www.academyhobby.com>



ACADEMY
HOBBY MODEL KITS

ACADEMY PLASTIC MODEL CO., LTD.
 273-64, Suyu-dong, Kangbuk-gu, Seoul, Korea
 TEL:82-2-908-7000 FAX:82-2-997-3003