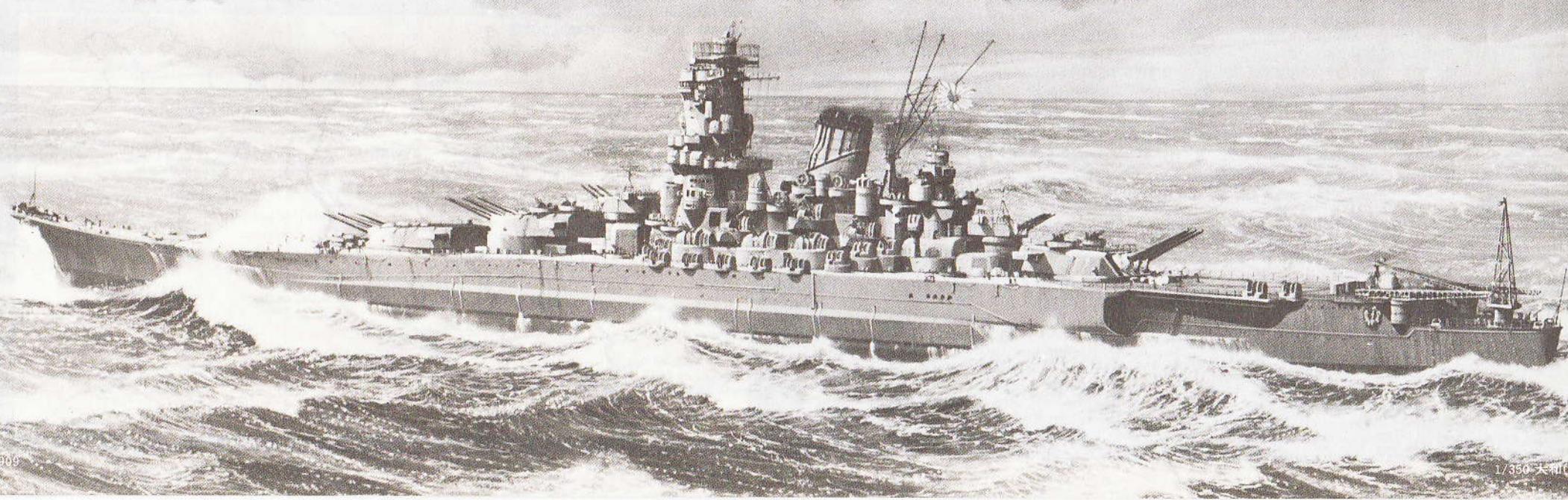
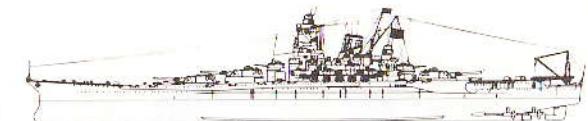


1:350 大和
JAPANESE BATTLESHIP 和 YAMATO



YAMATO



In 1917 the Japanese Navy began planning a strong "Eight-Eight" squadron. This was to comprise eight new battleships including the Nagato, Mutsu, Kaga, Tosa, Kii and Owari, and eight new battle cruisers including the Amagi, Akagi, Takao and Atago. In addition four new ships as yet unnamed were to be leviathans with a load displacement of 47,500 tons and carrying eight 46cm guns as their main armament. However, under the Treaty of Washington signed in 1921, the possession of capital ships was limited and the building of new ships was prohibited for 10 years. Although the Nagato and Mutsu were completed and the Akagi and Kaga were changed into aircraft carriers, the grand plan was never realized. In 1929-30 when the restrictions imposed were coming to an end, Japan planned to build battleships of 35,000 tons. However, the Washington treaty was followed by the London Treaty in 1930, and this plan was not realized either.

In October 1934 the Japanese Navy started plans for a new superdreadnought battleship, and after 22 months a proposal called A140-F5 was adopted. Substantial modifications were made and in March 1937 the final proposal for a 68,200 ton ship was adopted and building started at Kure Naval Dockyard on November 4th 1937. On August 8th 1940 the Yamato was launched and it was completed on the 16th December 1941. The most characteristic feature of the Yamato was the nine 46cm guns, the biggest ever mounted on a ship. For camouflage the guns were called 40 cm guns of type 94. They had a maximum range of 41,000 meters and could penetrate a 43cm armour plate from a distance of 30,000 meters. The rate of fire was two rounds per minute. An armour piercing projectile of type 91 weighed 1.4 tons. The gun barrel weighed about 166 tons and the revolving part of the turret was as heavy as 2,265 tons. In addition to the powerful 46cm guns, the Yamato carried twelve 15.5 guns. The Yamato had excellent protection. Its hull was short and broad for its displacement. The turrets, bridge, machinery, etc. were disposed near the centre where the armour protection was concentrated. Of nearly 43,000 tons of steel, 21,266 tons was armour plating - more than 30% of the load displacement. The length of the Yamato was 256 metres, the breadth 34.6 metres and it had a draft of 10 metres. To gauge how huge the Yamato was, the height from keel to top of bridge was more than 50

metres, the hull contained six decks and the bridge structure thirteen decks. There were about 400 speaking tubes, 750 telephones and eight generators with a total output of no less than 4,800 kw, enough to supply a small town. The Yamato first saw service in the Battle of Midway in June 1942, but it was not until October 25th 1944 that the 46cm guns were first used in action. On April 6th 1945 the Yamato took part in "Operation Ten No. 1" (Operation kikusui), and on the 7th April early in the morning the Japanese until was spotted by an enemy plane and in the afternoon it was attacked by more than 300 enemy aircraft. The Yamato was hit by ten torpedoes and eight bombs and at 2.23 p.m. it sank with its crew of 2,498 without proving the worth of its huge guns.

* * *

Im Oktober 1934 begann die japanische Marine mit den Plänen für ein neues Super-Schlachtschiff. Bereits nach 22 Monaten wurde der Entwurf a 140-F5 zur Prüfung vorgelegt und angenommen. Im Zuge der Technik wurden noch Verbesserungen eingeplant, sodass die Baufreigabe im März 1937 erfolgen konnte. Der Start mit den Arbeiten für das 68.200 ton Schiff begann am 4. November 1937 auf dem Kure Marine Dock. Am 8. August 1940 wurde die Yamato zu Wasser gelassen und Fertigstellung war am 16. Dezember 1941.

Das Auffallendste an der Yamato waren die neun 46cm Kanonen, die grössten, die jemals auf einem Schiff montiert waren. Zur Tarnung wurden diese Brummer als 40cm Kanonen Type 94 bezeichnet. Schussweite max. 41.000 Meter. Bei 30.000 Metern gingen die Geschosse durch eine 43cm starke Panzerplatte. Schussfolge war 2 Schuss in der Minute. Das Geschützrohr wog ca. 166 ton. Allein der Dreiteil des Geschützes hatte 2.265 Tonnen Gewicht.

Zuden kräftigen Geschützen hatte die Yamato noch zwölf 15.5 Kanonen. Die Panzerung des Schiffes war ausgezeichnet, der Rumpf kurz und breit in seiner Verdrängung. Die Brücke, die Geschütztürme, Maschine usw. war mittschiffs in der am stärksten gepanzerten Zone des Schiffes. Von 43.000 Tonnen Stahl waren 21.266 Tonnen nur für die Panzerung verwendet worden. Die Länge der Yamato betrug 256 Meter, die Breite 34.6 Meter und rund 10 Meter Tiefgang. Die Höhe von Kiel zur Mastspitze war über 50 Meter. Der Rumpf hatte 6 Decks, der Brücken-

teil 13 Decks. Es waren über 400 Sprechrohre eingebaut, 750 Telefone und 8 Generatoren mit einer Kapazität von 4.800 Kw's. genügend für eine kleine Stadt. Die Yamato wurde in der Midway-Schlacht eingesetzt im Juni 1942, aber erst im Oktober 1944 wurden die 46er Rohre zum Feuern freigegeben. Am 6. April 1945 war die Yamato in der Operation Ten No. 1 (Kikusui) eingesetzt. Am frühen Morgen des 7. April wurde das Schiff vom Feind erfasst und am Nachmittag von über 300 feindlichen Flugzeugen mit Torpedos und Bomben angegriffen. Getroffen von 10 Torpedos und 8 Bomben, hatte das Schiff und die 2.498 Mann starke Besatzung keine Chance, seine Stärke in Beweis zu stellen.

SPECIFICATION OF THE BATTLESHIP YAMATO AT THE TIME OF COMPLETION

Completed December 16, 1941

Sunk April 7, 1945

Constructed by Kure Naval Dockyard

<<Particulars>>

Overall length	263m
Waterline length	256m
Breadth maximum	38.9m
Waterline breadth	36.9m
Depth	18.915m
Draft (official trials)	10.4m
Displacement (loaded)	72,809t

Displacement (official trial)	69,100t
Displacement (standard)	65,000t
Heavy oil carried	6,300t
Cruising range	7,200nm/16kt
Top Speed	27kt
Shaft horsepower	150,000hp
Freeboard (center)	8.667m
Number of crew	2,500

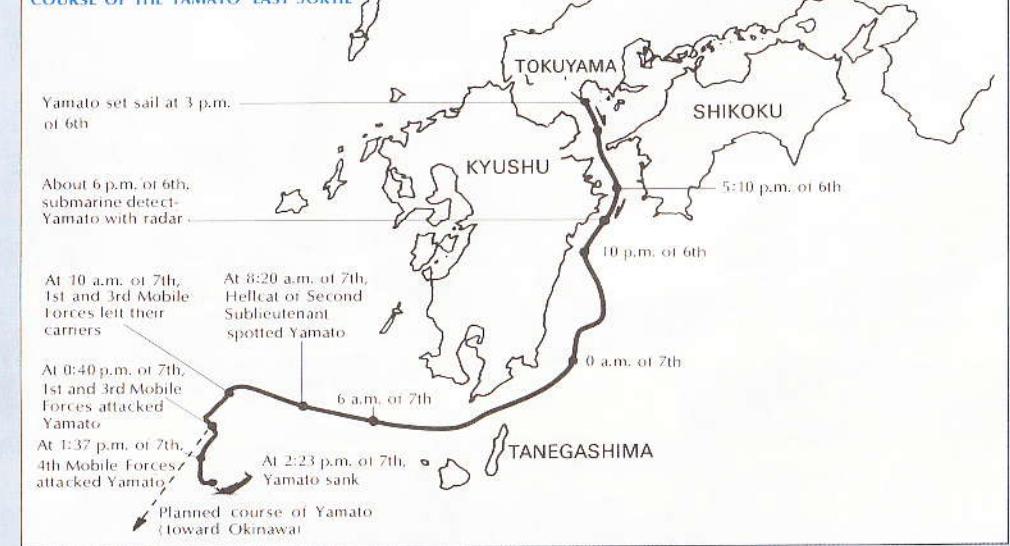
<<Engine>>

Main Machinery	4 turbines
Number of boilers	12
Steam pressure	25kg/cm ²
Steam temperature	325°C

<<Main Armament & Equipment>>

Main guns:	Three 46 cm L/45 triple-barreled guns
Secondary guns:	Four 15.5 cm triple-barreled guns
High angle guns:	Six 12.7 cm double-barrelled guns
Machine guns:	Four 13 mm double-barreled guns
Planes (reconnaissance seaplanes)	7
Catapults	2
Radio detectors	Type 21, two
Radio detectors	Type 22, two
Radio detectors	Type 13, two
Detectoscope	1
Underwater detector	1
Range finders	15m four
Searchlights	150 cm diam., eight

COURSE OF THE YAMATO'S LAST SORTIE





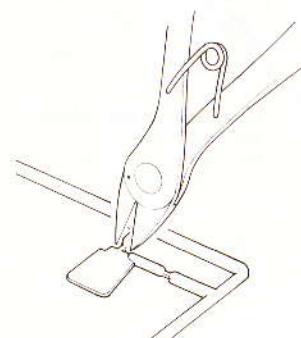
* Study the instructions and photographs before commencing assembly.
 * You will need a sharp knife, a screwdriver, a file and a pair of pliers.
 * Do not break parts away from sprue, but cut off carefully with a pair of pliers.
 * Use cement sparingly. Use only enough to make a good bond. Apply cement to both parts to be joined.
 * This kit needs four UM1 Dry cells.

This mark shows the colour.

* Vor Beginn die Bauanleitung studieren und den Nummern nach die Elemente zusammendauern.
 Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abwickeln; Teile vor Kleben zusammenhalten, auf genauen Sitz achten. Nicht zuviel Klebstoff verwenden. Kleine Teile hält man mit Pinzette fest.

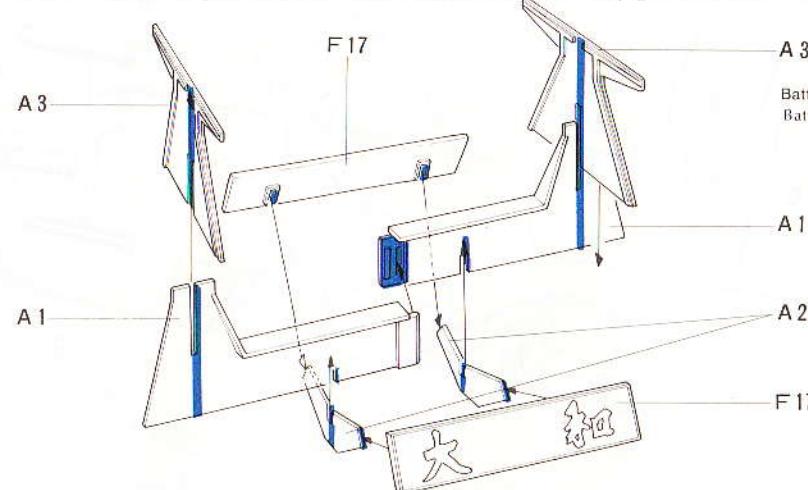
Zeichen für Bemalung

Do not break parts away from sprue, but cut off carefully with a pair of pliers.
 Bauteile nicht vom Spritzling abbrechen, vorsichtig abschneiden oder abwickeln.



1 Stand Ständer

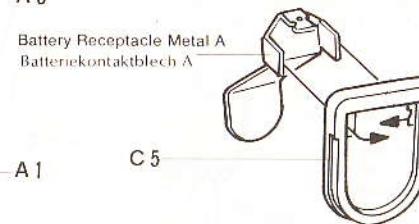
* If you are to make a display model, proceed to Step ⑥ after finishing Step ①
 Wenn nur Standmodell gebaut wird, dann nur den Ständer bauen und bei Step ⑥ weitermachen.



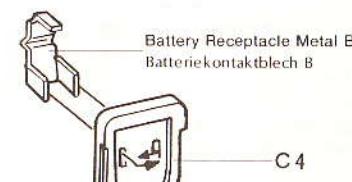
2 Motorized Model Parts Teile für Elektromodell

<< Metal A >> Make 2 sets
 << Metall A >> 2 Satz

<< Metal B >> Make 2 sets
 << Metall B >> 2 Satz

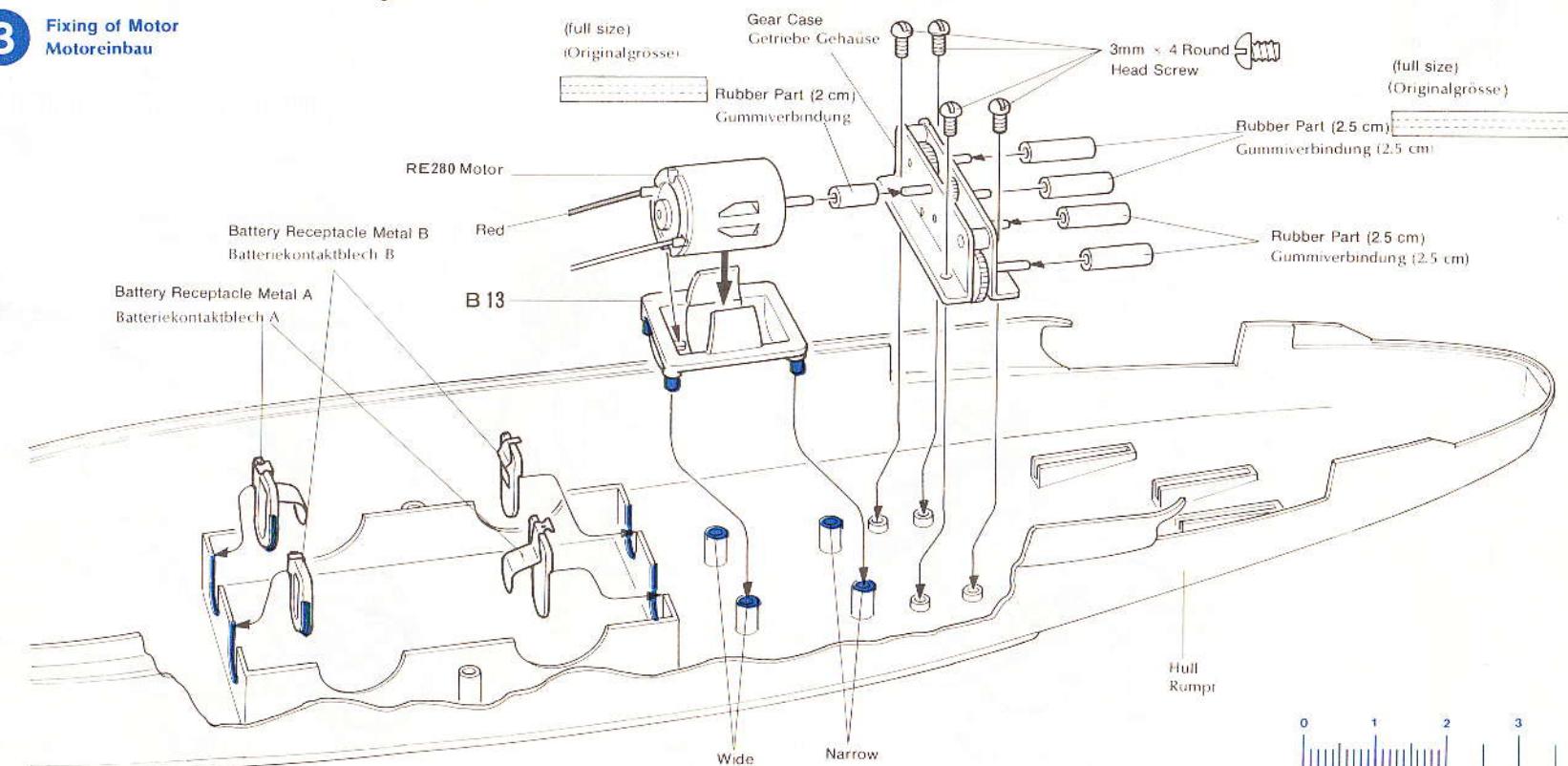


Side view of Battery Receptacle Metal A (full size).
 Seitenansicht Batteriekontakt,



Side view of Battery Receptacle Metal B (full size).
 Seitenansicht Batteriekontakt.

3 Fixing of Motor Motoreinbau



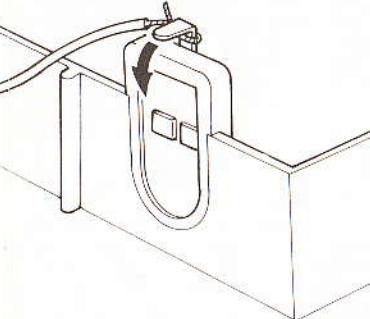
4

<<Switch>>
<<Schalter>>

<<How to connect wires>>

Pass wire through vinyl pipe and firmly connect it with another wire.

Vinylrohr auf Kabel schieben, Drähte zusammendrehen.

Vinyl Pipe
VinylschlauchInsulate with vinyl pipe
Mit Vinylrohr gut isolierenAfter connection, firmly bend down as shown below.
nach anklappen, nach unten biegen

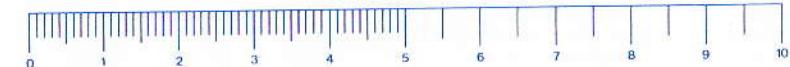
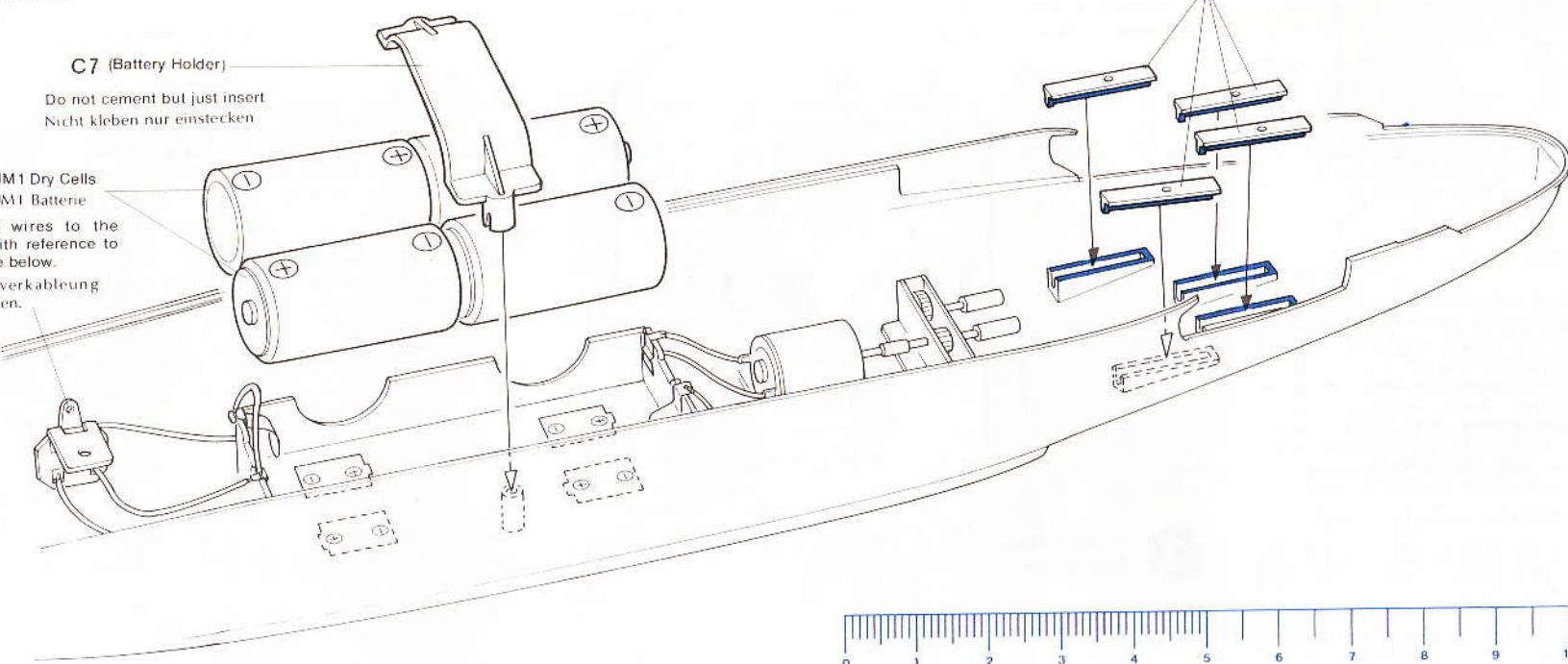
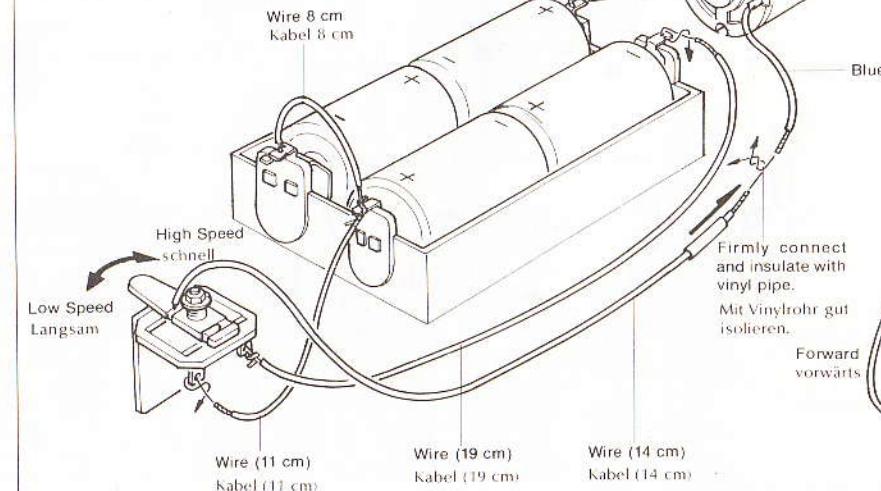
4

Switch
Schalter

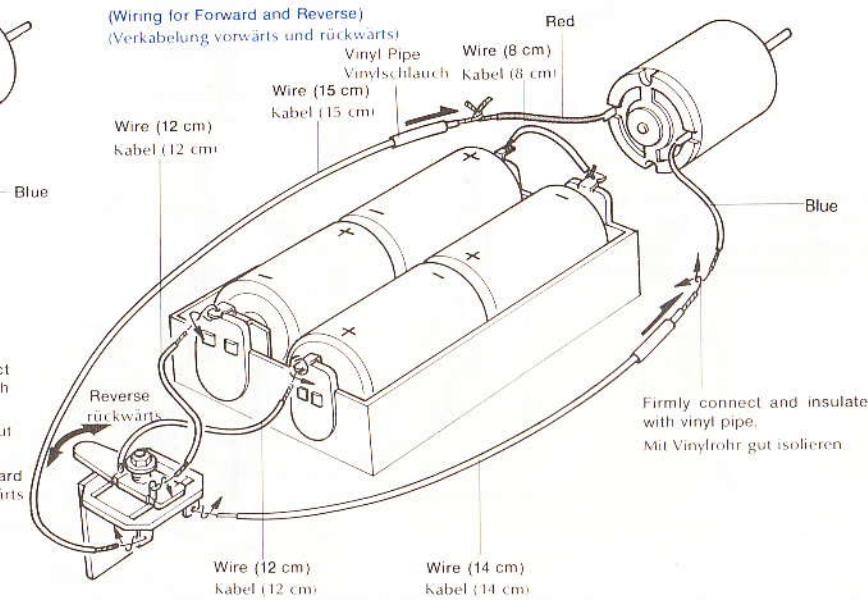
C7 (Battery Holder)

Do not cement but just insert
Nicht kleben nur einsteckenUM1 Dry Cells
UM1 BatterieConnect wires to the
switch with reference to
the figure below.
Schalterverkabelung
siehe unten.

nach unten biegen

<<Distributing Wires>>
<<Verkabelung >>Choose either two speeds (fast and slow) or one speed plus reverse.
Es gibt zwei Möglichkeiten : entweder schnell und langsam oder vorwärts und rückwärts.(Wiring for two speeds : fast and slow)
(Verkabelung schnell und langsam)(Wiring for Forward and Reverse)
(Verkabelung vorwärts und rückwärts)Red
Wire (8 cm) Kabel (8 cm)Wire (12 cm)
Kabel (12 cm)

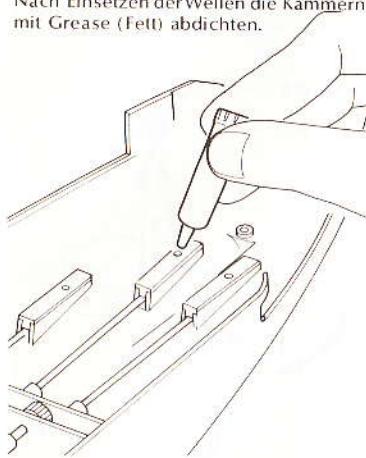
Blue



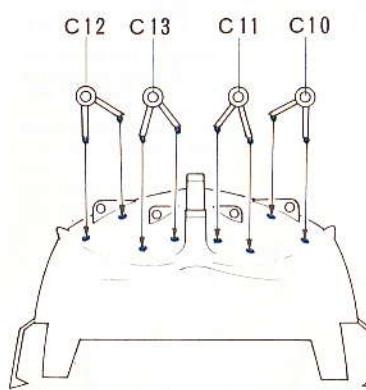
5 << Screw >>

<< Schiffsschraube >>

After fitting shafts, fill up with grease as shown below to prevent water leakage.
Nach Einsetzen der Wellen die Kammern mit Grease (Fett) abdichten.



C12 C13 C11 C10



* Before sailing the model, put it on the water to make sure that it is free from leakage of water.

* Rumpf auf wasserdichten Bau überprüfen

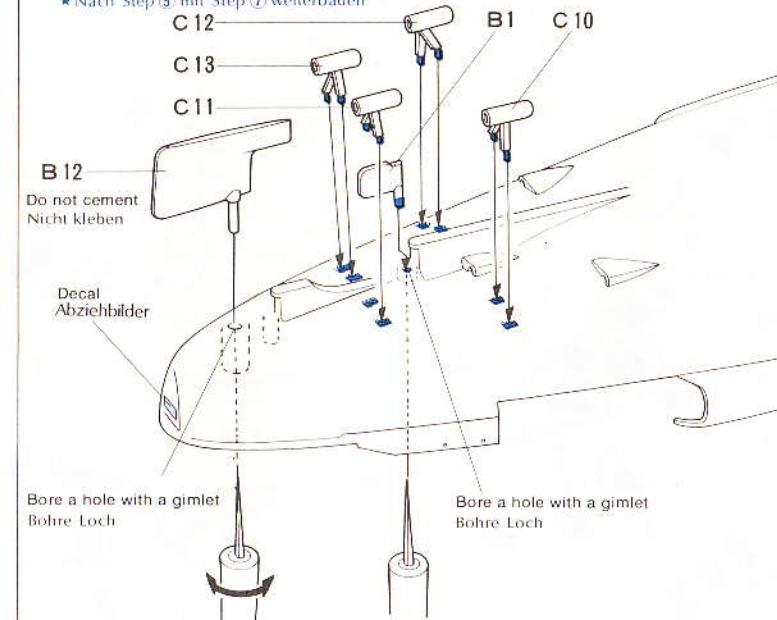


5

Screw (Motorized Model)

Schiffsschraube (Motormodell)

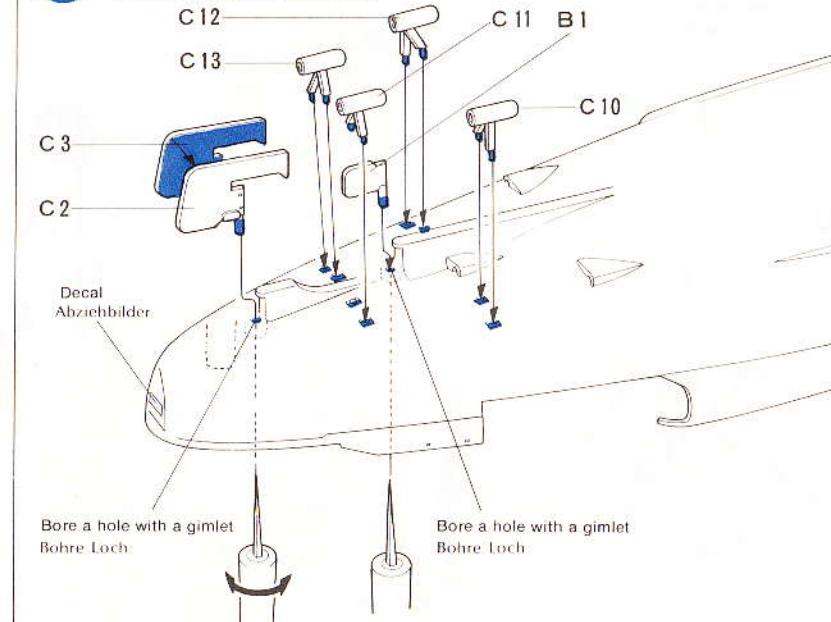
- * Proceed to ⑦ after finishing this step
- * Nach Step ⑤ mit Step ⑦ weiterbauen



6

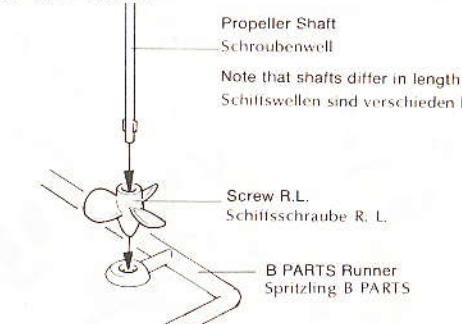
Screw (Display Model)

Schiffsschraube (Standmodell)



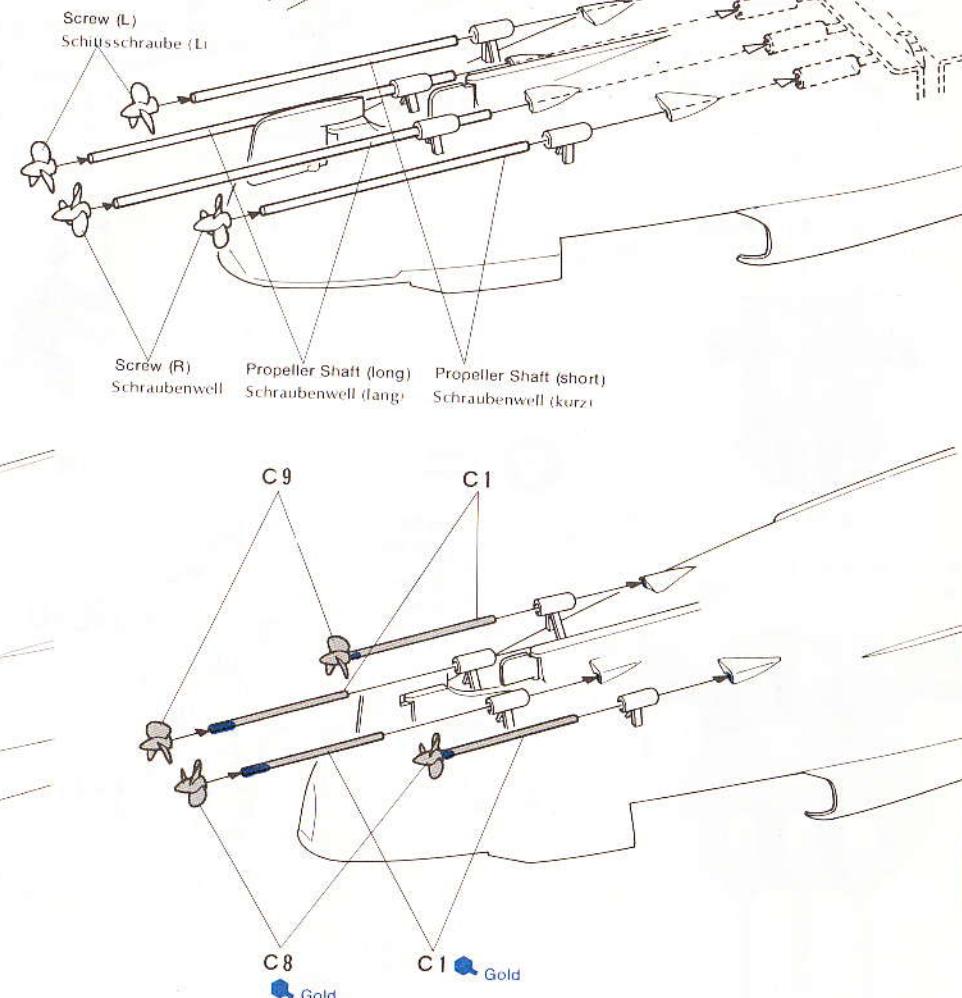
<< Fixing of Screw >>

<< Einbau der Schiffsschraube >>

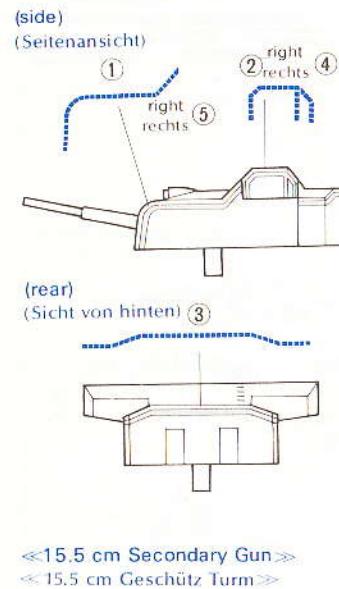


<< Rubber Part >>

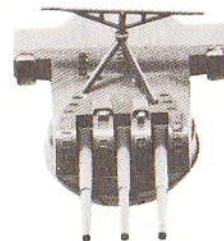
<< Gummidichtung >>



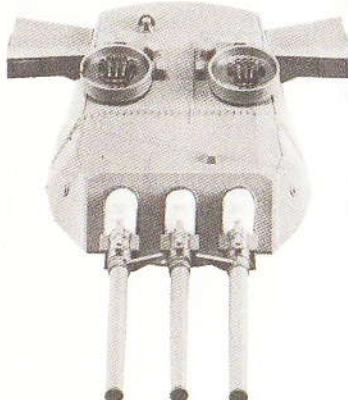
<<Marking of 15.5 cm Secondary Gun>>
 <<Markierung der 15.5 cm Geschütz Turm>>



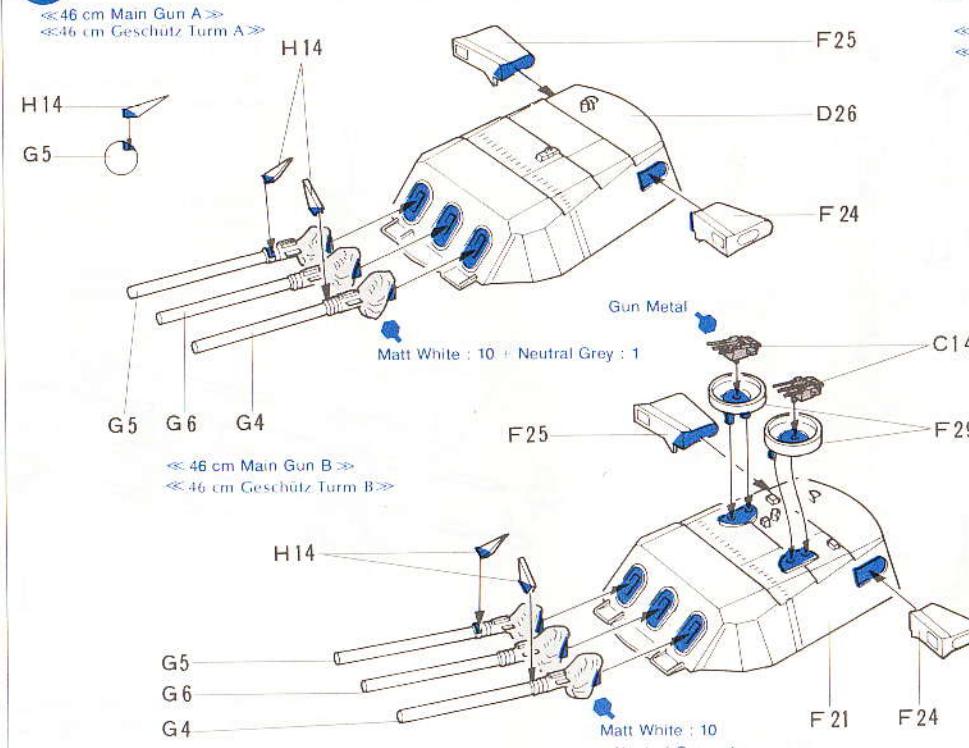
<<15.5 cm Secondary Gun>>
 <<15.5 cm Geschütz Turm>>



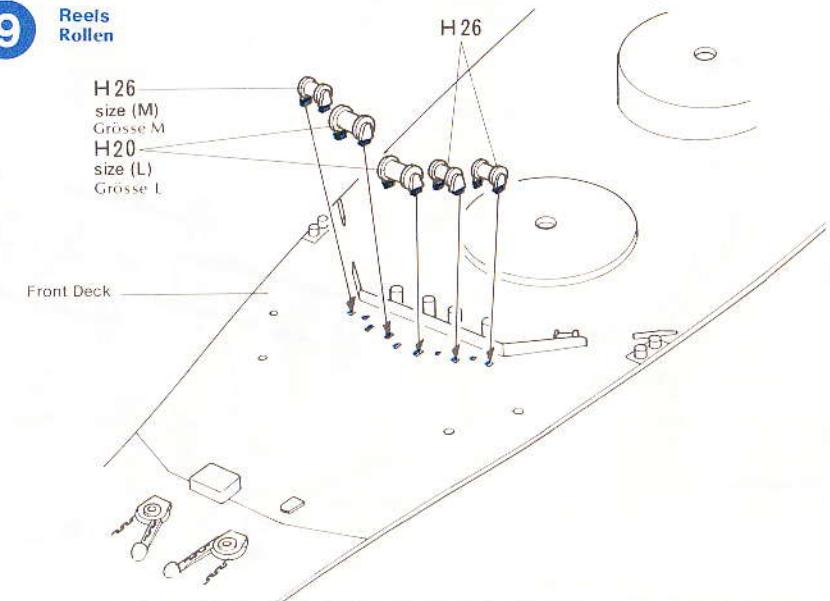
<<46 cm Main Gun B>>
 <<46 cm Geschütz Turm B>>



7 Guns 1 Geschütze 1

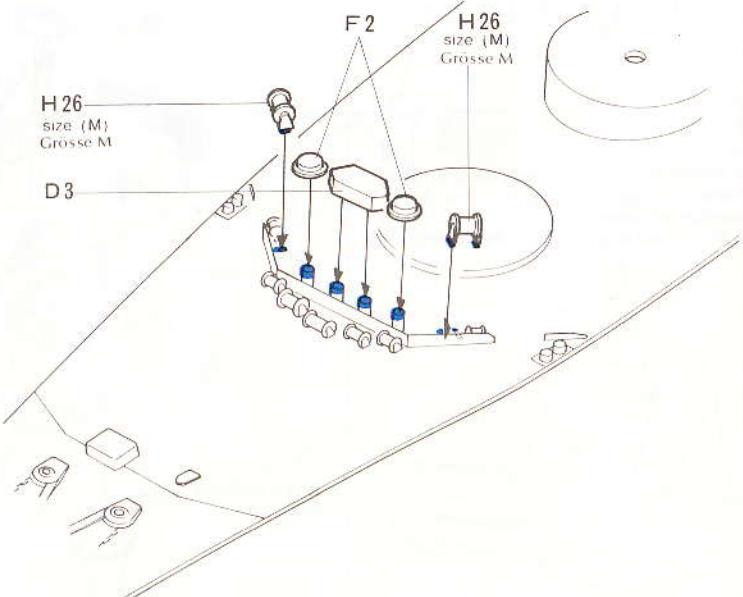
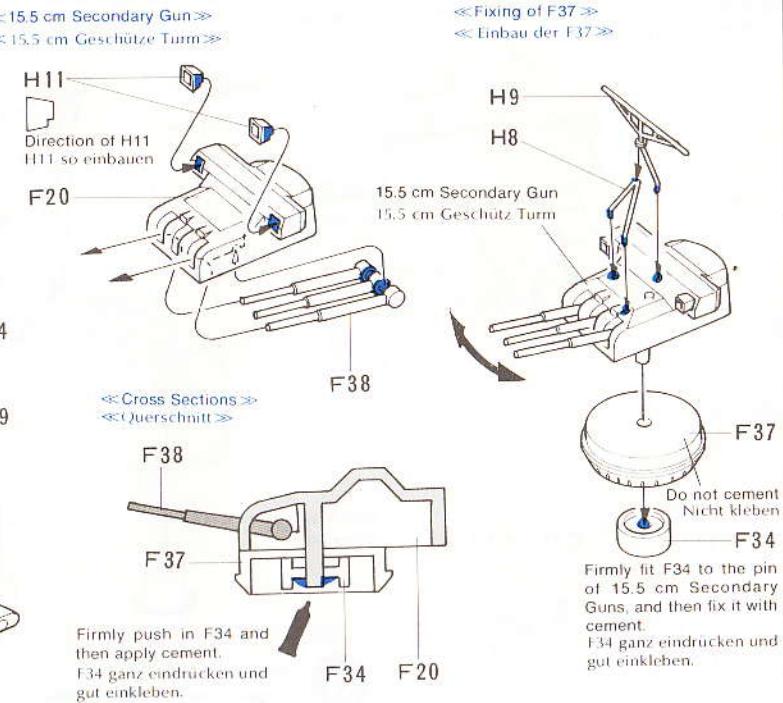


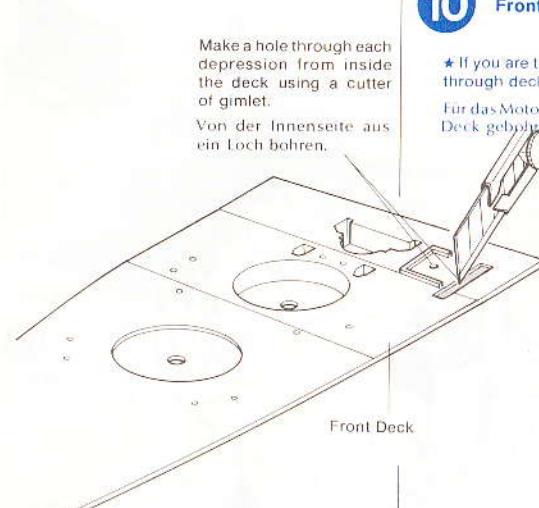
9 Reels Rollen



8 Guns 2 Geschütze 2

<<15.5 cm Secondary Gun>>
 <<15.5 cm Geschütz Turm>>





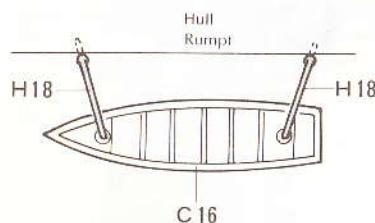
<<Fixing of Cutters C16>>

The kit represents the Yamato in "Operation Ten No. 1" (Okinawa special attack). In this operation, cutters were carried inside the ship, but you can attach them outside to accentuate the model.

<<Einbau der Kutter C16>>

Dieser Kit zeigt die Yamato in der Operation Ten No. 1 (Okinawa Special Attack) mit den Kuttern innerhalb des Schiffes. Natürlich können die Kutter auch nach Außen angebracht werden.

<<Fixing of Cutter C16>>



Like to detail your models?

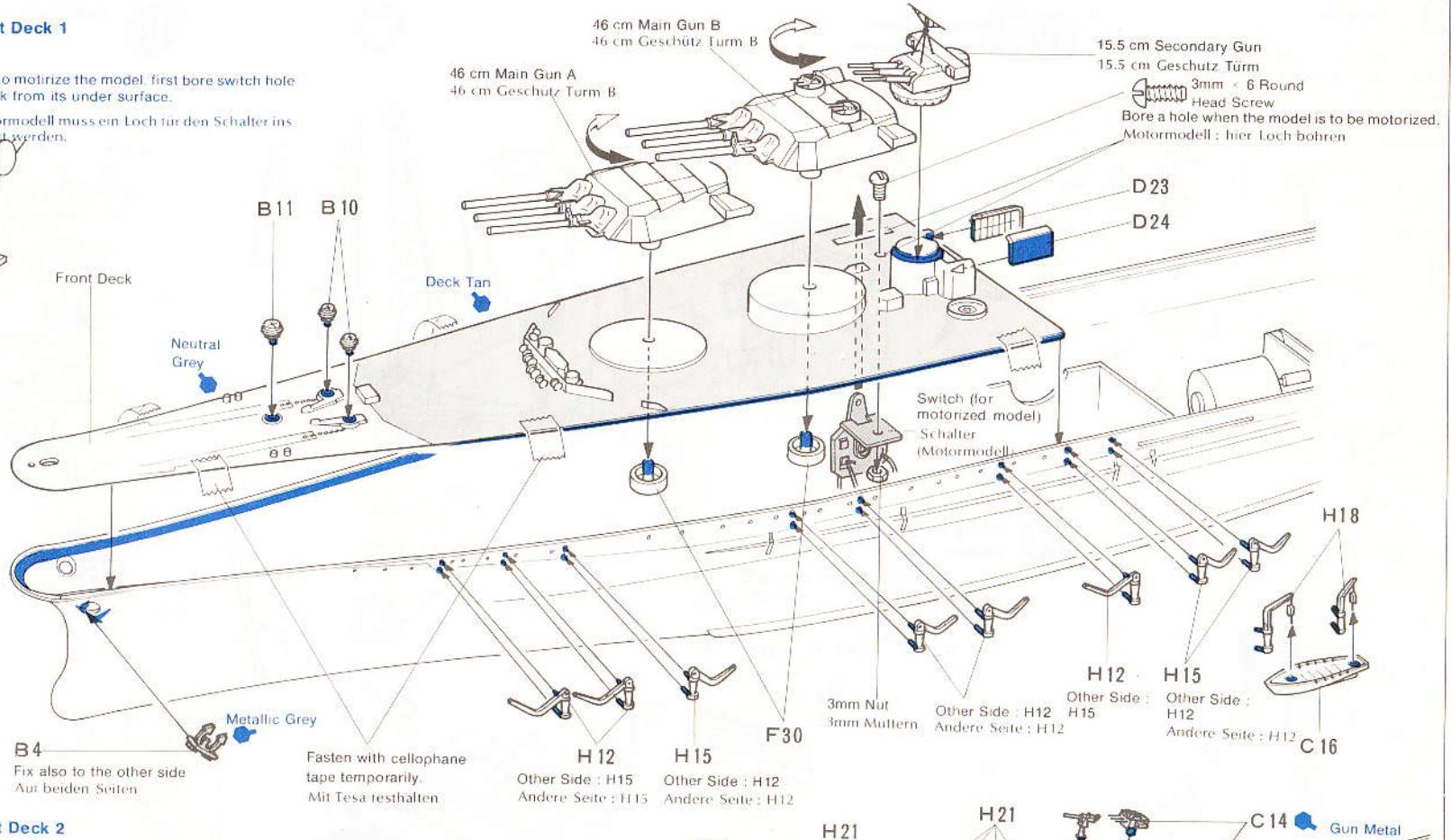
Tamiya has a fine line of photo albums that will help you in the super detailing of your tank models or diorama construction. See them at your nearest Tamiya supply house, or order direct from the factory.

TAMIYA COLOUR CATALOGUE

The latest in cars, boats, tanks and ships. Motorized, radio controlled and museum quality models are all shown in full colour in Tamiya's latest catalogue. At your nearest hobby supply house.

* If you are to motorize the model, first bore switch hole through deck from its under surface.
Für das Motormodell muss ein Loch für den Schalter ins Deck gebohrt werden.

Von der Innenseite aus ein Loch bohren.



<<Fixing of D11>>
<<Einbau der D11>>

Hull Rumpf

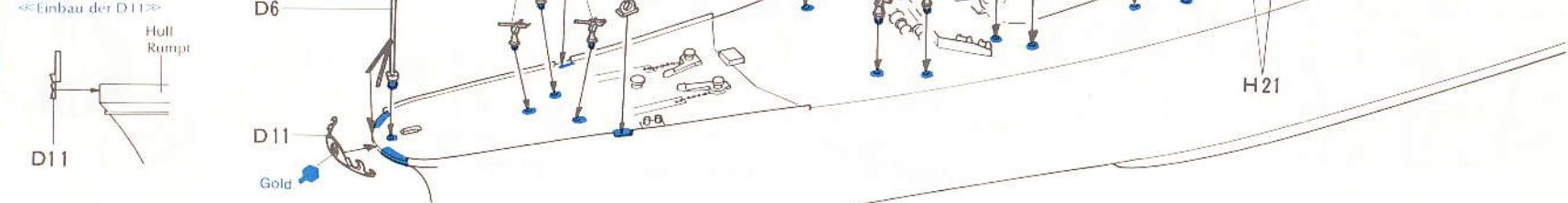
D6

H21

F12

D11

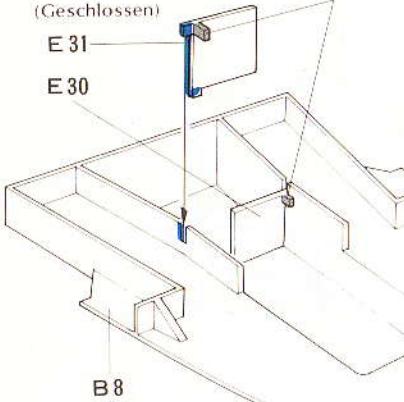
Gold



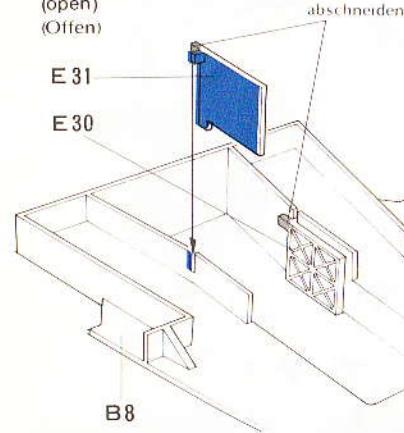
13 < Rear Deck >

Hanger Doors E31 and E30 can be fixed either in an open or closed states.
Die Tore E31 und E30 können offen oder geschlossen eingebaut werden.

Cut off
(closed)
(Geschlossen)



Cut off
(open)
(Offen)



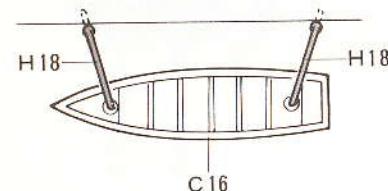
14 < Fixing of Rear Deck >

< Hinteres Deck >

If you will install cutters in Step ⑬, do not fix D4 and D5 to the hull.

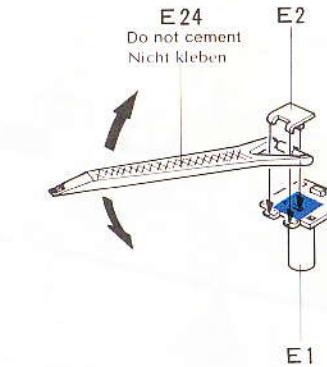
< Fixing of Cutter C16 >

< Einbau der Kutter C16 >



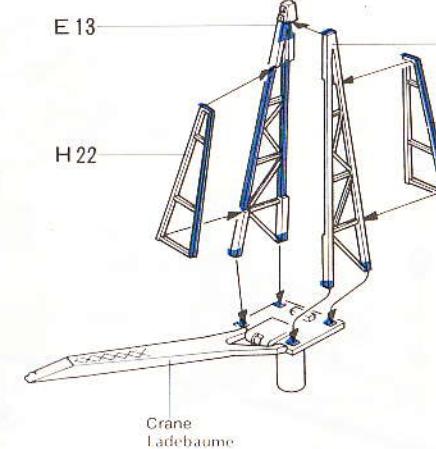
12 Assebly of Crane Bau der Ladebaume

<<Crane>>
<<Ladebaum>>



E 13

H 22



13 Rear Deck

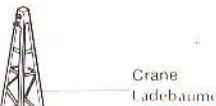
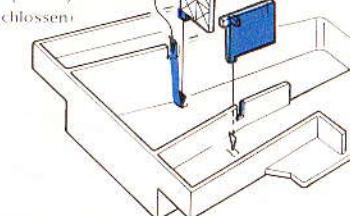
* E30, E31 : You can choose either open states or closed states.

* Tore E31 + E30 offen oder geschlossen einbauen.

Direction of E18 so einbauen

E 18

E 30
(closed)
(Geschlossen)



Crane
Ladebaum

E 29
H 21

E 3

14 Fixing of Rear Deck Hinteres Deck

If you will install cutters in Step ⑬, do not fix D4 and D5 to the hull.

★ D4 B 6 ★ D5

Rear Deck
Hinteres Deck

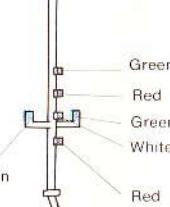
C 15 (12 m Launch)
(12 m Katapult)

E 27

E 19

Fix E27 first
Erst E27 einbauen

<<Painting of E19>>
<<Bemalung der E19>>



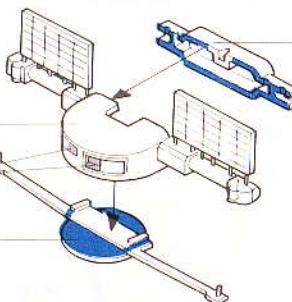
15 15 m Range Finder 15 m Entfernungsmesser

<<15 m Range Finder>>
<<15 m Entfernungsmesser>>

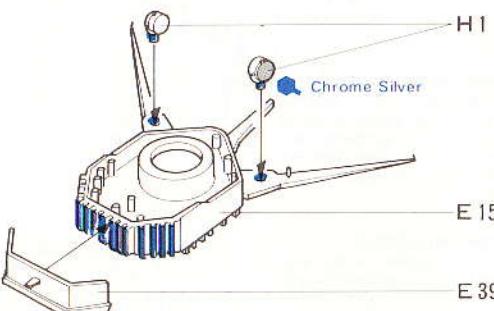
E 14

E 20

Green
Red
Green
White
Red



<<Antiaircraft Operation Center>>
<<Flugabwehrleitstelle>>

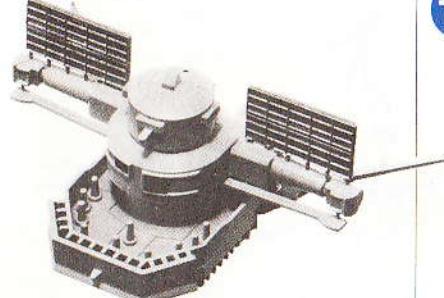


E 15

E 39

<< Antiaircraft Operation Center >>

<< Flakleitstelle >>

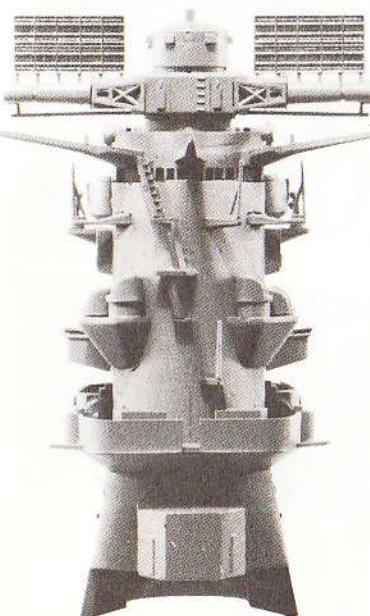
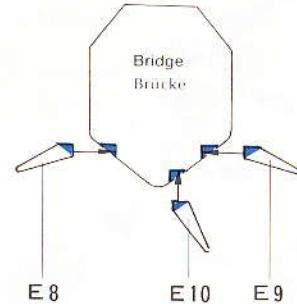


21 << Bridge 3 >>

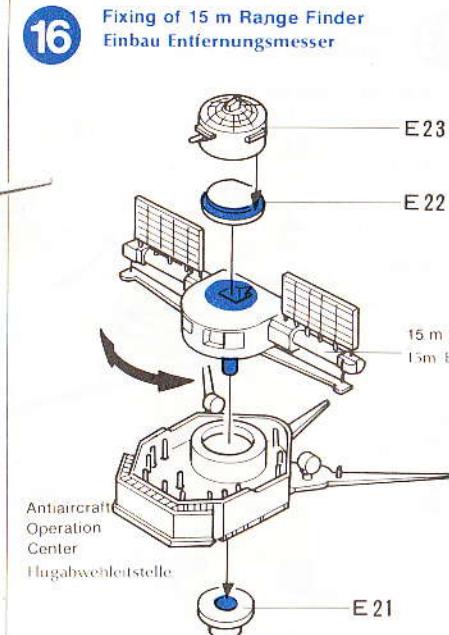
<< Brücke 3 >>

<< Fixing of E8, E9 and E10 >>

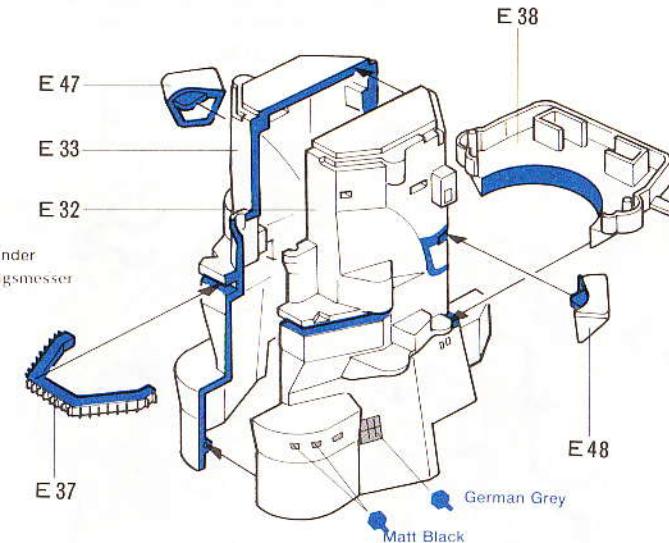
<< Einbau der E8, E9 und E10 >>



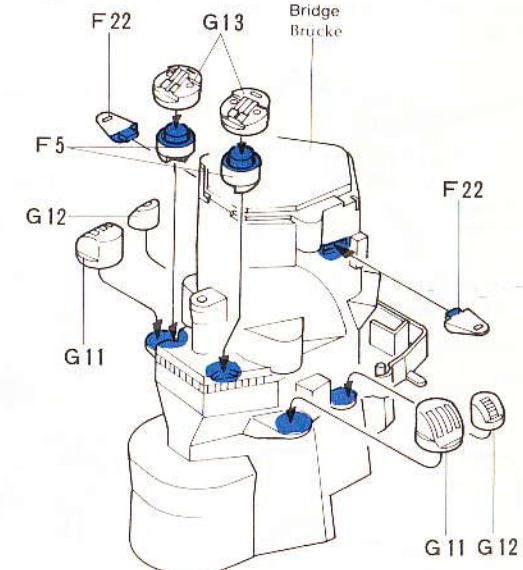
16 Fixing of 15 m Range Finder
Einbau Entfernungsmesser



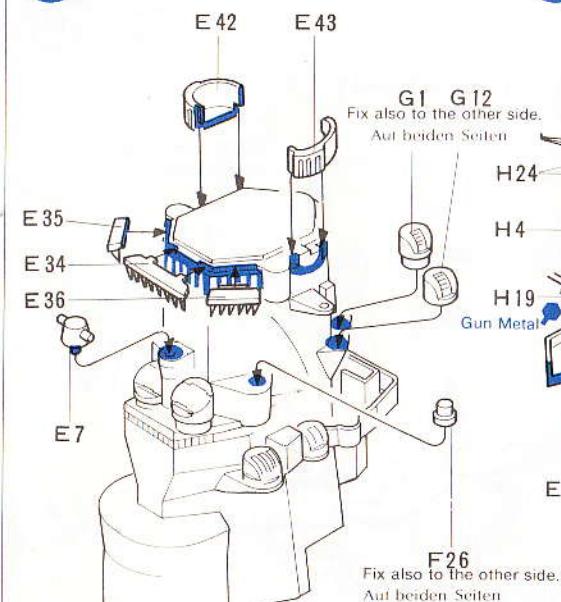
17 Bridge 1
Brücke 1



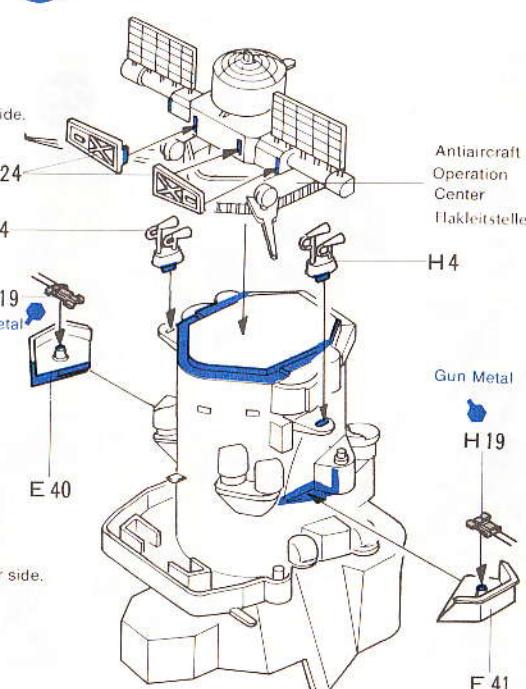
18 Fixing of Firing Equipment
Einbau der kleinen Geschütze



19 Bridge 2
Brücke 2



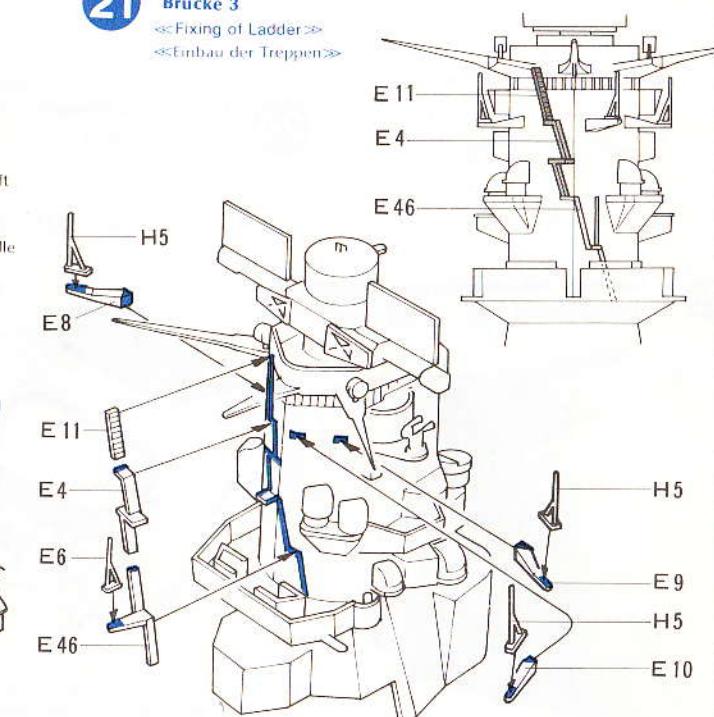
20 Fixing of Antiaircraft Operation Center
Einbau Flakleitstelle

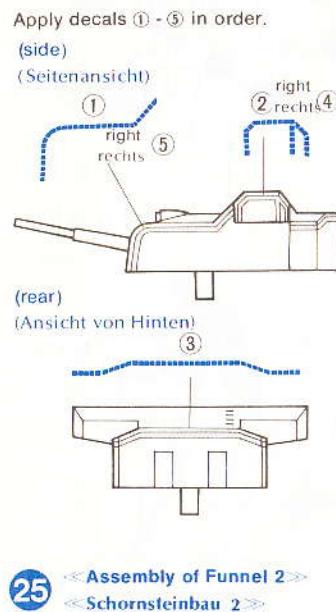
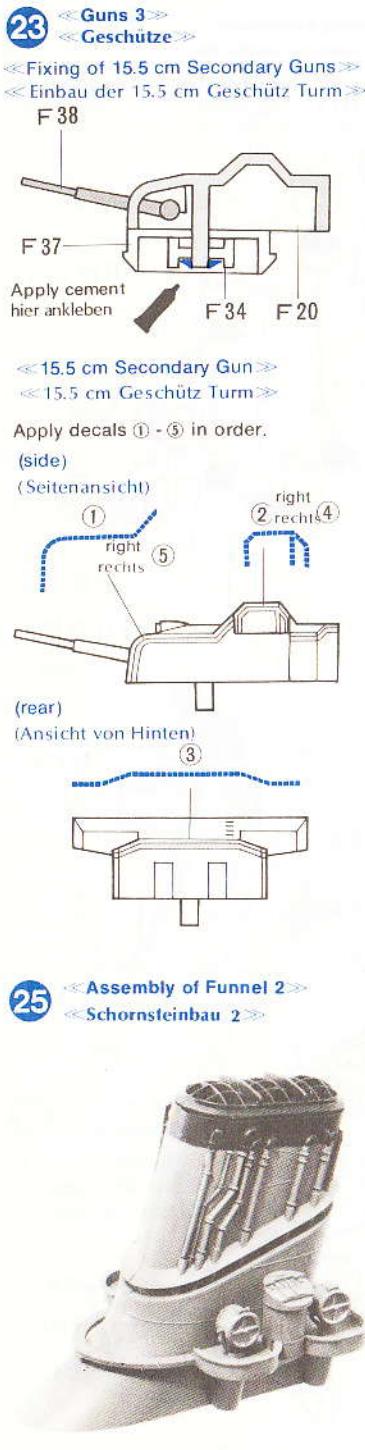


21 Bridge 3
Brücke 3

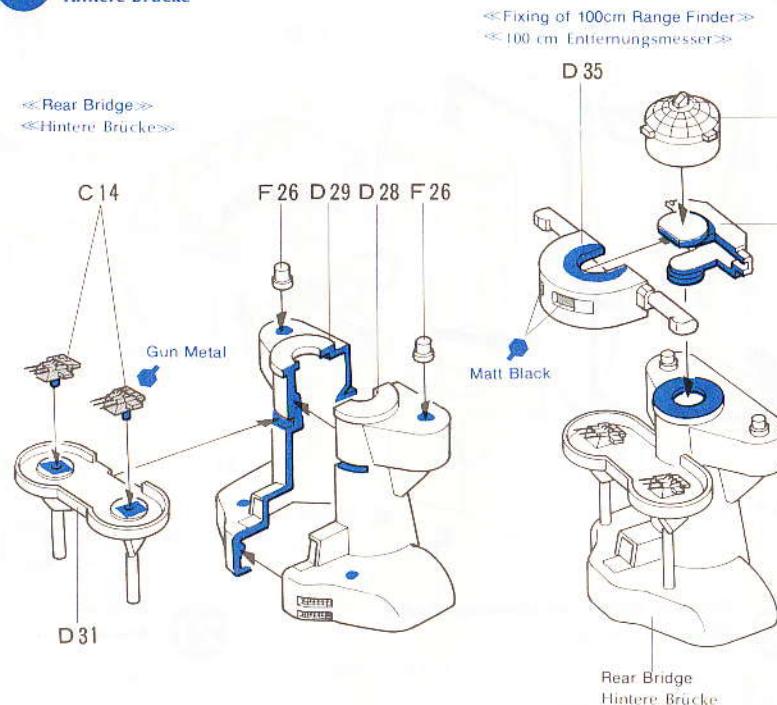
<< Fixing of Ladder >>

<< Einbau der Treppen >>

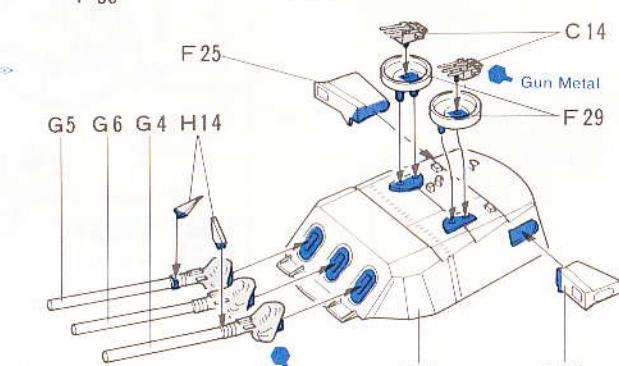
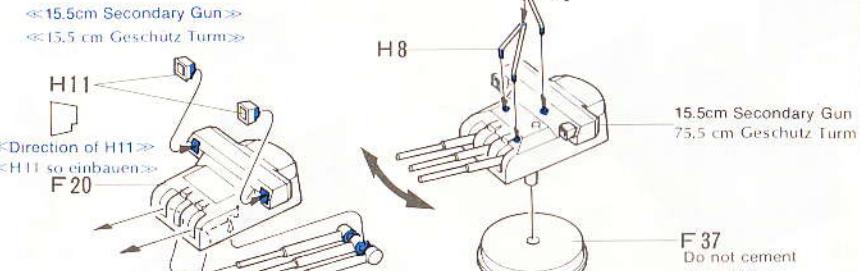




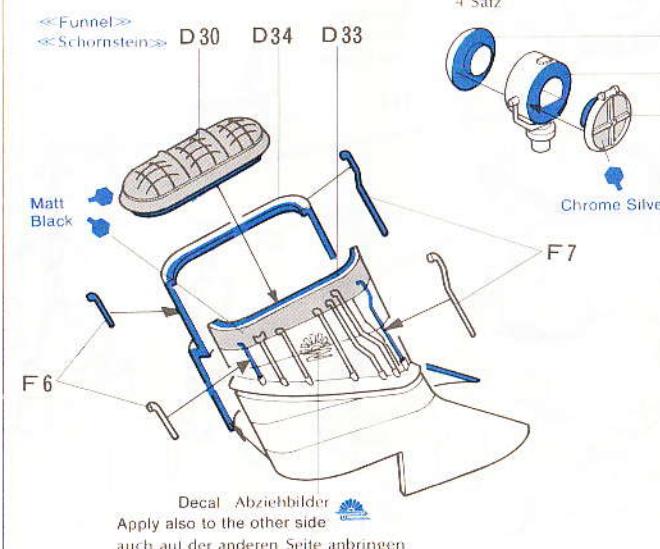
22 Klar Bridge
Hintere Brücke



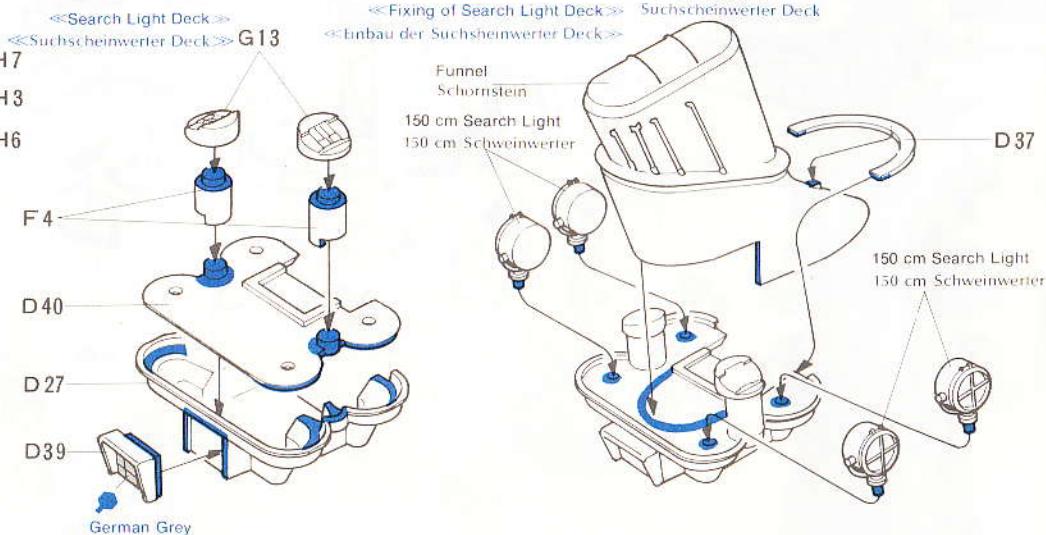
23 Guns 3
Geschütze 3



24 Assembly of Funnel 1
Schornsteinbau 1



25 Assembly of Funnel 2
Schornsteinbau 2



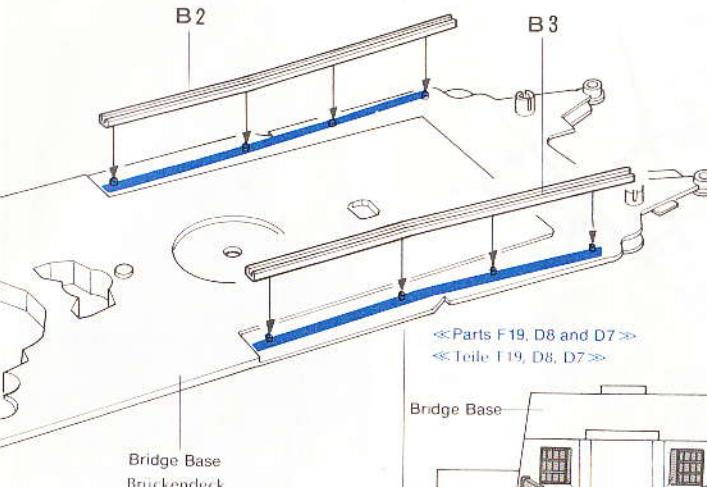
26

<< Construction of Bridge Base >>

<< Brückendeck >>

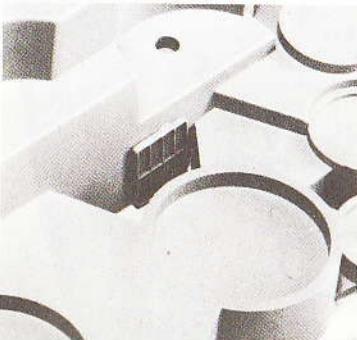
<< Hanging Rail >>

<< Hangende Schienen >>



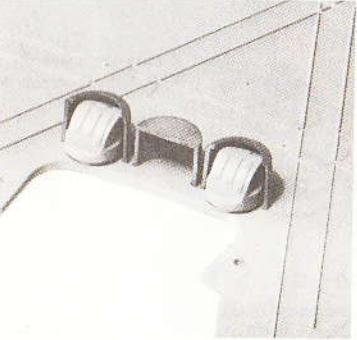
<< Fixing of F27 >>

<< Einbau der F27 >>

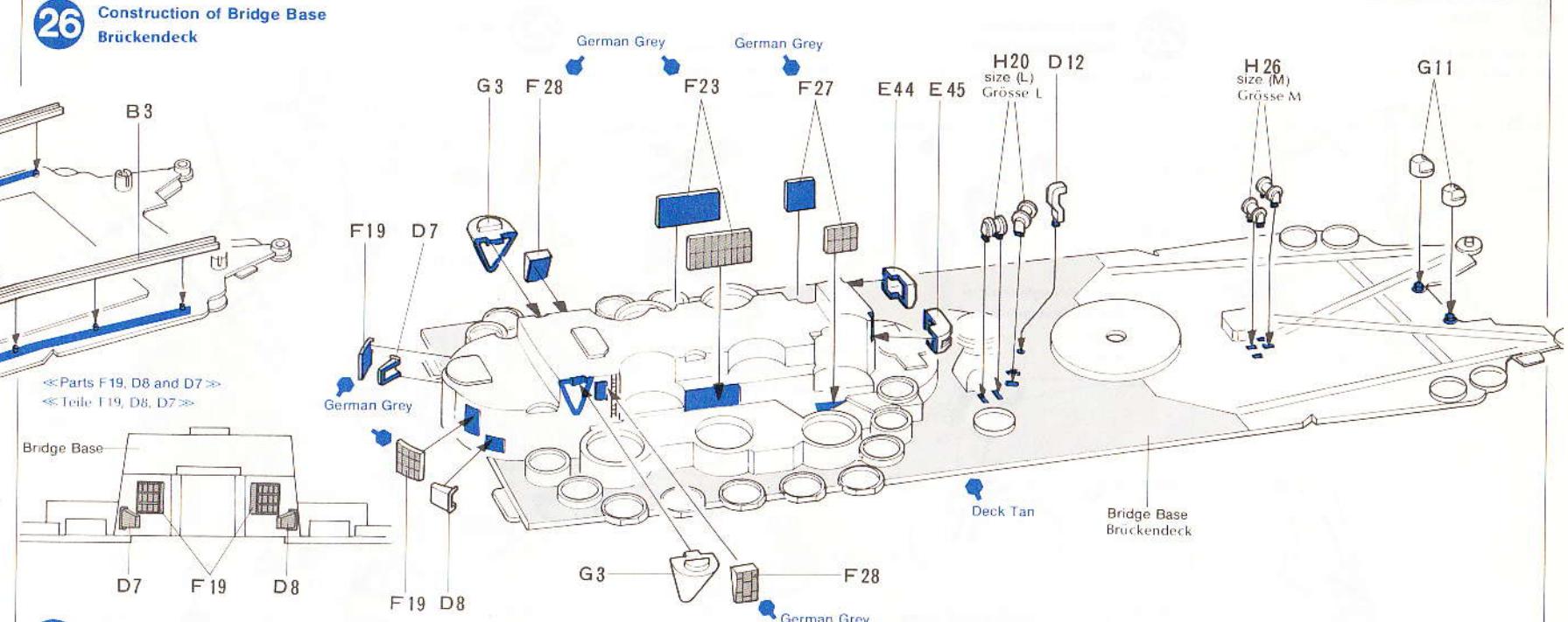


<< Fixing of F18 and D16 >>

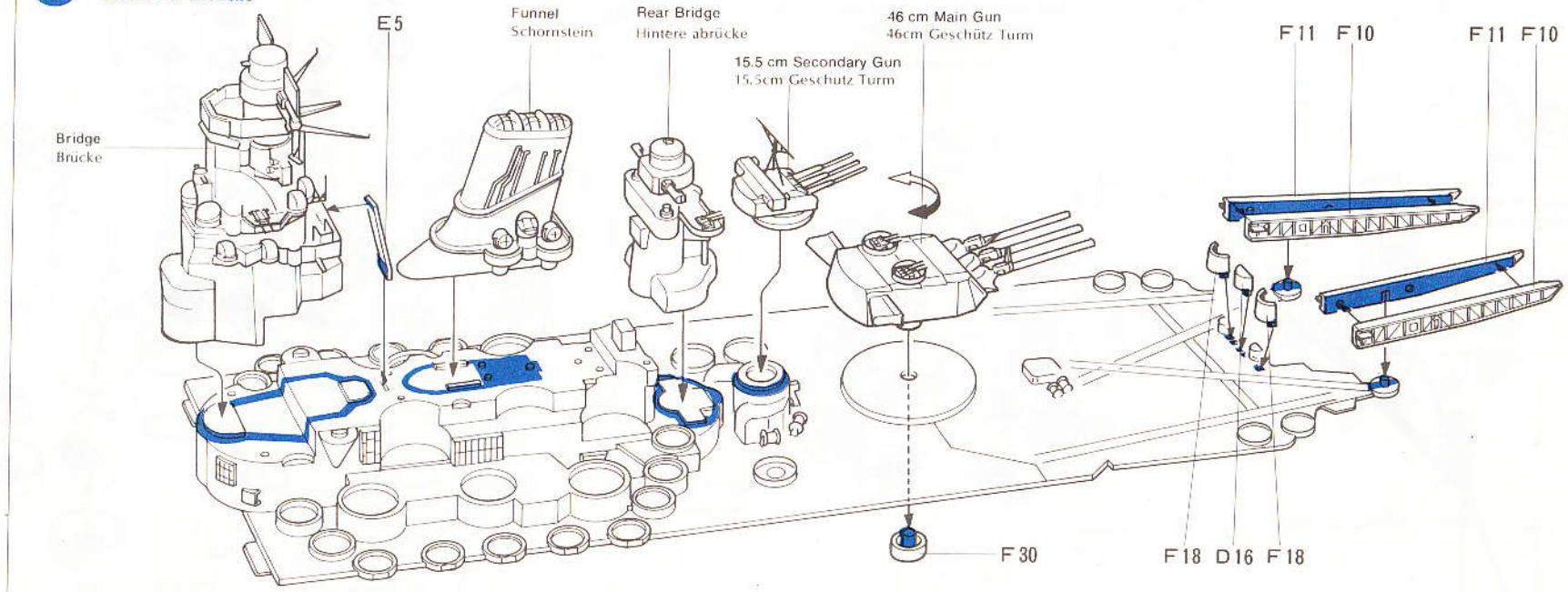
<< Einbau der F18 und D16 >>



26

**Construction of Bridge Base
Brückendeck**

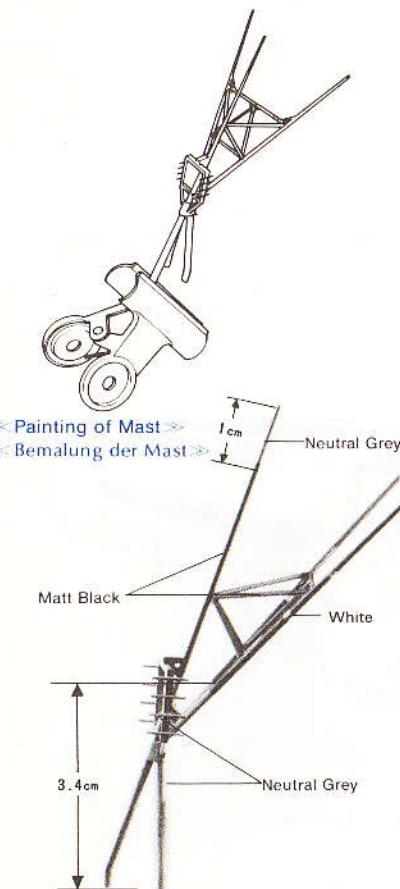
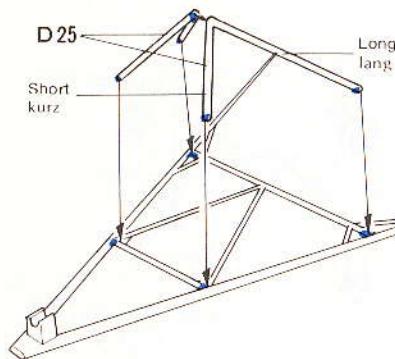
27

**Fixing of Bridge
Einbau der abrücke**

29 << Mast >>

<< Fixing of D25 >>

<< Einbau der D25 >>



28 High Angle Guns
Steilfeuergeschütze

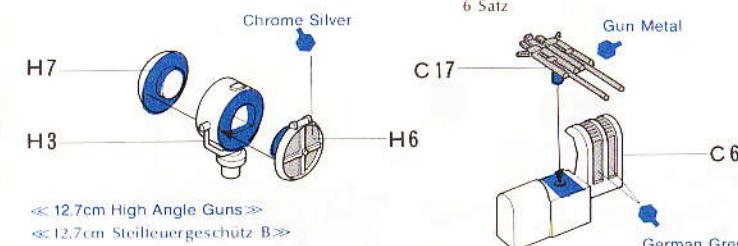
<< 150 cm Search Light >> Make 2 sets
<< 150cm Scheinwerfer >> 2 Satz

<< 12.7 cm High Angle Gun B >>
<< 12.7cm Steilfeuergeschütz B >>

Make 6 sets
6 Satz

<< Firing Equipment >>
<< Feuer Leitstand >>

Make 2 sets
2 Satz



<< 12.7cm High Angle Guns >>

<< 12.7cm Steilfeuergeschütz B >>

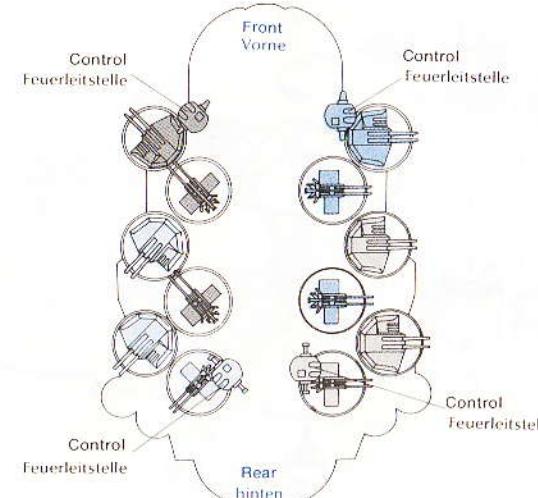
Make 6 sets
6 Satz



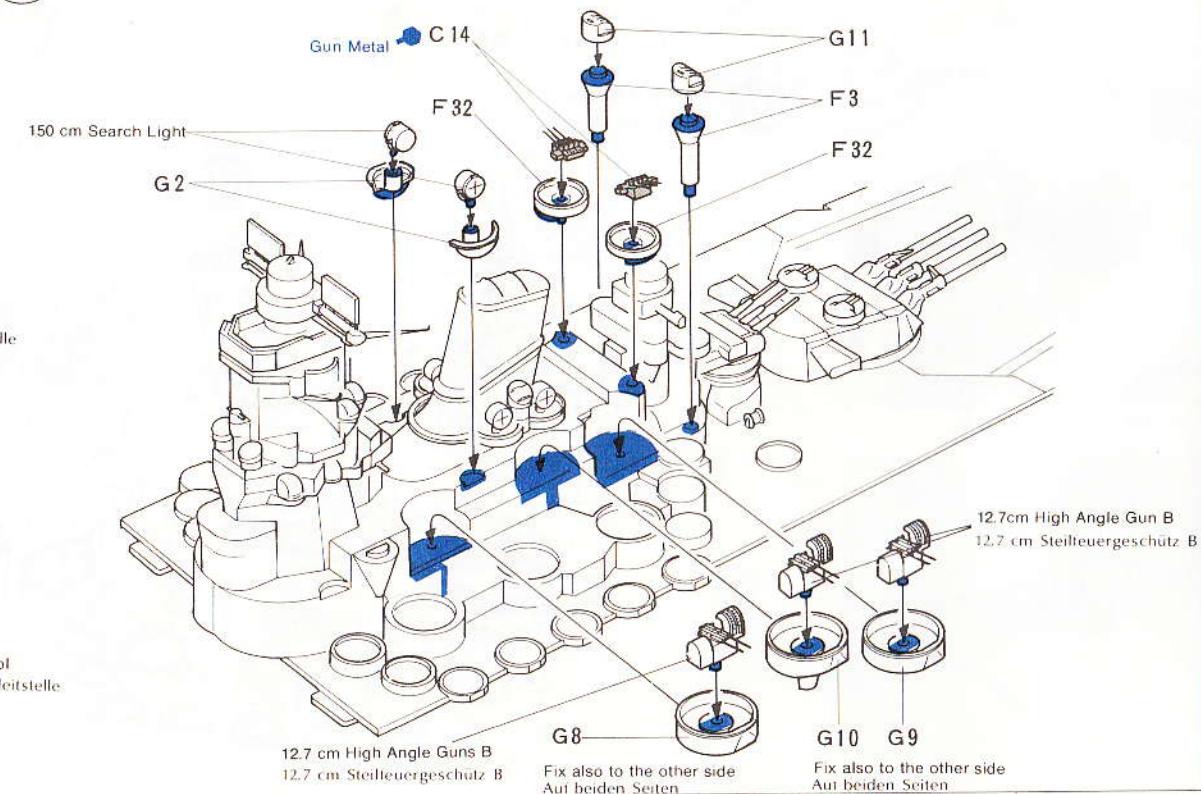
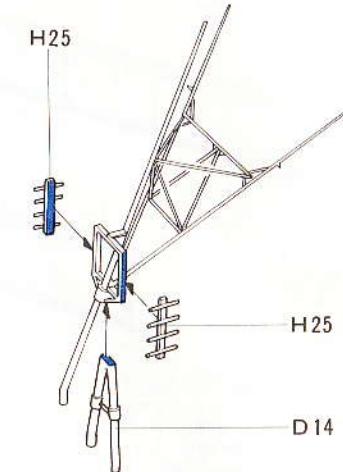
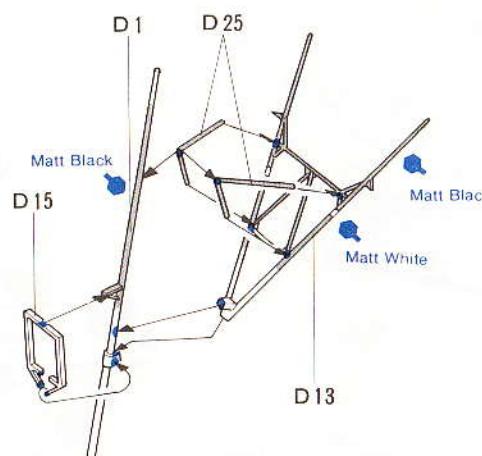
30 Fixing of High Angle Guns
Einbau der Steilfeuergeschütze

High Angle Guns were designed to move in the same way as their control. Determine their direction with reference to the figure below.

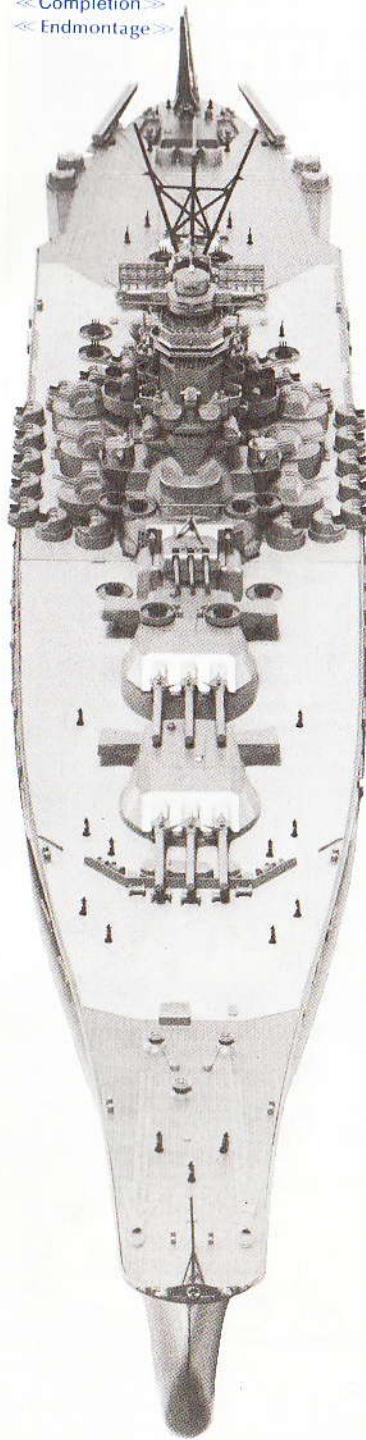
Die Steilfeuergeschütze können wie unten gezeigt eingebaut werden.



29 Mast

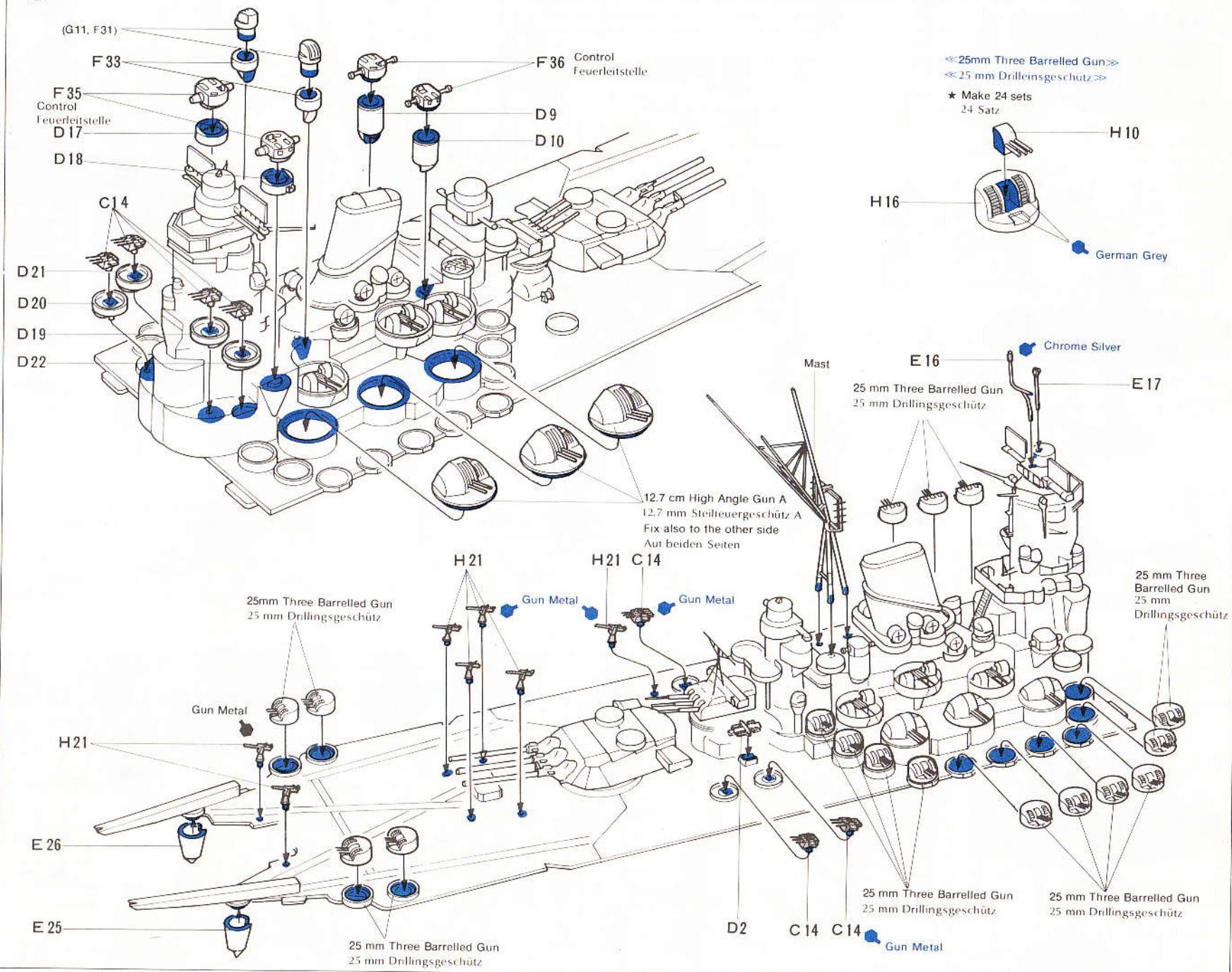


<< Completion >>
<< Endmontage >>

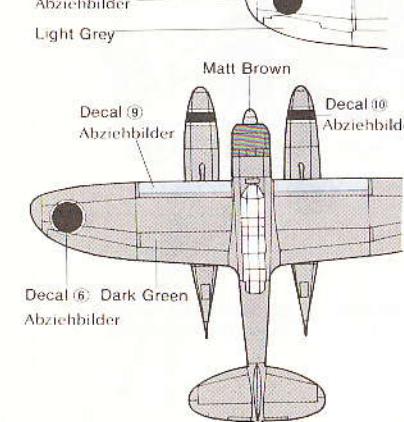
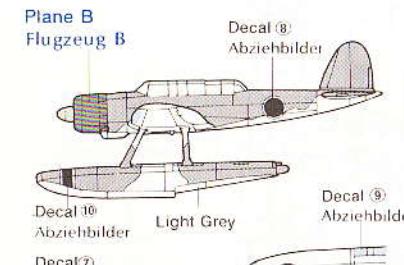
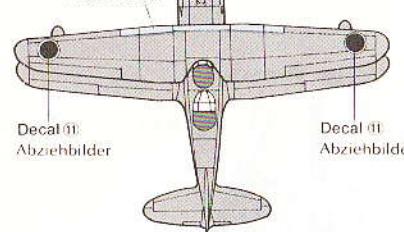
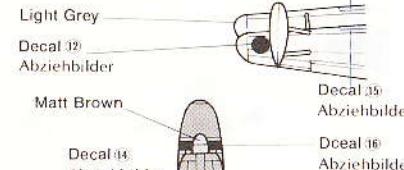
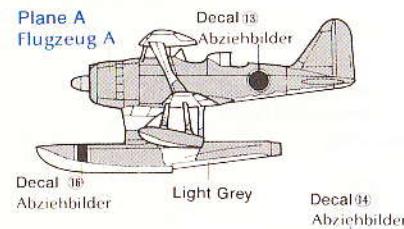


31

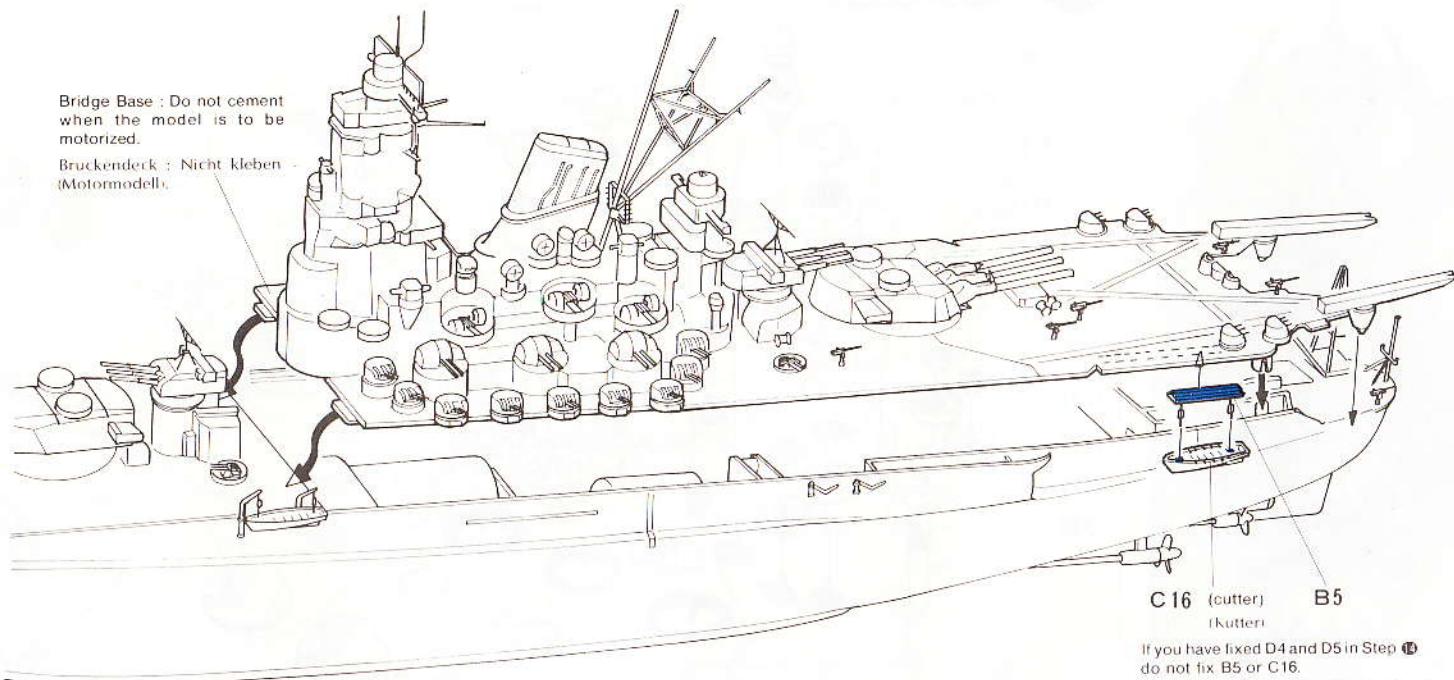
Fixing of Firing Equipment
Einbau der Geschütze



<<Painting and Marking of Floatplanes>>
<<Bemalung des Bordflugzeuges>>



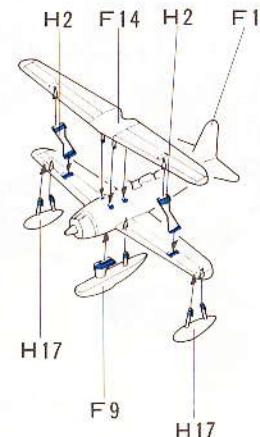
32 Completion Endmontage



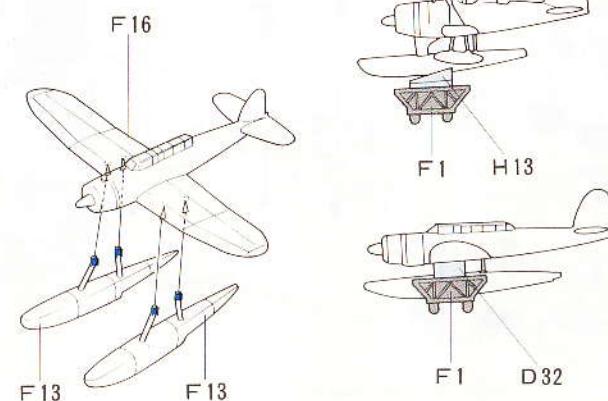
33 Floatplanes Schwimmflugzeug

The Yamato carried no planes in "Operation No. 1" (Okinawa special attack), but you can attach planes to accentuate the model.

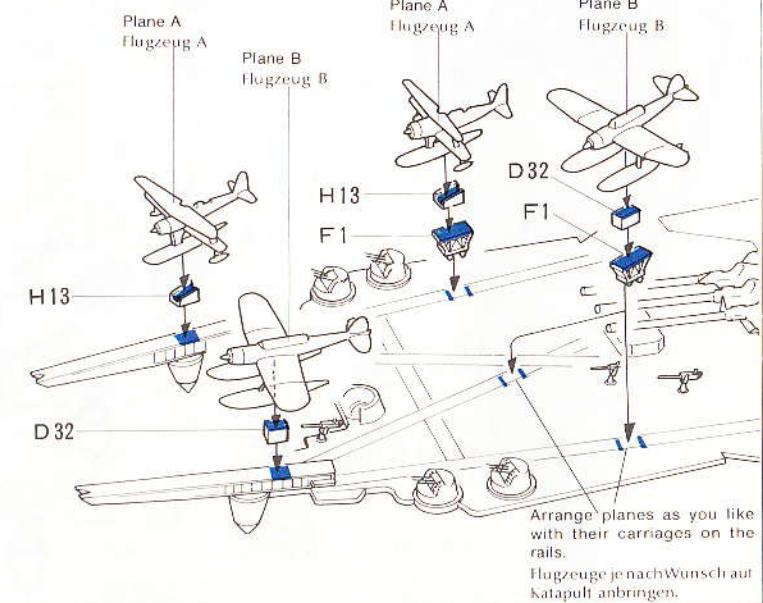
<<Plane A>> Make 2 sets
<<Flugzeug A>> 2 Satz



<<Plane B>> Make 2 sets
<<Flugzeug B>> 2 Satz



<<Fixing of Floatplanes>>
<<Einbau der Schwimmflugzeug>>



PAINTING

<< Painting of the Yamato >>

Japanese warships were painted dark grey with a tinge of blue, which was called wartime painting. This was first adopted in 1903 just before the Russo-Japanese War, and used till the end of World War II. The Yamato was also painted in this way. The ship's bottom below the waterline was maroon. The decks were covered with iron planting or boarding. The former was of the same colour as the hull, and the latter was not painted. The funnel top was black. The after-mast was painted black in the portion between the height nine meters above the funnel top and the same height as the lower border of the black portion of the funnel. The Imperial crest of the chrysanthemum was golden, and the waterproof covers at the base of the gun barrels were light grey.

<< Bemalung der Yamato >>

The Japanese Kriegsschiffe were dunkelgrau mit einem Stich blau bemalt. (Kriegsbemalung).

Diese Bemalung wurde 1903 kurz vor Beginn des Russ.-Japan Krieg eingeführt.

Der Schiffsrumpf unter der Wasserlinie war rotbraun. Die Decks waren entweder mit Eisenplatten belegt und dunkelgrau bemalt oder mit Holzplanken. Die Schornsteinspitze war schwarz. Der hintere Mast war ebenfalls schwarz auf 9 Meter über der Schornsteinhöhe bemalt.

Die wasserfesten Abdeckungen der Geschützrohre am Geschützturm waren hellgrau bemalt. Das königlichen Zeichen - die Chrysantheme - war golden.

<< Colours to be used >>

Bemalung

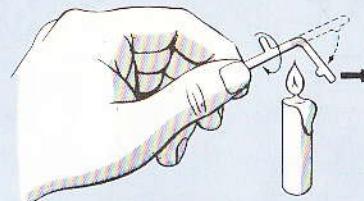
(From brushing colour)

Gun Metal.....	X 10
Chrome Silver.....	X 11
Gold.....	X 12
Matt Black	X F 1
Hull Red.....	X F 9
Dark Green.....	X F 11
Light Grey.....	X F 12
Neutral Grey	X F 53
Deck Tan.....	X F 55
Metallic Grey.....	X F 56
German Grey.....	X F 63

<< Antenna >>

The antenna will make your model look better. It should be stretched after the model has been painted. Make slender strings for the antenna as follows.

Cut off the runner to a suitable length. Heat it with a candle flame for a while. Then, take it away from the



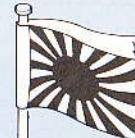
flame and pull it both ways. Stretch the antenna as follows with reference to the drawings, etc. Cut the string a little longer than necessary. Fix it in place by applying adhesive with a match. The extra length should be cut off after the adhesive has dried.

<< Antennen >>

Die Antennen sollten nach dem Bemalen angebracht werden. Die dünnen Fäden können entweder aus Garn, Zirnfäden oder Plastik hergestellt werden. Aus Plastik gehts so : Spritzlingreste über Kerze unter ständigem Drehen erhitzen und auseinanderziehen. Die Fäden etwas länger lassen, an der Klebestelle wenig Klebstoff anbringen, Fäden ankleben und nach Trocken die Überreste abschneiden. Evtl. Spezialkleber (Schnellkleber) verwenden.

The ensign differs in size and position according as the ship is fighting or not.

Die Größe der Flaggen und der Standort ist je nach Einsatz des Schiffs verschieden.

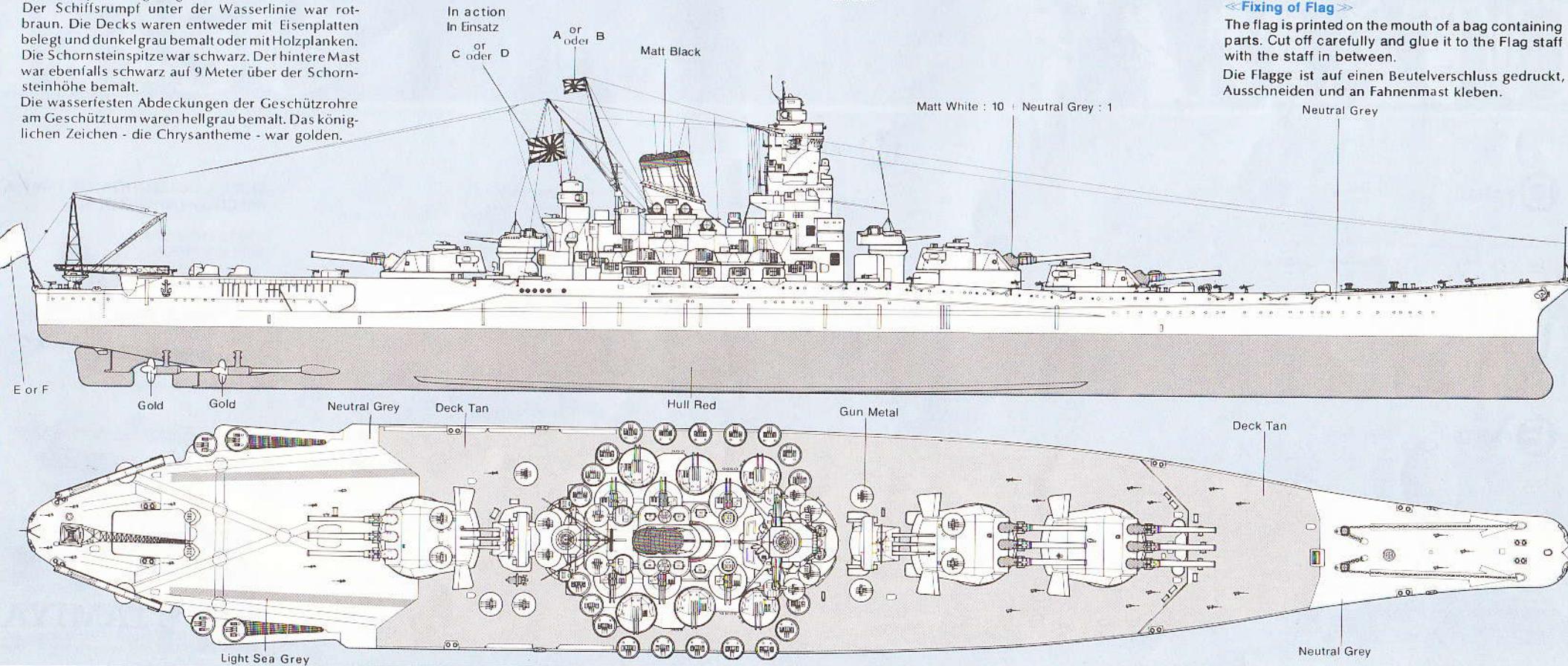
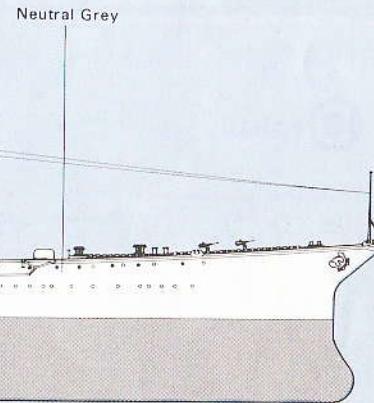


In action : Ensign wire C or D
Not in action : Stern staff E or F
Im Einsatz : Flagge C oder D
Ausser Dienst : Heckflagge E oder F

<< Fixing of Flag >>

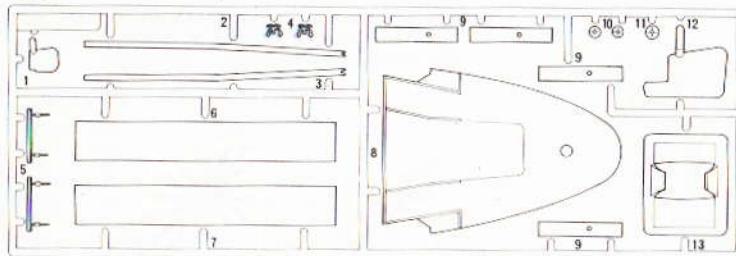
The flag is printed on the mouth of a bag containing parts. Cut off carefully and glue it to the Flag staff with the staff in between.

Die Flagge ist auf einen Beutelverschluss gedruckt, Ausschneiden und an Fahnenmast kleben.

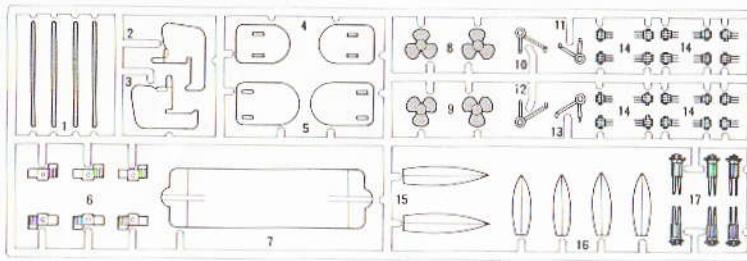


PARTS

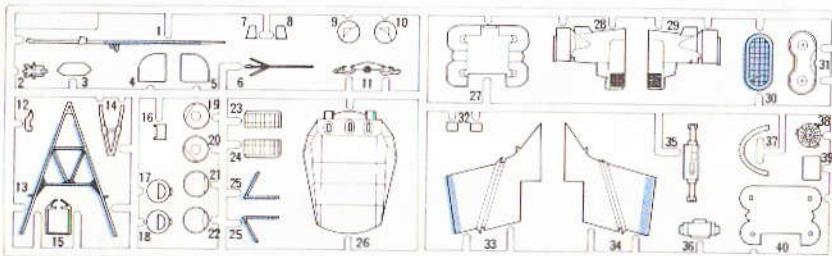
B PARTS Neutral Grey X-51 Gun Metal X-10 For motorized 9, 12, 13



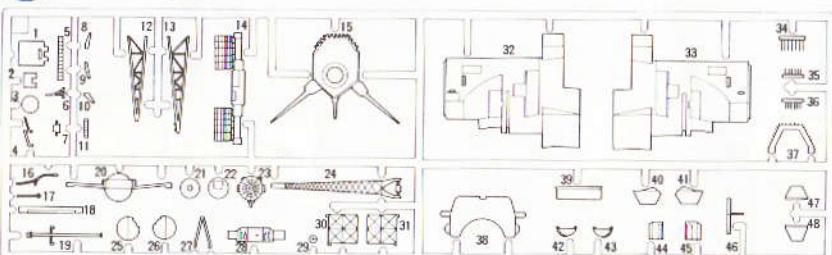
C PARTS Neutral Grey X-51 Gun Metal X-10 Gold X-12 For motorized 4, 5, 7 For display 1, 2, 3, 8, 9



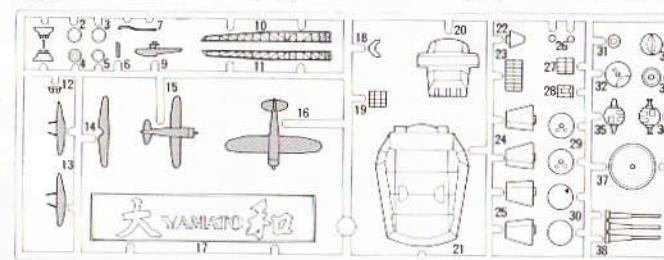
D PARTS Neutral Grey X-51 Matt Black X-4



E PARTS Neutral Grey X-51

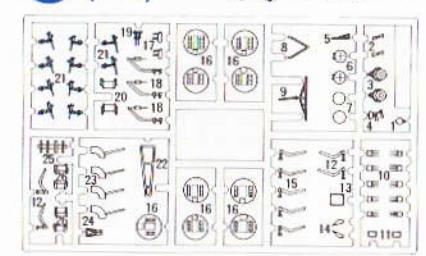


F PARTS (x 2) Neutral Grey X-51

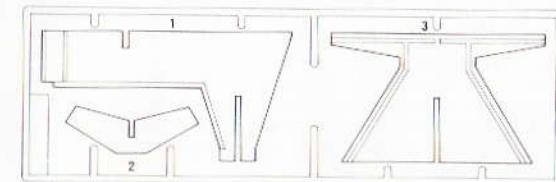


X-51
Surface : Dark Green
Reverse Side : Light Grey X-P-65

H PARTS (x 3)

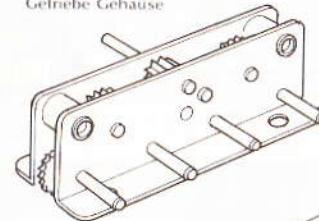


A PARTS (x 2)



M PARTS

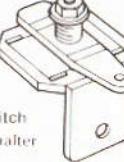
Gear Case
Getriebe Gehäuse



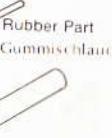
Battery Receptacle Metal A
Batteriekontakt A



Battery Receptacle Metal B
Batteriekontakt B



Propeller Shaft (long)
Schraubenwelle lang



Switch
Schalter



Wire
Vinyl Pipe
Grease

3mm x 4 Round Head Screw
3mm x 6 Round Head Screw



3mm Nut



Screw (L)
Screw (R)



Hull
Front Deck
Rear Deck

BUILT A COLLECTION OF TAMIYA PRECISION SHIP MODELS

1/350 GERMAN BATTLE SHIP BISMARCK



1/72 JAPAN TORPEDO BOAT PT-15



1/700 TAIHO AIRCRAFT CARRIER



TAMIYA
TAMIYA PLASTIC MODEL CO.
626, OSHIKA SHIZUOKA CITY, JAPAN.