80897 075

Heller

SCALE 1/100e
2107 PARTS

H.M.S. Victory

HISTORY

The VICTORY is what was called a "three-decker vessel" although she has actually got five and even six with the poop-deck, but what mattered was the number of decks or between-decks, able to receive "batteries" for the board artillery. The hundred cannons of the VICTORY are made up of three principal batteries and one poop-deck battery which is made of much lighter pieces.

The HELLER Model is the English Admiral Lord Horatio Nelson's "H.M.S. VICTORY", three-decker vessel which was involved in the Trafalgar battle and is the Royal Navy fifth vessel of that name.

The first English vessel of this name was a commercial vessel launched in 1560.The second was one of the last galleons (1620-1690).In 1715"VICTORY" was the new name given to the "Royal James". The fourth VICTORY was a first line vessel equipped with 110 cannons and was wrecked seven years later.

The construction of the last VICTORY was long and difficult, from 1759 to 1765. The project was started in 1758 when the British Admiralty asked the navy chief inspector, Thomas Slade, to make the drawings and calculations, which he did in less than six months.

The measurements were: lower deck length 56.7m, keel length 46.8 m, maximum width 15.8m, hull depth 6.5m. The VICTORY was different to any other first line vessel previously built because of her battery scuttle situated at five feet (1.52m) above the water-line instead of the traditional 2 or 3 feet. Other differences to the nautical conceptions of that time made the VICTORY an exceptionally fast and stable sailing-boat.

The British Admiralty wished to finish her construction within less than 3 years instead of the traditional 5 or 6 years required. The prepatory work was started very quickly and it was on 23rd July 1759, in Chatham dry dock, that the keel of the future VICTORY was put down. It was made of Teak wood and its cutting, in the middle of the ship, measured 136cm. It was made of seven pieces assembled to give a length of 46m. According to the regulations at that time, the width of the keel decreased at each end to be of 46 cm at the stem and 41 cm at the back. The curved stem was made of several pieces of oak. The stern-post, the bigger piece, was made of only one piece and had a length of 9m and a 92 cm x 42 cm base.

Once these pieces had been put into place, the construction of the hull started, beginning with the setting of the oak ribs (of more than a square foot at the keep cutting) raised and maintained in place with uprights.

The construction of such a vessel required,for the hull alone,more than 8500 cubic metres of wood which is more than 19 3/4 acres of oak forest. Her inner planking was about 13 cm thick. This meant a lower battery thickness of more than 60 cm to protect the crew. The masts feet were made of several pieces linked together with ropes. At a later date the ropes were replaced by metal rings. The diameter at the foot of the main mast was of 1 m. The top of the top gallont mast was 61 m above the water line, and the mainyear was 31.2 m long.

The Artillery was arranged at three different levels and composed, for the first artillery, of 30 x 42 pounder cannons, the second artillery was composed of 28 x 24 pounder cannons. On the poop-deck was a lighter artillery of 12 x 6 pounder cannons. But one must remember that during her long life the artillery of the VICTORY was modified according to the supplies available and the different ideas in artillery matters.

The framework was finished in just a little more than one year, but at the time, the ship was not urgently needed in squadron and the work started to slow down.

On 28th October 1760 the ship was officially named "VICTORY". The hull was finished at the beginning of 1765, it cost £63,176. On the 7th May of the same year the hull was put into water and only the lower masts were set, the work being stopped as the ship was no longer required in squadron.

In 1777 Great Britain was at war again and on 8th May 1778 the completed vessel was launched as Admiral Vessel under the command of Admiral Lord Keppel to fight her first battle against the French fleet near the Brittany coast. After exchanging a few cannon-balls into the French hulls and the English riggings and despite heavy losses on both sides, Admiral Keppel and his fleet were able to escape.

In 1780 the VICTORY was repaired and protected against woodworm by the means of copper lining which added a weight of 17 tons.

In 1781,as Admiral Vessel of Sir Richard Kempenfelt's fleet,the VICTORY fought once again against the French, still near the Brittany coast.This time the British fleet had the advantage, the French fleet suffered heavy losses, and the British brought 15 commercial vessels back to Plymouth.

On 20th October 1782, she victoriously fought at Cape Sartel, still as Admiral Vessel but this time under Lord Howe's command, whose orders were to free Gibraltar. Until 1787, the VICTORY was used as a normal ship of line. After the French Revolution, and under the Admiral Lord Hood's command she was among the English fleet besieging Toulon. The following year, after helping to capture Corsica, the VICTORY went back to England bringing Lord Hood back to other duties. Under the Admiral Sir Man's command, the VICTORY went back to the Mediterranean but not as Admiral Vessel. She joined in Hyeres battle and was for a while exposed to the fire of three French ships.

In July 1796 the VICTORY became Admiral Vessel again under Sir John Jervis' command. In 1797, the VICTORY went back into action, this time against 27 Spanish vessels, six of them being bigger than herself. It was during this battle of Cape St. Vincent that Nelson, at the time commanding "H.M.S. CAPTAIN", started to make himself famous by capturing 2 Spanish vessels, the VICTORY captured one.

In November 1797, the VICTORY came back to Great Britain to her "cradle" at Chatham Dock where she was taken out of commission and had the less glorious role of a prison-ship.

In 1799, after putting her into commission again, the Admiralty sent her back into service.

Put into dry dock the VICTORY was almost entirely reconstructed and in April 1803 she was armed again, with her appearance very different. Most of the golden ornementation had been changed, or had been deleted. Her gutters had been lifted and she had lost her rear opened galleries. Her mizzen-mast had lost its lateen yard for a horn.

Her artillery had also been modified, her 42 pounder cannons had been replaced by 32 pounder ones. When she then went back to sea she had the looks which are much admired today.

On Saturday 30th July, the VICTORY arrived in the Mediterranean under Captain Hardy's command showing Admiral Lord Nelson colours. The VICTORY joined in all the English fleet manoeuvres in the Mediterranean until mid-January 1805 when Nelson discovered that Napoleon's fleet was at sea.Nelson himself was between Corsica and Sardinia. The British Squadron got under way to search for the French fleet which they found on 21st October, ending with the Battle of Trafalgar which opposed Lord Nelson to the French Admiral Pierre de Villeneuve. It was during this battle that Nelson died, shot by a French sailor perched on the French vessel, "Le REDOUTABLE'S" mizzen top.

The Royal Navy still celebrates the British VICTORY over the French and Spanish fleet by hoisting the VICTORY'S famous signal sent by Lord Nelson to the other ship's crews : "England expects every man to do his duty".

Badly damaged during the battle, the VICTORY was towed to Gibraltar and temporarily repaired, she then sailed to England where she was taken out of commission in 1806. Once again put into commission in 1808, the VICTORY went twice to the Iberian Peninsula and helped to bring Sir John Moore's army back to Britain.

Until 1811, she served as Admiral Vessel under Admiral Saumerez's command in the Baltic sea. Napoléon defeated, she came back to England with the rest of the British fleet. On the way back they ran into a very bad storm which caused them a few losses. The VICTORY anchored in Portsmouth harbour where she was finally taken out of commission.

The VICTORY was repaired once more and her front was modified and changed shape. Although she was ready to sail again she was never to move again.

As the VICTORY was not going to join in any other military action,it was decided that she was to be demolished and her wood sold.

The journalist John Poole published an article about this project in the "Brighton Gazette" and raised such a strong protest that the British Admiralty decided to keep the VICTORY.

In 1825, the vessel became Portsmouth Chief Admiral Headquarters and kept this honour until 1869. The honour was restored to her 32 years later in 1901. She stayed anchored there for years and all Her Majesty's vessels passing by saluted her.

Wooden vessels do not last for ever and at the beginning of the century, it was feared she would sink in her dock.

In 1921, the Nautical Research Society, whose president was Lord Mildford Haven, organised a campaign to save the VICTORY and on 12th January she was moved into the oldest dry dock in the world:Portsmouth Dock No.2 It is in this dock that she can sill be admired, and remains in remarkable condition.

PARTS LIST

NOTE: Starboard on the right
Port on the left

PACK 1

1 Starboard half hull
2 Port half hull

PACK 2

3 Starboard half deck, 1st battery
4 Port " " "
5 Starboard half deck, 2nd battery
6 Port " " "

PACK 3

7 Castle deck
8 Starboard halfmain deck
9 Port " "

PACK 4 (4 pieces)

10 Right half of long 12 pounder gun (6)
11 Left " " " " " " (6)
12 Right half of short 12 pounder gun (5)
13 Left " " " " " " (5)
14 Right half of 32 and 24 pounder gun (15)
15 Left " " " " " " (15)
16 Right side of 12 pounder gun (11)
17 Left " " " (11)
18 Rear wheels and axle for 12 pounder gun (11)
19 Fore " " " " (11)
20 Gun carriage for 12 pounder gun (11)
21 Rear wheels and axle for 24 and 32 pounder gun (15)
22 Fore " " " " " " gun (15)
23 Gun carriage for 24 and 32 pounder guns(15)

PACK 5 (4 pieces)

p Small single pulley (85)
g Large single pulley (2)
G Large double pulley (5)
m Medium single pulley (10)
P Small double pulley (12)
M Medium double pulley (12)
24 Shroud support mizzen mast (2)
25 Shroud support main mast (2)
26 Hammock carrier (4)
27 Hammock carrier (7) (+2)
28 " " (5) (+2)
29 " " (2)
30 " " (2)
31 Pail (6)
32 Stirrup on main and fore masts
33 Right side of 32 and 24 pounder gun (15)
34 Left " " " " (15)
35 Crutch (5)
36 Cleat (2) (+1)
37 Pulley carrier
38 Small bitt (2)
39 Ladder (stairway)
40 Rings (17)
41 Cleat

PACK 6 (glazed)

42 Port glazing
43 " "
44 " "
45 " "
46 " "
47 " "
48 " "

PACK 7 (glazed)

49 Starboard glazing
50 " "
51 " "
52 " "
53 " "
54 " "
55 " "

PACK 8 (2 pieces)

56 Foresail boom
57 Hand rail
58 Studding sail yard on main sail
59 " " " foresail
60 " " " main top mast
61 " " " fore top mast
62 Pedestal
63 Half anchor stock
64 Hammock front
65 Anchor (2)
66 Support for shroud carrier, foremast
67 Fairlead below main spar
68 Hammock carrier
69 " "
70 " "
71 " "
72 " "
73 Hammock carrier
74 Rack (fife)
75 Half anchor stock
76 Stanchion (5)
77 Right side of 68 lb carronade
78 Left " " "
79 Rack (fife)
80 Pulley sheave on cathead
81 Rack re-inforcement
82 Cleat on cathead
83 Cathead
84 "
85 Locker for cannon balls (3)
86 Cathead block
87 Gun carriage for 68 lb carronade
88 Helm
89 Rack (fife)
90 Castle ladder (stairs)
91 Half collar at foot of mizzen mast
92 Stanchion
93 Railing
94 Fore castle half frontlet
95 Side of belfry
96 Railing
97 Ladder (3) (stairs)
98 Half crown
100 Cleat

PACK 9

101 Bunch of dead eyes, port side of foremast
102 " " " , stbd " " "
103 " " " , port side of main mast back stays
104 " " " , stbd " " "
105 " " " , port side of main mast
106 " " " , stbd " " "
107 " " " , port side mizzen mast
108 " " " , port side back stays
109 " " " , stbd " " "
110 " " " , stbd side of mizzen mast
111 " " " , stbd side of fore top mast
112 " " " , port " " "
113 " " " , port side mizzen top mast
114 " " " , stbd " " "
115 " " " , port side main mast
116 " " " , stbd " " "

PACK 10

117 Starboard side of bowsprit
118 Port " "
119 Element of bowsprit (jib boom)
120 Top part of binnacle
121 Sprit sail boom (lower)
122 Outer jib boom
123 Jib boom (inner)
124 Sprit sail boom (top)
125 Main mast starboard bib and cheek
126 " " port " "
127 Spar
128 Martingale boom
129 Element of stern castle facing
130 Element of fore castle facing
131 Flag pole
132 Main mast port side chain plate) (for
133 " " stbd " " ") shrouds)
134 Fore mast port side chain plate) (for
135 " " stbd " " " shrouds)
136 Fore mast port futtock plate
137 " " stbd " "
138 Mizzen mast port futtock plate
139 " " stbd " "
140 Main mast port back stay chain plate)
141 " " stbd " " " ")
142 Mizzen mast port back stay chain plate)
143 " " stbd " " " " ")
(For shrouds)

PACK 11

144 Stbd external curve
145 Port " "
146 Port curve
147 Stbd "
148 Mizzen mast stbd side chain plate
149 " " port " " "
150 Fore mast cross tree
151 Poop
152 Name plate
153 Port side flag locker
154 Stbd " " "
155 Bowsprit cap
156 Main mast rack (fife)
157 Support for mizzen mast cap
158 Main mast top
160 Stern support
161 Forward support

PACK 12

162 Large boat thwart
163 Boat thwart
164 Stbd side of large boat
165 Port side of large boat
166 Port side of boat
167 Stbd " "
168 Stbd side of pinnace
169 Port " "
170 Pinnace thwart
171 Forward bulkhead of dining cabin
172 Port side buttress
173 Stbd " "
174 Forward rack of mizzen mast
175 After " " "
176 Port ½ of galley funnel
177 Stbd " " "
178 Stbd cannon ball locker
179 Port " " "
180 Support for admiral lantern
181 Support for outside lantern (2)
182 Support for central lantern
183 Port forward cat head
184 Stbd " " "
185 Port aft cat head
186 Stbd " " "
187 Stanchion
188 Support
189 Boat rudder
190 Pinnace rudder
191 Large boat rudder
192 ½ Bitt, starboard side of main stay (inside)
193 " port " " " (inside)
194 " port " " " (outside)
195 " starboard " " " (outside)
196 Support for bowsprit floor
197 Large boat aft cradle
198 Large boat fore cradle
199 Boat aft cradle
200 Boat fore cradle
201 Pinnace aft cradle
202 Pinnace fore cradle
203 Double stanchion
204 Mizzen mast rack (fife)
205 Pump
206 Axe

PACK 13

207 Main mast step
208 Top of belfry
209 Stbd bitt
210 Port bitt
211 Stbd cat head after curve
212 Port cat head after curve
213 Figure head
213A Crown
214 Man, stbd side
215 " port "
216 Port bowsprit "Bee"
217 Stbd " "
218 Bell
219 Stirrup
220 Hammock, port fore castle
221 " stbd " "
222 Stanchion fore mast top
223 " mizzen mast top
224 " main mast top
225 Deck house facing
226 Stern castle facing
227 Captain's office forward bulkhead
228 Secretary's office side bulkhead
229 Master's cabin side bulkhead
230 Hammock port gangway
231 " stbd "
232 " port stern castle
233 " stbd " "
234 " port poop
235 " stbd poop
236 Nelson's quarters forward bulkhead

PACK 14

237 Cross bar
238 " "
239 " "
240 " "
241 " "
242 " "
243 " "
244 " "
245 " "
246 Cross bar
247 Main deck stern cross bar
248 Main deck mid-ship cross bar
249 Main deck forward cross nar
250 Half rudder stbd side
251 " " port "
252 Starboard trimming for curve
253 Port trimming for curve
360 Outside port volute
361 Inside " "
362 Outside stbd volute
363 " port "

PACK 15

254 Port lids, 1st battery, port side
255 " " " " "
256 " " " " "
257 " " " " "
258 " " " " "
259 " " " " "
260 " " " " "
261 " " " " "
262 " " " " "
263 " " " " "
264 " " " " "
265 " " " " "
266 " " " " "
267 " " " " "
268 Port lids, 1st battery, port side
269 Port lids, 2nd battery, port side
270 " " " " "
271 " " " " "
272 " " " " "
273 " " " " "
274 " " " " "
275 " " " " "
276 " " " " "
277 " " " " "
278 " " " " "
279 " " " " "
280 " " " " "
281 " " " " "
282 " " " " "
283 Port lids, 2nd battery, port side
284 Port lids, main deck, port side
285 " " " " "
286 " " " " "
287 " " " " "
288 " " " " "
289 " " " " "
290 " " " " "
291 " " " " "
292 " " " " "
293 " " " " "
294 Port lids, main deck, port side
295 Starboard weather tack cleat
296 Port lids, main deck, stbd side
297 " " " "
298 " " " "
299 " " " "
300 " " " "
301 " " " "
302 " " " "
303 " " " "
304 " " " "
305 " " " "
306 Port lids, main deck, stbd side
307 Port weather tack cleat
308 Port lids, 2nd battery, stbd side
309 " " " "
310 " " " "
311 " " " "
312 " " " "
313 " " " "
314 " " " "
315 " " " "
316 " " " "
317 " " " "
318 " " " "
319 " " " "
320 " " " "
321 " " " "
322 Port lids, 2nd battery, stbd side
323 Port lids, 1st battery, stbd side
324 " " " "
325 " " " "
326 " " " "
327 " " " "
328 " " " "
329 " " " "
330 " " " "
331 " " " "
332 " " " "
333 " " " "
334 " " " "
335 " " " "
336 Port lids, 1st battery, stbd side
337 Port lids, 1st battery, stbd side
338 Nelson's dining cabin bulkhead
339 Captain's cabin bulkhead
340 Bowsprit grating
341 Bulkhead for Nelson's night quarters
342 Starboard forward bulkhead for secratary's office.
343 Port forward bulkhead for master's cabin

PACK 16

344 Bulkhead for beakhead
345 Port side hawse hole
346 Stbd side " "
347 Element of curve, port side
348 " " " , stbd "
349 Stbd curve
350 Port "
351 Stern facing
352 Stbd quater
353 Stbd quater element
354 Port quater
355 Port quater element

PACK 16A

356 Half cutwater, stbd
357 " " , port
358 Section of flooring
359 Bulkhead for Nelson's day cabin

PACK 17 (glazing)

364 Stern window, Captain's cabin
365 " " Admiral's cabin
366 Window, 2nd battery
367 Stern window, Captain's quarter, port side
368 " " " " stbd "
369 " " , 2nd battery port side
370 " " " " stbd "
371 " " , Admiral's quarters, port side
372 " " " " , stbd "
373 Bulkhead window, stbd side
374 " " port "
375 Window on stbd quarter, Captain's accomod
376 " port " " "

PACK 18 (glazing)

377 Window on stbd quarter, Admiral's accomod
378 " port " " "
379 " stbd quarter, 2nd battery
380 " port " " "
381 Skylight
382 Window in bulkhead
383 " "
384 " binnacle (2)
385 Port skylight
386 Stbd "
387 Skylight (2)
388 Half outer lantern (2)
389 Half port side lantern, Admiral
390 " stbd " " "
391 Half central lantern stbd
392 " " " port
393 Half outer lantern

PACK 19

394 Half main mast, port
395 " " " stbd
396 Mast cap for fore top gallant
397 " " " main " "
398 Main mast cross tree
399 Top half of large yard
400 Bottom part of large yard
401 Cap for fore mast
402 Cap for main mast
403 Port half of main top mast
404 Stbd " " " "
405 Main top gallant yard
406 Main top gallant mast

PACK 20

407 Stbd half of mizzen mast
408 Port " " "
409 Mizzen mast bare yard
410 Fore top mast yard
411 Top half of yard for main top gallant
412 Mizzen top
413 Cap for mizzen mast
414 Mizzen mast cross tree
415 Element of spanker boom
416 Mizzen top gallant yard
417 Bottom half of yard for main top gallant
418 Spanker boom
419 Mizzen mast horn
420 Cap for mizzen top mast
421 Mizzen top gallant mast
422 Fore top mast

PACK 21

423 Stbd half of fore mast
424 Port " " "
425 Top half of fore mast yard
426 Bot. " " " "
427 Stbd half of fore top mast
428 Port " " " "
429 Top half of fore top mast yard
430 Bot. " " " " "
431 Fore mast top
432 Support for main mast head
433 " " fore " "
434 Fore top mast yard
435 Fore top mast

Shroud making frame

Parts 99 and 159 do not exist

In some cases there are more parts that are really required, this is to provide for loss and damage.

TECHNICAL INDEX

CHARACTERISTICS

Length from stem to stern	226' 6"	68.884 m
Length of keel	151'	46.025 m
Length of lower deck	186'	56.693 m
Width of hull	50' 6"	15.392 m
Total width	51' 10"	15.799 m
Depth of hull	21' 6"	6.655 m
Tonnage (displacement)	3500 (approx.)	
Crew	850 officiers and men	
Total length of caulked joints	13 miles	20 km (approx.)
Length of effective service	47 years	
Cost	£ 63 176 at time of building	
Number of oak stanchions	438	
Number of oak trees used in building	2000 to 2500	
Total length of timber for mast and yards	689.457 m	

ORDNANCE

First battery	Thirty 32 pounders
Second battery	Thirty 24 pounders
Third battery on main deck	Twenty two 12 pounders(long) Eight 12 pounders (short)
Forecastle and quarter deck battery	Twelve 12 pounders (short) Two 68 pound carronades
Total number of guns (cannons)	104

CARGO

Necessary provisions for sailing

Paraffin, coal and firewood	50 tons
Water	300 tons
Salt beef and pork	25-30 tons
Bear	50 tons
Pease	15 tons
Flour	9-10 tons
Cheese	180 lbs
Butter	2 tons
Biscuits	45 tons
Timber	20 tons

GENERAL NOTES ON ASSEMBLING

The following pages and chapters give the assembling instructions, the description and preparation of some separate elements, as in chapters 4 - 5 - 6 - 7 will have to wait until they are used at the appropriate moment. Chapters 20 - 21 - 22, make up of masts and all the rigging for each mast, represents a list of parts inclusive of some preparatory work prior to final assembly.

Chapter 23 gives the sequence for assembling a mast as it should be carried out in chapters 24 and 25.

Numerous details concerning the position of pulleys and yard arms are included in chapters 26 - 27 - 29 - 30 with sails.

BUILDING NOTES

It is important to read carefully each paragraph of the assembling procedure before proceeding with the work.

In view of the considerable number of parts, it is recommended to detach them from the stem as and when required.

Burrs should be removed and the parts polished with a file and glass paper, parts should be separated from the with a razor blade and the smaller parts should be handled for assembly with tweezers.
Use HUMBROL glue, paint and paint brushes, they are specially designed for plastic models.
Some parts include small round 'fillers' intended to facilitate moulding.
Those fillers must of course be removed when assembling.
We recommend you to paint the small parts while they are still attached to their moulding stem and do the 'touching up' after each assembly phase.

Some jobs: guns, rigging, decoration.. may appear tedious, but the care with which these jobs are carried out will greatly influence the appearance of your 'VICTORY' which you will be proud to show off to your friends.

TRANSFERTS

1 - Cut your transfers piece by piece
2 - Dip them in cold water for a few seconds
3 - Locate with care and carefully slide the transfer off its backing sheet
4 - Absorb excess water with blotting paper.

RIGGING - ROPES

The rigging of the VICTORY requires the use of pulleys, shrouds, ropes ending at various parts of the ship.

PULLEYS: There are a certain number of pulleys listeds as: p, P, m, M, g, G,(see list). In the assembling sequence they are marked as: p1, p2, p3.....M1, M2.....

SHROUDS: The way of making the shrouds is given in chapter 16, the marking in chapter 15, the assembling with the various operations. The chapter numbers are shown in a square box [15]

ROPES: They are of three types: H1 to H26 for the shrouds, E1,E2.. for the stays, V1 to V47 and A1 to A205 for the various running riggings. The diameters are shown in the table below, where ropes have to go, start and finish is indicated in the assembling method.

ENDS OF ROPES: Most of the ropes end on the deck, chapter 17, paragraph A. On the drawings these ends are shown as [17A] , or to simplify as, other cases are shown in the appropriate chapter.

VARIOUS: In order not to overload the drawings, most of the elements of the rigging are only shown once. To show that riggings is to be put on each side is indicated thus: p206 (207) means that p206 is shown on the drawing and p207 is a symetrical part on the other side. A79 (80) also indicate that A79 appears on the drawing but A80 is a symetrical part on the other side. Some elements appear on several drawings and this is indicated by the symbol [9-30] which means refer to chapters 9 and 30 or [28]● which means refer to chapter 28 and● to 17A

LENGTH OF ROPES: Some ropes are put in position before being used for the rigging, in this case the length of thread to be used is indicated in mm.
In general cut the lengths to suit the rigging.

TABLE OF ROPES

The diameter corresponding to the list is shown here for each rope.

TABLE OF THREADS

A	Ø	A	Ø	A	Ø	A	Ø	E	Ø	E	Ø	V	Ø
1	Ø 0,3	53	Ø 0,3	105	Ø 0,3	156	Ø 0,3	1	Ø 0,6	50	Ø 0,3	1	Ø 0,3
2	--	54	--	106	--	157	--	2	--	51	--	2	--
3	--	55	--	107	--	158	--	3	--	52	--	3	--
4	--	56	--	108	--	159	--	4	--	53	--	4	--
5	--	57	--	109	--	160	--	5	Ø 0,3	54	--	5	--
6	--	58	--	110	--	161	--	6	--	55	--	6	--
7	--	59	--	111	--	162	--	7	--	56	--	7	--
8	--	60	--	112	--	163	--	8	--	57	--	8	--
9	--	61	--	113	--	164	--	9	--	58	--	9	--
10	--	62	--	114	--	165	--	10	--	59	--	10	--
11	--	63	--	115	--	166	--	11	--	60	--	11	--
12	--	64	--	116	--	167	--	12	--	61	--	12	--
13	--	65	--	117	--	168	--	13	--	62	--	13	--
14	--	66	--	118	--	169	--	14	--			14	--
15	--	67	--	119	--	170	--	15	--			15	--
16	--	68	--	120	--	171	--	16	--			16	--
17	--	69	--	121	--	172	--	17	--			17	--
18	--	70	--	122	--	173	--	18	--			18	--
19	--	71	--	123	--	174	--	19	--			19	--
20	--	72	--	124	--	175	--	20	--			20	--
21	--	73	--	125	--	176	--	21	Ø 0,6			21	--
22	--	74	--	126	--	177	--	22	Ø 0,3			22	--
23	--	75	--	127	--	178	--	23	--			23	--
24	--	76	--	128	--	179	--	24	Ø 0,6			24	--
25	--	77	--	129	--	180	--	25	Ø 0,3			25	--
26	--	78	--	130	--	181	--	26	--			26	--
27	--	79	--	131	--	182	--	27	SEE BB			27	--
28	--	80	--	132	--	183	--					28	--
29	--	81	--	133	--	184	--					29	--
30	--	82	--	134	--	185	--					30	--
31	--	83	--	135	--	186	--					31	--
32	--	84	--	136	--	187	--					32	--
33	--	85	--	137	--	188	--					33	--
34	--	86	--	138	--	189	--					34	--
35	--	87	--	139	--	190	--					35	--
36	--	88	--	140	--	191	--					36	--
37	--	89	--	141	--	192	--					37	--
38	--	90	--	142	--	193	--					37	--
39	--	91	--	143	--	194	--					39	--
40	--	92	--	144	--	195	--					40	--
41	--	93	--	145	--	196	--					41	--
42	--	94	--	146	--	197	--					42	--
43	--	95	--	147	--	198	--					43	--
44	--	96	--	148	--	199	--					44	--
45	--	97	--	149	--	200	--					45	--
46	--	98	--	150	--	201	--					46	--
47	--	99	--	151	--	202	--					47	--
48	--	100	--	152	--	203	--						
49	--	101	--	153	--	204	--						
50	--	102	--	154	--	205	--						
51	--	103	--	155	--	206	--						
52	--	104	--		--	207	--						
						208	--						
						209	--						

Diameter	Recommended Length
Ø 0,30 mm	500 meters
Ø 0,60 mm	25 meters

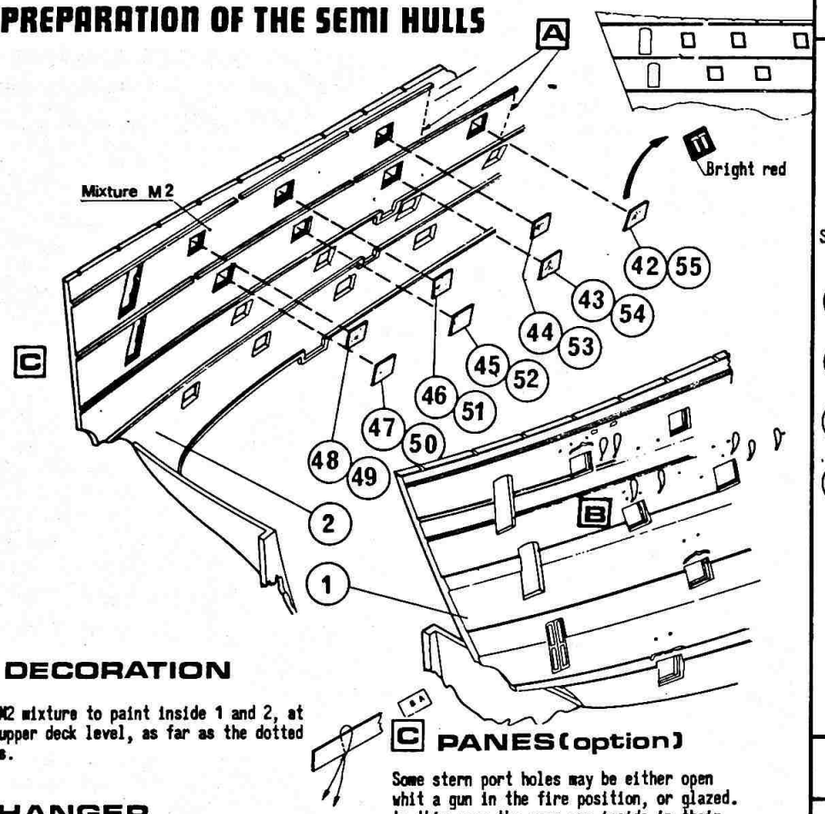
H7 to H27 — Ø 0,3 mm thread

H1,H2,H3,H4,H5,H6
Ø 0,3 mm thread for vertical ropes
Ø 0,3 mm thread for horizontal ropes

Foot ropes 1 to 35: use Ø 0,3 mm thread

Footrope - MP

1 PREPARATION OF THE SEMI HULLS



A DECORATION

Use M2 mixture to paint inside 1 and 2, at two upper deck level, as far as the dotted lines.

B HANGER

Make loops, as shown on detail drawing, using a piece of cartboard as dimensioned in 8A, the knot of those loops will be inside 1 and 2.

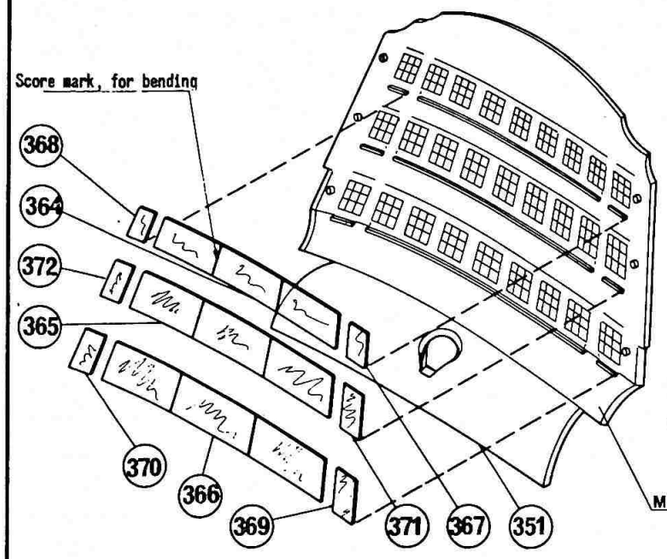
C PANES (option)

Some stern port holes may be either open whit a gun in the fire position, or glazed. In this case the guns are inside in their housing (See 9 , N° 1 sketch
Depending on choice the following are glued (or not) 49-50-51-52-53-54-55 on 1
42-43-44-45-46-47-48 on 2.

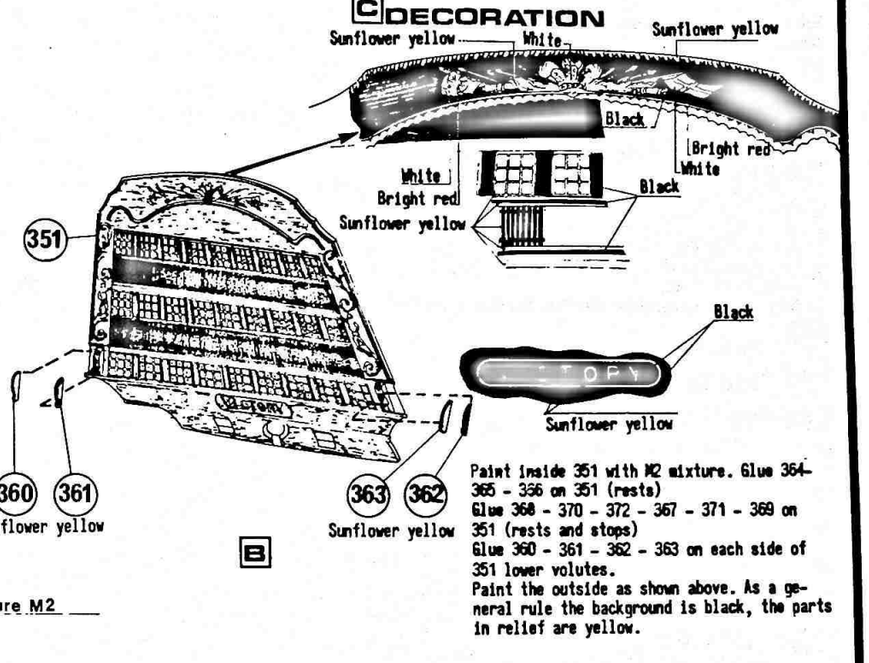
NOTE: the stern port holes are slightly slanted (see sketch)

2 PREPARATION OF THE BOARD

A PLACING OF THE PANES



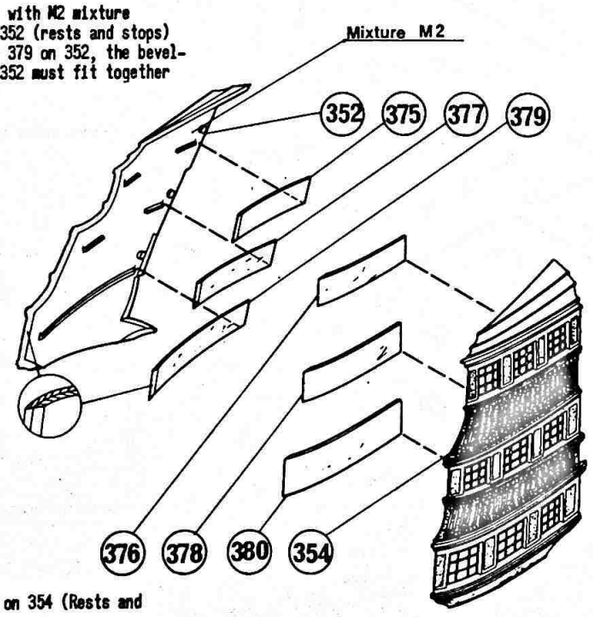
C DECORATION



Paint inside 351 with M2 mixture. Glue 364-365 - 336 on 351 (rests)
Glue 368 - 370 - 372 - 367 - 371 - 369 on 351 (rests and stops)
Glue 360 - 361 - 362 - 363 on each side of 351 lower volutes.
Paint the outside as shown above. As a general rule the background is black, the parts in relief are yellow.

3 PREPARATION OF THE QUATER GALLERIES

Paint inside 354-352 with M2 mixture
Glue 375-377-379 on 352 (rests and stops)
Careful when fitting 379 on 352, the bevelled ends of 379 and 352 must fit together (See detail drawing)



Glue 376 - 378 - 380 on 354 (Rests and stops)
Careful when fitting 380 on 354, the bevelled ends of 380 and 354 must fit together (See detail drawing).

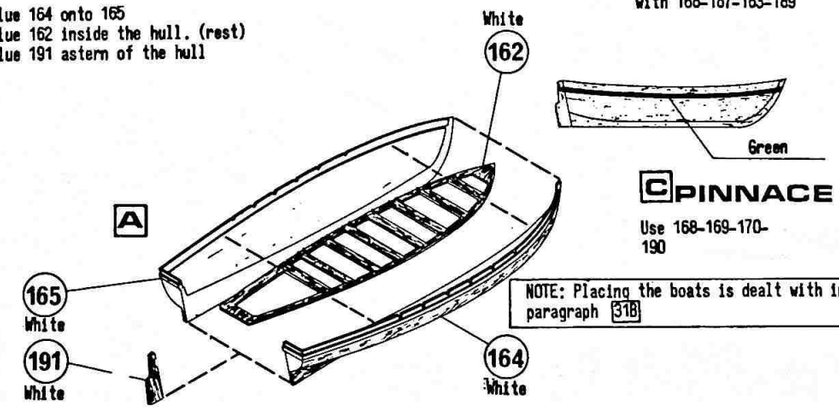
4 PREPARATION OF THE BOATS

A LONG BOAT

Glue 164 onto 165
Glue 162 inside the hull. (rest)
Glue 191 astern of the hull

B DINGHY

Same procedure as for A with 166-167-163-189



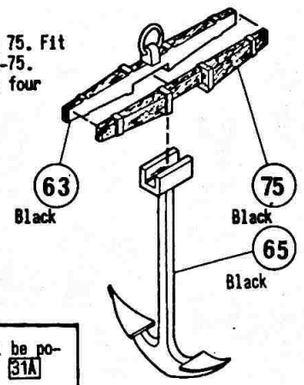
C PINNACE

Use 168-169-170-190

NOTE: Placing the boats is dealt with in paragraph 318

5 PREPARATION OF THE ANCHORS

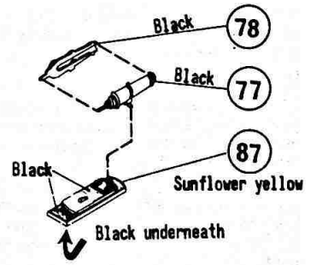
Glue together 63 and 75. Fit and glue 65 on to 63-75.
Repeat the operation four times.



NOTE: The anchors will be positioned in paragraph 31A

6 PREPARATION OF THE CARRONADES

Glue 77 onto 78,
then onto 87
Repeat the operation twice



NOTE: The caronnades will be positioned in chapter 240

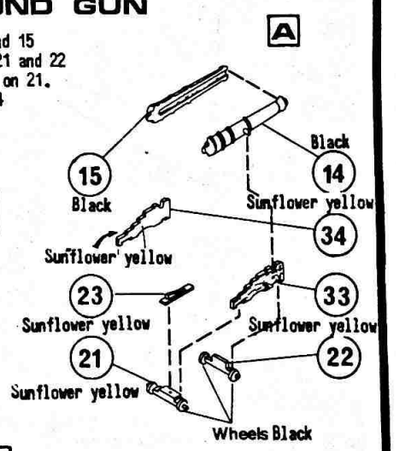
7 PREPARATION OF THE GUNS

A 32 POUND GUN

Glue together 14 and 15
Glue 33 and 34 on 21 and 22 (centering) and 23 on 21.
Glue 14-15 on 33-34
Repeat 30 times

NOTE: The guns will be fixed in paragraph 8A

Thread ref. 332



B 24 POUND GUN

Same method as for A with 14-15-33-34-21-22-23
Repeat 30 times.

NOTE: These will be fitted in paragraph 8A

C 12 POUND LONG GUN

Same method as for A with 10-11-16-17-18-19-20
Repeat 22 times.

NOTE: They will be fitted in paragraph 9

D 12 POUND SHORT GUN

Same as for A with 12-13-16-17-18-19-20
Repeat 20 times

NOTE: They will be fitted in paragraph 9

8 FITTING THE HULLS AND LOWERS DECKS

Put ropes E50 and E55 through holes in 1 and 2 (see table for diametres of ropes on page 11, lengths shown in drawings). Connections will be indicated in paragraphs shown in the appropriate box.

A- Glue 1 and 2 together keeping in place with clips. Let the glue set for 24 hours.
Glue 161 on 62 (centering) and 160 on 62 (centering).
To enhance the artistic value of your model we suggest you mount it on a plinth made of nice looking wood such as oak or beech which would have the following dimensions:500x250mm 20 to 25 mm thick.
Screw on the supports as shown on the drawing.

B- Glue together 356 and 357 and the whole onto A and 2 in the slots provided, (see assembly in paragraph 11A)
Rope E27 goes through holes in 345 and 346 (this is a large 2 mm thread to be braided with several Ø 0,3 mm threads,)
NOTE: E27 is used in paragraph 31A
Glue 346 on 356 and 1; Glue 345 on 357 and 2.
Put transfer on 356-357 assembly.

Glue the hull onto the supports 62 (2)
Glue 207 at the bottom of the hull 1 and 2 (engraving)
Glue 237-238-239-240-241-242 in housings provided in 1 and 2.
Glue 4 on 237 to 242
Glue 3 on 237 to 242 and on 4 (rests) see N° 1 sketch.
Let the glue set.
Glue 250 and 251 together.
Place the 250-251 assembly in housings provided in 1 and 2
Glue 40(2) on 1 and 2 (centering)

Put in ropes A206 and A207 each 200 mm long (see table of ropes on page 11), connections will be explained in chapter 24F

Position 30 guns, 15 each side, sub-assembly in paragraph 7A (See N°2 sketch).
Glue 243-244-245-246 in housings provided in 1 and 2, allow to set.

Glue 6 onto 243 to 246.
Glue 5 onto 243 to 246 and on 6 (rests)(See N°1 sketch), allow to set.
Position 30 guns, 15 each side, sub-assembly in paragraph 7B (See N°2 sketch) and glue.
Glue 247-248-249 in housings provided in 1 and 2.
Put in ropes A71-A72.

Example:

A72 starts at the hull following the arrow, goes through the pulley block m26 (see paragraph 29, which must be 200 mm from the starting point, comes back to pulley block m24, fitted according to detail drawing, goes again through the hull and is fixed according to instructions in paragraphs 9 and 17A . Rope A71, on the port side goes the same way, but the pulley block is 240 mm from the starting point.
Ropes A74-A73 are described in paragraphs 9 and 29.
Ropes A125-A124 are described in paragraphs 30 and 9.

Sketch N°1

Sketch N°2

9 FITTING THE UPPER DECKS
FITTING OUT THE DECKS

Glue 9 onto 247-248-249 and on 2 (rests)
Glue 8 on 247-248-249 and 9 (rests) and on 1 (rest) (See N°1 sketch,on page 6)
Glue 39(3) between 8-9 and 5-6 (See N°5 sketch)
Glue 41(2) on 2 and 41(2) on 1 (centering)
Fix A73 - A74 - A124 - A125.
Glue 359 on 9 and 8 and against 1-2 (centering)
Glue 236-341 and 338 together on 7-8 and to 1-2 (centering)
Place eleven guns [7C] sub-assembly and four guns [7D] sub-assembly on 9 and 8.
If glazing of stern port holes has been decided on (See paragraph [1C]) glue the guns behing the glass as shown in N°1 sketch.
Glue 205,89(2),76(10), 92(2) and 203 on 9 and 8

Glue 40(2) on 130;glue 40 (13) on 129 and 130 and 129 under 7 (See N°2 sketch).
Glue 7 onto 1 and 2 by lightly separating the two half hulls and on 76 (10), 92(2), 203 where glue has been spread at the top (See paragraph 24).
Glue 344 onto 1 and 2 (rest).
Decorate 344 (See N°4 sketch)
Glue 97(5) on 7 resting on 9 and 8.
Glue 39 on 7 resting on 9 and 8
Glue 88(2) on 206 and place a few turns of thread (ø 0.3) on 206.
Glue the 88-206 assembly on 187 and 188 and then on 7 (centering).
The ends of thread, ref. ø 0.3, go in the holes made in 7.
Glue together 384(2) then 120 on 384. The assembly will be glued to 7(See engraving).
Glue 382 on 171, 374 on 229 and 373 on 228.

Glue 383(2) on 343 and 342
Glue together 227, 339, 171, 228, 229, 342, 343 and then on 7 and against 1 and 2 (centering)
See N°3 sketch for the decoration of outside faces on 343, 229, 171, 228 and 342.
On 7 glue: 40(6), 38(8), 156, 226, 174, 175, 96(2)(centering) and also 93(2) on 96(2)
Glue 176 on 177 and then on 7 (centering)
Glue 95(2) on 7 (centering)
glue 218 between 95(2), glue 208 on 95(2)
Glue 94(2) on 7 and against 95(2).
Glue 36 on 95 on the starboard side.

Glue 35(18) on 7 (centering)
Glue 193 on 194 and the assembly on 9 (centering)
Glue 195 on 192 and the assembly on 8 (centering).
Glue 295-307 on the outside, port and starboard (centering)
Glue 135, 133, 148, 141, 143 (centering)on 1
Glue 134, 132, 149, 140, 142 (centering) on 2
Glue 25 (4+4) under 149-148 and onto 1 and 2 (engraving)
Glue 24 (4+4) under 133-132 and onto 1 and 2 (engraving)
Glue 66 (5+5) under 135-134 and onto 1 and 2 (engraving)

On 1 and 2 glue 210-209, 100 (1+1), 85(3+3),74(1+1),79 (1+1),and place ropes A168, A169, A166, A167.

On 7 place 6 guns on each side (sub-assembly [7D])
If glazed stern port holes has been selected (see paragraph [1C]) glue the guns behind the windows as shown in N°1 sketch.
Remove 250-251 from housings in 1 and 2.
Glue 351 against 1 and 2 and against 7, 8 and 9.
Replace the 250-251 assembly across 351 and in the housings provided in 1 and 2.
Glue 151 on 1 and 2 (rests) and against 351.
Place ropes A75-A76.

Sketch N°1

Sketch N°2

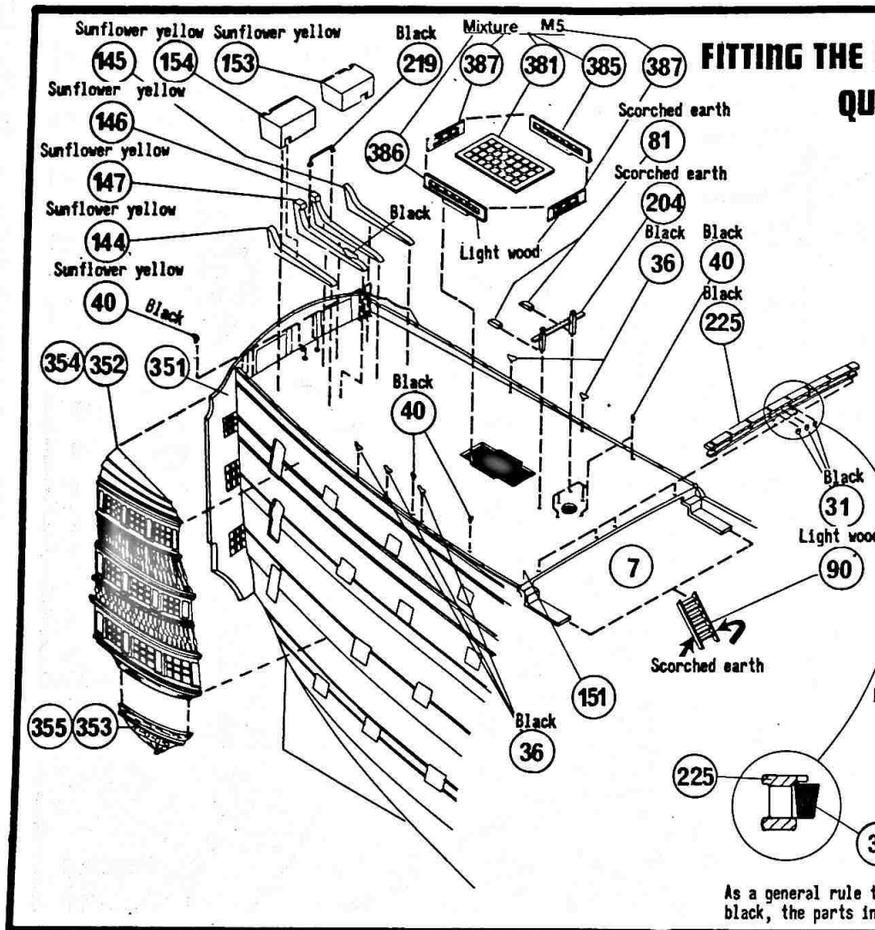
Sketch N°3

Sketch N°4

Sketch N°5

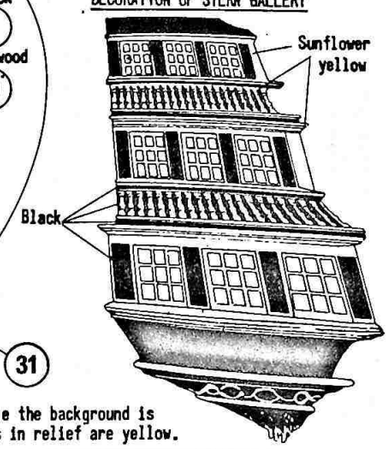
NOTE : The colours of pièces 24-25-66-295 and 307 follow the hull lines

10 FITTING THE POOP DECK AND QUATER GALLERIES



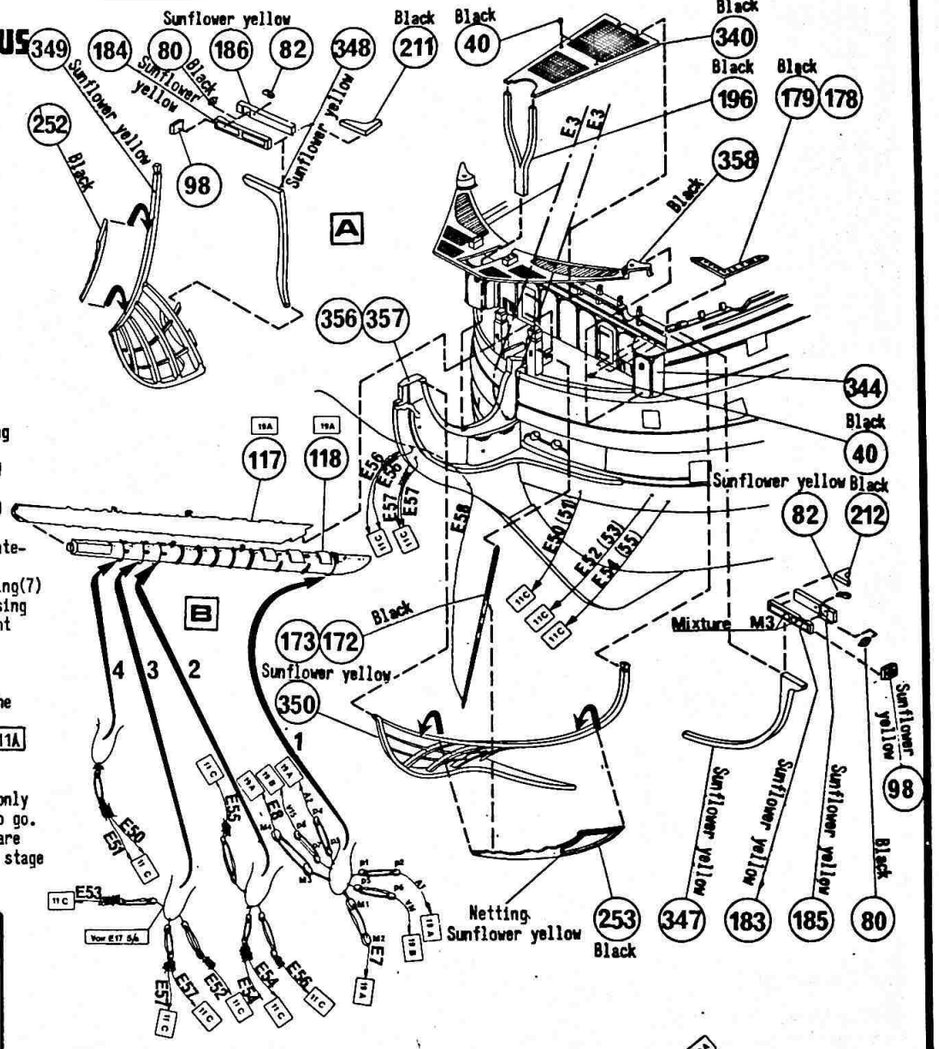
Glue 354 and 352 on 351 and onto the hull
Glue 353 on 352 and onto the hull
On 151, glue 40(15), 36(5) (centering); glue 146-147 on 151 and onto 351 (engraving)
Push 154 on 144 and glue the assembly on 151 and against 351(engraving)
Same method for 153 and 145.
Glue 219 on 146-147 (engraving) (See paragraph 26c)
Glue together 355-366-387(2) and then onto 151 (centering)
Glue 381 on the 385-386-387(2) assembly
Glue 204 on 151 and 81(2) and against 204 and on 151 (centering)
Glue 225 on 151 (centering) and 31(21) on 225 (see sketch)
Glue 90(2) against 151 and on 7

DECORATION OF STERN GALLERY



As a general rule the background is black, the parts in relief are yellow.

11 FITTING THE BOWS



Glue 178 and 179 on 7 and to the inside of 1-2 (See 24)
On the port side (See 19B) glue
- 350 to the hull and to 357
- 347 to the hull and to 350
- 253 to 350 (engraving)
- 82 to 185 (centering) then 80 between 185 and 183
- 98 on 347 and to the hull
- 212 to 185 and to the hull

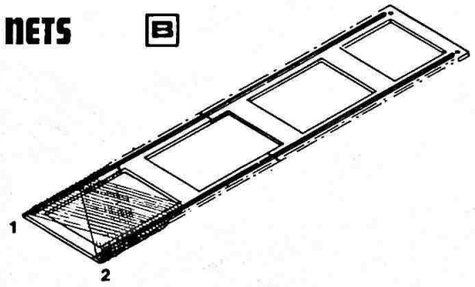
Repeat on the starboard side with 60-82-98-184-186-211-252-348-349
Glue 117 to 118
Put the transfer on 213
Glue 213 on 356-357 (centering)
Glue 213A on 213
Glue 214 and 215 on each side and to 213 and on 356-357
Place the various riggings 11B using the pulley blocks as indicated
For the collars 11B, 2-3-4 proceed as shown in paragraph 17E, 5/a
Glue 358 to 344 and between 350-349 (See paragraph 19B).
Glue 196 vertically in 356-357 (centering)
Glue 117-118 in the main deck housing(7)
Tie up the bowsprit rigging 11C, using ø 0,3 thread (9 turns), with 4 tight turns at the centre.
Glue 340 on 196 and to the forward part of 344.
Glue 172 as indicated and 173 on the starboard side (centering)
Finish placing the various ropes: 11A and 11C.

NOTE: Some of the ropes are shown only to indicate where they are to go. For instance: E12 - E13 - E3 are not to be positioned at this stage of the assembling.

12 PREPARATION OF THE NETS

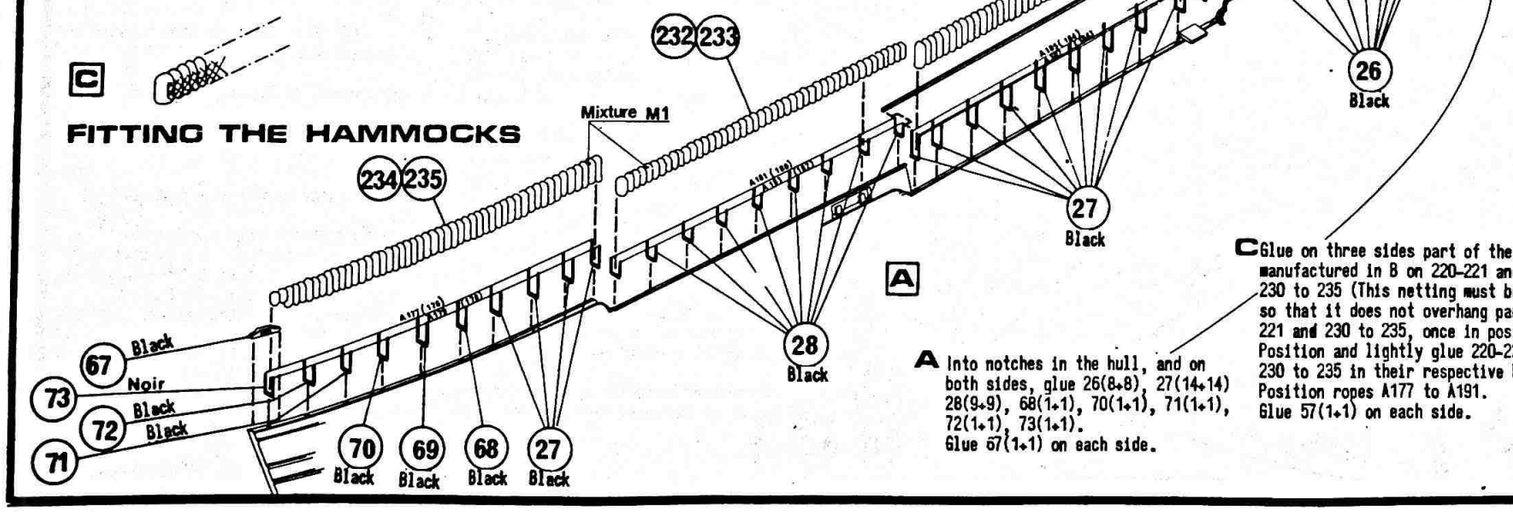
B

B Glue together the two parts making up the netting frame.
With ø 0,3 thread, starting from a hole marked 1 or 2 make a double web at 45° on the whole length of the frame. Glue the threads together.
Once set, the threads are cut on the outside of the frame in order to get two nets.
Repeat the operation for each set of netting.



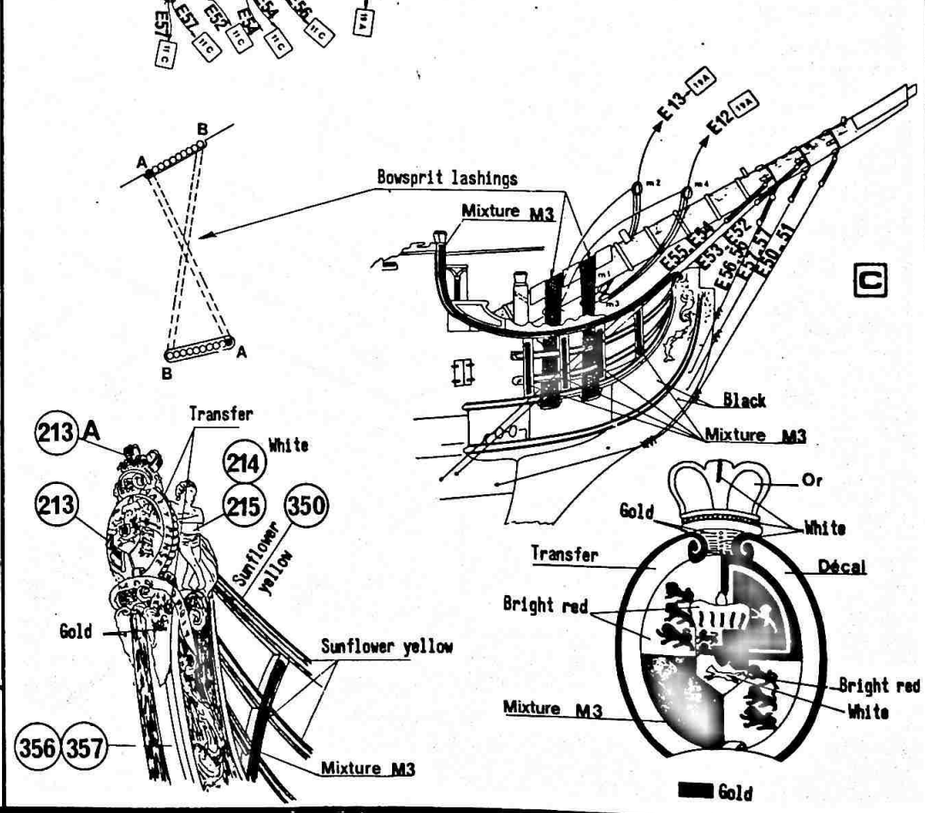
C

FITTING THE HAMMOCKS



A Into notches in the hull, and on both sides, glue 26(8+8), 27(14+14) 28(9+9), 68(1+1), 70(1+1), 71(1+1), 72(1+1), 73(1+1).
Glue 67(1+1) on each side.

C Glue on three sides part of the netting manufactured in B on 220-221 and on 230 to 235 (This netting must be cut so that it does not overhang parts 220-221 and 230 to 235, once in position)
Position and lightly glue 220-221 and 230 to 235 in their respective brackets.
Position ropes A177 to A191.
Glue 57(1+1) on each side.



13 RIGGING AND SAILS

A

The main work on the hull being completed, fixing the masts, the rigging and the sails will be the second stage of the assembling work.

2 bobbins included in the box.

Please have a look at the rigging threads correspondence table herewith.

B

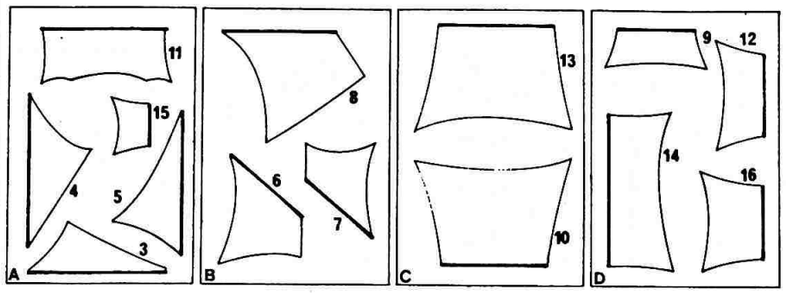
THE ROPES ARE SUPPLIED IN THE BOX.

The rigging of H.M.S. VICTORY to a scale of 1/100th requires fairly long lengths of different diameter threads.
Use the thread included in the box. Provide for sufficient Ø 0,9 thread not suppled with the model. The thread can be colored by dipping in strong tea or in coffee (instant variety)

NOTE: to avoid mistakes it is recommended to cross out the number of a rope on the drawing, or better still, to write the rope number on a piece of paper as soon as it has been positioned.

14 SAILS

A NOMENCLATURE



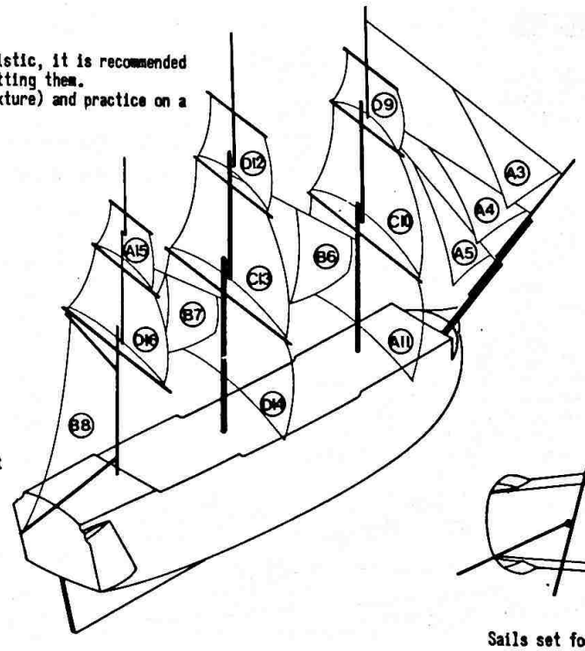
3 Flying jib
4 Outer jib
5 Jib
11 Fore course
15 Mizzen top gallant sail
6 Main top stay sail
7 Mizzen top mast stay sail
8 Spanker
10 Foremast top sail
13 Main mast top sail
9 Foremast top gallant
12 Main mast top gallant
14 Main sail
16 Mizzen top sail

The four sheets in the box, A - B - C - D, include all the ship sails

NOTE: The heavy line on the sails indicates the gluing line on the yard, the stay or the mast.

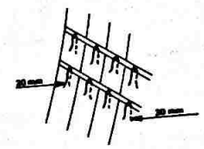
B PAINT

To make model look more realistic, it is recommended to paint the sails before cutting them.
Use diluted paint (See M4 mixture) and practice on a piece of spare material.

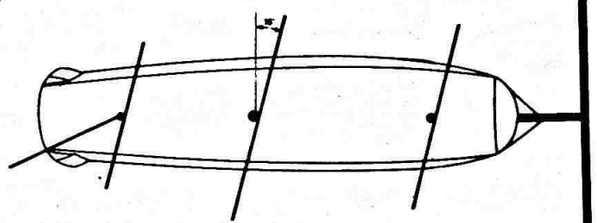


D REEF

Place the ropes as shown on sketch (Thread Ø 0,3)
- 1 row for D.14
- 3 rows for D.16 - B.8
- 4 rows for C.10 - C.13

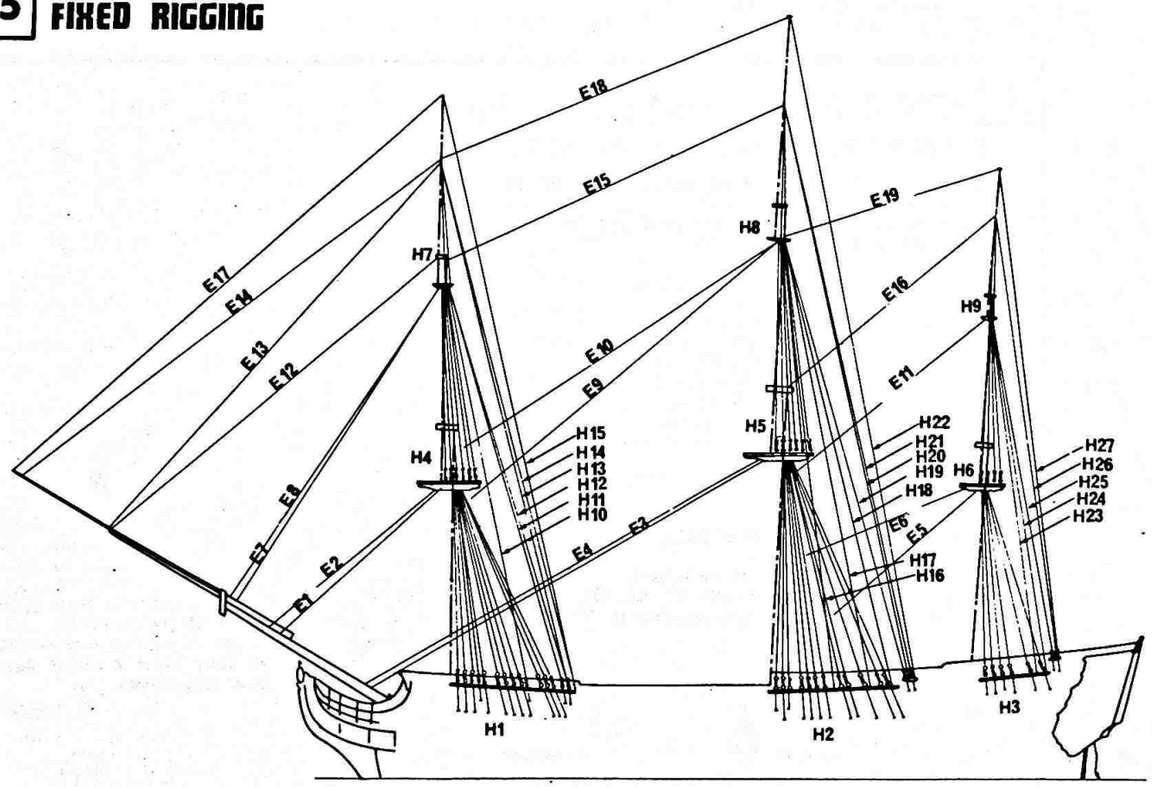


C DIRECTION



Sails set for wind on the port aft quarter, yards set at 15°.

15 FIXED RIGGING



A SHROUDS AND STAYS B BLOCKS

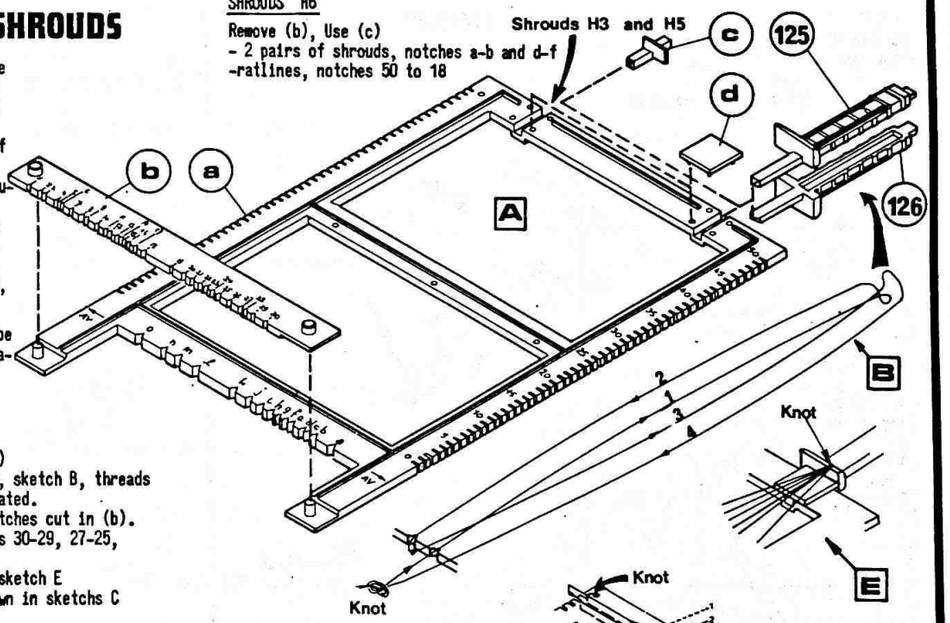
The sketch shows the arrangements of shrouds numbered H1 to H27 on each side and of stays in the longitudinal axis of the vessel.
The fitting will be described later.
Note that H1 to H6 represent bunches of ropes.

Refer to paragraphs 17B to 17E for positioning the pulleys.
In the instructions the pulleys are marked p1, p2, p3....(small single pulley) or P1, P2, P3..... small double pulley, or m1, m2, m3...medium single pulley, or M1, M2, M3.....medium double pulley or g1, g2, g3... large single pulley or G1, G2, G3.... large double pulley.
The numbers following the letter help to find such or such a pulley from one page to another in the assembling instructions.

16 MAKING UP THE SHROUDS

The frame supplied with the model of the H.M.S. VICTORY will enable the modeller to make perfectly symetrical shrouds H1 to H6.
Only HELLER gives you the possibility of making the shrouds with real thread.
Use the threads supplied by HELLER included in the box. Use Ø 0,3 mm thread, for the horizontal parts and Ø 0,6 mm threads, for the vertical runs.
Glue (d) on (a) (centering). (b) is movable and is used for making shrouds H3, H4, H6.

The operations described below are to be carried out when assembling the masts, paragraphs 23, 24 and 25.



SHROUDS H2

Place, without gluing, (b) on (a)
Place 125-126 without gluing (See 21B)
Shrouds are made in pairs for each side, sketch B, threads 1, 2, 3 and 4 as many times as is indicated.
The threads go around 125-126 and in notches cut in (b).
Make 6 pairs using in this order notches 30-29, 27-25, 23-21, 19-17, 14-9 and 4-2.
Make a knot at the top of the shrouds, sketch E
The horizontal ratlines are made as shown in sketchs C and D.
Make a knot at the start, follow the order 1, 2, 3, 4.... go through the notches on the side of the frame, they are numbered 50 to 0.
Using the minimum amount possible put a little glue where the threads cross one another

Put very little glue at the top of the shrouds, where they go around the pin. When the glue is set, cut off the ratlines outside the first and last shroud.
Remove from the frame the shroud assembly fixed 125-126.
Glue 125-126 according to instructions given in 23A.
This principle applies to shrouds H1, H2 and H5.

SHROUDS H3

Remove (b). Use 138-139 in the left notch
- 3 pairs of shrouds, notches i-k, l-m and n-o
- ratlines, notches 50 to 11
Using the minimum amount possible put a little glue where the threads cross one another. Put very little glue at the top of the shrouds, where they go around the pin. When the glue is set, cut off the ratlines, remove the shroud assembly taking care not to undo the loop around 138-139 and place the assembly according to the instructions given in 23C. Make a knot at the top of the shrouds (See E)
This principle applies to shrouds H3, H4, H6.

SHROUDS H4

Remove (b), use (c)
- 3 pairs of shrouds, notches c-e, g-h and i-j
- Ratlines, notches 50 to 10

SHROUDS H5

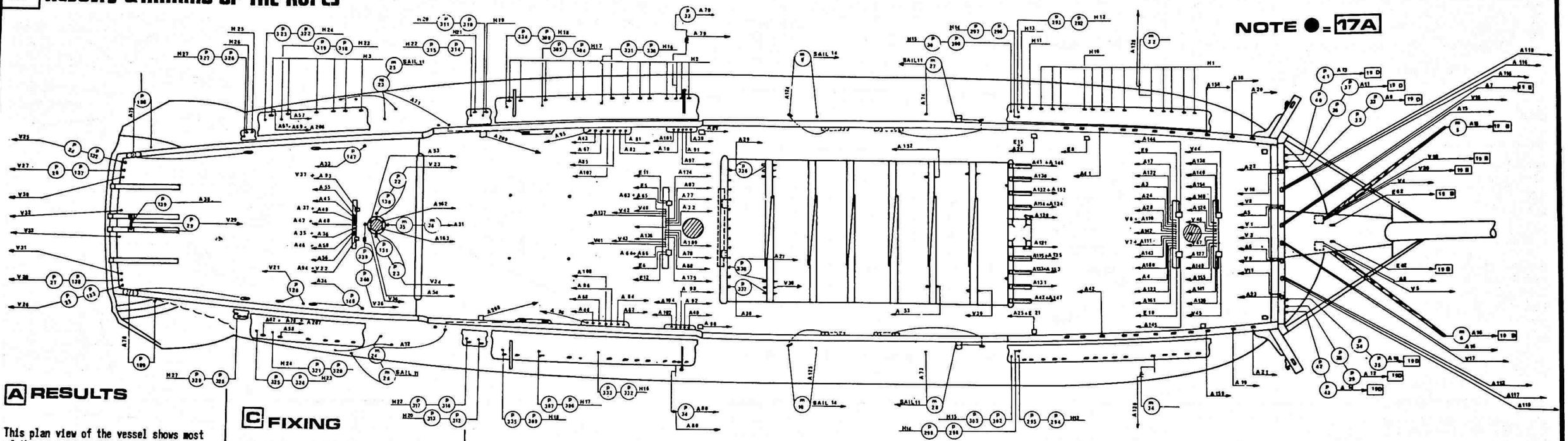
(c) in the left notch

Make the pairs 1,2,3 and 4 described in B around C. Use (b)
- 3 pairs of shrouds, notches 15-12, 10-8 and 7-6
- Ratlines, notches 50 to 8

SHROUDS H1

Manufacture is the same, use 136-137
- 6 pairs of shrouds, notches 28-16, 24-22, 20-18, 16-13, 11-5, 3-1.
- Ratlines, notches 50 to 9.

17 RESULTS & MAKING UP THE ROPES

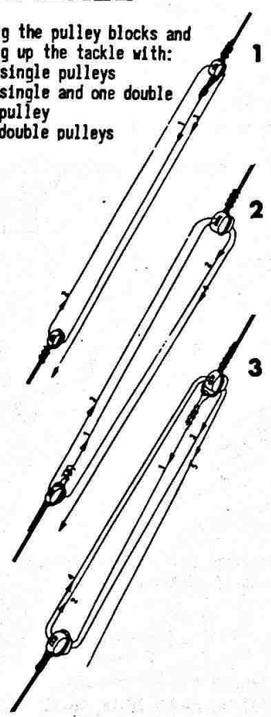


A RESULTS

This plan view of the vessel shows most of the rope ends fitted as explained in the following chapters.
Shrouds H1 to H27 are installed on the port and starboard sides.
To simplify the instruction, the symbol ● is equivalent to 17A.
The numerous pulley blocks shown on this drawing are positioned with the corresponding rigging.

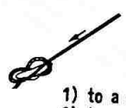
B TACKLE

Fixing the pulley blocks and making up the tackle with:
1) 2 single pulleys
2) 1 single and one double pulley
3) 2 double pulleys



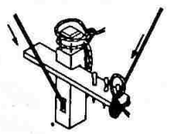
C FIXING

1

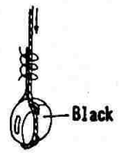


1) to a cleat
2) to a rail
3) to a pulley block

2



3



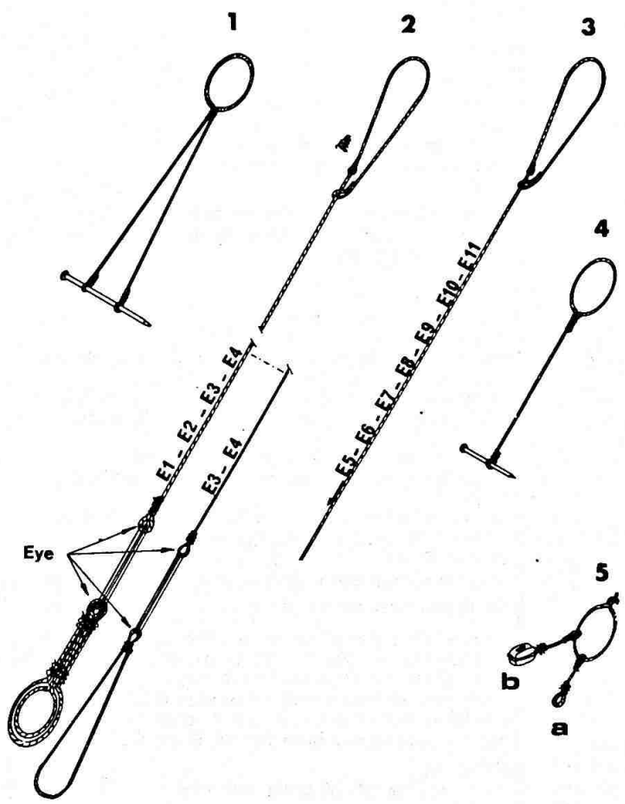
D REALIZATION

1

1) a collar (loop)
2 an eye with a 1 mm nail

2

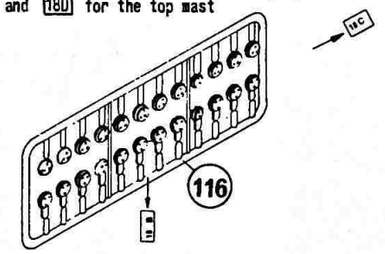
E REALIZATION



1) a double pendant
2) a looped stay
3) a straight stay
4) a single pendant
5) a collar (loop) with
a - an eye
b - a pulley block

18 RAM HEADS FITTING METHOD

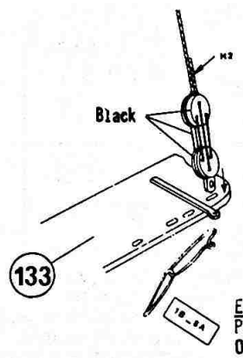
Their job is to tighten up the shrouds; paragraphs 23, 24, 25.
They are grouped for each mast and each side of the ship in bunches with pulleys (see part 116)
Before being used they have to be prepared 18A for the lower mast and 18D for the top mast



A

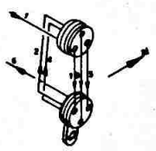
Thread a lanyard through a pair of pulleys as shown in detail 18C.
Use N°1 thread. Tie both ends of the lanyard.
This is to be carried out with: 101, 102, 103, 104, 107, 108, 109, 110, 115, 116. Positioning as explained in 18B.

B

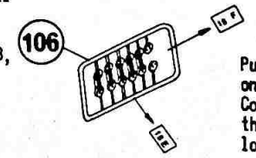


Example: starboard side of main mast (See paragraph 24)
Place shrouds H2, made up as in paragraph 15.
Offer 115-116 at 133 level
From 115 and 116 detach the first pair of dead-eyes, slide them into the slots on 132-133, reconnect with a looped thread made according to 1B - 8A. Tie the thread. Tie up the first 2 vertical threads to shrouds H2.
Carry on in twos on each side of the vessel.

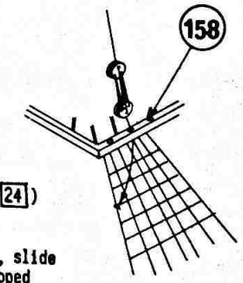
C



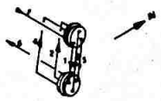
D



E



F



Put in the lanyards (detail 18F) on 105-106-111-112-113-114
Connect up in pairs on each side, the lower thread is tied to the lower mast shrouds.

DECORATION

Precise instructions are given on the various drawings as assembly proceeds.

HELLER paints to be used to decorate your H.M.S. VICTORY

HELLER Ref.	
VERMILLON (Bright red)	60
MID GREEN	101
WHITE	34
GOLD	16
BRONZE	1/2 16 + 1/2 53
BLACK	33
LIGHT COLORED WOOD	63
DARK COLORED WOOD	98
SKY BLUE	89
PEARL GREY	64
ROYAL BLUE	25
BURNT EARTH (Scorched)	70
YELLOW (Sunflower)	24

BRIGHT RED (Vermillon) 60

Cluster 1
inside 1 and 2

Cluster 2
3 - 4 - 5 - 6

Cluster 6
42 - 43 - 44 - 45 - 46 - 47 - 48

Cluster 7
49 - 50 - 51 - 52 - 53 - 54 - 55

Cluster 8
76 - 89 - 92

Cluster 12
203 - 205

Cluster 13
- 213 -

Cluster 15
254 - 255 - 256 - 257 - 258 - 259 - 260 - 261 - 262 - 263 - 264 - 265 - 266 - 267 - 268 - 269 - 270 - 271 - 272 - 273 - 274 - 275 - 276 - 277 - 278 - 279 - 280 - 281 - 282 - 283 - 284 - 285 - 286 - 287 - 288 - 289 - 290 - 291 - 292 - 293 - 294 - 296 - 297 - 298 - 299 - 300 - 301 - 302 - 303 - 304 - 305 - 306 - 308 - 309 - 310 - 311 - 312 - 313 - 314 - 315 - 316 - 317 - 318 - 319 - 320 - 321 - 322 - 323 - 324 - 325 - 326 - 327 - 328 - 329 - 330 - 331 - 332 - 333 - 334 - 335 - 336 - 337

Cluster 16
- 351 -

GREEN (Mid) 101

Cluster 12
164 - 165 - 166 - 167 - 168 - 169

WHITE 34

Cluster 12
162 - 163 - 164 - 165 - 166 - 167 - 168 - 169 - 170 - 189 - 190 - 191

Cluster 13
213 - 213 A - 214 - 215

Cluster 14
237 - 238 - 239 - 240 - 241 - 242 - 243 - 244 - 245 - 246 - 247 - 248 - 249

Cluster 16
- 351 -

GOLD 16

Cluster 11
- 152 -

Cluster 13
213 - 213.A

Cluster 16 A
356 - 357

BRONZE 1/2 16 + 1/2 53

Cluster 1
1 - 2

Cluster 10
- 120 -

Cluster 13
- 218 -

Cluster 14
250 - 251

BLACK 33

Cluster 1
1 - 2

Cluster 3
7 - 8 - 9

Cluster 4
10 - 11 - 12 - 13 - 14 - 15 - 18 - 19 - 21 - 22

Cluster 5
p - g - 6 - m - P - N - 24 - 25 - 26 - 27 - 28 - 29 - 30 - 31 - 32 - 35 - 36 - 37 - 38 - 40 - 41

Cluster 8
56 - 57 - 58 - 59 - 60 - 61 - 63 - 65 - 66 - 67 - 68 - 69 - 70 - 71 - 72 - 73 - 74 - 75 - 77 - 78 - 79 - 80 - 83 - 84 - 85 - 86 - 87 - 91 - 93 - 94 - 96

Cluster 9
101 - 102 - 103 - 104 - 105 - 106 - 107 - 108 - 109 - 110 - 111 - 112 - 113 - 114 - 115 - 116 -

Cluster 10
117 - 118 - 119 - 121 - 122 - 123 - 124 - 125 - 126 - 127 - 128 - 129 - 130 - 131 - 132 - 133 - 134 - 135 - 136 - 137 - 138 - 139 - 140 - 141 - 142 - 143 -

Cluster 11
148 - 149 - 150 - 155 - 158

Cluster 12
172 - 173 - 176 - 177 - 178 - 179 - 180 - 181 - 182 - 187 - 188 - 192 - 193 - 194 - 195 - 196 - 197 - 198 - 199 - 200 - 201 - 202 -

Cluster 13
209 - 210 - 211 - 212 - 216 - 217 - 219 - 222 - 223 - 224 - 225 - 226

Cluster 14
250 - 251 - 252 - 253

Cluster 15
254 - 255 - 256 - 257 - 258 - 259 - 260 - 261 - 262 - 263 - 264 - 265 - 266 - 267 - 268 - 269 - 270 - 271 - 272 - 273 - 274 - 275 - 276 - 277 - 278 - 279 - 280 - 281 - 282 - 283 - 284 - 285 - 286 - 287 - 288 - 289 - 290 - 291 - 292 - 293 - 294 - 295 - 296 - 297 - 298 - 299 - 300 - 301 - 302 - 303 - 304 - 305 - 306 - 307 - 308 - 309 - 310 - 311 - 312 - 313 - 314 - 315 - 316 - 317 - 318 - 319 - 320 - 321 - 322 - 323 - 324 - 325 - 326 - 327 - 328 - 329 - 330 - 331 - 332 - 333 - 334 - 335 - 336 - 337 - 340

Cluster 16
344 - 345 - 346 - 351 - 352 - 353 - 354 - 355

Cluster 16 A
356 - 357 - 358

Cluster 18
388 - 389 - 390 - 391 - 392 - 393

Cluster 19
394 - 395 - 396 - 397 - 398 - 399 - 400 - 401 - 402 - 403 - 404 - 405 - 406

Cluster 20
407 - 408 - 409 - 410 - 411 - 412 - 413 - 414 - 415 - 416 - 417 - 418 - 419 - 420 - 421 - 422

Cluster 21
423 - 424 - 425 - 426 - 427 - 428 - 429 - 430 - 431 - 434 - 435

LIGHT WOOD 63

Cluster 3
7 - 8 - 9

Cluster 5
- 39 -

Cluster 8
62 - 85 - 90 - 97 - 100

Cluster 11
151 - 160 - 161

Cluster 18
- 384 -

PEARL GREY 64

Cluster 3
7 - 8 - 9

Cluster 11
- 151 -

SCORCHED EARTH 70

Cluster 5
- 36 -

Cluster 8
81 - 88 - 90 - 95

Cluster 11
151 - 156

Cluster 12
171 - 174 - 175 - 204 - 206

Cluster 13
208 - 228 - 229

Cluster 15
342 - 343

SUNFLOWER YELLOW 24

Cluster 1
1 - 2

Cluster 4
16 - 17 - 18 - 19 - 20 - 21 - 22 - 23

Cluster 5
24 - 25 - 33 - 34

Cluster 8
66 - 82 - 87 - 98

Cluster 10
117 - 118 - 119 - 122 - 123

Cluster 11
144 - 145 - 146 - 147 - 153 - 154 - 157

Cluster 12
171 - 183 - 184 - 185 - 186

Cluster 13
228 - 229

Cluster 14
252 - 253 - 360 - 361 - 362 - 363

Cluster 15
342 - 343

Cluster 16
344 - 347 - 348 - 349 - 350 - 351 - 352 - 353 - 354 - 355

Cluster 16 A
356 - 357

Cluster 18
388 - 389 - 390 - 391 - 392 - 393

Cluster 19
394 - 395 - 403 - 404 - 406

Cluster 20
407 - 408 - 421 - 422

Cluster 21
423 - 424 - 427 - 428 - 432 - 433 - 435

MIXTURE M1
2/3 WHITE 34 + 1/3 LIGHT GREY 64

Cluster 8
- 64 -

Cluster 13
220 - 221 - 230 - 231 - 232 - 233 - 234 - 235

MIXTURE M2
WHITE 34 + 1 touch of GREEN 101

Cluster 1
1 - 2

Cluster 12
- 171 -

Cluster 13
227 - 228 - 229 - 236

Cluster 15
338 - 339 - 341 - 342 - 343

Cluster 16
351 - 352 - 354

Cluster 16 A
- 359 -

MIXTURE M3
1/2 ROYAL BLUE 25 + 1/2 SKY BLUE 89

Cluster 11
- 152 -

Cluster 12
183 - 184 - 185 - 186

Cluster 13
- 213 -

Cluster 16
344 - 349 - 350

MIXTURE M4 (very diluted
WHITE 34 + 1 touch of LIGHT WOOD 63

all the sails

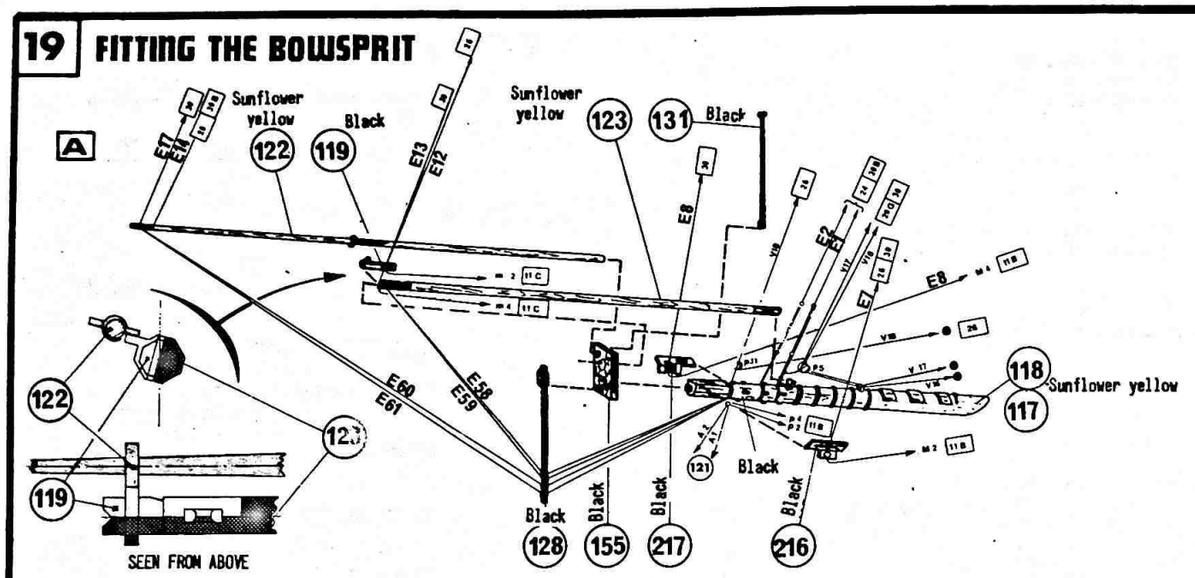
MIXTURE M5
1/3 LIGHT WOOD 63 + 2/3 DARK WOOD 98

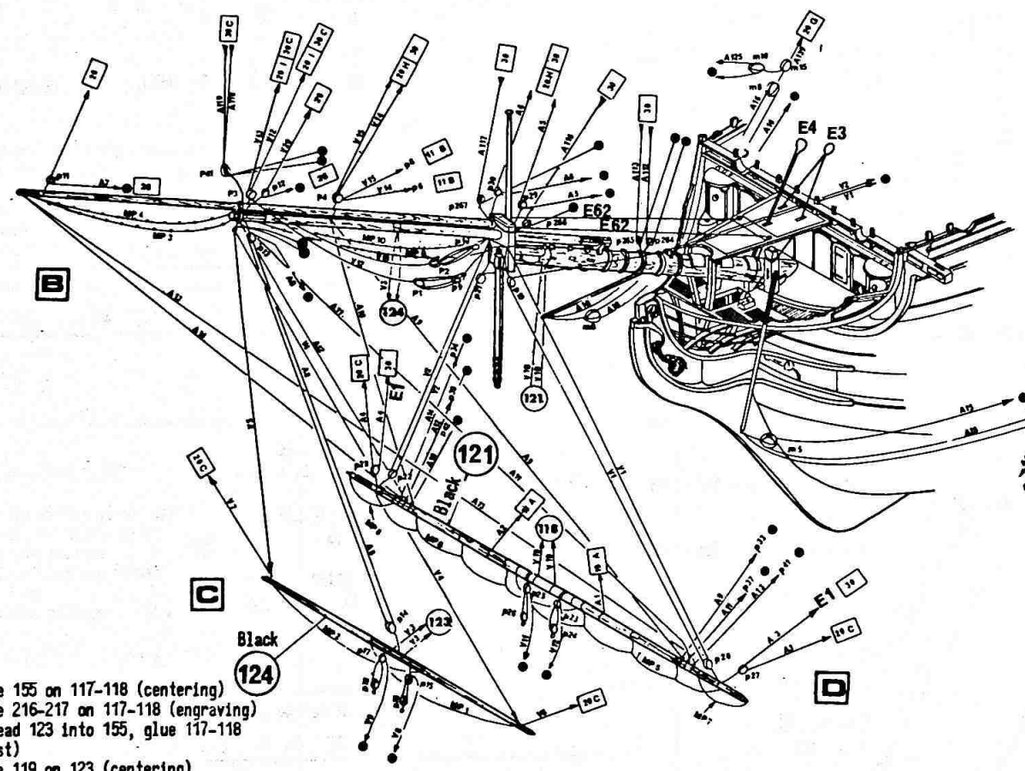
Cluster 3
7 - 8 - 9

Cluster 11
- 151 -

Cluster 18
381 - 385 - 386 - 387

19 FITTING THE BOWSPRIT





A- Glue 155 on 117-118 (centering)
Glue 216-217 on 117-118 (engraving)
Thread 123 into 155, glue 117-118 (rest)
Glue 119 on 123 (centering)
Thread 122 into 155, glue 117-118 (rest)(See 19B)
Glue 128 and 131 on 155 (centering).Assemble E58, E59,E60, E61

NOTE; Other parts of the rigging will be installed later. The drawing indicates where they are to go and where they are to end as well as the position of the pulley blocks.

B- Place foot ropes MP -3, 4, 9 and 10. Make a knot in these ropes every 10 mm
The remainder of the drawing indicates pulleys and to position.
The pulleys can be positioned now or later with the riggings.

C- Place foot ropes MP.1 - MP.2
Place p15, p16, p17 and p18 on 124
Place p13 on 119-123
Assemble A8, the yard must be quite close to the bowsprit
- A8 ends up on● or 17A mark the and fix
- Install V4 - V5 which go through an eye at the extremity of 119-123 and end at●
- Install V8 - V9 with p16, p18 ending●

D- On 121:
- Install MP.6, MP.5
- Fix the various pulleys
- Install the rigging ending as stated in a previous paragraph or at● Example: A1 11B refers to paragraph 11B to find rope A1 and its path
- A13 ends at●on p41 therefore install p40-p41 with one tackle for two pulleys 17 B1
- V1 starrs at 155 goes to p19, p20 and ends on ●
- Other ropes will be installed later.

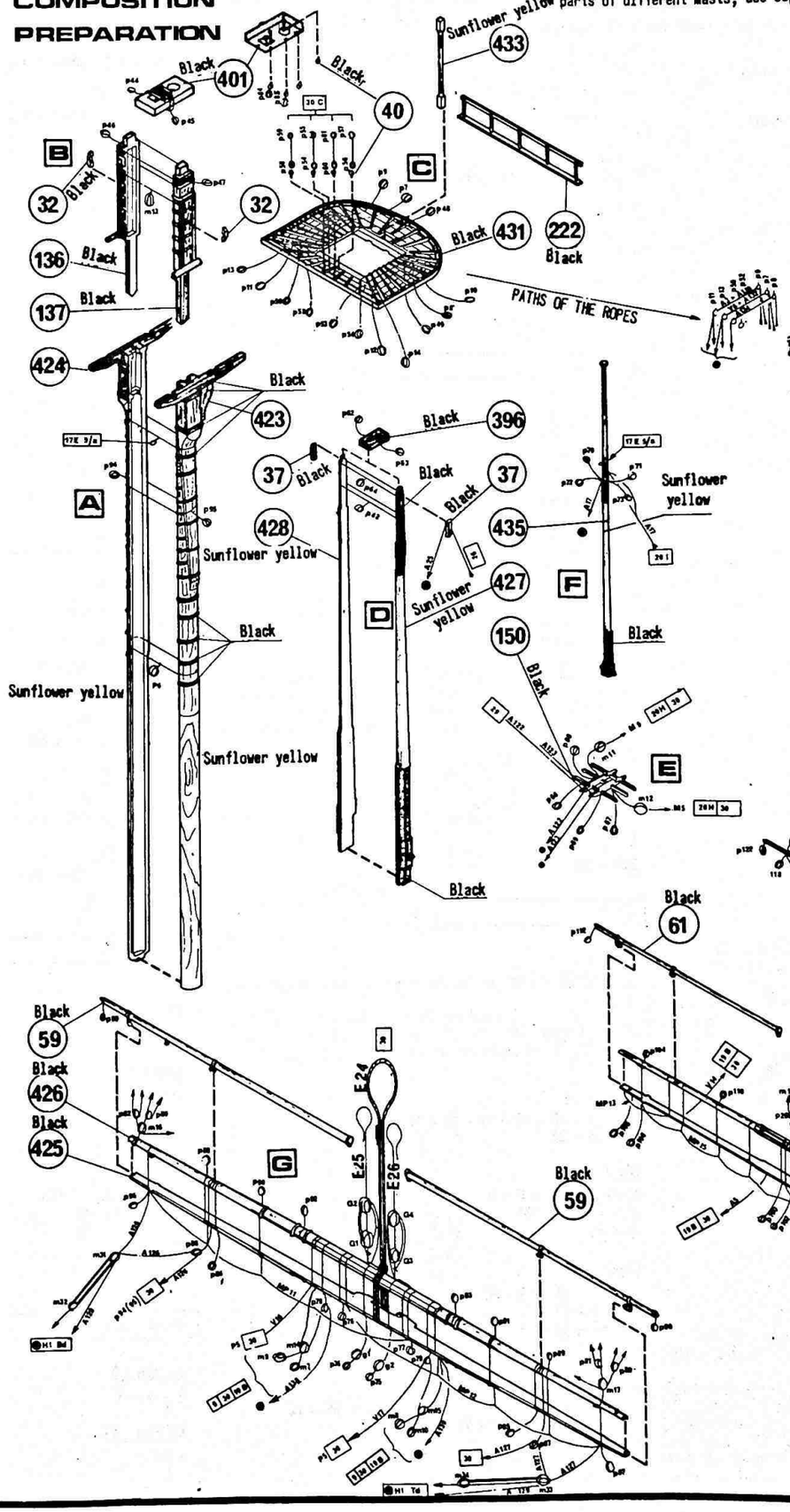
NOTE: The detailed method of installing the rigging shown on several drawings is always indicated by ▭ which enables the modeller to follow the path of each rope from start to finish.

20 FOREMAST

COMPOSITION

PREPARATION

The fore mast, and its yards, is made up of all the parts shown on this drawing to which it is necessary to refer to find the position of pulleys the paths of the various ropes etc.....
Some of the operations may be carried out now, but be careful not to mix parts of different masts, use separate bags for each mast assembly.



A - Glue 423 to 424
Make a knot 17E 5/a and fix P6,p94 and p95

B - Glue 136 to 137
Glue 32 either side of 136-137 (engraving)
Fix m13, p46, p47
Glue 40(4) under 401 (centering)
Fix p44, p45, p84, p85

C - Glue 40(4) on 431 (centering) and fix underneath P.7, 8, 9, 10, 11, 12, 13, 14 and p48, 49, 50, 51, 52, 53.

On 40(4) fix pulleys p54,56,58,60 and make the tackles with p55,57, 59, 61 (distances between pulleys: 30 to 50 mm)
Take note of ropes going through pulleys fixed under 431(see 30c)

D - Glue 427 to 428 and 37(2) on each side of 427-428 (engraving)
Assemble p64-P42
Fix p62-63 on 396

E - Fix all the pulleys on 151

F - Fix all the pulleys on 435

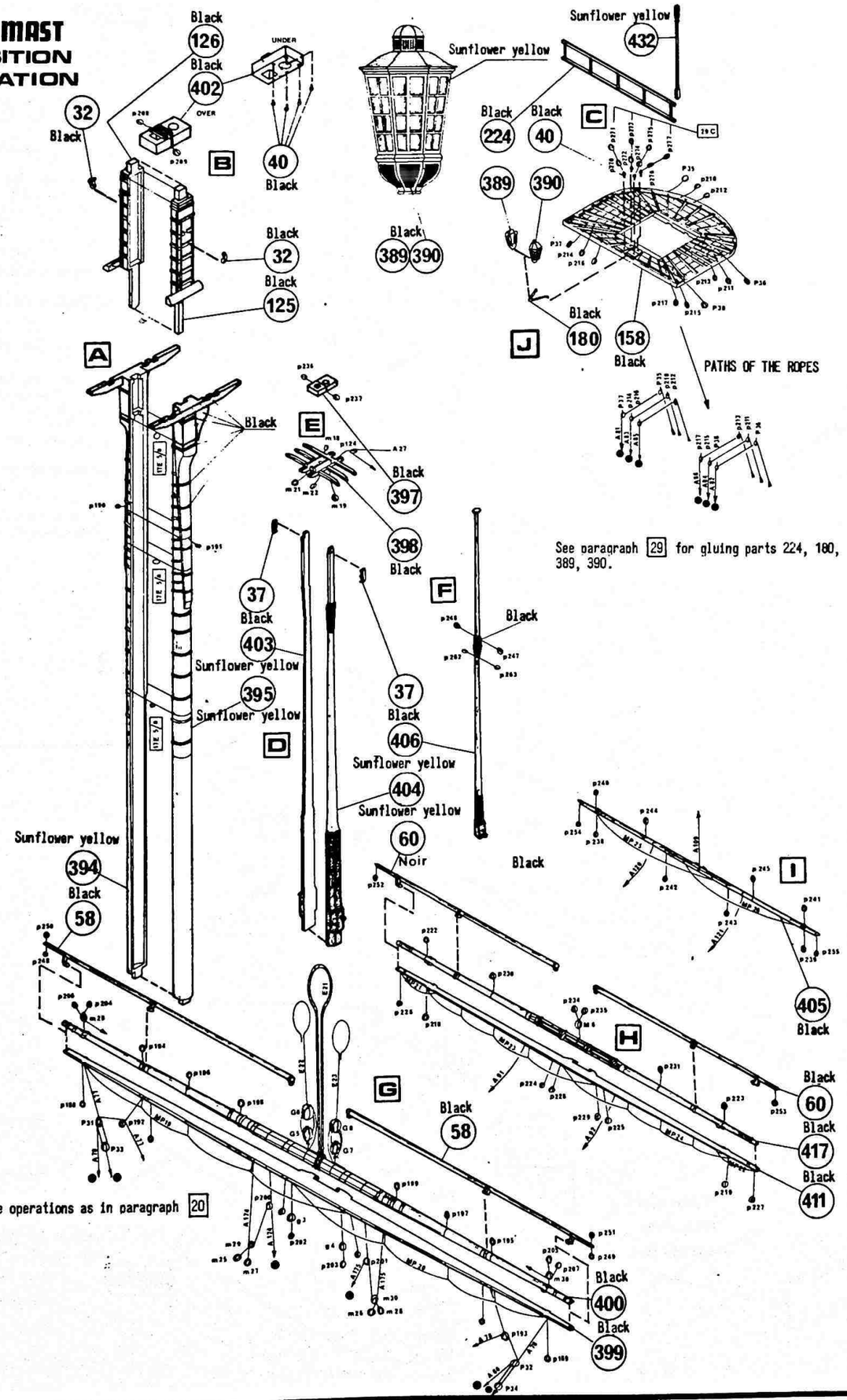
G - Glue 425 to 426
Glue 59(2) on 425-426 (centering)
Install MP 11-12
See stays E24-25-26 paragraph 30

H - Glue 430 to 429
Glue 61(2) on 430-429 (centering)
Install MP 15-16
Fix the pulleys

I - Install MP 17-18
Fix the pulleys

21 MAIN MAST

COMPOSITION
PREPARATION

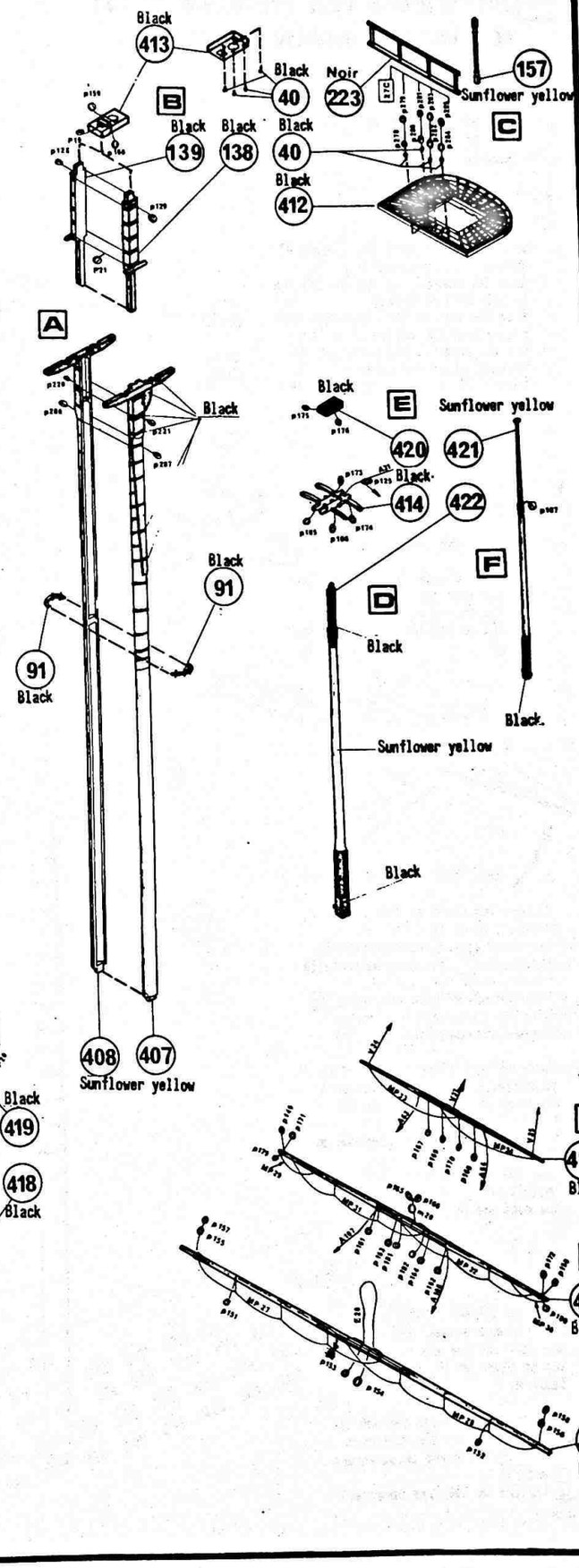


See paragraph [29] for gluing parts 224, 180, 389, 390.

Carry out the same operations as in paragraph [20]

22 MIZZEN MAST

COMPOSITION
PREPARATION



Carry out the same operations as in paragraph [20] and [21]
In A glue 91(2) to 407-408 (engraving)
In J glue 415 on 418 (centering)
See paragraph [27] for gluing part 223

23 PRINCIPLES FOR FITTING A MAST

EXAMPLE: MAIN MAST

NOTE: The work described below is to be carried out with the assembling operations indicated in 24 and 25 for each of the masts described in 20 - 21 and 22.

A - Carry out operations described in paragraph 24 (In conjunction with this).
With 125-126 install the shrouds H2 described in paragraph 16
Glue the assembly in the top housing in 395-194 (centering)
Glue the mast in the upper deck housing and at the bottom of the hull.
Fix the shrouds. See paragraph 18
Make and place the pendants 17E/1 (length 55 and 65 mm) on each side of 125-126
Position and glue 158 (centering)

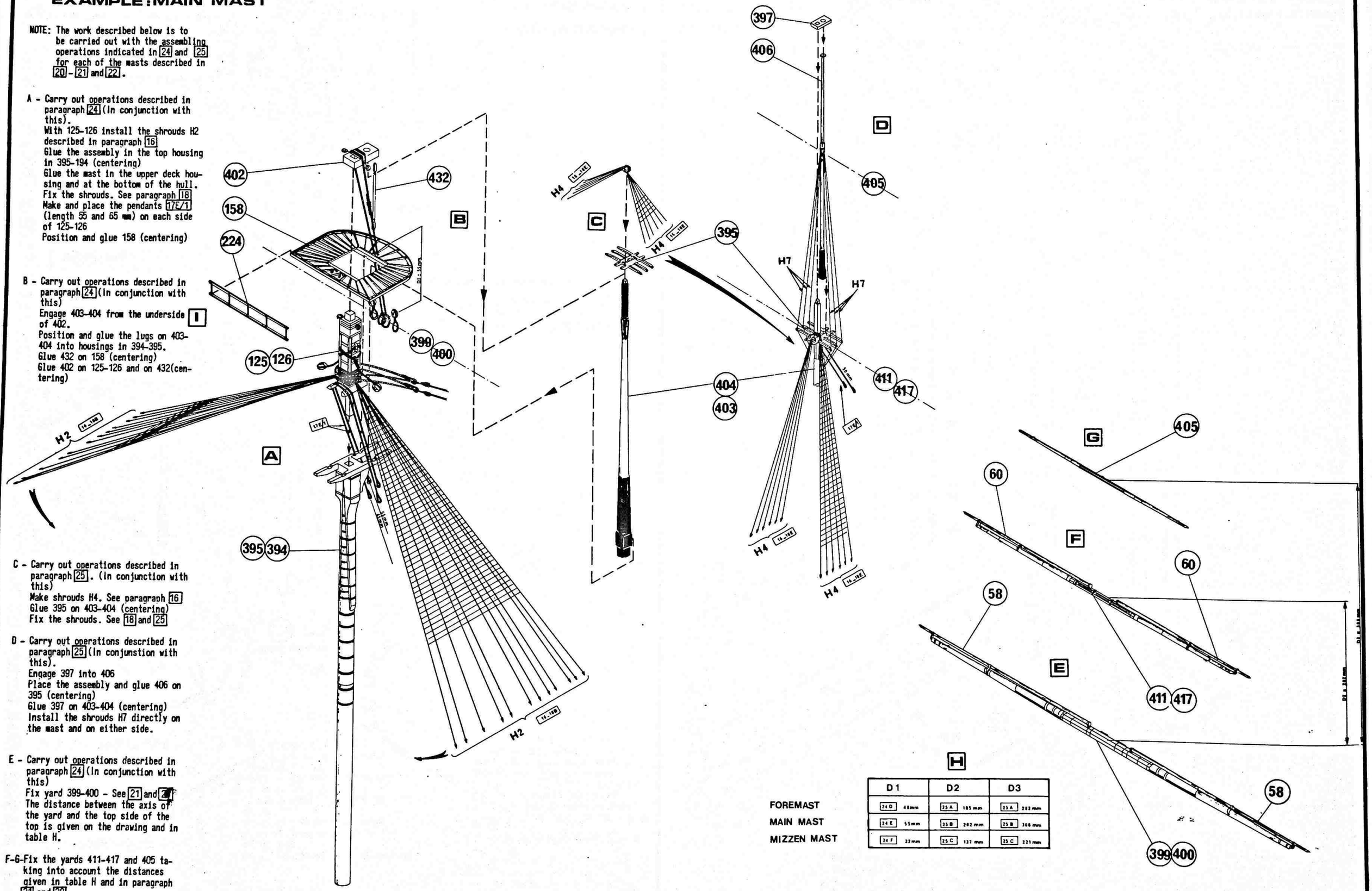
B - Carry out operations described in paragraph 24 (In conjunction with this)
Engage 403-404 from the underside I of 402.
Position and glue the lugs on 403-404 into housings in 394-395.
Glue 432 on 158 (centering)
Glue 402 on 125-126 and on 432(centering)

C - Carry out operations described in paragraph 25. (In conjunction with this)
Make shrouds H4. See paragraph 16
Glue 395 on 403-404 (centering)
Fix the shrouds. See 18 and 25

D - Carry out operations described in paragraph 25 (In conjunstion with this).
Engage 397 into 406
Place the assembly and glue 406 on 395 (centering)
Glue 397 on 403-404 (centering)
Install the shrouds H7 directly on the mast and on either side.

E - Carry out operations described in paragraph 24 (In conjunction with this)
Fix yard 399-400 - See 21 and 29
The distance between the axis of the yard and the top side of the top is given on the drawing and in table H.

F-G-Fix the yards 411-417 and 405 taking into account the distances given in table H and in paragraph 21 and 29.
To fix 224 on 158, see paragraph 21.



H

	D1	D2	D3
FOREMAST	24 O 48mm	35 A 185 mm	35 A 282 mm
MAIN MAST	24 E 55mm	35 B 282 mm	35 B 306 mm
MIZZEN MAST	24 F 22mm	35 C 137 mm	35 C 221 mm

24 FITTING THE LOWER MAST

A - Glue 197, 198, 199, 200, 201, 202 on the deck supports (engraving)
As an indication, take note of the boat positions: 4A, 4B, 4C in order to position them at paragraph 318.

B - Glue 30(8) on 226 (See paragraph 9) (centering)
Carry out, on 64, the same operations as in paragraphs 128 & C
Glue 64 into 30(8)
Install A194-A195

C - Similar to B
Glue 29(8) on 225 (See paragraph 10) (centering)
Glue 64 into 29(8) and install A196-A197.

D - INSTALLING THE FORE MAST

Follow the instructions given earlier in paragraph 23 to assemble the whole fore mast. Note that on 102(101 on the port side) three lots of deade-yes are not used. They come in, in paragraph 25.
See paragraph 30 for the ropes supporting the yards.
Install E1, E2
Place the two carronades under the assembly described in paragraph 6 on the top deck 7.

E - INSTALLING THE MAIN MAST

See paragraph 23
Install E3, E4
Fix pulleys p177-178-183-184-258-259. Note the future path of ropes and where they end.

F - INSTALLING THE MIZZEN MAST

Work as in D and E
Install E5, E6
Fix 207 as indicated and 206 on the port side

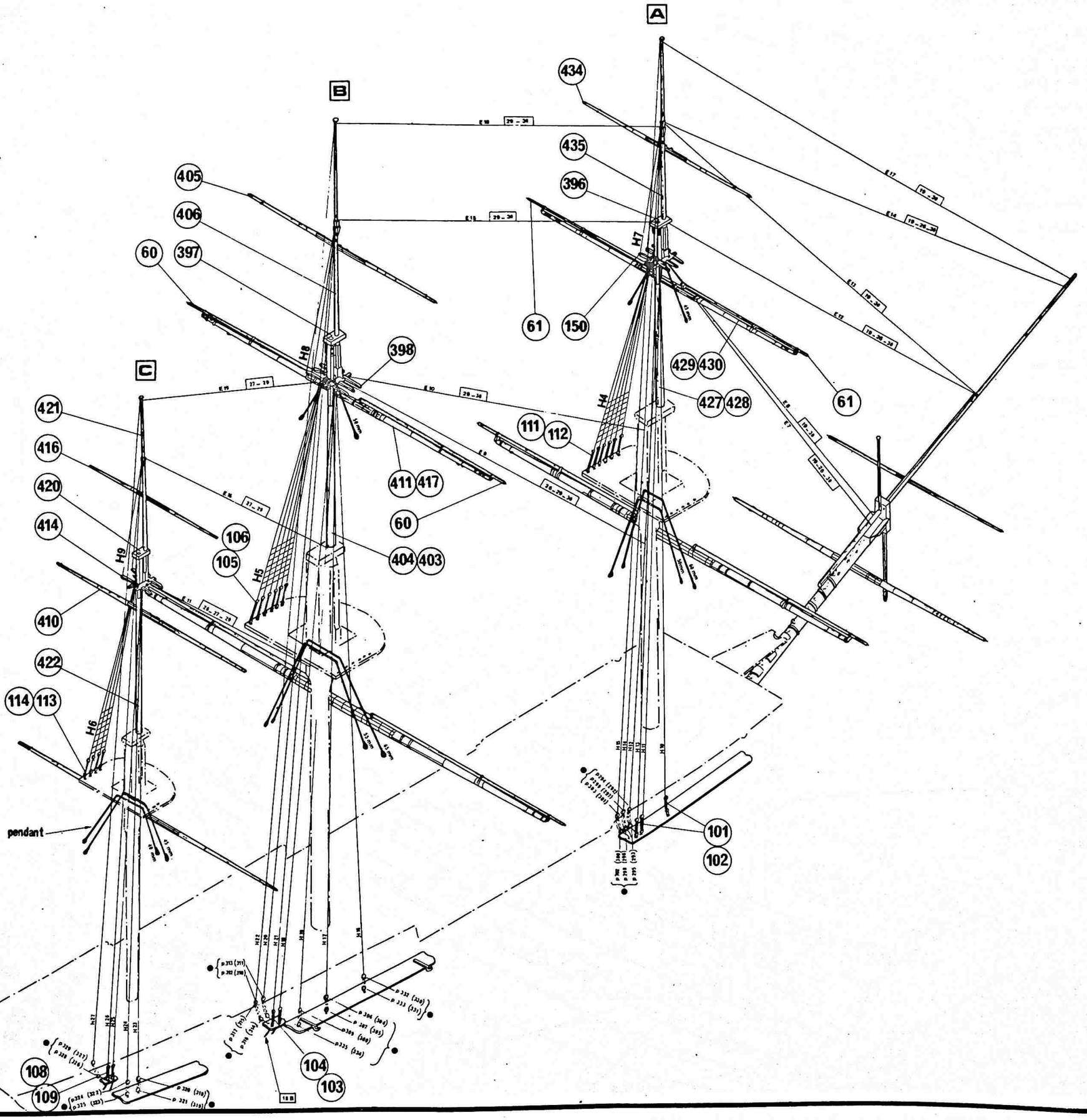
G - INSTALLING THE PORT LIDS

Below here is shown the numbers of the port lids to be installed, those on the starboard side are in a circle, others, on the port side.
For instance, for the first port lid on the starboard side for the 32 pounders, glue port lid 323 on the starboard side and 254 on the port side.
For each port lid, two lengths of metal wire are cut to represent the port ropes, length as required.

25 TOPSAIL RAM HEADS

A-B-C- For each mast assembly, carry out the operations corresponding to those described in paragraph 23

- Fix the yards, respecting the dimensions given in table 23H (See paragraphs 27 29 30 according to the mast being considered.
- Fix the various stays and shrouds. Note that shrouds H10 to H27 on each side are connected to the three sets of deadeyes remaining unused on 101-102, or the deadeys 104-103 and 109-108 or to single pulleys, to make up a tackle.
- The boxes ☐ refer to paragraphs where the corresponding ropes can be seen.
- Install all the remaining pendants, respecting the given lengths.



For each stay sail: A3 - A4 - A5 - B6 - B7 - B8

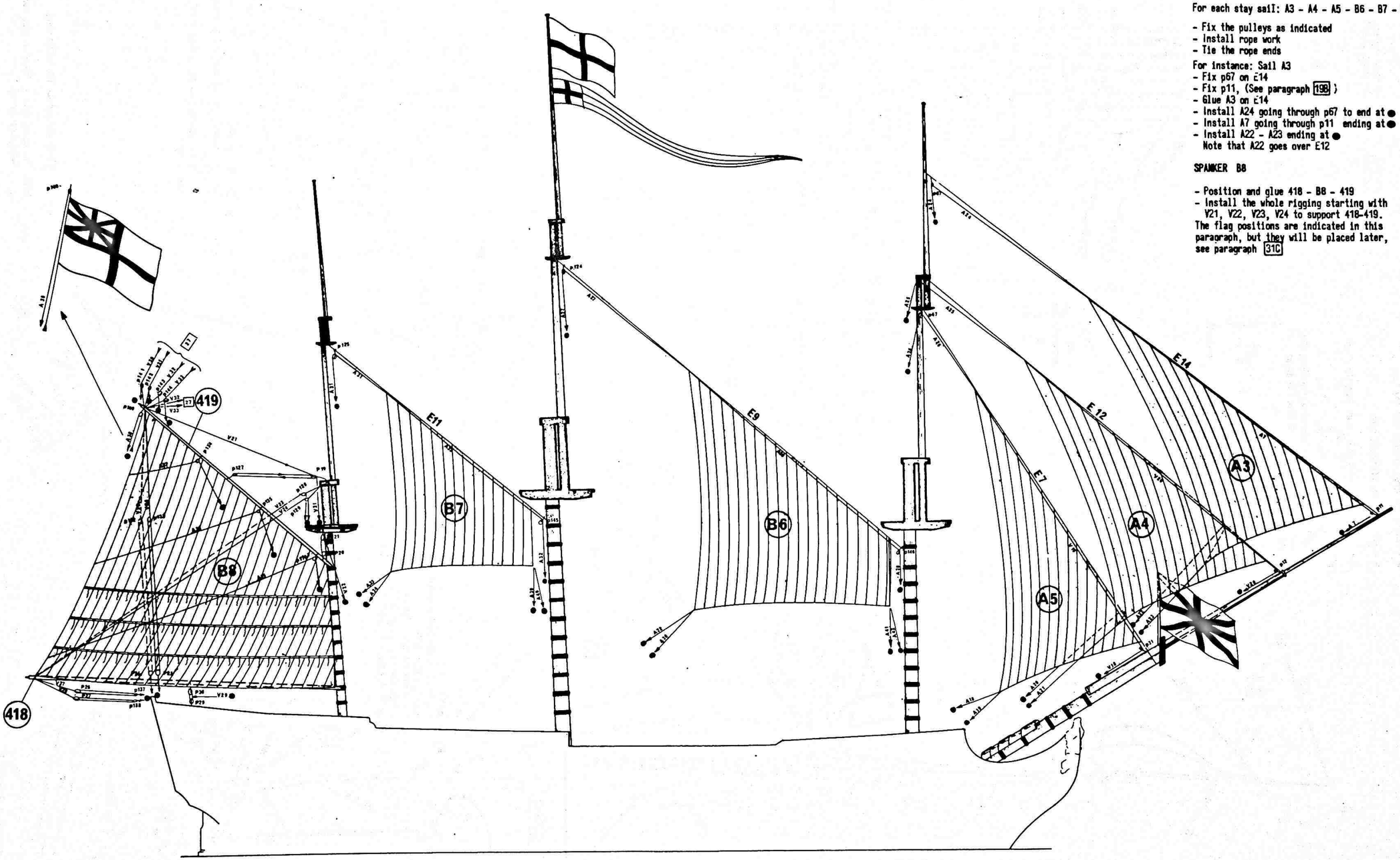
- Fix the pulleys as indicated
- Install rope work
- Tie the rope ends

For instance: Sail A3
- Fix p67 on E14
- Fix p11, (See paragraph 198)
- Glue A3 on E14
- Install A24 going through p67 to end at ●
- Install A7 going through p11 ending at ●
- Install A22 - A23 ending at ●
  Note that A22 goes over E12

SPANKER B8

- Position and glue 418 - B8 - 419
- Install the whole rigging starting with V21, V22, V23, V24 to support 418-419.

The flag positions are indicated in this paragraph, but they will be placed later, see paragraph 31C



27 SAILS ON THE MIZZEN MAST

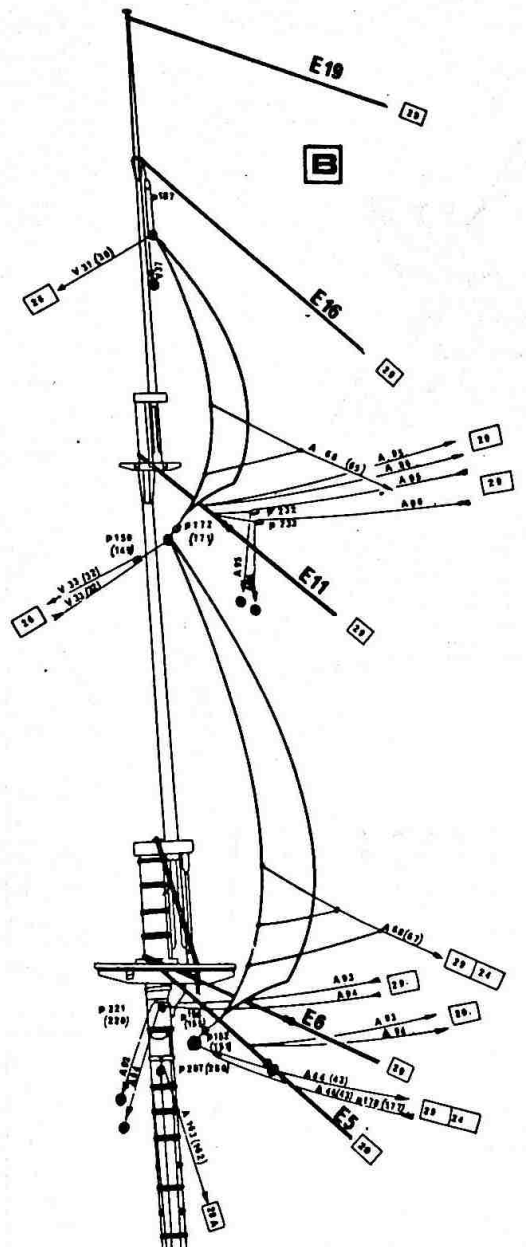
A - Fixing the yards as seen from the bows

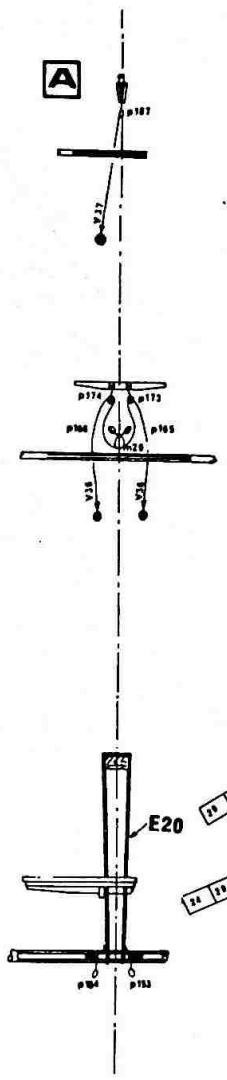
B - Seen from the starboard side

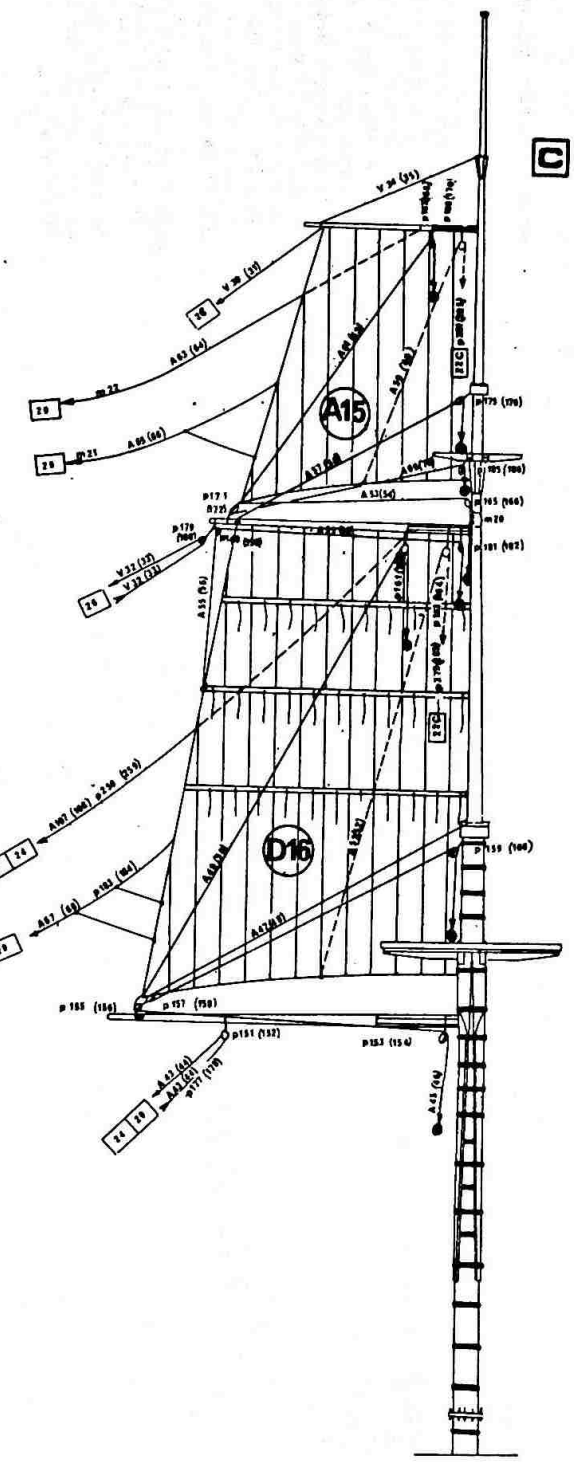
C - Half sails on port side, seen from the stern

METHOD:

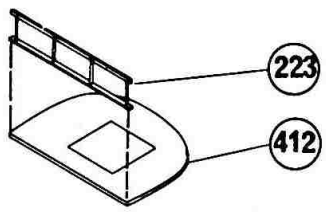
- Glue A15 and D16 on the corresponding yards
- Install the rigging starting from the lower corners of the sails



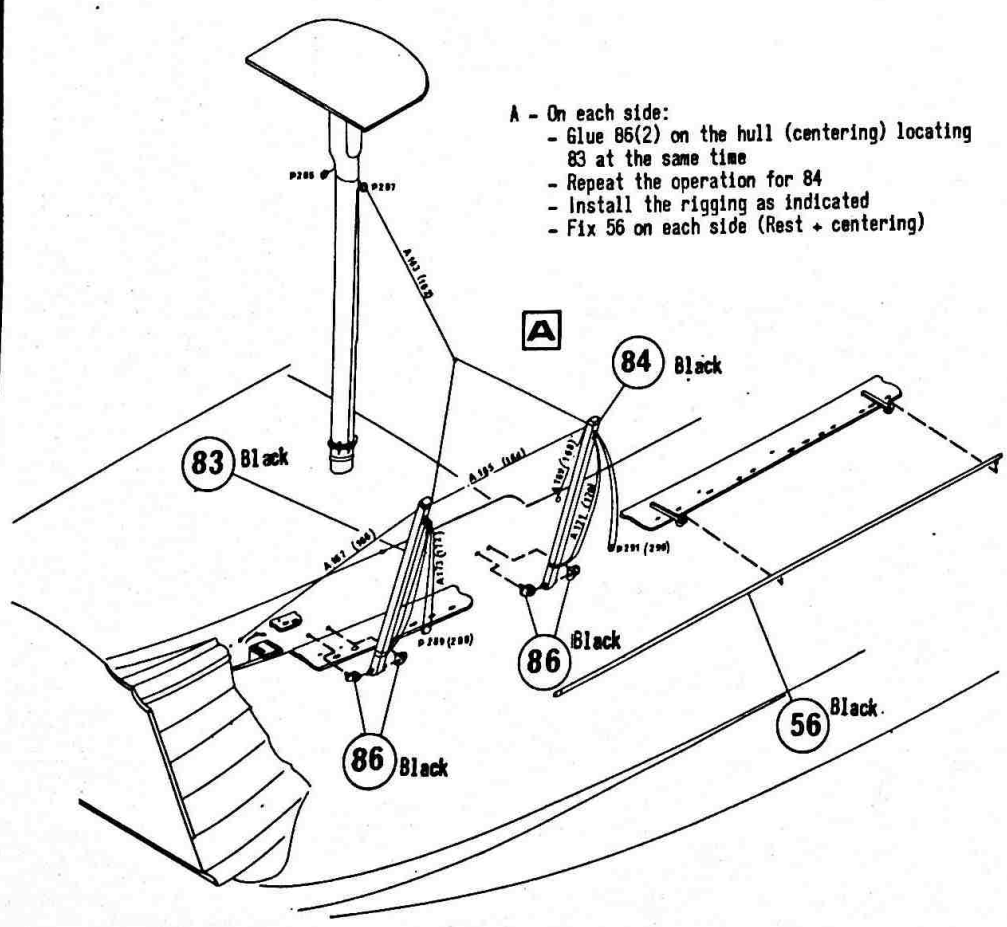




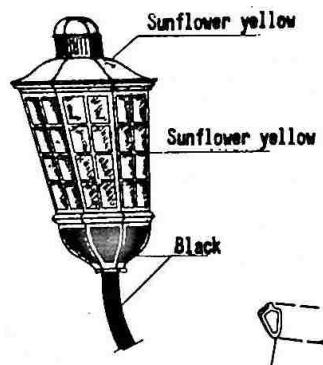
D - Glue 223 on 412 after making the rigging.

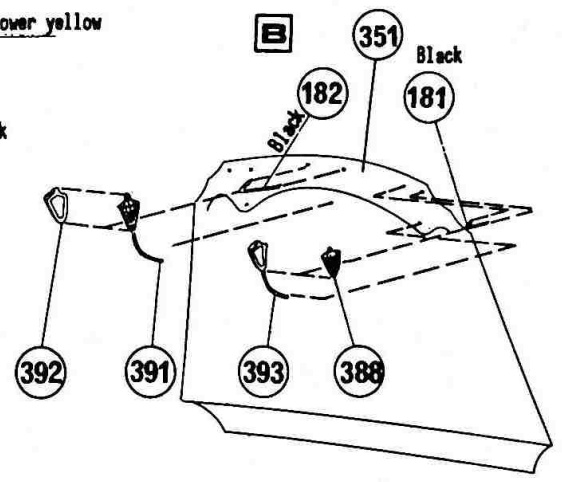


28 VARIOUS ASSEMBLY

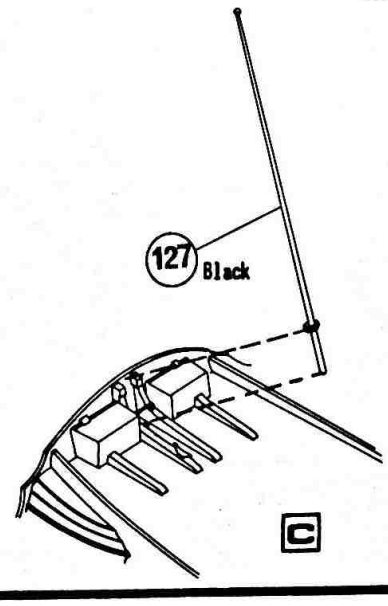


A - On each side:
- Glue 86(2) on the hull (centering) locating 83 at the same time
- Repeat the operation for 84
- Install the rigging as indicated
- Fix 56 on each side (Rest + centering)





B - Glue 392 to 391
Glue the assembly on 351 and on 182 (centering)
Glue 388(2) to 393(2)
Glue both assemblies on 351 and on 181(2) (centering)

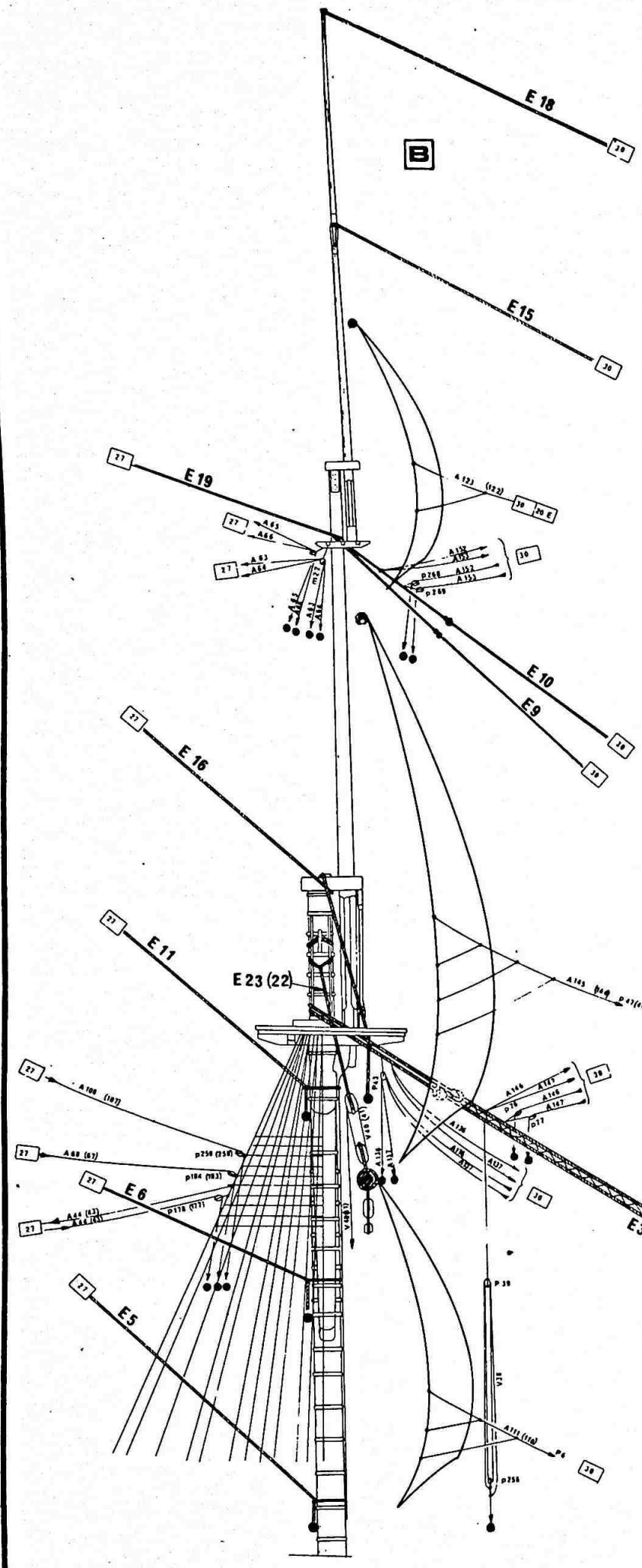


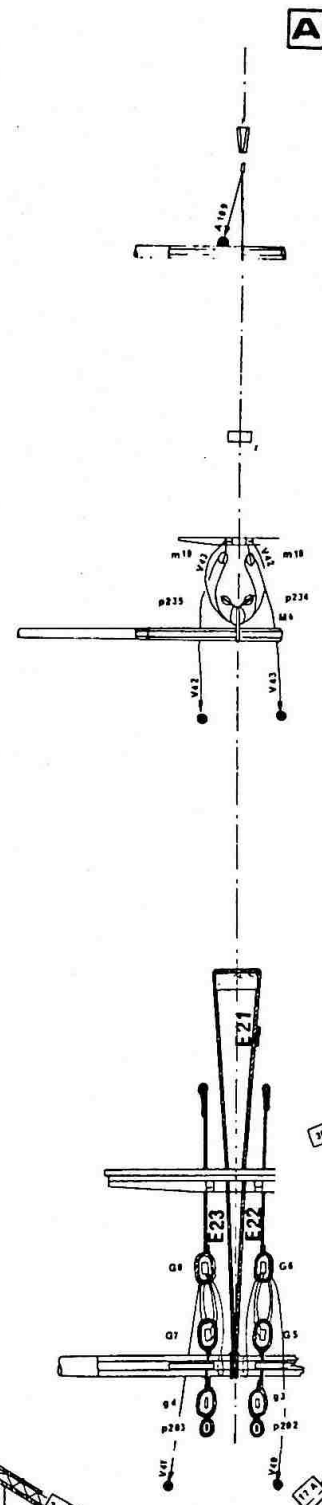
C - Glue 127 to 351 and on 151 (centering)

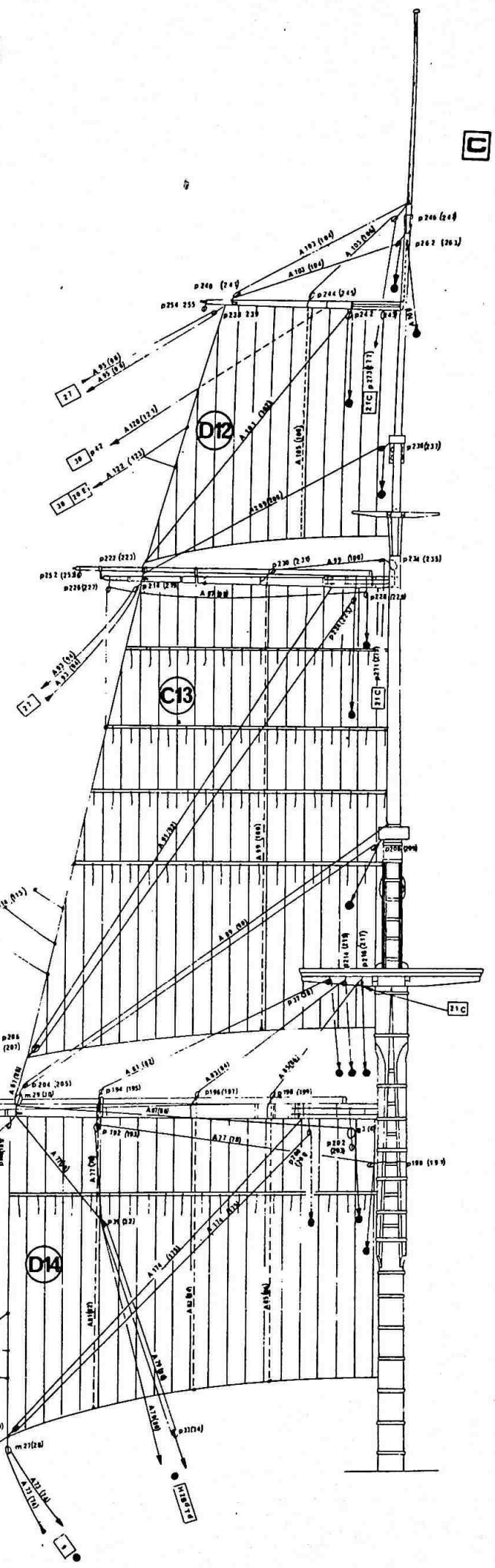
NOTE: The stern flag is fixed on rope A38
See paragraph 26

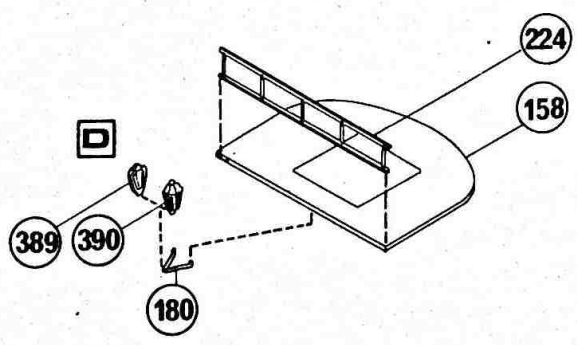
SAILS ON THE MAIN MAST

A - B - C - Proceed the same way as in paragraph 27









D - Glue 224 on 158 (after installing the rigging)
Glue 180 under 158 (centering)
Glue 389 to 390
Glue the assembly on 180

COMPLAINT

SEE

ON THE BACK

30 SAILS ON THE FOREMAST

DIMENSIONS OF THE MODEL

Lenght.....1010 mm
Breadth..... 336 mm
Height (with stand).... 698 mm
Height (without stand). 683 mm

IMPORTANT

PARTS ARE CAREFULLY CHECKED ON PACKING. ALWAYS WANTING TO IMPROVE QUALITY, HELLER ASKS YOU, IN CASE OF COMPLAINT, TO WRITE TO:

HELLER, 58 rue d'Hauteville, PARIS 75010

SENDING WITH THE LETTER:

- THE ATTACHED FORM, DESIGNED FOR THIS PURPOSE
- 5 STAMPS, AND A STAMP ON THE LETTER.

COMPLAINTS NOT PROPERLY MADE OUT WILL NOT BE CONSIDERED.

COMPLAINT

Ref:897 **H.M.S VICTORY** Scale 1/100

FILE N° (write nothing here)

Nr. of faulty parts: _____

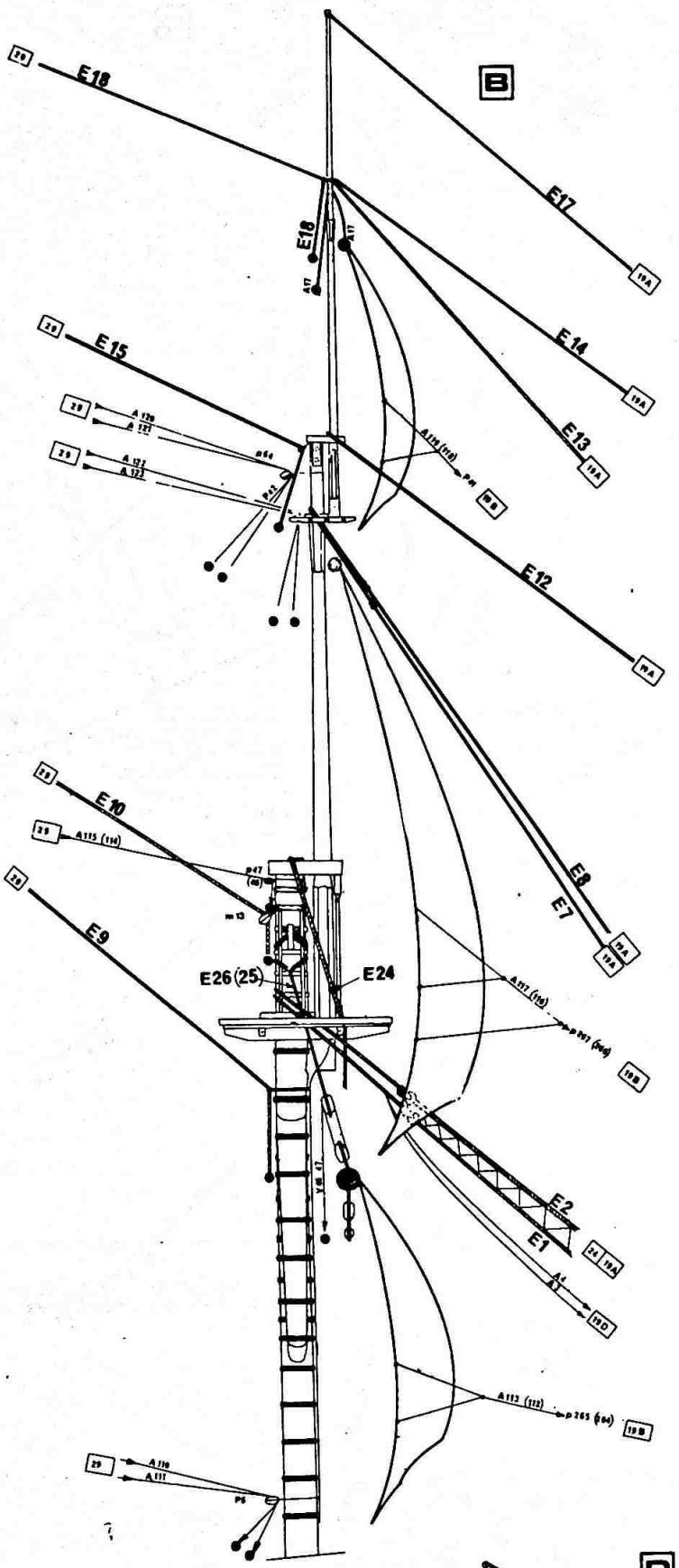
Dispatch to (write in capitals)

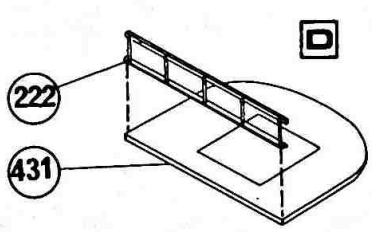
Name: _____

Road : _____

Town: _____

Postal code: _____

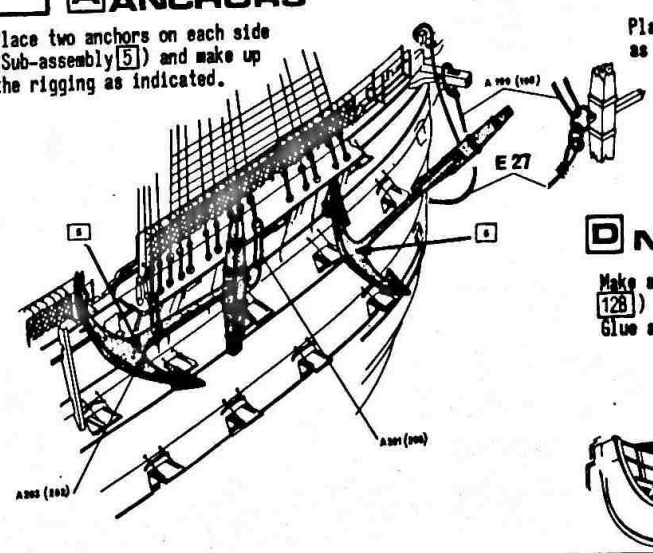




31

A ANCHORS

Place two anchors on each side (Sub-assembly 5) and make up the rigging as indicated.



B BOATS

Place the three boats 4A, 4B, 4C, as indicated in paragraph 24A

C FLAGS

Glue the flags as described in paragraph 26

D NETS

Make a net for each side (See 12B)
Glue and install A204 and A205