1/144 USS WARD FORWARD MAST KIT

ASSEMBLY INSTRUCTIONS

SCALE	PARTS	SUB-ASSEMBLIES	ADHESIVE	DOCUMENT
1/144	6	2 (A · B)	THIN CA	DS-UW-26-001 · A



FIG. A — KIT AS SUPPLIED, ALL SIX PARTS



FIG. B — COMPLETED ASSEMBLY, PORT ELEVATION

01 — KIT COMPONENTS & SUB-ASSEMBLY BREAKDOWN

REF	PART	QTY	DESCRIPTION
GROUP A — MAST STRUCTURE			
A1	Mast with Ladders	1	Lower mast pole with integral vertical ladder and two side brackets on the forward face
A2	Top Mast Platform	1	Flanged collar platform; bore slides over the mast and locates near its head
A3	Top Mast Pole	1	Upper pole carrying the horizontal yardarm; stepped foot locates on the mast head
GROUP B — SEARCHLIGHT ASSEMBLY			
B1	Searchlight	1	Searchlight drum in its yoke, on a pedestal foot
B2	Searchlight Platform	1	Railed platform deck on tripod struts, with a central pedestal seat
B3	Searchlight Ladders	1	Inclined access ladder from deck level to the searchlight platform

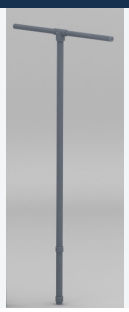
1.1 — PART IDENTIFICATION PLATES



A1
Mast with Ladders



A2
Top Mast Platform



A3
Top Mast Pole



B1
Searchlight

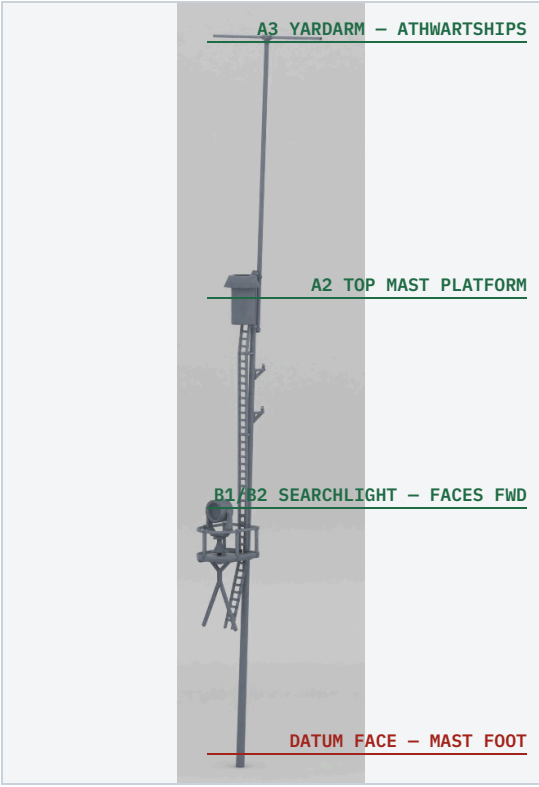


B2
Searchlight Platform



B3
Searchlight Ladders

02 — ORIENTATION GUIDE



DATUM FACE

The flat lower cut face of the mast (A1) — the surface that meets the deck — is the datum for this build. Every levelling and plumb check in Section 04 and Section 06 is judged against it. Stand the mast foot on a flat setting plate before checking anything.

FRONT VIEW — LOOKING FORWARD

The mast ladder and both brackets sit on the forward face. The searchlight (B1) faces forward. The yardarm of the top mast pole (A3) runs left to right, port to starboard.

SIDE VIEW — LOOKING TO STARBOARD

The searchlight platform (B2) projects forward of the mast on its tripod struts. The access ladder (B3) leans forward from the platform. Nothing projects aft of the mast.

VERTICAL ORDER, FOOT TO HEAD

Mast foot (datum) → searchlight platform bracket → upper bracket → top mast platform (A2) → mast head → top mast pole (A3) → yardarm.

03 — PREPARATION

1. Cut every part free of its support raft with flush cutters. Cut at the support, not at the part, and leave the stub to be sanded — twisting a support off a 1/144 ladder takes rungs with it.
2. Sand remaining support nubs back to the surface with a 600–1000 grit stick. Mating faces must be flat; a nub on the platform seat tilts the searchlight.
3. Wash all parts in warm soapy water, rinse, and dry completely. Uncured resin residue stops both primer and adhesive from keying.
4. Test fit every joint dry, in the order given in Section 04, before any adhesive is opened. Open out a tight bore with a twist drill turned by hand, never in a motor tool.
5. Prime and paint the searchlight (B1) and the platform deck (B2) before Step 02 — once the searchlight is seated in its yoke, the deck under it cannot be reached.
6. Work over a tray or a light towel. The ladders and the yardarm are the parts that get lost.

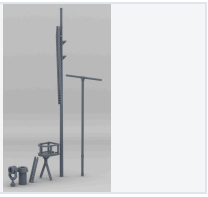
RECOMMENDED TOOLS

- Flush cutters
- Sanding sticks, 600–1000 grit
- Fine-tip tweezers
- Thin CA adhesive + applicator
- CA accelerator (light use only)
- Isopropyl alcohol, cotton buds
- Small engineer's square
- Flat setting plate or glass tile
- Primer suited to resin

04 — ASSEMBLY PROCEDURE

01 INSPECT AND PREPARE ALL PARTS

A1 A2 A3 B1 B2 B3

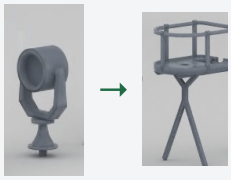


Lay all six parts out and identify each against the plates on page 1. Confirm the two ladder runs are intact and the yardarm of A3 is straight — a bowed yardarm can be eased true in warm water before assembly, not after.

> **CHECK:** all six refs present; no support nub over 0.2 mm on any mating face; no rung missing from either ladder.

02 SEAT THE SEARCHLIGHT ON ITS PLATFORM

B1 → B2



Set the pedestal foot of B1 into the central seat of the platform deck. Turn the drum so it looks out over the open forward rail, square to the platform. Bond with one touch of thin CA at the pedestal foot only — adhesive run up into the yoke locks the drum's elevation permanently.

> **CHECK:** pedestal flush to the deck, no visible gap; drum axis within 2° of the platform's forward face; yoke still free of glue.

03 FIT THE ACCESS LADDER TO THE PLATFORM

B3 → B2



Offer B3 up to the forward face of the platform with the top of the stiles level with the deck. Match the lean of the ladder to the forward tripod strut so the two read as one structure. Hold with tweezers and wick a trace of thin CA into the top contact; let it set before touching the foot.

> **CHECK:** stile tops flush with deck level ±0.3 mm; ladder centred on the forward face ±0.3 mm; both stiles touching, no rocking.

04 MOUNT THE SEARCHLIGHT ASSEMBLY TO THE MAST

B2 → A1



Stand the mast (A1) on the datum plate. Bring the completed searchlight assembly against the lower bracket on the forward face, struts down, so the platform deck reads level. Tack one strut first, sight the deck from the front, correct, then bond the remaining contacts.

> **CHECK:** deck level to the datum within 0.5 mm across its width; platform square to the mast, not skewed to port or starboard; mast ladder not fouled.

05 INSTALL THE TOP MAST PLATFORM

A2 → A1

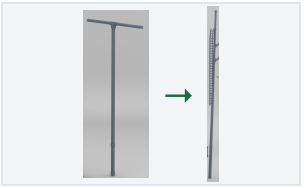


Slide the collar of A2 down over the mast head, flange uppermost, until it sits at its station near the top of the ladder run. Work it down dry to prove the bore before gluing; when it is at height, run a trace of thin CA into the joint from the underside so no adhesive shows on the flange.

CHECK: flange square to the mast within 0.3 mm side to side; collar concentric, no wedge of glue on one side.

06 STEP THE TOP MAST POLE

A3 → A1

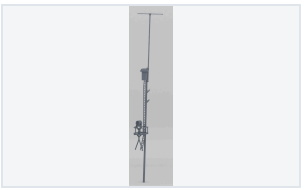


Locate the stepped foot of A3 at the mast head above the top mast platform and hold it in line with the mast, not leaning forward. Turn it so the yardarm runs athwartships — port to starboard, at right angles to the searchlight's line of sight. Fix with one small bead and support the pole until it has set.

CHECK: pole continues the mast line within 1°; yardarm level and perpendicular to the searchlight axis; arms equal off centre ±0.5 mm.

07 SET THE ASSEMBLY TRUE BEFORE FULL CURE

A1 A2 A3 B1 B2 B3



Stand the finished mast on the datum plate and sight it from the front and from the side against a straight edge. Thin CA allows a few seconds of correction; a joint eased true now is a joint that does not need cutting later. Leave the assembly undisturbed for a full cure before handling or masking.

CHECK: mast plumb to the datum within 0.5° in both planes; the whole assembly matches FIG. B on page 1.

05 — HANDLING CAUTIONS

- Resin parts are rigid and brittle. Carry the assembly by the mast, never by the yardarm or a ladder.
- Never force a joint. If it resists, open the bore or sand the spigot.
- Use adhesive sparingly; residue at 1/144 shows through paint.
- Keep parts and the finished model out of direct sunlight and away from heat.
- Not a toy. Keep out of reach of children.

06 — ALIGNMENT CHECKS

02	Searchlight square to platform	±2°
03	Ladder tops flush with deck	±0.3 mm
04	Platform deck level to datum	±0.5 mm
05	Top mast platform square	±0.3 mm
06	Yardarm arms equal off centre	±0.5 mm
07	Mast plumb to datum	±0.5°

07 — FINAL INSPECTION CHECKLIST

- ☐ All six parts installed and correctly identified.
- ☐ Glue residue removed; surfaces clean and ready for paint.
- ☐ Searchlight faces forward; platform level.
- ☐ Every joint fully cured and secure under light load.
- ☐ Mast plumb; yardarm level and athwartships.
- ☐ Assembly matches FIG. B and the reference images.

BUILT BY _____ DATE _____ INSPECTED _____

This 3D-printed item may not be copied or recast.