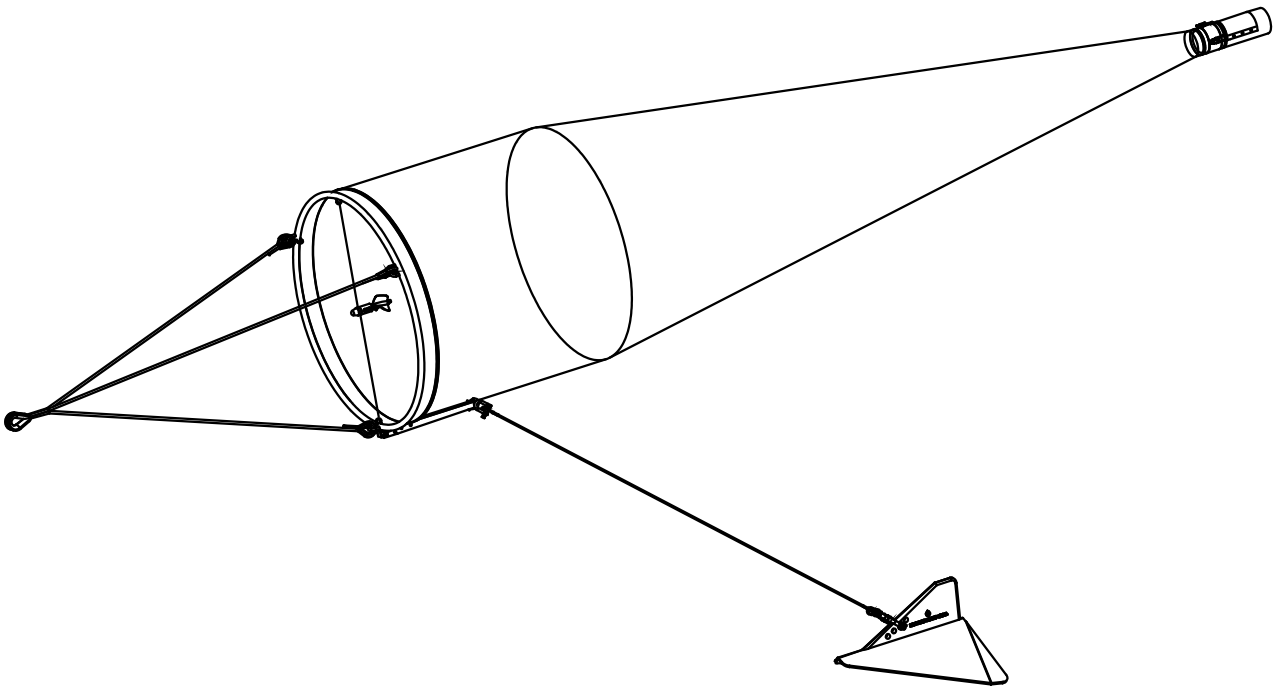


RING-TRAWL-NET

OPERATION MANUAL

Product ID 438 704

Edition 05/26

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GENERAL DESCRIPTION

The Ring Trawl Net based on a California Cooperative Oceanic Fisheries Investigation (CalCOFI) design. It is the standard non-opening / non-closing plankton net for quantitative sampling of larger water volumes during horizontal or oblique tows.

The net supports a Mechanical Flow Meter (optional) placed into the centre of the inlet aperture measuring the water volume filtered.

For easy retrieval the sample is concentrated inside of a rigid PVC bucket featuring an integrated window covered with corresponding mesh fabric. The bucket is attached to the net bag by three quickly released overcentre fasteners.

Use of a depressor (sold separately) is required to create negative lift as well as to increase lowering speed.

STANDARD EQUIPMENT

1. 1 Bridle with thimble and shackles
2. 1 Net ring of stainless steel tubing, 1 metre diameter, with Nylon webbing and zip fastener
3. 1 Truss for the depressor with 2 screws M8x60, 2 nuts M8 and 4 washers
4. Net part, consisting of:
   a) Net part with zip fastener, cylindrical, diameter 1 metre, length 1 metre, of synthetic material, mesh size 500 micron
   b) Net part, conical, upper diameter 1 metre, lower diameter 11 cm, length 3 metres, of synthetic material, mesh size 500 micron
5. 1 Plastic net bucket, consisting of:
   a) Fixing ring with overcentre fasteners, for attaching to the end of a net
   b) Plastic net bucket with side window, covered with sieve gauze 500 micron
6. 1 Wrench 13 mm
7. 1 Operation manual

ADDITIONAL EQUIPMENT

1. 1 Depressor 22 kg with steel robe Ø6 mm, 2 m long with shackle and swivel (Product ID 438 416) (required)
2. 1 Mechanical Flow Meter (Product ID 438 110 or 115) (optional)

TECHNICAL DATA

Length (full assembly):	600 cm
Length (net bag):	400 cm
Diameter:	100 cm
Net opening:	0.785 m^2
Standard mesh size:	500 µm
Weight on air:	19 kg
Material of frame:	stainless steel
Material of net bag:	MOnyl (PA 6.6)

DEPLOYMENT

PREPARATION

- Place the net ring (A) on the ground, zipper sides facing upwards.
- Connect the steel rope with the shackle (B) to the attachment loop (C) at the square of the net ring. Connect the depressor (D) with the swivel (E) to the second end of the steel rope.
- Fix the upper end of the net part (F) to the zip fastener of the Nylon webbing (mounted to the net ring).
- Attach the fixing ring (G) to the lower end of the net part (F) and fasten it hand-tight with the band clamp so it can be easily adjusted in a later step.
- Stretch the net part by pulling the fixing ring.
- Make sure that the net part is not twisted. Otherwise the end of the net part must be rotated at the fixing ring by hand until the seam of the net part runs straight from the Nylon webbing to the fixing ring.
- Fasten the band clamp on the fixing ring.
- Fix the net bucket (H) to the fixing ring with the overcentre fasteners.
- Attach the safety hooks of the net bucket to the loops at the fixing ring.
- Optional: Fix one Mechanical Flow Meter (438 110 or 438 115) with the Nylon ropes to the inner loops of the net ring.
- Connect the bridle (J) with the shackles to the outer loops of the net ring.

TIPS FOR DEPLOYMENT

- The standard mesh size of 500 µm is suitable for collection of fish eggs and fish larvae, the max. towing speed is 4 knots.
- For collection of zooplankton it is recommended to use nets with a mesh of 335 µm, the max. towing speed should not exceed 3 knots.

MAINTENANCE

A minimum of maintenance is required since all metal parts are protected against corrosion.

After use thoroughly rinse the complete Bongo Net with fresh water to avoid salt incrustation and to remove residue of the previous deployment.

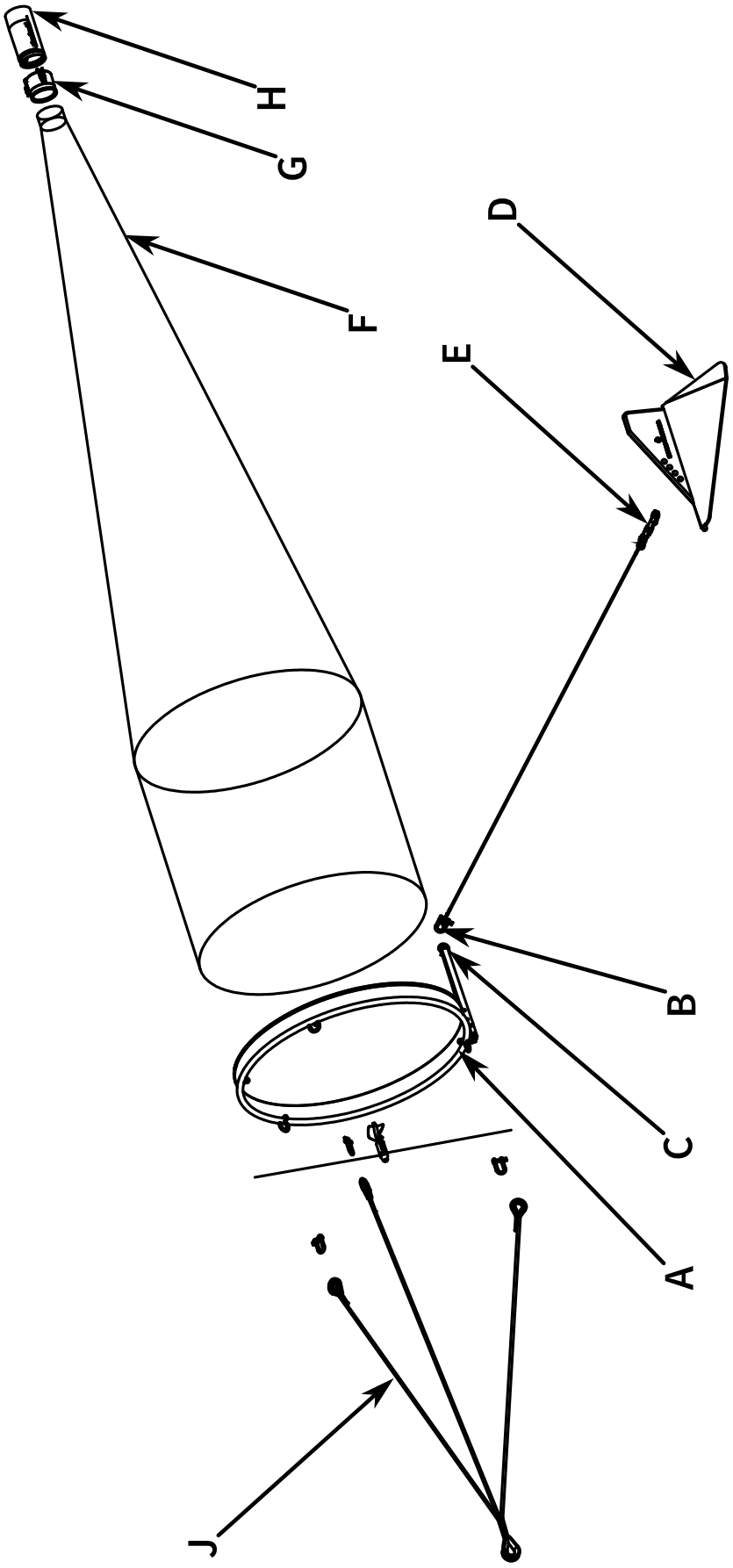


Fig. 1