

One Metre

RIGGING PLAN - booklet version

Description

SAILSetc code

The gooseneck/kicking strap unit supplied depends on the specification of your kit. One of the following drawings, as appropriate, will be provided with the item.

Gooseneck plan

PI01, PI05, PI15
or PI11a/b/c/d/f

The following sheets are collated into this booklet

Mast dimensions	RP-IOM-1
Mast bend	RP-IOM-2
Headsail halyard, topping lift	RP-IOM-3
Mainsail halyard, backstay	RP-IOM-4
Spreaders	PI 21-050
Headsail boom SAILSetc	RP 16d-6
Headsail boom round	RP 16d-7
Main boom	RP 16d-8
Terminations for wire & line	RP 16d-9
Main boom, SAILSetc, kit contents & instructions	RP 160-kit
Headsail boom, lw, kit contents & instructions	RP 180-kit
Headsail boom, SAILSetc, kit contents & instructions	RP 190-kit

*Please note that the numbers placed in circles on the plan sheets relate to the numbered instructions in the **kit instructions, KI16d**, which is available as a separate booklet. The numbers placed in circles are not SAILSetc codes for those products.*

end

IOM - International One Metre Rigging Pack*do not use for SAILSetc One Metre*

Rig	Item Description	No1	No 2	No 3
MAST				
1	mast	1800 mm	1400 mm	1100 mm
	mast section supplied as standard	round	GROOVY	GROOVY
	diameter supplied as standard	11.0 mm	11.1 mm	11.1 mm
1	joint piece (not included in price of kit but supply if mast is supplied in two pieces)			

GOOSENECK

1	gooseneck/kicker for IOM	No 15	No 15	No 15
OR				
1	ball raced gooseneck for IOM	No 11C	No 11C	No 11C

SPREADERS

1	2 x (50 mm spreader tubes + tips) + wire		21-050	21-050
-				

FITTINGS - PER RIG

1	backstay crane, stainless steel		22-040	
1	mast head fitting (1 to suit each size of mast)			23-110 &
23-127				
1	stainless steel wire, 1.5mm Ø x 50 mm long	-		
2	M3 rigging screws		30-030	
6	small bowsies, plastic		57C	
2	miniature bowsies, stainless steel		57X	
10	small crimps		70-012	
1	stainless steel hook		87G	
1	150 mm x 1.6 Ø mm shrink fit tubing		half of SF16	

EITHER - COMPLETED MAIN BOOM & COMPLETED HEADSAIL BOOM - PER RIG

1	completed main boom	350 mm	350 mm	310 mm
1	completed headsail boom	385 mm	350 mm	300 mm
1	counterbalance weight	102-15	102-15	102-15

OR - MAIN BOOM KIT & HEADSAIL BOOM KIT - PER RIG

1	main boom fittings pack + spar	350 mm	350 mm	350 mm
1	l'w headsail boom fittings pack + tube		400 mm	-
-				
1	headsail boom fittings pack + spar		-	350 mm
	350 mm			
1	counterbalance weight	102-15	102-15	102-15

EITHER - 7 STRAND WIRE & CORD - PER RIG

7/5.5/4 m	0.6 mm Ø x 7 strand ss wire (No 1/2/3/rigs)	W060		
1	1.25 mm ss wire x 300 mm	W120		
5m	0.6 mm Ø Dyneema cord	D50		

OR - FLAT WIRE & CORD - PER RIG

7/5.5/4 m	0.9 x 0.3 mm flat ss wire (No 1/2/3/rigs)	WFLAT		
1.5 m	0.6 mm Ø x 7 strand ss wire	W060		
1	1.25 mm ss wire x 300 mm	W120		
5m	0.6 mm Ø Dyneema cord	D50		

DRAWINGS & INSTRUCTIONS - PER ORDER

1	Int. One Metre Rigging plan - free download from website			
	RP16D			
1	Kit Instructions		KI 16D	

end

May 2015
SAILSetc KIT INSTRUCTIONS
KI16d

**One Metre
RIGGING PACK – 2015 version**

step by step instructions for the completion of Number 1, 2 and 3
One Metre rigs from SAILSetc Rigging Packs using Alloy GROOVY mast
section or plain round tube

before starting

Read these instructions and study the **One Metre Rig Plan RP16D** so
that you are familiar with the tools/techniques required and the
general layout of the rig.

rig dimensions

The dimensions will provide rigs suitable for use on SAILSetc
IOMs. For FRAKTAL there is a variation to the gooseneck which is
described separately.

gluing

- DO NOT GLUE anything except where instructed.
- 'Cyano glue' is the term used here for cyano-acrylate glue,
also known as superglue, supaglu, CA, Zap, and various other
trade names.

you will need

Hand drill, drill bits 1.6, 1.8, 2.1 and 3.0 mm diameter, round
nose pliers, wire cutters, screwdriver, cyanoacrylate glue,
junior hacksaw, round needle file, small flat file or abrasive
paper, scissors or sharp knife, heat gun or other safe heat
source.

Dyneema

Although Dyneema will heat seal it tends to form into a blob thus
making it difficult to thread through holes etc. Dyneema is
easiest to cut after a spot of cyano glue has been applied and
allowed to cure. The hard end is then easy to thread through
bowsies etc. Seal knots with a spot of cyano glue, leave briefly
to cure and trim ends short with sharp scissors.

terminations

See the 'terminations for wire & line' sheet for hints and tips
you should know before working with wire, crimps, line and
bowsies.

The correct method of rigging a bowsie on a line is shown on the
sheet. Start by attaching the line to what will be the fixed end
(deck, mast etc). Follow steps 1 to 5 and place the load/item to
be adjusted (hook, end of rigging wire, sheet etc) at step 3.
Take care to pull the knot out of the bowsie before using cyano

glue to lock the knot. Allow to cure and trim off the excess line
before pulling the knot back into hole.

To make a termination in 7 strand wire use a small crimp,
SAILSetc item 70-012, flattened using closely spaced 'nips' made
with end cutters.

To make a termination in flat wire follow the method shown on the
sheet through steps A to E using a small crimp, SAILSetc item 70-
012, flattened using closely spaced 'nips' made with end cutters.

Use 20 mm of shrink fit tube, SAILSetc item SF16, over each
crimped termination of wires to cover any un-trimmed wires and
protect your fingers. Heat gun or hair dryer will provide
sufficient heat.

For terminations at rigging screws use 25 mm of shrink fit tube,
SAILSetc item SF16, over each crimped termination and then add 15
mm of SF-35.

Use the heat gun to shrink the tube before adding any line to the
termination as the heat from the gun will melt the line.

end

mast - GROOVY or round tube

- 1 Start by marking out the masts. Measurements are given from the top of the mast.

The standard No 3 rig kit does not use spreaders. Ignore the plan if it shows a spreader position.

- 2 Add the mast measurement bands using self adhesive tape between 3 and 6 mm wide.

Wrap around the mast several times taking care that the lower edge is at the measurement point for the upper two bands and the upper edge is at the measurement point for the lower band. Alternatively mask the masts each side of the required band and paint them on. Cut the bands where they cross the mast track. SAILSetc can supply a 5 mm wide yellow tape that is ideal for this task - item TL-05.

- 3 **See note 5 first.** Drill the masts 1.6 mm diameter for the forestay, shrouds and spreaders.

- 4 Cut the mast to length allowing for the hull depth and any mast heel fitting.

- 5 If preferred you can add permanent set to the masts (pre-bend) as shown in the diagrams. The bend should be an approximately fair even curve FORWARDS. The offsets at the top are guide figures.

Be aware that once the mast is drilled it is easier to break the mast when adding the bend. If preferred, do the bending first and then the drilling. It is, however, more difficult to drill the masts after bending.

Method: with one hand on one end of the mast material, hold the mast about 800 mm away with the other hand. Rotate both wrists outwards (left anti-clockwise, right clockwise). Move your hands along the mast 500 mm and repeat. Repeat until the whole mast has been covered. Check the bend. If the mast is not bent then you should repeat the process with more force. If it is bent too much or unevenly then you should repeat the process in reverse until the bend is fair. When the rigs are set up on the boat this permanent set will permit greater forestay/backstay tension and still allow the mainsail to set properly.

spreaders

- 10 Cut the aerofoil tubes to length. Best practice has been to make them long enough to push out the shrouds from a straight line only about 0 to 10 mm. So, make them half as long as the distance from the mast to the shroud

attachment point (at deck level) plus 0 to 10 mm. Spreaders are not used on the standard No 3 rig kit.

- 11 Cut the pair of spreader tips in half and push one into each spreader end. Lock in place with a spot of cyano glue.

- 12 Round and smooth one end of the piece of 50 mm long wire and push the other end 20-25 mm into the end of one spreader. Use cyano glue to bond it in place. The spreader tube can be flattened to improve the grip. Use end cutters to nip the spreader tube onto the wire to improve the grip.

gooseneck

No 1 Gooseneck for GROOVY MAST SECTION

Drill the middle of the gooseneck body with a 2.7 to 3.0 mm Ø drill. Clean any rough edges. Push the gooseneck up the track into place. Do not drill the mast. Use the 13 mm screw to hold the gooseneck in place. Do not over-tighten.

No 15 Gooseneck for ROUND TUBE or GROOVY

Where the mast is 12.8 mm diameter round tube, or 12.7 mm diameter GROOVY section, clip the gooseneck body directly to the mast in the required position. Ensure it is aligned properly and drill three holes using the 1.8 mm diameter drill where shown on the gooseneck drawing. Add the self tapping screws carefully to avoid breaking them.

Where the mast is 11.0 mm diameter round, or 11.1 mm diameter GROOVY section, clip the C section plastic packer piece onto the mast where the gooseneck will go. When you are happy it is correctly positioned use cyano glue to lock it in place. Then clip the gooseneck body onto the mast over the plastic packer piece. Place a length of 1.5 mm diameter wire through the spreader hole to help check the alignment of the gooseneck is correct. Drill three holes using the 1.8 mm diameter drill where shown. Add the self tapping screws carefully to avoid breaking them.

Driving home a self tapping screw in one operation can break them. Tighten them half a turn, release them a quarter turn, repeat until driven home. Do not over-tighten.

No 11c Ball Raced Gooseneck for ROUND TUBE or GROOVY

Follow the instructions for Gooseneck No 15.

From August 2007 we have a tack attachment fitting called 'Cunningham ring', item 24-110 or 24-127, that can be added to the mast just above a ball raced gooseneck, item 11. It permits the luff of the mainsail to be slackened slightly when the boom is sheeted out

and allows the tack to move freely around the mast to leeward. A sheet of instructions are provided with the fitting. The fitting has to be added to the mast before the gooseneck body is fixed.

mark out the booms - SAILSetc boom section

- 25 Mark out the boom using a soft pencil as shown in the diagrams and table.

NB the fore end of the main boom and the aft end of the headsail boom are the datum points

Drill the booms making sure that the correct size drill bit is used. The holes in the headsail boom are not required if you will be using the 120d fitting. Clean the drill holes of swarf using a larger drill rotated by hand.

- 26 Trim off the boom to length.

headsail booms - SAILSetc boom section

(see step 100 for lightweight version of headsail boom)

- 31 Add the sheet adjustment fitting, item 104e (with 6 mm screw), and position where indicated. It is worth spending a little time smoothing the end of the hook with a small file first. Add the 'O' ring too.
- 32 Add the adjustable sheet attachment, item 104d (with 5 mm screw), and position where indicated. Note the variation for the No 3 headsail boom where the track slide element of the fitting can be omitted and the steel plate will remain in place between the clew attachment and the aft end fitting.
- 33 Omit this step if using the adjustable headsail boom swivel with ball race, item 120d. Push two eyelets into 1.9 mm diameter holes drilled for the headsail swivel. If the right size drill is not available use a larger drill and glue the eyelets in place. Bend a hook as shown and tie it to the boom using cord as shown.
- 34 The adjustable headsail boom swivel with ball race, item 120d, is not part of the rigging pack but can be supplied as an optional extra. It can be fitted without drilling the spar and is easily adjustable.
- 35 Add the track slide part of item 104a (with 6mm screw) and lightly tighten the screw to hold it in place. Do not add the clew hook yet.

For the No 3 rig headsail boom, where the sheet attachment point is near the aft end of the boom, the sheet attachment steel plate is fitted between the clew attachment and the aft end fitting.

- 36 Add the headsail boom fitting, forward end, item 101d. Use a spot of cyano glue to ensure it does not come loose. Add the pan head screw from the preferred side. The screw will make a 'self tapping' fit in the hole but some care will be needed to avoid over-tightening.
- 37 The headsail boom fitting, aft end, item 101f, needs no preparation. Simply push it into place. When the rig has been fitted to the boat and adjusted it may be possible to reduce the boom length slightly. Once this has been done use a spot of cyano glue to ensure the fitting does not come loose.
- 38 Cut the wire for the forestay (use 0.6 mm diameter x 7 strand wire, W060, 1500, 1100, 850 mm approximately). Form a small loop 50 mm from one end of the wire using a crimp. Attach the loop to the forward headsail boom end fitting with the screw.
- 39 The counterbalance weight, item 102-15 or 102-20, is NOT provided as part of the headsail boom kit. It is provided as part of the Rigging Pack. To fit a counterbalance weight push the wire into place.

When the rig is finished adjust its position to correctly balance the boom. Use a spot of cyano glue to lock in place or drill the underside, 1.6 mm diameter, and use the No 2 x 10 mm self tapping pointed screw as shown.

- 40 Smooth both ends of the wire clew hooks with a small file or abrasive paper. Attach the headsail clew to the clew slide using the hook as shown. Lightly lock in place with the allen key provided.
- 41 Pass the forestay wire through the narrow pocket on the luff of the headsail.
- 42 Finish the upper end of the forestay with a crimp to make a loop as shown so that the forestay ends 10-15 mm above the headsail luff.
- 43 Tie the headsail head to the eye as shown.
- 44 Spare
- 45 Add a length of cord to the hook.
- 46 Attach the cord to the forestay using the bowsie as shown.
- 47 Add the headsail topping lift (cut length 1600, 1200, 950 mm) to the hook, bowsie and headsail boom aft end fitting.
- 48 Add the headsail luff tension control (Cunningham) as shown. There are alternative arrangements but this one works very well.

- 49 Add the headsail sheet (length 600 mm) as shown. Form a loop about 12 mm long and a tail about 50 mm long. Soak the loop and tail in cyano-glue to stiffen them. The tail is used to help feed the sheet through the deck fairleads and sheet attachments. The loop attaches to the sheet adjustment fitting.

main booms

- 58 Add the sheet adjustment fitting, item 104e (with 6 mm screw), and position where indicated. It is worth spending a little time smoothing the end of the hook with a small file first. Add the 'O' ring too.
- 59 Add the adjustable sheet attachment, item 104d (with 5mm screw), and position where indicated
- 60 Spare
- 61 The plastic mainsail boom fitting is placed in the fore end of the boom.
- Note the variation for the ball raced gooseneck version.*
- 62 Push the gooseneck tang into place in the end of the boom.
- 63 Add the main sheet. Form a loop about 12 mm long and a tail about 50 mm long. Soak the loop and tail in cyano-glue to stiffen them.
- 64 Smooth both ends of the wire clew hooks with a small file or abrasive paper. Attach the headsail clew to the clew slide using the hook as shown. Lightly lock in place with the Allen key provided.

rig the masts

- 65 Cut shrouds to length (flat wire if possible, cut lengths 1800, 1350, 1000 mm).
- 66 Push the shrouds through the holes in the mast until they emerge from the top.
- 67 There are two simple options for attaching the upper end of the shrouds:

for round or flat wire

Attach both shroud wires through the large hole in the stainless steel backstay crane, item 22-040. First pass the wires through the plastic mast head fitting. Add a 15 mm length of heat shrink tube to each wire, add a small crimp to each wire, pass each wire through the lowest hole in a backstay crane, pass each wire back through the crimp and clench tightly. Place the heat shrink tube over each termination and apply heat. Assemble the backstay crane into the mast head fitting and into the mast top.

for round or flat wire

Add a miniature metal bowsie to the upper end of each shroud as shown in the series of illustrations in the 'terminations for wire and line' sheet. Note how the bowsie should seat snugly against the inside of the mast.

68 Pass the shrouds through the holes in the end of a pair of spreaders. A 10 mm piece of small shrink fit tube added above and below the spreader and shrunk in place after rigging helps to keep the spreaders perpendicular to the mast.

87-99 Spare

69 Add 25 mm of SF16 and 15 mm of SF35 shrink fit tubing to each shroud.

70 Add a crimp to each shroud.

71 Add a rigging screw to each shroud. Do not make off the shrouds to length until the rig can be added to the boat. See *FINISHING*.

There are two basic methods: attach the bodies of the rigging screws permanently to the hull as shown on the right: bend hooks in the ends of the rigging screws as shown on the left.

72-79 Spare

80 Add the mainsail. If the mast is GROOVY section it is necessary to remove the mast head fitting from the top of the mast.

81 Bend the second piece of 50 mm long wire to the shape shown and place in the mast head fitting. Tie the mainsail head as shown.

82 Add the mainsail luff tension adjustment (Cunningham).

Note the self adjusting variation for use with ball raced goosenecks. Parts not included in kit. You will need a split pin and track slide, item 104b.

83 Smooth both ends of the wire clew hooks with a small file or abrasive paper. Attach the headsail clew to the clew slide using the hook as shown. Lightly lock in place with the Allen key provided.

84 Spare.

85 Cut wire for the backstay (flat wire if possible, length between eyes 1625, 1200 and 925 mm) and attach to the crane as shown. Note that the design of the crane allows the attachment point to be adjusted. Use the most forward position without the backstay fouling the leech of the mainsail. It will be necessary to place the rig on the boat to adjust this properly. Only when you are sure the backstay misses the mainsail leech should you trim off the excess crane material. Cut two pieces of shrink fit tube 15 mm long and place over the crimps.

86 Add the cord at the lower end of the backstay. An improvement is to attach the hook to the hull and have a loop at the lower end of each backstay.

headsail boom - lightweight version

The standard No 1 Rigging Pack is provided with the lightweight headsail boom .

- 100 If the boom is to be used on a SAILSetc IOM, tie the middle of a 500 mm long piece of D30 around the boom band with pin and then add it to the boom. After you have rigged the boom and established the correct position for this fitting you can fix it in place with cyanoglue. Add the bowsie, clip hook and 'O' ring to the line aft of the fitting as shown. Add a bowsie to the line forward of the fitting and use it to tension the headsail luff.

If the boom is to be fitted with a ball race swivel (item 120-100) place it where shown relying on its own in-built friction to keep it in place. In this case add the lines as shown.

- 101 Add the attachment for the headsail sheet where shown. After you have rigged the boom and established the correct position for this fitting you can fix it in place with cyanoglue.
- 102 Push the clew attachment fitting onto the aft end of the boom and carefully bend the hook part of the fitting **forward** through about 45 degrees until it is open enough to permit the clew eyelet of the headsail to hook on.

Because they are made of soft stainless steel the hole in items 104-100 and 104-f can be distorted to a slight oval shape until it grips the tube enough to permit alteration of their position on the boom.

- 103 Cut the wire for the forestay (0.6 mm diameter x 7 strand wire, W060, 1500 mm approximately). Form a small loop in one end with a crimp and leave about 50 mm of excess wire projecting. Attach the loop to the eye of a sheet attachment fitting, item 104-100, using a crimp. Do not trim off the excess wire but push it into the headsail luff pocket. Push the boom end fitting into place on the boom. Position it correctly when the rig is added to the boat and, when you are sure it is correctly placed, use a spot of cyanoglue to ensure it does not move.
- 104 Add the forward end fitting by pushing it into the boom end. Ensure it is correctly aligned with the screw head at the top, to port side, or to starboard side as preferred.
- 105 To fit a counterbalance weight push the wire of the counterbalance weight through the hole in the boom end fitting. Tighten the screw onto the wire.

When the boom is rigged on the boat you should reduce the length of the wire progressively until the counterbalance weight does not project beyond the bow.

- 106 Applies if the boom band with pin/ring system or ball race headsail boom swivel is not to be used.

Take 250 mm of D50 and tie one end to the boom where indicated. Tie the hook to the other end leaving 20-40 mm gap between the hook and boom. Carefully lock in place with a spot of cyanoglue taking care not to stiffen the intervening line with glue.

- 107 Push the headsail boom fitting, aft end, item 101g, into the aft end of the boom and lock in place with a spot of cyanoglue ensuring it aligns properly with the sheet attachment.

finishing

Place the mast in the boat. Hook on the headsail and attach the backstay.

Adjust the rigging screws so that about one third of the thread is engaged. Add the spreaders to the mast, pull the shrouds up tight and clench the crimp tightly. Trim off the excess wire circa 5 mm from the crimp. Place the heat shrink tube over the termination and apply heat. Tension the shrouds by tightening the rigging screws.

After the rig has been used the terminations will 'take up' and it will be necessary to tighten the rigging screws more. Consider using the self locking nuts, item 31b, once the shrouds have stopped stretching.

Tension the forestay and backstay until the mast bend matches the mainsail luff curve. Tension the headsail topping lift to give some twist in the headsail leech. Adjust the kicking strap to give some twist to the main leech.

Note that the design of the backstay crane allows the attachment point of the backstay to be adjusted. Use the most forward position without the backstay fouling the leech of the mainsail. It will be necessary to place the rig on the boat to adjust this properly. Only when you are sure the backstay misses the mainsail leech should you trim off the excess crane material.

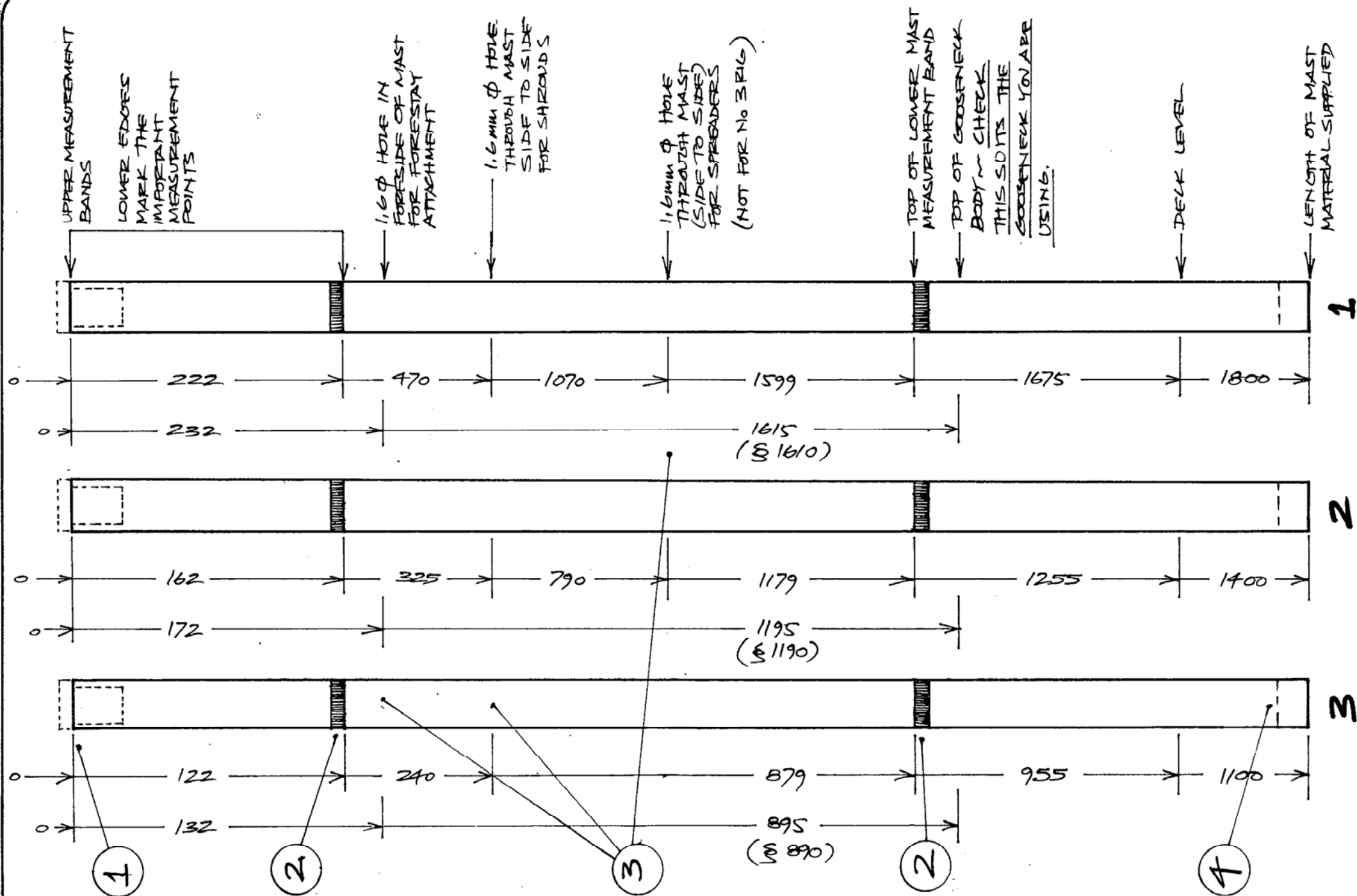
Adjust the sheets to length. Adjust the sail camber using the track slides and tighten the screws lightly to lock the slides in place. Tension the luff of each sail (cunningham) lightly.

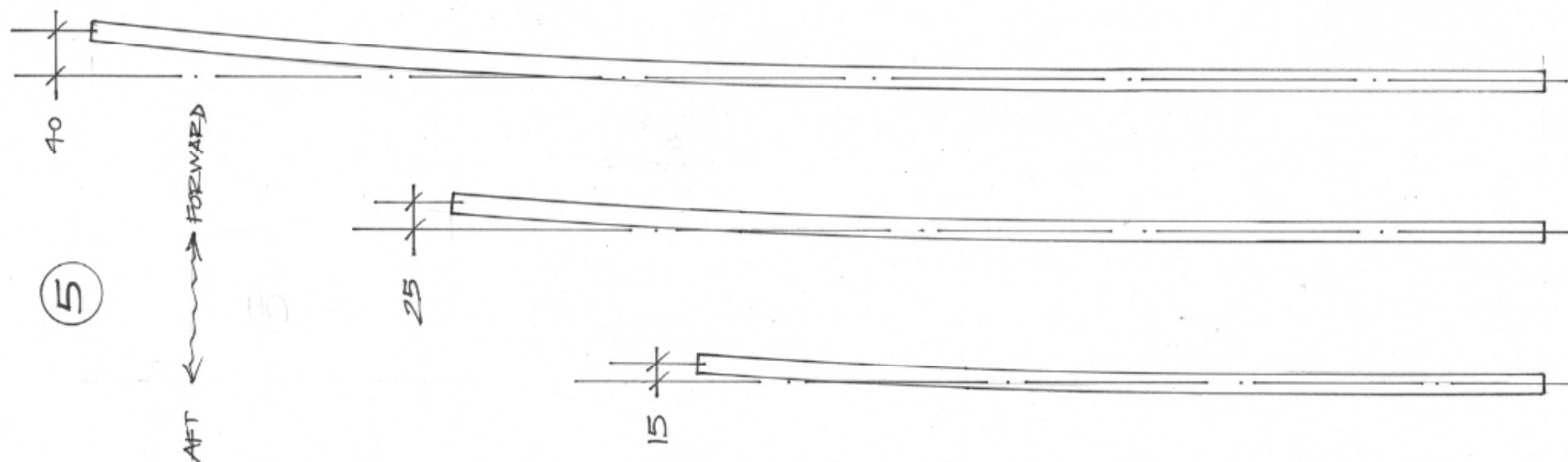
Use a heat gun to shrink the heat shrink tubes if not done already. Avoid overheating any Dacron or Dyneema lines when doing this.

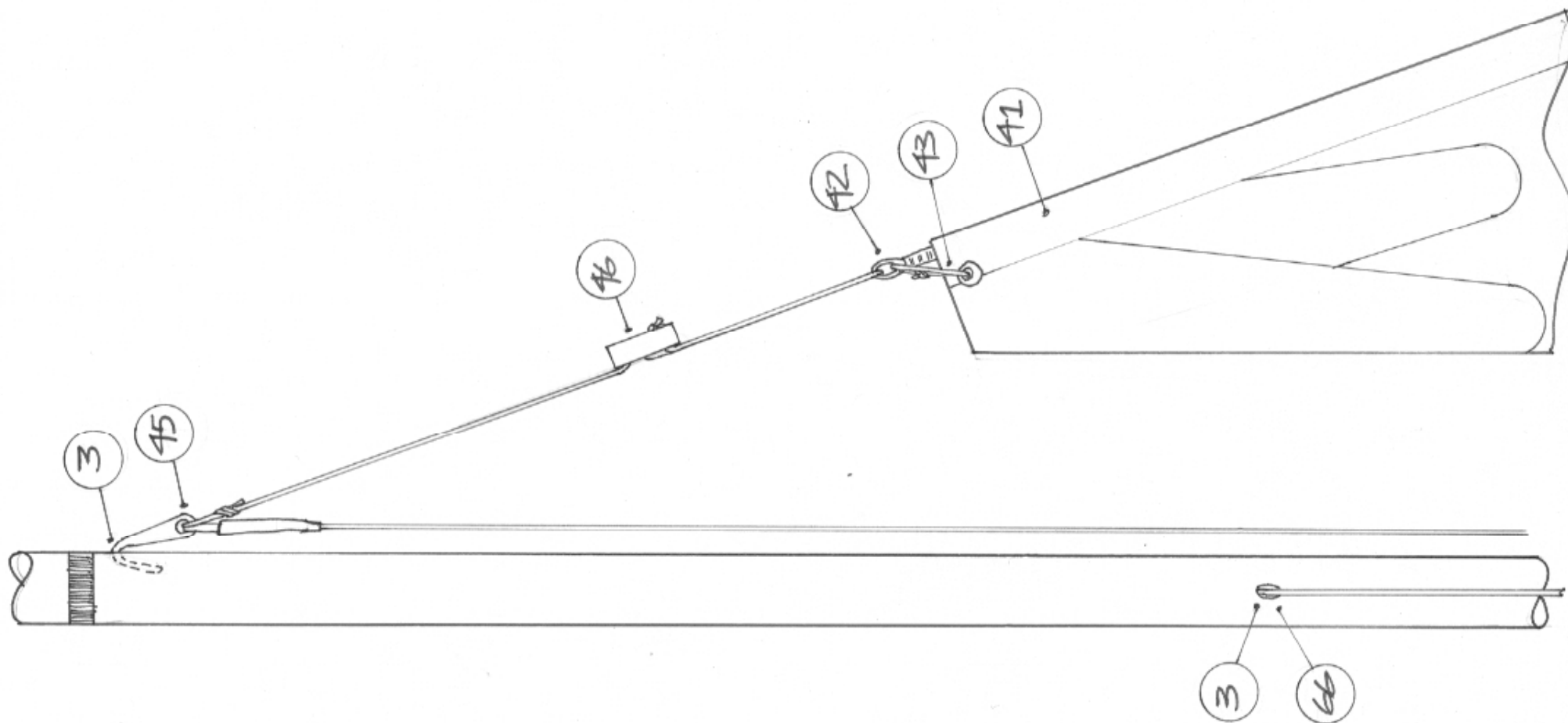
Seal all knots and trim excess cord.

MAST DIMENSIONS

RP-10M-1

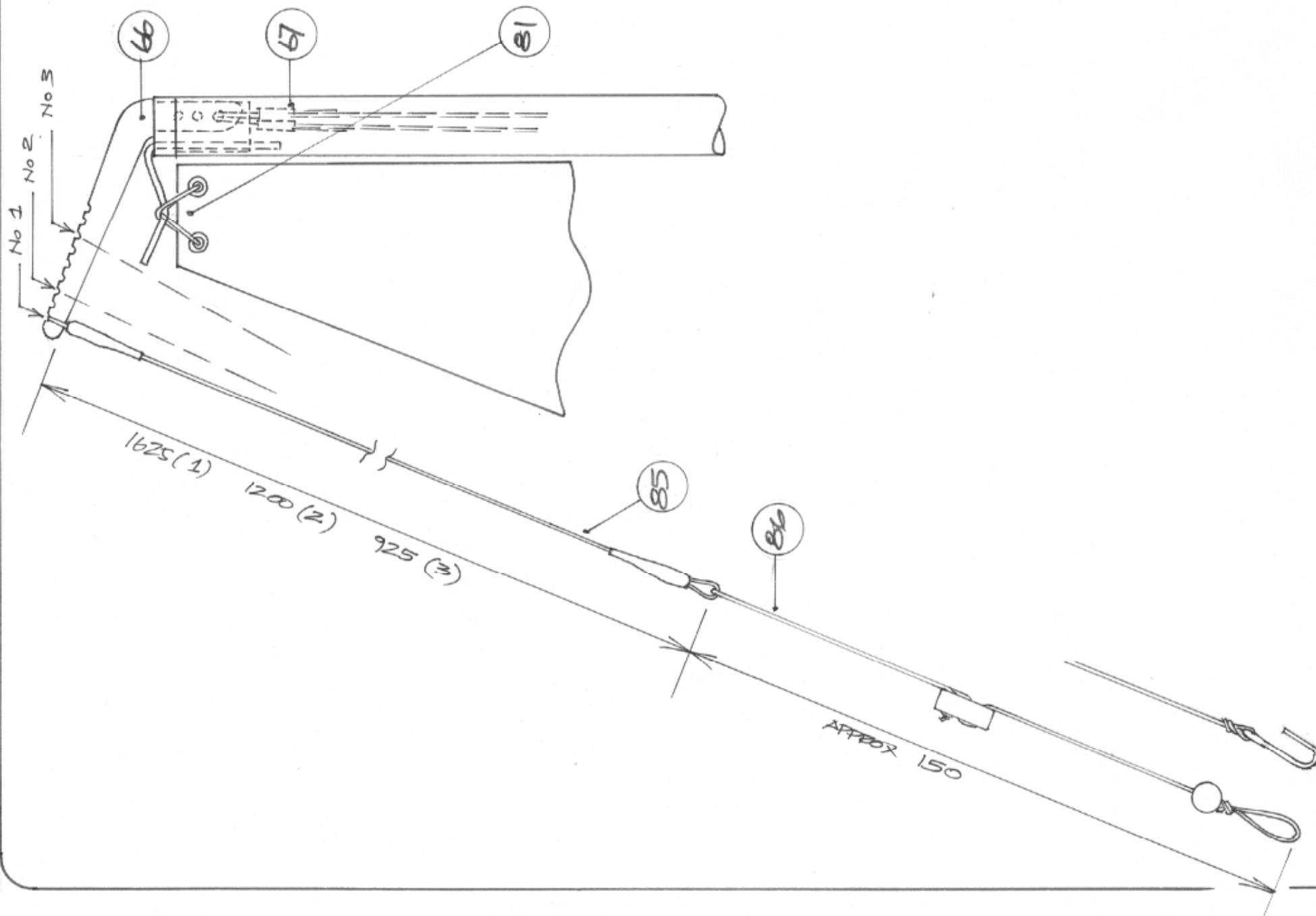






MAINSAIL HALYARD, BACKSTAY

RP-10M-4



SAILSETC Product Information 21-050

Cat No 21-050 - Spreader Kit for One Metre

Kit contents: 2 x spreader bars (50 mm for 21-050)

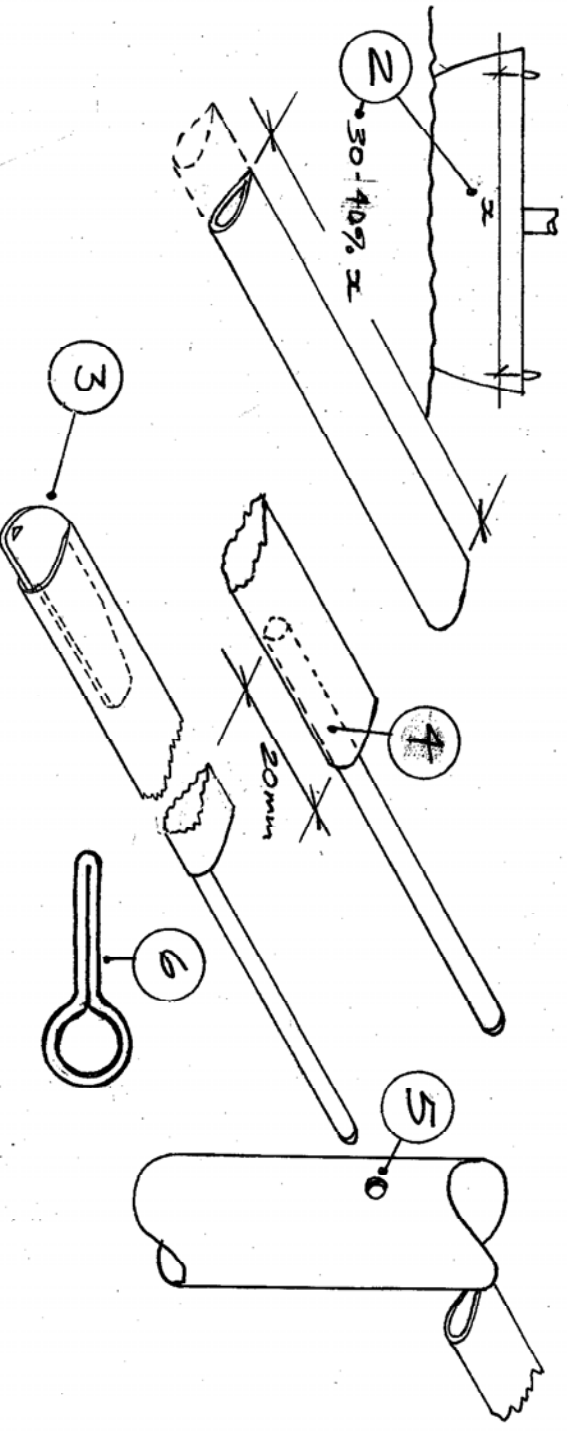
1 pair of spreader tips
1 x 50 mm x 1.5 mm diameter stainless steel rod

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Spreader Kit - aerofoil section

- 1 The spreader bar material may be supplied as two pieces of approximately the correct length, or as one piece from which you should cut the two pieces you need.
- 2 Adjust the spreader bar length to suit your boat. Each should be circa 30% to 40% of the distance between the port and starboard shroud attachment points on the deck. Remove any roughness at the ends with fine abrasive paper.
- 3 Break the pair of spreader tips. Push one into one end of each spreader bar, making sure it is correctly aligned, until it will go no further. Apply a spot of cyano glue to lock in place.
- 4 Take the 50 mm piece of 1.5 mm diameter wire and push it into one end of one spreader bar to a depth of 20 mm. Apply a spot of cyano glue to lock it in place and allow to cure. With a file and abrasive paper make the protruding end of the wire slightly pointed.
- 5 Drill a 1.6 mm diameter hole in the mast half way between the deck and the attachment point of the shrouds. Ensure it is correctly aligned transversely.
- 6 To rig the spreader to the mast, push the wire pin of the spreader bar through the hole in the mast. Add the other spreader bar to the wire sticking out of the mast on the other side. It may be a tight fit initially but this will slacken with use. If it becomes too slack it may be tightened by crimping the spreader bar onto the wire as shown and, when the wire has been removed, adding a spot of cyano glue to the inside of the flattened parts.
- 7 Decide which side of your boat will be uppermost when it is being rigged and ensure the spreader bar with the wire pin is on the shroud on that side of the boat.
- 8 The SAILSetc flat wire will go through the hole in the spreader tip easily if the end of the wire is carefully clipped off at an angle to form a sharp point



SAILSetc

2013

contents

400 mm SAILSetc boom section
bowsie
sail eyelets x 2
'O' ring
hook
plastic ball
headsail boom fitting, forward end, with 8 mm pan head screw
headsail boom fitting, aft end
boom track slide and clew hook
sheet attachment, adjustable
allen key

SAILSetc catalogue no

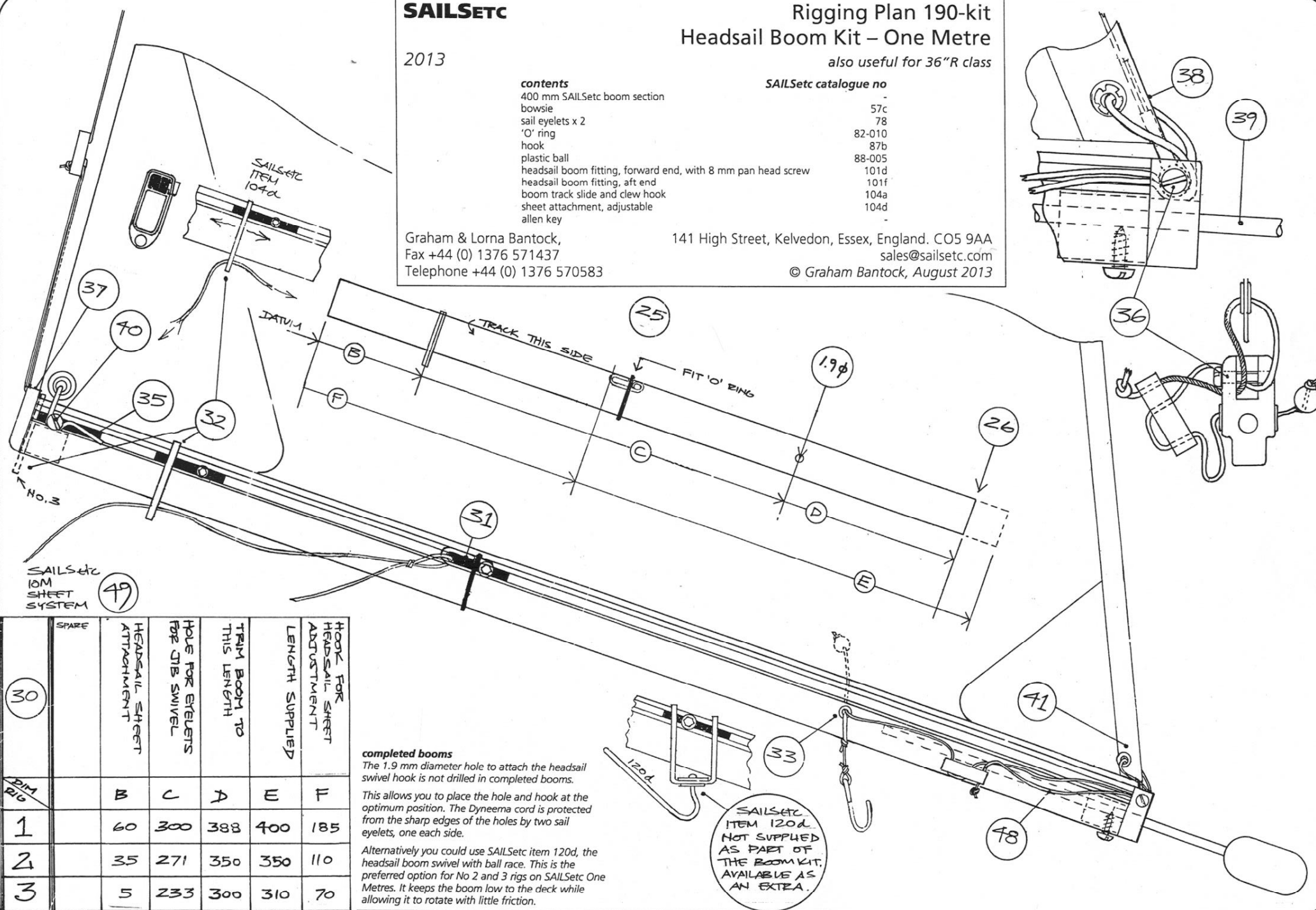
57c
78
82-010
87b
88-005
101d
101f
104a
104d

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Rigging Plan 190-kit Headsail Boom Kit – One Metre

also useful for 36"R class

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	SPARE	HEADSAIL SHEET ATTACHMENT	HOLE FOR EYELETS FOR JIB SWIVEL	TRIM BOOM TO THIS LENGTH	LENGTH SUPPLIED	HOOK FOR HEADSAIL SHEET ADJUSTMENT
		B	C	D	E	F
1		60	300	388	400	185
2		35	271	350	350	110
3		5	233	300	310	70

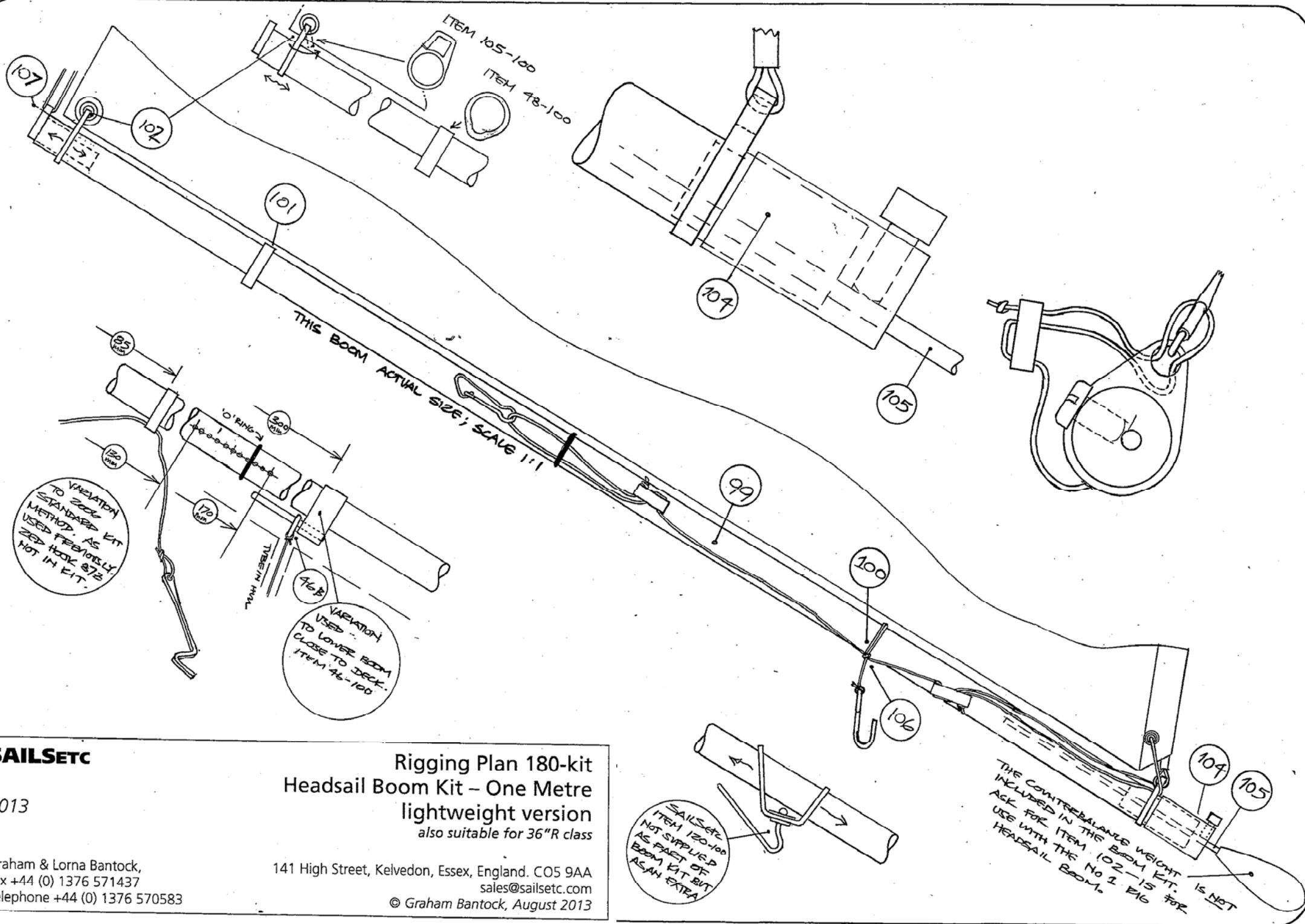
completed booms

The 1.9 mm diameter hole to attach the headsail swivel hook is not drilled in completed booms.

This allows you to place the hole and hook at the optimum position. The Dyneema cord is protected from the sharp edges of the holes by two sail eyelets, one each side.

Alternatively you could use SAILSetc item 120d, the headsail boom swivel with ball race. This is the preferred option for No 2 and 3 rigs on SAILSetc One Metres. It keeps the boom low to the deck while allowing it to rotate with little friction.

SAILSetc ITEM 120d. NOT SUPPLIED AS PART OF THE BOOM KIT. AVAILABLE AS AN EXTRA.



SAILSETC

2013

**Rigging Plan 180-kit
Headsail Boom Kit – One Metre
lightweight version**
also suitable for 36"R class

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Rigging Plan BOOM-M-SE

Main Boom Kit – One Metre

also useful for 36" R class

SAILSetc product reference no

SPAR-SE-350

82-010

104A

104D

104E

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contents

350 mm SAILSetc boom section

'O' ring

boom track slide and clew hook

sheet attachment, adjustable

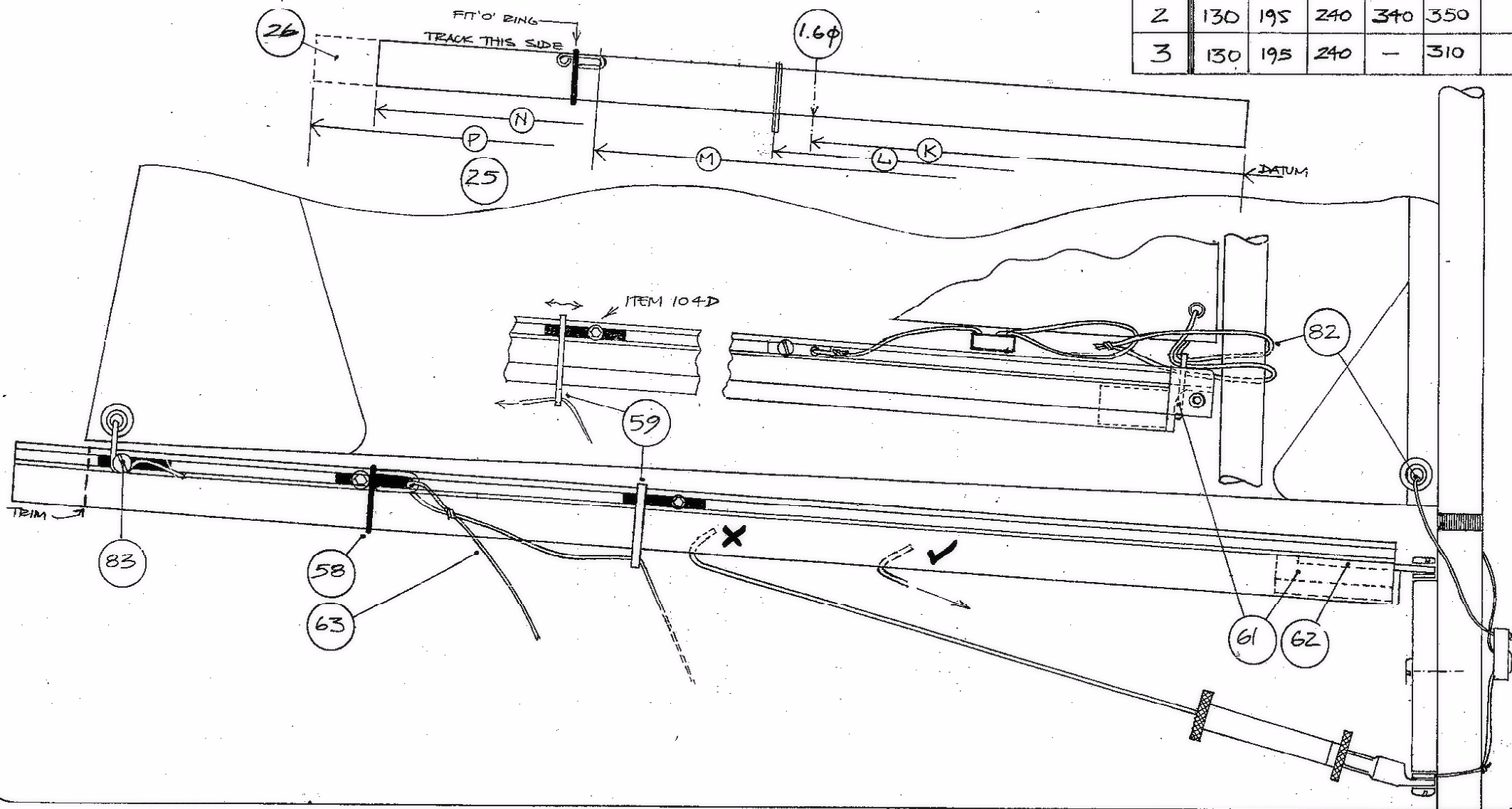
sheet adjustment

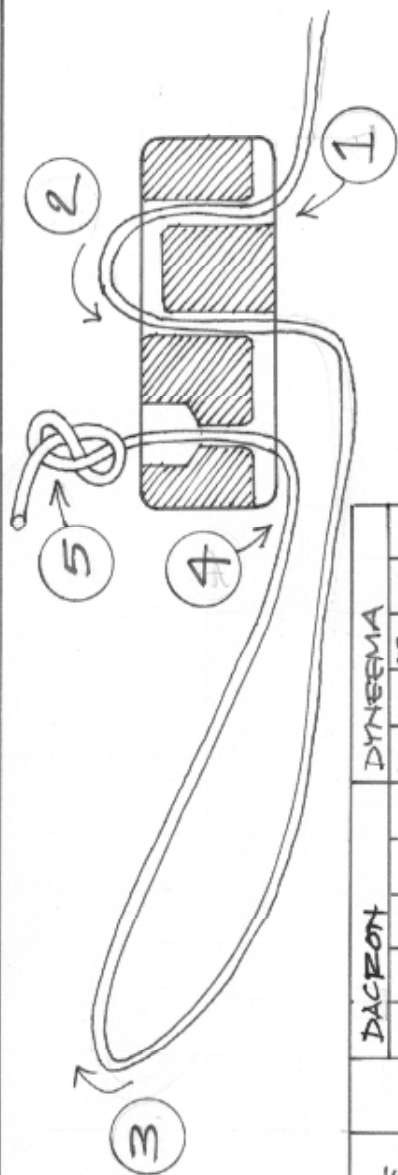
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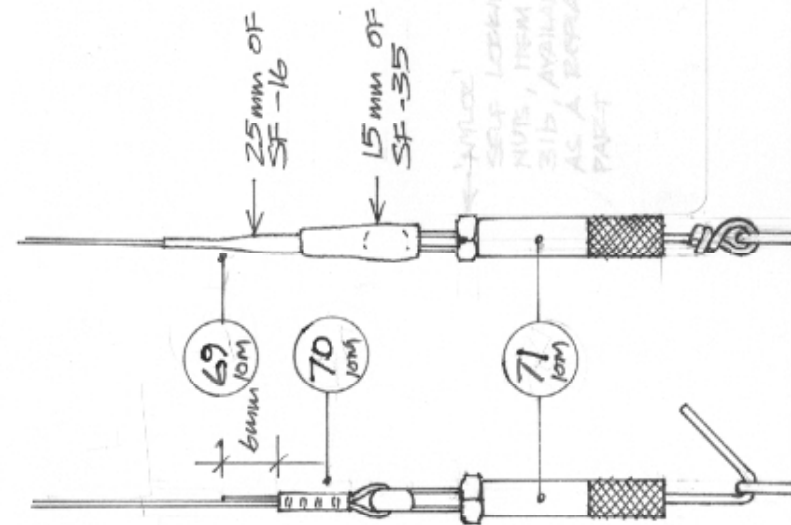
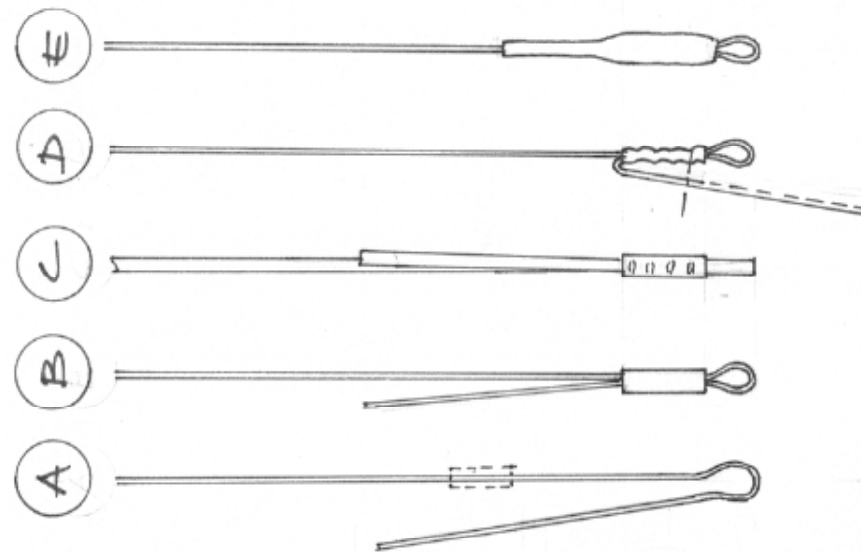
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SPARE	LENGTH OF BOOM MATERIAL SUPPLIED APPROXIMATE	TEAM BOOM TO THIS LENGTH IF PREFERRED	HOOK FOR MAIN SHEET ADJUSTMENT	POSITION FOR MAIN SHEET ATTACHMENT	THOLE FOR KICKING STRAP	SPARE
25						
DIM RIG	K	L	M	N	P	
1	130	195	240	—	350	
2	130	195	240	340	350	
3	130	195	240	—	310	





BOWTIE	DACRON	DYNEEMA	
		D25 D40 D60	D30 D50 D75 D110
SMALL	57c ✓		✓ ✓ ✓ ✓
LARGE	57b	✓ ✓	✓ ✓ ✓ ✓



March 2006
SAILSETC
KIT CONTENTS + INSTRUCTIONS
KC160

1M Main Boom Kit - item 160-kit

BOOM

1	SAILSetc boom section	350 mm
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Quantity	Item Description
SAILSETC Cat No	

FITTINGS

1	'O' ring for 10 mm diameter	82-010
1	moulded plastic boom end piece	103g (note 1)
1	boom track slide + clew hook	104a (with 6 mm screw)
1	sheet attachment, adjustable	104d (with 5 mm screw)
1	sheet adjustment	104e (with 6 mm screw)
1	Allen key to suit track slides	-

DRAWINGS

1	Main Boom Kit - One Metre	RP160
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Note 1
The boom end fitting suitable for use with the ball raced gooseneck is provided as part of the gooseneck/kicking strap.

You will need:

Hand drill, drill bits 1.6, 2.1 mm diameter, round nose pliers, wire cutters, cyanoacrylate glue, junior hacksaw, small flat file or abrasive paper.

Gluings.

Do not glue anything unless instructed.

INSTRUCTIONS

25 Mark out the boom using a soft pencil as shown in the diagrams and table.

NB the fore end of the main boom and the aft end of the headsail boom are the datum points

Drill the boom making sure that the correct size drill bit is used. Clean the drill holes of swarf using a larger drill rotated by hand.

In March 2006 the kit contents were revised to replace the Z hook (item 87z) with a sheet adjustment fitting (new item 104e). These comprise a boom track slide as used for the clew hook and a specially shaped hook that a loop at the end of the sheet clips on to. This saves drilling a row of holes in the boom, eliminates corrosion and permits infinitely variable adjustment.

26 Trim off the boom to length.

58 Add the sheet adjustment fitting, item 104e (with 6 mm screw), and position where indicated. It is worth spending a little time smoothing the end of the hook with a small file first. Add the 'O' ring too.

59 Add the adjustable sheet attachment, item 104d (with 5mm screw), and position where indicated

60 Spare

61 The plastic mainsail boom fitting is placed in the fore end of the boom.

Note the variation for the ball raced gooseneck version.

62 Push the gooseneck tang into place in the end of the boom.

63 Add the main sheet. Form a loop about 12 mm long and a tail about 50 mm long. Soak the loop and tail in cyano-glue to stiffen them.

83 Smooth both ends of the wire clew hooks with a small file or abrasive paper. Attach the headsail clew to the clew slide using the hook as shown. Lightly lock in place with the Allen key provided.

1M Headsail Boom Kit – 180-kit

Lightweight Version

also useful for 36R class

BOOM

1	piece arrow shaft, 10 mm diameter
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Quantity	Item Description	SAILSETC Cat No
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FITTINGS

1	boom band	48-100	
2	bowsie, small	57c	
1	small crimp	70-012	
1	'O' ring for 10 mm diameter	82-010	
1	hook, wire	87b (note 1)	
1	clip hook, large	87-025	
1	headsail boom fitting, forward end	101-100	
(note 2)			
1	allen key for above	-	
1	headsail boom fitting, aft end	101g	
1	sheet attachment	104-100	
1	clew attachment	105-100	

DRAWINGS

1	Headsail Boom Kit - Lightweight Version - One Metre RP180-kit
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note 1
alternatively use the ball raced headsail boom swivel, item 120-100

note 2
the counterbalance weight is NOT included in this kit - order item 102-15 if required.

Instructions:

- 99 The boom material is provided at the correct length - 400 mm.
- 100 If the boom is to be used on a SAILSetc IOM, tie the middle of a 500 mm long piece of D30 around the boom band with pin, item 46-100, and then add it to the boom. After you have rigged the boom and established the correct position for this fitting you can fix it in place with cyanoglue. Add the bowsie, clip hook and 'O' ring to the line aft of the fitting as shown. Add a bowsie to the line forward of the fitting - it will be used to tension the headsail luff.
- If the boom is to be fitted with a ball race swivel (item 120-100) place it where shown relying on its own in-built friction to keep it in place. In this case add the lines as shown.
- circa 400 mm
- 101 Add the attachment for the headsail sheet where shown. After you have rigged the boom and established the correct position for this fitting you can fix it in place with cyanoglue.
- 102 Push the clew attachment fitting onto the aft end of the boom and carefully bend the hook part of the fitting forward through about 45 degrees until it is open enough to permit the clew eyelet of the headsail to hook on.
- Because they are made of soft stainless steel the hole in items 104-100 and 105-100 can be distorted to a slight oval shape until it grips the tube enough to permit alteration of their position on the boom.
- 103 Cut the wire for the forestay (1500 mm approximately). Pass one end through the small hole in one of the sheet attachment fittings, 104-100, and form a small loop with a crimp leaving about 50 mm of excess wire projecting. Push the fitting onto the boom in approximately the correct place. After you have rigged the boom and established the correct position for this fitting you can fix it in place with cyanoglue.
- 104 Add the forward end fitting by pushing it into the boom end. Choose whether you want the screw head on the top or to one side of the boom.
- 105 To fit a counterbalance weight, slacken the screw a little, push the wire of the counterbalance weight into the hole in the forward end fitting and re-tighten the screw.
- When the boom is rigged on the boat you should ensure the counterbalance weight does not project beyond the bow.
- 106 Applies if the boom band with pin/ring system or ball race headsail boom swivel is not to be used.
- Take 250 mm of D50 and tie one end to the boom where indicated. Tie the hook to the other end leaving 20-40 mm gap between the hook and boom. Carefully lock in place with a spot of cyanoglue taking care not to stiffen the intervening line with glue.
- 107 Push the headsail boom fitting, aft end, item 101g, into the aft end of the boom and, after ensuring it aligns properly

with the other fittings, lock in place with a spot of
cyanoglue.
end