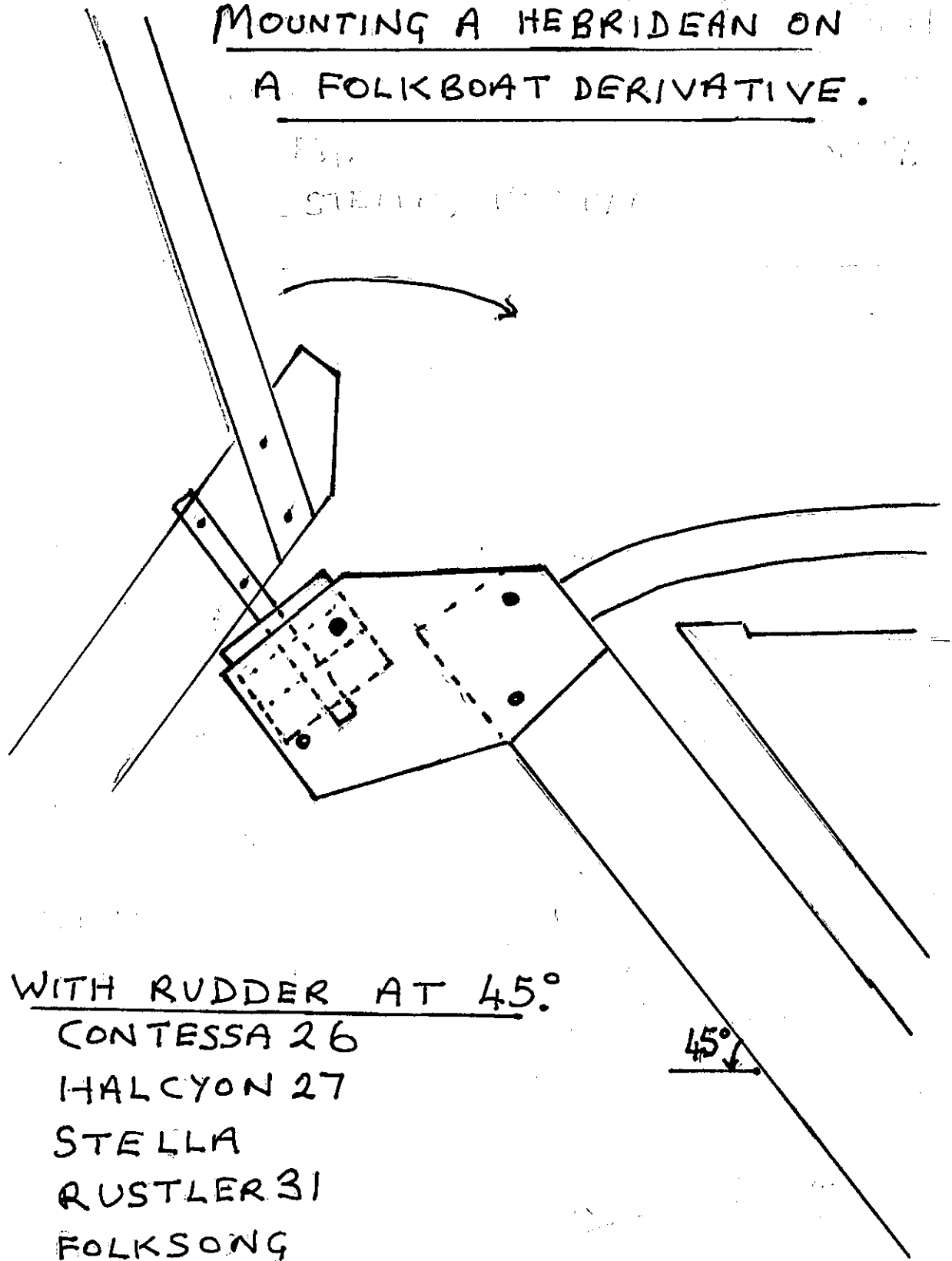


MOUNTING A HEBRIDEAN ON
A FOLKBOAT DERIVATIVE.



WITH RUDDER AT 45°

E.G. CONTESSA 26

HALCYON 27

STELLA

RUSTLER 31

FOLKSONG

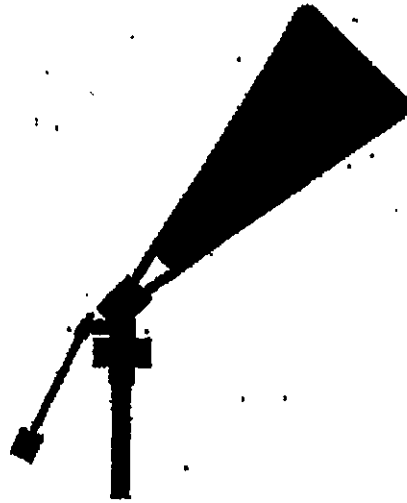
MARIEHOLM 26

BOWMAN 26

INVICTA

HURLEY 27.

TWISTER (AS IN VIDEO "HEBRIDEAN IN ACTION")



HEBRIDEAN

SERVO PENDULUM WIND VANE

Construction Manual

Part 2: Plans

NOT ALL PAGES ARE INCLUDED HERE

© John Fleming

Do-it-yourself yacht self-steering
for vessels with up to one metre of stern freeboard

Name of purchaser

DIY. SAILOR

License number


GOING PLACES ?

This manual is for the construction of one Hebridean wind vane.
For further licenses please contact John Fleming.
john.fleming173@gmail.com

www.windvaneseelfsteering.co.uk

1. PREFABRICATED S/S PARTS

DRILL OUT ALL HOLES MARKED (6) WITH A 6MM BIT.

PART 1. 

x1.

PART 2.



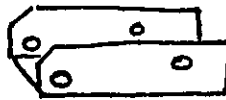
x1.

PART 3.



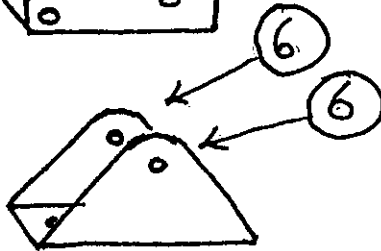
x1.

PART 4.



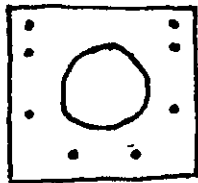
x2.

PART 5.



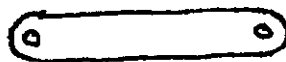
x2.

PART 6.



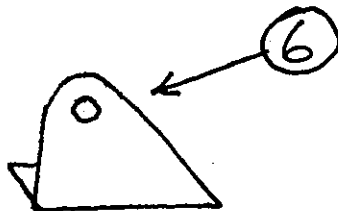
x3.

PART 7.



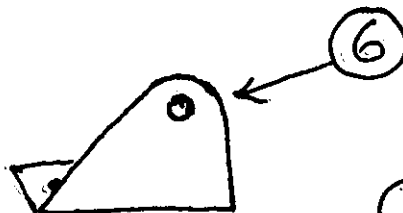
x1.

PART 8.



x2.


PART 9.




x2


Copyright protected.

2.


PART 10.  x2

PART 21.  x1.

PART 11.  x1


PART 22.  x1.
70

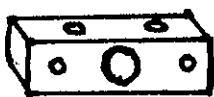
PART 12.  x1.


PART 23  30 x 4
15

PART 13.  x1

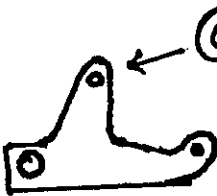
PART 24


PART 14.  x1
⑥


 x2.
HOLES
1 @ 20mm
1 @ 22mm
diameter

PART 15.  x1 5mm NEOPRENE RUBBER.

PART 25.

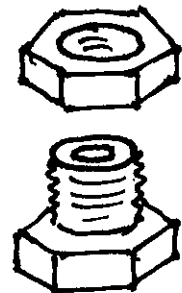
PART 16.  x1.
⑥ ⑥

 x1
HOLES
Both @ 22mm

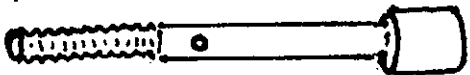
PART 17.  25. x1
⑥

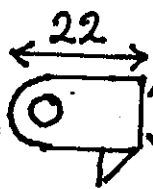
PART 26 x1.

PART 18.  x2.
⑥



PART 19.  x1

PART 27.  x6.

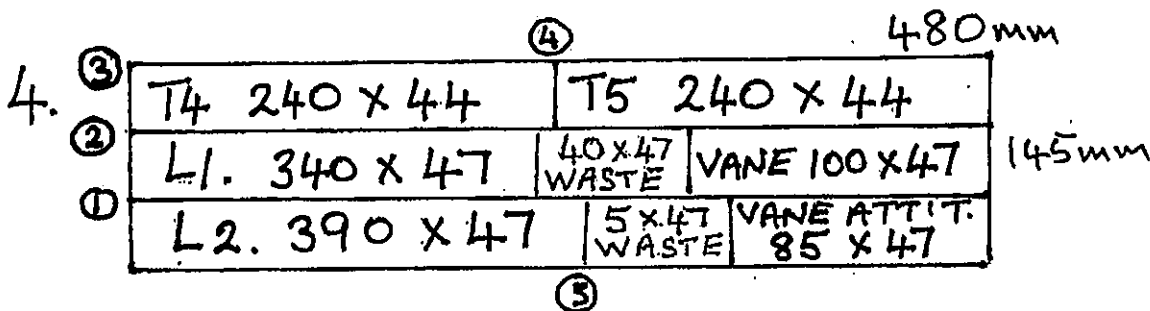
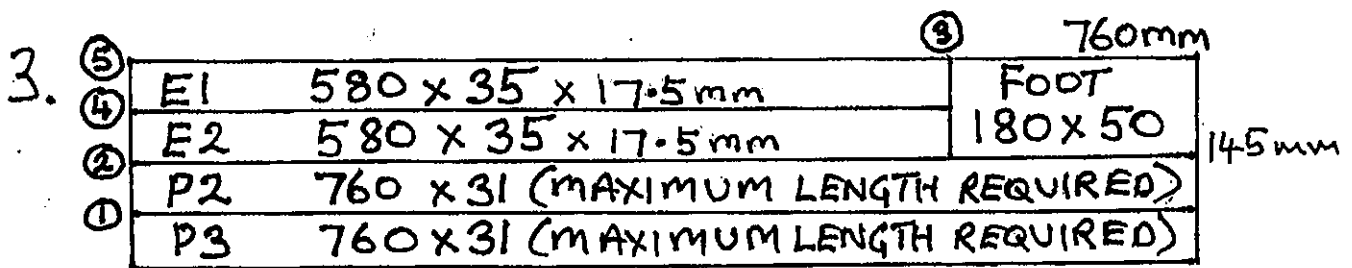
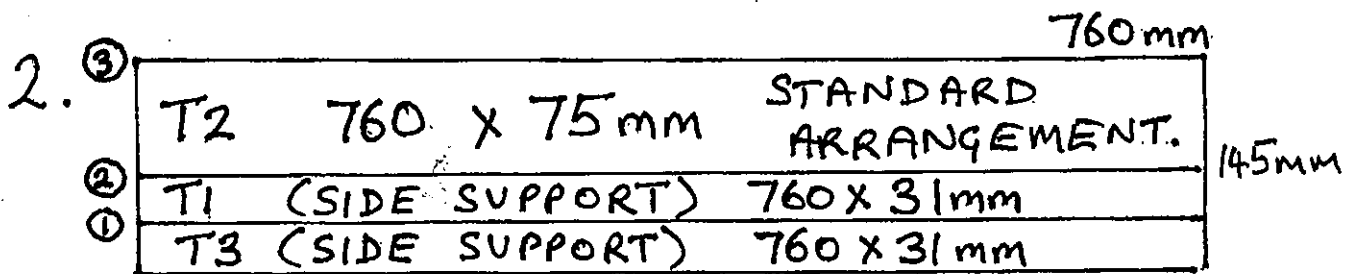
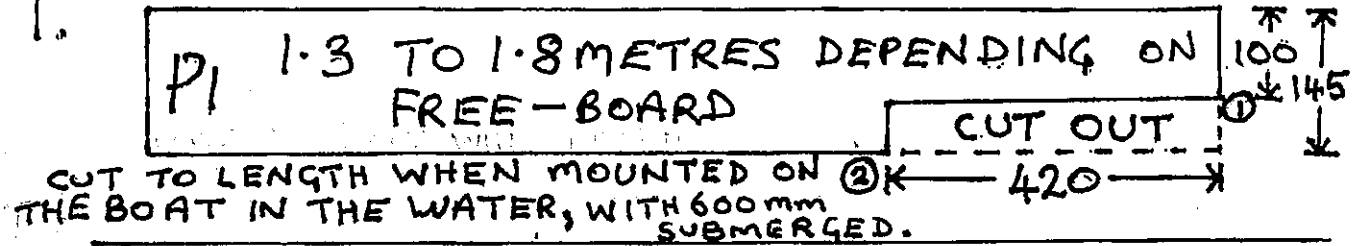
PART 20.  22 15 x1
⑥

Copyright protected.

3. TIMBER (HARD WOOD) PLANK 145 x 20 mm

IN THE H1 KIT T₁, T₂ AND T₃ ARE SUPPLIED 960mm LONG AS FOR THE "ALTERNATIVE" ARRANGEMENT.

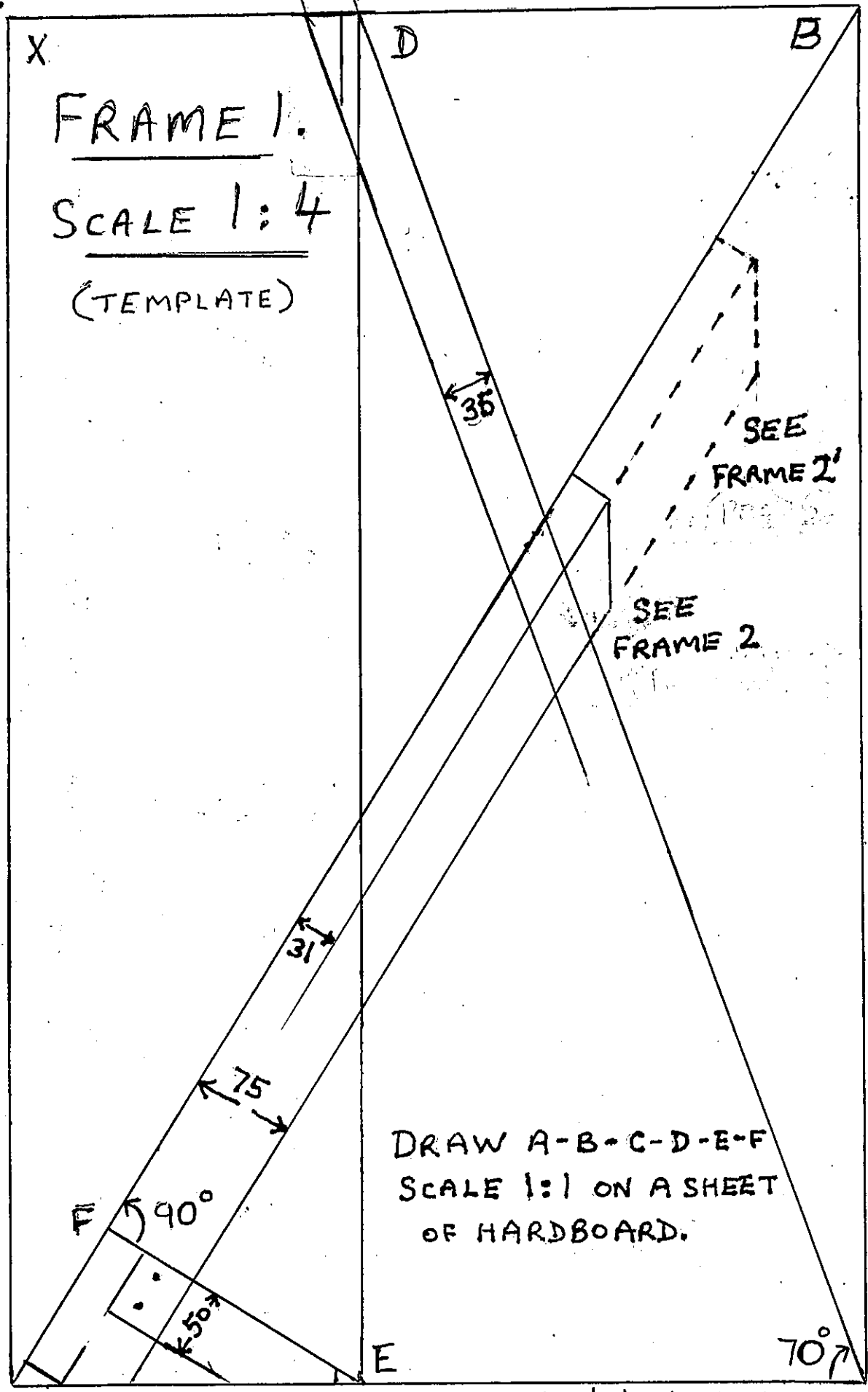
PENDULUM BLADE



FOR H2: USE THE DIAGRAMS 1-4 TO SAW ALL THAT IS REQUIRED FOR THE FRAME AND THE PENDULUM. THE LENGTHS OF THE PENDULUM AND THE SIDE SUPPORTS (P₁, P₂ AND P₃) ARE THE MAXIMUM LENGTHS FOR A HIGH FREE-BOARD.

CUT ACCURATELY WITH A CIRCULAR SAW IN ORDER (3mm BLADE) ① TO ⑤. Copyright protected.

4.



Copyright protected

5.

THE
TURRET.

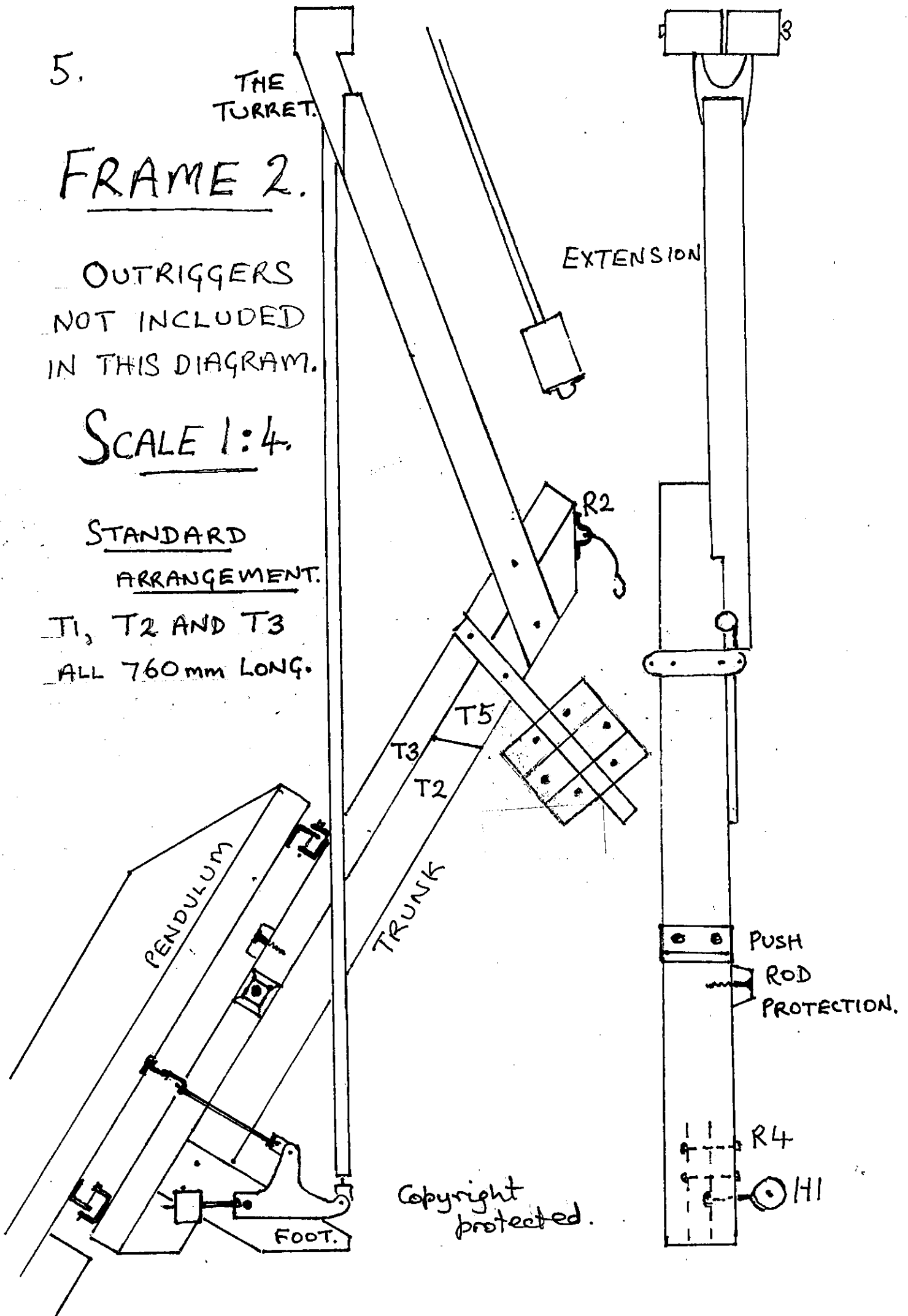
FRAME 2.

OUTRIGGERS
NOT INCLUDED
IN THIS DIAGRAM.

SCALE 1:4.

STANDARD
ARRANGEMENT.

T1, T2 AND T3
ALL 760 mm LONG.



6.

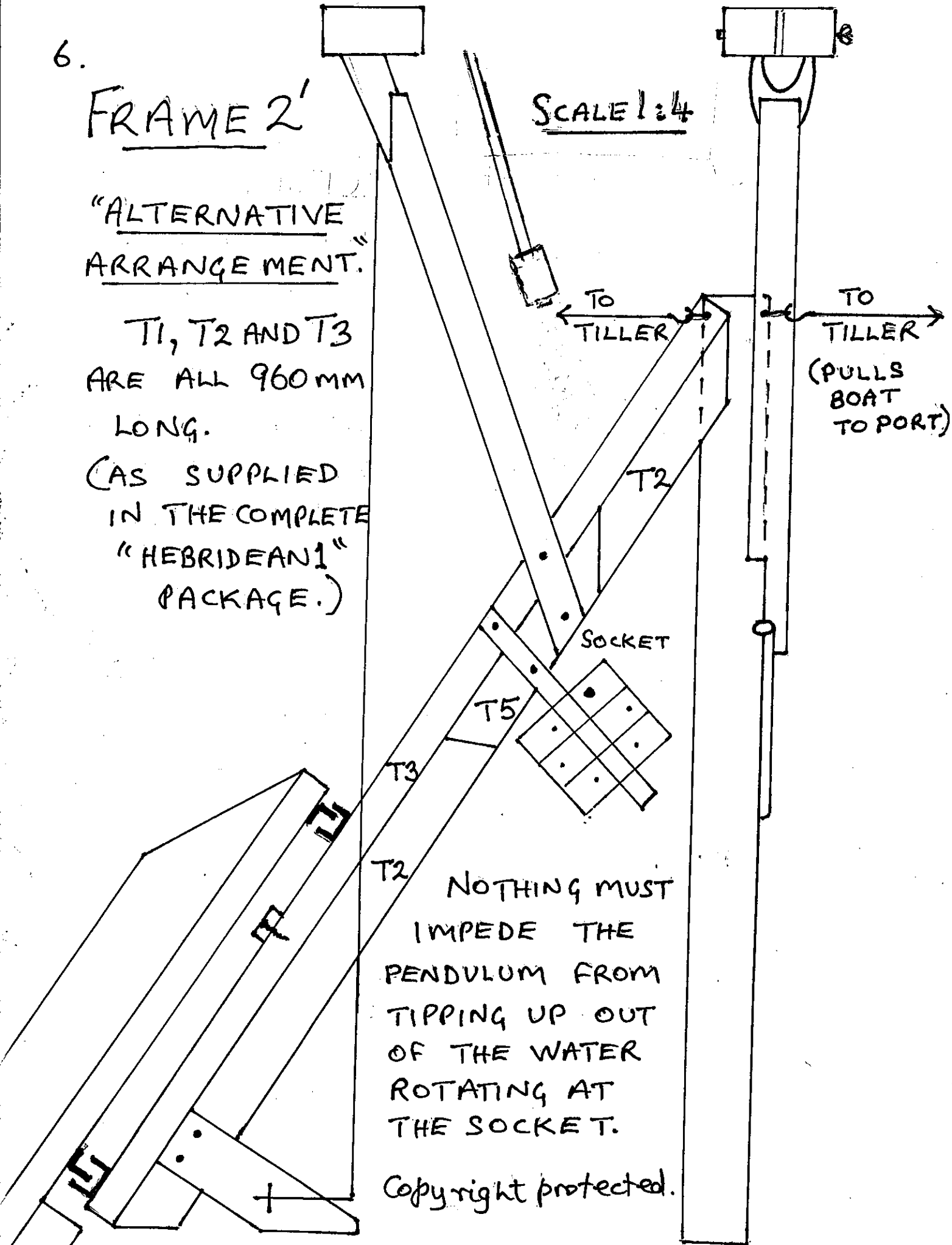
FRAME 2'

"ALTERNATIVE
ARRANGEMENT."

T1, T2 AND T3
ARE ALL 960MM
LONG.

(AS SUPPLIED
IN THE COMPLETE
"HEBRIDEAN1"
PACKAGE.)

SCALE 1:4



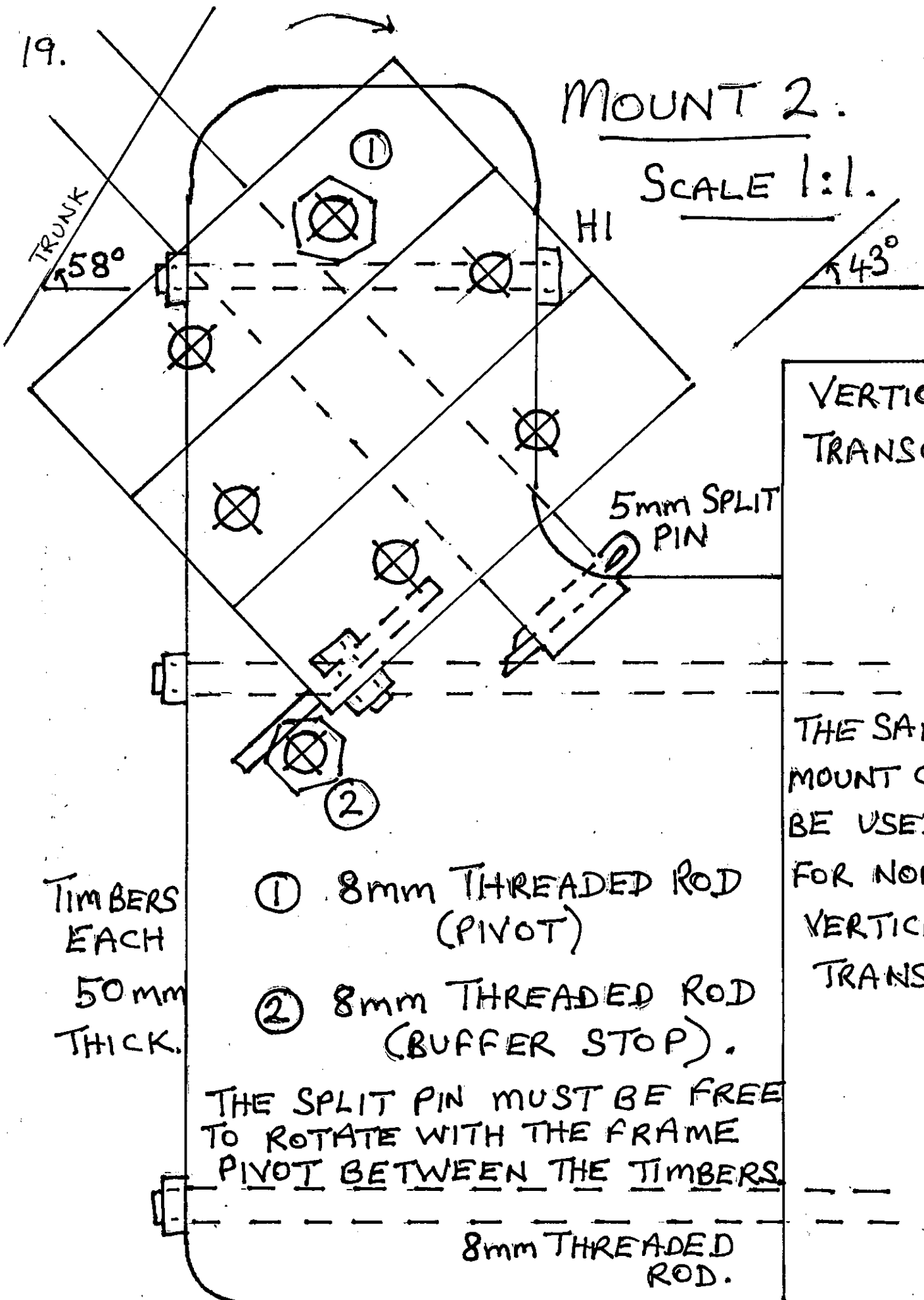
NOTHING MUST
IMPEDE THE
PENDULUM FROM
TIPPING UP OUT
OF THE WATER
ROTATING AT
THE SOCKET.

Copyright protected.

19.

MOUNT 2.

SCALE 1:1.



VERTICAL TRANSOM

5mm SPLIT PIN

THE SAME MOUNT CAN BE USED FOR NON-VERTICAL TRANSOMS

TIMBERS EACH 50mm THICK.

- ① 8mm THREADED ROD (PIVOT)
- ② 8mm THREADED ROD (BUFFER STOP).

THE SPLIT PIN MUST BE FREE TO ROTATE WITH THE FRAME PIVOT BETWEEN THE TIMBERS.

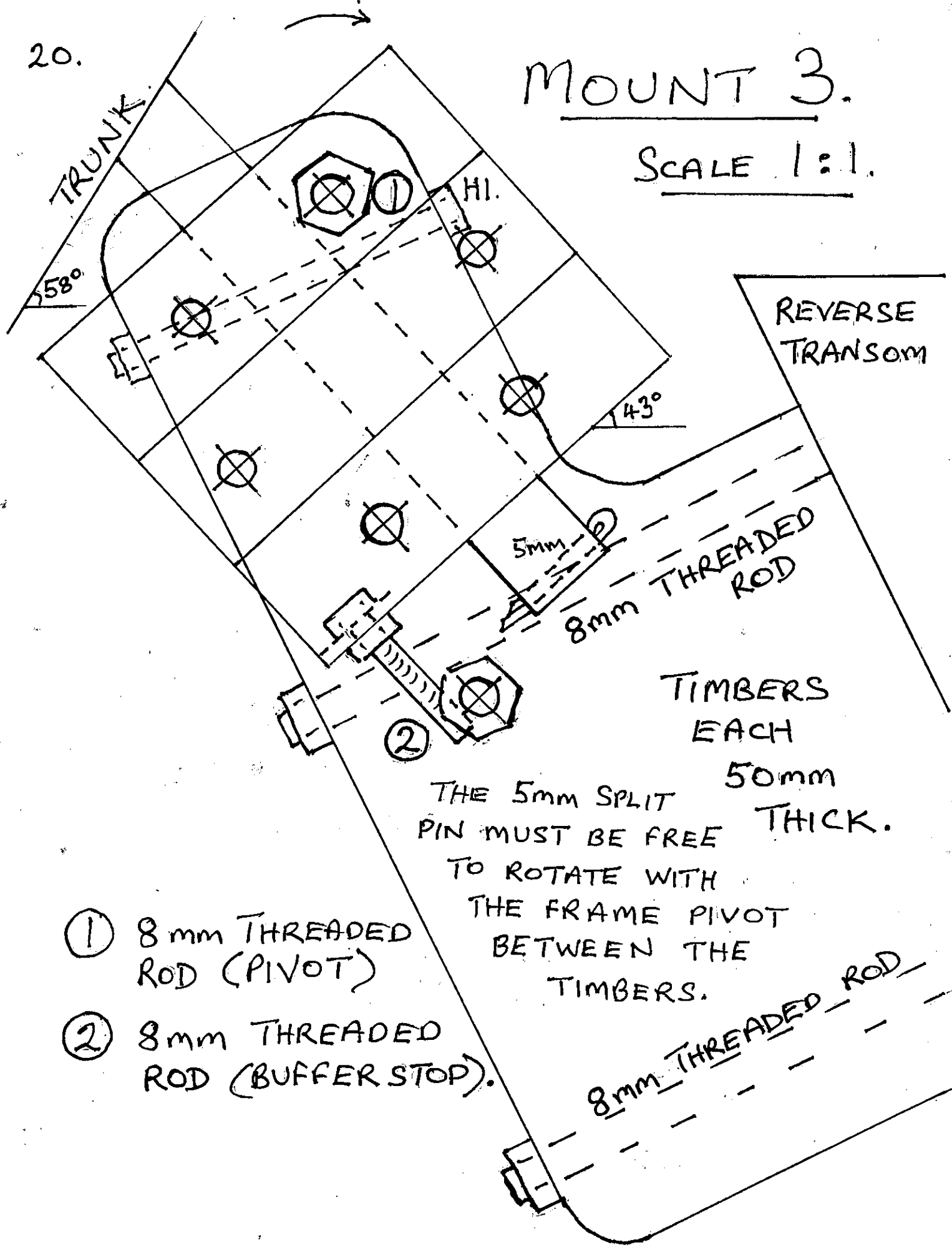
8mm THREADED ROD.

Copyright protected.

20.

MOUNT 3.

SCALE 1:1.



REVERSE TRANSOM

5mm
8mm THREADED ROD

TIMBERS EACH

50mm

THICK.

THE 5mm SPLIT PIN MUST BE FREE TO ROTATE WITH THE FRAME PIVOT BETWEEN THE TIMBERS.

- ① 8mm THREADED ROD (PIVOT)
- ② 8mm THREADED ROD (BUFFER STOP).

8mm THREADED ROD

21

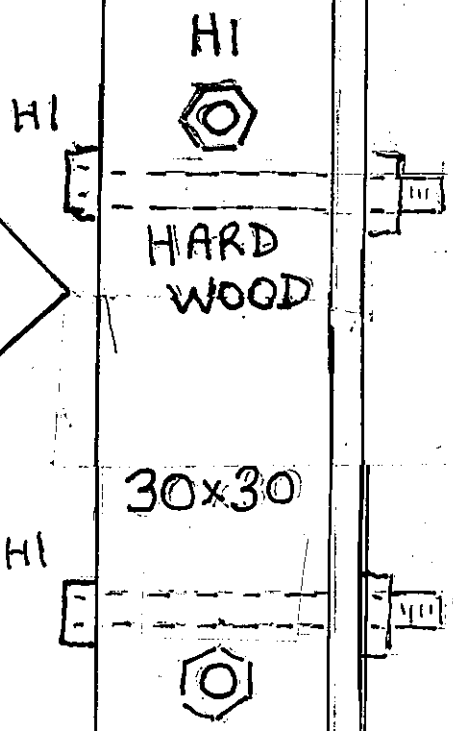
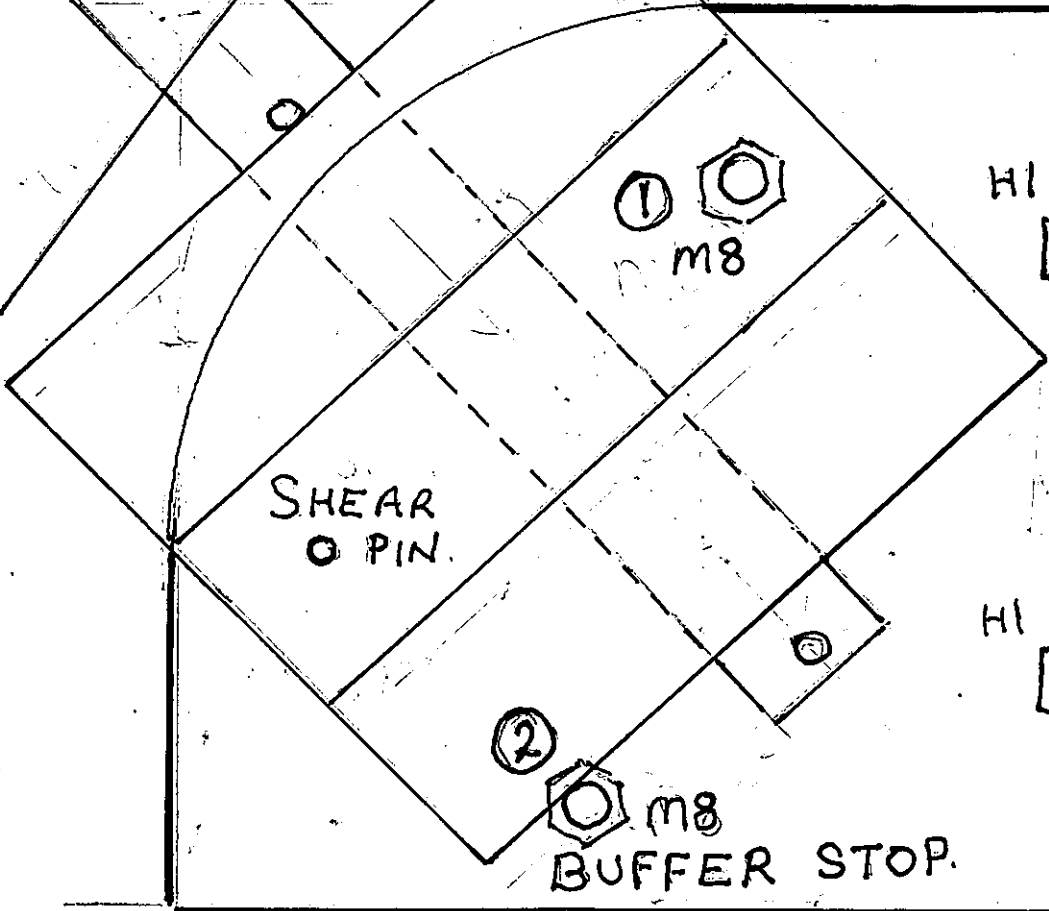
TRUNK

58°

MOUNT 4.

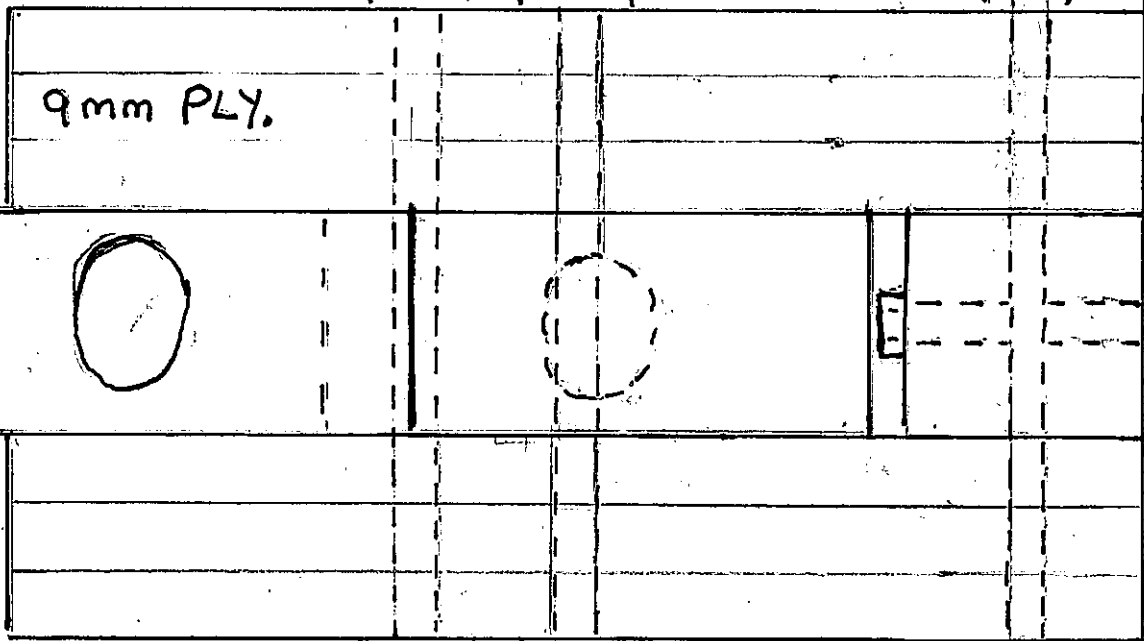
SCALE 1:1.

TRANSOM

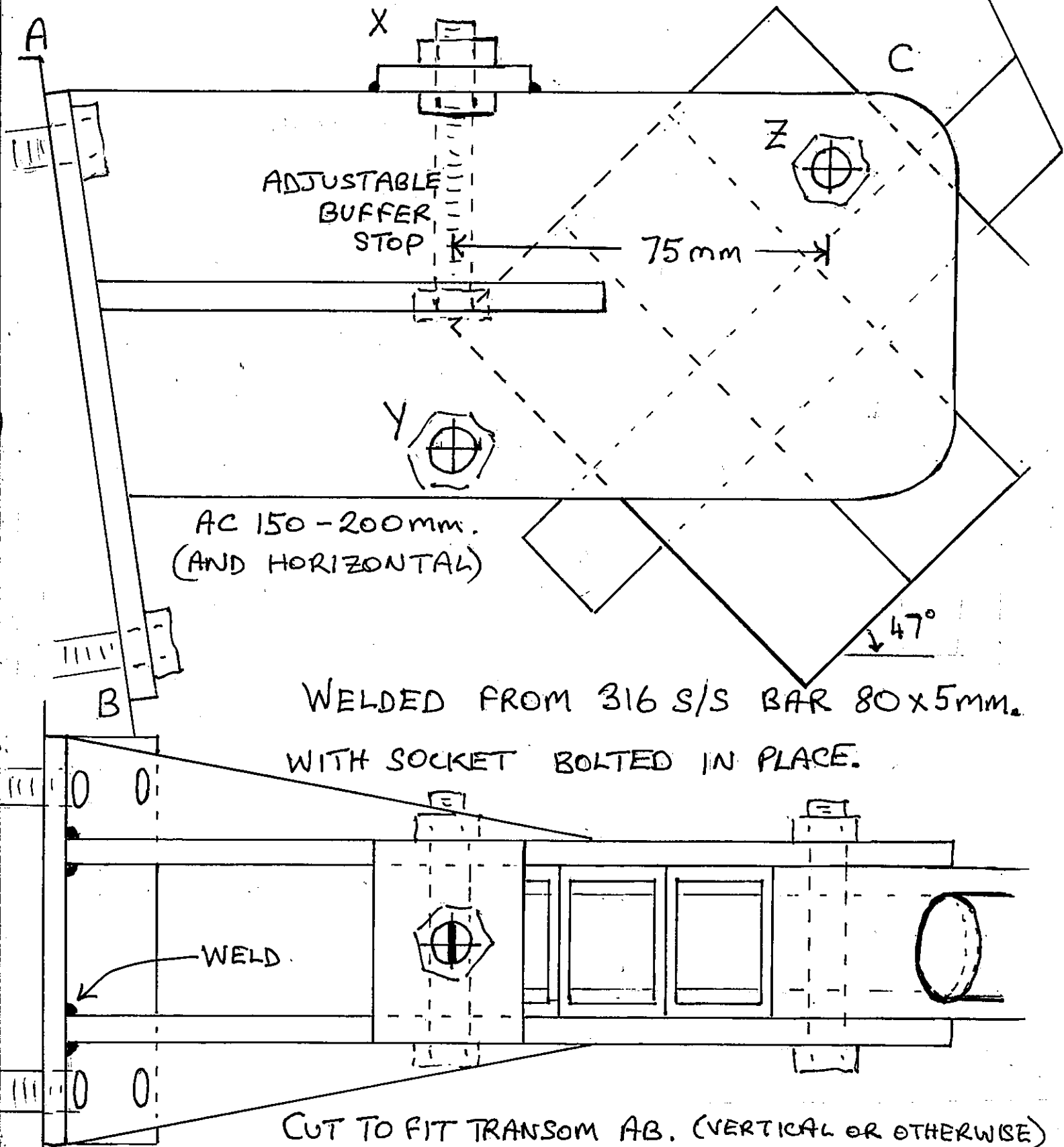


← INCREASE IF NECESSARY (UP TO 5 cm) →

BLOCK 1.



22 MOUNT IN 316 S/S WELDED. SCALE 1:1.



AC 150-200mm.
(AND HORIZONTAL)

WELDED FROM 316 S/S BAR 80x5mm.
WITH SOCKET BOLTED IN PLACE.

CUT TO FIT TRANSOM AB. (VERTICAL OR OTHERWISE)

8mm X BOLT ADJUSTS WIND VANE PUSH ROD VERTICAL.

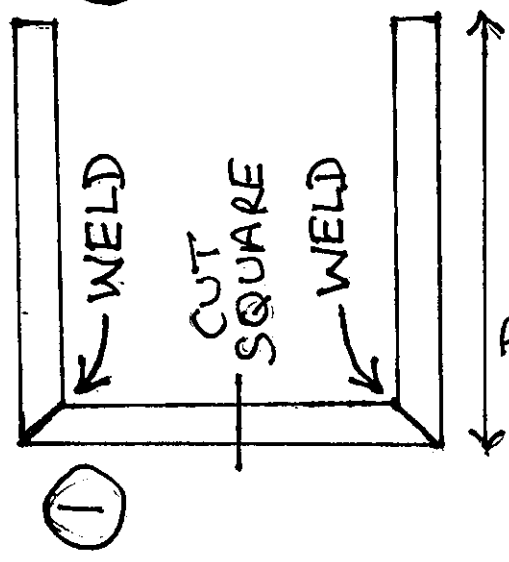
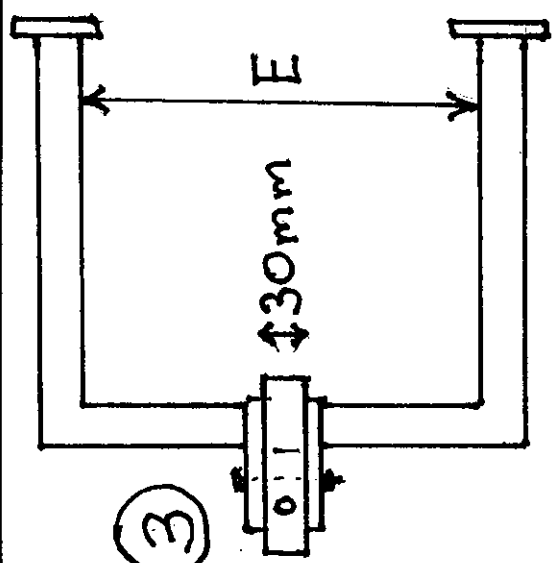
8mm Z AND Y BOLTS MAINTAIN FRICTION OF SOCKET
BETWEEN PLATES.

Copyright protected.

TRANSOM MOUNTED RUDDERS REQUIRE A FRAME (NOT SUPPLIED)

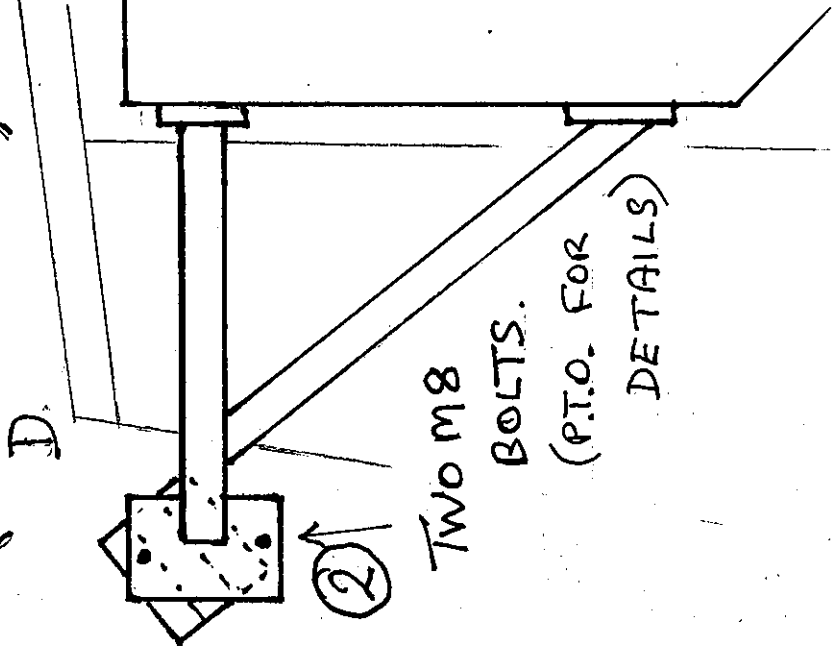
① BOX SECTION 30x30mm
2mm THICK (MIN) 316 S/S.

"D" AND "E" MUST BE
LARGE ENOUGH TO
ACCOMMODATE YOUR
TRANSOM MOUNTED
RUDDER AS IT SWINGS.



② TWO DIAGONAL SUPPORTS WELDED AND
FOUR "FEET" ON THE ENDS OF THE BOX
SECTION WHICH LIE FLAT FOR BOLTING.

③ "CUT SQUARE" CENTRALLY AND WELD TWO
RECTANGULAR PLATES 125x80mm (5mm THICK).
BETWEEN THE PLATES THE SOCKET 100x90mm
30mm THICK AS SUPPLIED (IN WHICH THE WIND
VANE PIVOTS) IS BOLTED. THIS ARRANGEMENT
ALSO ACCOMMODATES TRANSOMS NOT VERTICAL.
"D" MORE THAN 300mm IS NOT RECOMMENDED.

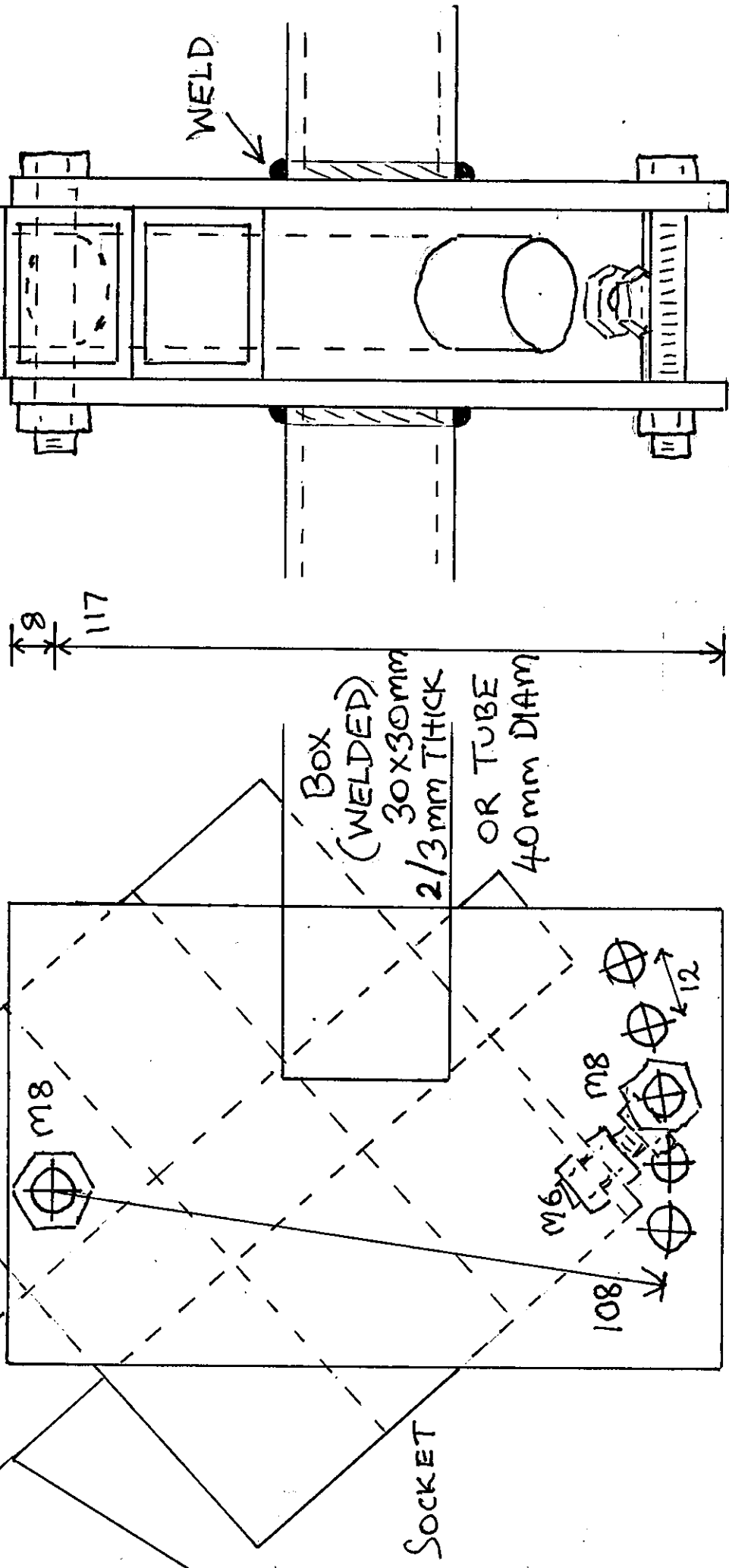


SOCKET BETWEEN 2 METAL PLATES

80 mm x 5 mm x 125.

SCALE 1:1.

58°



M8 BOLTS MAINTAIN FRICTION KEEPING PENDULUM IN THE WATER.
 M6 BOLT AGAINST BUFFER STOP KEEPS TRUNK 58° TO HORIZONTAL.
 copyright protected.

MOUNTING SOCKET AFT OF RUDDER STOCK IN WOOD.

25

NOT TO SCALE

PINDTS UP.

WIND VANE

SOCKET.
(90 x 100 x 30 mm)

45mm
(5 x 9mm
PLY
EPOXY
GLUED)

TRANSOM

RUDDER

30mm

