

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Ordinary Level

METALWORK

6040/02

Paper 2 Practical Test

October/November 2004

3 hours

Additional Materials:
As listed in Instructions to Supervisors

INSTRUCTIONS TO CANDIDATES

Please see page 2.

INFORMATION FOR CANDIDATES

All dimensions are in millimetres unless stated otherwise.

This document consists of **4** printed pages and **2** blank pages.



From the materials supplied you are to make the EMBOSSING TOOL shown in the drawing.

All dimensions are in millimetres.

The following material is supplied:

- Part 1 One piece bright drawn mild steel $18 \times 3 \times 172$ long.
- Part 2 One piece bright drawn mild steel $18 \times 3 \times 135$ long. Both ends squared.
- Part 3 One piece bright drawn mild steel $18 \times 3 \times 37$ long. One end squared.
- Part 4 One piece bright drawn mild steel $12 \times 12 \times 11$ long. Both ends squared.
- Part 5 One piece bright drawn mild steel 12 diameter $\times 28$ long, prepared prior to the examination.
- Part 6 One piece bright drawn mild steel 12 diameter $\times 6$ long, prepared prior to the examination.
- Part 7 One piece bright drawn mild steel 12 diameter $\times 36$ long, prepared prior to the examination.
- Part 8 One piece bright drawn mild steel $12 \times 3 \times 18$ long. Both ends squared.

One $\varnothing 6 \times 12$ snap head rivet.

One bag in which to enclose work.

Two tie-on labels.

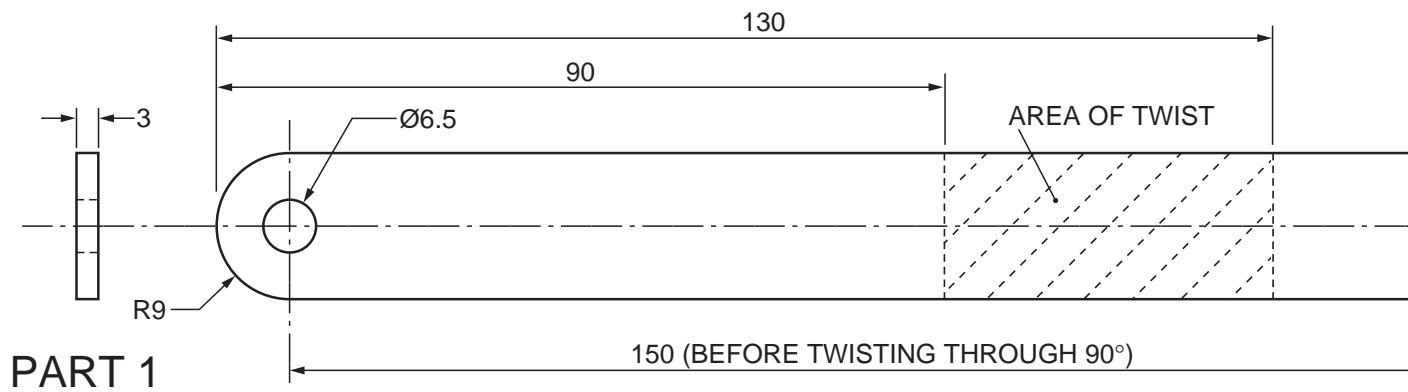
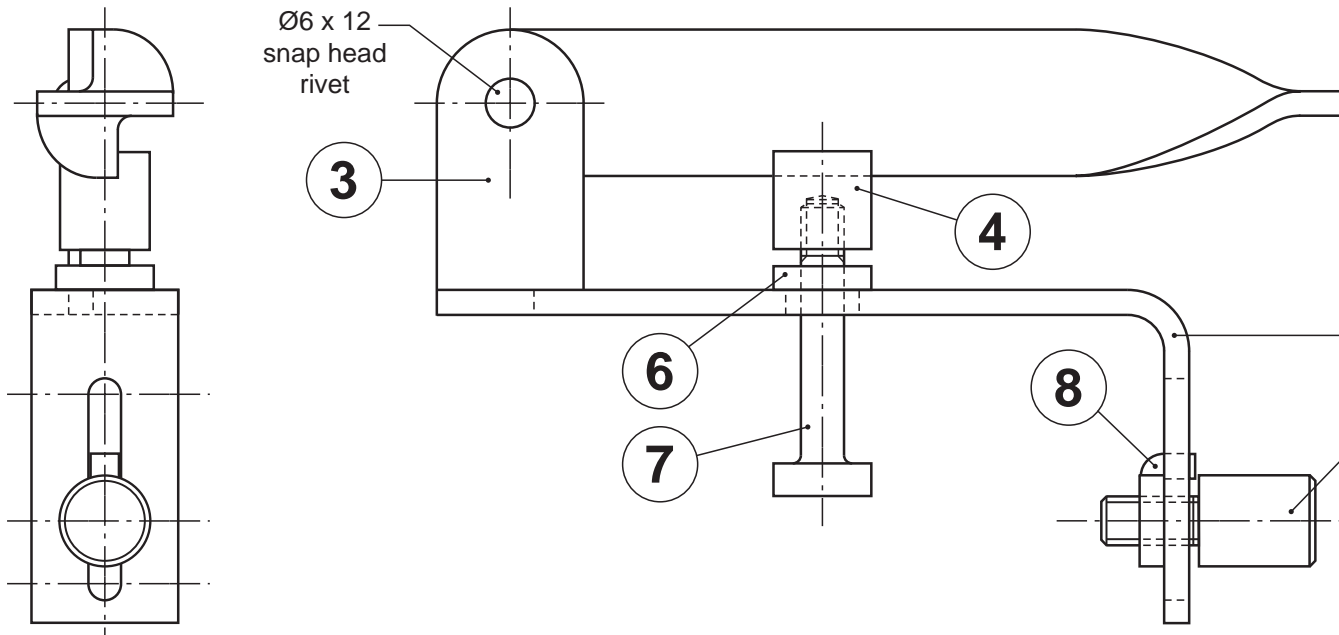
Notes

Working Procedures

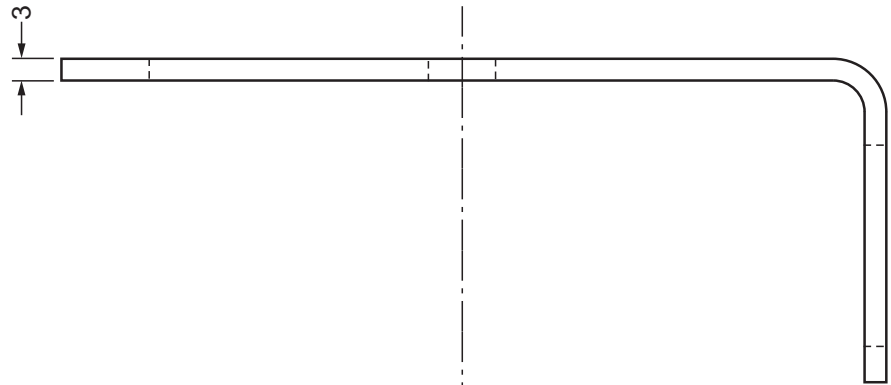
- A Part 1 is twisted through 90° as indicated
- B Part 2 is bent at 90° as indicated
- C Part 3 is silver soldered onto Part 2
- D Part 6 is silver soldered onto Part 2
- E Part 1 is loose riveted to Part 3 to give a moving joint
- F Part 8 is bent at 90° as indicated

General Notes

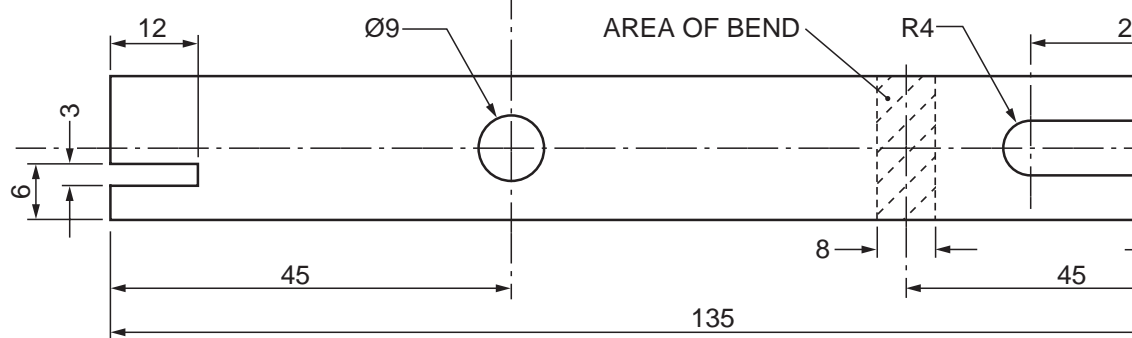
- A second supply of material is **not** allowed. If you make a mistake do your best to work as near to the dimensions given in the drawing as possible.
- Any dimensions omitted are left to your discretion.
- Attempt to complete all the work but remember that a partly completed piece of work of good quality may gain more marks than one which is complete but inaccurate or poorly finished.
- Clean up all parts by draw filing. Emery cloth or similar must **not** be used.
- Write your **name and examination number** on the labels supplied, attach **one** to your work and **the other** to the bag in which your work is enclosed. Put into the bag all worked and unworked materials, with the exception of waste.



AFTER BENDING



BEFORE BENDING

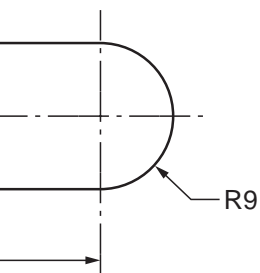


1

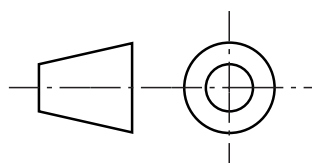
2

5

Modified for test purposes

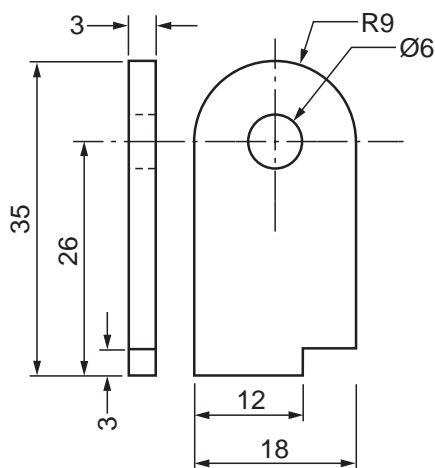
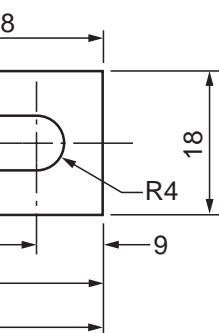


- R9

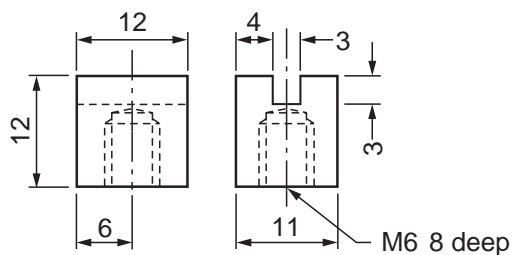


Dimensions in
millimetres

PART 2

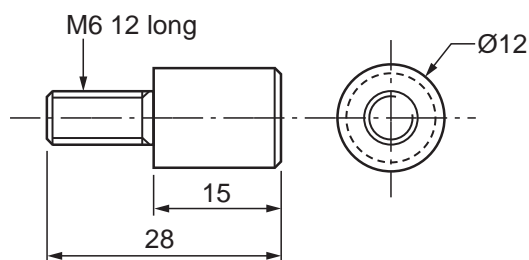


PART 3



- M6 8 deep

PART 4



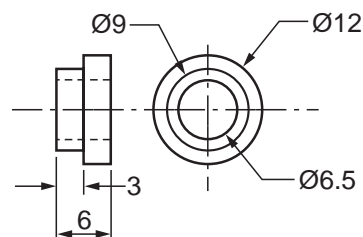
M6 12 long

-Ø12

15

28

PART 5 (supplied)



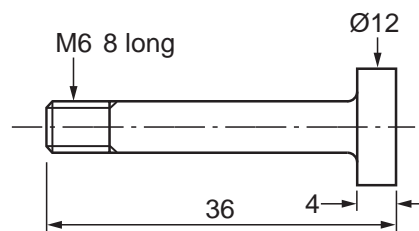
Ø9

—Ø12

—3

—3

PART 6 (supplied)



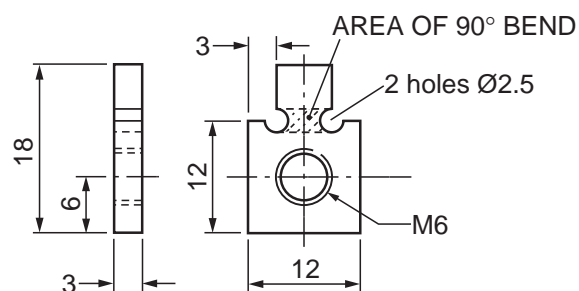
M6 8 long

Ø12

36

4—

PART 7 (supplied)



AREA OF 90° BEND

2 holes Ø2.5

—M6

PART 8

BLANK PAGE

FOLD OUT THIS PAGE

