ZIMBABWE SCHOOL EXAMINATIONS COUNCIL

General Certificate of Education Ordinary Level

METAL TECHNOLOGY AND DESIGN 4055/2

PAPER 2 Practical Test

SPECIMEN PAPER 3 hours 10 minutes

Additional materials:
As listed in the Instructions to Supervisors.

TIME 3hours 10 minutes

INSTRUCTIONS TO CANDIDATES

Please see page 2.

INFORMATION FOR CANDIDATES

All dimensions are in millimetres.

Drawings are **not** to scale.

This specimen paper consists of 3 printed pages and an insert.

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INFORMATION TO CANDIDATES

Instructions to Candidates

From the materials supplied, you are required to make a **car roof rack clip** shown in the drawing in **Fig. 1** on page **4**. Modifications have been made for examination purposes only.

Dimensions **not** given are left to your discretion.

All dimensions are in millimetres.

- A second supply of material is **not** allowed. If you make a mistake, do your best to work as near to the given measurements as possible.
- All heated parts should **not** be quenched in water or oil but should be left to cool down slowly.
- Any dimensions **not** given are left to your own discretion.
- Attempt to complete all the work, but remember that a partly completed piece of good quality work may gain more marks than a piece of work that is complete, but poorly finished and inaccurate.
- Clean **all** pieces by drawfiling the edges. **Do not** use emery cloth or similar material.

The following materials are required:

Part 1 **One** piece **40 mm** × **25 mm** × **10 mm** BDMS/cleaned BMS, **both** ends squared,

Part 2 **One** piece **85 mm** × **30 mm** × **2 mm** BDMS/cleaned BMS, with **both** ends squared,

Part 3 **One** piece **65 mm** × **20 mm** × **3 mm** MS/BDMS/cleaned BMS, (**both** ends squared) and prepared before the examination,

Part 4 **One** piece **40 mm** × **10 mm** × **3 mm** MS/BDMS/cleaned BMS, **both** ends squared,

Part 5 **One** piece **70 mm** × 20 **mm** × **3 mm** MS/BDMS/cleaned BMS prepared before the examination,

Part 6 **One** piece **Ø6 × 10 mm** length MS/BDMS both ends squared. Prepared before the examination.

Assembly Procedure

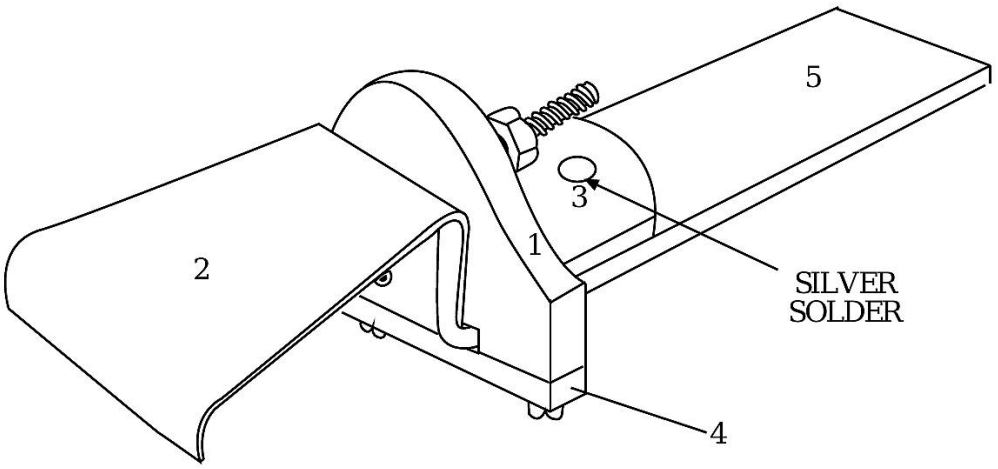
1. Rivet **Part 4** to **Part 5** before marking and fitting **Part 1** and 4 together.

2. Use a former for bending **Part 2**

3. Use **M5** screws joining **Part 1** to **Part 4**

4. Silver solder **Part 5** to **Part 3**.

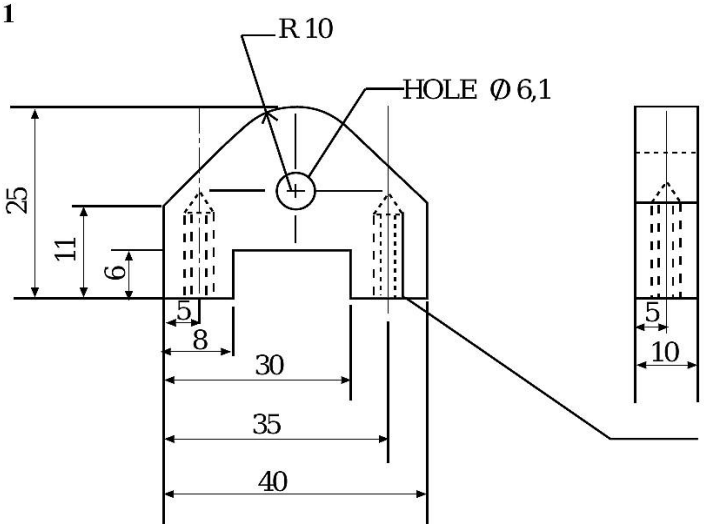
5. Join **part 2**, **Part 1** and **Part 3** using **M6** bolt and **nut**.



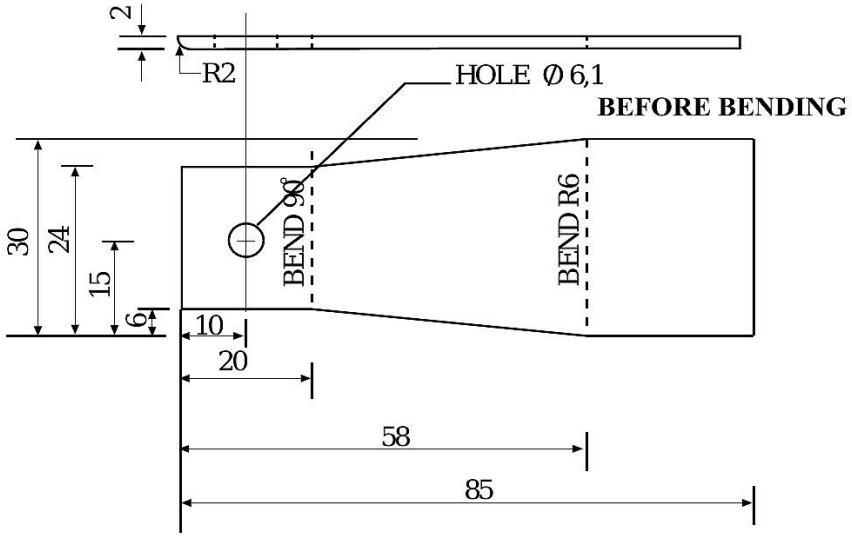
CAR ROOF RACK CLIP

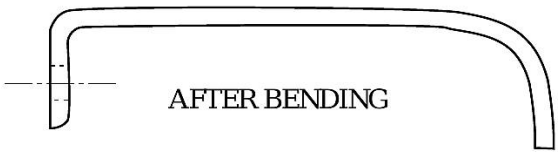
Fig. 1

PART 1

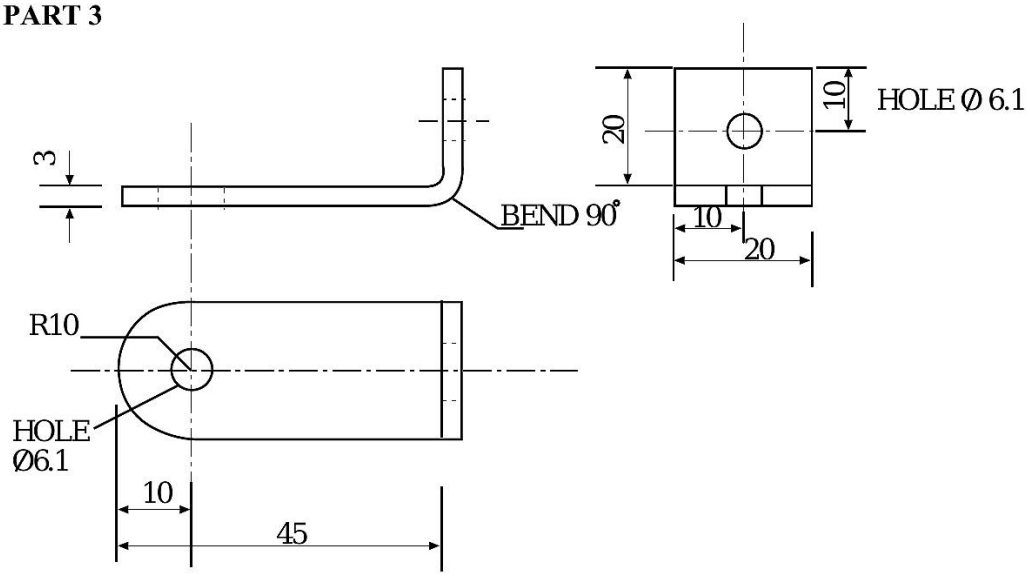


PART 2(Before Bending)

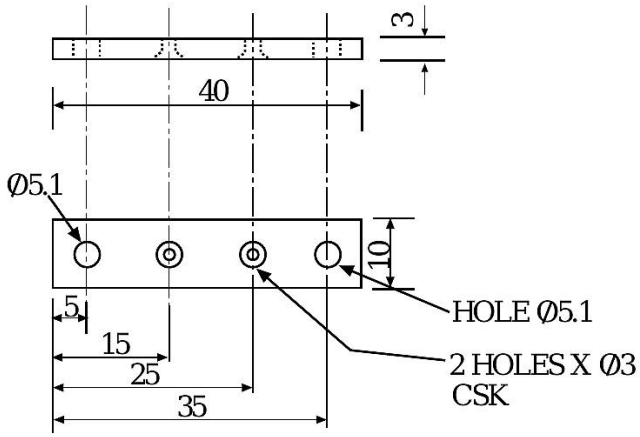




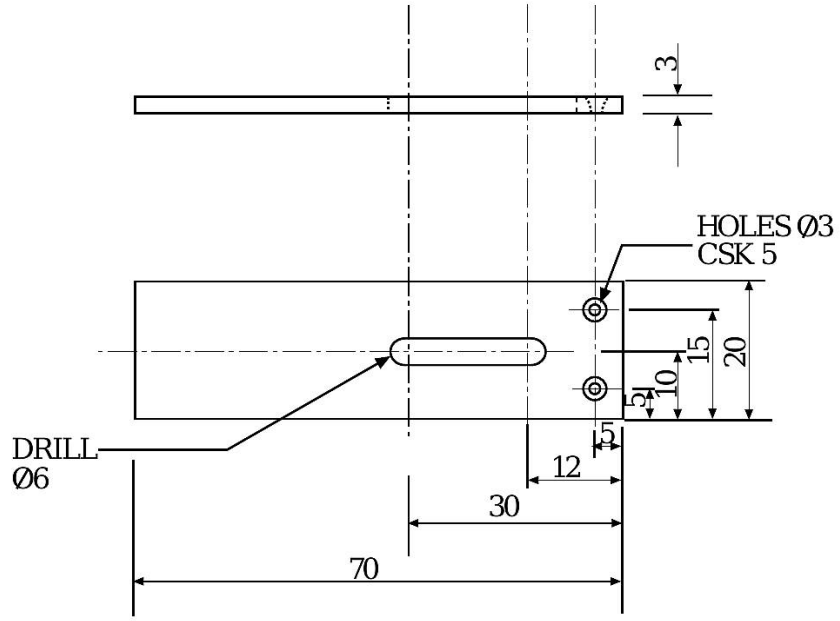
PART 3


3
BEND 90°
20
10
HOLE Ø 6.1
10
20
R10
HOLE
Ø6.1
10
45

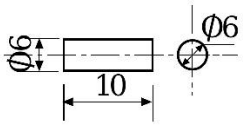
PART 4


3
40
Ø5.1
10
HOLE Ø5.1
5
15
25
35
2 HOLES X Ø3
CSK

PART 5



PART 6



BLANK PAGE