

1503/106

MOTOR VEHICLE TRADE PRACTICE I

Oct./Nov. 2021

Time: 6 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN AUTOMOTIVE ENGINEERING

MODULE I

MOTOR VEHICLE TRADE PRACTICE I

6 hours

**INSTRUCTIONS TO CANDIDATES**

*This paper is to be issued to the candidates on the day of the examination.*

*Equipment, tools and materials required for this examination will be provided by the centre.*

*This paper consists of FIVE questions.*

*Answer ALL questions as instructed by the examiner.*

*Each candidate is allowed SIX hours for this examination spread over TWO days.*

*Candidates should answer the questions in English.*



**This paper consists of 4 printed pages.**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

1. Service the rear final drive assembly provided.

(Time  $1\frac{1}{2}$  hours)

**Tools, materials and equipment required:**

- Final drive assembly
- Safety stands
- Wheel spanner
- Hydraulic jack
- Workshop tools
- Cleaning materials
- Spring balance
- Dial gauge
- Engineers blue
- Vee blocks
- Torque

2. On the vehicle provided, remove and service the front hub assembly.

(Time 1 hour)

**Tools, materials and equipment required:**

- complete vehicle
- safety stands
- wheel spanner
- hydraulic jack
- cleaning materials
- grease
- replacement seals.

3. On the tubeless tyre provided, repair the puncture and inflate the tyre to the required pressure.

(Time  $\frac{1}{2}$  hour)

**Tools, materials and equipment required:**

- punctured tubeless tyre
- tubeless tyre repair kit
- pressured air line with pressure gauge
- soapy water in an open tank
- tyre marker
- cleaning brush
- Cleaning materials

4. On the vehicle provided, replace the brake wheel cylinder seals.

(Time  $1\frac{1}{4}$  hours)

**Tools, materials and equipment required:**

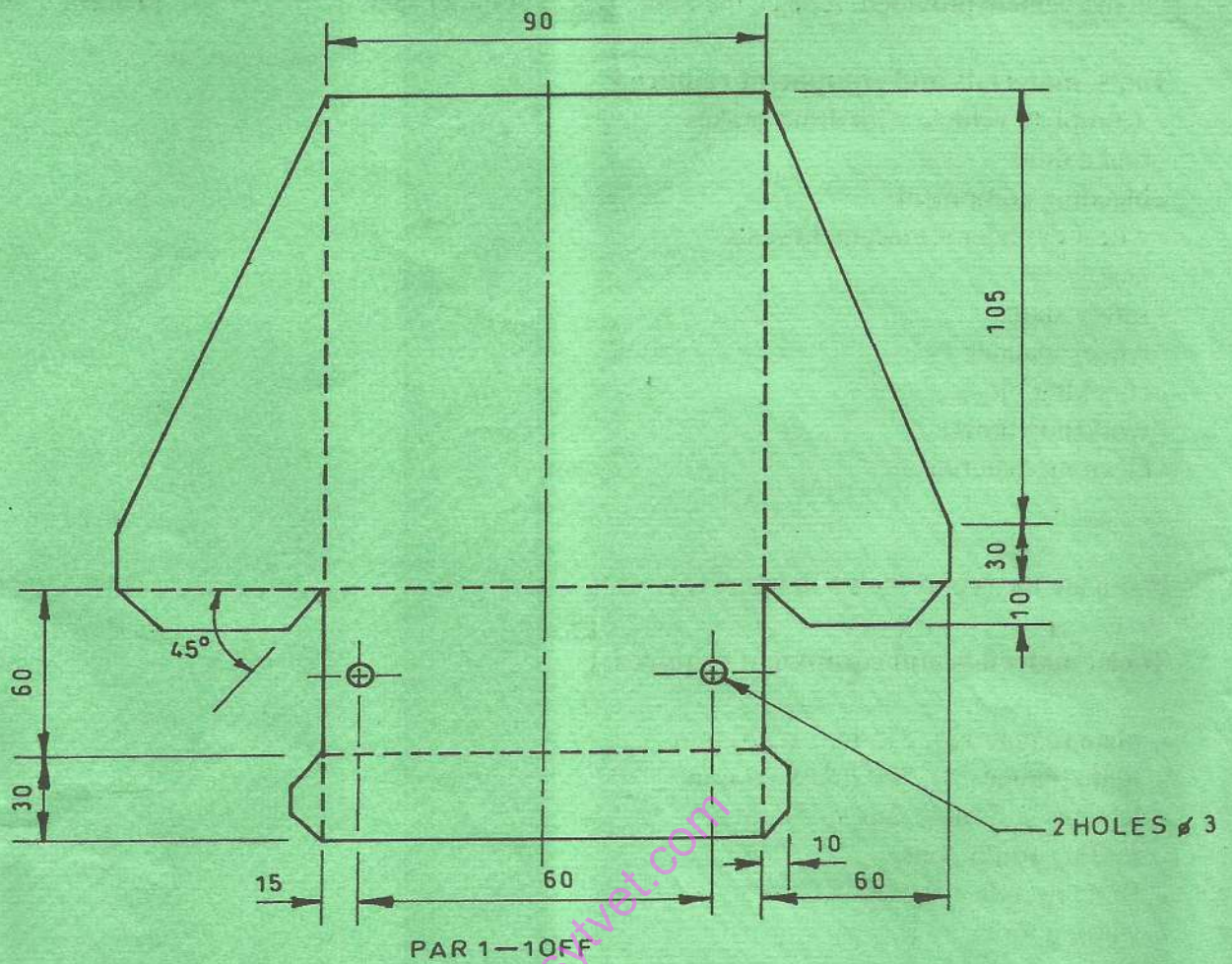
- Complete vehicle with drum brakes
- brake fluid
- bleeding equipment
- wheel cylinder replacement seals
- jack
- safety stants
- wheel spanner
- chocking blocks
- workshop tools
- cleaning materials

(5) Fabricate the scoop shown in figure 1.

(Time  $1\frac{3}{4}$  hours)

**Tools, materials and equipment required:**

- plate (gauge 18), 235 mm x 220 mm
- Plate (gauge 18), 200 mm x 20 mm
- Rivets ( $\phi$  3 mm), 2 pcs - 5 mm long
- folding equipment
- Brazing rods
- Cutting tools
- drilling machine
- drill bit,  $\phi$  3mm
- General workshop tools
- marking tools
- measuring tools
- bench vice
- brazing flux
- gas lighter
- wire brush
- riveting set
- ball peen hammer



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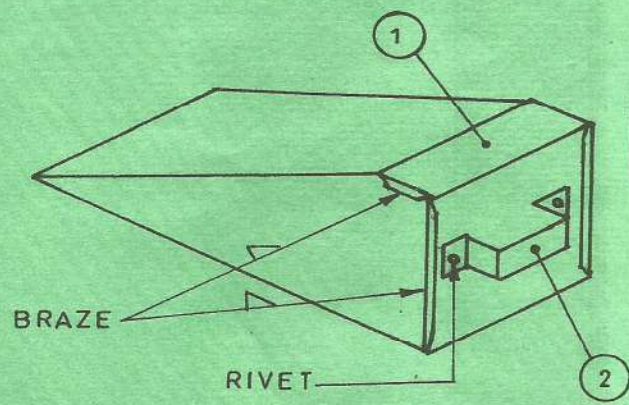
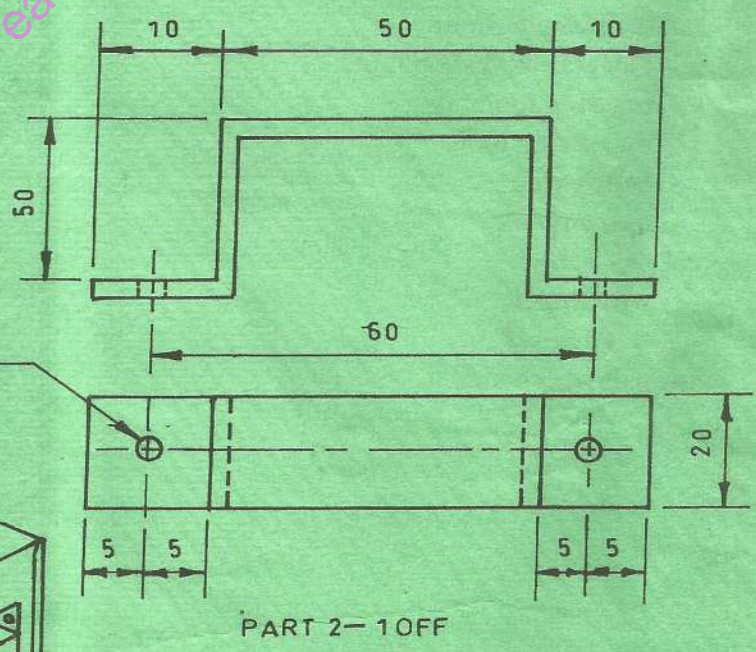


Fig. 1

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