

2025 SKILLS AUTOBODY REPAIR

ALUMINUM PROJECT

TASK SHEET PROJECT "C"

READ ALL INSTRUCTIONS BEFORE BEGINNING

Duration: 1.5 hours (75 Minutes)

LAP WELD MUST BE DONE IN A FLAT POSITION PLUG WELDING MUST BE DONE IN A VERTICAL / UPRIGHT POSITION

Instructions

All welding must be done to industry standards. Welds will be marked using the I-CAR specifications for length width and bead height, penetration will also be measured.

Join the three aluminum coupons using plug welds, and a lap weld.

All measurements are from left to right on the Coupon. Clean all coupons to industry standards

- 1. Start with two coupons, each **1mm** in thickness.
- 2. Mark out **3** plug weld locations on one coupon. Plug weld holes must be spaced 25mm from the top and from the left side 20mm, 62mm, and 102mm.
- 3. Drill or punch the holes for the plug welds (8mm 5/16th).
- 4. Secure onto the second **1mm** thick coupon 25mm down from the top.
- 5. Adjust coupons to a **vertical** position in vice, plug weld to industry standards.
- 6. Secure the third **2.5mm** coupon under the lower offset so it butts up to the coupon on the back of the two plug-welded coupons. Prepare coupons for lap weld.
- 7. Secure coupons in a flat position, Perform continuous seam weld along the lap seam.
- 8. Keep in mind that you are now welding together **mixed thicknesses**.

Completed project to be presented to the exam marker when finished