**2024 SKILLS AUTOBODY REPAIRALUMINUM PROJECTTASK SHEET PROJECT “C”READ ALL INSTRUCTIONS BEFORE BEGINNING**

**Duration: 1.5 hours (75 Minutes)LAP WELD MUST BE DONE IN A FLAT POSITIONPLUG 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 CouponClean 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**