**2024 SKILLS AUTO BODY REPAIR WELDING - SECONDARY**

**Structural Panel Sectioning Project**

**Task Sheet Project “A” B Pillar Sectioning**

**READ ALL INSTRUCTIONS BEFORE BEGINNING**

**Duration: 3 Hours**

**ALL WELDING AND FINAL STEP GRINDING ON THE VEHICLE PANEL MUST BE DONE WITH THE PANEL IN A VERTICAL/UPRIGHT POSITION IN VISE**

**ARROW INDICATES TOP OF VEHICLE**

**Instructions**

* All corrosion protection must be replaced.
* Join the vehicle and recycled components using a straight-cut butt joint with a backing.
* The overall length of the sectioned panel must be the same as the original vehicle component (406 +- 1mm).
* Any spot welds that have been removed must be replaced with plug welds.

**Measure 406mm from the VEHICLE TOP and mark. At this mark, cut through the outer and inner as one. *The SHORT PIECE is your SALVAGE COMPONENT. The LONG PIECE is your VEHICLE COMPONENT.***

**Vehicle Component**

1. Cut the panel outer 160mm measuring from the correct end. Leave the inner panel full length. Remove outer skin.
2. Using the removed piece, fashion an insert or (sleeve) 50mm wide. Trim off the flanges, cut the insert in half trim to fit in the vehicle section, weld together, dress and insert.
3. Plug-weld the sleeve into the panel. Use two (2) plugs on the top (face) and one (1) on each side. Evenly space

**Recycled Component**

1. Cut the outer panel 160mm (allowing for root gap) measuring from the correct end.
2. Prepare the removed piece and the inner panel of the vehicle component for welding.
3. **STOP for Judges Mark**

**Assembled Component:**

Assemble the components and weld them together using industry-accepted methods.

1. Apply weld through primer in required locations.
2. Assemble the components, test fit and re-measure.
3. Call the judge over BEFORE ANY WELDING TAKES PLACE



1. Using the section that was removed from the recycled component, weld the recycled component to the vehicle component. Use two (2) plugs on the top (face) and one (1) plug on each side. Evenly spaced. You will have a total of eight (8) plug welds joining the sections together.
2. Continuous or stitch weld the butt joint with backing. Stager the welds to control your heat.
3. Plug-weld the flange areas.
4. Finish grinding (Dress) one-half (1/2) of the outer surface of the welded component.

**Completed project panel to be presented to the exam marker when finished.**