Materials/Equipment/ and Supplies

**Metal Repair**

**Equipment the contestant must provide:**
- Body Hammer and Dolly set
- Compressed air
- Sanding Blocks
- Vixen File /Sanding Board
- Dual-Action Sander
- Stud welder with shrinking tip
- Tape Measure
- Automotive Paint Marker
- Camera/ Digital Tablet for Journal Submission
- Fender stand and clamps/fasteners to secure the fender

**Supplies the contestant must provide:**
- Body Filler
- Polyester glaze filler
- Cream Hardener
- Filler Mixing Board and Applicators
- Various grits sandpaper
- Guide coat (powder preferred)

**PPE-Equipment/Clothing the contestant must provide:**
- Eye Protection
  - safety glasses with side shields or goggles. (Prescription glasses can be used only if equipped with side shields. If not, prescription glasses must be covered with goggles.)
- Face Shield
- Gloves (Leather and Nitrile)
- Dust masks
- Dual cartridge respirator
• Official SkillsUSA light blue work shirt and navy pants, black or brown leather work shoes

**Plastic Repair**

**Equipment the contestant must provide:**

• Pistol Grip Grinder
• Compressed Air
• Sanding Blocks 3” and 5”
• Pneumatics Drill
• Dual-Action Sander
• Drill bits – ¼” and 1/8”
• Wood Block
• Automix Calking Gun PN 8117

**Supplies the contestant must provide:**

• DA Paper – 80, 180, 320
• Roloc Disc – 60 grit
• General Purpose Cleaner PN 8987
• Polyolefin Adhesion Promoter PN 5907
• Sheet Roll Abrasives – 80, 180, 320
• 3M Semi-Rigid Repair Mat. – PN 4240
• 3M Super Fast Repair Mat. – PN 4247
• 3M EZ Sand Repair Mat. – PN 5887
• 3M Contour Sheeting – PN 4903
• 3M Reinforcing Mesh – PN 4904
• 3M Mixing Nozzles -- PN 8194
• 3M Aluminum Tape – PN 6930
• Mixing Board and Spreaders
• Paper Towels

**Attachment Methods**
Equipment and Supplies the contestant must provide:

- Approved fire extinguisher (with current tag)
- Extra shielding gas (Argon/CO2 mix 75/25%)
- Extra welding wire (ER70S-6 (0.23 to 0.25))
- Extra welding consumables (tips, diffuser, nozzles, and liner)
- Heavy-duty vise, sturdy mounted for destructive testing
- Cleaning supplies for bare metal, nonflammable cleaner, towels
- Plastic abrasive pads
- 8 mm (5/16”) punches with deep access, or a drill with extra drill bits 8 mm (5/16”)
- 6 mm (1/4”) punches with deep access, or a drill with extra drill bits 6 mm (1/4”)
- At each station:
  - GMA (MIG) welder, 1 machine for each participants
  - Welding screen or welding blankets for protection
  - 1 pair of large C-type locking pliers
  - 2 pairs of medium C-type locking pliers
  - 3 pairs of regular or flat-bill locking pliers
  - Felt-tip markers, black or red
  - Welding pliers and/or side cutters
  - Auxiliary fluorescent drop light
  - Provided by each participant:
    - Government-issued ID
    - Welding gloves
    - Safety glasses
    - Ear protection
    - Welding respirator (NIOSH approved)
    - Long-sleeved welding shirt
    - Leather shoes
    - Welding helmet (auto-darkening preferred) with new protective lens
    - Welding magnifying lens per individual’s need for improving vision
    - Cutoff wheel with extra discs
    - Air saw with extra blades
    - Spot weld drill and required bits
    - Metric measuring tape

Suggested

- Face shield
- 3” to 6” grinder, pneumatic or electric
- Body hammer
- Ballpeen hammer
- Flat cold chisel
- Air hammer with flat thin chisel
- Multi-purpose dolly
- Center punch