



TEST PROJECT INSTRUCTIONS / INTRUCTIONS DU PROJET D'ÉPREUVE

SHEET METAL WORK

TOLEIRE

POST-SECONDARY /
NIVEAU POSTSECONDAIRE

Covered Wagon Specifications

Wagon Canopy (Parts A, B and C)

Part A Wagon Canopy Front

Using the appropriate template mark and notch the allowances according to the shop drawings on the copper sheet metal provided.

- 1/8" Wired edge
- 1/4" Grooved Seam

Part B Wagon Canopy Middle

Using the appropriate template mark and notch the allowances according to the shop drawings on the copper sheet metal provided.

- 1/4" Grooved Seam

Part C Wagon Canopy Rear

Using the appropriate template mark and notch the allowances according to the shop drawings on the copper sheet metal provided.

- 1/4" Grooved Seam
- 1/8" Wired edge

With Parts A, B and C cut out and notched and the appropriate bends formed for the grooved seam and with the wired edges completed. Connect Parts A and C to Part B using the correct grooved seamer.

With Parts A, B and C connected as one piece roll the canopy section to the desired radius indicated on the shop drawing. Take note on how the canopy section will fit on the wagons body.

Wagons Body (Part D and E)

Part D Wagon Body

Using the appropriate template mark and notch the allowances and form the appropriate seams, locks and edges according to the shop drawings on the copper sheet metal provided.

- 1/4" Double seam (female)

Part E Wagons ends (x2)

Using the appropriate template mark and notch the allowances according to the shop drawings on the copper sheet metal provided.

- ¼" Double Seam (male)

With the wagon body (part D) notched and formed, attach the wagon ends to the wagon body completing the ¼" double seam.

It is up to the competitor to decide whether to attach the wagon canopy to the wagon body now or later when the wheels and axle section is complete.

Part F Wagon Bench

Using the appropriate template mark/notch the allowances and form according to the shop drawing bending profile on the copper sheet metal provided.

- Attach to wagon body using 4 -1/8" copper rivets starting 1" in from the ends.

Part G Front and Rear Axle Carrier (x2)

Using the appropriate template mark/notch the allowances and form according to the shop drawing bending profile on the copper sheet metal provided.

- Attach rear axle carrier to underside of wagon body (Part D) using 4 -1/8" copper rivets starting 1" in from the ends.

Part H Front Axle Spacer

Using the appropriate template mark/notch the allowances and form according to the shop drawing bending profile on the copper sheet metal provided.

- Attach front axle spacer (Part H) to the front axle carrier (Part G) using 4-1/8" copper rivets starting 1" in from the ends.
- With the front axle carrier and spacer connected, attach to underside of wagon body (part D) using 4 -1/8" copper rivets starting 1" in from the ends.

Part I Wheels and Axles

With the wheels and axle hardware provided attach them to the axle carriers on the underside of the wagon body according to the drawing specifications.

Manitoba Base Specification

The base is comprised of 5 pieces and shall be made of 18 Ga. black iron. The top plate is 1 piece and is in the shape of the province of Manitoba and the other 4 pieces are for the mitered sides/ends and will be welded to the top plate.

It is up to the competitor to figure out where each side piece fits onto the top plate using the shop drawings provided.

Using the appropriate template, brake/bend up to form the mitered edges and brake/bend up the mitered sides with the appropriate tool/machine.

When all braking/bending has been completed, weld the appropriate side/ends to top plate to form the completed province of Manitoba Base on which the covered wagon will sit on for display.