



All Nation C&O Caboose

Description, Parts List & Assembly

C&O Steel Caboose

Step-by-Step Beginner Build Guide

The Basic Kit does not include the comprehensive detail kit parts.

1. Set up your workspace

A stable, comfortable workspace makes the entire build easier.

- Use a flat, well-lit table.
- Put down a cutting mat or a piece of cardboard.
- Keep a small tray or cup for tiny parts.
- Gather your tools: hobby knife, sanding stick, tweezers, clamps/clothespins, small files, CA or plastic cement, small square, and optional paints.

2. Lay out and inspect all parts

Identify each major component before you begin.

You should see:

- **Caboose body shell** (one-piece internal superstructure)
- **Underframe/floor/bolsters/braces**
- **2 Roof sections**
- **2 Car Sides**
- **2 Cabin Ends**

- **Cupola Parts**
- **End platforms**
- **Steps**

The Following are detail kit parts, not included in the basic caboose kit. See Link Below

<https://allnationline.com/WP/?product=detail-kit-scale-model-railways-megow-31-3-co-steel-caboose-pn4220an>

- **Ladders**
- **Brake wheel and staff**
- **Roof details** (smokejack, vents)
- **Small detail parts** (toolbox, grabs, etc.)
- **Trucks and screws** (if included in your version)

Check for:

- Straightness
- Clean edges of brims, threads build plate support material
- Any small nubs from printing (these will be trimmed next)

3. Trim and smooth the parts

This is the “prep” stage that makes assembly clean and square.

- Use the hobby knife to **carefully trim** any small bumps or leftover print supports.
- Use small files to smooth any edges left from the brims
- Lightly sand edges that will be glued—this improves adhesion.
- Do not over-sand; you’re just smoothing, not reshaping.

4. Test-fit the major components

Dry-fitting prevents surprises later.

Body + Floor

- Identify the box superstructure top verses the bottom
- The top has cross grooves for positioning and fitting the roof
- The roof sections join together to form the basis for mounting the cupola parts
- Cupola is off center from a side view same as the prototype
- Place the **underframe** onto the bottom of the **body shell superstructure**

- Ensure it sits flat and square.

Cupola

- Set the **cupola** on the roof.
- Make sure it sits flat in place, sides angle in slightly.
- Lightly pencil a guide mark if helpful.

End Platforms + Steps

- Hold each platform against the caboose ends.
- Check that steps align and do not interfere with truck swing.

Do **not** glue anything yet.

5. Glue the main body together

This is the structural core of the caboose.

Roof to Box Superstructure

- Align roof pieces such that the overhang on each end over the platforms is equal
- Optional pilot holes are in the roof if screws are preferred over glue. Screws are not supplied, drilling and tapping into the superstructure maybe the best if machine screws are used.

Car Sides to Body

- Check the Cabin Ends with the doors against the car sides to the body before gluing
- Make sure the sides are centered on the superstructure before the glue sets
- Sides should come up under the roof eve
- Stop and think about the process, window glazing and painting

Floor to Body

- Apply a **thin** bead of glue along the inside lower edge of the underframe.
- Press gently the underframe or clamp in position until glue sets.
- Use a small square or block to check the sides are vertical.
- Hold or clamp until set.

Check alignment

- Check alignments both length, width and height during assembly

- Adjust while glue is still soft.

6. Install the cupola

This gives the caboose its signature look.

- Check the C&O Caboose drawing for cupola sides
- The sides should be approximately slanted 3 to 5 degrees.
- Stop and think about the process, window glazing and painting
- Modelers seem to prefer building the cupola right onto the roof over prefabricating it on the side and then installing it.
- Mount the roof pieces to the superstructure box before assembling the cupola onto the roof.
- Lightly sand the roof contact area and the bottom of the cupola.
- Apply a small amount of glue to the cupola edges.
- Place it on the roof, aligned with your marks.
- Check from the side to ensure the ends of the cupola are vertical and the sides are slightly angled inward.

7. Attach end platforms and steps

These parts define the caboose's silhouette.

End Platforms

- Apply glue to the mating surfaces.
- Press the platform into place.
- Keep it level using your square.

Steps

- Apply a tiny amount of glue to the mounting tabs.
- Attach under the platform.
- Ensure they hang straight and clear the track.

8. Add ladders and grab irons

These details bring the caboose to life.

Ladders

- Hold a ladder in place to confirm orientation.
- Apply a small dot of glue to the top and bottom contact points.
- Press into place and hold until secure.

Grab Irons (if separate)

- Test-fit each grab.
- Add a tiny drop of glue to the pins.
- Insert and keep level.

9. Install roof details

These are small but important.

Smokejack (stovepipe)

- Locate the pilot hole, the intended spot on the roof.
- If needed, twist a drill bit **by hand** to create a shallow pilot hole.
- Glue the smokejack in place, vertical.

Other roof details

- Glue the roof walks in place centered lengthwise and the laterals for the ladders
- Test-fit each part.
- Glue sparingly to avoid blobs.

10. Paint the caboose (optional but recommended)

Painting can be done before or after assembly depending on preference, but beginners often find it easier after the main structure is built.

Base Color

- Inspect the model for any loose debris, oily fingerprints and clean it if necessary
- A base primer coat is recommended
- Apply thin coats of acrylic paint.
- Allow each coat to dry before adding another.

Detail Painting

- Paint ladders, steps, roof, smokejack, and grabs.
- Touch up edges as needed.

Lettering/Decals (if you have them)

- Follow the decal instructions.
- Seal with a clear coat if desired.

11. Install trucks and couplers

This is the final mechanical step.

Trucks

- Locate the truck mounting holes.
- Place a truck over the hole.
- Insert the screw and tighten until snug but free-rolling.
- The truck should swivel easily.

Couplers

- Follow the coupler manufacturer's instructions.
- Ensure coupler height is correct.
- Confirm they swing freely.

12. Final checks

A few last confirmations ensure smooth operation.

- Roll the caboose on a piece of track—trucks should turn freely.
- Check that ladders, steps, and cupola are straight.
- Look for any glue shine or stray marks and touch up with paint.

13. Your caboose is complete

You've built a full O Scale C&O steel caboose from raw parts—an excellent first model and a solid foundation for future builds.

APPENDIX

Parts List:

1 Roof PN4201

1 Roof Walk with Laterals

4 Steps PN700AN

1 Cupola Roof PN4204

2 Cupola sides PN4203A

2 Cupola ends PN4203b

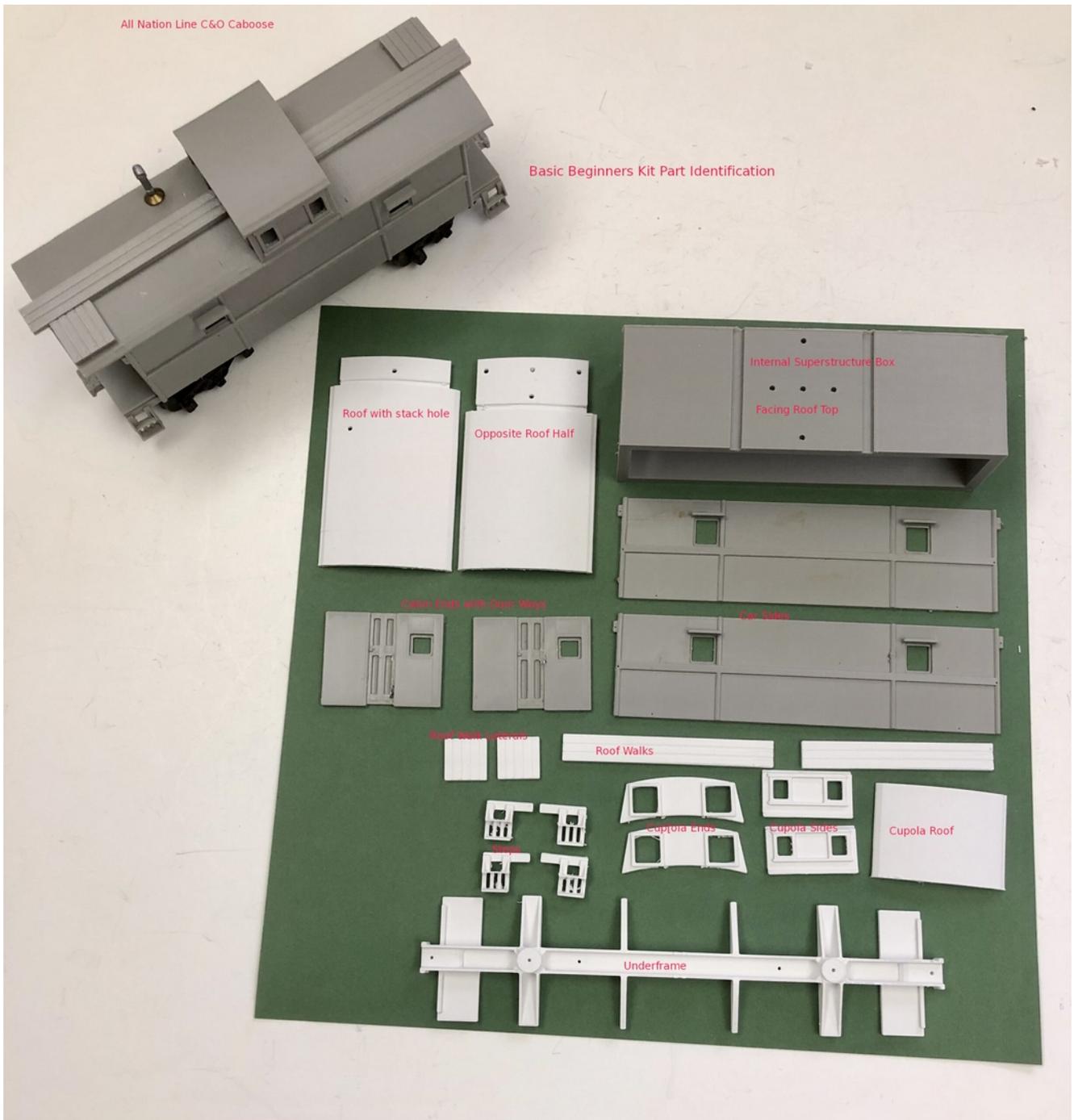
2 Ends with doorway PN4200

1 Box Shell (roof, floor, subends)

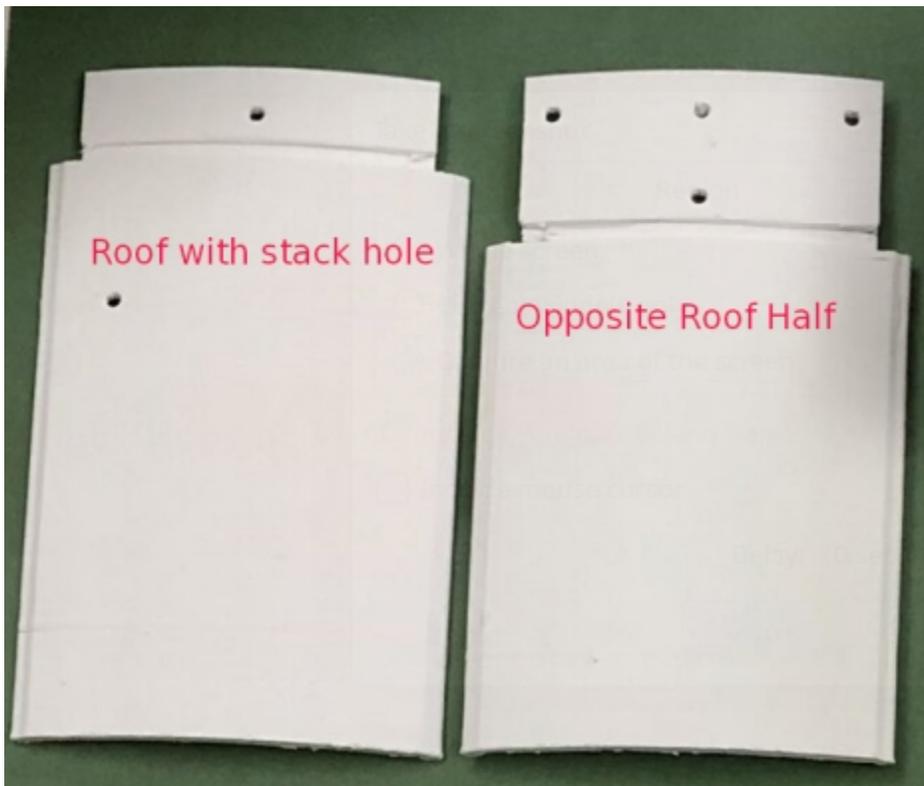
2 Car sides (No Rivets) PN4210Left PN4211 Right

1 Underframe – center sill with braces and bolsters PN4202

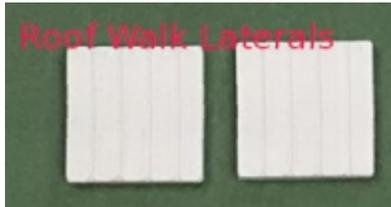
See individual parts Identifier photos below:

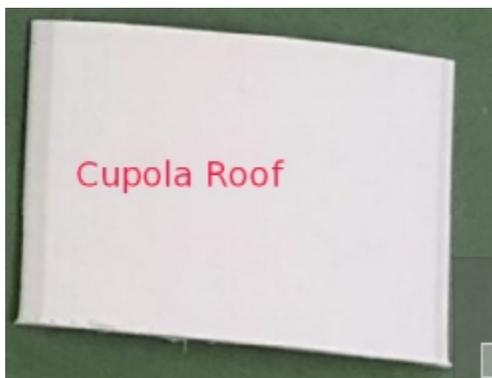


Manufacturer Of The Famous All-Nation "O" Scale Equipment

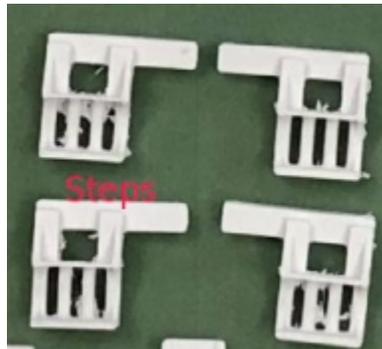


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Detail Kit Parts

2 Ladders 5-rung PN4209

1 Smoke stack PN6011

4 Marker Lights resin PN3051

1 Brake wheel PN3125A

2 Couplers PN1591

1 AB Brake set PN1698B

8 Red jewels PN697

4 Green jewels PN698

2 Brake hoses PN3010

4 Corner roof grab irons PN30313R

36" Brass wire .032 gauge

4 Acetate 3" x 2"

