

Boulder Valley Models #383 Ruffled Duckling Railbus Assembly Instructions

Before you begin: Wash resin parts, read notes on parts listing page, read instructions & consider your own preferences regarding painting, etc. prior to assembly.

Metric equivalents: 1" actual measure = 25.4 mm

1" (inch) scale measure = 0.53 mm * 1' (foot) scale measure = 6.35 mm

Railtruck Preparation

- ★ Test run your Bachmann railtruck prior to disassembly or modification in case any warranty work is needed. Break-in mechanism by running on a loop of track.
- Remove stake sides, cab and hood halves as shown on back of Parts Listing sheet. Set aside hood halves to be painted and re-used on your Ruffled Duckling railbus.
- Remove mailbox cover and set aside with long mounting screw. (This is the metal cover over the factory-installed Bachmann decoder.)
- Review the "Preparations and General Notes" on the Parts Listing -- these include helpful suggestions like sanding areas to be glued prior to joining parts.
- ★ **Plan ahead for sound installation!** We've illustrated one method for installing a sound decoder and speaker and described some alternative approaches. Read thru the instructions and plan ahead as needed if you're planning to install sound..

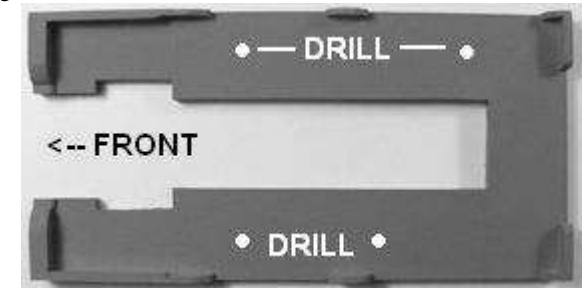


Assembly of Railbus Body

- ★ **Note:** To improve the quality of photos, we've pre-painted individual parts prior to assembly. This is not necessary or recommended for actual assembly.
- ★ **Design note:** We have designed the body of the railbus to be screwed to the metal chassis of the Bachmann railtruck. This allows for easy removal of the body to provide access for changes to the DCC decoder, installation of sound, etc.
- ★ Installation of mounting screws requires drilling through the metal chassis as described below. If you do not wish to drill the required mounting holes thru the metal chassis, then you may prefer to use the alternative mounting suggested in the Final Assembly section.
- ★ Drill two #64 holes in cowl on front (Part C) as shown -- these holes will accept the hinge pins of the Bachmann hood halves. [Metric: Match drill to diameter of hinge

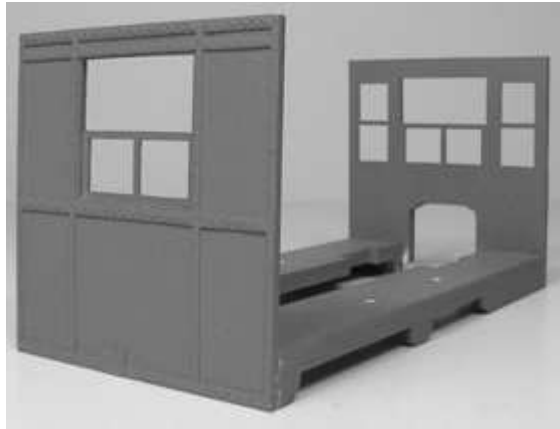


- pins on hood pieces.]
- Test fit front wall and hood pieces on Bachmann chassis as shown above left. The extended lip along the bottom edge of front will extend to edge of step well opening.
- Check clearance around Bachmann motor housing as shown above right -- file out opening in front casting as needed for a good fit. Test hoods for position and hinging action. If needed, slightly enlarge the holes in front wall cowl.
- ★ The following step describes drilling holes for mounting screws used to secure the body assembly to Bachmann chassis (recommended) -- see also alternative mounting in Final Assembly section.
- Drill four 1/16" holes in underside of floor (Part A) as shown, using dimples in casting to locate. Drill all the way thru to top (smooth) side. [Metric: 1.6 mm drill]
- If desired, the back wall (Part D) may be drilled to allow the Bachmann tail light to show thru. Drill a 1/16" hole [1.6 mm] thru the offset metal plate at bottom edge of back wall (Part D) as shown.
- ★ **Note:** The tail light on the Bachmann chassis is actually an LED mounted beneath the fuel tank -- a piece of clear plastic is used as a fiber-optic channel to the rear of stakebed. On our customized sample, we relocated this LED and used a Grandt Line tail light (not included in kit) mounted to the rear wall.

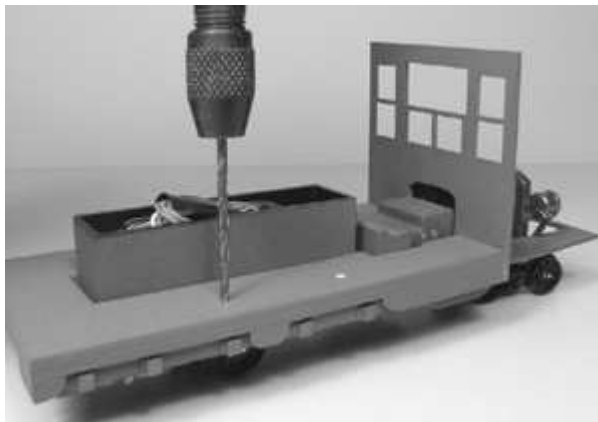


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★ **Important / orientation:**
The TOP side of the floor is smooth. The FRONT end is open in the center to clear the drive components.



□ Invert chassis so smooth side (top) is facing upward. Glue front wall to front end of chassis as shown. Assemble parts on smooth surface so bottom edges are flush. Be careful not to pinch the chassis inward -- the outer edges of chassis should be flush with outer edges of front wall.

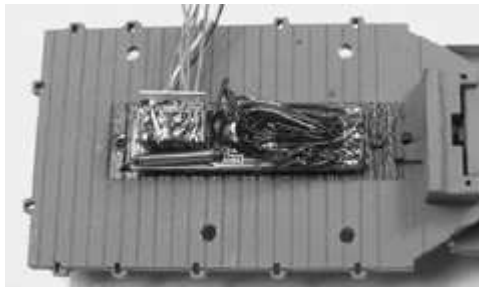


□ Glue rear wall in place as shown.

□ Test fit assembly on railtruck with hood pieces as shown (rear wall omitted in photo). If floor is too snug against mailbox (DCC housing), then file out center of floor as needed.

□ Test fit assembly and check hinge action of hood pieces. Make sure floor and end assembly is fully forward so lip on front extends to edge of step well opening (see photo of page 1). **Clamp** assembly in place to prevent slippage and use 1/16" drill [1.6 mm] to make transfer marks by drilling thru the holes in bus floor and just barely into metal bed of the Bachmann chassis -- just drill deep enough to make a dimple in the metal casting at each of the four locations.

□ Remove partial body assembly and double check to make sure that four locations have been marked. Use tape, plastic wrap, etc. to cover the drive and electrical components of the Bachmann chassis. Next, we'll drill thru the metal chassis. Use a smaller drill bit to start each hole -- this prevents the drill bit from "walking" out of the dimple that you've created. Enlarge each hole to 1/16" [1.6 mm]. Then enlarge each hole in **metal chassis only** to 3/32" [2.4 mm] -- this will provide clearance for the mounting screws



provided. (Do **not** enlarge holes in bus floor -- these should be kept at 1/16", as screws will self-tap into these smaller holes.)

★ Photo in previous column shows clearance holes drilled in metal deck of Bachmann railtruck (mailbox housing removed for clarity).

★ **Optional grab-irons:**
Assuming that the doors on this little bus would open outward, it's quite likely that they would have grab rails on the interior ... but, we couldn't resist adding this free-standing detail to the exterior. Sizing and placement is optional. (See color photos for better visibility.)



□ We drilled holes for grab-irons in the rivet bands on either side of door. Depending on the location selected, it may be necessary to shave off a rivet or two to create a flat spot for drilling. As shown, our grab-irons are approximately 2'9" scale length [17.5 mm]. #75 holes [0.5 mm] are drilled 6" and 3'3" scale from the bottom of side [3.2 and 20.6 mm].

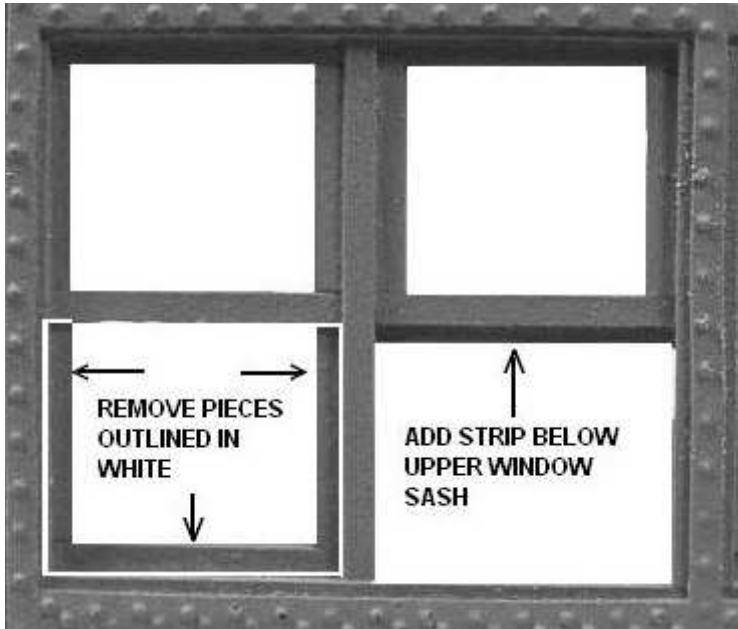
□ Use needle-nose pliers to form grab-irons from fine wire provided (Part P). Make a bend approximately 4" scale from end, then bend again 2'9" further away and clip second end at 4" from bend. Use wire cutters to clip wire and sand ends smooth with emery board or file. Use a tiny droplet of ACC to secure each end -- make sure that the ends do not protrude into interior. (Ends may be sanded inside if needed.)

Optional -- Open Windows for Fresh Air and Sound!

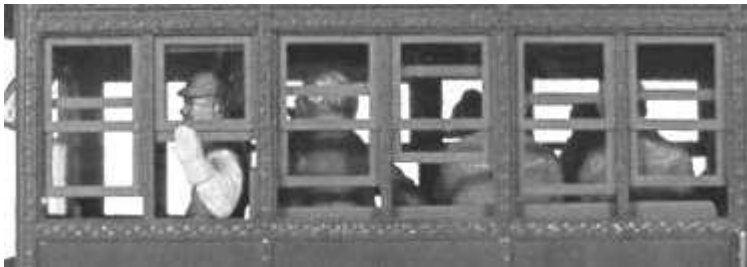
★ On our sample, we used an Artista #1406 Fireman Waving figure as the driver and we opened his window so he could wave freely. Adding this sort of detail is relatively easy in On30 and adds a great deal of visual interest to the model. We've suggested two ways of adding open windows below -- the first is relatively easy and should be quite comfortable for most modelers. The second is somewhat tricky, but adds even more interest. Either way, it's easy to make these modifications before the sides are glued to the body assembly.



★ **If you're planning to add SOUND:** You should consider opening at least a few windows to provide a port for your speaker's sound waves.



- ★ **The "Easy Way"** -- Trim out the frame of the lower window. Remove the portions outlined in white on left window. This produces an open window as shown at right. We've provided .010 x .040 styrene strip (Part S) to add sash(es) to the raised window(s). Cut strip slightly wider than open window and glue in place from back, with top edge slightly overlapping the bottom sash of the upper window.



- ★ **The "Tricky Way"** -- We cut out only the bottom sash and lower portion of the side frame pieces, then used styrene strip to replace the bottom sash. The driver's window is fully open as described previously. The other windows were "opened" to varying heights. The top sashes of the lower windows were pre-painted and installed from the interior after the window stock had been placed. If you try this and find it too tedious, you can "fix" it by continuing to remove the lower window as described in "Easy Way." (Visit our web page for color photos of this variation.)

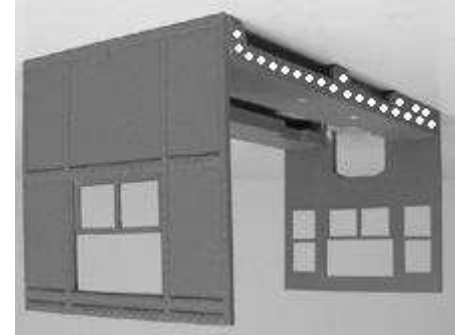
Continue Body Assembly

★ **Important / Positioning of Sides:**

The rounded corners on the side wall will overlap but not fully cover the edges of the front and rear wall castings. We suggest the following steps for easiest positioning and alignment of sides. Use a slow-setting ACC or 5-minute epoxy to allow maximum time for positioning. **Read thru the suggested steps before gluing parts!**

- Invert the floor / end assembly as shown above right. This will insure that the top edges of sides and ends are all flush, which will allow the roof to sit flat on body.
- Add ACC or 5-minute epoxy along the edge of floor as shown by white dots in second photo. Position side as shown above and check alignment at each end. Rounded edge on side casting will partially cover the edge of end wall casting.
- Double-check placement before glue sets, then allow to fully set in inverted position as shown above.
- After the glue is set, gently flex out the end as shown and use a toothpick or fine applicator to apply small dabs of glue where the side will overlap the end. Return end to correct position. Hold side in place against end. Double-check alignment and allow to set. Use a fine applicator or toothpick to apply additional cement along inside of seam as shown above right.
- Repeat these steps for second side.

- ★ **Design note / tip windows for ends:** These parts are **FRAGILE**, so please handle carefully! You'll use two of them in the actual assembly, and two extras are provided in case of breakage. If you tape them down for painting, be sure to use a low-tack tape such as blue painter's tape or "magic" office tape and



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be very gentle when removing the pieces from tape!

★ **Orientation of tip windows:** The side with raised lip as shown here is the **interior** side. This allows window stock to be inset so it will not be visible along the edges of open window.

□ The tip windows (Part F) must be trimmed from thin backing material. For best results, use a hobby knife and place part on a rubber cutting mat. Trim out interior window openings first, then trim around outside edge of part.

□ Test fit as shown here but **do not glue** at this time. The angle may be varied to suit your preferences. File out the opening on bus end as needed to allow tip window to fit in place - - do not file the fragile tip window casting.

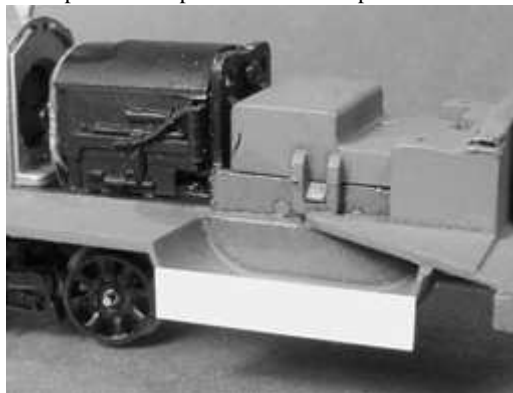
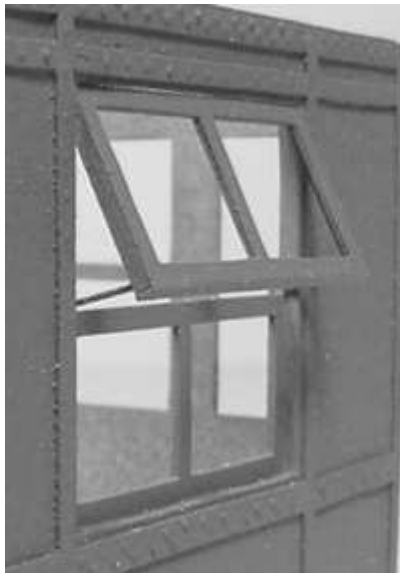
□ **Assembly options / tip windows:** You can paint these separately, add window glazing and install during final assembly ... OR ... precut window glazing to fit the tip windows (set pieces aside using one of the small zip bags in kit), then glue windows in place at the desired angle. The thin metal braces will be added after the window glazing is in place in Final Assembly.

□ Test fit body assembly on Bachmann railtruck. If body does not slide down easily over the metal bed, it may be necessary to lightly sand the exterior of the stake pockets (easily done with an emery board) and/or lightly sand the center opening of bus floor.

□ We've provided styrene strip to cover the bottom portion of the step well openings on the Bachmann chassis. Lightly sand the lip of the step well to remove paint. Cut a piece of .020 x .156 styrene strip (Part T) to approximately 3'6" scale [22.2 mm]. Glue in place as shown above left, with **bottom edge** of styrene **flush with or slightly below** the bottom of the step well. Repeat for second side and allow glue to set.

□ After glue has set, trim and sand the styrene overlays to match contour of step wells as shown at right.

□ Place body assembly on railtruck again and make sure that step well



covers do not interfere with placement of body and alignment with hood pieces. If there is interference, sand the bottom of the bus floor rather than the thin styrene step well covers to avoid breakage. (We added a little bit of moldable lead putty in each of the step well cavities for added weight -- use appropriate precautions if handling lead!)

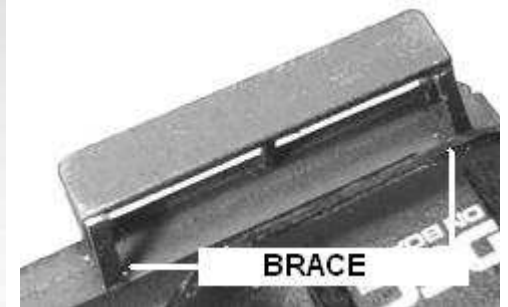
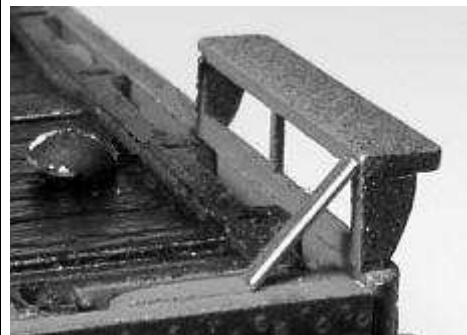
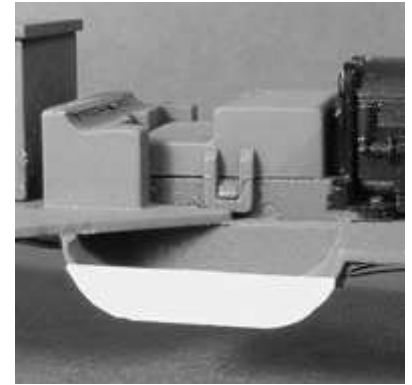
□ The steps (Part G) must be trimmed from thin backing material. For best results, use a hobby knife and place part on a rubber cutting mat. Trim out center openings first, then trim around outside edge of part.

□ Glue step beneath side door as shown. (Note: Body assembly is upside-down in photo.) Repeat for second side.

★ We've provided flat brass strip (Part R) to form braces for the steps. This will help reinforce these fragile parts against breakage.

□ Cut one piece of brass strip to brace rear step as shown above left. Glue in place with ACC. Make certain that brace is glued to step and body assembly, but does not extend into area where bus will mount on Bachmann chassis.

□ Cut two pieces of brass strip to brace front step as shown below. Glue in place with ACC. Make certain that brace is glued to step and body assembly, but does not extend into area where bus will mount on Bachmann chassis.

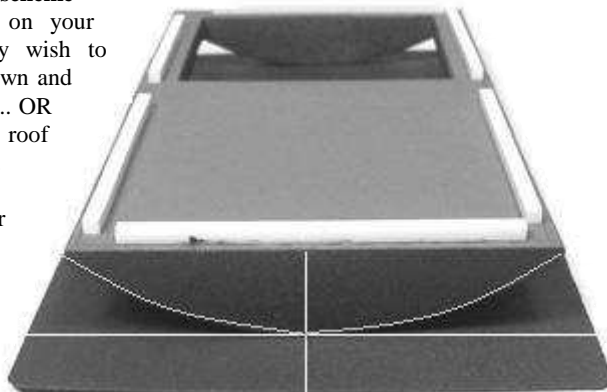


□ At this point, we painted the body as an assembly and the tip windows as separate pieces. We also masked off the drive and electrical components of the Bachmann chassis and painted that to give a flat finish.

Roof Assembly

- ★ **Design note:** The roof casting has a large opening to facilitate placement of a speaker. Whether or not you use a speaker, the opening should go toward the rear of the bus, so that the heaviest portion is located over the drive wheels and front truck.
- ★ **Sound installation / orientation:** If you choose to place a speaker in the roof, you will find it desirable to place the speaker toward the rear of the bus. This way, you can run wires up the back wall in the area without window openings. When adding the roof overlay, be certain that the longer overhang is at the front end -- away from the speaker cavity.

- ★ **Plan ahead / paint scheme selection:** Depending on your paint scheme, you may wish to assemble the roof as shown and then paint the assembly ... OR ... pre-paint the roof and roof overlay as separate items.



- Measure the interior dimensions of your completed railbus body. Place the roof (Part B) with flat side facing up on work surface -- use scraps of cardboard or magazines along edge to keep the piece from rolling. Use a pencil to draw an outline of your railbus interior dimensions on underside of roof.
- Cut pieces of .060 x .060" styrene strip (Part U) and arrange these just inside the pencil lines. This will create a lip for mounting your roof, while keeping it removable. Tack strips in place with small dabs of ACC. Test fit on body assembly and remove. Use a fine tip applicator or toothpick to apply a bead of ACC along inside edge of each piece to complete the bond.
- Use a pencil and square to mark the centerline on each end of roof casting (top half of vertical white line in photo). Use a pencil to mark the centerline along the length of roof overlay (Part N) -- (bottom half of vertical line in photo).
- ★ **Optional: Uneven roof overhang.** On our sample, we place the roof overlay so that it overhangs the front of the roof by 1/6" [9.5 mm] scale ... and overhangs the rear by only 6" scale [3.2 mm]. This placement may be altered to suit your preferences.
- Mark a line across roof overlay 1/6" scale from end (horizontal white line in photo). Make a trial placement of roof on overlay, aligning center marks at each end.
- Lift roof and apply a bead of ACC down the centerline on curved surface. Replace on roof overlay as shown in photo. Double check alignment of centering marks at each end. Allow glue to set. Nip corners of roof stock as shown, if desired. (Corners may be left square, cut-off at an angle as shown or rounded depending on your preference.)
- Apply ACC or 5-minute epoxy between roof and overlay on one side only. Roll roof overlay over roof as shown in opposite column. Although the assembly is shown in

hand, it's actually easier to roll the assembly against a flat surface and hold it that way while the glue sets.

- Repeat procedure to glue down opposite side of roof.
- ★ Bottom view of finished roof assembly is shown below.



- ★ **Speaker installation:** There's ample room for a 1" speaker as shown at right. (Note: Sound installation requires additional components and materials not included in kit.)

- ★ We cut a piece of .040" [1 mm] styrene sheet slightly larger than the opening in the roof casting. We then traced and cut out a 15/16" diameter hole (for a Soundtraxx 1" speaker). After the insert and roof assembly were

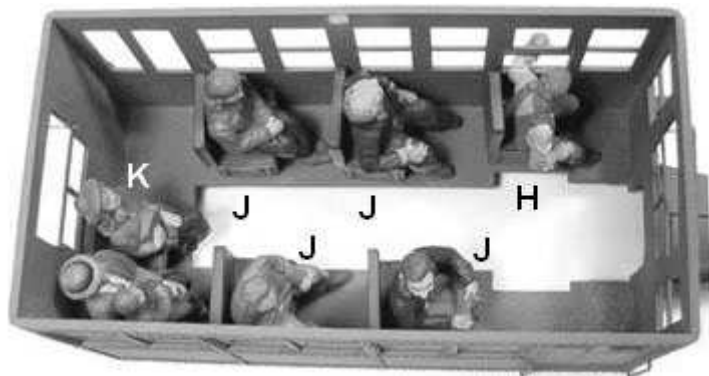
painted, we mounted the speaker against the .040" plate and drilled holes for the speaker wires. We also added a two-pin micro-connector on the end of speaker wires. (Test all components before making any permanent or semi-permanent mounts!)



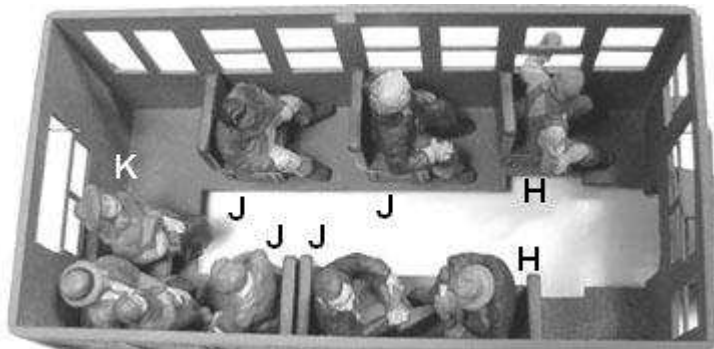
Choose Seating Arrangement

- ★ **Design note:** We have include seats that will allow for **your choice** of three different seating arrangements.
- ★ **Interior Design using stock Bachmann decoder and housing:** The first two seating arrangements (6 and 7 passenger versions) allow use of unmodified passenger figures, such as the Woodland Scenics and Arttista figures we've used. The third arrangement (8 passenger) version requires cutting the legs from figures seated on the long bench.
- ★ **Interior Design with SOUND installation:** Skip ahead to the next section describing our sound installation and the false floor that we used. Consider your preferences and choose seating to suit your placement of sound components.
- ★ **Note:** Letters in the following photos correspond to the Parts Listing designation for each of the seat types. This will help you choose the seats to assemble for the arrangement you select. Also, consider standing passengers for more capacity!

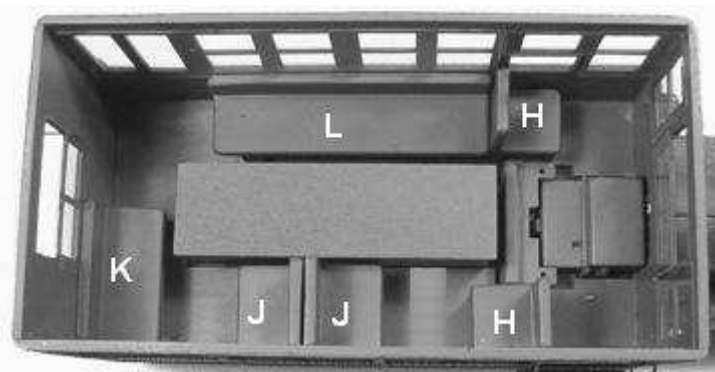
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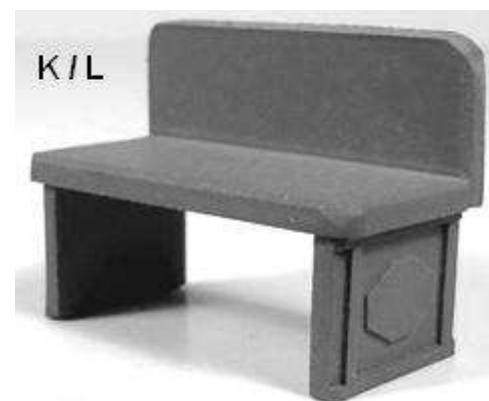
★ **6-Passenger Seating / all forward facing:** Using the stock Bachmann decoder and housing (which fills the white area in center), this arrangement allows for unmodified figures in all but the rear center position.



★ **7-Passenger Seating / some rear facing:** Similar arrangement, but the placement of two rear-facing seats increases capacity. Also allows for unmodified figures in all but the rear center position with stock decoder and housing.



★ **8-Passenger Seating / every which way:** Fairly typical of small busses, this arrangement uses a three-passenger bench on one side. Shown on the Bachmann



mechanism. Unmodified figures may be used in several positions, but it's necessary to cut the legs off figures seated on the bench seats. (Legs are well below the window line, so this is not very obvious on the finished model.)

- ★ It's very easy to trim Woodland Scenics plastic passenger figures with a razor saw and sanding stick. We used a cut-off wheel in a motor tool to cut Artista metal figures (be sure to wear safety glasses -- metal bits will definitely go flying!).
- Choose the seating arrangement that best suits you! (For sound installation with a false floor, review following section before proceeding.)
- **Type H and J seats:** These both assemble as shown above left. The **taller portion** of the seat casting is the **back** (upright portion). Glue two risers (Part M) to the bottom of each seat as shown.
- **Type K and L seats:** These low-back bench seats both assemble as shown above right. The **shorter portion** is the **back** (upright portion). Glue two risers to the bottom of each seat as shown.
- Assemble seats needed for the selected seating arrangement. Paint separately and set aside for installation in Final Assembly.

Suggestions for Sound Installation



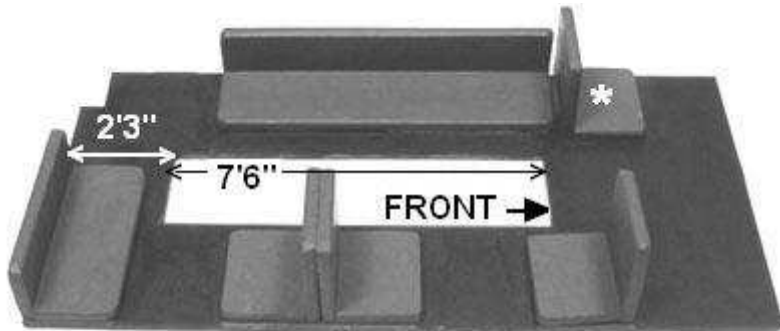
- ★ **Note:** Sound installation requires additional components and materials not included in the kit. Please consult the appropriate resources for technical information. We've included the following information to show that sound components can be placed in the Ruffled Duckling -- adjust and modify as desired!
- ★ **Installation WITHOUT a false floor:** It seems likely that the components can be fit without the use of a false floor. For example, in the 8-passenger arrangement, seats K and L could be glued to the body without using the risers and the decoder could be tucked underneath those "floating" seats. Photo shows test fit of Soundtraxx 821250

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decoder in a position compatible with this approach.

- ★ **Installation WITH a false floor:** After some experimentation, we opted to use a false floor made from .040" [1 mm] styrene sheet on risers that are .270" high [6.7 mm]. This seems to provide the "bare minimum" space required for the decoder, speaker capacitor and resistor for use with Bachmann LED lights. We also relocated the taillight into the passenger compartment on one customized model and added one ounce of additional weights below the false floor. Note that the back of the metal seat cast onto the Bachmann chassis was cut down to provide clearance.
- ★ The photo above shows placement of the decoder, capacitor and resistor ... plus added weights. The white blocks are styrene risers used to support the false floor. The height of .270" was achieved by using .250" wide strips with .020" overlays. An additional riser was placed along the dotted line at bottom right. The added weight has allowed for very smooth operation without interruption of sound!
- ★ **For more space below floor:** Increase the height of risers to .330" [8.4 mm] by using .250" strip with .080" caps. Cut off bottom of seats (approx. .060" -- equal to

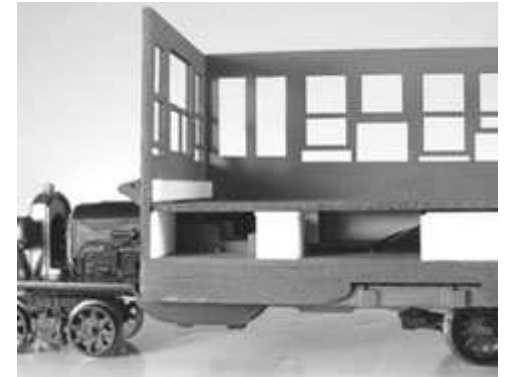


Approx. 6'9" x 13'9" scale floor dimensions

increased height of risers) and just use the seat backs glued to the false floor.

- ★ **Note:** Floor is shown in **REVERSE** position from interior shot at top of page. The (*) on the top photo corresponds roughly with (*) shown on driver's seat.
- ★ **Dimensions are approximate!** Cut a sample piece, test fit and modify as needed

- before mounting seats!
- ★ The overall size of floor is cut smaller than the interior so that it can be dropped in place from the top without disturbing window glazing. We used the metal mailbox cover (DCC compartment lid) from the Bachmann railtruck to secure the floor. The outer edges of the mailbox cover overlap the opening in center of the floor. We clamped the long mounting screw in a cushioned vice and shortened it with a cut-off wheel. The width of the center opening is approximately 1'11" scale. The notch in the rear corner (upper left of photo) is for a two-pin micro-connector we used to connect the roof-mounted speaker. [Metric: Use scale conversion on first page for all of these dimensions.]



- We added another styrene strip above the front edge of false floor as shown at right. This piece was mounted with the bottom edge approximately .020" above the top of floor. For our assembly, the floor is angled in from the top, with the front edge secured beneath this added strip. Then the floor itself is held in place by the Bachmann mailbox lid and mounting screw.
- ★ Photo shows false floor with modified passengers and mailbox lid installed on finished model.



Painting and Detailing Ideas

- ★ You can choose any sort of monochrome or multi-color paint scheme, depending on the style of your On30 railroad. We strongly recommend using a solvent-based primer as a base coat. After that, you may use a variety of paints, including water-based acrylics, etc. -- these may be sprayed, brushed or applied in thin washes.
- ★ At this point, we pre-painted the following as separate parts or assemblies: body assembly, roof casting, roof overlay, individual seats (or false floor with seats), tip windows and Bachmann hood halves.
- ★ Also, you may wish to paint and weather the frame of your Bachmann railtruck. Be sure to mask all drive and electrical components if using an airbrush or spray paint.
- ★ **Paint colors:** We sprayed all items with a light coat of Krylon 1218 Primer. The top of roof overlay was misted with Model Master 1954 Light Earth and a heavier mist of Testor's 1249 Flat Black. The body, roof, underside of roof overlay and hood halves

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were spray with mists of the light earth and flat black mentioned, followed by a heavier mist (nearly full coat) of Model Master 1913 Medium Green. Seats were brush-painted with Polly S 404070 Depot Olive. Window frames and doors were brush-painted with Polly S 414350 Mineral Red. The brass color on the radiator, headlights, bell, horn and grab-irons was brush-painted as follows: first, an undercoat of Polly S 414296 Stainless Steel to create an opaque metallic undercoat ... then a mixture of that silver color with Model Master 4672 Brass (about half-n-half) to start building a brass color and some depth ... then a final thin coat of the brass paint with just a touch of silver. (It's hard to build an opaque coat using just brass color!)

- ★ **Interior paint:** We opted to brush-paint the interior flat black (except for seats), to allow the figures to stand out as the interior detail items.
- ★ **Detail parts:** We used two different HO scale bells from Custom Finishes by Bob Rzasa -- B-137 Side Mount Bell on bus #5 and B-231 Cab Mount Bell on bus #7. The horns were salvaged from a Bachmann HO Plymouth body shell. A variety of bells and horns offered for HO, S or O scale can be used.
- ★ **Figures:** We used all five figures from the Woodland Scenics A2731 Passengers set (repainted) and several Arttista figures: 1406 Fireman Waving (driver), 1328 Hobo Eating Soup and two 1120 Sitting Man figures.
- ★ Please visit the "Painting Tips" section on our web site for color photos showing some simple techniques used on our Rambling Roadrunner freight conversion for the Bachmann railtruck (with the same green body color).
- ★ All lettering was done with Woodland Scenics dry transfer numbers.

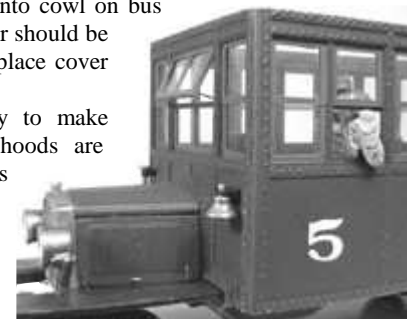
Final Assembly

- Cut window stock (Part O) to fit flat windows on sides and ends. If you opened any or all of the windows, it may be necessary to cut various separate pieces to fit the varied openings. Use a clear drying adhesive such as Micro-Scale Kristal Kleer (or slightly diluted white glue) to mount. If you modified windows as shown "The Tricky Way", then you'll want to paint the top sashes pieces (cut from .010 x .040 stock provided) separately with the body color. Glue in place on interior side of window stock.
- Test fit tip windows in frames again. If paint build up causes a snug fit, lightly scrape away a little bit of paint inside window frames on body (**not** on fragile tip windows).
- Cut window stock to fit interior side of (2) tip windows. Use a toothpick or damp brush to apply tiny droplets inside frame and place window stock with tweezers.
- Glue tip windows in place at desired angle and allow glue to fully set.
- Cut short pieces of ultra fine wire (Part Q) to create the window braces shown. It requires a good pair of tweezers and a bit of patience to fit these parts! (Use the heavier wire as an alternative if desired.) Test fit, then dip each end into a droplet of ACC and mount as shown. Add two to each tip window. Allow glue to fully dry, then brush paint with flat black or desired color.
- Glue seats in place as shown on page 6 -- according to arrangement you've selected. Glue figures in place if



desired. Use 5-minute epoxy to secure metal figures.

- Plug pins on Bachmann hood halves into radiator. Carefully lower body assembly over railtruck chassis, slightly back from final position to clear hood pins. Carefully work into place so that hood pins are plugged into cowl on bus front. (Note: The Bachmann mailbox cover should be removed prior to installing bus body. Replace cover and screw after body is in place.)
- Double-check position of body assembly to make certain that it is properly placed and hoods are aligned. Carefully invert body and chassis assembly and make sight-check thru clearance holes drilled in metal bed. Holes in bus floor should be approximately centered. **Caution!** If screw holes are not aligned with clearance holes or if body starts to twist when screws are tapped in place, then **STOP** and make adjustments as needed. If needed, remove body assembly and enlarge holes in metal body only.



- When alignment is okay, add mounting screws (Part V). These will drop into the clearance holes. Make sure they're straight and carefully tap each into the resin bus floor. If there's too much resistance, remove screw and add a touch of soap. You may use all four screws or just two screws placed on a diagonal.



- Alternative to screws:** If you prefer not to drill thru the metal chassis, you can add a piece of styrene strip, such as .020 x .156" (not included) as shown by white outline in photo above. Pre-paint strip and glue to body with a few small drops of ACC. Strip should overlap stake pockets on metal body. Repeat for other side. By gluing painted strip to painted body, you'll create a "breakable" joint that can be pried loose if it's necessary to remove bus body. (Photo also shows a modified exhaust -- more details on our web site!)
- Place removable roof assembly on body. If desired, the roof may be "tacked" in place by adding a tiny droplet of ACC, white glue or rubber cement in each corner.
- ★ Boulder Valley Models is owned & operated by Dallas Mallerich -- an On30 modeler who shares your interests and enthusiasm. Please feel free to write or email with any questions or ideas that you may have!
- ★ Thank you for your continued support, interest, ideas and encouragement! -- Dallas

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Please visit web site for larger color photos of Ruffled Duckling railbus!