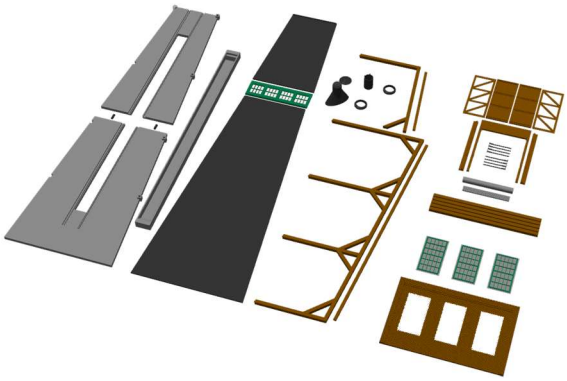
LS-RHSX – Roundhouse Stall Extension for Walthers 933-3041

This kit adds a single stall to the Walthers 933-3041 Roundhouse kit. The 3-stall expansion kit is not available from Walthers, and often the 3 stalls don't align with a modeler's needs, resulting in waste and unnecessary cost. This kit allows you to add one stall at a time in an economical way.



Preparation

Take a moment to familiarize yourself with the parts. Assembly is fairly simple and straightforward. We recommend washing the parts in luke-warm soapy water before painting and assembly.

- Foundation and Service Pit – paint a concrete color. There should be heavy dirt and rust weathering in the pit and some light oil staining on the foundation and in the pit. Heavy oil spills would be rapidly cleaned up to avoid accidents, but some moderate staining would remain.
- Roof Support Columns – these represent wood beams and should be either painted a natural wood color or a dirty white. Lots of nicks and scratches would be apparent on the lower half of the vertical posts. Note that the kit includes additional cross-members not in the Walthers kit that can be added if the roof will be removable.
- Roof Panels –the underside is usually painted gray, while the top is usually dull black. An interesting detail would be to apply a covering of 120-grit sandpaper to represent a tar & gravel roofing material application.
- Rear Wall – This is a brick panel matching the Walthers kit. Paint the bricks a terra-cotta color, add a few bricks painted with a darker or lighter color for variety, then apply the mortar. *Our preferred method is to spread a thin layer of lightweight spackle compound over the part, pressing it into the mortar lines. After a minute or two, gently wipe the surface with a damp paper towel. Use a toothpick to remove any excess from crevices. Allow 15-minutes to dry, then apply a light gray or tan wash to tone down the white lines. Allow to dry, then coat lightly with a flat finish to permanently fix the mortar.* The inside can remain a brick color or be painted – a common color combination was a light yellow-green upper and medium green lower half.
- Door Frame/Front Wall – this part allows the use of either wood swing doors (matching the Walthers kit) or a steel roll-up door in the open position. The latter can represent a modernized stall.
- Front Door – Each door consists of 6 parts – main door, rear frame, and 4 hinges. **The door and rear frame should be assembled before painting.** The hinges are black and can be given a bit of rust weathering with some greasy black at the hinge pin end. The hinge pins are fragile and the doors are NOT intended to be functional but instead glued into the desired position.
- Windows – there are two sets included – one with translucent "glass" pre-installed and one without any glass to allow you to apply your own glazing. There are 3 tall windows for the back wall and the skylight. These are printed in color to eliminate the need for painting – options include gray, olive green, bone white, and blue.
- Smoke Jack – this consists of a "flattened funnel" inside collector, roof collars, stack, and cap. These should be a dull, sooty black with some rust streaks.

Assembly

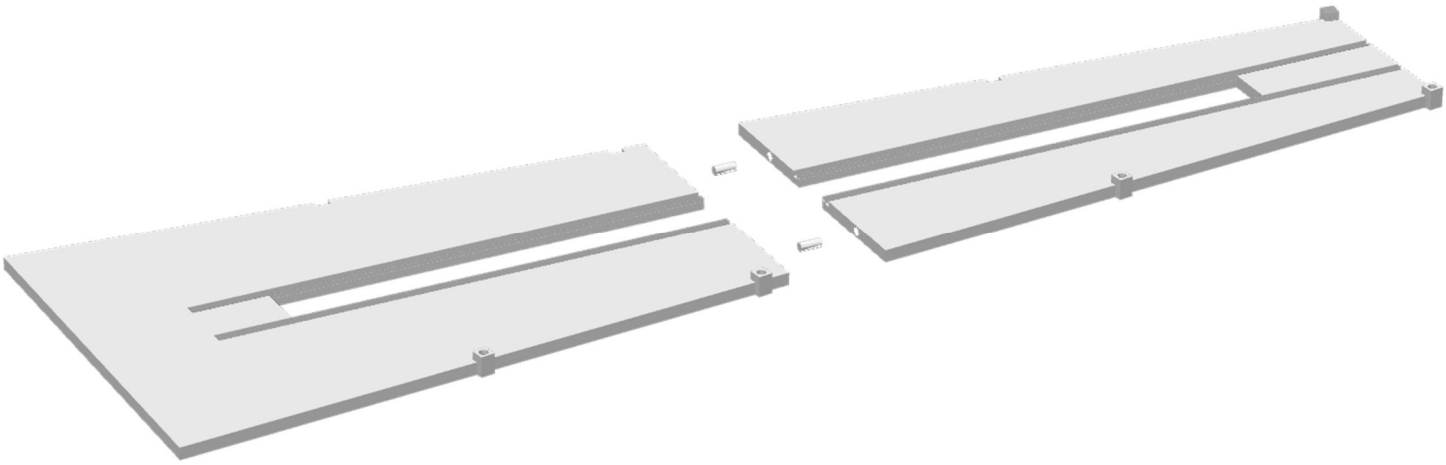
- Paint the parts as suggested. Any plastic-compatible paint can be used.
- Glue parts with a medium-viscosity plastic cement such as Model Master Liquid Cement. Remove paint from any mating surfaces before gluing. Thin liquid solvent cement or a 50:50 mix of MEK and Acetone can be used for a strong bond.
- Some of the parts may have a bit of "brim" material, which protects the part during printing and during shipping & handling. Remove this as you would any "flash" on injection molded kits, using a sharp knife.

> **TIP:** Use a drop or two of CA to hold parts together, then apply the liquid solvent cement. The CA doesn't provide a good structural bond, but does cure rapidly and acts like a "chemical clamp" to keep the parts aligned while the solvent does its work.

- Only the tasks specific to this kit are described in this guide. Please refer to the Walthers 933-1041 kit instructions for placement of the parts within the overall kit.

Foundation and Pit

Depending on the kit purchased, the foundation may consist of two separate parts. These are glued together to form a single stall foundation. Start by test-fitting the pins into the alignment holes. The pins can be rolled on fine sandpaper if necessary – they should be a snug fit. Apply glue to the mating edge of one part and into the corresponding pin holes, then join. Place the parts onto a flat surface and ensure both parts are held together for 30+ seconds, then set aside. If your kit has the one-piece foundation, simply proceed with the pit installation.



Once these parts have cured, you can add the optional service pit. Turn the foundation over, align the pit and secure with cement. This is a good place to use a drop of CA at each end to hold the pit while the solvent is applied. The pit requires cutting a recess into your platform as the pit hangs about 3/8" below the base. If the pit is not used, you can paint the platform surface dark gray to give the illusion of depth without cutting the recess.

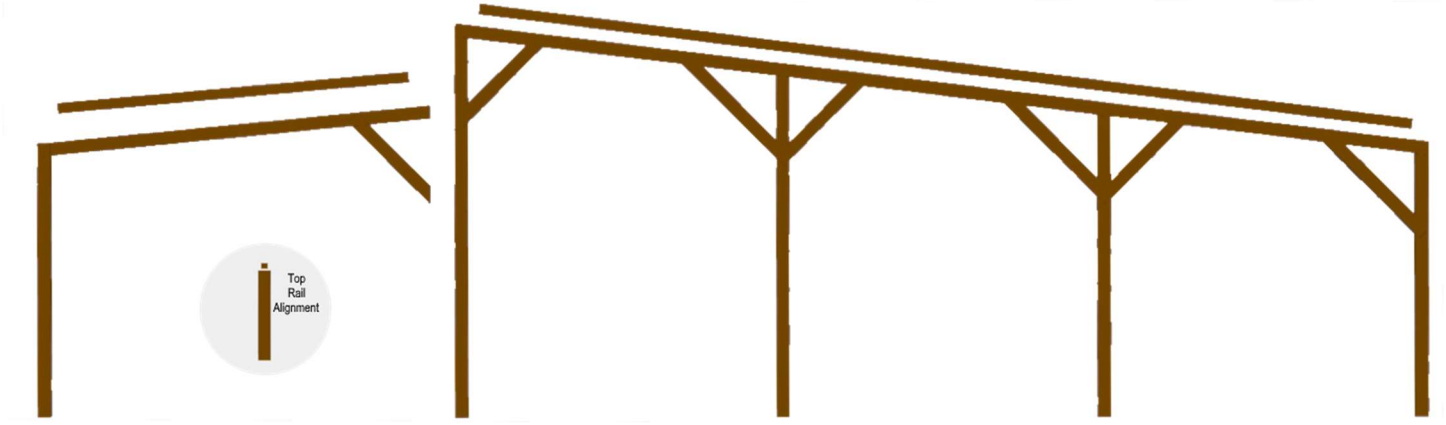
Glue the completed foundation to the foundation you are expanding using solvent. Be sure to remove any paint from the mating surfaces!

Roof Support Truss

The roof truss consists of 4 parts as shown in the image below. This image illustrates the relative position of the front and rear truss assemblies and the front and rear top rails.

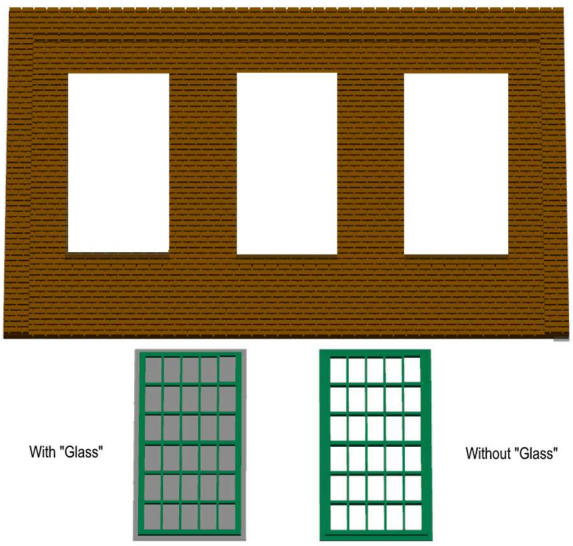
Start by gluing the top rails to the centerline of the truss assembly – the top rails are roughly centered along the length as shown below. There should be an equal gap on each side of the top rail as shown by the inset image below. Use a drop of CA at each end of the roof rail to chemically clamp the rails in position while the glue cures so you can continue with the next step without delay.

Start by aligning the base of the larger rear truss against a straightedge. Next, align the front truss "Y" against the front vertical post of the rear truss assembly, then slide downward until the front-most post touches the straightedge. Apply a bit of solvent where the front and rear truss assemblies meet. Set aside to allow a full cure before handling further!



Rear Wall & Windows

The rear wall has 3 tall window openings. The windows are glued from the back of the wall using plastic cement. You can choose from windows with or without "glass". The glass layer is a translucent material that is a good representation of "dirty" windows. Note that this translucent layer extends beyond the frame and creates the gluing surface, which "disappears" when glued. The non-glass windows have an extra interior frame width to provide the glue interface. This is smaller and thinner than the original Walthers parts and will look great when the interior is detailed.



Note that the frames without the "glass" layer may have fine strings created during the printing process. The easiest way to remove these is by holding the window with tweezers and quickly passing the frame over a flame from a match or lighter. Move quickly so the delicate frames are not deformed!

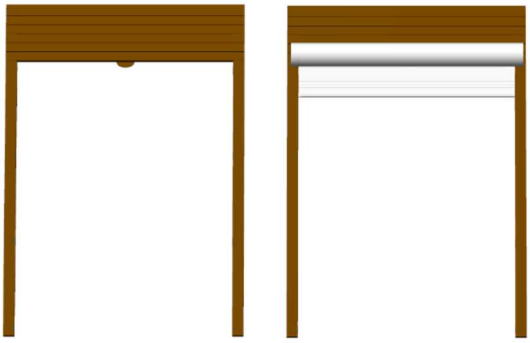
Install the desired windows and secure with glue, then add a layer of clear acetate plastic if you chose the non-glass frames (or use your favorite glass material!)

Doors

Two door styles are provided – a steel roll-up door for a modern appearance and the traditional wooden swing-out doors. The wooden doors are produced in two pieces and must be glued together before installation.

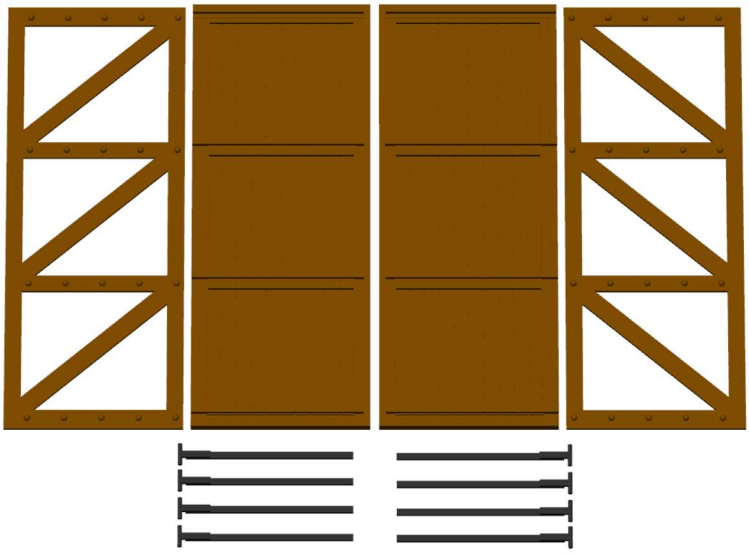
Roll-Up Door

To install the roll-up door, locate the frame, roll-up door panel, and the roller enclosure. Glue the door into the top of the opening, then glue the roller enclosure onto the wood header so that it slightly overlaps the top of the roll-up door panel. See the image to the right for placement of the door and enclosure. This door is only available in an open configuration.



Swing Doors

The swing doors need to be assembled before use. Orient the parts as shown – the diagonal cross-bracing should travel from the top on the hinge side to the bottom of the open side within each section.



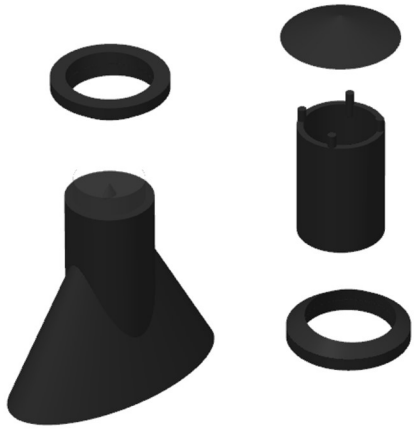
We suggest that after arranging the parts as shown, you turn them over while retaining the order. Apply plastic cement to the smooth side of the bracing panel and flip it onto the back of the door. The back side has vertical grooves but no bracing. Ensure that the two parts are square and clamp or apply weight until the glue cures. Repeat for the other door.

Once the door halves are assembled and painted, carefully remove the support material from the hinges. Start at the end without the hinge pin and peel the material toward the hinge. The tiny piece of plastic supporting the pin may separate by itself. If it doesn't, carefully persuade the support to come free of the pin by inserting a sharp knife blade tip and twisting slightly. The hinges should be a snug press-fit into the grooves in the door, but may require minimal sanding or filing to fit. Place 3-4 drops of plastic cement into the groove and then insert the hinge, ensuring that the raised hinge pin arm is facing away from the door.

Smoke Jack

The smoke jack consists of 5 parts as shown below. The two ring collars are the same and are interchangeable. Sand or file the ring collars so that the parts fit snugly. The ring collar on the collector funnel is fitted so that the taper faces down, while the upper ring collar tapers up. There should be just enough play so that the parts can be installed so the stack and collector funnel are vertical and the collars are angled to match the roof.

Unlike the Walthers kit, you can position the smoke jack anywhere along the roof/stall centerline to potentially accommodate a longer loco. Complete the assembly by placing a drop of plastic cement on each of the 4 stack posts and place the cap centered over the stack. When attaching the parts to the roof, apply plastic cement to the collar and position as desired.



Final Assembly

The remaining assembly should be done following the instructions in the Walthers kit. The only difference from this point forward is that the roof truss assembly does not have long centering pins. The 5 crossmembers can be cut to size and used to align the truss to the next and previous truss assemblies. Note that the crossmembers are about ¾” longer than the single front truss top rail (11cm vs 9cm).