

# 4-STALL PIT GARAGE PHOTO REAL BUILD KIT

by *Innovative Hobby Supply*

*Making Traditional Hobbies Better!*

## INSTRUCTIONS FOR:

### Kit BK 6411 "4-stall Pit Garage" Build Kit ~ 'S' scale

Free replacement parts are available simply by calling 866-712-4059.

Includes five (5 ea.) ¼ x 5-½ in. flat wooden craft sticks and two (2 ea.) Ultra Sign sample sign posts.

Views of the completed "4-stall Pit Garage" build kit shown below are for reference purposes and as an aid in assembly.



Fig. 1 – 4-stall Pit Garage with open doors



Fig. 2 – 4-stall Pit Garage overview



Fig. 3 – 4-stall Pit Garage with closed doors



Fig. 4 – Close-up view of door swing

**Innovative Hobby Supply**

11610 Jay St. NW, Minneapolis, MN 55448

Customer Service: 866-712-4059 ~ email: [info@innovativehobbysupply.com](mailto:info@innovativehobbysupply.com)

## INTRODUCTION

**Please read these step-by-step instructions thoroughly before you undertake any cutting or assembly.** Then follow the simple step-by-step instructions. This **4-stall Pit Garage** build kit is a skill level 4 assembly in the Photo Real Build Kit product line. Build time is approximately 1.5 hours assembly with the garage doors closed. Add 1.5 hours to the assembly time for optional, open garage doors and a hinged roof for garage access. The open garage door option requires the use of the wooden craft sticks provided. This option allows access to the garage for displaying HO or O scale slot cars or die-cast cars inside. With just a little patience and the right tools, this amazing kit can be constructed by any hobbyist, offering a more realistic-looking model than painted plastic forms. Printed on our exclusive, high-definition 'Flex Stock' material, these kits are very rugged and will provide many years of enjoyment on your train layout, slot car track, or diorama.

After you've read through the assembly instructions once, start again at the beginning and follow the steps to cut and assemble the model. We strongly recommend using a hot-melt mini-glue gun for assembling this kit. (Mini-glue guns are available at your local craft store, as well as many hardware stores and drug stores, for less than \$5.00.) Hot melt glue is easily controlled and sets-up fast, which greatly speeds-up the assembly time since you don't need to wait for the glue to dry. **Use hot-melt glue sparingly:** apply an amount just sufficient to tack the items together. You can reinforce the bond surfaces with a final bead of hot glue – or with white glue – once you are satisfied with placement of component pieces.

These instructions include plenty of clear, full-color photographs to make assembly easier. As with all model assembly, some patience is required. The skills acquired in constructing your first building kit will carry over to our other kits, which will make it easy to add as many buildings to your layout as you desire – saving you time and money and giving you better results than for most molded plastic kits. Enjoy the most innovative and realistic scale-model building kits available.

## GETTING STARTED

**IMPORTANT:** The most important skill in getting a good result is the technique of 'scoring' the material where indicated (fig. 1). Scoring is simply making a shallow cut through the top layer of the paper with a sharp hobby knife (e.g., an X-acto knife) while using a ruler or other straight edge.

This technique is simple to learn, yet vital to getting a perfect fold – even on small parts! Using this technique helps to ensure a beautiful trouble-free assembly. Without it, the folded edges tend to buckle unevenly and look bad when assembled.

Practice on a scrap piece until you have perfected your technique sufficiently to have confidence. The hobby knife should be used for scoring only! When cutting out parts completely, use a sharp scissors as this material is tough and does not cut easily with a knife. Remember to always wear safety glasses when using sharp tools or hot glue guns. Keep all materials away from extreme heat or flames. Hot glue can give you a burn so do not touch it until it cools. Adult supervision is required for those under age 16.

## Important “Do’s” for a Successful Build Kit Assembly



Do have the tools needed at hand



Do practice scoring and folding



Do detail edges beforehand



Do fold scored parts on desk edge

**Gather tools:** The tools you'll need include a hobby knife, a mini hot-glue gun, a ruler or straight-edge for scoring parts; a sharp, modern scissors; a clear plastic bag or tray for storing and separating components from scrap, and a good-size tweezers – handy for removing any hot-glue strings or webbing and for positioning and gluing small components.

You should also have on-hand some white glue for cementing right and left components together and a weighty object such as an inexpensive heavy book or catalog to place over parts and hold them flat while they dry. Gather waterproof markers (such as Sharpie-brand markers) in red, black, brown, green and silver for detailing the cut white edges of parts. A pencil is useful for marking assembly points and margins, such as a roof overhang. Zip-lock plastic bags are useful for storing small component pieces waiting to be assembled. Clear tape can be used to temporarily hold components together from the inside areas prior to gluing. Paint is not needed.

**Tip:** Keep all your scrap in a small clear plastic bag or tray to separate it from your components. Keeping your workbench clear of scrap will help to prevent losing or misplacing parts. If you do misplace a part, you'll know where to look for it.



## 1) PREP THE MAIN COMPONENTS

- A. Carefully cut out the five (5) main components as shown: floor base # 10; right side-wall; left side-wall, back wall; front wall and roof.
- B. Detail the edges using the appropriate colored marker along the exposed cut edge of each component piece. For the base and roof, use a black marker; for the walls use a silver marker.
- C. See "Important Do's" on the previous page to learn why detailing the edges is important for realism.

**TIP:** When coloring the edges sometimes it works better to move the component piece across the edge of the marker instead of the marker.

## 2) OPENING BACK DOORS

- A. Score the **hinge side** of the one of the middle two back doors with the hobby knife. Make sure the blade is fresh, and you put enough pressure on the ruler so the component does not move while you cut.
- B. Cut the knob side and top of the door all the way thru carefully and straight.
- C. Separate the door from the frame carefully and fold the hinge side on a desk edge.
- D. After door opens, detail the edges of the inside door frame and the door sides with a silver marker.
- E. At this point, you need to decide whether to have one or more of the overhead garage doors open. Using this option will add approximately 1.5 hours to your assembly time. With this option you must also add the hinged and pivoting roof and interior craft sticks provided to reinforce the door pillars. Once your model is assembled you will not be able to cut the doors out later. With the pivoting roof and opening doors you can put vehicles inside and display them with the doors open, or close them, as you please. Refer to figures 1-4 on page 1. Either way you will have a very realistic-looking model.
- F. If you do not opt for the opening garage doors skip to Step 4-D.

## 3) OPENING GARAGE DOORS

- A. Score the top of the overhead garage door.
- B. Cut the side all the way through very carefully and straight using a sharp scissors.
- C. Carefully separate the sides of the door from the pillar without bending the pillar.
- D. Fold the top hinge side on a straight desk edge towards the inside of the garage door.
- E. Repeat for the other doors.
- F. For the support pillars, measure and cut a total of five (5) craft sticks exactly 2-¼ in. high. You can get two of these out of each stick and they can be cut with a sharp large scissors. Wear safety glasses. These sticks will be used to support the pillars. Double-check the first one to ensure that it is ¼-in. below the top of the garage wall when held flush at the bottom.

## 4) ASSEMBLY

- A. White side up, draw a pencil line down center of pillar with ruler. Glue the bottom of the cut craft stick directly in the center and exactly flush with the bottom. Read the following instructions thoroughly before proceeding.





- B. Use hot-glue sparingly as these joints and the wood will show when the garage doors are open. A super clean and straight bond is essential. Do not use too much glue!
- C. Flip model wall over white part up. Using a straight edge, draw a line directly in the center of the pillar where the craft stick will be glued. Run a small bead of hot glue on the side of the craft stick, align it with the pencil line, and before glue cools quickly place the craft stick flush with the bottom and place the rest of the stick over the line very straight and push gently. You have just 3 seconds to get the craft stick on before the glue sets up.

**TIP:** *If hot glue sets-up before making your bond you may re-heat it with some success using the tip of the glue gun.*



- D. Attach the front wall to the base, starting at the right-hand corner. One-by-one, glue each pillar down by lifting slightly and applying a small bit of hot glue to the bottom of the reinforced pillar. These should line up naturally while bonding in the correct spot on the white line on the base. Let each pillar cool before going on to the next one, until the opposite corner is complete. You may see some slight curving at the top of the wall. This will be straightened during the following steps.
- E. Mark the last two remaining craft sticks and cut them to 4- $\frac{3}{4}$  inches long for the top two right and left supports. Test fit the supports before gluing at the top of the wall. Place a small bead of glue at the edge of the entire length of the craft stick and place on top and push against wall top to bond. Repeat for the other side: place a dot of glue where the uprights meet the top stick at the joint. Glue one of the 1-in. long craft stick scraps over the center joint. See picture of finished reinforced wood wall for reference.

**TIP:** *Any hot glue that goes where you don't want it let cool and gently scrape it off using your fingernail.*



## 5) INSTALLING SIDE AND BACK WALLS

- A. Test Fit the side wall so the corner lines up exactly, now put a  $\frac{1}{2}$  in. bead of hot glue to the bottom of the wall and the side and bond it to the front wall.
- B. Then bond the top of the side wall corner.
- C. Bond the middle of the side wall from the inside line up and push till cool. Bond to the base from the inside doing just a couple of inches at a time keeping straight.
- D. Repeat for the long back wall start at the bottom corner, then the top corner and lastly the middle of the corner.
- E. Glue this long wall to the base but only to where the door starts. Next.
- F. Bond the last side wall to the front wall starting at the bottom and then the top and then the middle from the inside for a perfect corner.
- G. Test fit the last corner and start bonding at the bottom of the corner then the top and Middle of the wall last.
- H. The last two walls can be glued to the base nice and straight by doing just a few bonds to hold it where you want it from the inside then using a small bead of glue reinforce any areas carefully from the inside. The walls are now up and we are ready for the roof detailing and hinge so it will open.



## 6) INSTALLING THE PIVOTING ROOF

- A. The hinge system for pivoting roof will allow you to open the roof for displaying and arranging your favorite 'S' scale cars or smaller 1:64 scale cars. The hinged roof option also allows opening, shutting and latching the doors in an upright hidden position and will make it easy to shut the garage doors.
- B. Cut out the four (4) pieces that look like hinges. Score them on both sides and bend the hinge pieces back-and-forth a few times to soften the hinges and make them very pliable so the roof lays flat.





Now fold the four (4) latches in a 'U' shape on lines without scoring this part for more strength. Set aside the latches for later assembly.

- D. Test fit the roof for the proper left-right and fore-aft centering for the look you want. Next, invert the roof (with vents toward the rear of building) and trace the building with a pencil along the exact perimeter line.
- E. Place the model back upright and line up the perimeter line with the top of the roof and the side lines with the right and left walls. Use small pieces of clear tape to attach the roof to the front wall at both ends. These pieces of tape will act as a temporary hinge. You will remove it when assembly is complete. Fold the roof down to make sure it is centered where you want it.
- F. Lay the softened hinges on top of the wood centered between the door pillars (see photo for hinge placement) and hot glue in position. Next, place a drop of hot glue on the backside of the hinge and quickly close the roof and apply flat, even pressure for 30 seconds until the glue sets-up. This is very important to achieve proper seating of the hinge. Open the roof and test it for proper seating. Then remove the clear tape slowly to avoid tears. To allow latching the doors in an open position, we will now install the door latch holders.
- G. Open the roof all the way and make a 2-in. pencil mark centered over the garage door.
- H. With the open end of the latch piece facing down, hot glue it just below the mark.
- I. Test that you can latch the door up with the roof open far enough to get your hand in and repeat Steps G and H for the remaining doors.
- J. The doors can now be latched up when the roof is raised sufficiently to access by hand. All doors will automatically be released when the roof is raised all the way up.

## 7) DETAILING

- A. Cut out the four (4) roof vents and carefully bend each vent on a table edge to shape it into an arch (ref. photo).
- B. Turn the vent piece upside down and apply a big drop off of hot glue to the back side directly in the center to support the arch in the vent. Repeat for the remaining vent pieces. Allow the glue to cool.
- C. Apply another small drop of hot glue to the vent piece and place it over the center of a printed roof vent that has its open end facing the sides of the building. Repeat for the remaining vent pieces.
- D. Cut out the large roof sign. Score and fold the attachment flap. Detail the edges with red marker. Attach the sign at the front center of the roof (ref. photo).
- E. Cut out any other signs as desired and attach them to the building using a drop of glue as a spacer. The spacer suspends the sign from the wall for added realism.
- F. Use the Ultra Sign sample sign posts to attach signs to both sides of posts. Either a double or single post can be used. Hot glue the posts to the base (ref. photos).
- G. Apply detail items such as clump moss, which is perfect way to cover any mistakes. Add scale-appropriate figurines and cars for an action look.
- H. Enjoy your Photo-Real Pit Garage!

