

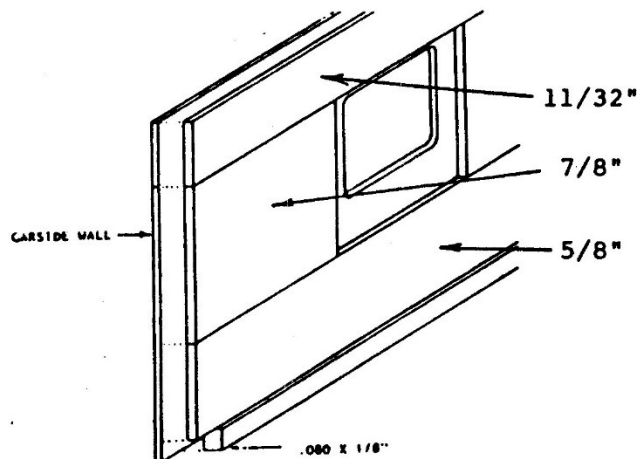
ASSEMBLY SUGGESTIONS

1. Assemble the basic car body as follows:

Notice that the sides have a small red dot on them. This is so that you will know that the marker is on the outside of the car-side. If fluting is required on the car, it goes on the side with the red dot. Notice also that the red dot is placed at the vestibule end of the carside on cars that have vestibule doors, otherwise the location of the red dot has no significance.

- Apply the .080 x 1/8" styrene strip first, along the inside bottom edge of the carside. Bring it to within 1/8" of the end of the carside.

- strip styrene stock is supplied to be applied to the interior of the carside. The 11/32" strip goes above the windows. The 5/8" strip goes below the windows. The 7/8" strip is to be used to fill in the area through the window panel section.



- Clean flash from the styrene doors, square up the edges so that there is no draft, and fasten each door to the appropriate car wall, noting that the handle details will be at the outside end of the wall when it is in proper position. Mount the doors flush with the top of the carside wall and file flush with the bottom if necessary.

- On the inside of each carside, at the end of the carside opposite the cardoor (on head-end cars, at both ends), add a strip of .010 x .080 styrene, flush with the end of the carside. This is simply to thicken the carside .010 prior to mounting the car sides and ends together. Do not add any material to the cardoor as it is slightly thicker than the carside and does not require this additional material.

- Clean up the car end castings and remove any draft from the edges. Mounting of grabirons on the ends depends entirely on whether you are modeling full-width diaphragms or narrow diaphragms, and what particular prototype you are following.

(2)

- When the ends are ready, mount one carside in place on an end. You will note that there is a rib on the inside of the car end at each side which serves to place the carside in the proper position and another raised rib effect across the inside of the end wall which will assure that both carsides will be at the same height when the body is assembled. When both ends are fastened to one carside and firmly set, mount the other carside to the assembly.
 - When both sides and ends are securely assembled, the floor may be placed in position, resting on the edge of the 080 x .125 strip at the bottom of the carsides. If necessary, trim any excess in the floor width until it drops in place without forcing the sides apart. Also trim away a bit as required to clear the doors at the vestibule end and a bit at each corner to clear the corner ribs on the ends.
2. Install interior partitions.

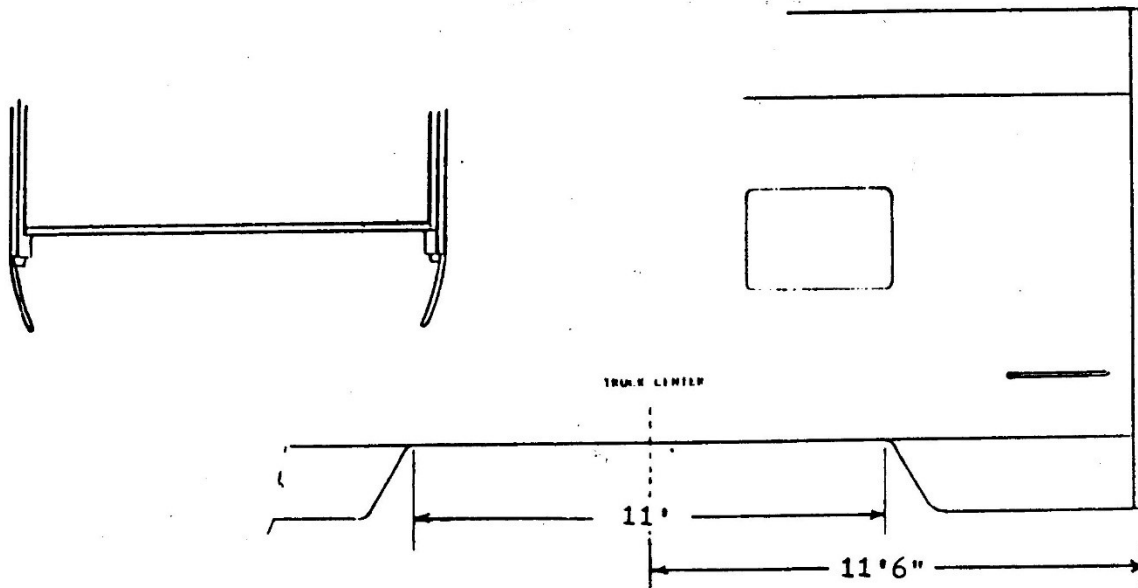
If you plan to detail the interior of your car, make the interior walls from cardstock or styrene and glue them in place. Be sure the tops of the interior walls are about 6 scale inches below the tops of the exterior walls so as not to interfere with roof installation.
 3. Install underbody parts.

Drill and tap the bolsters to accept the kingpin screws (2-56 suggested) Attach each bolster with the kingpin hole 11'6" from the end of the car.

 - Attach the rest of the underbody parts making sure that you leave enough room for the trucks to swivel. Air tanks are made by assembling two white metal ends to pieces of clear plastic tube. Walthers Goo or a similar adhesive is recommended for attaching underbody parts. (except bolsters--use solvent)
 - If you wish to install couplers before painting the car, they may be installed now. Coupler pads will be required to bring the couplers to the proper height.
 4. Install skirts.

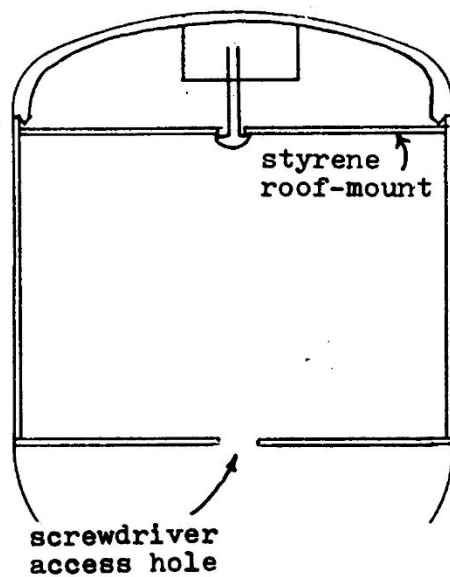
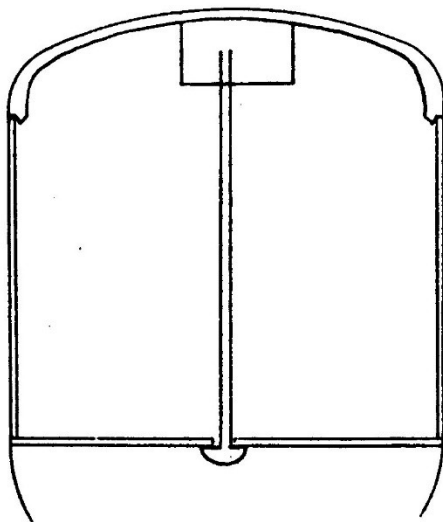
During the latter years of operation, most equipment had the long section of skirting removed leaving on the short sections at the ends. On some cars, where the skirt has the effect of corrugated or fluted material, we have supplied a grooved styrene material, which you can score gently along the grooves causing it to curl gently. It may now be easily glued over the skirting material. Use the .060 x .060 styrene strip on the back edge of the skirts sections, cutting it into sections of about 2 inches. The 11' opening in the skirts to accomodate the trucks may have to be adjusted somewhat if you do not use the trucks supplied with the kit.

(3)



5. Install roof.

Cut the roof section so that it fits snugly between the car ends. If you cut too much, just add a small scrap of styrene to the end of the roof and file to a proper match. Also if it appears that the roof contour does not exactly match the contour of the car end, gently but firmly squeeze the roof from each side, compressing it to re-shape the contour and raise it slightly in the middle. Or you may file the top edges of the ends to match the roof.



-Once you have achieved a proper fit, we suggest you use an ACC cement and attach a small wood block to the underside of the roof, so you can run a mounting screw up through the floor and secure the roof in place. This works quite well on some diners and Pullmans where the interior walls hide the screw, but on other cars, especially coaches, the screw will be visible through the windows and you may want to consider a second type of roof mount as follows:

-Drill a hole in the floor of the car just large enough to accomodate the screwdriver you plan to use to tighten the screw (we suggest 2-56) that secures the roof. This hole should be located as near the middle of the car as is possible.

-Use a small thick piece of styrene about $\frac{1}{2}$ " wide and exactly 9'4" (scale) long to make a roof mount. A scale 9'4" is the inside width of the car. Drill a hole in the center of the roof mount large enough for your roof mount screw to pass through, and cement it between the cars sides near the top of the car walls. Be sure it is located directly above the hole in the floor.

-Now secure a wood block to the underside of the roof directly above the hole in the roof mount. Allow plenty of time to dry. (Both the wood block and the roof mount)

-Place the roof on the car and insert a scribe or other long narrow tool through the hole in the floor, on through the hole in the roof mount, until it touches the wood block. Twist the scribe until it leaves a mark on the wood. Remove the roof, locate the mark on the wood block, and drill and tap a hole to accept the roof mount screw. Refer the the drawings on the previous page of the two suggested types of mounting the roof.

6. Paint the car.

Plastic-safe paints are recommended but other paints may be used if you use an airbrush and use normal pre-cautions. Still some crazing can occur--especially on the door and end castings.

7. Install interior furnishings, diaphragms of your choice, window glazing and grabirons. If your grabirons are painted instead of stainless steel, they should be installed just prior to painting. Most lightweight passenger cars had stainless steel or plated grabirons.