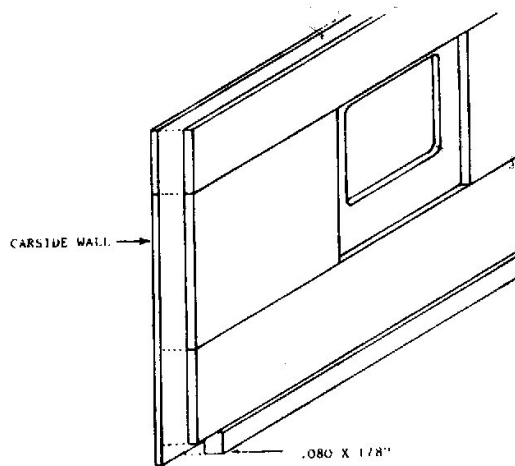


SUGGESTIONS FOR ASSEMBLING LIGHTWEIGHT KITS

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 carside...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 which 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 to within 1/8" of the end of the carside.

-A flat section of .030 x 2" x 21" is supplied, and is to be cut into three lengthwise strips as per the sketch to fit above, below and between the windows. Of course on a head-end car, you would simply place the supplied flat stock as is on the inside of the carwall, and trim away the surplus at the top.



- Clean flash off the cast car doors, square up the edges so that there is no draft, and fasten each door to the appropriate carside 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 ends of the carside opposite the cardoor, or on head-end cars, at both ends of the carside, add a strip of .010 x .080 styrene, placing it vertically and flush with the end of the carside. This is simply to thicken the carside .010 prior to mounting the carsides and ends together. Do not add any material to the cardoor, as it is slightly thicker than the carsides and does not require this additional material.

- Clean up the car end castings and remove any draft from the edges of the ends. 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.

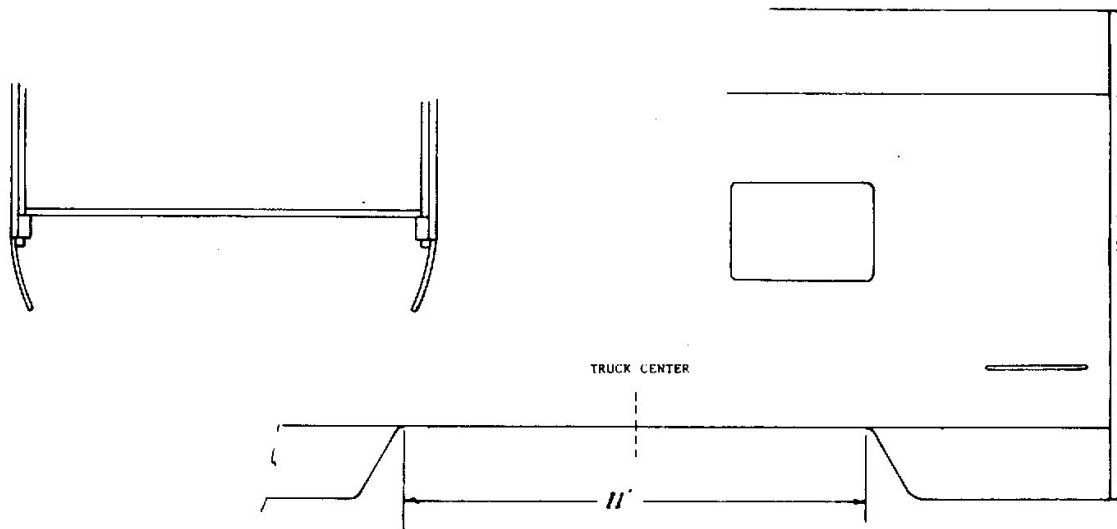
When the ends are ready, mount one carside in place on an end. You will note that there is a rib on the inside of the car end at each side which serves to place the carside in the proper position and another raised rib effect across the end wall which will assure that both carsides will be at the same height when the body is assembled. When both ends are fastened to one carside and firmly set, mount the other carside to this assembly.

- When both sides and ends are securely assembled, the floor may be placed in position, resting on the edge of the .080 x 1/8" strip at the bottom of the carsides. If necessary, trim away any excess in the floor width until it drops in place without forcing the carsides apart. Also trim away a bit at each of the corners of the floor to clear the doors at the vestibule end, and the four corner ribs at both ends of the body.

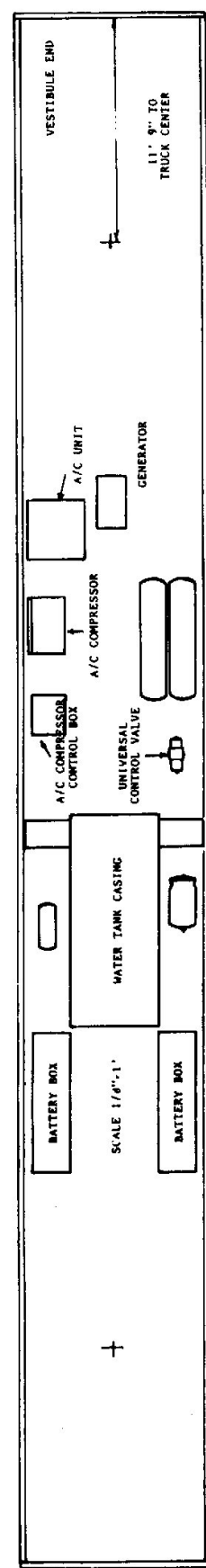
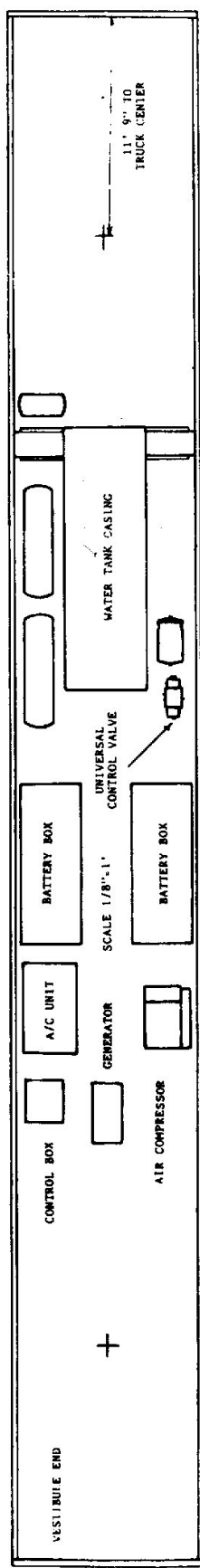
- Mount the roof in place next, filing as required to get a neat fit between the car ends. If you file away a bit too much, just add a small scrap of styrene to the end of the roof, and file again to fit.

- We suggest fitting a small piece of scrap wood to the underside of the roof, somewhere along towards the center of the car, so that you can run a mounting screw up through the floor and secure the roof in place. The roof is approximately .100 thick and you probably do not have enough material to drill into the roof and secure it without the possibility of raising a bump on the surface, so we suggest you epoxy a wood piece and run your mounting screw into it.

- Skirt material should be added now. Here, the period of time you are modeling will determine what skirting you apply. During later years, most of this equipment had the long section of skirting removed, leaving only the short sections at the ends. Add the .060 x .060 styrene to the back edge of the skirt, using several pieces about 1" long, 1" apart. The fluting effect on the skirting is achieved using the 12 rib wide material. Gently score this material on every other groove, just enough to break the surface of the plastic, and it will take a natural curve and can be fastened to the plain skirt with solvent. Trim away any excess material.



There were many, many variations in the kind of components which were placed underneath the various manufacturers prototype lightweight equipment. Unfortunately there is very little that is available that is authoritative enough to allow the preparation of detailed drawings for the modeler to use in detailing the underbody of his models. The same is also true of the roof details, as in many cases, a photo of a particular car is all that there is to give some idea of what was on the roof, and often the other side of the roof is a matter of conjecture. Plan data in the hobby magazines is often all that is available, and modelers are encouraged to cull these sources to avail themselves of any kind of prototype data that is available. Below we show two variations of the kind of array of underbody components that you might use under a lightweight, but we always encourage the active modeler to go by his prototype, if there is any information at all available. If your area of interest focuses on a particular railroad system, often you can find help from the rail historical societies who have much archival information, and often are able to assist.



On some head-end equipment, particularly postal cars, the windows in the postal section are not flush with the car wall as on regular smooth side equipment. When this is the case, the window openings in the outer car wall are punched in the appropriate places, and you will need to file the corners of these window openings square with a small file or X-acto knife. A strip of slightly smaller windows is supplied for this particular situation, and these windows are to be cut individually and placed behind the window openings in the car wall to give the effect of the window being recessed in the car wall.

The vertical edge of the various doors are drawn on the carside, and you will need to cut these door openings out, leaving 1/8" at the top of the carside and 3/16" at the bottom. Then follow the general suggestions for assembly to add the .080 x .125 styrene strip for the floor support and the additional .030 material to thicken the car side wall to .060. Then place the baggage or other doors behind the door cutout openings, centering the door so that the windows are centered in the door openings. At the door locations, with the door in place, the carside will be .090 thick (the .030 outer wall, the .030 inner wall, and the .030 door). You will need to remove portions of the rib on the underside of the roof at these door locations so the roof will fit snugly down on the carside.