

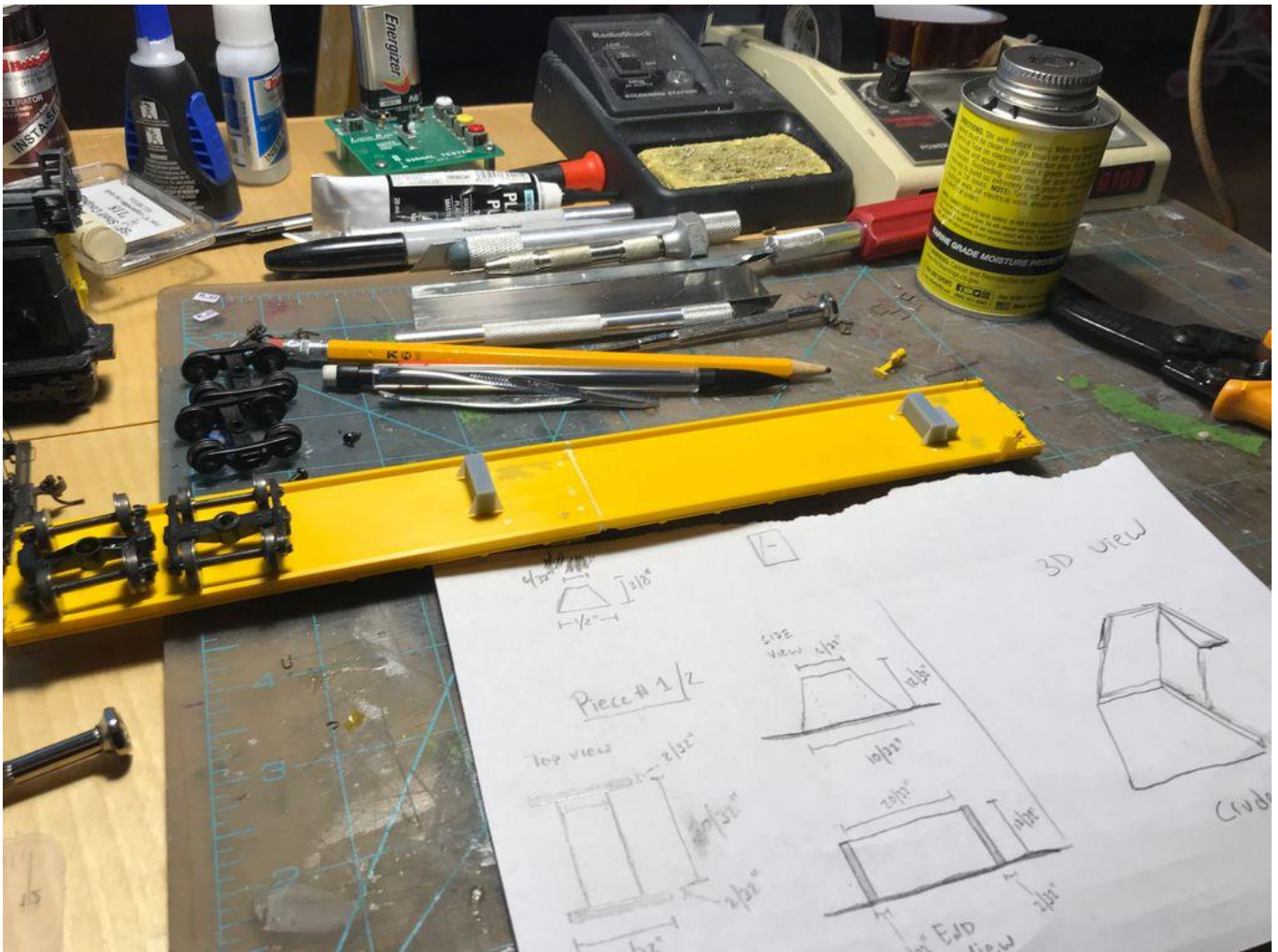
MAC-840

QUAX "Hospital Flat"

Installation Tips



The photos provided below are intended to show how I built my freelanced version of a QUAX "Red Streak" type hospital flatcar. A lot of these hospital flats that haul wrecked railcars have been cascaded from other service such as pipe flats, autoracks, or intermodal service so they all have a unique story making no two cars alike.



My base for the MAC Rail 840 part was capturing hospital flats that have deck pedestals permanently on the railcar and do not require wood cribbing. Kit provides pedestals, tool box, and decals making your focus on the actual car build / modification itself.

I started with a Walthers 89' flat and ended up cutting it down to a 75' flat which operates better around my 28-30" radius curves. I removed the length from the car center keeping the distancing from truck center to end sill longer which gives a larger car appearance.

I decided to also make a removable deck so I could model railcar loaded or empty depending on where it was in the car cycle.

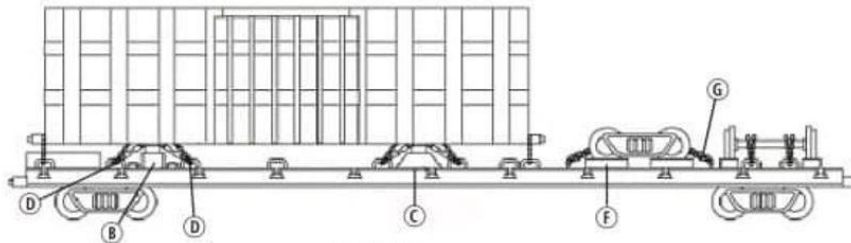
AAR Open Top Loading Rules are open to public. This specific figure 55-A can be found at <https://my.aar.org/OTLR/Documents/Section%203/Section>

IMPLEMENTED 06/2017

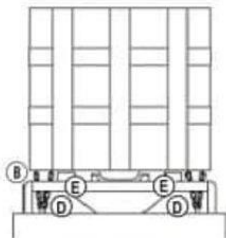
AAR Open Top Loading Rules Manual

Fig. 55-A (Revised 06/17)
(New 06/13)

WRECKED CAR BODIES—LOADED ON MODIFIED FLATCARS



SKETCH 1

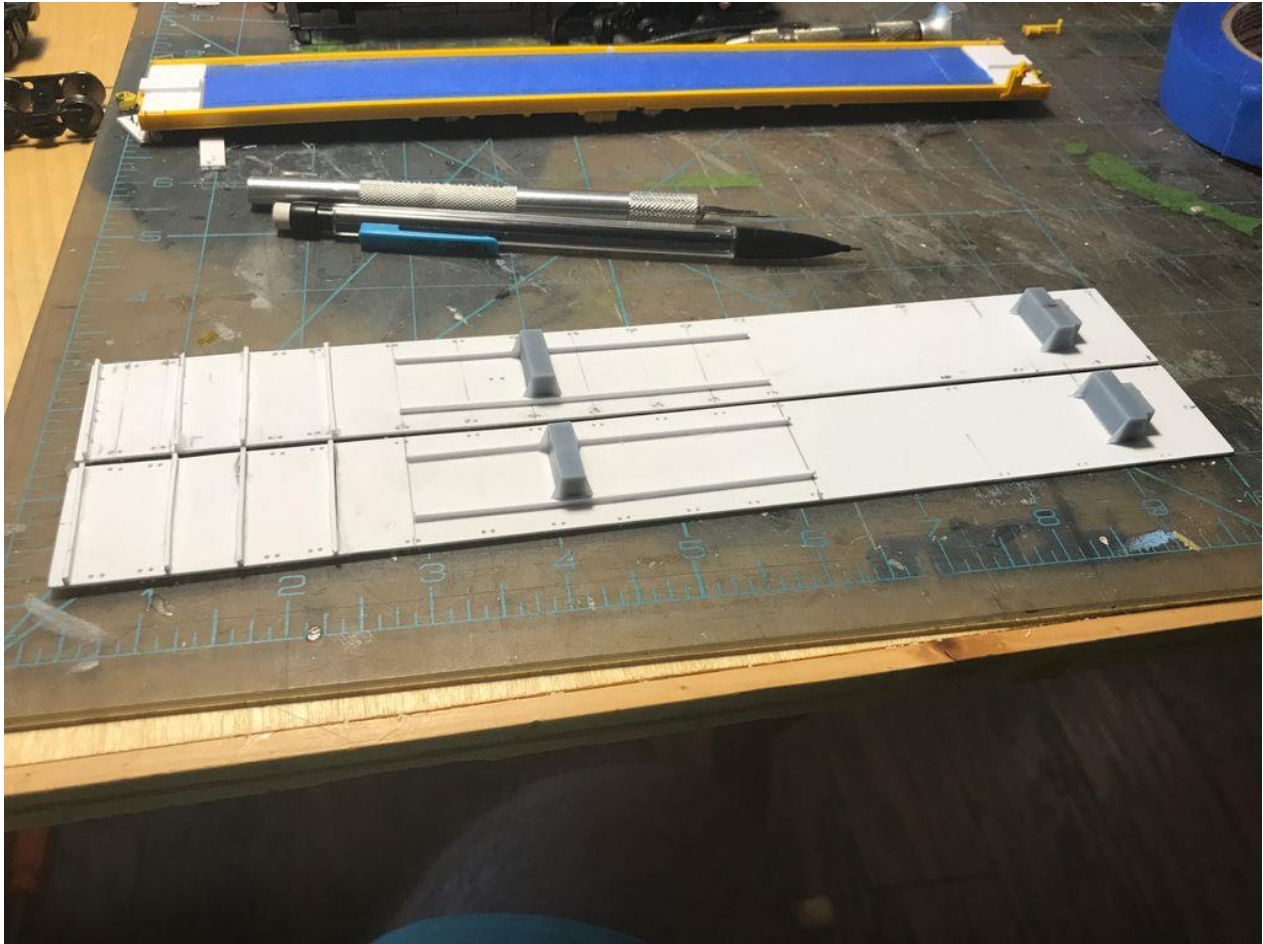


Item	No. of Pcs.	Description
Car Body		
A		Brake wheel clearance: see Section 1, General Rule 2.
B	1	Bearing piece: fixed bolster with 16 in. bowl welded to steel deck of the car.
C	1	Bearing piece: adjustable bolster with 16 in. bowl running on channel.
D	12	Alloy chain: 3/8 in., grade 100 chain. Apply chains at an approximately 45° angle to ratchet assembly at car sides, as follows: —Two at each end attached to or near center sill of wrecked car —Two attached from one end toward the bolster of the loaded car —Two more attached from the other end toward the bolster of the loaded car
E	4	Side bearing rockers: steel rockers pinned in place on each bolster if necessary to take slack from rocking motion
Truck Assembly		
F	4	Steel wheel chocks.
G	4	Tie-down chains with ratchet binders: 3/8 in., grade 100 chain. Apply two chains per truck set to ratchet assembly at car sides. Must have suitable protection between chains and axles to prevent metal-to-metal contact per <i>Field Manual of the AAR Interchange Rules</i> , Rule 41.E.14.

Notes and Additional Requirements:

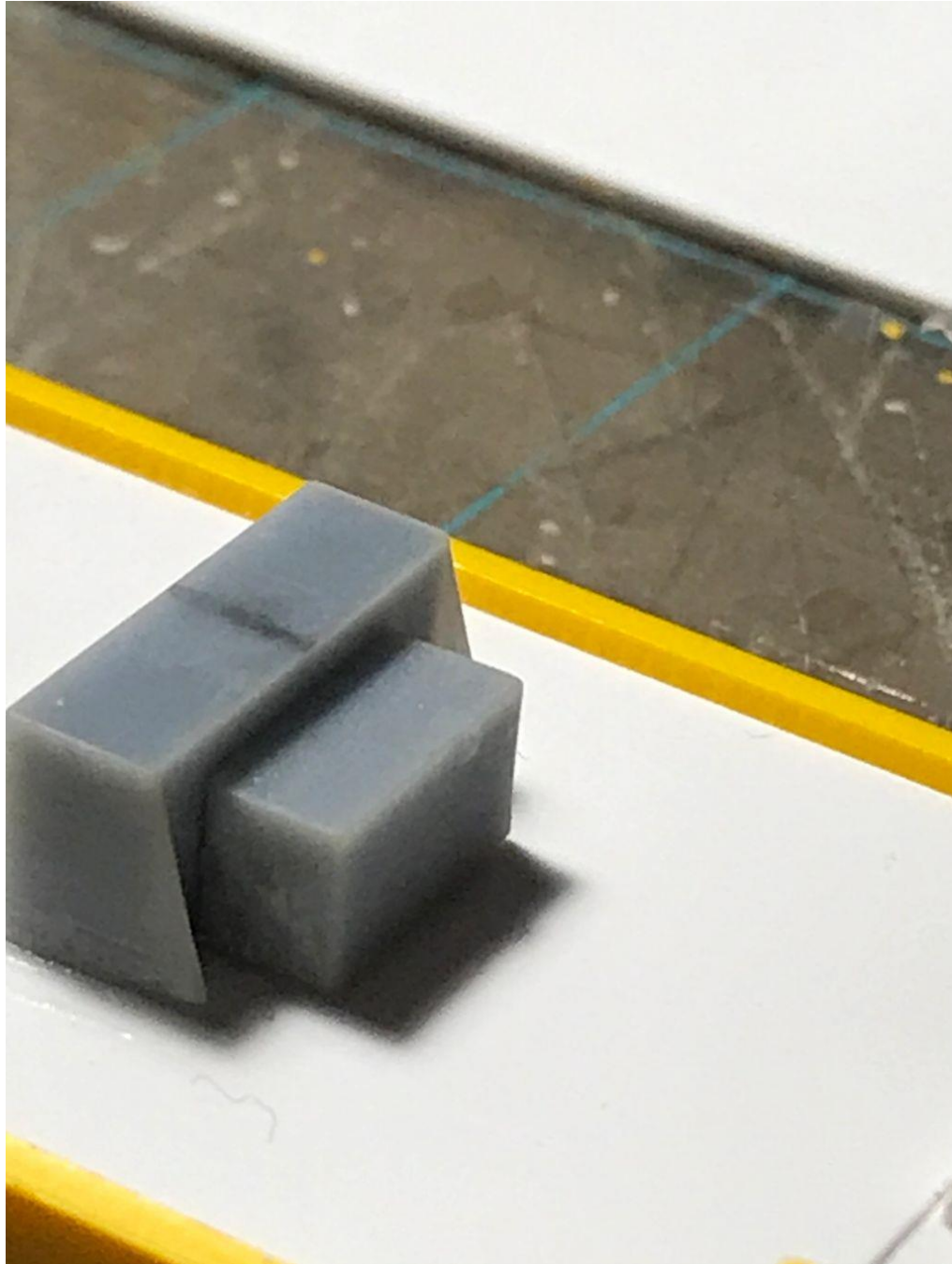
- Where chains are used, hooks must be wired to prevent displacement.
- Where wrecked car length will not allow proper angularity of chain at car ends, deviations from the required angularity in application of chains is permitted.
- Wrecked open top car bodies may be placed upside down, provided the body can be safely secured to the carrying car.
- Wrecked cars with defective sliding sills that are liable to move must have sills immobilized.
- Weight must be evenly distributed per AAR General Rules.

Reference the General Rules in Section 1 of the *Open Top Loading Rules Manual* for additional details.



After cutting car down to its new size and gluing back together I focused on the deck of the car. Since models of 89' flats on the market have channels I used .040 Styrene cut to fit inside the channels which brought the deck of the car closer to a flush deck setup.

Following prototype photos and the AAR open top diagram I went ahead and mounted the brake end pedestal and toolbox. This pedestal is permanently welded to the deck and does not move. Using strip styrene install the guide rails for the other pedestal and end mounted rails to hold the wrecked railcars trucks.



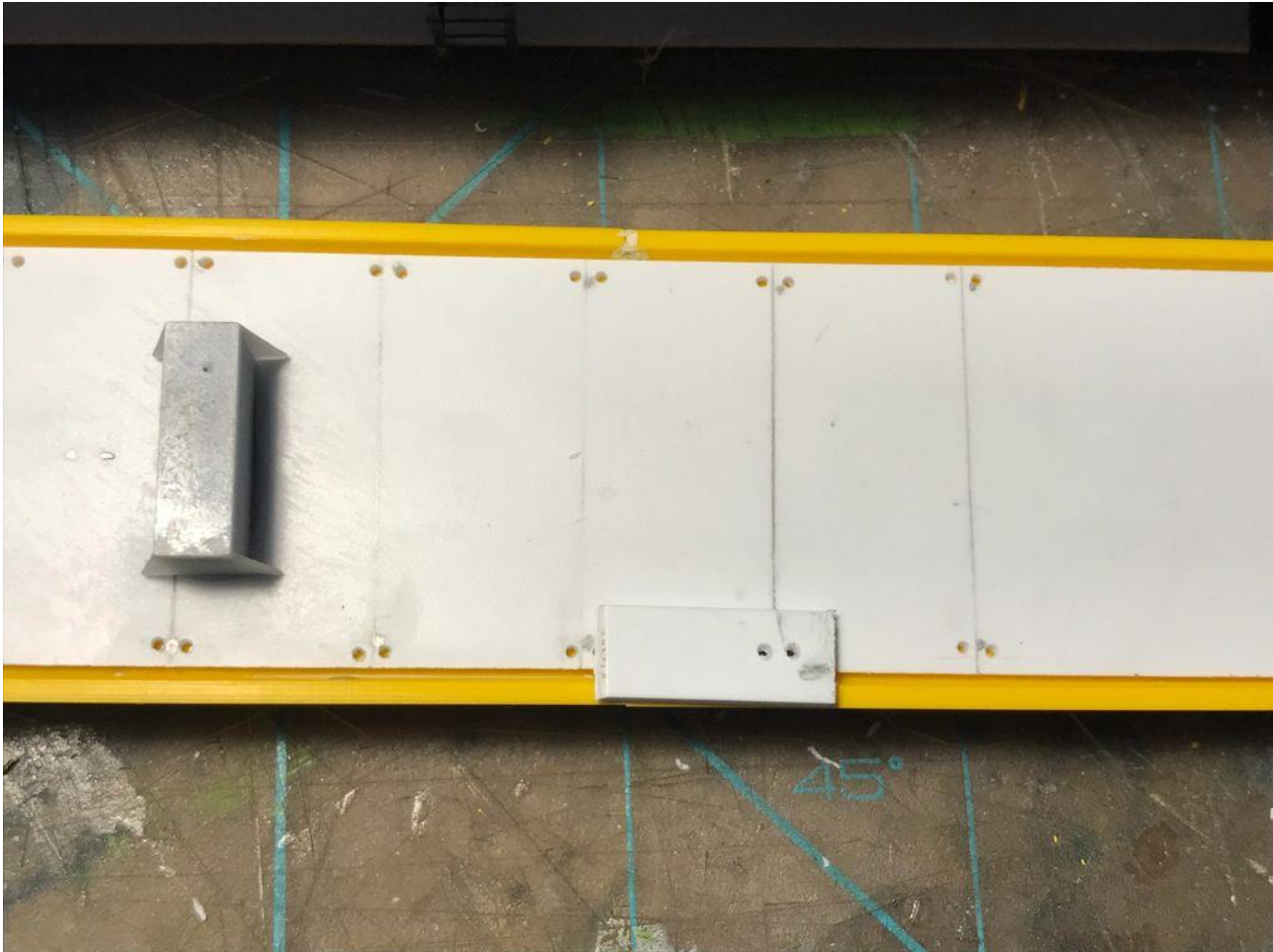
Closeup of solid mounted pedestal and tool box that rests to the outside. The other pedestal is on a track system that allows it to slide and adjust to the length of railcar being hauled.



Closeup of testing out the wrecked car placed on the center of the pedestal.



Another view of pedestal / wreck placement.



For installing the chains to the deck I used a small drilling jig to keep the holes consistent. To accomplish this, I used A-Line #29273 (6 links per inch) chain and cut them in half. This distance was then marked and drilled on the styrene piece that I used for the jig. The larger chain links that were cut in half were used as “D” rings and would have the smaller securement chain (A-Line #29220 27 links per inch) threaded through one end and CA applied before being lowered into the mounting hole on the deck (shown above). This was by the far the most time-consuming process.

As noted the deck with the pedestals was made to be removable so I was making two identical decks and the same time so they could be exchanged.



Finished railcar with a stunning coat of red and decals from the MAC Rail QUAX set.



View of permanently mounted pedestal and toolbox on "B" end of car.



View of adjustable end showing pedestal and track system made from styrene.



Wheel garden area of railcar with securement chains. The car can not only carry the wrecked railcar but also both sets of trucks.

View of the removable loaded deck with car on pedestals and secured.





Opposite end of loaded version showing the adjustable pedestal, wrecked load, securement, and the only surviving truck.



Loaded deck complete with 20,700 gallon tank car.



Railcar with empty deck in place and empty deck sitting beside.

I hope these photos and tips help inspire you to create your own hospital flat railcar and wrecked load.

-MAC