

Hello, Fellow 1/20.3 Fan;

Enclosed you will find the parts for the F & CC Boxcar "Semi-Kit" we offer. Keep in mind before you begin that the 3/16" thick Luan Plywood Sub-Floor part can be replaced with either Hartford's scale wood and metal underbody package; or the Luan can be augmented with 1/4" square basswood strips from the hobby shop to replicate the sills and end beams (the supplied Bolsters and Needle Beams will need some alteration if you go this route as well). The plywood and basswood parts are best assembled using a super glue, my personal favorite being "Hot Stuff Super T" and their "Hot Shot NCF" accelerator (to speed the process along). Yellow wood glue will work too, but takes longer to cure, and it is somewhat more tedious to get all things square when using it.

I also threw in laser cut wood Brake Beams and Hangers to fit the Aristocraft "Delton Classics" trucks, as well as some white metal parts for the Brake Shoes and Bolt Pads. A separate sheet shows how these are assembled to the trucks. All other hardware like the Carbody Brake details, Hand Grabs, Side Door Lower Guides, Handles, and assorted other Door mounting hardware not provided here is available from Hartford Products for about \$30.00.

If you run into problems during assembly, email me (JBSaxton@aol.com), and I can either walk you through it in text, or send .jpg's of a finished car.

Now to Assembly:

1. Locate and identify all the pertinent pieces using the Parts List and the Curt Johnson supplied scale bluelines. To begin, the Luan Sub-Floor should be glued to the 1/16" Plywood Car Decking, with all the corners and edges square. Scribes face up here! Note the "tabs" for the Decking to extend into the door openings will protrude though. After that, I find it easiest to add a Side Wall next, then a Luan End Sub-Wall, then a 1/16" Plywood End Wall ... etc. around the Car; and last the remaining Luan Sub-Roof; until you have it all glued up into a solid shell. Note that in ALL cases, the Sides lap the Ends, whether it is the Sheathing, or the Fascia pieces!! Sand any protruding corners smooth.

2. The Roof Halves are added next, and you may wish to add a length of some scrap basswood as a ridgepole to support the joint between the Halves. Install the two Halves evenly on top of the carbody, with the middle joint aligned with the End Peaks, with an evenly spaced overhang around the Carbody.

3. The Side and End Fascia go on next. For the Fascias, follow in this exact order: First apply the wide "chevron" shaped End Fascias, one to each End, aligned with the peaks; then apply the wide Side Fascias so that their ends overlap the End Fascia. Next apply the four smaller End Fascia, peak aligned again. Add the narrow Side Fascia next, noting that the end with four bolt holes goes to the "left" of each Door opening, and the section with two bolt holes goes to the "right" of each Door opening. Also note the bolt holes are closer to the bottom edge of the Fascia! Sand any protruding corners down.

4. Doors and Door Stops and Side Door Upper Guides. The small End Door gets glued over the scribed locator (this is now the "A" end of the car); and the End Door Stop Block gets glued along the "left" edge of the Door. Note bolt hole locations for proper orientation! The Side Door Stop Blocks are glued flush with the "left" side of the door opening, then the Upper Door Guides are glued on top of the Fascia, aligned with the left side of the Stop Block. See Curt's plans for more details. The Side Doors are mounted with either Hartford or scratchbuilt hardware as you wish. The scale plans should provide ample details for placing all the various hardware Bob Hartford provides, although you will have to fabricate a few small details to be more prototypically accurate to the F & CC cars if you so desire.

5. The Roofwalk Saddles are glued on next, and you'll need eighteen spaced along the Roof as shown in the plans. After these have dried, use a sanding block to bring all their top surfaces flush. The three Roofwalk Planks are added to the top of the Saddles, with an even overhang on both ends. The side ones are located flush with the edges of the Saddles, while the center one is, well, centered! The two End Supports are glued underneath the ends of the Roofwalks. You may wish to hand scribe some plank separations on the Roofwalk Planks; I have found a thin cut with a razor saw works very well.

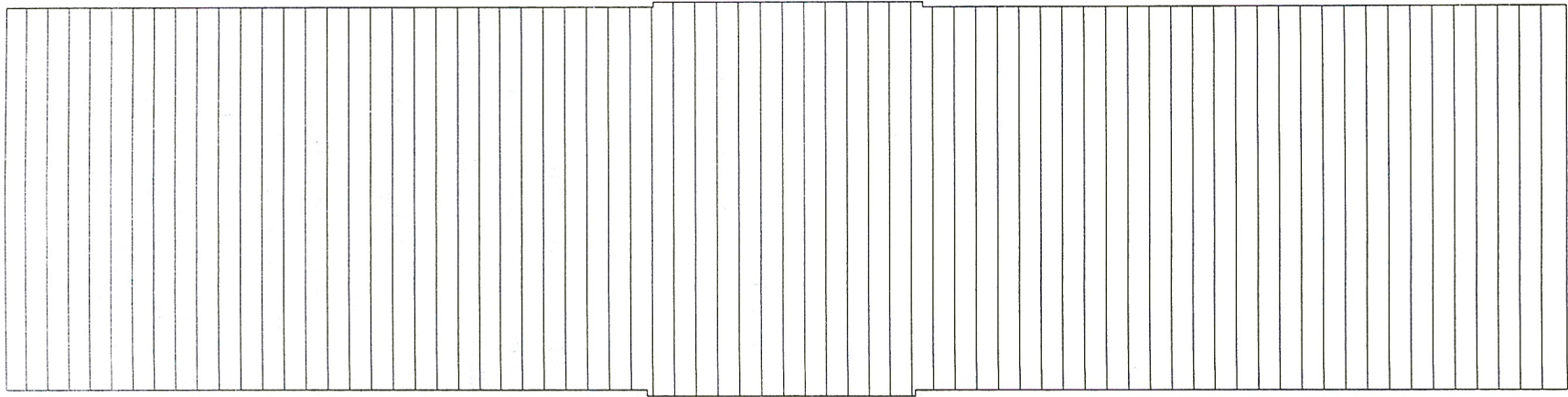
6. I have thrown in some Bolster chunks and Needle Beams for those who don't need a whole lot of underbody detail. The bolsters are made up from the small Luan planks with a piece of 1/16" basswood centered on it -- these are located in from the Car's end a scale 4' - 2" (2.463") to the Bolster centerline. These *should* be the correct thickness to locate the couplers and trucks properly to scale ... I say *should*, as everyone has their own idea of what coupler height *should* be. If you need more height, add some thin styrene or basswood shims to the Bolsters to bring the car up to height, or alternately, you may need to drop the coupler box lower. The Needle Beams are located per plans, and will be the correct size when viewed from the sides or ends.

7. I have included a laser cut plexiglas Hand Grab Bending Jig for those who will not be using Bob Hartford's package of goodies. To use this Bending Jig, get some 3/64" brass wire (about four, 12" lengths should do) and a pliers. Bend one end of the wire to 90 degrees, for about 1/4" length. Place this bent end in one of the "slots" in the Jig, then bend the other end 90 degrees into the opposing slot. You will have to adjust both angles to true 90 degrees once bent, but this goes a lot faster than it sounds. Additionally, you now have a jig usable anytime you need 18" grabs in future.

8. Add your Hartford or scratchbuilt detail parts now using the plans and any prototype photos you may have, add some trucks and couplers (the sill opening will accommodate a Kadee #820); paint, lettering ...etc ...

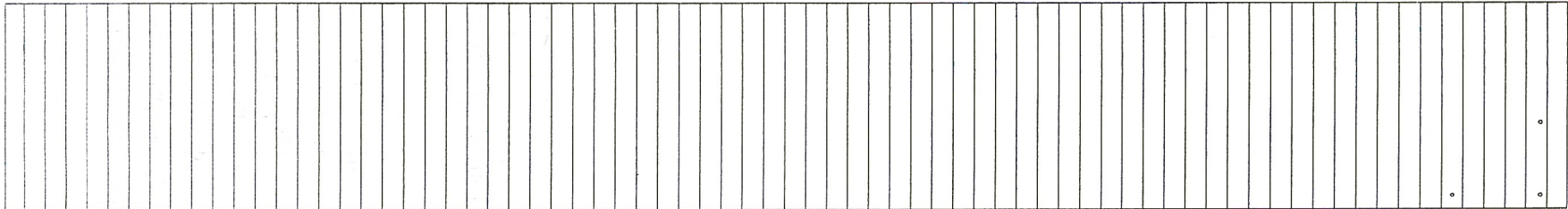
9. Make certain you send me pics of the finished car, and, Enjoy!

Jeff Saxton
Saxton Car & Foundry

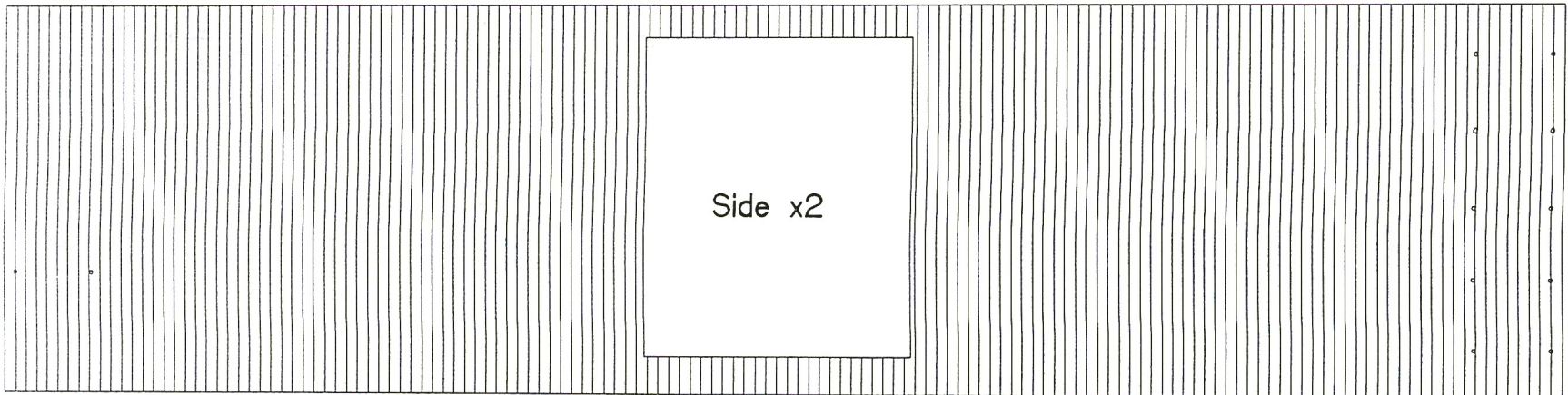


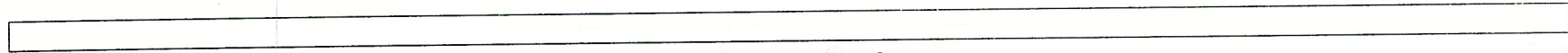
Floor

Roof Half x2

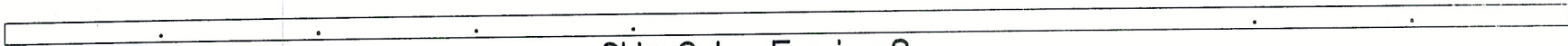


Side x2





Side Inner Fascia 2

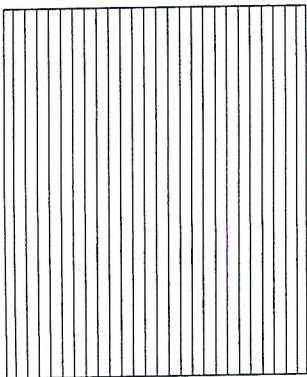


Side Outer Fascia x2



Roofwalk Planks x3
(narrower and longer than Side Inner Fascia)

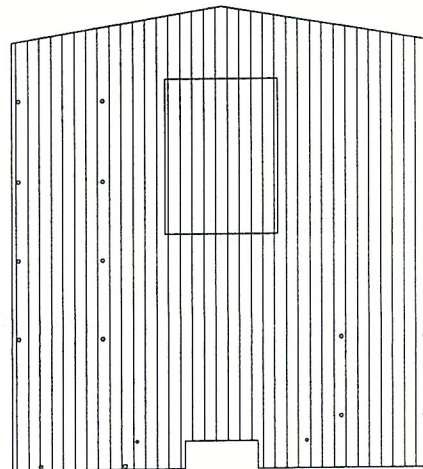
Side Door x2



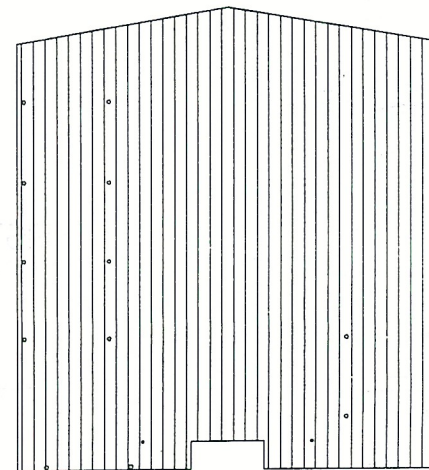
End Door x1

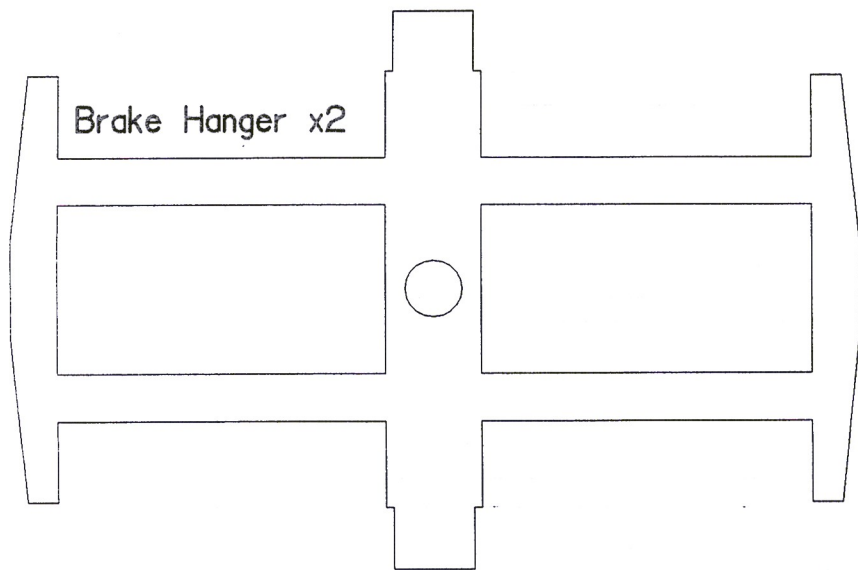


"A" End

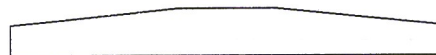


"B" End

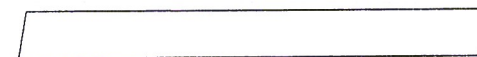




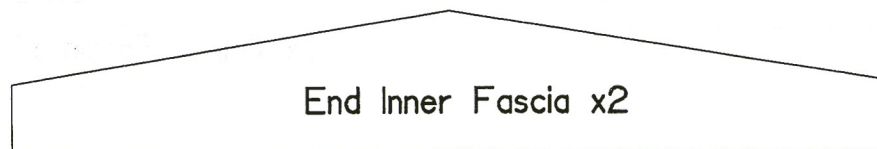
Brake Hanger x2



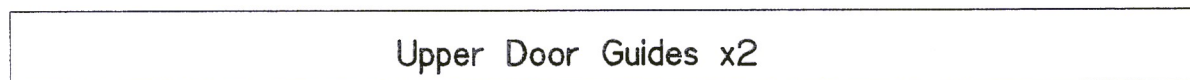
Brake Beam x4



End Outer Fascia, left & right
x2 each



End Inner Fascia x2



Upper Door Guides x2

Not shown:

8x Brake Shoes

4x Bolt Pads

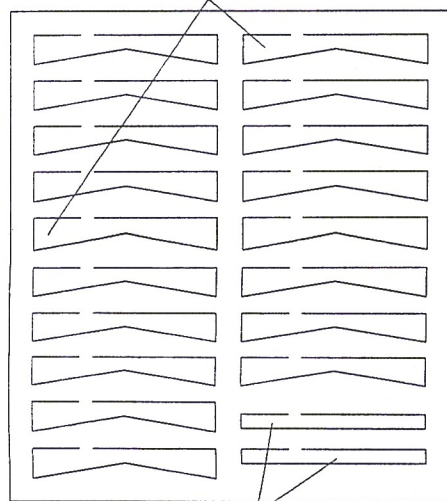
2x Luan Bolsters

2x Basswood Needle Beams

2x Luan Sub-Floor/Roof

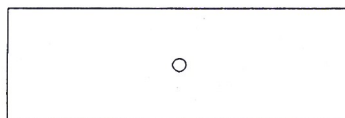
2x Luan Sub-Ends

Roofwalk Saddles x18



Roofwalk End Supports x 21

1/16" Bolster Pads x2

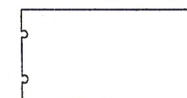


Side Door Stop Block x2

End Door Stop Block x1

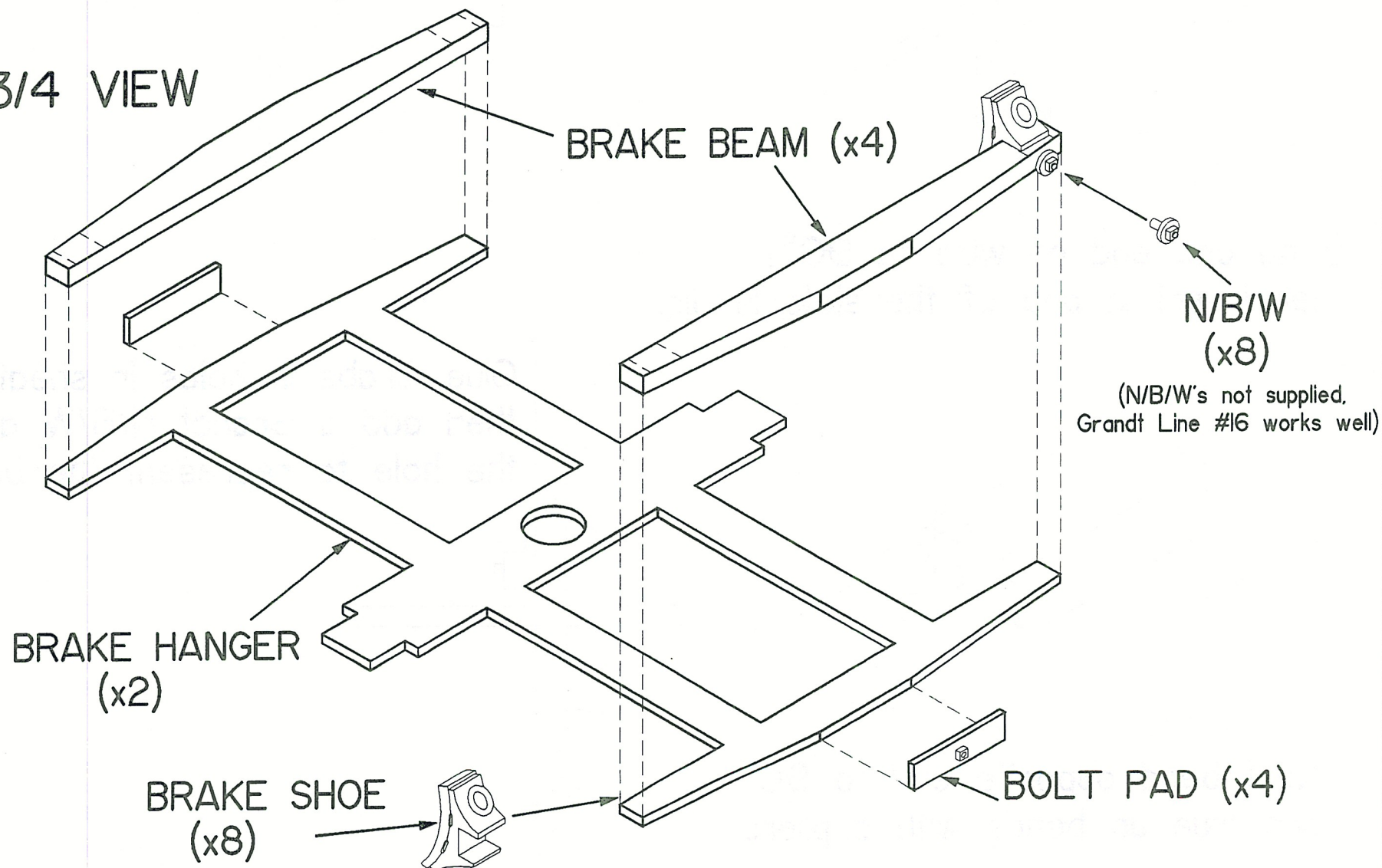


Bending Jig

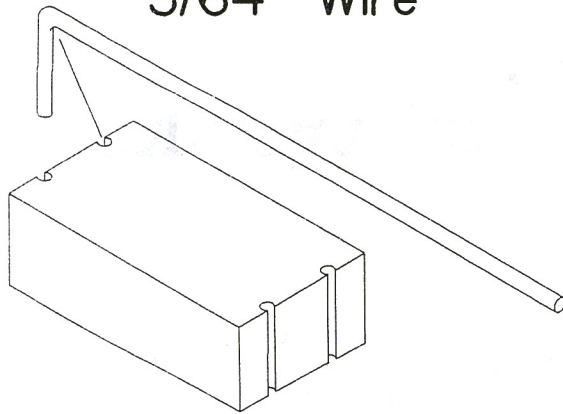


Kit #44;
Outside Hung Brake Rigging,
for Aristocraft "Delton Classics" trucks

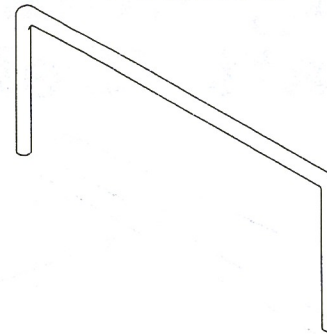
TOP 3/4 VIEW



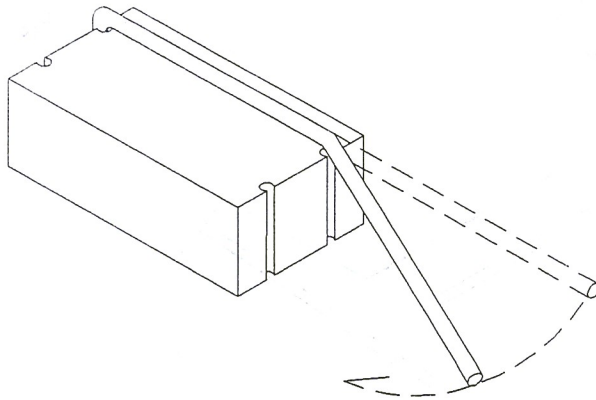
3/64" Wire



Finished Grabs



Bend one end of wire to 90°;
then insert in one of the slots in Jig.



Next bend opposite end to 90°;
and true up bends with a pliers.

Glue Grabs in holes in sheathing;
then add a Grandt N/B/W above
the hole to represent the bracket

