TT-to-AA Express Body Conversion

The 89-A express body was used for the AA express truck from the beginning of production in late 1927 (or maybe not until early 1928) through December 1930. This body is a wider and longer version of the 78-A pickup body. Both the 89-A express and 78-A pickup bodies were similar to the prior TT express and T pickup bodies with some parts of each being used on the corresponding AA and A bodies.

The TT body can be "made to be used" on the AA chassis and this is often the case since the AA express body is very hard to find. The TT body can be converted to an AA express body given the following comparison of these two bodies.

AA Express Wheel Wells – The most noticeable difference between the AA and TT express bodies are the wheel wells stamped into the side panels of the AA express. The wells are football shaped. These wheel wells are only about 1-11/16" in depth at the bottom where they meet the horizontal section of the metal sides. This reduces the overall inside width of the body from 48" to approximately 44-5/8" at the wheel wells. The 1928 and 1929 AA trucks used 32x6 rear tires. The TT trucks used 30x5 rear tires. The wheel wells give additional clearance for the larger tires. However, the larger tires will clear the TT express body just fine without the wheel wells. So, putting wheel wells into the TT side panels is basically done to make a correct conversion but is not necessary.

AA Express Tapered Sills – The AA frame is tapered (i.e. wider at the rear of the frame than at the rear of the cab). A major design change from the TT to the AA express was that the one piece body side panel stamping had tapered sills to rest on the AA frame. This provided support for the body and provided a way of holding the body to the frame.

To convert the TT-to-AA express, the straight metal sills (of the side panels) need to be modified by cutting a pie shaped portion from the horizontal section of the side panels so that the rear of the metal sills can be moved outward and the horizontal section welded back together. This conversion step is very important. It allows the body to fit the frame, makes the AA floor tie hardware usable, makes the AA rear fender brackets usable, and makes the AA rear fender spacers usable.

The outside faces of the side sills have a series of holes for the attachment of the cross sills for the TT and AA. The AA has additional holes for the body to frame installation hardware.

If the TT sills have much rust out (as is the case much of the time), it would make since to have 7' long patch panels made and welded into the TT.

AA Express #3 Support, Bracket Assemblies, and Reinforcements

The #3 side panel support is the "U" channel which forms the rear pockets. The on-body tail gate hinges are attached to this support. There are left and right bracket assemblies (two parts riveted together) which are riveted to this support and the side panels. These bracket assemblies cover the rear end of the wood side sills.

The TT and AA bracket assemblies are close to the same design but switched from side to side and are moved out to match the tapered metal sills on the AA express. I have not studied the TT bracket assemblies to determine if they can be converted or if new assemblies are required.

The stamped steel reinforcements below the wheel wells are smaller in width for the AA express body due to the tapered sills and the wheel wells. These reinforcements must be converted when the sills are changed to the tapered design.

AA Express Cross Sills – Because the AA express side sills are tapered, each of the three metal cross sills are progressively wider. The TT express metal cross sills are all the same width. Cross sill conversion is required if the sills are changed to the tapered design. The TT express has a wood cross sill at the front of the body just inside of the front panel. The early AA express with the tall front panel has this same wood cross sill.

AA Express Tail Gate – The two outside hinges of the AA express tail gate are further apart than the TT express tail gate outside hinges. Consequently the tail gate hinge rod is longer. It is possible to use spacers on the hinge rod to make up the difference in the locations of the outside hinges. So, moving the outside hinges is basically done to make a correct conversion.

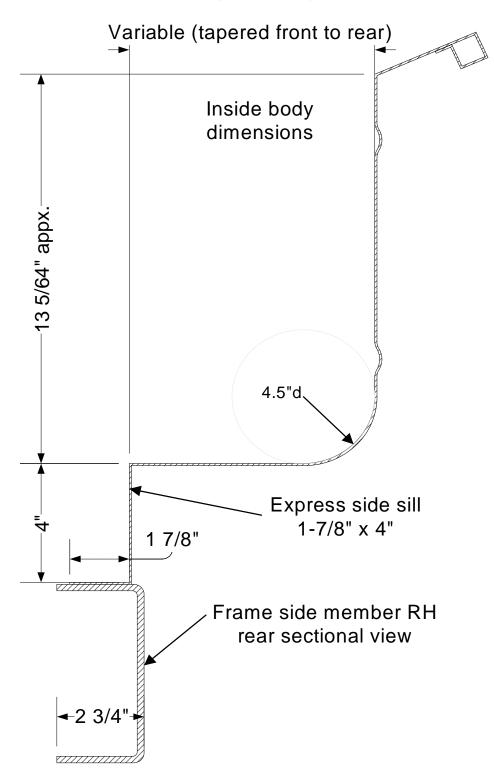
AA Express #3 Side Panel Supports (Center Stake Pockets) – The stamped wheel wells in the AA express side panels were below the center stake pocket. The initial AA express had center stake pockets which extend down to the top of the wheel well and the rear fenders were notched to fit around the pocket. In early 1928 the center stake pockets were shortened to be just above the rear fenders and the rear fender notches were eliminated. One of the two AA center stake pocket designs are required if wheel wells are stamped into the side panels. The second design is required if the rear fenders are not notched.

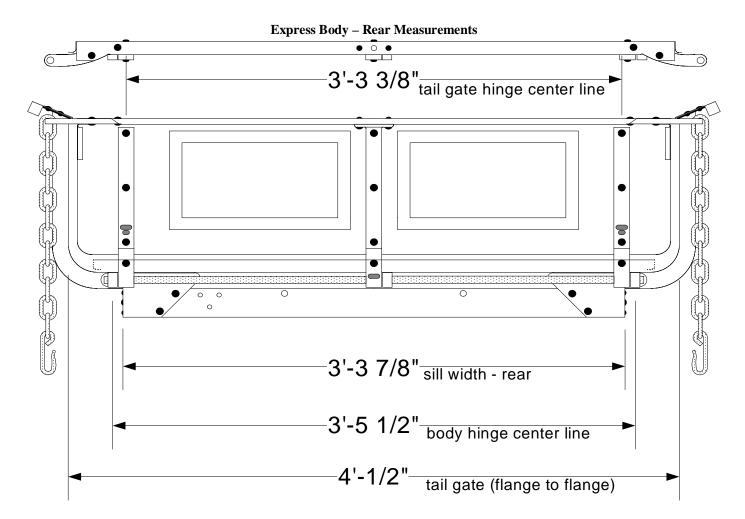
AA Express Front Panel – The TT express front panel was used for the AA express until mid 1928. This panel requires the use of the wooden front cross member for the floor boards support and skid strip attachment. In mid 1928 this panel was shortened to only go to the bottom of the floor boards and had a flange extending under the floor boards for support and attachment of the skid strips. This is like a pickup body. The reinforcement ribs in the short front panel are all the same length and extend down close to the lower flange.

AA Express Rear Fender Attachment – The rear fenders were attached to the AA express sides with carriage bolts (heads to the inside of the body). So, square holes need to be put into the panel sides for the rear fender. The reinforcement ribs in the panel sides need to be modified some to allow the fenders to fit flush with the sides.

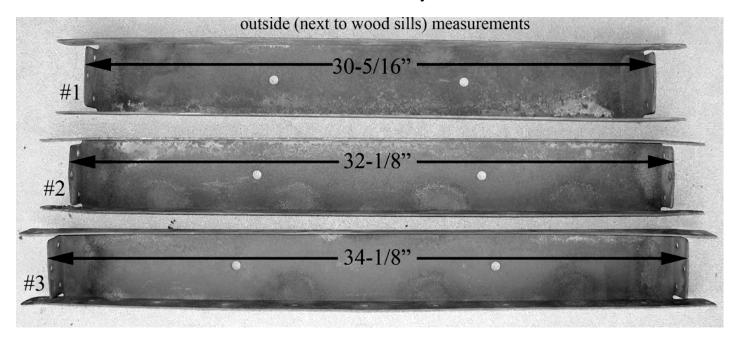
AA Express Body to Frame Attachment – The AA express was attached to the frame with pairs of floor tie straps. Two bolts through the straps and body sills were used. Holes must be put into the express body sills for use of these floor tie straps. There were four pairs of floor tie straps per side for AA express bodies with the tall front panel. The AA express bodies with the short front panel used three pairs of floor tie straps per side.

AA Express body sills-to-frame relationship – The outside face of the body sills are not flush with the outside face of the frame (cross section shown below). Note that the express side sill is (1-7/8") wide) and is centered on the frame (2-3/8") wide).

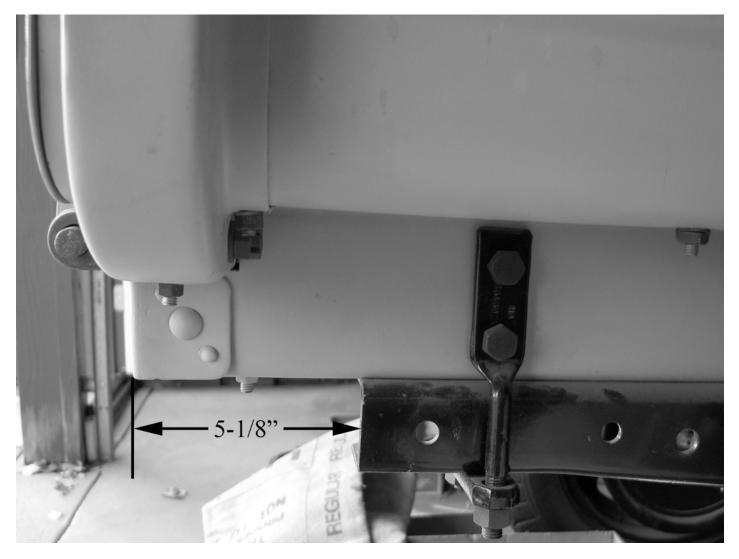




AA cross member lengths – shown below. The location of each cross member is the same as for the TT. The rear fender bracket location is controlled by the location of the #3 cross member!



AA express body to end of frame measurement – shown in the picture below. There is about 1/2" of space between the cab back (flat area) and express body. So, there is even less space between the express body and the raised areas of the cab back.



Sill Wood Type – The few original wood sills that I have seen have been yellow pine (same as the floor boards). I have used oak for my two projects. These sills are 1-7/8" x 4" x 86" long. The edge of each board which fit against the metal sides and bottom flange is chamfered to allow a tight fit. The boards are stepped at the rear so that they fit under the rear u-channel. The sills are notched at each cross member so that the cross member flanges are flush with the top and bottom of the side sill.

Wheel well dimensions – The picture below is taken from an upward angle of the football shaped wheel well. Note that the lower edge and the points at each end are not sharp angles between the sides and the wheel well because of the curve of the body sides. So, exact measurements are difficult. The drawing shows the measurements I got from my '29 AA express body.

