

AA TRUCK TALK – DOOR GLASS – CLOSED CAB 82-A

By Neil Wilson of Boulder, Colorado — April 2011

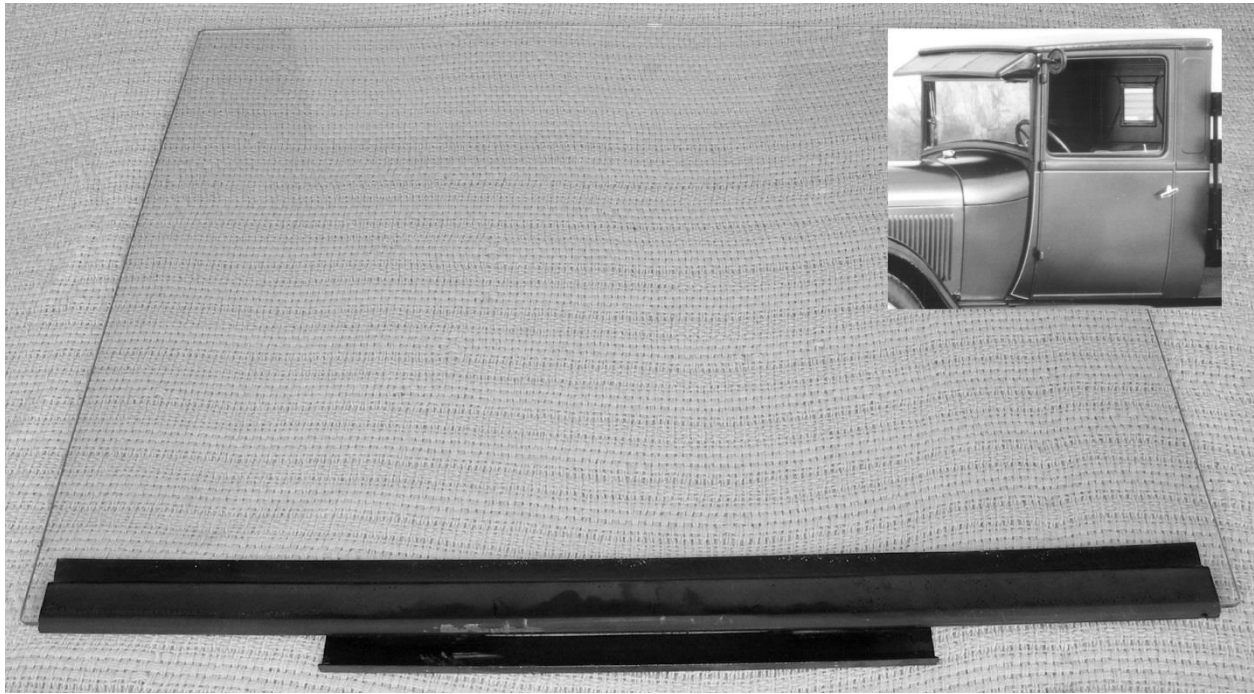


Figure 1a – Door Glass and Channel Assembly (82-A Closed Cab)

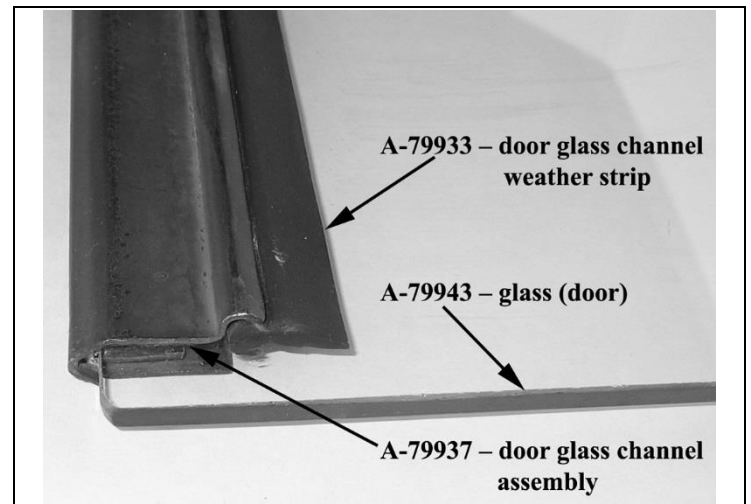
The following is information regarding door glass parts, removal, and installation for the 82-A closed cab (1927 through mid 1930). The A/AA Panel Deliveries (79-A/85-A) use the same door. These Model “T” carry over doors require glass installation and removal procedures which are very different from all other Model A doors. From the December 1, 1928 Ford “Price List of Body Parts”, this article involves the following part numbers:

- A-79935 & 36 – glass (door) and channel assembly RH/LH
 - A-79943 – glass (door)
 - A-79937 – channel (door glass) assembly
 - A-79933 – strip (door glass channel weather) – rubber
- A-79945 – run (door glass) assembly – (i.e. felt channel)
- A-79931-A – strip (door glass run retainer) thin – thick glass
- A-79931-B – strip (door glass run retainer) thick – thin glass
- A-80042 – rubber (door header)
- A-79965 – rest (door sash) assembly
 - A-46570 – cushion (door glass) – rubber
- A-48105-A & 06-A – regulator (window) assembly RH/LH
- A-80025 & 26 – Strip (door finish) assembly RH/LH
- A-80033 & 34 – Strip (door garnish finish) RH/LH

Door Glass and Channel Assembly (A-79935 & 36):

This assembly is shown in figures 1a and 1b. It consists of three parts – door glass, channel assembly, and weather strip. Figure 1b shows the parts of this assembly. Note that the channel is designed to hold the weather strip. Reproduction channels are not designed to hold a weather strip.

Figure 1b – Door Glass & Channel Assembly – A-79936 LH

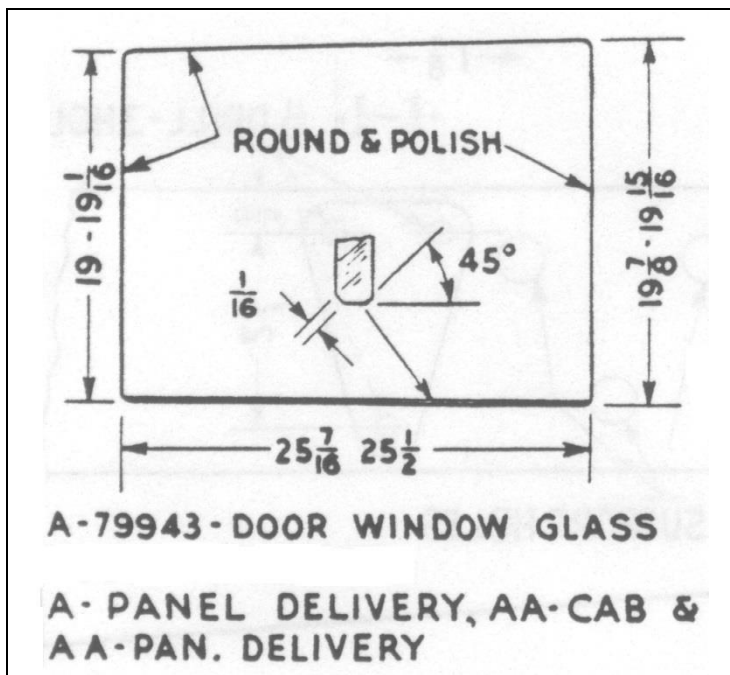


The original glass size and finish is found on page 250 of the Ford Service Bulletins (May 1928). Figure 2 is from the upper-left corner of page 250. This was 5/32”-9/32” thick plate glass. Note that it specifies “AA-Cab” since the closed cab was not available on the “A” until later in 1928. The dimensional specifications do not include a crown at the top of the glass even though the door has a slight crown. This door glass is *incorrectly* listed for the Tudor & Coupe in the service bulletin. Note that body model numbers are not used in any Ford documentation until mid 1930 when model numbers were assigned (see May 16, 1930 Indianapolis Service Letters).

For my on-going restoration project, I used tempered glass which is .20" thick (almost 13/64"). As I understand, modern day cars use tempered glass for the doors which allows one to drive off a bridge and then break the glass out to escape. Laminated safety glass can not be broke out (easily)! I contacted a MAFCA technical advisor, Dick Przywitowski, and his understanding is that tempered glass would be okay for judging. He recommended to state that the vehicle is equipped with tempered verses laminate if entered in judging.

The door glass channel (A-79937) is a welded together assembly which holds the glass (A-79943) and rubber weather strip (A-79933). The window regulator assembly arm connects to it also. The weather strip is the same type of rubber weather strip used to seal the windshield against the cab. The seal faces the outside of the door. The rubber rests against the outside panel of the door when the window is up. This weather seal keeps the glass from rattling and also keeps most dust and air out. But, it really does not keep water out since the water can simply run to each end of the seal and drip into the inside of the door.

**Figure 2 – Door Glass Size & Finish
Ford Service Bulletins (page 250 – May 1928)**



My recommendation is to pre fit the glass in the doors (after the door glass runs are installed). The glass I bought from Bert's Model A Center was within specification (and both pieces had the same dimensions). The right door glass fit just fine. However, the left glass would not slide down to the bottom position. It would get stuck in the felt channels (runs) about half way down. I determined that the door was the problem and the problem was not correctable. I ended up using a belt sander on the sides of the glass to get it to fit. Yea, a bit nerve racking at first! I had to clamp the glass (protected with a blanket) so I could keep both hands on the belt sander. I had to test fit the glass four of five times until it slid up and down correctly. I didn't want to take too much off and cause the glass to be too sloppy in the runs.

The door glass (A-79943) is installed into the A-79937 channel assembly using glass setting rubber (sold by vendors). It is

wrapped (dry) around the bottom edge of the glass and then the glass/rubber is pressed into the channel. If the glass does not hold tight, then it might require another layer of setting rubber. It also might be that the channel is too wide and needs to be slightly compressed (without the glass installed). I cleaned, primed and painted original channels (lots of rust inhibitor primer inside of the channel). I used two pipe clamps with soft wood protectors at the top of the glass to press the glass and channel together. The channel is not as wide as the glass and must be centered on the glass or there will be problems with the channel hitting the glass runs. The glass and channel assemblies are directional. The tall side of the glass is to the rear of the door. The channel must be installed so that the side for the rubber weather seal is to the outside.

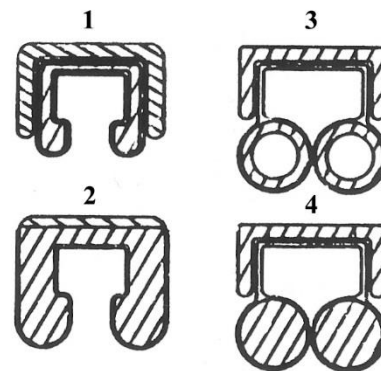
Once the glass is installed into the channel, the rubber weather seal is installed using soapy water. This seal should run the full length of the channel.

Door Glass Run Assembly:

Part A-79945 is listed as the run assembly for this door. This assembly would include the run and both the upper and lower clips installed with two tubular rivets per clip. I have yet to find a complete original assembly. More research is required to figure out exact measurements so that this single assembly design can be used for both the hinge and lock sides of the door. I ended up making different run assemblies for each side of the door.

Figure 3 shows cross section drawings of the four possible glass runs which could have been used in this door and most other doors as per the Judging Standards.

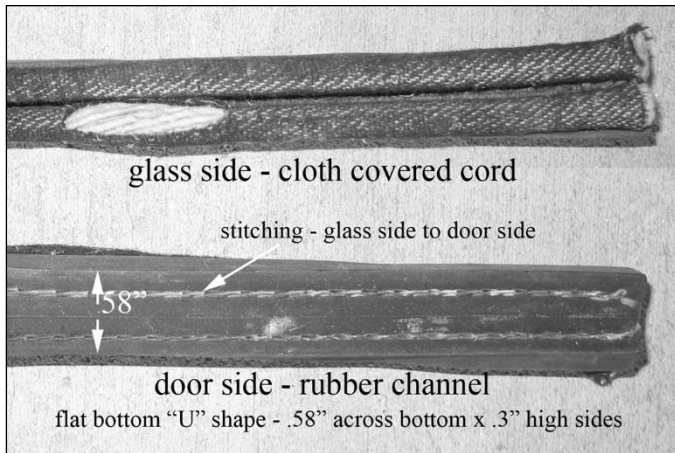
**Figure 3 – Glass Run Cross Sections
from page 10-4 of the Judging Standards**



The #4 design is the only original design of glass run that I have seen. This design is shown in figure 4. The run consists of cloth covered cotton cords sewn into a rubber channel. The rubber channel is .58" wide. This allowed the run to fit into the metal retainers inside of the door and still slide up and down. The glass runs must be able to slide in the metal retainers to allow the window glass and channel assembly to be installed or removed. This is unique to this particular door since it does not have a removable top cap like other doors.

The metal run retainers are riveted to the sides of the door. Figures 8 & 9 show the lower end of these retainers. There are two part numbers listed as A-79931-A and B (A = use with thick glass; B = use with thin glass). I have not figured out what the "thick" and "thin" glass notation actually means (more research needed)!

Figure 4 – Original Door Glass Run Example



Reproduction glass runs look like design #2 of figure 3 in the kit that I got. The runs are black felt. The Judging Standards does not specify any details on the makeup of the runs. The reproduction glass runs fit into the metal door retainers snugly which makes up and down movement very difficult. A snug fit works fine for all but these doors.

To insure that the reproduction glass runs can slide inside the retainers, I inserted a 1/4" thick strip of metal into the glass runs and then lightly clamped them in a vise to reduce the width. This made the cross section of the glass runs a slightly rounded "U" shape rather than a flat box shape.

There are two clips riveted to the back (rubber) side of original glass run assemblies. The upper clip goes at the top of each glass run. I used two different locations for the lower clips (not original since different spacing would make two assemblies). Figure 5 shows the two clips and the measurements I ended up using.

Figure 5 – Glass Run Retainer Clip Spacing

Must not be original spacing

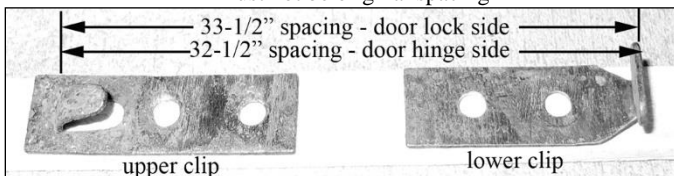


Figure 6 shows the upper clip attached to a reproduction glass run. I cut the top end of the run at a 60 degree angle to allow it to clear the cage nuts found at the inside-top of the door. Figure 7 shows the top of a glass run installed with the upper clip hooked over the internal bracket inside of the door.

I cut the runs about 1" above the rubber door glass cushions at the bottom of the door (see figure 9). This allows the glass runs to be slid up and down without interference with the rubber cushions. The original assembly would have been one length for both edges of the door.

The lower clip hooks into a slotted hole in the metal run retainers inside the door. Figure 8 shows the retainer's slotted hole and lower glass run clip. The slotted hole allows the run to move up and down and remain attached to the retainer.

Figure 6 – Upper Retainer Clip and Glass Run Assembly

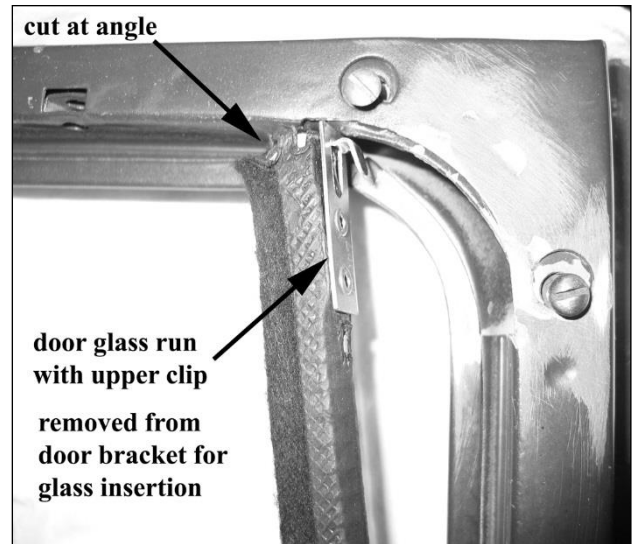


Figure 7 – Glass Run Assembly Installed

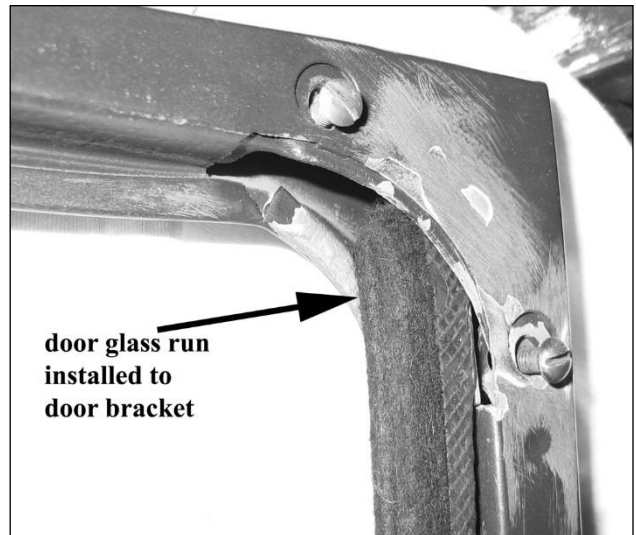
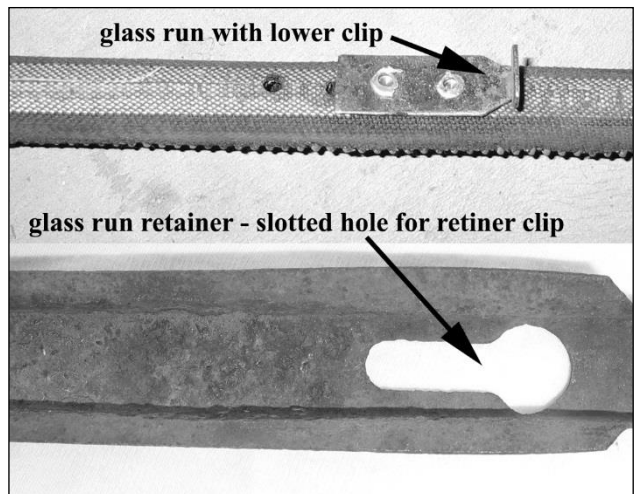


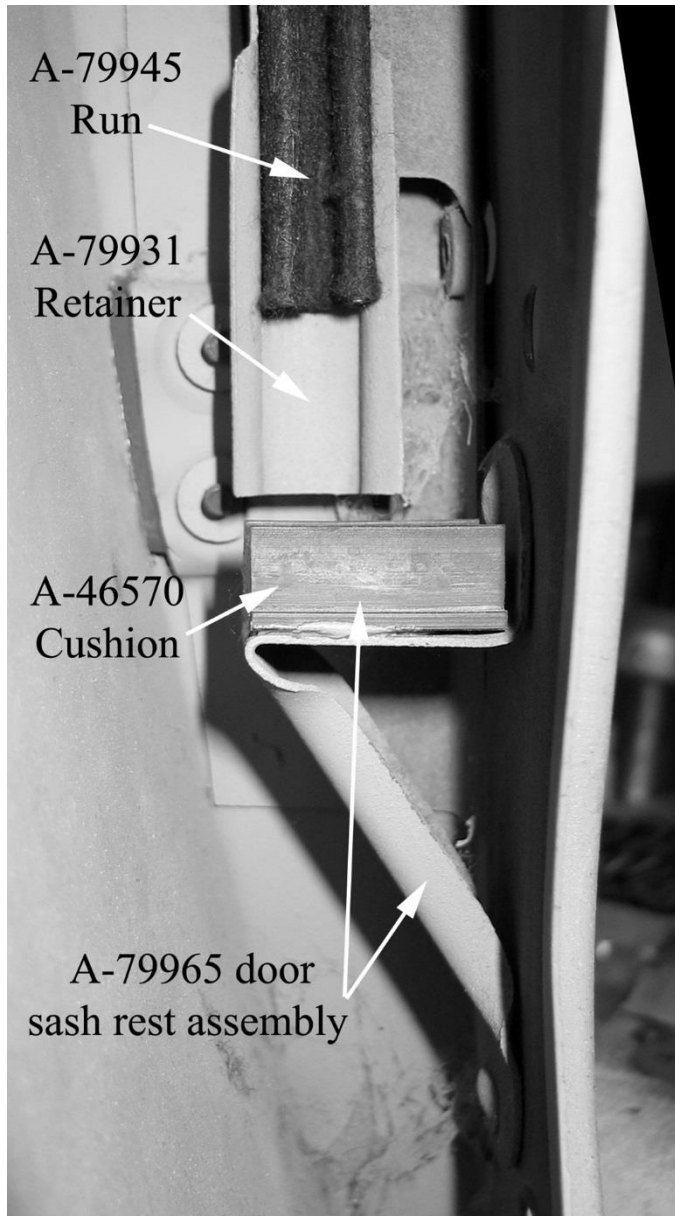
Figure 8 – Run Retainer & Lower Run Clip



Door Sash Rest Assembly:

The door sash rest assembly (A-79965) is the metal bracket riveted to the inside of the door inner panel with the cushion (A-45570) installed with a semi tubular rivet (one sash rest assembly on each side of the door). These assemblies were most likely riveted to the inside door panel prior to the panel being installed to the outside panel. Figure 9 shows this assembly. I glued and clamped the new cushion to the sash bracket (used the glue which came with the reproduction run kit). After about a year the cushion is still holding strong.

Figure 9 – Door Sash Rest Assembly



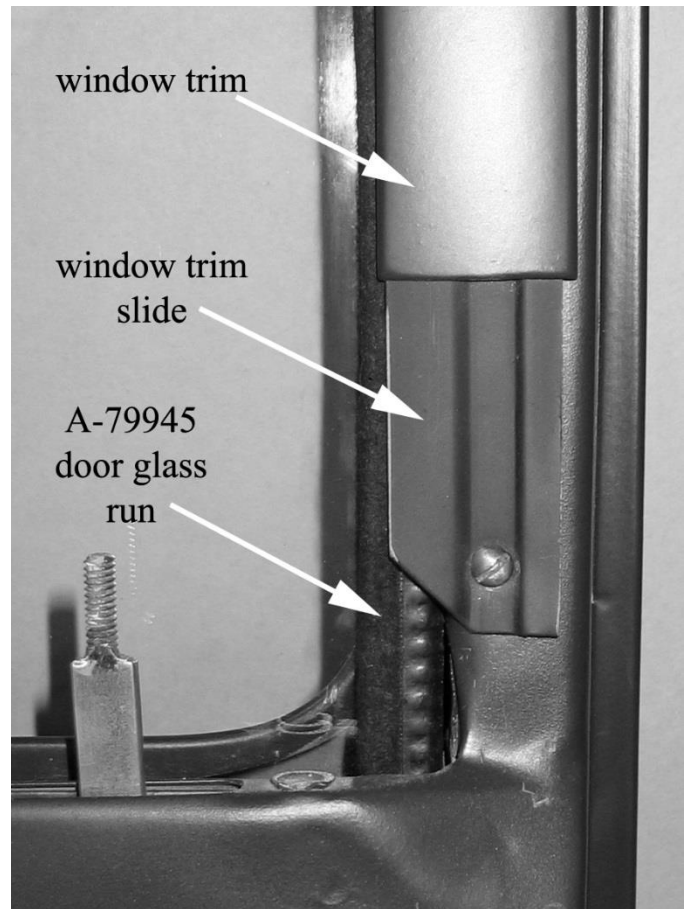
Door Finish Strip Assembly (A-80025 & 26 RH/LH)

These assemblies each consist of the window trim which goes around three sides of the window (top and each side) and the slides which attach to the door sides. The Judging Standards calls for this trim to be black enamel. These trim pieces were painted body color

(green) on my early February 1928 closed cab. Figure 10 shows the lower, rear corner of a right hand assembly (with the trim partially installed). The slides form a channel for the runs. The door hinge pillar wind lacing goes under the front slide.

The slides are each attached with three 10-32 x 1/2" round head machine screws with square nuts which are slid into cages which hold them in place. To allow the trim to slide on, the slides need to have a very slight amount of movement after installing the screws. If the slides are screwed down tight the trim will likely bind when being slipped down the slides. The bottom screw can be tightened once the trim is slipped most of the way down (like in figure 10). Figure 11 shows the window trim installed in the full down position.

Figure 10 – Door Finish Strip Assembly (A-80025 RH)

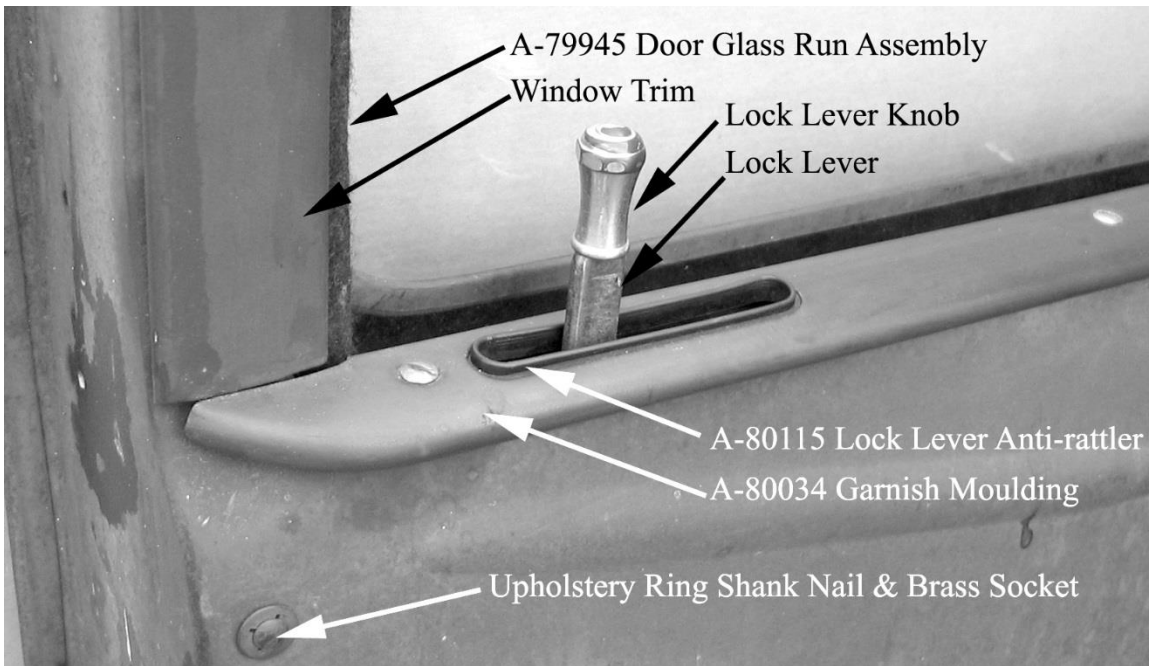


Door Garnish Finish Strip (A-80033 & 34 RH/LH)

These parts are named garnish mouldings (painted black enamel) as per the Judging Standards. However, I have found that these mouldings were painted body color (green) on my early February 1928 Closed Cab. The moulding must be removed to allow the door glass and channel assembly to be removed or installed.

Figure 11 shows the left hand garnish moulding and other details of the door. For a restoration, the garnish mouldings should be fit to the door as part of the metal work (i.e. prior to painting). The alignment of the d-nuts in the door must align with the counter sunk holes in the moulding to prevent chipping the paint when the French head, nickel plated screws are installed.

Figure 11 – Door Garnish Moulding (A-80034 LH)



Restoration Tips:

Parts were new on the assembly line and fit correctly.

As noted in this article, I recommend that the door glass and all associated parts be installed and fit prior to painting. Once all parts fit correctly, they need to be removed for painting.

Fitting parts after painting many times leads to chipped paint. This is particularly true of the window trim and garnish mouldings. All of the screws should easily thread in by hand and only need a screw driver for the final tightening.

Door Glass Removal:

Closed cab (82-A) or panel delivery (79-A and 85-A) doors are unique from other “A” bodies since there is no top door sill which can be removed to allow the door glass to slide out the top of the door. The glass must be tilted inward for removal or installation of the door glass and channel assembly (parts A-79935 and 36). Note that this assembly consists of the glass, channel, and weather strip (see figure 1).

Initial Disassembly of Parts

To remove the door glass and channel assembly (shown in figure 1a) the door lock lever knob, garnish moulding, door finish strip assembly (i.e. window trim and slides), window regulator handle, door check strap and door upholstery panel must be removed. This exposes the felt runners and window regulator for the task at hand. A protective rag should be placed on the door lock lever so the glass is not scratched when being tilted inward (or the lock can be removed from the door).

Parts disassembly notes:

1. Window Trim (see figure 10 & 11) has three French head, nickel plated machine screws across the top of the trim plus there is a rubber bumper at the top of the door which must be removed. The trim must then be slid up to remove it from the hidden trim slides installed on each side of the door. Sliding the trim up on the slides can be very difficult on an old rusty door!
2. An original door upholstery panel is attached to the door with ring shank nails inserted into brass sockets in the door (see the example in figure 11). To pop out the nails from the sockets, a pry bar with a “V” notch can be used (insert pry bar between upholstery panel and socket). This works like the claws on a

hammer. Note that popping the nails out can deform or break the sockets! Replacement sockets are very hard to find.

Door Glass and Channel Assembly Removal

The door glass and felt runners must be tilted toward the inside of the door to allow the door glass and channel assembly to be lifted out. To accomplish this:

1. Remove Window Regulator – The door glass should be in the up position. A wood support cut to run from the bottom of the glass and channel assembly to the inside bottom of the door can be used to hold the window up while the regulator is being removed (three machine screws) and its arm worked off the window channel.
2. Disconnect Felt Runners (original runner installation only) – With the door glass down (or part way down), each felt runner must be slid up to unhook the top clip from the bracket inside the door. The top of the runners can then be tilted inward (see figure 6). The lower runner clips remain hooked to the metal runner channel inside the door. If the runners are glued into the door (not original), then they will have to be separated from the door some way and hopefully the runners can be saved.
3. Remove Door Glass and Channel Assembly – With the runners tilted to the inside of the door, the glass and channel assembly can be slid up and out.