30 Tudor Seat Belts

by Tom Endy 2021

Every Model A owner should consider installing seat belts in their car. They may not afford the protection as in a modern car, but they are better than no seat belts at all. Being involved in an accident in a Model A is bad business in any event.

I installed seat belts in my Victoria years ago after reading about an accident that occurred on an interstate in Arizona. An elderly couple was rolling along as part of a club tour at a speed of about 55 mph when a modern car came up behind them doing 90 and rear ended them. The Model A did a cartwheel and the lady sitting in the passenger seat was ejected from the car and it rolled over her and killed her. Her husband, who was driving, managed to remain in the car by hanging onto the steering wheel. He suffered only minor injuries. Had they been restrained by seat belts she would have remained inside the car and likely survived. It also occurred to me that the door latches on a Model A are not fool proof and when making a left turn a passenger in the front seat has a tendency to lean against the door. If it should come open they could easily tumble out into the road.

Once the decision has been made to install seat belts consideration should be given to properly attaching the belts to the car. Quite often people merely drill a hole in the sheet metal at a convenient location and bolt the seat belt there. This is not good, the forces experienced during an accident could easily rip the bolt right out of the sheet metal. Seat belts should be bolted to something solid like the frame or a reenforced area of the sheet metal. One option is to bolt a length of hefty angle iron latterly to the floor pan under the car and attach the seat belt bolts through the sheet metal to the angle iron. Other options would have to be considered depending on the body style of the Model A.

During the recent restoration of a 1930 Tudor for my grandson Ben seat belts were certainly going to be included in the restoration. When we obtained the car there were seat belts installed, but only attached to the sheet metal. These were removed and discarded. Much thought has been given about how we were going to properly secure the new seat belts to the car.

The seat belts and associated hardware were purchased from the Buckle Up Company in Fullerton.

SEATBELTS	
www.buckle-up.net	
714-870-7920	1889 W. Commonwealth Ave.

The rear seat belts:

The rear seat belts were secured by fabricating two lengths of 2X2 inch by 1/8" thick angle iron. These were welded together longitudinally to form a "Z" shape. The "Z" was stood on its side so that one of the legs was vertical. Two separate pieces were fabricated and neatly fitted behind and under each side of the rail for the back seat lower cushion and bolted to it with a series of bolts. Four 7/16" holes were drilled into the vertical of the "Z" to attach the seat belts to with 7/16" grade-8 bolts and nuts.



These are the support brackets that attach to the rear seat rails on the 1930 Tudor. The D and the P indicate driver and passenger sides so that all the bolt holes in the seat rail will line up. The two larger pieces are the "Z" brackets that fit under the rear seat rail structure. The shorter pieces attach to the front of the seat rail to add additional support to the seat rail structure. Each section bolts to the seat rail with two $3\8"$ grade-8 bolts and nuts.



This photo shows the right side rear seat belt support brackets installed on the passenger side. The "Z" section has two 7\16" holes in the vertical section where the seat belts will bolt to with 7\16" grade-8 bolts and nuts. The short front section is bolted to the "Z" structure through the rear section of the seat rail structure with two 3\8" grade-8 bolts and nuts.



This photo shows the two rear seat belts installed to the support brackets.



The rear seat belts protrude out between the two seat cushions and are safely secured to the car.

The front seat belts:

The front seat belts were secured to the cross piece channel that supports the front and rear floor boards. But first it had to be strengthened. To do this two pieces of steel were added below the channel. The first was a U-shaped channel $1\4$ " thick, the second was a flat piece of steel $1\4$ " thick that fit inside the U-channel. Both pieces were bolted underneath the floorboard channel with grade-8 bolts. An additional length of flat steel 2" wide and $1\4$ " thick and the length of the floorboard cross piece was bolted to the top. The outboard bolts that anchor the outboard seat belts go down through the frame of the car and are grade 8 bolts. The bolt next to it on the cross piece anchors the top two inch wide steel to the frame. The inboard belts are attached to the two inch wide steel at the center of the ross piece.



This photo shows the steel supports that were attached to the cross piece. The bottom two fit inside each other and fit up under the cross pieces. The top support lays on top of the cross piece and it is all bolted together with grade -8 bolts and nuts.



The front seat belts will bolt to the inverted U-shaped cross piece on the 1930 Tudor that provides structure to support the two rear floor boards and the back legs of the two front seats. Under the U-shaped cross piece we attached a solid piece of steel up inside the U and is held in place with three $3\8"$ grade-8 bolts and nuts. The cross piece is also bolted to the frame on each side with $7\16"$ grade-8 bolts and nuts. Both front seat belts will bolt to this cross piece with $7\16"$ grade-8 bolts and nuts. A two inch wide $1\4"$ thick length of steel was attached to the top across the full width with the outboard bolts going down through the frame of the car.



The two long L-brackets and belt receptacles were purchased from Buckle Up.



All three cross piece supports have been installed. The two long L-brackets mount the belt receptacles that are on the outboard side of each front seat. The two short L-brackets at the center mount the seat belts.



The short L-brackets are attached with 716" grade-8 bolts. They go through the cross piece and all three supports.



The outboard long L-brackets for the belt receptacles are attached to the cross piece with two grade-8 bolts each. The bolt closest to the receptacle goes down through the frame. A steel spacer had to be added under both outboard long L-brackets to raise them up to the level of the door sills.

The spacers are 5\16" thick and one fits under each Long L-bracket.





The belt receptacles can pivot both fore and aft to allow them to be folded down and out of the way when entering and exiting the car.

The hole seen in the lower right corner of the photo was where a seat belt was previously attached when the car was procured.



The inboard seat belts will lay on the floor when not in use. By using belt receptacles for the outboard belts there is not the problem of a belt falling out on the running board and scratching paint or having the door closed on a belt.



The driver's side belt receptacle is shown here folded forward. The passenger side is folded back.



The front seat belts are safely secured to the car.