

Broken Rear Shackle Bolt

by Tom Endy 2024



The left rear shackle was found broken while removing the rear axle assembly from my grandson's 1930 Tudor during restoration. This is why it is never a good idea to pull the rear end with the spring attached to it. The rear spring could have broken loose and flown in any direction once the spring was free from the frame.

The procedure we used to remove the rear axle assembly was to first capture the spring tension with a proper spring spreader. The shackles were then removed and the rear axle assembly dropped out. The spring spreader was then collapsed and removed. The spring was then safe to remove from the frame of the car for restoration.

A broken shackle bolt is usually caused by the bolt being overtightened. When installing shackle bolts, they should be pulled down tight to ensure they are fully seated, then backed off a turn to allow the bolts to freely rotate when the spring is flexed while traveling on the road. An overtightened bolt can shear as did this one.

A new set of rear shackles were installed during the restoration.