



Ford T Tips



By Douglas Dachenbach

Safety in Your Shop

By definition, if you own a Model T, you're going to have to do some repairs yourself or have an infinite amount of money. Let's face it, most of us like the challenge of fixing something that is close to a hundred years old. If you work on your T, then you need to learn and apply a few shop rules to make sure you can work another day.

Let's start by defining the word accident. If you are walking down the road on a clear sunny day and a baseball size hailstone falls out of the sky and kills you, that's an accident. If you are under your T and it rolls off the jack and crushes you, that defines stupid. I have mixed feelings about stupid. Most often, stupid is avoidable, but then, it helps clean up the gene pool.

Wheel Chocks: A rock behind your tire on a slope is not a wheel chock. We have all used or seen someone use, wood blocks, concrete blocks, tree limbs; any number of objects we thought would keep the vehicle from rolling. Before you start those winter repair projects, take a few minutes and make a set of wheel chocks that work and will give you some real safety at the same time. I've pictured here a wheel chock I made from scrap lumber around my shop. It fits around the tire to prevent rolling both forward and backward. Use two of these and you know your T is secure before you climb under it. Carry at least one chock in your T whenever you are on tour. The accident that gets you is so often after you think, "This job will only take 30 seconds, it isn't worth the time to chock the vehicle.", (*DON'T BE STUPID*). The chock design I made will also function as a tire gauge. If made correctly, it will easily slip around a fully inflated tire, but you will have to kick it on and off an under inflated tire. If the picture doesn't tell you enough, go to www.tickints.com and click the (T Tips) tab at the bottom of the first page. On the T Tips page you can download a PDF file for Chock Plans.



Jacks and Jack Stands: I had a patient who was doing a brake job alone on his car, in a detached garage. No one knew for sure what happened but the car rolled off a hydraulic jack and fell enough to pin him. He was not crushed but he couldn't breath or call for help and he suffocated. First error; "no chocks". Second error, he used a hydraulic jack perched upon a block. A hydraulic jack is a must for many jobs, but we should never slide under a vehicle which is on a hydraulic jack, especially atop a block. Two sets of jack stands are a must. One pair that extend to about 16 inches is needed for use on model T axles. To secure the frame to do a major repair, a second, taller set of jack stands that can extend to about 24 inches are needed. Jack stands mechanically lock when the car is resting them and the car must be lifted to release the stand. They have a larger base and are less likely to fall over. Of course, wheel chocks are still necessary. Never try jacking up a vehicle that is resting on dirt, grass or gravel. If you lift the entire car off the ground, even jack stands aren't secure enough. Smart mechanics have frame stands that can't tip over or roll. Third error; don't work alone.

Safety Eyewear: Safety eyewear is one of the most important and least often used safety items in a shop. While working a summer college job, one of my co-workers was driving a nail into an asphalt

road with a hammer. A piece of the nail-head broke off, ricocheted off the road surface and penetrated his eye. The eye had to be removed. This sad event, that took just microseconds, but had lifetime consequences. There are few tasks we do in the shop that do not deserve safety eyewear. I worked as an Optometrist for 47 years and have removed more foreign bodies than I can count. Even with safety eyewear, crap happens. I routinely saw patients from machine shops where protective eyewear was an OSHA requirement, but they still got metal in their eyes despite protective eyewear being used. These are some guidelines you should consider. If a task is undertaken, that uses a high-speed tool such as a drill, lathe or even a hammer, that causes the eye injury, you need to see a professional immediately. If a foreign body penetrates the globe, immediate treatment can often save the eye. Never, never try to remove an object that has penetrated the eye, such as a nail or a piece of wire. The most common foreign bodies I saw were metal fragments from rusty mufflers and brakes. A handy item to have available in your shop is a large bottle of contact lens saline solution. Get someone to immediately squirt the solution in the eye, directing the stream at the foreign body if it can be seen. Weld splatter or hot shavings tend to fuse to the eye and don't often flush out. Foreign bodies will lodge anywhere on the globe or on the back of the lid. Believe me, it may not be where you feel it. I had an agreement with the machine shops. If workers couldn't flush the foreign body out in two hours, they were driven directly to my office. If the accident occurred after 3:00 P.M., they didn't wait, but came directly to the office. Try to call and warn the office that you are on the way. Tears are a salt solution and highly corrosive to iron, hence the two-hour rule. If you let a piece of steel rust in the eye, I must remove the steel, but also remove all tissue that contains rust stains or the cornea won't heal properly. ER doctors are rarely trained in eye injuries and prefer that you see a specialist.



The most common tool to remove a rust ring is a low torque AA battery-powered motor with a ½ mm burr called an Algerbrush. I have to go in and grind out all the rust stained tissue which often is 10 times or more the size of the foreign body. A topical anesthetic will make this procedure almost pain-free but that only lasts 30 minutes to an hour. I've had big burly men beg for more anesthetic. Continuous use of the anesthetic will stop or reverse the healing process. The reason I'm being so graphic about this is that these treatments are most often unnecessary if you just use precaution, eye protection and/or get help fast. When I had patients come in with a fresh piece of steel in their eye, I could usually remove it in minutes, instill an antibiotic and often they went back to work the same day or within 24 hours.



Finally, if you get caustic liquid in the eye, flush – flood the eye with water for up to 15 minutes. I do mean flood the eye. Acid or base liquids, can destroy the eye in a couple of minutes, so flush first and then seek immediate medical attention.

In the movie, the character, Forest Gump, said, “Stupid is as stupid does.” Always stabilize the car, use eye protection and try not to work alone. See you down the road and don't call me at midnight for something you got in your eye at 9:00 that morning.

Douglas Dachenbach, O.D. (retired) and Jerry Banks

