MODEL A FORD CAST IRON BRAKE DRUM INSTALLATION

Before tearing the whole car apart, make sure you have all the necessary parts to install the drums. New wheel studs are always required. Swedging tools are required for swedging the studs in place. Most parts suppliers carry the swedging tool to do this job. Lastly, a hydraulic press will be required to knock out the old studs as well as install the new ones. A minimum of a 40 ton press will be required for swedging the studs.

After the old drums / hubs have been removed from the car, you will have to press out the old studs. It is best to relieve the studs before driving them out. Grind the old studs off down to the brake drum surface. Take a center punch and punch the center of the stud. Drill the center of the stud out starting with a 1/8" drill bit and work up using larger and larger bits until you break through the wall of the wheel stud. Now take a punch and knock out what is left of the stud. You can press the old studs out with a hydraulic press but you must be sure to support the hub around the head of the stud when pushing on it. The first method of drilling out the studs is more time consuming but reduces the risk of distorting the flange of the hub. If the flange of the hub gets distorted, when you attach your new brake drum you will have a lot of run out which can cause wheel wobble and vibration. If you think the flange is distorted, have a machine shop face the flange so it is straight.

Once all of the old wheel studs have been pressed out, thoroughly clean your old hub and paint if desired. Slip the old hubs and the new drums together. Make sure that the hub goes all the way against the drum.

Now is the time to swedge the new studs in place. Use 4 bolts, nuts and washers to draw the hub and drum tightly together, before you swedge your first wheel stud in place. Slide your first wheel stud through the hub and drum and then place the assembly into your press supporting the head of the wheel stud you will be swedging, align the threaded head with the ram of the press. Slide the swedging tool over the threaded end of the stud and bring the ram down to swedge the shoulder of the stud. Normally the gauge will read between 27 and 29 tons when you finish swedging. The tool will normally be tight on the stud and will require a pipe wrench or a pair of vise grips to break it free. A little bit of shortening, like Crisco applied to the inside of the tool will help it come off of the stud easier.

Now that you have swedged all of the studs in place, you can move to the next step. Take the drums to a brake shop and have them true up the braking surface. The new drums are turned true, but you want them to be true in relation to the hub. The new brake drums are machined slightly undersize so you can true them to an I.D. of 10.995/11.005. Once this is complete, your are ready to install them on your car.

If your old drums were worn excessively, your old linings may be thicker than normal and requiring some grinding down. Even if you are putting new brake linings on, you will probably have to grind them down somewhat to get the new drums on. To fit the drums to the shoes properly, you can do one of two things. If you have an old brake shop in town, take your lined brake shoes and the new drums to them, and they can grind the lining to mate to the new drum perfectly. The other method takes more time, but does the same job! With the brake shoes on the car, put masking tape around the diameter of both brake shoes. Now slip the drum in place and put the axel nut on. Spin the drum. Now remove the drum and examine the tape. The tape will be worn off where you have high spots on the lining. Grind down the high spots until you can assemble the drum and not have any drag from the lining. You may end up putting the drum on and off several times, but that is the only way of doing the job.

After you have your shoes fitted and the drums installed, adjust the brakes just as you normally do. End of job!

WARNING: Never tack weld the heads of the studs in place instead of swedging them in place. If they are not swedged in place, the shoulder on the stud allows the wheel nuts to bottom out on the shoulder instead of the wheel which can be a very serious problem driving down the road.