

Upgrading the front brakes on my 1956 F-100 – Mike Sonn

My truck was stubbed with a '79 Malibu back in the 90's. This upgrade provided me with independent front suspension, a sway bar, power steering and disc brakes. I have always been unimpressed by the brake performance on my truck. In efforts to improve things over the years, the master cylinder was upgraded to a dual diaphragm booster, with new calipers, pad and rotors. After installing the 454 Big Block, with the aggressive cam, vacuum was too low for power brakes, so an electric vacuum booster was added. While better, it still wasn't what I expect. So, now, I decided to upgrade to Wilwood dual piston calipers, including drilled/slotted rotors and braided stainless hoses.

Here is an abbreviated step by step process, I used for my situation. One note of caution, if you are not familiar with, or comfortable working on brake components, either seek out a professional, or guidance from other club members that have tackled projects like this before.

First step for me is always to document any process with pictures, so I know what I started with and in other cases of repair, how to reassemble things on the back end. This upgrade removes existing components, and replacing them with something completely different. The instructions provided by Wilwood are very detailed and easy to follow. As with anything, carefully read the instructions several times through BEFORE starting anything, to gain familiarity with the process, and to know what steps are necessary to complete the project.

This project involves installing this on my truck. Pretty sweet huh?:

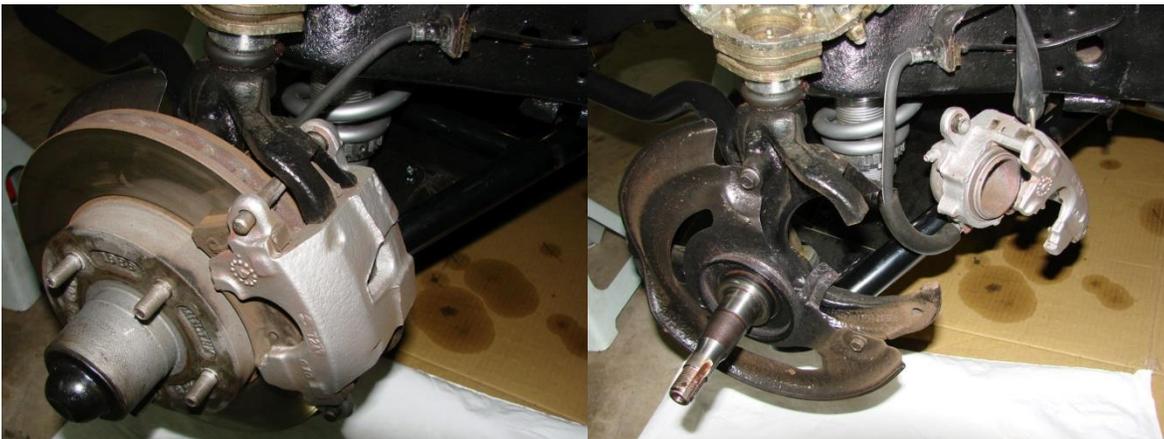


The hub and rotor pieces were assembled, prior to installation on my truck. All bolts had Red Locktite applied before threading in and getting torqued to 40ft/lb. The hub is set up with a dual bolt pattern. I'm using the 5 X 4.75" GM pattern. 5 X 4.5" is the other option.



SAFETY NOTE - *Whenever working on any vehicle with the tires off the ground, you must support the vehicle on jack-stands. Never rely on a jack only. You can't enjoy your vehicle if you're dead!*

Once the vehicle was safely supported, and the front wheel removed, this is where I started. First step was to remove the caliper and support it with a bungee cord. Then, the rotor/hub was removed by removing the dust cap, cotter pin, axle nut, washer and outer bearing.



The three bolts holding the dust shield were removed, as was the shield itself. To provide clearance for the caliper bracket, two existing portions of the spindle assembly, where the stock caliper mounted, needed to be trimmed off, per the diagram. This is not a critical cut and was done easily with a Sawzall. Just enough needed to be removed, so the new bracket wouldn't be interfered with.



By drilling and tapping two former dust shield bolt holes, they now became threaded holes for the new caliper bracket. The drill bit used was a .332" (Q) drill, and the tap was a 3/8-24. The top hole was drilled to 1" deep and the bottom hole drilled through. Once tapped, the holes were flushed with brake cleaner to remove all cuttings.



Once all the cutting, drilling and tapping was done, I cleaned up the cut areas with a grinder, sprayed everything off with brake cleaner, and applied some paint. Once the paint was dry, it was time to mount the caliper bracket, and install the hub on the spindle. The axle nut secures the outer bearing and washer. Once adjusted to the OEM specs for drag on the bearings, a new cotter pin was installed to prevent the axle nut from turning, and the dust cover was screwed into place.



Now it was time to mount the caliper. The bolts securing the caliper to the caliper bracket, utilize spacer washers (which are provided), to assure the caliper is centered on the rotor. I used two for each bolt, and both sides of the truck required the same. Once the calipers are mounted, it is simple to slide in the pads, and secure them with the provided long cotter pins. Last step was to remove the existing brake hose/caliper unit from the hardline, and install the new chassis fitting for the transition between the braided hose and the chassis hardline.



Brake bleeding comes next. I'm not going to bore you with those details. Google it if you don't know what that involves. For my install, I'm switching out the Wilwood bleeders with Speed Bleeders to make purging the air from the lines much easier. Note - There is specific break-in procedure that must be followed for Wilwood (and any new pads/rotors really), to assure proper pad and rotor bedding. Be sure to read and follow those procedures. As of the writing of this article, I have not done that yet as Winter is still in the way...

Have fun, be safe, and drive those effin effies!

Mike Sonn