

YOU CAN DO IT EASY UPGRADES

by Randy Irwin

1955-58 WILWOOD DISC BRAKE CONVERSION



Randy Irwin - Technical Writer

Randy has been involved in the Chevy parts business for over 25 years. He is a wizard at creating, making and modifying custom parts for Chevys.

A disc brake conversion on a Tri-Five is undoubtedly the number one safety upgrade for your car. We all put big power under the hood and now we have to make it stop! With 16" and larger wheels being installed and the large openings in the wheels, the stock GM cast iron calipers are more visible. You can only make stock calipers look so good. Wilwood brakes has developed a very clean, simple and affordable disc brake conversion that will bolt to the stock Tri-Five spindle and uses super-big 11-3/4" rotors and four piston aluminum calipers for superior braking and great looks behind your custom wheels.

20-174



20-175



Parts Needed:

20-174 1955-58 Wilwood Disc Brake Kit
20-175 Stainless Steel Braided Brake Hose Kit

To order parts call 1-800-456-1957 or visit ClassicChevy.com

Tools Needed:

3/8" Allen Wrench
Cutters
Pliers

1/2" Socket & Ratchet
9/16" Wrench
#45 Torx Bit

Time Frame:

4 Hours



Photo #1: The disc brake brackets are a two-piece bracket that will be assembled and bolted to the stock '55-'58 spindles using the factory

upper mounting hole where the wheel cylinder mounted and to the lower holes for the steering arm.



Photo #2a & 2b & 2c: A 5/8 X 1" countersunk bolt is used at the top to hold the bracket in place. A 1/2" spacer is installed between the top of the bracket and spindle. Leave this bolt loose at this time.

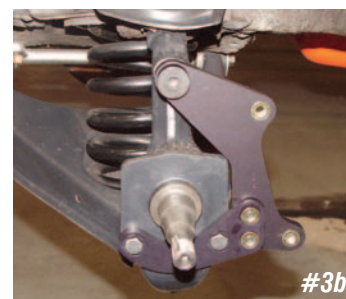
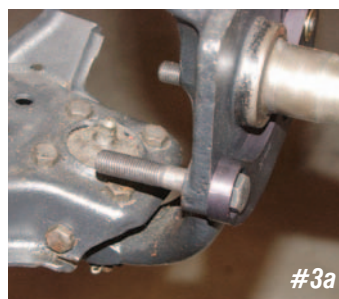
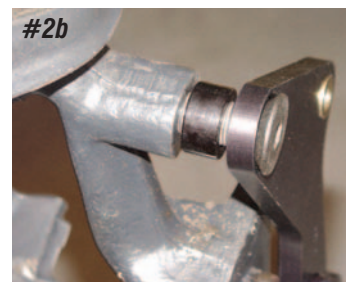


Photo #3a & 3b: Two 7/16" X 3" bolts and lock nuts hold the lower half of the bracket to the outer face of the spindle as well as the steering arm to the inner side of the spindle. The brackets mount the calipers so they will trail the spindle.



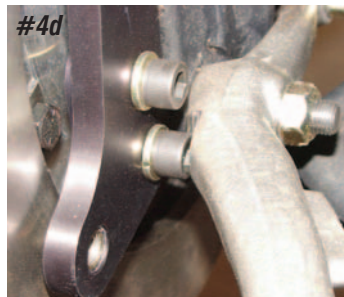


Photo #4a & 4b & 4c & 4d : When installing the lower steering arm (knuckle) it may make contact with the lower rear Allen bolt that holds the two caliper brackets together. If so, notch the steering arm slightly using a grinder so that the arm can be bolted up without interfering with the bolt. With the steering arm notched, the upper 5/8" Allen bolt and two lower 7/16" bolts can be tightened prior to installing the steering arms. Torque the upper bolt to 75 ft/lbs and the two lower bolts to 45 ft/lbs.



Photo #5: The Wilwood disc brake conversion uses an aluminum hub with a bolt-on adapter plate and an 11-3/4" rotor. When using an 11-3/4" rotor a 16" diameter or larger wheel must be used.

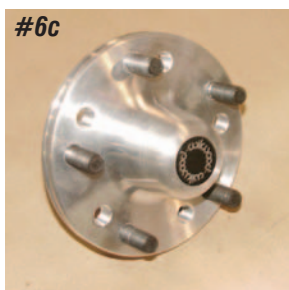


Photo #6a & 6b & 6c: The wheel studs are a beefy 1/2" not 7/16" like the stock wheel studs. In addition, they screw in the aluminum hub from the back side of the hub adding strength and ease of service. The hub is drilled for two bolt patterns; 5 on 4-1/2" (Ford) and 5 on 4-3/4" (Chevy). Using red thread locker on the threads, install the wheel studs in the outer five holes (Chevy) in the hub and torque to 65 ft/lbs.

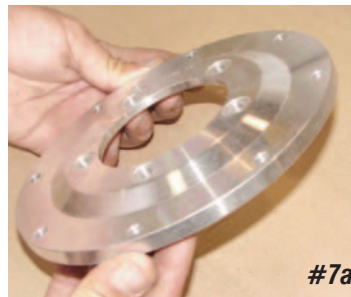


Photo #7a & 7b & 7c: Next install the rotor adapter plate on the hub. The rotor adapter plate is held to the hub with five 3/8" X 1-1/4" TORX button head bolts and flat washers. Use red thread locker on the bolts and torque to 45 ft/lbs.



Photo #8a & 8b & 8c: The rotor is held to the adapter plate with eight 5/16" X 3/4" bolts. The flat side of the rotor fits the inner face of the adapter plate. Using red thread locker, bolt the rotor to the adapter plate and torque to 24 ft/lbs. The heads of these bolts are drilled for safety wire. Using .020" safety wire tie all eight bolts together for added safety.



Photo #9a & 9b: The Wilwood hubs use the large GM inner and outer bearings from A or F body cars. Pack the bearings well with high temperature disc brake grease.



Photo #10: Install the inner bearing and seal. The seal is driven in flush with the back of the hub.

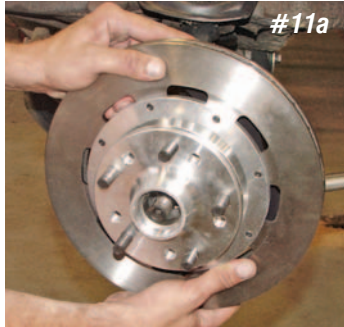


Photo #11a & 11b: Next install the rotor onto the spindle. Make sure the inner bearing and seal slides all the way onto the spindle and install the outer bearing.

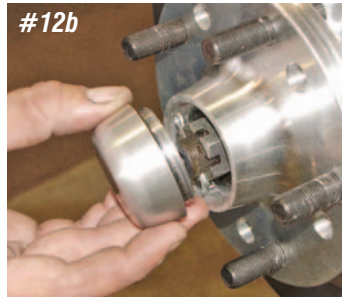


Photo #12a & 12b: The stock drum brake spindle nuts are used with the Wilwood disc brake kit. Install a new spindle washer (supplied with the kit) and torque the spindle nut to 30 to 33 ft/lbs and turn counterclockwise until the cotter pin lines up with the hole in the spindle and install a new cotter pin. Place a small amount of grease on the O-ring and threads of the screw-on dust cap and screw the cap on until it bottoms out.



Photo #13a & 13b: The calipers have four pistons for superior braking power over stock single-piston calipers. The brake pads are held in place with a cotter pin at the top of the caliper. To install, drop the disc brake pads in from the top of the caliper, slide the



cotter pin through the hole on the inboard side of the caliper, through the eyelets in the pads, out through the hole in the outboard side of the caliper and bend the cotter pin over so that the pin can not slide out.

Photo #14: The caliper has two mounting ears that match up to the two threaded holes in the main mounting bracket. The caliper is bolted to the main bracket with two 3/8" X 1" bolts and lock washers. The caliper may require lateral shimming to achieve the proper clearance between the brake pads and the rotor. Mount the caliper to the main bracket using the two bolts and lock washers. Do not use any thread locker at this time.

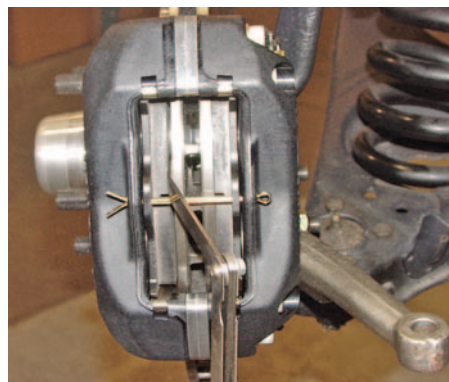


Photo #15: Once the caliper is mounted, use a feeler gauge and measure the gap between the inner brake pad and the inner face of the rotor as well as the gap between the outer brake pad and the outer face of the rotor. If the gap is

within .020" difference between the inner and outer measurement, shimming will not be necessary.

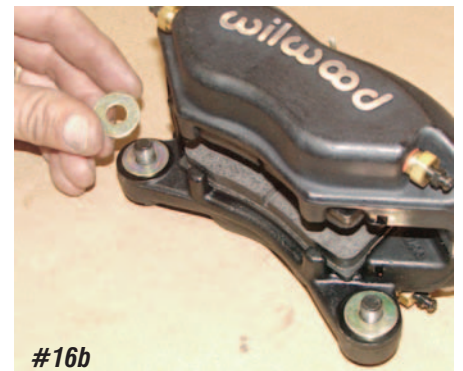
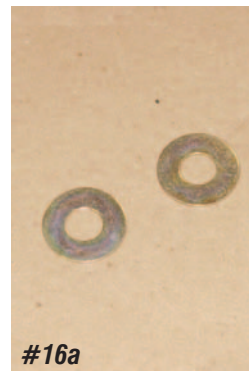


Photo #16a & 16b: If the caliper needs to be shimmed, it will always need to be shimmed inboard. The disc brake kit includes ten .035" thick 3/8" shims. These shims install between the mounting ears on the caliper and the caliper bracket.

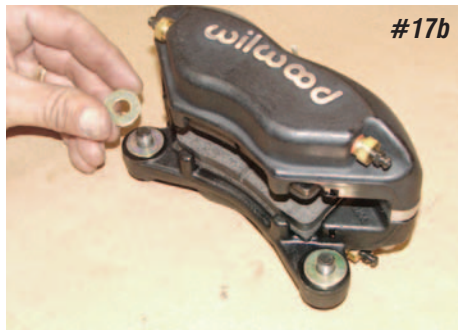


Photo #17a & 17b: When the desired amount of shimming is determined, use red thread locker on the 3/8" bolts and install the caliper for the final time.

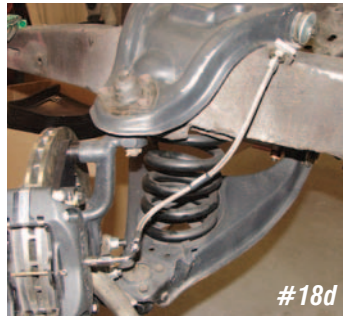
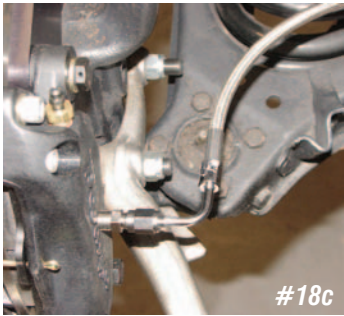
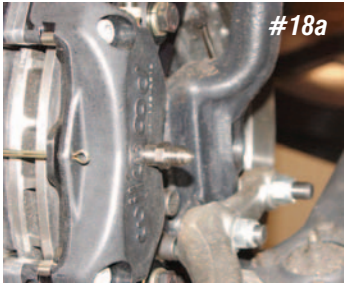


Photo #18a & 18b & 18c & 18d: The caliper has a 1/8" female pipe thread hole for the brake hose. Using red thread sealer, screw the fitting into the caliper. At the frame, an adapter is installed to connect the steel brake line to the #3 steel braided flex hose included in kit **P/N 20-175**. With both fittings in place, install the #3 steel brake hose with the 90-degree end of the hose connected to the caliper and facing forward. The straight end of the hose connects to the fitting on the frame. This hose kit really finishes off the looks of the brake conversion! Now bleed the brakes and enjoy the custom looks and better braking power of your new Wilwood system.



Photo #19: The Wilwood four piston calipers looks great through the spokes of our American Racing Torque Thrust wheels. Good Luck! 