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ACTUAL PARTS, YEARS AND BODY STYLES CONTAINED

IN THIS ARTICLE MAY DIFFER SLIGHTLY FROM YOUR APPLICATION. "

1955-58 POWER DISC BRAKE UPGRADE



#20-41

One of the most popular safety and performance upgrades on any car is the brakes, whether you are just upgrading to a better master cylinder or going from drum brakes to disc brakes. Our disc brake upgrade is a bolt-on conversion that can be completed with simple hand tools. The stock spindles will accept the large GM 11" vented rotors used in our kit and our bolt-on disc brake brackets use the large A & F body (Camaro, Nova & Chevelle) calipers. Many kits on the market today use the small S-10 pick-up and mid-80's Malibu calipers and rotors along with smaller bearings and smaller brake pads. When it comes to brakes, bigger is better! The kit includes a 7" diameter booster for plenty of valve cover to booster clearance, a dual master cylinder with a GM style proportioning valve, all the steel brake lines, brake hoses, large GM calipers, disc brake pads, bolt on one piece caliper brackets, 11" rotors with bearings and seals, all mounting hardware and instructions. This kit will not allow use of stock 1957-58 14" steel wheels.

Tools Needed:

Floor Jack
Jack Stands
Pliers
Assorted Sockets
Ratchet
Tubing Bender

Time Frame:

6 Hours

Part Needed:

20-41 1955-58 Complete Power Disc Brake Kit
49-38 Tubing Bender

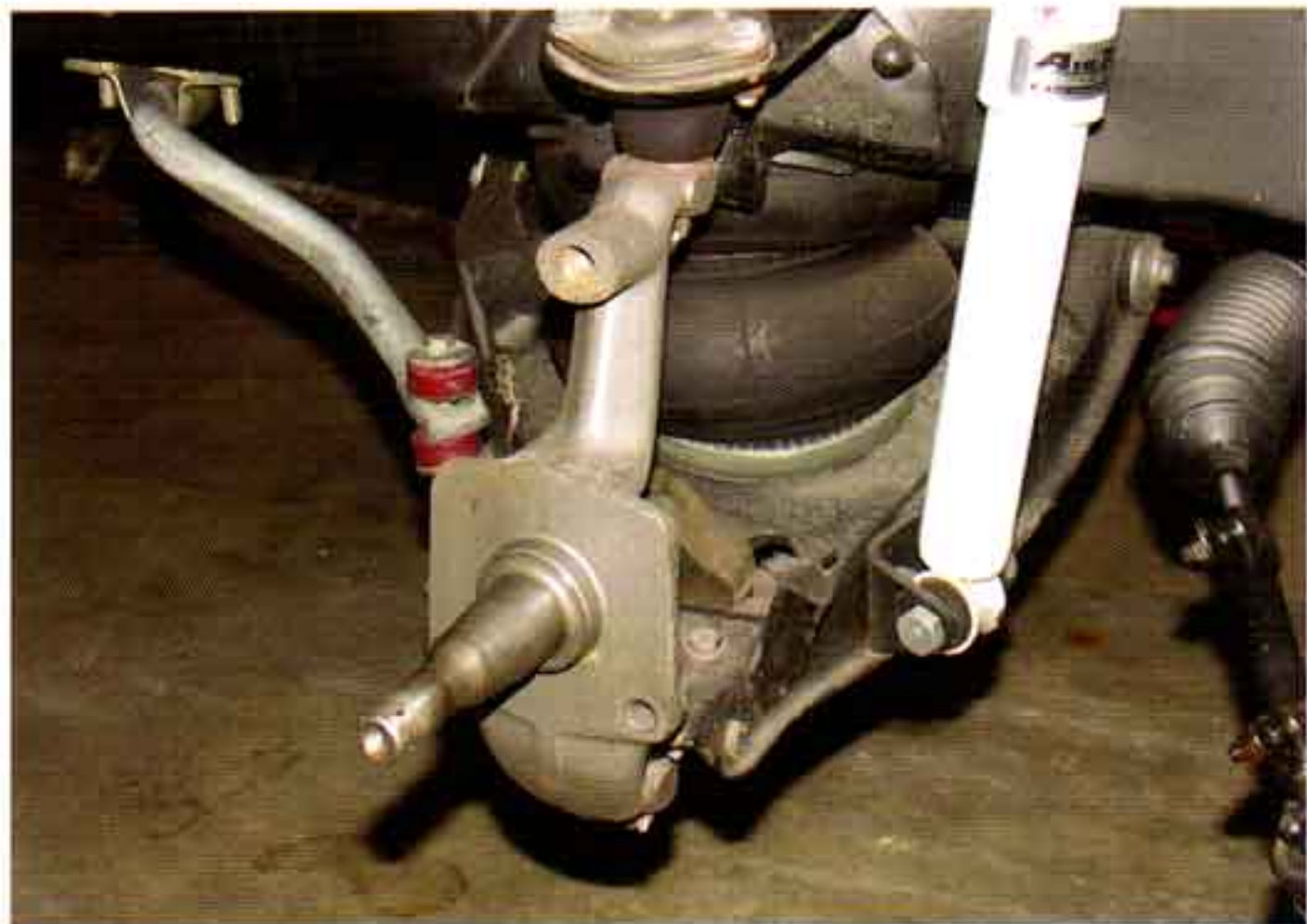


Photo #1: The stock spindle has a large bolt at the top of the spindle where the wheel cylinder is attached and two smaller bolts at the bottom where the backing plate and steering arm bolts up.



Photo #2: The caliper brackets included in the #20-41 brake kit are one piece bolt on brackets. This makes for a correct fit each time. The large hole in the bracket will mate up to the large threaded hole at the

top of the spindle. The milled out area will face to the inside.

Photo #3: Install the bracket so it is oriented to the rear of the spindle. The top of the bracket will fit over the spindle while the bottom will fit behind the lower part of the spindle. Install the new 15/16" anchor bolt provided but do not tighten.





Photo #4a & 4b:

The lower part of the bracket is bolted to the rear lower hole in the spindle where the steering arm attaches. The kit includes two 7/16" X 2-1/2" bolts and two 7/16" X 3" bolts. The 3" bolts are used in the rear spindle hole and will pass through the spindle, through the disc brake bracket and through the steering arm.

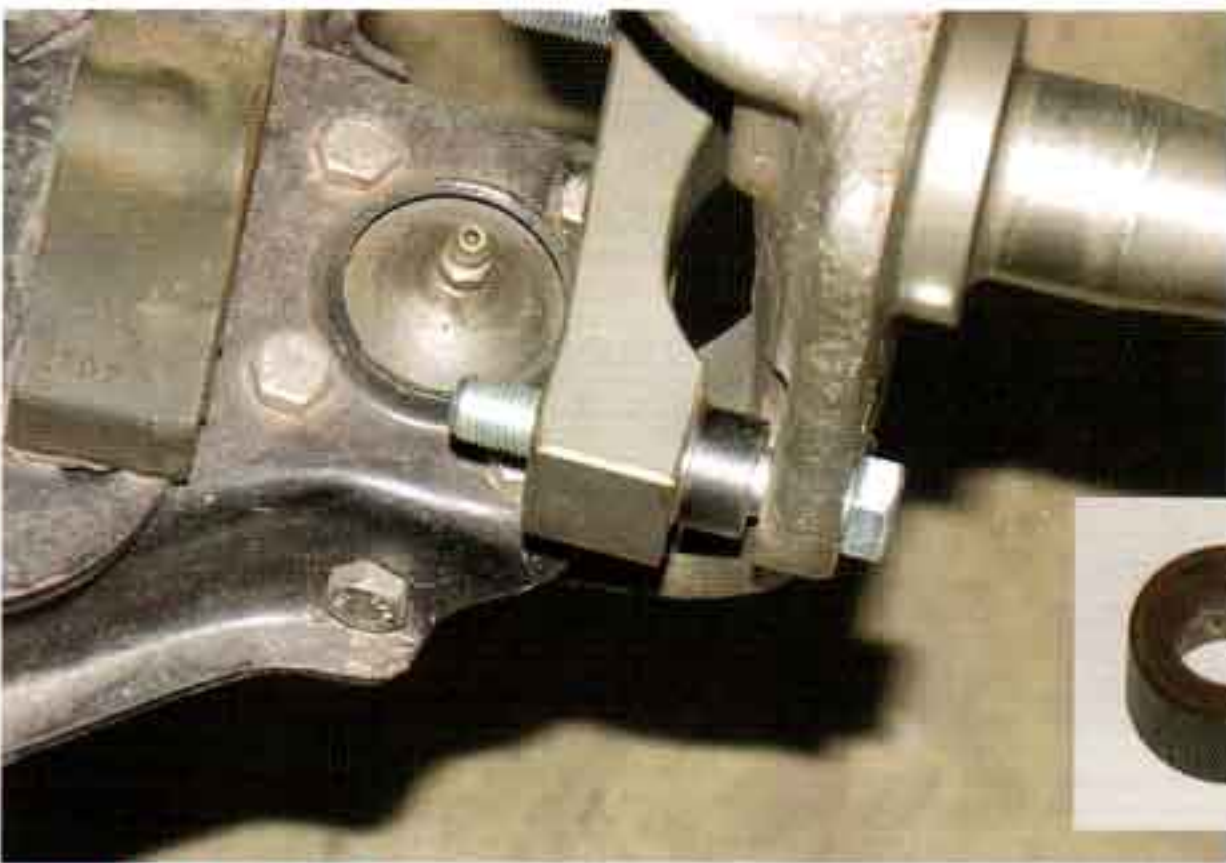


Photo #5a & 5b: At the forward spindle hole, slip the 3/8" spacer provided between the spindle and the steering arm. Install the 7/16" x 2-1/2" bolt through the spindle, the spacer and into the steering arm. The steering has now been spaced in 3/8" so the front end toe-in will need to be reset.

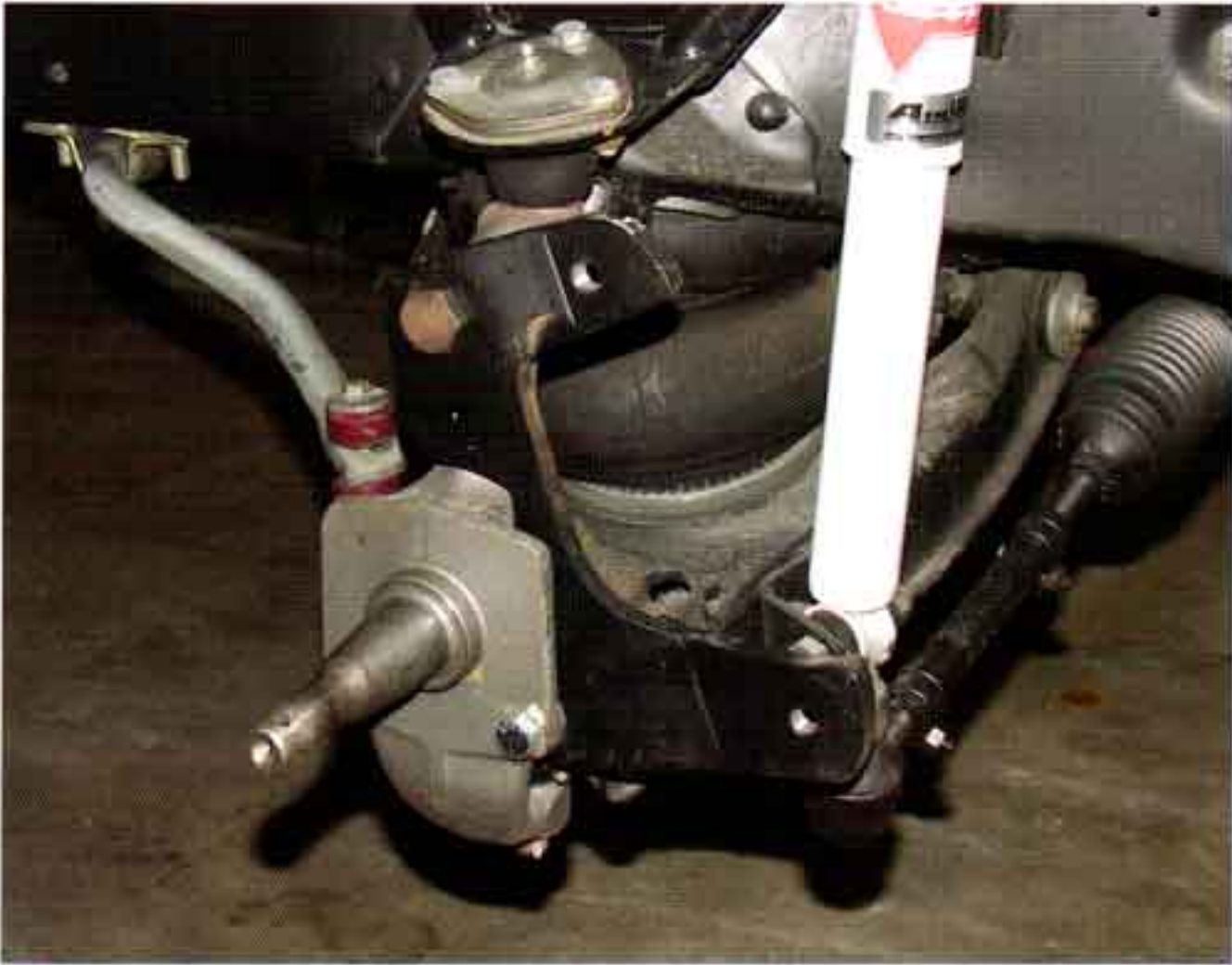


Photo #6: Once all three bolts are in place install the two lock nuts on the lower 7/16" bolts and torque them to 45ft/lbs. The upper 15/16" bolt gets torqued to 95ft/lbs.



Photo #7: Install the tapered inner bearing after packing it well with good quality wheel bearing grease. The inner bearing will fit into the race on the inside of the rotor and should turn smoothly.

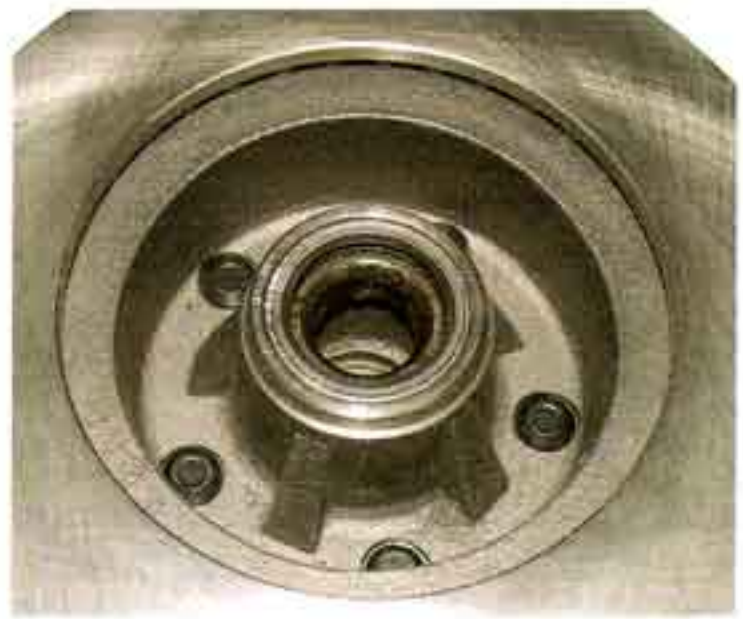
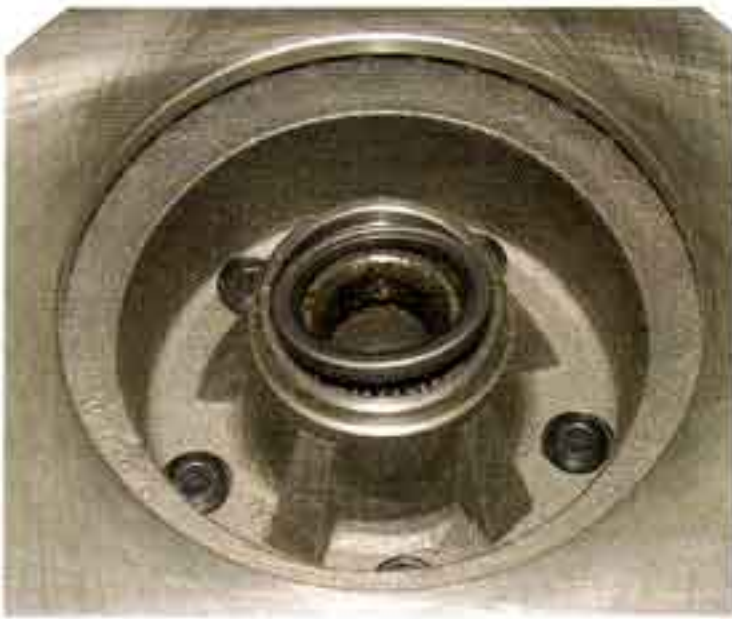


Photo #8a & 8b: With inner bearing in place, install the inner grease seal using a hammer and a flat block of wood. It will fit flush with the hub on the rotor when properly installed.



Photo #9: Now the rotor can be installed onto the spindle. Pack and install the smaller tapered outer bearing.



Photo #10a & 10b: Next install the new spindle washer and castle nut.

Torque the nut to 24ft/lbs, and rotate the nut slightly counter-clockwise until the cotter pin aligns with the hole in the spindle. Now install the dust cap and gently tap into place.

Photo #11: The single piston calipers come complete with pads, anchor pins, banjo bolts and copper sealing washers.

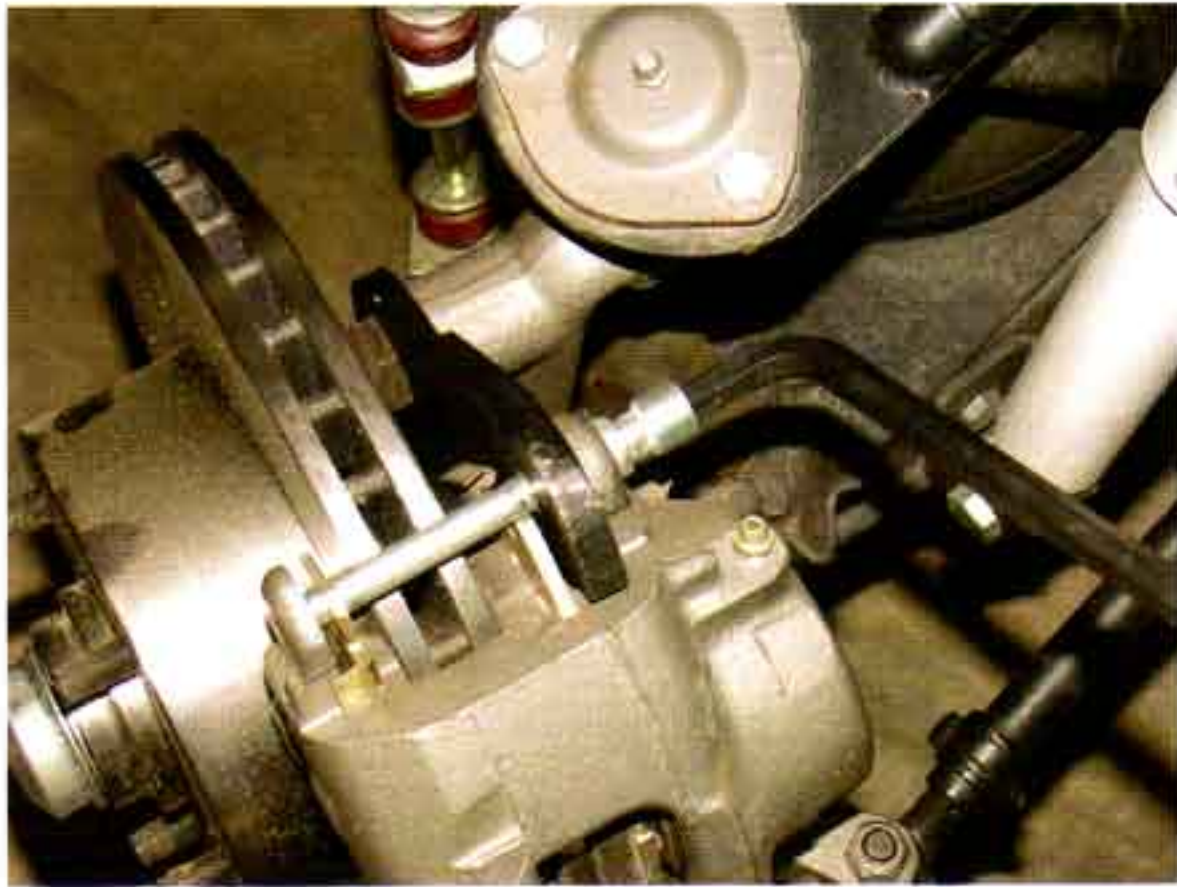
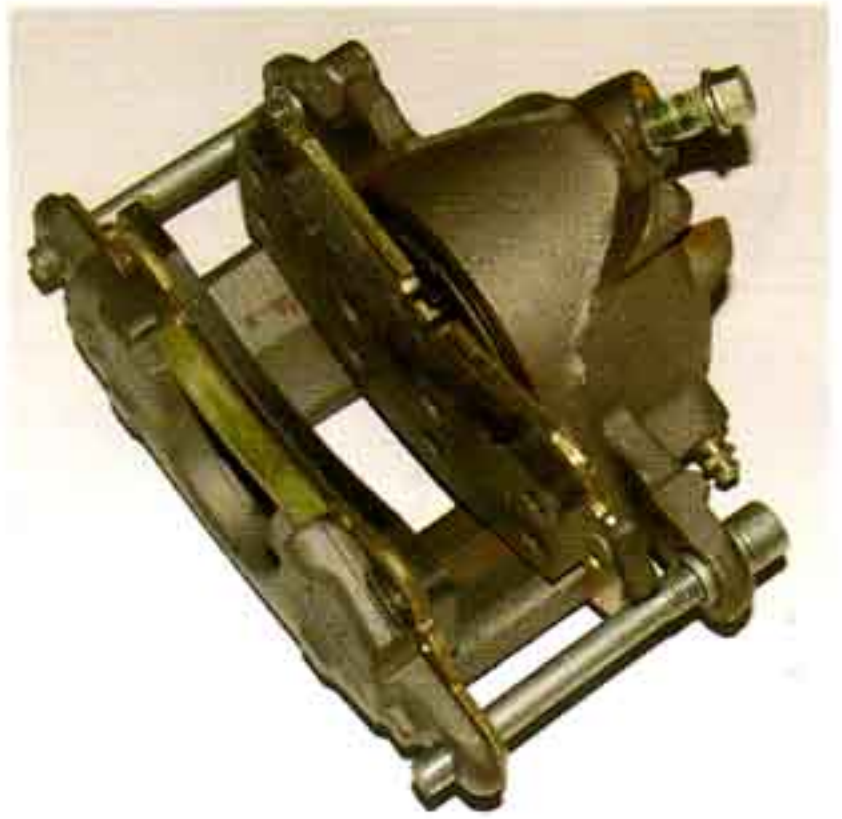


Photo #12: With the anchor pins removed, slip the caliper in place between the ears of the spindle bracket. Be certain the caliper cast “L” is installed on the left side of the car and “R” is installed on the right. Properly installed, the bleed screws will be at the top of the caliper. Install the anchor pins and tighten to 24 ft/lbs.

Photo #13: Attach the brake hose to the caliper with a copper sealing washer on each side of the brass block using the banjo bolt. Tighten the banjo bolt.

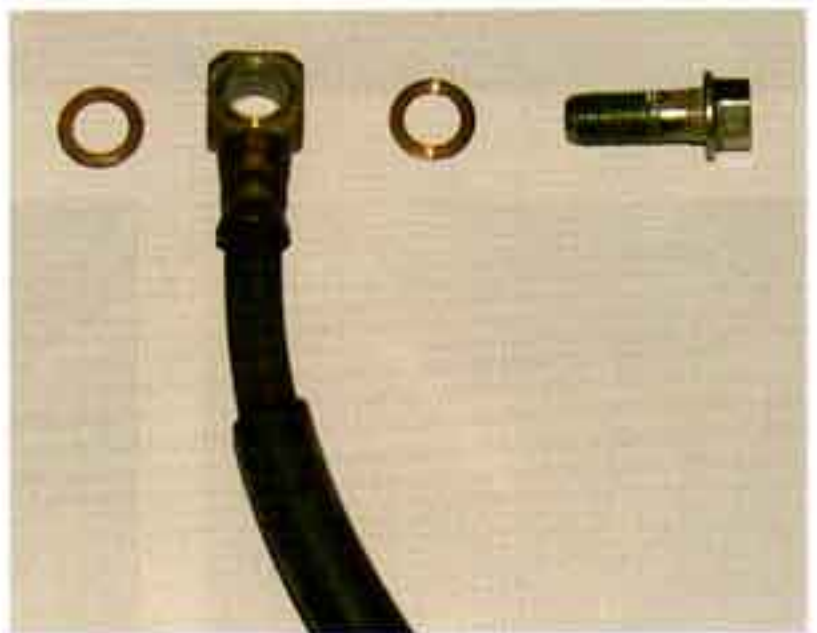


Photo #14: The other end of the brake hose is anchored to the frame using the stock brake hose bracket and C-clip.



Photo #15: The 7" power booster will bolt directly to the firewall where the original brake master cylinder bolted on.



Photo #16a & 16b: Drill a 3/8" hole in the brake pedal swing-arm under the dash exactly 1" lower than the original clevis pin hole. The new power booster push rod will attach to this new hole to allow proper travel of the booster diaphragm.

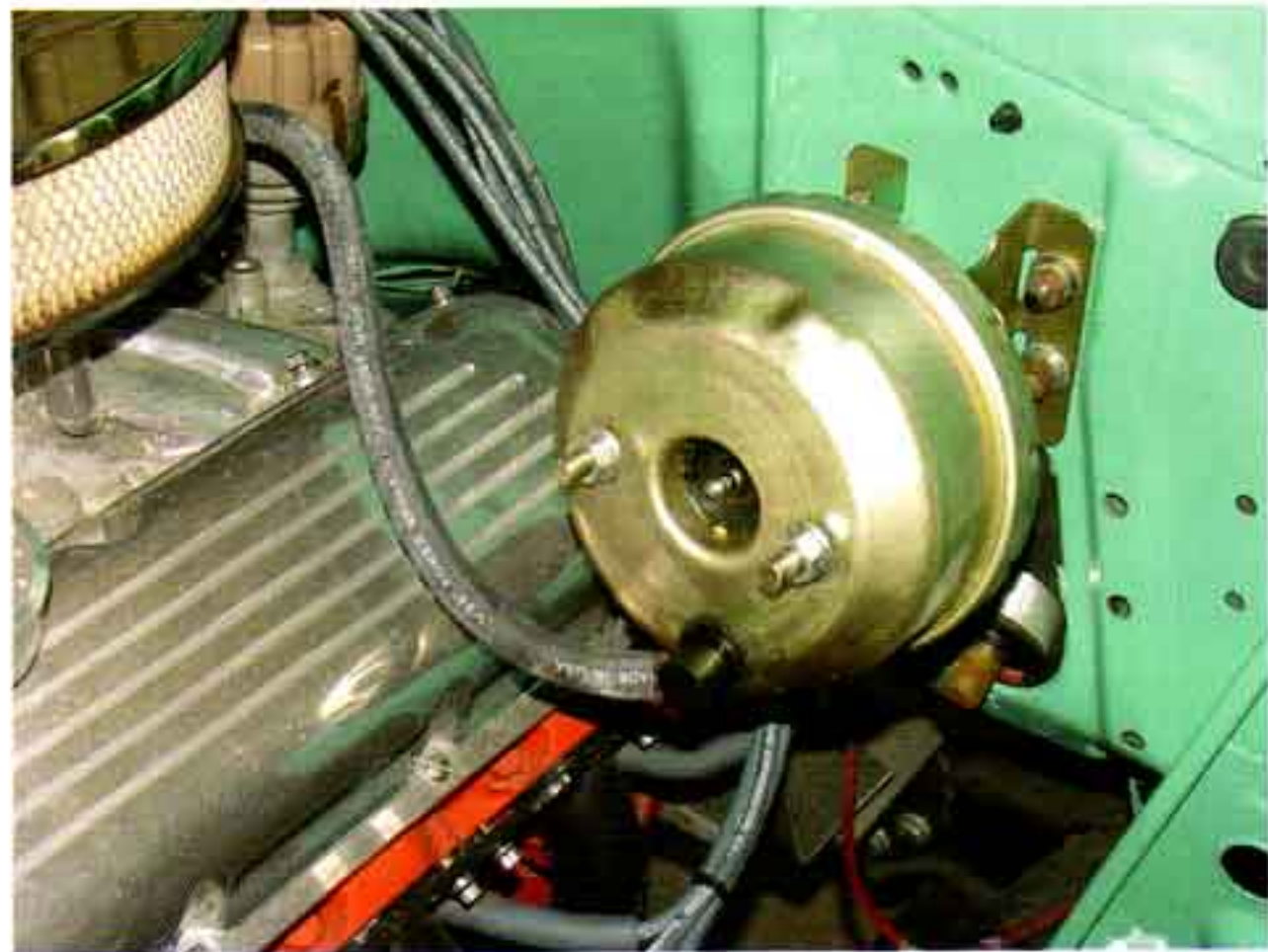


Photo #17: There is a one way check valve on the front of the booster that needs to be connected directly to the intake manifold or carburetor base plate. The booster requires no less than 14" of vacuum to work properly. If your engine has a modified camshaft and has lower than 14" of vacuum you may need to install a supplemental vacuum reservoir.

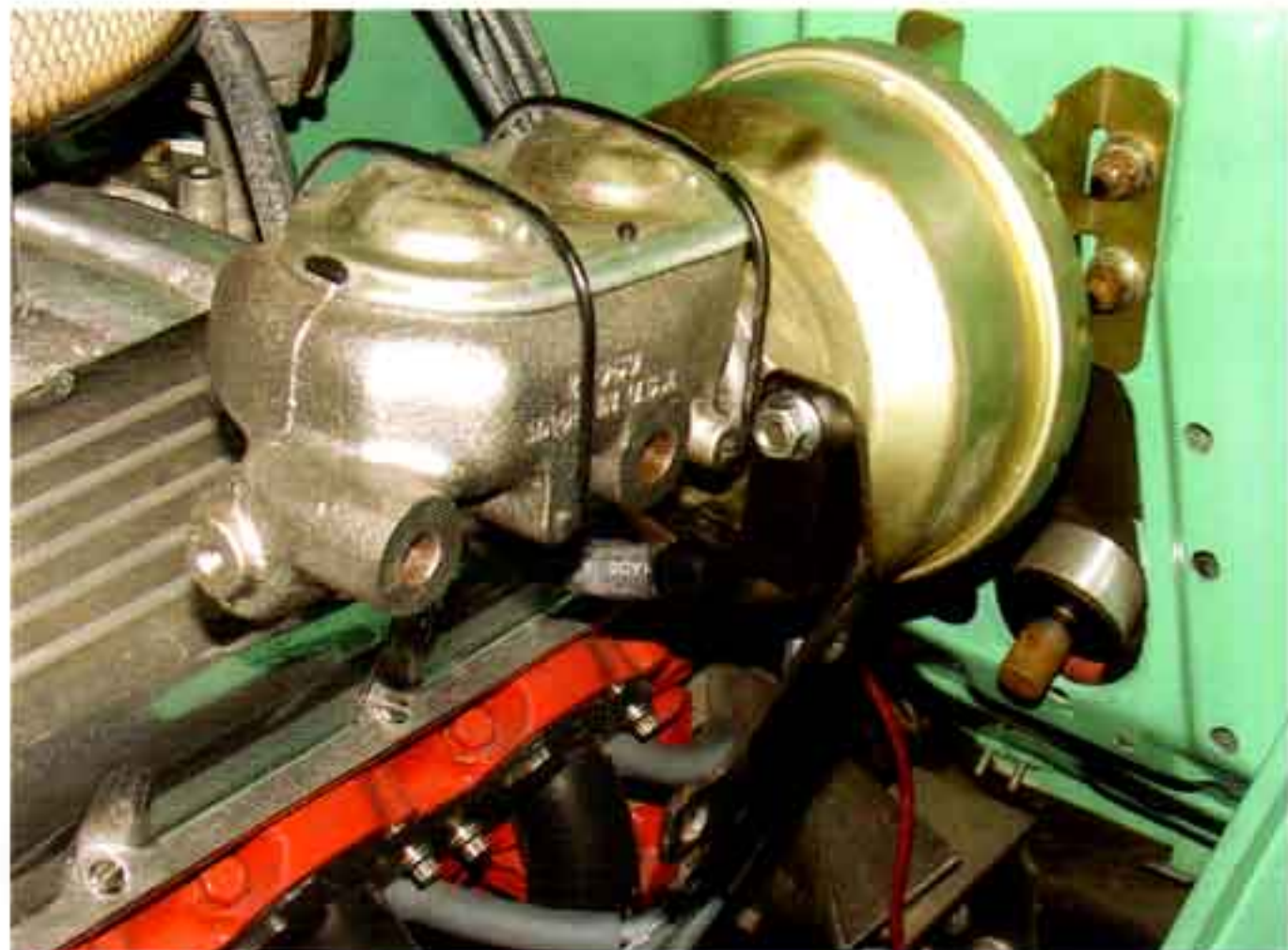


Photo #18: The master cylinder and proportioning valve bracket will bolt to the front of the booster with the nuts provided with the booster.

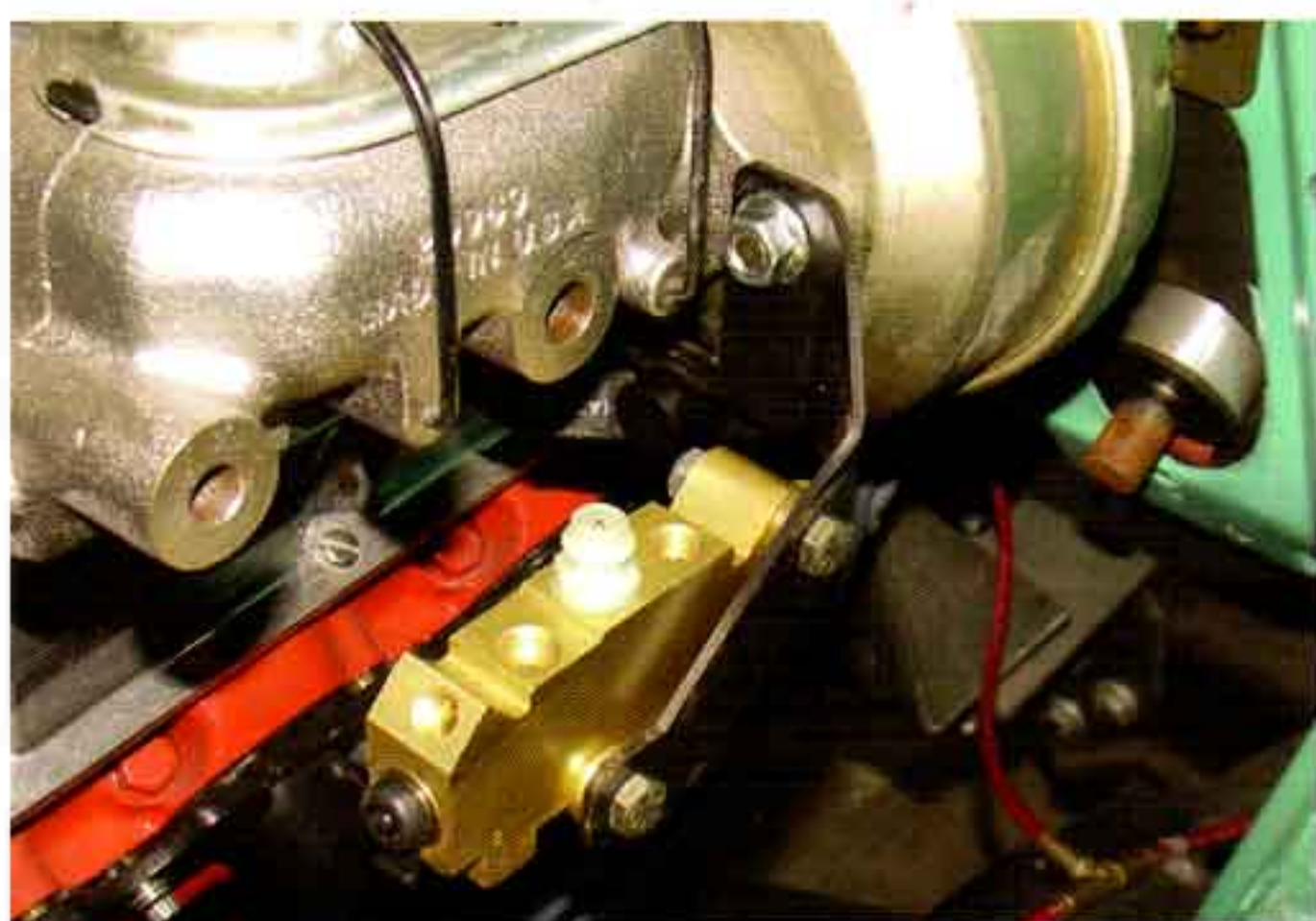


Photo #19: Install the brass proportioning valve using the hardware provided. The valve should be oriented with the plastic sender shroud up and the rubber cover to the front.



Photo #20: Install the pre-bent lines between the master cylinder ports and the proportioning valve.

Photo #21 & Diagram:

There are three long 3/16" brake lines provided. The longest line will couple the port at the rear of the proportioning valve to the forward end of the rear brake line on the passenger side. The intermediate length line will couple the forward angled port on the valve to the right front caliper hose. The shortest will couple the forward lower port on the valve to the left front caliper hose. Since these lines are shipped straight, they will need to be bent using tubing bender #49-38 to fit your car. Some long pieces of piano wire, or even coat-hangers will help mock-up the bends needed in each line. The lines that plumb the right side of the car should run side-by-side across the frame crossmember where the stock front lines have been removed.

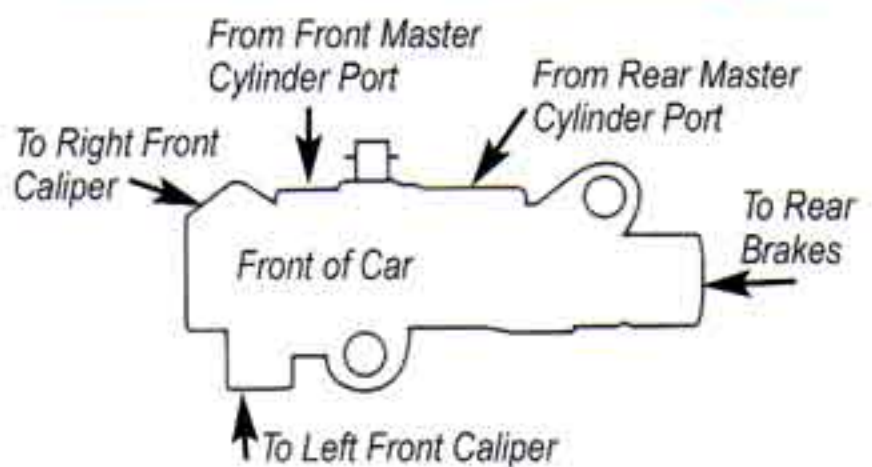
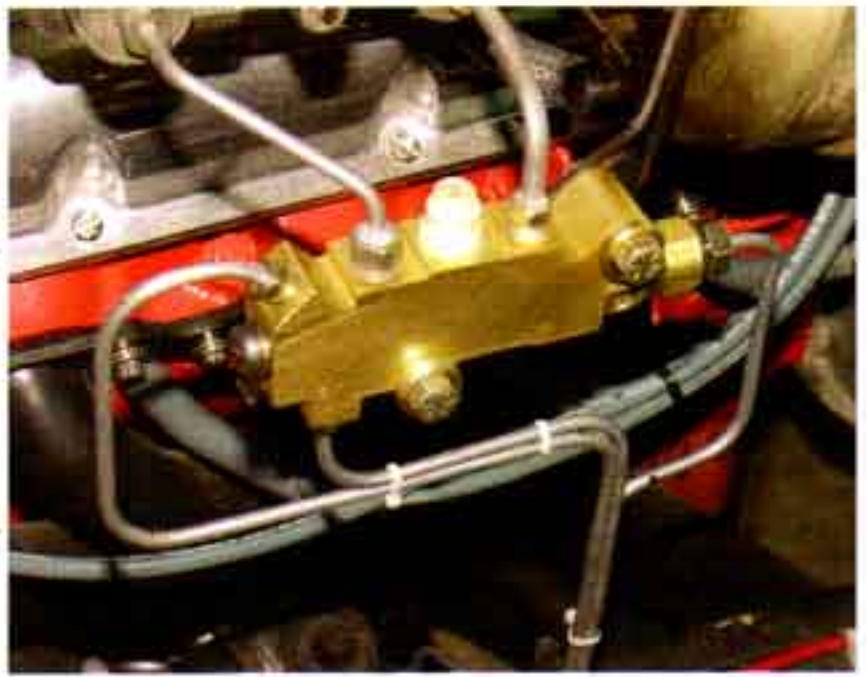


Photo #22: The largest brake line with the large nut on one end and coupler on the other end is for the rear brakes, the large nut will screw into the rear of the proportioning valve and the coupler will connect to the stock rear brake line just behind the right hand upper A-arm.



Photo #23: Once finished, pressure bleed the system, check all hardware for proper tightness and test the brakes at low speed. You now have a classic with much improved disc-brake stopping power! 