

INSTALLATION INSTRUCTIONS: PART# 3786/3787

Premium Hydroboost, 1966-77 Bronco

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James Duff

The Bronco Experts since 1967

Tools Required: 7/16"-3/4" 3/8" drive socket and wrench set, Flare wrench set ranging from 3/8 to 5/8, 1/8th - 3/8" allen key socket set, line wrenches, body saw, round file, penetrative oil (We find that "Knock'er Loose" works the best) to spray all rusty nuts and bolts.

NOTE: There are other tools required in the other instruction sets of this system.

1. Read **ALL** instructions before proceeding with installation of this system. There are critical instructions in the Hydratech Hydroboost unit box as well as the Wilwood box that you will also need to read, and pair with this instruction sheet. You will be working back and forth between all instructions.

2. You will be replacing the entire hydraulic portion of your braking system. We strongly recommend you crack the bleeders on your drums/calipers (One at a time if need be) and pump the brake pedal until all brake fluid is drained. You will be using flare wrenches on all hydraulic fittings to prevent rounding off.

A. Once the fluid is drained, place a towel, plastic lining, or other protective cover over your inner fender, under your brake master cylinder. You will be removing everything from the proportioning valve to the firewall to install your new system.

3. Disconnect your battery, and follow our video, <https://youtu.be/Jj2jEzJTJqo> to measure your brake pedal height.

4. Remove the pin that is attaching your brake booster rod to your brake pedal, let the pedal swing to the floor. The brake light switch may come off at the same time. Let it hang to the side.

NOTE: Make sure your protective cover is in place! Brake fluid is corrosive and will eat through paint!

A. Loosen your brake lines from the master cylinder and pull them to the side.

B. At this point you will be able to unbolt your MC/brake booster as a unit, or bell crank assembly from the firewall and remove the entire assembly. <https://youtu.be/Jj2jEzJTJqo?t=122>

5. Loosen the rear brake line from your original proportioning valve, as well as the line that connects to your front axle drop line. All of this (including the proportioning valve) will be replaced. **See figure A.**

A. Once you remove the brake lines you will be able to remove the protective coverings for the time being. This is a great time to clean your firewall and other areas where parts could have been in place for a long time.

6. Unwrap the fascia plate and hardware kit. If you chose the "No-Mod" Hydroboost system, you may skip to step 7.

A. With the brake booster bracket removed, center the fascia plate over the existing holes in the firewall (This is crucial!), you can use the plate as a template to mark the area you will need to cut. This will allow the "modified" Hydroboost to fit properly. We suggest using a body saw. **Do not cut with the fascia plate bolted into place!**

NOTE: When you mark the cut area, make sure that you will not be cutting into the pedal hanger assembly behind the firewall, inside the Bronco. It is a tight fit.



FIGURE A

Entire OEM Prop Valve
System will be REMOVED

B. Once the cut has been made, use a round file to knock down the sharp edges, and touch up paint to eliminate the chance of rust.

7. At this point you should be ready to bolt the fascia plate and Hydroboost unit to the firewall.

A. Remove the protective covering from the Fascia Plate where the Hydroboost unit will sit, leave the rest covered for now. Using the supplied hardware, set the fascia plate on the firewall and loosely place 2 bolts and washers on the holes closest to the drivers side.

B. Carefully place the Hydroboost unit against the fascia plate and use 3 more bolts and washers to bolt everything through the firewall. At this time you can line everything up visually and tighten all Hydroboost bolts. No more than 40-45 ft-lbs is required.

C. Remove the 2 bolts furthest to the drivers side and remove the rest of the plastic covering. Reinstall and torque the last 2 bolts.

8. Unbox your Wilwood master cylinder. You will want to install the ports and blocks, as per Wilwood instructions, so that your lines will attach on the drivers side of the master.

A. Following the Wilwood directions, bench bleed the master cylinder.

We suggest using our #3729 Master Cylinder Bench Bleeder to get the most air possible out of the system.

B. Refer to Wilwood instructions for instructions on how to mount the master cylinder and APV to the Hydroboost unit.

Note: It is extremely important that you do not engage the Hydroboost rod. Doing so can cause damage to the unit and brake failure. Read more about this in the instruction sheet that accompanies the Hydroboost unit.

9. You were supplied with 2 soft brake lines to attach from the prop valve to the hard brake lines on your vehicle.

A. At this point go ahead and bolt the zinc plated bracket using the supplied hardware, into place on the frame, where the original proportioning valve was removed.

B. The longer brake line goes to the front. We attached a section of Heatshield Products Hot Rod Sleeve to one end of it to help combat the temperature of a header. This end has a 90° fitting and attaches directly to your Front Axle Drop line. Attach the other end to your proportioning valve with the 90 degree bend pointing towards the firewall, use **Figure B on page 2** for a reference on how to properly route the line.

C. The rear line attaches to the bracket you installed in step 8a. In the bag is a horseshoe clip, and only one side of the line fits that bracket. If you have headers, and you purchased the Heatshield Products hot rod sleeve add-on, install it now on this line. Feed it through, and slide the horseshoe clip into place to hold the line down. Using the supplied adapters, match the thread to your existing brake hard line and thread into place on the soft line. **See figure C.** Screw the other end to the rear line to the “rear” side of the APV. We suggest canting the lines slightly.

10. Once the new soft lines are in place, install your protective covering from step 2a back in position. Thread the hard lines into place on the top of the APV, followed by threading them into the master cylinder.

NOTE: We suggest doing one at a time by pulling the clear plastic off of one side at a time, that way both ports are not trying to drain and make a mess.

11. Refer back to your Hydroboost instructions at this point, assemble your feed and return lines on the Hydroboost and bleed the steering system.

12. Get under your dash and hook up your pedal to the Hydroboost rod, as well as your brake light switch if needed. Following the same **video from step 1** set your brake pedal height and reconnect your battery.

13. After you have bleed your Hydroboost unit and checked it for leaks, bleed your brake system entirely. Check for leaks as you go, an unsealed system will introduce air.

Speed bleeders make this an easy one man job. #'s 3704 and 3705 @ dufftuff.com depending on what calipers/drums you have.

14. Before you take the first drive, confirm that there are no leaks and air is bled out of your entire system. This is typically indicated by a firm brake pedal that does not drop with steady consistent pressure applied.

Proceed with your test drive.

NOTE: You just replaced your entire brake hydraulic system, be mindful of this while you are out for the first time. Give yourself extra room in all situations. Do not drive the vehicle until you have complete confidence there are no leaks or air in the system.

Your last step will be to adjust the proportioning valve to your braking bias preference. Typically we set this to where the rear won't lock up before the front in a panic stop.

Congratulations! You just installed the best Bronco braking system on the market!

15. Check bolt torque, fluid level, and all connections for leaks, after your first 50 miles, as well as 500 miles after, and check it over during tune ups and oil changes.

Upgrades to consider available at DuffTuff.com



#3704/3705

Brake Caliper Speed Bleeders



#3776

Front Disc Conversion 71-76 Dana 44



Master Cylinder Bench Bleeder

#3729

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All warranty issues/claims for Wilwood & Hydratech will be handled under their company policy.

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