



BM1551 INSTALLATION INSTRUCTIONS 1966-1977 BRONCO BOOSTER & MASTER CYLINDER "WILL NOT FIT WITH 6 CYLINDER ENGINE"

INCLUDED COMPONENTS:

1. Dual outlet master cylinder.
2. Power booster
3. Firewall bracket and pedal linkage.
4. Vacuum hose with intake manifold fitting.
5. Bench bleeding kit. (NOT SHOWN)

NOTE: If you have disc/ drum or 4 wheel disc you will need to use the appropriate combination valve to properly balance your braking system.



Note: Inner fender panel needs to be either notched or replaced for clearance of booster.

To order a inner fender panel call: Jeff's Bronco Parts - Phone# 248-437-5060

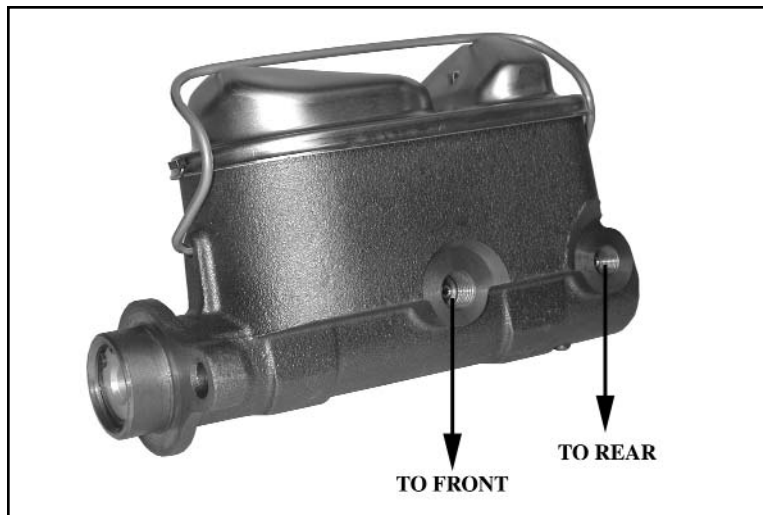
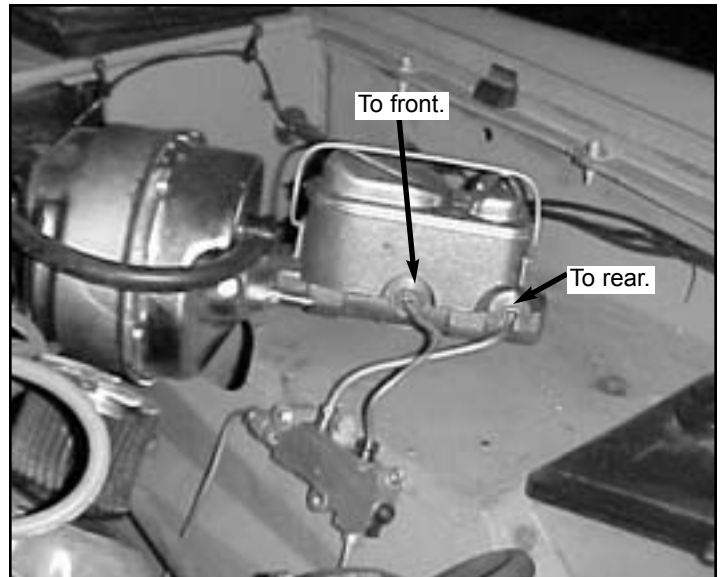
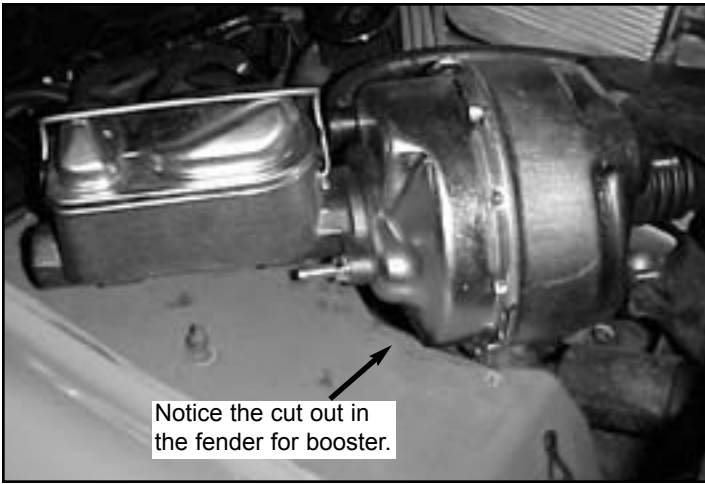
Inner fender panel part# 14018

1973-1975 D3BZ1002047A

1976-1977 D6TZ9702047A

INSTALLATION:

1. Disconnect the master cylinder push rod from the pedal inside the vehicle.
2. Remove the brake lines from the old master cylinder.
3. Remove the old master cylinder.
4. Now do your cutting to the inner fender panel or replace it.
5. Mount the bracket with the booster to the firwall.
6. Connect the booster push rod to the pedal using the existing hardware. Adjust the push rod to have appx. 1/4" freeplay at the top of the pedal.
7. Bleed the new master cylinder.
8. Connect the supplied vacuum hose from the booster check valve to either the back of the carburetor or to the intake manifold with the supplied manifold fitting.
9. Connect the hydraulic lines as required. The line to the FRONT should go to the master cylinder outlet closest to the booster.
10. If you have disc brakes in the front you should use a disc / drum combination valve to balance the system.



11. The lines for drum brakes may be run directly with one line to the front and one line to the rear. As above the line closest to the booster should feed the front drum brakes. Drum brakes will require the use of a 10 lb residual valve to the front and a 10 lb residual valve to the rear.
12. Bleed the entire braking system before operating. Check the pedal for firmness. If pedal is not firm bleed system again.

WHAT TO DO IF YOU SUSPECT YOUR BOOSTER IS NOT WORKING

It is rare that one of our kits will contain a defective power booster, but if you suspect that your booster is not functioning correctly perform the following tests:

BASIC TEST:

1. With the engine off depress and release the brake pedal several times to eliminate vacuum from the power section.
2. Depress the pedal and hold down with light pressure, 15 to 20 pounds.
3. Start engine.
4. If the power unit is operating the pedal will drop slightly. Less pressure will be needed to hold the pedal down.

IF BOOSTER IS NOT OPERATING, GIVING A VERY HARD PEDAL

1. Disconnect the vacuum hose from the booster check valve and check the vacuum level at this point, with engine running, with a vacuum gauge. You should have atleast 18" vacuum to the booster. Anything lower will begin to give a hard pedal. If the vacuum level is below 18" you may need to tune the engine and bring the vacuum level up to that level. If the vacuum level is around 16" the addition of a vacuum reserve canister will improve the braking. If the vacuum is below 16" you will need to add an electric vacuum assist pump to supplement the engine vacuum.
2. If your vacuum level at the check valve is 18" check that the booster check valve is working. Disconnect the vacuum hose at the check valve and attach a piece of tubing. Blow into the valve. If air passes through the valve, it is defective and must be replaced. Also look into the hose attachment neck on the check valve and be sure there is no obstruction inside the valve.
3. Check your booster for a vacuum leak. With everything hooked up run the engine at moderate speed. Release the accelerator and turn the engine off. Wait 90 seconds and apply the brakes. If the brake applications are power assisted there is no leak. If there is no power assist the booster is defective and must be replaced.

IF THE BOOSTER IS OPERATING BUT YOU STILL HAVE A HARD PEDAL

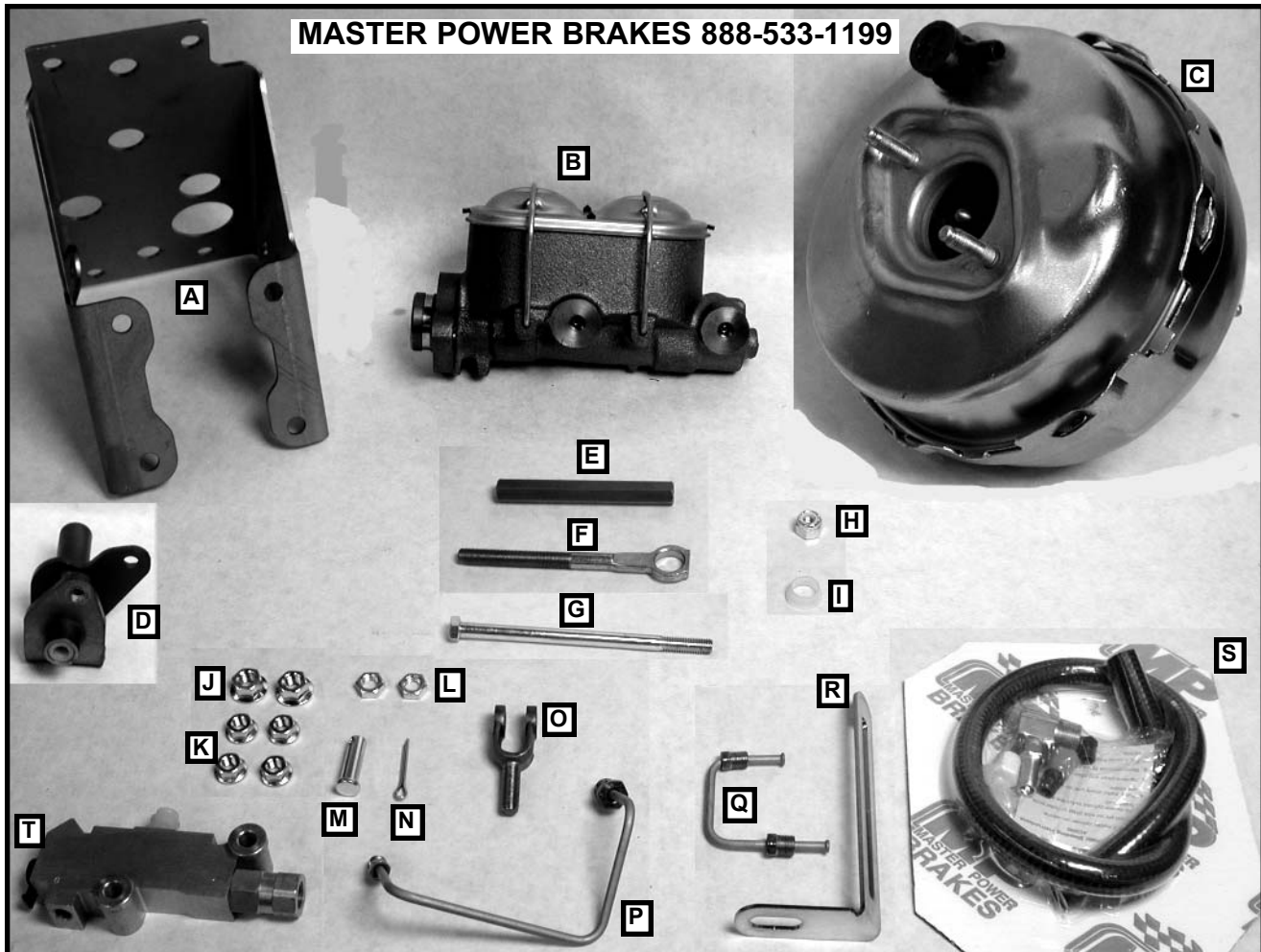
1. Your combination valve may have tripped shutting off fluid flow to front or rear brakes. This condition will produce a very hard pedal. Check that fluid passes through the valve to both the front and rear by cracking a bleeder screw and observing a good flow of fluid. If one half of the system does not have flow, re-center the valve.
2. You may have frozen rear wheel cylinders or frozen caliper pistons. If these components freeze you can get a very hard pedal.
3. Your pedal ratio may be too low. Check your pedal ratio. It must be between 4:1 to 5:1. Some of the older cars that had power brakes used a ratio of almost 1:1. If you add a vacuum booster to this type of car you will have a very hard pedal. Typically we are talking about late 50's cars. Adjust ratio as necessary.
4. Your booster may be undersized for the weight of the vehicle or the size of the master. If you try to use a small diameter booster such as a 7" street rod booster for a heavy car you will get a very hard pedal. Compounding the problem is an attempt to use a large bore master (1 1/4" or larger) on a small booster.

IF YOUR BRAKE PEDAL IS VERY SENSITIVE AND THE BRAKES GRAB

1. Your pedal ratio may be too high. Power brakes will require a 4:1 to 5:1 ratio. If your ratio is around 6:1 you are getting too much mechanical advantage making the brakes extremely sensitive. Adjust the ratio to correct level.
2. The booster may be too large for the weight of the vehicle. Lightweight vehicles with large boosters gives "touchy brakes." This effect may be dampened somewhat by going to a larger bore master.
3. Too large a booster for the front drum brakes. Drum brakes do not require as much pressure as disc brakes (500 psi vs. 1,000 psi.) If your booster is very large (11") and you have drum brakes, you are overboosted. Do a pressure test to determine what you have.
4. The booster has a cracked internal hub. When there is a crack in the phenolic hub inside the booster it will be either totally on or totally off. Any slight pressure to the pedal will cause the brakes to lock up. The booster must be replaced.

MASTER POWER BRAKES 888-533-1199

BM1551 BOOSTER/ MASTER BRONCO PARTS LIST



PARTS LIST

Revised 12/2/03

- A) (1) BR1549 BRACKET, 65-79 BRONCO FOR POWER BOOSTER
- B) (1) MC390387P MASTER CYL. POWER ST. ROD W/ RIGHT SIDE PORTS
- C) (1) BSKZ9 BOOSTER, 9", DUAL
- D) (1) BR1549 BRACKET PIVOT
- E) (1) PRBL4 PUSH ROD 4" LENGTH BOTH ENDS 3/8 X 24 FM
- F) (1) PR4724 PUSH ROD, FORD
- G) (1) NO PART # BOLT 3/8-16, 6"
- H) (1) 37CNNEZ NUT, 3/8-16 NYLOCK ZINC
- I) (1) BU1523 BUSHING, NYLON FORD FITS BOOSTER ROD, PEDAL PIN
- J) (2) 100CNWFZ NUT, M10, SERRATED FLANGE
- K) (4) 80CNWFZ NUT, M8-1.25 HEX FLANGE
- L) (2) 37FNFJOZ NUT, 3/8-24 HEX FINISH J-NUT ZINC
- M) (1) 37N112PCLZ PIN, 3/8 X 1 1/8 CLEVIS
- N) (1) 12R100PCOZ COTTER PIN, 1/8 X 1"
- O) (1) HW3720 CLEVIS, MINI
- P) (1) LN390387-2 LINE, ST. ROD 1/2 END 3/8
- Q) (1) LN390387-1 LINE, ST. ROD 7/16 END 3/8
- R) (1) BR1261 BRACKET, VALVE, UNIVERSAL
- S) (1) HS4001K HOSE KIT, VACUUM
 - (1) AC2002 BLEEDER KIT, USED IN DUAL MASTER CYL. APPL.
 - (1) HS4001-2 VACUUM HOSE, 2FT PER KIT
 - (1) HW40066 FITTING, MALE ELBOW, 3/8 O.D. TUBE, 3/8 PIPE VAC. HOSE
 - (1) HW413-66 FITTING, MALE INVERTED, 3/8 HOSE I.D., 3/8 O.D. MANIFOLD VAC. HOSE
- T) (1) VL3350 VALVE, COMBO, DISC/ DRUM