

**INSTALLATION INSTRUCTIONS:
1966-77 Bronco Proportioning Valves**

#3746 Disc/Drum
#3747 Disc/Disc

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Brake Warning Light Wire



865.938.6696 www.dufftuff.com
6609 Bronco Lane
Knoxville, TN 37921

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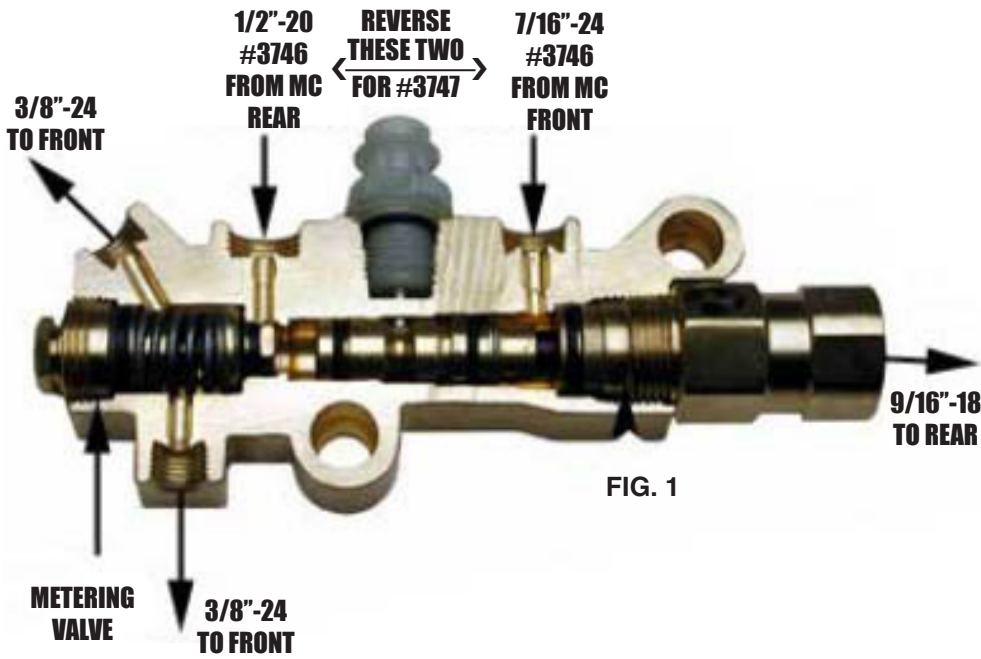


FIG. 1

WARNING: Proper operation of your brakes is essential for your safety and the safety of others. Any brake service should be performed **ONLY** by persons experienced in the installation and proper operation of brake systems. It is the responsibility of the person installing any brake component or kit to determine the suitability of the component or kit for the particular application. After installation and before operating your vehicle, be sure to test the function of the brakes under controlled conditions. **DO NOT DRIVE WITH UNTESTED BRAKES!**

PLEASE READ INSTRUCTIONS COMPLETELY BEFORE YOU BEGIN. BEFORE PROCEEDING, BENCH BLEED THE MASTER CYLINDER PER THE INSTRUCTIONS PROVIDED WITH IT AND MOUNT ALL LINES.

Use of this tool prevents the inconvenience of accidentally tripping your proportioning valve during the brake bleeding process. It is made of nylon to protect the threads on your valve from damage due to accidental cross-threading.

1. As you prepare to bleed your brakes, remove the sensor wire from the pressure sensor. Make sure to only pull on the sensor wire cap. **DO NOT** pull on the wire by itself as you may pull the wire out, ruining the cap.
2. Remove the brake pressure sensor warning light switch. You may need to use a wrench to loosen it. Once loose you should be able to easily unscrew it with your fingers. (Fig 2.)
3. Screw the valve tool prop valve lock into the sensor switch hole on the prop valve. (Fig. 3)
4. Bleed the brake system thoroughly.
5. After you have completely removed all air from the braking system, unscrew the tool from the prop valve.
6. Re-Install the brake pressure sensor warning light switch. Use a wrench and make sure the sensor is snug to prevent leaks. **DO NOT OVERTIGHTEN!** Reinstall the sensor wire cap.

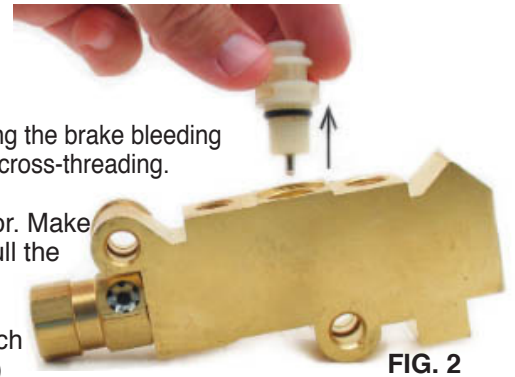


FIG. 2

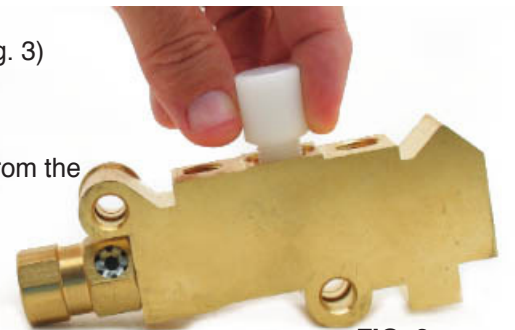


FIG. 3

TESTING THE PROPORTIONING VALVE FOR PROPER OPERATION:

1. Use a test light by attaching a clip to a positive contact on the vehicle and touch the point of the tester to the electrical connection of the valve. If the light does not come on, the valve system is operation correctly and no further testing is required.
2. If the light does come on, this indicates that the pressure differential valve is stuck in the front or rear position.
3. Bleed the brake system to determine if the front or rear lines are blocked off. Set up one front wheel and one rear wheel for bleeding at the same time. Crack both bleeder screws and gently pump the pedal a few times. The blocked side will trickle fluid out when the bleeder screw is cracked and the pedal pressed. An unblocked line will squirt fluid out the bleeder.
4. The lines that are clear must be left open and the blocked lines should have the bleeder screws tight to cause pressure to build up on that side. Be sure to use the standard bleeding procedures to prevent air from entering the system.
5. Slowly press the pedal with steady pressure a number of times until the light goes out; this will center the differential valve. You may also hear a pop come from the prop valve. This is the metering valve returning to its equalized position. When the light goes out, close the bleeder screw.

BRAKE WARNING LIGHT WIRING:

If your stock wiring is still intact, it will be a purple wire. If it is missing, you can easily run your own, it is just a single wire that goes from the prop valve sensor switch and goes straight to the warning light. It does not tie into the parking brake. It only comes on when the ignition is on.

LIMITED WARRANTY

James Duff Inc. warrants our products to the original purchaser to be free from defects in materials and workmanship. Warranty periods begin at the date of purchase and varies by product. Shocks have a limited lifetime warranty. Headers, Radiators, Suspension Products, Power Brake Boosters and Master Cylinders have a one year warranty. Adapters and soft goods such as vinyl and rubber products have a 90 day warranty. All warranties are to the original purchaser with proof of purchase only. Such obligations under this warranty shall be limited to the repair or replacement, at JDI's discretion, of any assembly or part which upon examination by JDI proves to be defective. Any costs of removal, installation, reinstallation or freight charges are expressly excluded from this warranty. This warranty covers only manufacturers defects, and does not cover product finish or damage resulting from abuse, misuse, negligence, racing, alteration, accident or damage in transit.

All returns must be pre-authorized by JDI and accompanied with a Return Goods Authorization Number (RGA) and a dated proof of purchase. Returns must be made within 90 days of purchase, shipped prepaid, packaged sufficiently to prevent damage in shipment to JDI, 6609 Bronco Lane, Knoxville, TN 37921. Returns without an RGA# will be refused.

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