ReMaster Proportioning Valve
Installation Instructions # 6000549

Congratulations on your purchase of Baer Brake Systems Adjustable Proportioning Valve! This valve allows you to adjust the front/rear bias of your braking system to allow for changes in weather, track conditions, vehicle loading, or when converting a system from drum to disc.

INSTALLATION:

1. Using a 3/16" T-Handle and the supplied ¼-20x2.25 Socket Head bolts, secure the new Proportioning Valve to your Baer ReMaster Maser Cylinder. The new Proportioning Valve is designed to mount on the same side as the ports on the ReMaster Master Cylinder. Torque each bolt to 14 ft-lbs. See Figure 1, Figure 2, and Figure 3 for reference.

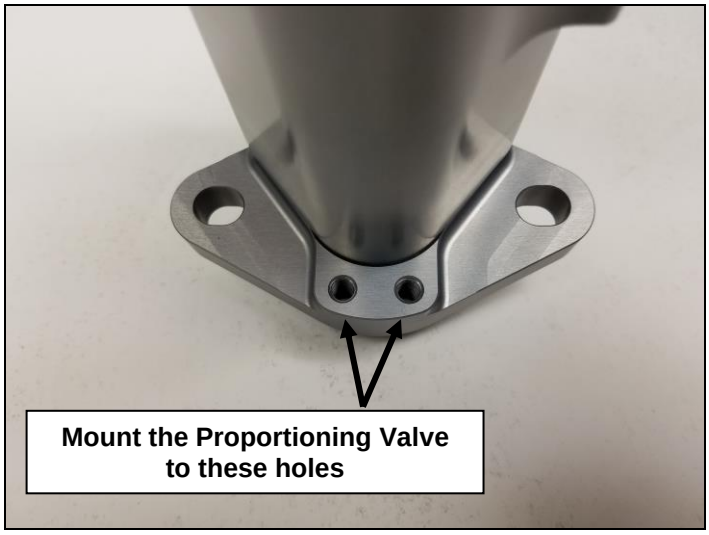

Figure 1: Proportioning Valve Mount Holes

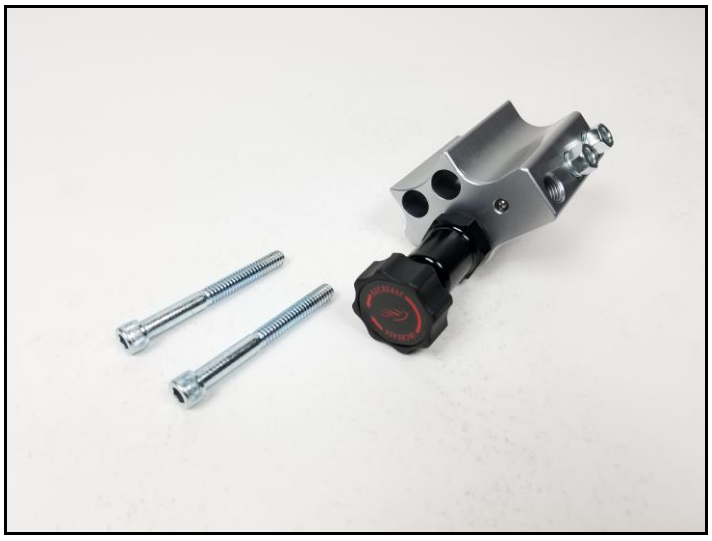

Figure 2: Proportioning Valve with 1/4-20x2.25" Socket Head Bolts

Figure 3: Proportioning Valve Installed to ReMaster

2. Hard line/Banjo Fitting Installation:
    a. Hard Line Installation:
        i. If you intend to use the supplied brass inserts and tube nuts, slide the tube nuts onto the hard line on either side.

        ii. Flare the ends of the hard line using the appropriate flare tool. Before moving on to the next hard line installation step, be sure to read the note below, ***carefully.***

***IMPORTANT NOTE:** The brass inserts and tube nuts may be pre-installed for shipping purposes only, or supplied in a hardware bag. Remove them before proceeding. For a standard **3/8-24** tube nut and line, install the brass inserts (seats) shown in Figure 4A. **The inserts must be fully seated (not at an angle) in the prop valve. Failure to do this can cause damage to the inserts and the prop valve resulting in fluid leakage (Figure 4B shows a correctly installed brass insert and Figure 4C shows an incorrectly installed brass insert).** Once the inserts are installed correctly attach the brake lines and tighten the brake line tube nuts to 10-12 ft-lbs. Inserts are designed for a 45° flare. See Figure 4 for reference.

        iii. Insert the tube nuts into the fittings on the Proportioning Valve. Reference Figure 5, Figure 6, and Figure 7.

        iv. Tighten all fittings.

    b. Banjo Fitting Installation
        i. If you intend to use banjo fittings, **YOU MUST NOT USE THE BRASS INSERTS.** Slide the banjo bolts through each of the banjo fittings. Make sure to place a banjo washer on either side. See Figure 8 and Figure 9 for reference.

        ii. Secure the banjo bolts in the ReMaster and ensure the bolts are tightened securely.

3. See “Valve Adjustment” for correct operation.

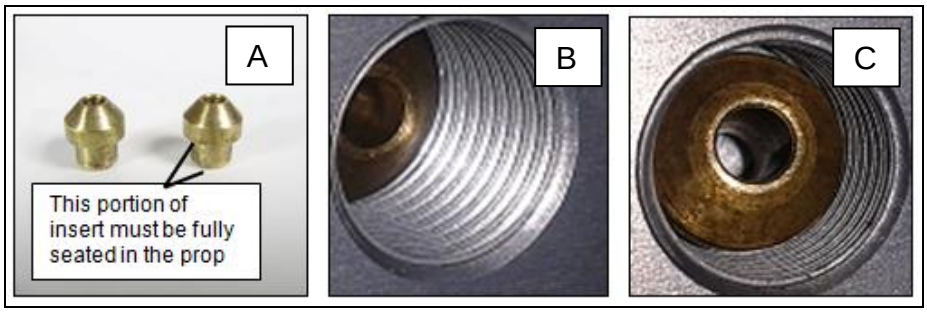

Figure 4: Brass Inserts-Sealing/Seating
***NOTE:** The exposed thread difference between a correctly and incorrectly installed insert.

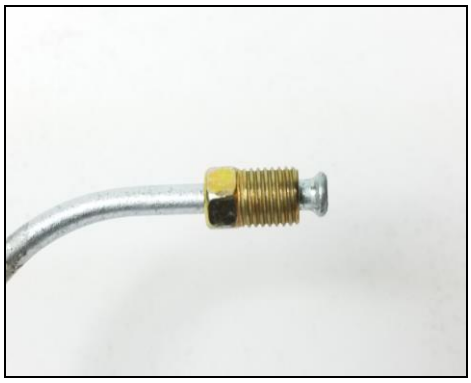

Figure 5: Tube Nut Installed on Flared Hard Line

Figure 6: Hard Line Installation

Figure 7: Sealing-Brass Inserts and Hard Line (REFERENCE ONLY)

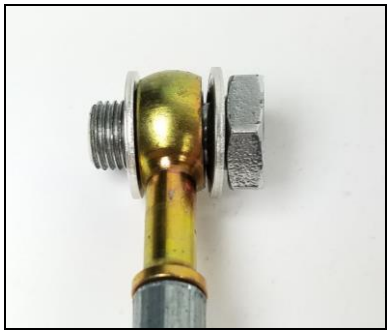

Figure 8: Banjo Fitting Assembly (w/Banjo Washers)

Figure 9: Banjo Fitting Installation

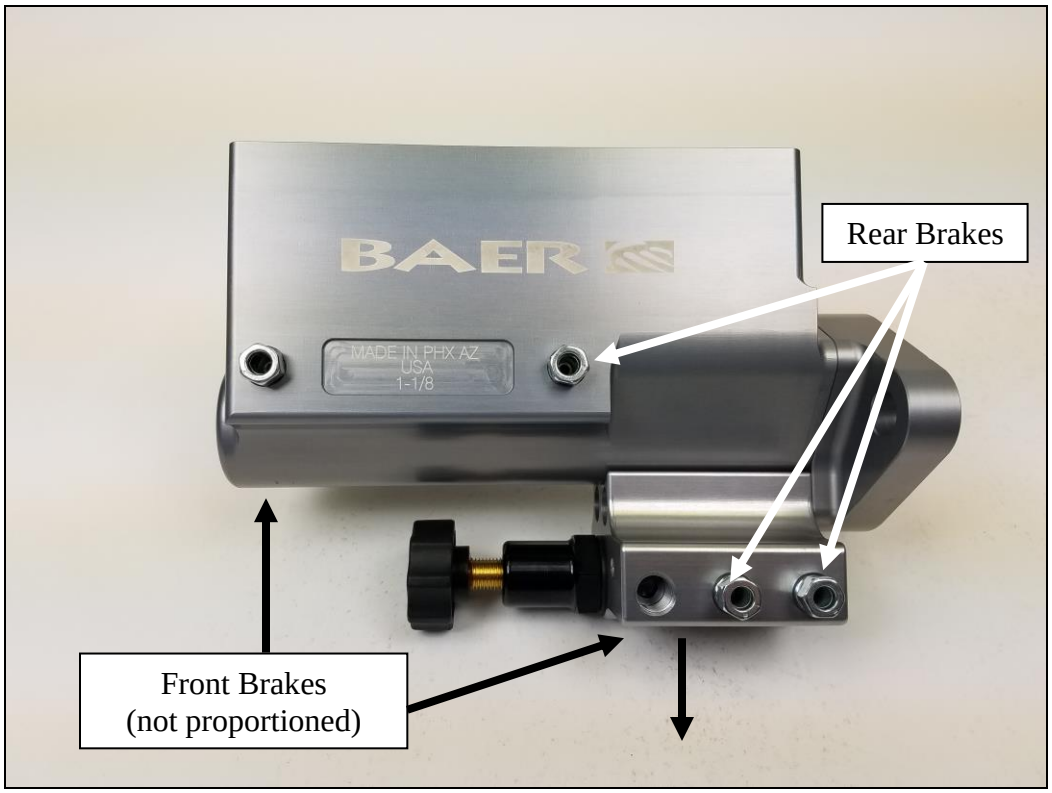

Figure 10: Hard Line Ports

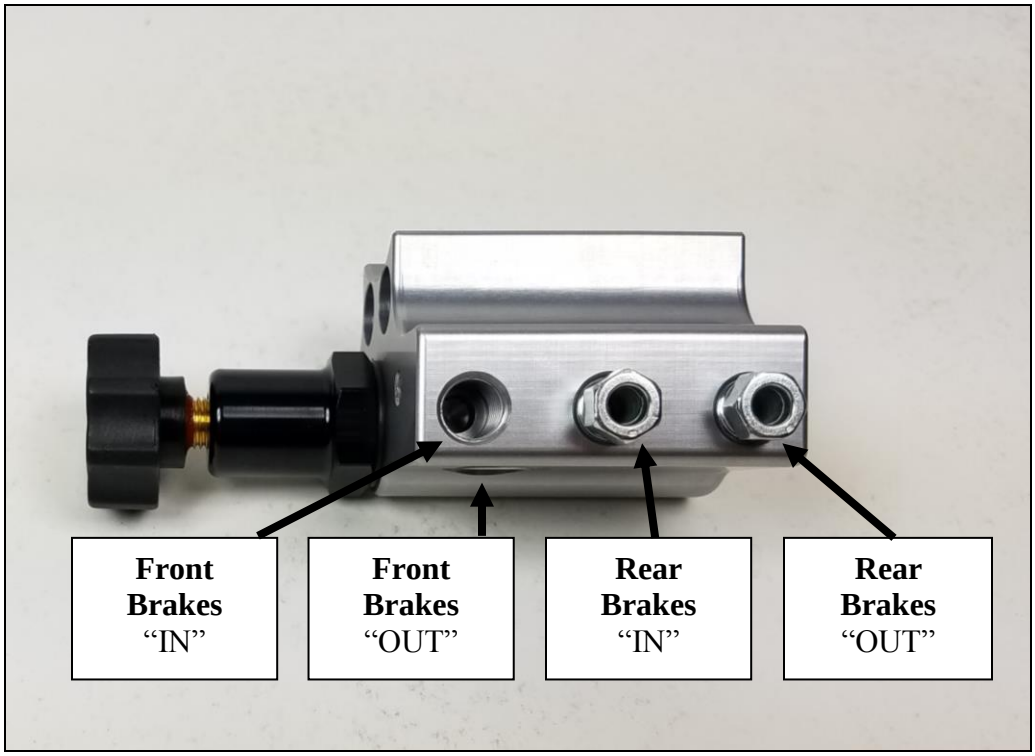

Figure 11: Hard Line Ports-Identified

Valve Adjustment:

*****IMPORTANT SAFETY NOTE:**

All driving done during this phase should be done in a large open area away from other people and while keeping the vehicle under control at all times.

1. Turning the valve all the way counter-clockwise will make the outlet pressure approximately 50% of the inlet pressure. With the valve in the full clockwise position, the outlet pressure will be approximately 90% of the inlet pressure.

2. For starting position, turn the valve counter clockwise until it stops. Begin to turn clockwise and count the number of turns until it stops. Divide that number by two (2) then rotate back, counter clockwise that amount of turns. This is the midpoint. Test the brakes at that point. When set properly, the rear brakes should lock up shortly after the front brakes. ****IMPORTANT: You do not want the rear brakes to lock up first as this could result in loss of control of the vehicle.** If the system is not set properly, adjust the valve ***slowly***, and test the vehicle again. Continue adjusting and testing until you are satisfied the valve is set for the proper front/rear bias for your application.

If there are any questions with the installation or operation of this item, please contact Baer for assistance. Baer's Technical Staff is available from 8:30a.m. - 5:00p.m. Mountain Standard Time (Arizona does not observe Daylight Savings Time) by phone: (602)-233-1411 Monday through Friday.