# Service-Information Motorcycle

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BMW NA Service Department Group: 3
Equipment
Advice

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For USA Only

## **BMW Pressure Brake Bleeder System Update**

The BMW Pressure Brake Bleeder System was developed to provide fast and effective periodic maintenance on the motorcycle brake system. The primary advantages of the system are that it forces the old fluid out of the system, refills the system from the master cylinder reservoir, thereby "washing" the master cylinder piston and internal components. This allows the debris and other undesirable contaminants to be rinsed out of the system. This method is a distinct advantage over vacuum systems, which can allow air to enter the system around seals and do not "wash" the master cylinder piston and bleed-back hole area.

However, dealers have reported complaints with several functions of the BMW Brake Bleeder System.

### The following is a listing of areas where improvement has been requested:

- Air and fluid valves do not always close completely, sometimes allowing tiny air bubbles to be mixed with the fluid cycle, requiring additional bleeding time where none would otherwise be necessary.
- 2. Rear master cylinder reservoir adapter does not always seal reliably, which can cause a real mess when filling the system under pressure. The cause of this problem has been identified as inconsistent manufacturing tolerances on the inside diameter of the master cylinder reservoir. Therefore, the o'ring does not always align with the sealing surface.
- 3. Make the valves easier to operate. The knurled knobs are too rough on the hands.
- 4. There should be an air pressure gauge.

We are pleased to announce that we have addressed each of these requests completely, utilizing the following methods:

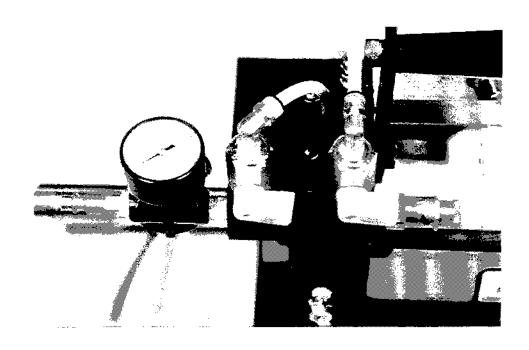
- New valves have been designed by Parker Valve in Chicago, which are 1/4 turn Teflon-packed ball valves, which provide an absolute positive seal, while being extremely easy to operate.
- A new o'ring has been sourced for the rear reservoir adapter, which is larger in diameter than the previous o'ring. This provides a positive seal on all rear reservoirs, regardless of the tolerance variation during manufacturing.

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- A pressure gauge has been sourced to provide you with an accurate reading on the regulated air pressure for the bleeder system.
- A new o'ring for the filler has been provided as investigations have shown that many dealers are over-tightening the filler cap, thereby damaging the o'ring seal. The filler cap should only be tightened with your fingers, no wrenches required.

#### Installation Instructions for the parts mentioned above

- Remove the previous valve assemblies and prepare the new valves for installation. You must remove the handles on the valves, using a Phillips screw driver. This will allow you to tighten the valves using a socket wrench and not cause interference with the carry handle. Use Teflon pipe sealing tape on all pipe-thread connections.
- Install the 90 degree adapters into the valve bodies and align as illustrated below.
- Remove the flexible tubing from the air valve fitting. This will be utilized on the fluid valve.
- Remove the two Allen bolts holding the manifold onto the air cylinder assembly. This will allow you access to the air fitting recessed for the fluid valve. Utilizing the tubing from the other valve assembly, trim the end nearest the valve. Install the sealing collar and tighten.
- Remove the right angle adapter on the air valve connection to the manifold and install only the straight fitting into the manifold.
- Utilizing the new hose supplied in the kit, connect the straight fitting to the valve. Note that a new seal ring is provided in the kit. You must utilize on the knurled nuts from the old line to install the new line.



#### Installing the Air Pressure Gauge

Remove the Allen key plug from the pressure regulator and install the pressure gauge in place. Do not over-tighten the gauge.

#### Installing the New O'rings

- Remove the old o'ring from the rear reservoir adapter and assemble the adapter within the threaded collar. Since the new o'ring is a larger diameter, once the o'ring is installed, you can not longer separate the two parts of the adapter.
- Using a dull screw driver or other instrument that will not damage the o'ring, "work" the o'ring into position under the threads of the ring collar, using some lubricant on the o'ring. Be careful during this process. When it is finally seated, the adapter collar will rotate freely.
- Replace the O'ring on the filler cap if needed. Remember, this cap should only require '"finger tight" tension to seal properly. Over-tightening will only damage the seal...it won't make it seal better.

All required parts to update the system are provided free-of-charge to all purchasers of the BMW Pressure Brake Bleeder System. If you have not received the updated parts kit for your BMW Pressure Brake Bleeder System, contact your Dealer Services Specialist to verify shipment.

Very truly yours,

BMW of North America, Inc.

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