

Bleeding the Hydraulic System

BLEEDING THE HYDRAULIC SYSTEM

This operation is not a routine maintenance procedure but is necessary whenever any part has been disconnected or when the level of fluid in a reservoir has been allowed to fall so low that air has been drawn into the master cylinder. When seals are worn it is possible for air to enter the system without any sign of leaking fluid.

If air has entered the system the cause should be rectified, as bleeding will have only a temporary effect.

Fluid bled from the system must not be re-used as it is aerated, and will re-introduce air into the system.

Chock the wheels.

Fill the reservoir above the minimum mark with the recommended brake fluid and do not allow the level to drop below $\frac{1}{4}$ full during the bleeding operation.

On vacuum/hydraulic models, vacuum should be applied.

On air/hydraulic models charge the air system to between 4,5-4,8 bar (65-70 lbf. in²). Do not allow the pressure to drop below 2,4 bar (33 lbf. in²) during the bleeding operation. This will provide 4 or 5 brake applications.

Attach a bleed tube to the bleed screw with the free end of the tube in a glass jar containing a small amount of brake fluid.

Unscrew the bleed screw one full turn and depress the pedal slowly, with a light pressure. This is best done by hand. Release the pedal slowly and pause for 4 seconds before making the next stroke.

Continue pumping slowly, maintaining the level in the fluid reservoir and the minimum pressure in the air system (air/hydraulic models), until bubbles cease to appear at the end of the bleed tube. Tighten the bleed screw whilst the pedal is on its next down stroke.

Bleed each system in the following order.

Vacuum/hydraulic system

Rear brake left hand side
Rear brake right hand side
Front brake left hand side
Front brake right hand side

Air/hydraulic system

Rear brake left had side
Rear brake right hand side
Front brake left hand side
Front brake right hand side

Top up the fluid reservoir to the maximum mark.

PRESSURE BLEEDING

If pressure bleeding the system, the maximum pressure applied at the fluid reservoir must not exceed 2 bar (29 lbf. in²)