STANDARD PROCEDURE

Always clean the master cylinder reservoir and cap before checking fluid level.

The fluid fill level is indicated on the side of the master cylinder reservoir.

The correct fluid level is to the MAX indicator on the side of the reservoir. If necessary, add fluid to the proper level.

BLEEDING PROCEDURE

NOTE: Any air in the hydraulic brake system acts as a cushion, absorbing a large amount of the pressure exerted by the master cylinder and reducing the efficiency of the braking.

NOTE: Always use new approved DOT 4 brake fluid. Do not reuse any collected brake fluid or mix types of brake fluid in vehicles.

NOTE: To make sure that the brake system is fully bled, set the manufactures equipment's service pressure to a minimum of 14 PSI and follow the equipment instructions.

1. Prior to disconnecting the battery, connect the scan tool to the Data Link Connector and go to the ABS control unit function in the "miscellaneous functions" menu, go to the "ELECTRIC HAND BRAKE MANAGEMENT" procedure and start the "MAINTENANCE MODE" procedure and disable the electric park brake system.

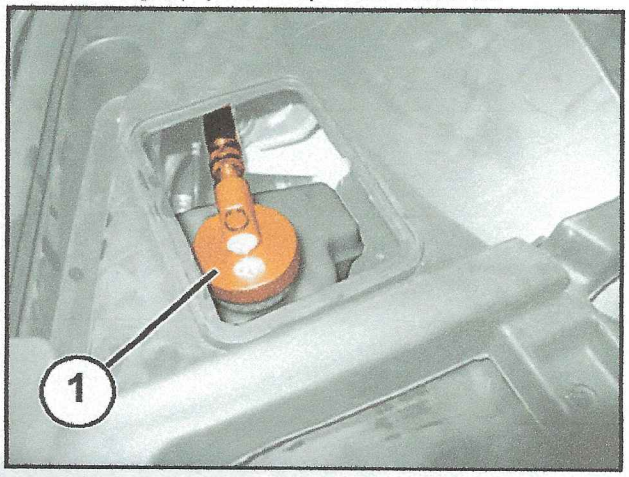
   NOTE: The bleeding procedure MUST BE CARRIED OUT with the battery disconnected.

2. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
3. To avoid vehicles with automatic transmission from starting during the procedure, disconnect the ECM.

   NOTE: To prevent any impurities from entering the brake fluid reservoir, before removing the cap thoroughly clean the surface area near the cap.

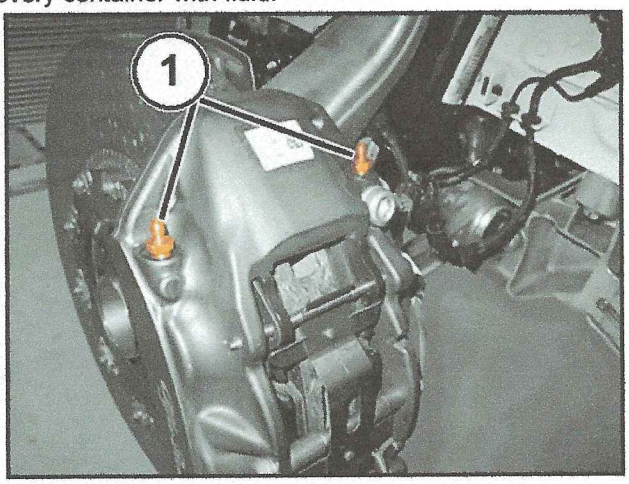
4. Remove the brake fluid reservoir cap and connect the suitable bleeding equipment cap to the reservoir.

   NOTE: Always use new approved DOT 4 brake fluid. Do not reuse any collected brake fluid or mix types of brake fluid in vehicles.

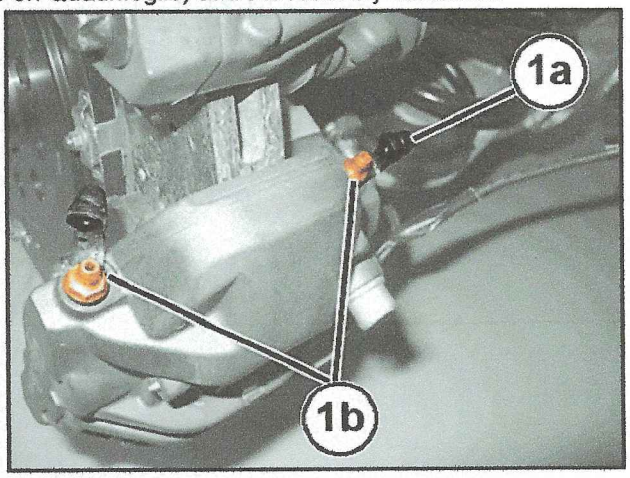


5. Using the suitable bleeding equipment, pressurize and maintain the brake system pressure to 28 to 42 PSI thought out the procedure.
6. Raise and support the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure) .
7. Remove tire and wheel assembly (Refer to 22 - Tires and Wheels/Removal and Installation) .

8. Remove the FL brake bleeder screw inner and outer dust covers from calliper bleeders (1). Position the brake fluid recovery hose to the INNER bleeder screw and to the recovery container with fluid.



9. Open the INNER bleeder screw allowing a small amount of brake fluid to drain into the recovery container. With the bleeder still open, have the assistant press the brake pedal three times and close the bleeder if the fluid is free from air.
10. Position the brake fluid recovery hose to the OUTER bleeder screw and to the recovery container with fluid.
11. Open the OUTER bleeder screw allowing a small amount of brake fluid to drain into the recovery container. With the bleeder still open, have the assistant press the brake pedal three times and close the bleeder if the fluid is free from air.
12. Torque the bleeder screws to the proper (Torque Specifications) .
13. Repeat the procedure for the FR caliper.
14. Remove the RR brake bleeder screw dust cover(s) (1a) from calliper bleeder(s) (1b). Position the brake fluid recovery hose to the bleeder screw (INNER bleeder screw on Quadrifoglio) and the recovery container.



15. Open the bleeder screw allowing a small amount of brake fluid to drain into the recovery container. With the bleeder still open, have the assistant press the brake pedal three times and close the bleeder if the fluid is free from air.
16. If bleeding on a Quadrifoglio, position the brake fluid recovery hose to the OUTER bleeder screw and to the recovery container with fluid.
17. Open the OUTER bleeder screw allowing a small amount of brake fluid to drain into the recovery container. With the bleeder still open, have the assistant press the brake pedal three times and close the bleeder if the fluid is free from air.
18. Torque the bleeder screw to the proper (Torque Specifications) .
19. Repeat the procedure for the RL caliper.
20. Clean all bleeder screws and install the dust covers.
21. Connect the ECM, if previously disconnected.
22. Connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector after connecting the negative battery cable.
23. Connect the scan tool to the vehicle Data Link Connector and go to the ABS control unit function in the "miscellaneous functions" menu, go to the "ELECTRIC HAND BRAKE MANAGEMENT" procedure and stop the "MAINTENANCE MODE" procedure, and enable the electric park brake system.
24. If the Integrated Brake System (IBS) control module, calipers, or brake lines were replaced, or the brake system was opened, with the scan tool connected to the vehicle Data Link Connector, go to ABS control unit in the "Miscellaneous functions" menu and select:
    - If IBS control module was replaced, it will be necessary to update software.

- ECU Program and Proxi.
- Scan Tool Bleed IBS control module
- ABS Pressure Sensor Calibration
- Check Air Presents in ABS Module.
- Check air in the hydraulic circuit between IBS control module and calipers. Refer to following chart for parameters.
- If a system fails testing; diagnose, repair, and retest as necessary.

25. If no components were replaced and the system was not opened, with the scan tool connected to the vehicle Data Link Connector, go to ABS control unit in the "Miscellaneous functions" menu and select:

    - Check Air Presents in ABS Module.
    - Check air in the hydraulic circuit between IBS control module and calipers. Refer to following chart for parameters.

26. Check that the value of Front Left (FL) - Front Right (FR) - Right Rear (RR) - Right Left (RL) volumes shown on the diagnostic equipment are within the ranges shown in the table.If values ARE between the Min. / Max:

    - Press Close on scan tool and proceed to next step.

    If one or more of the values are HIGHER than the Min. / Max:

    - Press Close on scan tool.
    - Repeat this bleed procedure from the beginning.

    If one or more of the values are LOWER than the Min. / Max:

    - Press Close on scan tool.
    - Check that the Electronic Parking Brake (EPB) is not activated.
    - Disconnect the scan tool from the vehicle.
    - Disconnect the battery.
    - Check the caliper corresponding to the indicated fault and make sure the caliper pistons are not sized or binding and are free moving.
    - Repeat this bleed procedure from the beginning.

Version	Steel Discs		Carbon Ceramic Material (CCM)	
	MIN	MAX	MIN	MAX
FL volume (mm3)	1440	2550	1900	3110
FR volume (mm3)	1625	2735	2190	3400
RR volume (mm3)	870	1990	750	1840
RL volume (mm3)	885	1975	735	1825

27. Install the tire and wheel assembly (Refer to 22 - Tires and Wheels/Removal and Installation) .

28. Remove the support and lower the vehicle (Refer to 04 - Vehicle Quick Reference/Hoisting/Standard Procedure) .

29. If battery is disconnect, connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector after connecting the negative battery cable.

30. Check for latest software updates and install as necessary.