

PROCEDURA DI SPURGO
BLEEDING PROCEDURE
PROCÉDURE DE PURGE
SÄUBERUNG
PROCEDIMIENTO DE EXPURGACIÓN

2010

SAFETY INFORMATION

Brakes are a critical safety related component of a bicycle. Improper set up or use of brakes may result in reduced braking power and, thus, loss of control of the bicycle which could ultimately cause serious injury or even death.

Bleeding is one of the most important steps to assure the perfect functioning of any hydraulic braking system. The goal of bleeding is to remove the air in the braking system. Any air inside a hydraulic braking system reduces its performance. **FORMULA STRONGLY RECOMMENDS THAT YOU AVOID BLEEDING YOUR BRAKES YOURSELVES BUT HAVE AN EXPERT MECHANIC PERFORM THIS DELICATE AND CRUCIAL FUNCTION FOR YOU.** Should you decide to perform it yourself, follow these instructions very carefully and please remember that you do so at your own risk.

Use only DOT.4 fluids with your Formula brakes. Do not use a fluid other than the DOT.4 fluids suggested. Doing so will damage the system and make the brakes unsafe to use.

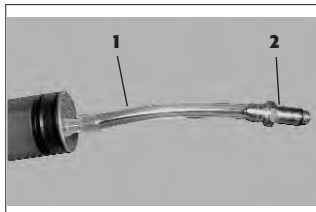
⚠ WARNING! The DOT.4 fluid used in this braking system may be dangerous to your eyes or skin upon contact. ALWAYS WEAR APPROPRIATE GLOVES AND GOGGLES WHEN BLEEDING YOUR FORMULA BRAKES. In case of accidental contact, rinse your eyes and/or skin abundantly with running water. In case of contact with your eyes seek immediate medical assistance.

DOT.4 fluids also damage painted surfaces. If any fluid comes in contact with a painted surface, wipe it off immediately and clean with isopropyl alcohol. Do not allow any brake fluid to come in contact with the brake rotors. If this occurs, clean the rotors with isopropyl alcohol. Do not allow any brake fluid to come in contact with the brake pads. If this occurs, the pads are contaminated and must be replaced. Do not touch the braking surface of any rotor with your bare hands, because the oils from your fingers will degrade its performance. Always wear gloves, or handle the rotor by its spokes. Disc brakes become very hot during use. Do not touch the caliper or rotor immediately after use. Make sure the brake has cooled down before making any adjustments.

DRAINING PROCEDURE (R1-RX-The One- Mega)

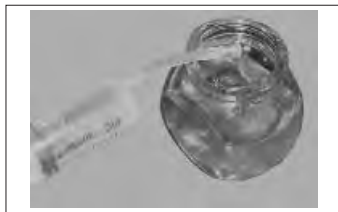
1:

- The package consists of the parts indicated in the figure.
- Mount the two syringes with pipe 1 and fitting 2.
- Prepare a work surface with a clamp in which a pipe with the diameter of the bicycle handle will be held.



2:

- Pour the Dot 4 oil into the glass jar.
- Suction about 20 ml of Dot.4 oil with a syringe and keep the fitting immersed in the jar..



3:

- Unscrew the drainage dowel of the brake gripper with the appropriate torque 10 wrench.



WARNING! Check the O-ring in the drain hole. Make sure it is in good condition and replace it, if necessary: use a 2.5x1mm diameter O-ring for Rx models and a 3x1mm diameter O-ring for R1 models, The One and Mega.



4:

- Remove the syringe with the oil and screw the fitting onto the gripper hole.
- Keep the gripper on the work table, at the same height as the pump.
- Insert the riser between the pads.



WARNING! The DOT.4 fluid used in this brake system is dangerous for the eyes and skin. In the case of accidental contact, wash eyes with plenty of water.



5:

- Place the pump on the pipe-handle. If Rx models must be operated on, the pump must be placed with its dowel slot in a vertical position.
- Unscrew the drainage dowel of the pump tank with the appropriate torque 10 wrench.



6:

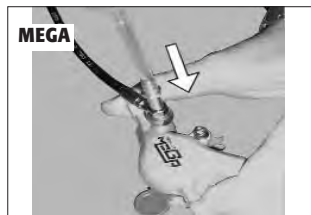
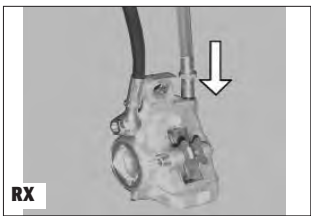
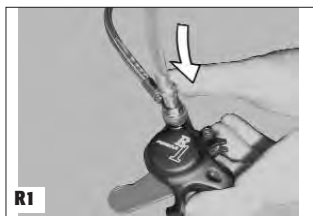
- Withdraw the second syringe and suction a slight quantity of Dot.4 oil from the jar. Screw the syringe fitting onto the pump drain hole.





7:

- Work on the gripper syringe with the two syringes inserted by pushing the piston in a manner that allows oil to enter the circuit and flow into the cylinder of syringe n. 2r.
- Leave a slight amount of oil in syringe n. 1.



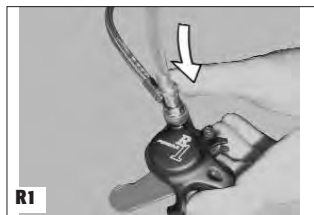
8:

- Press the pump lever until it reaches its end-stop position to close the connection with the tank. Lock the lever in this position.

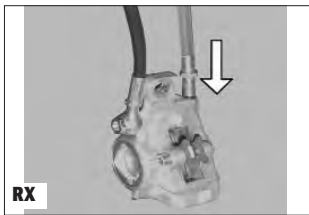


9:

- Keep SYRINGE 2 (Pump) in a vertical position and pull the piston of SYRINGE 1 (gripper) to create vacuum, allowing any air bubbles to be transferred into the syringe. Repeat this operation 3 or 4 times until all the air bubbles have been completely removed and collected in the SYRINGE (when there is no more air in the gripper, SYRINGE suction hardens).



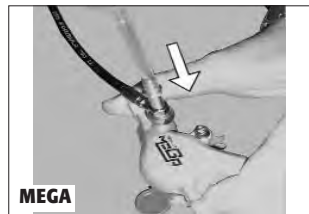
R1



RX



THE ONE



MEGA

⚠ WARNING! Make sure that, during the suction stage, the level inside the pump syringe does not descend too far. Although closed, the pump piston o-ring is devised to work when pressurized and not when depressurized, which means that a blow-by may occur at this stage. If the level descends too far, move the lever away from the handlebar and keep a low pressure on the syringe, refill the syringe connected to the pump.

10:

- Tenere premuta la leva e lasciarla lentamente facendo pressione contemporaneamente sulla siringa 1 della pinza. In questo modo l'olio comincia a fluire.
Effettuare il passaggio di olio, dalla siringa 1 alla siringa 2, 2/3 volte per una maggiore sicurezza di un perfetto spurgo.

11:

- Remove SYRINGE 1 from the gripper and remount the dowel.



WARNING! Before removing SYRINGE 2 from the pump, perform some test braking operations and pump compression to make sure that the membrane is in the correct position.



12:



WARNING! Before removing SYRINGE 2 from the pump, perform some test braking operations and pump compression to make sure that the membrane is in the correct position.

- Remove SYRINGE 2 from the pump.



- Check the quantity of oil and refill, if necessary.
- Remount the pump tank drainage dowel.



WARNING! Before removing SYRINGE 2 from the pump, perform some test braking operations and pump compression to make sure that the membrane is in the correct position.



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