MASTER CYLINDER MC9601

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1 CHECK

Verify that the package contains all the components:

- Master cylinder (body + lever + collar + screws).
- Tank with bracket.
- Single brake switch.

2 INSTALLATION

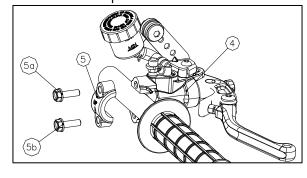
WARNING! GROPED NOT PERFORMING OPERATIONS FOR ASSEMBLY AND DISASSEMBLY THIS NEW BRAKING PRODUCT WITHOUT RELYING ON A PROFESSIONAL MECHANIC.

If you decide to ignore this important safety warning, follow the instructions for assembly and disassembly reported in this manual and keep in mind that you do so at your own risk.

- Connect the pipe of the tank to the master cylinder inlet. With a pliers loose the clips **19** and block the pipe.
- Tighten the screw 20 with a torque 3 Nm
- Insert the master cylinder 4 on the handlebar positioned as the

preferred location and check that there are no impediments to the ability to rotate and adjust to the needs of the rider.

- Fix the pump **5** with **4** mounting collar marked "UP" facing up (as shown in the illustration), tighten the top screw first **5a** with 6Nm



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torque then the screw **5b** with 6Nm torque.

- Connect the lines to the master cylinder by the components **10a**, **10b**, **10c** as show on picture.

Tighten the screw **10c** with **28 Nm** torque. Washer **10a** e **10b** must be used only one time. N.B.: Screw 10c should be replaced by brake switch (optional)

Push the brake lever to bottom out in order to verify that the piston can slide softly.

3 CHECK LINE POSITIONING

If you use the original lines ensure that it doesn't form curves with a radius less than 60mm in the master cylinder frontcourt.

If you use non-original tubes refer to the manufacturer's installation manual, then go to the same position, ensure that it doesn't form curves with a radius less than 60mm in the master cylinder frontcourt and master cylinder doesn't make contact with moving parts

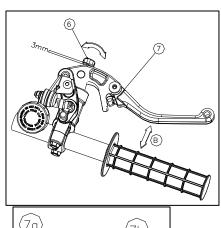
NOTE: A brake hose badly positioned or in contact with moving parts can frustrate the braking action and cause serious accidents. WARNING: After installing the brake, make sure that the handlebar rotates freely; in case of interference of the tube, must adjust in different way in order to avoid the problem, or consult the manufacturer.

4 SET UP

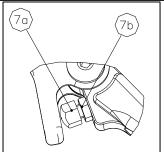
Lever positioning

- To adjust the lever position (distance B) depending on your needs, work with their fingers on the knob **6** to achieve a distance of 3-5mm between the lever and knob.

Then adjust the position by the screw **7a**, and lock in position by the nut **7b**.



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5 BLEEDING OPERATIONS

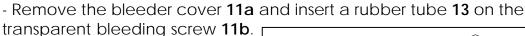
Use only DOT 4 o 5.1 from new pack.

Note

The use other fluid than brake fluid could cause damage to components of the braking system.

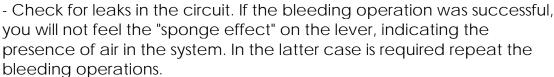
To a correct bleeding proceed as follows:

- Turn the handlebars to bring the edge of the oil tank in a horizontal position.
- Remove the cap 12 and fill the tank of fluid. (Please note: During the entire procedure of bleeding the oil level in the tank must never fall below the MIN).
- Operate the brake lever several times to make a partial filling of the circuit.



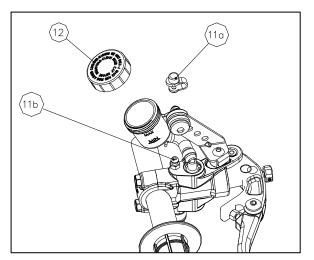
- Bleed the system by as following:
- Push the lever completely and keep it in this position.
- Loosen the drain screw **11b** and allow the oil and air flow out from the system.
- Tighten softly the bleeding screw **11b**.
- Repeat those operations until only the oil comes out from the system. Remember to fill in the oil in the tank so that never falls below the minimum level.
- Tighten the bleeding screw 11b to the correct torque 6 Nm,

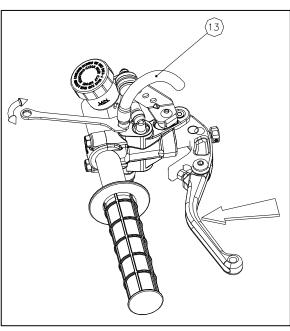
mount the bleeder cover **11a** and finally fill the tank.



Notes

- Brake fluid is corrosive.
- Bleeding operations described must also be carried out on the callipers.





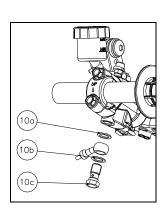
- Bleeding does not eliminate all the air inside the circuit, some very small air bubble will necessarily inside. These bubbles will be automatically deleted during the first use of the brakes as a result you will notice a shortening of the lever stroke.

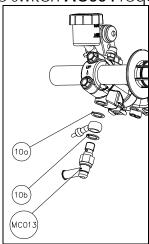
If you are unable to remove the sponge effect despite repeated bleeding procedures, do the following:

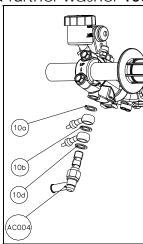
- Remove one pad from the caliper.
- Operate the lever in order the piston slide out 3-4 mm from its seat.
- Push the piston completely into its seat.
- Put the pad.
- Repeat the operation described by applying it to all pad.
- Check the effect of this operation.

6 MC013/AC004 - BRAKE SWITCH

- Empty the system.
- Loosen the banjo screw **10c**.
- Connect the lines to the pump through the components **10a**, **MC013**, **10c** in the order as shown.
- The brake switch $MC013\ \mathrm{must}$ be tightened with the appropriate torque 28 Nm
- The washer **10a** and **10b** must be replaced.
- Bleed the system.
- Installation of the brake switch AC004 require a further washer 10d.





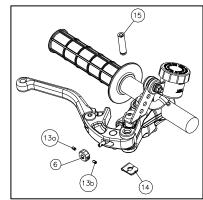


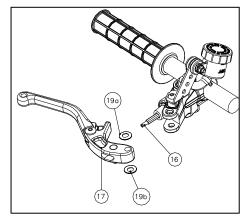
7 KR0091 – LEVER

- Remove the knob 6 by unscrewing the screws 13a and 13b.
- Remove the safety clip **14** and remove the pin **15**.
- Loosen the screw **16** until you can remove the lever **17**.
- If necessary, clean the master cylinder by compressed air to remove any dirt.
- Replace with the new lever 17 the springs 19a and 19b and repeating the operations

in reverse order making sure the holes in the knob 6 are aligned with

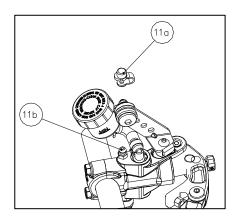
those of screw 16. Lock screws 13a and 13b with the LOCTITE 243





8 KR0119 – BLEEDER SCREW+RUBBER

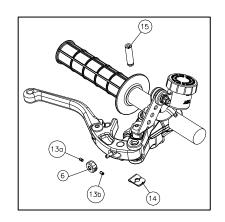
- Remove the bleeder cover **11a** and loosen the bleed valve **11b**.
- Replace with new screw and tighten a torque of 6 Nm
- Bleed and install the bleeder cover **11a**.

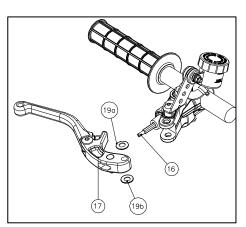


9 KR0121 – PISTON REPLACEMENT KIT Ø19

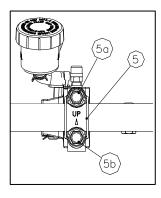
Clean first the master cylinder with water and dry with compressed air to completely remove residual dirt and water.

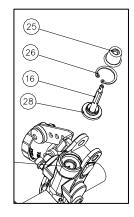
- Empty the tank and recover the oil in a suitable container for later disposal.
- Remove the knob 6 by unscrewing the screws 13a and 13b.
- Remove the knob 6 by unscrewing the screws 13a and 13b.
- Remove the safety clip **14** and remove the pin **15**.
- Loosen the screw **16** until you can remove the lever **17**.

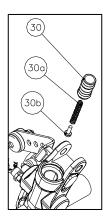


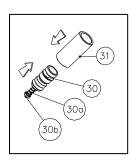


- Loosen the screw **5a**, **5b** and rotate the master cylinder 90° up, ensure that it doesn't form curves with a radius less than 60mm in the master cylinder frontcourt.
- Remove the folding rubber **25**, remove the C-clip **26** by pushing the screw **16**. remove the components **16** e **28**.
- Remove piston 30, spring 30a and rivet 30b.



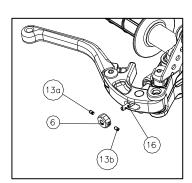






- Check the quality of the chamber (be free from scratch).

- Lubricate new components and the cylindrical tool **31** with DOT4 brake fluid.
- Install **30**, **30a**, **30b** (lubricate) and insert gently in to the tool **31** until the seals are inside the tool. Be careful to not damage the seals.
- Place the cylinder in the piston chamber, then push the piston until they are released from the cylinder **31**.
- On piston **30** put the grease in the groove for srew **16**.
- reassembling repeating the operations in reverse order checking the correct installation about C-clip **22** (round corner edge to the bottom side).
- check the installation of folding rubber 25 is without interference, touch correctly the C-clip 26 and it doesn't wrap around the screw 16
- Installing the lever making sure the holes in the knob **6** are aligned with those on screw **16**. Lock screw **13a** and **13b** by LOCTITE 243

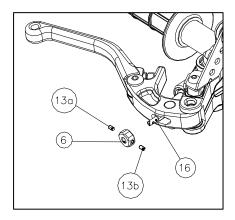


(26).

- Fill the tank.
- Bleed the system

10 KR0123 - REGULATING PIN

- Remove the knob 6 by unscrewing the screws 13a and 13b.
- Replace with new components and reassembling repeating the operations in reverse order making sure the holes in the knob 6 are aligned with those on screw 16. Lock screw 13a and 13b by LOCTITE 243.

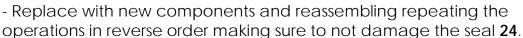


11 KR0124 - LOADING LINE FITTING

Clean first the master cylinder with water and dry with compressed air

to completely remove residual dirt and water.

- Empty the tank and recover the oil in a suitable container for later disposal.
- With a plier loosen the clip **19** and remove the tube. (Be careful to not disperse the residual oil).
- Loosen the screw **20** and remove the tank **21**.
- Remove the C-clip **22**, the pipe **23** and remove the seal **24**.
- Check that there isn't dirt. (in case clean it)

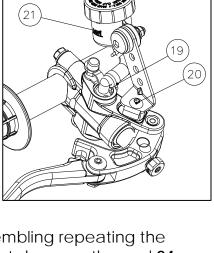


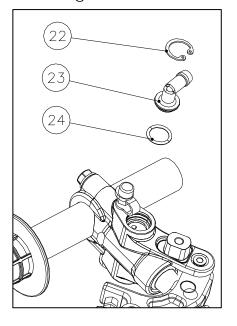
- check the correct installation about C-clip **22** (round corner edge to the bottom side). The pipe **23** must be fixed and lock.
- Install the oil can and tight the screw **20** by a **5 Nm** torque, using LOCTITE 243.
- Fill the tank

Note

NB:

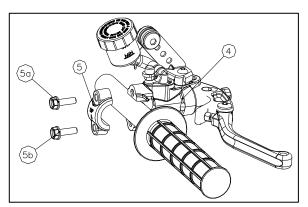
- It may be necessary bleed the master cylinder.
- You should completely replace the oil in the system.

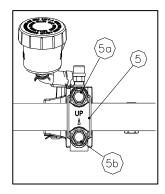




12 KR0125 - CLAMP WITHOUT MIRROR

- Remove the screws **5a**, **5b** and the collar **5**.
- Fix the master cylinder body 4 by mounting collar 5 with the new marked "UP" facing up (as shown), first tighten the top screw 5a with torque 6 Nm, and then the screw 5b with a torque of 6 Nm.





13 KR0143 - OIL CAN LEFT

Clean first the master cylinder with water and dry with compressed air to completely remove residual dirt and water.

- Empty the tank and recover the oil in a suitable container for later disposal.
- With a plier loosen the clip **19** and remove the tube. (Be careful to not disperse the residual oil).
- Loosen the screw **20** and remove the tank **21**.
- Install the new tank kit by tightening the screw **20** with a torque of 5 Nm, blocking with thread lock.
- Fill the tank.

NB:

- It may be necessary bleed the master cylinder.
- You should completely replace the oil in the system.

