



MD•1

MECHANICAL

•DISK BRAKE

## **SOSTITUZIONI PASTIGLIE**

*REPLACING THE PADS*

*REPLACEMENT PLAQUETTES*

*ERSETZUNG DER BELÄGE*

*SUSTITUCION PASTILLAS*

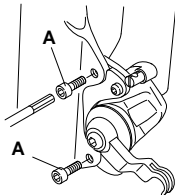
## GENERAL INSTRUCTIONS



Follow strictly the instructions contained herein, in order to ensure a long service life for the braking system and to avoid the most common accidents which occur during maintenance.

Warning: the braking system MD.1 pads must to be replaced by qualified personnel authorised by the manufacturer.

Failure to observe these instructions shall void the braking system warranty.

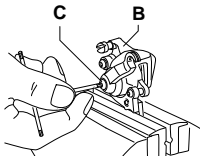


### REPLACING THE BRAKE PADS

Remove the wheel from the yoke or from the frame.

Remove the braking system linkage cable without loosening the clamp.

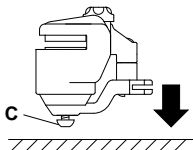
Remove the caliper by loosening lock screws A.



### Removing the external pad

Place caliper B on the workbench and secure it in a vice using a protective plate so as not damage it.

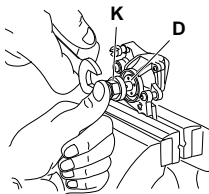
Loosen screw C of the linkage turning it three times anti-clockwise.



Take the caliper assembly, firmly holding the end of the linkage with one hand, and beat the side where lock screw C is located on a stiff surface.

Loosen completely the screw and remove the linkage.

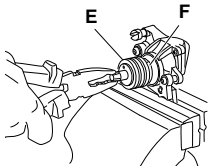
***WARNING:*** During disassembly hold firmly the linkage so as to prevent the spring to come out.



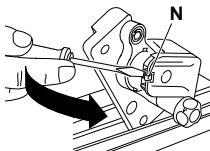
Loosen ring nut D by using wrench K (supplied by Manufacturer on request) or another one which is suitable.

Using a pair of pliers, pull out pad-holder cylinder E. Be extremely careful when performing this procedure in order to prevent the balls from coming out.

Gradually pull pad holder F off cylinder E, taking care not to let the balls come out. Replace the worn pad holder.



***CAUTION:*** Install the new pad as indicated in the "Installing the External Pad" chapter.

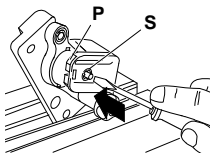


## Removing the internal pad

Hold the caliper in a vice with protective plates as shown in the illustration. Avoid overtightening the vice as this may damage the caliper.

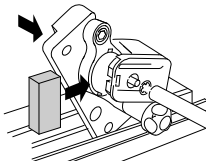
**1st version:** Raise tab N using a small flat-blade screwdriver, then remove it by using a pair of pliers.

**2nd version:** Perform the same procedure as for the 1st version but, in addition, press the lock pin of the pad until snap ring S comes out.



**WARNING:** As the various parts are extremely small, use the screwdriver with great care as it may seriously injure your hands. Wear protective gloves.

Remove worn pad P and replace it.



### **Installing the internal pad**

Check whether there is a pawl at the bottom of the pad seat, remove the pawl by gently pressing it.

Install a new pad by fitting it in from the cylinder seat, as pointed out in the illustration, so that the pin of the pad can be inserted in the hole provided.

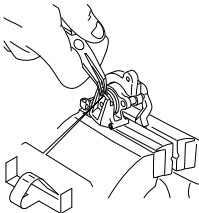
Fit a suitable shim between the caliper and the pad, then insert a new snap ring and secure the pad in place by pressing it with a tool having an outside diameter of 8 mm and a hole of 3.5 mm.

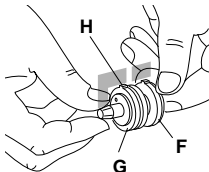
**WARNING:** Do not, for any reason, reuse the tab and snap ring that have been removed, but the ones provided with the new pads.

**ATTENTION:** There is a risk of serious injury or death if this recommendation is not observed.

Bend the tab on the support and, by using a pair of curved, flat nose pliers, secure the tab to the pad as indicated in the illustration, making sure there is no play.

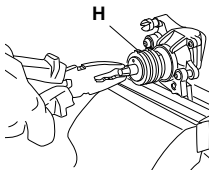
**WARNING:** Bend the tab with great care so as to avoid damaging it. As the parts are very small be extremely careful as you may seriously injure your hands. Wear protective gloves.





## Installing the external pad

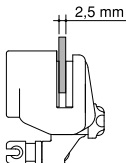
**WARNING:** Should support G come out of the ball holder, when replacing pad holder F, put it back in place that pawl H on the ball holder is lined up with the corner of hexagonal part of the cylinder as indicated in the illustration.



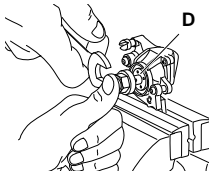
Before fitting the cylinder (complete with the pad in the brake unit) slightly lubricate the internal part of the unit and the external circumference of the cylinder assembly (use standard grease for bearings).

**WARNING:** Pay attention not to put grease on the pads as this may cause death!

Re-install the cylinder assembly and the pad holder on the caliper, fitting pawl H into the seat in the caliper itself.



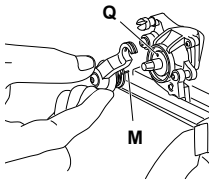
**IMPORTANT!** Place a 2.5 mm thick shim between the two pads as indicated in the illustration.



Re-install ring nut D using the wrench provided or another suitable one and fully tighten to a torque of 11 Nm.

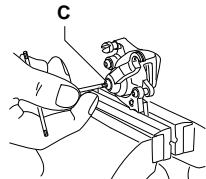
Re-install the linkage and spring on the caliper.

**IMPORTANT! When performing this operation, make sure retaining pin M of the spring fits into hole Q of the cylinder assembly.**

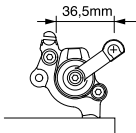


Then attach the linkage to the pin of the cylinder assembly, positioning the hexagonal tapered coupling in such a way that the linkage is as shown in the illustration, according to the value indicated.

Tighten fixing screw C of the linkage to a torque of 4.5 Nm. Make sure the linkage moves freely.



Re-install the caliper on the yoke or the frame, observing the instructions given in the manual concerning the braking system.



# **LARM** spa

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