



MAG

**MANUALE ISTRUZIONI
OPERATING MANUAL
MANUEL D'INSTRUCTIONS
BETRIEBSANLEITUNG
MANUAL DE INSTRUCCIONES**

THE ONE

 **FORMULA**
Power, Technology, Design.

- I** Scarica il manuale del prodotto direttamente dal web:
- GB** Pls. download the products' instruction manual from the website:
- F** Merci de bien vouloir telecharger les manuels d instruction sur la page:
- D** Bitte entladen Sie die Betriesanleitung vom den folgenden website:
- E** Por favor, descárgate el manual de instrucciones de nuestros productos de la web:
- BG** Моля, изтеглете наръчника на потребителя от следния адрес:
- HR** Molimo download-ajte nstrukcijski priručnik sa internetske stranice:
- SLO** Prosimo, da si naložite navodila o uporabi na strani:
- CZ** Stáhněte si prosím návod k použití z této webové stránky:
- DK** Download venligst produktets betjeningsvejledning fra følgende hjemmeside:
- SF** Ole hyvää ja lataa tuotteen käyttöohje seuraavalta sivulta:
- LV** Lūdzu lejupielādējiet instrukciju brošūru no adreses:
- PL** Proszę pobrać instrukcję obsługi produktu ze strony:
- P** Por favor, descarga o manual de instruções dos nossos produtos na web:
- SK** Prosím stiahnite si manuál produktov a inštrukcie z web stránky:
- S** Download venligst produktets betjeningsvejledning fra følgende hjemmeside:
- H** Kérem, töltsd le a termékek használati utasításait a website-ről:
- N** Last ned instruksjonsmanual for dette produktet på vår webside:
- NL** Aub. Download de product handleiding van de website:
- CN** 请到网页下载产品使用手册:

<http://support.formula-brake.com>

WARNING! BEFORE INSTALLING AND USING THIS NEW FORMULA SRL PRODUCT IT IS CRITICAL TO YOUR SAFTY READ AND STRICTLY ADHERE TO THE INSTRUCTIONS IN THIS MANUAL. FAILURE TO DO SO COULD CAUSE SERIOUS INJURY, DEATH AND INVALIDATE YOUR LEGAL RIGHTS.

KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE AS IT CONTAINS INFORMATION CRITICAL FOR YOUR SAFETY.

WARNING! DON'T TRY TO DISASSEMBLE OR MODIFY IN ANY WAY THIS NEW FORMULA SRL PRODUCT!

SERVICE ON THIS PRODUCT MUST BE PERFORMED ONLY BY QUALIFIED PROFESSIONAL MECHANICS WHO ARE FAMILAR WITH AND UNDERSTAND THE TECHNICAL DETAILS OF HOW THIS PRODUCT WORKS.

IF YOU DECIDE TO IGNORE THIS IMPORTANT SAFETY WARNING, YOU ARE DOING SO AT YOUR OWN RISK AND PERIL AND AT NO LEGAL LIABILITY TO FORMULA SRL OR ITS DISTRIBUTORS.

Note: AS FOR ANY MANUAL, THIS ONE MAY BE UPDATED FROM TIME TO TIME. CONTACT YOUR MECHANIC OR CHECK OUR WEB SITE (www.formula-brake.com) REGULARLY TO RECEIVE ANY SUCH UPDATES.

This manual provides information for a safe and proper mounting and use of the braking system and for its routine maintenance. Continual compliance of its rules assures the braking system's best performance, duty economy, a longer lifetime and allows the avoidance common causes of accidents which may occur during operation and maintenance.



WARNING: Follow carefully the SAFETY RULES for a proper use of the braking system.

In this handbook, within each paragraph, you will find the following safety notices:



CAUTION: Directs your attention toward unsafe practices which could result in damages to the equipment.



WARNING: Directs your attention toward unsafe practices which could result in personal injury or damages to the equipment.

GENERAL SAFETY RULES

- FORMULA SRL brakes have been designed for use on two-wheel vehicles with human propulsion only. Any other application is dangerous may result in the failure of this product. FORMULA SRL declines any and all responsibility for the safety of this product is used for an application other than which it is intended.
- FORMULA SRL brakes are a high-performance product, offering superior braking over normal brakes, so less braking force is required to lock up the wheel. Be aware that a locked wheel can make you lose control and can be the cause of an accident and injury. In-depth knowledge about the function and features of this product is required before use.
- The user is responsible for learning and using the correct braking technique; consult the Owner's Manual of the bicycle, ask a professional bicycle dealer for advice, or contact FORMULA SRL for additional details and recommendations.

- Test the brakes and your braking technique on flat and even ground before using the bike in more severe conditions.
- Brakes are essential for the safe use of a bicycle. The improper setup and use of the brakes can make you lose control and cause an accident, with the subsequent potential to cause serious injury.
- Do not introduce your hands close to or within moving parts; always use strong five-fingered gloves ensuring sensitivity and a powerful grip.
- Do not change the parameters of the braking system to obtain other performances than those established by the manufacturer.
- Before starting any mounting operations, carefully check for dangerous conditions of the work site. If too dark, use all available light sources and make sure they work properly before starting to work.
- Concentrate and take the due precautions before using components which could cause damages.
- When using the bike, it is advisable to wear an helmet and to ride with care and sense of responsibility.
- All extraordinary maintenance operations have to be carried out solely by personnel authorized by FORMULA SRL.
- Don't touch the surface of the disc rotors with your bare hands as the natural oils on your skin can compromise performance. Always wear clean latex gloves when handling the disc rotors.
- Disc brakes get very hot when used. WARNING: NEVER touch the caliper or the rotor immediately after use. Make sure the brakes have cooled down before working on them.
- Before use check to ensure the front brake lever is on the side of the handlebars you are accustomed to having it on. If the lever is on the other side, sudden braking can cause you serious injury. Have a professional mechanic swap the position of the levers if they are incorrect.
- A high braking load (total weight over 100 Kg and an incline of over 15%) will mean a necessary reduction in your speed and the use of both brakes when braking.

BRAKING SYSTEM SAFETY RULES

- Before each use, check all fasteners for correct torque. Torque ratings are supplied in this manual and an appropriate torque wrench is required to perform this check.
- The brake rotors must be installed on wheels that are suitable for this type of brake system. A wheel with an insufficient spoke section or with a radial spoke fitting can break under normal use of the braking system and cause serious injury or an accident. Check with your wheel manufacture BEFORE installation to ensure appropriate compatibility.
- Check the spoke tension and condition frequently. A damaged spoke may break suddenly, interfere with the braking system and result in serious personal injury or accidents. The bike frame or fork shall be suitable for mounting the braking system. Only in this case, the correct dimensioning of the supports and the suitable positioning of the elements which form it is assured.
- The frame and the fork of the bicycle must be suitable for this type of braking system. The support, size and position of the components will function properly only if the system is intended for use with the appropriate disc brake.
- **It is critical to cross-check your frame and fork manufacturers' manuals on all the parts of the braking system verify that the torque ratings match the ratings found**

in this manual. In the case of inconsistency of the values, don't install the braking system.

- Make sure the bicycle is clean before doing any maintenance on the brakes.
- Never install the brakes using adapters or supports supplied by other manufacturers. Doing so will void the warranty and release Formula srl of liability. Only use original FORMULA SRL products.
- Only use products recommended in this manual, otherwise you can damage the system and the brakes will be unreliable and potentially dangerous.
- Don't let brake fluid or other oils or grease used for lubricating the bicycle come into contact with the disc rotors. If this does happen, clean the discs using isopropyl alcohol ONLY.
- Don't let brake fluid or lubricants come into contact with the brake pads. If this does happen, the brake pads will be contaminated and must be replaced before the next use.
- Only use DOT 4 brake fluid from a new bottle. NEVER use old oil, or oil that has been bled out of the system. Old oil can contain water and **this will compromise the performance and function of the system.**
- All new brakes, new brake pads and new discs have to bed in. This requires at least 50 applications of the brakes at a speed of 30 Km/h before the brakes reach the maximum performance. Make sure you are in a zone where there is no road traffic to bed the brakes in.
- **Before every ride** make sure there are no oil leaks from the system by applying the lever and holding it down as far as it will go. Check the hose connections and the brake fluid reservoir for any leaks. Consult a professional mechanic if there are oil leaks. An oil leak can cause a serious accident!
- THE BRAKING SYSTEM MAY NOT HAVE THE HIGHEST BRAKING EFFICIENCY WHEN NEW, THEREFORE A BREAK IN PERIOD AND LONGER DISTANCES SHOULD BE ALLOWED FOR UNTIL THE SYSTEM IS BROKEN IN.
- The efficiency of the brakes depends on many factors which FORMULA SRL has no control over. These include the speed of the bike, the wheel-terrain contact, the brake lever application force, the correct installation and maintenance of the brakes, the hydraulic brake fluid, the levers, the brake shoes or pads, the condition of the bike, the weight of the rider, the correct braking technique, the weather conditions, the type and conditions of the terrain, and many other factors.
- We recommend using medium strength Loctite (Loctite 222 or 242) on all threaded fasteners. After applying Loctite and fitting the fastener, clean any excess Loctite with a cloth. Let the Loctite dry for at least 24 hours BEFORE use.



ENVIRONMENTAL NOTE

In order to safeguard the environment, it is advisable to refer to these simple indications for the correct disposal of Formula srl products.

- 1) The packaging material does not require special disposal precautions because it is not dangerous in any way; we suggest differentiated collection between paper and plastic.
- 2) It is also recommendable to dispose of the metal parts after use.
- 3) As regards the brake liquid DOT4, it is recommendable to follow the indications in the safety sheet available from the web address <http://support.formula-brake.com>.

In the case of all three items mentioned above, it is recommendable to dispose of the waste following the national directives through specialised companies.

FOREWORD

Recommended lubricants and cleaning products

Hydraulic brake fluid

Use only DOT 4 Super hydraulic brake fluid from sealed containers. Don't leave the bottles of DOT fluid open for a long time as this product absorbs moisture in the air and this will change its physical properties, seriously affecting the efficiency of the brakes if this fluid is used. Change the oil in the system every year.



WARNING: Besides damaging the paint, the brake system's fluid is extremely hazardous if it comes in contact with the eyes or skin. In the event of eye contact flush with fresh water and seek medical assistance immediately. In the event of leakage or accidental contact with the DOT4 brake liquid, please refer to the safety sheet available from the internet address <http://support.formula-brake.com>.

Grease

Use silicon grease for EPDM seals. Formula srl recommends: UNISILKON TKN 1011 by KLUBER.



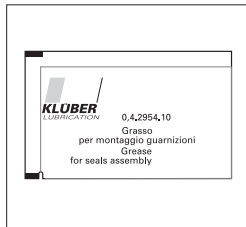
WARNING! Never use lubricating oils in the FCS adjustment area (indicated in the figure by an arrow) due to the presence of O-Rings made of EPDM.



CAUTION: Use of inappropriate type of grease may compromise the integrity of the seals and cause damage to the system and therefore to the user.



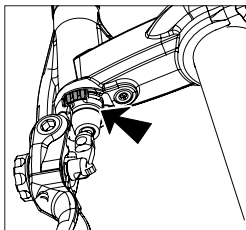
WARNING! The Loctite used in some parts found in this product can be dangerous if it comes into contact with your eyes or skin. ALWAYS WEAR SUITABLE GLOVES AND PROTECTIVE GOGGLES BEFORE USING.





If the product comes into contact with the eyes or skin, wash immediately with abundant warm water and soap.

If the product comes into contact with the eyes, call a doctor immediately. We recommend using medium strength Loctite (Loctite 222 or 242) on all threaded fasteners. After applying Loctite and fitting the fastener, clean any excess Loctite with a cloth. Let the Loctite dry for at least 24 hours **BEFORE** use.



1 INSTALLATION

1.1 Table of adaptors



WARNING: consult THE SAFETY REGULATIONS found in this manual.



Fork adapter FOX
40 for ø180mm
disc FD40092-10



I.S. adapter for
MEGA and the ONE
for ø160 disc and
for fork FOX with
ø203 disc (new
extruded version)
FD40089-10



I.S. adapter
for ø200 front
- ø180 rear disc
FD40063-10



I.S. adapter
for ø220 front
- ø200 rear disc
FD40064-10



I.S. adapter for
ø180 front - ø160
rear disc (new
extruded version)
FD40062-10



Post mount
adapter for
MEGA and the
ONE for ø180
front disc (new
extruded version)
FD40074-10



Fork adapter FOX
40 for ø200 front
disc FD40073-10



Fork adapter FOX
40 for ø225 front
disc FD40084-10



Fork adapter
Marzocchi QR20
for ø180 front
disc FD40088-10



I.S. adapter for
ø220 rear disc
FD40086-10



Post mount
adapter for
ø200 front disc
FD40065-10



Post mount
adapter for
ø220 front disc
FD40085-10



Fork adapter
BOXER for
ø180 mm disc
FD40091-10



Fork adapter
BOXER for
ø200 front disc
FD40066-10



Fork adapter
BOXER for
ø220 front disc
FD40087-10

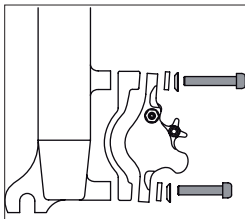


I.S. adapter for
ø203 mm rear
disc FD40093-10

If you are using the POST MOUNT adaptor for a Ø180 disc, use the conical spacers shown in the figure.



WARNING: Never install FORMULA SRL caliper using adapters or supports supplied by other manufacturers. Doing so will void your warranty. To avoid serious accidents, only use FORMULA SRL parts mounted on suitable forks and frames.



1.2 INSTALLING THE BRAKE ROTOR



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If you decide to ignore this important safety warning, you are doing so at your own risk and peril and at no legal liability for FORMULA SRL or its distributors.



WARNING: Consult THE SAFETY REGULATIONS found in this manual.



CAUTION: You must use a torque wrench to install the disc rotor bolts.

WARNING: Ensure the disc rotor isn't hot before working on it by letting it sit without use for a minimum of 10-15 minutes. Let it cool if necessary.

Place brake disc **1** on hub **2** of an assembled wheel with the marking facing outwards, making sure you note the direction of rotation shown by arrow **3** on the disc flange, attaching it using the supplied M5 screws and tightening in a criss-cross pattern to a torque setting of **6 Nm \pm 5%**. Carefully clean the disc with isopropyl alcohol to remove any traces of grease or oil.



CAUTION: When removing the screws, always make sure to reapplying medium strength loctite and ensure the torque settings are correct by using an appropriate torque wrench.



1.3 INSTALLING THE KIT



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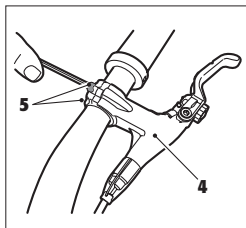
WARNING: Consult THE SAFETY REGULATIONS found in this manual.



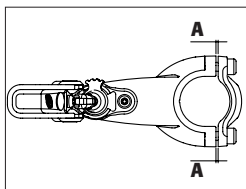
CAUTION: You must use a torque wrench to install the disc rotor bolts.

KIT Installation 1a version

Place the pump body **4** on the bar in the desired position and lock it in place with the screws **5** using a tightening torque of **2,5 Nm \pm 5%**.

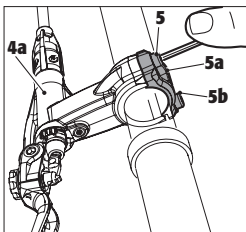


The two screws have to be tightened alternately and at the same distance **A**.

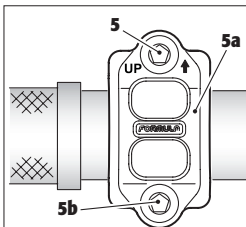


KIT Installation 2° version

Fit the pump body **4a** to the handle bar positioning it as shown in the figure and orientating it in the desired position.



- Fix the pump body **4a** by mounting the collar **5a** so that the indication "**UP**" faces the upper part (as shown in the figure). Tighten the upper screw **5** with a tightening torque of **2,5/3 Nm \pm 5%**, then tighten the screw **5b** with a tightening torque of **2,5/3 Nm \pm 5%**.



The pump supplied can be fitted either on the right or the left and is reversible.
If the hose length needs to be adjusted see paragraph 2.4, if not proceed with the positioning of the hose on the bicycle, bearing the following in mind:

- the hose needs to be attached to the fork or frame in a way that does not interfere with the free flow of fluid through the hose;
- the hose should not make curves smaller than a 20 mm radius and should not interfere with any moving part of the bicycle;

WARNING: An incorrectly mounted hose or a hose that is in contact with moving parts of the cycle, can eliminate the braking performance and cause serious accidents.

CAUTION: After installing the brakes, check to make sure the handlebars turn freely; if the brake hose gets in the way, proceed as indicated in paragraph 2.4 "Adjusting the length of the hose".

To adapt the frames or forks to the various diameters of brake rotors available, FORMULA SRL supplies different adapters which can be mounted between the fork or frame and the brake caliper.

CAUTION: Only a correct mounting of the system and it's various support elements ensures the safety of the cyclist and the exceptional performance of FORMULA SRL disk brakes.

Fit the caliper to the fork, proceeding as follows:

INTERNATIONAL STANDARD MOUNT OR SIMILAR

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CAUTION: You must use a torque wrench to assemble the all fasteners.

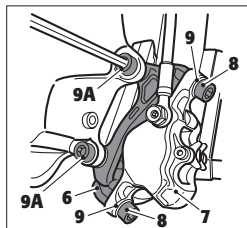
CAUTION: When removing the screws, always make sure that medium strength loctite is applied when reassembling, and that the correct torque wrench settings are used.

CAUTION: Consult paragraph 1.1 "TABLE OF ADAPTORS" to see which adaptor you need.

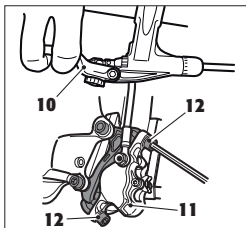
- Install adaptor **6** on caliper **7**, making sure the arrow is pointing upwards, screwing in fixing screws **8** a little without tightening down, then apply medium strength Loctite, if this isn't present.

CAUTION: Make sure washers **9** are installed before assembling fasteners **8**.

- Install the adaptor with the caliper to the fork, tightening the screws **9A** to **9 Nm \pm 5%** and applying medium strength Loctite, if this isn't already present.



- Apply pressure to brake lever **10** to let caliper **11** settle and at the same time tighten fixing screws **12** holding the caliper on the adapter to a torque of **9 Nm \pm 5%** and apply medium strength Loctite, unless this is already present.



POST MOUNT COUPLING



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CAUTION: You must use a torque wrench to assemble the all fasteners.



CAUTION: When removing the screws, always make sure that medium strength loctite is applied when reassembling, and that the correct torque wrench settings are used.



CAUTION: Consult paragraph 1.1 "TABLE OF ADAPTORS" to see which adaptor you need.



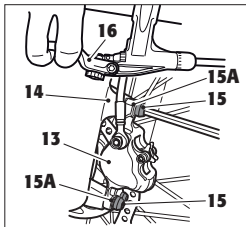
CAUTION: Make sure the washers are installed before assembling the fasteners.



CAUTION: When mounting the caliper onto the fork, check that the caliper body is not in contact with the fork itself.

1) Installing directly onto a POST MOUNT fork

- Install the caliper **13** on fork **14** screwing in screws **15** slightly (apply medium strength Loctite, unless this is already present) leaving the caliper free to move. Make sure that the washers **15A** are present between the screws **15** and the caliper **13**.
- Apply pressure to lever **16** so the caliper settles and at the same time tighten fixing screws **15** to a torque of **9 Nm \pm 5%**.

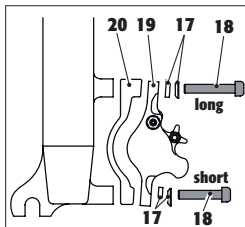


2) Installing with POST MOUNT 180 adaptor:

- Fit the special washers **17** onto the screw **18**, paying attention to match the concave and convex profiles (apply medium strength Loctite, unless this is already present)

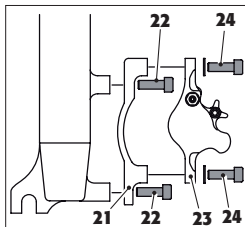
and following the order shown in the figure. Insert the screws assembled in caliper **19** and adaptor **20** making sure the arrow points upwards.

- Screw the assembly onto the fork without tightening down, leaving the caliper free to move.
- Apply pressure to lever **16** so the caliper settles and at the same time tighten fixing screws **18** to a torque of **9 Nm \pm 5%**.



3) Installing with adaptor on POST MOUNT fork

- Fit adaptor **21** on the fork making sure the arrow is pointing upwards.
- Tighten screws **22** to a torque of **9 Nm \pm 5%**, apply medium strength Loctite, unless this is already present.
- Fit caliper **23** on adaptor **21**.
- Screw in fixing screws **24** slightly, leaving the caliper free to move. Apply medium strength Loctite, unless this is already present.
- Apply pressure to lever so the caliper **23** settles and at the same time tighten fixing screws **24** to a torque of **9 Nm \pm 5%**.

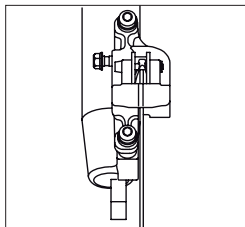


WARNING: Never install the FORMULA SRL brake system with adapters that are not supplied by FORMULA SRL. This will void the warranty. To avoid serious accidents use only parts made by FORMULA SRL and mounted on specially preset forks and frames.

Turn the wheel slowly, making sure that the disk is centred on the pads and that none of the parts comes into contact with the others.

Perform 2 or 3 test braking actions to bring the pads to the correct distance from the disk.

WARNING: The brake system needs a break in period. FORMULA SRL suggests to brake at least a 50 times before considering the system broken in and fully efficient.



2 SET UP

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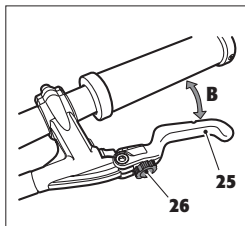
WARNING: Consult THE SAFETY REGULATIONS found in this manual.

2.1.1 The ONE lever position

To adjust the position of lever **25** (distance **B**), either screw or unscrew the adjustment knob **26**.



ATTENTION: Do not force the adjustment knob **26** beyond the stop when unscrewing and screwing it, as it may lead to functioning failures.

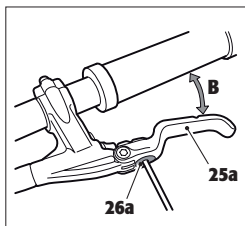


2.1.2 MEGA lever position

To adjust the position of lever **25a** (distance **B**) on the mega pump, adjust the screw **26a** using a 3 mm Allen key.



ATTENTION: If the adjustment screw is not functioning properly, please contact Formula srl authorized personnel.

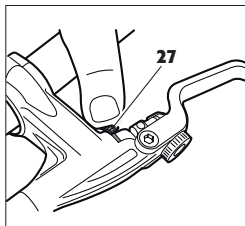


2.2 FCS

To adjust the FCS to meet your requirements, turn knob **27**.



WARNING: When adjusting the FCS, the lever must be in its resting position.



2.3 Hose-caliper angle

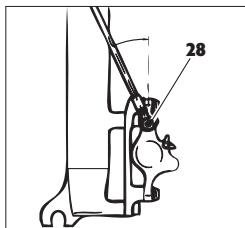
Use an 8 mm socket wrench to loosen screw **28** by a 1/4 of a turn, making sure no oil escapes. Turn the banjo coupling until reaching the desired position. Tighten the screw to a torque of **8 Nm \pm 5%** using a torque wrench.



CAUTION: You must use a torque wrench to tighten the fastener.



WARNING: Incorrect torque can have a detrimental effect on the braking performance and cause a serious accident which may result in injury or death.





CAUTION: The hose must have a radius of curvature of over 20 mm.

2.4 Tube length adjustment



WARNING: It is necessary to get the special adjustment kit before carrying out any hose length adjustment operations.

Remove the rubber seal **30** from the hose seat, so that it will be possible to unscrew the tightening bush **29** using an 8 mm spanner.

Then, remove the hose from its seat.

After having decided which part of the tube is to be cut off, perform a clean cut using the special Formula srl tube cutter (code FD P034-00), or else a well-sharpened cutter.

Fit the new threaded bushing **29** and the new biconical **31** onto the tube, making sure to avoid oil spillage.

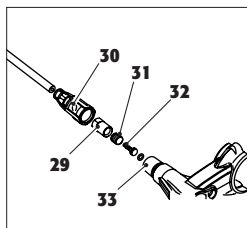
Then, fit a new plug **32** provided with O-Ring into the tube end and press tightly until it sets perfectly into the hose seat.

Grease the threaded bushing **29** and the biconical **31** (UNSIKON TKN 1011 KLUBER).

Remount the hose onto the pump body using the locking bushing **29**, ensuring that the O-Ring is correctly placed inside the groove and that the plug **32** is in contact with its seat inside the pump body.

Apply a tightening torque equal to **8 Nm \pm 5%** to the tightening bushing **29**.

Place the rubber seal **30** back to its original position.



WARNING: When assembling the fasteners, always make sure they are tightened to the proper torque using a torque wrench.



CAUTION: You must always use a torque wrench to assemble all fasteners.

Make sure that the hose has been installed correctly, pulling it forcefully outwards and then pull the lever sharply and check that there are no leaks close to the joint.



WARNING: Be careful while using a razorsharp cutter or blade. Do not use blades or saws that could deform or lacerate the hose in such a way to cause loss of fluid or inefficiency of the system. AN UNNECESSARILY SHORT HOSE NOT ONLY CAUSES STEERING PROBLEMS but can also cause strain on the hose which may result in its disconnection from the caliper or pump lever. Using the correct length of the hose is vital to achieve maximum efficiency of the system.



WARNING: Should biconical bushing **31** not be tightened enough, as prescribed, it might come loose while riding. This causes hose detachment and consequently a dangerous situation for the rider and for anyone found nearby.

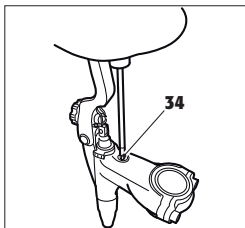


CAUTION: After adjusting the hose length you must bleed the system to eliminate any air bubbles as described in paragraph 2.5.

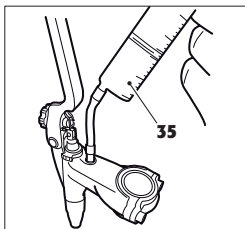
2.5 Air bubble removal


The following operations must be carried out after adjusting the length of the hose.


- Position the pump vertically and remove screw **34**, using wrench TORX T10.





- Install syringe 35 supplied in the FORMULA SRL brake bleeding kit, screwing it into the screw hole, making sure there is 10ml of DOT 4 brake fluid in the syringe.
- With the syringe always upright slowly suck out all the air contained in the hose. The presence of air in the hose is evidenced by the bubbles coming up through the fluid head contained in the syringe;
- Release the syringe piston and repeat the procedure as many times as necessary until you have removed all the air from the pipe.





-  **WARNING:** Before removing the syringe, press lightly on the plunger to make sure that the reservoir fills completely.
- Remove the syringe from the hole and replace screw **34** tightening it to a torque of **1.5 Nm**, making sure you don't damage the O-Ring.

-  **CAUTION:** When assembling the fasteners, always make sure they are torqued down to the right torque wrench setting.

-  **WARNING:** You must always use a torque wrench to assemble all fasteners.

-  **WARNING:** Make sure to note any hydraulic oil leaks or spills; carefully clean using a cloth soaked in spirit.

-  **WARNING:** After having carried out this operation, make sure the system works properly by performing 50 braking tests and only use the bike after having made sure the system is working properly. If this is not the case, contact a professional mechanic.

-  **WARNING:** Every time before you use the bike, check to ensure all fasteners and bolts are tightened to the correct torque setting supplied in this manual.

3 PAD REPLACEMENT

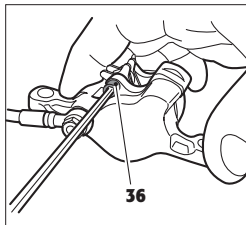
WARNING! DON'T TRY TO DISASSEMBLE OR MODIFY IN ANY WAY THIS NEW FORMULA SRL PRODUCT!

Service on this product must be performed only by qualified professional mechanics who are familiar with and understand the technical details of how this product works.

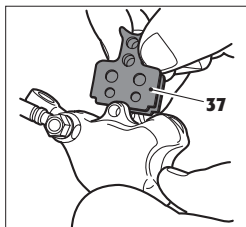
If you decide to ignore this important safety warning, you are doing so at your own risk and peril and at no legal liability for FORMULA SRL or its distributors.

WARNING: Consult THE SAFTY REGULATIONS found in this manual.

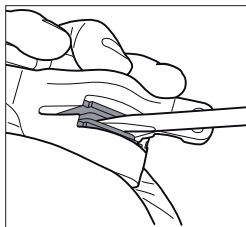
- Remove the o-ring and unscrew the fastening pin **36** from the pads.



- Remove the pads **37** and the spring.
- Carefully clean the pistons inside the caliper, using a brush soaked in spirit.
- Carefully clean the disc using a cloth soaked in isopropyl alcohol.












- Temporarily put the WORN pads back in position and, using a screwdriver to push down between the pads, push the pistons fully back inside the caliper.
- Remove the worn pads.
- Insert the new pads with the spring.



NOTE: the pads are identical and can be placed on the left or right side.




- Screw brake pad fixing pin **36** in again and tighten to a torque setting of **2 Nm±5%** blocking it in place with fastening pin.

-  **WARNING:** When assembling the fasteners, always make sure they are torqued down to the right torque wrench setting.
-  **CAUTION:** You must always use a torque wrench to assemble all fasteners.
-  **CAUTION:** Never apply the lever without the pads in place or with the wheel removed. If this does happen you will have to press the brake pads back into the caliper with a clean flat-bladed screwdriver.
-  **CAUTION:** When installing new brake pads, be very careful to avoid contamination with oil or grease.
-  **WARNING:** After having carried out this operation, make sure the system works properly by performing 50 braking tests and only use the bike after having made sure the system is working properly. If this is not the case, contact a professional mechanic.
-  **WARNING:** Before each use make sure all the screws and bolts are tightened to the correct torque found in the present manual.
-  **CAUTION:** Don't worry if you can hear the brake disc and pad rubbing lightly. This noise will disappear as the brakes are used; new brake pads must bed in to find the correct position on the disc. You may hear a slight rubbing noise after changing the brake pads or if the wheel hasn't been fitted properly.
-  **WARNING:** Don't use brake pads supplied by other manufacturers. This would make the guarantee of the braking system void. Only use original FORMULA SRL products.
-  **CAUTION:** When transporting the bike with the wheels off, always fit the relevant spacer between the brake pads.

4 MAINTENANCE

-  **WARNING:** Consult THE SAFETY REGULATIONS found in this manual.

The periodic cleaning of this braking system using a suitable biodegradable degreasing product that doesn't damage the system is necessary.

-  **WARNING:** ISOPROPYL ALCOHOL is recommended to clean the disc brake. The use of any other product may be hazardous to the user.
-  **WARNING:** Do not touch the rotor right after its use as it might cause you severe injury.
-  **WARNING:** After carrying out this operation, perform 50 braking tests to make sure the brakes are working properly.

READ CAREFULLY!

FORMULA SRL extends to the original purchaser of its brakes a limited warranty that the brakes are free of defects in material and/or workmanship for a period of two years from date of purchase. The burden of proof of such purchase date shall be the consumer's.

WHAT PROTECTION DO I RECEIVE FROM THE WARRANTY?

FORMULA SRL will, at its discretion, repair or replace the defective product under warranty.

WARRANTY CONDITIONS AND LIMITATIONS

1. This warranty **applies only to the original owner** of the FORMULA SRL products. FORMULA SRL does not warranty any second hand-merchandise;
2. The validity of this warranty is subject to the proper application of the following «claims procedures»:
 - (a)-The claim must be initiated within eight (8) days of discovery of the potential defect;
 - (b)-Every claim must be submitted to the FORMULA SRL Dealer from which the product was purchased, with the understanding, however, that the discretion as to the acceptability of the claim is exclusively FORMULA SRL's;
 - (c)-Only a FORMULA SRL Dealer can ship to FORMULA SRL the allegedly defective product, with the accompanying documentation.

Failure to comply with these procedures will invalidate the claim; in which case the product will be made available to the owner for thirty (30) days and then destroyed.

3. This warranty does not apply to:
 - a) Costs and transportation damages directly or indirectly arising out of the application of this warranty including, but not limited to, the transportation of the product from FORMULA SRL to the owner's domicile, or from the owner's domicile to FORMULA SRL;
 - b) Damages to the product resulting from:
 1. Abuse, alteration, mishandling, misuse including, but not limited to the failure to use the product for the purposes it was designed and manufactured for (**such purposes include cross country and downhill UCI organized competitions**) and, generally, to follow the warnings and instructions contained in FORMULA's Owner's Manual;
 2. Repairs performed by anyone other than a FORMULA SRL Dealer;
 3. Accidents, falls, acts of God, or any cause outside FORMULA's control;
 4. The use of corrosive agents on the product;
 5. The prolonged exposure of the product to the elements and/or solvents;
 - c) **If and to the extent the serial number and/or production code has been deliberately altered, damaged or removed;**
 - d) **In case of modification of the product;**
 - e) **In case of normal wear and tear and, in general, to parts subject to normal wear and tear. Such parts include:**

- discs
- pistons
- brake pads
- washers
- hoses
- oil

f) In case of damage to the product caused by the use of parts of different manufacturers, and/or not compatible, suitable and/or authorized by FORMULA SRL for use on FORMULA SRL products.

6. Retailers, wholesalers, importers or anyone else besides FORMULA SRL may not modify this warranty in any way.
7. This warranty does not affect the rights of the consumer afforded by applicable law nor the rights arising out of the sale contract with the retailer. In the absence of any applicable law, however, this warranty will be the consumer's only safeguard and neither FORMULA SRL nor any FORMULA SRL Dealer nor any Official FORMULA SRL Importer will be responsible for any incidental, special or consequential damage incurred as a direct or indirect violation of any explicit or implicit warranty of this product.
8. The validity and interpretation of this warranty shall be governed by, construed and enforced in accordance with, the internal laws of Italy. Any controversy arising out of this warranty shall be brought in front of the Prato Forum.

PLEASE NOTE: In reference to Article n°. 1341 of the Italian Civil Code, you, the consumer, are hereby explicitly requested to read carefully and understand the ramifications of Clauses 1 through 8 which submit to conditions and limitations some of your legal rights with respect to FORMULA SRL.

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