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# INSTRUCTIONS

RADIAL MASTER CYLINDER  
XR SERIES

ENGINEERED FOR EXCELLENCE

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01.903.0000016.000

User Manual Rev.: 00

WWW.TALOSPERFORMANCE.COM

## JOIN US ON THE RIDE TO PERFORMANCE |

In a world where every second counts, having the confidence to brake effectively can make all the difference. Our team combines expertise, quality, and a deep passion for motorcycles to deliver performance brake systems that are as powerful as they are reliable. This commitment to excellence ensures that when you're on the road, you can focus on the journey ahead, knowing that Talos Performance has your back—every stop of the way.

### Before you start

Please carefully follow the instructions in this guide, which will allow for the correct mounting and use of the product. For your protection and safety, Talos Performance expressly requires that you have the installation of the product performed by skilled personnel. Improper installation, repair or maintenance, can cause accidents. Keep this user guide as a reference for the future. Talos Performance accepts no liability for any damage, of any kind, which may be caused, directly or indirectly, to persons or things as a result of incorrect assembly or failure to observe all the assembly instructions. We also invite you to comply with the provisions of the Highway Code and Traffic rules and/or to additional regulations in force in your Country.

### General conditions

! – Attention: Descriptions preceded by this symbol contain information, instructions, or procedures, which, if not followed, may result in death or serious injury.

Carefully read, understand and follow these instructions, they are an essential part of the product. If you have any doubt whatsoever regarding installation or use of your Talos Performance product, please see your authorized Talos Performance dealer for assistance (on [www.talosperformance.com](http://www.talosperformance.com)).

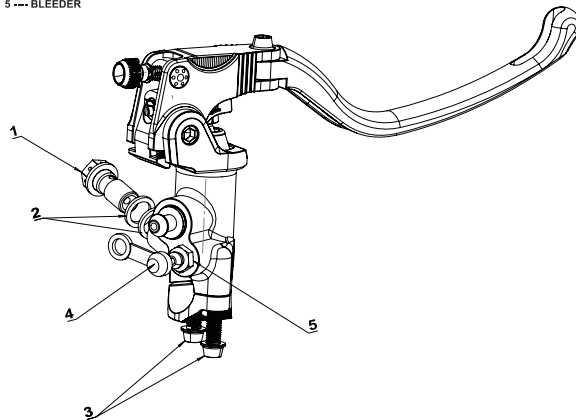
After installing any Talos Performance product, please check that all related components of the motorbike function e.g. brakes, clutch, steering. We strongly suggest to repeat these checks periodically, especially after long trips or prolonged periods of not using the bike.

Your Talos Performance products require regular inspection and maintenance. The more you ride the more often you must inspect your Talos Performance products. If your products are leaking, bent, deformed, cracked, chipped or worn, no matter how slight, immediately have a Talos Performance dealer inspect the products before you ride again. In any case never try to repair or modify the Talos Performance products or their components, always replace with Talos Performance original components. Talos Performance products may not be compatible with your motorcycle or with other aftermarket equipment installed before. For your safety Talos Performance ask that you always contact your Talos Performance dealer.

### 1. SCOPE

To show the correct procedures for the mounting and use of Talos Performance front braking master cylinder.

- 1 --- BANJO BOLT (NOT INCLUDED IN THIS KIT)
- 2 --- COPPER WASHER
- 3 --- M6 BOLT
- 4 --- RUBBER CAP
- 5 --- BLEEDER



! – Before beginning to mount the product please check the completeness of the kit. Warning: Make sure that the motorbike is standing firmly before beginning to work, as a fall may lead to damage to the motorbike or injury to you or others. Also make sure that the temperature of the exhausts and the engine are similar to the ambient temperature.

## 2. RESERVOIR

### 2.1. Choice of the reservoir

The capacity of the reservoir must be such that when the brake fluid is between the MIN and MAX levels (with the cover in a horizontal position) the volume is at least equal to that required by the brake pistons in case of maximum pad and rotor wear.

### 2.2. Mounting the reservoir

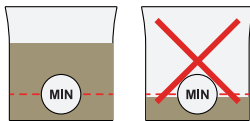
- The reservoir must be mounted on the motorcycle in such a way that, with the motorcycle in a vertical position, the reservoir upper border is horizontal.
- With the motorcycle in a vertical position, the MIN level indication on the reservoir must be higher than the master cylinder fluid inlet pipe fitting.

### 2.3. Inspections

Ensure that the brake fluid is able to flow unobstructed within the reservoir, from the upper edge down to the MIN level. This is facilitated by the movement of air from the outside into the reservoir membrane. If this airflow is restricted, a vacuum may form, preventing the fluid from descending. Additionally, please note that the bands or 'socks' that are often placed around brake fluid reservoirs may interfere with this necessary "breathing" process if they are positioned too close to the reservoir cover, potentially leading to inadequate feeding of the master cylinder.

### 2.4. Brake fluid

- Use only high boiling point DOT 4 or DOT 5.1 brake fluids.
- Use only brake fluid from a new and sealed container.
- Change brake fluid before each race.



## 3. RESERVOIR TO MASTER-CYLINDER CONNECTION

### 3.1. Choice of tubing

Black rubber tubing, compatible with brake fluid, could be used; transparent plastic tubing could also be used: The rubber tubing is the better solution, but it is not possible to see through it, and so you could not see possible air bubbles; the transparent plastic tubing is better in this sense but since it is not compatible with brake fluid, sweating could occur and so it would have to be changed periodically.

### 3.2. Mounting

The tube must connect the reservoir outlet with the master-cylinder inlet; the appropriate hose clamps must be used at both ends.

**NOTE:** It is highly recommended that the parts under the master cylinder be covered with a cloth or paper towels when working on the motorcycle to prevent the spill of brake fluid.

## 4. MASTER CYLINDER - DISASSEMBLY

First remove the switch and any wiring if these were installed on the master cylinder.

Remove the banjo bolt from the brake master cylinder. By removing the banjo bolt, the brake line is no longer connected to the master cylinder, allowing for easy removal of the master cylinder.

**WARNING:** When removing the brake line, it is best that the connection is kept in the upward orientation.

**WARNING:** When removing the banjo bolt, fluid will flow from the brake line through the banjo bolt. It may be best to stop the flow of the fluid using a paper towel.

**WARNING:** Please take care that the brake fluid does not come in contact with components that could be damaged.

Unscrew the locking screw on the master cylinder clamp, then remove the master cylinder from the handlebar.

Pour out excess brake fluid still in the original brake master cylinder, disposing of this excess brake fluid in the appropriate manner.

**WARNING:** During disassembly, please take care that the brake fluid does not come in contact with components that could be damaged. Brake fluid is corrosive and can ruin the surface of coated parts as well as those plastic and rubber materials.

If there is a leak, it is possible to dab away the fluid with a cloth or absorbing paper.

## 5. MASTER CYLINDER MOUNTING

Manually fasten the brake line fitting to the TALOS master cylinder.

**IMPORTANT:** It is absolutely necessary to replace the copper washers in order to avoid any sort of leak.

**IMPORTANT:** Before assembly, you should check to ensure that the fitting can be assembled with the master cylinder. The TALOS master cylinder should be assembled with fittings with M10x1 threads.

Now place the brake line on the master cylinder manually, along with the washer and banjo bolt.

Adjust the master cylinder to the required position on the handlebar and tighten the two M6 bolts.

First tighten the upper bolt, then the lower.

Torque the bolts to maximum 9 N/m, ensuring the brake lines remain in the correct alignment.

Attach the TALOS brake light switch if needed.

Tighten the banjo bolt (previously hand-lightened) to a torque of 24-26 N/m.

Adjust the lever distance from the handlebar by turning the adjusting nut either clockwise or anticlockwise according to the driver's requirements; it must be noted that the lever positioning must allow the driver to generate the pressure necessary to stop the motorcycle.

**! - INSPECTIONS:** Pull the lever until it touches the grab handle on the handlebar and verify that the master cylinder piston stroke is smooth.

#### 6. BLEEDING THE BRAKE SYSTEM AFTER INSTALLATION OF THE MASTER CYLINDER

Remove the brake fluid reservoir cap and the rubber diaphragm on the inside the reservoir.

Fill the brake fluid reservoir to the MAX indication with brake fluid.

**WARNING:** Ensure that the fluid inside the braking system is compatible with any new fluid added to the reservoir. In the case that the fluid is not compatible, you should replace it completely.

Remove the rubber cap from the bleeder and connect it to a tube. It's best if the tube is transparent, this way you can check the stream of the fluid and air.

**WARNING:** Collect any unwanted fluid in a separate container so that it can be appropriately disposed of later.

Since at this point, there is too little brake fluid in the brake system, because the master cylinder has been replaced, it is first necessary to add more fluid to the system.

This will be accomplished in the following way:

- Loosen the bleeder
- Pull the lever several times so that the brake fluid enters the system
- Repeat the pulling of the lever until the brake fluid has entered the tube
- Fasten the bleeder, without releasing the lever
- Let go of the lever

Now it is necessary to remove excess air from system with the following procedure:

- Loosen the bleeder
  - Pull the lever
  - After 2/3 seconds fasten the bleeder, without releasing the lever
  - Let go of the lever
  - Repeat the above steps several times.
- When the bleeder is fastened, the lever should be quite hard to pull.

Remove the tube to dispose of the brake fluid.

Fasten the bleeder to a torque of 8-10 N/m.

Clean the bleeder with a cloth. Cover it with the rubber cap.

After finishing the above, it is necessary to add brake fluid to the reservoir until the amount of fluid reaches the appropriate level.

**CAUTION:** During the bleeding process, you must always check and, if necessary, restore the fluid level in the reservoir to avoid it running out.

**! - Inspections:** Verify that there are no leakages from the various fittings and connections. If the braking system has been bled properly, following the lever dead travel, you will feel the direct action of the fluid without any sponginess; if this is not so, repeat the bleeding procedure.

**CAUTION:** Brake fluid corrodes paints

**! - Bleeding will not eliminate completely the air that is present in the braking system; the small residual air bubbles that remain in the braking system will be eliminated automatically during the initial brake applications: this will result in a shorter lever travel and less elastic feeling.**

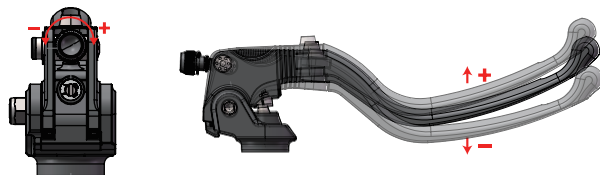
Notes: If the lever seems too elastic following the bleeding procedure, proceed in the following manner:

- a. Remove one brake pad from a caliper.
- b. Apply the brakes several times so as to push-out the pistons about 3 - 4 mm.
- c. Push back the pistons (avoid damaging the disc and the pistons).
- d. Put the brake pad back into the caliper.
- e. Repeat the above steps on the other(s) pad(s) and/or caliper(s).
- f. Verify whether brake lever travel has improved.

#### 7. ADJUSTMENT OF LEVER DISTANCE

Lever distance can be adjusted by clockwise / counter-clockwise adjustment of the knob indicated in the photo.

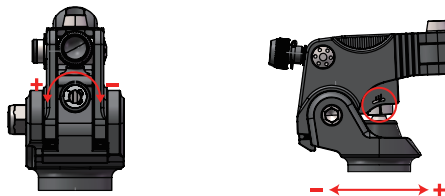
Adjustment in the clockwise direction move the lever away from the handlebar.



## 8. ADJUSTMENT OF PIVOT

Pivot can be adjusted by clockwise / counter-clockwise adjustment of the knob indicated in the photo.

Adjustment in the counter-clockwise direction increases the pivot.



## 9. BRAKING SYSTEM FINAL INSPECTIONS

After running a few laps, it is necessary to carry out the following checks:

- The wheels must rotate freely without any residual torque.
- There must not be any interference between disc and caliper.

## 10. BRAKE EXAMINATION FOLLOWING USE

### 10.1 Fittings

Verify that there are no leakages from the various components, connections, or fittings. If a leak is found on one of the fittings, either increase the tightening torque, or replace the defective component.

## 11. GENERAL NOTES

### 11.1 Overhauling and replacement of master cylinder:

These must be overhauled after 5000 km MAX of running, or when problems arise;

### 11.2 Miscellaneous

- Cleaning of the master-cylinder and calipers can only be done with water-based detergents; do not use solvents or paint thinners, these could damage the seals and other rubber components.
- During warehousing the inlet and outlet holes should be protected with the appropriate caps.
- Master-cylinder cannot be disassembled and taken-a part (removing pistons, seals, etc).
- Half-caliper union bolts cannot be re-torqued.
- Replacement of components with non-Talos Performance parts is not permitted.
- Overhauling of racing products must be carried out exclusively by Talos Performance.

## WARNINGS

Talos Performance reserves the right, in its sole discretion, to make changes to the product and this information at any time and without prior notice. Although many catalogs and advertisements depict riders engaged in extreme or stunt riding, this activity is extremely dangerous, increases the risk of an accident, and increases the severity of any injury. The action depicted is performed by professionals under strictly controlled riding conditions. Only you know the limits of your riding ability and only you can control the conditions under which you ride. All riders are strongly urged to take a motorcycle rider safety clinic. Always wear a properly fitted and fastened motorcycle helmet (Talos Performance recommends a full face helmet), that has been approved by ANSI, SNELL, CE, or any other relevant authority, and any other safety equipment necessary for your riding style, such as full finger gloves, boots, and body armor. Be sure to read and follow all the instructions and warnings that originally accompanied your motorcycle, as well as the literature that accompanied any other component parts installed on your motorcycle. Be sure that your tires are inflated to the correct pressure and that there is no damage whatsoever in the tread or sidewall of the tire.

## LEGAL NOTICE

Our products are race use only. Thus Talos Performance declines any responsibility for a different use of its products.