S.A.T.	189 rev.1 MV
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Service Bulletin

Service Bulletin - Technisches Rundschreiben - Circulaire Technique - Circular Tecnica

Date: **3rd July 2020**

Subject: **Rear brake bleeding procedure update**

Product: **All models**

This Service Bulletin cancels and replaces the previous Service Bulletin No. 189.

As part of the process of continuous improvement of the quality of our products, we have introduced an IMPORTANT UPDATE of the bleeding procedure of the rear brake system.

We ask you to carefully read the following procedure BEFORE working on the motorbike, and thoroughly follow each step.

Use the procedure below whenever it is necessary to bleed the rear brake system.

The warranty refund for the following procedure is provided only during the motorcycle's contractual warranty period.

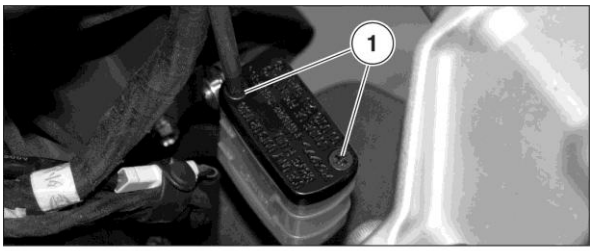
- Warranty type: GC
- OPERATION CODE: 145
- PROBLEM CODE: 012
- It is also mandatory to include the description in the warranty claim's notes: "REAR BRAKE BLEEDING CODE -1606"

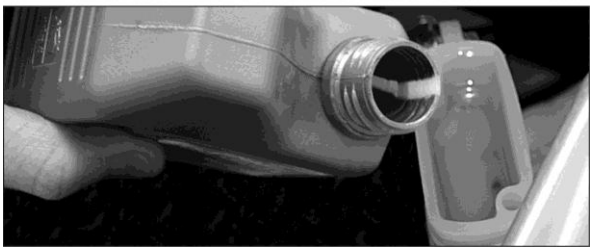
we take this opportunità to remind you that the scheduled maintenance plan, which the Customer must carry out regularly, provides for the replacement of the brake system fluid every 2 years.
In order to carry out this operation correctly, you must in any case carry out bleeding of the braking system, obviously following the procedure below which will remain the responsibility of the customer.

Thanking you in advance for your collaboration, we remain at your disposal for any technical / commercial support.

Best Regards,
MV AGUSTA MOTOR S.p.A.
Technical Assistance Service

REAR BRAKE BLEEDING PROCEDURE





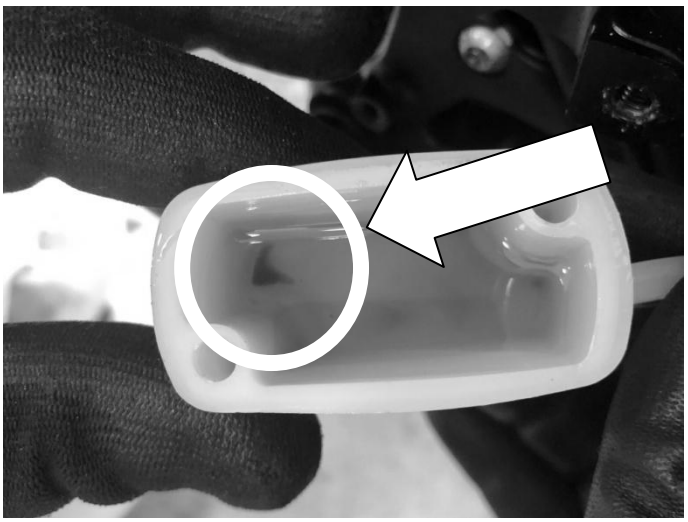
- Phase 1: Bleeding the ABS module

Open the rear brake fluid tank cover by removing the 2 screws (1).
Place a protective cloth around the brake fluid reservoir.

The brake circuit fluid has a high corrosive power. Avoid any contact with eyes, skin and mucous membranes. In case of accidental contact, wash thoroughly with water and consult a doctor.

During all subsequent operations avoid dripping of the brake fluid on the painted parts.

Before proceeding with the bleeding of the system, make sure that no debris or dirt is present in the fluid tank or in the feeding tube between the fluid tank and the master cylinder. If present, then proceed clearing perfectly the parts.

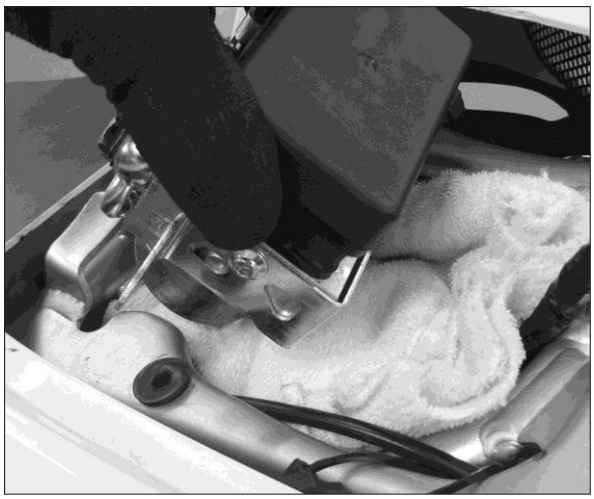




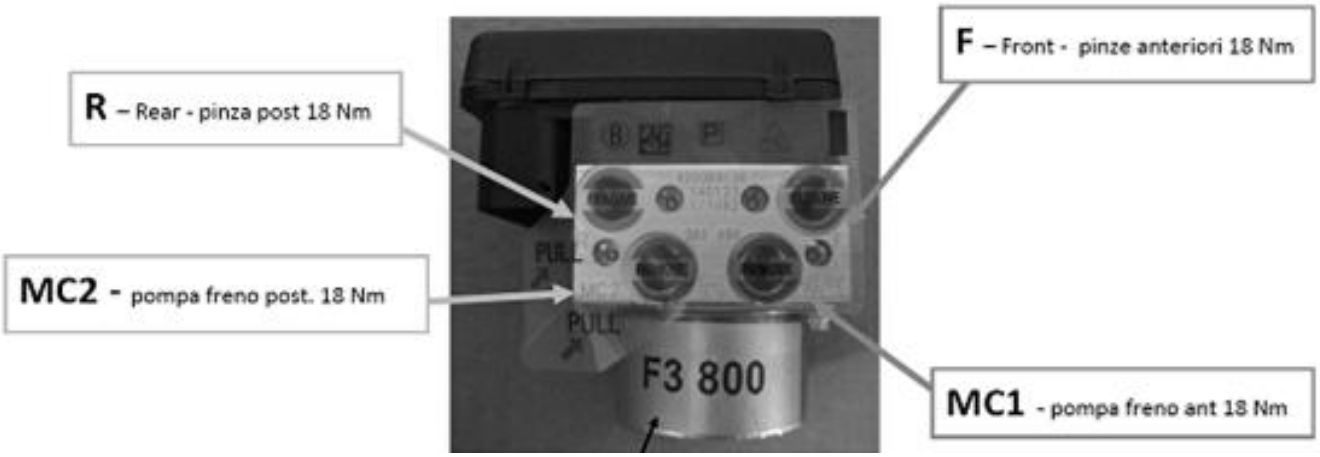
Check the brake fluid level in the fluid tank. If the level is lower than the MAX level line, top up by adding brake fluid conforming to the following specification:

Brake oil:
Motul DOT 4 Brake Fluid
(See lubricant table in the Workshop Manual)

Use only the prescribed brake fluid from a new and sealed container. Never use used brake fluid.

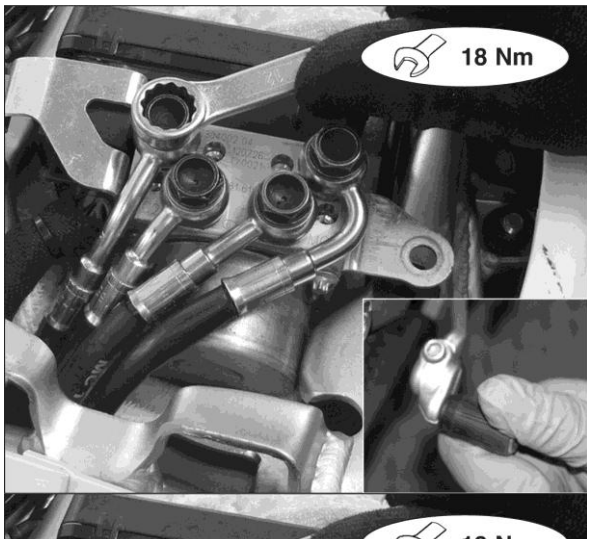


Remove the fixing screws of the ABS module support.
Place a clean cloth under the ABS module to protect the surrounding areas from leaking brake fluid.



NOTE: The following operations must be done by two people.

Keeping the rear brake lever pressed, loosen the screw on "MC2" position on the ABS module by bringing the brake lever to the limit stop. Tighten the screw before releasing the brake lever.
Repeat the operation until air bubbles are no more detectable in the bled fluid.



NOTE: The following operations should be done by two people.

Keeping the rear brake lever pressed, loosen the screw on "R" position on the ABS module by bringing the brake lever to the limit stop. Tighten the fitting before releasing the brake lever.
Repeat the operation until air bubbles are no more detectable in the bled fluid.

Tighten the 2 screws of the ABS module to the prescribed torque.

ABS screws tightening torque:
18 Nm

Remove the cloth from the bottom side of the ABS module. Mount the ABS module bracket by putting the mounting screws back in place.



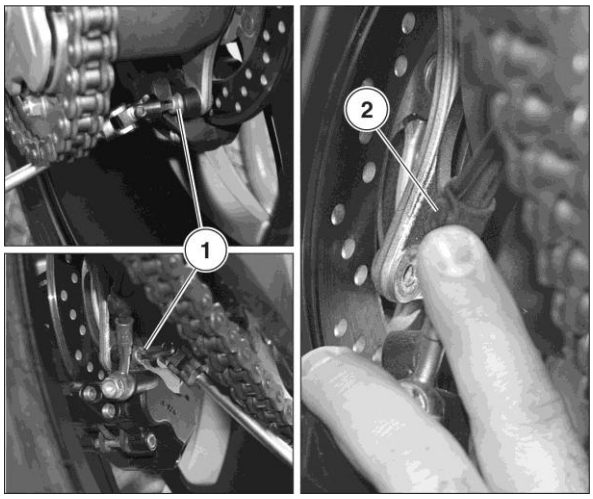
NOTE: in order to make the bleeding procedure easier, on MY 2020 motorbikes some improvements have been implemented:
Brutale and Dragster are equipped with a new brake hose featuring an integrated bleeding nozzle. On Turismo Veloce and F3 a new type of bleeding screw has been added to the joint of the ABS module (MC2).
Such screw, due to room reasons, can NOT be installed on Brutale and Dragster.
On the MY prior to 2020 it is possible to fit such improved components. Such update is not mandatory, but it is recommended for all those cases in which the bleeding of the system is still difficult.

It will be possible to claim these improvements as warranty claims of all kind (GP, GC, GE,...).

Turismo Veloce and F3 all versions:
cod. 8000A3975 (bleeding screw) + cod. 800053259 (rubber cap)

Brutale and Dragster all versions:
cod. 8000C7016 (brake hose with nozzle + rubber cap)

Always when intervening on these parts on all models replace the copper washers cod. 800021480 with brand new ones.



- Phase 2: Bleeding the rear brake circuit

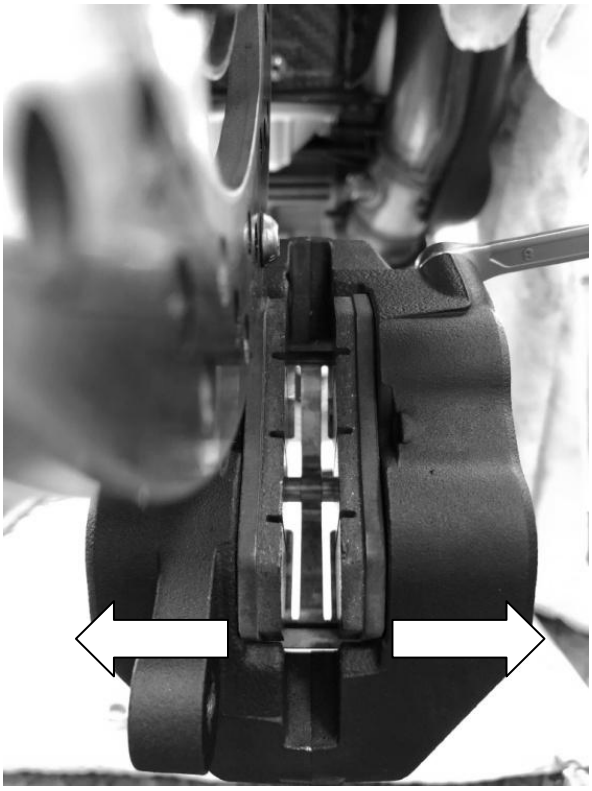
Check the brake fluid level in the fluid tank. If the level is lower than the MAX level line, top up by adding brake fluid conforming to the following specification:



Brake oil:
Motul DOT 4 Brake Fluid
(See lubricant table in the Workshop Manual)

Use only the prescribed brake fluid from a new and sealed container. Never use used brake fluid.

Through the execution of the procedure use exclusively an open collecting container or a suitable vacuum device.



Remove the two fixing screws of the rear brake caliper.

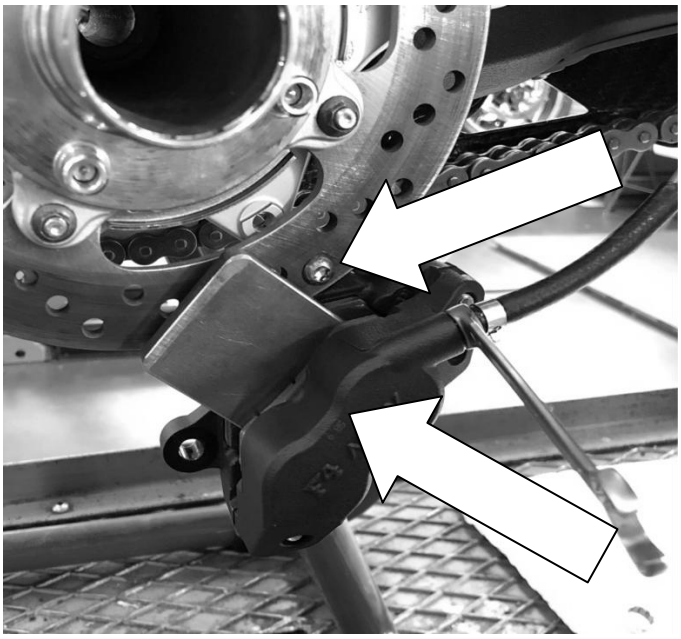
Remove the retaining clamp of the rear brake hose

Remove the rear brake caliper by passing it under the swingarm on the left side of the motorcycle.

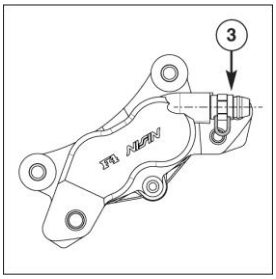
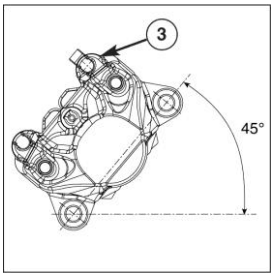
Open the caliper pistons completely out and apply a suitable spacer in order to keep them in place through the bleeding operations.

Rotate the caliper as shown in the pictures and schemes reported below, so to place the bleeding screw in the position that is more effective to make air bubbles bleeding out.

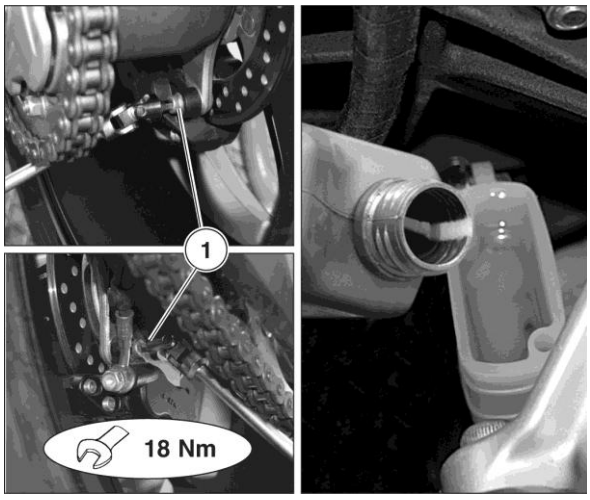
It is also possible to fix the caliper to the rear brake disc to facilitate operations, taking care to maintain the inclination indicated below:



Connect the bleed pipe to the bleeding screw (3), keeping it in a vertical position as shown in the figures:

Rear brake caliper position NISSIN (for 4 cylinder models) Position the screw with the axis of the Bleeding screw horizontal		**Rear brake caliper BREMBO (for 3 cylinders models)** Tilt the clamp at 45 ° respect to the ground line	

NOTA: The following must be done by two people.



Strongly and repeatedly push the rear brake lever down, in order to be sure that the system is pressurized.
Once pressurized the system, hold the pressure energically and at the same time loosen and tighten the bleeding screw while pushing the lever firmly to the end of its stroke.

NOTE: make sure that the lever is free to cover its entire stroke during the bleeding operations; in the case there are obstacles on its movement preventing it from swiping its entire stroke, proceed removing such parts, restoring this way its full movements capabilities.

During the procedure, check that the brake fluid level in the fluid tank never drops below the lower level line. If not, top up by adding brake fluid conforming to the following specification:

⚠ **During the execution of the procedure use exclusively an open oil collecting container or a suitable vacuum device**

Brake oil:
Motul DOT 4 Brake Fluid
(See lubricant table in the Workshop Manual)

Finally tighten the bleeding screw and remove the bleeding tube.
Clean with alcohol and tighten the bleeding screw.
Make sure that the brake lever has a minimum initial idle stroke; if not, repeat the operations described above.
Refit the clamp and the rear brake caliper, tightening the fixing screws (1) to the prescribed torque.

Tightening torque: 18 Nm

Fill the rear brake fluid tank up to the maximum level.

Brake oil:
Motul DOT 4 Brake Fluid
(See lubricant table in the Workshop Manual)

Use only the prescribed brake fluid from a new and sealed container. Never use used brake fluid.

Carefully clean the entire edge of the brake fluid reservoir, using a clean cloth slightly soaked in alcohol.
Close the rear brake fluid tankcover by tightening the 2 fixing screws..

NOTE: when repositioning the fluid reservoir make sure that the brake hose to the master cylinder has no crushing points and is routed with no tight curve or obstruction which can reduce its full functionality.

- Phase 3: Vehicle road test

After bleeding the rear brake circuit, the vehicle must be used for a short road test. During the test, it is necessary to exceed the speed of 10 km / h and perform several consecutive braking operations using the rear brake pedal until the ABS system intervenes at least 5 times.

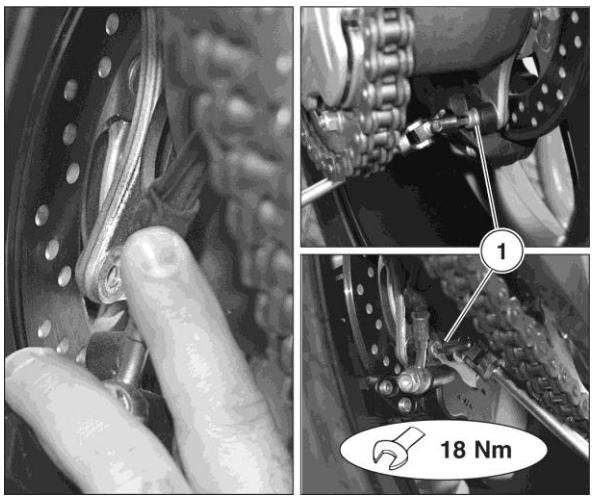
- Phase 4: Final bleeding of the rear brake circuit

Leave the system rest and verify again the functionality in "cold" conditions.
If the feedback of the brake lever after the resting period will be unsatisfactory, or the stroke will be too long, repeat the procedure from Phase 1.

At the end of the bleeding operations, reassemble the clamp and the rear brake caliper, tightening the fixing screws (1)

For motorbikes equipped with titanium screws (B4 1000 Serie Oro + F4 RC)
Torque = 18 Nm + grease CU

For motorbikes equipped with steel screws
Torque = 18Nm + Loctite 243



- Phase 5: Verify the functionality of the braking circuit

In order to verify the functionality of the braking circuit, apply a weight between 2Kg and 4 Kg to the brake lever for 1 minute approximately.
If a continuous drop of the lever can be observed, it will be necessary to replace the rear master cylinder and repeat the procedure.

The replacement of the master cylinder will be eventually authorized and passed as a warranty claim by sending a video in which the creep of the lever can be clearly seen.