# Installation manual

RACETORX®

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## RTX613 Brake Junction Valve

**This product should be installed by a trained vehicle technician**

# Important safety information

## This product must be installed by a trained vehicle technician.

- Read all of these instructions before starting and keep them for future reference.
- If you are not qualified, have this product fitted by a motorcycle dealer or professional workshop. If you choose to fit this product without the necessary training, you do so at your own risk.
- Check this product is correct for your motorcycle before fitting. Fitment details are on racetorx.co.uk. If in doubt, contact us before starting.
- Check the contents of the kit. Do not fit the product if any part is damaged or missing.
- Use these instructions together with the manufacturer's workshop manual for your motorcycle.
- Tighten all fasteners to the torque values given, using a calibrated torque wrench. Original (OEM) fasteners must be refitted to the manufacturer's specified torque.
- Work with the motorcycle stable and secure on a stand, the engine switched off and cool, and the ignition key removed.
- Wear suitable gloves and eye protection.
- Do not modify, machine or alter this product in any way.
- Inspect the product and check its fasteners after the first ride and at every service.

## Brake system warning

**Brakes are a safety-critical system. Take care to fit and bleed them correctly, and check they work properly before riding.**

- Use only the brake fluid type shown on your master cylinder cap (normally DOT 4). Never mix fluid types.
- Brake fluid damages paint and plastics. Cover nearby surfaces and wash off any spills with water straight away.
- Keep brake fluid away from tyres, discs and pads. If pads have been contaminated, they must be replaced.
- Always use the copper sealing washers supplied with the kit on the banjo bolt, one each side of the banjo.
- After fitting, the brake system must be fully bled.
- **Before riding:** check the lever or pedal is firm with no sponginess, there are no leaks at any joint, and the brake light works.
- Test the brakes at low speed in a safe area before riding normally.

## Torque settings

| Fastener | Torque | Notes |
|---|---|---|
| Banjo bolt into junction valve (M10) | 23 Nm | Use the supplied copper washers |

## Kit contents

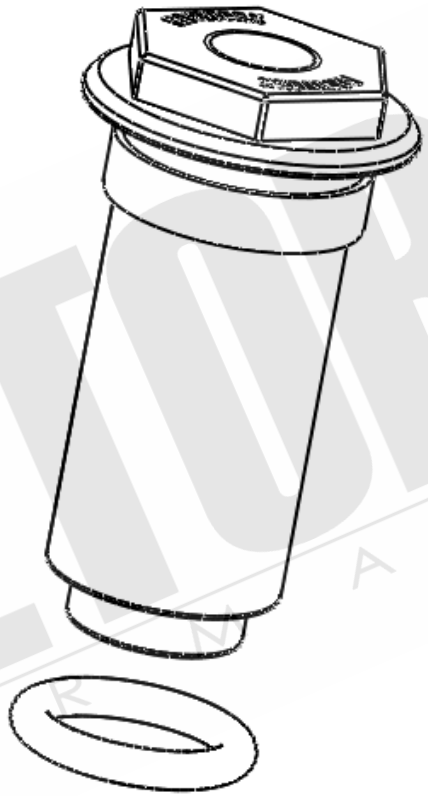
**A** 1 x RTX613 junction valve

**B** 2 x O-ring, 13 x 3 mm

**C** 2 x copper washers for the banjo bolt

## Tools and materials

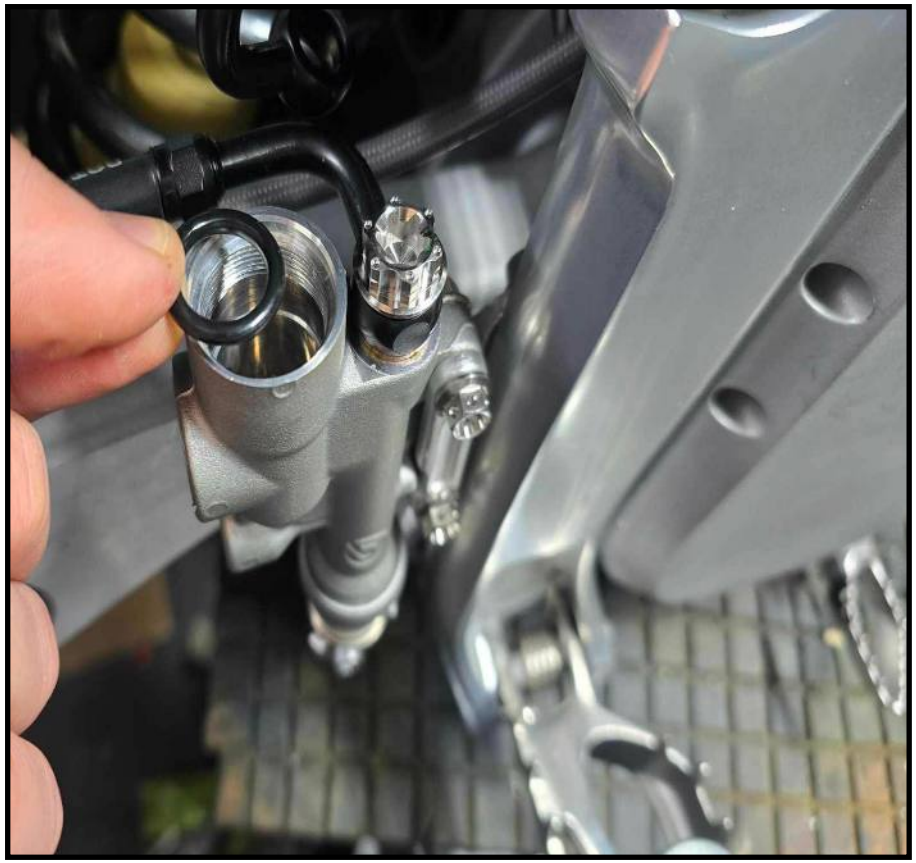
- Calibrated torque wrench
- Brake fluid as shown on your master cylinder cap
- Reverse-bleed kit (we use the Phoenix Systems V5) or a 200 cc syringe
- Clean lint-free cloth or tissue



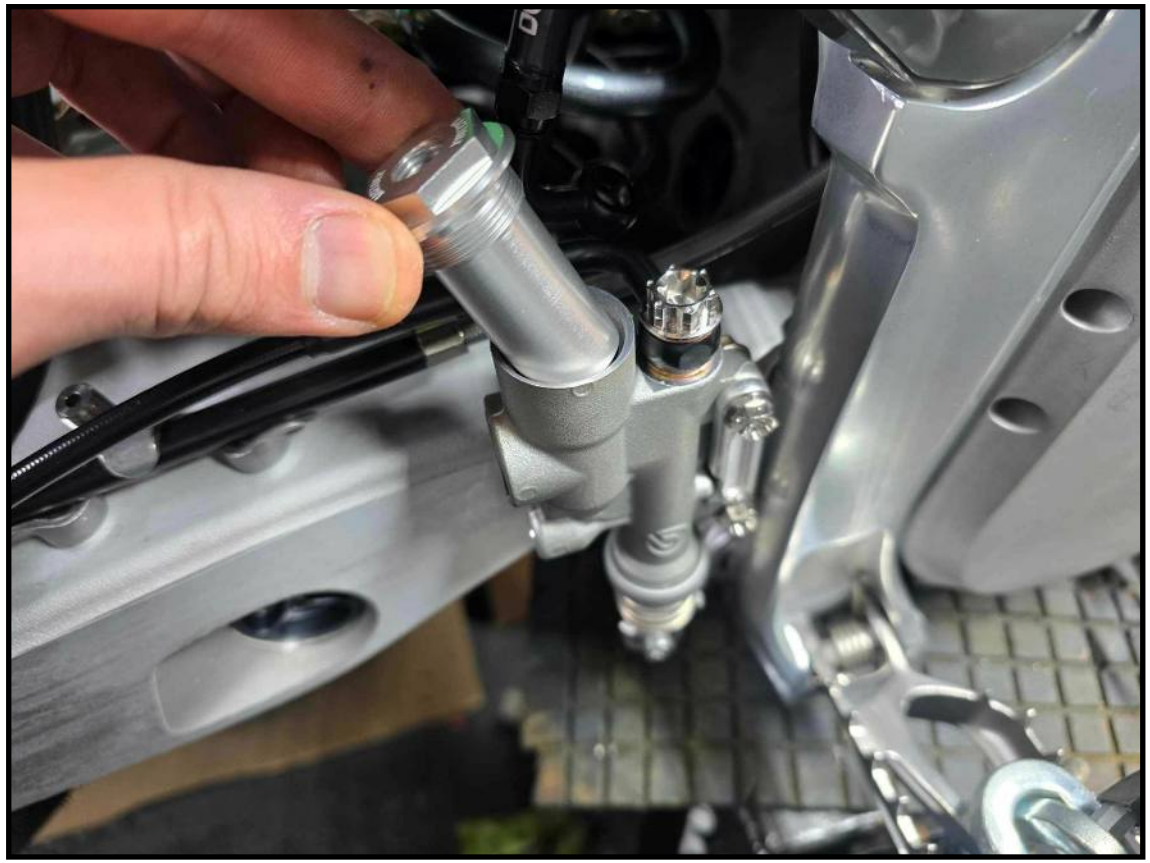




**1.** Remove the screw cap and O-ring.



**2.** Fit the supplied O-ring (B).



**CAUTION: DO NOT REFIT ANY ORIGINAL MASTER CYLINDER PARTS**

**3.** Fit the junction valve (A).

**WARNING: Do not refit any of the parts removed from the original master cylinder. Use only the supplied O-ring.**



**CAUTION: BANJO 23 Nm, SUPPLIED COPPER WASHERS. BLEED BEFORE RIDING**

**4.** Fit the brake line from your thumb brake or hand brake to the junction valve as shown, using the banjo bolt and the copper washers supplied. Tighten the banjo bolt to **23 Nm**.

**5.** Bleed the system. Air will be trapped between the rear master cylinder and your thumb brake or hand brake, so a conventional bleed is not recommended. Use a reverse (back) bleed instead.

We use the Phoenix Systems V5 reverse-bleed kit, available on our website. A 200 cc syringe will also do the job.

**Check the lever or pedal is firm and there are no leaks before riding.**



## After installation: final checks

**1.** The junction valve is fitted with the supplied O-ring only.

**2.** The banjo bolt is tightened to 23 Nm with the supplied copper washers.

**3.** The system has been fully bled. The lever or pedal is firm, with no sponginess.

**4.** There are no leaks at the junction valve or any other joint.

**5.** All brake fluid has been cleaned up and none is on the tyres, discs or pads.

**6.** The brake light works.

**7.** Test the brakes at low speed in a safe area before riding normally, and re-check after the first ride.

**If anything is unclear or does not fit correctly, stop and contact us before riding.**

## Warranty and liability

Racetorx Ltd accepts no responsibility for damage, loss or injury caused by incorrect installation, misuse, modification of the product, or failure to follow these instructions. Our warranty does not cover damage caused by incorrect fitting.

### Contact us

Racetorx Ltd, Peterborough, UK
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Web: www.racetorx.co.uk

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