Installation manual

RACETORX®

PERFORMANCE

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BMW S1000RR/R/XR

Gear shift support

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.

Gear shift parts

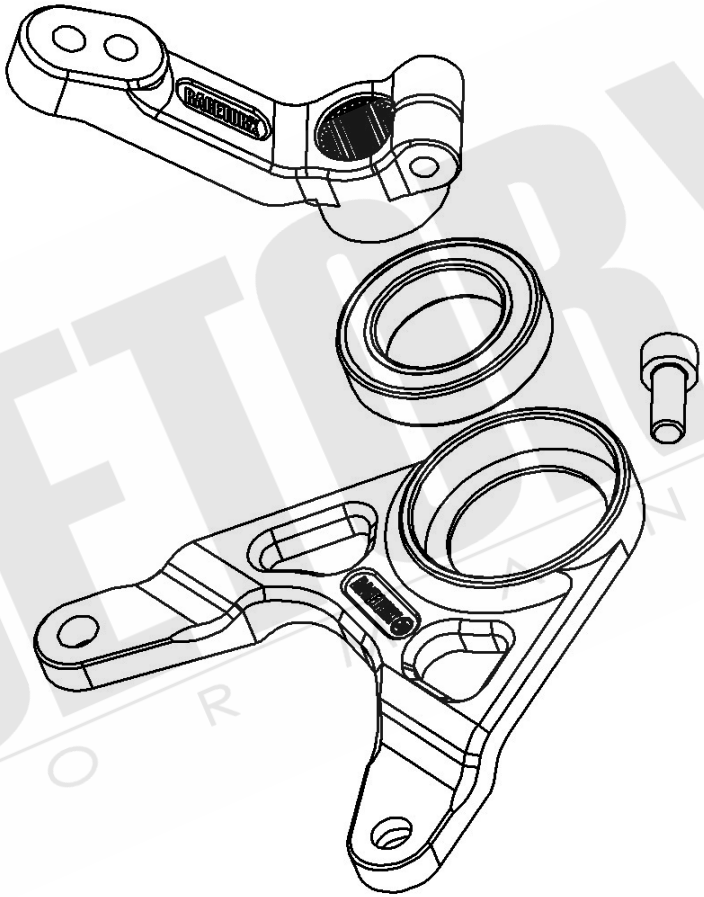
- With the engine off, check the gear lever selects every gear smoothly with no binding.
- Check nothing touches the exhaust, frame, chain or bodywork through the full range of movement.
- Refit any fairings, covers or guards removed during fitting before riding.

Torque settings

Fastener	Torque	Notes
M5 gear arm pinch bolt	7 Nm	
Sprocket cover bolts (all 4), or the 2 supplied bolts if no cover is fitted	8 Nm	Into OEM crankcase threads
Gear linkage to gear arm (OEM bolt)	8 Nm	BMW OEM value. Apply threadlock

Tools and materials

- Calibrated torque wrench (low range)
- Torx bits (T30 for the sprocket cover)
- Stubby Allen key for the pinch bolt
- Threadlock

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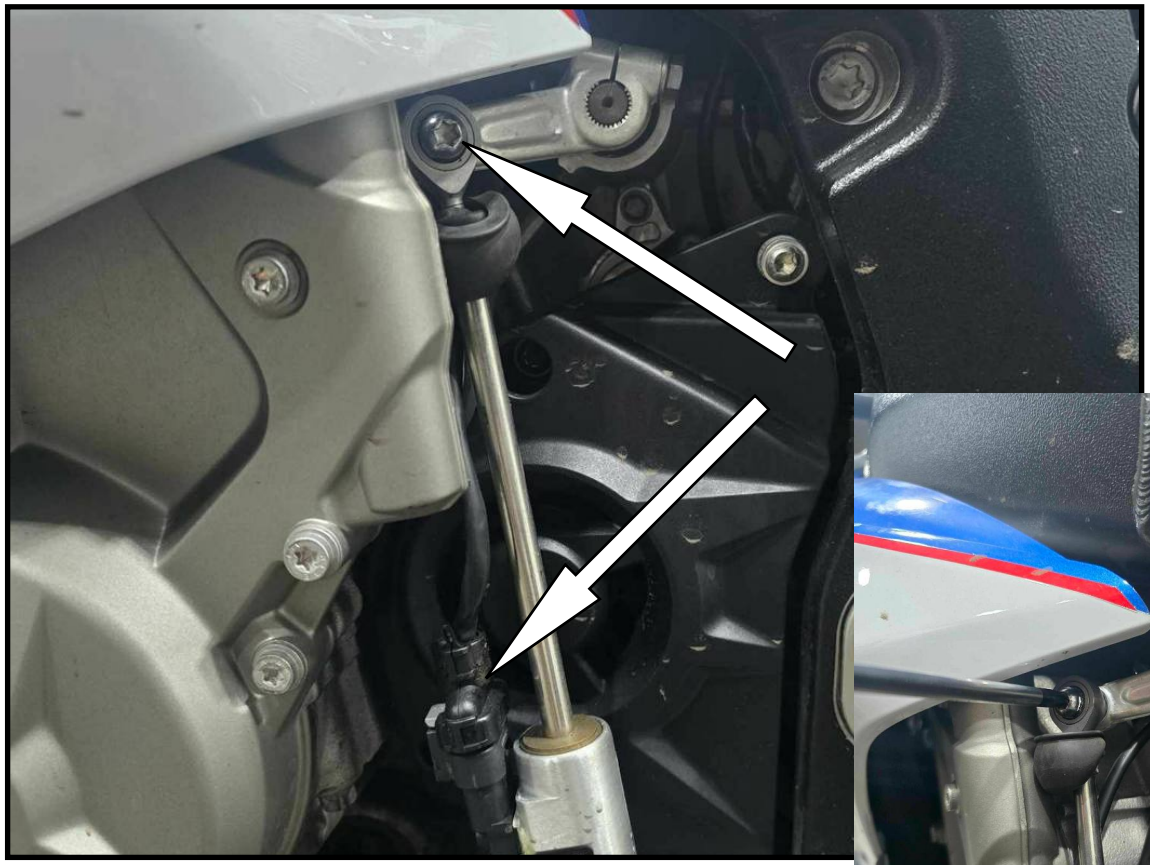
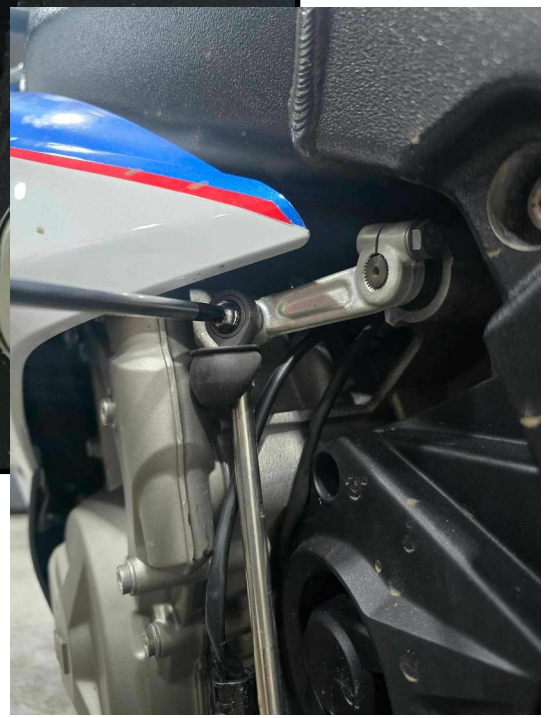
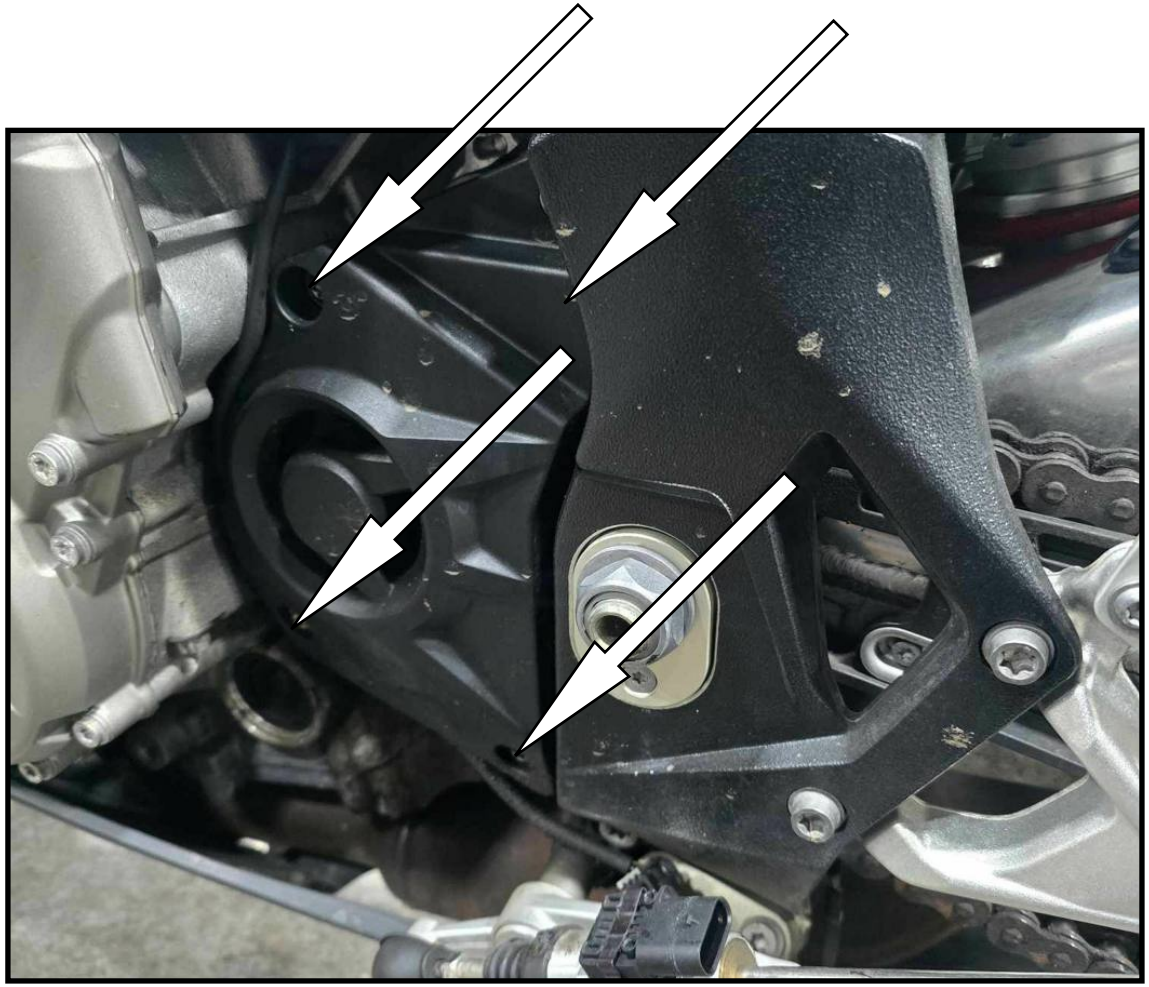




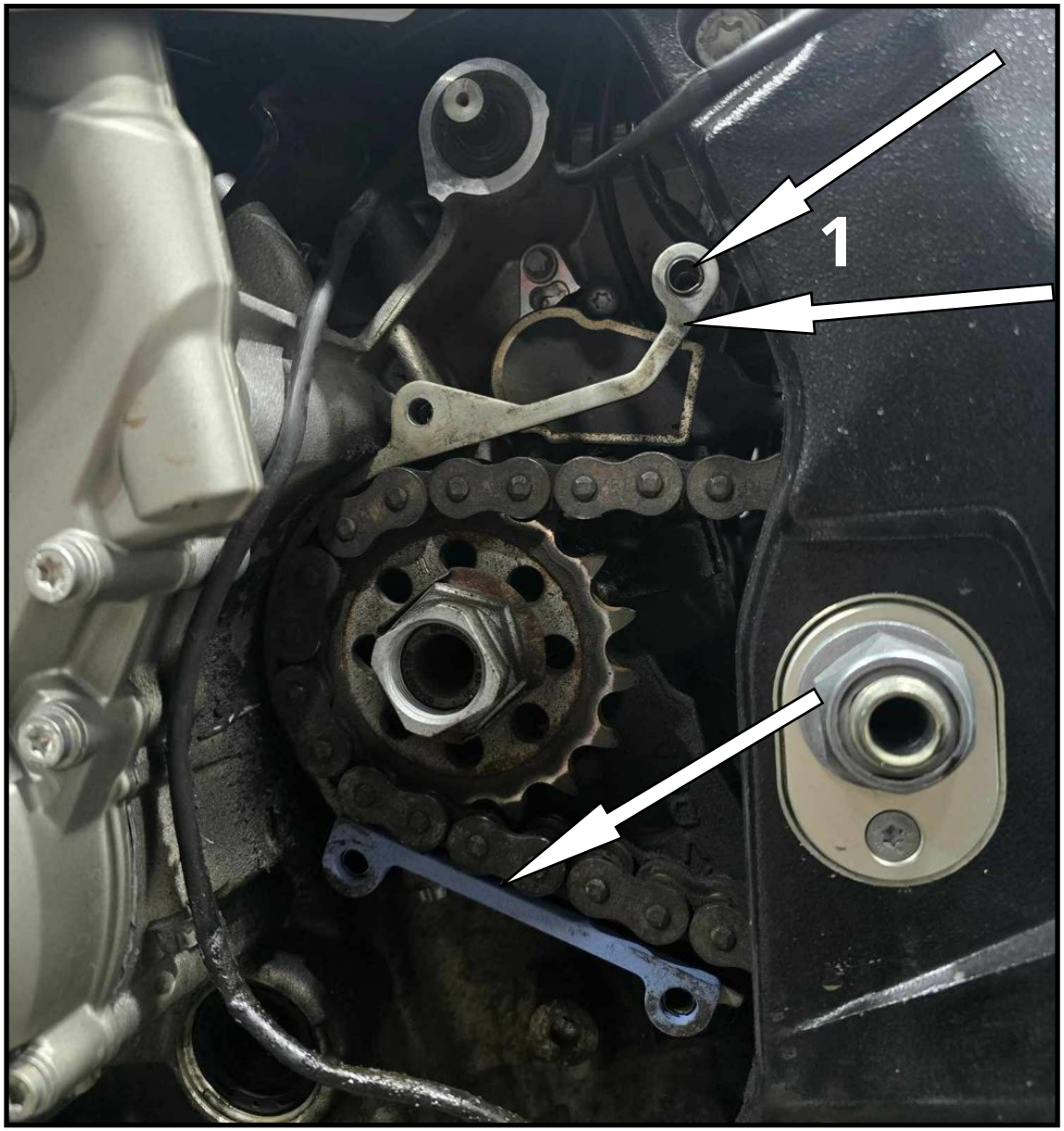
1. Remove the bolt and plug on the quickshifter.

2. Move the quickshifter away from the sprocket cover.



CAUTION: DO NOT LOSE THE 4 LOOSE SPACERS

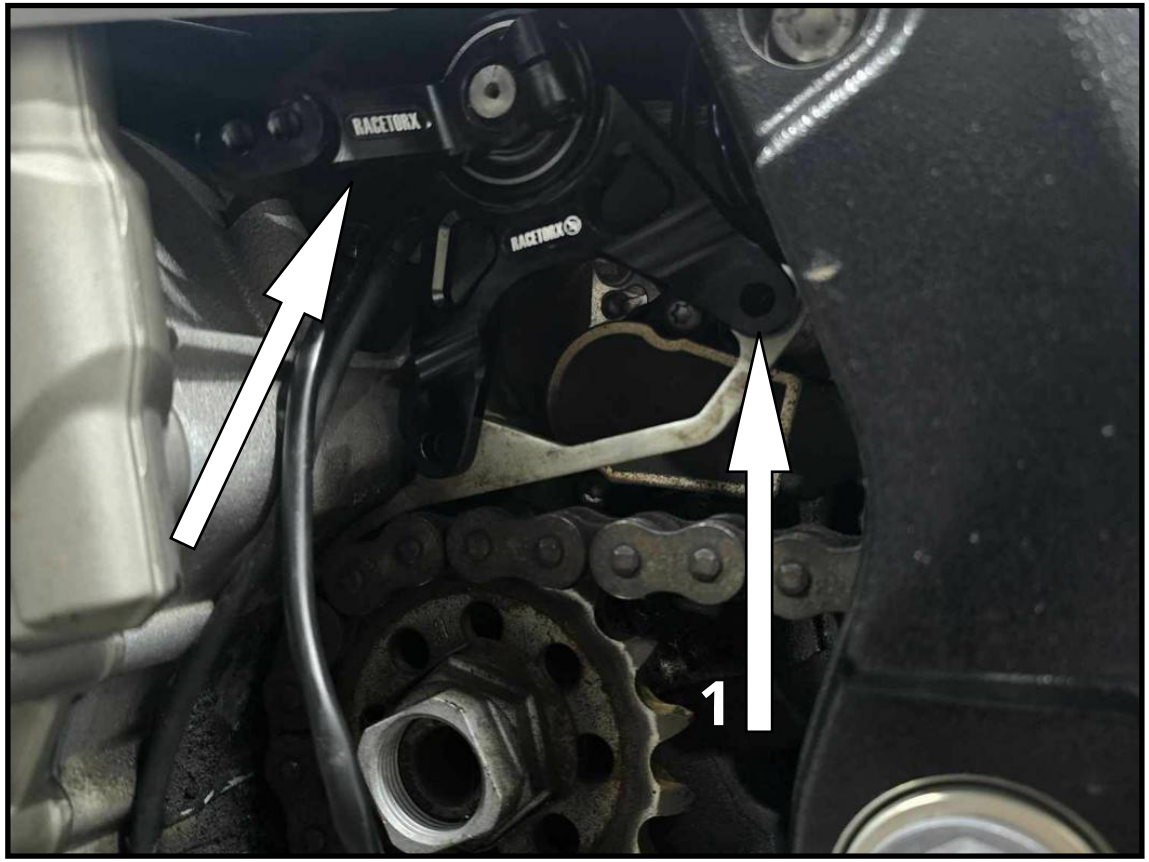
3. Remove the bolts holding the sprocket cover and remove the cover. Make sure the 4 spacers in the cover are there, and do not lose them, as they are loose.



4. Place the supplied plastic spacer over the bottom holes.

If you do not use a sprocket cover, skip this step and use the bolts supplied in the kit to mount the gear shift support.

The chain fin/guard and dowel "1" must be fitted for this installation.



5. Slide the assembly over the gear shaft in the same orientation as the OEM arm.

The slit for the OEM gear arm pinch bolt lines up with the dot mark on the end of the gear shaft. Use this to set the orientation of the Racetorx gear arm.

6. The bottom-right hole "1" must press over the dowel so it sits flush. This gives perfect alignment.

CAUTION: HOLE "1" MUST PRESS FULLY OVER THE DOWEL



7. Tighten the Allen pinch bolt to **7 Nm**. Space is tight, so you will need a stubby Allen key or similar.



8. Fit the sprocket cover over the supplied plastic spacer and over the gear shift support.

9. Tighten all 4 sprocket cover bolts to **8 Nm**.

No sprocket cover fitted? Use the 2 supplied bolts and washers to mount the gear shift support and tighten them to **8 Nm**.



10. Refit the gear linkage bolt with threadlock and tighten to **8 Nm**. Refit the quickshifter plug, then put the rubber cover back over the bolt.

There is an extra bolt position for a shorter shift.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After installation: final checks

1. All bolts are tightened to the torque values in this manual.

2. With the engine off, operate the gear pedal by hand. The gear shaft must move smoothly, with no binding or sticking, and select every gear.

3. Nothing touches the exhaust, frame, chain or bodywork through the full range of movement.

4. All fairings, covers and guards removed during fitting have been refitted.

5. Re-check all fasteners 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

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