Installation manual

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Honda CBR/CB/RC51

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

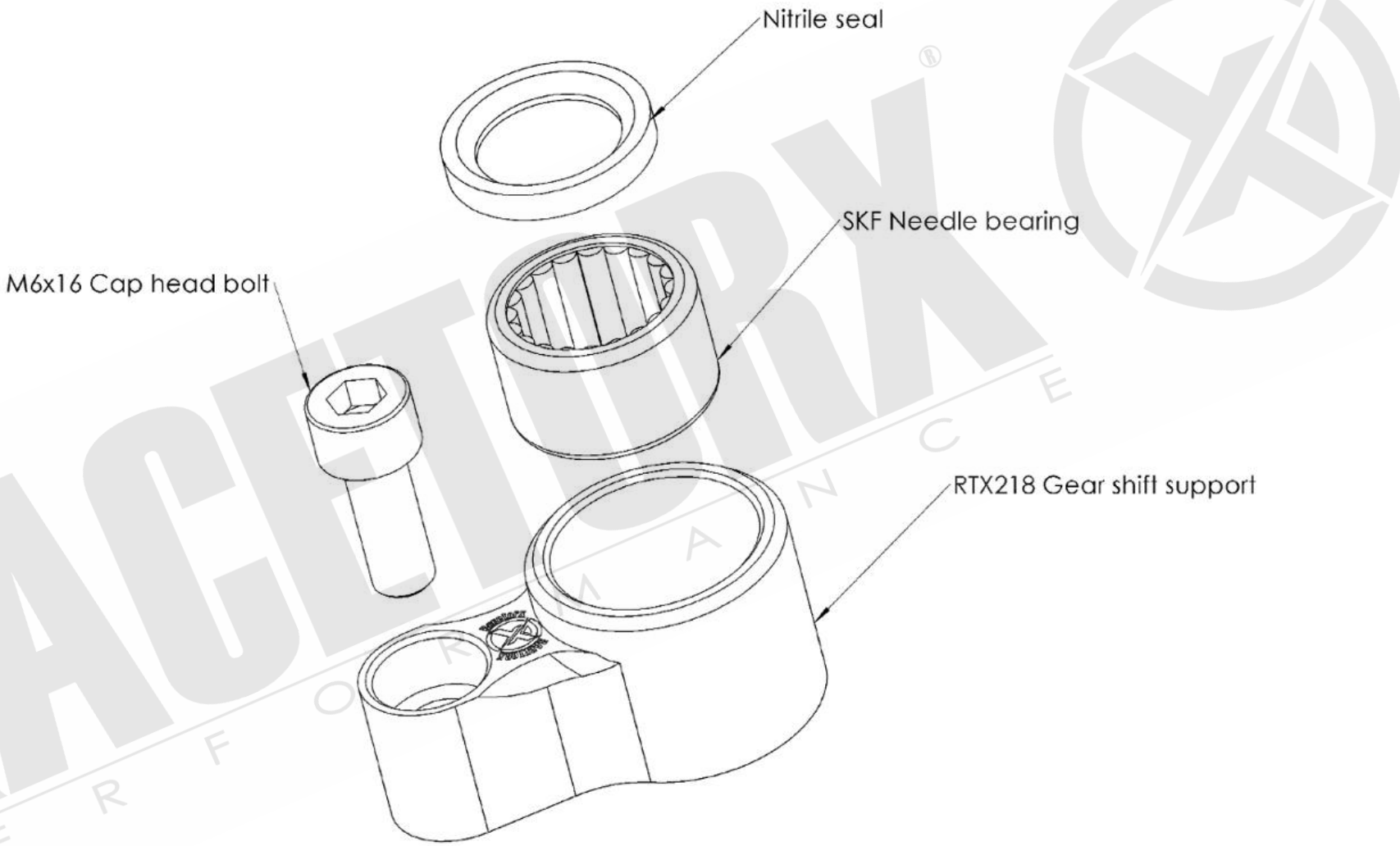
- With the engine off, check the gear lever selects every gear smoothly with no binding.
- Check nothing touches the exhaust, frame, chain or bodywork through the full range of movement.
- Refit any fairings, covers or guards removed during fitting before riding.

Torque settings

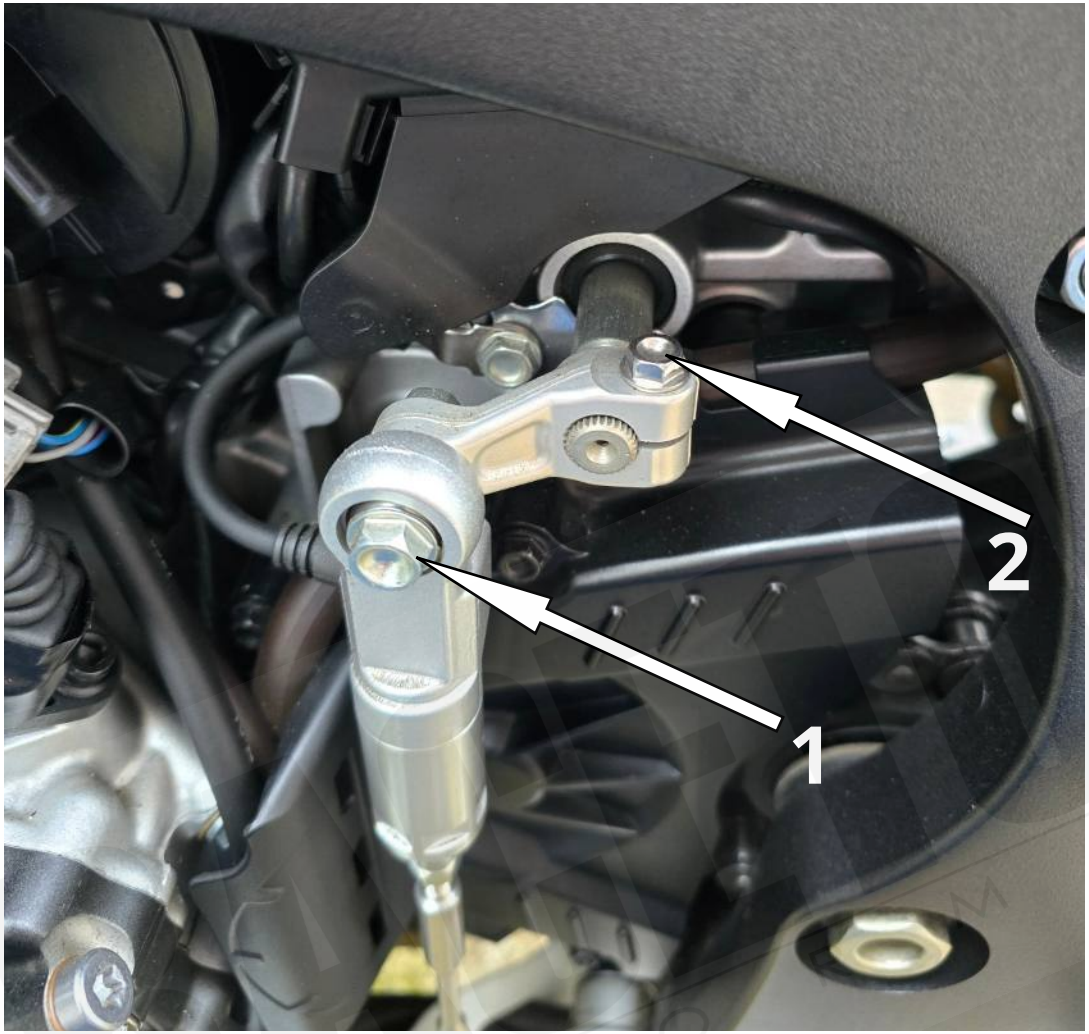
Fastener	Torque	Notes
M6x16 cap head bolt (bolt "1", step 8)	10 Nm	Into OEM thread. Honda standard
Gear arm pinch bolt (bolt "3", OEM)	9.8 Nm	Honda OEM value
Gear linkage rod to gear arm (OEM bolt)	10 Nm	Honda standard M6

Tools and materials

- Calibrated torque wrench (low range)
- Allen keys / sockets
- Circlip pliers
- Grease for the bearing

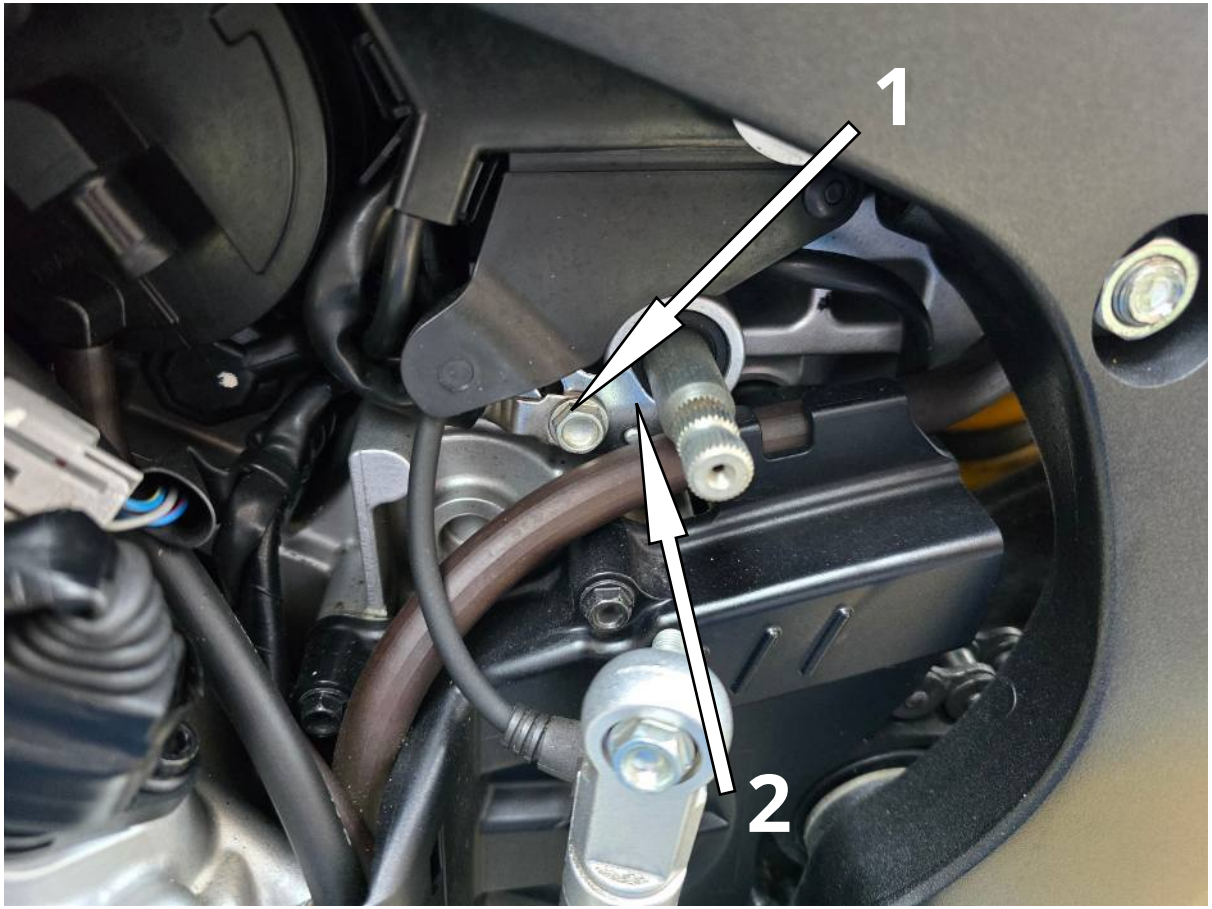

Nitrile seal
SKF Needle bearing
M6x16 Cap head bolt
RTX218 Gear shift support





1. Remove bolt "1" and move the shift linkage to one side.

2. Remove the bolt and gear arm "2". Note that the gear arm pinch slot lines up with the dot mark on the end of the spline shaft. You will use this to set the orientation later.



3. Remove bolt "1".

4. Remove c-clip "2". The bolt and c-clip are not needed again.



5. Grease the bearing.

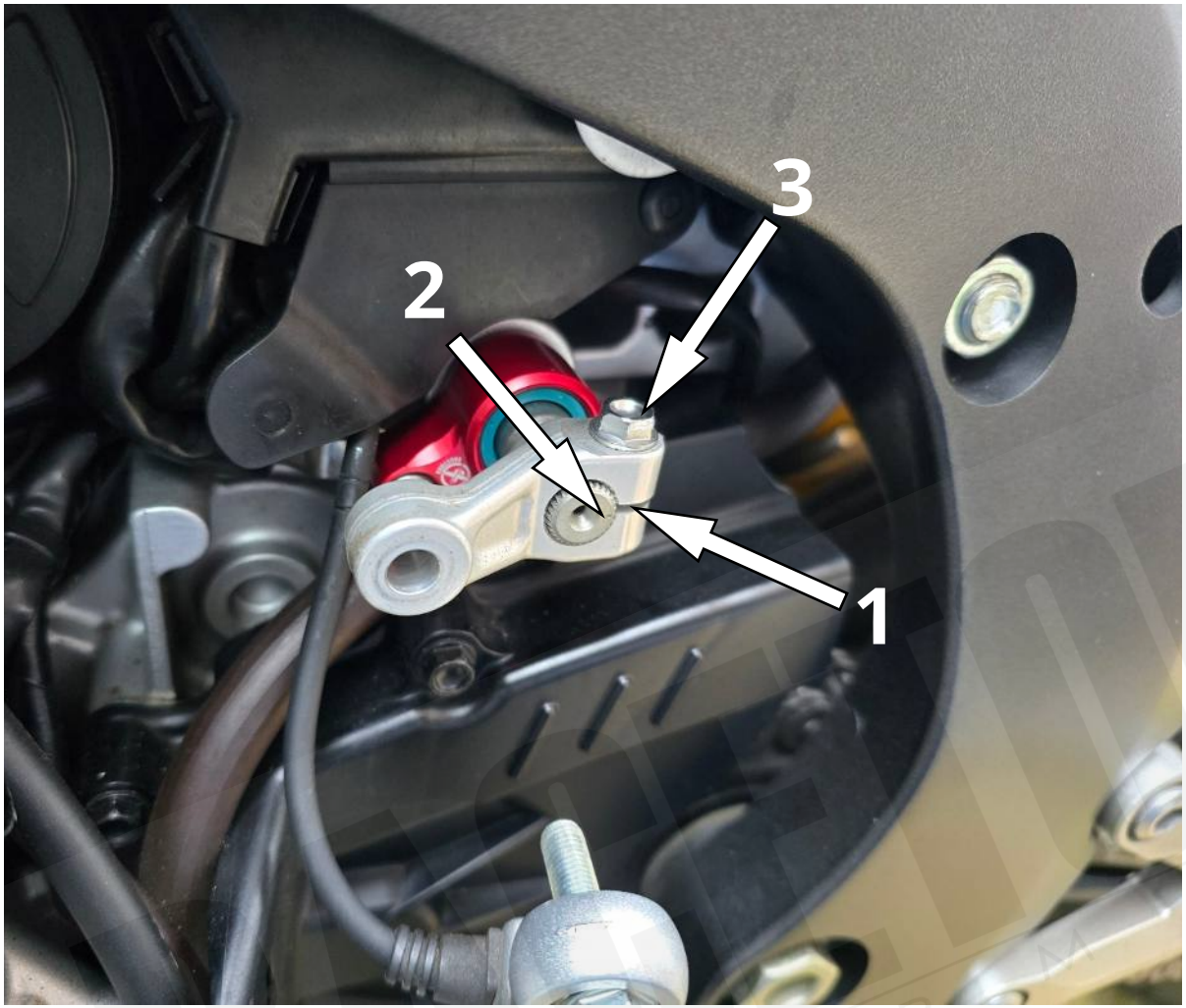


6. Fit the gear shift support over the gear shaft and line it up with the bolt hole.

7. On later models the earth cable sits behind the gear shift support.



8. Fit bolt "1" and tighten to **10 Nm**.



CAUTION: PINCH SLOT MUST LINE UP WITH THE DOT MARK

9. Line up the pinch slot "1" with the dot mark "2" to set the correct orientation.

10. Fit bolt "3" and tighten to **9.8 Nm**.



11. Refit the gear linkage rod to the gear arm with bolt "1" and tighten to **10 Nm**.



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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