

Challenge Frontsuspension Dealer info sheet 1/2

Standard inspection of the Challenge front suspension

The dust cup has to be fitted correctly around the bearing plate and the buffer ring. Look frequently for cracks in the injection molded carbon parts. If the carbon parts are damaged they have to be replaced immediately so no bigger damage can follow. Check if both the fixation screws are in place, and the rubber buffer on signs of wear.

Play in the in the steering or a bad steering control can be coarsed of a fall whits damaged the injection molded carbon parts. Replace directly. Never let a suspension on the road with damaged or cracked carbon parts.

(De)mounting and greasing

Screw the positioning Screw in de closing cap so there will be space on the gas cartridge. Remove the closing cap, the gas cartridge and the rubber buffer.

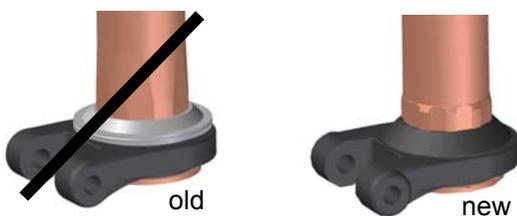
Loosen the nut of the span bold. Slide the suspension in and push the span bold to the rear side out of the fork. Let the fork slide out of the tube.

Clean the tube and the CrMo-slider. Look for signs of wear.

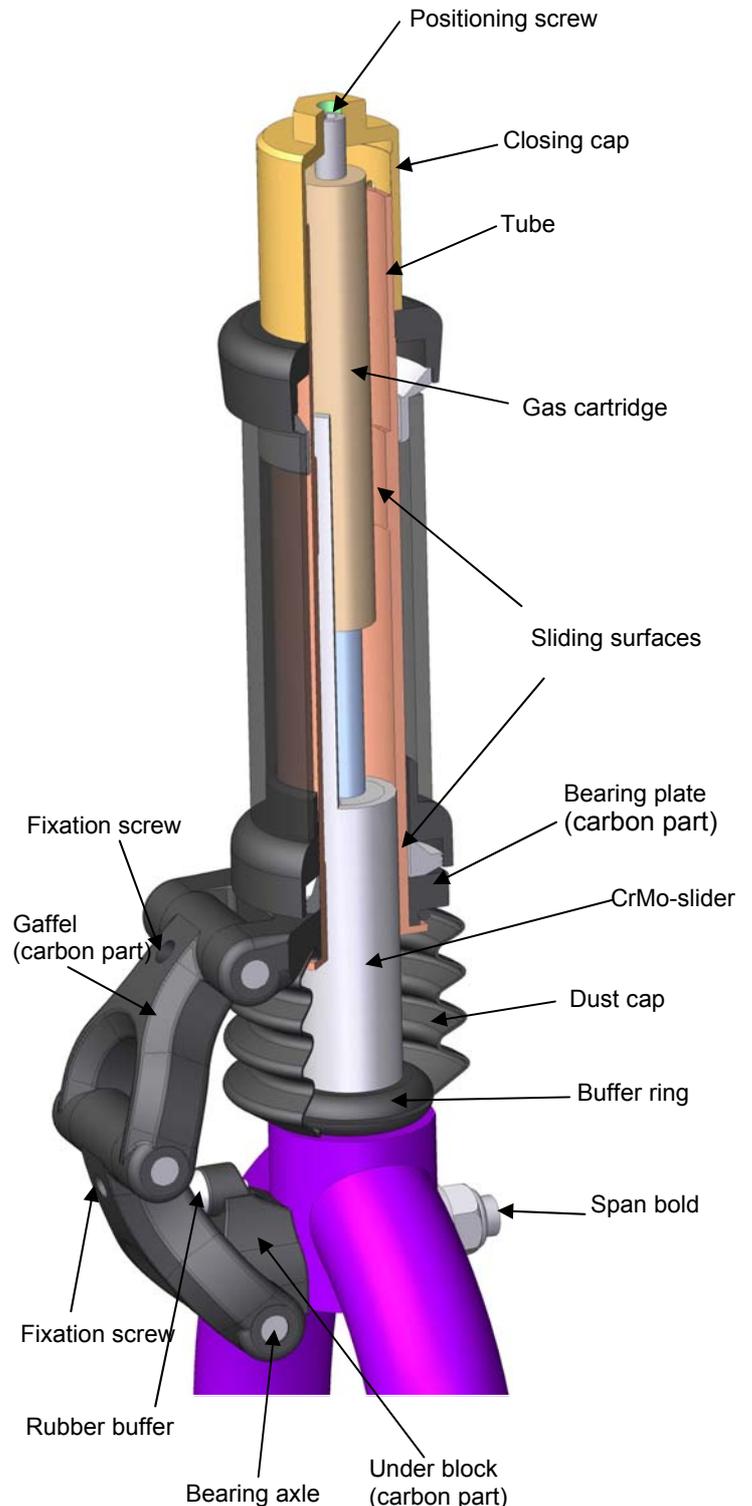
Grease the tube well with Challenge Suspension Grease. Especially between the sliding surfaces. Mount the buffer ring and dust cap on a clean (free of grease) slider axle. Put a thin even layer of grease on the slider axle. Replace the fork in the tube and mount the span bold. Be sure you have tightened the nut on the span bold (don't forget the mudguard clamp). Replace the rubber buffer and fix the dust cap to the tube. Screw the gas cartridge to the closing cap. Put a lot of grease on the gas cartridge. Replace the closing cap (with gas cartridge) and adjust.

Modification

After the 20th June 2004 a modification has taken place to ease the replacement of the bearing plate. This means that the lower bearing cone is part of the plate and no longer has to be pressed over the tube.



The gas cartridge in under an enormous pressure, never open it or heat it up.



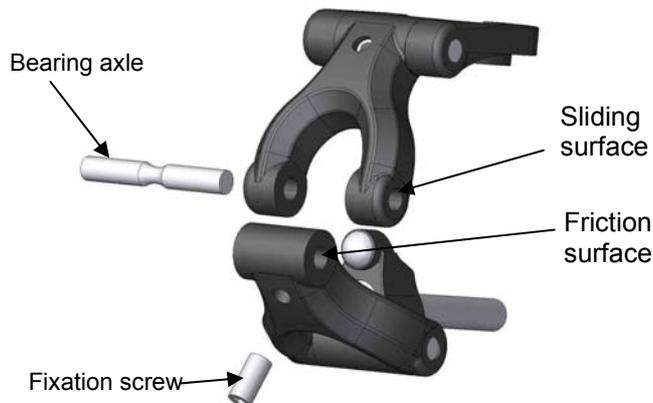
Replacement of bearing axle and 'gaffels'.

The bearing axles, 'gaffels' and bearing plate have to bring the steering power to the front fork. The movement has to be smooth and show no signs of play. The bearing axles have small saving for fixation with the fixation screw or span bold.

It should be that the sliding takes place on de end of the axle and the middle is fixated in the 'gaffel'.

After removing the span bolt and the fixation screws the axles can be pressed out with a 5 mm pin. Replace the parts and pres in the axles. Be sure that the sliding takes place on de end of the axle and the middle is fixed. Don't forget the fixation screws.

Never put a carbon part in a bench-vice to remove the axle, this to avoid cracking.



Replacement of the bearing plate

Take out the fork as written by greasing. Also remove the top steering head bearing and let the tube slide out of the steering head tube. Remove the 'gaffels' and press the bearing plate of the tube. Place the new bearing plate. Position it correctly, there is one plane side. Try if the slider runs smoothly in the tube. Mount in the opposite order.

Replacement of the gas cartridge

Remove the closing cap. Screw the gas cartridge out of the closing cap. The new cartridge has to have an M6x20 fixation screw with loctide 222 against running loose. Screw the gas cartridge with the positioning screw in the closing cap. Grease the gas cartridge well, replace the closing cap and adjust.

Adjusting

The hart of the suspension is a gas cartridge, responding after a load of 350N. Control the cartridge for play by pressing the suspension in by hand. A clear sound is a result of play. Adjust this play by screwing the positioning screw in little by little. If necessary the final pressure can be raised by screwing in maximal 3mm (3 turns) after adjusting play. This final pressure has no influence on the starting response. At the high end 1mm results in 100N. On request there are also 300 and 400N cartridges available.

