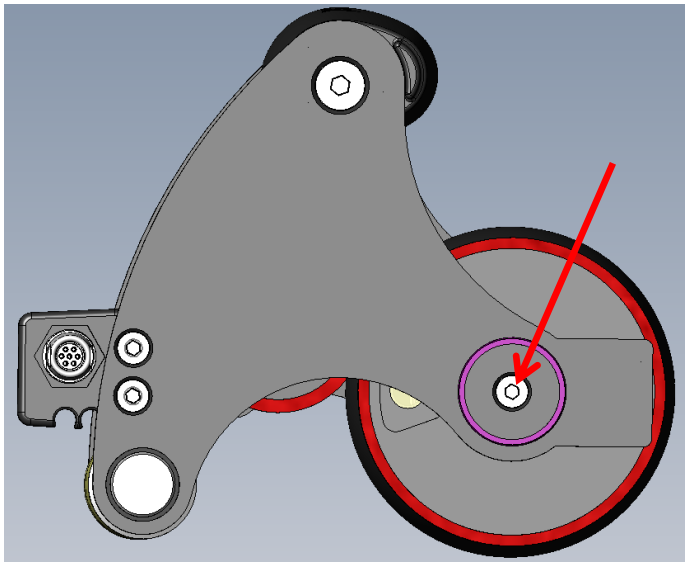
Tyre replacement on Corrosion WheelProbe

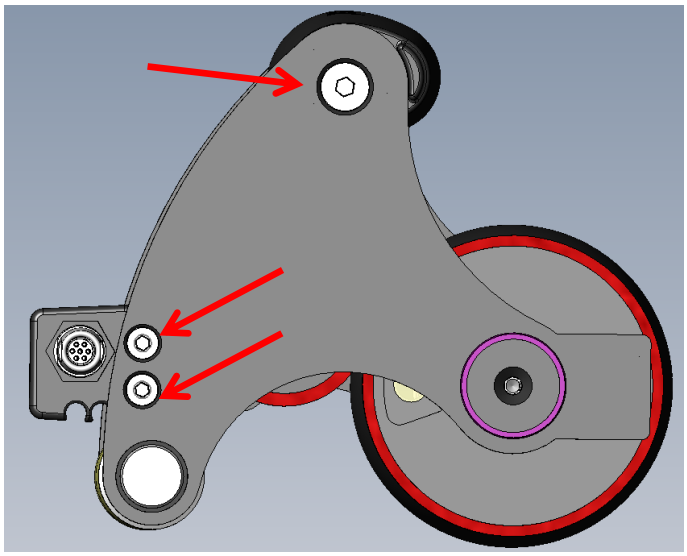
Step 1: Remove countersink screw from end of axle

Start with the Wheel Probe drained of water.

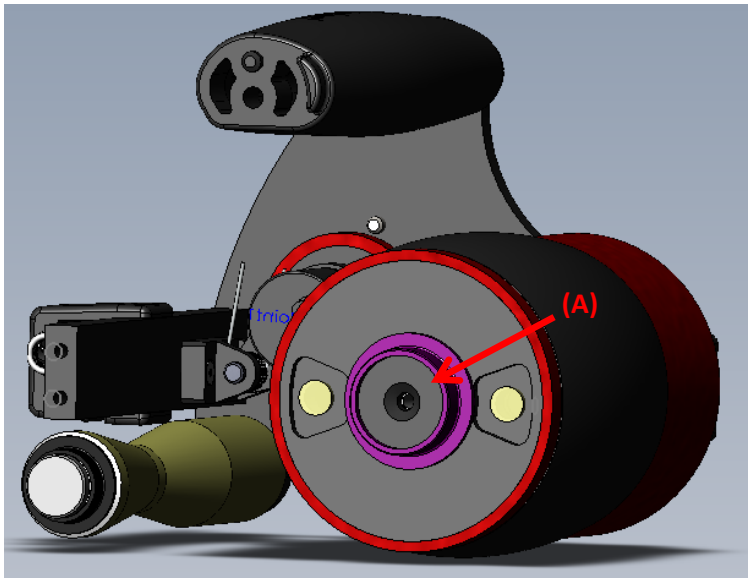


This fastener may be stiff, and should always be re-fitted with some copper grease. If in doubt use a new fastener on reassembly.

Step 2: Remove rear brace and top handle screws

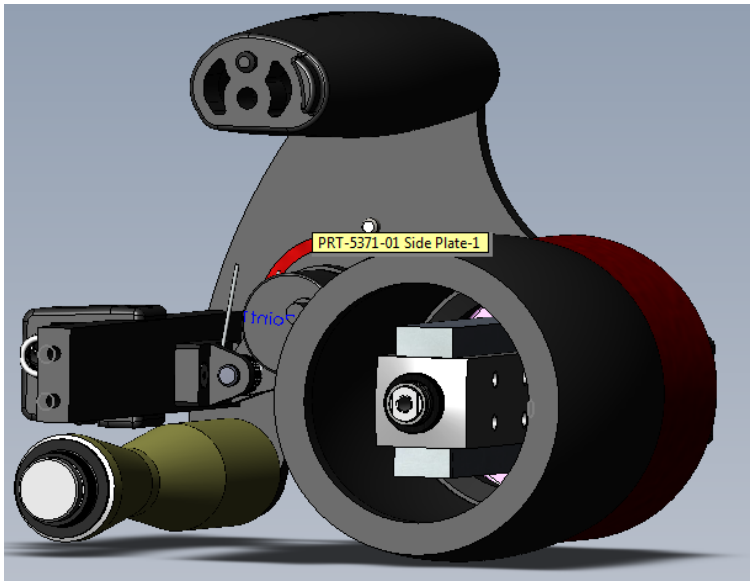


Step 3: Remove the side plate from the WheelProbe



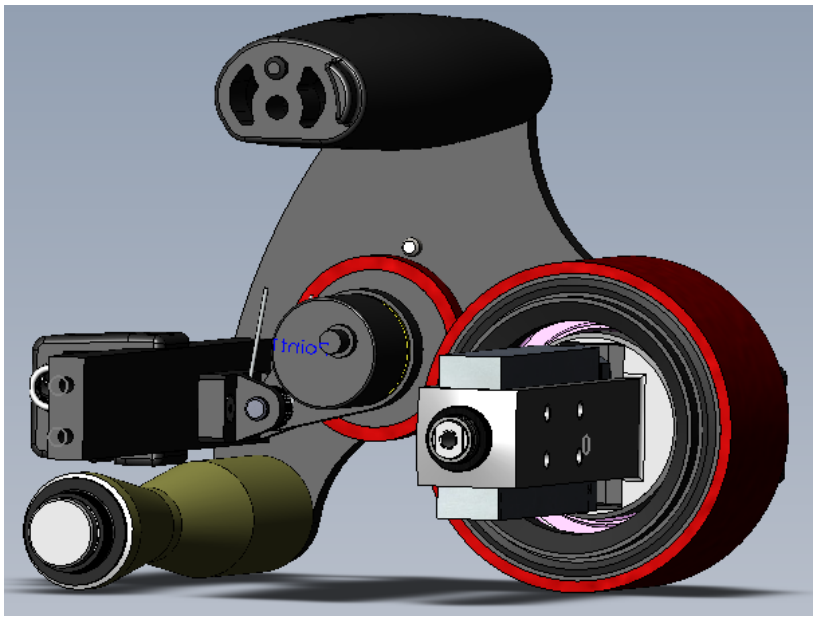
The small disc (A) and dry bearing may come away with the side plate, otherwise remove them separately.

Step 4: Remove the roller end plate



Gently lift the roller side plate way, try not to twist the plate when removing as this can cause damage to the small seal and bearing.

Step 5: Remove the tyre



The tyre can now be removed by hand, no force should be required.

Step 6: Examine condition of array, axle and seals

Whilst the wheel probe is disassembled, examine the array and axle for corrosion, limescale or microbiological build-up. Clean the front surface of the array with plain water and a non-abrasive cloth. Remove any deposits but be very careful not to scratch the surface of the black anodised aluminium components.

Check the smooth operation of the main bearing and seal.

Check that the front face of the array is aligned with the axle.

Check that the small seal in the side plate is in good condition.

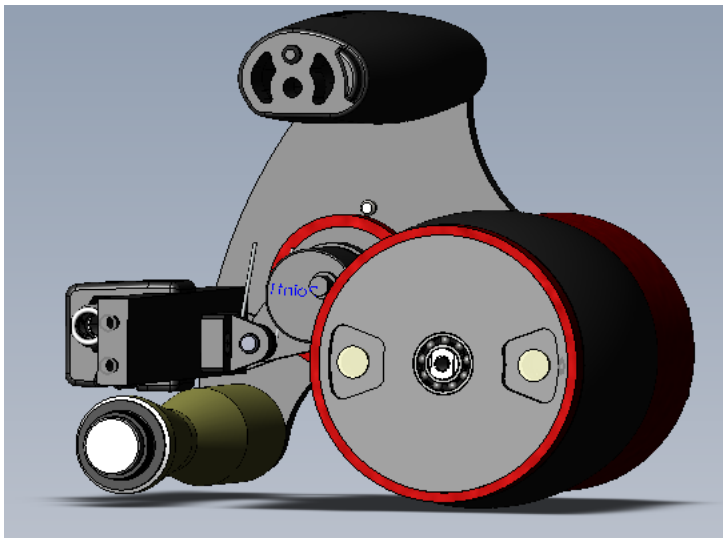
Step 7: Fit new tyre

Check that the condition of the new tyre is good, and free from deposits. Check that the sealing faces at each end of the tyre are smooth and free from damage.

Do **not** squeeze the tyre by hand, as this can cause cracking in the rubber.

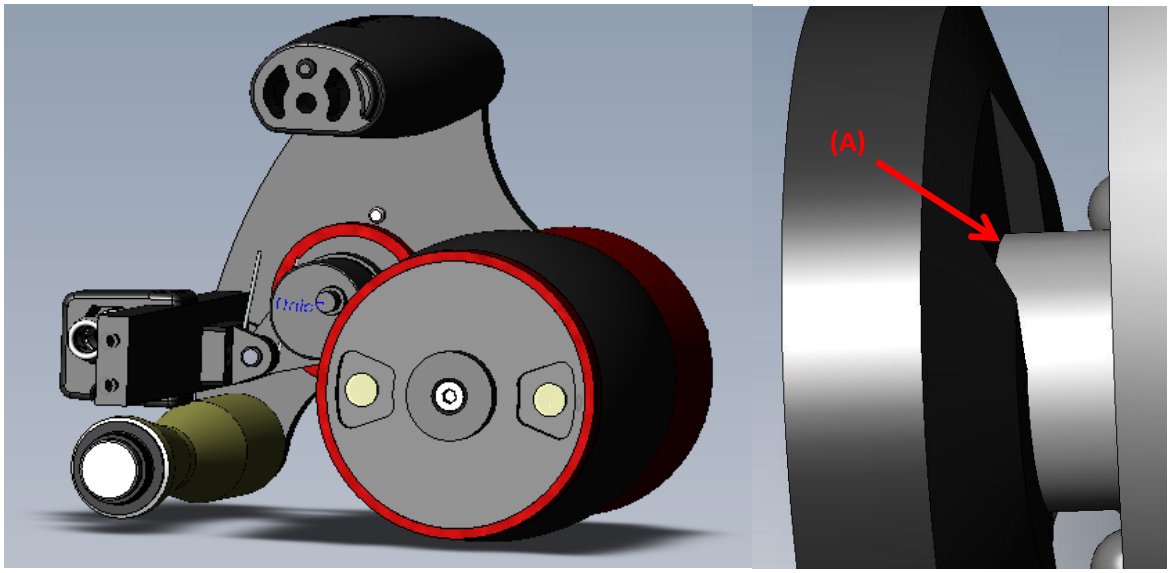
Fit the new tyre in place of the old one

Step 8: Re-fit the end plate



Fit the side plate onto the axle, taking care not to damage the small green seal as it fits over the end of the axle. Press the side plate firmly against the tyre.

Step 9: Fit the retaining disc

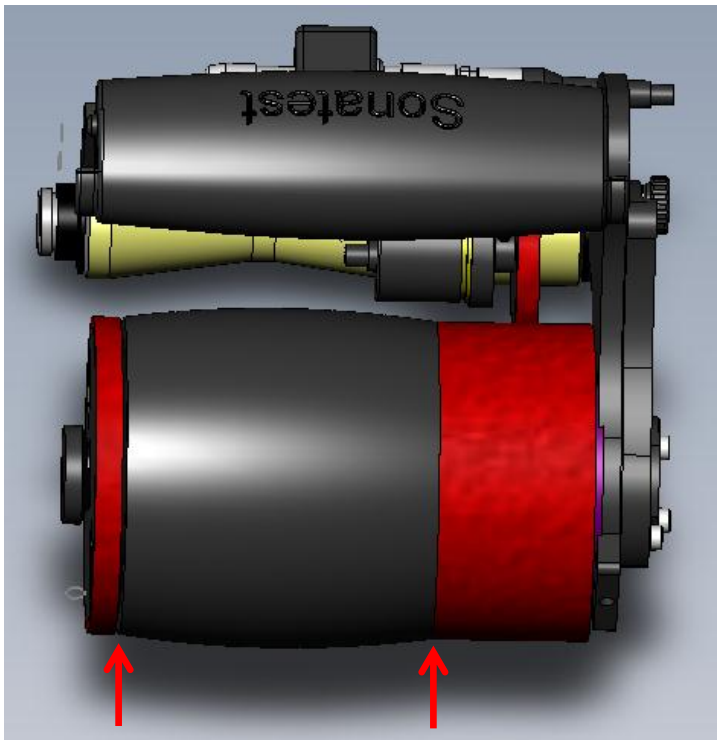


Check that the slot in the disc aligns with the slot in the axle (A).

Apply some copper grease to the countersink fastener.

Screw in the fastener ensuring the disc is properly located. Apply hand torque only.

Step 10: Check the tyre fits

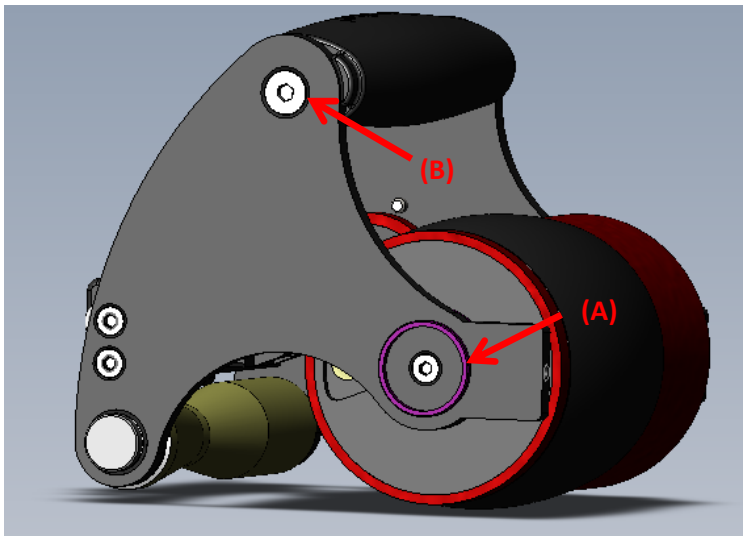


Check the gap between the side plate and the tyre.

The tyre should be firmly clamped between the side plates.

If the tyre is free to move, check the alignment of the circular retaining disc in Step 9

Step 11: Refit the side plate of the wheelprobe



Ensure dry bearing (A) is fitted

Apply hand torque only to the handle fastener (B) to prevent damage to the plastic thread in the handle.

Step 12: Re-fill the wheel probe and check operation

Re-fill the wheel probe with water. Use de-ionized/distilled water and add corrosion inhibitor/biocide solution as recommended.

Check that the wheel probe rolls correctly.

Check that water does not seep from the edges of the tyre when rolling on a flat surface. Do not squeeze the tyre, as this will force water out.