

03 Conquest Rebuild Kit

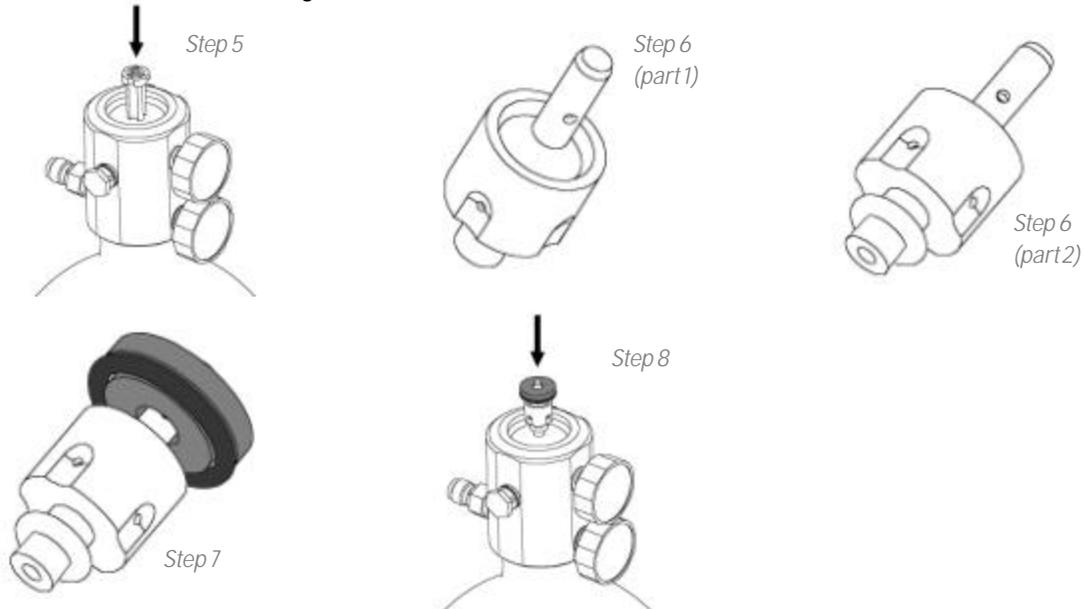
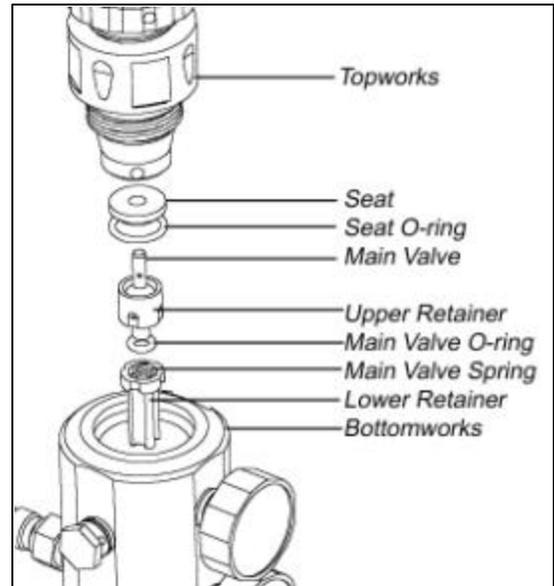
This Conquest rebuild kit contains the parts you need to deal with the most common difficulties experienced during the life of your Conquest system. Please refer to the table below, If your problem cannot be fixed easily or you are unsure in any way, please contact our tech support staff by email (info@macdev.net)

Problem	Likely solution
Pressure creep or shutdown	Replace the high pressure seals
Air leaking from the on/off cap	Check the piston o-rings first, if these are correct, replace the high pressure seals
Air leaking from the fill nipple	Replace the fill pin

Replacing the high pressure seals

Leaking high pressure seals can cause your Conquest to spike, leak, shutdown or creep. Do not replace these seals unless you are experiencing problems. The high pressure seals are the seat o-ring, seat and main valve o-ring.

1. Ensure that all pressure is relieved out of the system.
2. Use a thin adjustable wrench to loosen the regulator topworks from the bottomworks.
3. Carefully unscrew the regulator topworks completely from the bottomworks. Between these two halves, you will find the high pressure parts. Remove all of these parts and lay them out on a clean surface – some parts may need to be gently tapped out of the bottomworks.
4. Identify the main valve, main valve o-ring, seat and seat o-ring, then put them aside (so they can't get mixed up with new parts).
5. Put the main valve spring into the upper retainer (if it isn't already in there) and drop it into the bottomworks.
6. Take the replacement main valve and slide it into the upper retainer (as shown). Then slide the main valve o-ring over the shaft of the main valve.
7. Make sure the seat o-ring is located on the seat underside. Then slip the seat and o-ring over the nose of the main valve.
8. Now grab the nose of the main valve and drop the assembly into the bottomworks (on top of the lower retainer and seat that you already dropped in there).
9. Screw the topworks back into the bottomworks (the main valve nose should push through the hole in the bottom of the topworks). The topworks should screw almost all the way by hand, then use your thin adjustable wrench to just tighten it down a further 1/8th of a turn or so.



Replacing the fill pin

The fill nipple contains a pin that seals the air into your tank after it is filled – this is called the fill pin. If you find that your tank will not hold air or cannot be filled, the problem may be damage to your Conquest fill pin.

To replace the fill pin, follow these steps:

1. Ensure your Conquest tank is completely empty.
2. Use a 7/16" wrench to unscrew the Fill nipple. Under the fill nipple you will find a spring, put it aside.
3. On the underside of the fill nipple, you will see a steel circlip. Use a pair of circlip pliers to carefully remove the circlip. **Be careful of your eyes when using circlips – always wear eye protection.**
4. Once the circlip is removed, the fill pin can be removed from the fill nipple - replace the pin with a new one from the rebuild kit.
5. Re-install the circlip over the fill pin. You will notice that there is a small groove that the circlip needs to pop into to hold the fill pin in place – ensure that the circlip is in firmly before continuing.
6. Place the spring back into the main body before you screw the fill nipple back in. (You will have to use a sealant on the fill nipple – thread tape is acceptable).

Piston o-rings

Your 03 Conquest rebuild kit contains replacement o-rings for each part of your piston. These o-rings should be lubricated with Dow 33 lithium grease.

If your Conquest is leaking air from the on/off cap, the on/off o-ring (on the bottom face of the piston) may be damaged or dislodged. This o-ring should be pressed into the face of the piston before it is replaced in the Conquest.

Other difficulties

If you have any difficulties that are not addressed in this kit – or if you still cannot solve a problem, please contact either your local MacDev tech or macdev online support – info@macdev.net.

