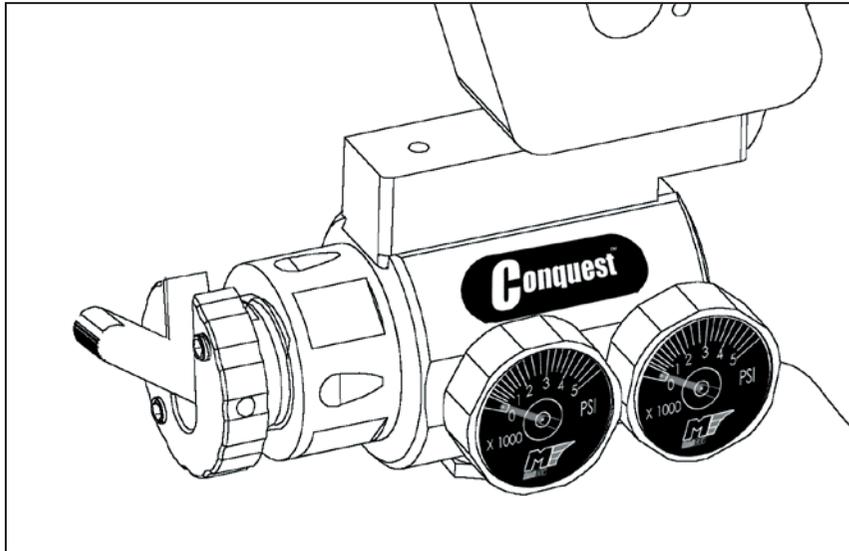




Users Manual



Mac Developments - Australia
www.macdev.net
Info@macdev.net



Users Manual Version 1.30

Copyright Mac Developments Pty. Ltd. 2003

All rights reserved

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of Mac Developments Pty. Ltd.

Notice is hereby given that this manual is part of the article owned in whole by Mac Developments Pt. Ltd., known as indicated in this manual and drawings. All rights of manufacture and reproduction of such articles or any part thereof are reserved by Mac Developments Pty Ltd. Neither said article nor any part thereof may be manufactured or reproduced without the written authorization from Mac Developments Pty. Ltd. All proprietary rights and information are the sole property of Mac Developments Pty. Ltd.

Statement of Liability

Mac Developments Pty. Ltd. Makes no warranties with respect to this documentation and disclaims any implied warranties of merchantability or fitness for a particular purpose. The information in this document is subject to change without notice. Mac Developments Pty. Ltd. assumes no responsibility for its resale or safe handling. Mac Developments Pty. Ltd. assumes no responsibility for physical injury or property damage resulting from its use.

Caution!

High pressure air is very dangerous! This system is not a toy!
Do not hold the system near your face when turning on or off. Never fill the system above 4500psi. Never fill the system if the bottle is damaged or out of hydrotest. Always fill slowly. Do not disassemble with gas in the bottle.

Introduction

The 03 Conquest is a fully balanced, enhanced flow 4th generation paintball regulator. The Conquest is built from precision machined components manufactured on some of the most sophisticated computer controlled machinery in the world today.

Features

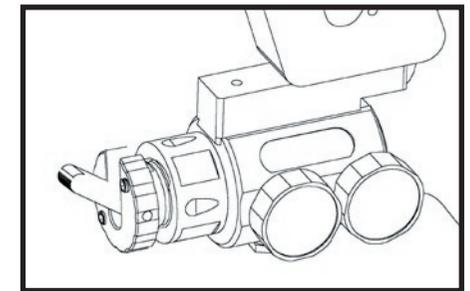
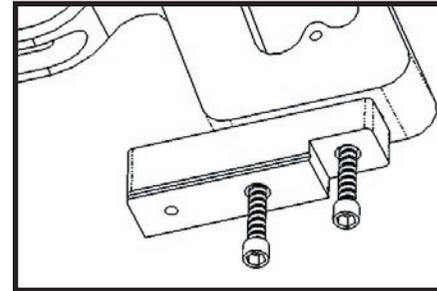
- Dual pressure, balanced regulation
- Optimised high flow seals
- Patented self lubricating, abrasion resistant seal material
- Low pressure on/off with full relief function
- 3 point overpressure safety system
- Harmonised motion piston system, with low maintenance features
- Easy rebuild design - fully user rebuildable
- MacDev micro gauges - side by side configuration
- Filtered gas flow protecting both your Conquest internals and your marker from debris
- Strengthened dovetail mount

Installation

Step 1: Attach the included mounting rail to the base of your grip frame using the two screws provided.

Step 2: Slide the Conquest system onto the dovetail, then lock the system into place using the set screw in the dovetail.

Step 3: Plumb a line from the outlet port (the only empty port on your Conquest regulator) to your marker. Never use a microline, it will choke the flow and restrict the performance of your Conquest. We recommend the use of a MacLine kit (macroline), however braided hose is acceptable.



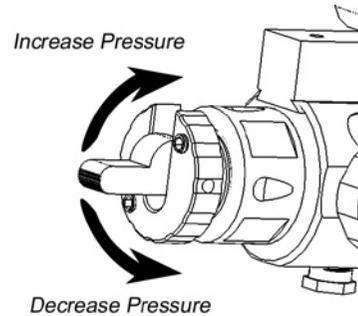
Filling the Conquest system

Check that the on/off lever on your Conquest system is in the off position (lever sticking out) then fill the system slowly. Always ensure that the fill nipple connection is firm before filling the bottle. Never fill above 4500psi. Always use compressed air/nitrogen to fill your system.

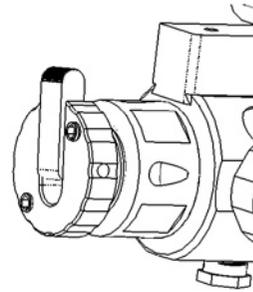
Setting the Conquest outlet pressure

To turn the air on to your marker, push the on/off lever down flat. Check the pressure on your outlet gauge. If the pressure is not correct, then flick the on/off back into the off position before adjusting the pressure. To increase the outlet pressure, you must turn the on/off cap clockwise, to decrease the outlet pressure, you must turn the on/off cap anti-clockwise. To check the pressure, push the on/off lever back into the on position. Repeat these steps until the desired outlet pressure is achieved.

OFF POSITION (pressure adjust)



ON POSITION



Using your Conquest with a gas thru grip

The Conquest is fully balanced, so you can run it directly into your gun using a gas thru grip. In this case, you can set the marker velocity by increasing or decreasing the outlet pressure.

Using your Conquest with an inline regulator

In this case, the Conquest should be set 200psi above the pressure your inline reg is supplying to your marker.

Tourney locking your Conquest

In many cases, adjusting the Conquest outlet pressure can change the velocity of your marker. For this reason, you may be required to lock the outlet pressure for tournament play. To lock the outlet pressure, simply screw the two plastic tipped screws (located on the top of your on/off cap) down onto the body of the regulator - this will allow you to turn the system off without changing the outlet pressure.

Caring for your Conquest

The Conquest is a very low maintenance system, however there are some things that you can do to keep it running at optimum performance:

Piston lubrication

The Conquest piston slides up and down every time you fire your marker. To keep the piston sliding smoothly, it is a good idea to lubricate it every 20,000 shots (10 cases of paint) or 4 months - whichever comes first. Lubricating the piston is very easy, and it is not necessary to empty your bottle. To re-lubricate the piston you should:

1. Flick off the on/off lever and unscrew the on/off cap. Remove the cam disc and load spring.
2. Pull out the piston using a pair of long nosed pliers
3. Clean the piston with a clean rag, and clean the piston bore (inside the regulator) with a clean q-tip.
4. Lubricate the piston o-rings as well as the piston bore (you may need to use a q-tip to get lube into the piston bore)
5. Re-assemble and test your regulator.

On/off lubrication

Each time you turn the system on or off, the on/off lever slides on the cam disc. If you find the system becomes stiff to turn on, it may require lubrication between the on/off lever and the cam disc.

Fill nipple care

When you take a dive, so does your air system - try to avoid getting dirt in the fill nipple of your system. The Conquest comes with a plastic fill nipple cover, use this to keep unwanted dirt out of your system when you play.

Factory approved lubricants

For general purpose lubrication, the ideal lubricant is Molykote 33 or Dow 33 - manufactured by Dow Corning (also commonly known as shocker lube). However any high quality, low temperature silicone or lithium grease should be acceptable. Never use silicone spray - or any other aerosol lubricant.

Troubleshooting

There are very few things that may go wrong with your Conquest system. The most common difficulties are detailed below. If you are unsure about the solution to your problem in any way, contact your local macdev dealer/tech for assistance.

Creeping or inconsistent outlet pressure

If your outlet pressure will not remain constant, you may have a small piece of debris caught in the high pressure seal area. To fix this you need to empty the tank of any pressure, then split the reg in half using an adjustable wrench. Now remove the seat, seat o-ring, main valve, upper and lower retainers and main valve spring and o-ring from the regulator. Clean all of these parts thoroughly and re-assemble the regulator exactly as shown in the diagram. If you are unsure about the re-assembly of the regulator, do not force it - incorrect assembly may damage parts inside your Conquest. If the problem persists, your high pressure seals may be damaged, there is a full set of replacements in the Conquest rebuild kit.

Air leaking from the on/off cap

This problem is usually due to on/off o-ring (located on the underside of the piston). The o-ring may have been dislodged or damaged. To check this o-ring, you do not need to bleed the air from your tank, just unscrew the on/off cap and remove the piston to inspect it. If your on/off o-ring is not damaged or dislodged, it is possible that there is a problem with your high pressure seals - please follow the instructions above for creeping outlet pressures to fix high pressure seal difficulties.

The on/off o-ring is a standard size o-ring (BS006) that is available from most o-ring stockists - if this o-ring is lost or damaged, you should be able to easily obtain a new one. A spare on/off o-ring is included in the 03 Conquest rebuild kit available from most MacDev dealers.

Accessories

Use genuine macdev accessories for best results.

Rebuild Kit

The Conquest rebuild kit contains all the most important parts of your Conquest. This kit is good for peace of mind, especially when entering an important tournament.

Gas Thru Grip

The Gladiator gas thru grip gives you a high volume chamber on the front of your gun for lower operating pressures. The grip features the 2k3 Gladiator milling.

Gladiator Inline

For those users who want extra regulation, the Gladiator high flow inline is the ideal companion for the Conquest air system. It features side adjustment, bottom inlet and ultra high flow internals.

Sonic ASA

The Sonic ASA is specifically designed to fit the Gladiator inline or gas thru to popular paintball markers - designs currently available include:

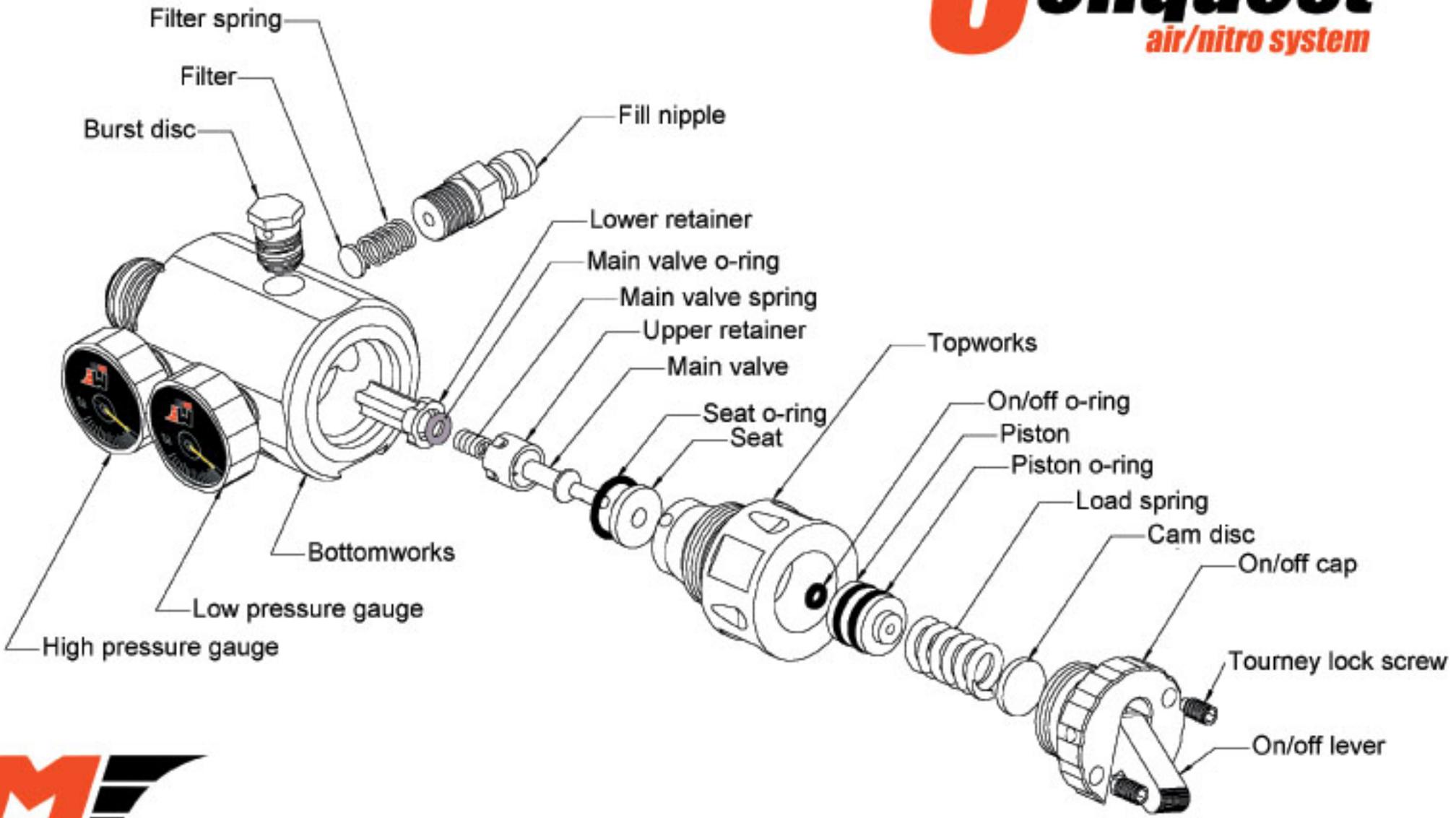
- Angel LCD
- B2K/B2K2/DEFIANT
- Tribal
- AutoCocker

MacLine Kit

The Macline kit includes 3 fittings (1 straight, 1 fixed elbow and 1 swivel elbow) as well as 1" of hose to ensure easy plumbing to any popular marker.

Conquest™

air/nitro system





MacDev 2003

Find us on the web at:

www.macdev.net

Email us at:

info@macdev.net

Australian Office:

Mac Developments
PO Box 584
GyMEA, NSW
Australia 2227

ph: INT+612 9531 5055

fax: INT+6129531 5188

US distributor:

Gramps and Grizzly's Outpost
7203 Arlington Ave, Unit F
Riverside, CA 92503

ph: (909) 359-4859