# **Gladiator Inline Reg Guide**

Please Note: These pages are intended to assist you in maintaining your purchase or troubleshooting any problems. The Gladiator is a low maintenance regulator and is very simple to look after in comparison to most regs on the market. you do not need to perform maintenance on your reg every time you play.

## Installation Guide

The Gladiator will be accepted into all standard ASA adaptor threads. (for example: Cocker, LCD Angel, Tribal)

#### Step 1:

Lubricate o-ring and ASA threads with good quality silicon grease. DO NOT USE OIL.

#### Step 2:

Screw Gladiator into ASA thread. Making sure that the placement of the velocity adjusting screw (on side) is accessible with an allen wrench.

#### Step3:

Select a suitable style hose or macro-line kit (for under 500psi) and plumb into air system or bottom-line adaptor. Never use micro-line, it will be detrimental to the performance of the Gladiator. NOTE: When tightening the fitting into the Gladiator, hold the flats on the bottom of the Gladiator with a wrench - do not tighten against your ASA adaptor!!

#### Step 4:

Turn on air to the Gladiator reg. Wind the adjustment screw clockwise to increase velocity and anticlockwise to decrease velocity. NOTE: always chronograph your marker after adjusting your regulator. Never chrono over 300fps.

#### Step 5:

Put on your goggles, scream out "WHO'S YOUR DADDY?" and run onto the field.

### Maintenance Procedure

Just like you, the Gladiator likes to play paintball. And just like you, the Gladiator doesn't like eating dirt. So always check the quality of air you are putting into your air system otherwise it will adversely affect your inline reg, your gun, your game and the way your team mates look at you when you go over the chronograph.

#### Adjustment screw

If you continually adjust your velocity, then your velocity screw will need to be removed and lubricated with silicon grease. This will keep the adjustment smooth.

#### Piston

The piston is continually sliding up and down inside the piston bore. This will eventually push the lubricant away from the backup ring and o-ring. To remove the piston for lubrication:

- 1. Degas system of all pressurized gas.
- 2. Remove end cap
- 3. Grip the front end of the piston (Brass colored piece) with a pair of long nosed pliers and remove carefully.
- 4. Clean the piston of old grease using a clean rag, do not leave any lint or cotton strands on or between o-ring and backup ring. Re-apply good quality silicon grease to the o-ring and backup ring filling gaps.
- 5. Clean the piston bore using Q-tip removing all old grease.
- 6. Using a clean Q-tip, apply silicon grease to the piston. Do not over apply grease all you need is a thin film.
- 7. Using long nosed pliers, replace the piston into the piston bore the same way as it came out. Take care not to scratch the bore or cock the piston in the bore. The piston should slide freely and smoothly.
- 8. Replace end cap and hose. Re-chrony your marker.

# NOTE: Keeping your piston clean and lubricated always is essential to keeping your Gladiator inline reg consistent over the Chronograph.

# Troubleshooting Guide

#### Inconsistency over the chronograph

Clean and re-lubricate piston o-ring & piston bore.

Check seat for contamination, clean or replace as necessary.

Check paint and barrel match

If all of the above are correct, check your markers internals for problems.

#### First shot over the chronograph is hot

Check to see if the pressure in the regulator is rising slowly, if so, your seat is contaminated, clean or replace immediately. If the regulator is steady, then there must be some other reason causing that first hot shot (perhaps your markers LPR etc).

#### Drop off during rapid fire

Clean and re-lubricate piston o-ring & piston bore.

Check that your air system is supplying enough pressure. For best results use with Max Attack or Conquest air/nitro system

#### Air leaking from between end cap and main body

O-ring has been twisted or damaged during re-assembly. Re-install correctly or replace.

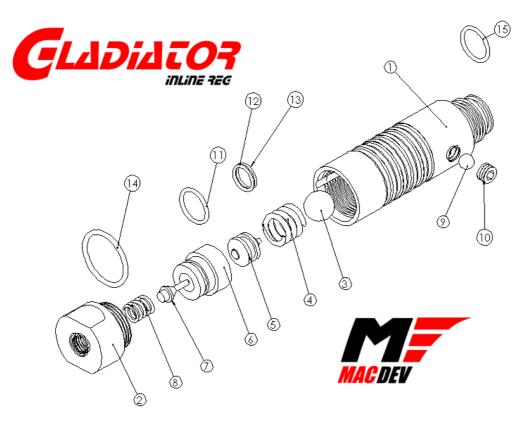
### Air is bleeding from the small hole on the side (positioned in the gripping grooves)

Clean and relubricate your piston. If this does not solve the problem, your piston o-ring is leaking and must be <u>replaced</u>

#### Adjustment will not go down to zero now

Your Adjustment ball has slipped over the other side of the regulator - this can happen if you screw the adjustment down too far.

## **Gladiator Parts List**



Click on the image to zoom

1	main body	8	main valve spring
2	end cap	9	velocity adjuster ball
3	piston spring ball	10	velocity adjuster
4	piston load spring	11	seat o-ring (014)
5	piston	12	piston o-ring (012)
6	seat	13	piston backup ring (012)
7	main valve	14	end cap o-ring (018)
		15	ASA o-ring (015)

# **CORRECTIVE ACTION GUIDE**

# Below is a listing of actions that may be required to fix problems described in the Gladiator Troubleshooting section

#### Replacing the O-ring on your piston.

- 1. de-pressurize your marker and remove the gladiator.
- 2. remove the bottom of the regulator by unscrewing in a counterclockwise motion. This should be possible using only your hand. If the regulator is very firm, then carefully use a wrench on the flats provided.
- 3. set aside the bottom of the regulator.
- 4. if you look up the regulator, you will see the brass piston, take a pair of long nosed pliers and remove it carefully. Take care not to scratch the surface of the piston (especially in the centre) because this may affect consistency. Remember which way the piston came out so that you can put it back in the same way (this is also very important for your consistency.
- 5. The piston has an o-ring and backup ring (as shown in the manual). The o-ring should be replaced, however, the backup ring should never require replacement. Remove the o-ring with a sharp implement.
- 6. Replace the old o-ring with a BS012 size o-ring ensuring that the backup ring is on the spring side of the piston.
- 7. Grease the piston liberally with a high quality silicone grease and replace it back in the regulator with a pair of long nosed pliers.
- 8. NOTE: check that the threads holding the two halves of the regulator together have a generous amount of thread lubricant applied before re-assembly! If there is not enough lubrication, your regulator may be impossible to get apart next time! Re-assemble the

# Replacing the seat

regulator and test.

- 1. de-pressurize your marker and remove the gladiator.
- 2. remove the bottom of the regulator by unscrewing in a counterclockwise motion. This should be possible using only your hand. If the regulator is very firm, then carefully use a wrench on the flats provided.
- 3. The seat is held in the bottom of the regulator by an o-ring, simply grip the seat and twist it out.
- 4. When installing the new seat, check the spring it has a small end and a large end, the large end should be facing down (away from the seat). Locate the spring in the center of the bottom of the reg. Locate the main valve into the spring. Now place the seat over the two, taking care not to move them from the center, push and twist the seat into the regulator. Check that the end of the main valve is pointing out of the seat and is in the center.
- 5. NOTE: check that the threads holding the two halves of the regulator together have a generous amount of thread lubricant applied before re-assembly! If there is not enough lubrication, your regulator may be impossible to get apart next time! Re-assemble the regulator and test.

#### Re-aligning the adjustment ball

- 1. De-pressurize your marker and remove the gladiator.
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- 3. Set aside the bottom of the regulator.
- 4. If you look up the regulator, you will see the brass piston, take a pair of long nosed pliers and remove it carefully. Take care not to scratch the surface of the piston (especially in the center) because this may affect consistency. Remember which way the piston came out so that you can put it back in the same way (this is also very important for your consistency.
- 5. remove the spring and large ball bearing from the regulator. When you do this take care not to scratch the hole that leads up into the regulator this is the piston bore and needs to be smooth and flawless to give a good o-ring seal.
- 6. screw the adjustment screw out of the regulator and remove the adjustment ball.
- 7. replace the large ball, spring and piston in the bottom of the regulator.
- 8. NOTE: check that the threads holding the two halves of the regulator together have a generous amount of thread lubricant applied before re-assembly! If there is not enough lubrication, your regulator may be impossible to get apart next time! Re-assemble the regulator.
- 9. using a Q-Tip, put a generous amount of grease around the threads of the adjustment hole before placing the small ball-bearing back into the hole. Now screw the adjustment screw down over the top screw it down just enough that you can feel all the parts touching.
- 10. screw the Gladiator into your ASA adaptor and test.