

The AP BMCL Swivel Inflator Range

Fitting Guide



1. Fitting Single or Dual Swivel Inflators as an upgrade to existing units:

[Note: Only the Diluent is shown here but the set up of the hoses is the same for the Single or Dual Oxygen versions]

1.1 Remove the old inflator block using a 17mm spanner to undo the counterlung Feed Hose.

1.2. Reuse your existing Snap Connector and Feed Hoses (unless they require renewal*):

a. Unscrew and remove the Feed Hose from the old counterlung Inlet Elbow (Fig.2), then undo (by hand) the elbow base locking ring.(Fig.2) Ensure the large base O-ring is in good condition and is positioned correctly in the groove. Replace the old Inlet Elbow with the new Low Profile Inlet provided. (Fig.3) Re-fit the locking ring and hand tighten.

b. Re-fit the Feed Hose by reversing it and screwing the 3/8th UNF male end (previously fitted into the old inflator block - Fig.1) into the new Counterlung Inlet. (Fig.3) Nip up tight with a 17mm spanner. Be careful - DO NOT OVER-TIGHTEN this fitting.

c. The knurled female end of the Feed Hose now screws onto the threaded male post on the new inflator. (Fig.4)

d. Fit the Snap Connector Hose to the post on the new inflator. (Fig.4)



Fig.1



Fig.2



Fig.3



Fig.4

2. Fitting Single or Dual Diluent Inflators with ADV Shutoff Valve

[Note: Only the Dual version is shown here but the set up of the hoses is the same for the Single version]

2.1 Repeat steps 1.1 & 1.2 to fit your existing Snap Connector and Counterlung Feed Hoses. (N.B. Do not reuse them if they require renewal due to damage or age*)

***Note: Our recommendation is that you should replace all diluent/air hoses every 8 years and all oxygen hoses every 5-6 years.**

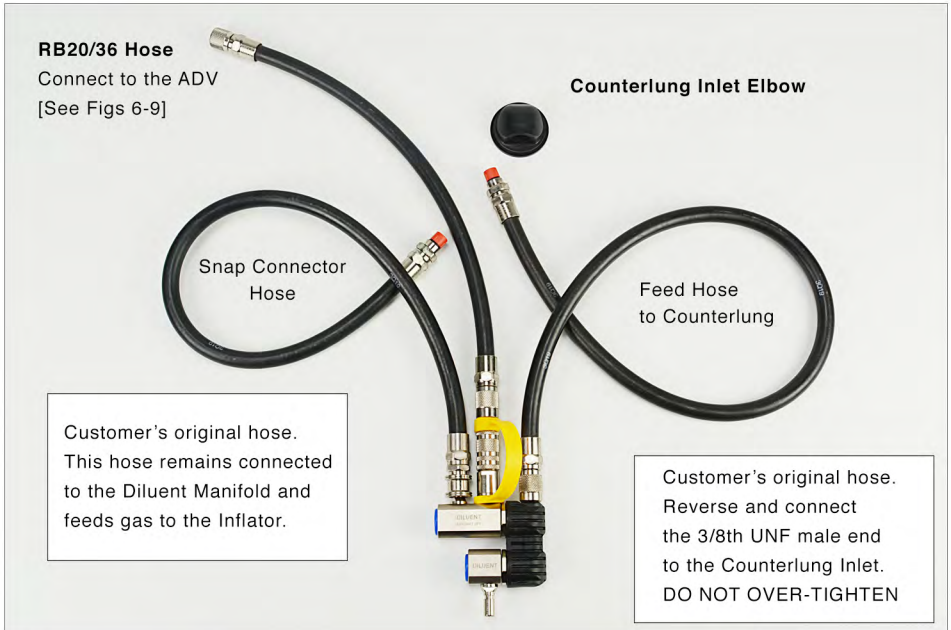


Fig. 5

2.2 Remove your existing (now redundant) GC3 Flowstop (if fitted) (Fig.6) from the ADV and your existing (now redundant) diluent ADV hose (AP300/10) from the diluent manifold.(Fig.7)



Fig.6



Fig.7



Fig.8

2.3 After removing the hose, ensure you plug the empty port in the diluent manifold with an FS14/01 3/8" UNF LP Port Plug (not included with the Inflator kit) (Fig.8)



Fig.9

2.4 With the corrugated breathing hoses removed, rotate the ADV body 180° anti-clockwise so that the chromed connection port is facing towards the front of the rebreather. (Fig.9)

2.5 Finally, screw the new RB20/36 hose (Fig.5) to this connection port so that diluent gas is now fed to the ADV from the new Diluent Inflator block. Gas supply to the ADV can now be shut off or restored by opening/closing the GC3R Flowstop attached to the new Diluent Inflator.

3. Fitting Single or Dual Oxygen Inflators with Solenoid Shutoff Valve

[Note: Only the Dual version is shown here but the set up of the hoses is the same for the Single version]

3.1 Repeat steps in Section 1 to fit your existing Snap Connector and Counterlung Feed Hoses. (N.B. Do not reuse them if they require renewal due to damage or age*)

***Note: Our recommendation is that you should replace all oxygen hoses every 5-6 years and all diluent/air hoses every 8 years.**

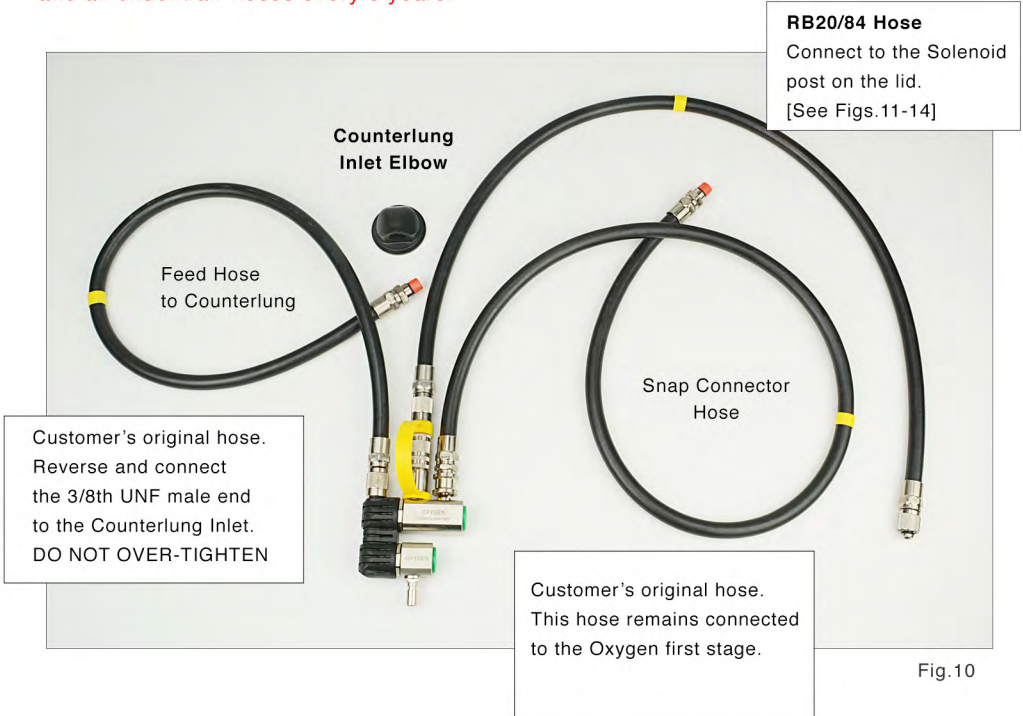


Fig.10

3.2 Remove and discard your existing (now redundant) Solenoid Hose (EV20/03) by unscrewing it from the Solenoid connection in the lid and from the oxygen first stage.

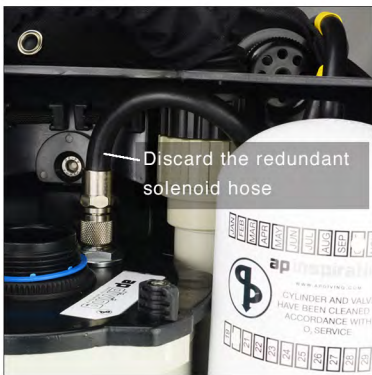


Fig.11



Fig.12



Fig.13

3.3 After removing the redundant solenoid hose, ensure you plug the empty port in the oxygen first stage with an oxygen cleaned FS14/01 3/8" UNF LP Port Plug (not included) (Fig. 13)



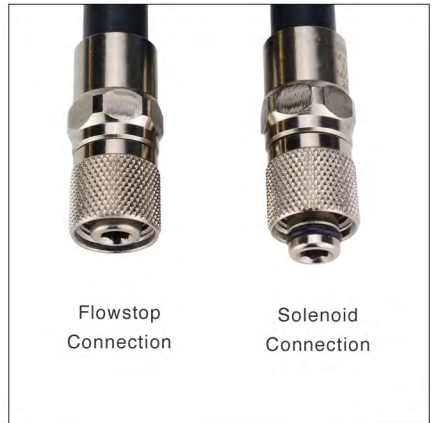
Fig.14

3.4 Feed the RB20/84 Solenoid Hose coming from the new Inflater through the hole in the black case and connect it to the solenoid post on the lid as shown in Fig.14.

**NOTE #1: Fitting the Flowstop to Solenoid Hose to
Oxygen Shutoff Inflators (Single or Dual):**

When fitting the RB20/84 Flowstop to Solenoid Hose (Fig.15) it is important to fit the hose the correct way round - noting that the ends are different. (Fig.16)

If you attempt to connect the solenoid end to the Flowstop you will have exposed threads (Fig.17), and neither end of the hose will be properly secured.



INCORRECT **CORRECT**
(Threads showing) (No threads, no gap)

NOTE #2: Fitting the Flowstop Locking Strap:

When fitting the yellow locking strap to the Flowstop/Hose assembly, it is important that you fit the loop above the knurled area of the Hose End. (Fig.19) If fitted below the hose end, the strap can slide off easily and might snag, preventing operation of the slider. (Fig.18)



INCORRECT Fig.18
(Strap can slip off, as shown)



CORRECT Fig.19
(Strap is secure behind the knurled hose end)

Alternatively, if preferred, the yellow strap can be configured with the loop at the bottom located on the connector of the inflator body - as shown in the right hand image on the front cover.

NOTE #3: The Flowstop open/close slider (GC3R) is fitted the opposite way to a regular AP Flowstop (GC3):

All of the AP Swivel Inflators (with shutoff) are supplied with a new Flowstop which differs from a regular AP GC3 Flowstop in that the OPEN/CLOSE slider is reversed.

This configuration is recommended by AP for several reasons: first, it makes closing the valve a positive pull-up action and second, if the locking strap gets accidentally dislodged the valve 'fails-open' in the open position rather than closed.

Note: If you prefer to have the slider OPEN/CLOSE the other way, it is simple to change but care needs to be taken, with adherence to oxygen-clean practices, when rebuilding.

See the GC3 Maintenance Manual: www.apdiving.com/en/rebreathers/resources/manuals/