

ADAS SAFETY ALERT

Alert 2016/02

November 2016



TITLE

Buoyancy Control Device (BCD) Maintenance

BACKGROUND

An ADAS ATE recently found that the BCDs being used in diving operations were inflating slowly resulting in the divers being unable to properly control buoyancy.

This incident occurred twice, the second time being after the BCD inflators were disconnected and returned to the contracted servicing centre for inspection.

WHAT HAPPENED

The initial component of this incident occurred when student divers were unable to effectively control buoyancy. Although the BCDs being used had recently been serviced, they were removed from service and returned to the servicing centre for inspection.

Examination of the BCDs appeared to reveal an incorrect maintenance procedure during the prior servicing, leading to sticky power inflators. The units were re-serviced with particular attention being paid to the correct lubrication of all parts.

The re-serviced BCDs were utilised the following day with the same issue occurring. The units were again returned to the servicing centre for further inspection.

ROOT CAUSE/S

After additional investigation, it was discovered that the recommended BCD maintenance procedure had been modified due to a change of the BCD supplier.

Originally, BCDs were supplied by Apeks Marine Equipment Ltd but have recently been supplied by Aqua Lung. The original Apeks maintenance procedure called for the inflation valve to be replaced on an annual basis, with instructions indicating that the valve assembly is non-maintainable and should not be dismantled.

Aqua Lung maintenance procedures recommended the valve be disassembled, cleaned, o-rings replaced, all parts lubricated, and the valve reassembled.

The servicing centre which undertook the original and follow-up services followed the maintenance procedures issued by Aqua Lung, which inadvertently led to the sticky power inflators.

CORRECTIVE ACTIONS

Since the incident occurred, Aqua Lung was alerted to the incidents and has acknowledged the error. They have since modified their maintenance procedures and returned to the recommendation that the valve assembly is to be replaced annually.

Additionally, both Aqua Lung and Apeks Marine Equipment Ltd have issued a recall alert of select Powerline inflators, recommending that any Aqua Lung BCD purchased since January 1st 2015 is inspected by an authorised service provider, and replacements provided if required.

Of particular concern are Powerline inflators with a date code of “H”, as shown below.



Image sourced from www.aqualung.com

LINKS

[Apeks Marine Equipment Ltd Recall](#)

[Aqua Lung Recall](#)

