

## Near-miss during diving operations

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**IMCA has been advised of a near-miss during diving operations involving the cam lock on a KMB17 diver's helmet.**

The diver entered the water and stopped at a depth of 3 metres to begin safety system checks, after which he continued his descent. At 8 m, the diving superintendent heard a water gurgling sound from the diver and asked him if he was experiencing any problems. The diver reported that his cam lock had come undone. The diver turned on his free flow, evacuated the helmet and attempted to relatch the neck dam. Realising that something had become stuck in the cam, the diver reopened, cleared and relatched the cam lock.

Having confirmed that the safety system was secure, the diver was ready to continue to the bottom. However, the diving superintendent thought it best to abort the dive to check the cam lock and ensure there was no damage. The dive was aborted and the diver returned to the surface safely.

During debriefing, the diver stated that he had one hand on the down-line and the other held a cloth measuring tape. The diver was proceeding down the down-line head first and the cam lock apparently made incidental contact with the down-line, causing the cam lock to dislodge.

### What were the causes?

Investigation noted the following positive points:

- The diver was able to relatch the cam lock whilst in the water.
- The dive was promptly aborted in an effort to better understand the matter.
- The site leader gave immediate attention to the situation and contacted all appropriate supervisors.
- The contractor and client were in agreement and supportive of the entire investigative process.

The following points were noted:

- The manufacturer's manual includes the notice reproduced as figure 1.
- The diver had been carrying something whilst descending.
- There was a lack of appropriate safety pins for cam locks.

## Actions

The following lessons and corrective action were suggested:

- The use of a safety pin or other secondary safety device on Kirby 17A/B helmets (see figures 2 and 3).
- The importance of remaining up-to-date on safety alerts from manufacturers of dive equipment.
- Divers should not descend to the work site carrying tools or equipment.



**DANGER: KMDSI highly recommends the utilization of the safety pin part # 540-080. This pin is inserted just below the cam-lock bail. If a safety pin is not used, there is a possibility the clamp on the yoke latching system could be inadvertently opened during the course of the dive by unintentional depression of the “old style” plunger lock. Helmet flooding, drowning and death may result.**





If used, the yoke strap (168) is now placed over the top of the helmet (but under the handle) and secured in place. The yoke strap is standard on all 17 A/B helmets shipping after January 2004. It's use is strongly recommended.

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