

Regulator's purge button

When trying to provide rescue breaths in the water to an injured diver, why can't I use my spare regulator's purge button? That seems easier to me than trying to manage a pocket mask.

Answer from DAN experts:

Using the purge button of a second-stage regulator has been proposed many times, but any advantage it may seem to offer does not outweigh the potential risks and complications. If the regulator mouthpiece is not already in the unconscious diver's mouth, trying to replace it can be difficult and time consuming. Without a good seal and a means to occlude the diver's nostrils, any attempts to ventilate will be unsuccessful. Even if the mouthpiece can be successfully placed in the diver's mouth there is a risk of it pushing the relaxed tongue to the back of the throat and blocking the airway. If the regulator mouthpiece remained or was placed in the diver's mouth without blocking the airway, the next challenge would be administering air. Purge buttons do not have any true regulatory capability. They effectively override the second stage's function of stepping down gas from intermediate pressure to ambient pressure and thereby deliver intermediate-pressure gas directly from the first stage. Delivering breathing gas to the lungs at too high a pressure may overinflate them, potentially leading to serious injury. If the diver's airway is not maintained in an open position, the breathing gas delivered by the purge button could be forced into the stomach, causing gastric distention. This places the diver at risk for regurgitation, which can further compromise the airway and lead to aspiration. Delivering rescue breaths using a pocket mask or similar method provides tactile feedback via changes in pressure required to ventilate the lungs; supplying rescue breaths with the purge valve eliminates this important feedback. Using a regulator's purge valve also precludes the option of supplementing the gas with 100 percent oxygen. Rescue methods that are currently taught by dive-training agencies are the result of years of practical experience. Purge valves were never designed to function as rescue equipment. When ventilating an injured diver, rely on established methods.