

# The Villages Scuba Club



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## Jacket BCD vs. Backplate-Wing BCD

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# Jacket BCD vs. Backplate-Wing BCD



- air cell which wraps around your sides, up your back to your shoulders
- standard inflator, typically multiple dumps plus inflator vent
- shirt-size, adjustable harness with quick disconnects
- adjustable cummerbund
- typically plastic backplate with single tank strap
- well padded
- pockets and d-rings for storage
- integrated quick release weight pockets



- contained in a air cell on your back, usually a donut shape for single tank set ups
- standard inflator, typically one dump plus inflator vent
- 2" webbing harness pre-fitted to diver, no disconnects
- adjustable waist belt and crotch strap to prevent ride up
- stainless steel, aluminum or carbon fiber backplate with double tank straps
- minimal to no padding, although padding is available
- d-rings for storage, although add-on pockets are available

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# Pros and Cons of a Jacket style BCD

- A Jacket BCD provides good, vertical buoyancy on surface.
  - When properly sized to diver, a Jacket BCD is very comfortable with lots of padding.
  - A Jacket BCD has pockets and d-rings for storage.
  - The integrated quick release weight pockets spread load of weight across jacket BCD harness (vs. weight belt on hip).
  - A Jacket BCD tends to force feet down while underwater, making proper trim more difficult.
  - Also, air can migrate to a corner of bladder when diver rolls. This can cause imbalance and trim issues.
  - Over inflation on surface can cause squeeze on chest and waist.
  - A Jacket BCD cannot be resized as diver grows.
  - A Jacket BCD is bulky and tends to be more buoyant, requiring more weight.
  - Pocket accessibility is affected when BCD is inflated.
  - D-rings tend to be held in place by small loops.
  - Accidental release of weight pockets happen too often.
  - Replacing integrated weight pockets is expensive.
  - Lack of modularity of Jacket style BCD limits repairability.
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# Pros and Cons of a Backplate-Wing BCD

- A BPW provides excellent horizontal trim underwater.
  - Donut shape of wing limits issues of air entrapment.
  - One size - fits all - a BPW is basic kit that is then sized to fit the diver.
  - As diver grows, replacing harness webbing is all that is necessary to upsize.
  - Due to limited padding, a BPW tends to be negatively buoyant, requiring less (or no weight).
  - Backplate tie-offs, d-rings provide numerous tie off points. D-rings tend to be stainless or titanium and are integrated into web harness.
  - Lack of bulk due to no pockets and limited padding provides a more streamlined profile.
  - Modularity of BPW allows for easy replacement or modification of BCD.
  - A BPW tends to force diver face down while on surface, especially if over-inflated.
  - Once sized, a BPW has limited adjustment.
  - Due to limited padding, comfort is limited, especially when diving with a rash guard or skin. Add-on padding or padded harnesses are available \$\$
  - Add-on pockets or pocket shorts add \$\$.
  - Integrated weight pockets available but as add-on \$\$.
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# Back Inflate BCDs - a better alternative?



- A Back Inflate BCD provides very good horizontal trim underwater.
- Donut shape of wing limits issues of air entrapment.
- When properly sized to diver, a Back Inflate BCD is very comfortable with lots of padding.
- A Back Inflate BCD tends to be less bulky and buoyant, requiring less weight than a Jacket BCD.
- A Back Inflate BCD has pockets and d-rings for storage
- Pocket accessibility not affected on surface.
- The integrated quick release weight pockets spread load of weight across jacket BCD harness (vs. weight belt on hip).
- A Back Inflate BCD tends to force diver face down while on surface, especially if over-inflated.
- A Back Inflate BCD cannot be resized as diver grows.
- D-rings tend to be held in place by small loops.
- Accidental release of weight pockets happen too often.
- Replacing integrated weight pockets is expensive.
- Lack of modularity of Back Inflate style BCD limits repairability.