

# DIAMOND BACK®

### LOW COST RANGE EXTENSION WING ASSEMBLY

Diamond Back<sup>®</sup> is a low cost, high performance range expansion wing assembly, compatible with air-launched stores.

Diamond Back® features a unique joined tandem wing design that extends the wings from a compact storage position. The deployed wings provide a diamond shaped platform with excellent maneuverability and glide characteristics.

The Diamond Back® wing assembly triples the stand-off of air-launched stores providing more flexible mission options.

The unique wing assembly, provides stand-off and cross-track maneuverability for a significantly expanded footprint for air-launched stores. The larger footprint not only provides additional survivability for the delivery aircraft, but also allows delivery to multiple points from a single release point. Diamond Back's compressed carriage design meets the demanding space requirements and for internal rotary launchers in the B-1 and B-2 bombers as well as on the F-35 and F-22.

## **Operational advantages**

- · Low cost, high performance
- Increases launch platform
- · In full rate production
- Combat proven

Diamond Back® is currently in full rate production for the US Air Force Small Diameter Bomb and has been combat proven in U.S. combat operations over the last ten years.













## Why Diamond Back®?

- Allows delivery to multiple points from a single release point
- Provides increased stand-off outside point defenses
- Provides expanded delivery envelope
- Increases launch aircraft survivability and tactical flexibility
- Shapes terminal profiles for delivery vector and velocity
- In production and successfully used in combat operations

#### **Benefits**

- Scalable size to accommodate full weapon load out
- · Longer range and improved maneuverability
- Deployment mechanism is simple, robust and reliable at any launch condition

## Flight-proven Extended Range

The Diamond Back® wing assembly has been extensively tested, qualified, and combat proven for the GBU-39/B Small Diameter Bomb (SDB) weapon. Diamond Back® has also been successfully demonstrated in flight on the extended range Joint Direct Attack Munition (JDAM) BLU-109 weapon and the Focused Lethality Munition.

## **Production status**

The integrated Diamond Back® wing assembly is in full rate production for use on the US Air Force small diameter bomb. Total production has exceeded 32,000 units.

## **Technical characteristics/specifications**

Weight: 24 lbs

Length: 47 Inches (wings closed)

42 Inches (wings extended)

Width: 7.5 Inches (wings closed)

63 Inches (wings extended)



