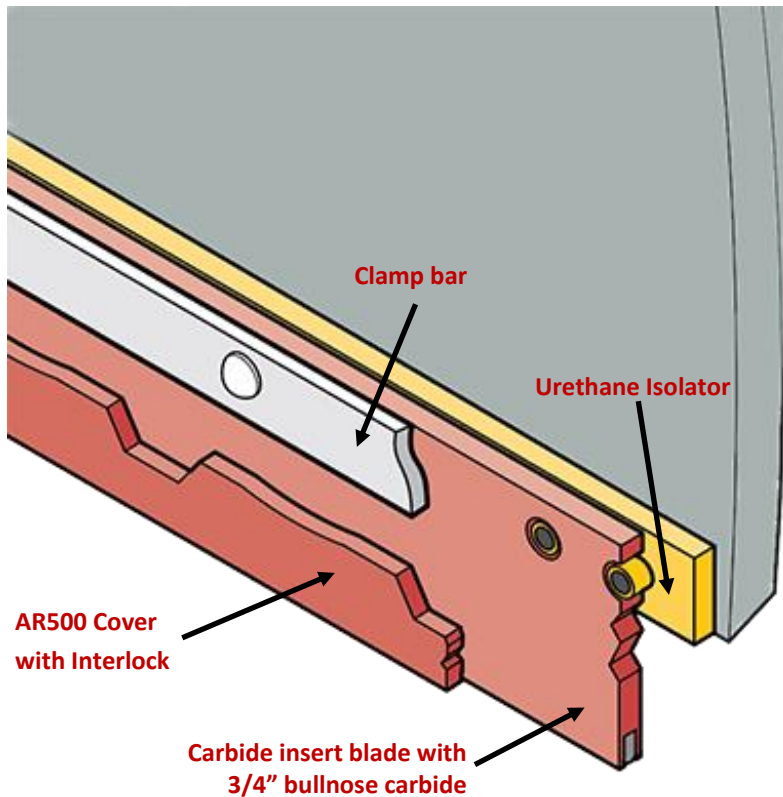


ICE-O-FORCE™ BLADE SYSTEM

Expansion joints, pavement changes, and other variations in the road surface create shock and vibration. A rigid blade is not equipped to adapt to these irregularities and will transmit the vibration and noise to the plow truck. Ironhawk's patented Ice-O-Force™ blade system suspends the blade, allowing it to travel 3/8", greatly reducing shock and vibration. Less vibration = less noise, which can significantly help reduce operator fatigue over a long shift.



Dampen Shock and Vibration

A standard plow cutting edge transmits a tremendous amount of vibration into the moldboard and then the plow truck. This vibration can play havoc with a plow truck's mechanical and electrical systems. The Ice-O-Force™ blade systems use a flexible urethane isolator to eliminate the metal-to-metal contact between the blade and the moldboard.



Reduced Driver Fatigue

As any plow truck driver can attest, noise is a major cause of operator fatigue. In-cab noise levels can exceed the OSHA limits for a shift. Our Ice-O-Force™ system has been proven to reduce the in-cab noise levels by 8 to 10 decibels, which is equivalent to reducing the volume by half.

Increase Blade Life 2 to 3 Times

Tungsten carbide's hardness is the key to the long life of a carbide insert blade. However, while it is very hard, it is also brittle and will fracture and fall out of a normal carbide blade over time. The Ice-O-Force™ blade system uses a urethane isolator and an AR500 welded-on cover to protect the carbide, which in turn increases the blade life by 2 to 3x over a typical carbide blade system.

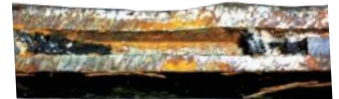
To demonstrate the effectiveness of our vibration isolation technology, we conducted a test with a state DOT. We ran back-to-back tests of a standard carbide blade and then an Ice-O-Force™ blade. The test was conducted using the same truck on the same route. The pictures to the right were taken after running them for the same mileage. The Ice-O-Force™ blade system had a smooth and consistent wear, with no loss of carbide.

Ice-O-Force Carbide Blade



The Ice-O-Force™ Isolated Carbide Blade had smooth and even wear without any signs of fracturing or loss.

Standard Carbide Blade



The standard carbide blade had significant fracturing and loss of carbide.

IRONHAWK®

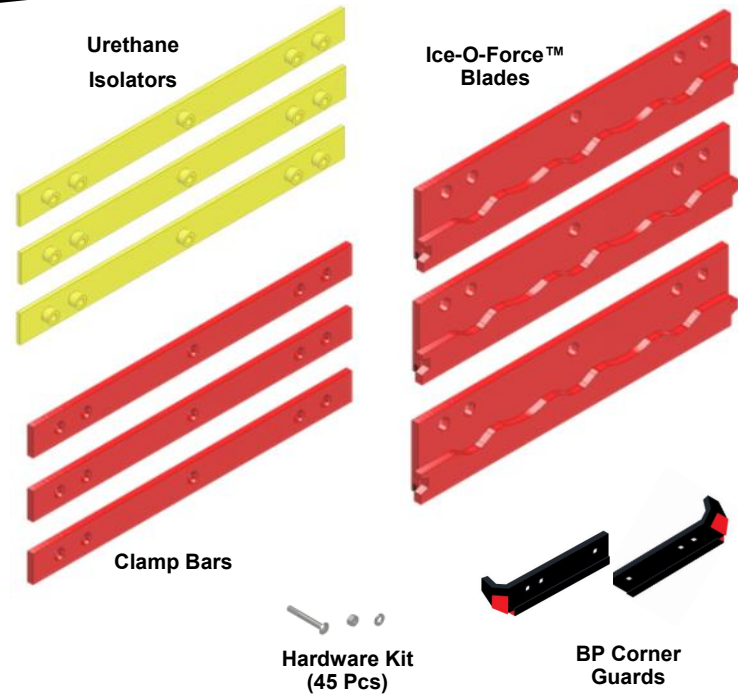
PHONE: 888.843.8612 FAX: 216.481.1156

EMAIL: sales@ironhawkindustrial.com

ICE-O-FORCE™ BLADE SYSTEM KITS

We have bundled our Ice-O-Force™ Blade Systems into kits. A single part number will get you everything needed, including:

- (3) Ice-O-Force™ Carbide Blades with AR500 Cover
- (3) Urethane Isolator - reusable
- (3) Clamp Bar—reusable
- (2) BP Series 6" Corner Guards
- (1) Grade 8 Hardware Kit
- (1) Installation Instructions
- (1) Systems are individually crated



Description	Part #
8 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF8-INT-C
9 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF9-INT-C
10 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF10-INT-C
11 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF11-INT-C
12 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF12-INT-C
14 ft Ice-O-Force Isolated Carbide Blade System - Initial Set-up Kit	PBA-IF14-INT-C
8 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF8R-INT-C
9 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF9R-INT-C
10 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF10R-INT-C
11 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF11R-INT-C
12 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF12R-INT-C
14 ft Ice-O-Force Isolated Carbide Blade System - Replacement Kit	PBA-IF14R-INT-C