

# BEADLOCK

**PROTECTING THE MOST IMPORTANT VEHICLES IN THE WORLD**



Hutchinson, the world leader in mobility systems, has provided solutions to the military and off-road markets for over 80 years. The Hutchinson Internal Beadlock System has proven to be the best in all terrain types from arctic snow to desert sand.

▶ **Hutchinson Internal Beadlock**

To increase the mobility of a wheeled vehicle operating in soft terrain such as sand, mud or snow, it is necessary to **increase the footprint** of the tires. This is achieved by the crew **decreasing the tires' air pressure**. For example, a 4x4 with tires at low pressure can exceed the footprint of an 8x8 at service pressure.



Hutchinson Internal Beadlock

▶ **Mobility in all Terrain**

The air inside a tire applies pressure on the tire walls. This pressure clamps the tire beads on the wheel flange. At low pressure the clamping force on the tire beads decreases drastically and is not sufficient to prevent the tire from slipping on the wheel or unseating.

**Solution:** The Hutchinson Beadlock **ensures the clamping of the tire** beads on the rim at lowered or zero pressure. As a result, the vehicle capabilities are enhanced by:

- Increased **traction and braking**
- Improved **steering control**
- **Minimal** chance of rollover caused by the unseating of the tire
- **Preventing** foreign materials from entering the tire

All these safety features make the Hutchinson Internal Beadlock or the VFI with Integrated Beadlock mandatory on vehicles operating at low air pressure, and vehicles equipped with a CTI system.

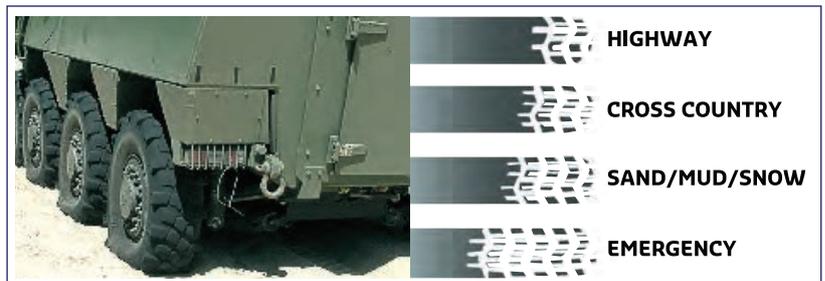


▶ **Tire Protection**

The Hutchinson Internal Beadlock is configured to fit the shape of the tire bead. It is easily installed on a two-piece bolted together or three-piece lock ring type wheel. Once the components are installed, increasing the footprint of the tire on the ground for improved traction is as easy as reducing the air pressure in the tires.

▶ **Compatibility**

The Hutchinson Internal Beadlock complies with all main flat rim standards and has been used **with all major tire brands**. It is DOT "street legal". It is standard equipment on many military OEM platforms and specialty vehicles that require low pressure operation but do not have need for runflat capability. It also adapts to all two- and three-piece wheel configurations which use CTIS.



Low pressure operation with Beadlock



Tire without Beadlock

The Hutchinson Internal Beadlocks are available for a wide range of rims and tires from 12" to 36". Different from beadlock rings which only clamp one side of the tire to the wheel, the Hutchinson internal beadlock clamps both the Inboard and outboard sides of the tire to the wheel. Beadlock rings are illegal for on-street use. The Hutchinson Internal Beadlock is legal everywhere.