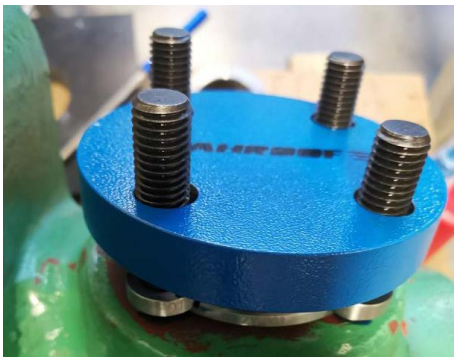
Zahroof JACK BOLT ELIMINATOR™



If your reciprocating compressor valves are held in place by jack bolt torque, then your compressor is probably leaking both fugitive emissions and profitability.

AN EMISSIONS & RELIABILITY SOLUTION

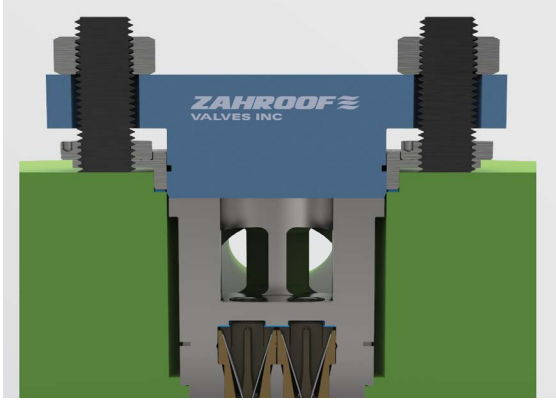
Zahroof Jack Bolt Eliminator™ kits convert valves to a modern cage/O-ring/valve cap design with a gas-tight sealing surface. The conversion is installed in the field in 15-30 minutes per valve with no machining or cylinder modification required.

Jack Bolt Eliminators reliably prevent fugitive emissions through the valve cap. They improve the MTBF of the compressor because there is no longer a need to continually monitor and adjust jack bolt torque, which can lead to compressor shutdowns. Jack Bolt Eliminators are easy to maintain. Once installed, the conversion ring does not have to be removed to service the valve.

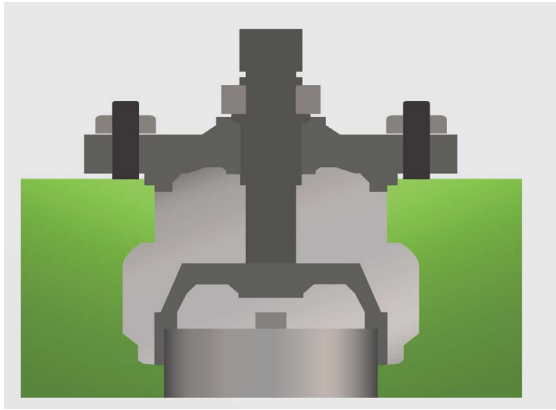
WHY IT'S SUPERIOR TO JACK BOLTS

Jack-bolt-retained valves are difficult to maintain because they have two gaskets designed to prevent leakage: one between the valve and cylinder and another between the valve cap and cylinder. A third possible leak path exists between the jack bolt and valve cap. Clamping force applied to the gasket under the valve cap opposes clamping force applied to the gasket under the valve during installation and operation, making it a challenge to stop leakage.

With a Jack Bolt Eliminator, the valve cap seal is independent of the seal between the valve and cylinder. Furthermore, there is no leak path between a jack-bolt and valve cap. This eliminates both leakage and the need for maintenance during operation.



Zahroof Jack Bolt Eliminator™



Jack Bolt Assembly

CLEAR ADVANTAGES

ESG
Eliminates leak paths to reduce emissions

SERVICEABILITY
Installs in minutes, on-site, without machining

RELIABILITY
Solid and secure valve retention

OPEX SAVINGS
Reduces maintenance costs

ZAHROOF VALVES INC

713-554-2678 | sales@zahroofvalves.com | www.zahroofvalves.com

JACK BOLT ELIMINATOR™ INSTALLATION OVERVIEW

A Zahroof Jack Bolt Eliminator™ is a complete solution that comes with a new StraightFlo™ valve , cage, valve cap, sealing ring, and hardware.

Longer studs and a gasket are installed between the new sealing ring and cylinder.

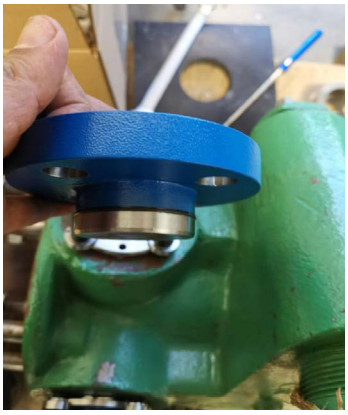
A sealing ring is installed on the cylinder using the valve cap studs.

The ring is centered on the cylinder. No machining or cylinder modification is required.

The sealing ring is secured. Once installed, it does not have to be removed to service the valve.

New valve with cage.

Conversion kit installed and new valve/cage installed in the cylinder.



New valve cap with O-ring that seals against the sealing ring.

Valve cap installed.

Valve caps secured to the cylinder.

Ingersoll-Rand compressor cylinder refitted with Jack Bolt Eliminators.