Football Lubricators - How they work

Compressed air enters the lubricator through the compressed air tube which runs through the centre of the lubricator, which is filled with rock drill lubricant.

The compressed air pressurizes the lubricator through a hole in the regulator pin which intersects the compressed air tube.

The compressed air pushes down on the surface of the lubricant in the chamber of the lubricator.

The pressure on the surface of the lubricator causes it to seek an exit point from the lubricator.

A lubricant pick up orifice located at the bottom of the regulator pin allows the pressurized oil to travel up the regulator pin port to an exit point on the downstream side of the regulator pin. The location of the exit point also creates a venturi effect which helps to siphon the oil out of the lubricator.

As the oil is carried along the regulator pin to the exit port, it is carried into the high velocity compressed air passing the regulator pin. The oil is then atomized by the strong mechanical action of the passing turbulent compressed air.

The atomized oil is then carried through the hose or other conduit leading to the pneumatic tool. **It is not possible to stop lubricant flow completely on a football lubricator. It is only possible to adjust the flow rate.**