

## **Product Knowledge Base**

An Auto Lube(Registered Trademark is miniature centrifugal pump built into the shaft of a QMAX and QTWO model pumps. This pump continuously forces oil from the reservoir, through the bearing, and back again. A balanced chamber behind the oil reservoir is connected by a passage to the inlet side of the pump. This chamber always keeps pressure in the oil reservoir equal to water pressurewhether you are pumping at high inlet pressure or pulling vacuum. The miniature pump adds enough extra pressure to constantly keep the flowing oil a few PSI higher than water pressure. Thus, oil pressure inside the double lip-type seal is always slightly higher than water pressure outside. Dirt and water are repelled by this pressure.

The Auto-Lube ensures continuous lubrication, even when you are pumping dry. It permits the use of a compact double lip-type seal and maintains a constant film of oil under this seal to prevent shaft wear. Because it is built into the main pump, it completely eliminates the need for a second set of packing or second mechanical seal.

Refer to Page 1-11 in your Hale Muscle Pump manual for additional details



