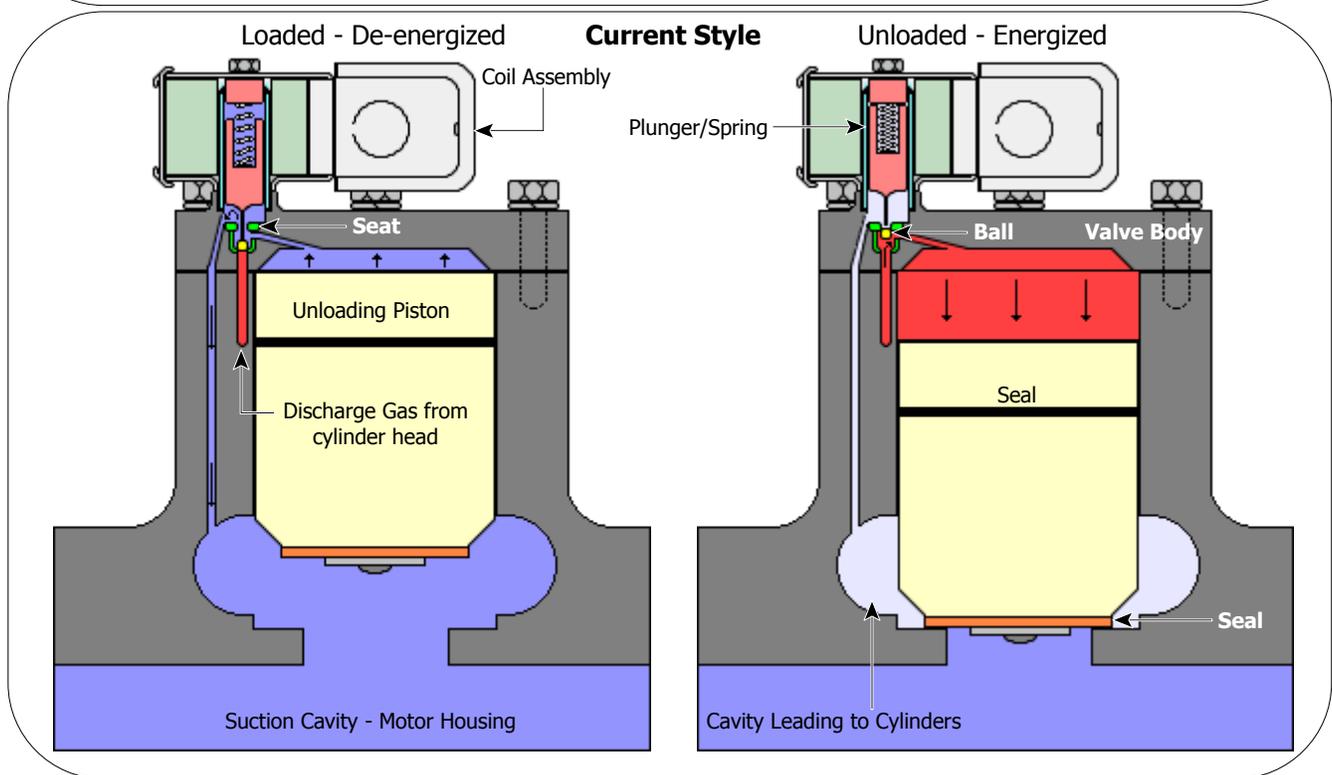
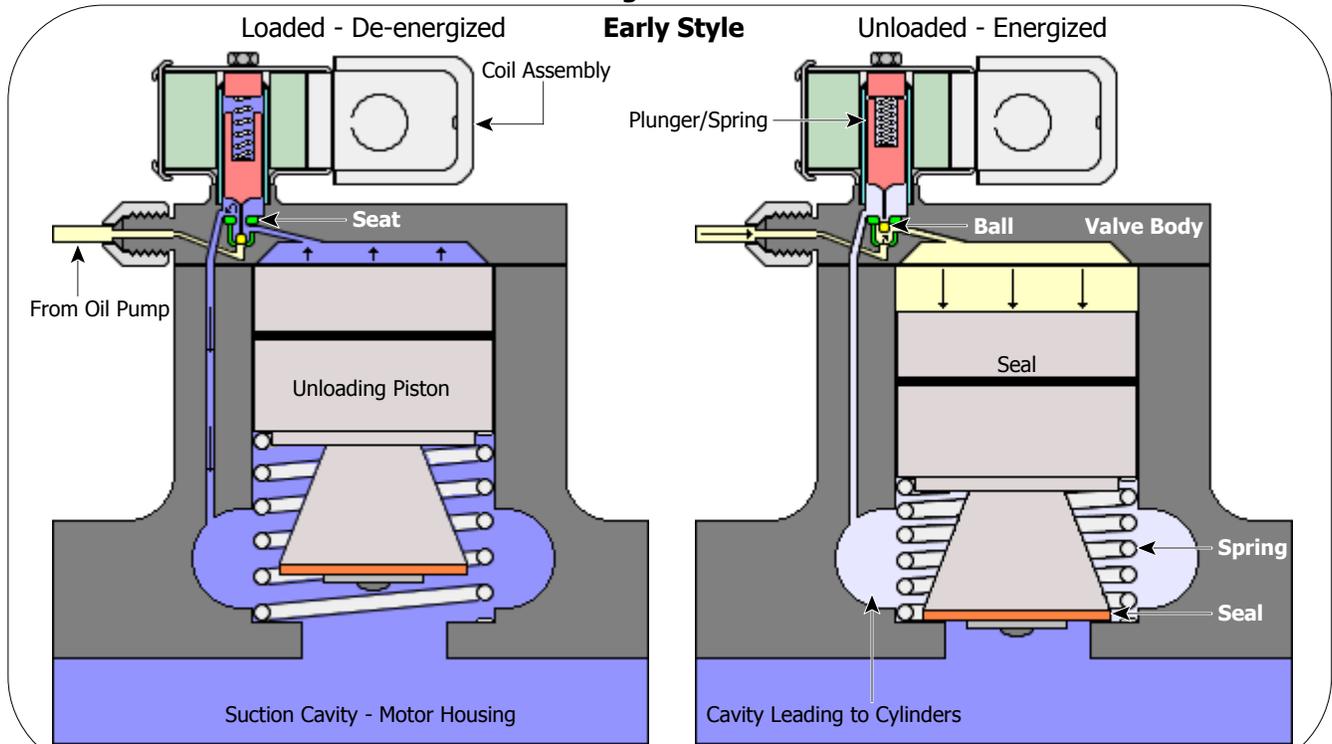


**York
Z Model Compressors
Unloading Characteristics**



York Z Model Compressors Unloading Characteristics

Early Style

Loaded

When the solenoid valve is de-energized oil pressure on top of the suction blocking piston is allowed to flow into the cavity leading to the cylinders. As the cylinders pump the pressure in their suction cavity is lowered below the suction pressure in the motor housing. The spring beneath suction blocking piston forces the piston upwards opening the port to the motor housing and suction gas flows into the cylinders and is pumped into the discharge cavity. This action loads the cylinders.

Unloaded

When the solenoid valve is energized a port from oil pressure is opened and oil pressure is allowed to flow to the top of the suction blocking piston. This forces the piston down and seals off the port leading to the motor housing thus cutting off the flow of suction gas to the cylinders. As the cylinders pump, the pressure in their suction cavity lowers to a point where there is no longer any pumping action. This effectively unloads the cylinders.

Current Style

Loaded

When the solenoid valve is de-energized pressure on top of the suction blocking piston is allowed to flow into the cavity leading to the cylinders. As the cylinders pump the pressure in their suction cavity is lowered below the suction pressure in the motor housing. This difference in pressure forces the suction blocking piston upwards opening the port to the motor housing and suction gas flows into the cylinders and is pumped into the discharge cavity. This action loads the cylinders.

Unloaded

When the solenoid valve is energized a port from discharge gas pressure is opened and the discharge gas is allowed to flow to the top of the suction blocking piston. This pressure forces the piston down and seals off the port leading to the motor housing thus cutting off the flow of suction gas to the cylinders. As the cylinders pump, the pressure in their suction cavity lowers to a point where there is no longer any pumping action. This effectively unloads the cylinders.