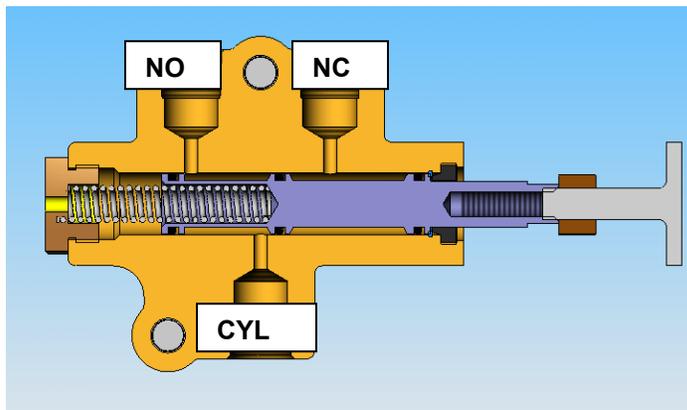


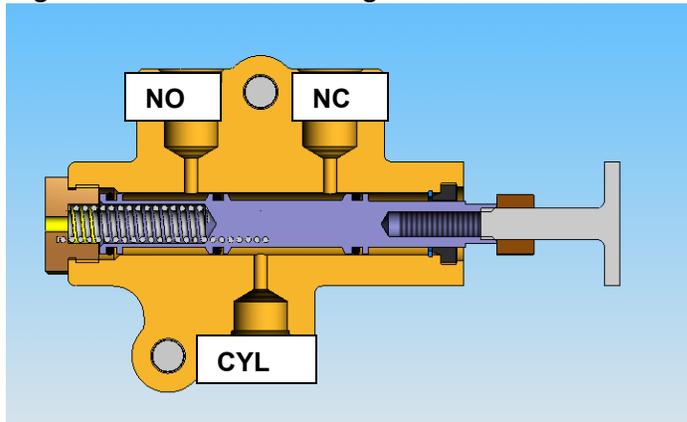
Connection 1 – Example: Mounted On API Valve 5204

Figure 1 – Free Plunger Position



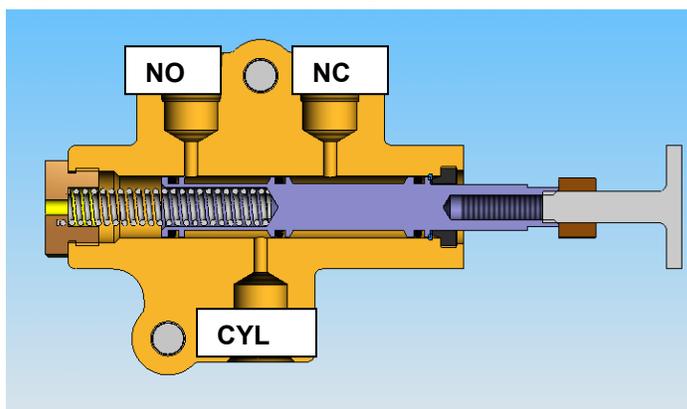
The supply air from the trailer is connected to the NC port. The CYL port is connected to the cylinder to be operated (for example the sequential vapor valve VR6030SQ). The NO port is left open to atmosphere for venting.

Figure 2 – Activated Plunger Position



When the plunger is pushed, the exposure of the internal ports switches so that the NC port (supply air in this case) is exposed to the CYL port. This causes air to flow to the sequential vapor valves causing them to open.

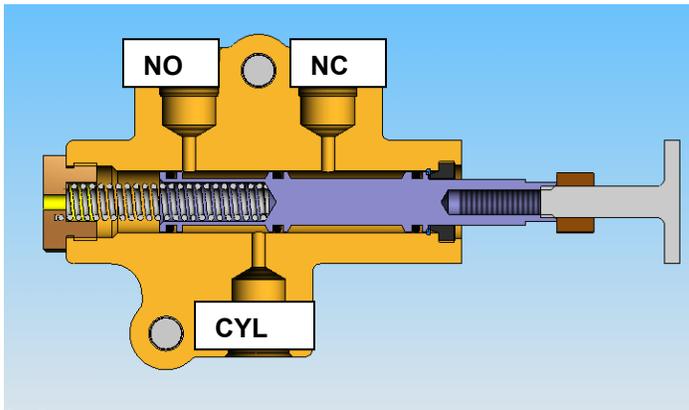
Figure 3 – Released Plunger Position



When the plunger is released, the spring returns the spool to its normal position. Now the NC port is blocked (closed) and the CYL port is exposed to the NO port which is open to the atmosphere. This causes the sequential vapor valves to exhaust the air causing them to close again.

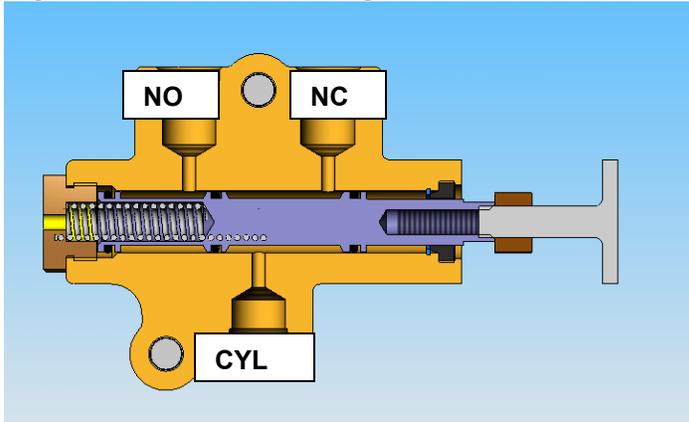
Connection 2 – Example: Mounted On Vapor Valve VR4100

Figure 1 – Free Plunger Position



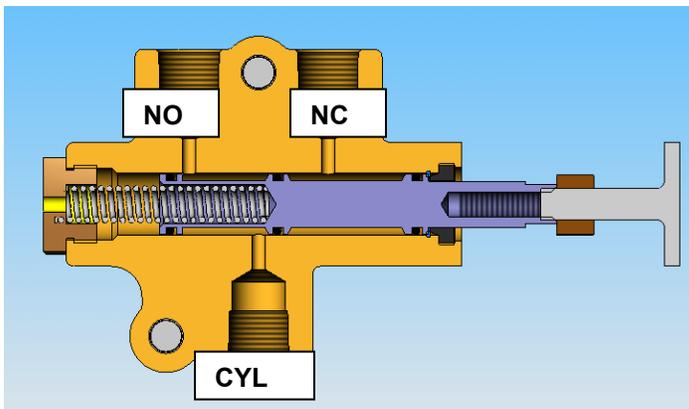
The supply air from the trailer is connected to the NO port. The CYL port is connected to the cylinder to be operated (in this case the truck's air braking system, creating an open flow of air to the brake cylinder). This is in reverse to the above described "connection 1" because truck brakes are off when there is pressure. The NC port is left open to atmosphere for venting.

Figure 2 – Activated Plunger Position



When the plunger is pushed, the exposure of the internal ports switches so that the NC port (open to the atmosphere in this case) is exposed to the CYL port. This causes the brake lines to exhaust air and depressurize, causing the brakes to be set (truck brakes are set with a lack of air pressure). Now the trailer cannot accidentally be driven away from the loading rack while the coupler is still connected to the vapor valve

Figure 3 – Released Plunger Position



When the plunger is released, the spring returns the spool to its normal position. Now the NO port is exposed to the CYL port (supply air) and the brake lines are pressurized, causing the brakes to unlock. Now the truck can be driven away.