Model AV27
Gate Operating Instructions for Vacuum Unloading
Items to Note before Unloading

AV27 Nozzle Cap Options:
Currently ATP has three nozzle cap options with which your gate may be equipped. Identify the correct nozzle cap to ensure proper installation and removal.

Standard Cap

- Gasketed Plastic Cap Design
- Stainless Steel Handle

Aluminum/Stainless Double Seal Cap:

- Double Sealing System
- Stainless or Aluminum Construction

Cam Lock Fitting Cap:

- Double Sealing System
- Stainless or Aluminum Construction
**Door Throttling Positions:**

Locate the doorplate indicator markings at the rear of the gate frame. These markings will aid in throttling the doorplate to the correct locations for unloading.

**Gate Operation Decal:**

Typically, an operational decal will be located on the hopper of the car. This decal will aid as a reference in the unloading process.
Step One For Standard Cap:

- **Locate and Remove the Nozzle Cap**

If your gates have the standard cap on them, begin by cutting the security seal on the cap. Once the seal has been removed, flip the cap latch upward as shown below.

Rotate the nozzle cap counterclockwise until it hits the stops. Once it hits the stops, pull the cap towards you to remove. The vacuum unloading hose can now be attached to the gate. Do NOT power up the vacuum pumps on the unloading system yet.
Step One For Double Seal Cap:

✓ Locate and Remove the Nozzle Cap

If the gates are equipped with the double seal cap, it operates the same way as the standard cap. Flip the cap latch open, twist the cap counterclockwise until it hits the stops, and then pull towards you.

Step One For Cam-Lock Fitting:

✓ Locate and Remove the Nozzle Cap

If the gates are equipped with the Cam-Lock fitting cap, first cut the safety seal. Once the seal is removed, pull the cap handles outward to unlock the cap. Finally, pull the cap towards you to remove.
Step Two:

✓ **Throttle the Doorplate to Position “O”**

Before starting the vacuum, open the top doorplate (Red Socket) to position “O” on the gate frame. To do this, rotate the red socket forward until the rear edge of the doorplate is in line with the “O” marking as shown below. It is now safe to turn on the vacuum pumps and begin unloading.
Step Three:

✓ **Throttle the Doorplate to Position “A”**

Once the vacuum pumps are on, throttle the doorplate to position “A”. To do this, rotate the RED socket forward until the rear edge of the doorplate is in line with the “A” marking as shown below. Commodity should now begin to unload from the car. Continue to unload the car with the doorplate at position “A” until unloading begins to slow or the unloading volume decreases. This time will vary depending on the type of commodity being unloaded. Once unloading slows, continue to step four. (The doorplate will be in this position for the longest amount of time, as the majority of the car will unload in this position.)
Step Four:

✓ **Throttle the Doorplate to Position “11”**

Again, rotate the RED socket clockwise until the rear edge of the doorplate is in line with the “11” marking as shown below. Continue to unload the car with the doorplate at position “11” until unloading begins to slow or the unloading volume decreases. This time will vary depending on the type of commodity being unloaded. Once unloading slows, continue to step five.
Step Five:

✓ Throttle the Doorplate in 6" Increments Until Fully Open

Continue to throttle the doorplate in roughly 6 inch increments until unloading is complete. Each time the volume or unloading begins to slow down, move the doorplate open 6 more inches. Continue this process until the doorplate is fully open. Once the doorplate is fully open and commodity is done flowing from the car, the unloading process should be complete.
Step Six:

✓ Close the Doorplate and Reinstall the Nozzle Cap

Once unloading is complete, remove the vacuum hose. Close the doorplate by rotating the RED socket toward the rear of the gate until the edge of the doorplate is at the “X” marking on the gate frame as shown below. Reinstall the nozzle cap by reversing the installation instructions.
Quick Unloading Instructions

1) Remove Nozzle Cap

2) Attach Vacuum Hoses

3) Throttle Top Doorplate to Position “0”

4) Turn on Vacuum Pump

5) Throttle Top Doorplate to Position “A”

6) When Commodity Flow Slows, Throttle Top Doorplate to Position “11”

7) Continue to Throttle Doorplate in roughly 6” increments until unloading is completed.

8) Close Top Doorplate

9) Reinstall Nozzle Cap