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SAFETY ALERT

Industry Safety Alert:

Refrigerant Recovery 80% Shut Off Switches

In the early 1990's, the EPA declined to require 80% shut off sensors in the final rule governing commercial refrigerant recovery due to inherent problems with them, including the **safety hazards** they pose.

On most machines, these switches simply turn off the recovery machine **without stopping the flow of refrigerant**. This can result in an **overfilled tank,** becoming extremely dangerous to the technician. This is a known hazard in these common situations:

1. During push-pull procedures, once a siphon is started, merely powering off the machine **does not prevent the tank from overfilling**.

2. When using a tank with a large amount of cold refrigerant and recovering from a system at a higher temperature, turning the machine off **will not stop the refrigerant** from migrating to the coldest point (in this case, the recovery tank) eventually **overfilling the tank** even with the machine off.

The float sensor **can also collapse from over-pressure** due to non-condensables in the cylinder or from overfilling. A collapsed float would render the shut off switch useless and the technician would not know it as the float sensor is concealed in the tank.

Crushed Float Sensor

Warning: *An 80% shut off switch does not always prevent overfilling. Any technician using an 80% shut off switch must be aware of the liability and safety risks that come along with their use.*

Also, tanks that are more than 80% full (DOT violation) may expose the technician to high concentrations of vented refrigerant, and severely overfilled tanks can possibly explode.

Reminder: 80% shut off switches are not "walk-away" features. As a general safety precaution, no process involving temporary connections and systems under pressure should ever be left unattended.