

View this email in your browser



# Nextelligence Newsletter

Issue #10

August 2023



Environmental  
Solutions Group  
a DOVER company



## Welcome to the Nextelligence Newsletter!

Welcome to the tenth edition of the Nextelligence Newsletter. We look forward to continuing to provide the latest news in the Nextelligence training community.

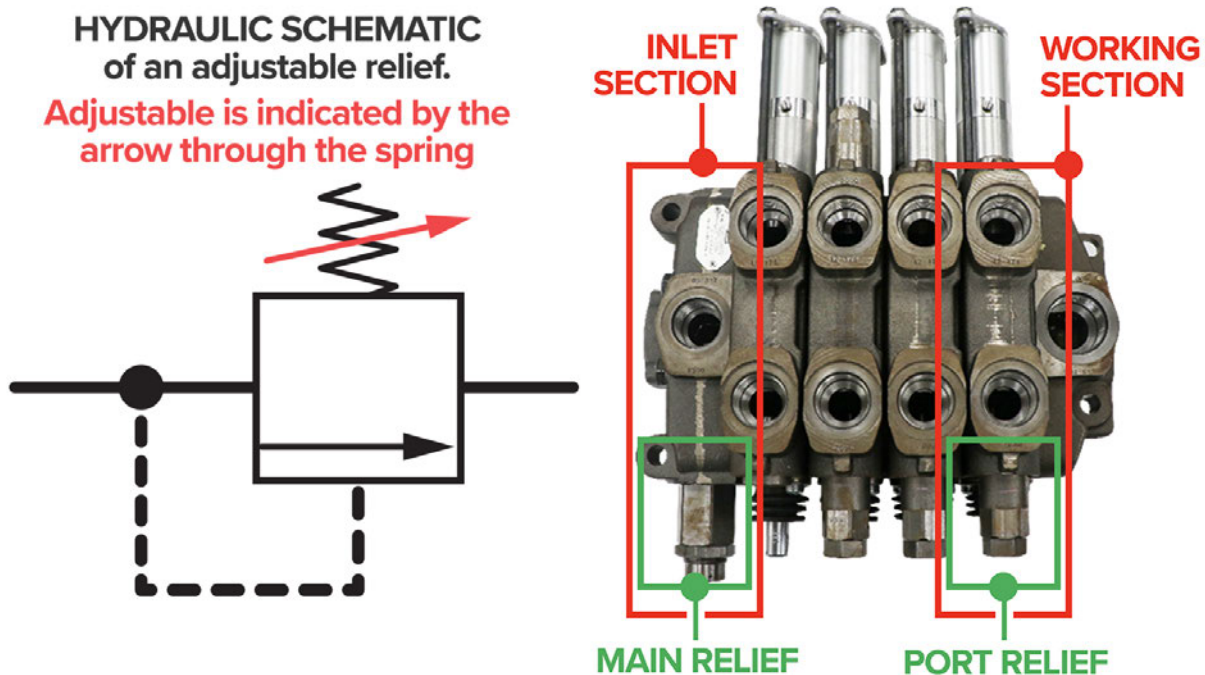


## What a Relief!

### Relief Valves - What they do in a hydraulic system

In this month's Nextelligence Newsletter, we will learn to identify hydraulic relief valves, discuss what they do, and what types of relief valves are in a garbage truck hydraulic system. Relief valves can be found in multiple places in a hydraulic system. They can be located on the inlet side of a valve, on the valve section, and even at the pump. So how do relief valves work, and what do they do? Relief valves control pressure in the hydraulic system to optimize the functionality of

the system and protect the components from over-pressurization. They prevent over-pressurization by providing an alternate path for the hydraulic fluid to travel back to the hydraulic reservoir or hydraulic tank to relieve the pressure that is over the set point of the relief.



### Set point of the relief, what is that?

The set point of the relief valve is the opening point or cracking point of the relief. This means when the pressure reaches the desired or “set” value, the relief will open and allow the hydraulic oil to flow back to the hydraulic tank. Reliefs are engineered into the system for component protection in regard to maximum cylinder, pump, and hydraulic valve pressures or to provide the pressure that is required to make a part of the hydraulic system function to the requirements needed, such as: lifting a heavy container with an automated lift arm. The higher the pressure setting, the more force that can be exerted by the cylinder to move heavier objects.

**There are many types of relief valves, but the two that we are going to discuss today are what we refer to as main relief valves and port relief valves.**



## Main Relief Valves Are Adjustable

**(Turning Clockwise turns Up pressure)**

**(Turning Counter-clockwise Turns Down Pressure)**

These are most often found on the inlet section of the hydraulic valve.



## Some Port Relief Valves Are Adjustable

**(Turning Clockwise turns Up pressure)**

**(Turning Counter-clockwise Turns Down Pressure)**

These are found on the working section of the hydraulic valve to control individual pressures of the single circuit. For example, the grip pressure on an automated lift may be set lower than the main system pressure to keep from crushing containers. You wouldn't want to grip a plastic garbage can at the main system pressure of 2500psi, would you? No! For that reason, we set the pressure much lower at 1250psi to prevent container damage.



## Some Port Relief Valves Are Non-Adjustable

Non-Adjustable reliefs have the pressure that they will open and return fluid back to tank stamped on the end of the relief.

These are also found on the working section of the hydraulic valve.

**Again, reliefs are to provide the correct working pressure in the hydraulic system and to protect components from damage from**

**too much pressure in the system. Next month we will discuss the proper procedures to adjust the relief pressure settings in a hydraulic system.**

---

Would you like to know more about hydraulic systems? Good news! We teach that in our Nextelligence MAT classes. You can get in-depth training by contacting us to register for a Nextelligence MAT class at: [Nextelligence@doveresg.com](mailto:Nextelligence@doveresg.com)

---

## **Contact Info & Helpful Links**

### **Nextelligence Class Registration**

Feel free to contact us anytime if you have any training questions or to register for one of our training classes.

[Email Training](#)

---

### **2023 Nextelligence Training Schedule**

Our 2023 Training Schedule is now available and can be viewed via the Nextelligence Training webpage, as well as the Heil Dealer Portal.

[View Training Schedule](#)



## Service Shack

Visit the Heil Service Shack for helpful training and instructional videos

[View Service Shack](#)

---

## Sign Up for the Nextelligence Newsletter!

To sign up for the newsletter or to add members of your team, click button below!

[Sign Up Here](#)





---

*Copyright © Environmental Solutions Group - All rights reserved.*

**Our mailing address is:**

Environmental Solutions Group  
201 W. Main Street, Ste 300  
Chattanooga, TN 37408

Want to change how you receive these emails?

You can [update your preferences](#) or [unsubscribe from this list](#).