



# Technical Bulletin

## Hydraulic Schematics for Connecting Multiple Cascade Hydraulic Accessories

The schematics in this Bulletin show the preferred method of connecting multiple Cascade Hydraulic accessories together for best performance. The Accessories covered are:

### **Two Function Pressure and Control Valve**

Provides auxiliary pressure and flow control to the attachment. Used with the Low Pressure Tank line kit. See pages 2, 3, 4, 5, 6.

### **Three Function Pressure and Control Valve**

Provides auxiliary pressure and flow control to the attachment. Used with the Low Pressure Tank line kit. See page 7.

### **Three Position Pressure Relief Valve**

Allows clamping force to vary from load to load using the minimum require hydraulic pressure setting. Used with the Low Pressure Tank line kit. See pages 2, 5, 6, 7.

### **3N2 Valve**

Provides control of three attachment functions (typically Clamp, Swing, Rotate) with the use of two truck function levers. A Priority Flow Control Valve is used to provide a switching signal to the 3N2 Valve. Used with the Low Pressure Tank line kit. See pages 3, 4, 5, 6, 7.

### **Low Pressure Tank Line**

Hose and hardware to install a hydraulic line directly into an existing low pressure tank line hose. Single and Dual line kits are available. See pages 2, 3, 4, 5, 6, 7.

### **Clamp Open Guard**

Prevents accidental opening of the a clamp prior to the load being properly lowered. See pages 4 and 6.

**NOTE:** This information should not be interpreted as the basis for warranty claims unless so designated.

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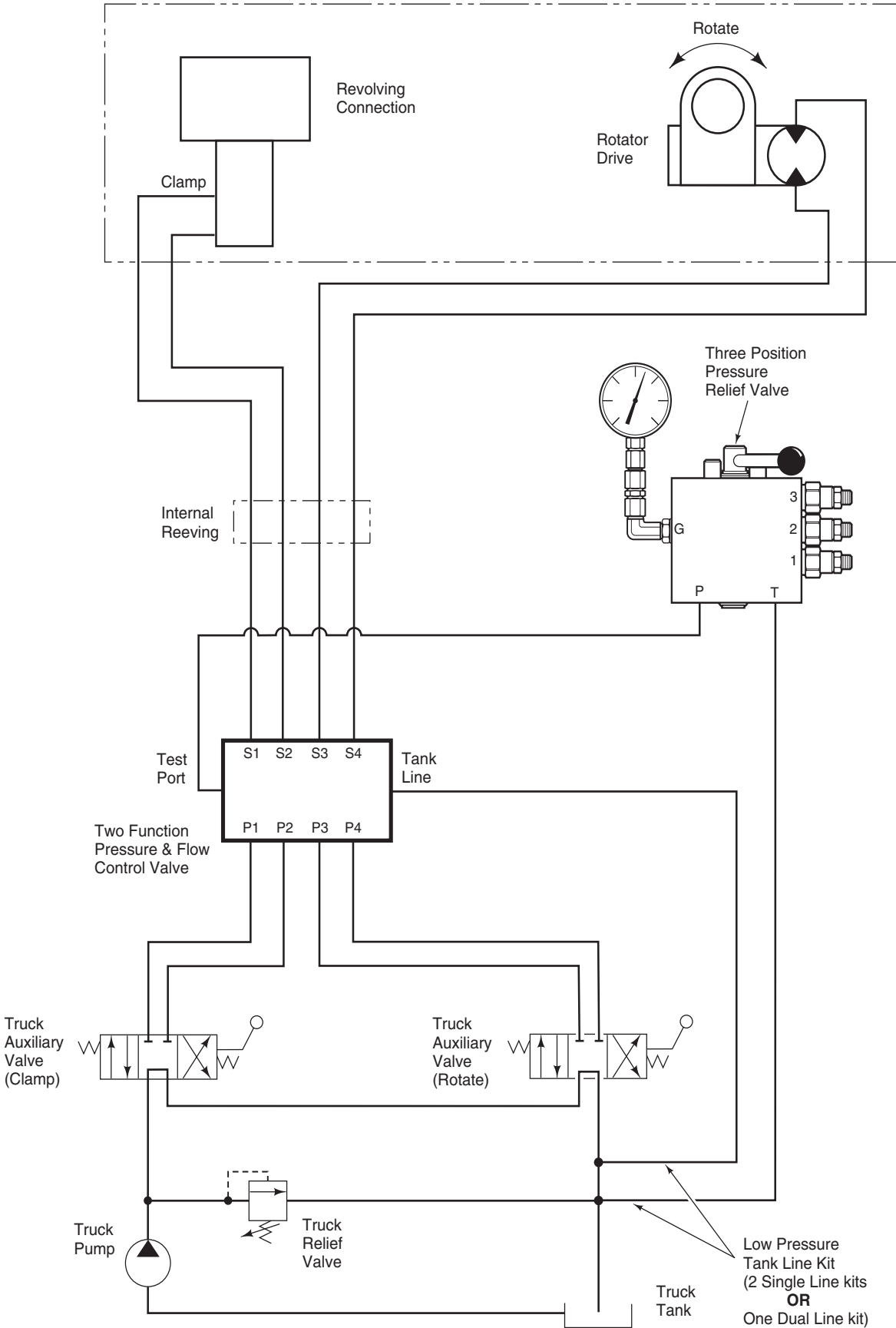
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# Hydraulic Schematic

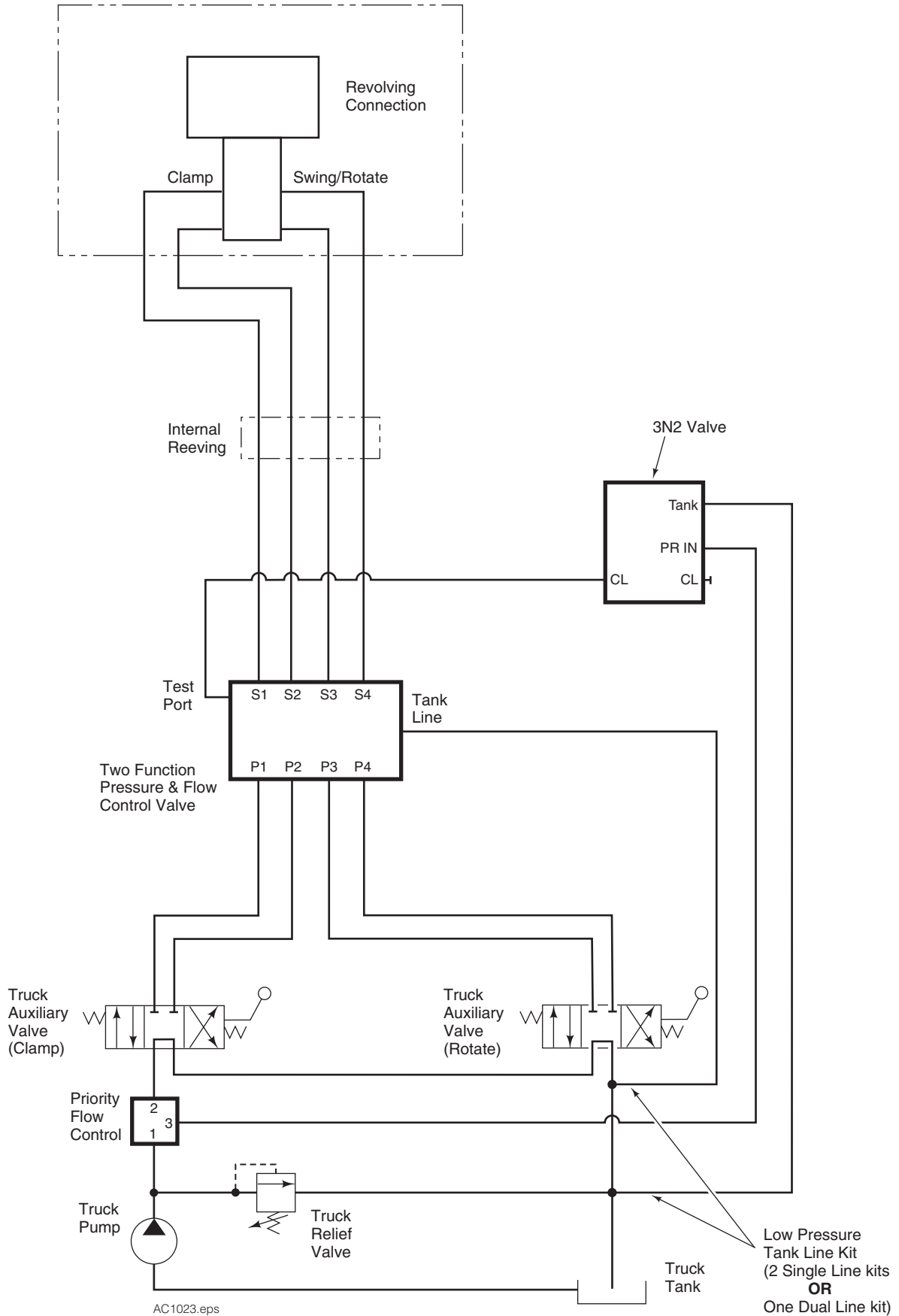
Attachment Equipped with  
Two Function Pressure and Flow Control Valve  
& Three Position Relief Valve



AC1017.eps

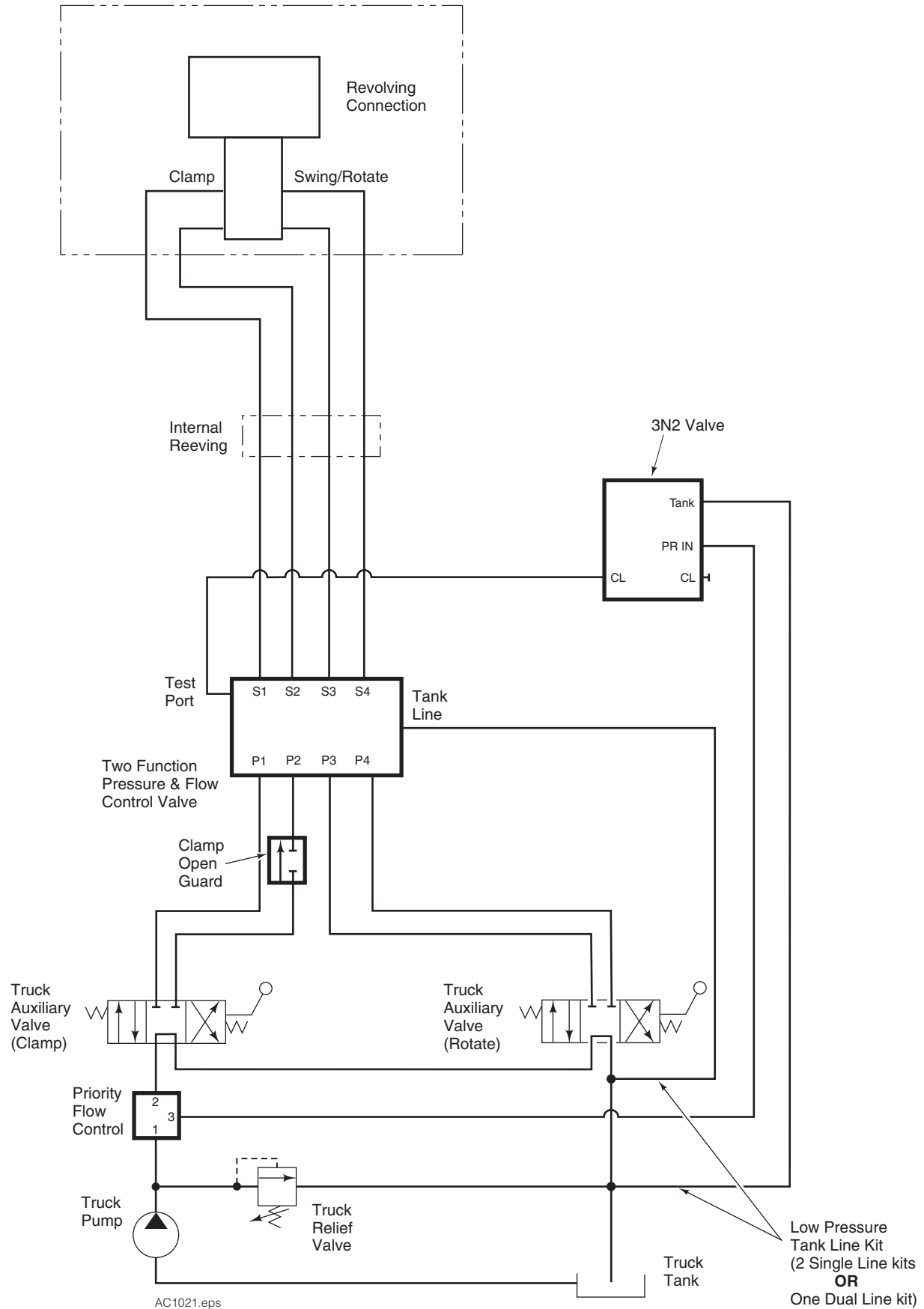
# Hydraulic Schematic

## FX Swing Frame Roll Clamp Equipped with Two Function Pressure and Flow Control Valve



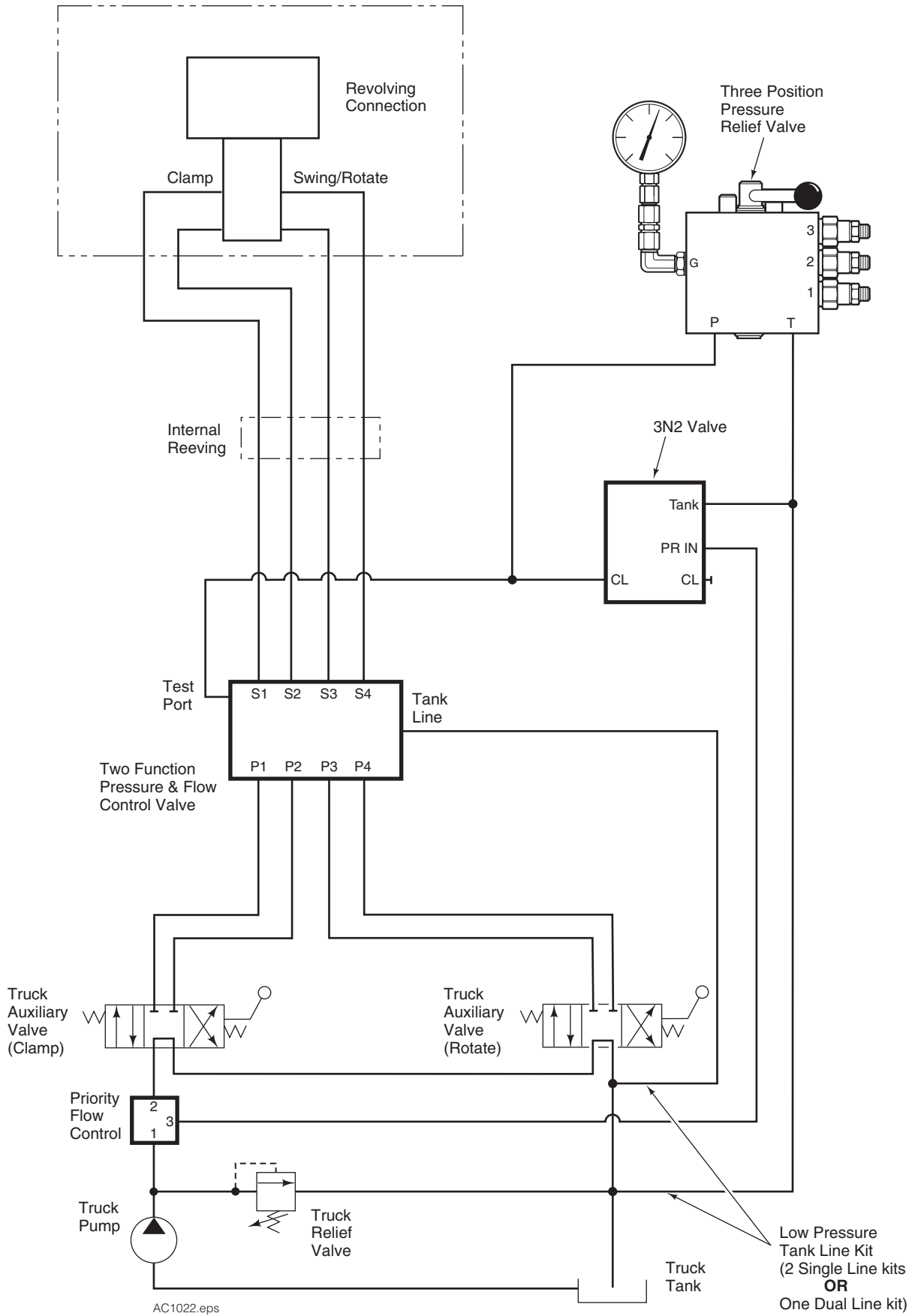
# Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with  
Two Function Pressure and Flow Control Valve  
and Clamp Open Guard



# Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with  
Two Function Pressure and Flow Control Valve  
& Three Position Relief Valve

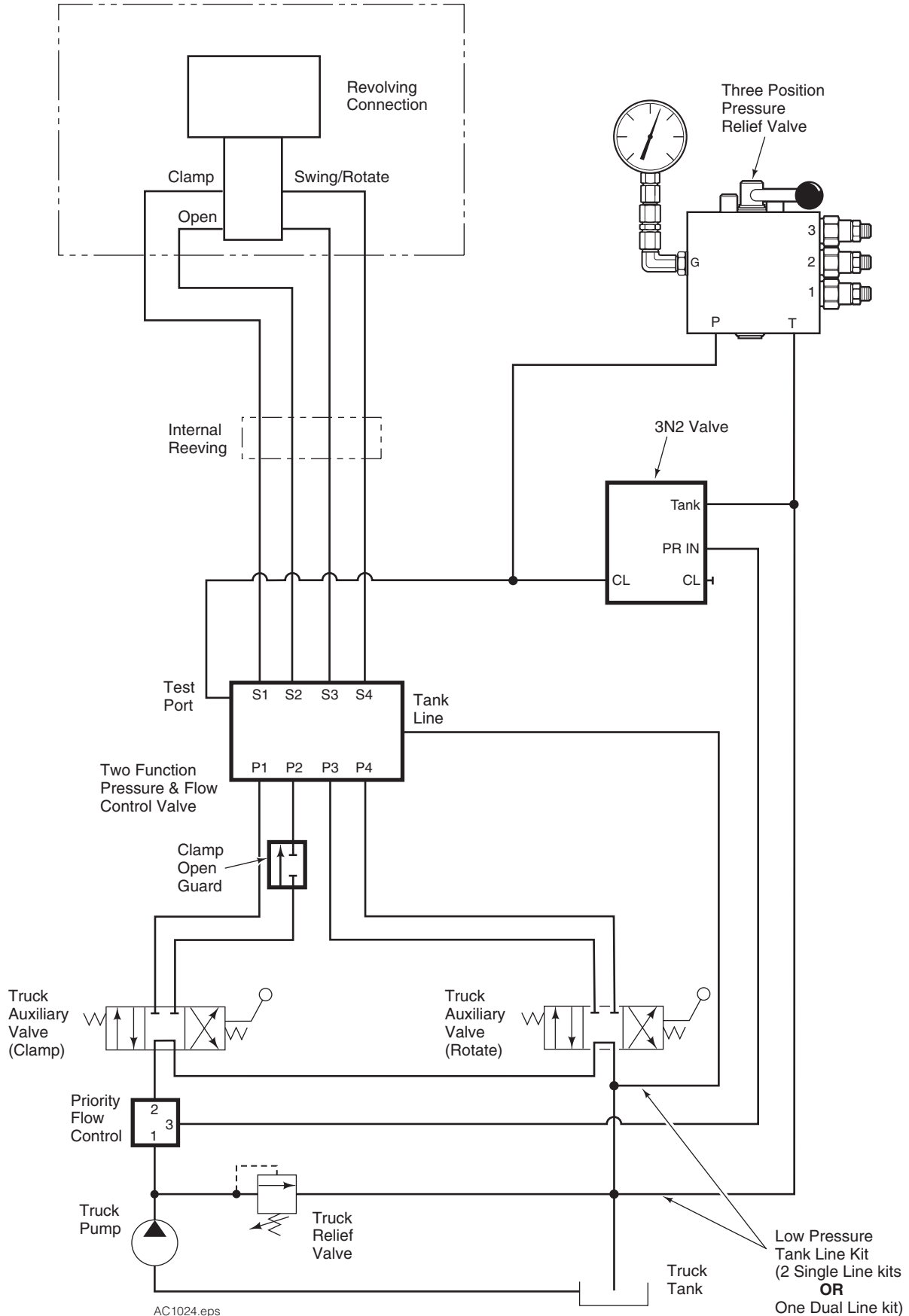


AC1022.eps

Low Pressure Tank Line Kit  
(2 Single Line kits  
OR  
One Dual Line kit)

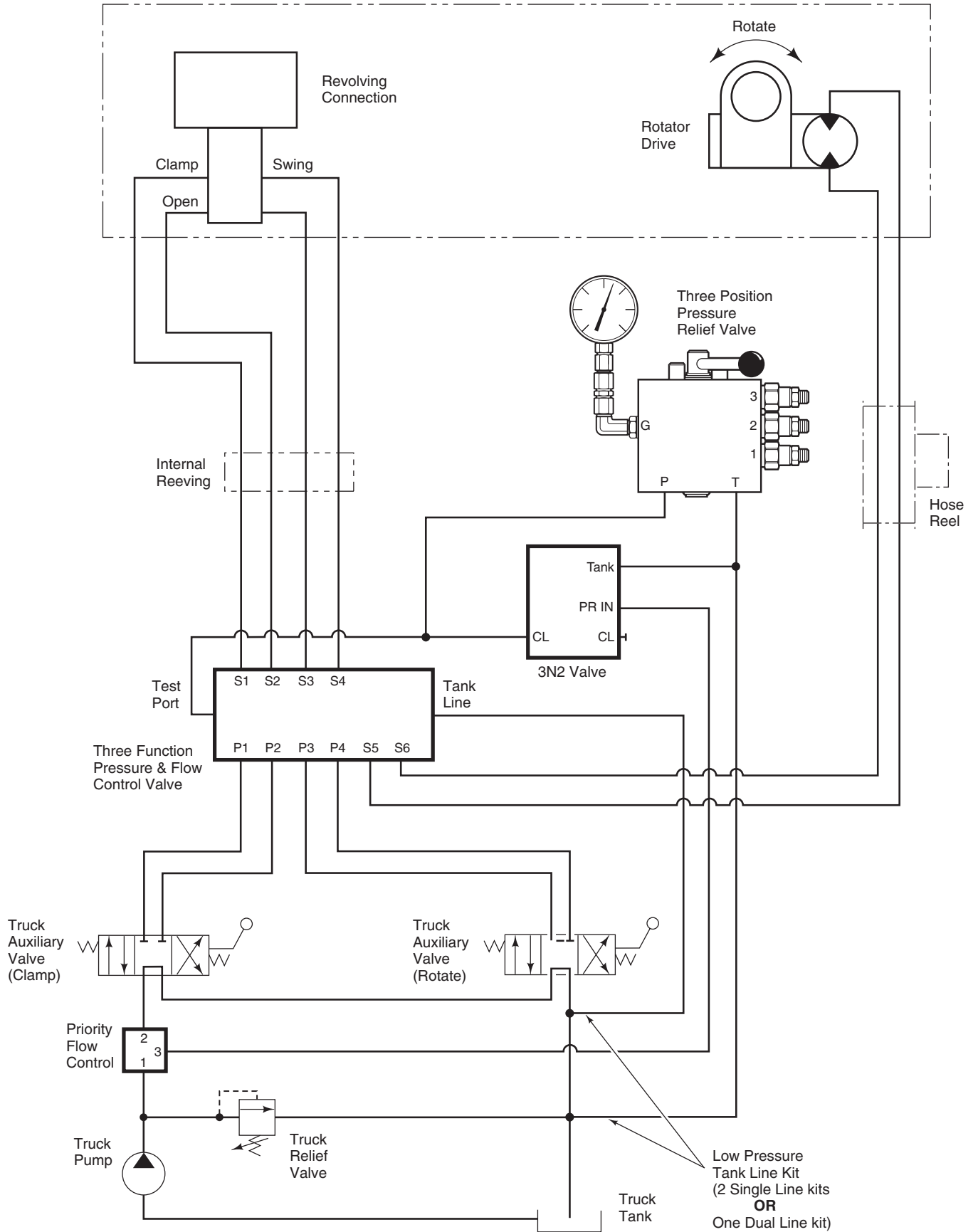
# Hydraulic Schematic

FX Swing Frame Roll Clamp Equipped with  
Two Function Pressure and Flow Control Valve,  
Three Position Relief Valve & Clamp Open Guard



# Hydraulic Schematic

Swing Frame Roll Clamp Equipped with  
Three Function Pressure and Flow Control Valve  
& Three Position Relief Valve



**Do you have questions you need answered right now?** Call your nearest Cascade Service Department. Visit us online at [www.cascorp.com](http://www.cascorp.com)

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