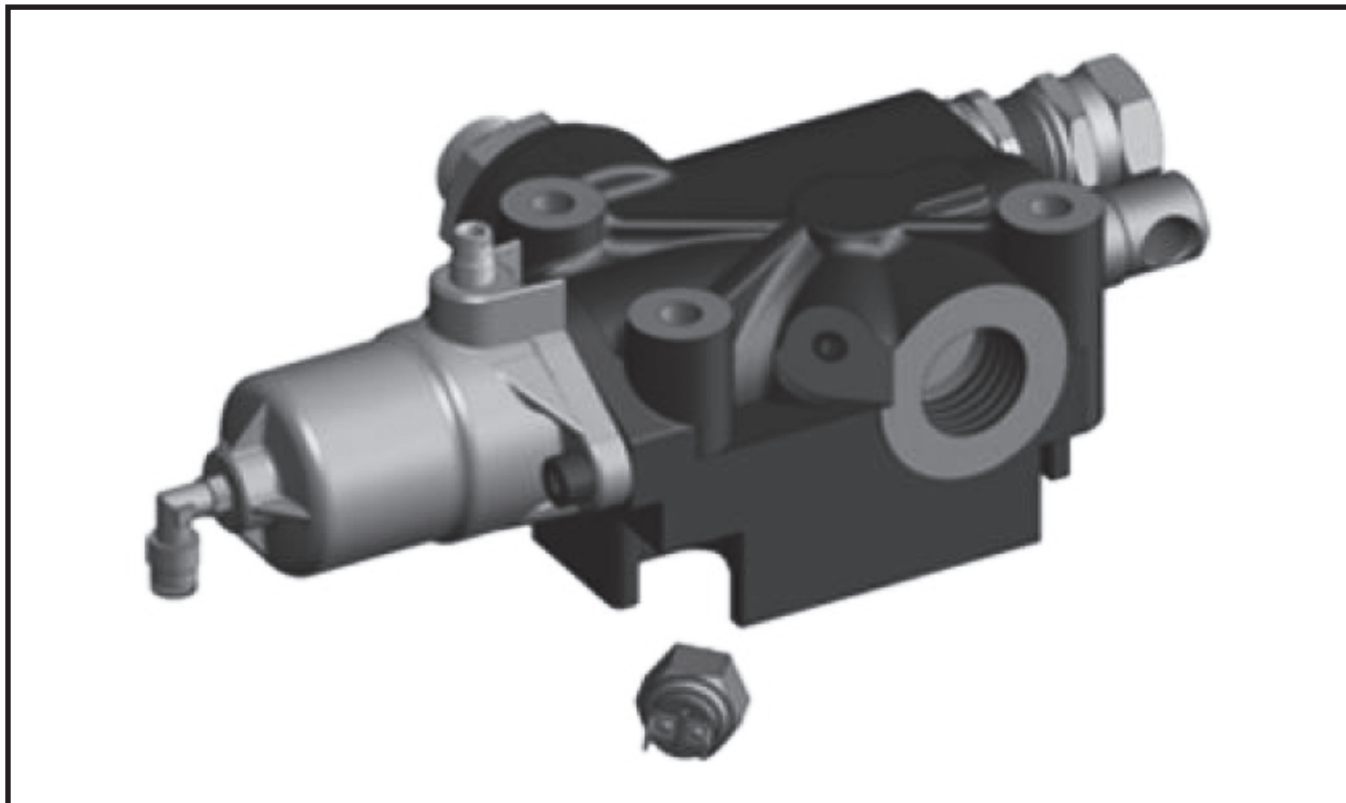


Bulletin PCD1011-1

# Owner's Manual CVA16DP

Effective: May 2016

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**Dual Pressure Relief Valve Assembly**





## **WARNING — User Responsibility**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

## **Offer of Sale**

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

## **Patent Information**

The Power Take-Off or its components shipped with this owner's manual may be manufactured under one or more of the following U.S. patents:

4610175 5228365 4597301 5645363 6151975 6142274 6260682 7159701 B2 7510064 US7690450 B2

Other patents pending.

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# CVA16DP Dual Pressure Relief Valve

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## General Information

## CVA16DP Dual Pressure Relief Valve


### Safety Information

#### Rotating Auxiliary Driveshafts




- Rotating auxiliary driveshafts are dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death.
- Do not go under the vehicle when the engine is running.
- Do not work on or near an exposed shaft when the engine is running.
- Shut off the engine before working on the Power Take-Off or driven equipment.
- Exposed rotating driveshafts must be guarded.

#### Guarding Auxiliary Driveshafts

 **WARNING:** We strongly recommend that a Power Take-Off and a directly mounted pump be used to eliminate the auxiliary driveshaft whenever possible. If an auxiliary driveshaft is used and remains exposed after installation, it is the responsibility of the vehicle designer and P.T.O. installer to install a guard.

#### Using Set Screws

 **WARNING:** Auxiliary driveshafts may be installed with either recessed or protruding set screws. If you choose a square head set screw, you should be aware that it will protrude above the hub of the yoke and may be a point where clothes, skin, hair, hands, etc. could be snagged. A socket head set screw, which may not protrude above the hub of the yoke, does not permit the same amount of torquing as does a square head set screw. Also, a square head set screw, if used with a lock wire, will prevent loosening of the screw caused by vibration. Regardless of the choice made with respect to a set screw, an exposed rotating auxiliary driveshaft must be guarded.

#### Important: Safety Information and Owner's Manual

Chelsea Power Take-Offs are packaged with safety information decals, instructions, and an owner's manual. These items are located in the envelope with the P.T.O. mounting gaskets. Also, safety information and installation instructions are packaged with some individual parts and kits. **Be sure to read the owner's manual before installing or operating the P.T.O.** Always install the safety information decals according to the instructions provided. Place the owner's manual in the vehicle glove compartment.

#### **WARNING: Operating the P.T.O. with the Vehicle in Motion**

Some Power Take-Offs may be operated when the vehicle is in motion. To do so, the P.T.O. must have been properly selected to operate at highway speeds and correctly matched to the vehicle transmission and the requirements of the driven equipment.

If in doubt about the P.T.O. specifications and capabilities, avoid operating the P.T.O. when the vehicle is in motion. Improper application and/or operation can cause serious personal injury or premature failure of the vehicle, the driven equipment, and/or the P.T.O.

Always remember to disengage the P.T.O. when the driven equipment is not in operation.

## General Information

## CVA16DP Dual Pressure Relief Valve

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### General Information

#### Safety Information Continued



NEVER run your hand, arm or any other part of the body over a hydraulic hose, line, fitting or assembly to check for leaks. A pinhole leak can release toxic fluid at more than 600 feet per second – acting as a hypodermic needle penetrating both protective clothing and skin at short distances. A seemingly superficial wound could lead to loss of life or limb as a result of fluid poisoning.

NEVER loosen or tighten a hydraulic connection when the system is under pressure. The connection could fail catastrophically and cause an injection injury and/or damage to property. Be sure that all high pressure is bled/released from the hydraulic system.

When working with hydraulic hose, lines, fittings or assemblies - whether during installation, preventive maintenance, or scheduled component replacement, exercise extreme caution. Fluids under high pressure can be dangerous and potentially lethal. Make sure all high pressure is relieved so that hoses and components may be examined safely.



Failure or improper handling of hose, tubing, fittings, assemblies or related accessories (“Products”) can cause death, personal injury and property damage. Possible consequences of failure or improper handling of these Products include but are not limited to:

- Fittings thrown off at high speed.
- High velocity fluid discharge.
- Explosion or burning of the conveyed fluid.
- Electrocutation from high voltage electric power lines.
- Contact with suddenly moving or falling objects that are controlled by the conveyed fluid.
- Injections by high-pressure fluid discharge.
- Dangerously whipping hose.
- Contact with conveyed fluids that may be hot, cold, toxic or otherwise injurious.
- Sparking or explosion caused by static electricity buildup or other sources of electricity.
- Sparking or explosion while spraying paint or flammable liquids.
- Injuries resulting from inhalation, ingestion or exposure to fluids.

# Installation Instructions

# CVA16DP Dual Pressure Relief Valve

## CVA16DP Valve Overview

The Parker Control Valve Assembly is a dual pressure relief setting system used in combination with wetline kits. The system allows the operator to use his truck for dual functions by switching between different operating pressure requirements.

The operator may connect to a dump trailer operating at 2000 psi. and later connect to a different systems similar to a Moving Floor trailer requiring 3000 psi. without making any pressure adjustments.

The operator has one pressure hose to connect to the trailer eliminating the need to remember to switch between low and high pressure, making for a safer operation.

## Installation of the Parker CVA16DP Control Valve

Assembly with dual pressure setting relief on the truck frame can be mounted in any orientation. However, it should be rigidly mounted using proper mounting hardware. Recommended mounting would be between the truck's frame rails to protect the valve from road debris kicked up by the tires (see Fig 1).

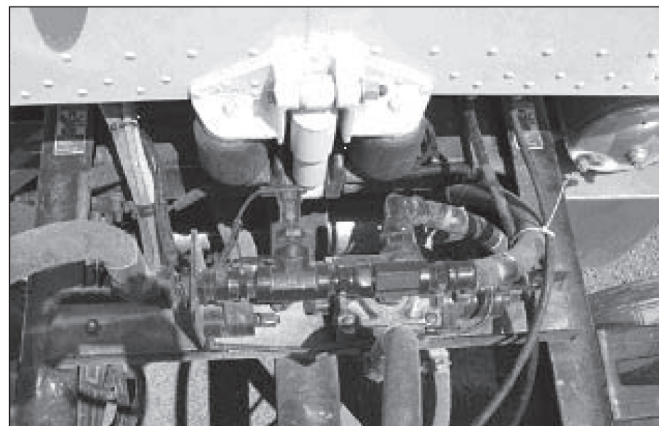


Figure 1

There are three (3) hydraulic hoses, two air lines to connect.

1. See SK-506 on page 7 for proper hydraulic hose and air connections
2. All hydraulic fittings should be torque to their proper specifications before using the hydraulic circuit.

## JIC 37° and S.A.E. 45° Flare

Parker's recommended assembly method for JIC 37° flare and SAE 45° flare is the Flats From Wrench Resistance (FFWR) method. This includes steel as well as other materials.

The torque values assigned by size are for reference only and are only applicable to Parker system components using the FFWR method with trivalent chromate passivation on zinc plating of carbon steel components without lubrication.

Dash Size	Flats From Wrench Resistance (FFWR)	Swivel Nut Torque	
		Newton Meters (ref)	Pound Feet (ref)
-4	2	18	13
-5	2	23	17
-6	1-1/2	30	22
-8	1-1/2	57	42
-10	1-1/2	81	60
-12	1-1/4	114	84
-16	1	160	118
-20	1	228	168
-24	1	265	195
-32	1	360	265

## Installation Instructions

## CVA16DP Dual Pressure Relief Valve

### Torque Conversion

The torque values for other materials are as follows:

- Brass fittings and adapters - 65% of the torque value for steel.
- Stainless steel, and Monel - Use 5% higher than listed for steel. Threads to be lubricated for these materials.
- Dissimilar metals - use torque value designated for the lower of the two metals.
- All fittings are dry except as noted above. The Flats From Wrench Resistance (FFWR) and torque values listed above are consistent with the values recommended by Parker Tube Fittings Division (614) 279-7070 or [www.parker.com/tfd](http://www.parker.com/tfd).

### Torque Conversion Equivalents

Pound Inch - Pound Foot - Newton meter		
Pound Foot x 12	=	Pound Inch
Pound Foot x 1.356	=	Newton meter
Newton Meter x 8.850	=	Pound Inch
Newton meter x 0.737	=	Pound Foot
Pound Inch x .083	=	Pound Foot
Pound Inch x 0.113	=	Newton Meter



## Operation Instructions

## CVA16DP Dual Pressure Relief Valve

### Operation of CVA16DP Valve

Control valve number CVA16DP is used to provide pump flow to the trailer. More importantly it allows from within the vehicle cab two different pressures. Alternative higher pressures are achieved by engaging the auxiliary air valve (high pressure) in the cab. **Use of the auxiliary air valve (high pressure) on trailers designed for only the low pressure could result in equipment damage.**

**NOTE:** Valve comes factory pre-set at 2100 psi for low pressure and 3000 psi for high.

### Dump Trailer

#### Parker Combo Valve AVCP-695-M-T-8 OEM PTO Switch Installed

1. Connect the tractor to the trailer using a male and female quick coupler. (Figure 1)
2. For hose connections to the CVA16DP valve see (Figure 2)
3. Turn the PTO switch on and use the Combo valve AVCP-695-M-T-8 to control the CVA16DP valve using the lever control to raise, hold, or lower the dump trailer. (Figure 3)
4. After fully lowering the bed use the PTO switch provided by the OEM to shut off the PTO and disable the hydraulic system.



Figure 1

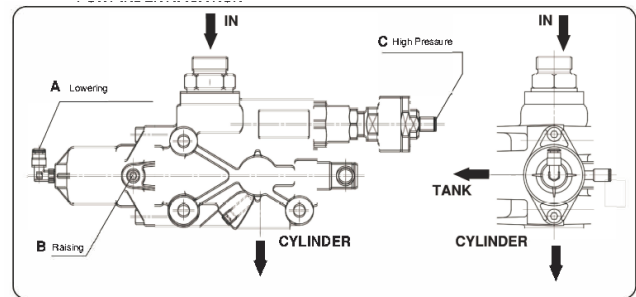


Figure 2

**NOTE:** Never turn the Moving Floor switch to the on position when operating a Dump Trailer Hoist. Flipping this switch while operating a Hoist can cause serious injury and or death to the driver.



Figure 3

## Operating Instructions

## CVA16DP Dual Pressure Relief Valve

### Moving Floor and 2 Line Trailer Applications Parker Combo Valve AVCP-695-M-T-8 OEM PTO Switch Installed

1. Quick Couple the High Pressure Hose From the tractor to the trailer. (Figure 1)
2. Quick Couple the Return Line hose from the trailer to the tractor. (Figure 1)
3. To start the moving floor
  - A. Turn the PTO on
  - B. Turn the moving floor switch to the on position this will set the moving floor to the high pressure mode. (Figure 2)
  - C. shift the hoist control to the raise position this will enable the moving floor controls (Figure 2)
4. Use controls on the trailer for moving floor
5. To STOP moving floor operations move hoist lever back to "HOLD". Turn the Moving Floor Switch to the off position and then Turn the PTO switch off.



Figure 1



Figure 2

# Operating Instructions

## Dump Trailer

### Moving Floor and Two Line Trailer Applications

#### Parker Combo Valve AVCP-295-MTCK8

#### No OEM PTO Switch Installed

## Dump Trailer

1. Quick Couple Tractor to the Trailer. (Figure 1)
2. For hose connections to the CVA16DP valve see (Figure 2)
3. Turn the PTO switch on and use the Combo Valve AVCP-695-M-T-8 to control the CVA16DP valve using the lever control to raise, hold, or lower the dump trailer (Figure 4)
4. After fully lowering the bed place the Combo valve in the hold position, and turn the PTO off.

**NOTE:** Never turn the Moving Floor switch to the on position when operating a Dump Trailer Hoist. Pulling this switch while operating a Hoist can cause serious injury and or death to the driver.

## Moving Floor and Two Line Trailer Applications

1. Quick Couple the high pressure hose from the tractor to the trailer (Figure 3)
2. Quick Couple the the return line hose from the trailer to the tractor (Figure 3)
3. To start the moving floor
  - a. Turn the PTO On
  - b. Pull the moving floor button to the on position this will set the moving floor to the high pressure mode (Figure 4)
  - c. Shift the hoist control to the raise position this will enable the moving floor controls on the trailer. (Figure 4)
4. Use the trailer to operate controls
5. To stop moving floor operations move hoist lever back to HOLD, and push moving floor button to the off position. Turn PTO switch off.

## CVA16DP Dual Pressure Relief Valve



Figure 1

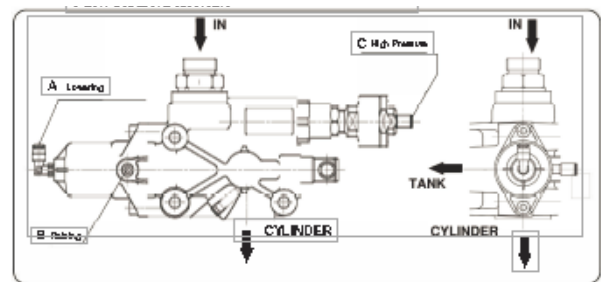


Figure 2



Figure 3



Figure 4

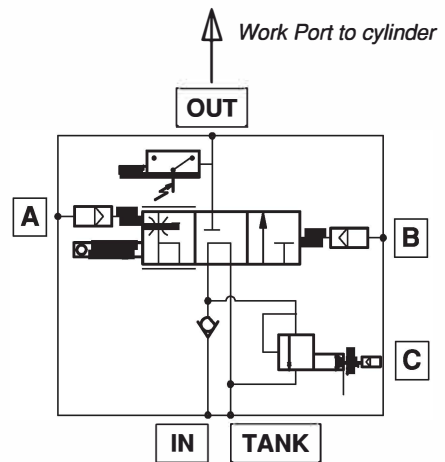
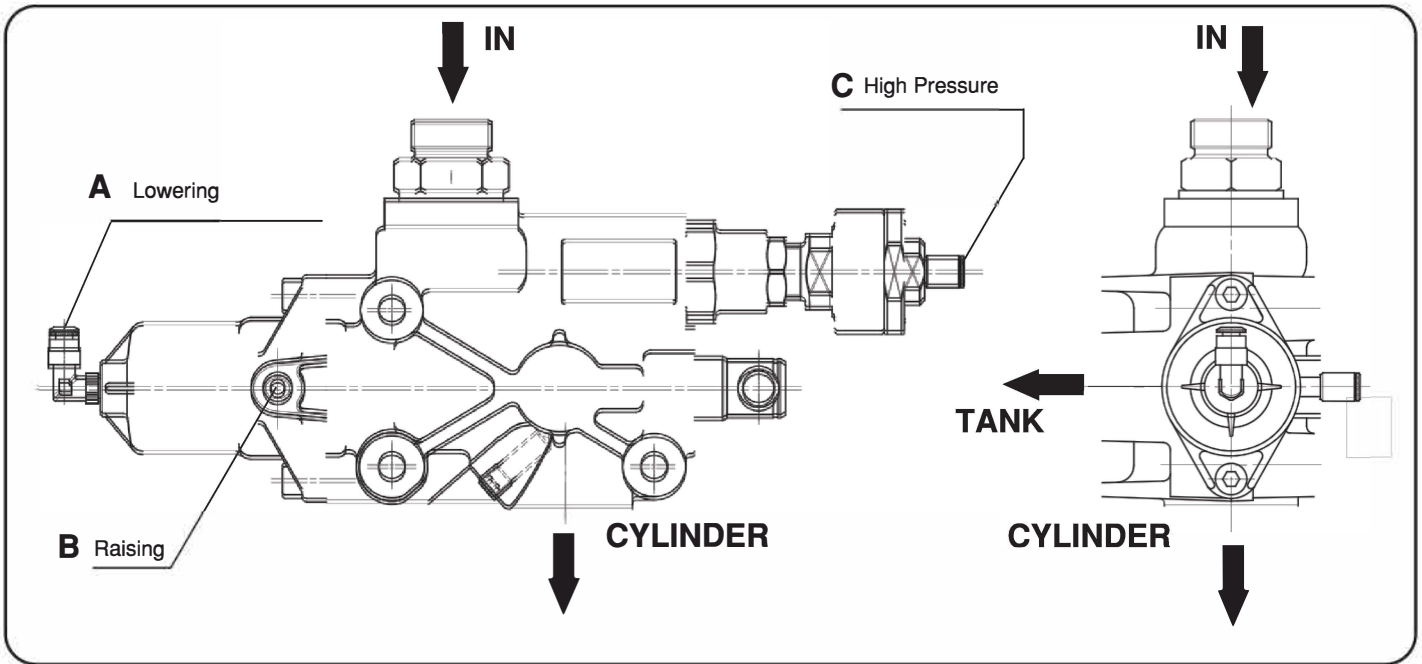
# Installation Sketch

# CVA16DP Dual Pressure Relief Valve

## Installation Sketch of the Parker CVA16DP Control Valve

Caution total maximum pressure could be set to 400 bar / (5800 PSI)

### PORT IDENTIFICATION



Functional diagram

# Relief Valve Setting Instructions

# CVA16DP Dual Pressure Relief Valve

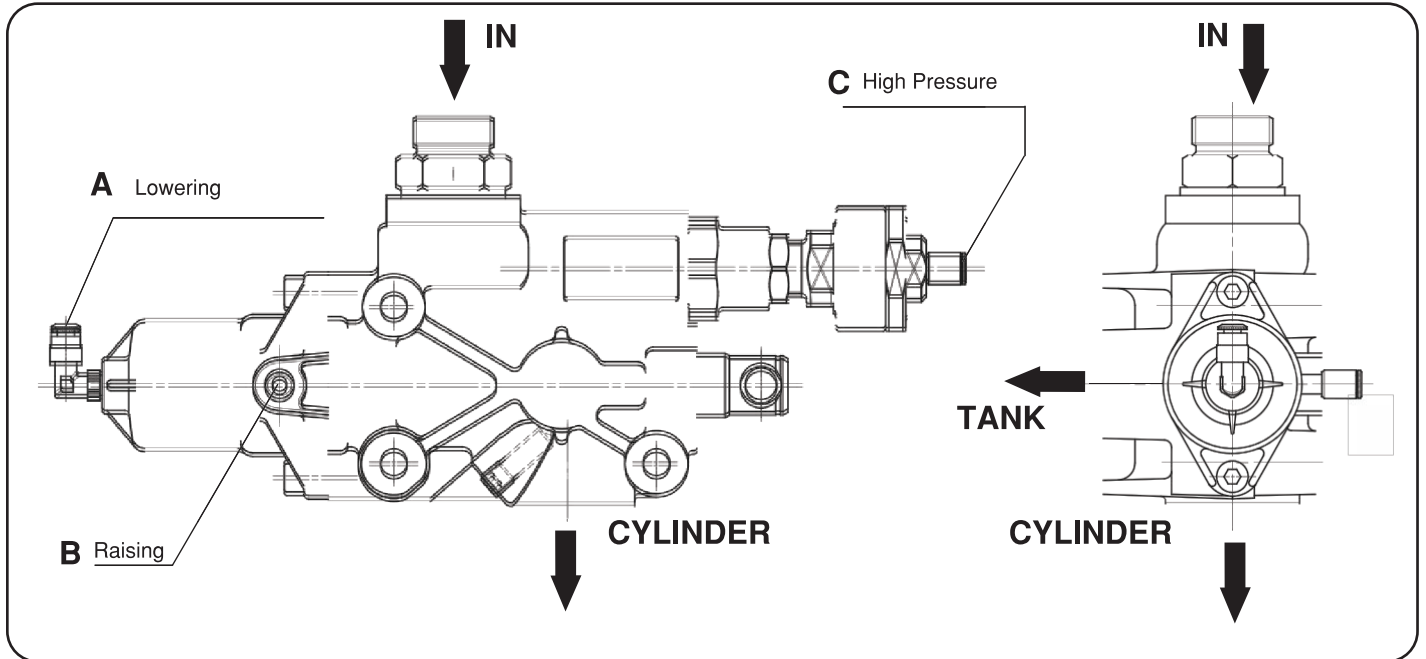
## CVA16DP Relief Valve 2 Independent Pressure Relief Valve Setting Instructions

The double pressure pneumatic relief valve allows the setting of the higher pressure level independently from the low pressure value. Disconnect equipment attached to the cylinder port. Install a pressure gauge, with a pressure range to cover 0-400 bar / 0-5800 PSI, to the cylinder port. When setting the high pressure relief valve, apply air pressure to the top of the relief valve.

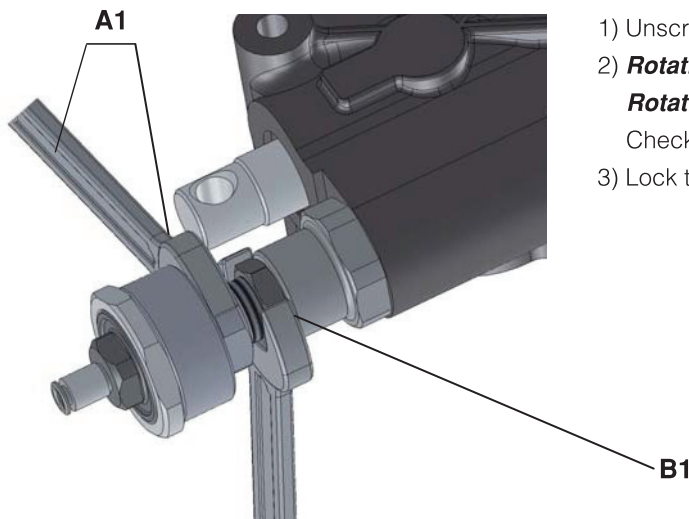
Pressure setting Range approx:  
 Low pressure: 0-200 bar / (0-2900 PSI)  
 High pressure: low pressure value + 0-200 bar / (0-2900 PSI)

Caution total maximum pressure could be set to 400 bar / (5800 PSI)

### PORT IDENTIFICATION



### LOW PRESSURE SETTING

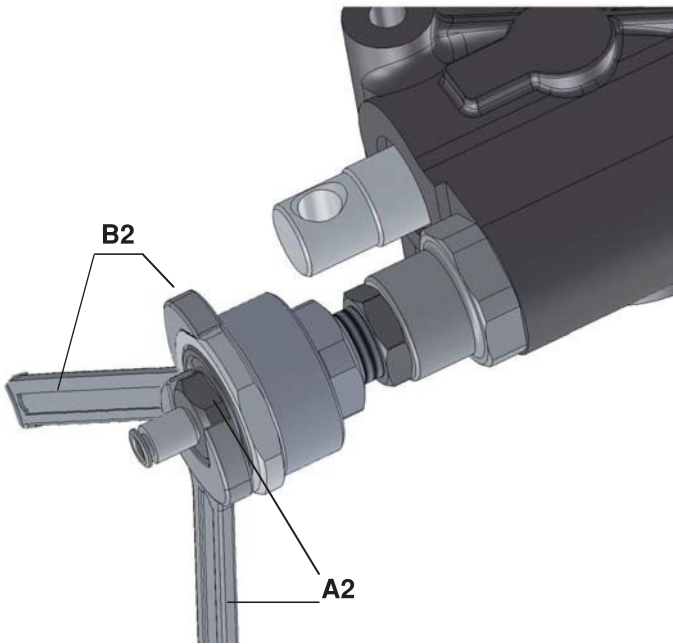


- 1) Unscrew the nut **B1** while maintaining position of tool/nut **A1**.
- 2) **Rotating (CW)** tool/nut **A1** the pressure increases.  
**Rotating (CCW)** the pressure decreases.  
 Check the pressure with a pressure gauge.
- 3) Lock the nut **B1**, while maintaining position of tool/nut **A1**.

# Relief Valve Setting Instructions

# CVA16DP Dual Pressure Relief Valve

## Relief Valve 2 Independent Pressure HIGH PRESSURE SETTING

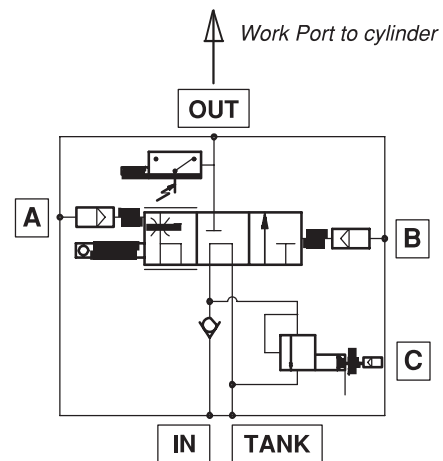


- 1) Unscrew the nut **B2** while maintaining position of nut **A2**.
- 2) **Rotating (CW)** tool/nut **A2** the pressure increases, **Rotating (CCW)** the pressure decreases. Check the pressure with a pressure gauge installed at the cylinder port.
- 3) Lock the nut **B2** but keeping carefully attention to maintain tool/nut **A2** position.

**WARNING:** any setting or adjustment of relief valve has to be carried out by using proper pressure gauges in the hydraulic circuit and should only be done by a **qualified hydraulic technician**

- If the Low and High pressure are set at their highest level possible, the High pressure can go over 400 bar / (5800 PSI).
- Changes applied to the Low pressure affect also the High pressure level.

In case you need to change **ONLY** the Low pressure setting you have to adjust the High pressure value in order to restore its initial value.



Functional diagram

## Power Take-Off Maintenance

## CVA16DP Dual Pressure Relief Valve

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### Power Take-Off Maintenance

Due to the normal and sometimes severe torsional vibrations that Power Take-Off units experience, operators should follow a set maintenance schedule for inspections. Failure to service loose bolts or Power Take-Off leaks could result in potential auxiliary Power Take-Off or transmission damage.

Periodic P.T.O. MAINTENANCE is required by the owner/operator to ensure proper, safe and trouble free operation.

**Daily:** Check all air, hydraulic and working mechanisms before operating P.T.O. Perform maintenance as required.

**Monthly:** Inspect for possible leaks and tighten all air, hydraulic and mounting hardware, if necessary. Torque all bolts, nuts, etc. to Chelsea specifications. Ensure that splines are properly lubricated, if applicable. Perform maintenance as required.

With regards to the direct mounted pump splines, the P.T.O. requires the application of a specially formulated anti-fretting, high pressure, high temperature grease. The addition of the grease has been proven to reduce the effects of the torsional vibrations, which result in fretting corrosion on the P.T.O. internal splines as well as the pump external splines. Fretting corrosion appears as a "rusting and wearing" of the pump shaft splines. Severe duty applications, which require long P.T.O. running times and high torque may require more frequent regreasing. Applications such as Utility Trucks that run continuously and are lightly loaded also require frequent regreasing due to the sheer hours of running time. It is important to note that service intervals will vary for each and every application and is the responsibility of the end user of the product. Chelsea also recommends that you consult your pump owner's manuals and technical services for their maintenance guidelines. Fretting corrosion is caused by many factors and without proper maintenance; the anti-fretting grease can only reduce its effects on components.

Chelsea offers the grease to our customers in two packages. The first is a 5/8 fluid ounce tube (379688), which is included with every applicable P.T.O., and the second is a 14-ounce grease cartridge (379831).

**Warranty: Failure to comply entirely with the provisions set forth in the appropriate Owner's Manual will result in voiding of ALL Warranty consideration.**

# Offer of Sale

The items described in this document and other documents or descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors are hereby offered for sale at prices to be established by Parker Hannifin Corporation, its subsidiaries and its authorized distributors. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any such items, when communicated to Parker Hannifin Corporation, its subsidiary or an authorized distributor ("Seller") verbally or in writing, shall constitute acceptance of this offer.

**1. Terms and Conditions of Sale:** All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance of an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer. Acceptance of Seller's products shall in all events constitute such assent.

**2. Payment:** Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

**3. Delivery:** Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

**4. Warranty:** Seller warrants that certain Products, namely PTOs, SEMs, and Wet Line Kits sold hereunder shall be free from defects in material or workmanship for a period of twenty four months from the date of delivery to Buyer. Seller warrants that certain Products namely Pumps, and Hydraulic Accessories shall be free from defects in material or workmanship for a period of eighteen months from the date of delivery to the Buyer. The prices charged for Seller's products are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **DISCLAIMER OF WARRANTY: THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED HEREUNDER. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

**5. Limitation Of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.**

**6. Changes, Reschedules and Cancellations:** Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.

**7. Special Tooling:** A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

**8. Buyer's Property:** Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property, Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

**9. Taxes:** Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

**10. Indemnity For Infringement of Intellectual Property Rights:** Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. Patents, U.S. Trademarks, copyrights, trade dress and trade secrets (hereinafter 'Intellectual Property Rights'). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

**11. Force Majeure:** Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

**12. Entire Agreement/Governing Law:** The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain there/to. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

10/09-P



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