

SHERWOOD VALVE CHLORINE GAS PRODUCTS





A History of Quality and Innovation

For nearly a century, Sherwood has been the world's leading provider of system-critical compressed gas solutions serving blue-chip bulk and specialty gas manufacturers, distributors and storage & delivery system providers (OEMs).

Sherwood had its beginnings in Buffalo, NY in 1923. Over the last 90 years, we have earned a reputation for products that not only keep pace with customer requirements, but also anticipate their changing needs. Our expert engineering and product development teams continuously work to improve Sherwood's core competencies and create new, innovative products to meet the industry's ever-changing standards and demands.

Today Sherwood Valve has three manufacturing facilities near Pittsburgh, PA and Cleveland, OH.

Manufacturing Quality, Safety and Reliability

Automated manufacturing processes throughout Sherwood's operations are set up to eliminate 97% of all touch labor, resulting in consistently higher-quality products. We've added many new advanced process controls, including infrared thermal imaging to ensure optimization at every stage in the manufacturing process, and helium leak checking for quality, safety and reliability.

We're using the latest technology available to lower costs and increase quality. For example, Sherwood's Industrial Automation Center produces up to 6500 assembled and tested valves per shift. And to help ensure quality for our customers, this equipment features automated self-diagnostic and maintenance procedures that increase manufacturing efficiency and output.

Sherwood is a totally integrated brass valve manufacturer. We manufacture our own rod and raw forgings at our foundry. These forgings are then machined into the bodies that we use

in our valves. Because we manufacture our own brass rod, we can control the alloy components more closely, resulting in a more durable forging. All Sherwood products are designed to meet the highest standards, and only quality materials are used. For example, Sherwood's specialty gas products for medical and breathing apparatuses are cleaned and assembled in a strictly controlled, clean environment. Careful assembly and detailed inspection of every part ensure top performance and durability. Sherwood is fully certified to the stringent requirements of ISO 9001, which increase manufacturing efficiency and reliability.

Your Valve Partner

Sherwood's diverse product lines of specialty gas, compressed gas, refrigeration products, propane and life-support equipment have enabled us to develop varied and diverse technical expertise. Our engineering team includes experts in product design and development as well as experts in the quality and compliance testing requirements needed to create custom valves to meet your unique applications.

Sherwood is partnered with a solid network of worldwide industry leaders, distributors, manufacturing representatives and customers supporting continuous improvement. Sherwood is your partner for the best quality valves, delivered on time, at the best possible price!



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Chlorine Gas Valves

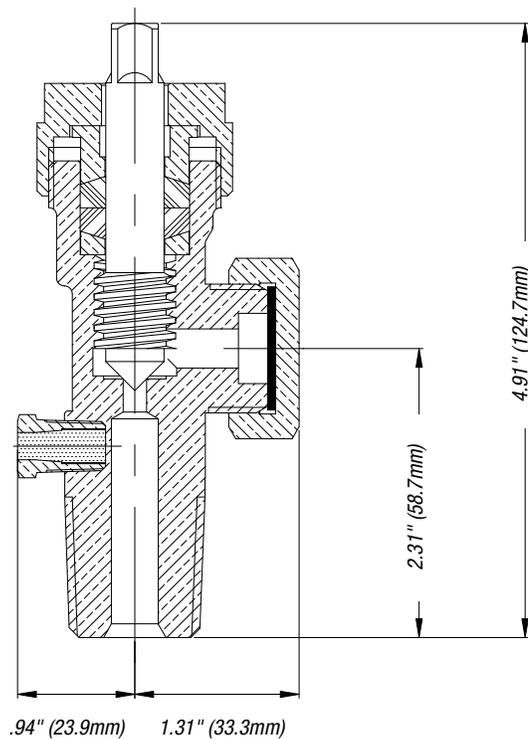
Robust Valve



The Sherwood Exclusive Robust Valve features a heavy-duty body and packing nut for increased load carrying capacity and resistance against stress corrosion and cracking.

Key Features & Benefits

- Approved per the Chlorine Institute Pamphlet 17 Alternate Design Criteria
- Design retains same outlet, inlets, pressure relief device, packing ring, packings, follower, outlet cap, wrenches, yoke and materials as the basic valve
- One-piece Monel® stem offers exceptional durability and positive shut-off in chlorine and other corrosive gas service
- Choice of PTFE (shown here) or Garlock® 6130 packing for easy operation and durable leak-resistant stem seal
- Large wrench flats on valve body for easy installation
- Robust Aluminum Silicon Bronze (C64210) valve body offers corrosion resistance



1210AX1-CL1

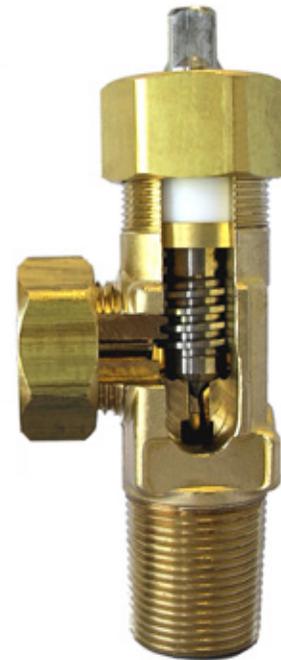
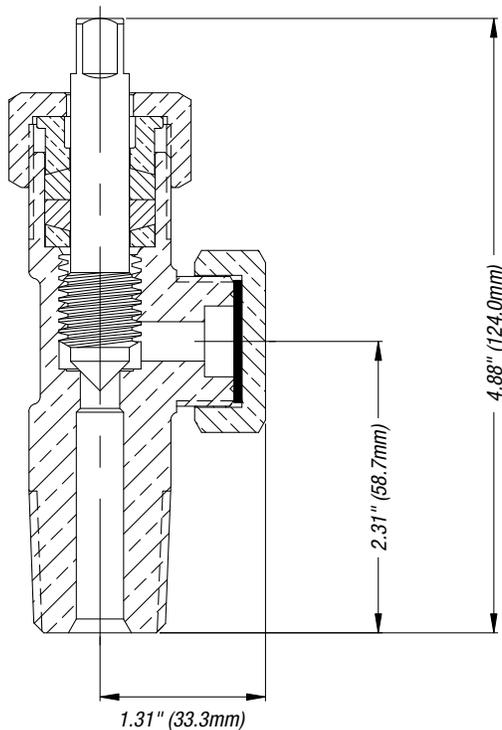
Chlorine Gas Valves

Basic Valve



Key Features & Benefits

- Manufactured in conformance to Chlorine Institute Pamphlet 17
- One-piece Monel® stem offers exceptional durability and positive shut-off in chlorine and other corrosive gas service
- Choice of PTFE (shown here) or Garlock® 6130 packing for easy operation and durable leak-resistant stem seal
- Large wrench flats on valve body for easy installation
- Robust Aluminum Silicon Bronze (C64210) valve body offers corrosion resistance



1214X1-B1

Chlorine Gas Valves

Robust and Basic Valves

Design Specifications		
	English	Metric
Maximum Working Pressure	500 PSI	34 BAR
Burst Pressure	7200 PSI	496 BAR
Operating Temperature Range	-50° F → +149° F	-45° C → +65° C
Storage Temperature Range	-60° F → +149° F	-51° C → +65° C
Leak Rate Internal/External	1 × 10 ⁻⁶ atm cc/s	1 × 10 ⁻⁶ mL/sec
Operating Torque	5–6 ft.-lbs.	6.8–8.1 N-m
Closing Torque	25 ft.-lbs.	33.9 N-m
Packing Nut Installation Torque	25–35 ft.-lbs.	33.9–47.4 N-m
Stem Installation Torque	10–12 ft.-lbs.	13.5 – 16.3 N-m
Fusible Plug Installation Torque	12–15 ft.-lbs.	16.3–20.3 N-m
Yoke Torque	Not to exceed 35 ft.-lbs.	Not to exceed 47.4 N-m
Minimum Cycle Life	2000 Cycles	2000 Cycles
Cv Flow Factor	1210A .733	1210A .733
	1214A 1.88	1214A 1.88

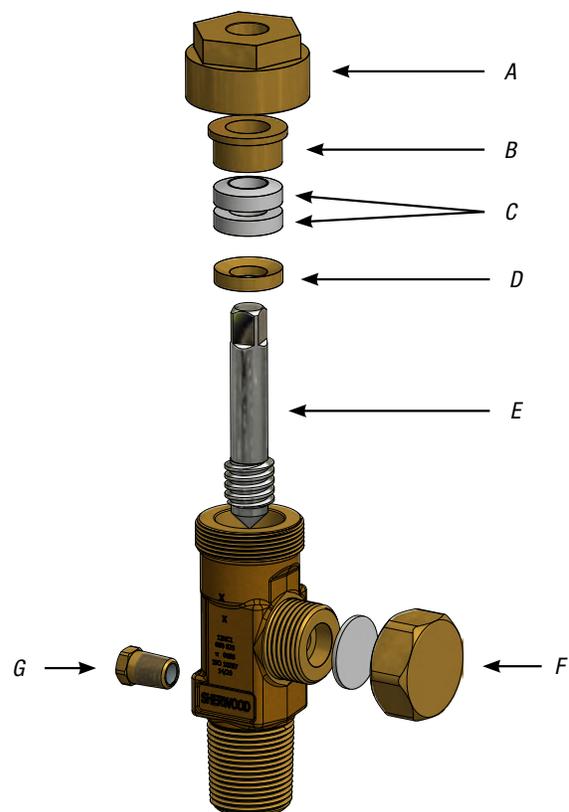
Materials of Construction	
Part Description	Materials of Construction
Body	Aluminum Silicon Bronze C64210
Stem	Monel® ASTM B164-84 Type UNS N04400 or N04405
Packing Nut	Brass C36000
Packing Collar	Naval Brass C48500
Packing Gland	Brass C36000
Packing	PTFE or Garlock® 6130
Outlet Cap	Brass C36000
Outlet Cap Gasket	PTFE
Fusible Plug PRD	Naval Brass C48500 (with 165° F fusible metal)

Standards Conformance	
CGA V-9	Standard for Gas Cylinder Valves
CGA S-1.1	Standard for Pressure Relief Devices
CGA V-1	Compressed Gas Cylinder Valve Outlet and Inlet Connections Standards
Chlorine Institute Pamphlet 17	Cylinder and Ton Container Procedure for Chlorine Packaging and Valve Design Criteria
ISO 10297	International Standard for Cylinder Valves Design Specification
TPED/ADR	Transportable Pressure Equipment Directives

Parts Breakdown for Chlorine Gas Valves

- A. Packing Nut **P1210-3 (Basic) or P1210A-3 (Robust)**
- B. Packing Gland **P1210-4**
- C. Packing (2 required) **P1210-6 (Garlock 6130) or P1210-6T (PTFE)**
- D. Packing Washer **P1210-5N**
- E. Stem **P1210-2M**
- F. Outlet Cap Assembly **P1210-11**
Outlet Cap Only **P1210-14**
Outlet Cap Gasket **P10-G-T**
- G. Fusible Plug **5853T Series (Cylinder Valve) 1333 or 1303 Series (Ton Container Valves)**

See Parts & Accessories, page 7–8, for more information



Chlorine Gas Valves

Chlorine Cylinder Valves

Ordering Information — Robust Cylinder Valve

Sherwood Part Number	Inlet Thread Size*	CGA Outlet**	Pressure Relief Device	Packing
1210AX1-CL1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock® 6130
1210AX1-CL2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210AX1-CL3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210AX1-CL4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE
1210A-CL4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	Garlock 6130

Ordering Information — Basic Cylinder Valve

Sherwood Part Number	Inlet Thread Size*	CGA Outlet**	Pressure Relief Device	Packing
1210X1-B1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B1	¾"-14 NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B2	¾"-14 NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B3	¾"-14 NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1210X1-B4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE
1210-B4	¾"-14 NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B1	1"-11½ NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B1	1"-11½ NGT (CL)-1	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B2	1"-11½ NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B2	1"-11½ NGT (CL)-2	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B3	1"-11½ NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	PTFE
1211-B3	1"-11½ NGT (CL)-3	660/820	CG-2 165° F Fuse-Metal	Garlock 6130
1211X1-B4	1"-11½ NGT (CL)-4	660/820	CG-2 165° F Fuse-Metal	PTFE

*Inlet Thread Size Note:

(CL)-1 = 1st Thread Standard

(CL)-2 = 1st Thread 4 Threads Oversized

(CL)-3 = 1st Thread 8½ Threads Oversized

(CL)-4 = 1st Thread 14 Threads Oversized

**Outlet Connection Note: The same chlorine valve can be used with a CGA 660 connector nut connection or with a CGA 820 yoke connection.

Chlorine Ton Container Valves

Chlorine Gas Valves

Chlorine Ton Container Valves

Ordering Information — Robust Ton Container Valve

Sherwood Part Number	Inlet Thread Size*	Outlet**	Pressure Relief Device	Packing
1214AX1-CL1	¾"-14 NGT (CL)-1	660/820	None	PTFE
1214A-CL1	¾"-14 NGT (CL)-1	660/820	None	Garlock® 6130
1214AX1-CL2	¾"-14 NGT (CL)-2	660/820	None	PTFE
1214A-CL2	¾"-14 NGT (CL)-2	660/820	None	Garlock 6130
1214AX1-CL3	¾"-14 NGT (CL)-3	660/820	None	PTFE
1214A-CL3	¾"-14 NGT (CL)-3	660/820	None	Garlock 6130
1214AX1-CL4	¾"-14 NGT (CL)-4	660/820	None	PTFE
1214A-CL4	¾"-14 NGT (CL)-4	660/820	None	Garlock 6130

Ordering Information — Basic Ton Container Valve

Sherwood Part Number	Inlet Thread Size*	Outlet**	Pressure Relief Device	Packing
1214X1-B1	¾"-14 NGT (CL)-1	660/820	None	PTFE
1214-B1	¾"-14 NGT (CL)-1	660/820	None	Garlock 6130
1214X1-B2	¾"-14 NGT (CL)-2	660/820	None	PTFE
1214-B2	¾"-14 NGT (CL)-2	660/820	None	Garlock 6130
1214X1-B3	¾"-14 NGT (CL)-3	660/820	None	PTFE
1214-B3	¾"-14 NGT (CL)-3	660/820	None	Garlock 6130
1214X1-B4	¾"-14 NGT (CL)-4	660/820	None	PTFE
1214-B4	¾"-14 NGT (CL)-4	660/820	None	Garlock 6130
1209X1-B1	1"-11½ NGT (CL)-1	660/820	None	PTFE
1209-B1	1"-11½ NGT (CL)-1	660/820	None	Garlock 6130
1209X1-B2	1"-11½ NGT (CL)-2	660/820	None	PTFE
1209-B2	1"-11½ NGT (CL)-2	660/820	None	Garlock 6130
1209X1-B3	1"-11½ NGT (CL)-3	660/820	None	PTFE
1209-B3	1"-11½ NGT (CL)-3	660/820	None	Garlock 6130
1209X1-B4	1"-11½ NGT (CL)-4	660/820	None	PTFE
1209-B4	1"-11½ NGT (CL)-4	660/820	None	Garlock 6130
1214W6X1-1	1.015 1st Thread 25E	BS #6	None	PTFE
1214W6X1-2	1.041 1st Thread 25E	BS #6	None	PTFE

*Inlet Thread Size Note:

(CL)-1 = 1st Thread Standard

(CL)-2 = 1st Thread 4 Threads Oversized

(CL)-3 = 1st Thread 8½ Threads Oversized

(CL)-4 = 1st Thread 14 Threads Oversized

**Outlet Connection Note: The same chlorine valve can be used with a CGA 660 connector nut connection or with a CGA 820 yoke connection.

Chlorine Gas Valves

Parts and Accessories

Fusible Plugs

- Manufactured in accordance with Chlorine Institute specifications and CGA S-1.1
- Materials: Brass C48500 and 165° F fusible alloy

Ordering Information — Fusible Plugs for Cylinder Valves

Sherwood Part Number	Inlet Thread Size	Hex Size
5853T	1/8"-27 NGT	7/16"

Ordering Information — Fusible Plugs for Ton Container Valves

Sherwood Part Number	Inlet Thread Size	Hex Size
1333-N1	3/4"-14 NGT (CL)-1	1 1/4"
1333-N2	3/4"-14 NGT (CL)-2	1 1/4"
1333-N3	3/4"-14 NGT (CL)-3	1 1/4"
1333-N4	3/4"-14 NGT (CL)-4	1 1/4"
1303-N1	1"-11 1/2 NGT (CL)-1	1 1/4"
1303-N2	1"-11 1/2 NGT (CL)-2	1 1/4"
1303-N3	1"-11 1/2 NGT (CL)-3	1 1/4"
1301-N4	1"-11 1/2 NGT (CL)-4	1 1/4"



Fusible Plugs

Yoke

- Complies with Chlorine Institute specifications and CGA V-1
- Material: Forged steel with zinc plating
- CGA 820 connection

Ordering Information — Yoke

Sherwood Part Number	Description	Minimum Clearance
628B	Yoke Assembly	1 1/4"
P628A-2	Replacement Stem	1 1/4"
P628A-3	Replacement Slotted Follower	1 1/4"



Yoke

Flex Connectors

- 3/8" OD, zinc-plated copper
- Working pressure 500 psig
- Provided with CGA 660 connector nuts for non-yoke applications

Ordering Information — Flex Connectors

Sherwood Part Number	Connectors/Length
6414X11C	CGA 820 × CGA 820; 30 in.
6414X2C	CGA 820 × CGA 820; 4 ft.
6414C	CGA 820 × CGA 820; 6 ft.
6414X1C	CGA 820 × CGA 820; 10 ft.



Flex Connectors

Parts and Accessories

Chlorine Gas Valves

Parts and Accessories



High Flow Yoke Adapters

High Flow Yoke Adapters

- Material: Aluminum Silicon Bronze C64210

Ordering Information — High Flow Yoke Adapters

Sherwood Part Number	Size
5888-6	CGS 820 x 3/8" SAE Flare
5888-8	CGA 820 x 1/2" SAE Flare
5888-D	CGA 820 x 1/2"-14 NPT (male)
5888-E	CGA 820 x 660

Ordering Information — Gaskets for Yoke Adapters

Sherwood Part Number	Size
P10-CLAL	Lead Outlet Gasket (.937" OD)
P10-G-T	PTFE Outlet Gasket (.937" OD)



5928 Charging Valve

5928 Charging Valve

- Material: Aluminum Silicon Bronze C64210

Ordering Information — 5928 Charging Valve

Sherwood Part Number	Description
5928	The 5928 valve is a modification of Sherwood's ton container valve. A chlorine adapter is soldered on the outlet to permit yoke attachment to all standard chlorine cylinder valves. A standard CGA 660 outlet connection has been machined where the cylinder inlet normally is to permit connection to the permanent chlorine charging or discharge line.



Wrenches

Wrenches

- Designed for use with 1210/1214 and 1210A/1214A chlorine valves and yokes
- Material: Forged steel construction
- Size: 1/4" open end; 3/8" stem square

Ordering Information — Wrenches

Sherwood Part Number	Description
635	Straight Shaft
635X3	Twisted Shaft

Repair Instructions for All Chlorine Gas Valves

WARNING

In order to ensure proper and continued performance of Sherwood products, regular inspection and maintenance are required to detect any corrosion or unusual wear of metallic and non-metallic parts.

These instructions are intended for trained chlorine valve installers and repairers. If you are not familiar with chlorine valve equipment and applications, do not proceed.

Disassembly of Valve

A. Place the valve assembly into a vise or similar holding fixture.

The holding fixture must securely grip the valve body on the wrench flats so no damage is done to the internal bores, external or internal threads, outlet or fusible plug PRD.

B. Chamber

1. Using a 1/4" socket or hex box wrench, remove the packing nut by turning it counter-clockwise.
2. Using a 3/8" square socket or open end wrench, remove the stem from the valve chamber by turning it counter-clockwise. The packing gland, the two packings and the packing collar will be removed with the stem.
3. Remove the packing gland, the two packings and the packing collar from the stem.

C. Outlet

1. Remove the outlet cap from the valve assembly by turning it counter-clockwise.

D. Fusible Plug Pressure Relief Device (Cylinder Valves)

1. Using a 7/16" socket or hex box wrench, remove the fusible plug PRD by turning it counter-clockwise.

1534/1534A Refacing Tool

- Increase the life of the valve with this easy-to-use, manually operated reseating tool



Inspection of Valve and Components

A. Valve Body

1. Inspect the valve body for cracks. If cracks are suspected, scrap the valve body. Inspect the valve body chamber bore for dirt, debris and damage. Blow out the valve body chamber using clean, dry compressed air or nitrogen to remove these contaminants.
2. Examine all internal and external threads for damage or deterioration due to wear or corrosion. Special attention should be given to the threads closest to the outlet since they are the most vulnerable to corrosive attack.
3. Examine the valve body seat for excessive wear or corrosion build up. Wear creating a 1/8" x 90° or greater bevel should be eliminated with the 1534 refacing tool (1210/1214) or 1534A refacing tool (1210A/1214A). The valve has reached its end of life and should be replaced when the tool can no longer remove this bevel.
4. Clean the internal threads for the fusible plug to remove all thread luting compound.
5. If the valve body is damaged or corroded, do not attempt to repair. Order a new valve assembly.

B. Components

1. Scrap any component that is suspected of being cracked. Also, replace components damaged, worn or corroded to the point where safe operation, valve performance or leak integrity may be compromised. Special attention should be given to wear grooves in the nose of the stem. Stems with grooves 1/64" or greater in depth should be replaced.
2. Special attention should be given to the fuse plug for signs of leakage. An extrusion of the fusible metal greater than 1/64" may adversely affect use of the emergency kit tool used to temporarily seal fusible metal leaks.
3. It is recommended that both of the packings be replaced before the valve is reassembled.

Ordering Information — 1534/1534A Refacing Tool

Sherwood Part Number	Description
1534	For use with 1210 and 1214
1534A	For use with 1210A and 1214A

Repair Instructions for All Chlorine Gas Valves

Assembly of Valve

NOTE: All parts must be clean, free of oil, chips and other contaminants before beginning assembly.

A properly calibrated torque wrench must be used. Overtightening will damage components and the valve body. Undertightening may result in leaks. Reassembly of a used valve should not begin until all the components of that valve have been examined to determine their combined effects on valve performance and operation.

A. Chamber

1. Insert the stem into the valve chamber and turn it clockwise; engage it one full thread. Engaging the stem more than one full thread may make installation of parts difficult.
2. Place the packing collar, flat side down, onto the stem.
3. Install two packings with the flat sides facing each other, and place them onto the stem.
4. Place the packing gland with the beveled end down onto the stem.
5. Tighten the stem using a $\frac{3}{8}$ " square socket and a torque wrench to 10–12 ft.-lbs. to coin the seat in the body.
6. Press down on the packing gland until the two packings are completely below the top of the body.
7. Install the packing nut over the stem. Making sure the threads are properly engaged, tighten the packing nut to 25–30 ft.-lbs. using a $\frac{1}{4}$ " socket and torque wrench.

B. Outlet

1. Install the outlet cap onto the valve assembly outlet, turning clockwise until hand tight.

C. Fusible Plug PRD (Cylinder Valve)

1. Apply a chlorine-compatible thread luting compound onto the bottom threads of the fusible plug PRD.
2. Thread the fusible plug PRD, finger tight, making sure at least one thread is engaged in the body.
3. Using a $\frac{7}{16}$ " socket and a proper torque wrench, tighten the fusible plug to 12–15 ft.-lbs. or $1\frac{1}{2}$ –2 turns.

Testing of Assembled Valve

NOTE: Only leak detection solutions compatible with chlorine should be used. Thus, only commercial or household detergents should be used that DO NOT contain ammonia, phosphates or other chemicals which are harmful to copper alloys and can initiate stress corrosion cracking of these alloys.

- A. Test each reassembled valve by installing the valve securely in a suitable test fixture and pressurizing the valve with air, nitrogen or carbon dioxide to 500 psig.
- B. With the outlet plugged or capped, open the valve assembly slowly and check for leaks through the valve body, past the stem and all threaded connections using a leak detection solution.
- C. Close the valve assembly and remove the outlet cap assembly or plug. Pressurize the valve to 500 psig and check for seat leakage through the outlet.
- D. If any leakage is detected, in the open or closed position, make necessary repairs and retest the valve before returning to service.

NOTE: Periodic retightening of the packing nut to 25-30 ft.-lbs. may be required to maintain a leak-tight packing nut and stem seal. However, tightening more than is necessary or applying excessive torques will prematurely wear the packings and may damage the packing nut and the valve body threads.

Sherwood Valve, LLC Limited Warranty

Revised January 2013

Seller warrants to you, the first purchaser, that it will repair or replace, at its sole discretion, defects in materials or workmanship that occur and are reported to Seller, within the applicable warranty period, subject to the terms, conditions and exclusions set forth in this document. Your acceptance of delivery of the warranty product constitutes your acceptance of the terms of this limited warranty. This limited warranty gives you specific legal rights and you may have other rights which may vary from state to state.

This limited warranty is the sole and exclusive warranty from Seller and there are no express warranties which extend beyond those outlined in this limited warranty. Under the laws of certain states, there may be no implied warranties from Seller and ALL IMPLIED WARRANTIES (INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) ARE EXCLUDED AND DISCLAIMED WHERE ALLOWED BY APPLICABLE LAW. ANY IMPLIED WARRANTIES (IF APPLICABLE) ARE LIMITED TO THE SCOPE AND MINIMUM PERIOD OF TIME ALLOWED UNDER APPLICABLE LAW.

Coverage Under This Limited Warranty:

The limited warranty period runs for one (1) year from the date the product was shipped from Seller's manufacturing plant to the first purchaser. This WARRANTY EXTENDS ONLY TO THE FIRST PURCHASER of the Seller's product and does not extend to a consumer who purchases Seller's product from a dealer or otherwise.

THIS LIMITED WARRANTY DOES NOT COVER damage caused by misuse or negligence and does not cover or apply to any product, accessory, part or attachment which is manufactured by someone other than Seller.

THE SOLE AND EXCLUSIVE REMEDY UNDER THIS LIMITED WARRANTY AND ANY APPLICABLE IMPLIED WARRANTY IS THE REPAIR OR REPLACEMENT, AT SELLER'S SOLE OPTION, OF WARRANTED PRODUCTS AS SET FORTH HEREIN. SELLER EXCLUDES AND DISCLAIMS ANY LIABILITY FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES RESULTING FROM THE DELIVERY, USE OR FAILURE OF THE PRODUCT (INCLUDING, WITHOUT LIMITATION, LOSS OF ANY MATERIALS STORED IN PRODUCT; ANY DISRUPTION OF BUSINESS, DISRUPTION OF MANUFACTURING OR OTHER OPERATIONS; LOSS OF REVENUE OR PROFIT OR DAMAGES RESULTING FROM ANY BREACH OF ANY CONTRACT BETWEEN BUYER AND ANY THIRD PARTY), OR FROM ANY OTHER CAUSE WHATSOEVER. Any legal action alleging breach of any applicable warranty coverage must be brought within one (1) year from the date the alleged breach first occurred.

If Buyer believes that any part of Seller's product is defective, Buyer must give written notice to Seller at the address on the reverse side of this document before the expiration of the initial warranty period, giving details as to date and place of purchase, serial number and alleged defect. Seller will then give written instructions to Buyer regarding the manner in which the defective item is to be repaired or replaced. Buyer may be requested to return the item at Buyer's expense, but no return should be made until Buyer has received written instructions from Seller. Seller will then perform under this limited warranty within thirty (30) days after the defective item is returned to Seller.

This document contains the entire limited warranty provided by Seller. The Terms and Conditions contained in this limited warranty may not be modified, altered or waived by any action, inaction or representation, whether oral or in writing, except upon the express written authority of a senior management level employee of Seller. Seller does not authorize any person or persons (except a senior management level employee of Seller) to change the terms of this limited warranty. Seller reserves the right to change or improve the design or manufacture of its products without obligation to modify any product previously manufactured.

Please note: In order to ensure proper and continued performance of Sherwood products, regular inspection and maintenance is required to detect any corrosion or unusual wear of metallic and non-metallic parts.



***Beyond Chlorine Gas...
Quality Products
for Diverse Markets***

Sherwood's years of experience in the diverse product lines of compressed gas, propane, specialty gas and life support provide us with the technical expertise to meet your varied needs. Sherwood is your partner for the best quality valves, delivered on time, at the best possible price!





SHERWOOD®

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