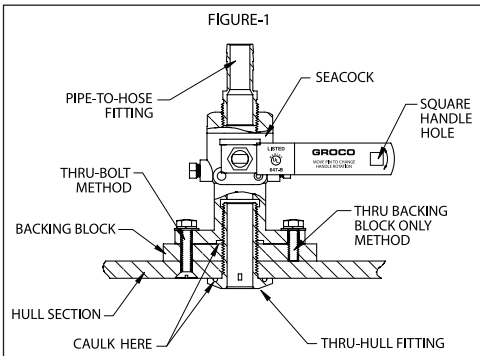


SBV-P Series Full Flow Safety Seacocks

Installation, Operation, and Maintenance

Installation: Refer to figure-1. Install the seacock in accordance with ABYC H-27 onto a backing block of suitable material for wet bilge areas. The backing block serves to further spread the load, but not directly on the hull section through which the thru-hull fitting penetrates. Some installers prefer bolting through the hull and backing block, while others will bond the backing block permanently to the hull, and then bolt into the backing block, but not all the way through the hull. Either installation is acceptable.

Depending on the combined backing block + hull thickness, the thru-hull fitting length may need to be reduced so it does not bottom out inside the seacock before proper compression is achieved.



Changing Handle Position: GROCO SBV-P seacocks allows the installer to change handle position, from one side of the valve to the other. This feature provides uniformity of installation and eliminates confusion in valve operation (for example, port and starboard valve handles may both close by moving them aft). To change handle position, first close the seacock. Refer to the Exploded View Drawing. Remove one item-8, item-9, 10, 17, and 13-16. From the opposite side remove items 11 and 12. Re-install the items removed from each side into the opposite side IN THE SAME ORDER shown in the exploded view drawing. Install Note: Apply a drop or two of Loc-Tite® Threadlocker #243 to the threads of items 10 and 11 during re-installation.

Square Handle Hole: GROCO SBV-P seacock handle has a square hole that will accept a standard ratchet extension. Use this feature to break loose a stuck valve or to reach the handle in an inaccessible location. Exercise caution when operating the valve with a ratchet handle attached as the added length provides a mechanical advantage that could damage the valve handle.

Bonding: The seacock base has a bonding screw. Use at least 14ga marine grade stranded copper wire to connect the seacock to the vessel bonding system. Bonding may be made in series with other non-motorized equipment such as strainers. **WARNING: DO NOT** bond motorized equipment such as air conditioner pumps in series with the seacock. Motorized equipment must have a separate connection to the vessel AC or DC grounding bus, in accordance with ABYC E-11, Figure-18.

Side Port: SBV-P Side Port is threaded NPT, one pipe size smaller than the top and bottom ports. The side port must be closed with a valve (GROCO IBV Series). After the valve other components may be added, such as a bilge strainer (GROCO BS series), or an engine flush kit/safety seacock conversion (GROCO SSC series).



BS Series Bilge Strainers are available in sizes from 3/4" to 3" NPT

Normal Operation: The valve is closed when the handle is horizontal (perpendicular to the thru-hull fitting) and is open when vertical (parallel to the thru-hull fitting).

Emergency Operation: In an emergency or if bilge level is above the SBV-P side port, close the seacock and open the in-line valve at the side port. With the connected engine running, excess water will be drawn through the open side port and pumped overboard through the exhaust system. Note: Monitor the bilge level around the SBV-P. If the level falls below the side port you no longer have an emergency, and the engine raw water pump will be running dry. Close the in-line valve and open the SBV-P to allow outside water to be drawn into the cooling system. **WARNING: DO NOT** open the SBV-P without first closing the in-line valve; bilge flooding will result.

Bilge Maintenance Operation: The SBV-P side port is threaded to accept a variety of NPT threaded components. If a bilge strainer is used, it is to be installed in the deepest or most inaccessible bilge area, and with a hose connection to the SBV-P location. To pump out the remote bilge location, close the seacock, and open the in-line valve. Start the connected engine; bilge water will be drawn and pumped overboard through the exhaust system. Note: Monitor the bilge level in the remote bilge area.



SBV-P with In-line valve, BS Bilge Strainer, and pipe-to-hose adaptors

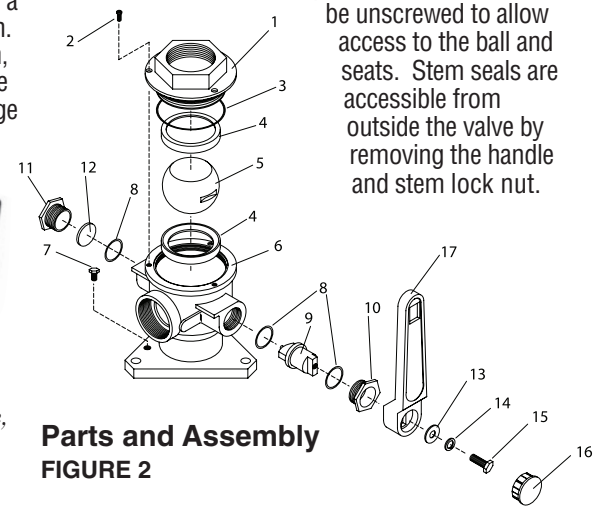
If the level falls below the Bilge Strainer openings, the engine raw water pump will be running dry. Shut off the connected engine immediately and close the in-line valve. **WARNING: DO NOT** open the seacock without first closing the in-line valve; bilge flooding will result.



Winterization: Freezing may damage the seacock and connected plumbing if left filled with water. In freezing conditions, close the seacock and drain the water from the valve by removing the Quick Release Plug. Replace the Quick Release Plug after draining.

Connections: GROCO offers a complete line of straight and 90-degree cast bronze pipe/hose fittings in full flow (FF or FFC) or standard flow (PTH or PTHC) models to complete your installation. Use TFE thread tape on threaded connections; double clamp hose connections.

Maintenance: No regular maintenance is required. It is recommended that the valve be operated at least monthly to assure free movement and to prevent the build-up of nuisance marine growth. If service is required, GROCO SBV series seacocks allow in-field disassembly. Remove the cap screws (Exploded View Item-2) that secure the top nut. The nut can now be unscrewed to allow access to the ball and seats. Stem seals are accessible from outside the valve by removing the handle and stem lock nut.



Parts and Assembly FIGURE 2

ITEM NAME	QTY	SBV-1250-P	SBV-1500-P	SBV-2000-P	SBV-2500-P	SBV-3000-P	SBV-4000-P	SBV-5000-P
1 Top Nut	1	BV-1252	BV-1502	BV-2002	BV-2502	BV-3002	BV-4002	BV-5002
2 Screw	3	632X38SOC	632X38SOC	-	-	-	-	-
3 Screw	4	-	-	632X38SOC	632X38SOC	632X38SOC	632X38SOC	632X38SOC
4 O-Ring	1	2-135	2-140	2-150	2-154	2-157	2-162	2-263
5 Seat	2	BV-1256	BV-1506	BV-2006-1	BV-2506-1	BV-3006-1	BV-4006-1	BV-5006-1
6 Ball	1	SBV-1254	SBV-1504	SBV-2004	SBV-2504	SBV-3004	SBV-4004	SBV-5004
7 Body	1	SBVP-1250-BT	SBVP-1500-BT	SBVP-2000-BT	SBVP-2500-BT	SBVP-3000-BT	SBVP-4000-B	SBVP-5000-B
8 Screw	1	1420X12HS	1420X12HS	1420X12HS	1420X12HS	1420X12HS	1420X12HS	1420X12HS
9 Seal	3	1-017	1-116	1-116	1-118	1-118	1-216	1-216
10 Driver	1	BV-1001-A	BV-1501-A	BV-1501-A	BV-2501-A	BV-2501-A	BV-4001-A	BV-4001-A
11 Nut	1	BV-1003-A	BV-1503-A	BV-2003-A	BV-2503-A	BV-2503-A	BV-4003-A	BV-4003-A
12 Nut	1	BV-1003-B	BV-1503-B	BV-1503-B	BV-2503-B	BV-2503-B	BV-4003-B	BV-4003-B
13 Seal	1	SBV-1250 Plug	SBV-2000 Plug	SBV-2000 Plug	SBV-3000 Plug	SBV-3000 Plug	SBV-4000 Plug	SBV-4000 Plug
14 Washer	1	14FS	38FS	38FS	38FS	38FS	38FS	38FS
15 Lockwasher	1	14SS	38SS	38SS	38SS	38SS	38SS	38SS
16 Bolt	1	1420X12HS	3816X58HS	3816X58HS	3816X58HS	3816X58HS	3816X34HS	3816X34HS
17 Cap	1	PFW-10	PFW-10	PFW-10	PFW-10	PFW-10	-	-
18 Handle	1	SBV-1008	BV-1508	BV-1508	BV-2508	SBV-3008	BV-4008	BV-4008