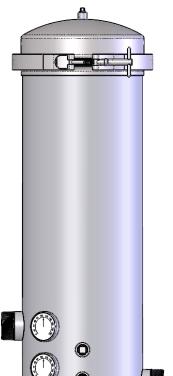
# SJCH CLAMP SERIES FILTERS

MODELS SJCH40, SJCH90, SJCH170 INSTALLATION, OPERATION and MAINTENANCE MANUAL

## **WARNING:**

The filter must be protected from freezing to prevent cracking, which would result in leakage.



**60** 

#### **MAXIMUM OPERATING PRESSURE:**

150 PSI (10 BAR) @ 300°F (149°C)

#### INSTALLATION

A recommended installation is shown in FIGURE 1 below with shut-off and bypass valves to isolate the housing for ease of changing cartridges. Also recommended is the installation of unions on either side of the filter to facilitate installation and removal of the housing. Ensure that the direction of flow shown below is consistent with your process. **DO NOT INSTALL BACKWARDS.** 

The housing must be mounted securely to your base or floor so that stress is not exerted on the housing or piping. Failure to properly install the filter housing could result in leakage.

Standard gauges (1/4" NPT) are on the front of the housing. These gauges indicate pressure differential between inlet and outlet to assist in determining the remaining service life of the filter cartridge.

A grounding lug is provided to conduct any static electricity to ground.

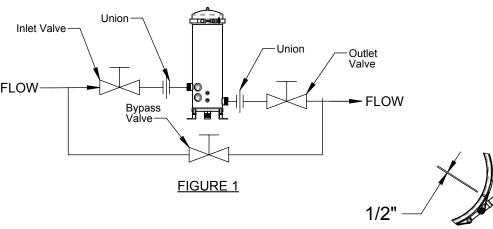


FIGURE 2

## CARTRIDGE INSTALLATION OR REPLACEMENT

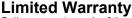
- 1. Close inlet and outlet valves and open the bypass valve. Open drains and vent and allow sump to drain.
- 2. Loosen the cover clamp nut and remove the T-bolt from the retainer.
- 3. Remove the cover clamp and head. Remove the wing nut from the hold-down plate and remove the hold-down plate. Remove the spent cartridge.
- 4. Installing a new cartridges is the reverse of removal. Ensure that the bottom of the cartridge is properly aligned and seated on the boss on the bottom support plate.
- 5. It is recommended that the closure gasket be inspected and/or replaced at the same time the cartridges are replaced. Before replacing the cover assembly, ensure that there is no debris on the sealing surfaces. Replace the head and cover clamp and tighten the T-bolt so that there is a gap of approximately ½" between the V-band segments (See FIGURE 2).
- 6. Refit the drain plugs. Close the bypass valve and gradually open the inlet and outlet valves. When the fluid streams out of the vent, refit the plug. Open the inlet and outlet valves fully.
- 7. If leakage is observed, drain the housing per step 1 and repair the source of the leak. Repeat steps 6 and 7

## **MAINTENANCE**

Shelco filters generally require very little maintenance. The filter cartridges should be replaced when the pressure drop across the filter reaches a maximum of 25 PSI. Your experience might dictate more frequent cartridge replacement. The gasket should be inspected and replaced if necessary at the time the cartridges are replaced.

SJCH Spare Parts								
	Model	SJCH-40	SJCH-90	SJCH-170	SJCH-40-316	SJCH-90-316	SJCH-170-316	
Item	Description	Part No.	Part No.	Part No.	Part No.	Part No.	Part No.	Qty.
1	Vent Plug, 1/4" npt	2103-S	2103-S	2103-S	2103-S-316	2103-S-316	2103-S-316	1
2	Cover	10002-S	10002-S	10002-S	10002-S-316	10002-S-316	10002-S-316	1
3	Cover Gasket*	10017-*	1001 <i>7</i> -*	10017-*	10017-*	10017-*	10017-*	1
4	V-band Clamp	10008-S	10008-S	10008-\$	10008-S	10008-S	10008-S	1
5	T-bolt & Handle Kit	8070	8070	8070	8070	8070	8070	1
6	Wing Nut	8020-W-S	8020-W-S	8020-W-S	8020-W-S-316	8020-W-S-316	8020-W-S-316	1
7	Hold-down Gasket*	10019-*	10019-*	10019-*	10019-*	10019-*	10019-*	1
8	Hold-Down Plate	8011-S	8011-S	8011-\$	8011-S-316	8011-S-316	8011-S-316	1
9	Center Rod	3016-S-40	3016-S-90	3016-S-170	3016-S-40	3016-S-90	3016-S-170	1
10	Cartridge	Consult your Shelco representative to select the optimum cartridge materials for your process						1
11	Drain Plug, 1/2" npt	8011-S	8011-S	8011-\$	8011-S-316	8011-S-316	8011-S-316	2
12	Pressure Gauge, Back Mount	8710-B	8710-B	8710-B	8710-B	8710-B	8710-B	2

<sup>\*</sup> Consult your Shelco representative to select the proper gasket material for your application



Seller warrants each of the products described herein, under normal use and service, and subject to the user's compliance with these and any other operating instructions and directions given by the seller to be free from defects in materials or workmanship for a period of one year from date of shipment from seller's plant. Seller's liability under this warranty shall be limited to repairing or replacing any such defective products, at the seller's option, FOB seller's plant in Middletown, CT and reimbursing purchaser's shipping costs subject to the following: (1) timely receipt of purchaser's written notice that such products are defective; (2) seller's written authorization to purchaser for the return of such products to seller with shipping charges prepaid, and (3)seller's inspection of and confirmation that such products are defective in materials or workmanship. If seller's inspection shows that the products returned are defective due to dirt, rust, or any foreign material not attributable to seller, improper usage, over-tightening of threads, abuse or incorrect reassembly in the field or other cause not due to seller's improper manufacture, seller will, subject to purchaser's written authorization, repair or replace such products at cost. Seller's factory inspection and testing will be made available to purchaser upon request.

purchaser upon request.

THE WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. NO REPRESENTATIVE OR SELLER HAS AUTHORITY TO MAKE ANY REPRESENTATIONS OR WARRANTIES EXCEPT AS STATED HEREIN. Under no circumstances shall Seller be liable to Buyer or any third party for any loss of profits or other direct or indirect costs, expenses, losses or consequential damages arising out of or as a result of any defects in or failure of its products or any part or parts thereof or arising out of or as a result of parts or components incorporated in Seller's equipment but not supplied Seller.

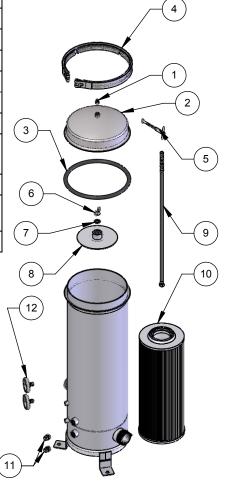
The warranty excludes the following: A) Filter housings used for filtering brackish water, sea water, or where analysis shows TDS or Chlorides are in excess of 1,000 ppm; B)Gaskets and O-rings, once used; C) Altered products; D) Products without Seller's identification label.

It is the purchaser's responsibility to make certain the filter is compatible with all materials procured. Stainless Steel is not 100% non-corrosive. It is the purchaser's responsibility to complete a comprehensive water analysis (including Chlorides, TDS, and pH) to determine suitability of material. It is the purchaser's responsibility to inform seller of any application where TDS levels are in excess of 1,000 ppm, and/or where chlorides are in excess of 1,000 ppm.



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Bulletin: SJCH-C.IOM.18-06