

KEEP FOR REFERENCE

241-017 TSL Tubing Repair Kit

FOR THE SERIES B H₂O PRO SYSTEMS 237-927 AND 237-928

Installation

Use this kit to replace the TSL (throat seal liquid) tubing lines and connecting hardware.

WARNING

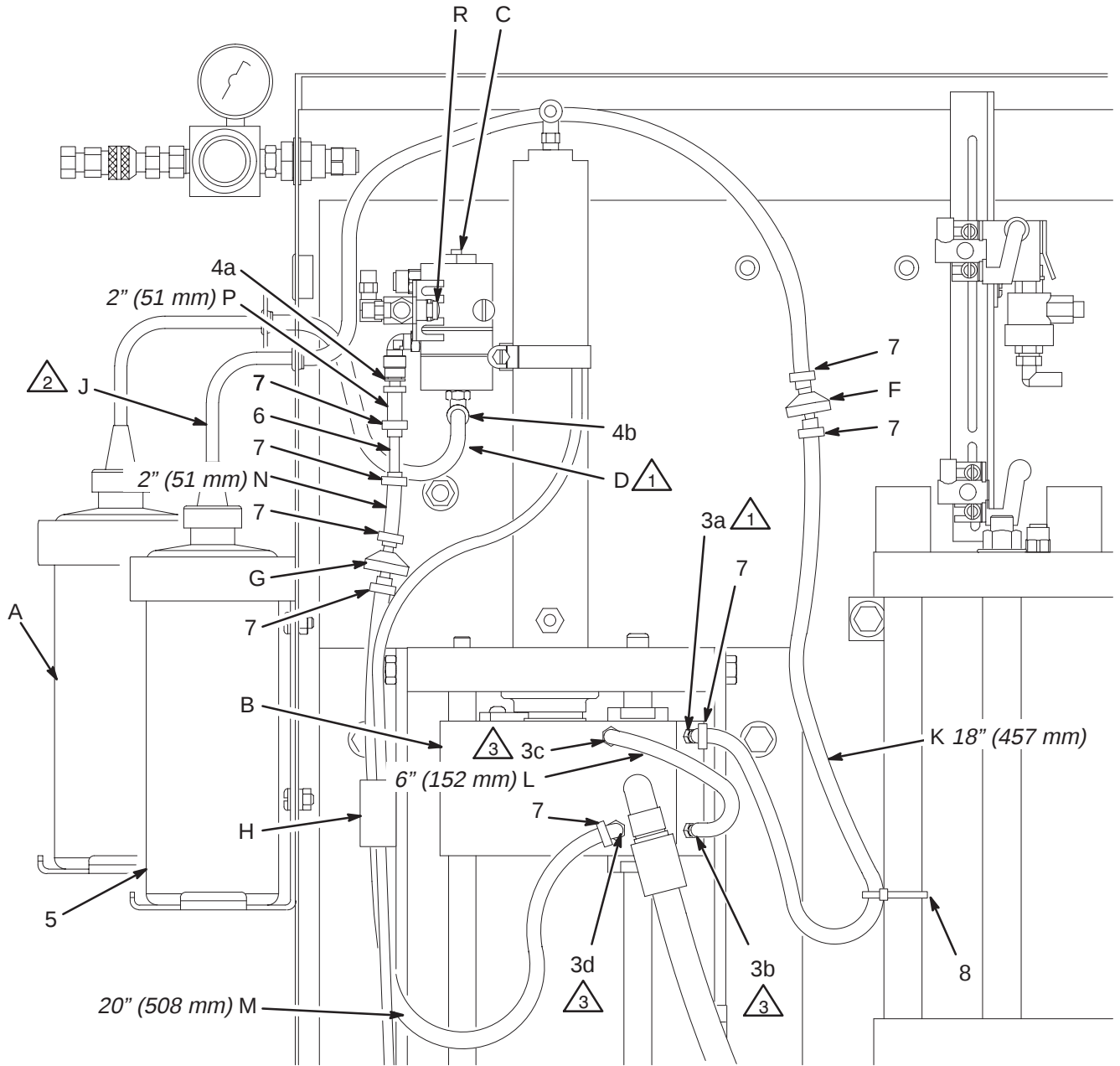
Refer to the H₂O PRO System manual 308-504 or 308-581 for important warnings and information.

1. Follow the General Shutdown Procedure in the H₂O PRO System manual 308-504 or 308-581.
 2. Follow the Fluid Voltage Discharge and Grounding Procedure in the H₂O PRO System manual 308-504 or 308-581.
 3. Disconnect the TSL supply tube at point 3a (see the Parts drawing on page 3). Drain the TSL into a waste container.
 4. Disconnect the TSL return tube at points 4a and 4b and drain the TSL into a waste container.
 5. Disconnect all the other TSL tube lines and drain the TSL into a waste container.
 6. If necessary, remove the four old barb fittings (3a-3d) from the isolator fluid block (B). If the barb stems (4a, 4b) in the TSL pump (C) are damaged, remove and discard the stems.
 7. Install the four new barb fittings (3a-3d) in the isolator fluid block (B). Torque the barb fittings to 8 in-lb (0.9 N•m) maximum. **Do not overtighten.**
 8. If necessary, install the two new barb stems (4a, 4b) securely into the TSL pump (C).
 9. Make sure all barbs are clean and dry of TSL before connecting the new tubing lines.
 10. Cut the new tubing into lengths as follows:
 - two segments 2" (51 mm) long
 - one segment 6" (152 mm) long
 - one segment 18" (457 mm) long
 - one segment 20" (508 mm) long
- In addition:**
- If servicing a Batch System or the left isolator of a Continuous Flow System:*
- one segment 12" (305 mm) long
 - one segment 29" (737 mm) long
- If servicing the right isolator of a Continuous Flow System:*
- one segment 29" (737 mm) long
 - one segment 41" (1041 mm) long
- Follow the steps on page 2 to connect the TSL lines. Install a tube clamp (7) at each of the tube connections, as shown in the Parts drawing.

Installation

11. Remove the tubing assembly from the old TSL bottle. Install the full TSL supply bottle (5) in the bracket and replace the bottle cap with the tubing assembly.
12. Connect the new TSL inlet line from the TSL supply bottle (5) to the isolator fluid block (B) as follows:
 - a. Connect a tube (J), cut to the required length, from the TSL bottle (5) outlet barb, to the check valve (F). Be sure to install the check valve correctly; the fluid flow direction of the check valve is from white to black.
 - b. Connect an 18" (457 mm) tube (K) between the black end of the check valve (F) and the open barb (3a) on the isolator fluid block (B).
13. Use the cable tie (8) to secure the TSL tube to the nearest accumulator support. Ensure there is an adequate tube loop to allow full movement of the isolator.
14. Connect the new 6" (152 mm) crossover tube (L) between the isolator fluid block barb fittings (3b and 3c).
15. Connect the new TSL return line from the isolator fluid block (B) to the TSL pump (C) as follows.
 - a. Connect a 20" (508 mm) tube (M) between the isolator fitting (3d) and the white end of the check valve (G).
 - b. Connect a 2" (51 mm) tube (N) between the black end of the check valve and the sight tube (6).
 - c. Connect the other 2" (51 mm) tube (P) between the sight tube and the pump fitting (4a).
 - d. Retain the 20" (508 mm) tube in the tube holder (H).
16. Connect a new TSL return line (D), cut to the required length, from the TSL pump (C) to the TSL waste bottle (A).
17. Fill the tubing with TSL by pressing the button (R) on the TSL pump repeatedly until all air is purged from the tubing. View the air pockets in the sight tube (6).
18. To restart the system, follow the startup procedure in the H₂O PRO System manual 308–504 or 308–581.

Parts



8570A



Use 12" (305 mm) tube for batch system or left side of continuous flow system. Use 29" (737 mm) tube for right side of continuous flow system.



Use 29" (737 mm) tube for batch system or left side of continuous flow system. Use 41" (1041 mm) tube for right side of continuous flow system.



Torque to 8 in-lb (0.9 N•m) maximum.
Do not overtighten.

Ref No.	Part No.	Description	Qty	Ref No.	Part No.	Description	Qty
1	054-737	TUBING; thermoplastic rubber; 3/16" (5 mm) ID	20 ft	5	206-995	THROAT SEAL LIQUID (TSL); 1 quart (0.95 liter)	1
2	M71-265	CHECK VALVE	2	6	191-077	TUBE, sight	1
3	113-213	FITTING, hose, barb	4	7	113-894	CLAMPS, tubing	8
4	113-211	STEM, barb	2	8	114-600	TIE, cable; 5.5" (140 mm)	1

Graco Standard Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

FOR GRACO CANADA CUSTOMERS

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

Important Phone Numbers

TO PLACE AN ORDER, contact your Graco distributor, or call this number to identify the distributor closest to you:
1-800-367-4023 Toll Free

*All written and visual data contained in this document reflects the latest product information available at the time of publication.
Graco reserves the right to make changes at any time without notice.*

Sales Offices: Minneapolis, Detroit

Foreign Offices: Belgium, England, Korea, France, Germany, Hong Kong, Japan

GRACO INC. P.O. BOX 1441 MINNEAPOLIS, MN 55440-1441

<http://www.graco.com>

PRINTED IN USA 308-901 October 1998