

# T-Filters

## Introduction

See Figure 1. T-filters are used as coating material final filters to reduce nozzle clogging.

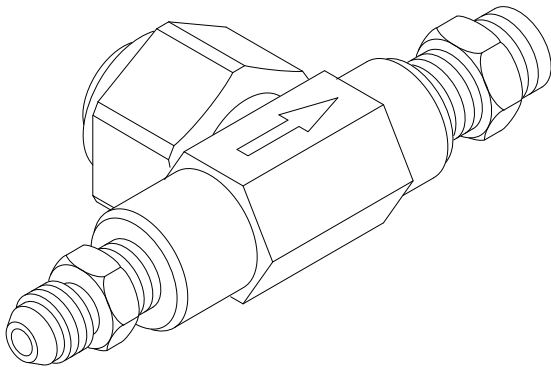


Figure 1 Typical T-Filter Assembly

## Installation

See Figure 2. Installation may differ depending on the type of application.

**NOTE:** The arrow on the T-filter designates the direction of fluid flow.

1. Several connectors are provided with each T-Filter. The filter has  $\frac{1}{4}$  in. inlet and outlet ports. Apply the provided pipe adhesive to the threads of the inlet (5) and outlet (6) connectors and install the connectors on the T-filter.

2. Install the T-filter in the fluid line, close to the fluid inlet of the calibrated orifice, restrictor, or spray device. Make sure that the nut (2) is accessible for removing the filter element (4) and gasket (3).
3. Tighten the fluid lines to the connectors securely.

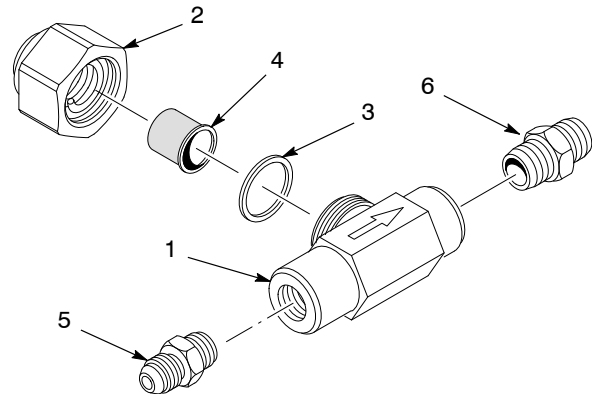


Figure 2 Installation

- |                 |                     |
|-----------------|---------------------|
| 1. T-filter     | 4. Filter element   |
| 2. Nut assembly | 5. Inlet connector  |
| 3. Gasket       | 6. Outlet connector |

**NOTE:** A bypass nut with  $\frac{1}{8}$  in. NPT outlet port can be installed in place of the standard nut assembly. The bypass nut allows you to connect a dump valve to the T-filter.

Table 1 Inlet and Outlet Connectors

Item	Connector Type	Application System	Connector Size	Connector Part Number
5	Inlet	CanNeck I	$\frac{9}{16}$ -18 x $\frac{1}{4}$ -in. NPT	972688
		CanNeck II and Other Systems	$\frac{1}{2}$ -20 x $\frac{1}{4}$ -in. NPT	972029
6	Outlet	CanNeck I and CanNeck II	$\frac{3}{8}$ -in. tube x $\frac{1}{4}$ -in. NPT	971252
		Other Systems	$\frac{3}{8}$ x $\frac{1}{4}$ x 1.406-in. nipple	973971

## Maintenance



**WARNING:** System or material pressurized. Relieve pressure. Failure to observe may result in serious injury.

**NOTE:** T-filters should be disassembled and cleaned according to a maintenance schedule determined by material used, production schedules, and experience. Always keep spare filter elements on hand.

1. Turn off fluid and air pressure. Trigger the spray device to relieve system pressure.
2. See Figure 3. Remove the nut (2), filter element (4), and gasket (3) from the T-filter (1).
3. Clean the filter element with a nozzle brush and compatible solvent. Inspect the filter element and gasket for wear or damage. Replace worn and damaged parts.

**NOTE:** Only mesh screen elements can be cleaned and re-used. Sintered filter elements cannot be cleaned well enough for re-use. Sintered elements should be discarded and replaced with new elements on a regular schedule.

4. Before cleaning the nut, remove the external retaining ring and the internal spring. Be careful not to lose the spring. The nut, retaining ring, and spring are replaceable only as an assembly.

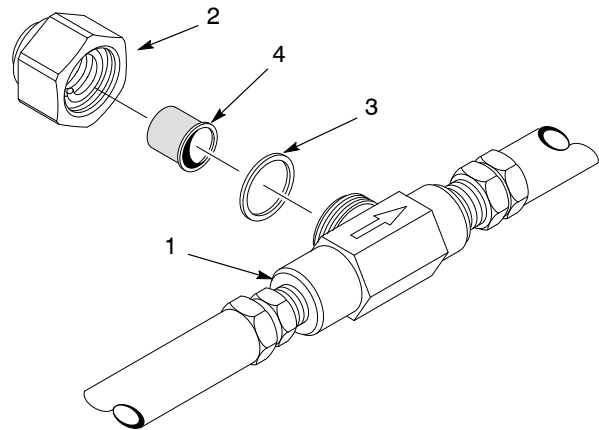


Figure 3 Maintenance

- |                                      |                   |
|--------------------------------------|-------------------|
| 1. T-filter                          | 3. Gasket         |
| 2. Nut (w/retaining ring and spring) | 4. Filter element |
5. Install the gasket on the T-filter.
  6. Insert the open end of the filter element into the T-filter.
  7. Install the nut and tighten it securely.

## Parts

See Figure 4.

NOTE: Optional Bypass Nut available. Refer to page 4 for part number.

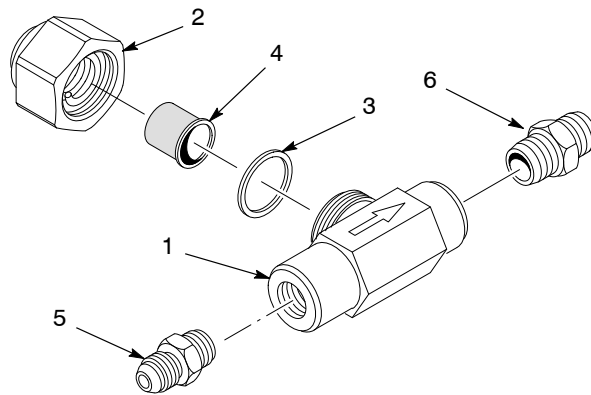


Figure 4 Parts

### 15-Micron T-Filter

Item	Part	Description	Quantity	Note
—	179368	T-FILTER, liquid, $\frac{1}{4}$ -in. NPT, stainless steel, with 15-micron element	1	
1	179300	• FILTER, liquid, $\frac{1}{4}$ -in. NPT, stainless steel, T-type	1	
2	1084451	• • NUT, assembly, filter, T-type	1	
3	179367	• • GASKET, filter, liquid, stainless steel, T-type	1	
4	159908	• FILTER ELEMENT, 15-micron, cv-0.074 max flow	1	
5	972029	• CONNECTOR, male, 37, $\frac{1}{2}$ -20 x $\frac{1}{4}$ in., stainless steel	2	
6	973971	• NIPPLE, hex, $\frac{3}{8}$ x $\frac{1}{4}$ x 1.406 in., stainless steel	1	

**140/15-Micron T-Filter**

Item	Part	Description	Quantity	Note
—	179495	T-FILTER assembly, liquid, 140/15 micron	1	
1	179300	• FILTER, liquid, 1/4-in. NPT, stainless steel, T-type	1	
2	1084451	• • NUT, assembly, filter, T-type	1	
3	179367	• • GASKET, filter, liquid, stainless steel, T-type	1	
4	159908	• FILTER ELEMENT, 15-micron, cv-0.074 max flow	1	
4	179498	• FILTER ELEMENT, 140-micron, cv-0.37 max flow	1	
5	972029	• CONNECTOR, male, 37, 1/2-20 x 1/4 in., stainless steel	1	
5	972688	• CONNECTOR, male, 37, 9/16-18 x 1/4 in., stainless steel	1	
6	971252	• CONNECTOR, male, hydraulic, compression, 3/8-in. tube x 1/4-in. NPT	1	

**Filter Elements and Spare Parts**

Part	Description	Note
159908	15-MICRON FILTER ELEMENT, cv-0.074 max flow	A
163520	60-MICRON FILTER ELEMENT, cv-0.22 max flow	B
169636	230-MICRON FILTER ELEMENT, cv-0.37 max flow	B
179498	140-MICRON FILTER ELEMENT, cv-0.37 max flow	A
179300	FILTER, liquid, 1/4-in. NPT, stainless steel, T-type	
179367	GASKET, filter, liquid, stainless steel, T-type	
901905	BRUSH, nozzle	
NOTE A: For use with CanNeck, CleanSpray, and Ink Dot systems. B: For use with Pressure Control Conversion.		

**Optional Bypass Nut**

Part	Description	Note
1080838	NUT, bypass, 4TF series filter	A
NOTE A: Replaces 1084451 nut assembly. Outlet port of bypass nut has 1/8 in. NPT threads. Use to connect a dump valve to the T-filter.		

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