

FT Series Filter



Maximum Allowable Working Pressure

Seal Material	Brass Filters	Stainless Steel Filters
Elastomeric & Metallic	2000 psig at 70 °F 13.8 MPa at 21 °C	6000 psig at 70 °F 41.4 MPa at 21 °C
PTFE	2000 psig at 70 °F 13.8 MPa at 21 °C	2000 psig at 70 °F 13.8 MPa at 21 °C

Always consult your authorized Parker representative if questions arise. The arrow on the Filter Body indicates the normal direction of flow.

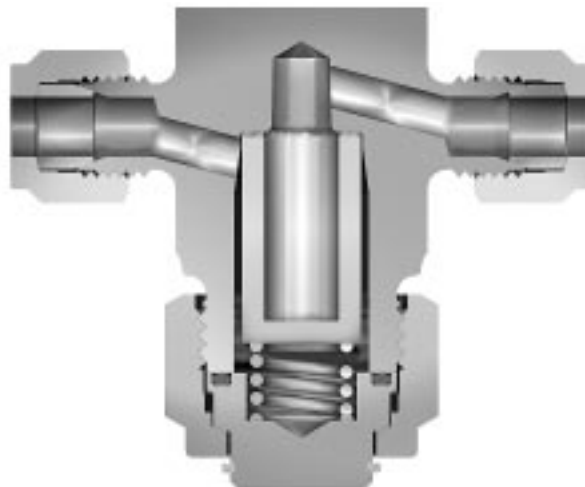
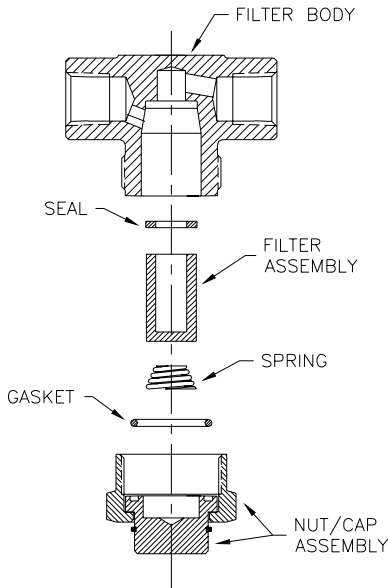


Figure 1: FT Series Filter Cross Sectional View



**Figure 2: FT4 Series Tee Filter Exploded View
purchased after March 2, 1990**

DISASSEMBLY

(For valves purchased after March 2, 1990)

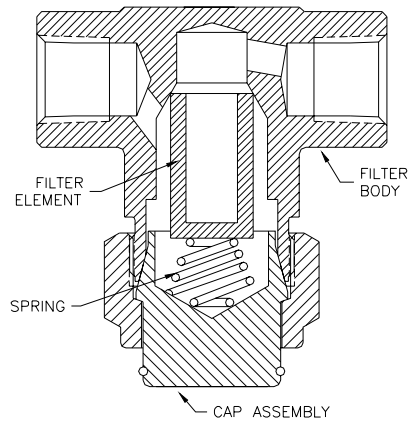
WARNING: MAKE CERTAIN THE SYSTEM IN WHICH THE FILTER IS INSTALLED IS DRAINED AND/OR EXHAUSTED OF ALL PRESSURE BEFORE STARTING VALVE REMOVAL OR DISASSEMBLY. FAILURE TO DO SO CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

1. Remove the nut/cap assembly by turning the nut counter-clockwise with a 1 1/8 inch size hex wrench.
2. Carefully remove the nut/cap assembly, gasket, spring, filter element and filter seal.
3. Preferably, wipe the filter body's internal areas to remove any contamination. The filter's interior must be completely dry before reassembly.

REASSEMBLY

1. Refer to Figure 2. Insert the gasket into the groove on the cap. Place the wide end of the spring into the cavity of the cap and set aside.
2. Place the filter seal on the opened end of the filter element. Insert these into the filter body with the filter seal going in first.
3. While holding the filter element in place, move the spring, and nut/cap assembly into place with the small end of the spring contacting the closed end of the filter element.
4. Thread the nut onto the body with a clockwise rotation until finger tight.
5. Securely tighten the nut by turning clockwise, with a 1 1/8 hex (FT4) or 1 1/4 hex (FT8) wrench to the following torque:

Valve Material	Torque
Stainless Steel	15 ft-lbs (20 N-m)
Brass	12 ft-lbs (16 N-m)



**Figure 3: FT4 Series Tee Filter Cross Sectional View
prior to March 2, 1990**

DISASSEMBLY

(For valves purchased prior to March 2, 1990)

WARNING: MAKE CERTAIN THAT SYSTEM IN WHICH FILTER IS INSTALLED IS DRAINED AND/OR EXHAUSTED OF ALL PRESSURES BEFORE DISASSEMBLY.

1. Remove the nut/cap assembly by turning the nut counter-clockwise with a 1 1/8 inch size hex wrench.
2. Carefully remove the nut/cap assembly, gasket, spring, filter element and filter seal.
3. Preferably, wipe the filter body's internal areas to remove any contamination. The filter's interior must be completely dry before reassembly.

REASSEMBLY

1. Refer to Figure 3. Install the new (or cleaned) filter element and spring into the Filter Body.
2. Thread cap assembly onto body in a clockwise rotation until handtight.
3. Securely tighten the nut by turning clockwise, with a 1 1/8 hex wrench until the nut/cap assembly returns to its original position (usually less than 1/8 turn from handtight). **Do not overtighten cap assembly.** Excessive torque may result in internal body damage or a weakened connection.

VALVE CONNECTOR MAKE-UP INSTRUCTIONS

MALE AND FEMALE PIPE PORTS

Wrench flats are provided on the Valve Body. It is recommended a smooth-jawed wrench or vise be used to grip the Valve Body.

1. On the male threaded part of the connection, apply a high quality pipe joint compound or PTFE tape made for this purpose. When PTFE tape is used, it is recommended two full turns of tape be applied. PTFE tape should not be overhanging or covering the first thread
2. Engage the Valve and the other component part together, until hand-tight.
3. With a proper wrench, holding both the Valve and the component part, continue to tighten to achieve a leak-tight joint.

ULTRASEAL CONNECTIONS

1. Insert the proper O-Ring into the UltraSeal fitting's O-Ring groove. Position the UltraSeal gland sealing face against the O-Ring, and then advance the Nut to a finger-tight position.
2. A positive seal is obtained by advancing the Nut no less than 1/4 turn from the finger-tight position. Proper UltraSeal make-up is achieved when a sharp rise in required application torque occurs, which indicates proper seal face contact and O-Ring seal compression into the UltraSeal groove.

VACUSEAL CONNECTIONS

1. A positive seal is obtained by advancing the Nut 1/8 turn from the finger-tight position.
2. A new gasket should be installed upon each fitting re-make to insure system pressure integrity.

TUBE FITTING CONNECTIONS

1. Insert the tube into the Valve port until the tube bottoms out in the Valve Body. Care should be exercised to insure the tube is properly aligned with the Valve Body and port.
2. Normal make-up for US Customary port sizes 1 thru 3 (1/16 thru 3/16 inch) and SI port sizes 2 thru 4 (2 thru 4 mm) is 3/4 turn from finger tight. Normal make-up for US Customary port sizes 4 thru 16 (1/4 thru 1 inch) and SI port sizes 5 thru 25 (5 thru 25 mm) is 1 1/4 turn from finger tight. For larger port sizes consult Parker Ferrule Presetting Tool Instructions.

PLEASE FOLLOW THE ABOVE DIRECTIONS FOR COUNTING THE NUMBER OF TURNS FOR PROPER FITTING MAKE-UP. DO NOT MAKE-UP TUBE FITTINGS BY TORQUE OR "FEEL". VARIABLES SUCH AS TUBING AND FITTING TOLERANCES, TUBE WALL THICKNESS, AND THE LUBRICITY OF NUT LUBRICANTS CAN RESULT IN AN IMPROPERLY ASSEMBLED TUBE FITTING CONNECTION.

A -Two ferrule A-LOK® compression port



Z -Single ferrule CPI™ compression port



F -ANSI/ASME B1.20.1 Internal pipe threads



V -VacuSeal face seal port



Q -UltraSeal face seal port



M -ANSI/ASME B1.20.1 External pipe threads



WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

ALL PARKER VALVES MUST PASS A RIGID OPERATIONAL AND LEAKAGE TEST BEFORE LEAVING THE FACTORY. IT IS RECOMMENDED AFTER ANY REASSEMBLY, THE VALVE SHOULD BE TESTED BY THE USER FOR OPERATION AND LEAKAGE. IF THESE INSTRUCTIONS ARE NOT FULLY COMPLIED WITH, THE REPAIRED PRODUCT MAY FAIL AND CAUSE DAMAGE TO PROPERTY OR INJURY TO PERSONS. PARKER HANNIFIN CANNOT ASSUME RESPONSIBILITY FOR PERFORMANCE OF A CUSTOMER SERVICED VALVE.

