

GENERATION² FILTRATION™



G2F-POR101 SERIES

Portable Oil By-pass Systems



ISO 9001
QMI-SAI Global

THE NEXT GENERATION OF OIL FILTRATION

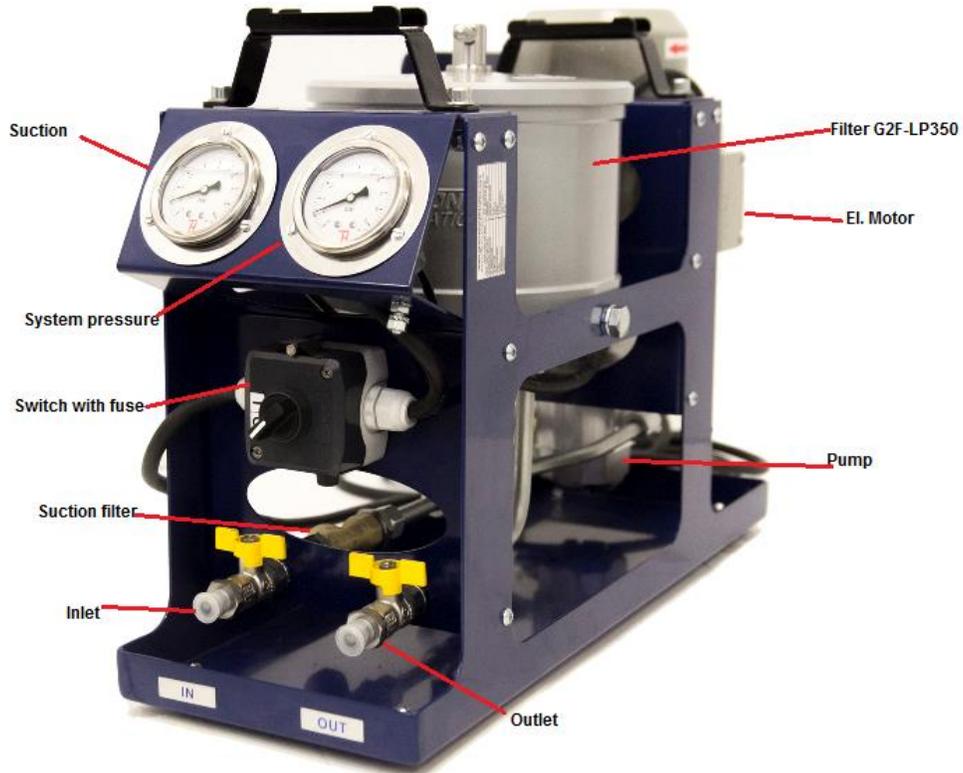
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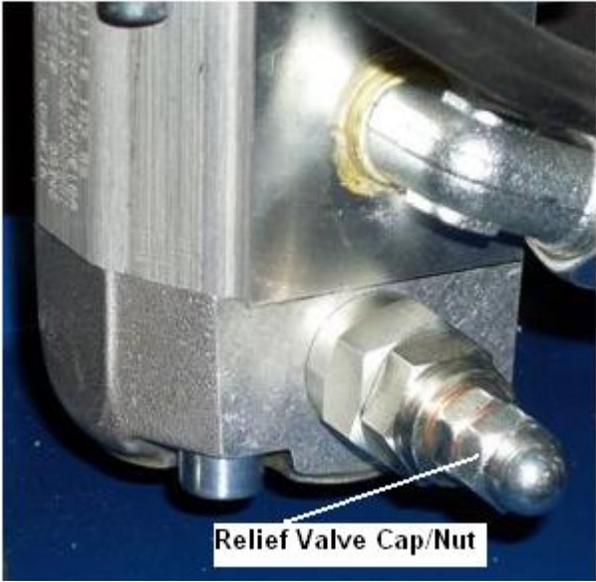
NOTE: G2F is the abbreviation for Generation 2 Filtration™

<u>TECHNICAL PARAMETERS</u>		
PARAMETER	UNIT	VALUE
Outside measurement	mm	610 (L) X 230 (W) X 420 (H)
Weight	kg	27
Suction filter	1	80 Mesh
G2F-filter housing	1	G2F-LP350 type
Normal flow	l/min	4
Maximum tank capacity	liters	1,800
Hose connection	JIC	Inlet -6 JIC Outlet -6 JIC
Maximum oil temperature	° C	80
Range of oil viscosity	cSt	9 – 220
Working pressure	bar	3
Element change out pressure		5
Feed	Volts	1~/110V (1~/230V) <1~/220V/> [3~/230V/400V] {3~/220V/440V}
Motor	Hz/kW	60Hz/0,37 kW (50Hz/0,25 kW) <60Hz/0,37kW> [50Hz/0,37kW] {60Hz/0,43kW}

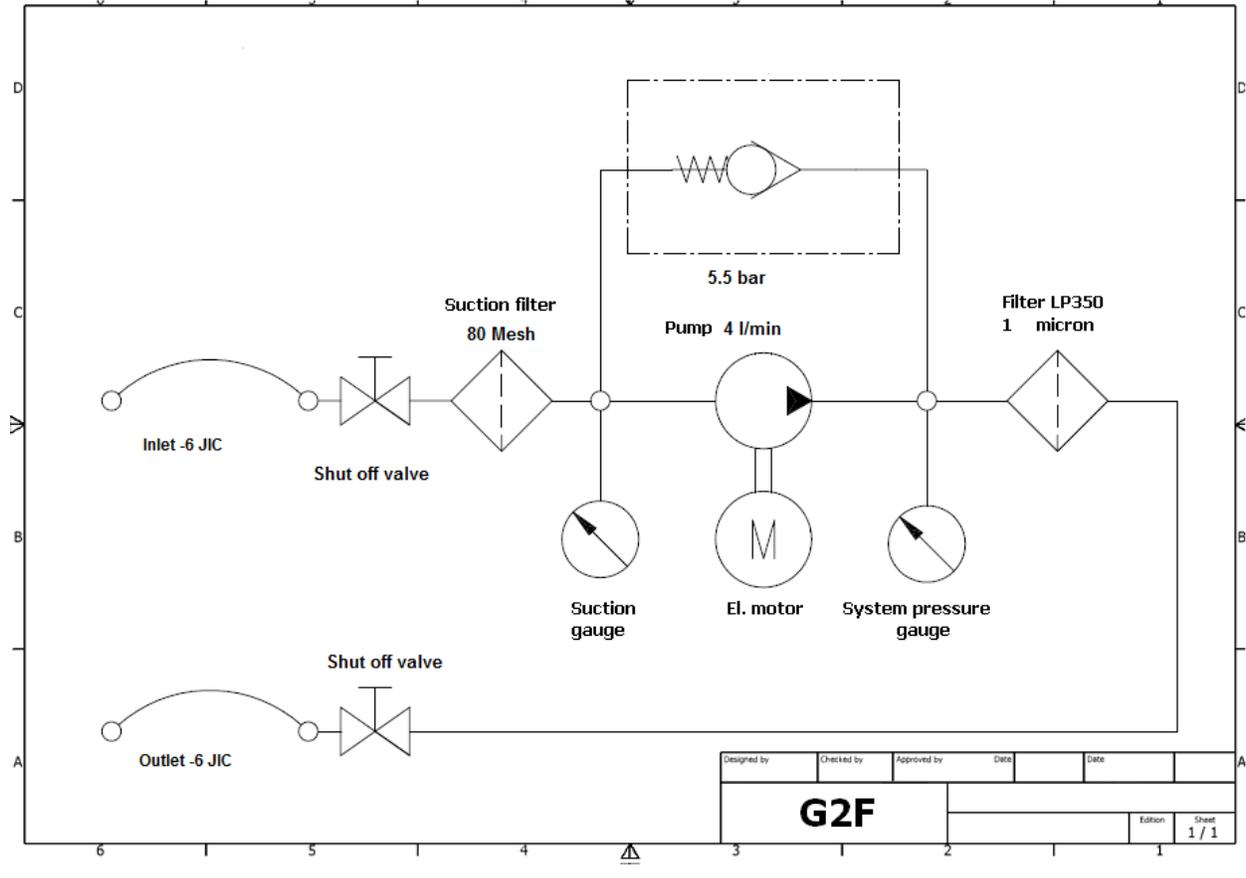
PICTORIAL PARTS LIST



**CLOSE UP VIEW OF RELIEF VALVE
AT BASE OF PUMP**

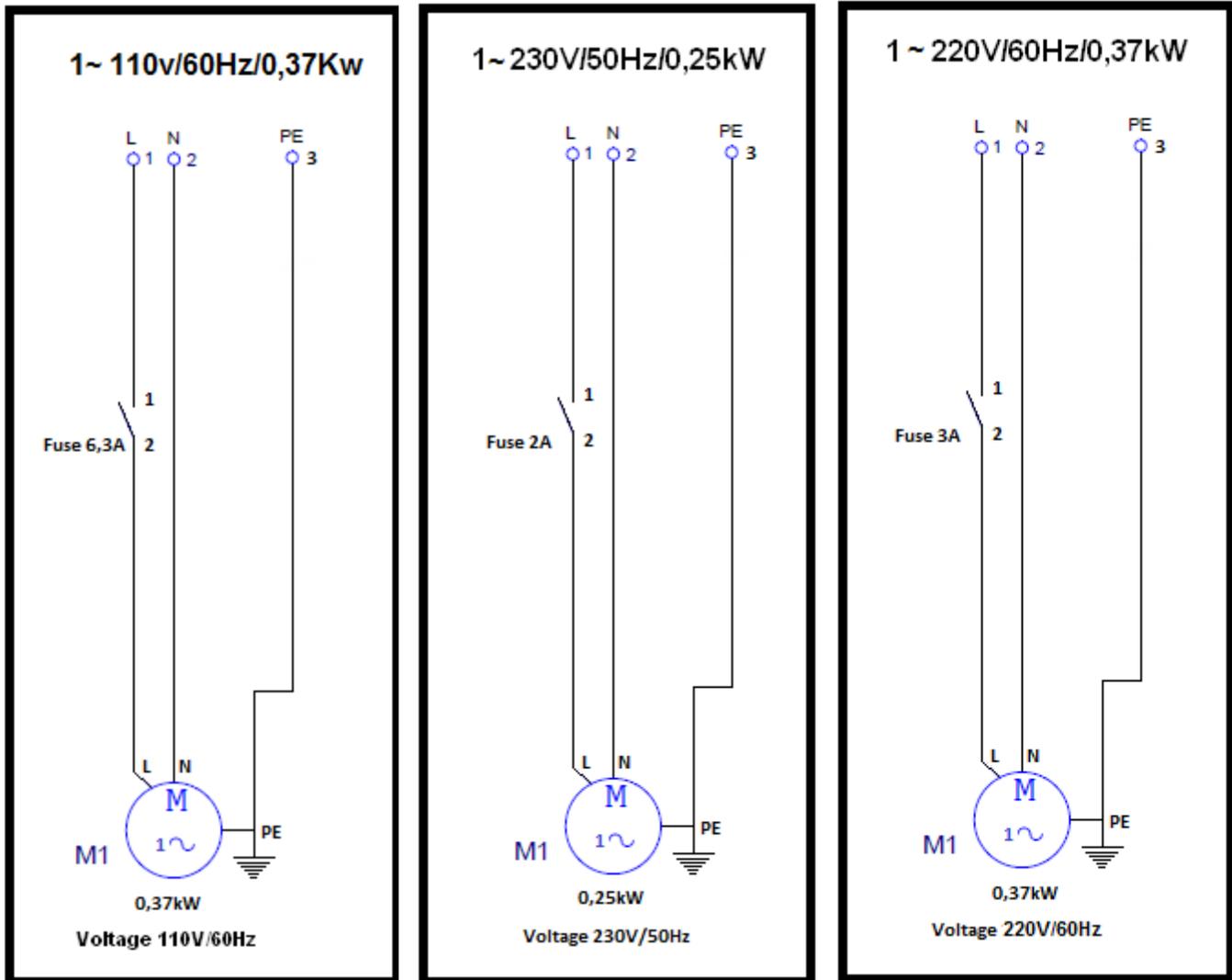


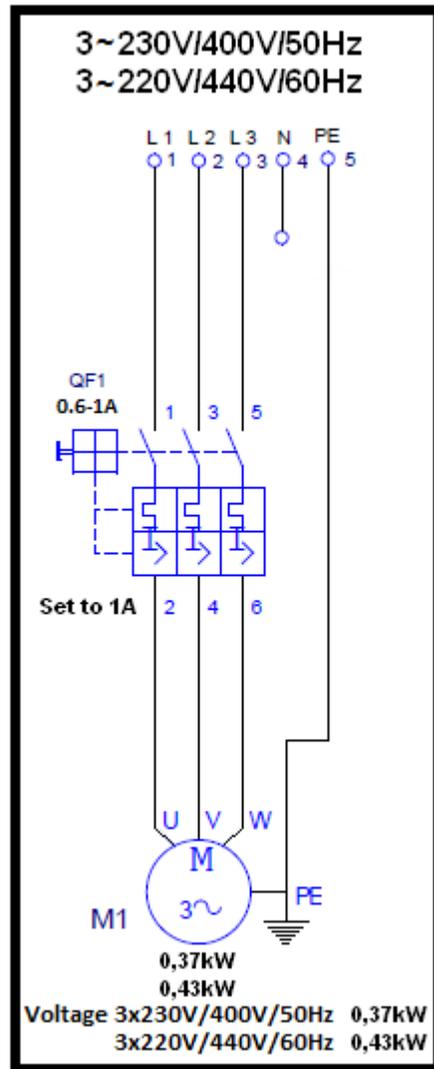
HYDRAULIC SCHEMATIC



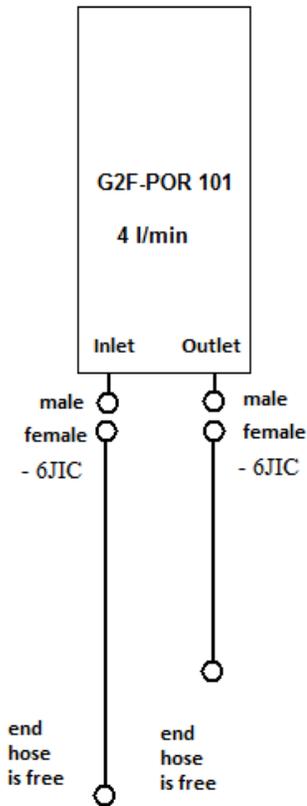
ELECTRICAL SCHEMATIC

Schematics depending on unit configuration as depicted below:





HOSE CONNECTIONS



Safety Precautions:

This is intended as a guide and to aid in the start-up and operating of the G2F-POR101 only and any other safety requirements set out by law and or company must be followed relating to safety and lock out policy or procedures.

Ensure:

- ✓ *Power supply switch is in the off position.*
- ✓ *G2F Element is in the G2F-LP 350 Housing.*
- ✓ *G2F Lid is tight.*
- ✓ *Oil viscosity is between 9 - 220 cSt.*
- ✓ *G2F Filter Cart is on a level surface.*
- ✓ *Do not leave Filter Cart in operation when building is unoccupied.*

PROCEDURES

After following all Safety procedures you may proceed to operate the G2F-POR101 by following these instructions:

- Ensure the power switch in the “off” position.
- Ensure your licensed electrician has wired the G2F - POR101 in accordance to the Standards of the Local Electrical Code for your area.
- Take the end of the Inlet hose that has the female -6JIC swivel end and attach it to the Inlet fitting of the Filter Cart. Take the other end of the Inlet hose and insert the hose three quarters of the way down to one side of the oil reservoir. This will ensure proper fluid suction. The Inlet hose **should not** be longer than 4 meters.
- Take the end of the Outlet hose that has the female -6JIC swivel end and attach it to the Outlet fitting of the Filter Cart. Take the other end of the hose and insert it about ¼ of the way down in the oil reservoir and as far opposite to the Inlet hose as possible.
- By placing the hoses in this manner it will ensure optimal circulation and maximum amount of oil being filtered within the reservoir.
- Make sure inlet and outlet shut off valves are in the open position by:
 - ✓ *Opening the inlet shut off valve.*
 - ✓ *Opening the outlet shut off valve.*

NOTE:

First Picture below illustrates valve is the CLOSED POSITION



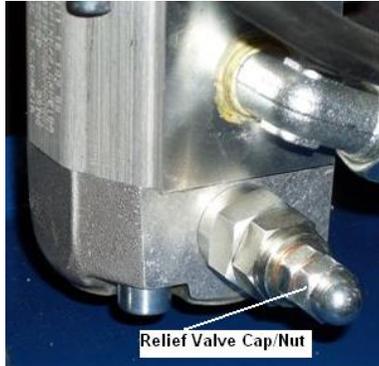
This picture indicates the OPEN POSITION



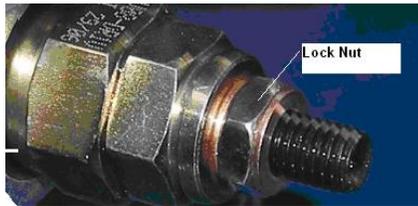
- Turn the power switch to the on position briefly in order to check the direction of rotation of the motor. Looking at it from the pump's side of the motor it should turn counter clockwise as indicated by the red arrow on the motor fan cover. If it is turning the wrong way, change the phases of the wiring in the connection box on top of the motor, the switch box or the electrical panel.
- Upon proper rotation of the motor turn the Filter Cart to the on position until the pressure gauge shows a pressure of 3 bar.
- Let the Filter Cart installation run for about 10 to 15 minutes, until all the air is pumped out and the filter housing unit is completely saturated with oil.
- Monitor Filter Cart for any possible leaks.
- If leaks occur shut down immediately by turning power switch to the off position to investigate and rectify.
- When using a brand new G2F Element, the bar pressure gauge will rise until the G2F Element is thoroughly saturated with oil, then the pressure gauge will decrease to give you a true reading.
- Should the suction gauge indicate high values, the inlet hose or the suction filter is blocked/obstructed and needs to be cleaned. If on the other hand this suction gauge shows extremely low values, air is taken in.
- Should after start up and the G2F element is fully saturated with oil and if the pressure gauge rises into the red, adjust the Relief Valve accordingly to lower the pressure back into the green section of the System pressure gauge (to 3 bar) .

ADJUSTING RELIEF VALVE

- To Adjust Relief Valve remove relief valve Cap/Nut with a 13mm wrench counter clock wise rotation exposing the Adjustment Screw.



- Loosen the Locking Nut counter clock wise with a 13mm wrench.



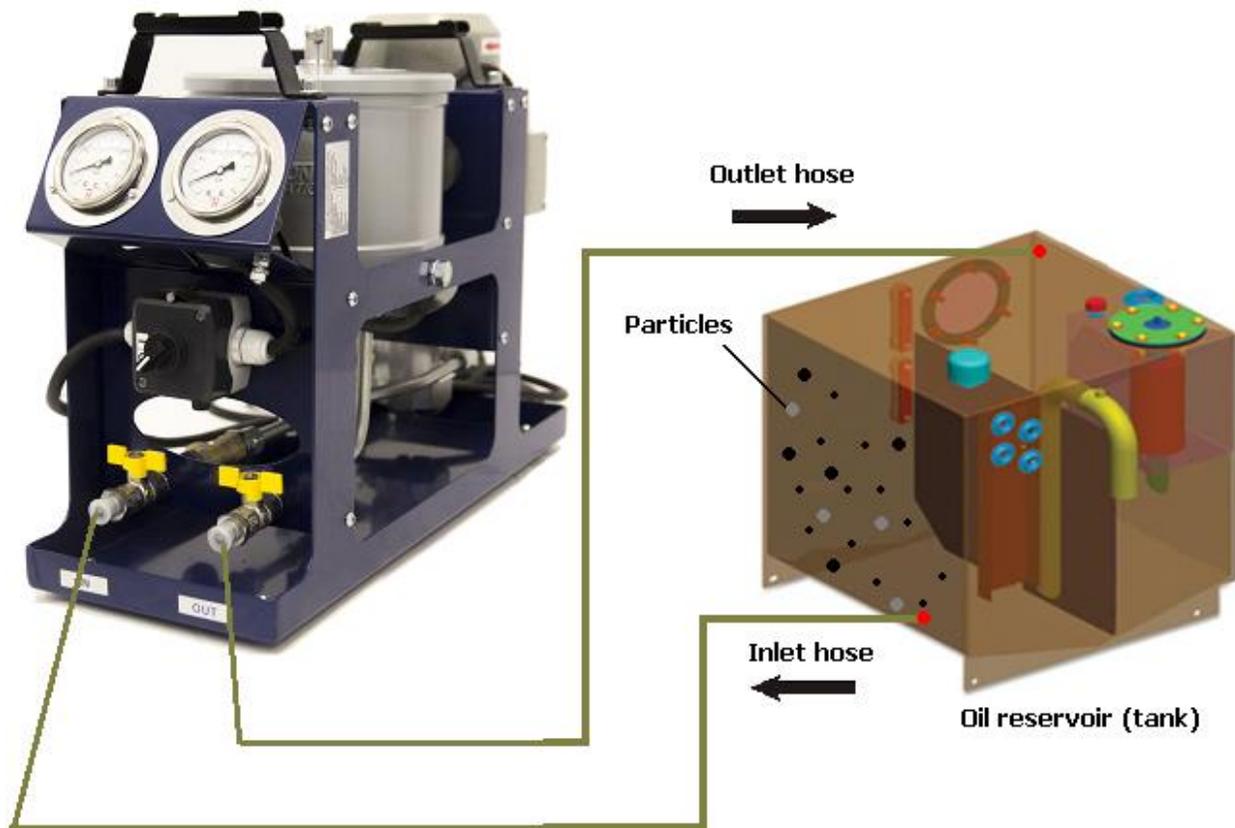
- Insert 4 mm Allen Key into Adjustment Screw end and adjust pressure accordingly by turning the Allen Key till the pressure is in the green at 3 bar.



- Tighten Lock Nut in a clockwise rotation to fix the setting in place.



- Thread on Cap/Nut and tighten Cap/Nut.



TECHNICAL NOTATIONS

- System pressure gauge will indicate proper pressure levels as well as when to change G2F Element.
- When System pressure gauge goes into the yellow change G2F element. (follow Element Change out Procedures)
- If System pressure gauge goes into red shut down immediately.
- G2F Element will need changing immediately as well as investigate as to other possible causes should the element be in good condition.



- Never filter 2 different types (viscosity) of oil fluid with the same G2F Element. This may cause cross contamination between the fluids. All G2F Elements must be changed prior to filtering a different type of oil.
- To Change Element (see G2F Element Change Procedures below) and to repair leaks etc. all power supply must be in the off position and for further certainty and safety remove plug from power supply. If portable filter cart is wired direct ensure power switch is in off position and follow all company and governmental regulations for lock out procedures as required.
- Do not run pump dry as this will cause damage to the motor/pumping mechanism.
- Pump is already self-primed.

G2F ELEMENT CHANGE PROCEDURE

This is intended as a guide to the changing of the element only and any other requirements set out by law and or company must be followed relating to lock out policy or procedures.

- Follow all lock out procedures as required by government and company.
- Turn off power switch to the off position.
- Remove power cord from power outlet.
- Allow Portable Filter Cart too sufficiently cool down in order to prevent possible burn injuries.
- Slowly loosen T- Handle (by turning counter clock wise) on G2F Housing.



- Remove G2F Lid placing it on a clean location avoiding placement such as to add contamination to lid.



- Clean G2F Lid and do not remove O-rings that are under the T-handle and G2F Lid, merely inspect and replace if necessary.
- Unwrap G2F Element from Vacuum sealed vapour barrier; remove plastic disposal bag from center core of element. This will be used to dispose of spent element upon removal.
- Place the new G2F Element down on clean surface with the top side down (as to not to add contamination to bottom side of element prior to changing).

- Remove used G2F Element from housing by either pulling up on the straps or by using the G2F–Puller and dispose of used element in accordance with all applicable regulations.



- Using clean shop towels wipe inside the housing removing any visual contamination.
- Insert new G2F element with the two fabric bands facing upwards, force the element down until the bottom is firmly set onto the inside edge of the G2F housing. (tapered cardboard end down)
- Never pour oil on top of new element.
- Replace Lid assembly.



- Hand-tighten T-handle clockwise.



TECHNICAL SUPPORT

Please call your local distributor or our Head Office below:

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Toll free: 1-800-960-3848 (North America)
Email: info@generation2filtration.com
www.generation2filtration.com

WARRANTY:

Limited life-time warranty to the original purchaser for defects in workmanship and materials of the housing canister only. Warranty is not transferable. Other components are warranted by the original manufacturer. Failure to deviate from installation instructions will invalidate warranty. The use of a *Generation2 Filtration™* system does not affect original manufacture warranty. As technical advancements take place, product specifications may be subject to change.



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