AVIATION FUEL QUALITY CONTROL

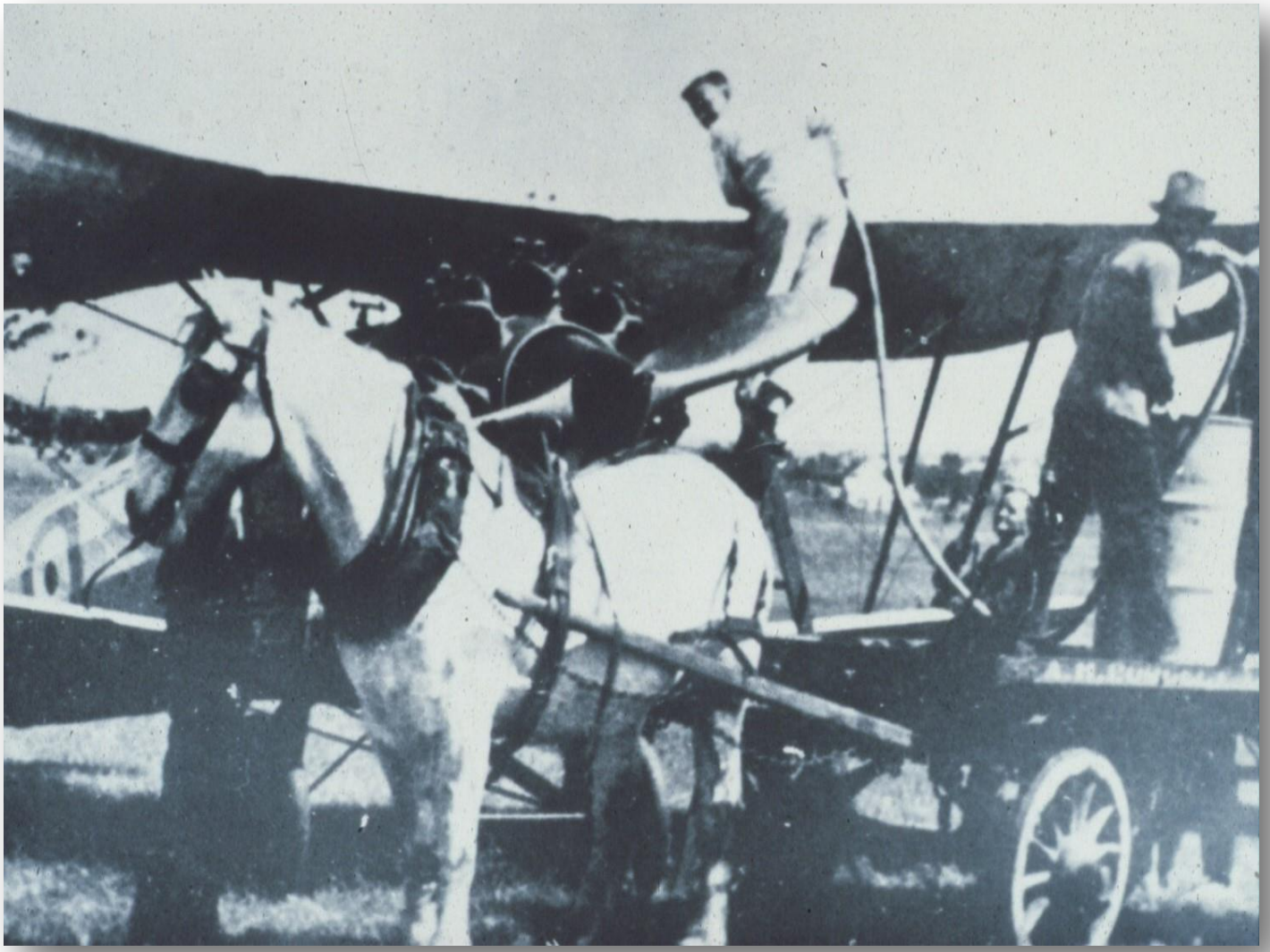
AN OVERVIEW OF FUEL QUALITY CONTROL GUIDELINES & TEST EQUIPMENT

BY GAMMON TECHNICAL PRODUCTS, INC.

LINE SERVICE CREED

"It is impossible to accurately measure the results of fueling aircraft safely. No one can count the fires that never start, the engine failures that never take place, nor can anyone evaluate the lives that have been saved or plumb the depths of the human misery that was spared. But the man or woman with the fueling hose can find satisfaction that he has worked wisely and well, and that safety has been his first consideration."

-Anonymous



OUR EQUIPMENT HAS IMPROVED OVER THE YEARS

SENSING WATER IN JET FUEL SYSTEMS

Water is Sensed From Our Fuel Systems in 4 Ways

1. Visual Inspection
2. Electronic Sensors (Parker and Faudi – by others)
3. Float Operated Controls on Filter Separator Vessels
4. Differential Pressure On Water Absorbing Filter Vessels
5. *In Development* – Differential Pressure on Water "Barrier" Filter Vessels

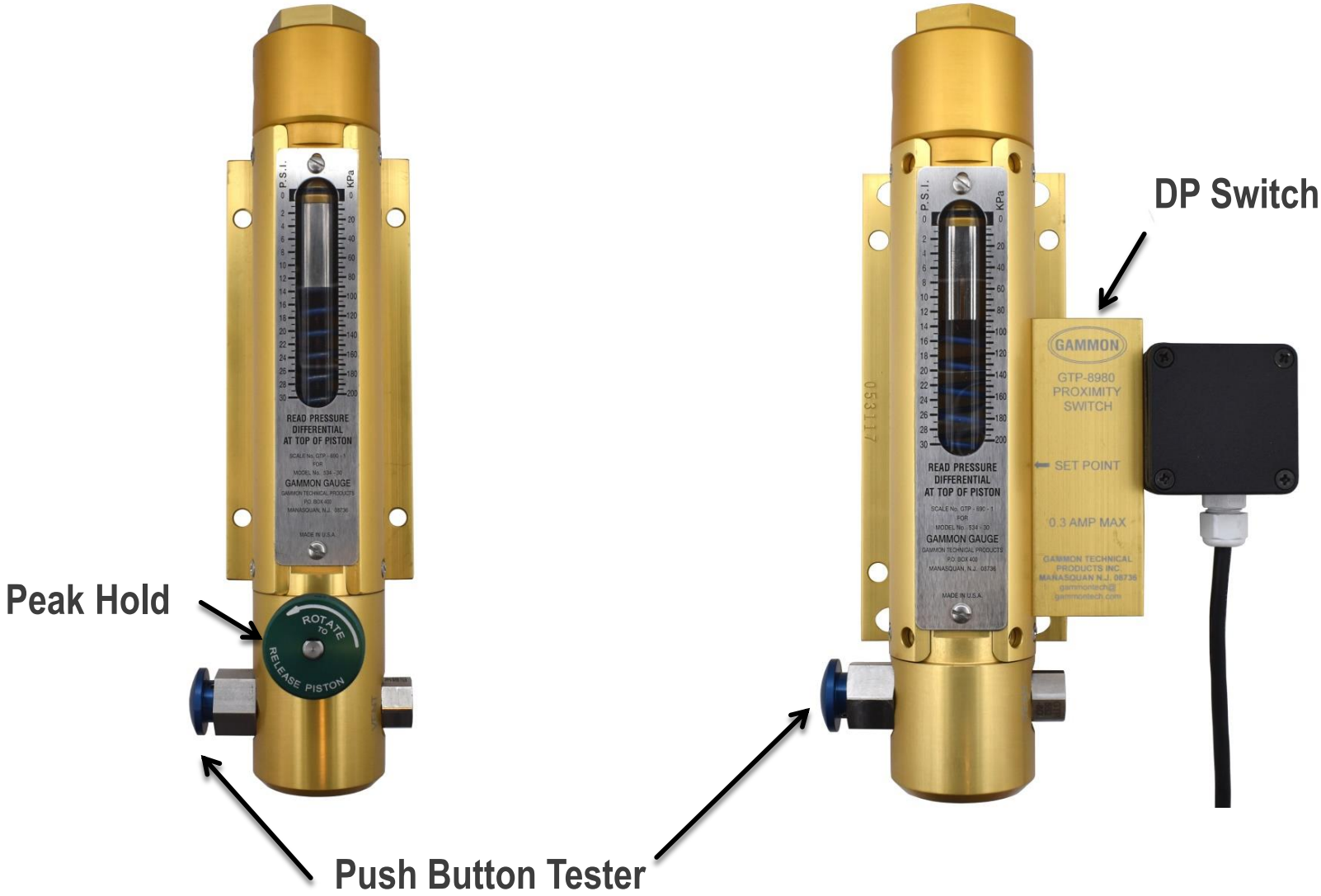
FLOAT OPERATED WATER SENSING

Float Operated Water Sensors Are Used On Filter Separator Sumps

Floats on water but not on fuel

For Vertical (shown) and Horizontal Filter Separator Vessels

GAMMON GAUGE OPTIONS

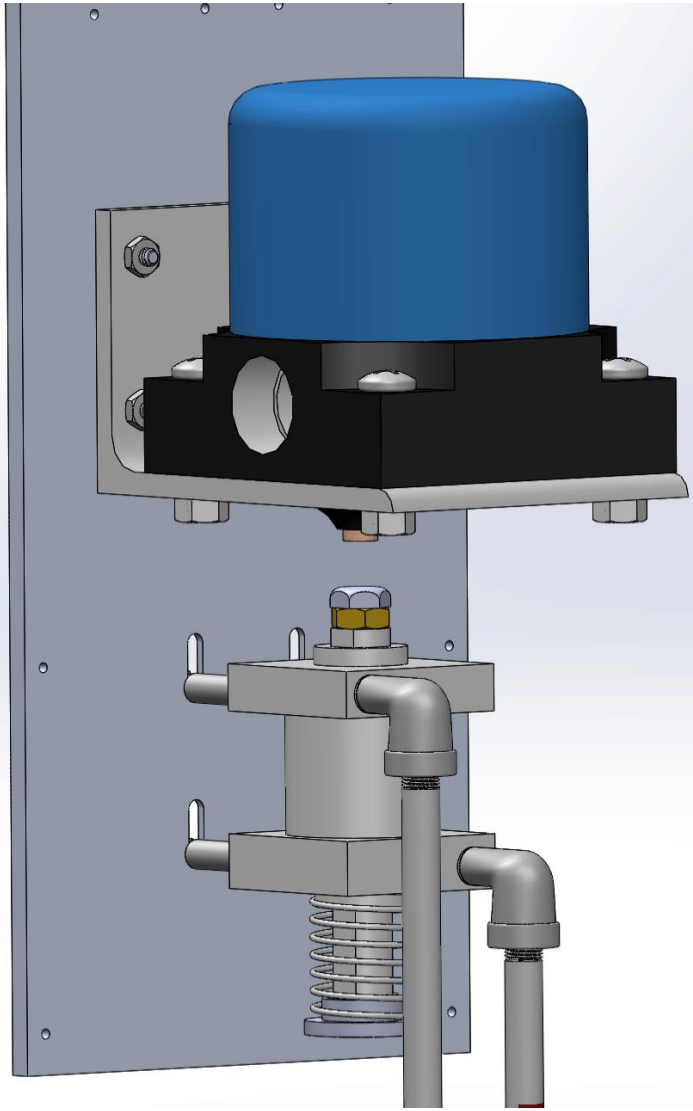


DP SHUTDOWN

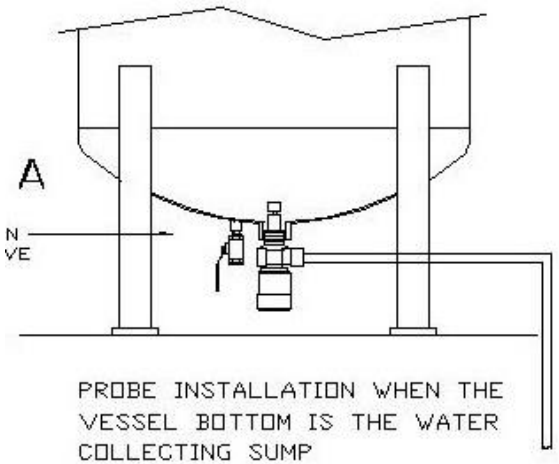

GTP
GTP-8950
PROXIMITY
SWITCH
← SET POINT
AMP MAX
READ PRESSURE
DIFFERENTIAL
AT TOP OF PISTON
GAMMON GAUGE

TEST VALVE AND PEAK HOLD

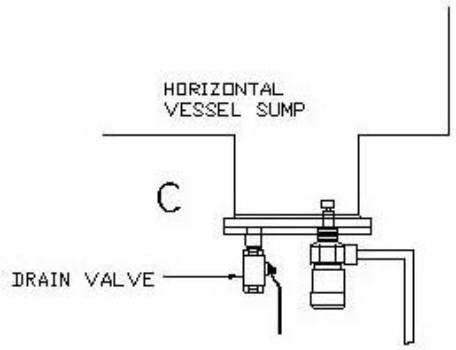
DP GARD

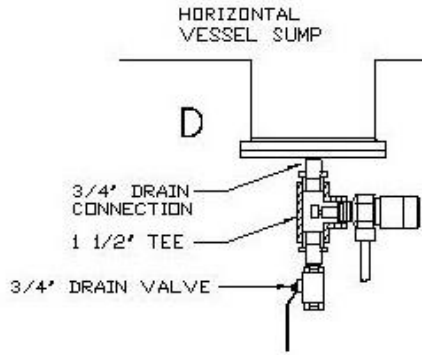


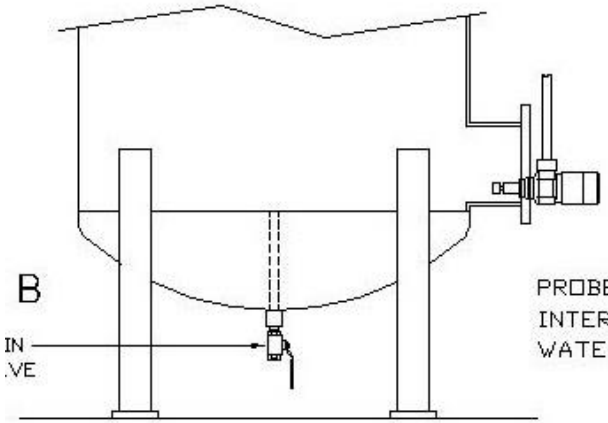
WATER SENSING IN FILTER VESSEL SUMPS



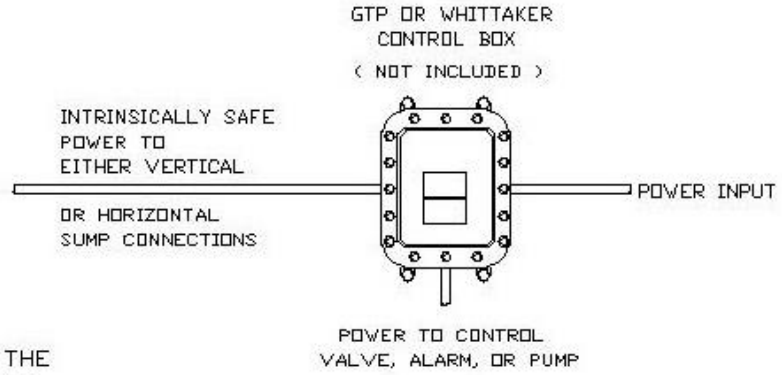
PROBE INSTALLATION WHEN THE VESSEL BOTTOM IS THE WATER COLLECTING SUMP



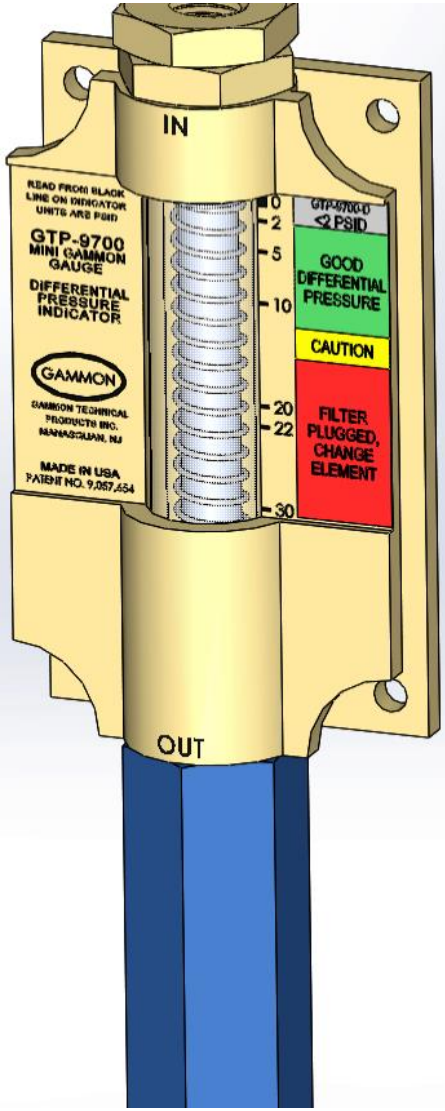




PROBE INSTALLATION WHEN THE INTERNAL DECK PLATE IS THE WATER COLLECTING SUMP



MINI GAMMON GAUGE - NEW FOR < 400 LPM VESSELS



Available in EI Configuration,
Industrial and
Soon with a DP Switch

USE THE CORRECT REPLACEMENT FILTERS

GAMMON GAUGE CALIBRATION CERTIFICATE

GAMMON GAUGE GTP-534 SERIES
OPERATIONAL CHECK AND CALIBRATION CERTIFICATE

Unlike common pressure gauges, Gammon Gauges do not require periodic bench/laboratory calibration. A complete test of the Gammon Gauge consists of the following steps. If all steps are conducted with the correct results, the gauge is calibrated. To perform this test in accordance with API-1581, the underside of the piston must be vented by blocking pressure from the downstream side of the filter vessel. A 3-way valve, such as our GTP-2305, can be installed, but we strongly recommend the Gammon Gauge with a built-in 3 way push button valve, GTP-534PB.

1. With no flow in the system, read the gauge; it should read within the zero band.
2. Establish full system flow. The gauge should read a differential pressure greater than zero.
3. Actuate the test valve on the bottom of the gauge to vent the underside of the piston. The piston should move to the bottom of its travel smoothly without evidence of sticking as it moves. Be prepared to collect approximately 50 ml of fuel from the outlet of the 3-way valve. Return the test valve to the normal position by releasing the button on GTP-534PB or by turning the valve handle of GTP-2305.
4. Stop system flow. The piston should move back to a position within the zero band. In the case of a Peak Hold gauge, turn the green reset knob to release the piston. Accuracy of the gauge is within ± 0.5 psi if the piston returns to the zero band.

   NOTE: If the piston moves erratically and/or it does not return to zero, disassemble and clean the piston and glass tube with jet fuel and Scotch-Brite. Refer to Installation and Maintenance Bulletin, for instructions.
5. Repeat the test after cleaning and reassembly. If the piston still will not return to zero, the spring must be replaced.

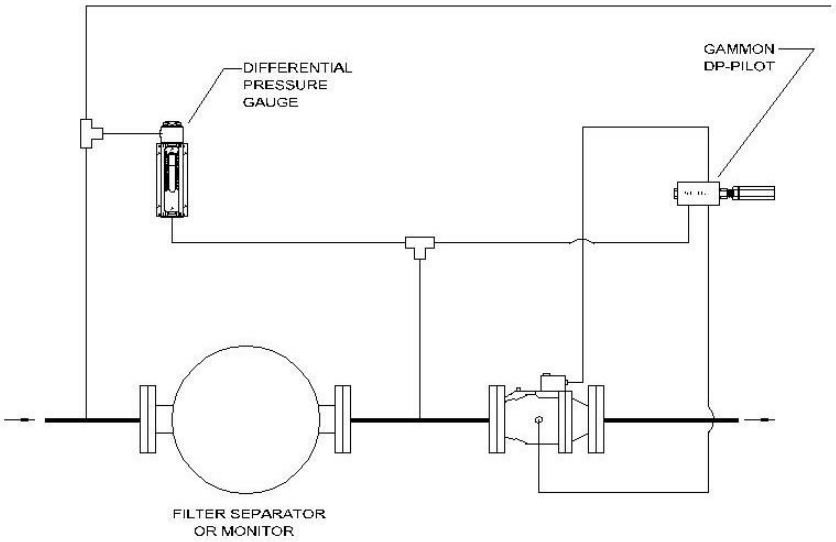
TEST CONFIRMATION
Steps 1-5 above were successfully performed on gauge/filter/vehicle# _____ DATE _____

TEST PERFORMED BY_____ Sign here_____

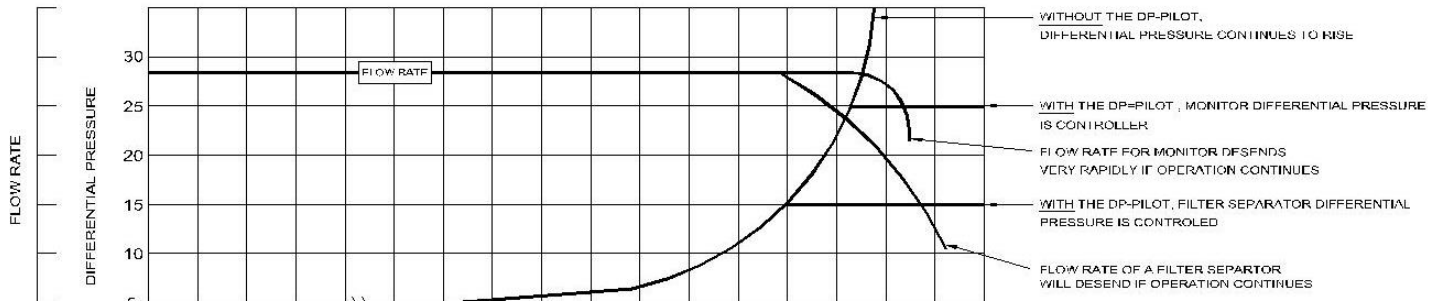
Company Name _____ Location _____

GAMMON TECHNICAL PRODUCTS, INC.
2300 HIGHWAY 34
MANASQUAN, NJ 08736 USA
PHONE (732) 223-4600 FAX (732) 223-5778
FORM# GGTC2-08/11
gammontech@gammontech.com

DIFFERENTIAL PRESSURE *REGULATION* - DP PILOT



TYPICAL CONTROL VALVE



CHECK THE FILTER VESSEL

THE GAMMON GAUGE

We have a free test procedure and certificate at: https://goo.gl/VNJHBs

When the test valve is operated, the piston should move smoothly to the bottom of the scale.

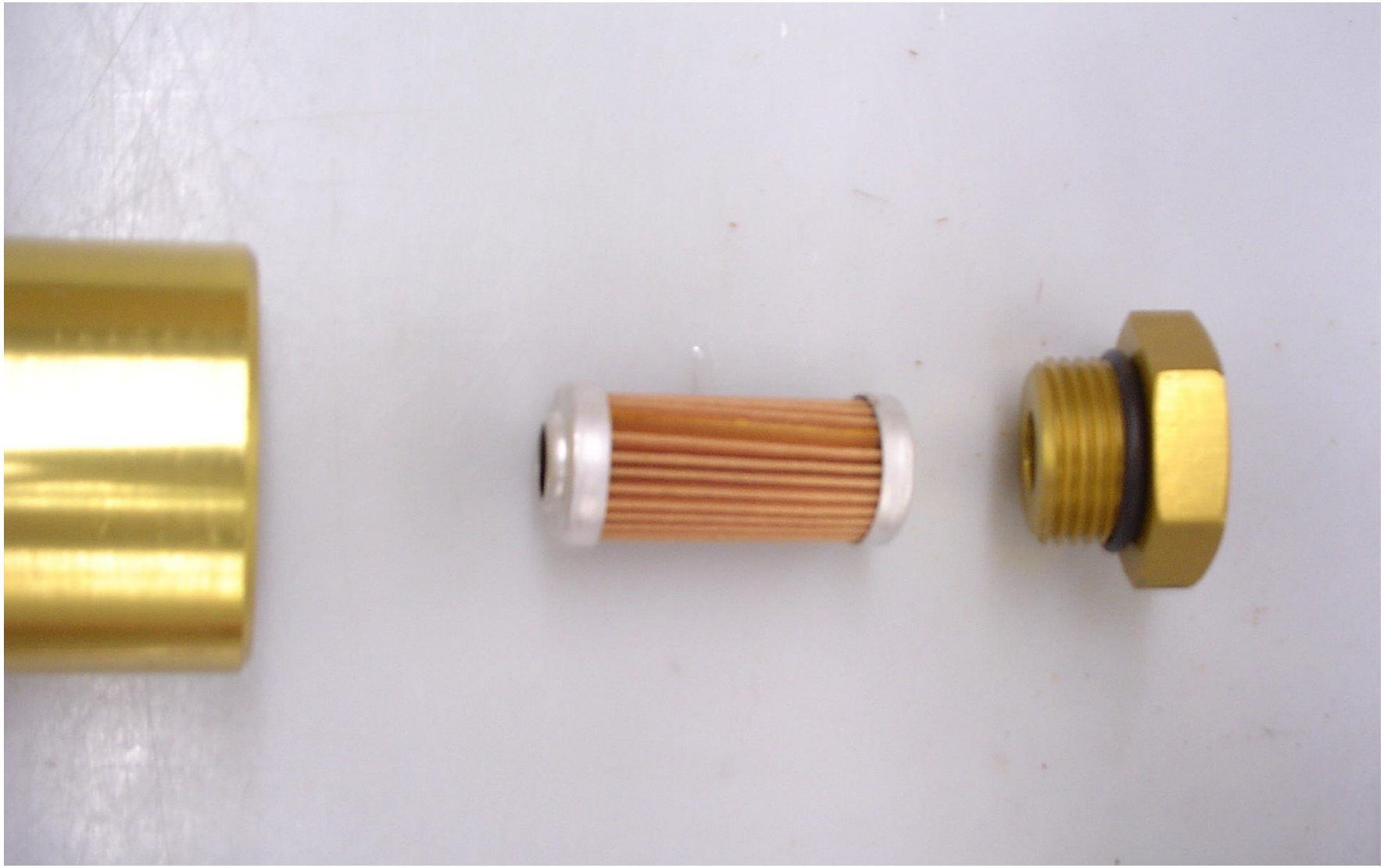
If it moves smoothly but slowly, you may need a new filter.

If it moves in jumps, or does not move to the bottom of the scale, clean the glass and piston with Scotch-Brite.

Return the valve to the normal position, and stop flow. The piston should return to zero. If not, clean the tube and piston. If this does not solve the problem, replace the spring.

This push-button tester is simple, inexpensive, and includes a pressure relief valve.

FLUSHING NEW FUEL HOSES



FLUSHING NEW FUEL HOSES