

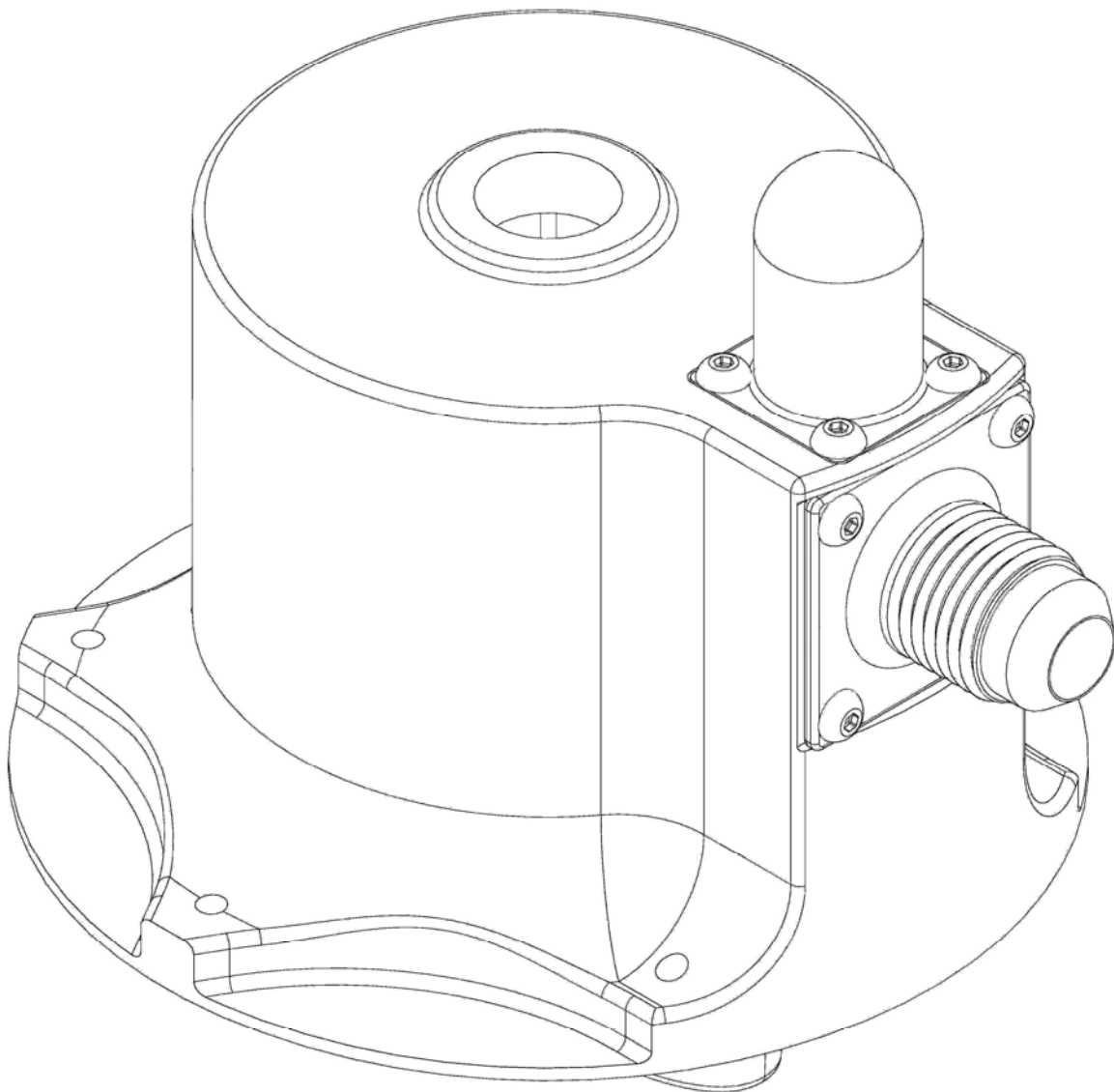


Installation Manual
Product: Filter Gascolator
P/N: RR002

Rev: -
Date: Jun.2012

Filter Gascolator

P/n. RR002



Installation Manual

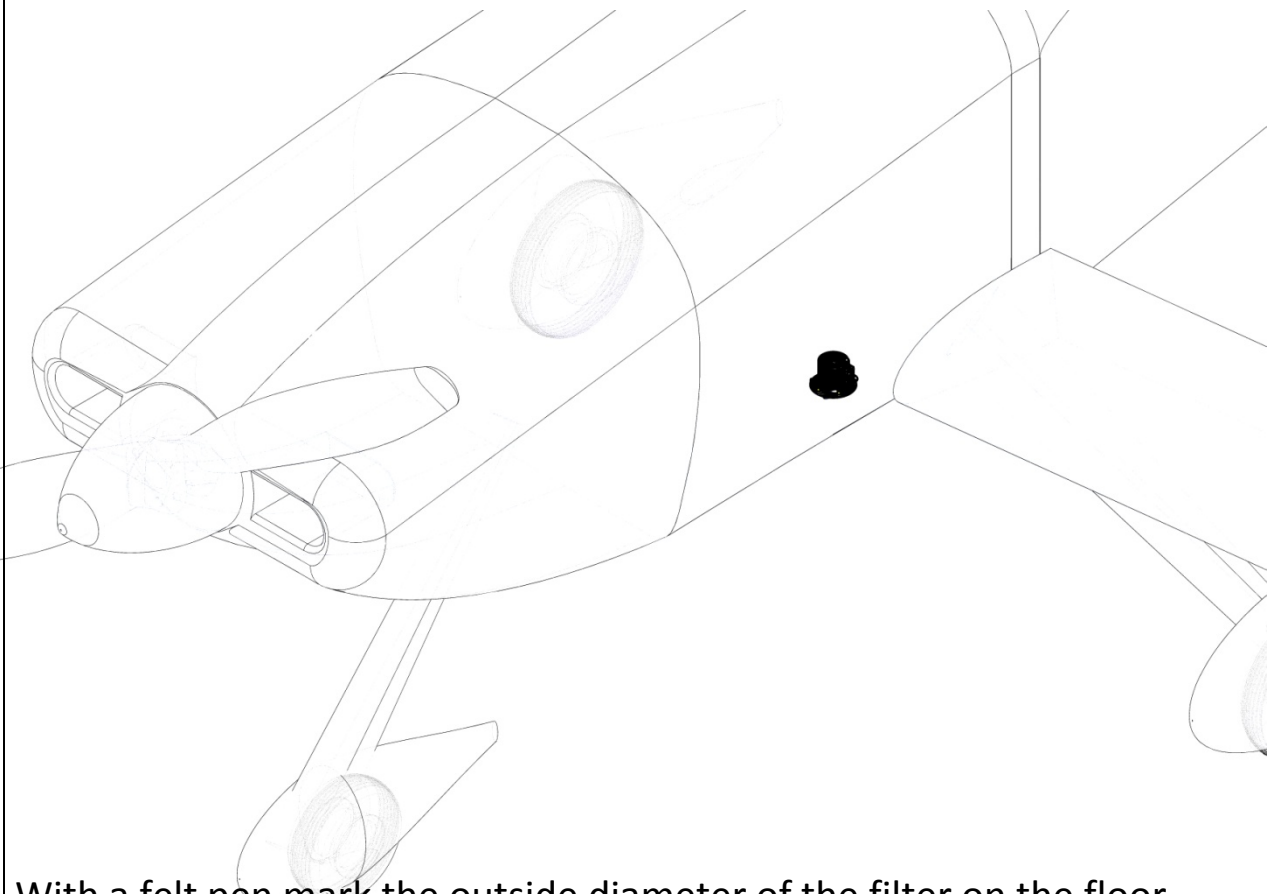


Note: this filter was originally designed to be installed on metal aircraft like F1 Evo, RV's, Zenair's and similar; should you plan to install it on a fabric covered aircraft you will have to design a sort of metal interface, firmly attached to the main structure, where you intend to install the unit.

The minimum thickness of the material where to install the filter unit is 0.8 mm (0.032"); if needed you may add a doubler 0.6 mm (0.020") thick and diameter of 100 mm (4").

Step #01

Locate the optimal position of the filter (s), considering the position of the fuel system tubing and other accessories.



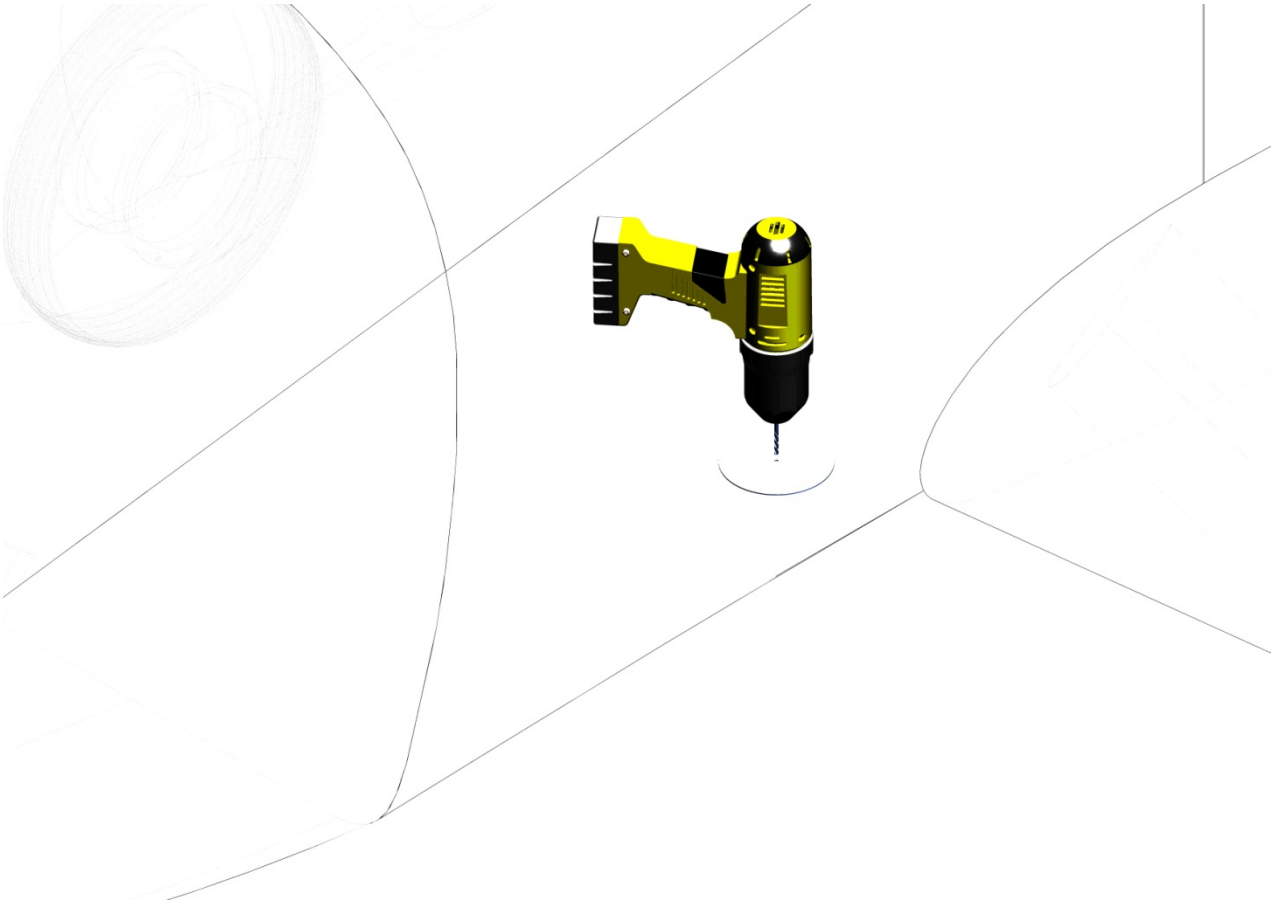
With a felt pen mark the outside diameter of the filter on the floor.

Note: if you decide to install an elbow fitting on the fuel outlet, please go to Step #14.



Step #02

Position the paper template of the base of the filter on the surface you defined to support the filter and mark the center with a punch.



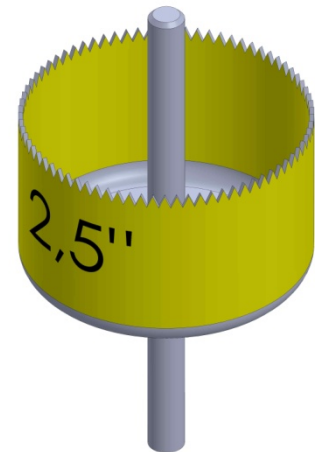
Drill a center hole with 1/8" drill bit.



Step #03

Prepare a 2.5" hole saw and replace the center drill bit with a rod.

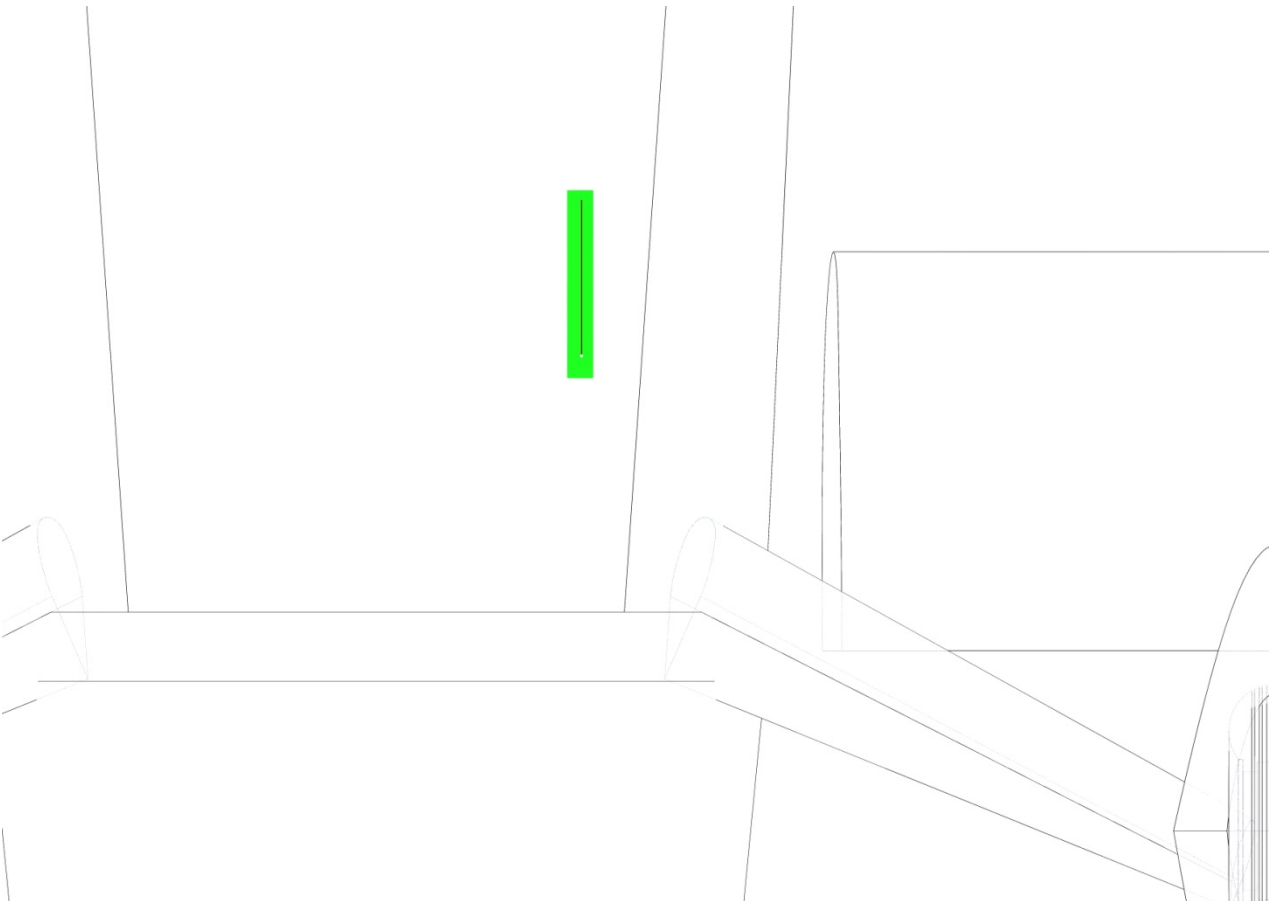
Replacing the original drill bit with a rod will avoid the wobble of the hole saw.



Step #04

Place a masking tape strip on the belly of the aircraft;

mark a line from the center of the 1/8" hole previously made and parallel to the a/c center line.





Step #05

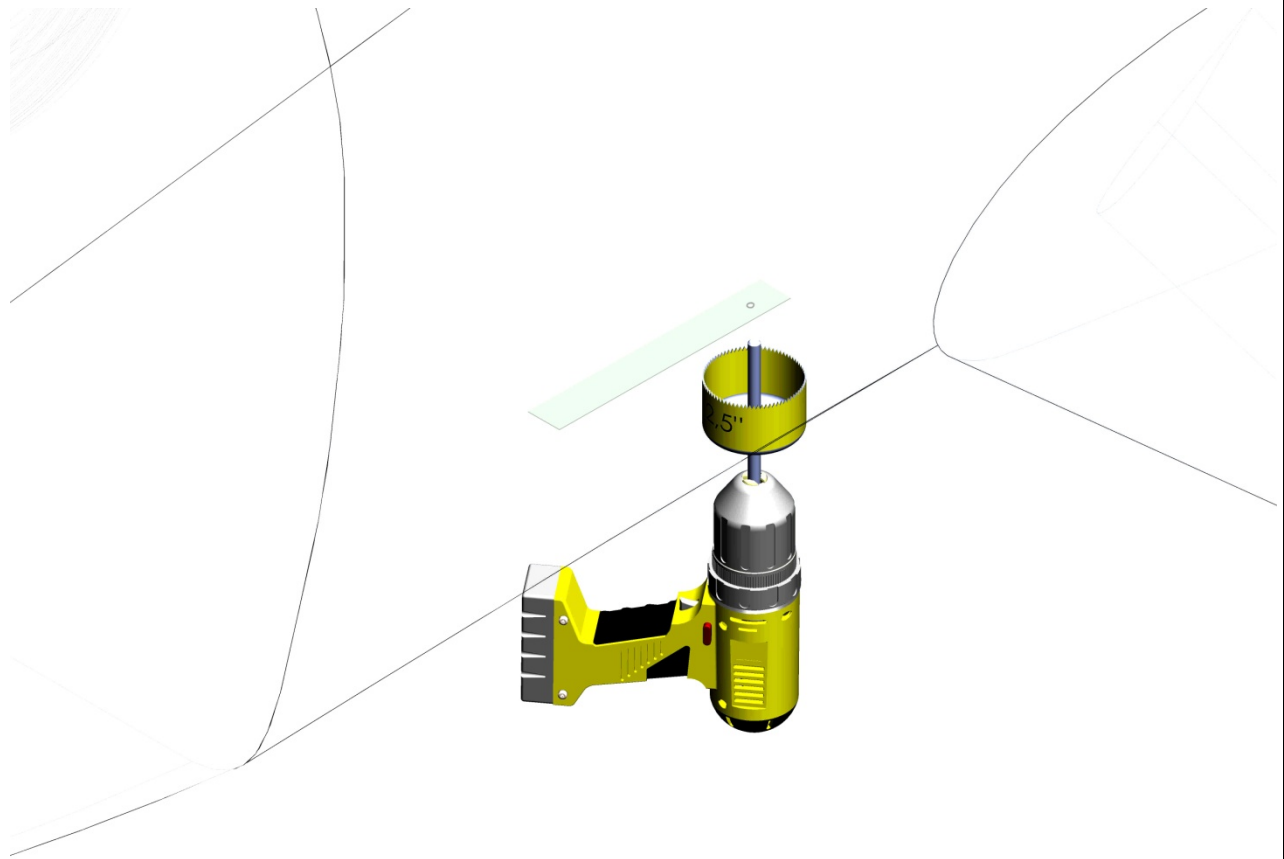
Enlarge the 1/8" hole up the size of the rod you installed inside the hole saw.





Step #06

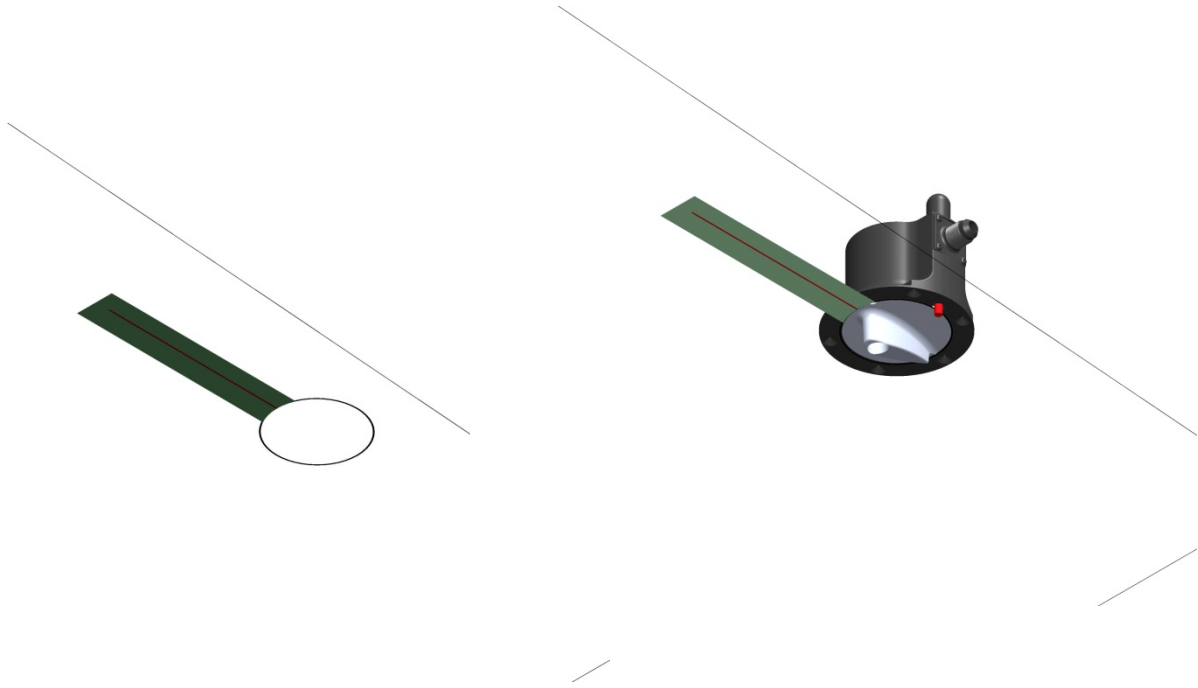
With the 2.5" hole saw create the access hole for the filter bottom cap.





Step #07

Deburr the hole as needed ...

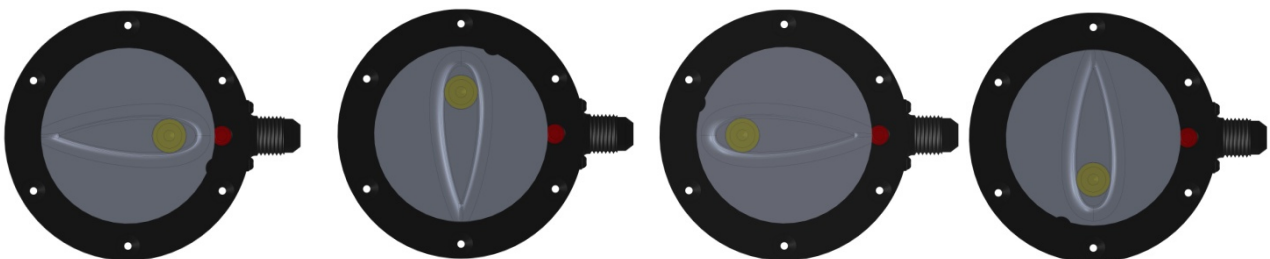


... and check the general arrangement of the filter unit;

Note the position of the release safety button (red).

It should be placed as closely as possible to the side of the fuselage for convenient access.

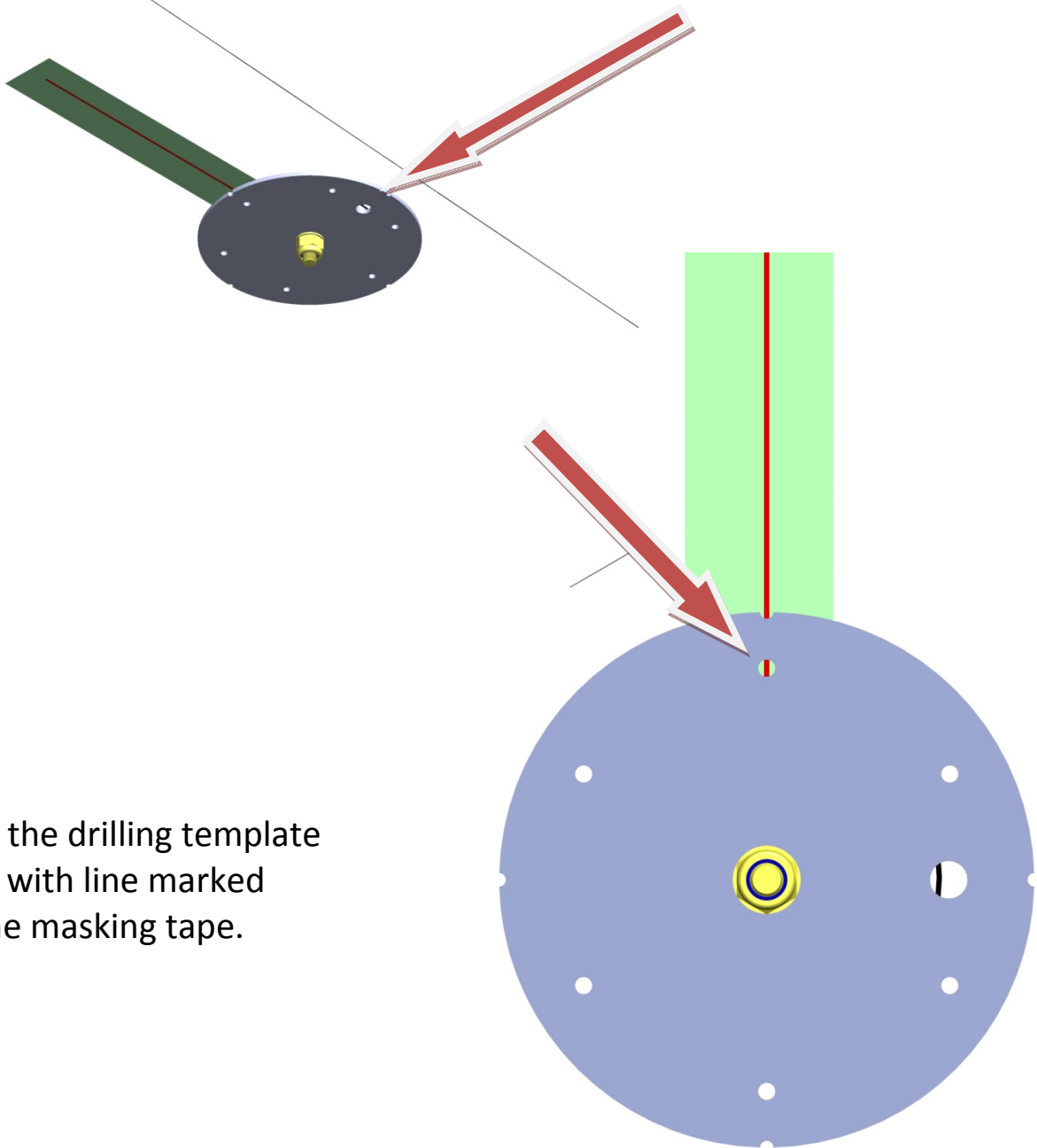
The slot on the fuel cap allows the assembly of the filter in four different positions.





Step #08

Place the drilling template in position, keeping in consideration the final position you selected for the release safety button (red)

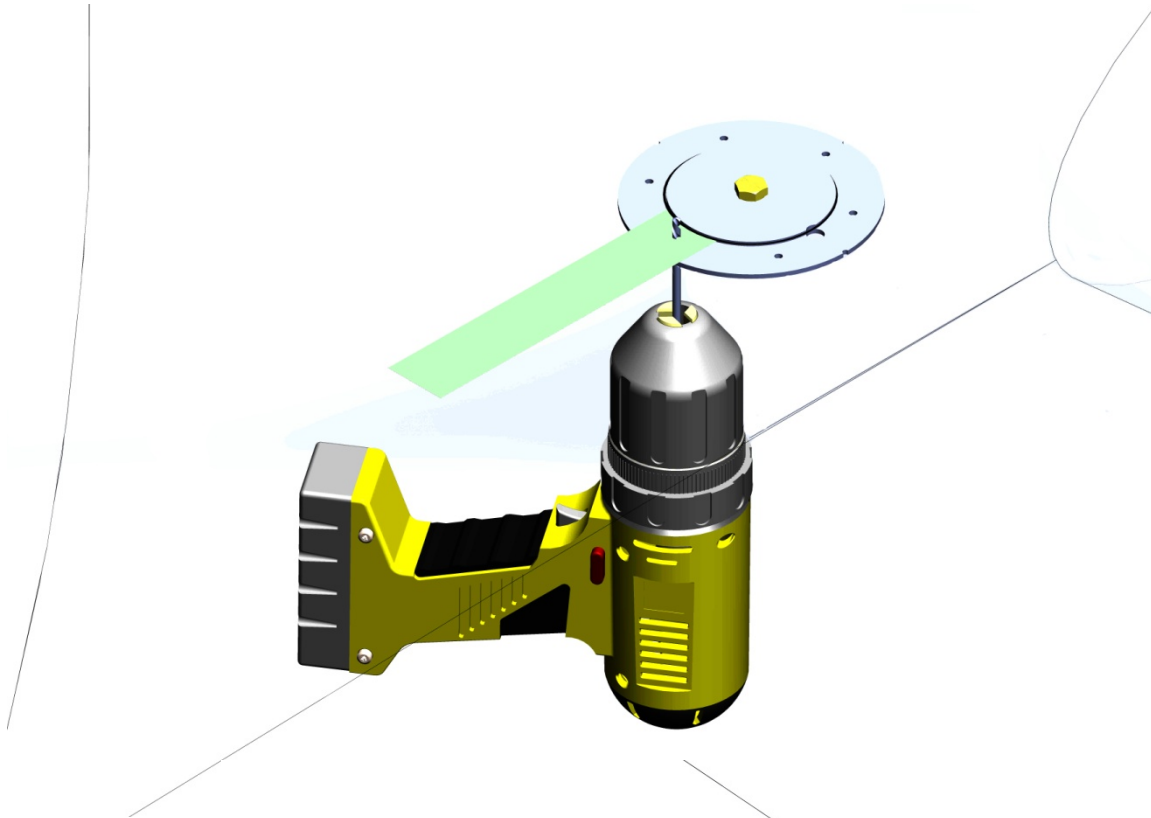


Align the drilling template hole with line marked on the masking tape.

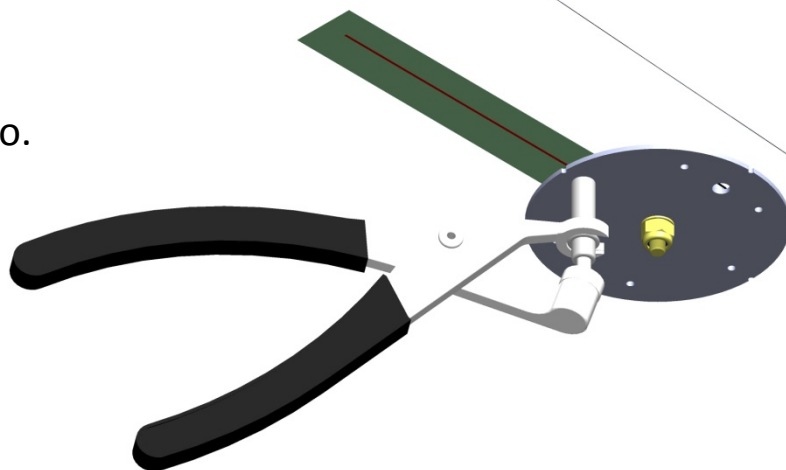


Step #09

Drill the first hole a 1/8" drill bit



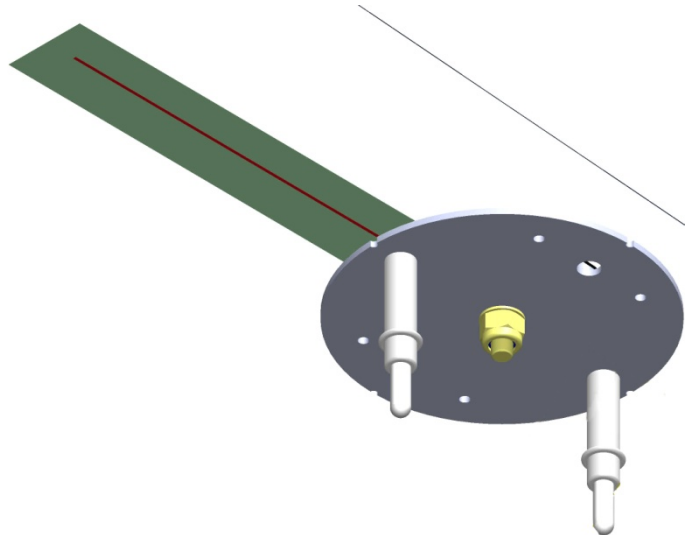
And insert a 1/8" cleco.



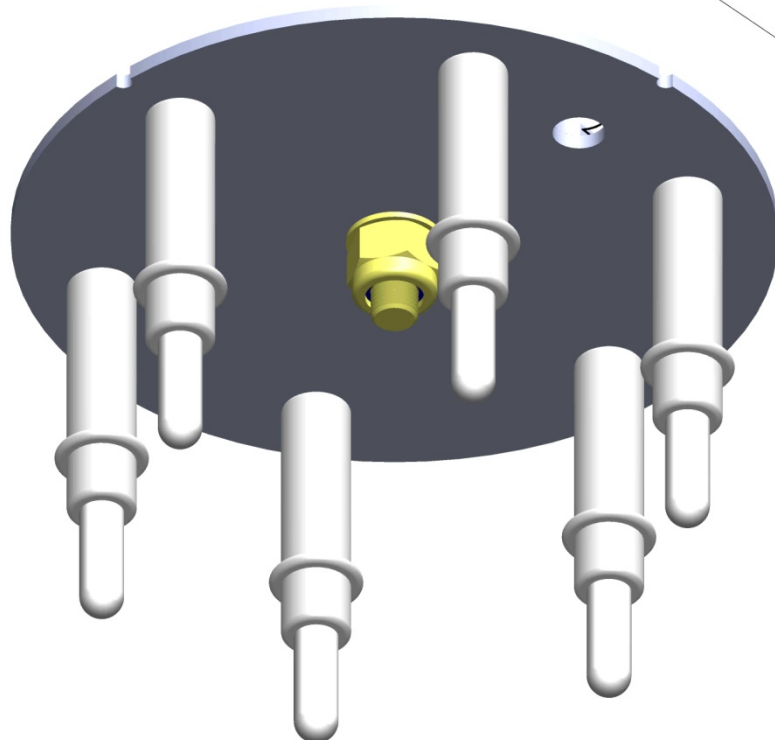


Step #10

Drill the second hole and insert the cleco



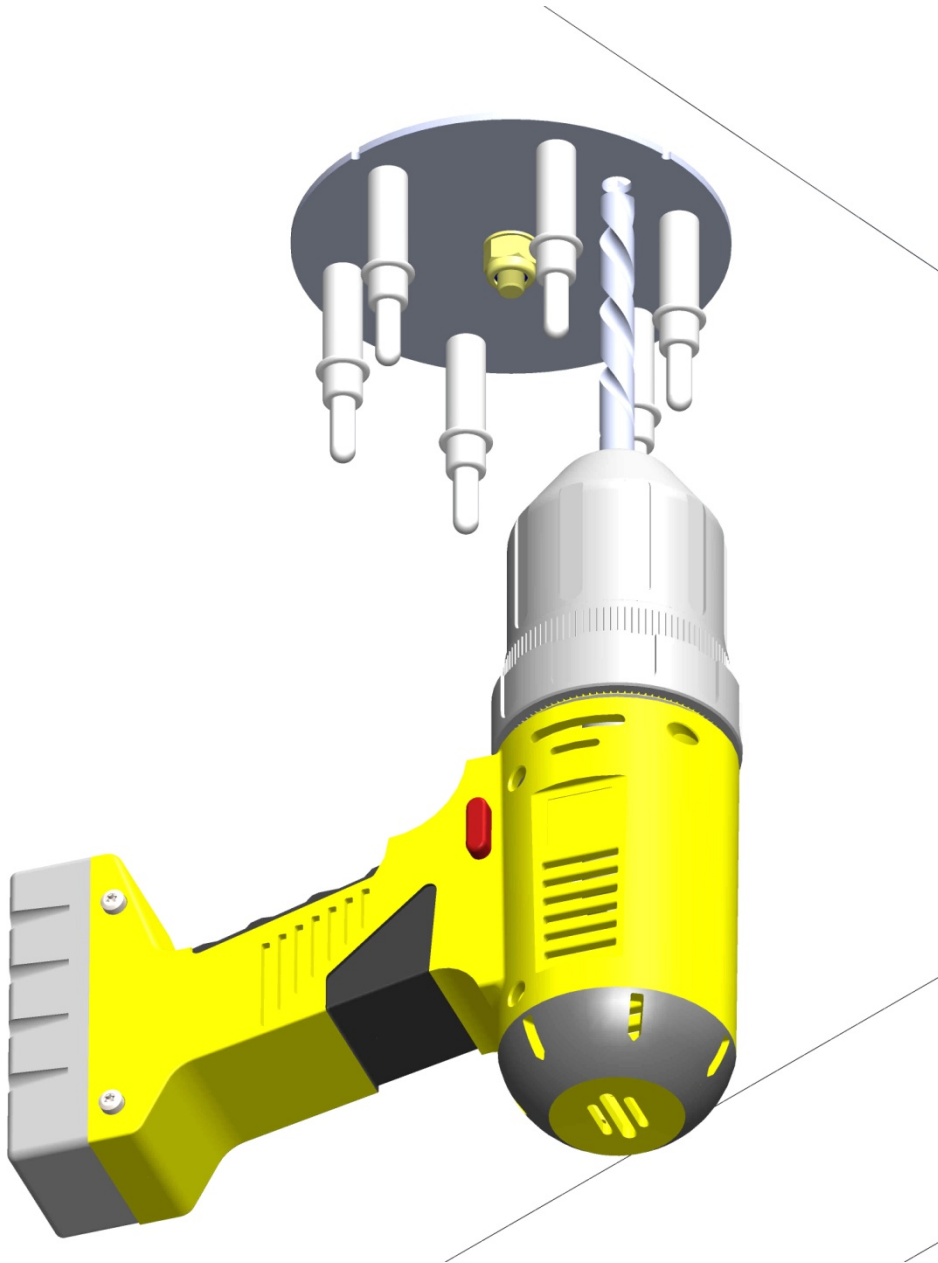
then complete with the remaining four, inserting a cleco as each hole is drilled.





Step #11

With a 7.5 mm (11/64" or N) drill bit, drill the hole for the release safety button.

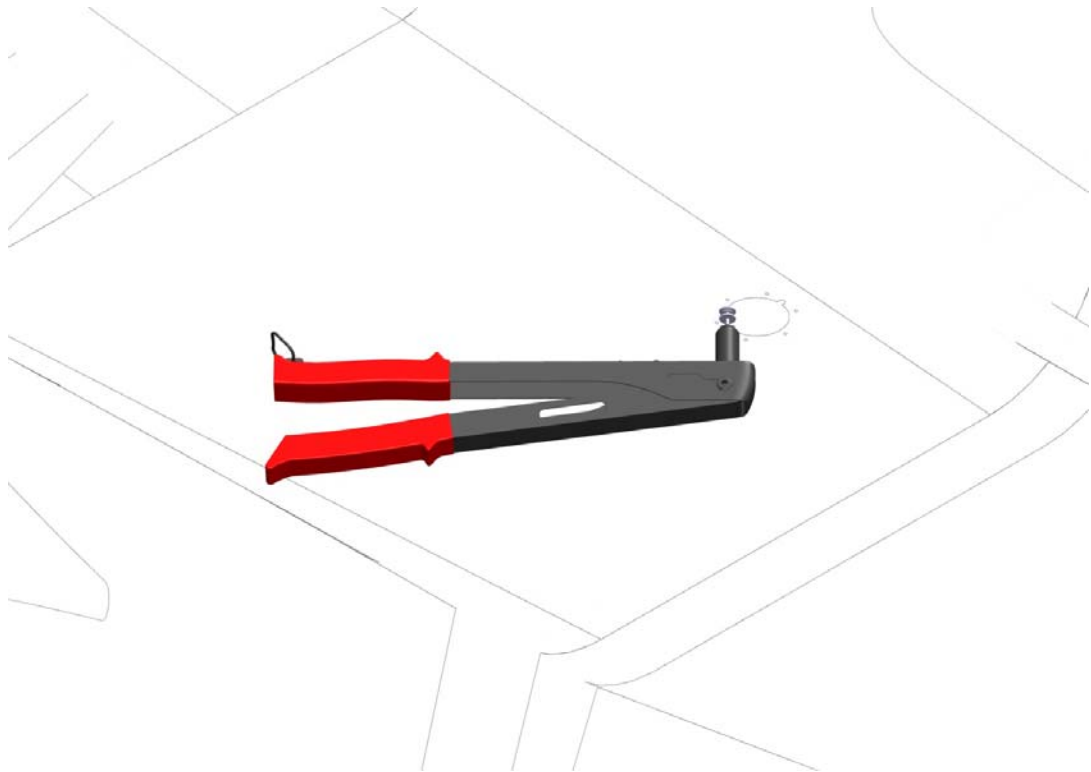


Deburr as needed.



Step #12

In case of countersunk screw installation, dimple the holes for the #6-32" screws.

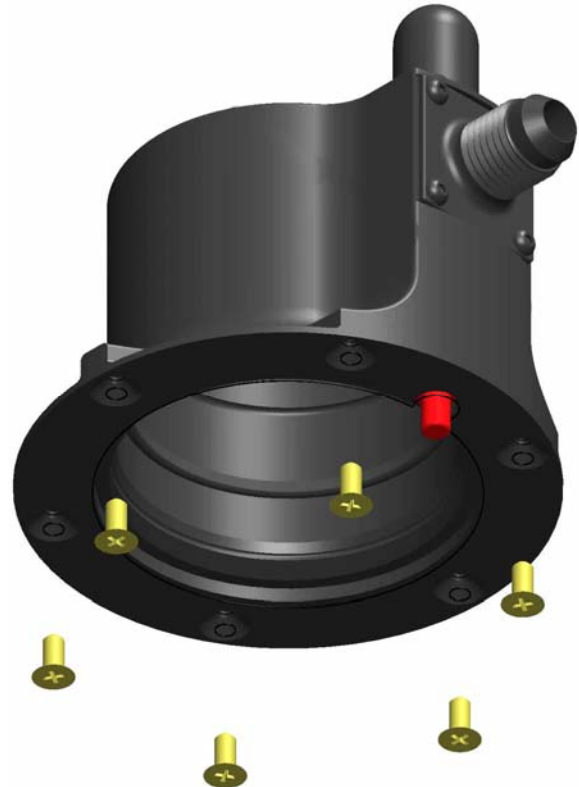


After countersinking, pass a 3.5 mm (#28 or 9/64") drill bit through the screw holes, in order to clear the space for #6 screws.



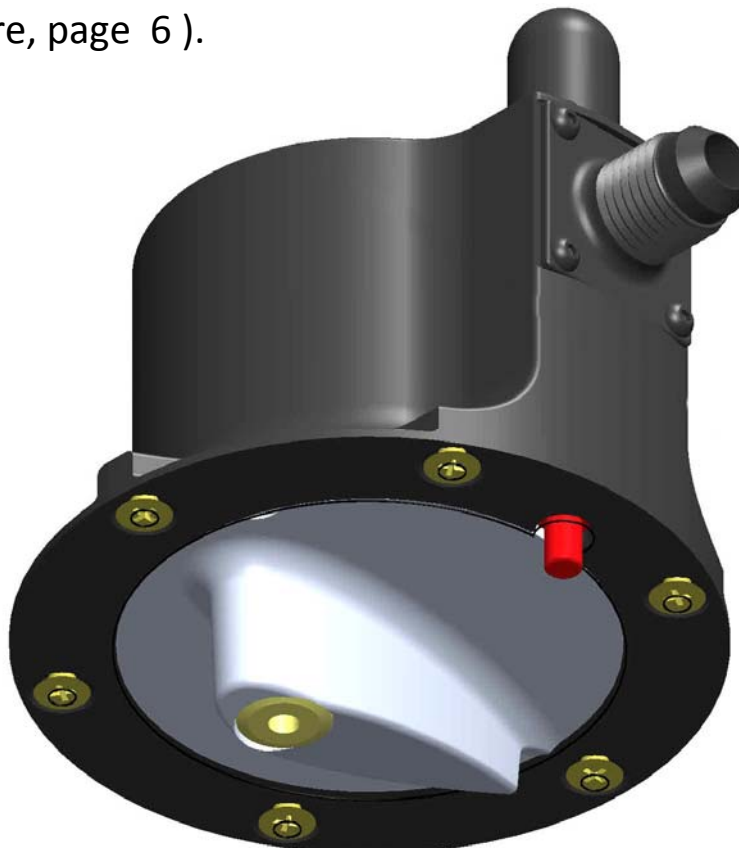
Step #13

Applying a polyurethane sealant compound (3M 8690 or similar) screw in position the filter unit with suitable #6-32" aircraft screws. A light application of grease on the threading of the bottom cup, before the installation, will allow the removal of eventual sealant contamination.



Install the bottom cap aligning the handle with the direction of the flight:

(see the P/n RR002 Filter Gascolator Owner's Manual for the details of the procedure, page 6).





NOTE

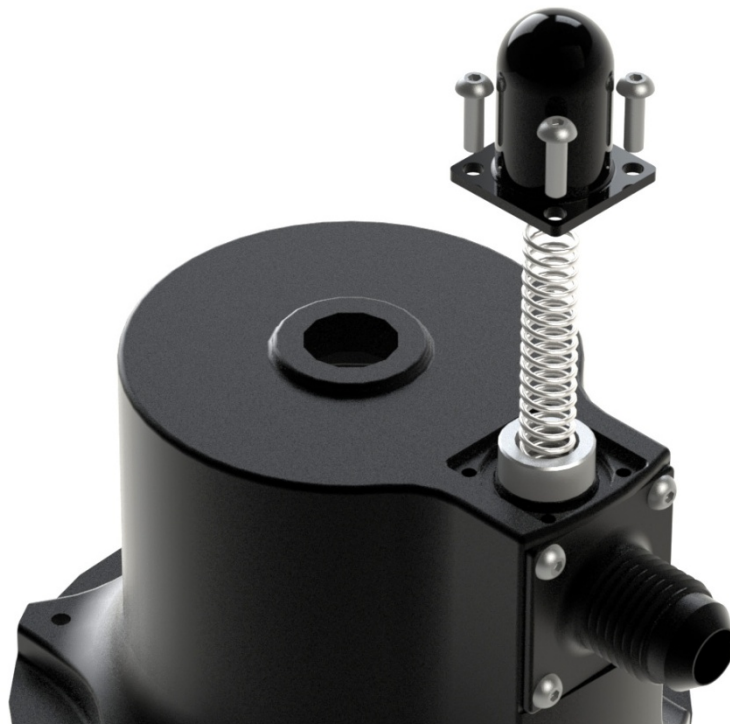
In case of AN822-6D Elbow Fitting installation (or other aluminum fittings) please remember to use some anti-seizing compound, like Loctite Silver Grade, Sealube or similar.

To allow this operation the screws holding the spring bell HAVE NOT BEEN TREATED with a thread-locker; whatever is your fitting installation decision you have to apply some thread-locker on those screws before putting the unit in operation.

Step #14

To install an elbow fitting that interferes with the dome bell, proceed as follow:

1. Remove the bottom cap in order to allow the closure of the automatic fuel cut-off valve (red button extended);
2. Remove the four screws at the base of the spring bell, being careful of the force provided by the inside spring;
3. Remove the spring bell and the spring inside from the filter unit;





4. Apply an anti-seizing compound on the fitting you wish to install on the fuel outlet (1/4-18" NPT threading);

5. Screw in the fitting in position;



6. Reinstall the spring and the spring bell in place, threading the four screw just half the way;

7. Push firmly down with your finger and apply some thread-locker on the exposed threads of the screws;

8. Screw the four fasteners in place, taking care not to overtorque them.

Max torque 0.7 Nm or
6.2 lbf.in.

