

# Installation and Testing Instructions for: RIS-STOP-3GF (Gravity Fill) OVERFILL PREVENTION VALVE

(applicable to both flanged & threaded versions)



ALWAYS USE  
NON-SPARK TOOLS!

PLEASE READ CAREFULLY BEFORE INSTALLATION

**ALWAYS USE NON-SPARK TOOLS!**

**NOTES:**

# ALWAYS USE NON-SPARK TOOLS!

## Introduction

The RIS-STOP-3GF Overfill Prevention valve is a Normally Closed, Failsafe and Testable mechanical tank overfill prevention device, suitable for pressure fill deliveries to above and below ground fuel storage tanks. The valves are designed and manufactured for use with Petroleum Spirit and Diesel.

**NB:** If use with alternative fuels outside this spectrum is required please refer to the Risbridger Ltd.

The RIS-STOP-3GF valve is opened with the flow of product being delivered into the tank, and is closed against the delivery flow when the float lifts at the preset maximum tank capacity (Normally 95% of Tank Capacity. For details of Installing Float Assembly to correct level please see Installation Instructions.)

Should the float become dislodged or damaged the valve will fail to open to receive fuel into the tank, this indicates a problem with the valve as this is the valves FAILSAFE mode.

Maintenance is recommended to be carried out on a 12 month period. Testing of the Valve's correct functioning is part of this Maintenance Procedure and is carried out during a delivery, when tank is at least 80% full. Further Testing Operations can be carried out to the owners' or operators' required schedules.

**Should the RIS-STOP-3GF Valves need servicing or replacement parts please refer to Risbridger Ltd for more information.**

Before starting a Maintenance or Testing Operation Please make sure you observe the correct Health & Safety Precautions and carry out work with due adherence to Site Specific Regulations

Before starting work ensure you have the following: -

### RECOMMENDED INSTALLATION TOOLS REQUIRED FOR RIS-STOP-3GF



- Spanners 17mm, 19mm, 1.5inch AF, 1.25inch AF  
(or adjustable up to 1.5 inch)
- Metric sockets 17mm, 19mm
- Torque wrench
- Thread / O-ring Grease
- Test Tool - 4921 Available from Risbridger Ltd / PFS Ltd

# ALWAYS USE NON-SPARK TOOLS!

## IN THE BOX

FOR THE RIS-STOP-3GF TO OPERATE, A FLOAT KIT AND DROP TUBE **MUST BE FITTED**. There are two models of float kit, specifying this is part of the Part Number Matrix



Flanged Float Kit

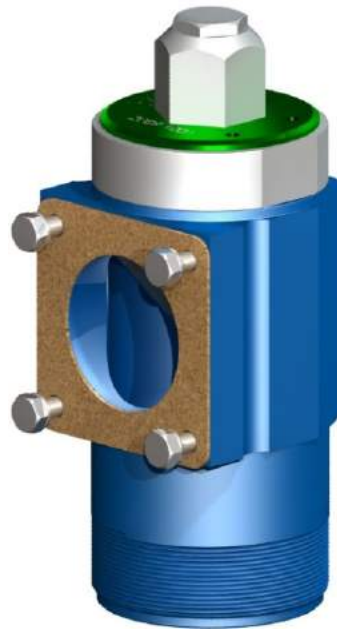
Threaded Float Kit

# ALWAYS USE NON-SPARK TOOLS!

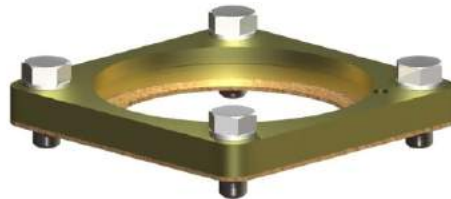


3" to 4" Eccentric Flex Connection

**We recommend using a flex connector to reduce stress on the valve body and therefore ensuring correct operation.**



RIS-STOP-3GF Valve Assembly



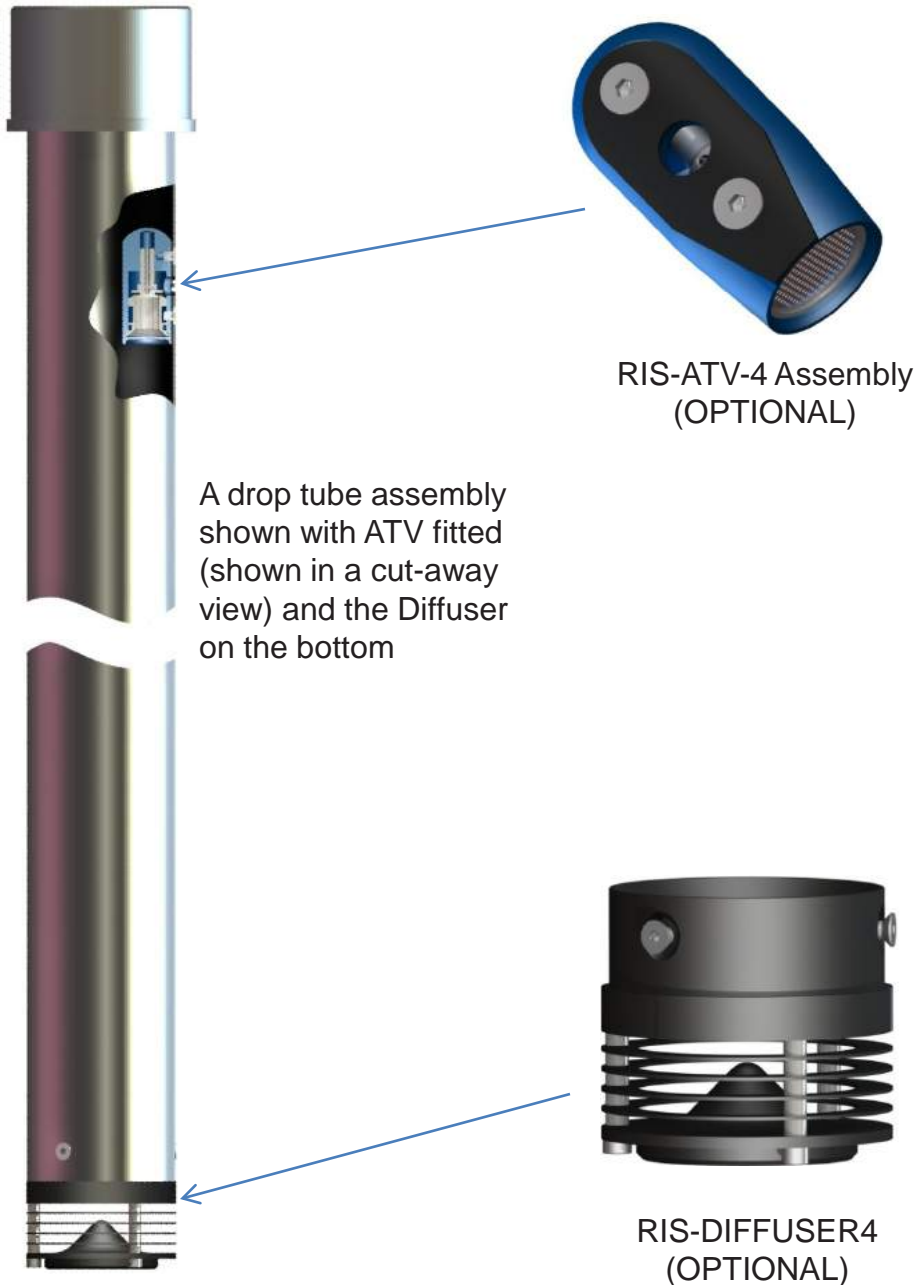
Flange ring. Part No: 4688-WB



RIS-FLANGE4-BSPT - Threaded Base Adaptor – to allow for use on threaded port tank lid (i.e. not a RIS-FLANGE Lid)

## ALWAYS USE NON-SPARK TOOLS!

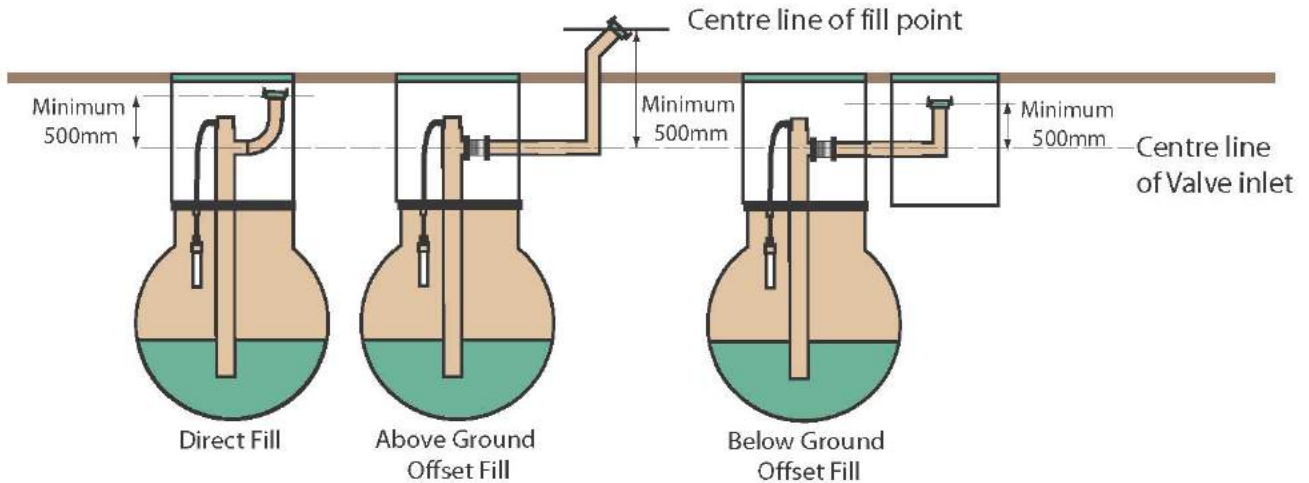
Note: These Vapour Saving drop tube accessories are optional and will be included in the build only if specified using the part number Matrix



# ALWAYS USE NON-SPARK TOOLS!

## APPLICATION REQUIREMENT FOR GRAVITY FILL

The RIS-STOP-3GF will not operate correctly unless it has a fuel head pressure of at least 35mbar (i.e. 0.5 psi, at least 500mm fluid head height). Measure from the centre line of the valve inlet to the fill point adaptor centre height.



## PREPARATION

The tank lid top surface (either threaded socket or flange joint type) should be thoroughly cleaned prior to installation of RIS-STOP-3GF components.

Threaded sockets should be tested with a suitable male thread fitting to ensure there is no binding. Tight threads should be cleared with a thread tap of correct specification:

2in	BSPP Female	(ISO 228-G2)
3in	BSPP Female	(ISO 228-G3)
4in	BSPP Female	(ISO 228-G4)

Likewise with flange style tank lids, the blind bolthole tapping's should be individually and thoroughly cleaned (compressed air if available). Using a dummy bolt to check for full thread engagement without binding.

If required, tight threads should be cleared with a suitable thread tap, refer bolt table.

Bolt Thread (Male Tap Size)	Recommended Torque Setting	Socket/Spanner Size
M8 x 1.25	20 Nm (15 lbf/ft)	13mm AF
M10 x 1.50	40 Nm (30lbf/ft)	17mm AF
M12 x 1.75	60 Nm (60lbf/ft)	19mm AF

**Warning – Do not over tighten bolts especially into alloy body components.**



# ALWAYS USE NON-SPARK TOOLS!

## RIS-STOP-3GF VALVE AND DROP TUBE INSTALLATION.

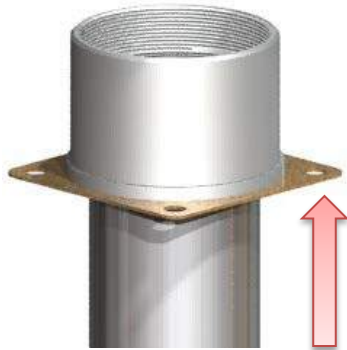
The RIS-STOP-3GF flange adaptor is supplied already fitted to the swaged drop tube along with the Air Transfer Valve (optional), as shown:



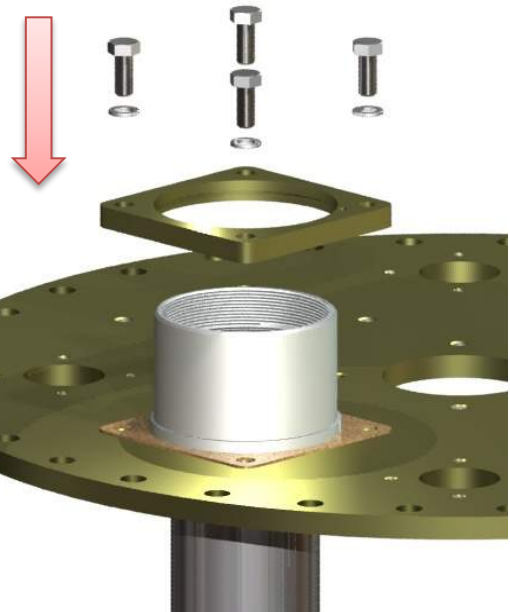
If you are fitting to a threaded joint, fit the RIS-FLANGE4-BSPT to the tank lid first.



1. Cut the non-swaged end of the drop tube to suit the dimensions of the tank. To do this measure from the top face of the tank lid to the bottom of the tank.
  - **FOR PLAIN DROP TUBES:** This dimension **LESS 120mm** is the cut length
  - **FOR DROP TUBES WITH A DIFFUSER:** This dimension **LESS 180mm** is the cut length (refer to RIS-DIFFUSER-4 INSTRUCTIONS for diffuser fitment) (these dimensions allows 70mm gap between the end of the drop tube and the bottom of the tank)



2. Fit the 4" Gasket up the tube & lower the drop tube into the tank.

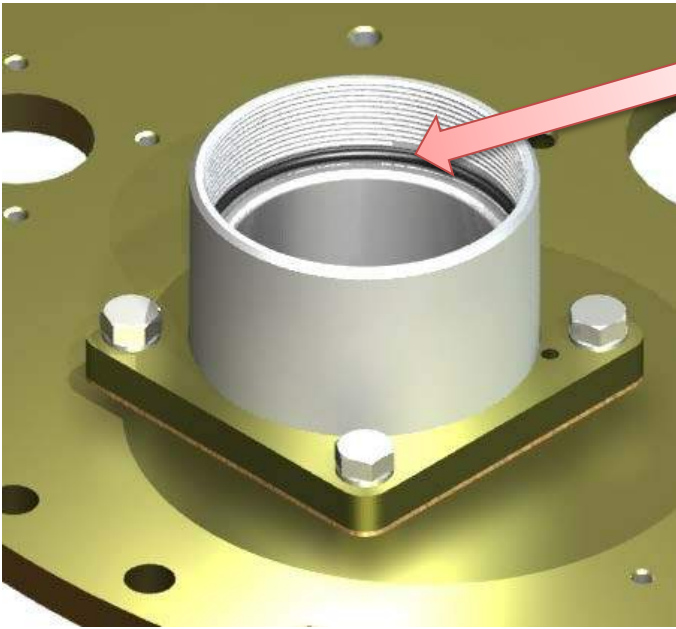


3. Fit the 4" Flange Plate with the M12 bolts & spring washers to the tank lid as shown, using **NON-SPARK** tools.

**Do not over tighten at this stage.**

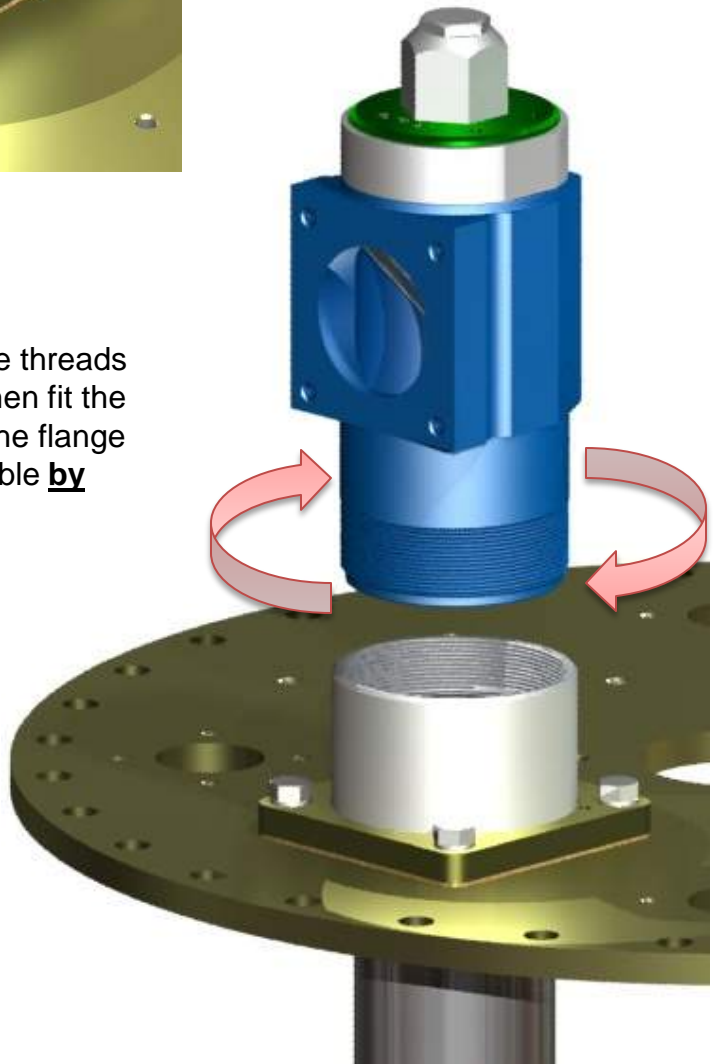


## ALWAYS USE NON-SPARK TOOLS!

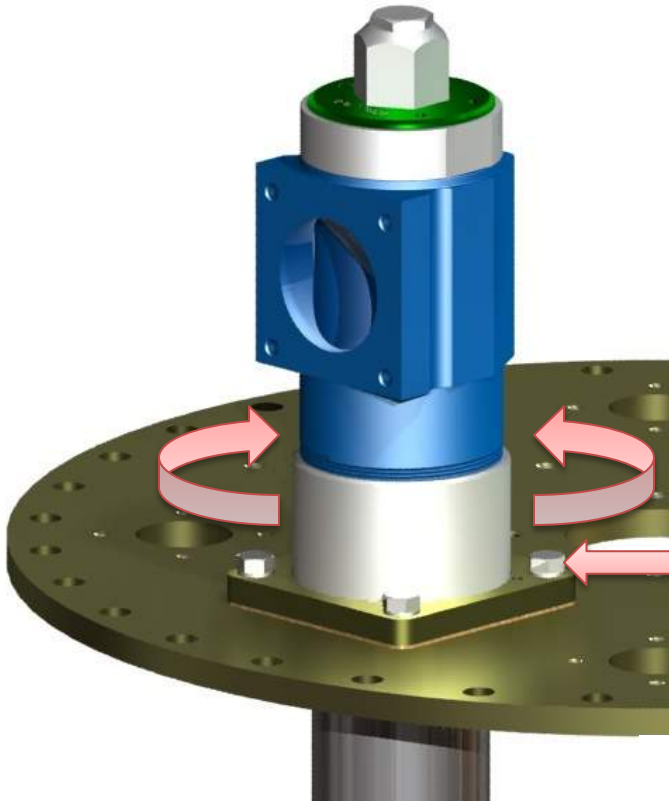


4. Fit O-ring (as supplied), in flange adaptor groove as shown and apply o-ring grease:

5. Apply thread grease to the threads on the main valve body, then fit the RIS-STOP-3GF valve to the flange adaptor. As tight as possible **by hand only.**



## ALWAYS USE NON-SPARK TOOLS!



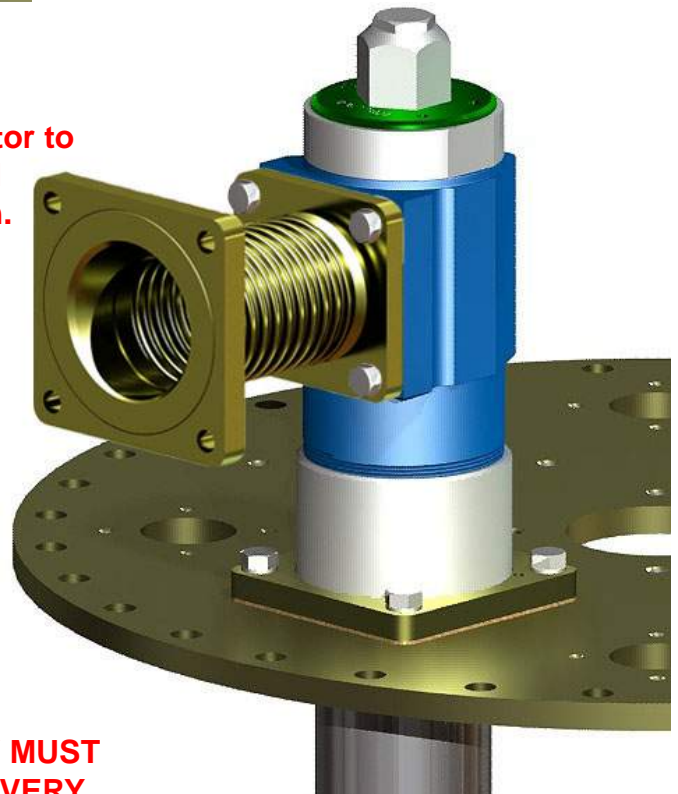
6. Loosen M12 bolts, then rotate valve to align the inlet face with the pipe work.

7. Re-tighten M12 bolts when valve is aligned.

**We recommend using a flex connector to reduce stress on the valve body and therefore ensuring correct operation.**

8. Fit flex connector (optional) to the RIS-STOP-3GF valve body, using gasket and M10 bolts as supplied:

9. Fit swivel end of the flex connector to inlet pipe work. (Gasket and bolts not supplied for this end of flex).



**THE RIS-STOP-FLOAT KIT ASSEMBLY MUST BE FITTED PRIOR TO ANY FUEL DELIVERY. SEE RIS-STOP-FLOAT KIT INSTRUCTIONS.**

**ALWAYS USE NON-SPARK TOOLS!**

**RIS-STOP VALVES MUST ALWAYS BE TESTED FOR CORRECT OPERATION BEFORE THE SITE INSTALLATION IS SIGNED OFF**

**FITTING THE TEST TOOL.**

RIS-STOP-3GF overfill prevention devices can be tested to ensure the valve operates correctly and in controlled cases, can be manually overridden to drain the lines.

The test tool 4921 is designed specifically to be fitted to the top of the RIS-STOP-3GF valve for testing.

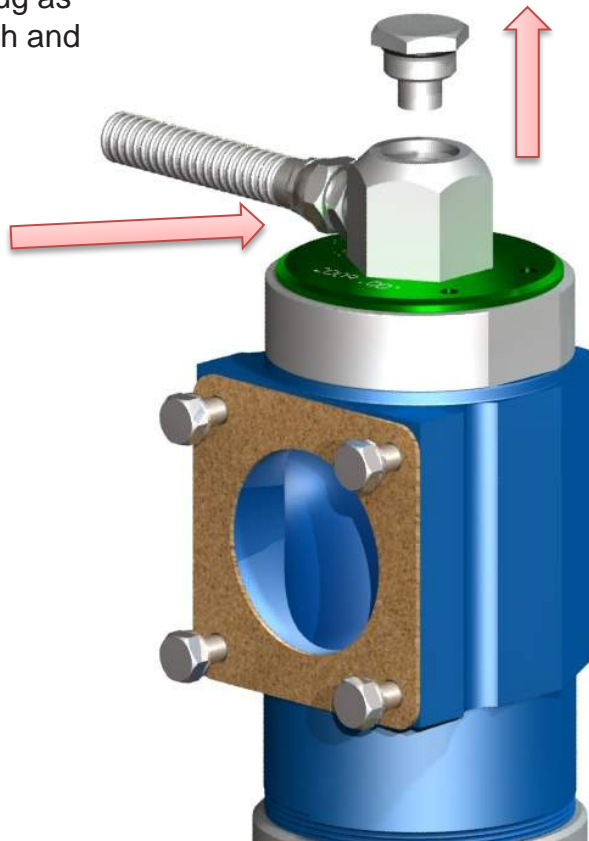
Please contact Risbridger Ltd or PFS Ltd to order.



**PRODUCT CODE:  
4921 (TEST TOOL 3GF)**

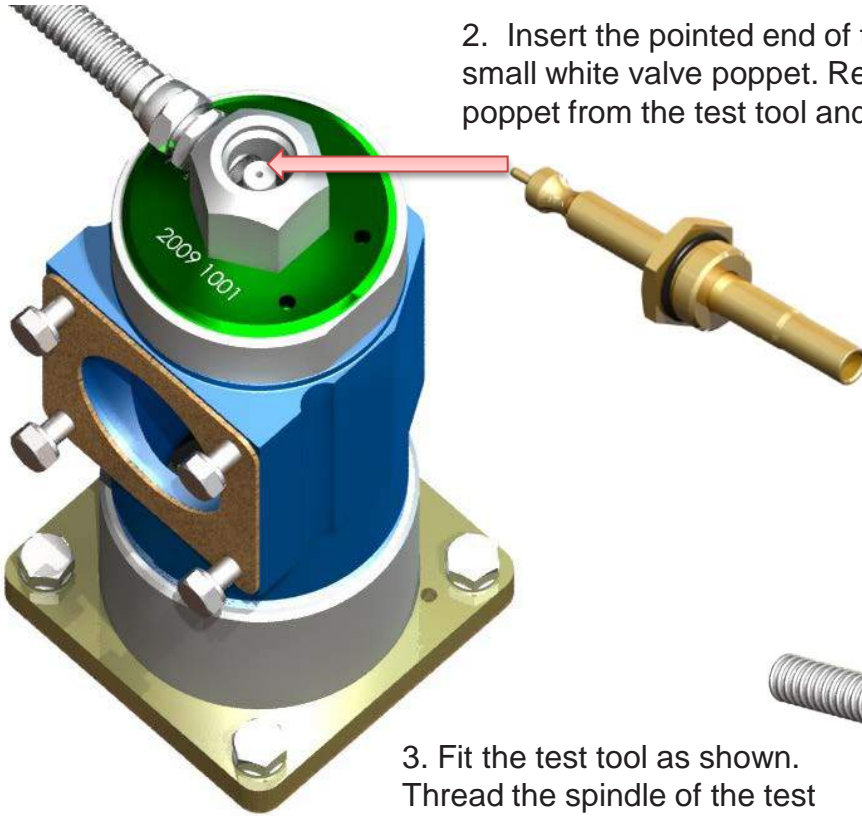
1. Remove the top hexagonal plug as shown using a non-spark 1¼ inch and a 1½ inch spanner (or non-spark adjustables).

This 1½ inch hexagonal vapour adaptor should rotate freely in the top cap.

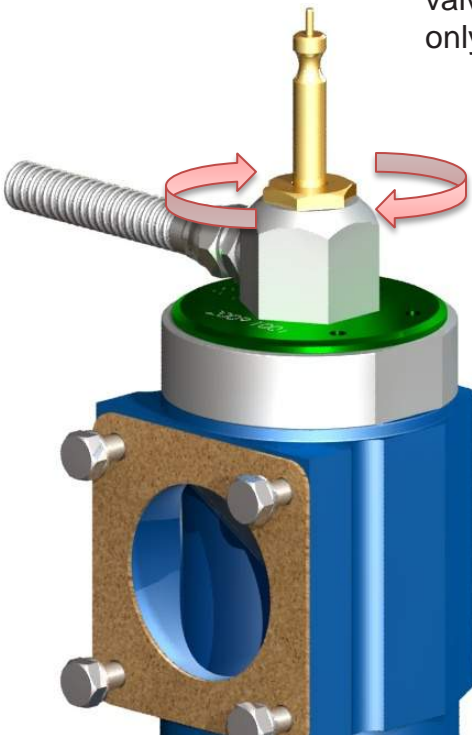


## ALWAYS USE NON-SPARK TOOLS!

2. Insert the pointed end of the test tool into the top of the small white valve poppet. Remove the poppet. Remove the poppet from the test tool and retain.

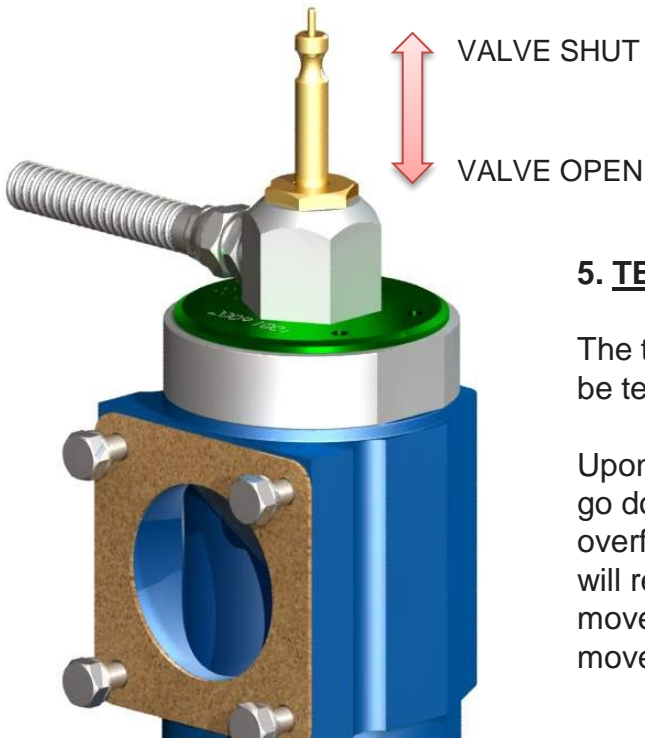


3. Fit the test tool as shown. Thread the spindle of the test tool onto the top of the internal valve for safety – hand tight only.



4. Tighten the test tool hexagon onto the large aluminium hexagon with non-spark spanners (1¼ and 1½ inch AF). Do not over-tighten.

# ALWAYS USE NON-SPARK TOOLS!



## 5. TESTING THE VALVE OPERATION.

The test tool is now ready for the valve to be tested.

Upon fuel delivery, the brass spindle will go down. Then on overflow (or simulated overflow as explained earlier), the spindle will return to the up position. These movements of the spindle indicate correct movement of the internal valve.

6. Replace the white poppet and hexagonal cap with non-spark spanners (1¼ and 1½ inch AF).



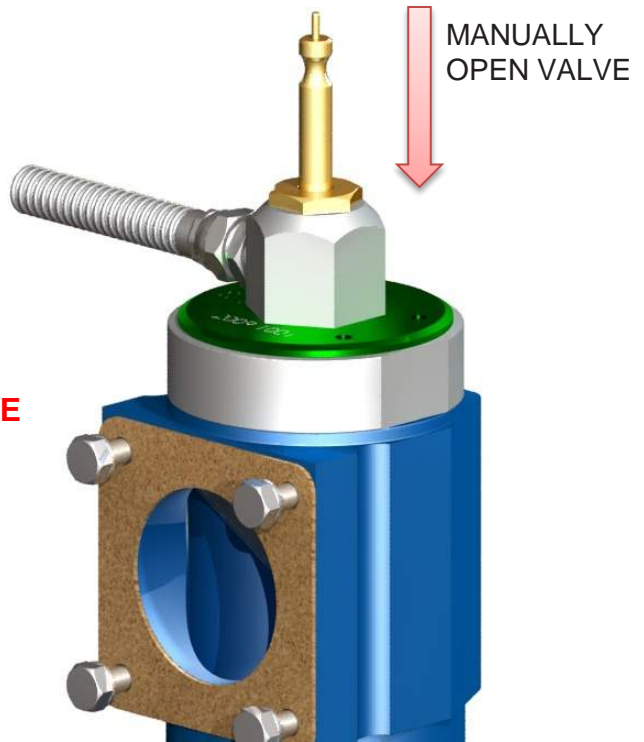


# ALWAYS USE NON-SPARK TOOLS!

## MANUALLY OPENING THE VALVE TO DRAIN THE LINES.

Push the brass spindle down to manually open the valve.

**CAUTION:**  
**ENSURE TANKER DELIVERY VALVE IS CLOSED BEFORE OPERATING THE TEST TOOL MANUALLY, TO PREVENT OVERFILL.**



Replace the white poppet and hexagonal cap with non-spark spanners (1¼ and 1½ inch AF).

# ALWAYS USE NON-SPARK TOOLS!

## **FOR REFERENCE.**

Risbridger Ltd offer a range of tools specifically designed for Risbridger products. For further details please contact Risbridger or alternatively, order direct from our website: [www.risbridger.com](http://www.risbridger.com)

For installation details of the products supplied with a RIS-STOP-3GF and maintenance instructions, please see the following documents enclosed with the products or view on our website:

- RIS-STOP-FLOAT KIT INSTRUCTIONS
- RIS-STOP-3GF MAINTENANCE INSTRUCTIONS
- RIS-DIFFUSER 4" INSTRUCTIONS (OPTIONAL)

## **WARRANTY.**

All RISBRIDGER Ltd products are guaranteed against defects in material and workmanship for a period of 12 months from the date of purchase subject to normal use and service. The sole obligation under this warranty is limited to repair or replacement, at the option of RISBRIDGER Ltd any product found to be defective upon examination provided that such product will be returned for inspection carriage paid, within three months of installation. Liability is strictly limited to replacement of defective parts manufactured by RISBRIDGER Ltd and no liability can be accepted for any loss or consequential damages arising from the installation or use of any products supplied by RISBRIDGER Ltd whatsoever the cause. This warranty shall not apply to any product subject to abuse, negligence, accident, misapplication or any alteration by others.



**ALWAYS USE NON-SPARK TOOLS!**

**Contact Details:**

# Risbridger

Quality Engineering Solutions

Risbridger Ltd.  
25 Trowers Way,  
Holmethorpe Industrial Estate,  
Redhill,  
Surrey.  
RH1 2LH.

Tel: 08456 44 23 23. (8am – 5pm Mon-Fri)

Fax: 08456 44 24 53

Email: [info@risbridger.com](mailto:info@risbridger.com)

Website: [www.risbridger.com](http://www.risbridger.com)

**UK and Eire Distributor:**

The logo for pfs fueltec features the letters 'pfs' in a large, bold, green font, with 'fueltec' in a smaller, black font directly below it.

Purfleet Forecourt Services Ltd.,  
Unit 2-3 Wheaton Court,  
Eastern Industrial Estate,  
Wheaton Road,  
Witham,  
Essex.  
CM8 3UJ.

Tel: 01376 535260.

Email: [trevor.mason@purcom.com](mailto:trevor.mason@purcom.com)

Website: [www.pfsfueltec.com](http://www.pfsfueltec.com)

**France, Belgium, Netherlands,  
Luxembourg and North Africa  
Distributor:**

The logo for CGH Belgium features the letters 'CGH' in a large, bold, black font, with 'Belgium' in a smaller, italicized black font below it. To the left of the text is a stylized graphic consisting of two overlapping loops, one yellow and one blue.

CGH Belgium NV,  
Rijksweg 10C,  
B-2280 Bornem,  
Belgium

Tel: +32 (0)3 459 80 76

Email: [info@cghbelgium.com](mailto:info@cghbelgium.com)

Website: [www.cghbelgium.com](http://www.cghbelgium.com)

Document Reference: INS-RIS-STOP-3GF-151130