



IB102

Inline Vent Breakaway

Instruction Manual

▲ WARNING

Failure to follow these instructions or to properly install and maintain this equipment could result in gas leakage, fire or explosion causing property damage and personal injury or death.

Oasis products must be installed, operated and maintained by trained and competent personnel in accordance with all applicable local codes, rules and regulations in addition to the Oasis Instructions.

Oasis Engineering Ltd. will not be held liable in such circumstances where installation, operation and maintenance procedures were performed by incompetent personnel resulting in improper assembly, unsafe operation, equipment damage or personal injury.

Oasis recommends that all service technicians should watch the Product Servicing Video before attempting to service this part.



Servicing Video

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Instruction Manual

Warning!

High pressure gas and gas equipment can cause serious harm to both infrastructure and personnel if safety precautions are not followed.

Oasis recommends considering the use of the following PPE when working with high pressure along with any other site specific health and safety requirements:



Foot Protection



Hearing Protection



Safety Helmets



Hand Protection

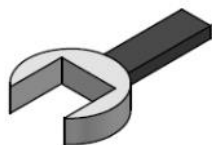


Safety Glasses



Ensure the system is clean of debris, vented and isolated before any installation or servicing work is carried out.

Tools Required



Spanner
(Wrenches)
- 19mm (3/4)



Pick Tool
Part Number:
TOOL-PICK
(Sold separately)



Spray bottle
(Snoop or soapy water)

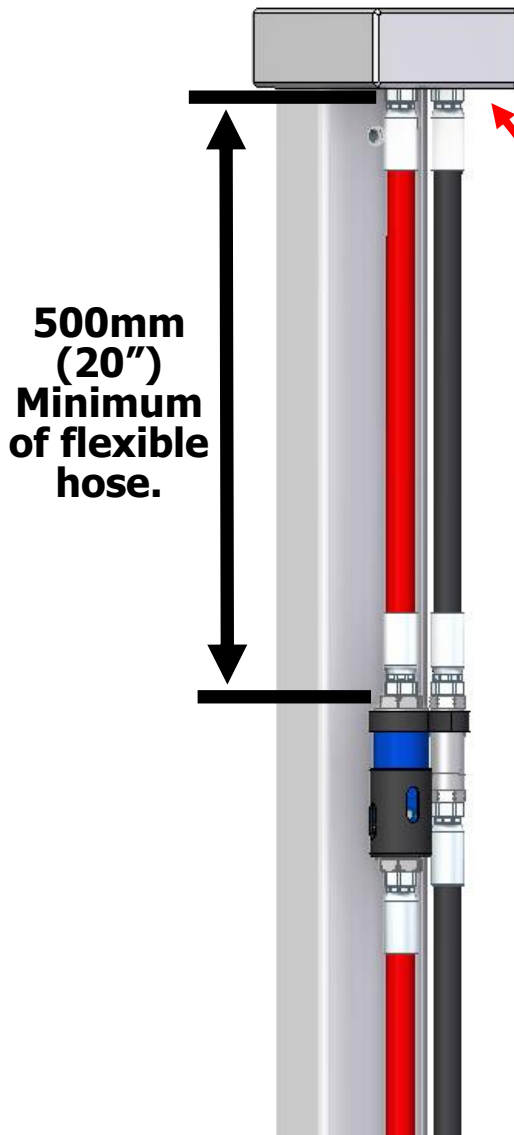


Silicone Grease



Anti Seize Grease
- Swagelok Silver Goop
- Omega 99
- or similar

Recommended installation setup.



FORCE:

The post should be designed to accept the breakaways maximum separation force of 667N/150lb (as per CSA/ANSI NGV 4.4-2021 standard) in any direction in which a drive off may occur.

CAUTION:

For the hose breakaway to operate correctly, the gas supply hose and mounting connection must be sufficiently long and flexible enough to allow the breakaway to align itself in the direction of force in a drive away event. The connection should be designed so that in the worst case scenario the breakaway is free to align itself in the direction of the force with no stress on the gas supply hose.

If the breakaway is installed on a dispenser hose retractor the breakaway should be installed between the hose retractor clamp and the nozzle.

Important:

The device has conforms to the relevant sections of CSA/ANSI NGV4.4-2021. The installation of this device shall conform with the requirements of the authorities having jurisdiction or, in the absence of requirements, to NFPA 52 Standards, Compressed Natural Gas (CNG) Vehicular Fuel Systems, or CAN/CSA-B108, NGV Fuelling Stations Installation Code, as applicable.

IMPORTANT NOTES FOR INSTALLATION OF IB103 ALONGSIDE IB102

IB103-7SPSH-T and IB103-7SPSH-V are supplied as a package including IB102 vent breakaway as well as an IB103 pressure line breakaway.

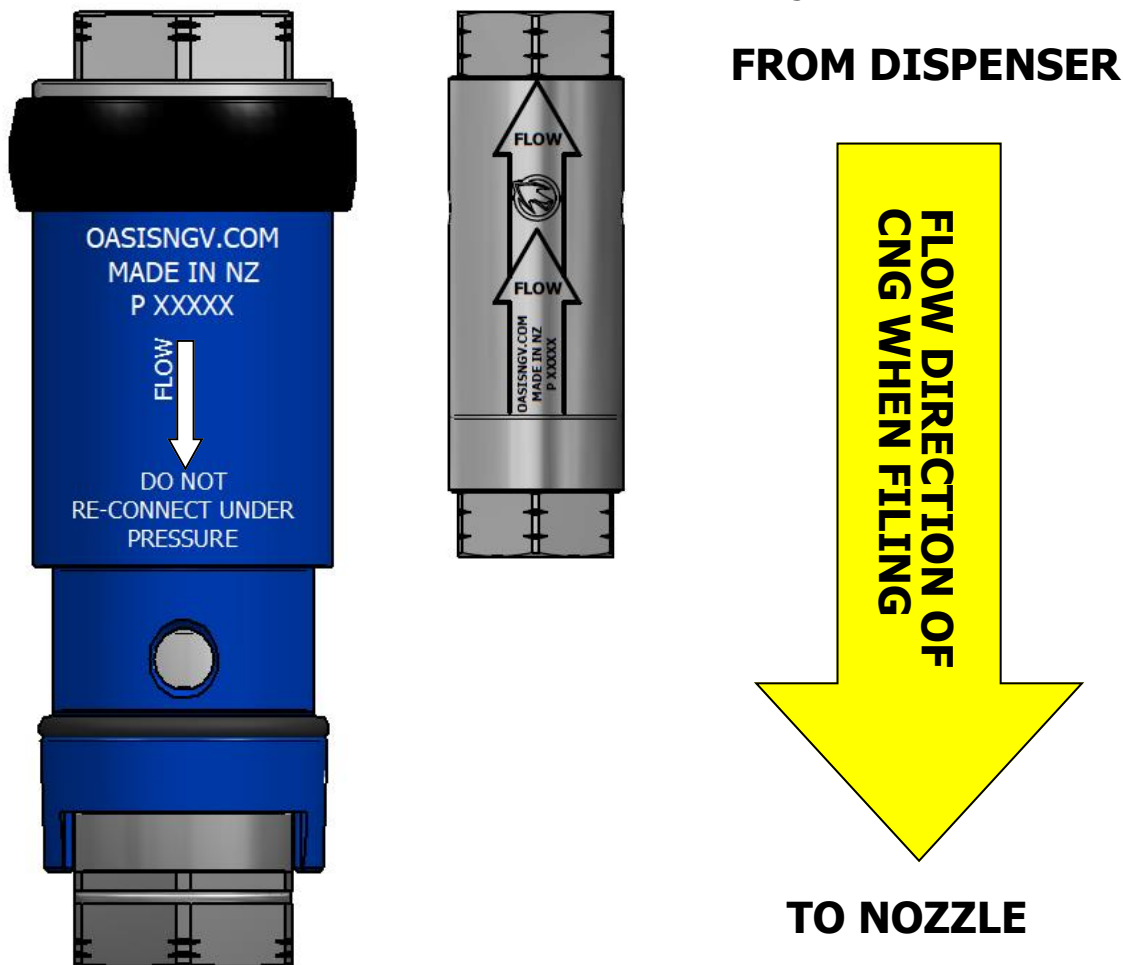
IB103-7SPSH-T also features a shock absorbing retainer, which attaches the Vent and Pressure breakaways to each other.

When installing the unit, the following steps must be undertaken.

For further information about the vent breakaway see the IB102 instruction manual.

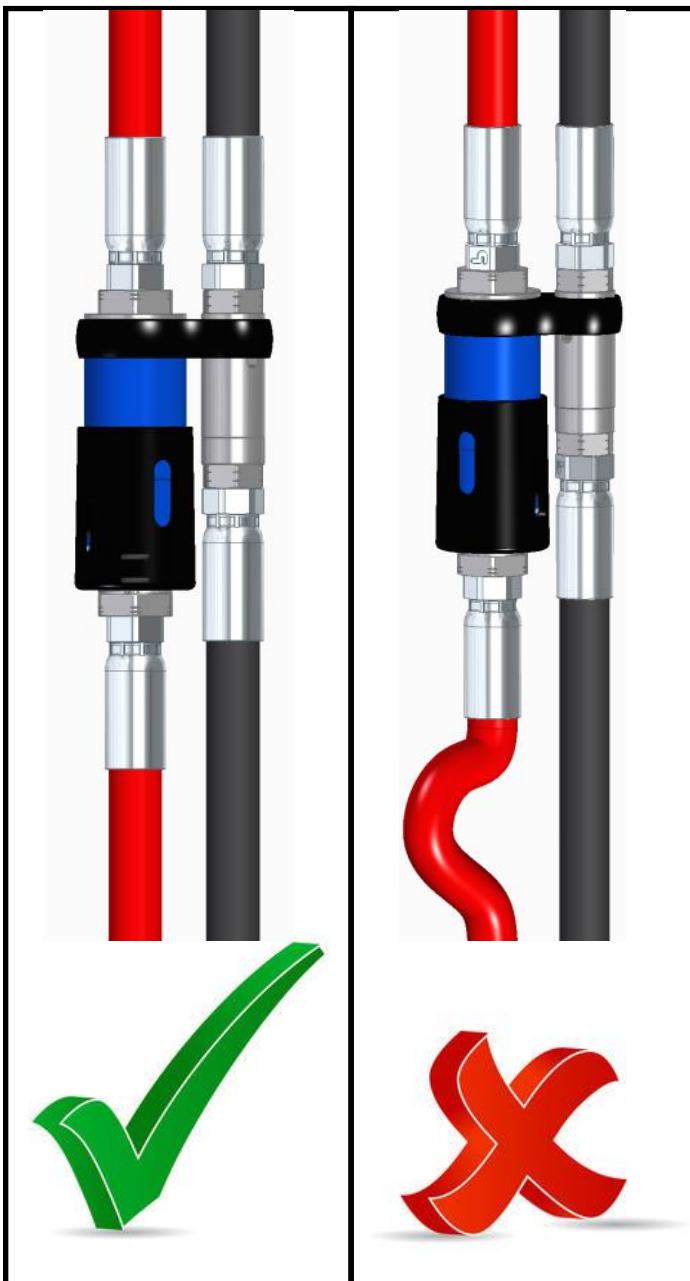
1. Ensure that the flow direction markings of the main and vent breakaways **OPPOSE** each other.

When installed, the flow direction of the IB103 (main breakaway) must align with the flow direction of CNG into the vehicle when filling.

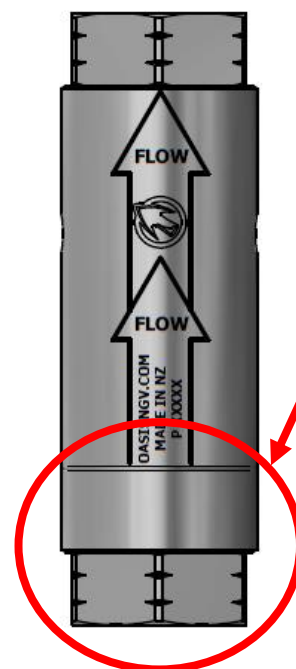


2. When installing, ensure that the main and vent lines are offset sufficiently that the hose does not kink due to the difference in length between the breakaways.

3. When installing the IB103-7SPSH-T, the IB102 vent breakaway can be slid up or down within the retaining bump stop to aid alignment with the hose offset.



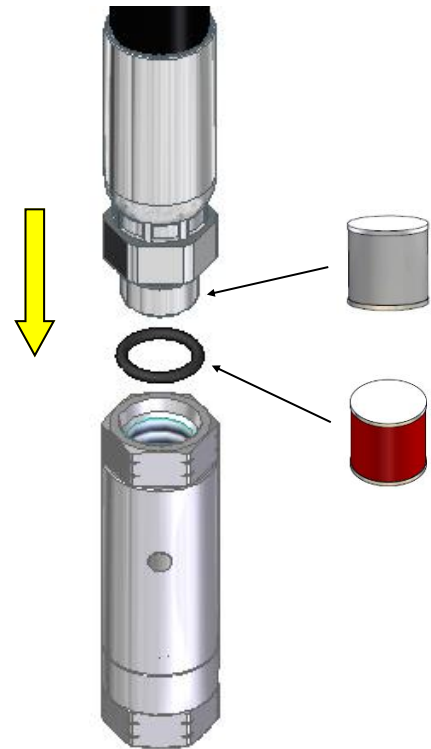
NOTE:
When moving the IB102 upward, ensure that the male part of the breakaway is outside of the mount so that it is free to separate in a drive off event.



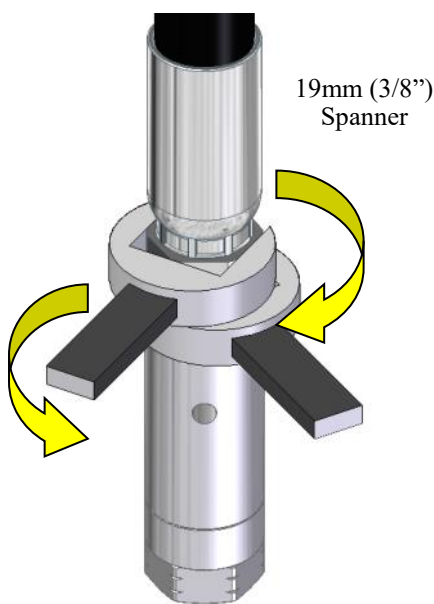
1. Note the flow direction of the breakaway.



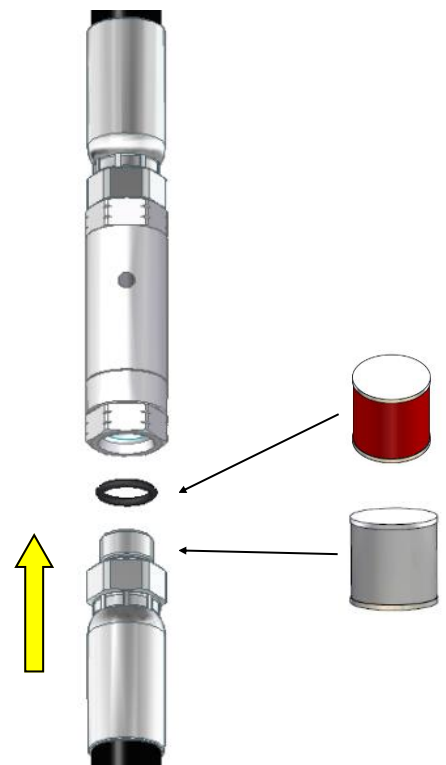
2. Apply anti seize to thread and silicone grease to the O-ring. Install the O-ring on the fitting if not pre-installed.



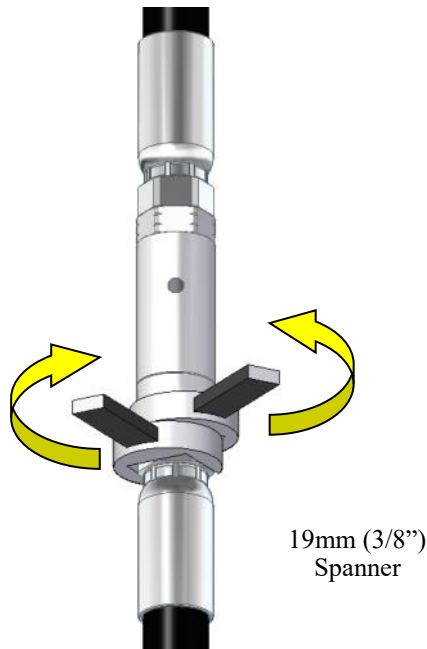
3. Screw the fitting into the body and torque to the fitting suppliers recommended tightening torque.



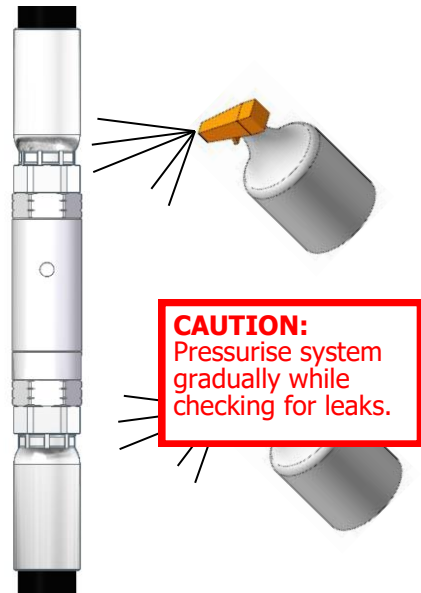
4. Install the second hose using the same method.



5. Screw the fitting into the body and torque to the fitting suppliers recommended tightening torque.

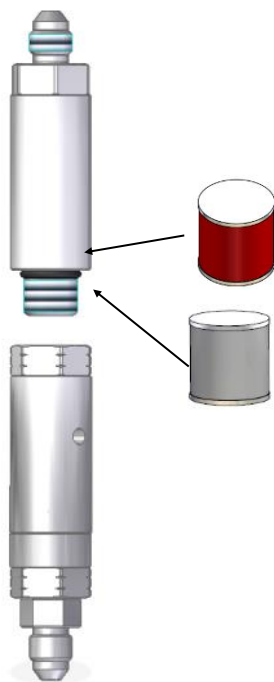


6. Test the device for leaks at the connections, and the installation is complete.

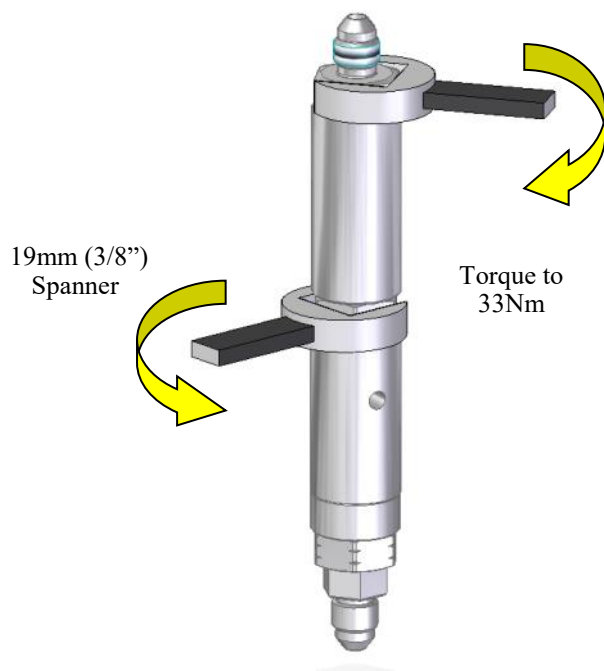


Installation of IB102-04 Extension

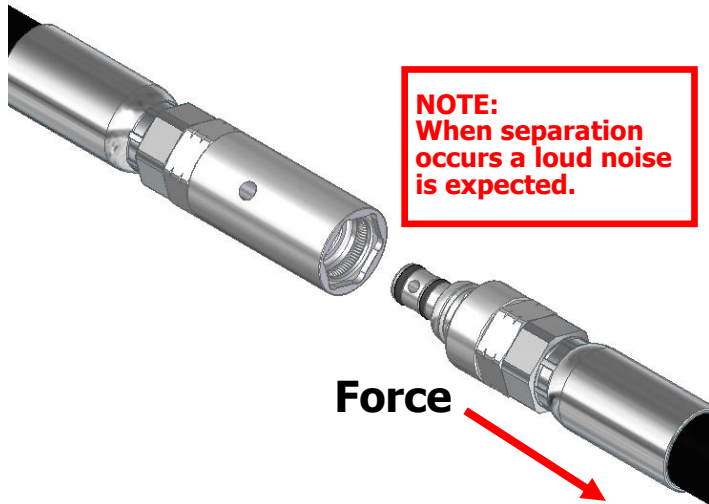
1. Apply anti seize to thread and silicone grease to the o-ring.



2. Screw extension into the body and tighten.



1. Vent breakaway will activate when a pull force is applied to the hose.

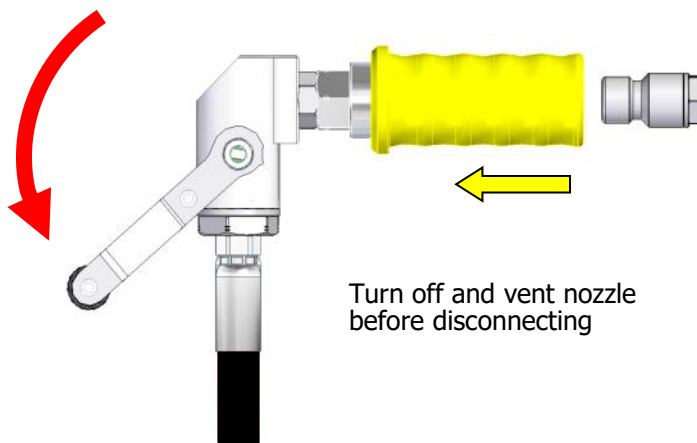


CAUTION:
In an a event of separation the hoses will stretch and whip around from the breakaway housing which may cause injury to near by personnel.

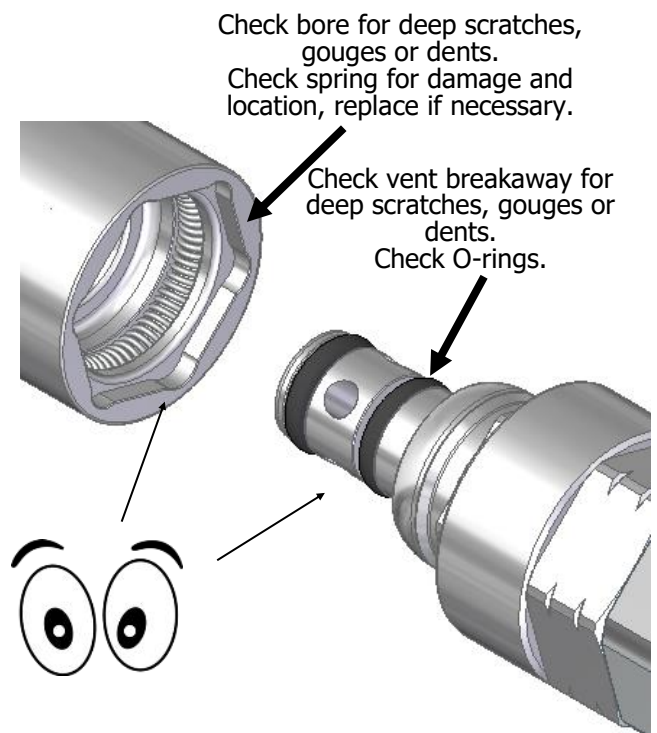
2. The hose will vent when separation occurs as there are no internal poppets.



3. Disconnect the nozzle from receptacle.



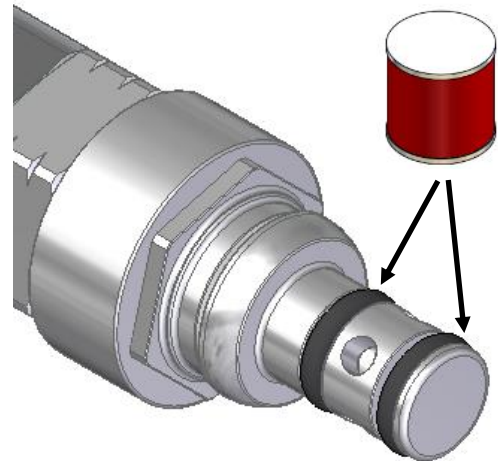
4. Check the vent breakaway and hose for damage.



5. Check O-rings and remove them if there is damage. (Oasis provides service kits for vent breakaways).

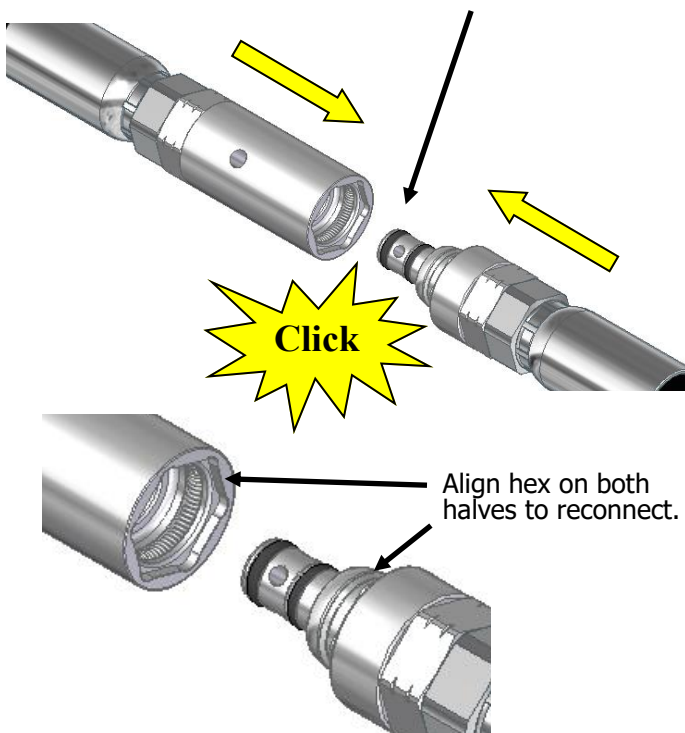


6. Apply silicone grease to the O-rings and reposition or replace.

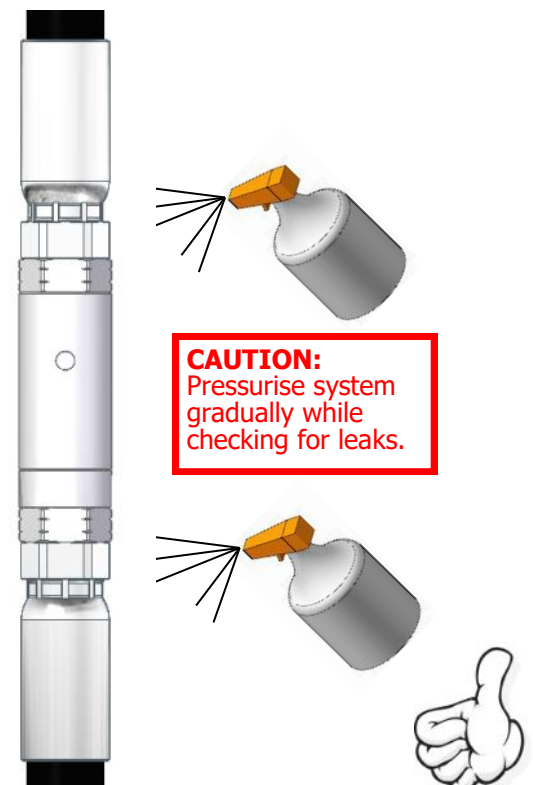


7. Re-assemble vent breakaway.

To re-connect the breakaway. Put male part into female part and push together by hand.



8. Re-pressurize the hose and test for leakages. The breakaway is then ready for use again.



Service Kit Parts



2 x SAE O-rings
(906 Nitrile 90)



2 x Small O-rings



1 x Silicone Grease
(Rocol MX22 or similar for all O-Rings)



1 x Locking Spring

Tools Required



Cleaner (Warm Soapy
Water or Similar)



Anti Seize Grease
(Loctite 771 or Similar)
For All Threads



Spanner
(Wrenches)
- 19mm (3/4")



Spray Bottle
(Snoop or soapy
water)



Pick Tool
Part Number:
TOOL-PICK
(Sold separately)

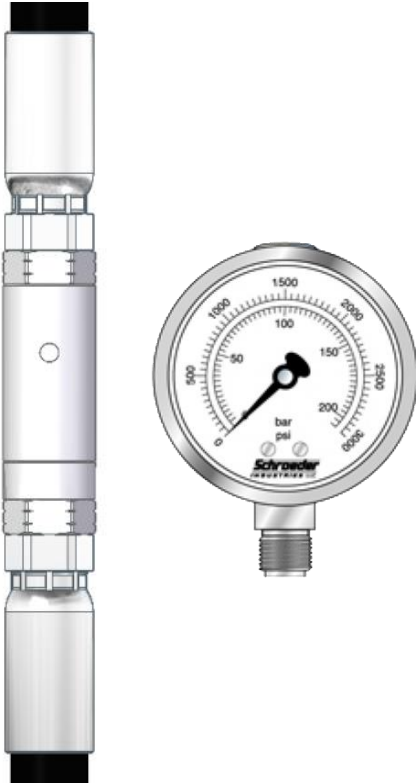


Silicone Grease
(Rocol MX22
or similar for all O-Rings)

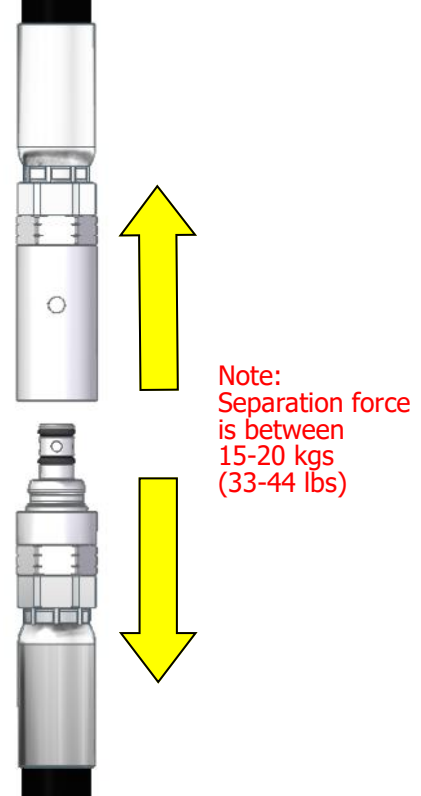
Routine Checks & Service:

Hose breakaways should be inspected for damage or leaks by a trained personnel every 6 months and/ or as part of the end-user's preventative maintenance program. This procedure should follow step 6 of the installation instructions (Page 5).

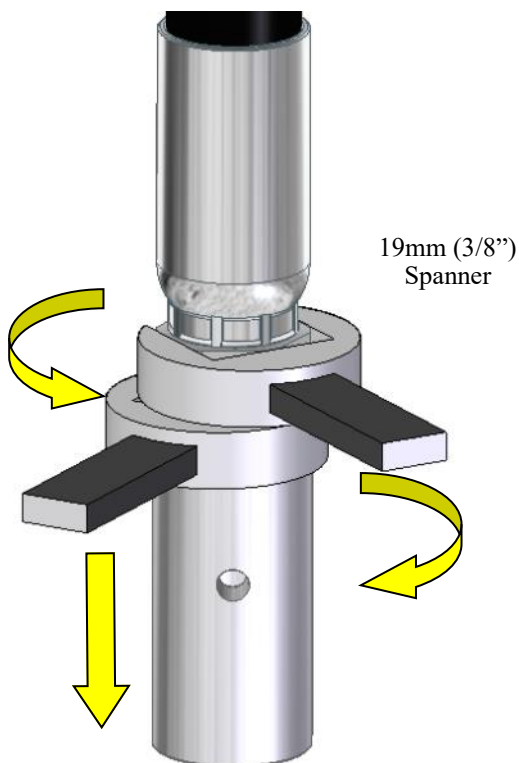
1. Isolate the vent breakaway and vent all pressure from hose.



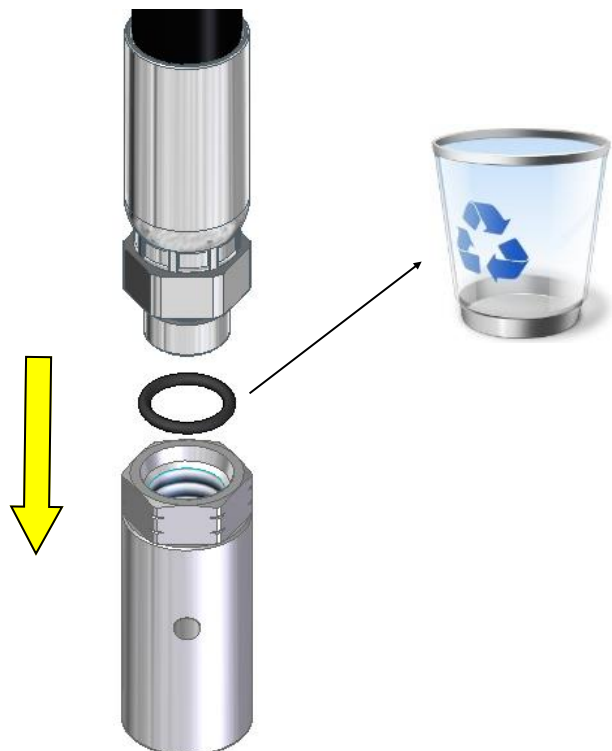
2. Separate vent breakaway by pulling apart while on post.



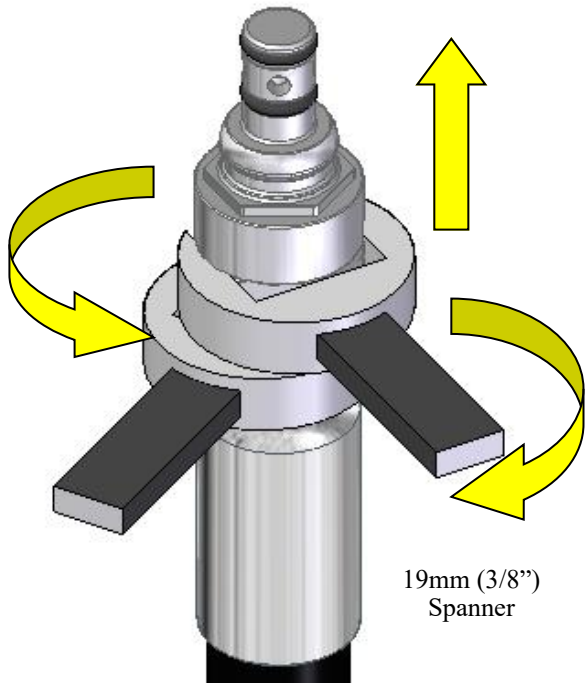
2. Loosen hose from vent breakaway.



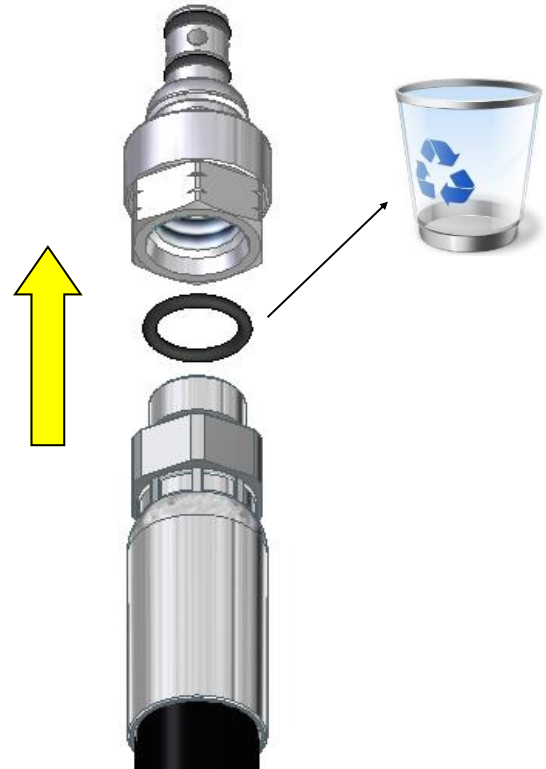
3. Remove hose from vent breakaway and discard O-ring if required.



4. Loosen hose from vent breakaway.



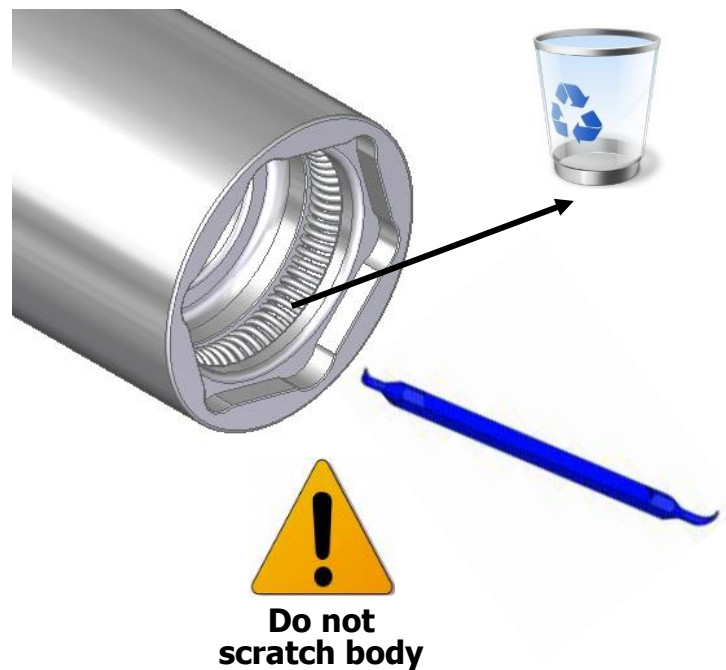
5. Remove the hose from vent breakaway and discard O-ring if required.



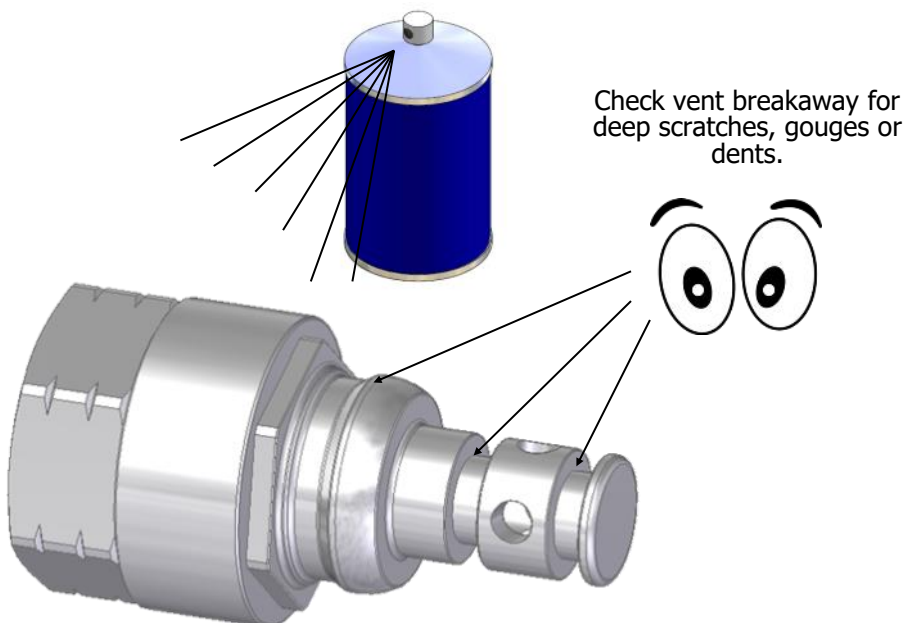
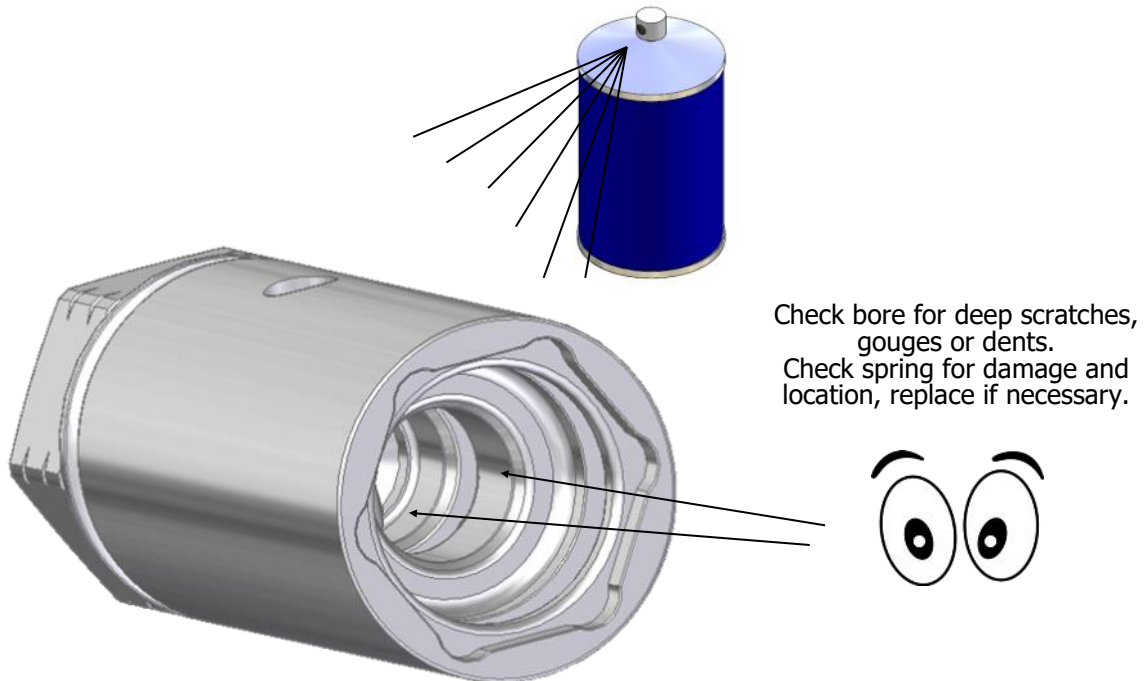
6. Remove the vent breakaway O-rings from male.



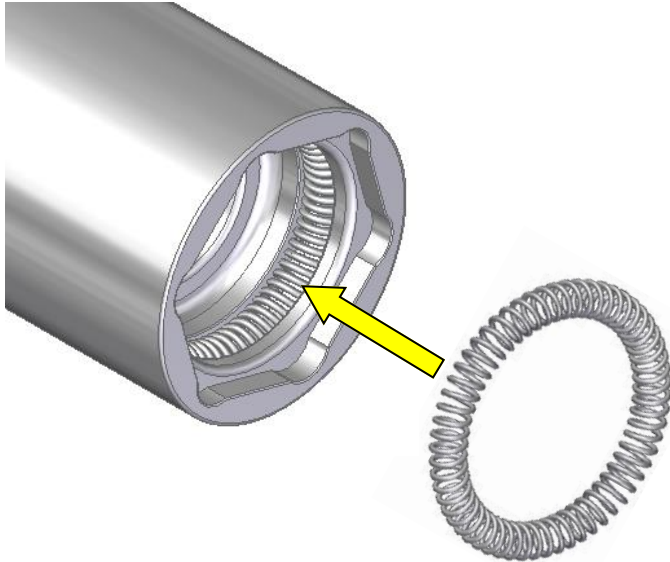
7. Pick out the locking spring from inside body and discard.



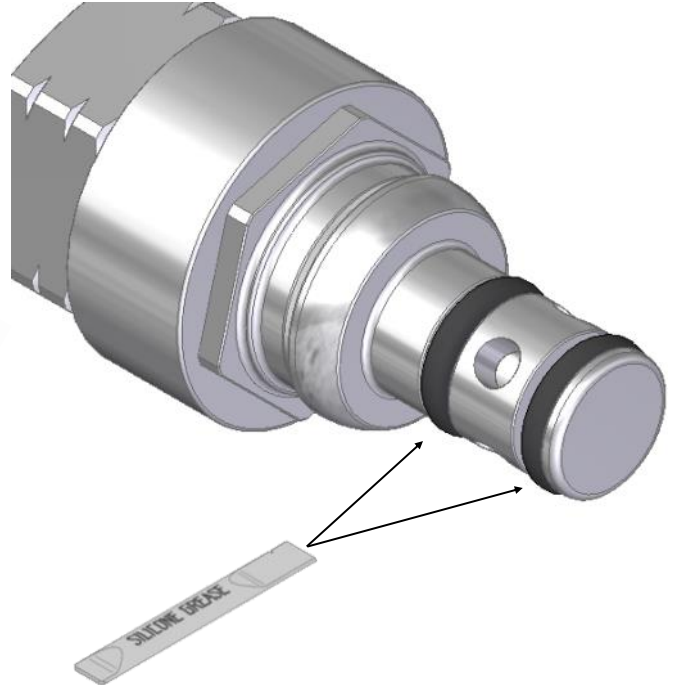
8. Clean parts and check for damage.



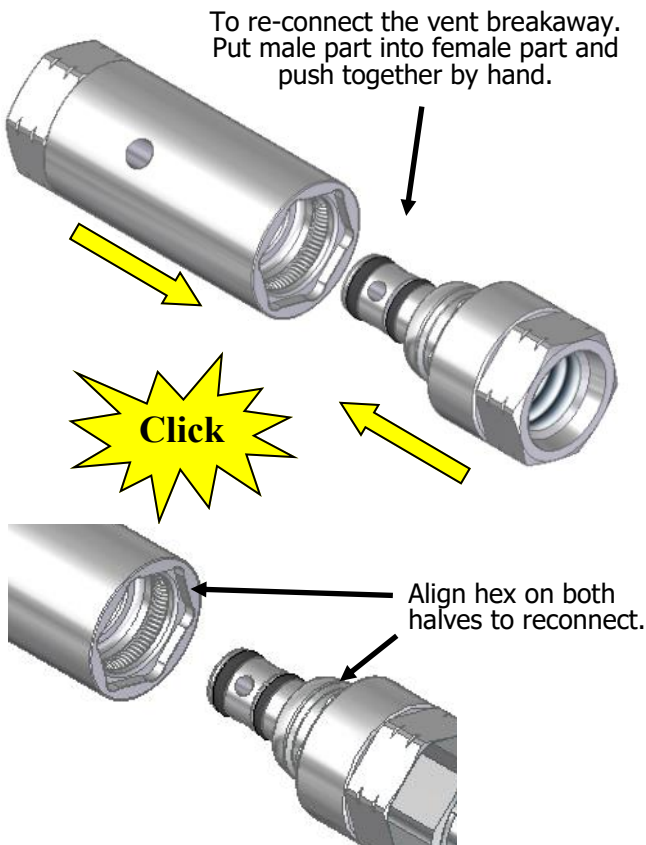
1. Install new locking spring into body.



2. Grease new O-rings and install onto male.



3. Push the two parts together by hand.



4. Part is ready to be install again.



Servicing complete, follow installation instructions on page 3 to re-connect the vent breakaway.