Poseidon Emergency Egress Breathing Device

PEEBD9393 (4,500psi)

&

PEEBD1206 (3,000psi)

Technical Manual

Poseidon
Leaders in Aviation and Maritime Life Support Products

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Contents

Product Safety Information

The PEEBD9393 and PEEBD1206 are emergency breathing devices which contain high pressure compressed air. They are designed as a robust and reliable device to provide a limited supply of breathing air for emergency and training use only.

Prior to and during repair, maintainers must read and understand the warnings, notes and cautions contained in this document to ensure that devices are maintained in accordance with the manufacturer's instructions to avoid injury or damage to equipment.

This manual provides the procedures for the maintenance and repair of the Poseidon™ PEEBD. This manual should only be used by appropriately trained and qualified personnel. Training and qualifications should only be obtained through Poseidon™ qualified technicians.

For any clarification or questions regarding the procedures outlined in this Manual, contact Poseidon™ directly for assistance prior to continuing with the task.

WARNING

The WARNING indicates a procedure or situation that, if not avoided, could result in serious injury or death to the user

CAUTION

The CAUTION indicates any situation or technique that could cause damage to the product, and could subsequently result in injury to the user

NOTE

The NOTE is used to emphasize important aspects of operation, tips and reminders.

Introduction

This manual provides the procedures for the maintenance and repair of the Poseidon™ PEEBD. This manual should only be used by appropriately trained and qualified personnel. Training and qualifications should only be obtained through Poseidon™ qualified technicians.

For any clarification or questions regarding the procedures outlined in this Manual, contact Poseidon directly for assistance prior to continuing with the task.

The PPEEBD9393 and PPEEBD1206 Stage 1 regulator features a modular design and share common features. These maintenance, repair and servicing instructions compliment this modular design providing clear instructions.

The PPEEBD9393 and PPEEBD1206 Stage 2 regulator require complete disassembly for repair. These maintenance, repair and servicing requirements must only be completed by competent persons.

WARNING

Due to the modular design and commonality of components care must be taken to ensure that PPEEBD9393 and PPEEBD1206 devices are segregated during servicing and maintenance to avoid inadvertent mixing of components which will affect product performance.

Maintenance and Servicing Schedules

The PEEBD is safety critical life support equipment. The PEEBD should be maintained in accordance with the timeframes and procedures set out in the user manual.

In addition to routine maintenance, the PEEBD requires a full service every 36 Months.

Component Replacement - Maintenance

During maintenance activities, components should be replaced on the basis of condition unless otherwise directed in these instructions.

Component Replacement - Servicing

Unless otherwise agreed with a user, the PEEBD must be serviced at 36-month intervals. During servicing, all in-service parts corresponding to parts provided in the Poseidon servicing kit must be replaced.

General Instructions

1. The procedures and steps provided in this manual need to be followed in the order they are presented. Before commencing any task, the appropriately qualified personnel must familiarize themselves with the entire task paying particular attention to any “Warnings”, “Cautions” or “Notes”. Ensuring the tooling and parts required for the task undertaken are available prior to commencing. Always refer to the Manual during the task.
2. Within this document, parts are referenced by name. To enhance understandability a number corresponding to an illustration may be provided.
3. Any Repair, Service or Overhaul should be carried out in a work area with appropriate lighting, free from contaminants (such as airborne pollutants) and using the Poseidon PEEBD003600 Tool Kit.
4. Ensure parts are segregated appropriately as the PEEBD disassembly is carried out. Protect sensitive parts as required to ensure no inadvertent damage. Ensure mandatory replacement parts are discarded and reusable parts inspected.
5. Only use genuine OEM parts for this product. The use of Non-OEM parts can jeopardise the functionality of the PEEBD. The manufacturer will not take responsibility for any malfunction of the system if such items have been discovered to have been used for Repair, Maintenance or Overhaul of the PEEBD.
6. Discard all Mandatory replacement parts.
7. Every torque specification prescribed in this manual must be adhered to and applied using a calibrated torque wrench.
8. Discard any part showing damage or excessive wear. Cut O-Rings with scissors to ensure that they cannot be accidently reused.

CAUTION

If moisture is observed inside the N1 regulator body during servicing or maintenance the EBD is unserviceable. Remove from service and dispose of or return to Poseidon for overhaul.

Acceptable Wear and Component Condition

Metal Components

External Surfaces

Light scratching. Minor nicks to edges not exceeding 0.5mm.

Nil corrosion.

Internal Surfaces and Components

No damage. No contamination. No scratches. No nicks.

Nil corrosion

Plastic Components

External Components and surfaces

Minor scratching or chafing. Minor nicks not affecting function.

Internal Components

No damage. No contamination. No scratches. No nicks.

O-Rings

No level of damage is acceptable. If an O-Ring is not visually perfect it must be replaced.

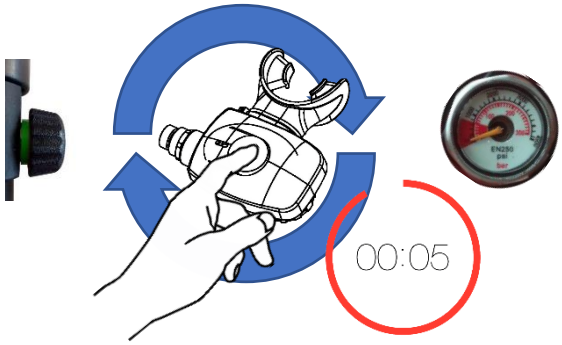
General Procedures, Terms and Definitions

The following outlines the terminology and common terms and meanings used throughout this manual:

• To avoid contamination, unpowdered latex or nitrile gloves must be worn during servicing or maintenance.	
• To remove, unscrew or loosen a threaded part, turn the part counter-clockwise.	
• To install, screw or tighten a threaded part, turn the part clockwise.	
• To "OPEN" the 1st stage regulator valve, turn the valve counter-clockwise. A green indicator ring will be visible below the Valve Knob, this indicates the unit is in the "Open" position.	
• To "CLOSE" the 1st stage regulator valve, turn the valve clockwise. The red indicator ring will be visible below the Valve Knob, this indicates the unit is in the "Closed" position.	

First Stage Regulator Valve Closed

First Stage Regulator Valve Open

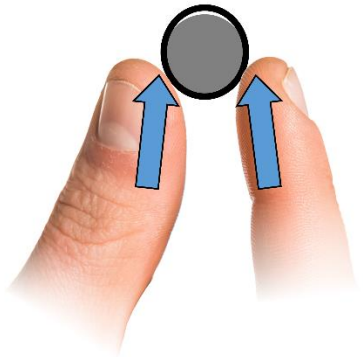
• To depressurize the system, depress the second stage purge button for 5 seconds and release for 5 seconds. Repeat this procedure until the system is completely depressurized. 	
• To fill or refill the cylinder, 3000 PSI (207 BAR) is the standard fill pressure used for testing purposes. Once testing is complete, fill the cylinder to operating pressure.	
• **LP** means **L**ow **P**ressure	
• **HP** means **H**igh **P**ressure	
• Illustrated parts breakdowns of the PEEBD are referenced throughout the procedures outlined in this Manual in parentheses. **For example**: “Remove the O-Ring (14) from the fitting (12)” 14 is the reference number in the exploded parts view of the O-Ring.	

- To remove an O-Ring the pinch method is to be followed where possible (see illustration below). Alternatively, the use of brass or plastic O-Ring removal picks is permitted. Do not use hardened
- steel picks (unless directed), as they will damage the O-Ring sealing surface. Discard all removed O-Rings.

Pinch Method

Press along the sides of the O-Ring to create a protrusion.

Pinch the protrusion or insert an O-Ring pick through the protrusion and remove.



Condition Checks

The word ‘Condition’ within this manual means a visual check to ensure that a part, assembly or surface is free from damage, corrosion, debris, contamination and water.

Cleaning and Lubricating

Cleaning

All parts removed or installed during maintenance or servicing must be thoroughly cleaned using the approved techniques below.

Approved cleaning tools, soaps and solvents are listed at “Approved Tools and Service Kits” Page 53

Unless stated in the service instructions, the following techniques must be applied to all parts removed or installed during maintenance or servicing.

Preparation for cleaning

1. Remove new components from their packaging and inspect for damage
2. Inspect all used parts for damage
3. Remove all O-Rings and plastic parts from metal components

Cleaning Metal Parts excluding hose fittings and the N1 regulator body

1. Pre-clean using an approved detergent and approved cleaning tools.
2. Thoroughly clean parts in an ultrasonic cleaner filled with warm soapy water. DO NOT place non-metal parts in the ultrasonic cleaner
3. Remove parts from the ultrasonic cleaner.
4. Check for contamination to ensure proper cleaning and like-new condition.
5. If contamination is visible repeat stages 1-3.
6. When the part appears clean, rinse in clean distilled water to remove detergent residue.
7. Place in a bath of an approved disinfectant for 5 minutes, remove and allow to dry.

Cleaning inside the N1 regulator body

CAUTION

Do not use water-based cleaners inside the N1 regulator.

1. Check for water. If water is seen, remove from service and return to Poseidon for overhaul.
2. Clean threads and orifices internal to the N1 regulator with an approved cleaning tool and an approved solvent/disinfectant.
3. Check for contamination to ensure proper cleaning and like-new condition. If contamination cannot be removed, replace the N1 regulator body.
4. Allow to dry thoroughly prior to re-assembly.

Cleaning non-metal parts 1. Pre-clean using warm soapy water and approved cleaning tools 2. Check for contamination to ensure proper cleaning and like-new condition. 3. When the part appears clean, rinse in clean distilled water to remove detergent residue. 4. Place the part in a bath of an approved disinfectant bath for 5 minutes, remove and allow to dry.	
Cleaning Hoses 1. Clean hose fittings using isopropyl alcohol and a cotton swab or lint-free cloth.	

Lubrication

All parts installed during maintenance or servicing must be thoroughly lubricated before installation using the approved techniques below.	
Approved lubricants are listed at “Approved Tools and Service Kits” Page 53	
Unless stated in the service instructions, the following techniques must be applied to all parts prior to installation during maintenance or servicing.	
O-Rings All O-Rings should be lubricated with an approved lubricant.	
Dress the O-Rings with a very light film of lubricant and remove any visible excess by running the O-Ring between thumb and forefinger. Avoid applying excessive amounts of lubricant, as this will attract particulate matter that may cause damage to the O-Ring.	
Threads All threads should be lubricated with an approved lubricant	
For each thread pair, lubricate the Male thread.	
Do not lubricate internal surfaces on the N1 regulator.	
Dress the thread with a very light film of lubricant and remove any visible excess by running a finger over the thread. Avoid applying excessive amounts of lubricant, as this will attract particulate matter that may cause damage to the thread.	
Other Components and Surfaces Where a component or surface requires lubrication, dress the surface or component with a very light film of lubricant and remove any visible excess with the fingers and swabs. Avoid applying excessive amounts of lubricant, as this will attract particulate matter that may cause damage to component or surface.	

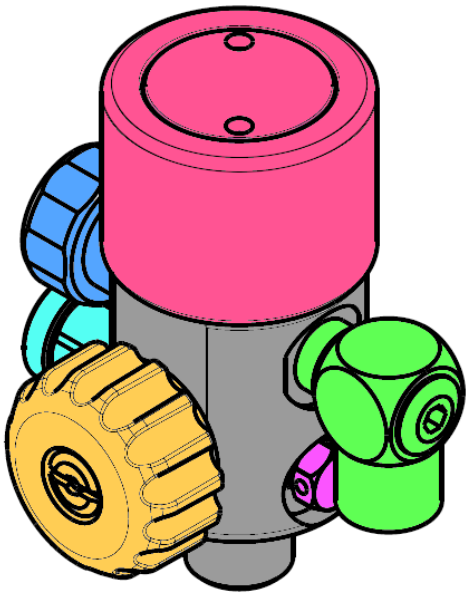
Post cleaning and lubrication re-assembly

Complete post-cleaning and lubrication re-assembly immediately to avoid possible contamination. 1. Place lubricated O-Rings onto their associated metal part. 2. Install the sub-assembly in accordance with these instructions	

Final cleaning after servicing

After servicing the external surfaces of the device are cleaned. Clean the outer surfaces of the N1 Regulator, N2 Regulator and Hose, as well as the inner surfaces of the N2 Regulator Bite-On using a clean lint-free cloth and a solution of an approved sterilization fluid mixed in the required ratios.	

Component Identification – Stage 1 Regulator



- Cap and piston
- Swivel
- Valve Assembly
- Burst Disk
- Manometer
- Filler adapter

Stage 1 Regulator Disassembly and Assembly Procedures

CAUTION

Use only brass or plastic O-Ring picks when removing O-Rings to avoid damage to critical sealing surfaces. A small scratch on a O-Ring sealing surface could result in a leak. Once an O-Ring sealing surface is damaged, the part must be replaced. DO NOT use any steel instrument on O-Ring sealing surfaces.

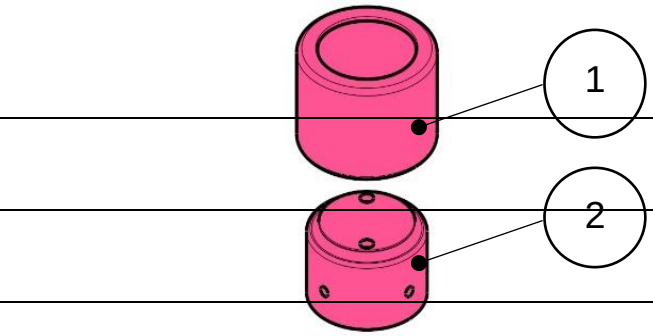
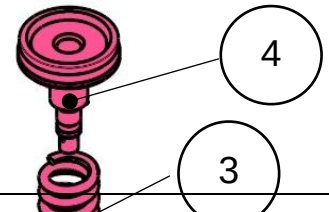
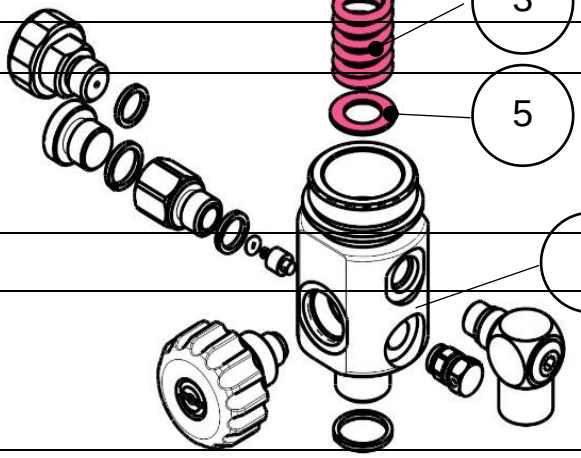
NOTE

Prior to disassembly, refer to Appendix A for all mandatory replacement parts. These parts must be replaced with new parts and cannot be reused under any circumstances, regardless of the regulator age or frequency of use since it was last serviced or overhauled

Prior to any maintenance activities, de-pressurise the system using the procedure in General Procedures, Terms and Definitions	

Cap and Piston Assembly

Disassembly

1. Remove the rubber boot (1)		
2. Using a pin-face socket (PEEBD001204), unscrew the Cap (2) and lift-off.		
3. Remove the Spring (3) from the Regulator body.		
4. Invert the Cap (2) and pull out the Piston Assembly (4).		
5. Invert the Regulator Body (6) and allow the Polycarbonate Washer (5) to fall free. If required, provide light assistance by tapping the regulator sharply on the palm of the hand.		

Reassembly

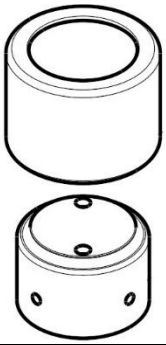
6. Check components for condition. Clean all components. Lubricate O-Rings and threads. Refer to Cleaning and Lubricating.		
7. Re-assemble the Piston Assembly.		
8. Replace the Piston Assembly in the inverted Cap. Ensure that the Piston Assembly is seated against the bottom of the Cap.		
9. Place a new Polycarbonate Washer at the bottom of the recess inside the Regulator Body.		
10. Place the spring onto the Polycarbonate Washer.		
11. Place the assembled Cap and Valve Assembly onto the spring.		
12. Screw down the Cap until finger-tight.		
13. Install the rubber boot by sliding over the Cap. Note that the boot should be oriented with the quartered end facing towards the regulator.		

Swivel Module

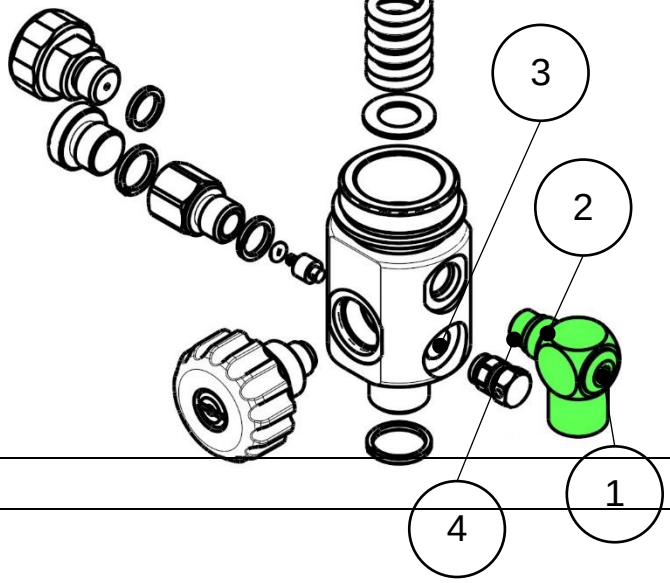
5mm

PEEBD001700

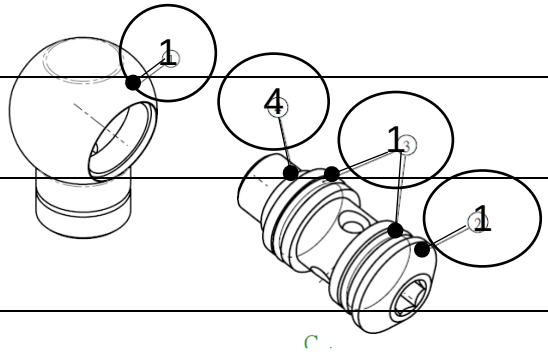
The Swivel module is a sealed, non-user servicable module. If the swivel adapter is damaged it must be replaced with a new module.



Disassembly

1. Remove the LP Hose if attached.		
2. Using a 5mm hex wrench, remove the swivel adapter (1).		
3. Check the swivel adapter for condition. Clean the Swivel adapter threads using an approved solvent/disinfectant and cleaning tools. 4. Remove the O Rings and discard 5. Lubricate and replace O Rings 4, 1a(x2), 1b 6. Lubricate O-Rings and threads. Refer to 7. Cleaning and Lubricating.		

Reassembly

8. Inspect inside the Regulator body (3) for condition. Clean if required. Refer to 9. Cleaning and Lubricating.		
10. Lubricate the threads (4) on the Swivel module.		
11. Replace the Swivel Module into the Regulator body and tighten with a 5mm hex wrench to 11.7NM.		
12. Install the LP Hose using the LP Hose installation Procedure.		

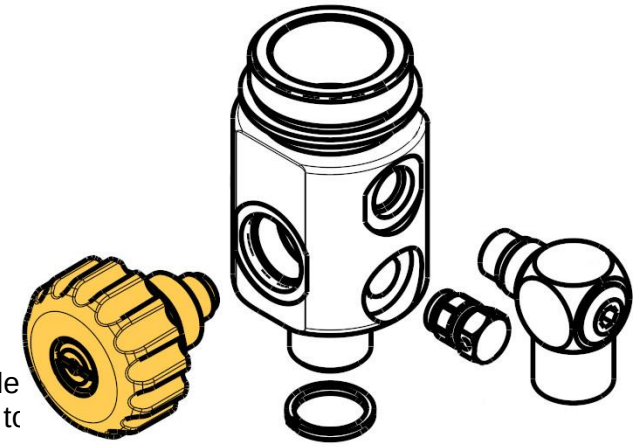
Valve

19mm

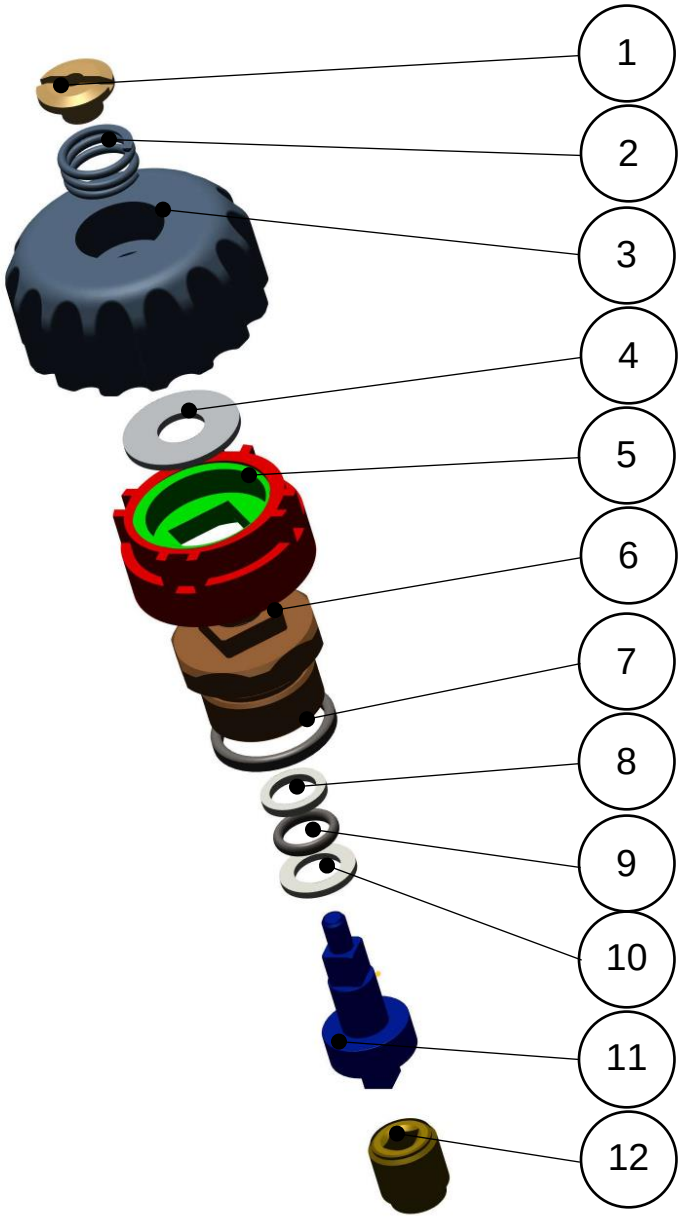
PEEBD001900

10mm

PEEBD002001/PEEBD002000



The valve assembly is a complex mechanical module Care is required during repair or service activities to ensure that it remains reliable.



#	Component
1	Retaining Nut
2	Tension Spring
3	Valve Knob
4	Indicator Washer
5	Indicator
6	Valve Cap
7	O-Ring
8	Plastic Washer
9	O-Ring
10	Plastic Washer
11	Valve Stem
12	Valve Piston

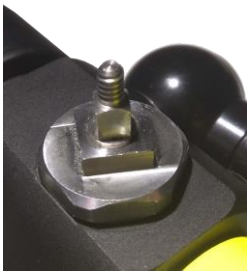
Disassembly

1. Secure the Regulator so that the Valve Assembly faces upwards.		
2. Using a 10mm 'driver' drive bit, (PEEBD002000/PEEBD00201) remove the retaining nut (1) and spring (2). Lift off the Valve Knob (3).		
3. Lift off the On/Off Indicator (5) and Indicator Washer (4) assembly.		
4. Using a 19mm socket, remove the Valve Cap and Stem assembly (6 - 11).		

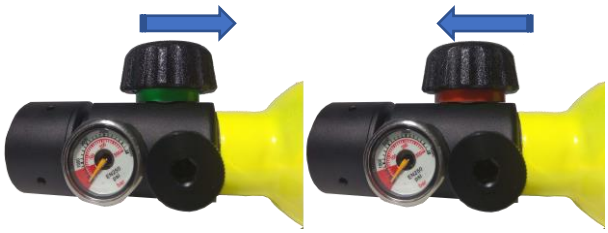
5. Press the Valve Stem (8) from the Valve Cap (6) and place the Valve Stem into the receiver on the Valve Piston (12) which is inside the regulator body.		
6. Use the Valve Knob to unscrew the Valve Piston with the Valve Stem.		
7. Remove the Valve Piston from the body		

Reassembly

8. Inspect inside the Regulator body (3) to ensure that the air path is clear of debris and contamination.		
9. Inspect inside the Valve Cap for condition. Ensure that the plastic seal is clean and undamaged and that the edges of the black rubber seal can be seen and are smooth. If a component requires closer inspection or appears damaged, refer to Valve Cap seal replacement. Remove the Valve Cap O-Ring for cleaning but do not further disassemble the Valve Cap. Clean internally and externally using an approved solvent / disinfectant.	 Acceptable Condition  Unacceptable Condition	
10. Remove O-Rings from components Clean all remaining components. Check all components for condition. Lubricate O-Rings and threads. Refer to Cleaning and Lubricating Lubricate the valve stem.		
11. Rotate the Valve Knob fully Anti-Clockwise (approximately 2 ½ turns) to seat the Valve Stem in the Valve Cap Seal.		

12. Turn the Valve Knob fully Clockwise to ensure that the valve is fully closed. Remove the Valve Knob. Ensure that the flange at the base of the square section of the Valve Stem is flush with the top of the Valve Cap.	 	
13. Place the On/Off indicator assembly onto the Valve Cap, ensuring that the black plastic disk is present.		

14. Turn the On/Off indicator assembly Clockwise by hand to ensure that the Green part is fully retracted. Use caution and do not over-tighten. When the indicator assembly has been fully tightened, 'Back the indicator off' using ¼ of a turn Anti-Clockwise.		
15. Note the required orientation of the Valve Stem with the On/Off Indicator tabs. If required, slightly adjust the On/Off indicator to achieve the required orientation.		
16. Replace the Valve Knob, ensuring that the internal alignment aids are seated in the On/Off indicator receivers. Replace the Tension Spring.		

17. Replace and tighten the retaining bolt using a 10mm 'driver' drive bit to 11.7NM		
18. Check that the Valve and On/Off Indicator are correctly aligned. Turn the Valve Knob fully Clockwise. The indicator should show red. Turn the Valve Knob Anti-Clockwise. The Green indicator should appear.		

Burst Disk

10mm

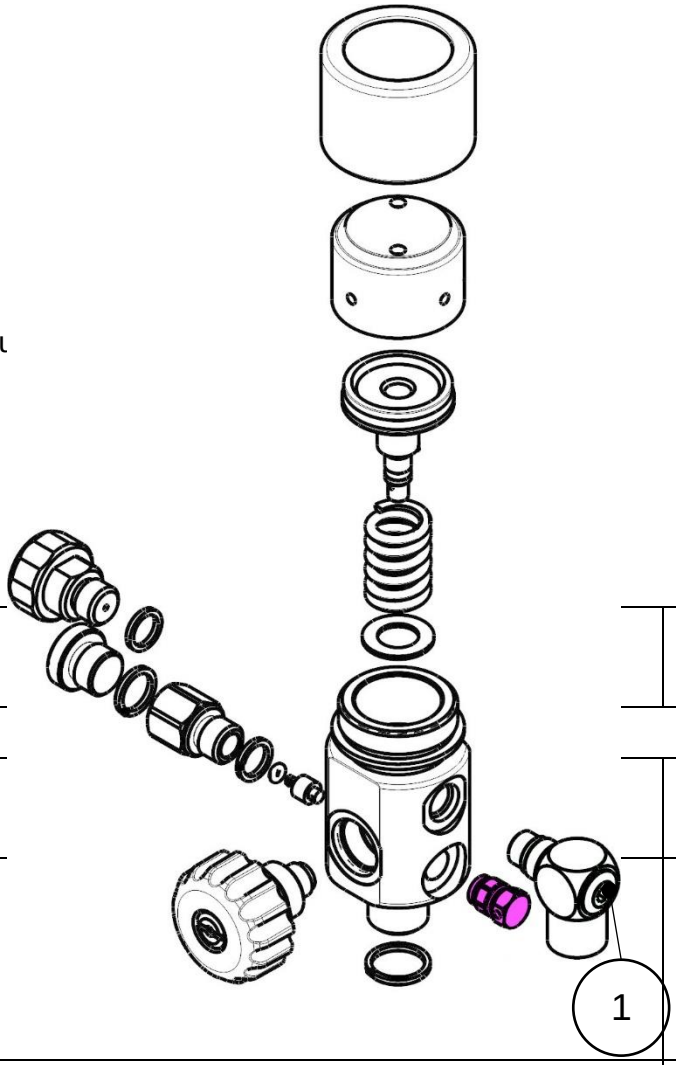
PEEBD002200

The Burst Disk is a sealed, non-user module. If the Burst Disk is damaged or ruptu be replaced with a new module.

Ensure that the correct Burst Disk is used:

PPEEBD9393 – Burst Disk Unit 7.5K

PPEEBD1206 – Burst Disk Unit 5K



Disassembly

1. Using a 10mm socket, remove the Burst Disk module (1).		

Reassembly

2. Inspect Burst Disk and inside the regulator body for condition.		
3. Clean the threads of the Burst Disk module and N1 regulator body using approved tools and solvent/disinfectant. Do not submerge the burst disk in liquid.		
4. Lubricate threads. Refer to 5. Cleaning and Lubricating.		
6. Install the Burst Disk module in the Regulator body, tightening to 10.7NM torque.		

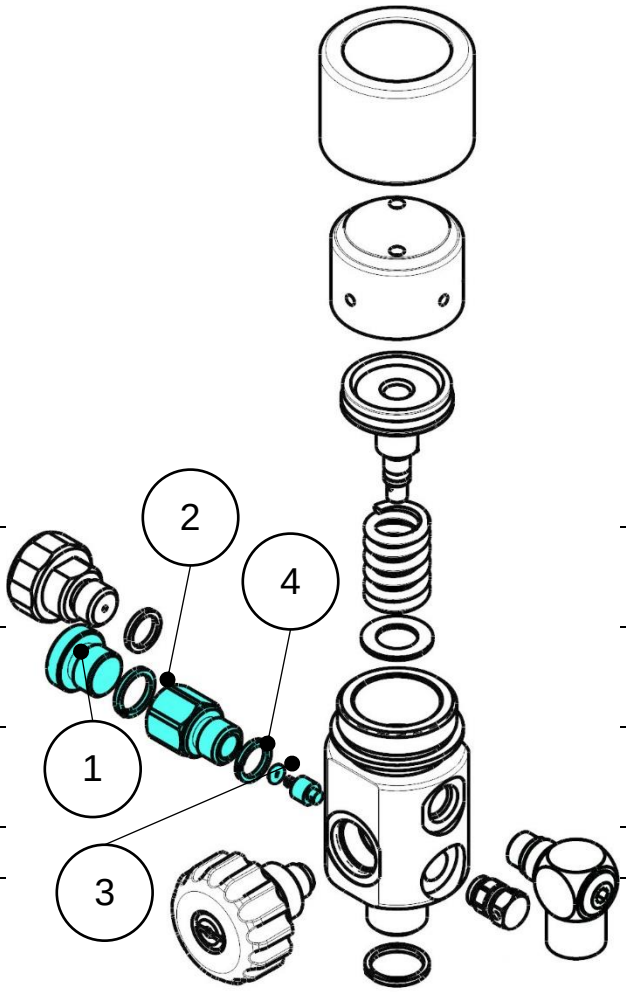
Filler Adapter

5mm

PEEBD001701

15mm

PEEBD002400

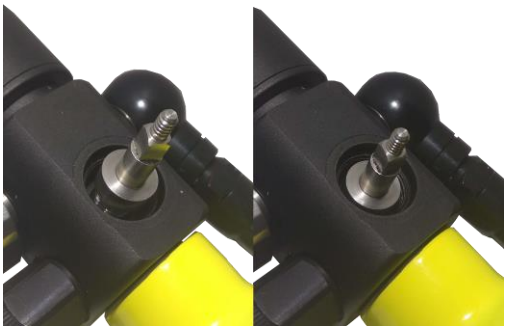
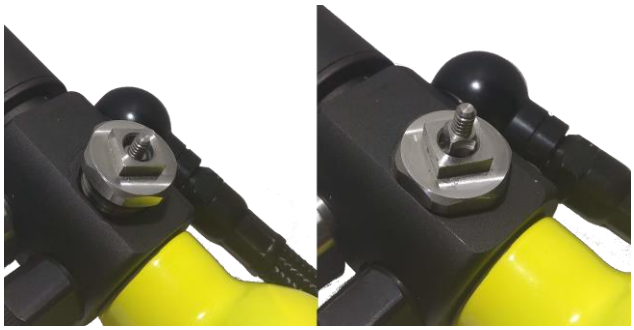


Disassembly

1. Remove the plastic Filler Adapter cover (1).		
2. Using a 15mm spanner, remove the filler adapter body (2).		
3. Remove the Filler Piston (3) from the Regulator Body.		

Reassembly

Clean all components. Lubricate O-Rings and threads. Refer to 4. Cleaning and Lubricating.		
5. Invert the Filler Adapter and place the Filler Piston inside with the O-Ring facing downwards.		
6. Turn the Regulator Body so that the Filler Adapter orifice is orientated to the side and screw-in the Filler Adapter assembly until finger-tight.		
7. Complete installation by using a 15mm spanner, tightening to 4.5NM.		
8. Inspect the plastic Filler Adapter Cover for condition. Replace the O-Ring if necessary. Install the plastic filler adapter cover into the Filler Adapter, tightening finger tight.		

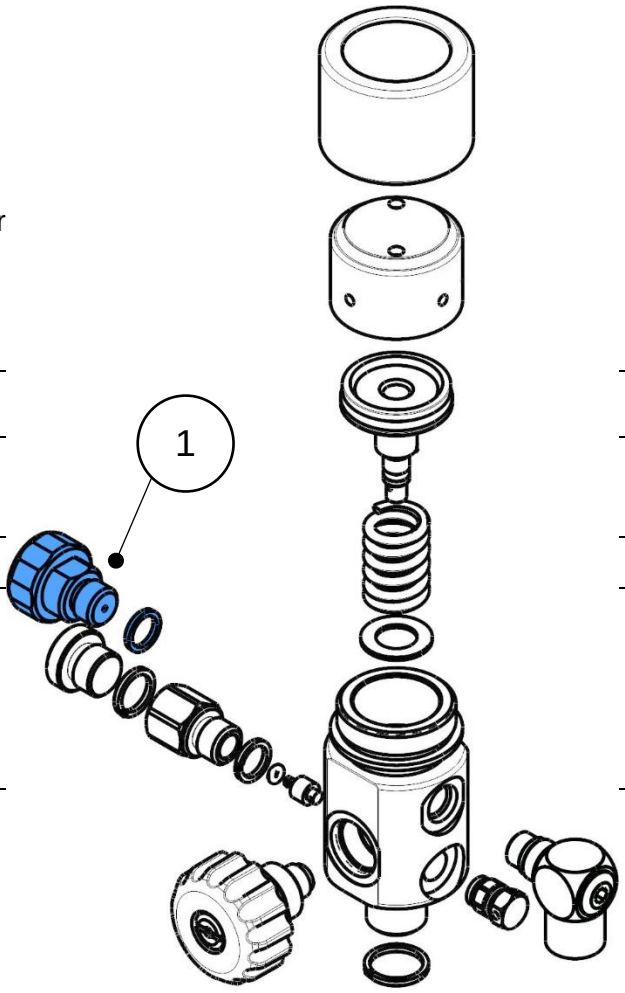
9. Place the Valve Piston back into the Regulator Body. Check correct orientation.		
10. Place the Valve Stem into the Valve Piston. Use the Valve Shaft to screw down the Valve Piston tight.		
11. Leave the Valve Stem in place. Place the Valve Cap over the Valve Stem and screw down with a 19mm Socket to 11.7NM of torque.		
12. Place the Valve Knob onto the Valve Stem.		

Manometer

22mm

PEEBD003700

The Manometer is a sealed, non-user module. Of the Manometer is damaged replaced with a new module.



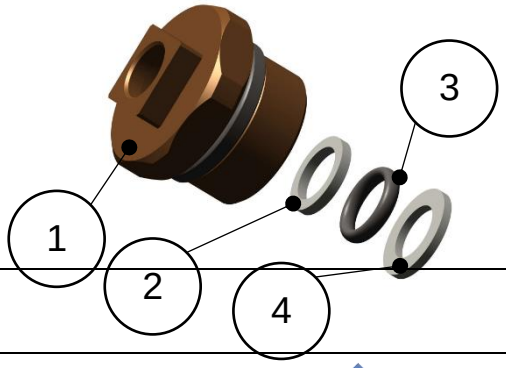
Disassembly

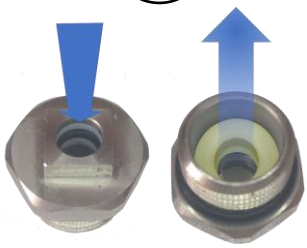
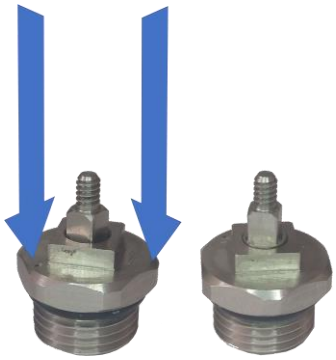
1. Remove the Filler Adapter.			
2. Using a 22mm socket, remove the Manometer.			

Reassembly

3. Check inside the Regulator Body for debris and contamination. Clean if required. Refer to Cleaning inside the N1 regulator body.			
4. Inspect the air inlet (1) on the Manometer for debris and contamination. If necessary clean gently with a toothpick, taking care not to enlarge the hole. Do not use liquids.			
5. Remove and Lubricate the Manometer O-Ring.			
6. Clean and Lubricate the Manometer threads.			
7. Install the Manometer into the Regulator body. Ensure the correct installation port is used. Tightening to 2NM using a 22mm socket.			
8. Install the Filler Adapter.			

Valve Cap Seal Replacement



If the Valve Cap Seal requires replacement, use the following procedure		
Using an O-Ring pick, remove the seal assembly (2-4). First, push the assembly loose through the top of the Valve Cap, then invert the Valve Cap and remove the washers and O-Ring.		
1. Exchange the O-Ring for a new OEM part.		
Clean and lubricate all components. Refer to 2. Cleaning and Lubricating.		
3. Place the O-Ring and plastic bushings onto the Valve Spindle.		
4. Place the Valve Cap onto the Valve Spindle and press down to seat the bushings and seals.		

Remove the Valve Spindle from the Valve Cap and continue with 5. Cap and Piston Assembly Cap and Piston Assembly Stage 10.		

LP Hose Removal and Installation

 15mm

PEEBD002400

 17mm

PEEBD002500

The LP Hose is supplied as a sealed unit.

Maintenance actions are limited to replacement, checks of condition and O-Ring (2) replacement.

Disassembly

1. If removing an existing hose, unscrew the attachment (2) from the N1 Regulator swivel fitting using a 15mm spanner. Then unscrew the attachment (1) from the N2 Regulator Orifice using a 17mm spanner.		

Reassembly

2. Inspect the inside of the N1 Regulator swivel fitting and N2 regulator Orifice for condition. Clean using an approved disinfectant/solvent.		
3. Inspect the inside of the Hose N2 Regulator attachment (1) for condition.		
4. Remove the O-Ring (2) from the hose.[1]		
5. Clean the thread (1) using an approved disinfectant/solvent. [2]		
6. Clean the thread on the N2 Regulator Orifice using an appropriate disinfectant/solvent and lubricate.		
7. Lubricate the hose Threads (2) and O-Ring. Lubricate the N2 Regulator Orifice Thread. Refer to 8. Cleaning and Lubricating.[3]		

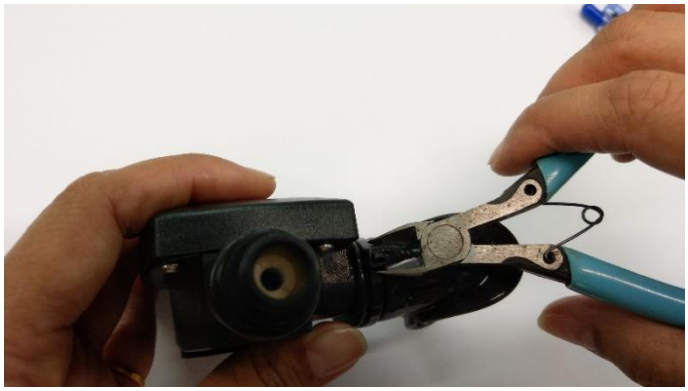
[1] This step may be omitted if a new hose from a sealed bag is used.

9. The 1St stage regulator attachment end can be identified by the Male (2). Install the LP hose into the Swivel Fitting using a 15mm spanner, tightening to 2.8NM.		
10. The 2St stage regulator attachment end can be identified by the Female thread (1). Install the LP hose into the 2nd Stage Regulator using a 17mm spanner, tightening to 5NM.		

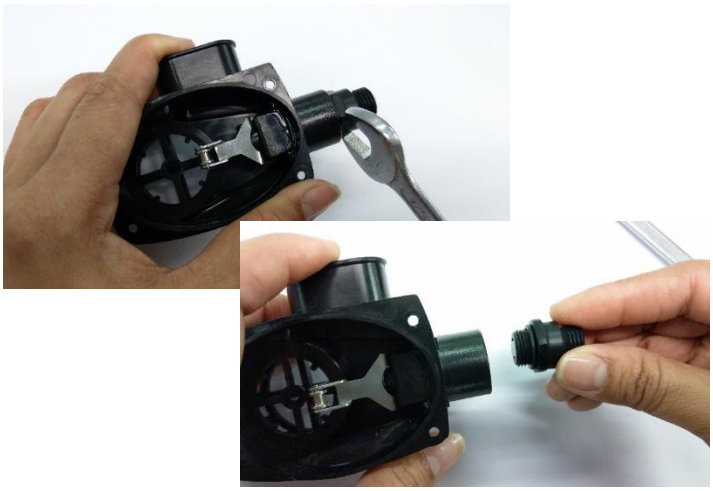
Stage 2 Regulator Disassembly Procedures

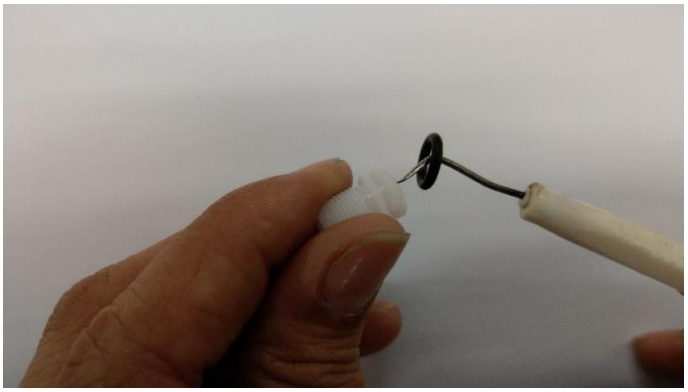
Prior to any maintenance activities, de-pressurise the system using the procedure in General Procedures, Terms and Definitions

.

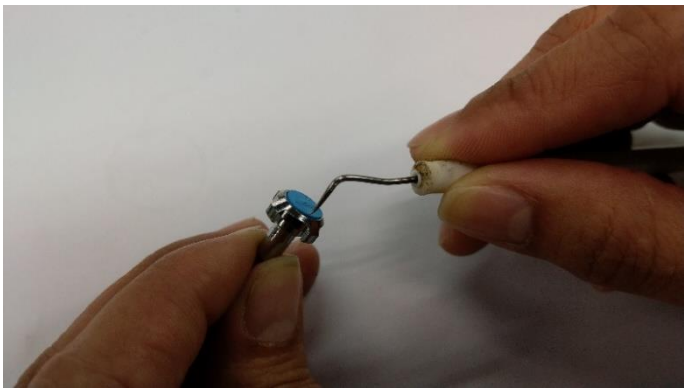
1. Remove the LP hose if fitted using a 17mm Spanner.		
2. Use diagonal pliers to cut the Nylon Tie (2) retaining the 2nd stage bite-on.		
3. Remove the bite-on (3) from the regulator by gently pulling with fingers.		
4. Remove the bite-on from the regulator by gently pulling with fingers. Ensure the mouthpiece is free from any damage. Discard mouthpiece if any damage is evident.		

5. Using a Phillips Screwdriver, remove the 4 screws (18) located on the back of the Regulator Housing.		
6. Remove the top cover (7) from the Regulator housing (1).		
7. Remove the diaphragm (6) from the Front Cover.		

8. Using a 19mm Spanner, unscrew the Orifice Seat Screw (15) from the Regulator Housing as shown.		
9. Remove Orifice Seat Screw O-Ring (14) from Orifice Seat Screw.		
10. Remove Orifice (17) from Orifice Seat Screw using a flat screw driver as shown in picture below.		

11. Remove O-Ring (16) from Orifice using an O-Ring pick.		
12. Remove Exhaust Cover (5) from Regulator Housing by pulling gently with fingers.		
13. Remove the exposed Exhaust Diaphragm (4) by pinching and pulling outwards.		

14. Use a ¼" spanner to restrain the nylon nut (11) inside the regulator body.		
15. Use a Poppet Tool inserted through the regulator orifice to unscrew the Poppet (13) from the Nylon Nut.		
16. Once the Nylon Nut has been removed from the Poppet, carefully remove the POM Washer (8), Lever Arm (9), POM Spacer (10) and Nylon Nut from the Main Housing. The picture below shows the disassembled Lever and Poppet assembly. **CAUTION** **Failure to keep the spring compressed while removing the lever will result in damage to the spindle body.**		

17. Remove the LP Seat (13X) from Poppet with an O-Ring pick.		

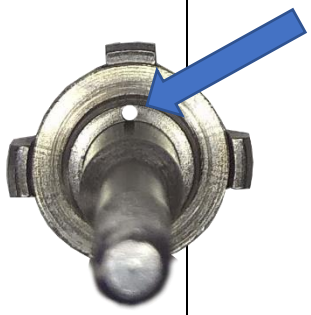
Second Stage Inspection and Cleaning

The purpose of parts inspection is to identify any problem that might occur based upon visual confirmation. This practice helps to eliminate problems include both functional and long-term safety of the second stage.

Where a damaged part is found it should be discarded. Use scissors to cut damaged O-Rings and seals to ensure they cannot accidentally be reused.

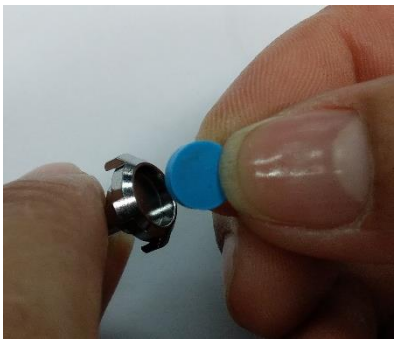
Where a damaged part is found it should be discarded. Use scissors to cut damaged O-Rings and seals to ensure they cannot accidentally be reused.

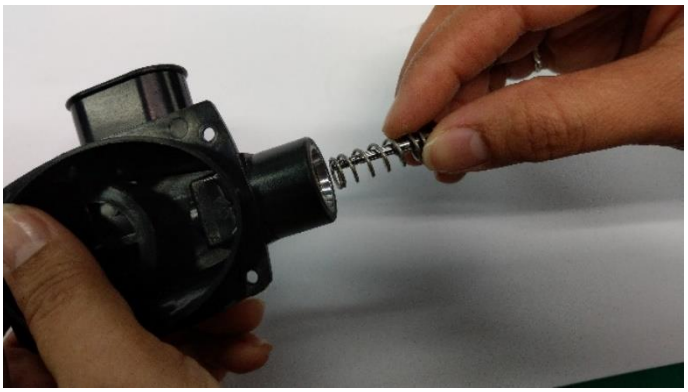
1. Check all metal parts for excessive wear or corrosion.
2. Check all metal sealing surfaces which make contact with O-Rings for any signs of contamination and/or imperfections that may cause leakage past the O-Ring seal.
3. Inspect all threads for galling, cross threading, or damage. If any parts show damage or excessive wear, they must be replaced with new.
4. Inspect body for condition. Replace if any cracks are found.
5. Replace Orifice if damaged
6. Inspect Diaphragm for deformation, cuts and holes.
7. Inspect Exhaust Valve for deformation, cuts and holes.
8. Check through hole on Poppet for obstructions.
9. Ensure the mouthpiece is free from any damage.

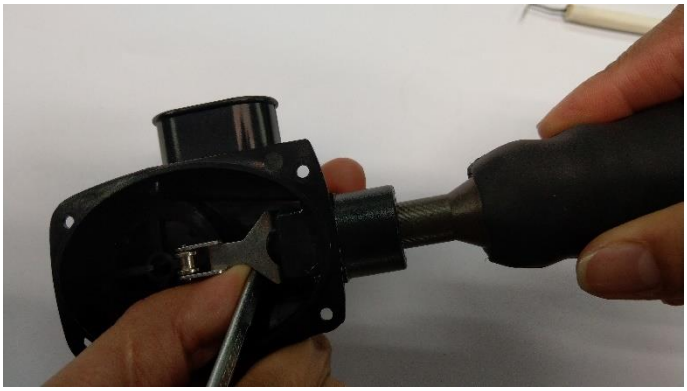


Clean and lubricate metal parts, plastic washers, O-Rings and the mouthpiece. Refer to Cleaning and Lubricating

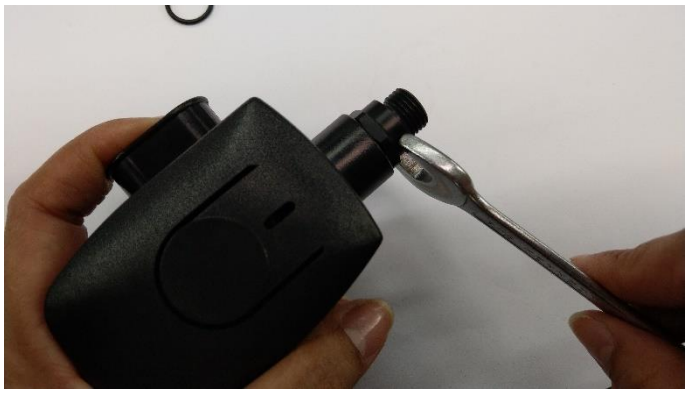
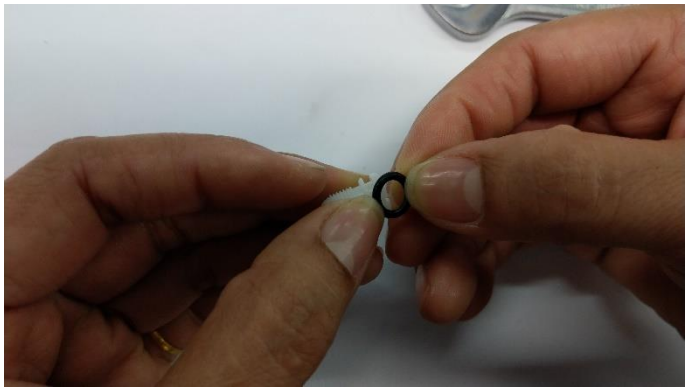
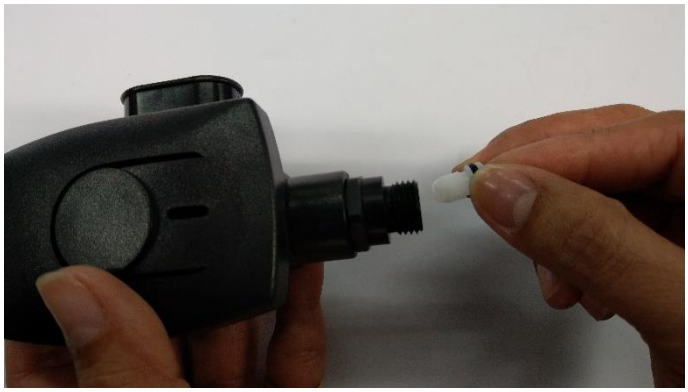
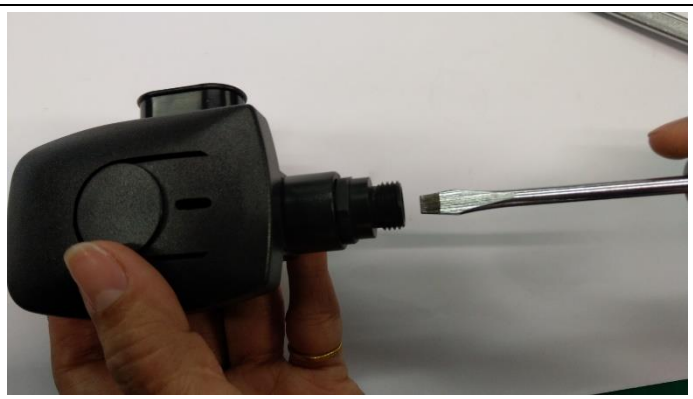
Second Stage Reassembly

1. Place the lubricated O-Ring (14) onto the orifice seat screw (15).		
2. Insert the LP seat (13x) into the receiver on the Poppet (13). Note orientation. The side with the center dimple should be at the base of the receiver.	 Inside Outside 	
3. Insert Exhaust Valve (4) through the hole at the base of the Main Housing (1)		
4. Pull the tab to seat the Exhaust Valve.		

5. Inspect the seal of the Exhaust Valve, ensuring that it sits flush with the Main Housing around its entire circumference. If the Valve appears damaged, deformed or will not sit flush with the Main Housing, remove, discard and replace.		
6. Push in the Exhaust Cover (5).		
7. Place the Main Spring (12) onto the poppet and insert into the Main Housing.		
8. Temporarily insert the Orifice Seat Screw (15) into the Main Housing and turn until finger tight, exposing the Poppet thread.		

9. Hold. the Main Housing vertically. Place the POM Washer (8), POM Spacer (10) and Nylon Nut (11) onto the poppet thread. Tighten until finger tight.		
10. Invert the Main Housing to move the spacer against the nut. Carefully place the Lever Arm (9) into the shaped recess inside the Main Housing, ensuring that it is trapped between the washer and spacer.		
11. Remove the Orifice Seat Screw from the Main Housing. Ensure the lever is secure. Do not test at this point.		
12. Use 1/4in wrench to restrain the Nylon Nut. Use the poppet tool to turn the Poppet clockwise, tightening down the Nylon Nut until the top of the Poppet spindle is flush with the upper face of the Nut.		

13. Insert the Diaphragm (6). Ensure the Diaphragm is properly oriented and that the seal does not stretch or wrinkle around its circumference.		
14. Put the cover back onto the 2nd regulator		
15. Fasten 4 screws at the back of the housing, using Phillips screwdriver		
16. Screw in the lubricated orifice seat screw onto the 2nd stage		

17. Tighten the Orifice Seat Screw with a 19mm socket to 40 lns-in of torque.		
18. Place the lubricated O-Ring onto the orifice		
19. Insert the orifice into the Seat Screw		
20. Screw in the Seat Screw		

21. Attach the mouthpiece to the 2nd stage		
22. Use zip tie to secure the mouthpiece.		

Second Stage Regulator Adjustment

Pressurize the valve at 145psi

If the demand valve leak initially, one of the following conditions exist and must be re-adjusted before continuing: • There is no slack in the lever (lever loosing) • The IP is too high • The spring is too weak • Poor seating result between the Orifice and LP seat.	
If the demand valve dose not leak: • Back the orifice outward until the valve leaks air, • then turn the orifice inward until the leak stops, Note: the orifice may need to be readjusted after the LP seat has taken an initial set during the break in period. Depress lever several times to be certain that the valve will seal airtight when the lever is released	

Pressurize 2nd stage

Watch for lever drop when air pressure is applied Recheck IP for correct pressure range and drift	

Checks

First Stage Functional Checks

WARNING

Compressed air and pressurised components can present a hazard. Ensure the Valve Knob is opened slowly. Use eye and ear personal protective equipment when performing any tests involving compressed air.

1. Cycle the Valve Knob several times to ensure the proper function of the indicator ring. Leave the valve in the closed position when finished.	
2. Remove the 2nd Stage Regulator if fitted.	
3. Secure the 2nd stage regulator end of the LP hose in the bench clamp.	
4. Slowly fill the cylinder to its operating pressure. Caution: note correct cylinder pressure (PEEBD1206 – 3,000psi) (PEEBD9393 – 4,500psi)	
5. During the fill process, check for any air leaking from the open end of the hose. If a leak is detected, immediately stop the filling process and refer to **Error! Not a valid result for table.** to determine its cause. If no leak is detected, complete filling the cylinder and remove the fill adapter from the fill port.	
During steps 7-9 below, If the pressure at the test gauge exceeds 150 PSI (10 BAR), creeps or flutters quickly open the test gauge bleed valve and close the N1 Regulator Valve as this indicates a HP leak. Refer to **Error! Not a valid result for table.** to determine its possible cause.	
6. Check that the test gauge is clean and free from debris, contamination and moisture. Screw the test gauge onto the hose until tight. Open the bleed valve on the test gauge and slowly open the Valve Knob. While watching the test gauge, slowly close the Valve Knob. *During this procedure, a stable pressure should be indicated on the test gauge while air if flowing.* *Ensure that the pressure gauge does not 'flutter' when air is flowing and remains stable when the bleed valve is shut.*	
7. If pressure remained stable, re-open the Valve on the N1 Regulator and cycle the bleed valve on the test gauge 5 times.	
8. After cycling the bleed valve, ensure that the bleed valve is shut and the N1 Regulator Valve Knob is open. Closely monitor the test gauge for 3 minutes. *Ensure that pressure indicated at the test gauge remains stable.*	
9. Install the second stage regulator.	

FINAL TESTING

WARNING

Compressed air can present a hazard if mishandled. Ensure the Valve Knob is opened slowly. Use eye and ear personal protective equipment when performing any tests involving compressed air.

WARNING

It is critical to ensure that no leakage is present and the PPEEBD has met all requirements in the Final Testing section of this manual.

DO NOT release a PPEEBD which exhibits any signs of leakage or unsatisfactory performance until the problem has been thoroughly diagnosed and repairs have been made as needed, including the possible replacement of a damaged component or subassembly.

Subjective Test

1. Charge the PEEBD to operating pressure	
2. Slowly open the N1 Regulator Valve to pressurize the system. Check the dial indicator gauge reads charged pressure.	
3. Press the N2 Regulator purge button two times for about five seconds each, with a five second pause between each purge. *Ensure no leaks can be heard coming from the N2 Regulator. If a leak is detected, refer to TROUBLESHOOTING GUIDE SECOND STAGE to determine its possible cause*	.
4. Perform a subjective breathing test to ensure the second stage is operating properly using the following procedure: • Fully depress the front cover (46) to ensure an adequate volume of air passes through the second stage to clear out any water • Inhale slowly but deeply from the second stage. A properly serviced and adjusted regulator should deliver air upon deep inhalation without excessive inhalation effort, free-flow or fluttering of the second stage diaphragm (47). When exhaling, there should be no fluttering or sticking of the exhalation valve (63). If any of these problems occur, refer to Table 1 & 2: Troubleshooting Guides section of this manual to determine its possible cause.	

Pressure Drop Test

1. Ensure the system is pressurized to operating pressure and the N1 Regulator Valve is open.	
2. Check the Manometer indicates operating Pressure.	
3. Place the PPEEBD in a stable temperature environment for a minimum of twelve hours. *After the time has elapsed, check Manometer continues to indicate operating pressure.*	
If the dial indicator gauge indicates a drop in pressure after 12 hours, refer to TROUBLESHOOTING GUIDES section of this manual to determine possible cause.	
4. Refill the cylinder to its full capacity as marked.	
5. The PEEBD may be released to service.	

Warranty Period

All Poseidon PEEBD systems offer a 36-month warranty period from the time of purchase

Warranty is conditional upon all aspects of conditions contained within this manual being complied with

Warranties may be rejected if any condition contained within this and the Poseidon Technical Manual (PMPEEBD0002b) are not complied with, or what is considered by Poseidon to be abusive use

TROUBLESHOOTING GUIDE – STAGE 1 REGULATOR

After completing any troubleshooting activity full system testing is required. All previous tests are void.

SYMPTOM		TREATMENT	
System will not remain depressurized after Valve Knob is closed and second stage is purged.	The On/Off indicator assembly is preventing the Valve from fully closing due to incorrect Valve assembly.	Complete Stage 1 Regulator Valve disassembly and Reassembly procedures.	
	The Stage 1 Valve is damaged, dirty or worn, or a foreign object is preventing the valve from fully closing.	Complete Stage 1 Regulator Valve disassembly. Thoroughly inspect the Valve Piston and interior of the N1 Regulator. Replace parts as necessary and reassemble.	
High pressure indicated on test gauge or Unstable Pressure.	Stage 1 Valve is dirty, worn or damaged.	Complete Stage 1 Regulator Valve disassembly. Thoroughly inspect the Valve components and interior of the N1 Regulator. Replace parts as necessary and reassemble.	
	Stage 1 Piston is dirty, worn or damaged.	Complete Stage 1 Cap and Piston disassembly. Thoroughly inspect the components and interior of the Cap, Regulator Body and Piston Assembly. Replace parts as necessary and reassemble	
	The Polycarbonate Washer is worn or damaged.	Complete Stage 1 Cap and Piston disassembly. Replace the Polycarbonate washer and reassemble	
	An O-Ring on the Piston is damaged or dirty.	Complete Stage 1 Cap and Piston disassembly. Replace the O-Rings and reassemble	

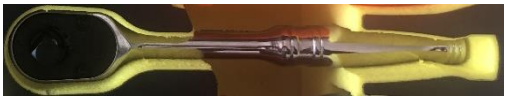
	The Balance chamber in the Stage 1 Regulator is worn or damaged.	Remove all Stage 1 Regulator Modules. Replace Stage 1 Regulator body. Install all Stage 1 Regulator Modules.	
External Air Leak with the Valve Off.	The Burst Disk is incorrectly installed	Complete Burst Disk removal. Inspect the interior of the Stage 1 Regulator and the copper cap on the Burst disk for damage or contamination. After inspection and cleaning, reinstall or replace the Burst Disk.	
	The Valve is incorrectly installed and the valve seal is leaking.	Complete Stage 1 Regulator Valve disassembly. Thoroughly inspect the Valve components and interior of the N1 Regulator. Replace parts as necessary and reassemble.	
	The Cylinder is incorrectly installed or the O-Ring is damaged.	Discharge Cylinder. Remove Cylinder. Check O-Ring condition. Clean threads. Reinstall cylinder, torque correctly and retest.	
External Air Leak with the Valve On.	Swivel Module or hose is incorrectly installed.	If leak is coming from the junction between the Swivel Module and Regulator or Hose, complete Stage 1 Regulator Swivel Module disassembly and reassembly.	
	Swivel Module internal leak.	If leak cannot be cured by disassembly and reassembly, replace swivel module.	
	Valve seal leaking	Complete Stage 1 Regulator Valve disassembly.	

		Check condition of the Valve Cap seal. Disassemble and replace if required. Complete Regulator Valve Reassembly.	
Restricted Air Flow or High Inhalation Resistance	Valve not completely open.	Open Valve Fully.	
	Valve incorrectly installed.	If resistance remains, complete Stage 1 Regulator Valve disassembly and reassembly.	
Unfamiliar taste in inhaled air. Feeling of nausea or light-headedness.	Air contaminated.	Seek medical assistance. Administer 100% oxygen Check air supply used for filling. If air supply is uncontaminated remove the PPEEBD from service and return to Poseidon for overhaul.	

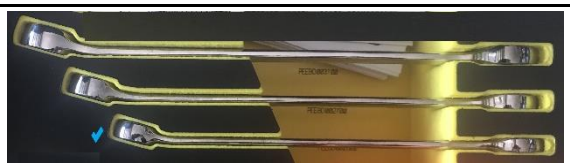
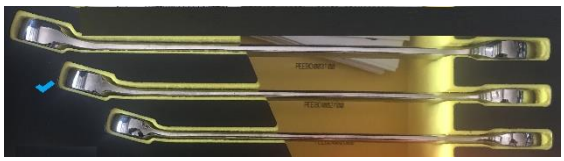
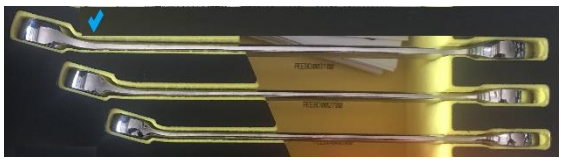
TROUBLESHOOTING GUIDE – STAGE 2 REGULATOR

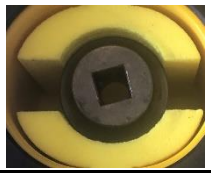
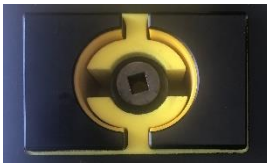
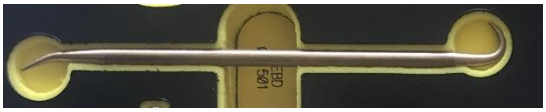
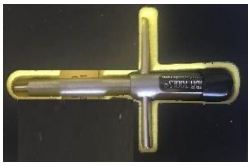
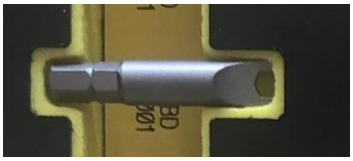
SYMPTOM	CAUSE	ACTION REQUIRED	
Leaking or free-flow from the second stage	1. High first stage intermediate pressure. (Should be 140 (±5) PSI)	1. Refer to Table 1: Troubleshooting Guide.	
	2. The LP seat (13X) is damaged or worn.	2. Replace LP seat (XX).	
	3. The Orifice (15) or Nylon Nut (11) is incorrectly adjusted and the Lever (9) is set too low.	3. Repeat Stage 2 Regulator disassembly/reassembly procedures.	
	4. The Orifice O-Ring is damaged.	4. Replace Orifice O-Ring.	
	5. The poppet spring (12) is damaged.	5. Replace the poppet spring (12).	
Low purge or excessive work breathing (full cylinder pressure)	1. Low intermediate pressure, should be 140 (±5) PSI.	1. Refer to Table 1: Troubleshooting Guide.	
	2. Popper / Orifice incorrectly adjusted, Lever Arm (9) set too low.	2. Repeat Stage 2 Regulator disassembly/reassembly procedures. Reset Orifice (XX) and perform Final Tuning and Testing procedures.	
	3. Hose contaminated or blocked.	3. Replace the hose.	
External Air Leak	1. The hose is loose or damaged.	1. Re-check and tighten hose or replace the hose.	
	2. The Orifice O-Ring (16) is damaged.	2. Disassemble and replace O-Ring (16).	
	3. The Main Housing (1 or 7) is damaged.	3. Disassemble and replace the Main Housing (1 and/or 7).	
Water entering second stage	1. The mouthpiece (3) is damaged.	1. Replace mouthpiece (3).	
	2. The diaphragm (6) is damaged or incorrectly seated.	2. Replace the diaphragm (6).	
	3. The exhaust valve (4) is damaged or incorrectly seated.	3. Replace the exhaust valve (4).	
	4. The Main Housing (1 and/or 7) is damaged	4. Replace main housing (1 and/or 7).	

APPROVED TOOLS AND SERVICE KITS

PART #	ID	DESCRIPTION	APPLICATION	
PEEBD003600	Tool Kit	 	EBS Tool Kit	
PEEBD06000	Lubricant		Parts lubrication – Tribo Lube 71	
PEEBD002300	Torque Wrench		Torque Wrench 3/8” Drive 3/8" DRIVE - 2-34Nm	
PEEBD001501	O-Ring Tool Kit		Removal / Installation of O-Rings	
PEEBD-002400	SOCKET TOOL – 10mm - 3/8" DRIVE		Burst Disk removal/replacement	
PEEBD001900	SOCKET TOOL – 19mm - 3/8" DRIVE		Control Valve removal/replacement	
PEEBD002800	SOCKET TOOL – 22mm - 3/8" DRIVE		Gauge removal/replacement	
PEEBD1800	WRENCH - SOCKET BI DIRECTIONAL - 3/8" RATCHET		Rachet for socket attachments	

APPROVED TOOLS AND SERVICE KITS

PART #	ID	DESCRIPTION	APPLICATION	
PEEBD002900	PLIERS - DIAGONAL - SMALL (SIDE CUTTERS)		Removal of Bite-On Clamp	
PEEBD003900	15mm crow's foot (3/8 drive)		Low-Pressure Hose connection to 1st Stage Regulator	
PEEBD002500	17mm crow's foot (3/8 drive)		Low-Pressure Hose connection to 2nd Stage Regulator	
PEEBD003200	19mm crow's foot (3/8 drive)		Control Valve removal/replacement alternative to PEEBD002800	
PEEBD003000	Screw Driver - PHILLIPS #1		2nd Stage Regulator Cap attachment screws	
PEEBD002000	Screw Driver - 10MM Modifier Screw Driver		Control Valve 2nd Stage Regulator	
PEEBD002600	Spanner – 15mm Open End Ring		Low-Pressure Hose connection to 1st Stage Regulator	
PEEBD002700	Spanner – 17mm Open End Ring		Low-Pressure Hose connection to 2nd Stage Regulator	
PEEBD003100	Spanner – 19mm Open End Ring		Control Valve removal/replacement Tool	

PART #	ID	DESCRIPTION	APPLICATION	
PEEBD001204	Special Dual Pin Tool		1st Stage Piston Cap removal tool	
PEEBD001304	Clamps		Cylinder Clamp tool for 1st Stage Regulator removal/attachment	
PEEBD001500	Picks - Brass	 	O-Ring Picks 1st & 2nd Stage Regulators Low Pressure Hose	
PEEBD001700	Allen Key		Probe	
PEEBD001600	H.P Seat Removal Tool		H.P Seat Removal Tool	
PEEBD002001	Flat Head Screw Drive Kit – Half Moon		Control Valve attachment nut	

TORQUE SPECIFICATIONS

DESCRIPTION / KEY ITEM #	TORQUE	US ft Pounds	
Cylinder to 1st Stage Regulator	31 to 34 Nm	22.86 – 25.07	
Burst Disc	10.7 Nm	7.89	
On/Off Valve attachment	11.7 Nm	8.63	
Pressure Gauge	2 Nm	1.475	
LP Hose to 1st Stage Regulator	2.8 Nm	2.06	
LP Hose to 2nd Stage Regulator	5 Nm	3.68	
Filling Adaptor to 1st Stage Regulator	4.5 Nm	3.31	
Swivel to 1st Stage	11.7 Nm	8.63	
1st Stage End Cap	17 Nm	12.53	
2nd Stage Cap fastening screws (4)	0.7Nm	6.1	

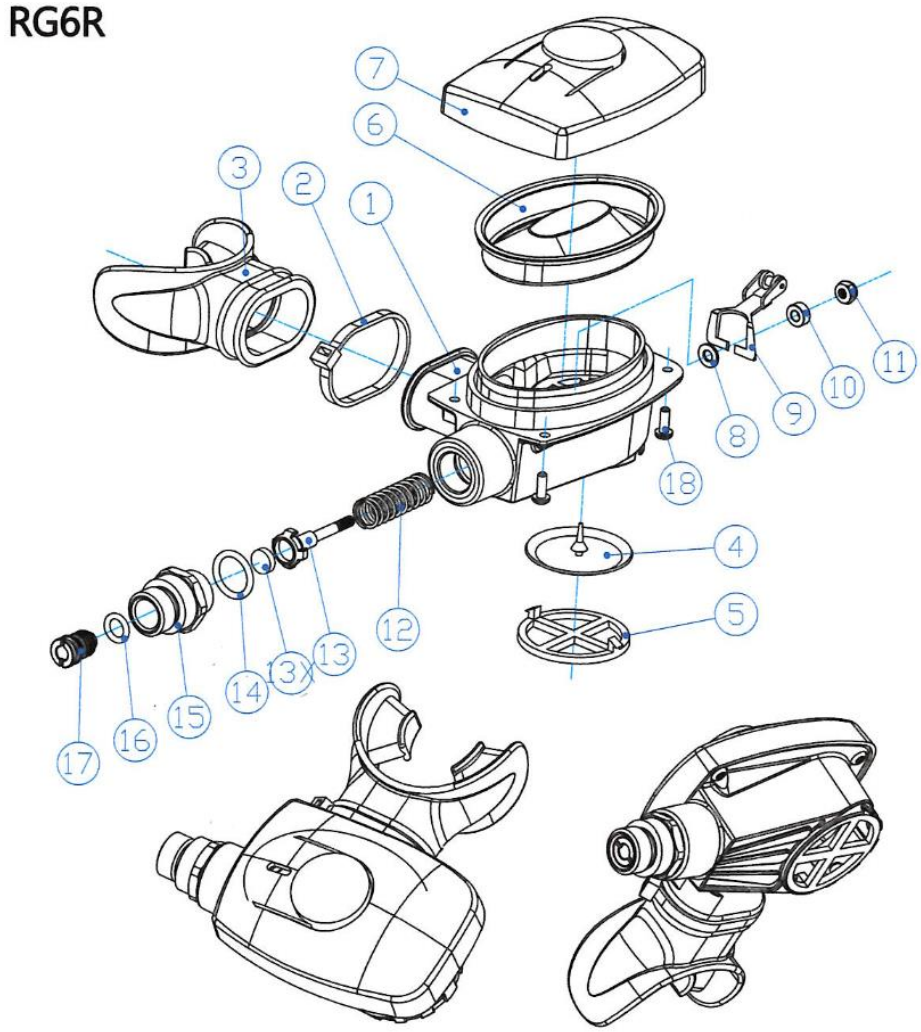
TEST BENCH SPECIFICATIONS

TEST	CONDITION	SPECIFICATION	
Leak Test	Inlet 3000 PSI (207 BAR)	No leaks allowed	
Stage 1 Regulator downstream	Inlet 3000 PSI (207 BAR)	145 ±5 PSI (10 ± 0.34 BAR)	
Pressure Creep	Inlet 3000 PSI (207 BAR)	5 psi (0.34 BAR) max between 5 to 15 seconds after cycling regulator (purge)	
Opening Effort	Inlet 3000 PSI (207 BAR)	+2.5 to + 3.5 inch H_20 (6.2 -8.7 mbar)	
Flow Effort	MP 145 ±5 PSI (10± 0.34 BAR)	+5 inches H_20 (12.5 mbar) (maximum) at 8 SCFM (227 LPM)	
Purge Flow	MP 145 ±5 PSI (10± 0.34 BAR)	5 SCFM (142 LPM) flow rate (minimum)	

TABLE 6: APPROVED CLEANERS AND LUBRICANTS

LUBRICANT/CLEANER	APPLICATION	SOURCE	
Trilube 71	All O-Rings and threads	Any reputable supplier.	
Isopropyl Alcohol 70%	Solvent / Disinfectant	Any reputable supplier.	
Liquid dish washing detergent **(diluted with warm water)**	Degreaser for brass and stainless steel parts; general cleaning solution for plastic and rubber	Simple Green Crystal	
SteriGENE	Sterilizing Fluid	Any reputable supplier.	

EBS SECOND STAGE EXPLODED VIEW



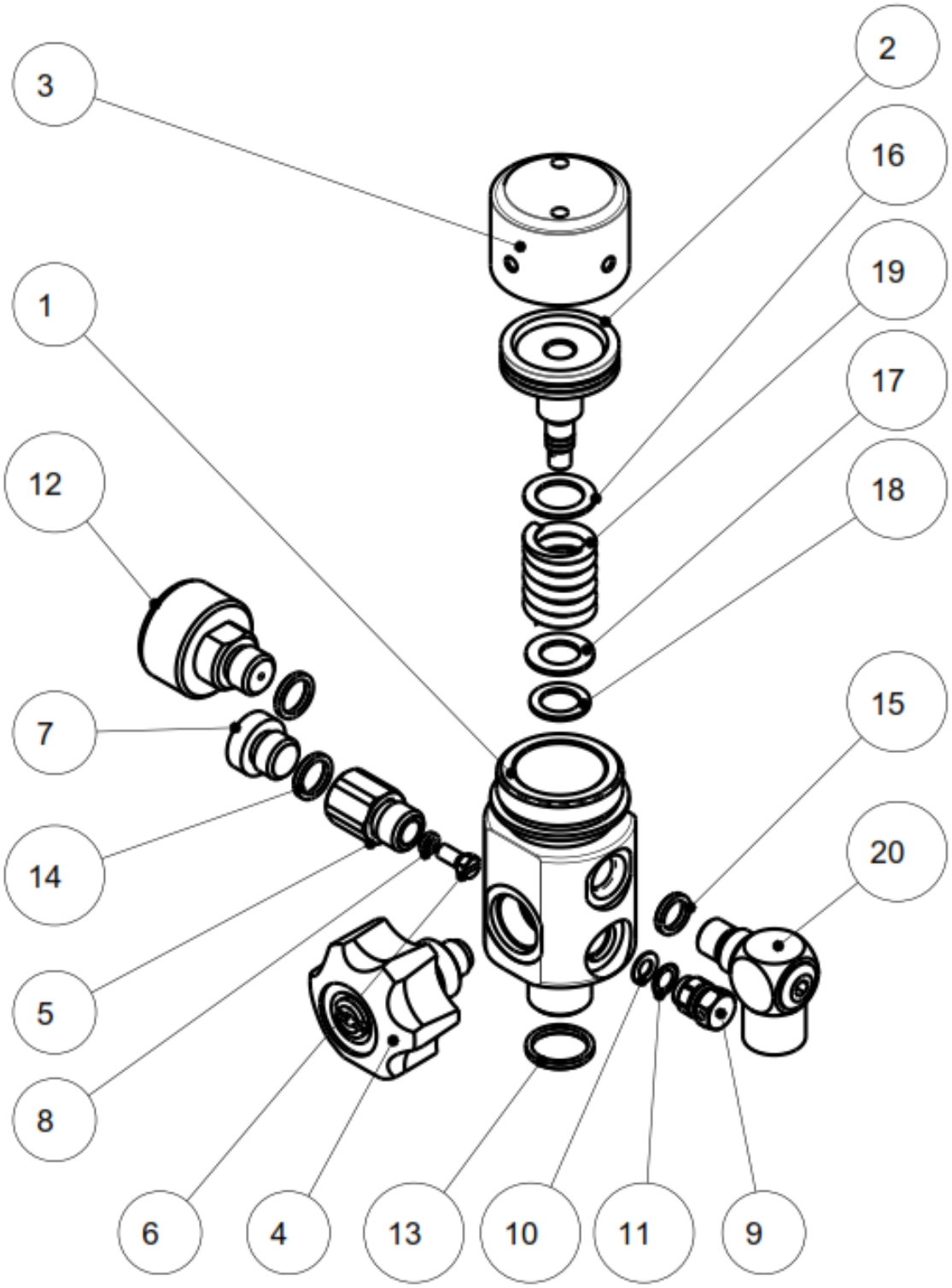
Key #	Part #	Description
1	1A-02-006-01	Main Housing-R
2	1A-02-010-12-BK	Nylon Tie
3	1A-SN-022-01-33	Mouthpiece 4876
4	1A-02-001-03	Exhaust Valve 4576
5	1A-02-006-02-XX	Exhaust Cover
6	1B-02-006-01	Diaphragm
7	1A-02-006-03-XX	Front Cover
8	1C-02-010-04	POM Washer
9	1S-02-006-01	Lever Arm
10	1C-02-010-05	POM Spacer
11	1C-02-010-06	Nylon Nut 5-40
12	1D-02-001-52	Main Spring

Key #	Part #	Description
13	1C-02-01002	Poppet
13X	1A-02-010-07-BL-R	LP Seat
14	1O-AS568-906-01	906 O-Ring N70
15	1C-02-003-02	Orifice Seat Screw
16	1O-AS568-010-01	010 O-Ring N70
17	1A-02-010-06	Orifice
18	1C-02-006-01	Screw

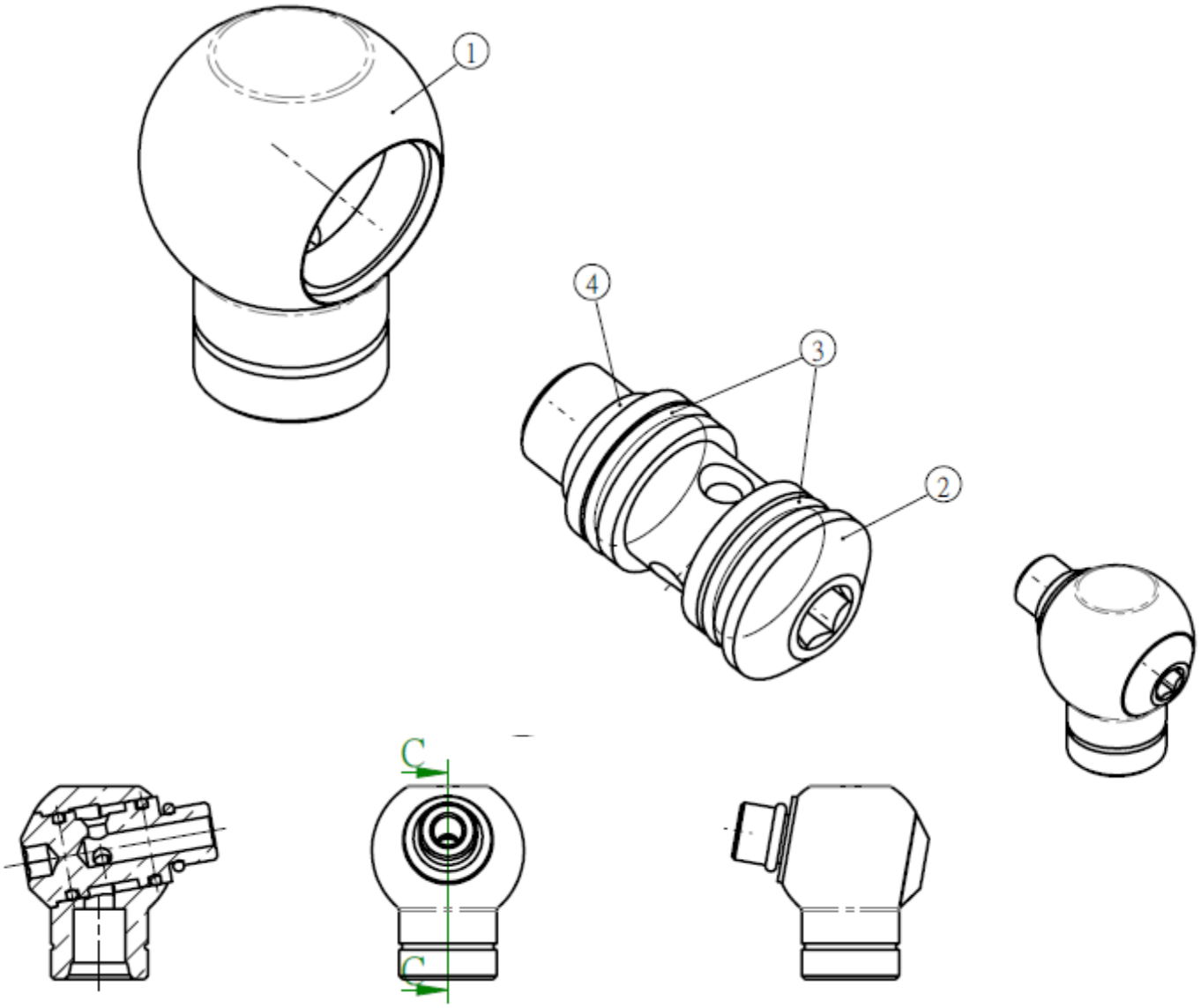
Part numbers in ***BOLD ITALIC*** indicate standard overhaul replacement part.

EBS FIRST STAGE EXPLODED VIEW

EBS FIRST STAGE EXPLODED VIEW



EBS FIRST STAGE EXPLODED VIEW

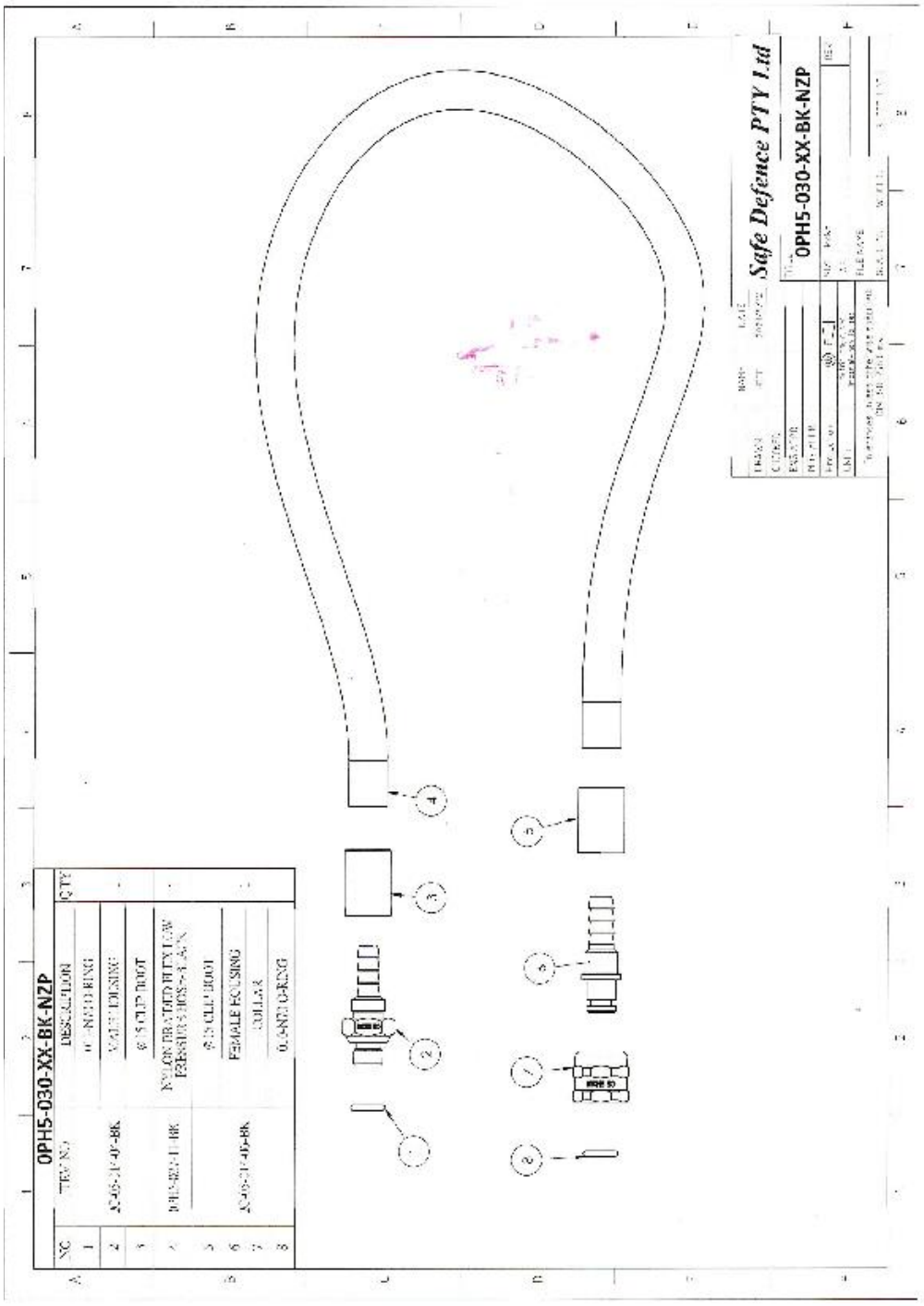


Key #	Part No.	Description
1	PEEBD086-001-01-03	SWIVEL 3/8 – 24 - Swivel – Body (supplied as complete assembly)
2	Supplied as complete unit	Swivel flow & attachment aperture
3	PEEBD9587A	O Ring – Swivel & attachment aperture
4	PEEBD9587	O Ring – Body Seal

EBS FIRST STAGE PARTS LIST

Key #	Part #	Description
1	086-001-00-00-001	Regulator Body
2	086-001-00-01	Piston Assy
3	086-001-00-00-002	Cap
4	086-001-00-02	Valve Assy
5	086-001-00-00-003	Filler Adaptor
6	086-001-00-00-004	Filler Piston
7	086-001-00-00-005	Filler Cap
8	O-Ring_03-00X1-60_D3-14	O-Ring 3X1.6
9	086-001-00-00-006	Burst Disc Bolt
10	086-001-00-00-007	Washer 8.5X4.5X0.5
11	086-001-00-00-008	Burst Disc
12	086-001-00-00-009	Manometer 350 BAR
13	O-Ring_14-00X1-78_D14-2	O-Ring 14X1.78
14	O-Ring_09-25X1-78_D9-35	O-Ring 9.25X1.78
15	O-Ring_07-50X1-80_D7-96	O-Ring 7.5X1.8
16	086-001-00-00-011	Washer 18X12X1
17	086-001-00-00-012	Washer 17X10X1
18	086-001-00-00-013	Washer 15X10X1
19	086-001-00-00-014	Compression Spring
20	086-001-00-03	Swivel 3/8-24

Low-Pressure Hose:



Key #	Part No.	Description
1	PEEBD95911	O-Ring Large
8	PEEBD95910	O-Ring Small
	Part number variable in regard to length and colour	Hose available in any vary length Colours of Overt Yellow – Covert Black

Rebuild Kits:

Poseidon
Leaders in Aviation and Maritime Life Support Products

Spare Air Refurbishment Kit

Build of Materials

Item No.	Description	Drawing Reference		Drawing Part No.	Identifier	Quantity	OEM Part No.	TYPE	Poseidon Part No.	Compartment No.	
1	**Rebuild Kit**	**086-001-01-10**							**PEEBD9210 & PEEBD9310**		
	Control Valve	Main Drawing	086-001-01-10	4						1	
		Valve Assembly	086-001-01-02	7	Small	1	BS010	N70	PEEBD9564		
		Bonet Assembly	086-001-01-06	4	Large	1	BS015	N90	PEEBD9563		
2	Piston	Main Drawing	086-001-01-10	2	Large	1	25 x 2.5	N70	PEEBD9551	2	
		Piston	086-001-00-01-001	2	Small	1	BS007	S70	PEEBD9572	3	
		Piston	086-001-01-01-002	4	Small	1	2A-01-007-02	PCTFE	PEEBD9902	3	
3	Filler Adaptor	Main Drawing	086-001-01-10	16	Large	1	BS012	N70	PEEBD9555	4	
				12	Large	1	BS012	N70	PEEBD9555		
				6	Small	1	BS004	NBR70	PEEBD9596		
4	Gauge	Main Drawing	086-001-01-10	13	Large	1	BS012	N70	PEEBD9555	5	
5	Swivel	Main Drawing	086-001-01-10	4	Small (Brown)	1	BS011 (V75)	V75	PEEBD9587	6	

Item No.	Description	Drawing Reference		Drawing Part No.	Identifier	Quantity	OEM Part No.	TYPE	Poseidon Part No.	Compartment No.	
		Swivel	1Z-MJ-AA46-00	3	Large (Brown)	2	BS013 (V75)	V75	PEEBD9587A		
6	Hose	Main Drawing	OPH5-030-XX-BK-NZP	8	Small	1	BS010 Grey	NBR70	PEEBD95910	7	
				1	Large	1	BS011 v75 Brown	V75	PEEBD95911		
14	O Ring Cylinder/1st Stage connection	Main Drawing	086-001-01-10	7		1			PEEBD95818	12	
7	**Rebuild Kit**	**RG2-006-01**							**PEEBD9510 Black**		
	2nd Stage Regulator	Main Drawing	RG-6-R	16	Small	1	BS010	NBR70	PEEBD94913	8	
				14	Large	1	12x2 (N70)	N70	PEEBD94912		
				11	Nylock Nut	1	NTNC403.2		PEEBD94022		
8	Cable Tie	RG 6-R	RG2-006-01	2		1	CT204BKCD		PEEBD940414	SEPARATE	
9	O Ring	RG 6-R	RG2-006-01	16		1	BS010	N90	PEEBD95910	9	
10	O Ring	RG 6-R	RG2-006-01	15		1	BS012	N70	PEEBD9555		
11	Orifice	RG 6-R	RG2-006-01	17		1	A-02-010-06		PEEBD94020	10	
12	O Ring	RG 6-R	RG2-006-01	13		1	BS010	N90	PEEBD9564		
13	L.P Seat	RG 6-R	RG2-006-01	13x		1	A-01-001-07		PEEBD94015		
14	POM Washer	RG 6-R	RG2-006-01	8		1	C-02-010-04		PEEBD94016	11	
15	POM Spacer			10		1	C-02-010-05		PEEBD94017		
16	Box for storage		PEEBD9700	N/A	BOX	1	N/A		PEEBD9700	BOX	
17	Exhaust Valve	RG 6-R	RG2-006-01	4	Valve	1	A-02-001-03		PEEBD94021	SEPARATE	
18	Front Cover Black	RG 6-R	RG2-006-01	7	Front Cover Black	1	1A-02-006-03-XX		PEEBD1410	SEPARATE	

Item No.	Description	Drawing Reference		Drawing Part No.	Identifier	Quantity	OEM Part No.	TYPE	Poseidon Part No.	Compartment No.	
19	Diaphragm	RG6-R	ORG206R	6	Daiphragm	1	1B-02-006-01		PEEBD44016	SEPARATE	

MAINTENANCE NOTES