

CLEANLOAD NEXUS

COUPLER FOR CLOSED TRANSFER WITH EASYCONNECT CAPS

P/N: PNR-CN100

SERVICE & MAINTENANCE MANUAL



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1. SAFETY INFORMATION

READ THESE INSTRUCTIONS AND THEN KEEP THEM FOR REFERENCE: This manual contains important instructions that should be followed during routine maintenance of Cleanload Nexus.

SAFETY SYMBOLS

! This is the safety alert symbol. When you see this symbol do not ignore it! Look for one of the following signal words and be alert to the potential for personal injury:

▲ DANGER Warns about hazards that will cause serious personal injury, death or major property damage.

▲ WARNING Warns about hazards that could cause serious personal injury, death or major property damage.

▲ CAUTION Warns about hazards that could cause serious personal injury or property damage.

The word **NOTE** indicates special instructions that are important but not related specifically to hazards.

GENERAL SAFETY

Carefully read and follow all safety instructions in this manual and on the Cleanload Nexus itself. Failure to comply with the safety/operating instructions could result in personal injury and/or property damage and could lead to the loss of any claims for damages.

Ensure that you understand where Cleanload Nexus should be used, its limitations, and potential hazards. Keep safety labels fixed to Cleanload Nexus and in good condition. Replace any missing or damaged labels.

▲ WARNING The mounting and connections of Cleanload Nexus must be done by professionals who are trained in repair and maintenance of the sprayer.

- **▲ WARNING** For mounting on the sprayer only use hoses and fittings that meet the recommended specifications of the sprayer manufacturer.
- Only use pipe, hose, and hose fittings that have not been used before and meet the stated maximum pressure ratings of the Cleanload Nexus. Check all hoses for weakness or signs of wear before each use.
- **▲ WARNING** Regulations and recommendations for personal protective equipment (PPE) must be complied with.

	When operating Cleanload Nexus use the Personal Protective Equipment (PPE) that is recommended on the agrochemical label.
	If no specific PPE is required by the agrochemical label wear gloves, protective glasses and a chemical resistant apron or overall when operating, maintaining or servicing Cleanload Nexus.

Before using Cleanload Nexus:

- Ensure that the Cleanload Nexus is mounted securely on the sprayer or other mounting location.
- Always comply with regulations when choosing a suitable site for filling the sprayer with chemical.
- **▲ DANGER** Ensure that all hoses are securely connected, that the sprayer's suction is operating and that the Umbrella Valves are in place
- Only use containers that are fitted with an easyconnect cap. Do not remove and refit the cap to any other container except a container of water or cleaning agent that is used for cleaning the Cleanload Nexus as directed in the Installation and Operating Manual.
- Do not operate Cleanload Nexus at pressures outside of the range given in this manual.
- Only operate Cleanload Nexus at temperatures between 0° and 60°C (32° to 140°F).
- Do not attempt to transport or move Cleanload Nexus with a chemical container connected.
- Defective components and assemblies must be replaced immediately. Use original spare parts for replacement only.

After using Cleanload Nexus:

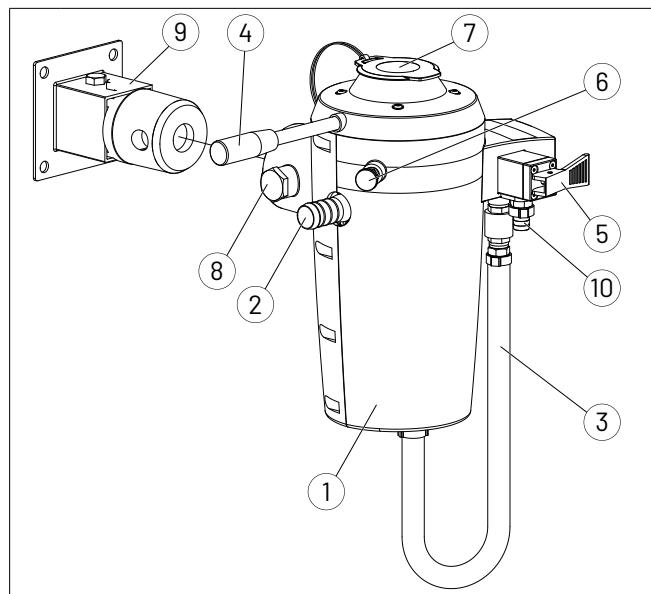
- **▲ CAUTION** Always clean the Cleanload Nexus according to the instructions.
- Comply with regulations on cleaning sprayers when cleaning the Cleanload Nexus.
- Do not leave concentrated agrochemicals in the Cleanload Nexus for extended periods after carrying out a transfer.
- Store Cleanload Nexus under protected, frost-free conditions and inaccessible to children and animals at all times.
- For winter storage or if freezing conditions are anticipated, clean the Cleanload Nexus according to instructions then additionally pass a 50/50 mixture of water and antifreeze through.
- Fit the Top Cover to protect Cleanload Nexus when not in use.
- Check if there is leakage from any part of the Cleanload Nexus or connecting hoses or if the handle is very difficult to rotate and rectify before next use.
- Do not attempt to maintain or repair Cleanload Nexus without the required training, tools and parts as any substitute could result in damage and failure of the Coupler.

▲ CAUTION Hazardous substances alert

1. Always drain and clean Cleanload Nexus before storage, servicing or disassembling for any reason.
2. Always drain and clean Cleanload Nexus prior to returning to a service agent for maintenance or repair.
3. Before attempting to carry out any maintenance or repair, make sure that you are wearing appropriate PPE.

2. LAYOUT

NOTE: Cleanload Nexus is designed to be connected to the sprayer suction supply that is used for the induction bowl. It must also be connected to a source of clean rinse water.



1	Cleanload Nexus Body
2	Suction Hosetail Outlet
3	Internal Rinsing Water Hose
4	Operating Handle (not attached at delivery). Screw into position shown.
5	Rinsing Water Lever
6	Lock Release Knob
7	Top Cover
8	Mounting fitting with bolt
9	Mounting Point (To be securely fitted to sprayer, wall, stand or bench)
10	Rinse Water Supply Inlet

3. TOOL REQUIRED

The following tools are required for maintaining and servicing the Cleanload Nexus.

Do not attempt to maintain or service Cleanload Nexus without the required tools as any substitute could result in damage or poor performance.

- Hammer or Deadblow hammer
- Torque wrench (0.6 to 4nm)
- 5mm Allen Key
- Punch (< 4mm)
- O-ring pick tool
- A T10 Torx screwdriver
- A T25 Torx screwdriver
- Molykote Grease '111' for keyways and '55' for plastics and elastomers (or the equivalents)
- Plumbers Wrench or adjustable Spanner up to 25mm
- Hose clamp crimping tool
- Do not use an electric screwdriver/drill when maintaining or servicing Cleanload Nexus, as it is likely to damage the Coupler.

4. CLEANLOAD NEXUS SERVICE INSTRUCTIONS

The service procedure described below is recommended to be carried out annually.

If you encounter a part that is not provided in the Service Kit that is broken or damaged beyond usage, please contact your local Cleanload Nexus Distributor to discuss the possible options.

To carry out this repair you will be required to purchase a Service Kit (P/N: PNRNEX-KITSER), which will include the following parts:

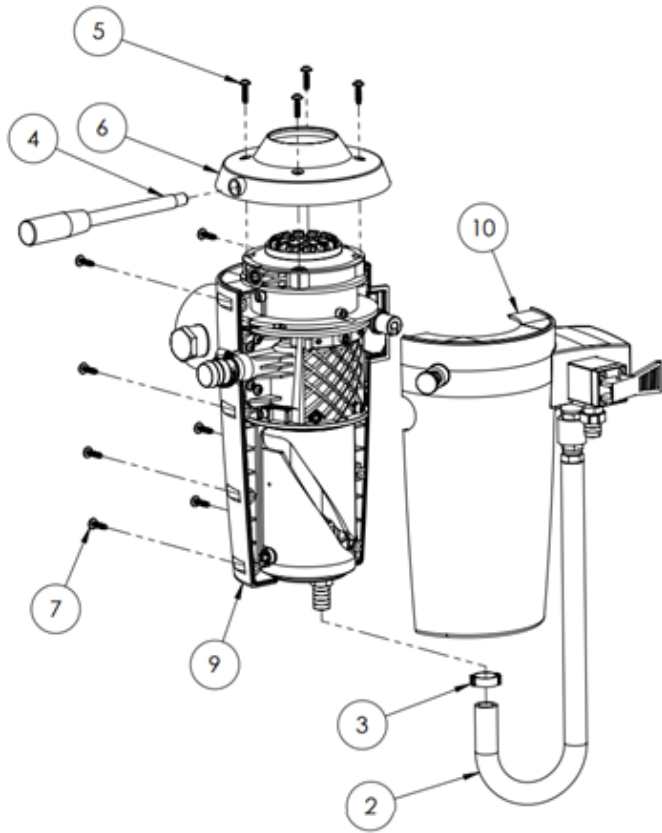
P/N	Description	Qty.
PNRNEX-KITUMB	Umbrella valve kit	2
1750-0001	Quad-ring 31.34 x 3.53 Viton	1
1721-0252	O-ring 47 x 3.0 Viton	1
1721-0253	O-ring 77 x 3.0 Viton	1
1721-0266	O-ring 44 x 2.0 Viton	1
1721-0267	O-ring 25.08 x 2.62	1
1721-0268	O-ring 10.78 x 2.62	1
1721-0269	O-ring 10.82 x 1.78	1
1721-0270	O-ring 7.65 x 1.78	4
2420-0059	Spring Compression	1
2910-0039	Double Ear Hose Clamp 22-25 mm	2
2420-0057	large Umbrella Valve	1

TORQUE REFERENCE CHART				
REF. No.	P/N	Qty.	N-m	In-Lbs
15	2220-0137	4	3.50	30.98
19	2220-0139	1	3.50	30.98
14, 35	2420-0051	6	3.50	30.98
5,7,8	2220-0094	16	0.95	8.41
39	2220-0141	4	0.95	8.41
46	2220-0142	1	0.95	8.41
45	2220-0143	2	0.95	8.41
40	2420-0048	3	0.95	8.41
23	2220-0138	2	0.95	8.41
64	2220-0140	4	0.30	2.65
Tolerance on Torque value: +/-10%				

IMPORTANT: Always follow the Cleaning procedure described in section 7.1 of the Installation and Operating Manual before servicing Cleanload Nexus. This ensures that the internal parts of the Cleanload Nexus and the Suction Hose are clean and free of chemical residues before disassembly.

▲WARNING When cleaning Cleanload Nexus, always wear the recommended personal protective equipment.

Be careful when disconnecting Cleanload Nexus and hoses from the sprayer. Residues might be left in the hoses and on connections.



Step 1:

Place the Cleanload Nexus on a workbench and observe for any sign of external damage.

Step 2:

Unscrew the Operating Handle (4, P/N: 2420-0047) and remove it.

Remove the 4 screws (5, P/N: 2220-0094) in the Top Cover (6) with the Torx T25 driver.

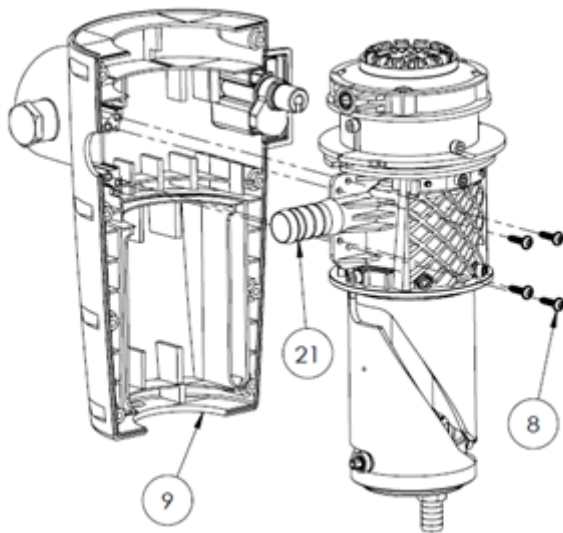
Lift off the Top Cover and set it aside.

Remove the Internal Rinse Hose (2, P/N: 2420-0043) at the base by removing the Double Ear Hose Clamp (3, P/N: 2210-0039).

Step 3:

Remove 8 screws (7, P/N: 2420-0094) on the Rear Casing (9, P/N: 2420-0019) with the Torx T25 Driver.

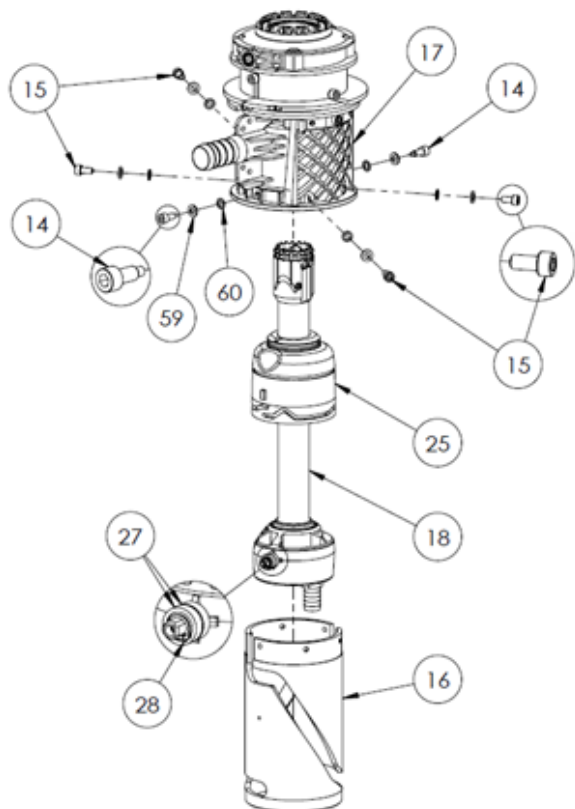
Lift off the Front Casing (10, P/N: 2420-0018) and put it aside.



Step 4:

Remove the 4 Torx screws (8, P/N: 2220-0094), that secure the Hosetail Outlet (21, P/N: 2420-0020) to the Rear Casing (9, P/N: 2420-0019) using the Torx T25 driver.

Set the Rear Casing aside.



Step 5:

Remove the 2 Dog Point Screws ((14), P/N: 2420-0051) from either side of the Ring Lifter ((17), P/N:2420-0037) using a 5mm allen key along with their Washers ((59)) and Lockwashers ((60)).

NOTE: These screws are specific to these positions as they run on the Gate Keyway ((25), P/N: 2420-0027), they **MUST BE PUT BACK IN THE SAME POSITION** during reassembly.

Step 6:

Remove the 4 screws ((15), P/N: 2220-0137) along with Washers ((59)) and Lockwashers ((60)). [Note that these are not the same screws that are used for the Gate Keyway]

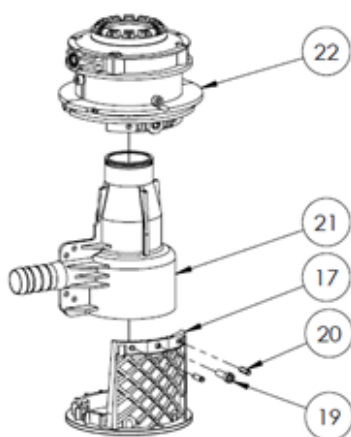
Twist the Aluminium Keyway ((16), P/N: 2420-0022) so that the bearings run along it until it can be removed from the bottom. Check that they run smoothly.

Inspect the Aluminium Keyway surface, it should be smooth and undamaged. However the presence of grease is normal.

With the Aluminium Keyway ((16)) removed, the Probe Assembly ((18), P/N: 2420-0004) can be pulled down with a little effort and removed bringing the Gate ((25)) along with it.

Ensure that 4 bearings ((27), P/N: 2420-0050) on either side of the base of the Probe are not damaged and are firmly positioned and retained by the C Clip ((28), P/N: 1810-0040).

Set these parts aside.

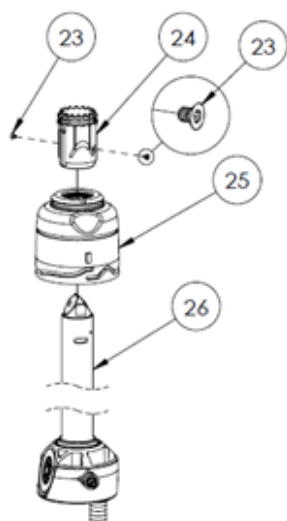


Step 7:

Remove the Screw ((19), P/N: 2220-0139) with the 5mm Allen Key and gently punch out the 2 pins ((20), P/N: 1600-0113) using a 4mm pin punch.

This separates the Ring Lifter ((17), P/N: 2420-0037) which can be put aside.

Separate the Hosetail Outlet ((21), P/N:2420-0020) from the Transfer Cylinder and Clamp Support Keyway ((22), P/N:2420-0005)



Step 8:

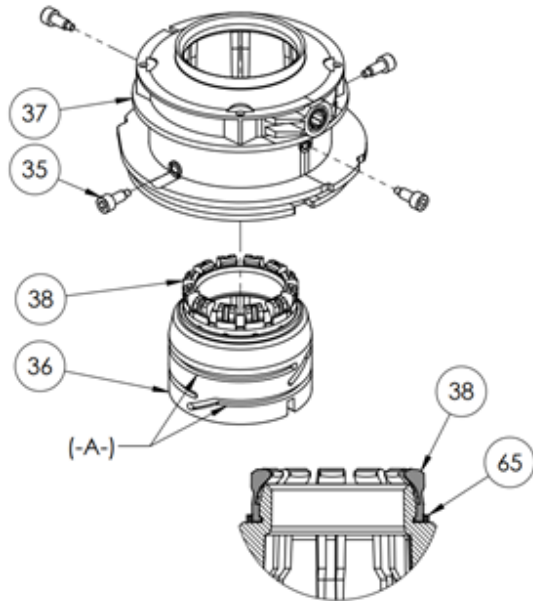
Remove the 2 screws ((23), P/N:2220-0138) that join the Probe Head ((24), P/N:2420-0014) to the Probe Tube ((26), P/N: 2420-0016) with the T10 Torx driver.

The Probe Head ((24)) can now be slide off the probe tube ((26)).

Step 9:

Pull the Probe Tube ((26)) out of the Gate ((25)). Inspect that there is no sign of damage or wear.

No further disassembly of the probe is needed, this can be set aside.



Step 10:

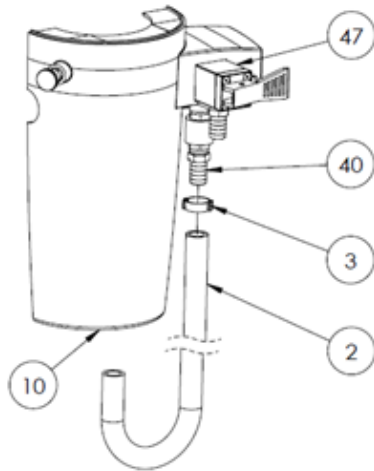
Remove the 4 Dog Point Screws ((35), P/N: 2420-0051) with the 5 mm allen key from the Transfer Cylinder ((37), P/N: 2420-0023) and push out the Cap Support Keyway ((36), P/N: 2420-0024) by applying thumb pressure on the claw.

Step 11:

Inspect the Cap Support Keyway ((36)) to ensure that all 4 keyways (-A-) are free of damage and debris and check the condition of the white Cap Claws ((38), P/N: 2420-0025). The presence of grease is normal.

Check that the metal ring ((65)) holding the claws ((38)) is touching the cap support keyway. Press it down if necessary.

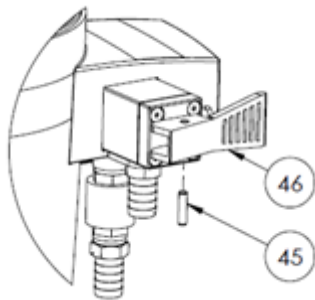
The following section (steps 12-26) explains how to service the Rinse Valve. Please note that if the Rinse Valve is used exclusively with clean water it is unlikely to require regular maintenance or service. However if it is contaminated with diluted chemical for any reason steps 12-26 should be followed as part on annual maintenance. The parts required for servicing the Rinse Valve are included in service kit P/N: PNRNEX-KITSER.



Step 12:

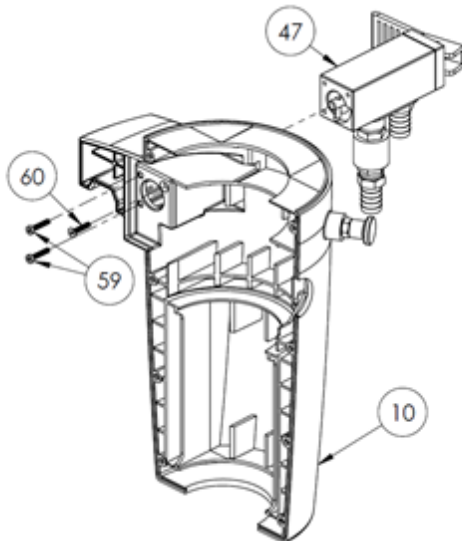
Prior to servicing the Rinse Valve. Take the front cover (Ref. 10) which has the rinse valve connected ((47), P/N: 2420-0009).

Remove the internal rinse water supply hose ((2)) from the hosetail ((40), P/N: 2420-0048) by removing the Double Ear Hose Clamp ((3), P/N: 2210-0039).



Step 13:

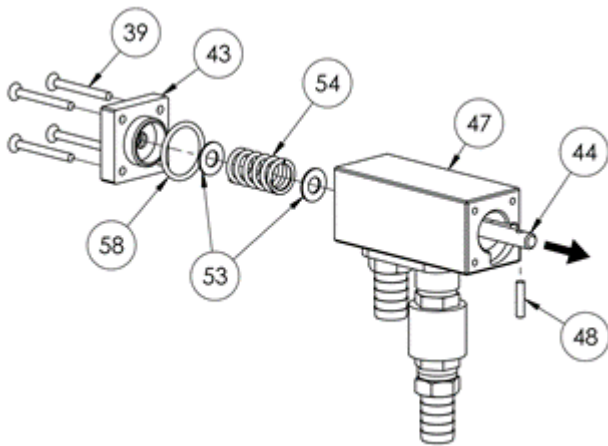
Remove the Pin ((45), P/N: 1600-0113) that secures the red Rinsing Water Lever ((46), P/N: 2420-0046) by gently punching it out using a 4mm pin punch.



Step 14:

Remove the 2 Screws (59, P/N: 2220-0143) and the Flat Head Screw (60, P/N: 2220-0142) that secure the Valve Assembly (47) to the Front Casing (10, P/N: 2420-0018). Keep these screws separate.

The Valve Assembly (47) should now easily slide out of the Front Casing (10).



Step 15:

Remove the 4 Screws (39, P/N: 2220-0141) in the Valve Front Plate (43, P/N: 2420-0032) and pull the Front Plate off revealing the O-ring (58, P/N: 1721-0267), the Spring (54, P/N: 2420-0059) and 2 Washers (53, P/N: 2270-0155).

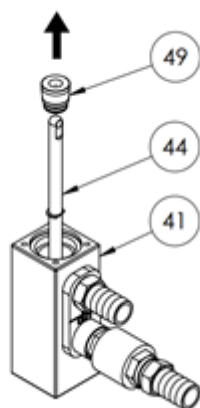
Discard the old Spring, a replacement is included in Service Kit P/N: PNRNEX-KITSER.

Step 16:

Push the Shaft (44, P/N: 2420-0033) from the back so it moves in the direction of the arrow.

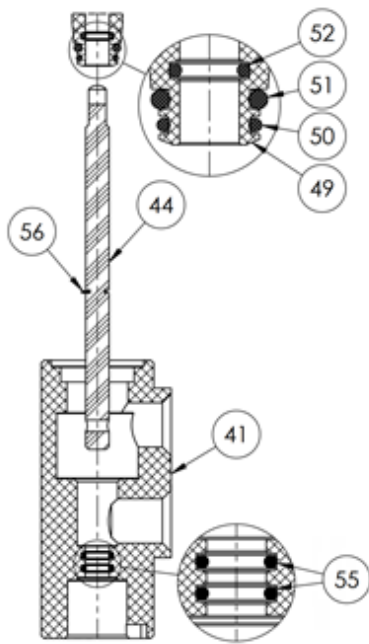
This will expose a Pin (48, P/N 1600-0013) at a 90 degree angle to the Shaft (44)

Push this Pin out with your fingers to avoid damage and set it aside.



Step 17:

The Valve Shaft (44) can now be removed along with the Plunger (49, P/N: 2420-0060) by sliding it out of the Valve Body (41, P/N: 2420-0038) in the direction of the arrow.



The Rinse Valve can now be reassembled using the replacement seals and spring that are included in the Service Kit P/N: PNR-NEX-KITSER.

▲ CAUTION When removing/replacing o-rings, use a plastic o-ring pick tool to ensure that the o-ring and groove are not damaged.

Step 18:

Observe the Valve sShaft ((44)) for signs of wear, this may appear as heavy black residue.

Remove and replace O-ring ((50), P/N:1721-0269) and O-ring ((51), P/N:1721-0268), Lubricate with Molycote '55' grease (or equivalent that is suitable for use with plastics and elastomers).

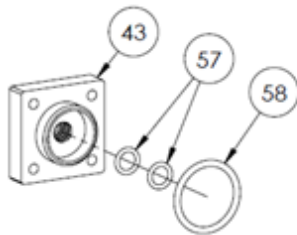
Observe the Plunger Body ((49)) and make sure it is free of cracking or deformation.

Replace the O-ring ((52), P/N:1721-0270) on the interior groove of the Plunger.

Step 19:

Using a small o-ring pick, lift the the 2 O-rings ((55), P/N:1721-0270) from their grooves.and replace them with new ones from the service kit.

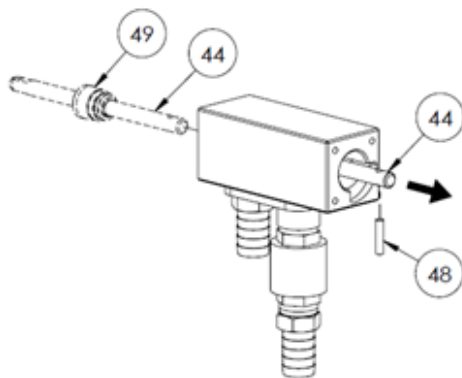
Lubricate generously with Molycote '55' grease or equivalent.



Step 20:

Remove the 2 O-rings ((57), P/N:1721-0270) and 1 O-ring ((58), P/N:1721-0267) from the Front Plate ((43)) and replace them.

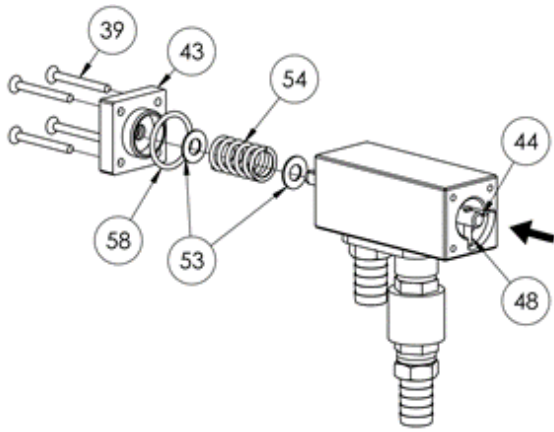
Lubricate generously with Molycote '55' grease or equivalent.



Step 21:

Lubricate the Shaft ((44)) with molycote '55' grease or equivalent.

Push on the Shaft ((44)) from the back so it moves in the direction of the arrow, Refit the Pin ((48)) into the hole of the Shaft ((44)).



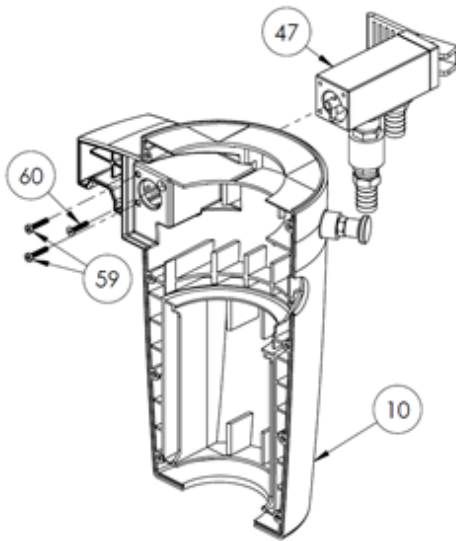
Step 22:

Push the Shaft (44) back in and align the Pin (48) in the slot as shown.

Insert the replacement Spring (54) and refit the 2 Washers (53) in place.

Refit the Front Plate (43) including the O-rings (shown in Step 20) and the 4 Screws (39). Apply torque evenly by tightening the Screws in a balanced way.

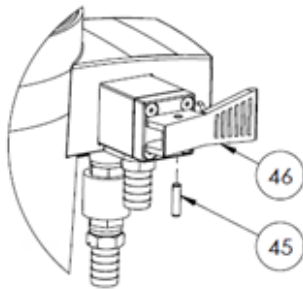
Ensure that the Shaft (44) is fully in position by pushing at the Pin (48) end.



Step 23:

Slide the Rinse Valve (47) back onto the Front Casing (10).

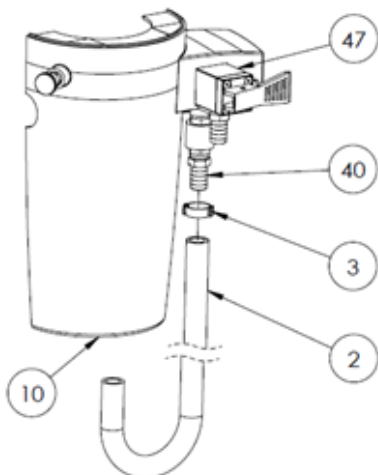
Refit the 2 screws (59) and 1 screw (60).



Step 24:

Refit the red Rinsing Handle (46) and gently push in the pin (45), do not use a hammer as it may bend the shaft.

Keep the red Rinsing Handle (46) in the orientation shown while inserting the Pin (45).



Step 25:

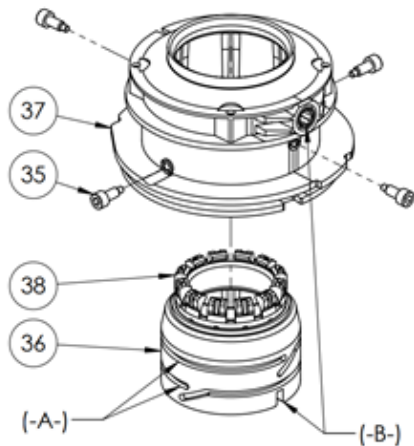
Reconnect the Internal Rinse Water Supply Hose (2) to the rear Hosetail (40) by installing one of the new Double Ear Hose Clamps (3, P/N: 2210-0039) supplied in the Service Kit.

Step 26:

Ensure that the Rinsing Handle motion is free and uninterrupted. Ensure that the Double Ear Hose Clamps are tight.

The remainder of the Cleanload Nexus should now be reassembled using the replacement seals that are included in the service kit.

▲ CAUTION When removing/replacing o-rings, use a plastic o-ring pick tool and ensure that the o-ring and groove are not damaged.



Step 27:

Apply a generous amount of MolyKote '111' grease or equivalent to the keyways (-A-) in the Cap Support Keyway (36, P/N:2420-0024) and then push it firmly back into Transfer Cylinder (37, P/N:2420-0023), noting the following;

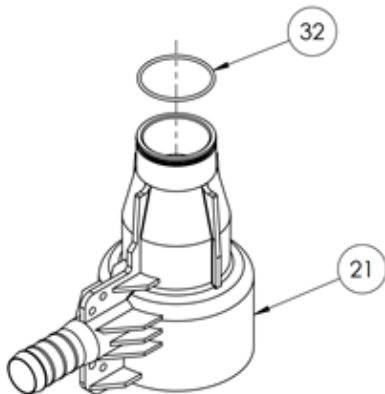
- It is critical to ensure the correct alignment (-B-) as shown or you may damage the Cap Support Keyway.
- Ensure that the white Cap Claws (38, P/N:2420-0025) slip past the lip at the top of the Transfer Cylinder (37).

Align the screw holes to the keyway path. Have a look through the threaded holes to ensure this alignment.

Initially fit only one of the Screws (35, P/N: 2420-0051) without a washer. Refer to Torque reference chart on page 5.

NOTE: DO NOT overtighten.

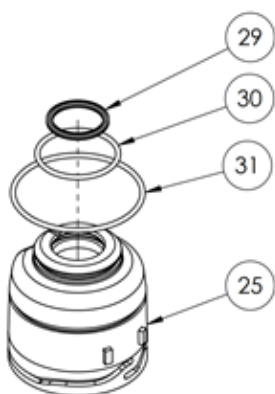
Ensure that the keyway rotates to engage the Cap Claws as intended and then fit the remaining 3 Screws (35) without washers.



Step 28:

Remove the O-ring from the top of the Hosetail Outlet (21, P/N: 2420-0020) & discard.

Fit the new o-ring (32, Size: 44 x 2.0mm, P/N:1721-0266) and coat it with MolyKote '55' grease or equivalent.



Step 29:

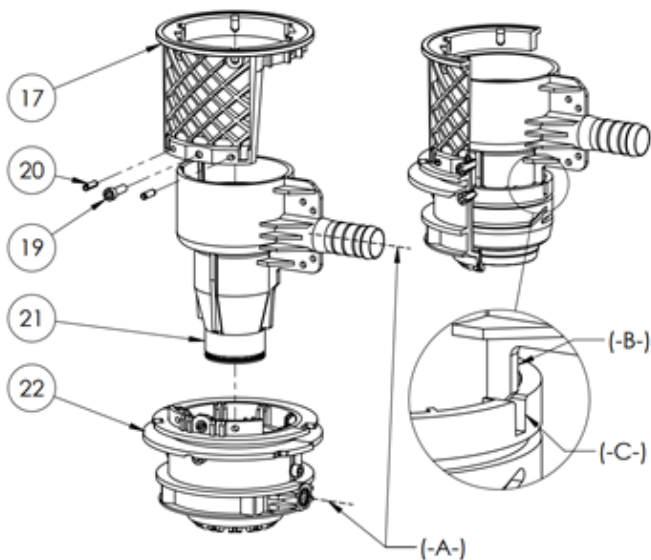
Using the O-ring pick tool, remove the 3 O-rings from the Gate (25), note the position and discard.

▲ CAUTION Remove any dried chemical residue from the Gate (25) and ensure it moves freely.

NOTE: DO NOT apply any Molykote grease '55' or '111' (or equivalent) to the O-ring (30, Size: 47 x 3.0mm P/N:1721-0252).

However Molykote '111' (or equivalent) should be applied to the gate profile.

Molykote '55' (or equivalent) should be applied to the new O-ring (31, Size: 77 x 3.0 mm, P/N: 1721-0253) and the new Quad O-ring (29, Size 31.34 x 3.53 mm, P/N:1750-0001) before installing them.



(-A-) ORIENT FOR CORRECT ALIGNMENT

(-B-) FIN

(-C-) SLOT

Step 30:

Ensuring the alignment (-A-) shown in the picture, push the Hosetail Outlet ((21), P/N: 2420-0020) back into the Transfer Cylinder Clamp Assembly (Ref. 22, P/N: 2420-0005).

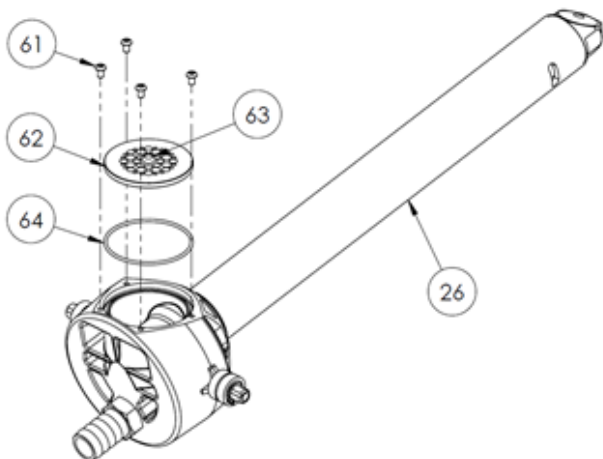
Make sure that the fin (-B-) on the Hosetail Outlet ((21)) is properly aligned with the slot (-C-) on the Transfer Cylinder Clamp Assembly ((22), P/N: 2420-0005) as shown.

NOTE: This alignment is essential for Cleanload Nexus to function.

Step 31:

Refit the Ring Lifter (Ref. 17, P/N:2420-0037) using the 2 pins ((20), P/N:1600-0113). Gently punch in the pins using a punch with diameter <4mm and a hammer or deadblow hammer and refit the screw ((19), P/N:2220-0139) with a 5mm Allen Key.

IMPORTANT: After this assembly, twist the hosetail within the ring lift and check the Cap Claw movement.

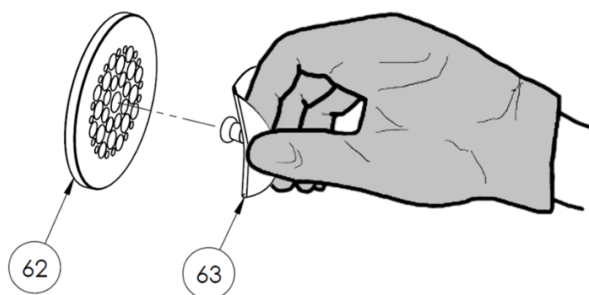


Step 32:

Take the Probe tube ((26)).

Remove the 4 screws ((61), P/N: 2220-0140) that secure the Valve Plate ((62), P/N: 2420-0056) along with large Umbrella Valve ((63), P/N: 2420-0057).

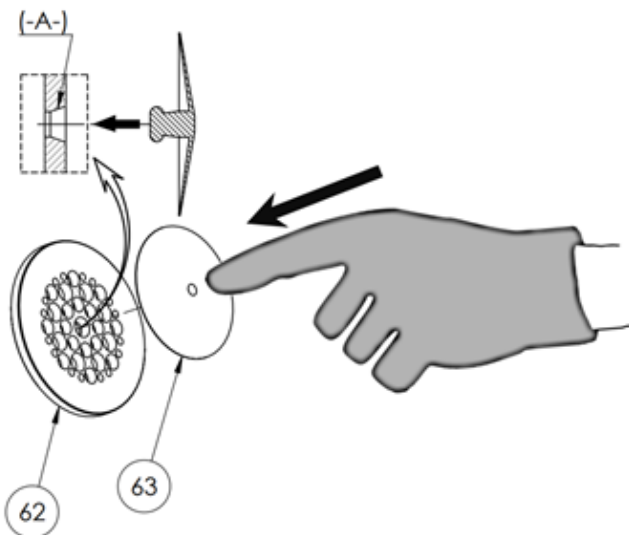
Remove the O-ring ((64), Size 43 x 1.5 mm, P/N: 1721-0263) and set it aside.



Step 33:

Pull the Large Umbrella Valve ((63)) away from the Valve Plate ((62)) using fingers and discard it.

Wipe out the Valve plate ((62)) faces thoroughly to get rid of any dirt or oil/grease stains.

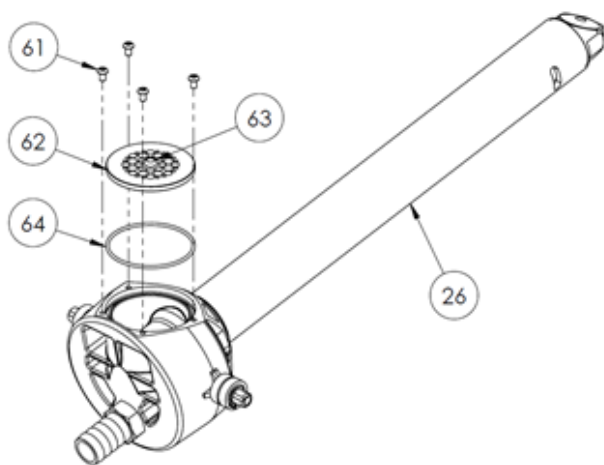


Step 34:

A new Large Umbrella Valve (63) is included in the Service Kit . Insert it into Valve Plate (62) by gently pushing into centre hole with your finger.

NOTE: Use the lead-in (-A-) side of centre hole for easy insertion as shown.

Make sure that the new Large Umbrella Valve seals flat against the Valve Plate and is not deformed.



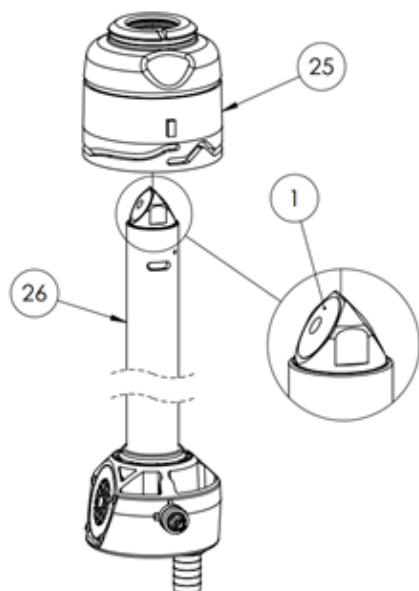
Step 35:

Apply Molykote '55' (or equivalent) to the o-ring (64) before installing it.

NOTE: It is important to ensure that there is no grease on the mounting port and surfaces that come into contact with the large Umbrella Valve.

CAUTION Ensure that the large Umbrella Valve (63), shown pushed in from underneath) faces inward when refitting the Valve Plate (62).

Refit 4 screws (61, P/N: 2220-0140). Apply torque evenly by tightening the screws in a balanced way.

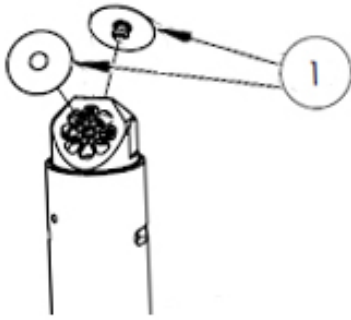


Step 36:

The Gate (25, P/N: 2420-0027) that was prepared in step 29 should now be pushed back onto the Probe Tube (26).

NOTE: It is recommended to push the gate back before replacing the Umbrella Valves (1) to avoid the risk of damage or contamination of the new ones.

CAUTION Lightly coat the Probe tube (26) in MolyKote '55' or equivalent, this will help reduce wear on the Quad ring (Ref 29, P/N:1750-0001).

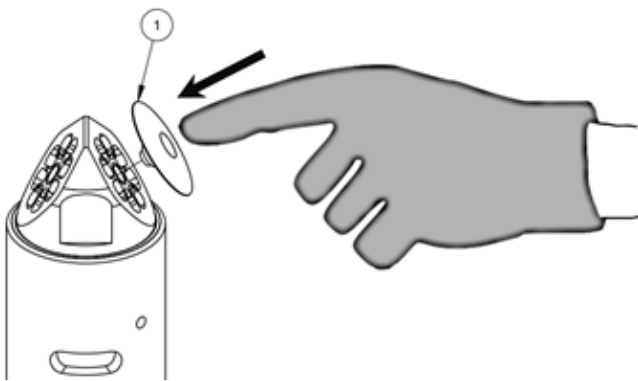


Step 37:

Now remove the 2 used Umbrella Valves (1) P/N:2420-0044) from the 2 ports by pulling with fingers. Discard the used Umbrella Valves.

Inspect the ports and valve mounting at the top of the probe to ensure they are free of debris and dirt.

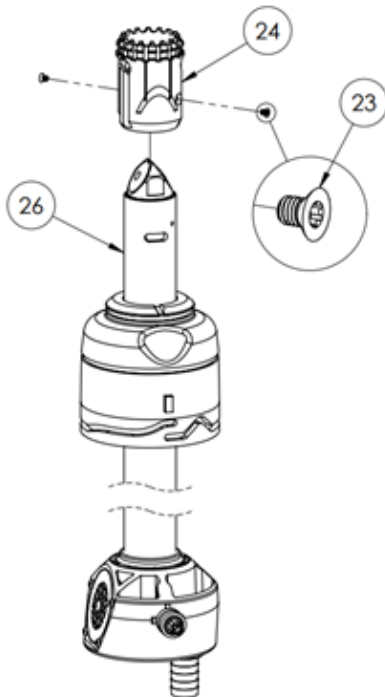
NOTE: It is important to ensure that there is no grease on the mounting ports and surfaces that come into contact with the Umbrella Valves (1).



Step 38:

Take 2 of the new Umbrella Valves provided in the Service Kit. Place the protruding bulb of each Umbrella Valve (1) centrally onto its mounting port and push your finger in the centre to push it in firmly in.

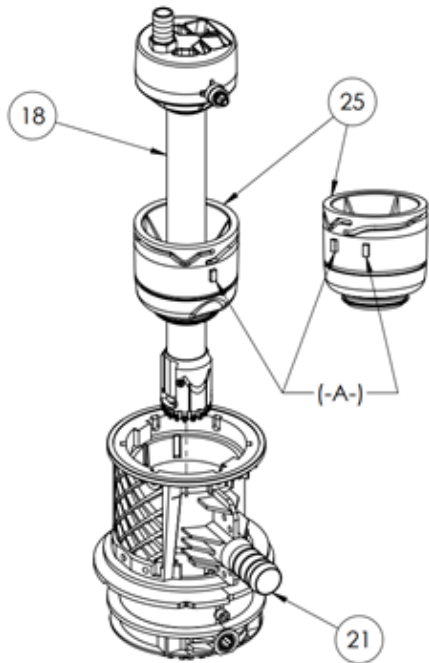
2 Umbrella Valve Kits (PNRNEX-KITUMB CTS are provided in the Service Kit. One should be fitted and the other one left with the Cleanload Nexus user as spares.



Step 39:

Reinstall the Probe Head (24, P/N:2420-0014) and screw in the 2 Torx screws (23, P/N:2220-0138). It helps to line up the holes on the cap interface to the holes in the probe assembly before placing the Probe Head in place.

CAUTION Don't overtighten, the screws may break if too much torque is applied due to their small size.

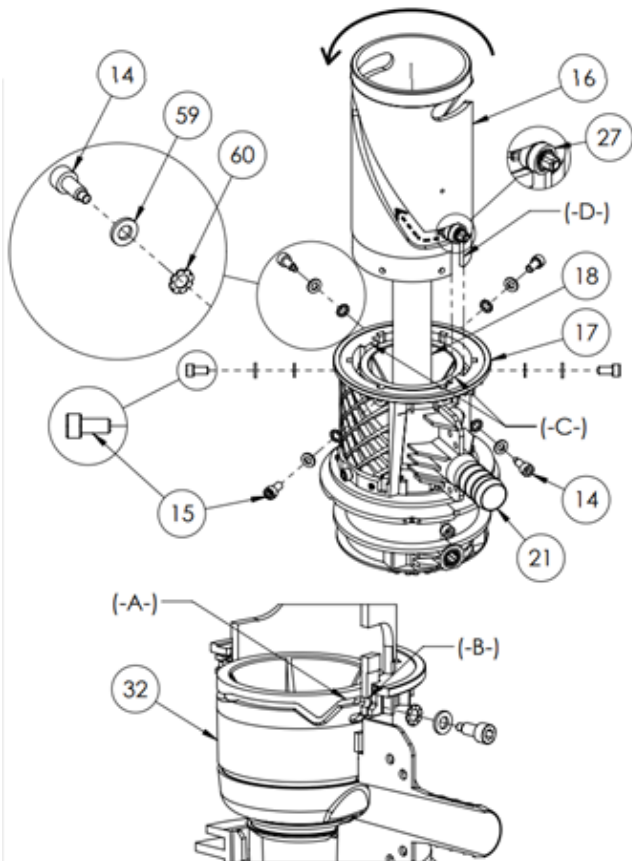


Step 40:

Invert the Probe Assembly (18) including the Gate (25) and push it into the Hosetail Outlet (21).

Ensure that the Gate (25) is greased as instructed in step 29.

The Gate can only be reinserted in one orientation. Take care that the position of the Locating Ribs (-A-) on the Gate (25) corresponds with the slots on the inside of the HoseTail Outlet (21).



Step 41:

Apply Molycote '111' (or equivalent) to the keyways (-D-) in the Aluminium Keyway (16).

Now slide the Aluminium Keyway (16) over the bearings (27), and run them up the keyways. Locate the keyways (-D-) into position (-C-) on the Ring Lifter (17).

Step 42:

Refit the 2 Dog Point Screws (14, P/N:2420-0051), the Washers (59) and Lockwashers (60) on either side of the Ring Lifter (17), P/N:2420-0037) using a 5mm Allen Key.

Ensure that it is aligned as shown.

NOTE: It is important to ensure that both the Washers and Lockwashers are installed to damage occurring.

When reinstalling these 2 Dog Point Screws (14), make sure that the Keyway (-A-) of the Gate (32) is directly under the screw hole (-B-) as it is screwed in.

To check that this has been done correctly, hold the Hosetail (21) and rotate the Aluminium Keyway (16) clockwise. It should move freely. If it does not, then work through steps 41 and 42 again.

(-A-) KEYWAYS

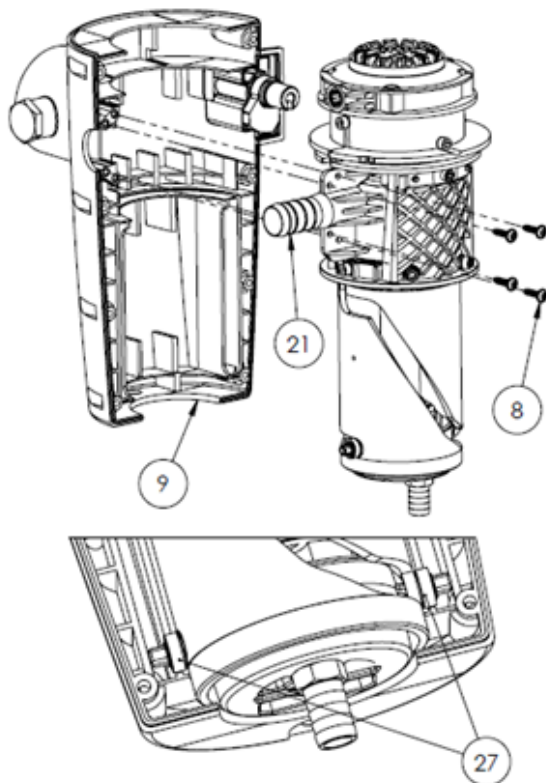
(-B-) SCREW HOLE

(-C-) PROTRUDING LOBES

(-D-) KEYWAYS

Step 43:

Refit the 4 Screws (15, P/N: 2220-0137) along with Washers (59) and Lockwasher (60) that connect the Aluminium Keyway (Ref. 16) to the Ring Lifter (17).

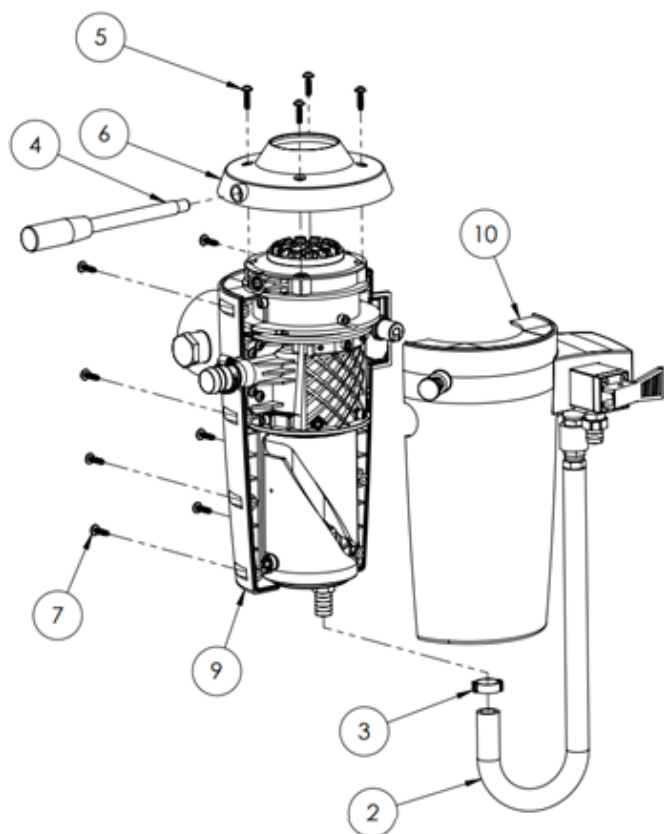


Step 44:

Refit the four screws (8, P/N:2220-0094) to re-fix the Hosetail Outlet (21, P/N:2420-0020) to the Rear Housing (9, P/N:2420-0002) using the Torx T25 Driver.

Do not to apply too much Torx as it will damage the threads. Refer to the torque reference chart on page 5.

NOTE: It is important to ensure that both bearings (27) are at the bottom of the keyways and sit on the casing guides as shown.



Step 45:

Reinstall the Front Housing (10, P/N:2420-0018) using the 8 T25 Torx Screws (7, P/N:2220-0094). Ensure that the Front and Rear Casing are engaged correctly when reinserting Screws.

CAUTION Do not overtighten these Screws as this will cause damage. Do not use an electric screwdriver for this task.

Step 46:

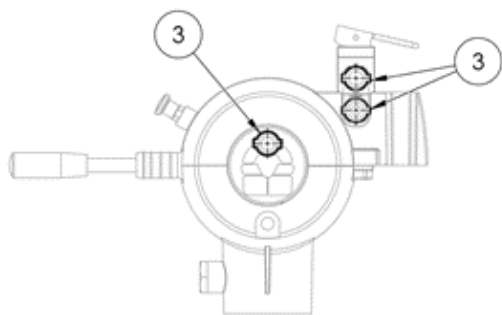
Reinstall the Top Housing (6, P/N:2420-0040) using the 4x T25 Torx Screws (5, P/N:2220-0094).

Screw in the Operating Handle (4, P/N:2420-0047).

Step 47:

Reinstall the Rinse Water Hose (2, P/N:2420-0043) and Double Ear Hose Clamp (3, P/N: 2210-0039).

CAUTION The Double Ear Hose Clamp must be oriented so that the "ears" of the clamp do not collide with the casing when the Rinse Water Hose moves up and down. Once assembled check this to prevent the risk of damage.



Step 48:

The Cleanload Nexus is now fully assembled. Check the correct operation of Operating Handle and Rinse Lever movement (**NOTE:** the Rinse Lever will only operate when the Operating Handle is in one of the 2 rinsing positions).

Before use, carry out all of functions of Cleanload Nexus using a container filled with clean water as detailed in the Installation and Operating Manual

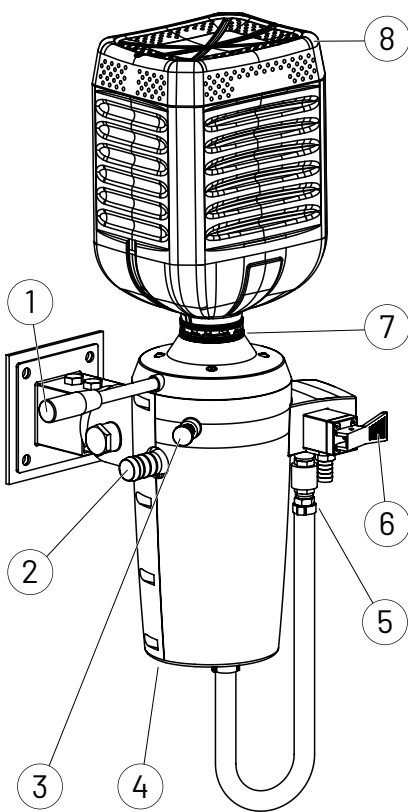
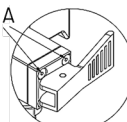
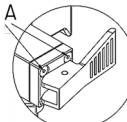
Ensure all hose clamps are tight and there is no leakage.

5. MAINTENANCE OF CLEANLOAD NEXUS

ITEM	Type	SERVICE & INSPECTION PERIOD			
		Before every use	After filling the sprayer	Annually	Before Storing
Orange Umbrella Valves at the top of the Cleanload Nexus probe are in place and show no visible damage or contamination (see section 7.4 of the Installation & Operating Manual.	Inspection	X	X		
No damage or leaks are visible to hoses, fittings and couplings.	Inspection	X			
Suction is connected and drawing from Cleanload Nexus in the specified range. Rinse water is connected and operating at the specified pressure.	Inspection	X			
The containers that will be used are factory fitted with compatible easyconnect caps that are tight and have not been previously unscrewed or otherwise modified.	Inspection	X			
The Cleanload Nexus Mounting Point is secure on the sprayer or stand and no damage or wear is evident.	Inspection	X			
The Operating Handle moves smoothly without any noise or vibration	Inspection		X		
Connect a 10L container fitted with an easyconnect cap and filled with clean water or a suitable cleaning liquid. Observe for leaks from the Cleanload Nexus and check that transfer is smooth and progressive in the measuring zone (see sections 7.1 and 7.2 of the Installation & Operating Manual.	Maintenance and Inspection		X		X (with antifreeze solution)
Inspect for any visible chemical residue contamination at the top of the Cleanload Nexus, hoses, fittings and couplings and if necessary rectify with the cleaning procedures described in section 7.1 of the Installation & operating Manual.	Inspection		X		
Always ensure to refit the Cleanload Nexus Top Cover after use.	Refit		X		
Annual service carried out by a trained and qualified service agent. CAUTION This is essential to maintain internal o-ring condition.	Service			X	

6. TROUBLESHOOTING

In the event of malfunction or a fault developing, please immediately stop using the Cleanload Nexus and seek advice. Below are some problems that may be encountered and their possible causes.

			General Function of Cleanload Nexus	
Slow or incomplete emptying of container due to low suction.			Insert a suction gauge in the line to check suction pressure, if necessary review the inductor (venturi) specification of the sprayer.	
			Check for obstruction of the suction line or air leaks in the Suction Hose or its connections.	
Poor rinsing of container or cap.			Rinse pressure must be a minimum 3.5 bar.	
1. Operating Handle				
Hard to turn.			Consult a trained service technician.	
Will not turn at all.			Check that the Rinse Water Lever(6) is not engaged.	
			Check for evidence of chemical residue and review cleaning regime. Consult a trained service technician.	
Makes a noise.			Consult a trained service technician.	
Flow is hard to control when partial dosing.			Reduce the sprayer suction pressure, e.g. by adjusting the pump speed, the optimum suction for dosing is -0.4 bar.	
2. Hosetail Outlet				
Leak from Hosetail.			Secure the hose clamp.	
Foaming in suction line.			Secure the hose clamp. Check for air leaks.	
3. Lock Release Knob				
Fails to stop the Operating Handle on return.			Consult a trained service technician.	
Fails to release the Operating Handle on return.			Consult a trained service technician.	
4. Outer Casing				
Liquid is dripping from the base of the outer casing.	Rinse water leak; constant flow.	Rinse valve fault, check the four retaining screws (A) for tightness and if not resolved, consult a trained service technician.		
	Rinse water leak; intermittent.	Back flow from the Suction Hose may be escaping into casing. Ensure that a Check Valve is installed in the suction line.		
	Chemical leak	Immediately stop using and consult a trained service technician.		
				
5. Rinse Water Hoses				
Leaking.	Check and tighten or replace the Ear Clamps or other connections.			
6. Rinse Water Lever				
Will not engage.	Check that the Operating Handle is in one of the 2 rinse positions or consult a trained service technician.			
Will not disengage.	Consult a trained service technician.			
7. Top of Coupler				
Liquid emerges or pools around the top of the Probe Head when no container is attached.	Constant; when there is rinse water supply.	Rinse Valve fault, check the four retaining screws (A) for tightness and if not resolved, consult a trained service technician.		
	Intermittent; only when suction is switched off.	Back flow from the Suction Hose may be escaping into the casing. Ensure that a Check Valve is installed in the suction line.		
				
8. Easyconnect Container				
After measuring a partial container, rinse water is seen to enter the container while rinsing the outside of the cap.	The plug from the easyconnect cap has become dislodged and entered the container.	Move the Operating Handle to the closed position  then: EITHER: Fully discharge the container by moving the Operating Handle fully to the right and then rinse as usual. OR: To retain the remaining contents inside the container invert the Cleanload Nexus with the container still locked in position to drain the contents back into the container which can then be carefully removed.		

NOTES

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