Universal Hot Water Pressure Cleaner Manual

Universal Manual – UN1500/12

This manual covers the set of the machine including all breakdowns of the major components and a fault-finding chart.

Server
1/1/2008

JETBLASTER

HIGH PRESSURE WATER BLASTERS

UNIVERSAL INSTRUCTION MANUAL

UNIVERSAL

UN1500/12

Table of contents

SAFETY:

Before operating a pressure cleaner, please ensure that you read the enclosed manual that will be supplied with every unit and that you understand all the information contained within. If anything is unclear, please re-read the manual until you have a complete understanding. If you still have questions, contact the supplier for clarification.

1) **Read Manual Completely and Understand it**
2) **Ensure You Are Wearing the Following Safety Gear:**

- Safety Glasses
- Steel Capped Shoes
- Long Pants
- Long Sleeved Top
- Head Protection
- Safety Gloves
- Ear Plugs

The above items are to protect your feet, legs, torso, arms, hands, head, eyes and ears.

3) **Check the power outlet:**
   Ensure that the power point that you are plugging the machines plug into is safe and not faulty. If by chance it is faulty, please get a qualified electrician to repair prior to using the machine with that socket.

DOS AND DON'TS

Please read the following points carefully.

1) **Never** point the lance of a high-pressure water blaster at a person while in use

2) **Never** point the lance of a high-pressure water blaster at an animal while in use

3) **Never** wash the machine down with the high-pressure water

4) **Never** wash the electrics of the machine or other electrics with the high-pressure water blaster

5) **Always** have a qualified technician repair faults with the pressure cleaner

6) **Always** wear the above safety gear while operating a pressure cleaner

7) **Always** read the operations manual of the machine prior to the first time using the pressure cleaner

8) **Always** abide by warning labels on the machine

9) **Always** get a qualified electrician to repair or replace the electrical cable of the pressure cleaner

SET UP INSTRUCTIONS FOR USE:

ITEMS REQUIRED:

1) WATER SUPPLY CONNECTION:

- Water hose with ½" internal bore size

2) ELECTRICAL CONNECTION:

- Single Phase 240volt 50Hz – for Single Phase unit
- 3 Core flex cable - for Single Phase
- 3 Phase 415volt 50Hz – for 3 phase unit
- 5 Core flex cable supplied with standard 5 pin plug (needs neutral line) – for 3 Phase

3) FUEL:

- Standard Diesel – NOT Bio Diesel

CAUTION:

Do not use Kerosene. Burner is not adjusted to burn kerosene.
Kerosene can only be used if burner is re-adjusted.

WARNING:

- Do not use petrol or any oil containing petrol. This may result in explosion of the boiler.
- Sufficient air must be available for combustion.
- Use only in properly ventilated areas to ensure free flow of air to the burner.
- Beware of tight locations and exhaust fans.
- Combustion with inadequate oxygen produces dangerous carbon monoxide.

OPERATION:

1) CHECK:

- Power connection is OK and switches are OFF
- Water supply is ON
- Water tank is full and float valve operating
- Float valve is closed when water level in water tank is 3” below top of tank
- Fuel tank is full

2) TO START:

- Pump and burner switches must be in OFF position
- Turn on the main power switch
- Turn pump switch ON. Ensure that the pump primes itself and settles down to steady operation with a continuous high pressure water flow from nozzles, before turning on the burner
- If the hot water is required turn burner ON. Burner is equipped with automatic ignition and flame control. Firing results 5 to 12 seconds after turning ON. Should flame not occur, refer to burner instructions
- If steam is required, fully open steam valve with the burner switch ON, steam will be generated after a short heating up period. (Approximately 1 minute) – ***(Steam is an optional extra and is not provided standardly with the machine)***

3) STOP:

- Turn burner switch to OFF position.
- Keep pump running for approximately one minute after burner is turned off to allow burner to be cooled.

> **NOTE:** Burner will only fire if the pump switch is in the ON position. Turning the pump switch to OFF position will also turn the burner off.

4) OPERATING HINTS:

- General cleaning: Use plenty of detergent (If this option has been requested to be supplied with the machine) and work from the top of the equipment down with a steady gun movement. Pre-soaking with detergent is generally advantageous.
- After pre-soaking, pressure wash at close range or as required with high pressure and steady gun movement.
- Pre-treatment with degreasing solution can aid cleaning heavy buildup of grease and oil, which should be applied by a hand spray and not a pressure cleaner.

5) IMPORTANT:

- Keep trigger gun open as much as possible. Less frequent use of gun ensures longer life of gun, unloader valve, high pressure hose, etc.
- Unit is fitted with an Auto Stop control but ALWAYS turn off the unit when not in use.

6) STOPPING MACHINE:

- Turn off burner and while still holding the trigger, wait for the water to cool.
- While keeping trigger gun open switch off motor.

MAINTENANCE:

IMPORTANT SAFETY NOTE:

Before performing any maintenance:

- Ensure the machines **ON/ OFF** switch in in the **OFF** position
- Disconnect the power supply
- Unplug the machine from the power outlet
- Turn off and disconnect the water supply

PUMP:

- **Check the oil level** weekly. Use **SAE 15/40W oil** to top up as needed. The oil level is checked via the dipstick on top of the pump.
- **Change oil** every **6 months** or **500 hours** of use (whichever comes first). Remove the oil using the drain plug underneath or at the back of the pump.

MOTOR:

- No regular maintenance is required.
- **IMPORTANT:** Always keep the motor **dry** to prevent damage.

FILTERS:

- **Clean the inlet water filter** weekly, or more frequently if needed.
- Clogged inlet water filters can allow debris into the pump and cause damage.

FUEL FILTERS:

- **Check monthly** and replace if required.

DETERGENT:

- Ensure detergent **lines fit tightly** over barbs.
  Loose fittings allow air to enter, causing loss of pressure or pulsation.
  Extended operation with air leakage will damage the pump.

WARNING:

- **DO NOT run pump dry** – Ensure you always have water to the inlet side of the machine. Lack of water will cause cavitation and damage to the pump and bypass valve.
- An **Auto Stop Time Delay** is built in (~1.5 minutes) but always switch off manually when not in use.
- Minimise unnecessary gun triggering to prevent wear and tear.
- Avoid the detergent tank running dry and suck air.

OPERATING HINTS:

1. Always clean from top to bottom.
2. To rinse:
   - Shut off detergent
   - Wait 20 seconds for clean water to appear
   - Rinse with cold or hot water

GENERAL INFORMATION:

1) GENERAL FEATURES:

- Use only **clean water** or **approved detergent mixtures.**
- **Do not use corrosive additives** (e.g., acids) without consulting technical support or your service agent.

2) INSTALLATION:

- Follow installation instructions carefully for optimal performance and lifespan.

3) DELVERY PIPEWORK:

- The hose internal diameter must be equal to or larger than the pump outlet diameter to avoid pressure loss.
- Do **not exceed 10% above the maximum rated pressure** of the pump.

4) STARTING PROCEDURE:

- Do **not run the pump dry** for more than a few seconds.
- Clean the filter and prime the pump quickly by opening **a discharge valve to expel air.**

5) LUBRICATION:

- Check oil levels regularly.
- Change the oil:
  - After the **first 50 hours**
  - **Then 500 hours**
  - **Use SAE 15/40W oil.**

6) SHUT DOWN PROCEDURE:

- Wipe down the pump after each use.
- If detergent was used:

- Run clean water through the system for at least **1 minute** to flush out residue.

FREEZING CONDITIONS:

If the unit is in a freezing environment**, empty the pump by running for 20 seconds without water supply.** This ensures all water is expelled from the pump, preventing potential damage caused by water freezing inside the system.

GENERAL FAULT FINDING:

Please refer to the general fault-finding list below. This is to help identify and solve minor issues that may arise during operation, reducing downtime and improving efficiency.

Pump running normally but pressure low

CAUSE	REMEDY
Pump sucking air	Check water supply and possibility of air ingress
Valves sticking	Check, clean, or replace if necessary
Unloader valve worn out	Check and replace if necessary
Nozzle incorrectly sized	Check and replace if necessary
Seals worn out	Check and replace if necessary

Fluctuating pressure

CAUSE	REMEDY
Valves worn	Check and replace if necessary
O-ring plunger retainer worn	Check and clean out if necessary
Pump sucking air	Check water supply and inspect joints in suction line
Seals worn out	Check and replace if necessary

Pressure low after period of normal use

CAUSE	REMEDY
Nozzle worn	Check and replace if necessary
Suction and delivery valves worn	Check and replace if necessary
Suction and delivery valves blocked	Check and clean if necessary
Unloader valve worn	Check and replace if necessary
Seals worn out	Check and replace if necessary

Pump noisy

CAUSE	REMEDY
Air suction	Check water supply and suction line connections
Broken/weak suction or delivery valve spring	Check and replace if necessary
Foreign matter in valves	Check and clean if necessary
Worn bearings	Check and replace if necessary
Excessive liquid temperature	Reduce to below 75°C
Back end of pump let go	Check backend of pump and replace whole pump

Presence of water in oil

CAUSE	REMEDY
Oil seal worn	Check and replace if necessary
High humidity in air	Check and change oil twice as often
Piston seals worn	Check and replace if necessary

Water dripping from under pump

CAUSE	REMEDY
Piston seals worn	Check and replace if necessary
O-ring plunger retainer worn	Check and replace if necessary
Thrust collars broken	Check and replace if necessary
Piston broken	Check and replace if necessary

Oil dripping

CAUSE	REMEDY
Oil seals worn	Check and replace if necessary

Excessive vibration in delivery line

CAUSE	REMEDY
Not enough water	Check water supply and pressure to the machine
Sucking air	Check and ensure all fittings tight on inlet water supply and not holes or leaks

No burner

CAUSE	REMEDY
Flame sensor activated	Check fuel and refill if needed. Then press RESET button on burner
Pressure switch failure	Inspect pressure switch and replace if required.

Burning dirty

CAUSE	REMEDY
Water in fuel	Drain tank, refill with clean fuel. Replace fuel filter

Flame stops

CAUSE	REMEDY
Fuel filter clogged	Replace fuel filter
Low fuel	Fill with fuel
Burner nozzle blocked	Call service technician for repairs

Unit does not auto-stop

CAUSE	REMEDY
Pressure switch failure	Replace pressure switch
Timer failed	Replace timer

SAFETIES THROUGHOUT THE MACHINE:

The following safety features have been incorporated throughout the machine to reduce the risk of operator injury and prevent potential damage to the equipment.

1) **Riello high efficiency burner with flame sensor**
   Prevents the hot water side of the machine from operating without diesel.

2) **Burner reset button**
   When the burner runs out of fuel, it will not restart automatically after refueling. The operator must press the reset button to resume operation.

3) **Low-pressure bypass system**
   Ensures a slow buildup of pressure when the trigger is released and then pulled again, preventing a sudden 3000 PSI kickback that could throw the operator off balance or cause accidental spraying.

4) **IP56 Control Box**
   The electrical components are enclosed in an IP56- rated control box, protecting both the machine and operator from moisture and dust ingress.

5) **Flex drive coupling between pump and motor**
   Helps reduce heat transfer between the two major operating components, increasing reliability and lifespan.

6) **Safety Valve**
   If the machine is turned up over pressure or bypass locks out, the safety valve releases the pressure from the machine.

7) **Header Tank**
   Ensures a continuous water supply to prevent the machine from running dry, which could damage the internal components.

8) **Auto Stop Time Delay**
   Automatically shuts down the machine approximately 1.5 minutes after the trigger is released to protect the pump from overheating. The machine can be restarted using the pulse start switch.

9) **Steel Powder-Coated Frame and Cover**

Provides enhanced durability and fire resistance. In the unlikely event of a burner malfunction, the powder-coated steel prevents flames from damaging the machine.

10) **Mobility and Stability Features**

- **2 x Solid Rubber wheels** for ease of movement
- **2 x Lockable Jockey Wheels** to prevent the unit from rolling unintentionally, especially on inclined surfaces or if bumped.

11) **IP55 Rated Electric Motor**

Offers protection against water overspray, enhancing motor durability and safe operation in wet environments.

SAFETY / RISK ASSESSMENT:

Please find following a risk assessment on the Universal range of Hot Water Pressure Cleaners. The below will show that if a certain thing occurs with the machine, what the possible outcome to the machine and operator will be and whether this is a high or low risk.

INDEX:

Low – No danger to the operator

Medium – Operator could possibly get injured, but not likely

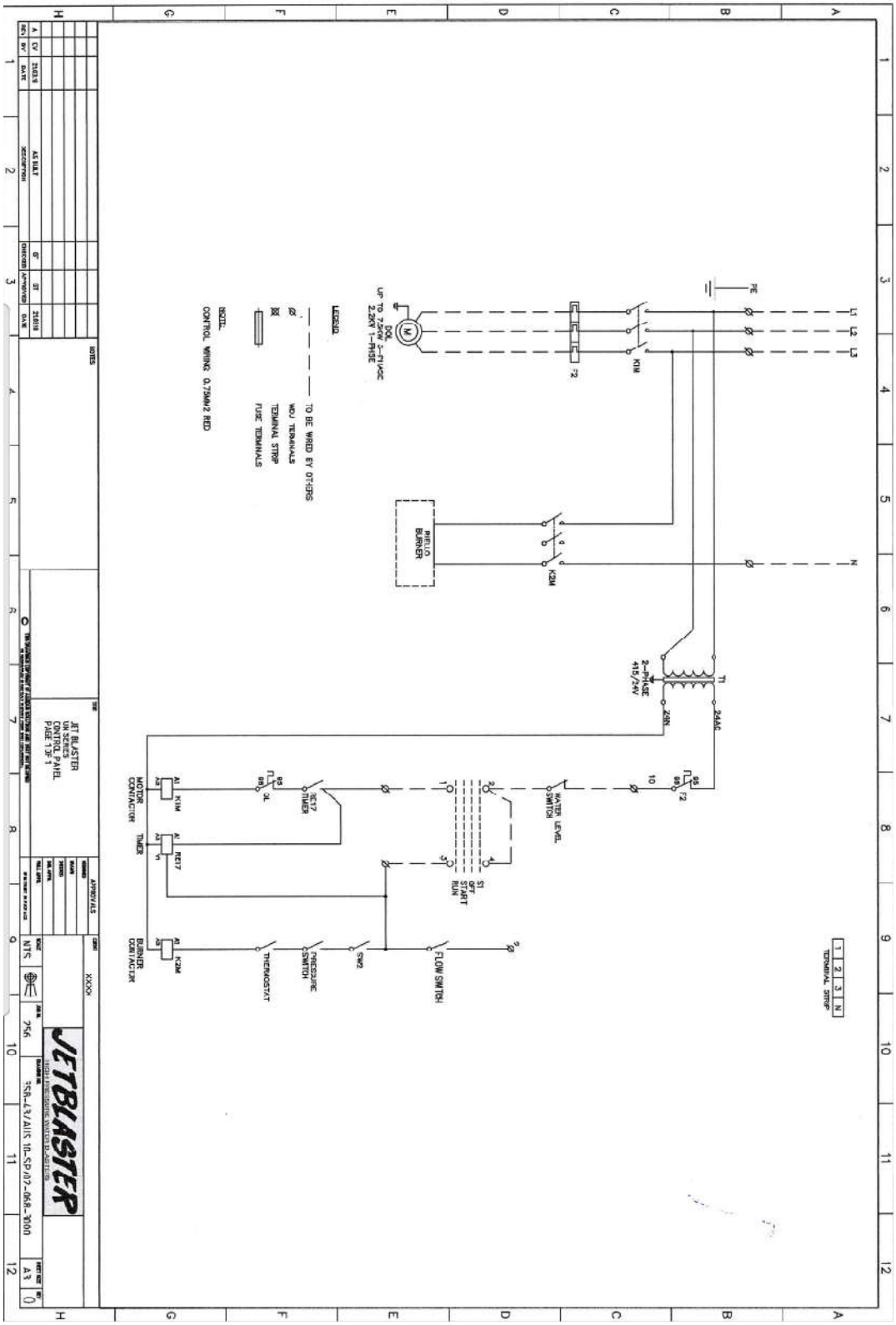
High – Operator is likely to get injured, but this VERY RARELY occurs

FAULT	POSSIBLE OUTCOMES	RISK TO OPERATOR	SOLUTION
High pressure hose blowing near trigger	Hot water making contact with the operator and possibly cutting the operator depending upon how close it is to the operator's body	HIGH – Operator could get burnt or cut depending upon how close the burst hose is to the operator	Cut the hose and get it re-crimped and re-attached. This can be done by any qualified technician.
Safety Valve lets go	Water spraying out the back of the machine and no pressure in the unit	LOW	Contact your qualified service technician for the machine and get the item replaced.
Auto Stop not functioning	Machine would run until switched off, causing the pump to overheat and melt the seals and valves	LOW	Contact your qualified service technician for the machine and get the item replaced.
Header Tank Over Flowing	Water would leak out of the top of the header tank and on to the ground	LOW	The float in the header tank is most likely stuck open with a piece of dirt. This may free up by itself or contact a technician.
Water being Sprayed onto the electrics	The electrics could possibly get wet and stop the machine from operating	LOW	Contact your qualified service technician for the machine and get the item replaced.
Flex Drive coupling lets go	Pump and motor would vibrate and machine would have no pressure	LOW	Contact your qualified service technician for the machine and get the item replaced.
High Pressure Hose lets go at the machine	Hose would burst off and hot water would	MEDIUM – Operator could get burnt if they	Contact your qualified service technician for

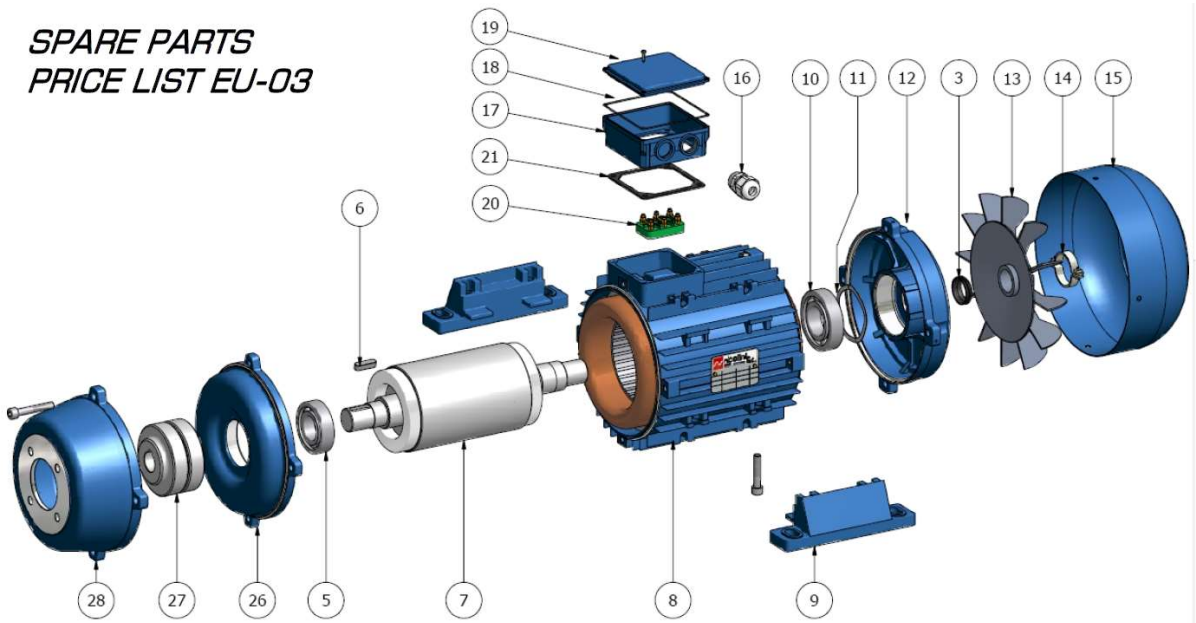
	just be gushing out of the machine at normal tap pressure	put any body part in the way of the water	the machine and get the item replaced.
Heating coil burst	Machine would not produce hot water and coil chamber would fill up with water	LOW	Contact your qualified service technician for the machine and get the item replaced.
Trigger stuck open	The machine would continuously run until it was turned off at the machine	MEDIUM – Continuous pressure could cause fatigue and RSI of operator	Contact your qualified service technician for the machine and get the item replaced.
Plastic on lance comes off	Burnt hand if touched without gloves on	MEDIUM – If the operator touches the lance while in operation on the stainless-steel part, they would get a burnt hand or arm	Contact your qualified service technician for the machine and get the item replaced.
Nozzle flies off	If the nozzle flies off it could hit someone or something causing damage	HIGH – This would cause severe damage to a person if hit with the nozzle flying off at 3000psi	Contact your qualified service technician for the machine and get the item replaced.
Thermostat is turned up too high	The machine will be operating with very hot water; if it contacts the operator, it will burn them	MEDIUM	Contact your qualified service technician for the machine and get the item replaced.
Cut or splice in the Electric Cable	If there is a cut in the electrical cable, there's a high risk of malfunction and electric shock if touched	HIGH – This would cause an electric shock to the person	Contact a qualified electrician to replace the entire electric cable on the machine.

All of the above risks are mainly risks to the machine and not the operator. If the operator of the unit has read and understands the instructions and operation of the unit then nothing can really go wrong with the unit and more than likely nothing will happen to the operator in regards to getting injured.

WIRING DIAGRAM:



MOTOR BREAKDOWN:

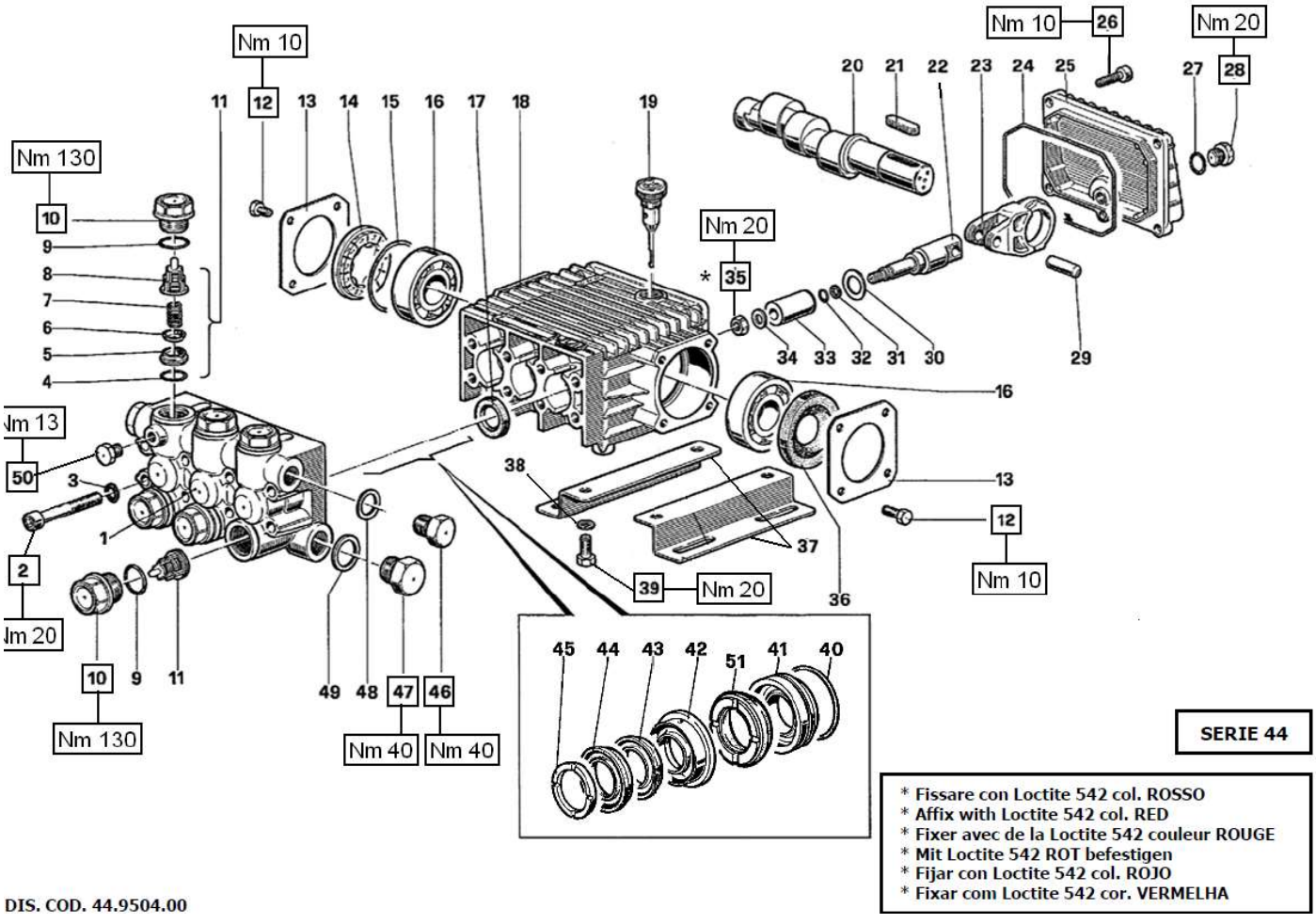


nr.	Descrizione - *Description*		112		132		160
03	Anello tenuta - Rubber seal ring	€	1,45	€	3,51	€	3,99
06	Chiavetta - Key	€	0,53	€	0,72	€	1,32
07	Albero rotore - Rotor shaft		= =		= =		= =
08	Carcassa+Avvolgimento - Casing+Coil		= =		= =		= =
09	Piedi assemblati - Separate feet	€	7,20	€	9,00	€	12,00
11	Anello a molla - Split ring	€	0,66	€	0,66	€	1,33
12	Scudo posteriore - Rear shield	€	15,18	€	26,93	€	40,00
13	Ventola - Fan	€	2,42	€	3,32	€	5,32
14	Anello ventola - Fan fixing ring	€	0,48	€	0,54	€	0,66
15	Copriventola - Fan cover	€	5,81	€	7,26	€	11,35
16	Passacavo - Core hitch	€	0,97	€	2,11	€	2,11
17	Base copribaset. - Terminal box	€	2,75	€	5,50	€	11,00
18	Guarnizione OR - OR seal	€	0,22	€	0,44	€	0,77
19	Copribasetta - Cover box	€	1,10	€	2,75	€	3,30
20	Morsettiera - Terminal strip	€	2,11	€	2,42	€	4,96
21	Guarnizione - Seal for cover	€	0,30	€	0,42	€	0,66
26	Flangia Interna	€	23,50	€	31,10	€	65,20
27	Giunto Elastico	€	9,50	€	32,50	€	45,00
28	Flangia Esterna	€	17,80	€	30,00	€	76,80
			6207 ZZ		6308 ZZ		6309 ZZ
05-10	Cuscinetti - Bearings	€	8,36	€	16,2	€	19,3

PUMP BREAKDOWN AND SPARE PARTS LIST:

The high-pressure water pump is an Interpump with three ceramic pistons. The oil level can be checked via the sight glass on the right-hand side of the pump, or by removing the oil filler plug, which a dip stick is attached. Check the oil level regularly top up with SAE 15/40W motor oil.

IMPORTANT NOTE: Never run the pump without water for more than a few seconds. Never allow the pump to freeze with water inside, as this will almost certainly damage the pump beyond economical repair.



DIS. COD. 44.9504.00

W97 - W112 - W124 - W130
W140 - W150 - W154 - W170
W200 – W204 - W950 - W951
W952 - W953 - W954 - W955
W956 - W957 - W958 - W959
W14200 - W16180 - WW116
WW136 - WW156 - WW176
WW186 - WW189 - WW206
WW209 - WW960 - WW961
WW962

	PISTONE – PISTON Ø15	PISTONE – PISTON Ø18
OTTONE BRASS	W130 – W150 – W170 W950 – W951 – W952 W953 – WW116 - WW136 – WW156 WW176 - WW186 - WW189 - WW206 WW209 - WW960 - WW961 - WW962	W97 – W112 - W124 W140 - W154 – W954 W955 – W956 - W957 W958 - W959
NICKEL	-	W200 – W204 W14200 - W16180

KIT RICAMBI – SPARE KITS

	OTTONE BRASS	NICKEL	PISTONE- PISTON Ø15					PISTONE- PISTON Ø18				
KIT Nr.	KIT 123	KIT 123	KIT 124	KIT 158	KIT 88	KIT 89	KIT 90	KIT 125	KIT 130	KIT 126	KIT 127	KIT 128	KIT 129	KIT 131
Posizioni incluse Positions included	17	4 – 5 6 – 7 8 - (11)	9 - 10	9 - 10	43 – 44 51	42	45	40 – 41	40 – 41 42 – 43 44 – 45 51	40 – 41	43 – 44 51	42	45	40 – 41 42 – 43 44 – 45 51
Nr. Pcs.	3	6	6	6	3	3	6	3	1	3	3	3	6	1

POS	COD.	DESCRIZIONE – DESCRIPTION - KIT		NR
1	44.1200.41 44.1204.41 44.1207.41	Testata Ø 15 Testata Ø 18 Testata Ø 18 – NICKEL		1 1 1
2	99.3175.00	Vite M8x60 UNI 5931		8
3	96.7014.00	Rosetta Ø 8.4x13x0.8		8
4	90.3841.00	OR Ø 17.13x2.62 (3068)	123	6
5	36.2003.66	Sede valvola	123	6
6	36.2001.76	Valvola	123	6
7	94.7376.00	Molla Ø 9.4x14.8	123	6
8	36.2025.51	Guida valvola	123	6
9	90.3847.00	OR Ø 20.24x2.62 (3081) 90 Sh.	124-158	6
10	98.2226.00 98.2225.00	Tappo M24x1.5x17 Tappo M24x1.5x17 – NICKEL	124 158	6
11	36.7115.01	Gruppo valvola aspiraz./mand.	123	6
12	99.1807.00	Vite M6x10 UNI 5739		8
13	50.1500.74	Coperchio carter		2

POS	COD.	DESCRIZIONE – DESCRIPTION - KIT		NR
14	44.2118.01	Distanziale con indicatore		1
15	90.4097.00	OR Ø 55.56x3.53 (159)		1
16	91.8331.00	Cuscinetto a sfere 6305 – Spec.		2
17	90.1614.00	Anello rad. Ø 20x30x5	23	3
18	44.0100.22	Carter pompa		1
19	98.2103.00	Tappo carico olio G 3/8"		1
20	44.0200.35 44.0203.35 44.0205.35 44.0206.35	Albero – WW186-WW206 Albero – W112-W140-W150-W950-W954 W955-W956-WW116-WW156-WW209-W200 W14200 Albero – WW189 Albero – W97-W124-W130-W154-W170 W951-W952-W953-W957-W958-W959 WW136-WW176-W204-W16180		1 1 1 1
21	91.4892.00	Linguetta 8x7x35 UNI 6604		1
22	44.0500.66	Guida pistone		3
23	44.0300.22	Biella		3
24	90.3920.00	OR Ø 101.27x2.62 (3400)		1
25	44.1600.22	Coperchio posteriore		1
26	99.1837.00	Vite M6x14 UNI 5931		5
27	90.3585.00	OR Ø 10.82x1.78 (2043)		1
28	98.2041.00	Tappo G 1/4"x9		1
29	97.7340.00	Spinotto Ø 10x29.5		3
30	96.7350.00	Rosetta Ø 16x27x1.7/0.7		3
31	90.5022.00	Anello antiest. Ø 6.2x9x1.5		3
32	90.3572.00	OR Ø 5.28x1.78 (2021) – Spec.		3

POS	COD.	DESCRIZIONE – DESCRIPTION - KIT		NR
33	52.0400.09 44.0401.09	Pistone Ø 15 Pistone Ø 18		3 3
34	44.2115.70	Rosetta Ø 8 con collare		3
35	92.2216.00	Dado M8x13x5 - INOX		3
36	90.1641.00	Anello rad. Ø 25x62x10		1
37	50.2000.74	Piedino		2
38	96.7016.00	Rosetta Ø 8.4 UNI 1751		4
39	99.3037.00	Vite M8x16 UNI 5739		4
40	90.3612.00	OR Ø 31.47x1.78 (2125)	125-126 130-131	3
41	44.0800.70 44.0801.70	Anello di fondo Ø 15 Anello di fondo Ø 18	125-130 126-131	3 3
42	52.2166.70 44.2161.70	Anello intermedio Ø 15 Anello intermedio Ø 18	89-130 128-131	3 3
43	90.2622.00 90.2683.00	Anello RESTOP Ø 15 Anello RESTOP Ø 18	88-130 127-131	3 3
44	90.2620.00 90.2682.00	Anello tenuta Ø 15 HP Anello tenuta Ø 18 HP	88-130 127-131	3 3
45	51.1000.51 44.1001.51	Anello di testa Ø 15 Anello di testa Ø 18	90-130 129-131	3 3
46	98.2100.00	Tappo G 3/8"x13		1
47	98.2176.00	Tappo G 1/2"x10		1
48	96.7380.00	Rosetta Ø 17.5x23x1.5		1
49	96.7514.00	Rosetta Ø 21.5x27x1.5		1
50	98.1966.00	Tappo G 1/8"x8		1
51	90.2617.00 90.2684.00	Anello tenuta Ø 15 LP Anello tenuta Ø 18 LP	88-130 127-131	3 3

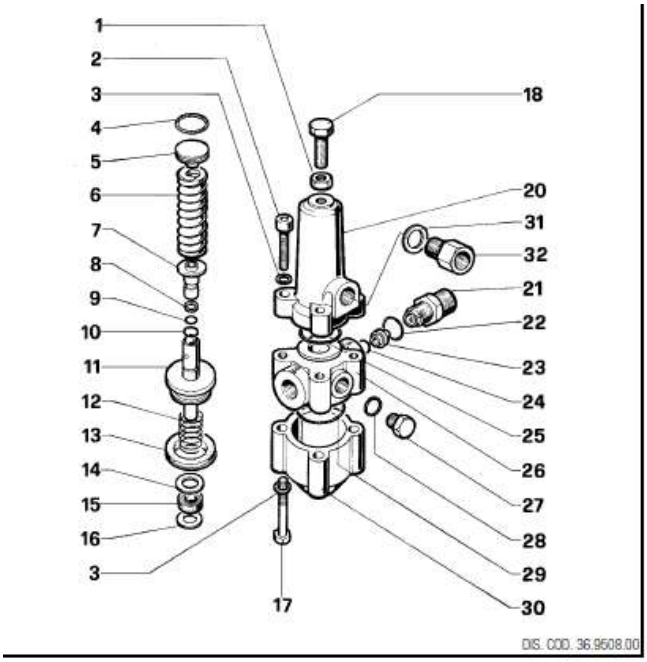
UNLOADER VALVE AND PARTS LIST:

These unloader valves do wear out over time, and you will find that the pressure of the machine will reduce. Machine gunning (rapid firing) of the trigger on any pressure cleaner will wear the unloader / bypass valve out very quickly. If you find reduced pressure you can adjust the unloader as described below:

- Slacken the locknut
- Screw in the setting nut in **¼" turn steps** until the machine runs normally with no tendency for the unloader to activate.
- Set the nut in a further ¼ turn and tighten the locknut.

This procedure will result in a correct unload pressure another **100psi** above the normal operating pressure.

Please see a breakdown of the unloader and parts list below.



K7

KIT N.	KIT 70
Positions Included Posizioni Incluse	4 - 7 - 8 - 9 - 10 11 - 12 - 13 - 15 - 16 22 - 24 - 25 - 28 - 29
N. pcs.	1

*** TAB. "A" - TABLE "A"

MODEL	POS.	CODE CODICE	DESCRIPTION DESCRIZIONE	N. PCS.
K 7.0 8÷11 l/min.	21	10.0078.70	Nipplo G 3/8 con foro Ø 3	1
	23	10.0076.66	Ugello Ø 2,2	1
	32	36.3117.70	Nipplo G 3/8	1
K 7.1 11÷16 l/min.	21	10.0078.70	Nipplo G 3/8 con foro Ø 3	1
	23	10.0077.66	Ugello Ø 2,5	1
	32	36.3116.70	Nipplo G 3/8	1
K 7.2 16÷25 l/min.	21	10.0160.70	Nipplo G 3/8 con foro Ø 3,25	1
	23	10.0162.66	Ugello Ø 2,75	1
	32	36.3118.70	Nipplo G 3/8	1
K 7.3 25÷41 l/min.	21	10.0161.70	Nipplo G 3/8 con foro Ø 3,5	1
	23	10.0163.66	Ugello Ø 3	1
	32	36.3119.70	Nipplo G 3/8	1

POS.	CODE CODICE	DESCRIPTION DESCRIZIONE		N. PCS.
1	92.2368.00	Dado M10		1
2	99.3084.00	Vite M8x30 UNI 5931		4
3	96.7014.00	Rosetta Ø 8,4x13x0,8		8
4	90.3849.00	OR Ø 20,63x2,62	KIT 70	1
5	36.3095.70	Piattello molla		1
6	94.7466.00	Molla Ø 17x60		1
7	36.3094.66	Sede valvola	KIT 70	1
8	90.5052.00	Anello per OR	KIT 70	1
9	90.3820.00	OR Ø 9,13x2,62 - Spec.	KIT 70	1
10	90.3582.00	OR Ø 9,25x1,78	KIT 70	1
11	36.3097.02	Assieme pistoncino e sfera	KIT 70	1
12	94.7464.00	Molla Ø 17x17	KIT 70	1
13	90.2766.00	Anello tenuta Ø 40	KIT 70	1
14	96.7215.00	Rosetta Ø 13x20x2		1
15	90.2565.00	Anello tenuta Ø 10	KIT 70	1
16	90.5063.00	Anello per OR	KIT 70	1

POS.	CODE CODICE	DESCRIPTION DESCRIZIONE		N. PCS.
17	99.3127.00	Vite M8x45 UNI 5737		4
18	99.3663.00	Vite M10x25 UNI 5740		1
20	36.3090.41	Corpo valvola superiore		1
21	***	Vedi Tab. "A" - See table "A"		
22	90.3833.00	OR Ø 13,95x2,62	KIT 70	1
23	***	Vedi Tab. "A" - See table "A"		
24	90.3823.00	OR Ø 9,92x2,62	KIT 70	1
25	90.3863.00	OR Ø 28,25x2,62	KIT 70	1
26	36.3091.41	Corpo valvola centrale		1
27	98.2041.00	Tappo G 1/4x9		2
28	90.3585.00	OR Ø 10,82x1,78	KIT 70	2
29	90.3871.00	OR Ø 34,60x2,62	KIT 70	1
30	36.3092.41	Corpo valvola inferiore		1
31	96.7380.00	Rosetta Ø 17,5x23x1,5		1
32	***	Vedi tab. "A" - See table "A"		

BURNER BREAKDOWN:

This machine uses a **Riello high-efficiency burner** with its own built-in safeties. The burner unit includes a photoelectric cell, so if there is no fuel in the system (and therefore no spark), the burner will not start. The burner will also shutdown if it is running low on fuel.
If the fuel system is run dry and the burner won't restart, you need to refill the fuel tank and then push the **reset button** on the burner until it clicks to resume operation.

WARNING: Do not use contaminated diesel or truck diesel in the unit, this will clog the system and stop the burner from operating.

Please refer to the **parts breakdown** for the Riello burner below. – Riello Burner manual is supplied as a separate attachment.

RIELLO 40 G10 cod. **3746412 - 3746414** TIPO / TYPE / TYP **464 T1**

Bruciatori di gasolio • Light oil burners • Brûleurs fioul • Öl-Gebläsebrenner
Quemadores de gasóleo

Number	Code	Description
1	3007234	Cover
2	3007800	Pump
3	3002279	Coil
4	3006553	Shell and Knob
5	3007202	Regulator
6	3008653	Filter O-ring
7	3006925	Needle valve
8	3007203	Plate
9	3001156	Control box 530SE*
10	3002278	Terminal board
11	3000439	Pump seal
12	3005789	Tube
13	3000443	Joint
14	3006557	Cover
15	3005791	Collar
16	3005764	Nozzle holder
17	3002280	P.E Cell
18	3006151	Blast tube
19	3006392	End ring and diffuser disc
20	3005795	Gasket
21	3005796	Flange
22	3002918	Electrode assembly
23	3006552	Electrode Bracket
24	3009063	Connector
25	3005720	Flexible Oil line
26	3007815	Tube
27	3006911	Hydraulic Jack
28	3000879	Air Damper
29	3007205	Air Damper
30	3005788	Fan
31	3006386	7 Pole Socket
32	3005798	Capacitor 4 µF
33	3008451	Motor