

BERTOLINI PUMP & REGULATOR SPARES



Installation and General Safety Information	_	2
Poly 2073 - STAP42	_____	6
Poly 2073 - Spare Parts	_____	7
Trial R - STAP29	_____	8
Trial R - Spare Parts	_____	9
20 VF - STAP30	_____	8
20 VF - Spare Parts	_____	10
20RT4 - Spare Parts - STAP31	_____	11
PA 330 - STAP 36	_____	12
PA 330 - Spare Parts	_____	13
PA 530 - STAP 39	_____	12
PA 530 - Spare Parts	_____	14
Karin - Spare Parts - STAP 77 & 78	_____	15
Sting - Spare Parts - STAP79 & 80	_____	15
Multicontrol RS - Spare Parts - STAP83	_____	16

INSTALLATION & GENERAL SAFETY INFORMATION

*This catalogue has been prepared and illustrated to assist You in the maintenance of Your Bertolini Pump.
The user is obliged to read the installation/operation manual supplied with each pump.*

1. SETTING UP THE PUMP FOR USE (INSTALLATION)

To ensure that the pump works correctly and has the maximum working life, we recommend to respect the general regulations for installation and use, such as fixing protection and compliance with the rpm shown on the pump's label. The motor and electric pumps must be installed on a rigid, horizontal surface. Check that the motor has the correct power output. Check that the anchorage of the pump support to the machine base has been performed correctly and with bolts sufficiently strong to hold it in place.

SUCTION HOSES

The suction hoses must be mounted in such a way as to avoid the formation of air bubbles. All threaded connections must be assembled with PTFE tape or an equivalent material to ensure a perfect seal. The sizes of the hoses and connections must not be less than the diameters of the connections on the pump. The suction strainer must have a cartridge with a suction of at least 2.5 times pump flowrate and the recommended net should be 32 mesh.

FOR DIAPHRAGM PUMPS

The max. negative pressure is: - 0,3 bar

The max. pressure is: 0,3 bar

DISCHARGE HOSES

Check to make sure that the discharge hoses have the correct diameter i.e. never smaller than the union of the pump, so as to avoid reductions in pressure.

2. CHECKS TO MAKE BEFORE USING THE PUMP

Some Pumps require pump to be operating under pressure to check oil level. Please refer to operator's manual supplied with the pump.

Check, with the pump not running, to make sure that the oil level is correct. Otherwise pour oil, but take care not to exceed the indicated level on the oil sight tube. **ATTENTION:** too much oil creates pressure inside the crankcase, so this can result in some leakages or diaphragm failures.

A Be sure that the inlet and discharge hoses are not crimped and the strainer is clean. In any case be sure connections are tight to prevent any hose restrictions or air entering, since these conditions will compromise pump performance.

B If pumping from a tank, check to make sure that the control unit by-pass line is not too close to the inlet line. Make sure that it does not create turbulence inside the tank.

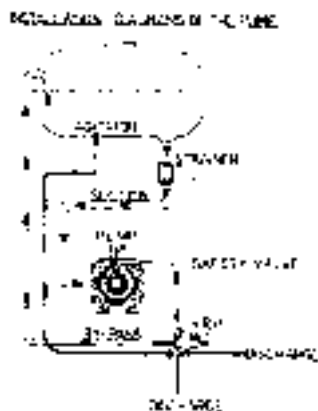
C When starting, the pressure adjustment lever must be turned in the "by-pass" position.

D. PULSATION DAMPENER (only diaphragm pumps). The pulsation dampener on the pump or on the pressure line is generally charged at 6÷8 Bar, equal to the max pressure rating of the pump

For any different working pressure, the pressure of the pulsation damper should be set as follows:

WORKING PRESSURE	PULSATION DAMPENER PRESSURE
20÷50	6÷8
10÷20	5÷6
5÷10	2÷5

If working pressure is lower than 15 bar, we recommend to make sure that the pulsation dampener pressure is at least 1:3, to check better the pulsations.



INSTALLATION & GENERAL SAFETY INFORMATION

Check the pressure with the pump not running, with air in pressure. It is good practice to inspect, from time to time, the pulsation damper diaphragm.

E. When installation is made with pulleys, ensure that these are well-aligned. Bad alignment may damage the pump.

F. Where connection is made with gearboxes use only new original Bertolini parts.

3. USE OF THE PUMP

When starting up the pump turn the valve lever to the dump position (by-pass) to facilitate priming. Once pump is primed, turn the valve lever to "PRESS" position and adjust the working pressure with the knob, turning knob clockwise will increase pressure, turning knob counter-clockwise will decrease pressure.

DURING USE

- Check that the pump does not exceed the rotation speed shown on the label;
- Be sure oil is at the indicated level;
- Check to make sure the strainer is clean;
- Do not run pump dry.

> COUPLING TO AGRICULTURAL MACHINERY

- Check that the P.T.O. of the machine does not exceed the max. rpm shown on the pump plate.
- If the P.T.O. is synchronized with the motor speed, consult the service manual to get gear number and rpm corresponding to the max. pump rotation speed.
- When the rpm of the P.T.O. is higher than the max. speed, use the suggested reduction gear.
- Disconnect the P.T.O. when moving with pump out of service if that is impossible then disengagement should be provided.
- Disconnect the P.T.O. when changing direction.

> COUPLING TO ELECTRIC MOTORS AND PETROL ENGINE!

- For direct coupling use always the suggested reduction gear.
- For coupling with pulley check alignment of the two pulleys.

Maximum transmission ratio: $\frac{\text{motor r.p.m.}}{\text{pump r.p.m.}} = K$

after fixing K, you can establish the motor or pump pulley diameter:

Motor pulley pitch diam.: $m.p. \varnothing = \frac{\text{pump pulley pitch diam.}}{K}$

Pump pulley pitch diameter = $p.p. \varnothing \text{ motor pulley pitch } \varnothing \times K$

4. OIL CHANGE

Change oil after the first 500 hours as follows:

- remove the tank plug and the drain plug;
- rotate the shaft to remove excess oil;
- wash inside the parts with Diesel oil;
- refill pump with oil through the glass and rotate the shaft to distribute oil and fill to the proper level;
- start pump and let run for a few minutes at zero to facilitate the correct lubrication of inside parts;
- **USE ONLY OIL "SAE 30".**

For all pumps without the drain plug normally oil is changed whenever the wear parts (like diaphragms, o-rings, valves assembly) are changed.

Always perform this routine maintenance on the pump at the end of the season. Drain the oil from the pump by removing the pump heads one by one and the relevant piston sleeves.

ALWAYS USE ONLY ORIGINAL PUMPS



ALWAYS USE ONLY ORIGINAL PUMPS



5. GENERAL SAFETY INFORMATION

Idromeccanica Bertolini points out that, according to the Regulations "ASAE S316" and "ASAE S207" in force, the machine manufacturer should observe all the safety regulations in order to prevent personal injuries and environment damage, so he is the only responsible of the design, construction and wrong use of the equipment

IT IS ALWAYS NECESSARY TO RESPECT THE FOLLOWING SAFETY INSTRUCTIONS

- *Equipment should be operated only by trained, responsible people.*
- *If a cardiac connection is made to the pump, the use of protective ear-muffs is mandatory.*
- *Provide adequate protection in guarding around the moving parts, such as shaft pulley etc.*
- *Use of a pressure relief valve on the discharge side of the pump is required to prevent damage from pressure build up.*
- *Do not pump flammable or explosive fluids such as gasoline, fuel oil, kerosene etc*
- **DO NOT USE IN EXPLOSIVE ATMOSPHERES.** *The pump should only be used with liquids compatible with the pump component materials. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE PRODUCT WARRANTY.*

Do not pump water or other liquids for human or animal consumption.

- *When in the area of spray pump and/or control, always wear eye protection and protective clothing such as helmets, gloves etc.*
- *Disconnect power before servicing. Release all pressure within the system before servicing any component.*
- *Check hoses for weak or worn condition before each use. Make certain that all connections are tight and secure*
- *When wiring an electrically driven pump, follow all electric and safety regulations (EN60204-1).*

All wiring should be done by a qualified electrician.

- *Do not operate a gasoline engine in an enclosed area. Be sure that the area is well ventilated.*
- *Do not handle a pump or pump motor with wet hands or when standing on a wet or damp surface or in water*

6. INSTRUCTIONS FOR THE CORRECT USE OF THE PRESSURE REGULATION VALVE

1. *Before starting pump, turn the lever counter-clockwise to the dump position (by-pass)*
FAILURE TO FOLLOW THIS WILL INVALIDATE THE PUMP WARRANTY .
2. *Turn the adjustment knob counter-clockwise to reduce pressure to "0" bar. This is strictly required in the initial start-up.*
3. *Start the pump just when valve is in the "by-pass" position. let it run for at least two minutes and, in any case, until air has been vented from the hydraulic circuit*
4. *Turn the valve lever clockwise to "Press" position, close the spray gun or spray boom, turn the adjustment knob clockwise up to the working pressure selected, open the spray gun or spray boom and start spraying.*

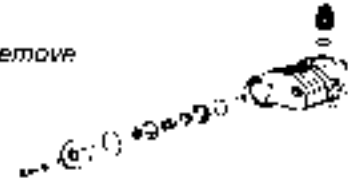
INSTALLATION & GENERAL SAFETY INFORMATION

MAINTENANCE FOR DIAPHRAGM PUMPS

Routine maintenance on the pump includes changing the diaphragms, oil, valves assembly, O-rings, all of which are normal wear parts.

1. VALVES ASSEMBLY AND O-RINGS REPLACEMENT

- Occasionally debris can cause the valves to not seat properly or damage O Rings.
To check for this problem please follow these steps
- remove the valve cover (consult the exploded drawing of the pump), remove the valves, check for debris and wear, as well as O-Rings;
- replace necessary parts and reassemble;
- repeat for all valves



2. DIAPHRAGM REPLACEMENT

- remove the pumps heads one by one;
- use a hex wrench to remove the diaphragm locknut, remove the nut, retaining washer, diaphragm and support washer. It is recommended to wash inside with Diesel oil;
- if you removed the piston sleeves, replace them one at a time in their previous position (best mark them when removing);
- insert the new diaphragm on the piston and install it with its nut. Use these tightening torques:



M10 x 1.5 mm
M8 x 0.5: 12 N.m
M10 x 25: 25 N.m

The diaphragms should be replaced with the piston at its bottom DP and the edges inserted perfectly into the groove all the way around.

- replace the heads and attach them with their bolts;
- refill pump with oil through the glass and rotate the shaft to distribute oil and fill to proper level. Repeat all the checks described above in the section "Checks to make before using the pump".
Check oil level with the pump running with no pressure until all air bubbles have been vented.
When the air has been bled off, close the cap on the oil sight tube.
After the first inspection of the oil level as above, check once more the oil level with the pump running with pressure.

TROUBLES AND CURES (DIAPHRAGM PUMPS)

PROBLEMS	CAUSES	CURES
The pump doesn't reach the required pressure	<ul style="list-style-type: none"> washed pump with water suction hose with air pockets or kinks at elbows worn nozzles or with wrong diameter hose clamp clogged strainer 	<ul style="list-style-type: none"> check valves check hose check nozzles clean strainer
The pressure gauge fluctuates	<ul style="list-style-type: none"> pump is sucking air or air has not been evacuated completely valves blocked 	<ul style="list-style-type: none"> start pump with the gun open, to evacuate the air and commutate clean or change valves
The oil level is irregular	The air in the pulsation-damper is incorrectly set	Check pressure in pulsation-damper (see chart)
Output drops and the pump is noisy	Oil level is too low	Top up with oil to correct level (halfway of the sump), when pump is operating
Oil comes out of the discharge pipe	One or more diaphragms are broken	Drain the pump of oil. Disassemble the head and change diaphragms. Fill to the correct oil level
Oil is changing colour into white	Diaphragms failure. Stop pump immediately	Drain the pump of oil. Disassemble the head and change diaphragms. Fill to the correct oil level



Three piston semi-hydraulic diaphragm pump

Versions available:
 "VS" - Splined Shaft 1" 3/8
 "VA" - Solid Shaft dia 1"

FOUR SOUND REASONS TO PREFER POLYPUMPS

Bertolini Polypumps are an excellent choice for all spraying applications in agriculture, horticulture, lawn care and nursery markets. Three piston semi hydraulic diaphragm pumps assure a smooth and quiet operation even with high volume flows. Proper for low pressure.

1. All fluid end components are in polypropylene, AISI 316 stainless steel, with amazing reliability. They provide satisfactory service pumping chemicals, including the most aggressive on the market.
2. Bertolini Polypumps self-lubricating cast iron piston sleeves provide for unique "oil-thrust-pad" design.

Optional Extras - Bronze conrods and resistant elastomers.
3. The heads, designed with a new patented technology, include an aluminium die-cast core inside the polypropylene structure.
4. Pre-deformed diaphragms in NBR, 316 stainless steel washer and diaphragm bolt, piston stroke reduced provide long life operation and ensure wide reliability. Bertolini Polypumps self-lubricating cast iron piston sleeves provide for unique "oil-thrust-pad" design.

Specifications		mod. POLY 2073			
R.P.M.		R.P.M.	R.P.M.	550	550
Power		KW	HP	2.1	2.8
Weight		Kg	lb	11	24.2
Suction Lift - MAX		mt	ft	1.5	4.9
∅ Intake		mm	in	32	1" 1/4
∅ High Pressure		mm	in	25	1"
MAX Temperature		°C	°F	40	104
Oil Type		SAE	W	30	30
Oil Capacity		lt	U.S.G.	0.7	0.18

63.5000.97.3 - VS

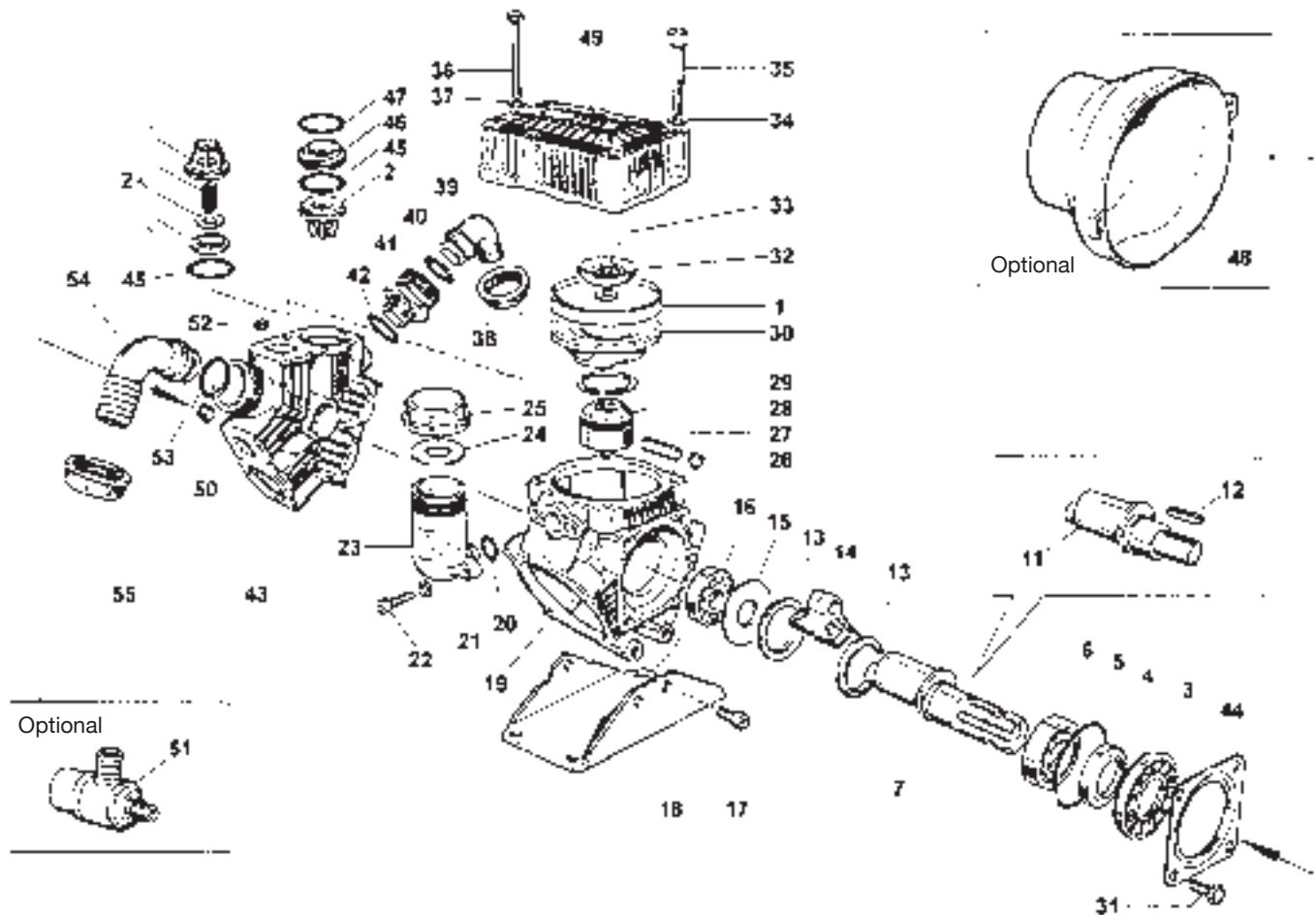
63.5200.97.3 - VA

75 l/min	19.8 USGPM	Max Flow
15 bar	21.8 PSI	Max Pressure

POLY 2073		R.P.M. ; l/min							
		400		450		500		550	
BAR	P.S.I.	l/min	KW	l/min	KW	l/min	KW	l/min	KW
2	29	54.5	0.2	61.4	0.2	68.2	0.3	75.0	0.3
5	72.5	53.8	0.5	60.5	0.6	67.3	0.7	74.0	0.7
10	145	52.4	1.0	58.9	1.2	65.5	1.3	72.0	1.4
15	218	50.9	1.5	57.3	1.7	63.6	1.9	70.0	2.1

Spares Kits																			
Rapid Spray Part No.	STAP110				STAP111			STAP112			STAP113			STAP114			STAP115		
Kit Part No.	63.9880.97.3				63.9870.97.3			63.9872.97.3			63.9871.97.3			63.9873.97.3			63.9826.97.3		
Kit Description	Pump Seals Kit				Polypropylene Valve Assy			Stainless Steel Valve Assy			BUNA-N Diaphragms			DESMOPAN Diaphragms			VITON Diaphragms		
Position No.	5	4	45	47	2	45	47	2	45	47	1	45	47	1	45	47	1	45	47
Quantity Incl.	1	1	6	4	6	6	4	6	6	4	3	6	4	3	6	4	3	6	4

SPARE PARTS LIST - POLY 2073 - STAP42



Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	95.0040.31.2	3	NBR Piston Diaphragm	30	63.0015.01.2	3	Piston Sleeve
1	95.0040.33.2	3	Viton Piston Diaphragm (Optional)	31	86.3184.00.2	4	Screw M10 x 16 UNI5739
1	95.0040.36.2	3	HPS Piston Diaphragm (Optional)	32	63.0017.68.2	3	Disk
1	95.0040.00.2	3	Desmopan Piston Diaphragm (Optional)	33	63.0018.51.2	3	Diaphragm Locking Bolt
2	28.9809.97.3	6	S. S. Valve Assy	34	84.3801.50.2	12	Washer Dia. 10.5 x 21 x 2
3	53.0007.32.2	1	Housing	35	86.3562.50.2	12	Screw M10 x 70 UNI5931
4	80.2143.10.2	1	Oil Seal Dia. 35 x 52 x 7	36	86.3002.00.2	3	Screw M8 x 75 UNI5931
5	80.3310.00.2	1	O-Ring 4.0 x 82	37	84.3693.00.2	3	Washer Dia. 8.4 x 17 x 1.6
6	81.2837.00.2	1	Ball Bearing Dia. 35 x 62 x 14	38	82.0067.50.2	1	Wing Nut G.1"1/4
7	63.0009.26.2	1	Crankshaft "VS" Version	39	84.0542.40.2	1	90° Elbow Connector Dia. 25
11	63.0016.26.2	1	Crankshaft "VA" Version	40	80.3219.05.2	1	O-Ring 3.0 x 25 Viton
12	80.6475.00.2	1	Tab 6.36 x 6.36 x 38	41	83.5089.00.2	1	Nipples G.1"-G.1"1/4
13	26.0047.76.2	2	Ring	42	80.3219.10.2	1	O-Ring 3 x 30
14	23.0005.09.2	3	Light Alloy Conrod	43	63.0003.32.2	1	Manifold
14	23.0045.11.2	3	Bronze Conrod (Optional)	44	17.0016.61.2	1	Flange
15	95.0097.61.2	1	Crankshaft Spacer	45	80.3320.80.2	6	O-Ring 5.34 x 40.65
16	81.2646.00.2	1	Ball Bearing Dia. 20 x 52 x 15	46	28.0229.32.2	4	Valve Assy Spacer
17	86.3264.00.2	3	Screw M10 x 25 UNI5931	47	80.3219.80.2	4	O-Ring 3.0 x 39
18	63.0006.61.2	1	Mounting Rail	48	31.1468.32.2	1	Plain Safety Cone (Optional)
19	63.0001.09.2	1	Crankcase	49	63.0022.32.2	3	Head
20	80.3180.00.2	1	O-Ring 2.62 x 15.08	50	85.2585.00.2	1	Cap G.3/8
21	84.3685.50.2	2	Washer Dia. 8.2 x 15 x 1.5	51	24.3015.97.3	1	Safety Valve 15 bar (Optional)
22	86.2682.50.2	2	Screw M8 x 25 UNI5931	52	81.4574.50.2	3	Nut M8 UNI5588
23	23.0008.32.2	1	Oil Filler	53	80.3219.15.2	1	O-Ring 3.0 x 30 Viton
24	82.4120.00.2	1	Gasket Dia. 45 x 19 x 1.5	54	84.0570.00.2	1	90° Elbow Connector Dia. 35 (Optional)
25	85.2750.00.2	1	Oil Filler Cap	54	84.0561.00.2	1	90° Elbow Connector Dia. 30 (Optional)
26	80.0021.00.2	6	Ring Dia. 15	54	84.0566.00.2	1	90° Elbow Connector Dia. 32 (Standard)
27	85.2006.70.2	3	Piston Pin Dia. 15	54	84.0571.00.2	1	90° Elbow Connector Dia. 38 (Optional)
28	63.0014.09.2	3	Piston	54	84.0591.00.2	1	90° Elbow Connector Dia. 40 (Optional)
29	81.8504.50.2	3	Piston Ring	55	82.0070.00.2	1	Wing Nut G.1"1/2

11.6011.97.3
Two piston semi-hydraulic diaphragm pump, built-in gearbox, complete with pressure regulator.



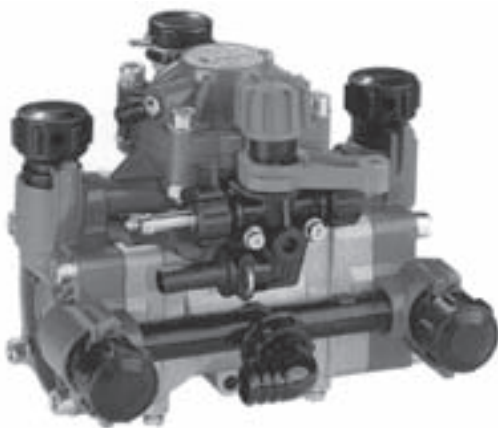
Version available: "R" - with I. B. petrol engines

Max Flow	17 l/min	4.5 USGPM
Max Pressure	20 bar	290 PSI

Specifications		mod. TRIAL R		
R.P.M.	R.P.M.	R.P.M.	1000	1000
Power	KW	HP	0.73	1
Weight	Kg	Lbs	3.8	8.4
Suction Lift - MAX	mt	ft	1	3.3
∅ Intake	mm	in	19	3/4"
∅ High Pressure	mm	in	10	3/8"
MAX Temperature	°C	°F	40	104
Oil Type	SAE	W	SAE30	30W
Oil Capacity	Lt	U.S.G.	0.085	0.022

TRIAL R		R.P.M.					
		600		800		1000	
BAR	P.S.I.	l/min	KW	l/min	KW	l/min	KW
2	29	10.2	0.05	13.6	0.06	17.0	0.08
10	145	9.0	0.2	12.0	0.3	15.0	0.3
15	217.5	8.7	0.3	11.6	0.4	14.5	0.5
20	290	8.4	0.4	11.2	0.5	14.0	0.6

Two piston semi-hydraulic diaphragm pumps, complete with pressure regulator
 (20RT4 only)



Version available: "VF" - 3 holes standard shaft.

Hose Fitting Sizes:
 3/4" Suction
 1/2" By Pass
 3/8" Pressure

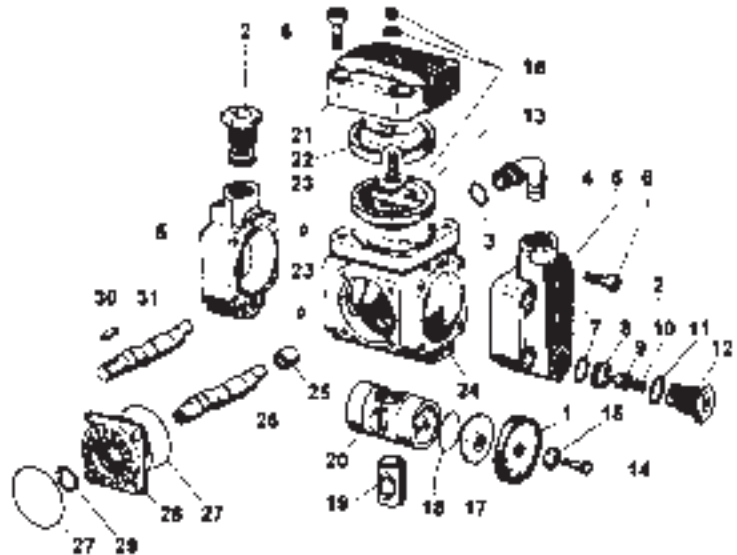
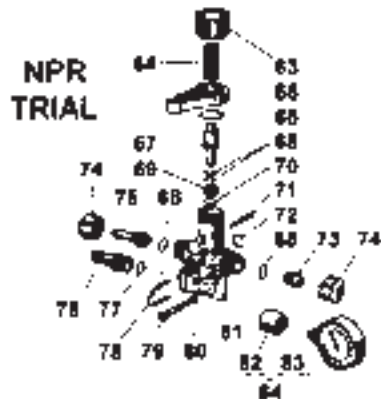
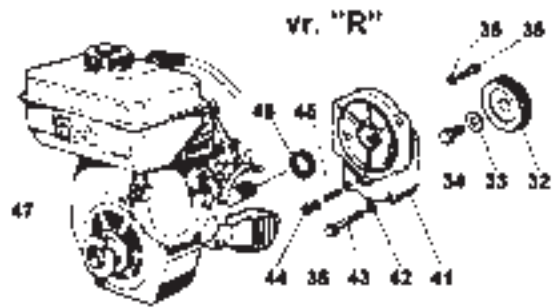
Max Flow	22 l/min	5.8 USGPM
Max Pressure	20 bar	290 PSI

These 2 piston semi-hydraulic diaphragm pumps are ideal for gardening, small sprayers, washers and liquid transfer. Their compact light weight can be driven PTO mounted (20 VF) or gasoline engine (TRIAL R - 20 RT4). All wetted parts are plastic coated for use with most agricultural spray materials and chemicals. Diaphragms constructed from chemical resistant elastomer(s) ensure long pump life even when used with aggressive agricultural and industrial chemicals. Factory equipped with regulator and a gearbox reduction unit to be mounted to a gasoline engine. (RT4 version). Ready to accept pulleys for belt drive, shaft kits, female PTO drive (chain or rigid type). (20VF supplied without regulator but includes spline shaft)

Specifications		mod. 20 VF		
R.P.M.	R.P.M.	R.P.M.	650	650
Power	KW	HP	0.88	1.2
Weight	Kg	Lbs	5.6	12.3
Suction Lift - MAX	mt	ft	1	3.3
∅ Intake	mm	in	16	5/8"
∅ High press	mm	in	8	5/16"
MAX Temperature	°C	°F	40	104
Oil type	SAE	W	SAE30	30W
Oil capacity	Lt	U.S.G.	0.7	0.18

20 RT4		R.P.M.					
		550		600		650	
BAR	P.S.I.	l/min	KW	l/min	KW	l/min	KW
2	29	18.6	0.1	20.3	0.1	22	0.1
10	145	16.9	0.4	18.5	0.4	20	0.4
15	217.5	16.2	0.5	17.7	0.6	19.2	0.6
20	290	16.1	0.7	17.5	0.8	19	0.8

SPARE PARTS LIST - TRIAL R - STAP29



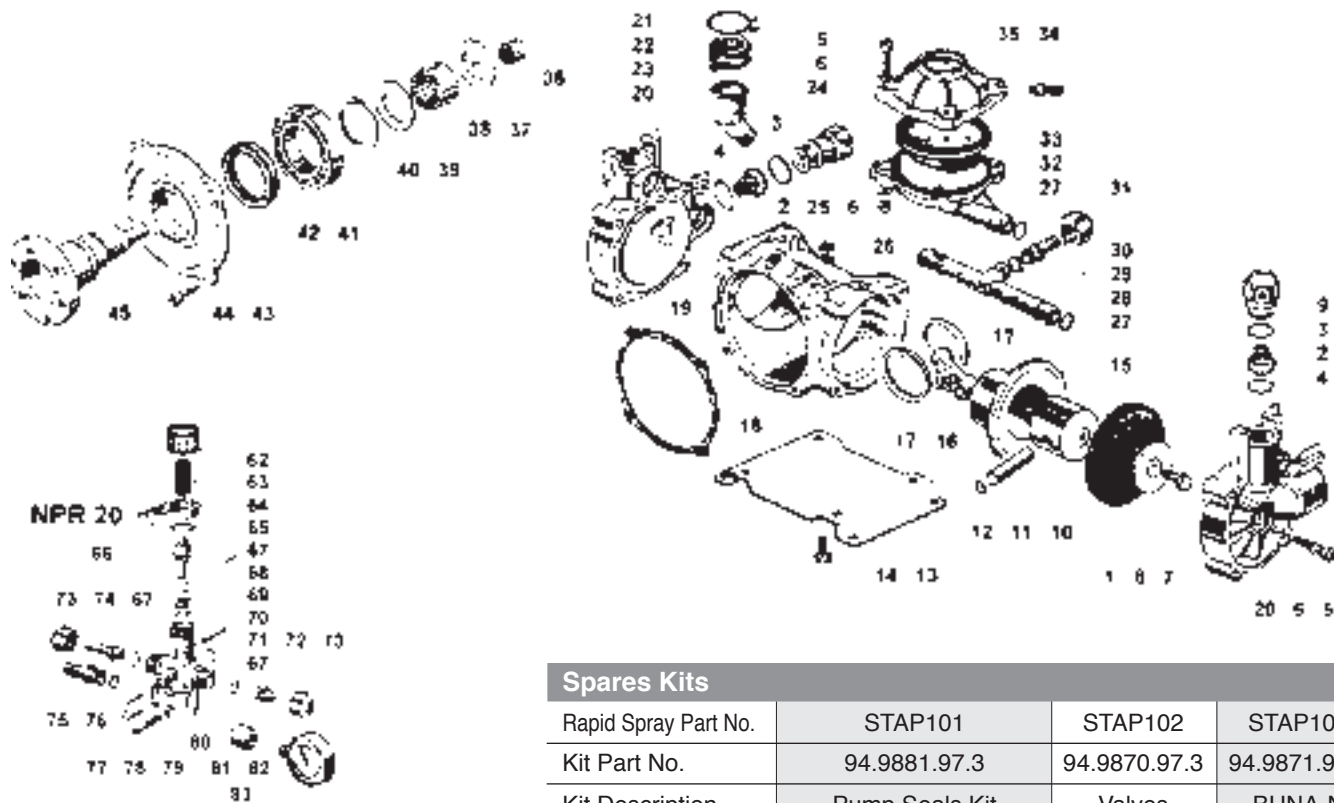
Spares Kits

Rapid Spray Part No.	STAP119						STAP120	STAP121			
Kit Part No.	11.9881.97.3						11.9870.97.3	11.9871.97.3			
Kit Description	Pump Seals Kit						Valves Assy	BUNA-N Diaphragms			
Position No.	46	18	7	27	23	11	2	22	13	1	23
Quantity Incl.	1	2	4	2	4	4	4	1	1	2	4

Pos.	Part No.	Qty	Description
1	12.0040.31.2	2	Diaphragm
2	11.9812.97.3	4	Valves Assembly
3	80.3090.00.2	1	O-Ring Dia. 2 x 16
4	84.0510.00.2	1	Inlet Suction
5	11.0102.09.2	2	Head
6	86.2730.00.2	12	Screw M8 x 30
7	80.3069.00.2	4	O-Ring D. 1.78 x 18.77
8	11.0052.32.2	4	Seat
9	11.0051.32.2	4	Valve
10	38.0054.51.2	4	Spring
11	80.3199.00.2	4	O-Ring
12	11.0054.32.2	4	Plug
13	10.0040.31.2	1	Lower Accumulator Diaphragm
14	11.0008.53.2	2	Diaphragm Clamping Bolt
15	11.0009.32.2	2	Insert
16	86.1608.50.2	1	Air Valve
17	11.0011.32.2	2	Piston Head
18	80.3005.00.2	2	O-Ring D. 1 x 28 x 30
19	11.0015.01.2	1	Plunger Rod
20	11.0010.09.2	1	Piston
21	11.0004.09.2	1	Ballaster Cover (Ex 11.0024.09.2)
22	10.0041.31.2	1	Upper Accumulator Diaphragm
23	80.3088.20.2	4	O-Ring
24	11.0121.09.2	1	Pump Crankcase (Ex 11.0120.09.2)
25	81.2520.50.2	1	Roll Bush DHK 1212
26	11.0033.42.2	1	Crankshaft
27	80.3080.40.2	2	O-Ring D. 1.78 x 53.7
28	11.9811.97.2	1	Housing
29	80.1135.00.2	1	Circlip
30	80.6441.00.2	1	Key 5 x 5 x 15
31	11.0032.42.2	1	Crankshaft
32	11.0017.26.2	1	Ring Z53
33	84.3696.00.2	2	Washer D. 8.4
34	86.2474.00.2	1	Screw M8 x 14

Pos.	Part No.	Qty	Description
35	86.1938.00.2	2	Galvanised Screw M5 x 30 UNI 5737
36	84.3542.00.2	3	Washer Dia. 5.3
40	85.2539.10.2	1	Plug With Gasket (Ex 85.3501.00.2)
41	11.0012.09.2	1	Gear Box Crankcase
42	84.3585.00.2	4	Washer Dia. 6.4 x 12.5 x 1.6 UNI 6592
43	86.2350.00.2	4	Screw T. E. M6 x 45
44	81.4525.00.2	1	Nut M5
45	83.8005.00.2	1	Stud M5 x 14
46	80.2035.00.2	1	Oil Seal Dia. 15 x 25 x 5
47	83.2188.30.2	1	CM46 Engine (recoil start)
63	94.0203.32.2	1	Knob
64	94.0073.48.2	1	Spring
65	94.0202.32.2	1	Lever
66	80.3199.00.2	1	O-Ring
67	94.0204.32.2	1	Valve
68	80.3174.00.2	2	O-Ring 112-D. 9.92 x 2.62
69	05.0068.51.2	1	Seat PG
70	80.3056.00.2	1	O-Ring Dia. 1.78 x 8.73
71	85.1045.00.2	1	Parallel Pin D. 3 x 30 UNI 1707
72	80.3088.00.2	1	O-Ring
73	94.0201.32.2	1	Pressure Regulator Plug
74	82.0015.00.2	2	Cap Nut
75	84.1528.00.2	1	Straight Connector 10mm
76	84.1551.00.2	1	Straight Connector D. 13
77	80.3178.00.2	1	O-Ring
78	94.0206.49.2	1	Bayonet
79	86.1943.90.2	2	Screw M5 x 45
80	84.3542.00.2	2	Washer Dia. 5.3
81	94.0200.32.2	1	Pressure Regulator Body
82	94.0207.32.2	1	Nipples G 1/2" - G 1/4"
83	83.0010.00.2	1	Pressure Gauge Glycerine Filled - SC. 0-24
84	94.9849.97.3	1	Pressure Gauge For N.P.R. 20

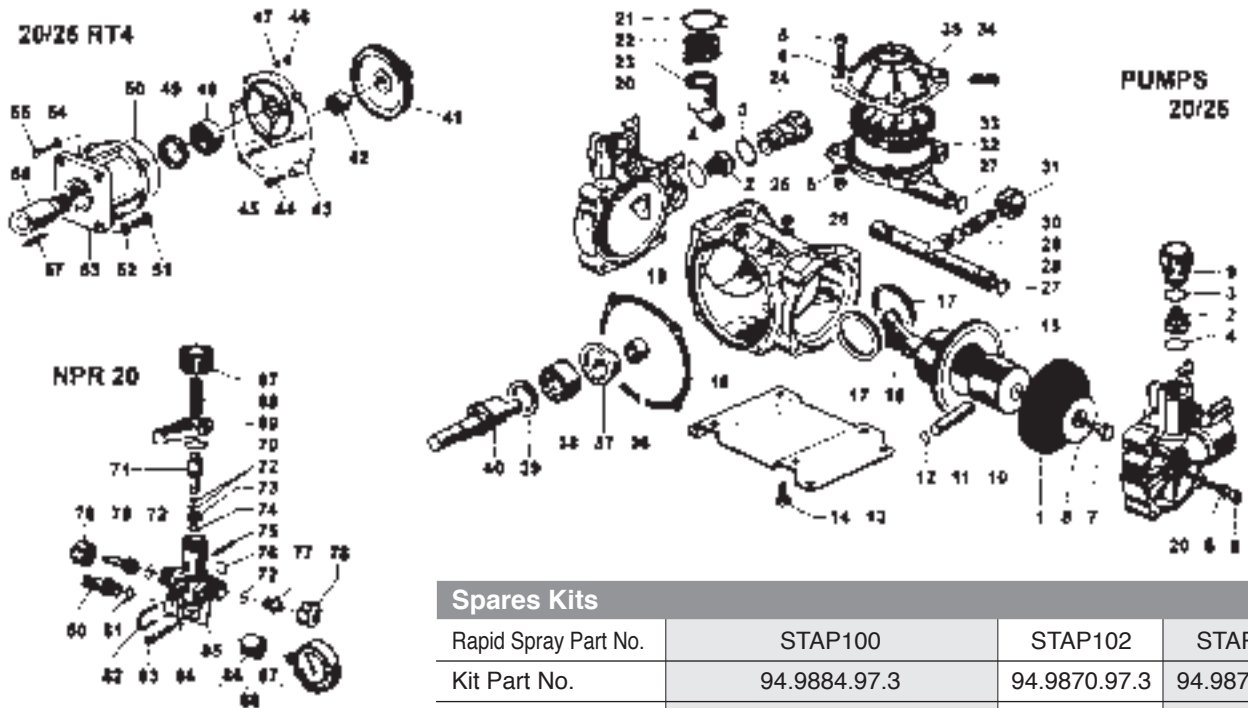
SPARE PARTS LIST - Pump Series 20VF - STAP30



Spares Kits											
Rapid Spray Part No.	STAP101			STAP102			STAP103				
Kit Part No.	94.9881.97.3			94.9870.97.3			94.9871.97.3				
Kit Description	Pump Seals Kit VF				Valves Assy			BUNA-N Diaphragms			
Position No.	42	27	3	4	19	2	3	4	1	27	33
Quantity Incl.	1	4	4	4	1	4	4	4	2	4	1

Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	94.0040.31.2	2	Piston Diaphragm	33	94.0041.33.2	1	Viton Damper Diaphragm
1	94.0040.33.2	2	Viton Piston Diaphragm (non stock)	34	86.1605.00.2	1	Air Valve
2	94.9828.97.3	4	Valve Assy	35	94.0003.09.2	1	Damper Cover
3	80.3219.00.2	4	O-Ring 3.0 x 25	36	81.2531.00.2	1	Needle Bearing DHK 1312
4	82.4154.00.2	4	Gasket Dia. 30 x 24 x 1	37	94.0026.32.2	1	Crankshaft Spacer
5	86.2796.00.2	12	Screw M8 x 40 UNI5931	38	81.2688.00.2	1	Needle Bearing DHK 2520
6	84.3685.00.2	16	Washer Dia. 8.4 x 15 x 1.5	39	94.0027.32.2	1	Spacer
7	94.0048.43.2	2	Diaphragm Locking Bolt	40	80.1264.00.2	1	Ring Dia. 35
8	94.0036.32.2	2	Disk	41	81.2837.00.2	1	Ball Bearing Dia. 35 x 62 x 14
9	94.0091.98.2	2	Outlet Valve Cap	42	80.2178.10.2	1	Oil Seal Dia. 40 x 52 x 7
10	94.0017.08.2	2	Piston Dia. 42 (20 series)	43	94.0216.09.2	1	Bearing Housing (VF)
10	94.0016.08.2	2	Piston Dia. 48 (25 series)	44	86.2168.00.2	4	Screw M6 x 22 UNI5931
11	85.2004.00.2	2	Piston Pin	45	94.0029.26.2	1	Crankshaft VF
12	80.0003.00.2	4	Ring Dia. 10	62	94.0203.32.2	1	Knob
13	94.0022.61.2	1	Mounting Rail	63	94.0073.48.2	1	Spring
14	86.2059.00.2	4	Screw M6 x 14 UNI5739	64	94.0202.32.2	1	Lever
15	94.0007.01.2	2	Piston Sleeve Dia. 42 (20 series)	65	80.3199.00.2	1	O-Ring 2.62 x 21.89
15	94.0015.01.2	2	Piston Sleeve Dia. 48 (25 series)	66	94.0204.32.2	1	Poppet
16	94.0008.09.2	2	Conrod	67	80.3174.00.2	4	O-Ring 2.62 x 9.92
17	94.0047.76.2	2	Conrod Ring	68	05.0068.51.2	1	Seat
18	94.0001.09.2	1	Crankcase	69	80.3056.00.2	1	O-Ring 1.78 x 8.73
19	94.0080.72.2	1	Crankcase Cover Gasket	70	85.1045.00.2	1	Pin Dia. 3 x 30
20	94.0002.09.2	2	Pump Head	71	80.3217.00.2	1	O-Ring 3.0 x 14
21	81.7537.00.2	1	Clamp	72	94.0201.32.2	1	Pressure Regulator Plug
22	94.0044.31.2	1	Oil Filler Cap	73	82.0015.00.2	2	Wing Nut G.1/2
23	94.0043.32.2	1	Oil Filler	74	84.1528.00.2	1	Outlet Connector Dia. 10
24	94.0090.98.2	2	Inlet Valve Cap	75	84.1551.00.2	1	Return Connector Dia. 13
25	94.0075.66.2	1	Cap	76	80.3178.00.2	1	O-Ring 2.62 x 13.1
26	81.4575.00.2	4	Nut M8 UNI5588	77	94.0206.49.2	1	Quick Release Pin
27	80.3181.00.2	4	O-Ring 2.62 x 15.54	78	86.1943.90.2	2	Screw M5 x 45 UNI5931
28	94.0014.32.2	1	Inlet Manifold	79	84.3542.00.2	2	Washer Dia. 5.3 x 10 x 1
29	80.3060.00.2	1	O-Ring 1.78 x 12.42	80	94.0200.32.2	1	Pressure Regulator Body
30	84.0521.00.2	1	90° Elbow Connector Dia. 20	81	94.0207.32.2	1	Nipples G.1/2 - G.1/4
31	82.0042.10.2	1	Wing Nut G.3/4	82	83.0010.00.2	1	Pressure Gauge
32	94.0004.09.2	1	Damper Body	83	94.9849.97.3	1	Pressure Gauge Kit
33	94.0041.31.2	1	Damper Diaphragm				

SPARE PARTS LIST - 20RT4 - STAP31



Spares Kits												
Rapid Spray Part No.	STAP100			STAP102			STAP103					
Kit Part No.	94.9884.97.3			94.9870.97.3			94.9871.97.3					
Kit Description	Pump Seals Kit RT4			Valves Assy			BUNA-N Diaphragms					
Position No.	49	50	27	3	4	19	2	3	4	1	27	33
Quantity Incl.	1	1	4	4	4	1	4	4	4	2	4	1

Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	94.0040.31.2	2	Membrana Pistone	41	94.0212.42.2	1	Ingranaggio Z=51 ("Rt4")
1	94.0040.33.2	2	Membrana Pistone Viton	42	81.2546.00.2	1	Cuscinetto A Rullini
2	94.9828.97.3	4	Gr. Valvola A/m	43	94.0208.09.2	1	Carter Riduttore
3	80.3219.00.2	4	Anello Or 3,0x25	44	86.2261.00.2	4	Vite Tcei M6x30 Uni5931
4	82.4154.50.2	4	Guarnizione D.30x24x1	45	83.8006.00.2	1	Prigioniero M5x18 Uni5914
5	86.2796.00.2	12	Vite Tcei M8x40 Uni5931	46	81.4525.00.2	3	Dado M5 Uni5588
6	84.3685.00.2	16	Rosetta D.8,2x15x1,5	47	84.3542.00.2	2	Rosetta D.5,3x10x1
7	94.0048.43.2	2	Vite Fissaggio Membrana	48	81.2631.00.2	1	Cuscinetto Sfere
8	94.0036.32.2	2	Plattello Membrana	49	80.2117.00.2	1	Anello Radiale
9	94.0242.98.2	2	Tappo Mandata	50	80.3210.64.2	1	Anello Or 2,62x75,87
10	94.0017.08.2	2	Pistone (Serie 20)	51	86.2566.00.2	4	Vite Te 5/16"-24unf L=3/4"
10	94.0016.08.2	2	Pistone (Serie 25)	51	86.2622.00.2	4	Vite Te M8x22 Uni5739 (Honda G100)
11	85.2004.00.2	2	Spinotto D.10x35	52	84.3685.00.2	4	Rosetta D.8,2x15x1,5
12	80.0003.00.2	4	Anello D.10 Per Foro	53	94.0210.09.2	1	Flangia Motori Termici ("Rt4")
13	94.0022.61.2	1	Piedino	54	84.3560.00.2	3	Rosetta D.5,5x15x1,6
14	86.2059.00.2	4	Vite Te M6x14 Uni5739	55	86.1935.10.2	2	Vite Te M5x25 Uni5737
15	94.0007.01.2	2	Camicia (Serie 20)	56	94.0211.42.2	1	Pignone Z=10 (Sae 3/4")
15	94.0015.01.2	2	Camicia (Serie 25)	56	94.0228.42.2	1	Pignone Z=10 (Honda G100-s)
16	94.0008.09.2	2	Biella Singola	56	94.0218.42.2	1	Pignone Z=10 (Honda G100-q)
17	94.0047.76.2	2	Anello Serraggio Biella	57	80.6436.00.2	1	Linguetta 4,75x5x30
18	94.0001.09.2	1	Carter Pompa	57	80.6445.00.2	1	Linguetta 5x5x30 (Honda G100-s)
19	94.0080.72.2	1	Guarnizione Coperchio Carter	67	94.0203.32.2	1	Pomolo Di Regolazione
20	94.0002.09.2	2	Testata Pompa	68	94.0073.48.2	1	Molla
21	81.7537.00.2	1	Fascetta D.33	69	94.0202.32.2	1	Leva Scarico Rapido
22	94.0044.31.2	1	Coperchio Serbatoio	70	80.3199.00.2	1	Anello Or 2,62x21,89
23	94.0043.32.2	1	Serbatoio Olio	71	94.0204.32.2	1	Otturatore
24	94.0243.98.2	2	Tappo Aspirazione	72	80.3174.00.2	4	Anello Or 2,62x9,92
25	94.0075.66.2	1	Pastiglia Appoggio	73	05.0068.51.2	1	Sede Valvola
26	81.4575.00.2	4	Dado M8 Uni5588	74	80.3056.00.2	1	Anello Or 1,78x8,73
27	80.3181.00.2	4	Anello Or 2,62x15,54	75	85.1045.00.2	1	Spina Cilindrica D.3x30
28	94.0014.32.2	1	Collettore	76	80.3217.00.2	1	Anello Or 3,0x14
29	80.3060.00.2	1	Anello Or 1,78x12,42	77	94.0201.32.2	1	Tappo
30	84.0521.00.2	1	Raccordo Curvo D.20	78	82.0015.00.2	2	Galletto G.1/2
31	82.0042.10.2	1	Galletto G.3/4	79	84.1528.00.2	1	Raccordo Mandata D.8
32	94.0004.09.2	1	Accumulatore Inferiore	80	84.1551.00.2	1	Raccordo Scarico D.13
33	94.0041.31.2	1	Membrana Accumulatore	81	80.3178.00.2	1	Anello Or 2,62x13,1
33	94.0041.33.2	1	Membrana Accumulatore Viton	82	94.0206.49.2	1	Baionetta
34	86.1605.00.2	1	Valvola Aria	83	86.1943.90.2	2	Vite Tcei M5x45 Uni5931
35	94.0003.09.2	1	Accumulatore Superiore	84	84.3542.00.2	2	Rosetta D.5,3x10x1
36	81.2531.00.2	1	Cuscinetto A Rullini	85	94.0200.32.2	1	Corpo Valvola Regolazione
37	94.0026.32.2	1	Distanziale	86	94.0207.32.2	1	Manicotto G.1/2-g.1/4
38	81.2688.00.2	1	Cuscinetto A Rullini	87	83.0010.00.2	1	Manometro
39	94.0027.32.2	1	Distanziale	88	94.9849.97.3	1	Kit Manometro Npr 20
40	94.0215.26.2	1	Albero Eccentrico "Rt2"-rt4"				

Semi-hydraulic triple diaphragm piston pumps engineered for a smoother and quieter operator. Medium pressure pumps (up to 40 bar - 580 P.S.I.) and medium flow rate, in light alloy, compact design and complete with mounting rails. All moving parts are completely submerged in oil and because of their reliability (self-lubricating cast iron piston sleeves with double rings, special steel forged crankshafts for added resistance), they ensure long life. All metallic fluid end components are either anodized or stainless steel, like the check valves. They are commonly fitted with simple P.T.O. shaft, but, for quick and flexible coupling, they are supplied in the following version: VF: one only standard P.T.O. for all applications.



STAP36 - PA 330

Three piston semi-hydraulic diaphragm pump

Versions available: "VF" - Standard 6 holes shaft.



Specifications		mod. PA 330			
R.P.M.		R.P.M.	R.P.M.	650	650
Power	KW	HP	2.5	3.4	
Weight	Kg	Lbs	7.3	16	
Suction Lift - MAX	mt	ft	1.5	4.9	
∅ Intake	mm	in	25	1"	
High Pressure			G. 1/2	G. 1/2	
MAX Temperature	°C	°F	40	104	
Oil Type	SAE	W	SAE 30	30 W	
Oil Capacity	Lt	U.S.G.	0.6	0.16	

03.6000.97.3 - VF

PA 330

R.P.M. ; t/min; g/min

Max Flow	34 l/min	9 USGPM
Max Pressure	40 bar	580 PSI

		500		550		600		650	
BAR	P.S.I.	l/min	KW	l/min	KW	l/min	KW	l/min	KW
2	29	26.5	0.1	29	0.11	31.5	0.12	34	0.14
20	290	25	1	27.5	1.1	30	1.2	32	1.3
30	435	24.5	1.5	27	1.6	29.5	1.8	31.5	1.9
40	580	24	2	26.5	2.2	29	2.4	31	2.5



STAP39 - PA 530

Three piston semi-hydraulic diaphragm pump

Versions available:
"VF" - Standard 6 holes shaft



Specifications		mod. PA 530			
R.P.M.		R.P.M.	R.P.M.	650	650
Power	KW	HP	4.2	5.7	
Weight	Kg	Lbs	14	31	
Suction Lift - MAX	mt	ft	1.5	4.9	
∅ Intake	mm	in	32	1 1/4"	
High Pressure			G. 1/2	G. 1/2	
MAX Temperature	°C	°F	40	104	
Oil Type	SAE	W	SAE 30	30 W	
Oil Capacity	Lt	U.S.G.	0.5	0.13	

23.6004.97.3 - VF

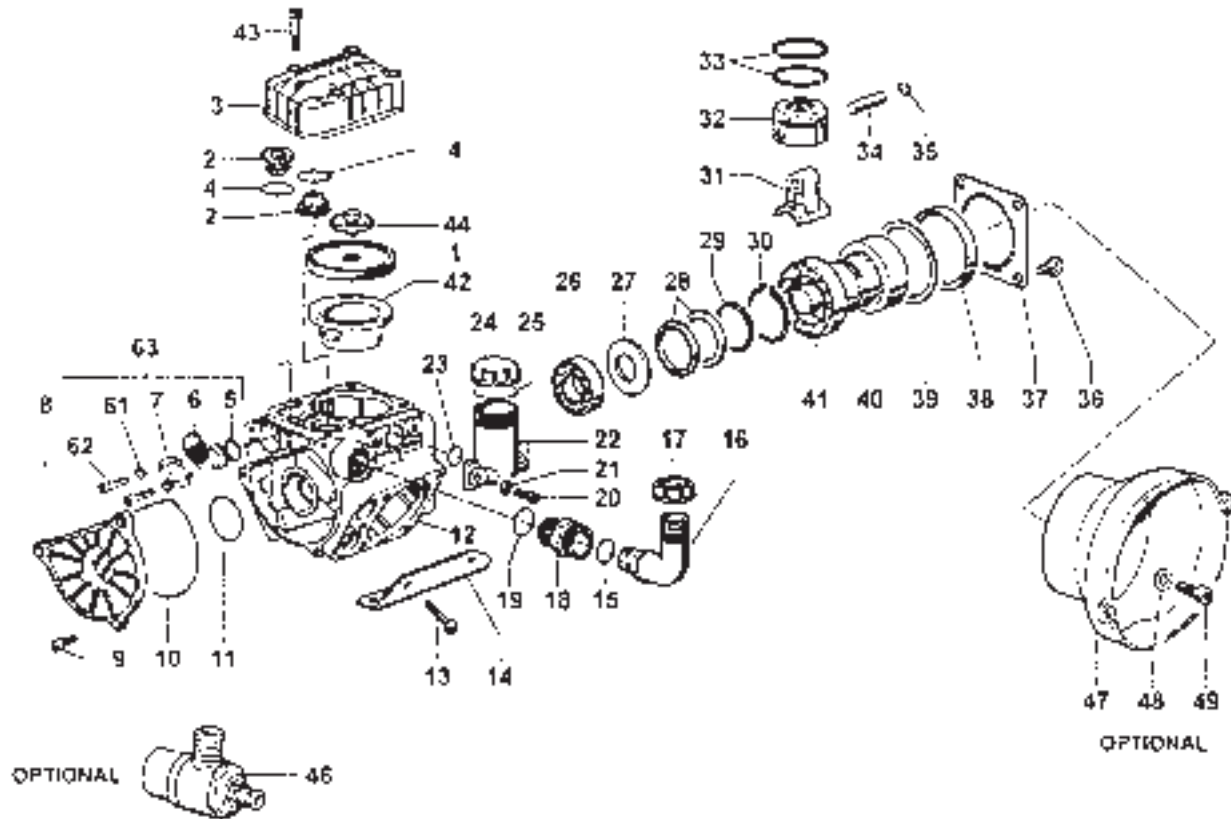
PA 530

R.P.M.

Max Flow	54 l/min	14.3 USGPM
Max Pressure	40 bar	580 PSI

		400		450		500		550	
BAR	P.S.I.	l/min	KW	l/min	KW	l/min	KW	l/min	KW
2	29	39.2	0.12	44.2	0.13	49	0.15	54	0.16
20	290	38	1.5	42.8	1.7	47.5	1.9	52	2.1
30	435	37.6	2.3	42.3	2.6	47	2.8	51.5	3.2
40	580	37.2	3	41.8	3.4	46.5	3.8	51	4.2

SPARE PARTS LIST - PA 330 VF - STAP36

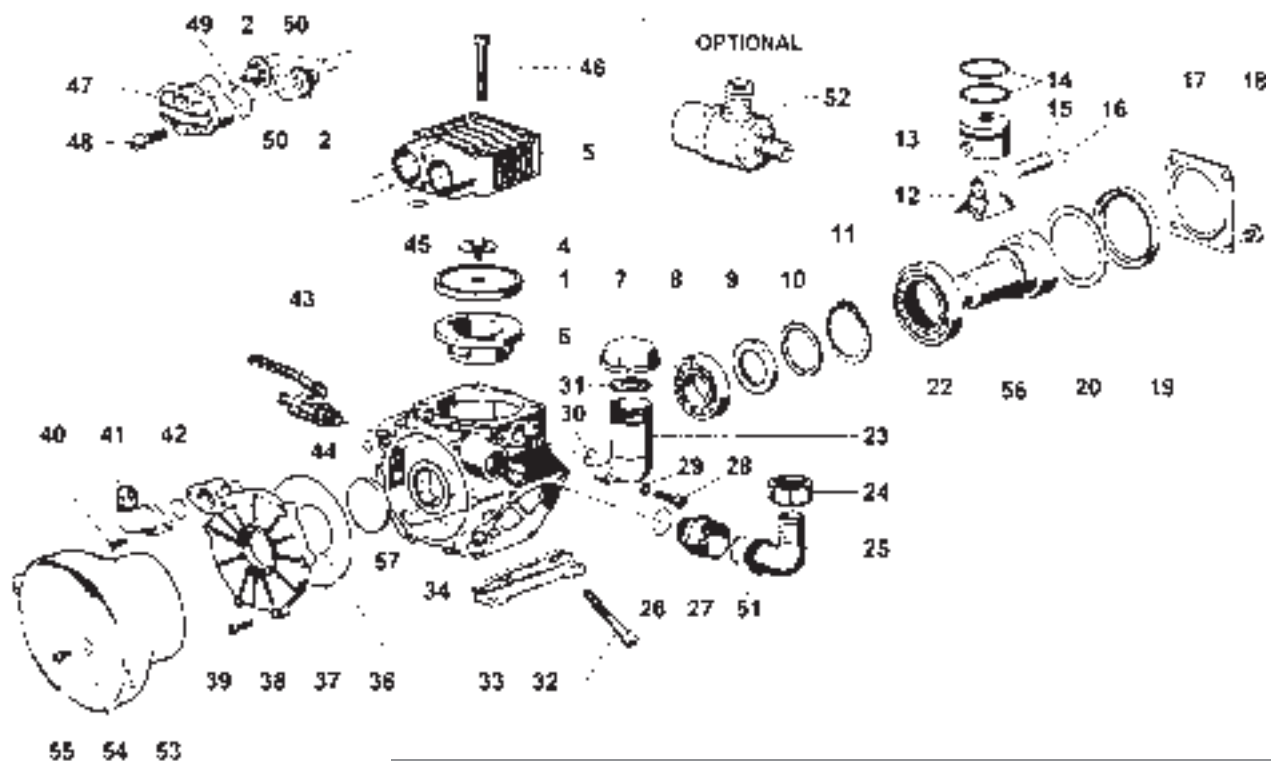


Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	03.0040.31.2	3	Piston Diaphragm	25	82.4120.00.2	1	Gasket Dia. 45 x 19 x 1.5
1	03.0040.00.2	3	Desmopan Piston Diaphragm	26	81.2646.00.2	1	Ball Bearing Dia. 20 x 52 x 15
1	03.0040.36.2	3	HPS Piston Diaphragm	27	03.0011.61.2	1	Spacer
2	03.9801.97.3	6	Valve Assy (up until Nov 04)	28	94.0047.76.2	1	Conrod Ring
2	03.9821.97.3	6	Valve Assy (new style Dec 04)	29	03.0012.61.2	1	Spacer
3	03.9820.97.3	3	Head (up until Nov 04)	30	80.1331.00.2	1	Shaft Ring D.45
3	03.0202.09.2	3	Head (new style Dec 04)	31	03.0005.09.2	3	Conrod
4	03.0016.31.2	6	Valve Seal	32	03.0006.09.2	3	Piston Dia. 48
6	31.8916.97.3	1	Outlet Flange Kit G.1/2	33	81.8502.50.2	6	Piston Ring
8	03.0003.09.2	1	Suction Cover	34	85.2006.00.2	3	Piston Pin Dia. 10
9	86.2131.00.2	3	Screw M6 x 18 UNI5931	35	80.0003.00.2	6	Ring Dia. 10
10	80.3210.66.2	1	O-Ring 2.62 x 101.27	36	86.3185.00.2	4	Screw M10 x 16 UNI5739
11	80.3208.30.2	1	O-Ring 2.62 x 36.14	37	17.0013.61.2	1	Cover
12	03.0001.09.2	1	Crankcase	38	80.2264.10.2	1	Oil Seal Dia. 68 x 90 x 10
13	86.2893.00.2	4	Screw M8 x 50 (up until Nov 04)	39	03.0015.61.2	1	Spacer
13	86.2900.00.2	4	Screw M8 x 55 (new style Dec 04)	40	03.0017.26.2	1	Crankshaft
14	03.0014.61.2	2	Mounting Rail	41	81.2933.00.2	1	Ball Bearing Dia. 45 x 75 x 16
15	80.3200.00.2	1	O-Ring 2.62 x 22.22	42	03.0007.01.2	3	Piston Sleeve Versions
16	84.0542.00.2	1	90° Elbow Connector Dia. 25	43	86.2852.00.2	11	Screw M8 x 45 (up until Nov 04)
17	82.0049.00.2	1	Wing Nut M34	43	86.2893.00.2	11	Screw M8 x 50 (new style Dec 04)
18	83.5062.10.2	1	Nipples G.3/4 - M34	44	03.0021.97.3	3	Kit Diaphragm Washer / Screw AISI 316
19	80.3205.00.2	1	O-Ring 2.62 x 25.07	46	24.3040.97.3	1	Safety Valve 40 Bar (Optional)
20	86.2730.00.2	2	Screw M8 x 30 UNI5931	47	31.1482.32.2	1	Plain Safety Cone (Optional)
21	84.3685.00.2	2	Washer Dia. 8.4 x 15 x 1.5	48	84.3810.00.2	4	Washer Dia. 10.5 x 21 x 2
22	23.0008.32.2	1	Oil Filler	49	86.3212.00.2	4	Screw M10 x 20 UNI5931
23	80.3180.00.2	1	O-Ring 2.62 x 15.08				
24	85.2750.00.2	1	Oil Filler Cap				

Spares Kits

Rapid Spray Part No.	STAP105	STAP106	STAP106.1	STAP107	STAP108
Kit Part No.	03.9830.97.3	03.9850.97.3	30.9875.97.3	03.9851.97.3	03.9873.97.3
Kit Description	Pump Seals Kit	Valve Assy (up until Nov 04)	Valve Assy (from Dec 04)	BUNA-N Diaphragms	DESMOPAN Diaphragms
Position No.	4 38 10 11	2 4	2 4	1 4	1 4
Quantity Incl.	6 1 1 1	6 6	6 6	3 6	3 6

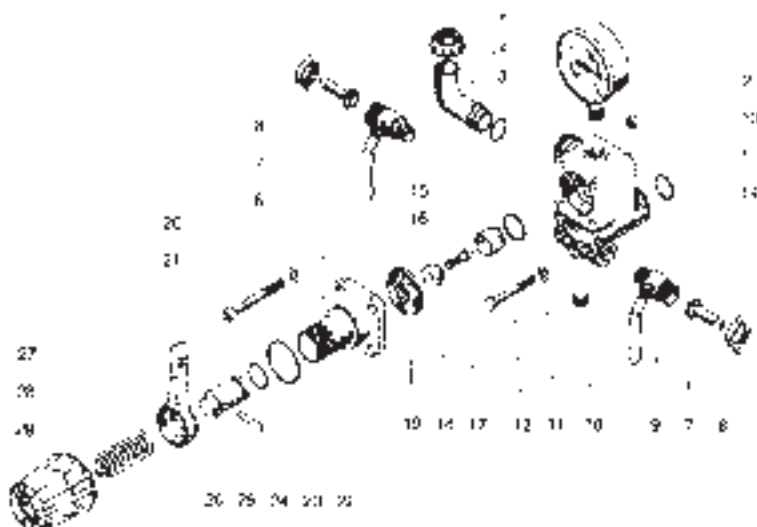
SPARE PARTS LIST - PA 530 - STAP39



Spares Kits													
Rapid Spray Part No.	STAP116			STAP117			STAP118						
Kit Part No.	23.9880.97.3			23.9829.97.3			23.9828.97.3						
Kit Description	Pump Seals Kit			Valves Assy			BUNA-N Diaphragms						
Position No.	35	19	44	45	49	50	36	37	2	50	49	1	45
Quantity Incl.	1	1	1	6	6	6	1	1	6	6	6	3	6

Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	23.0011.31.2	3	Piston Diaphragm	28	86.2730.00.2	2	Screw M8 x 30 UNI5931
1	23.0011.33.2	3	Viton Piston Diaphragm	29	84.3685.00.2	2	Washer Dia. 8.4 x 15 x 1.5
1	23.0011.36.2	3	HPS Piston Diaphragm	30	80.3180.00.2	1	O-Ring 2.62 x 15.08
1	23.0011.00.2	3	Desmopan Piston Diaphragm	31	82.4120.00.2	1	Gasket Dia. 45 x 19 x 1.5
2	23.9805.97.3	6	Valve Assy	32	86.3562.00.2	4	Screw M10 x 70 UNI5931
4	23.0043.98.3	3	Kit Diaphragm Washer / Screw AISI 316	33	23.0018.61.2	2	Mounting Brackets
5	23.0002.09.2	3	Head	34	23.0001.09.2	1	Crankcase
6	23.0020.01.2	3	Piston Sleeve D.55	36	80.3209.80.2	1	O-Ring 2.62 x 50.47
7	85.2750.00.2	1	Oil Filler Cap	37	80.3210.68.2	1	O-Ring 2.62 x 120.32
8	81.2846.00.2	1	Ball Bearing Dia. 35 x 72 x 17	38	23.0046.09.2	1	Crankcase Cover
9	23.0019.76.2	1	Ring	39	86.2216.00.2	6	Screw M6 x 25 UNI5931
10	26.0047.76.2	1	Ring	40	86.2168.00.2	2	Screw M6 x 22 UNI5931
11	80.1377.00.2	1	Ring Dia. 55 ("VM" - "VC")	41	31.1003.09.2	1	90° Elbow G.1/2 Fitting
12	23.0005.09.2	3	Light Alloy Conrod	42	80.3218.00.2	1	O-Ring 3.0 x 22
12	23.0045.11.2	3	Bronze Conrod	43	84.5544.10.2	1	Left Tap G.3/8 - F.1/2
13	23.0007.09.2	3	Piston D. 55	44	80.3176.00.2	1	O-Ring 2.62 x 11.91
14	81.8504.50.2	6	Piston Ring	45	80.3189.00.2	6	O-Ring 2.62 x 18.72
15	85.2006.70.2	3	Piston Pin Dia. 15	46	86.3560.00.2	8	Screw M10 x 65 UNI5931
16	80.0021.00.2	6	Ring Dia. 15	47	23.0003.09.2	3	Valve Cover
17	17.0013.61.2	1	Cover	48	86.3300.00.2	6	Screw M10 x 30 UNI5931
18	86.3185.00.2	4	Screw M10 x 16 UNI5739	49	80.3219.20.2	6	O-Ring 3.0 x 35
19	80.2264.10.2	1	Oil Seal Dia. 68 x 90 x 10	50	80.3207.00.2	6	O-Ring 2.62 x 29.82
20	17.0024.76.2	1	Spacer	51	80.3219.00.2	1	O-Ring 3.0 x 25
22	81.2972.00.2	1	Ball Bearing Dia. 55 x 90 x 18 ("VM" - "VD")	52	24.3040.97.3	1	Safety Valve 40 Bar (Optional)
23	23.0008.32.2	1	Oil Filler	53	31.1467.32.2	1	Safety Cone (Optional)
24	82.0067.50.2	1	Wing Nut G.1"1/4	54	84.3618.00.2	3	Washer Dia. 6.4 x 18 x 1.5 (Optional)
25	84.0560.00.2	1	90° Elbow Connector Dia. 30	55	86.2086.00.2	3	Screw M6 x 14 UNI5931 (Optional)
25	84.0565.00.2	1	90° Elbow Connector Dia. 32 (Optional)	56	23.0028.26.2	1	Crankshaft Version "VF"
26	80.3207.00.2	1	O-Ring 2.62 x 29.82	57	80.2099.50.2	1	Cover "VF"
27	83.5089.00.2	1	Nipples G.1" - G.1"1/4				

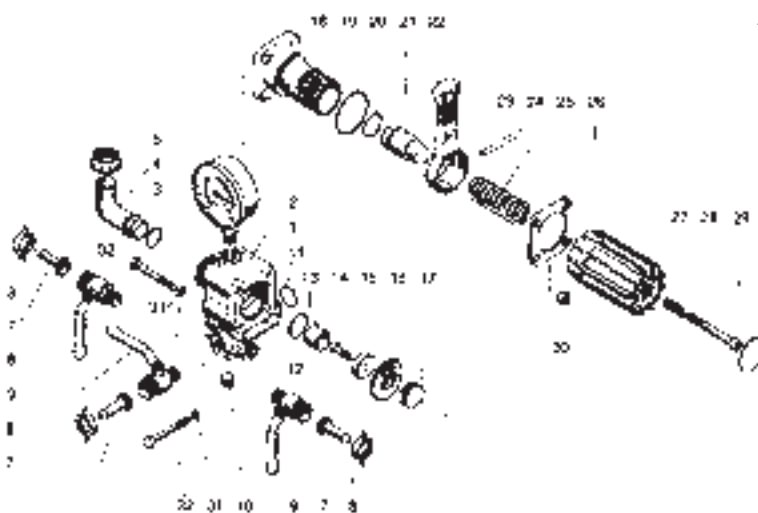
SPARE PARTS LIST - KARIN - STAP77 (15 bar) + STAP78 (40 bar)



Spares Kits	
Rapid Spray Part No.	STAP133
Kit Part No.	25.9963.97.3
Kit Description	Karin Kit
Position No.	3 14 15 16 18 19 23 24
Quantity Incl.	1 1 1 1 1 1 1 1

Pos.	Part No.	Qty	Description
1	24.0310.32.2	1	Valve Housing
1	83.0080.00.2	1	Pressure Gauge 0-100 Bar
2	83.0010.00.2	1	Pressure Gauge 0-24 Bar
3	80.3060.00.2	1	O-Ring 1.78 x 12.42
4	84.0521.00.2	1	90° Elbow Connector Dia. 20
5	82.0042.10.2	1	Wing Nut G.3/4
6	84.5544.10.2	1	Left Tap G.3/8 - G.1/2
7	84.1544.00.2	2	Outlet Straight Port D.10
8	82.0010.00.2	2	Wing Nut G.1/2
9	84.5544.00.2	1	Right Tap G.3/8 - G.1/2
10	85.2585.00.2	1	Cap G.3/8
11	84.3585.00.2	2	Washer Dia. 6.4 x 12.5 x 1.6
12	86.2426.00.2	2	Screw M6 x 60 UNI5737
13	84.4525.00.2	4	Nut M5 UNI5588
14	80.3218.00.2	1	O-Ring 3.0 x 22
15	80.3059.00.2	1	O-Ring D.1.78 x 11.11
16	24.0320.51.2	1	Valve Seat
17	86.1841.50.2	1	Screw M4 x 12
18	24.0319.51.2	1	Poppet
19	24.0313.36.2	1	HPS Diaphragm
20	84.3539.00.2	4	Washer Dia. 5.3 x 10 x 1
21	86.1944.20.2	4	Screw M5 x 50
22	24.0311.32.2	1	Flange
23	80.3075.00.2	1	O-Ring
24	80.3175.00.2	1	O-Ring 2.62 x 10.78
25	85.1148.00.2	1	Pin
26	24.0314.53.2	1	Guiding Piston
27	24.0312.32.2	1	Lever
28	24.0316.48.2	1	Spring 40 Bar
28	24.0550.48.2	1	Spring 15 Bar
29	24.0321.32.2	1	Knob

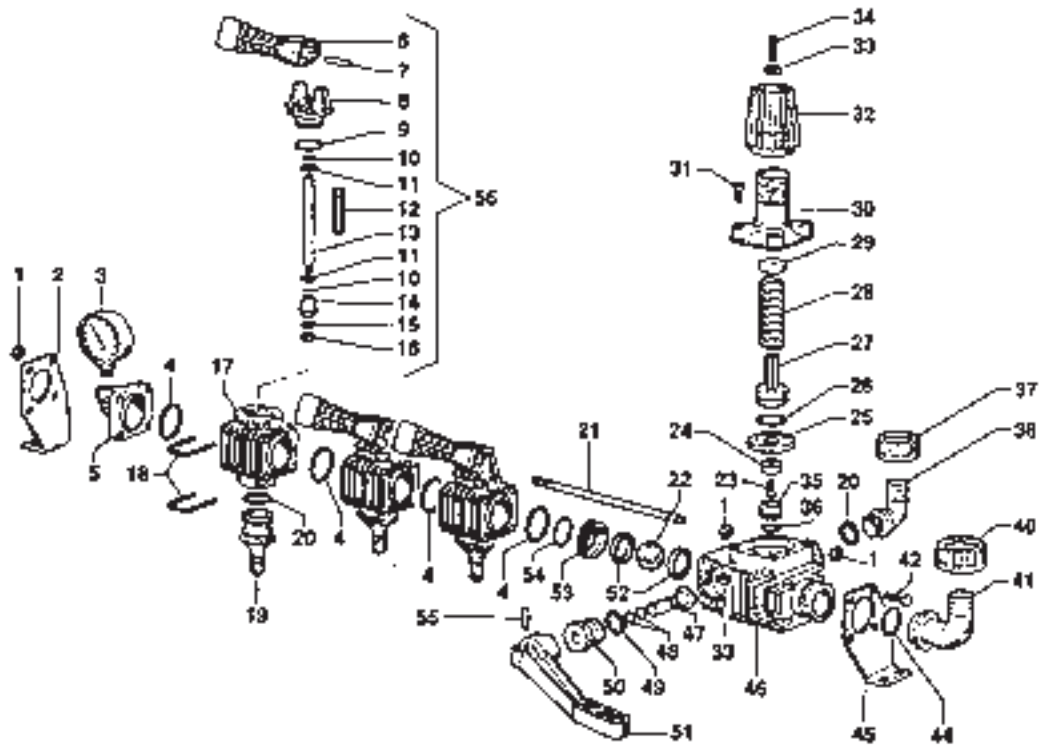
SPARE PARTS LIST - STING - STAP79 (15 bar) + STAP80 (40 bar)



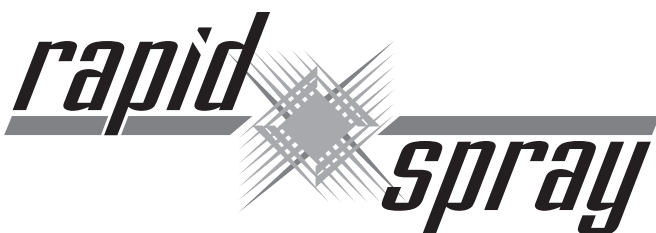
Spares Kits	
Rapid Spray Part No.	STAP134
Kit Part No.	25.9964.97.3
Kit Description	Sting Kit
Position No.	3 11 12 13 15 16 19 20
Quantity Incl.	1 1 1 1 1 1 1 1

Pos.	Part No.	Qty	Description
1	24.0300.32.2	1	Valve Housing
2	83.0080.00.2	1	Pressure Gauge (0-100 Bar)
2	83.0010.00.2	1	Pressure Gauge (0-24 Bar)
3	80.3060.00.2	1	O-Ring 1.78 x 12.42
4	84.0521.00.2	1	90° Elbow Connector Dia. 20
5	82.0042.10.2	1	Wing Nut G.3/4
6	82.5544.10.2	1	Left Cap G.3/8 - G. 1/2
7	84.1544.00.2	2,3	Outlet Straight Port D. 10
8	82.0010.00.2	2,3	Wing Nut G.1/2
9	84.5544.00.2	1,2	Right Tap G.3/8 - G.1/2
10	85.2585.00.2	1,2	Cap G.3/8
11	80.3213.00.2	1	C-Ring 3.0 x 22
12	80.3182.00.2	1	C-Ring 2.62 x 17.13
13	26.0220.18.2	1	Valve Seat
14	86.1934.80.2	1	Screw M5 x 16 UNI5933 Inox
15	26.0201.18.2	1	Ceramic Poppet
16	26.0189.36.2	1	HPS Diaphragm
17	26.0203.32.2	1	Diaphragm Holder Piston
18	24.0301.32.2	1	Flange
19	80.3208.20.2	1	O-Ring 2.62 x 34.6
20	80.3181.20.2	1	O-Ring 2.62 x 15.88
21	24.0302.53.2	1	Guiding Piston
22	24.0303.32.2	1	Lever
23	85.1161.00.2	1	Pin Dia. 4 x 45.5
24	26.0217.48.2	1	Spring (15 Bar)
24	26.0212.48.2	1	Spring (40 Bar)
25	24.0304.61.2	1	Shim
26	24.0304.32.2	1	Knob
27	24.0306.49.2	1	Spring
28	86.2428.00.2	1	Screw T.C.E.I. M6 x 65 UNI5931
29	24.0307.32.2	1	Cap
30	81.4542.00.2	4	Nut M6 UNI5588
31	84.3585.00.2	6	Washer Dia. 6.4 x 12.5 x 1.6
32	86.2426.00.2	6	Screw M6 x 60 UNI5737

SPARE PARTS LIST - MULTICONTROL "RS" - STAP83



Pos.	Part No.	Qty	Description	Pos.	Part No.	Qty	Description
1	81.4575.00.2	12	Nut M8 INI 5588	28	26.0212.48.2	1	Spring
2	25.0226.61.2	1	Feet	29	26.0204.51.2	1	Spring Washer
3	83.0010.00.2	1	Pressure Gauge Glycerine Filled - SC. 0-24	30	25.0152.32.2	1	Cap
4	80.3208.30.2	8	O-Ring Dia. 2.62 x 36.14	31	86.2261.00.2	4	Screw M6 x 30 UNI5931
5	25.0312.32.2	1	Pressure Gauge Holder Cap	32	26.0219.32.2	1	Adjusting Knob
6	25.0373.32.2	7	Lever	33	81.4542.00.2	5	Hexagon Nut M6
7	85.1139.90.2	7	Pin Dia. 4 x 25	34	86.2235.00.2	1	Screw M6 x 35 UNI5927
8	25.0369.32.2	7	Section Boom Valve Body "RS"	35	25.0155.51.2	1	Seat
9	80.3200.00.2	7	O-Ring Dia. 2.62 x 22.22	36	80.3195.00.2	1	O-Ring 3081 - Dia. 20.24 x 2.62
10	80.3087.60.2	14	Viton O-Ring Dia. 2 x 7	37	82.0045.00.2	1	Wing Nut G.1"
11	84.3653.00.2	14	S.S. Washer Dia. 8.4 x 14 x 1.6	38	84.0520.00.2	1	Outlet 90° Elbow Tail 25mm
12	25.0058.51.2	7	Spring	40	82.0067.50.2	1	Wing Nut G.1-1/4
13	25.0371.51.2	7	Section Boom Valve Rod - "RS"	41	84.0542.40.2	1	90° Elbow 20mm. Tail
14	25.0352.32.2	7	Poppet	42	86.2555.00.2	4	Screw M8 x 20
15	84.3525.00.2	7	S.S. Washer Dia. 4.3 x 12 x 1	44	80.3219.00.2	1	O-Ring D. 3 x 25
16	81.4513.50.2	7	Stainless Steel Nut M4	45	25.0323.61.2	1	Right Drilled Mounting Rail
17	25.0339.32.2	7	Valve Body	46	25.0151.32.2	1	Control Unit Body
18	25.0059.49.2	14	Quick Release Pin Dia. 25	47	24.0230.51.2	1	Ball Control Pin
19	25.0340.32.2	7	Outlet 13mm	48	80.3052.50.2	2	Viton O-Ring D. 1.78 x 6.75
20	80.3200.00.2	8	O-Ring Dia. 2.62 x 22.22	49	80.3189.00.2	1	O-Ring Dia. 2.62 x 18.72
21	85.4512.00.2	4	Stay Rod D 162	50	25.0223.32.2	1	Connector For Lever Pin
22	25.0156.53.2	1	Ball Valve	51	25.0160.32.2	1	Lever
23	86.1934.80.2	1	Stainless Steel Screw M5 x 16	52	24.0223.32.2	2	Teflon Gasket
24	26.0201.18.2	1	Ceremic Poppet	53	25.0154.32.2	1	Washer
25	25.0016.31.2	1	Diaphragm	54	80.3208.10.2	1	O-Ring D. 32.99 x 2.62
26	80.3247.30.2	1	O-Ring 3.53 x 26.57	55	85.1139.50.2	1	Pin Dia. 4 x 24
27	25.0153.32.2	1	Piston	56	25.9817.97.3	3	Manual Section Valve Kit "RS" For Control Unit



Freecall 1800 011 000
Fax 02 6571 2951