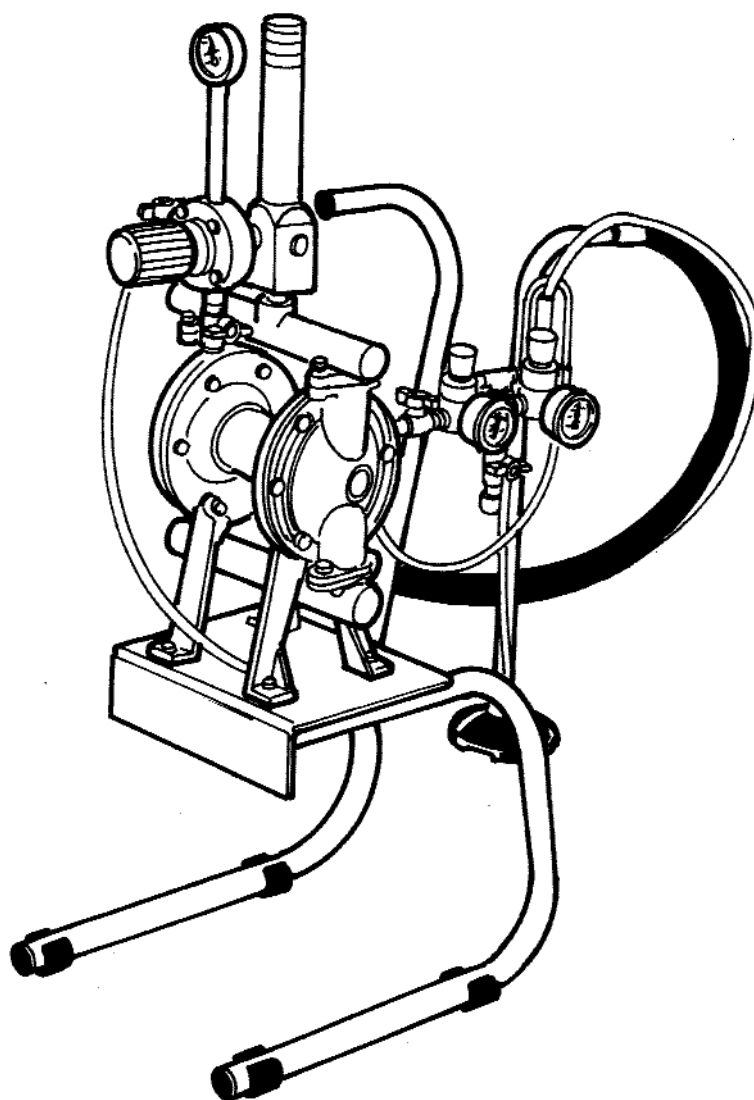


WM 30



USE AND MAINTENANCE MANUAL

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• • • OPERATING PRINCIPLE

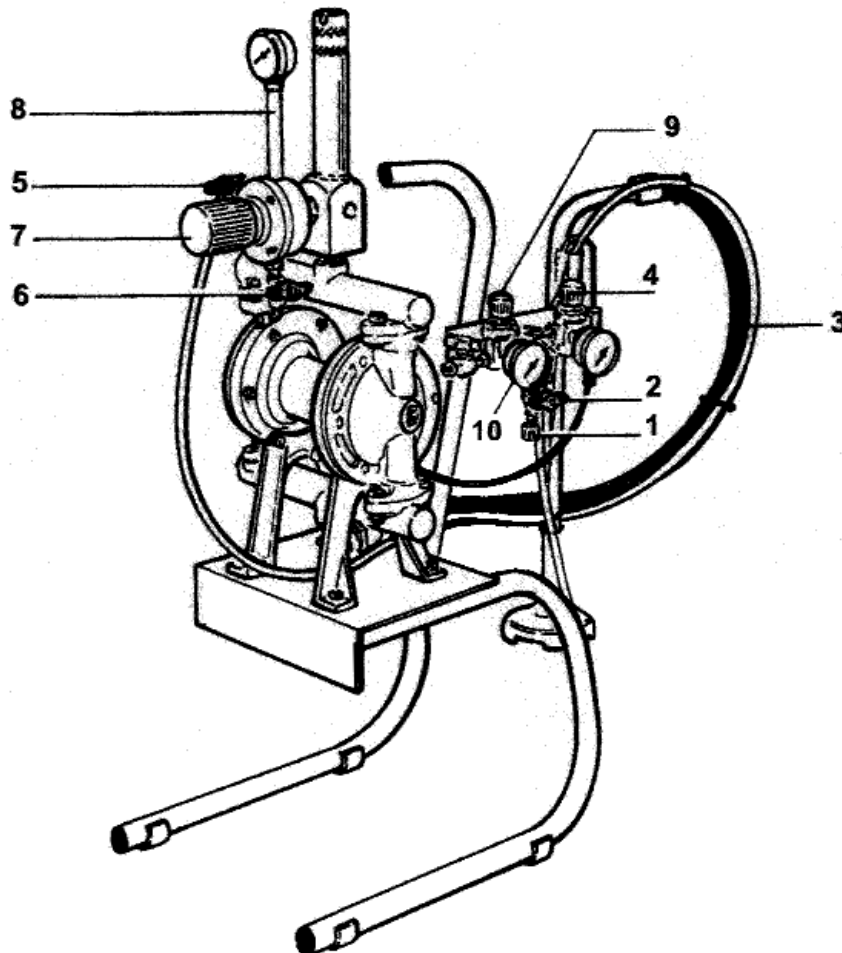
This is a low-pressure diaphragm pump for supplying hand-held spray guns and automatic ones fitted to painting machines.

It works like this: the supply air feeds the pump's pneumatic motor that is connected to two diaphragms at its ends. The alternate motor movement permits the pump to draw in the product from the container and to force it into the gun supply pipe with no falls in pressure. There is also a paint pressure regulator with a small reserve to compensate for any feed pulsation; this ensures even spraying.

TECHNICAL DATA	WM 30
Pressure ratio	1 : 1
Air supply pressure	2 ÷ 6 bar (29 ÷ 87 Psi)
Max product pressure	6 bar
Max working flow rate	30 Lt./min.
Max air consumption when empty	155 NI/min.
Air inlet	1/4" Gas
Product inlet	1/4" Gas / 1/4 Gas
Product outlet	Ø 6 mm. / 1/4" Gas
Flexible diaphragm material	Special rubber with fabric
Membrane protection material	P.T.F.E.

• • • SAFETY INSTRUCTIONS

- 1) When using the pump take care not to direct the spray jet towards yourself or other persons.
- 2) Always wear a mask and protective goggles to avoid inhaling the product and splashes into your eyes.
- 3) Always read the handling instructions and indications printed on the product drums.
- 4) In the event of injury to the skin caused by paints or thinners, contact a doctor immediately.



• • • BEFORE STARTING WORK

- 1.1 Connect the pump to the air supply using the coupling (pos. 1) and open the valve (pos. 2).
- 1.2 Submerge the draught pipe (pos.3) in a container containing clean thinners.
- 1.3 Regulate the pump air supply pressure to around 5 bar via the regulator (pos.4)
- 1.4 Open the return valve (pos.5) and circulate the thinners for 2 – 3 minutes; this cleans the pump from any impurities possibly present.
- 1.5 Close the return valve.
- 1.6 Open the product supply valve to the spray gun (pos.6)
- 1.7 Open the spray gun (by pressing the trigger) holding it above the thinners container.
- 1.8 After checking that the pump supply air pressure is around 5 bar, adjust the product pressure to around 0.8-1 bar using the regulator (pos.7) and by checking on the gauge provided (pos. 8). In any case, the product pressure is correct if it gives a spray of around 30 cm. from the gun nozzle when the atomising air is still closed; this pressure varies in fact, also in function to product viscosity and the type of nozzle fitted to the gun.
- 1.9 Regulate the atomising pressure to 2-3 bar using the regulator (pos. 9) and by checking its gauge (pos.10).

The pump is now ready for use.

• • • ISTARTING PAINTING

- 2.1 After preparing the paint in a clean container, submerge the draught pipe into the product to be applied.
- 2.2 Open the gun (by pressing the trigger), and direct the jet inside the thinners container (the pump draws up paint and sprays the thinners contained in the pipes).
- 2.3 When the product starts to leave to gun, you can begin spraying.
- 2.4 When using a particularly viscous product or a fine nozzle, it is opportune to slightly open the paint return valve to prevent the pump from operating discontinuously and harmfully due to

• • • MAINTENANCE OPERATIONS AT THE END OF SPRAYING

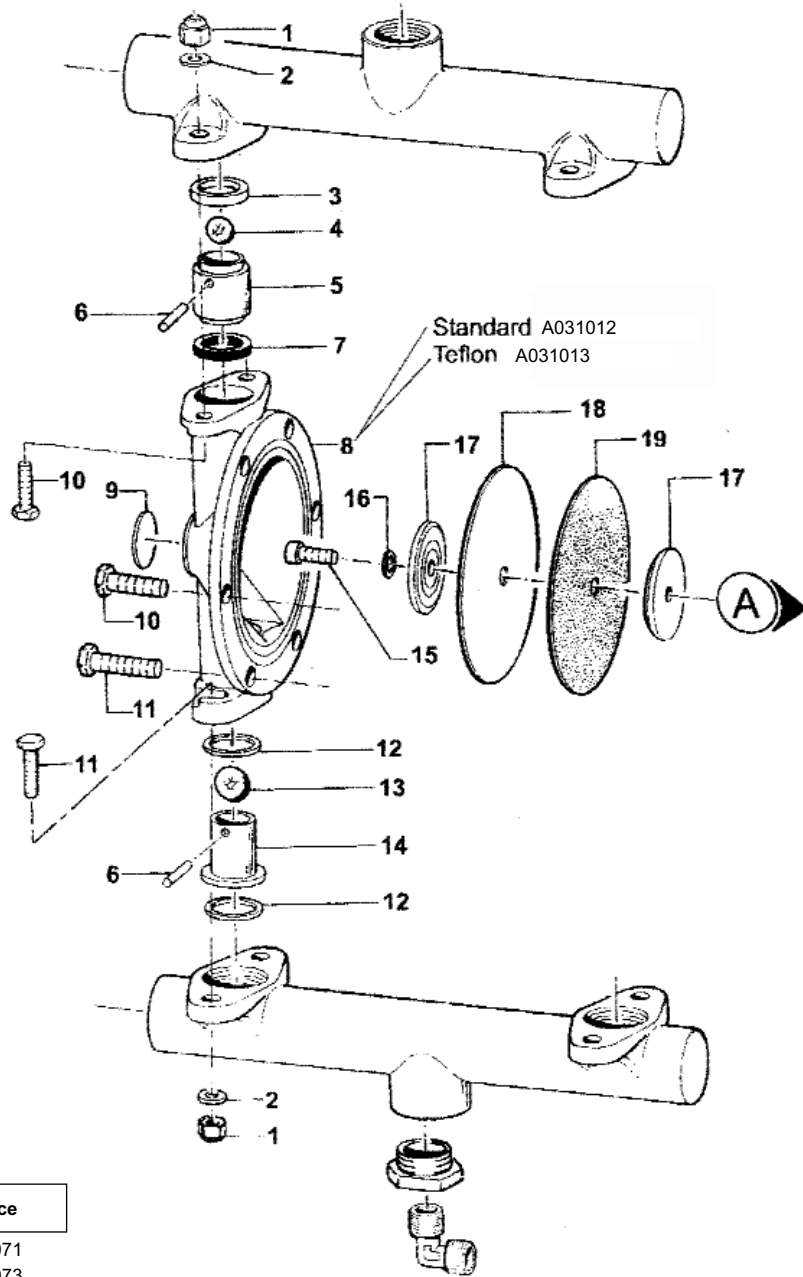
- 3.1 At the end of spraying, close the atomisation air valve.
- 3.2 After raising the draught pipe, slightly open the paint return valve and let the paint flow back into its container.
- 3.3 Submerge the draught pipe in a container with thinners and press the gun's trigger onto the product container (the pump draws up the thinners and sprays the residual paint into the pipes).
- 3.4 When the thinners begin to leave the gun, direct the jet onto the drum and circulate for 2-3 minutes.
- 3.5 Close the pump supply air.

N.B. It is opportune to leave a certain amount of thinners inside the pump to prevent any slight paint residues from drying and damaging the pump. We recommend using pure thinners and not a recycled product because this latter is highly corrosive and has low solvent power.

• • • DEFECTS AND REMEDIES

DEFECTS	CAUSE	REMEDY
The pump does not start.	<ul style="list-style-type: none"> - An absence of air in the air supply. - The motor exchange piston is in a position of balance and the air cannot pass. 	<ul style="list-style-type: none"> - Restore the air supply. - Close the pump air supply valve and press the release button provided on the air valve.
The pump works but paint does not reach the gun or return.	<ul style="list-style-type: none"> - Blocked draught filter. - Draught pipe blocked with paint particles. - Reserve filter blocked. - Draught valve blocked with paint particles. - Broken diaphragms. 	<ul style="list-style-type: none"> - Replace it. - Dismount and clean it. - Replace it. - Dismount the external pump flanges and clean the valves. - Check that there are no pieces of black rubber on the reserve filter. If there are some present it is necessary to replace the diaphragms by dismounting the external pump flanges.
The paint at the gun exit “pulses” and the paint reducer gauge oscillated between the minimum and maximum values.	<ul style="list-style-type: none"> - Broken paint pressure reducer diaphragm 	<p>Dismount the upper flange of the reducer and replace the diaphragm.</p>

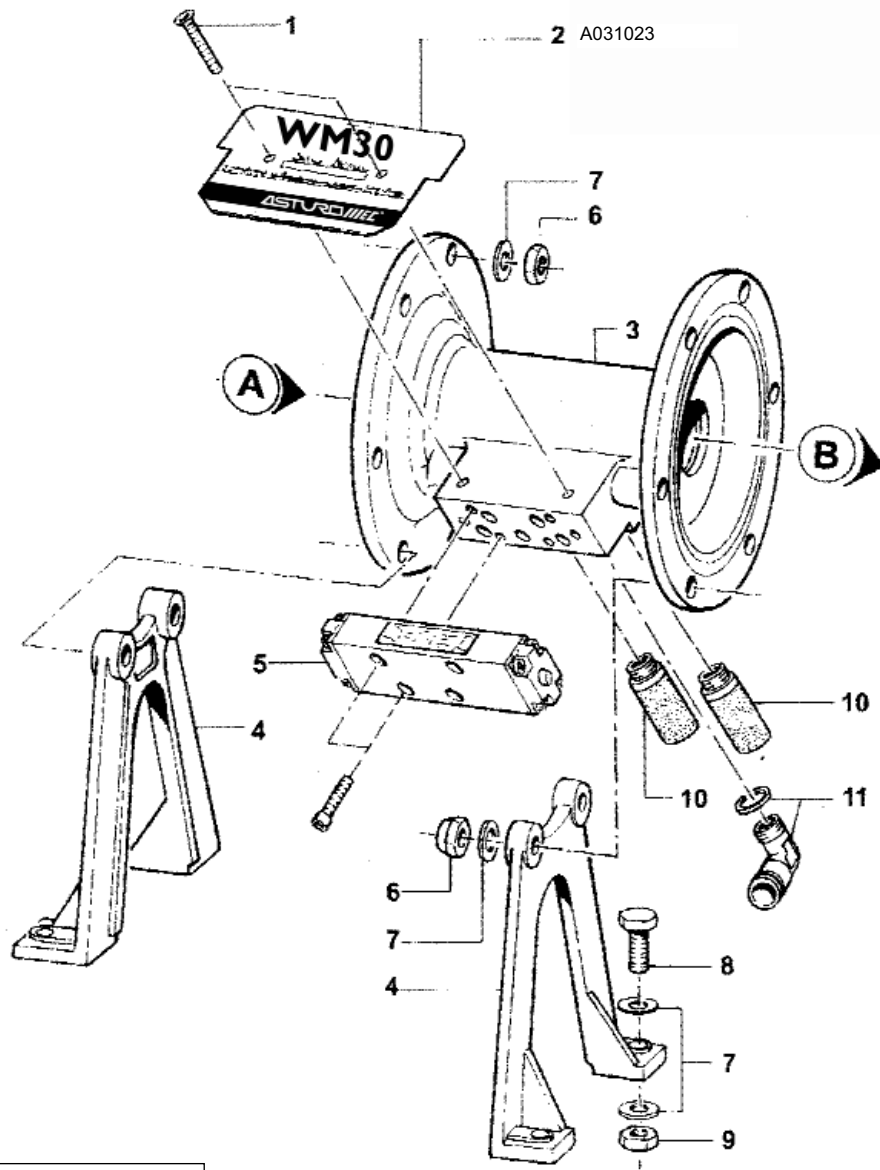
**GRUPPO POMPA (A)
PUMP GROUP**



AE109/04

Pos.	Q. tà	Codice
1	1	A031071
2	1	A031073
3	1	A031028
4	1	A031085
5	1	A031032
6	1	A031014
7	1	A031030
8	1	A031012
8	1	A031013
9	1	A031022
10	1	A031061
11	1	A031062
12	1	A031027
13	1	A031086
14	1	A031034
15	1	A031065
16	1	A031080
17	1	A031037
18	1	A031001
19	1	A031000

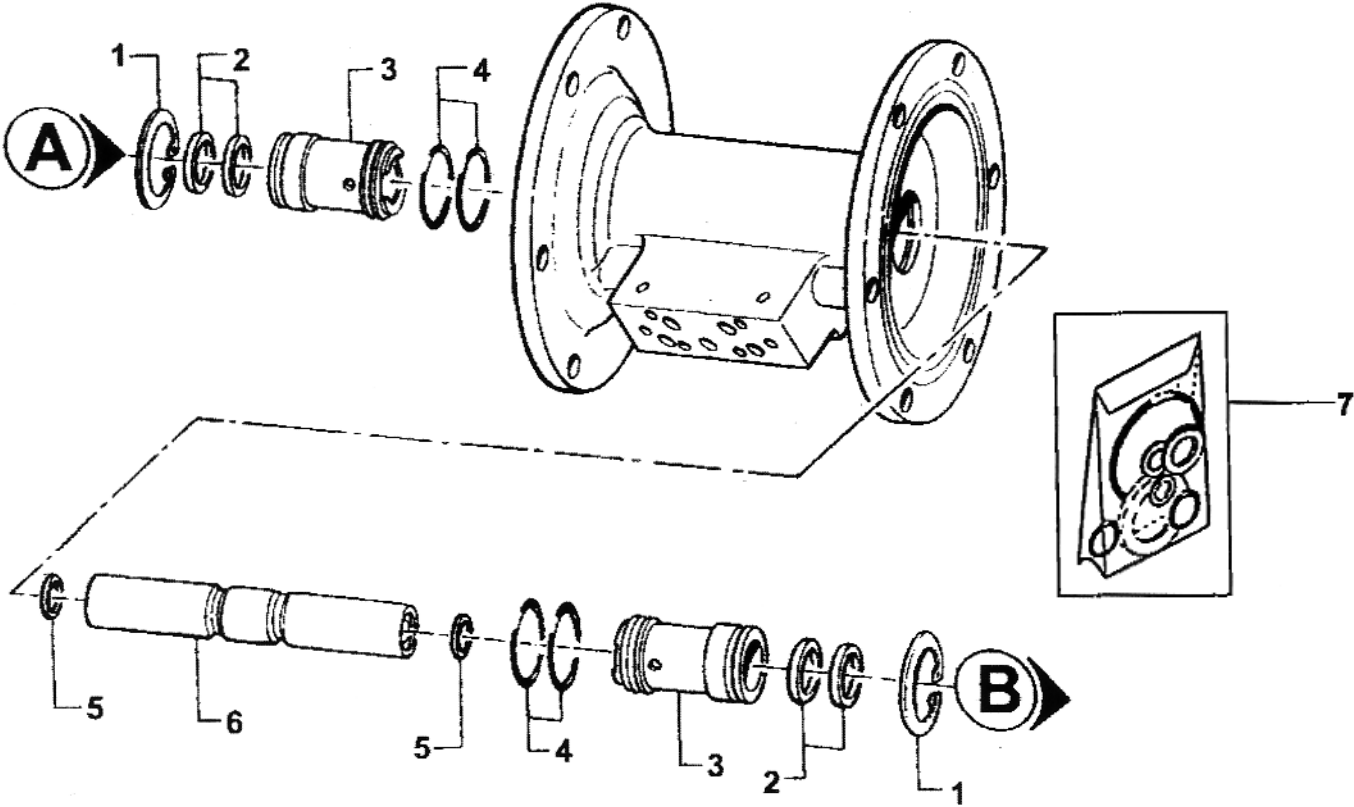
GRUPPO POMPA (B)
PUMP GROUP



AE110/04

Pos.	Q. tà	Codice
1	1	A031066
2	1	A031023
2	1	A031024
3	1	A031017
4	1	A031009
5	1	A031005
6	1	A031071
7	1	A031073
8	1	A031060
9	1	A031070
10	1	A031083
11	1	A031055

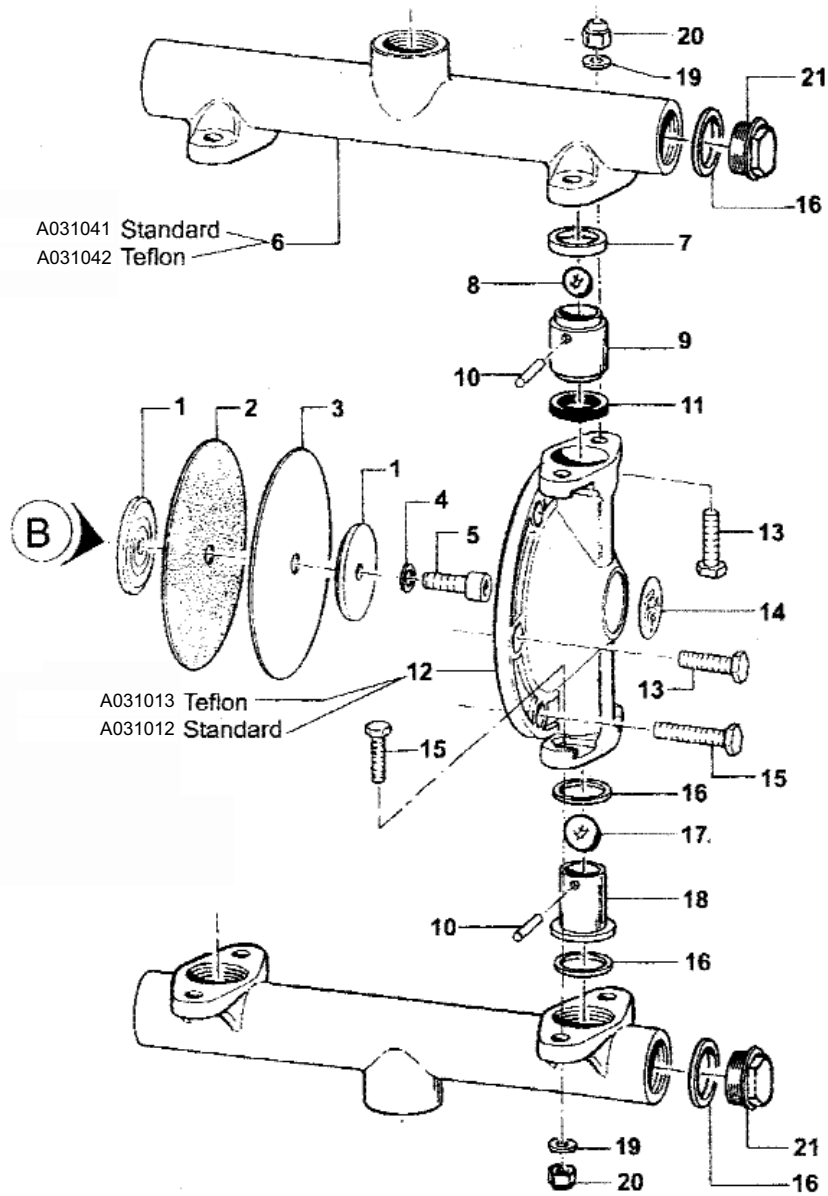
GRUPPO POMPA (C)
PUMP GROUP



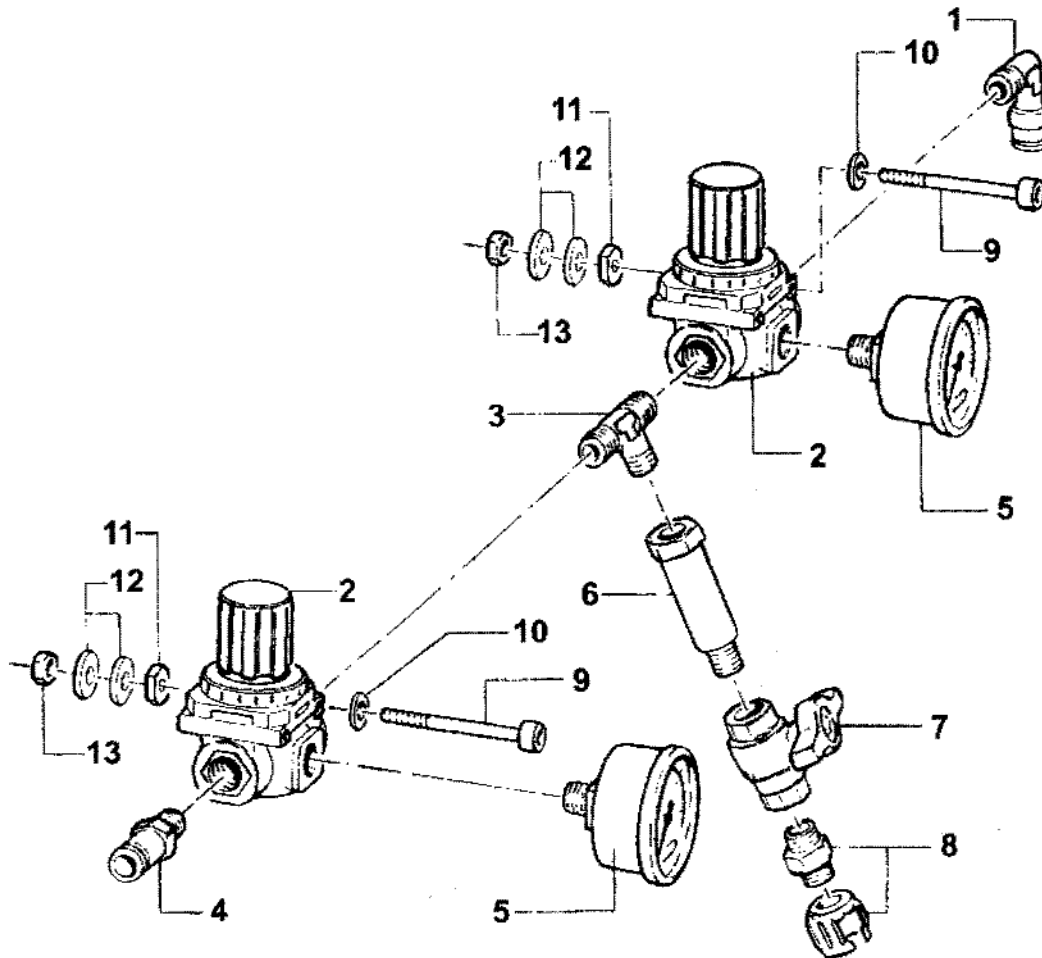
AE1111/04

Pos.	Q. tà	Codice
1	1	A031089
2	1	A031090
3	1	A031091
4	1	A031092
5	1	A031093
6	1	A031094
7	1	A031004

GRUPPO POMPA (D)
PUMP GROUP



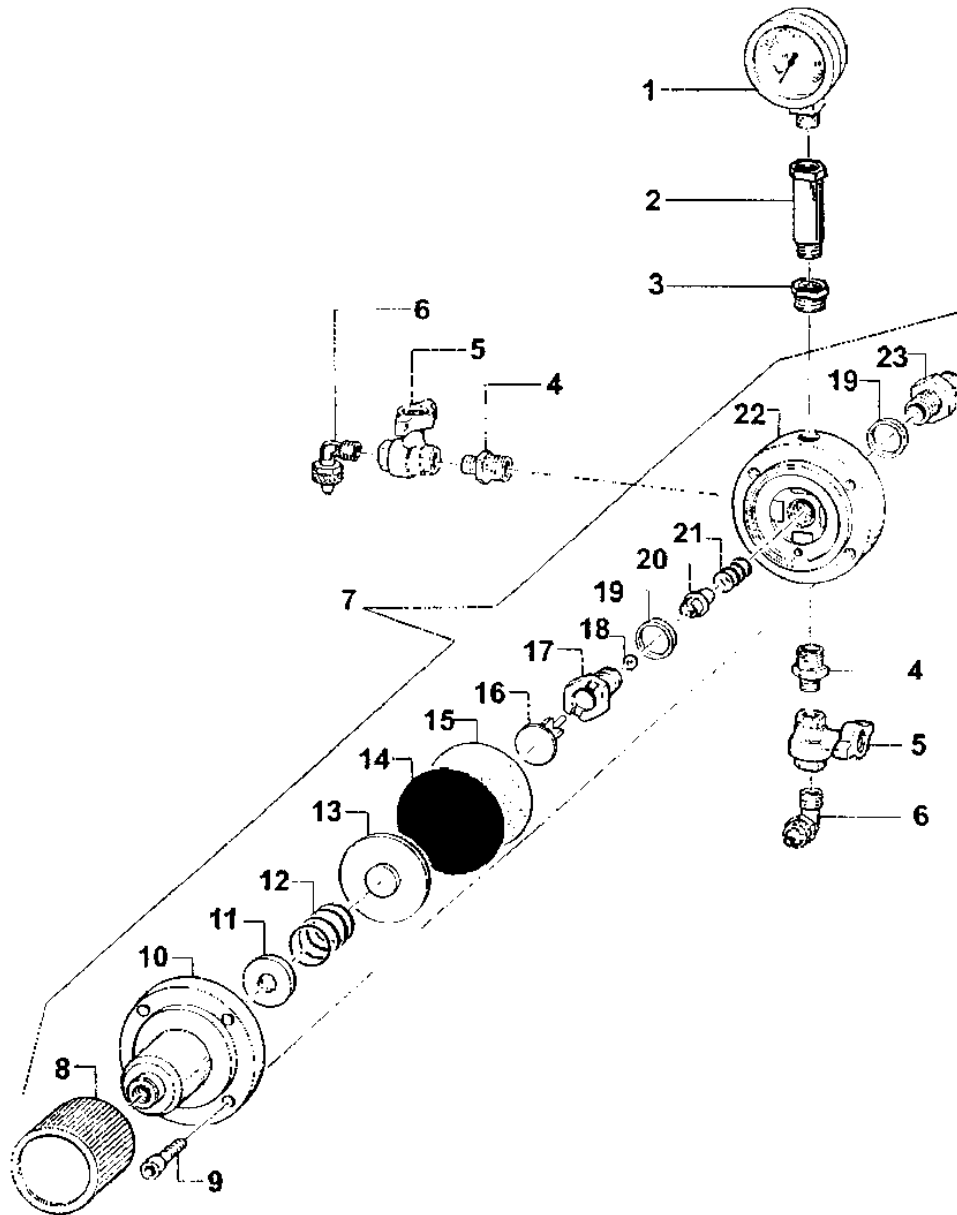
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2	1	A031000
3	1	A031001
4	1	A031080
5	1	A031065
6	1	A031041
6	1	A031042
7	1	A031028
8	1	A031085
9	1	A031032
10	1	A031014
11	1	A031030
12	1	A031012
12	1	A031013
13	1	A031061
14	1	A031022
15	1	A031062
16	1	A031027
17	1	A031086
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19	1	A031073
20	1	A031071
21	1	A031058



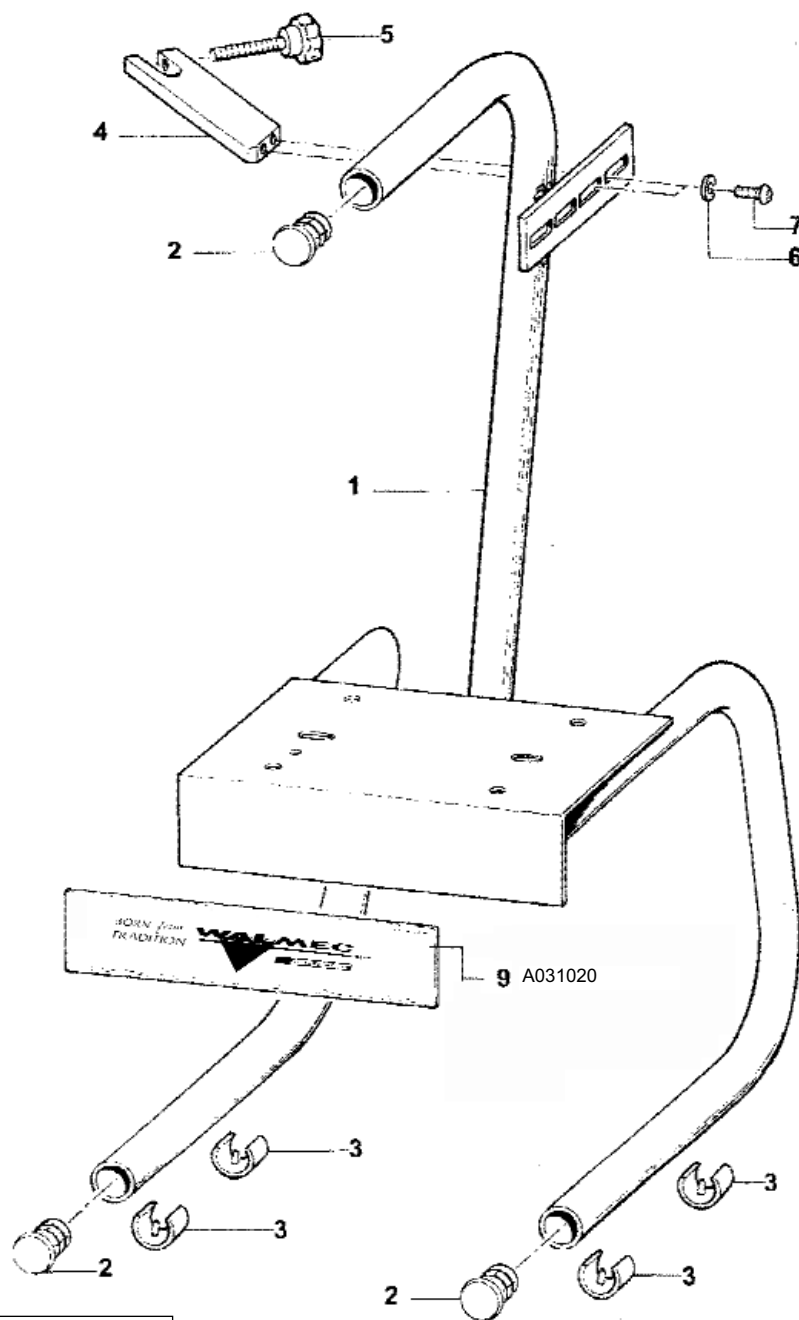
AE113/04

Pos.	Q. tà	Codice
1	1	A031055
2	1	A031045
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4	1	A031056
5	1	A031046
6	1	A031052
7	1	A031057
8	1	A031059
9	1	A031063
10	1	A031072
11	1	A031069
12	1	A031075
13	1	A031068

AE114/04



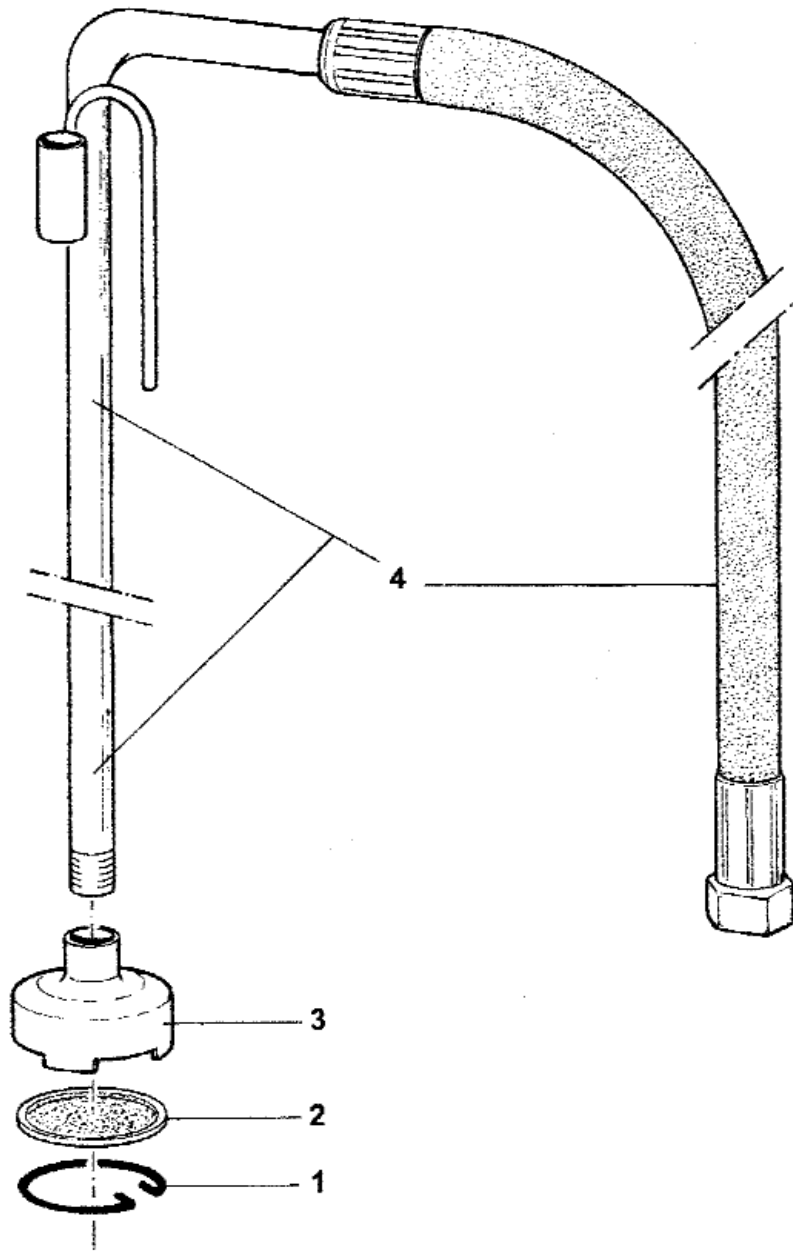
Pos.	Q. tà	Codice
1	1	A031047
2	1	A031052
3	1	A031053
4	1	A031051
5	1	A031057
6	1	A031050
7	1	A031087
8	1	A031043
9	1	A031064
10	1	A031010
11	1	A031015
12	1	A031077
13	1	A031035
14	1	A031002
15	1	A031003
16	1	A031036
17	1	A031031
18	1	A031084
19	1	A031029
20	1	A031033
21	1	A031078
22	1	A031011
23	1	A031039



AE115/04

Pos.	Q. tà	Codice
1	1	A031044
2	1	A031048
3	1	A031049
4	1	A031008
5	1	A031076
6	1	A031074
7	1	A031067
8	1	A031025
9	1	A031020
10	1	A031021

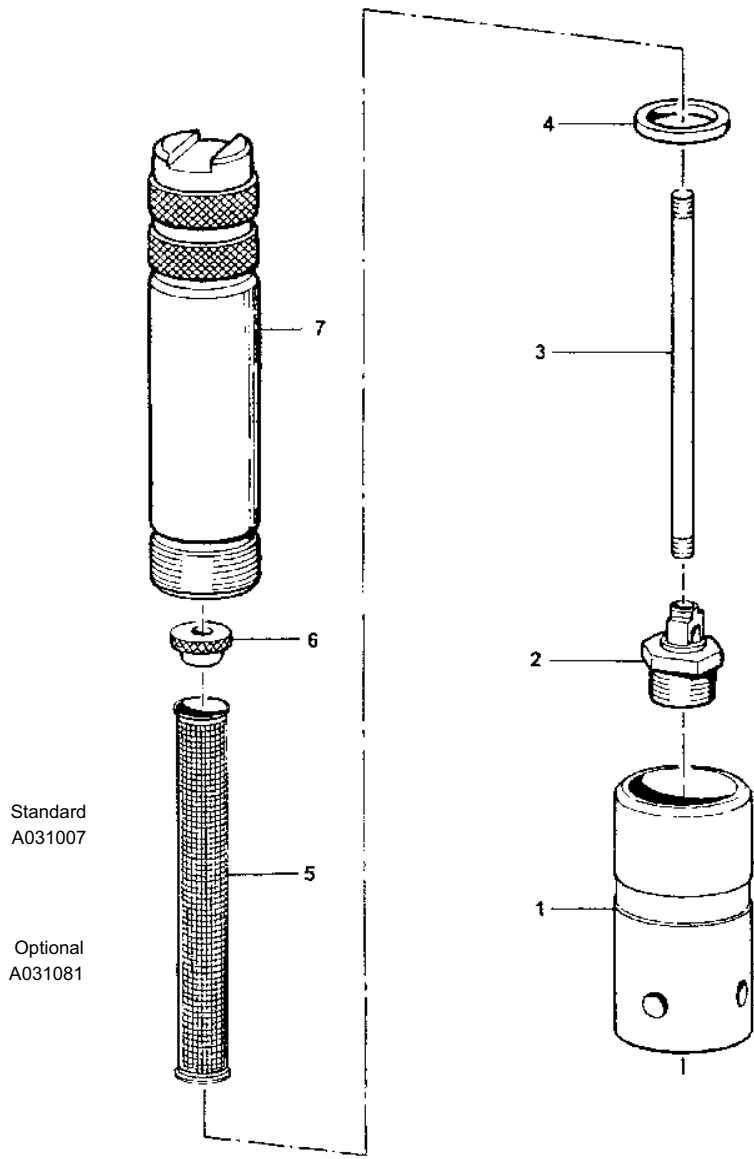
GRUPPO PESCANTE ECO 13 X 23
SUCTION GROUP



AE116/04

Pos.	Q. tà	Codice
1	1	A031079
2	1	A031006
3	1	A031082
4	1	A031088

GRUPPO POLMONE BASSA PRESSIONE
LOW PRESSURE PLENUM CHAMBER



AE117/04

Pos.	Q. tà	Codice
1	1	A031018
2	1	A031038
3	1	A031019
4	1	A031026
5	1	A031007
5	1	A031081
6	1	A031016
7	1	A031040