

New Unit Information



HD 5/12

1.514-101

Drive unit

- 2-pole, air-cooled electric motor.

Pump:

- 3-piston axial pump.
- Pistons made from stainless steel, Ø 12mm (0.472 in), stroke 9.3mm (0.366 in).
- Cylinder head made from brass.
- Swash plate with thrust ball bearing.
- Pressure and suction valve made from stainless steel and plastic.
- The pressure switch switches off the motor when the handgun is closed.
- Injector.
- Non-return valve.
- No safety valve.
- No pressure gauge.
- No pressure and flow control valve.
- Water inlet with strainer.

Electrics:

- Unit switch with thermal motor protection.
- Pressure switch.

Cleaning agent:

- Without cleaning agent tank.
- Metering valve on the unit.
- Cleaning agent operation at low pressure.

Accessories:

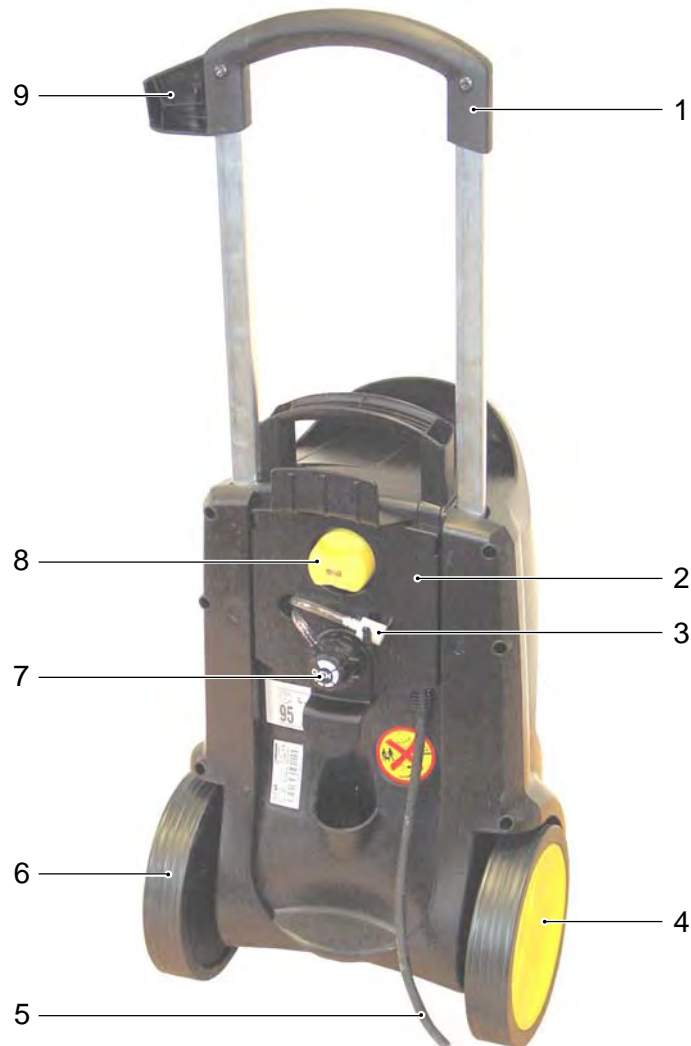
- Standard gun.
- Curved spray lance.
- Triple nozzle.

View from the front



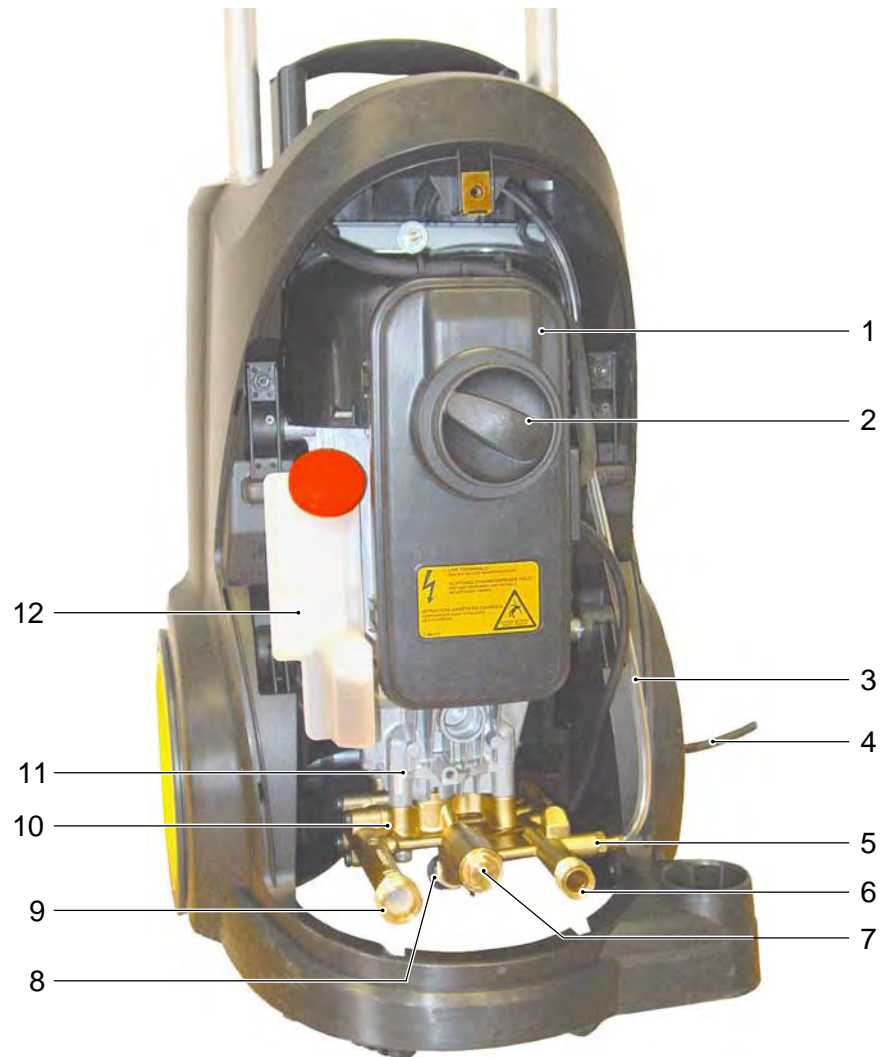
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|----------------------------|------------------------------------|
| 1 High-pressure hose | 8 Water connection with strainer |
| 2 Handgun | 9 Inspection window for oil level |
| 3 Mains connecting plug | 10 Front cover |
| 4 Spray lance | 11 Unit switch |
| 5 Wheel | 12 Retaining screw for front cover |
| 6 Triple nozzle. | 13 Handle, height adjustable |
| 7 High-pressure connection | |

Rear view



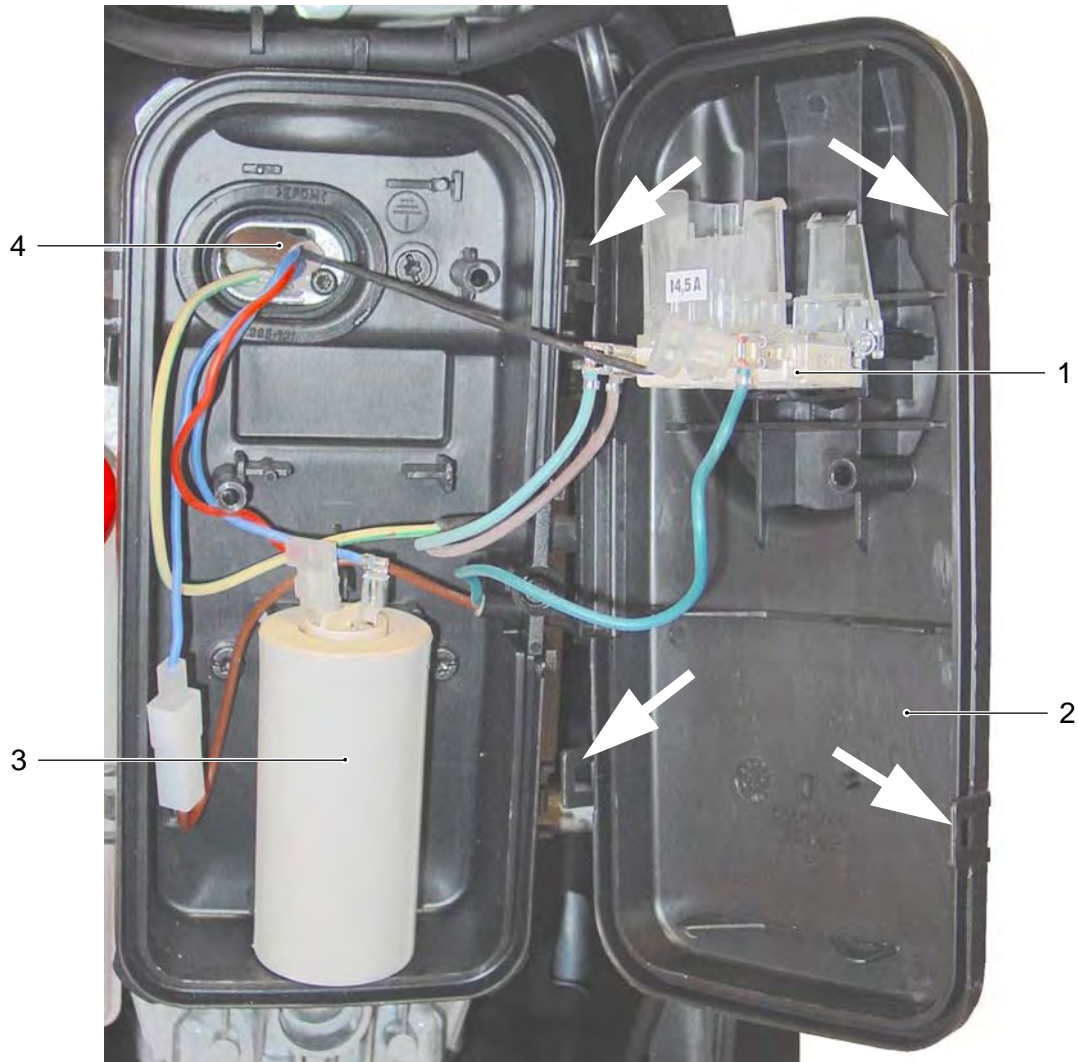
- 1 Handle, height adjustable
- 2 Rear cover
- 3 Cleaning agent supply hose with filter
- 4 Wheel
- 5 Mains connection cable
- 6 Wheel
- 7 Cleaning agent metering valve
- 8 Clamping screw for adjusting handle height
- 9 Handgun bracket

View from the front, cover removed



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|---|----------------------------------|
| 1 Electrical box | 7 Overflow valve |
| 2 Unit switch | 8 Pressure switch |
| 3 Cleaning agent hose | 9 Water connection with strainer |
| 4 Mains connection cable | 10 Cylinder head |
| 5 Cleaning agent connection with non-return valve | 11 Motor housing |
| 6 High-pressure connection | 12 Oil reservoir |

Electrical box

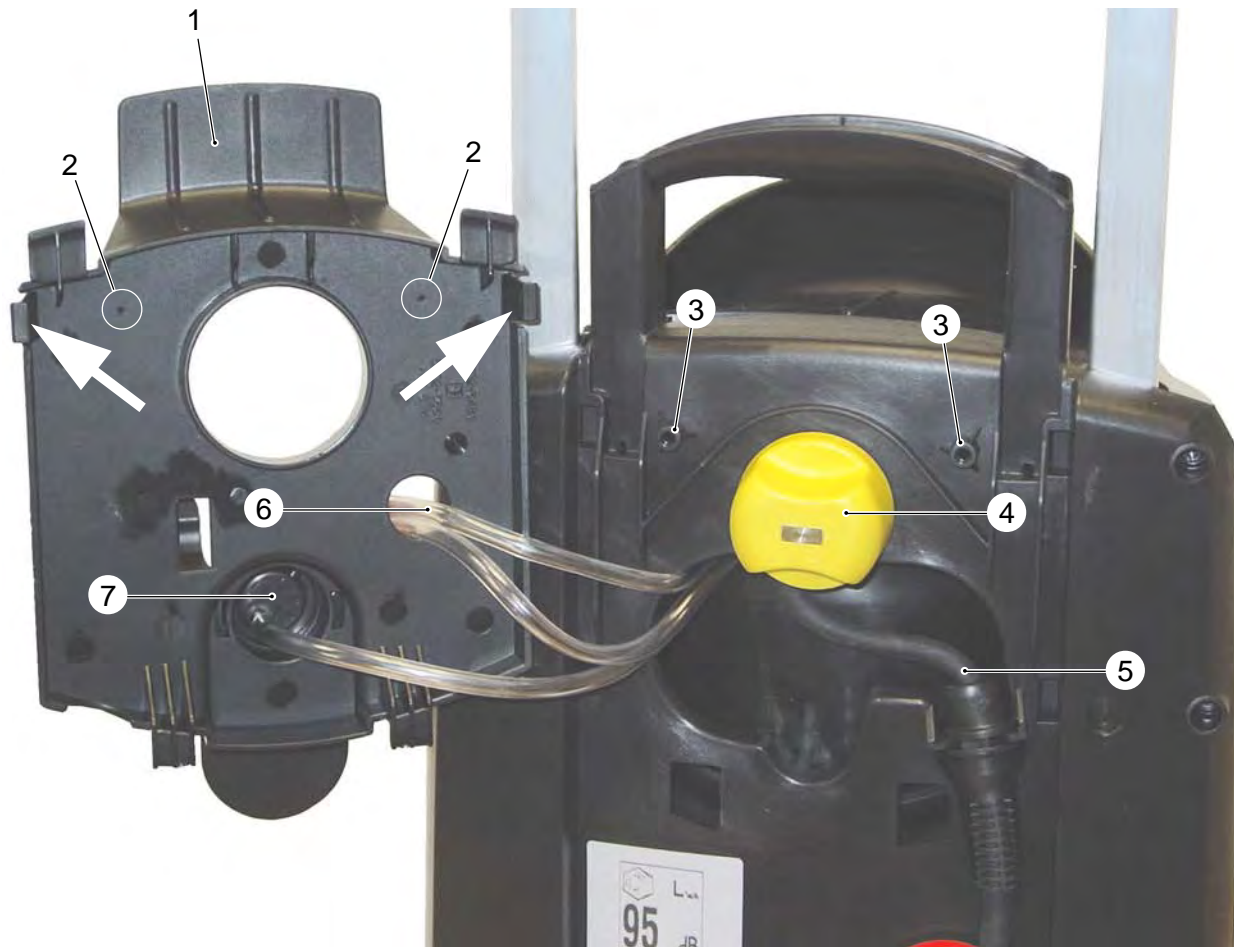


- 1 Unit switch
- 2 Cover
- 3 Capacitor
- 4 Connection cable with motor

Electrical box open

- Pull the retainer clips (arrows) outward and remove the cover (2).

View from the rear, cover open



- 1 Rear cover
- 2 Bore markings
- 3 Screw holes
- 4 Clamping screw for adjusting handle height
- 5 Mains connection cable
- 6 Cleaning agent supply hose
- 7 Cleaning agent metering valve

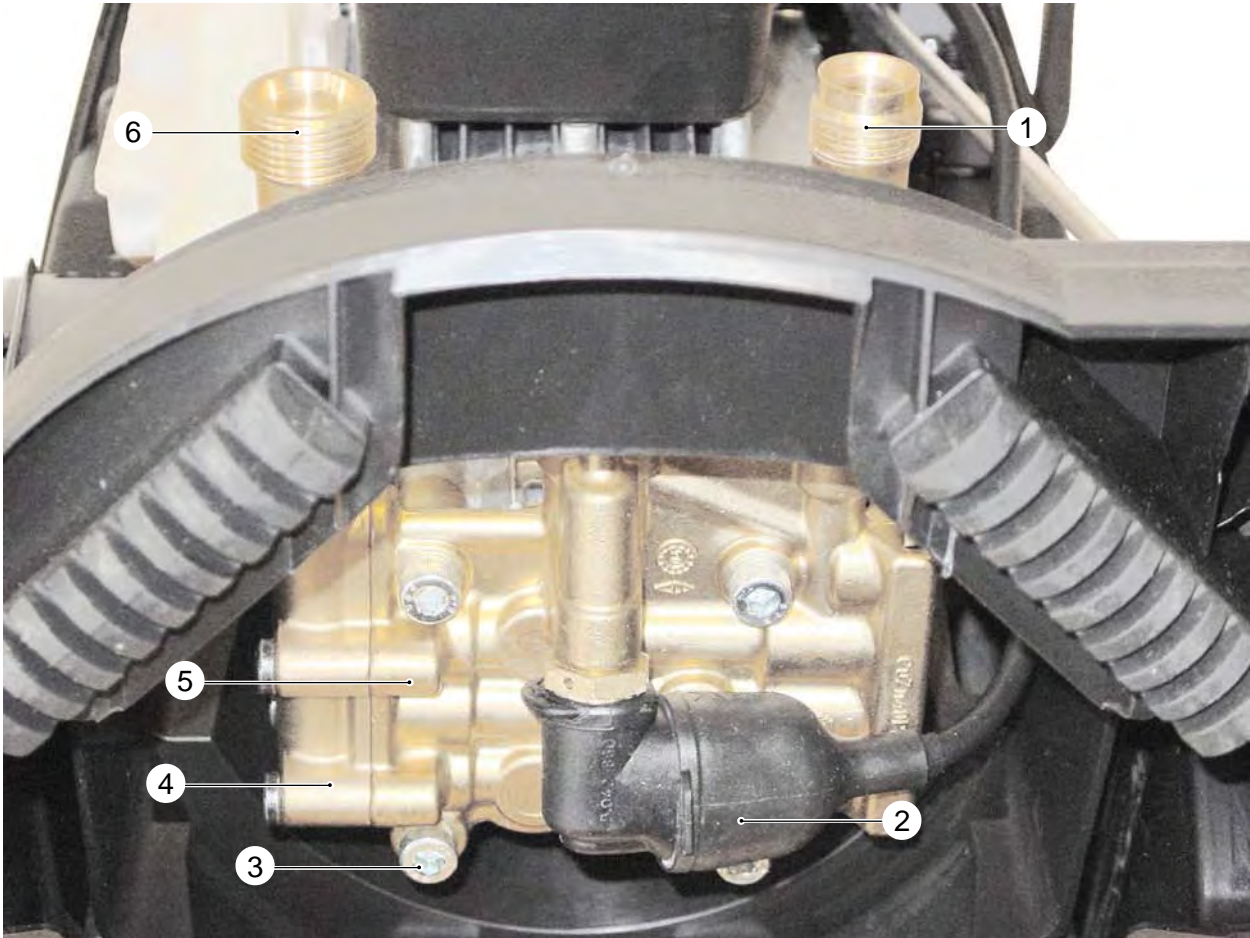
Rear cover open

- Pull the retainer clips (arrows) outward and remove the cover (1).

Note:

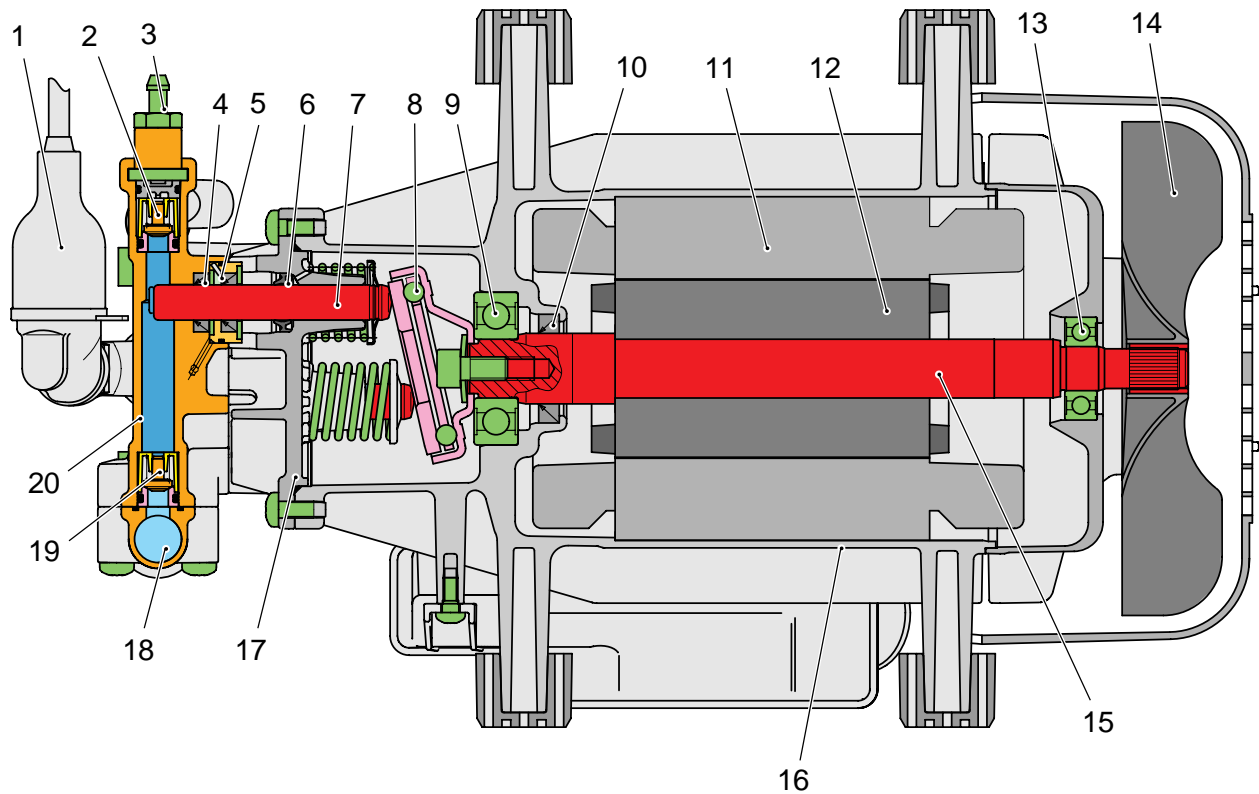
If the retaining clips have broken repair as follows: Drill through the two bore markings (2) in the cover with a \varnothing 5mm bit. The cover (1) can then be mounted with two screws M5 x 20 (7.303-108) in the screw holes (3).

View from below



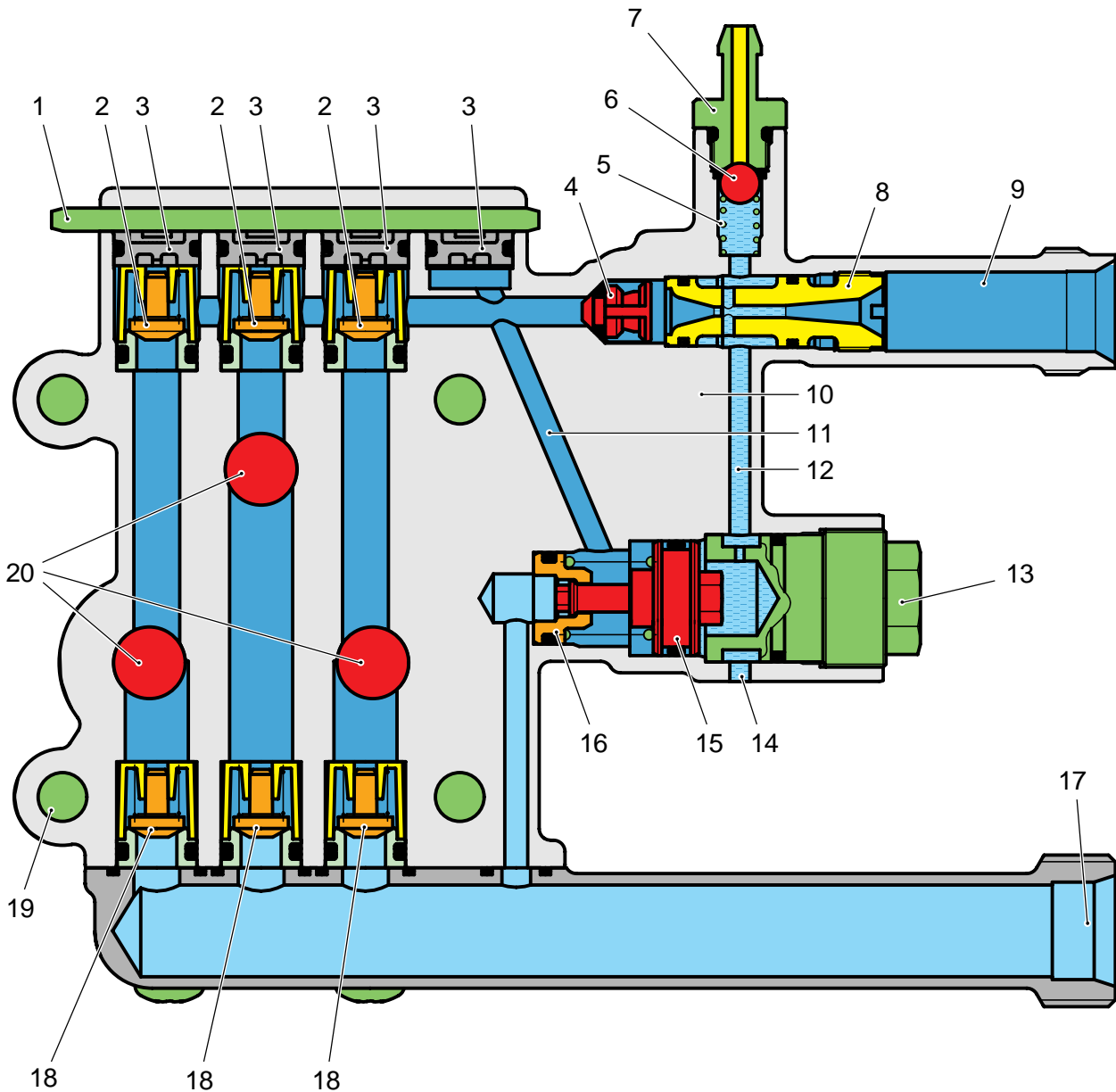
- 1 High-pressure connection
- 2 Pressure switch
- 3 Cylinder head bolt
- 4 Suction cover
- 5 Cylinder head
- 6 Water connection with strainer

Motor



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|--|---------------------------|
| 1 Pressure switch | 11 Motor winding (stator) |
| 2 Pressure valve | 12 Magnet (rotor) |
| 3 Cleaning agent suction hose connection | 13 Motor bearings |
| 4 High-pressure seal | 14 Fan wheel |
| 5 Low-pressure seal | 15 Motor drive shaft |
| 6 Oil seal | 16 Motor housing |
| 7 Piston | 17 Piston housing |
| 8 Swash plate with thrust ball bearing | 18 Water connection |
| 9 Motor bearings | 19 Suction valve |
| 10 Shaft seal | 20 Cylinder head |

Cylinder head



- | | |
|----------------------------------|---|
| 1 Retaining plate | 11 Connection bore (pump pressure) |
| 2 Pressure valve | 12 Connection bore (dynamic pressure) |
| 3 Retaining plug | 13 Screw plug |
| 4 Non-return valve | 14 Connection bore to pressure switch (only indicated here) |
| 5 Spring | 15 Overflow valve |
| 6 Ball | 16 Valve seat |
| 7 Cleaning agent hose connection | 17 Water connection |
| 8 Injector | 18 Suction valves |
| 9 High-pressure connection | 19 Cylinder head screws |
| 10 Cylinder head | 20 Piston |

Troubleshooting

Fault	Solution
Unit not running	<ul style="list-style-type: none"> – Check/replace mains voltage, connection cable and mains fuse. – Check/replace unit switch. – Check/replace pressure switch. – Check/replace overflow valve. – Check/replace motor.
Unit does not become pressurised	<ul style="list-style-type: none"> – Check/increase water inlet volume. – Clean/replace water inlet strainer. – Bleed unit. – Check/replace high-pressure hose. – Check cylinder head for leaks and replace as necessary. – Check/replace overflow valve.
Unit constantly switches on and off with handgun closed	<ul style="list-style-type: none"> – Check/replace handgun and o-rings at high-pressure hose for leaks. – Check/replace cleaning agent non-return valve. – Check/replace pressure/suction valves for leaks. – Check/replace overflow valve. – Check/replace non-return valve. – Check/replace pressure switch.
Unit won't switch off when the handgun is closed	<ul style="list-style-type: none"> – Check/replace overflow valve. – Check/replace non-return valve. – Check/replace pressure switch.
Cleaning agent is not drawn in	<ul style="list-style-type: none"> – Clean/replace cleaning agent non-return valve. – Check/replace cleaning agent nozzle. – Replace injector. – Clean/replace cleaning agent strainer. – Check replace metering valve.
Water escapes between the cylinder head and piston housing	<ul style="list-style-type: none"> – Check replace high-pressure and low-pressure seals.
Oil escapes between the cylinder head and piston housing	<ul style="list-style-type: none"> – Replace the oil seals.

Technical specifications

Unit Type	Unit No.	Circuit diagram	Operating instructions	Maintenance booklet	Spare parts list
HD 5/12 (220-240 Volt / 50 Hz)	1.514-101	0.087-853	5.960-966	5.950-582	5.970-209

The technical data sheet and the circuit diagram will be included in the next issue of the spare parts CD-ROM (DISIS) and are available in the Intranet.

Technical data sheet: Folder: „Central / Service Info Int'l / Technical Specifications“

Circuit diagram: Folder: „Central / Service Info Int'l / Circuit Diagram“

If required, the operating instructions and the spare parts lists can be ordered as a paper copy from the spare parts service by quoting the relevant part number.

Special tool

Assembly tool (12mm) for high-pressure and oil seals

2.901-036

Tightening torque

Cylinder head bolt

23-27 Nm

Swash plate

12-15 Nm