



Electronic Service Manuals

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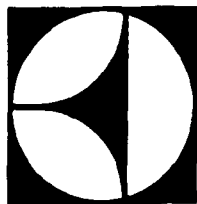
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Serving the Cleaning Industry Since 1922

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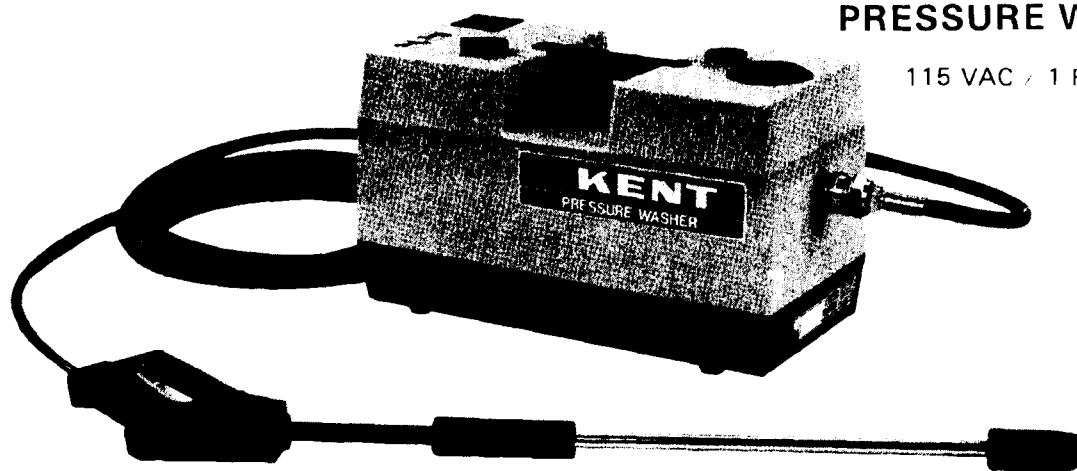
KENT

MODEL

KW-1000C

PRESSURE WASHER

115 VAC / 1 PHASE



OPERATING, MAINTENANCE INSTRUCTIONS & ILLUSTRATED PARTS LIST

MARCH 1987

Write the model and serial number of your unit in the space provided. Refer to the rating plate on unit.

Model #

Serial #

Retain this owner's guide for future reference.

THE KENT COMPANY

P.O. Box 1665
2310 Industrial Parkway
Elkhart, IN 46515 (219)293-8661

CONGRATULATIONS

Congratulations on your choice of new Kent cold water cleaner. We are sure that it will live up to your expectations.

Important

To ensure that you obtain the best possible results from your new cleaner, we ask you to read this instruction manual carefully before use.

SAFETY

Your Kent cleaner is designed and manufactured to comply with the very latest labor safety regulations. Still, the following instructions must be strictly observed when operating the cleaner.

1. Always hold the spray pistol and lance firmly in both hands during operation.
2. Never direct the high pressure spray towards people or electrical equipment.
3. Stop the cleaner during intervals of operation and before dismantling the high pressure hose.
4. Only connect the cleaner to the power supply after having first switched off the motor.
5. Only use the hoses and nozzles approved by Kent. Nozzles with a hole diameter smaller than 1.4mm must not be used.
6. Never let the high pressure pump circulate for more than 5 minutes (compare below).
7. Never start the KW-1000C cleaner before the machine, the hoses, the MULTI-SPEED-nozzle and the spray lance have thawed out.
8. Follow the directions for use of detergents.
9. Do not use the KW-1000C cleaner in environments with danger of explosions.

The high pressure pump incorporates a circulation valve which recirculates the water in the pump when the spray handle is closed or if a nozzle is blocked. The circulation valve ensures that the cleaner is automatically devoid of pressure when it is stopped. Please be aware that the water gets hot during circulation.

The electrical motor is fitted with a thermal cut-out sensor as a protection against overheating. This cuts out the current if the motor gets too hot and the motor will stop. When the motor has cooled down again the thermal cut-out sensor restarts the motor automatically, provided that it has not been disconnected in the meantime.

MODEL DESIGNATION

The Kent KW-1000C is a cold water cleaner. the model designation is printed on the model plate.

STANDARD EQUIPMENT

1. Electric cable
2. Water connection and water filter
3. Start/stop button
4. Oil gauge and oil filter
5. Manometer
6. Outlet socket
7. High pressure hose
8. Spray handle
9. Bayonet coupling
10. MULTI—SPEED-nozzle
11. Model plate
12. Carrying handle
13. Chemical dosing and filter
14. Chemical hose
15. Holder for chemical dosing and filter

APPLICATIONS

Kent high pressure cleaners can be used for all cleaning jobs that require water. Especially for cleaning of food shops, canteens, swimming baths, hospitals, hotels, institutions etc. Chemicals can be added, see paragraph (use of chemicals).

CONNECTION

Before starting the machine, remove the red plug (D1) and replace it with the oil gauge stick (D2) accompanying the machine. Check at the oil gauge that the oil level is between the MIN. and MAX. marks (E). The oil level control should be performed when the motor is cold.

High pressure hose

The high pressure hose features an imprint indicating max. working pressure and max. temperature. It is connected to the outlet socket (A6) at the front of the machine by screwing in the screw coupling of the hose. Only use the high pressure hoses approved by Kent. The high pressure hose must not be subjected to excessive load, for instance knots and sharp folds, as they may cause the hose to burst. The high pressure hose must only be connected to **one** extension hose.

Spray handle - MULTI-SPEED-nozzle

Clean the nipple (G1) of the MULTI-SPEED-nozzle for possible impurities. Plug the nipple of the MULTI-SPEED-nozzle into the bayonet-coupling (G2) and turn.

Water connection

Run water through the inlet hose (not standard equipment) in order to remove impurities, if any, in the hose. (Water temperature max. 86°F (30°C).

Water is supplied at the back of the cleaner (B1). The machine can be connected directly to the main water supply (Max. pressure 15 bar. Min. pressure 0 bar). The inlet hose must be at least 5m long.

Please note that connection to the public water supply may entail mounting of a float chamber (order No. 6400192).

If there is sand, grit or other impurities in the water an external water filter (see accessory catalogue) must be fitted in addition to the internal one of the cleaner.

Main power connection

The cleaner is fitted with an inlet cable with a plug (B2). The cable must only be connected to a wall socket installed in accordance with the regulations. Check that the specifications indicated on the model plate (A1) of the machine correspond to the main voltage. (Max. pre-fuse - see the technical data.)

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the product; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

EXTENSION CORDS

Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole cord connectors that accept the plug from the product. Use only extension cords that are intended for outdoor use. These extension cords are identified by a marking: Acceptable for use with outdoor appliances; store indoors while not in use. Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords.

Examine extension cord before using and replace if damaged. Do not abuse extension cord and do not yank on any cord to disconnect.

Keep cord away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

WARNING: To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands.

OPERATION

Starting up-procedures

Start the cleaner by turning the start/stop button (A3) to position 1. Place the safety catch (F1) in free position, so that the trigger (F2) is freely movable, then press home the trigger. Run water until there is no more air in the system. The trigger can be secured by lifting the safety catch as shown in position (F1).

High pressure/low pressure

When operating at high pressure place the MULTI-SPEED-nozzle in position (H1). At low pressure place the MULTI-SPEED-nozzle in position (H2). The chemical dosing (J3) must be closed if no chemicals are used, see paragraph (use of chemicals).

Spray angle

The spray angle can be adjusted by turning the MULTI-SPEED-nozzle (I).

Use of chemicals

As standard equipment the cleaner is fitted with a built-in injector which enables cleaning with chemicals. If chemicals are added, draw out the chemical dosing and the filter (J1) from the holder (J2). Adjust the scale of the chemical dosing (J3) for the chemical dosage required and insert the filter into the chemical container (J4).

Place the MULTI-SPEED-nozzle in position (H2) - low pressure. The supply of chemicals can be stopped by turning the MULTI-SPEED-nozzle to position (H1) - high pressure.

The filter and the hose can be rinsed by letting the cleaner draw clean water from a bucket.

Chemicals must not be supplied with the inlet water, and the pH-value must be between 4 and 12.

Stopping procedure

Turn the start/stop button (A3) to position O. Turn off the water supply and actuate the spray handle (F2).

Disconnect the electric cable.

Disconnect the high pressure hose (A7) and the inlet hose.

ACCESSORIES

You too, can make the best of your Kent cleaner by obtaining one or more of the accessories. Please feel free to contact your Kent distributor for further information.

STORAGE

The cleaner must be stored in a frost-proof place during breaks in operation and must always be emptied of water before being left.

Empty the cleaner in the following way:

1. Stop the machine and disconnect and empty both the high pressure hose and the inlet hose.
2. Start the pump and let it run until no more water runs out of the outlet socket (A6).
3. Tilt the machine 45° backwards to allow the water, if any, to run out of the inlet filter.

Important:

For safety reasons, always ensure that the cleaner, hoses and MULTI-SPEED-nozzle with spray lance have thawed out.

MAINTENANCE

Oil

The oil level should be checked regularly. Use motor oil SAE 15W/50 or corresponding motor oil used for cars. The oil should be changed after 500 hours operation. Remove the oil gauge, turn the machine upside down. Let the oil run out. Refill with 0.3 quart of motor oil.

Water filter

The water filter must be cleaned regularly.

Filter for detergents

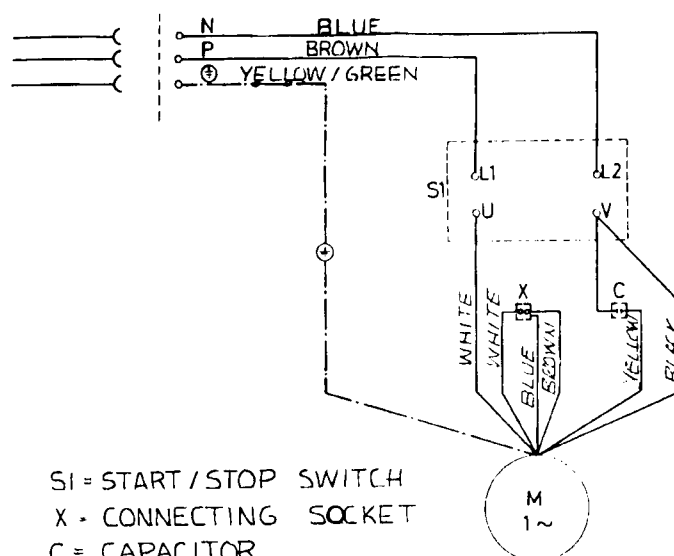
The filter must be rinsed in clean water every time it has been used.

Couplings

In order to prevent leakages and damage to the couplings/connections on hoses, cleaner and spray lance, it is necessary to clean and lubricate the parts regularly with a little oil or grease.

MULTI-SPEED-nozzle

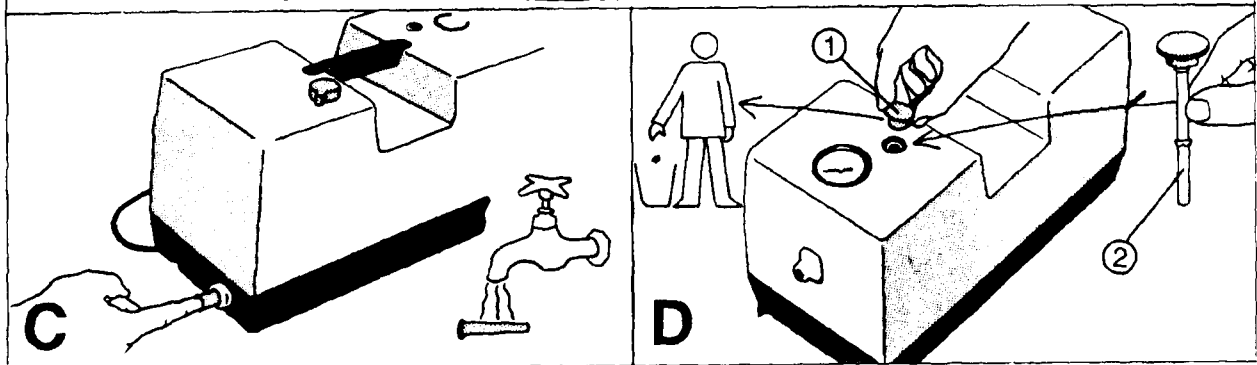
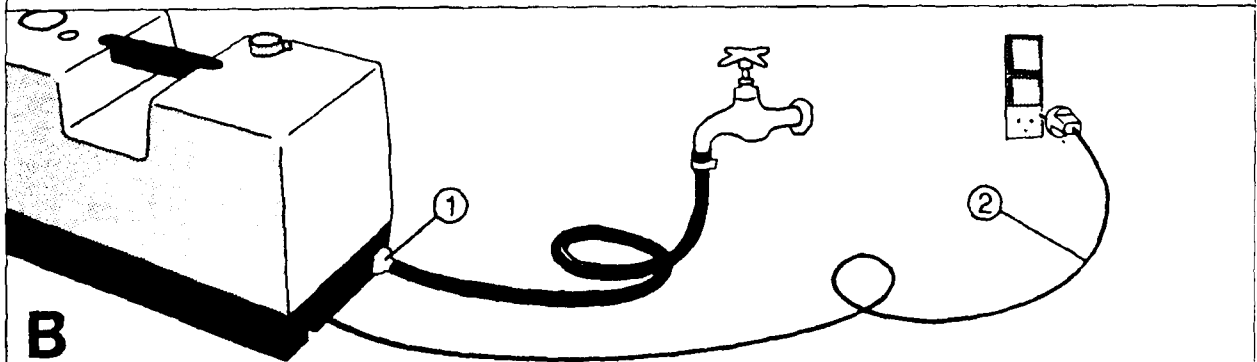
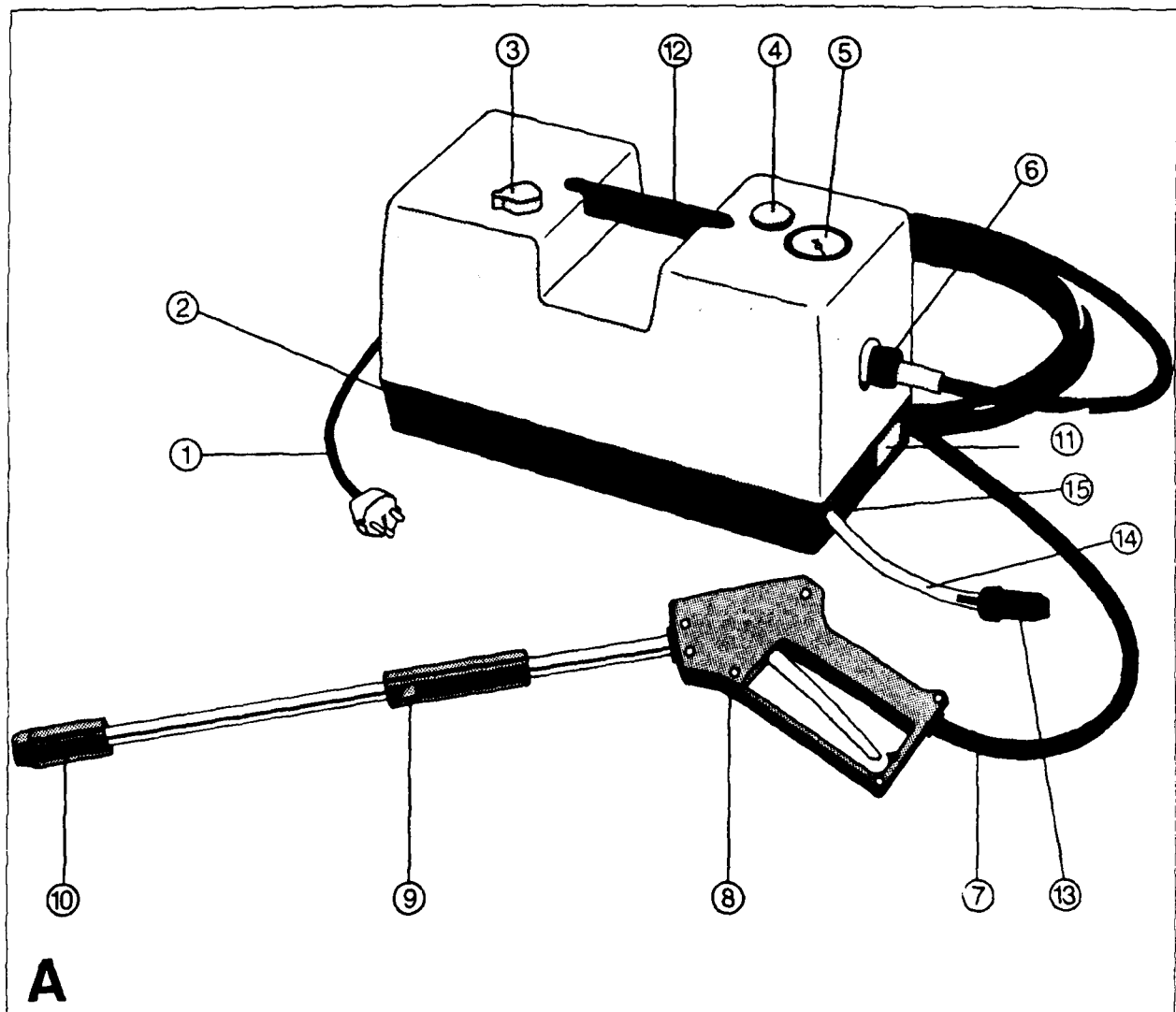
The high pressure/low pressure device of the MULTI-SPEED-nozzle should regularly be lubricated with oil.

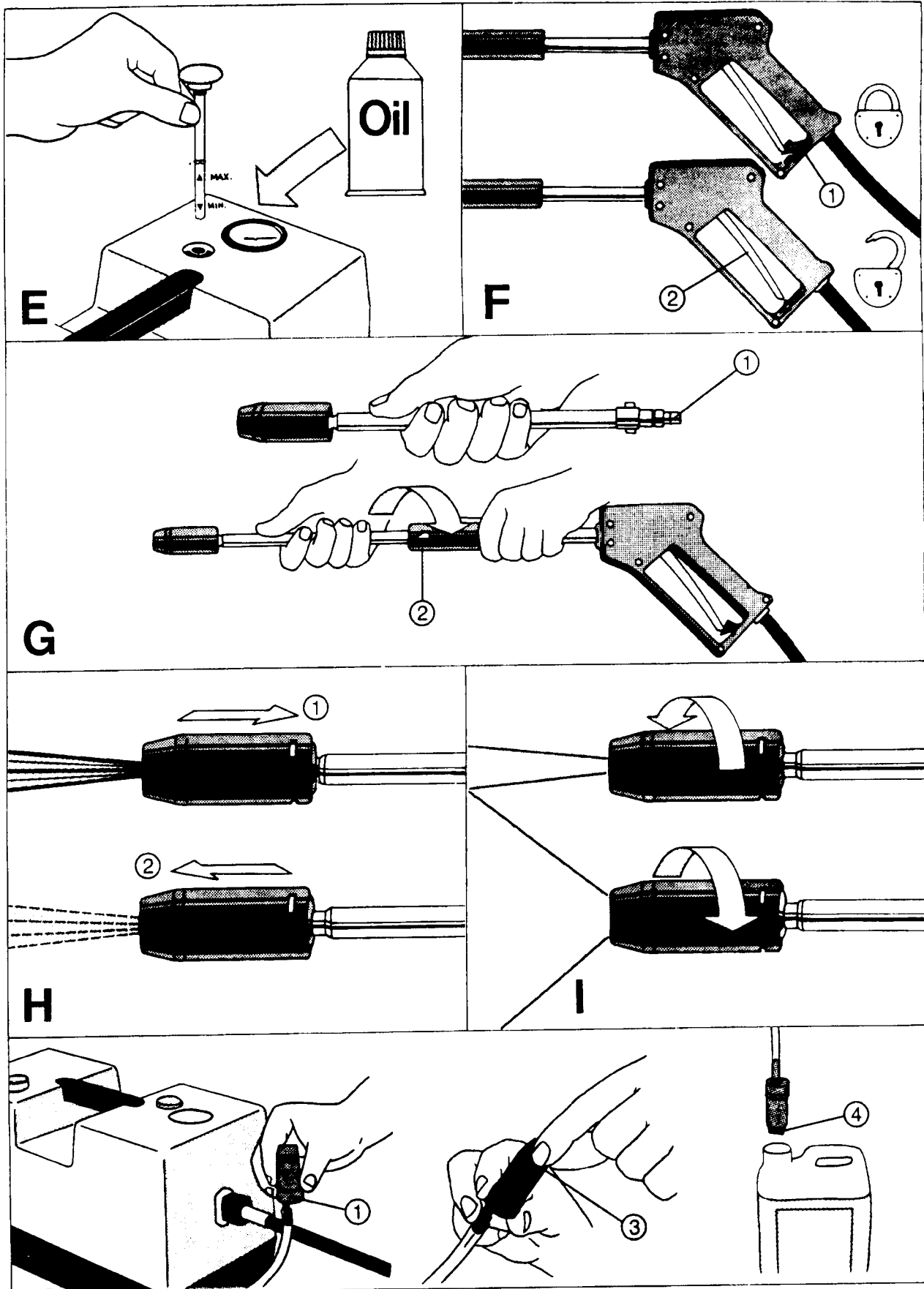


CIRCUIT DIAGRAM

Diagnosis of faults and repair

Fault	Cause	Repair
The motor does not start	The plug is not connected	Connect the plug.
	A fuse has blown	Change the fuse.
	The pump is frozen	Let the pump thaw.
	The motor is too hot	Let the motor cool down.
The motor stops	A fuse has blown	Change the fuse. Check that the mains voltage corresponds to the specifications.
	The motor is too hot	Let the motor cool down.
Working pressure too high	Nozzle partly blocked	Clean the nozzle.
Irregular working pressure	Air in the pump	Let the cleaner work with open spray handle until the working pressure is regular.
	Filter blocked	Clean the filter.
By direct water connection	Mains water supply inadequate	Change to a water supply with a greater output.
No working pressure	Nozzle blocked	Clean the nozzle.
	No water	Check the water connection.
	Circulation valve frozen	Allow the cleaner to thaw.
	High pressure hose/nozzle tubes frozen	Allow high pressure hose/nozzle tubes to thaw.





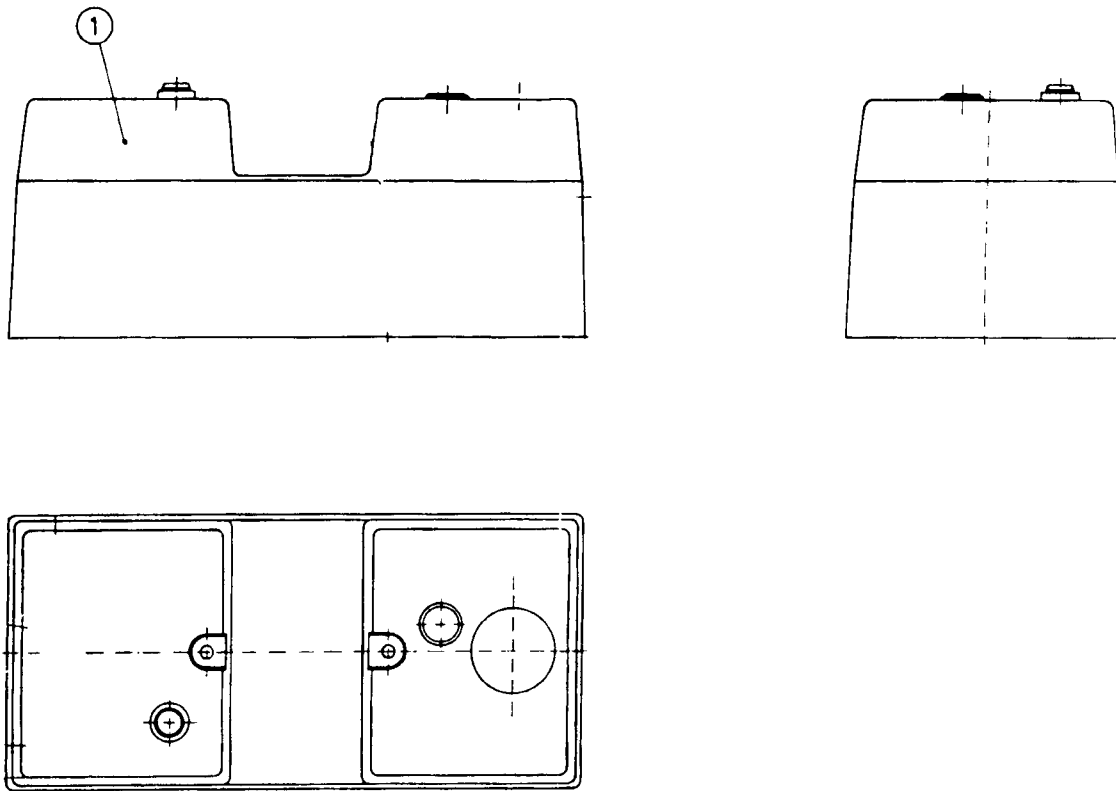


FIGURE A

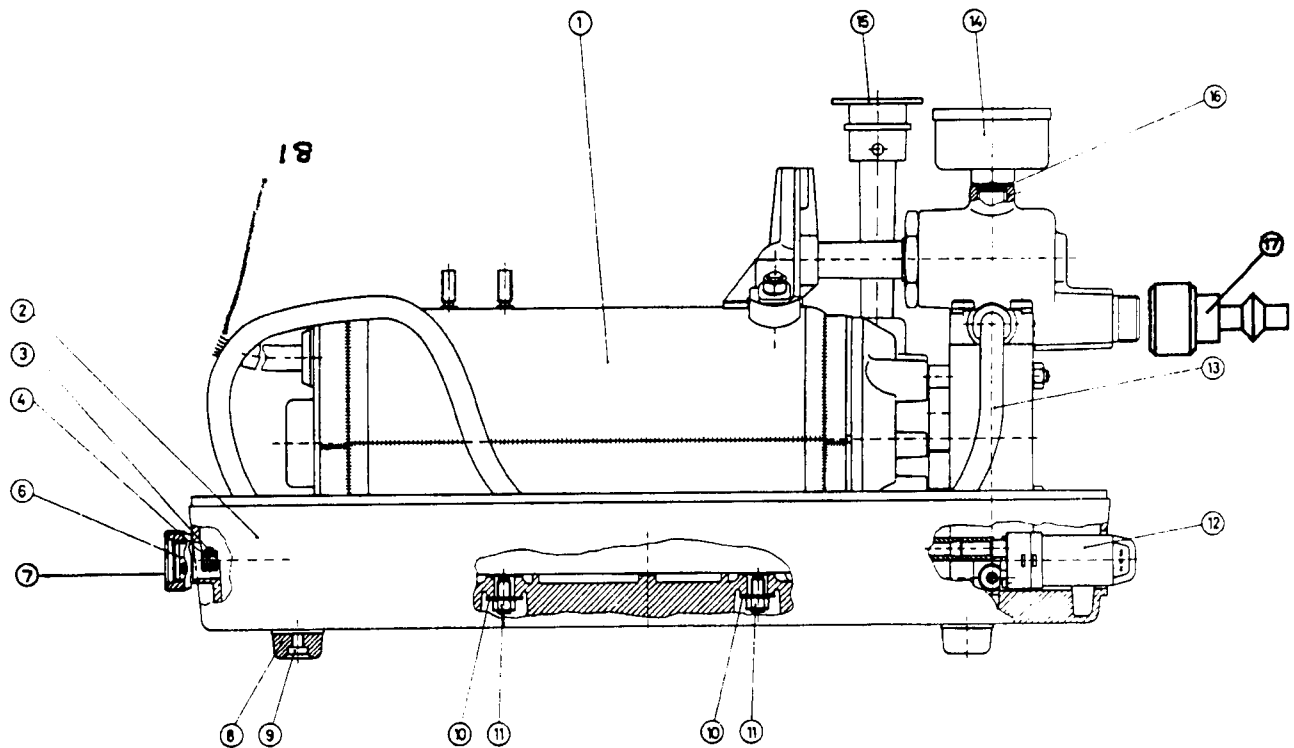


FIGURE B

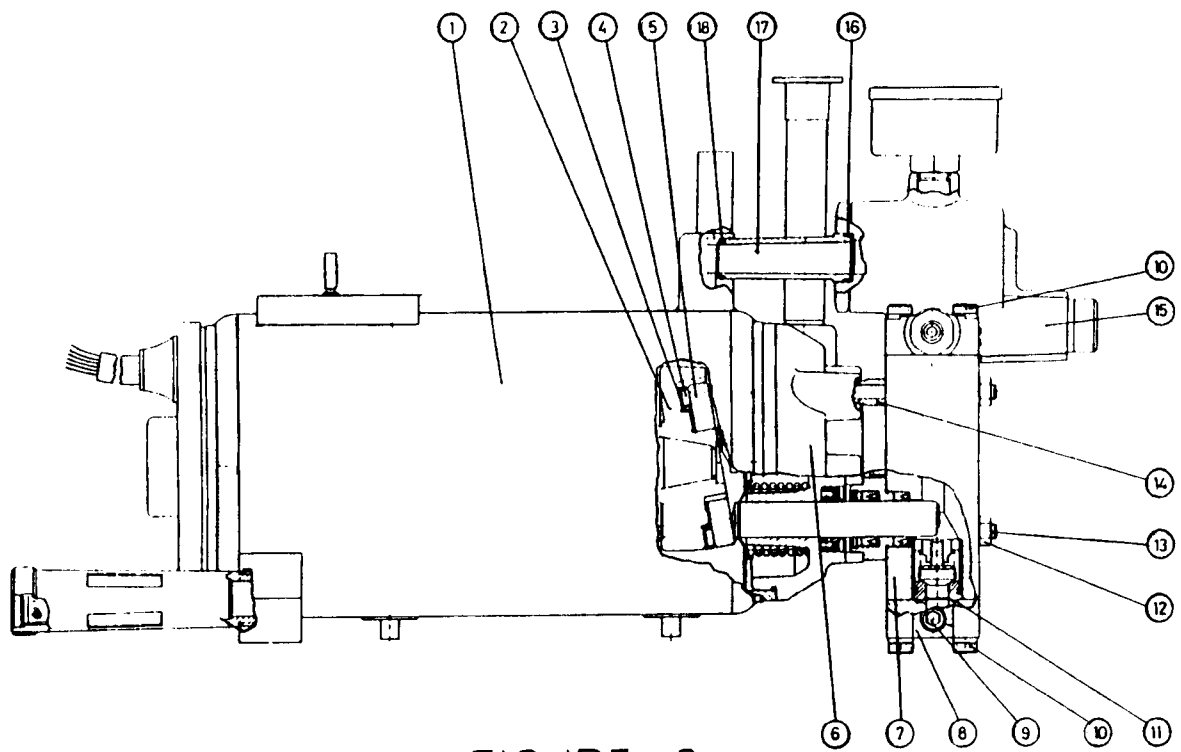


FIGURE C

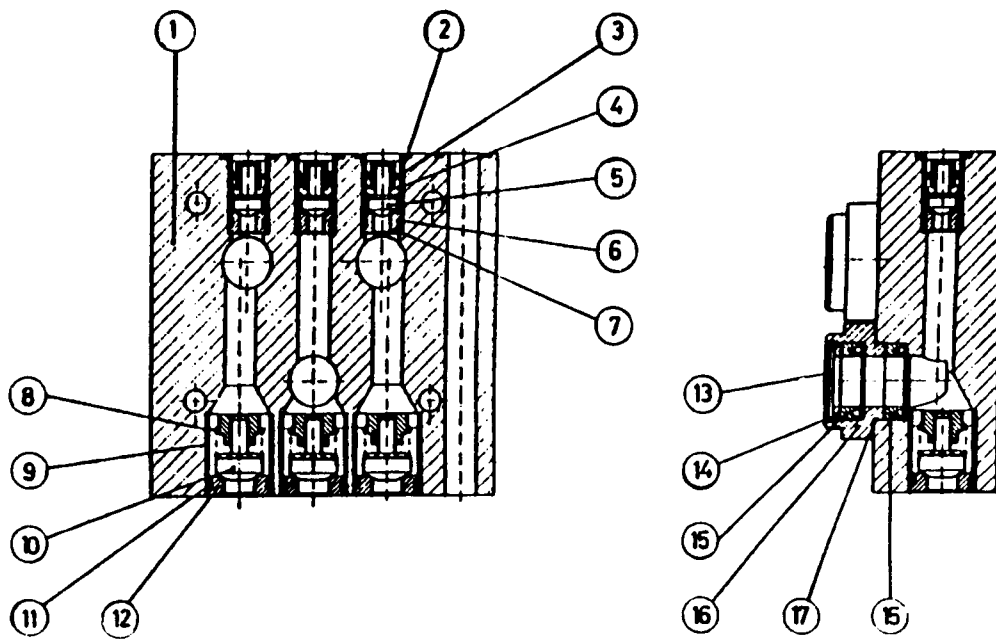


FIGURE D

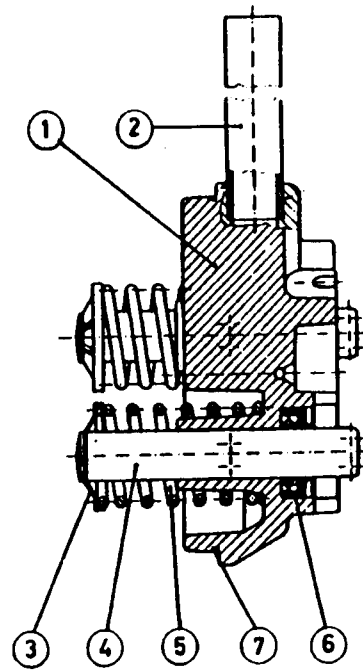


FIGURE E

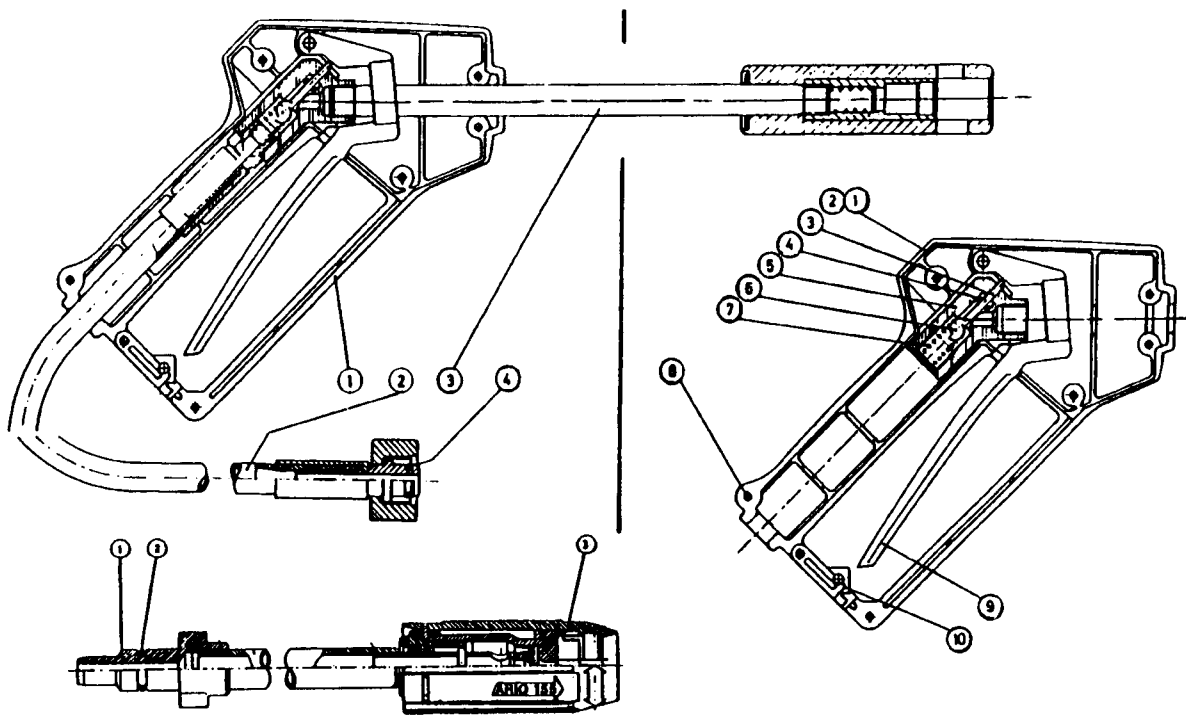


FIGURE F

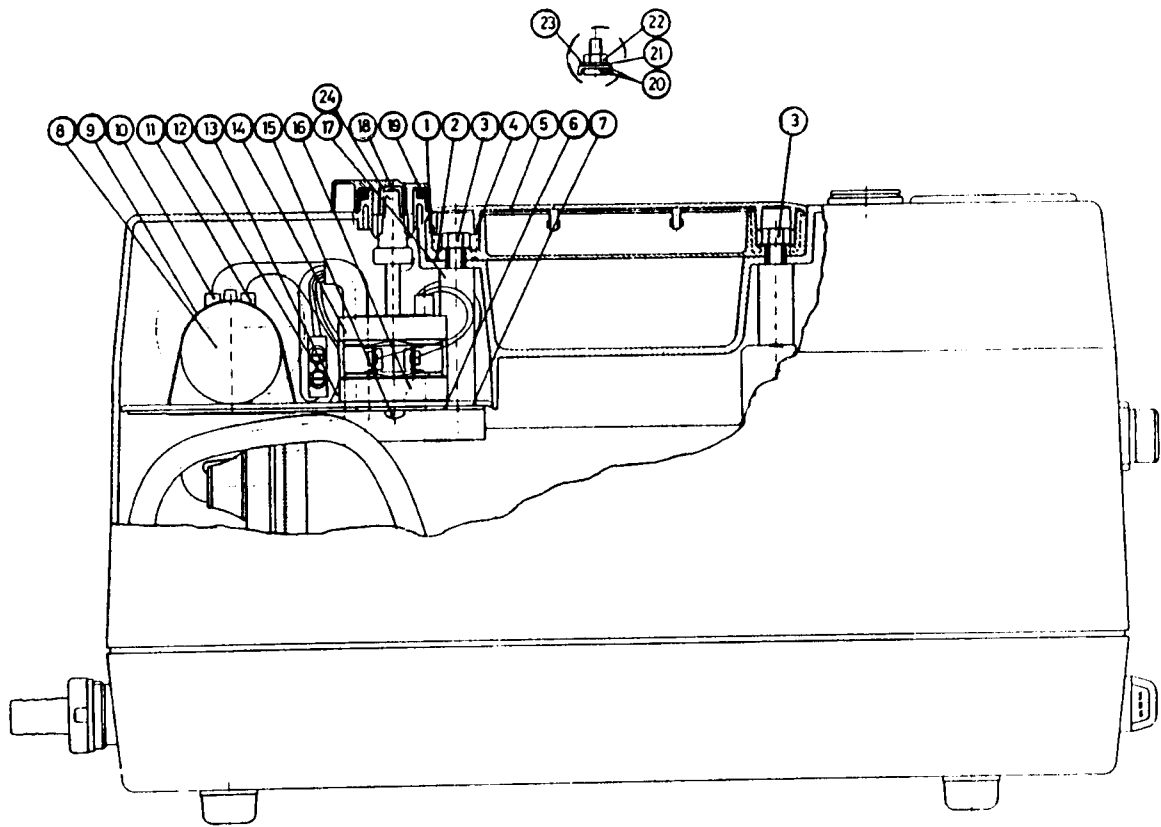


FIGURE G

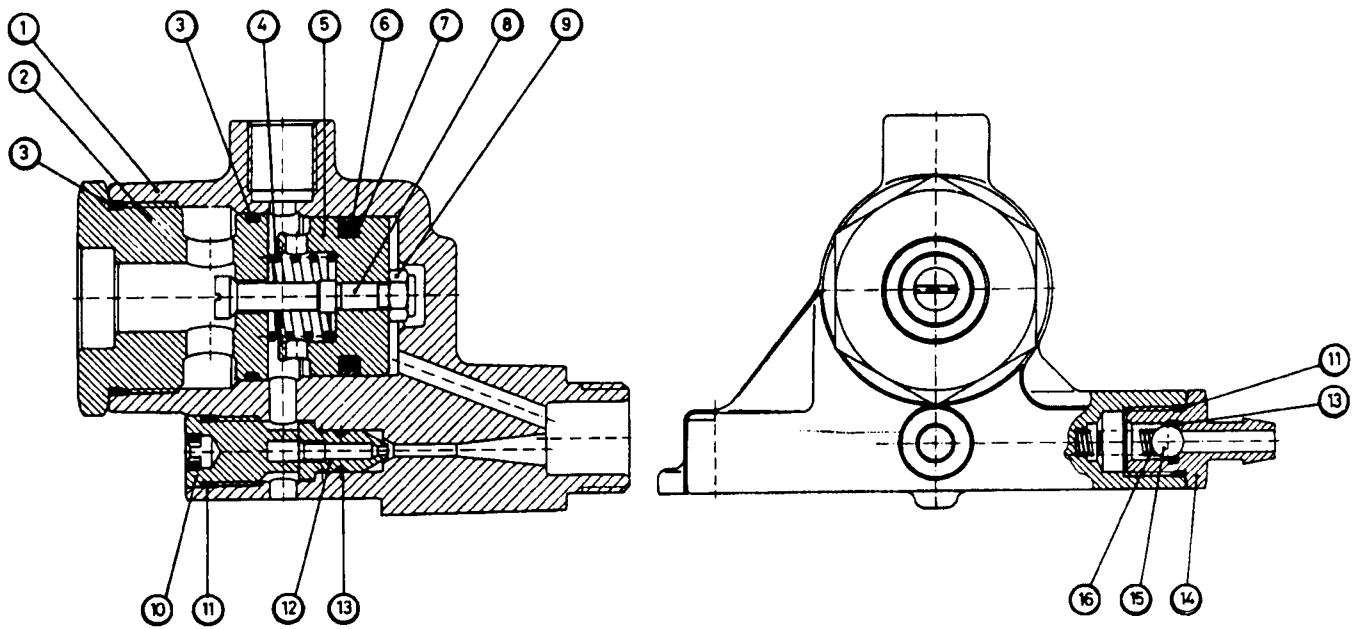


FIGURE H

REF. NO.	PART NO.	DESCRIPTION	NO. REQ.
FIGURE A			
1	6120775	Cabinet, Comp.	1
FIGURE B			
1	6120700	Motor/Pump unit in chassis	1
2	1800952	Chassis, bottom	1
3	3806252	Sheet metal screw, B4 x 10	2
4	6120538	Spacer piece	1
5	6100941	Filter Housing	1
6	1602945	Filter	1
7	4600847	+1605955 Inlet hose connector	1
8	1801406	Foot	4
9	1800440	Sheet metal screw, B10 x 13	4
10	1804673	Washer	2
11	6120380	Screw, M6 x 8	2
12	2402667	Filter w/metering valve	1
13	3600806	Fluid Hose	1
14	4600839	Pressure Meter	1
15	6105516	Plug	1
16	1402569	Washer	1
17	6120133	HP Male Quik- Connect	1
FIGURE C			
1	6120335	Motor, Comp.	1
2	6120550	Wobble disc., No. 3	1
3	3200938	Bearing Ring	1
4	3200946	Needle Bearing	1
5	6120493	Bearing disc.	1
6		Cylinder Block, Comp.	1
7		Head Cylinder, Comp.	1
8	6120497	Suction Cover	1
9	1602333	Plug	1
10	1800259	Screw, M6 x 25	8
11	3001070	O-Ring, 13,1 x 1,6	4
12	1800705	Nut, M6	4
13	6120505	Stay Bolt	4
14	6120569	Rubber Gasket	4
15		O-Ring - 16,1 x 1,6	1
16	3001989	Connecting Piece	1
17	6120537	O-Ring - 13,1 x 1,6	1
18	3001070	Oil	1
FIGURE D			
1	6120495	Head Cylinder	1
2	3001070	O-Ring - 13,1 x 1,6	4
3	2600583	Spring, Pressure	3
4	6100622	Valve Guide, Pressure	3
5	6100621	Piston, Pressure	3
6	3001120	O-Ring - 9,1 x 1,6	3
7	6100629	Valve Seat, Pressure	3
8	2600245	Spring, Suction	3
9	6100623	Piston Guide, Suction	3
10	6100620	Piston, Suction	3
11	3001419	O-Ring - 15,6 x 2,4	3
12	6120568	Valve Seat, Suction	3
13	1804632	Circlip	3
14	6120514	Backup Ring	3
15	3001914	U-Sleeve	6
16	6120504	Thrust Collar	3
17	3001930	O-Ring - 20 x 1	3
FIGURE E			
1	6120489	Cylinder Block	1
2	6120563	Oil Pipe	1
3	6120534	Lock Nut	3
4	6120491	Piston	3
5	2600526	Spring	3
6	3001906	U-Sleeve - 14 x 26 x 10/7	3
7	3001948	O-Ring - 95 x 1,5	3

REF. NO.	PART NO.	DESCRIPTION	NO. REQ.
FIGURE F			
1	6120383	Spray Handle	1
2	1402254	Hose	1
3	6120382	Pipe w/Coupling	1
4	3001211	O-Ring - 9,6 x 2,4	1
	6120377	Variable Nozzle, Comp.	1
1	6120486	Nipple	1
2	3001211	O-Ring - 9,6 x 2,4	1
3	6120525	Nozzle Protection	1
	6120383	Spray Handle	1
1	6120458	Handle, Right	1
2	6120459	Handle, Left	1
3	6120567	Pin	1
4	3001781	U-Sleeve	1
5	6120475	Valve Housing	1
6	3400447	Ball	1
7	2600070	Spring	1
8	1804400	Sheet Metal Screw, B4 x 20	6
9	6120456	Handle	1
10	6120457	Locking Pawl	1
FIGURE G			
1	6120702	Electric Parts	1
2	3001070	Handle, Underpart	1
3	1804665	O-Ring	2
4	3000064	Screw, M6 x 16	1
5	6120703	O-Ring	1
6	6120103	Handle, Upperpart	1
7	6120104	El-Plate	1
8	3807450	Gasket	1
8	3807476	Capacitor, 25uf	
8	3807476	Capacitor, 60uf	
9	1800416	Capacitor, 100uf	
9	1804616	Cable Binder	1
10	3800661	Cable Binder	1
11	6200770	Spade Plug	1
12	3807591	Cable w/Spade Plug	1
13	3803780	Crown Socket	1
14	3803780	Cable Lead-In	1
15	3807492	Switch	1
15	1800606	Screw, M4 x 10	2
15	1804814	Screw, M4 x 12	1
16	3803772	Cable Lead-In	1
17	6120101	Attach	1
18	4000360	Start Switch	1
19	3001922	U-Sleeve, 20 x 28 x 4	1
20	1802735	Washer	2
21	1802727	Washer, M5	1
22	1802743	Nut, M5	1
23	3800059	Earth Symbol	1
24	4000352	Axle	1
FIGURE H			
1	6120507	Valve Cover	1
2	6120516	Plug f/Valve	1
3	3001971	O-Ring, 27 x 2	2
4	2600104	Spring	1
5	6120512	Valve Plunger	1
6	3001955	Slide Ring	1
7	3001963	O-Ring, 22 x 3	1
8	6120513	Valve Cone	1
9	1804285	Nut, M5	1
10	6120517	Plug	1
11	3000072	O-Ring, 10,1 x 1,6	2
12	6120558	Injector Nozzle	1
13	3000270	O-Ring, 5,1 x 1,6	2
14	6120515	Chemical Pipe Branch	1
15	1804640	Ball	1
16	2600575	Spring	1
6121600 Repair kit - New style valves 1118561 " " " " " "			

THE KENT LIMITED WARRANTY

Your Kent Equipment, which has been manufactured, tested and inspected in accordance with carefully specified engineering requirements, is warranted to be free from defects in material and workmanship.

This warranty is, however, subject to the following qualifications, conditions, and limitations which are set forth to provide you and all users of the Kent Equipment with information concerning the duration, extent, availability, and applicability of this Kent Limited Warranty, the procedure to be taken to obtain its performance, and other information concerning the Kent Warranty policy.

DURATION OF WARRANTY AND TO WHOM EXTENDED

This warranty extends for a period of one year from the date of the original purchase of the Kent Equipment by the original purchaser.

PARTS OF KENT EQUIPMENT NOT COVERED BY WARRANTY

Certain parts of Kent Equipment require replacement in the ordinary course of use due to normal wear by reason of their characteristics. These are normal wear items such as cords, gaskets, switches, bumpers, carbon brushes, handle grips, bags, hoses, bearings, etc.

EXCEPTIONS AND EXCLUSIONS FROM WARRANTY

This equipment is required to be used on electric current as indicated on the name plate. Otherwise damage, defects, malfunctions or other failures of the equipment arising from use on electric current not as indicated are excepted and excluded from this warranty.

Defects, malfunctions, failure or damage of the equipment caused by improper, unreasonable or negligent use or abuse while in the possession of the purchaser are likewise excluded from this warranty.

If repair is done on your equipment by anyone other than those below designated as authorized to perform such work without first having obtained factory instructions, The Kent Company, at its sole option, may determine that this warranty will not apply and that reimbursement for such repair will not be made because of the failure to comply with such factory specified instructions.

Honda Engines are guaranteed by American Honda Motor Co., Inc. for a period of one year. Parts and service are available only through Honda servicing dealers.

Motor Appliance Corp. guarantees all Mac Battery Chargers to be free from defects in material or workmanship for a period of one year from date of manufacture. The nearest Mac authorized Service Facility should be contacted for service assistance.

FIVE YEAR POLY COMPONENT WARRANTY

Your Kent rotational molded polyethylene parts have been manufactured, tested and inspected in accordance with carefully specified engineering requirements and are warranted to be free from defects in material and workmanship.

This warranty extends for a period of five (5) years from the date of the original purchase of the Kent equipment by the original purchaser.

This warranty will not cover damage attributable to the following:

- (1) Improper, unreasonable or negligent use or abuse of the equipment.
- (2) Use of the equipment with hot water or high temperature above 130° Fahrenheit (54° Centigrade).
- (3) "Warpage", "creepage", or "distortion" of part so long as the same does not interfere with normal operation.
- (4) Abrasions or punctures of the equipment.

PROCEDURE TO BE TAKEN TO OBTAIN PERFORMANCE OF WARRANTY

REPAIRS - To secure repair of the equipment or any warranted parts under this warranty, the following procedure should be taken.

The inoperative equipment or warranted parts, together with satisfactory evidence of the purchase date, must be delivered, with shipping and delivery charges prepaid, to one of the following:

- (1) The Dealer from whom purchased.
- (2) Any Kent Distributor's Service Department in the United States.
- (3) Any Kent Authorized Service Station in the United States.

If you are unable to locate any of the foregoing, you may write or otherwise communicate with The Kent Company for instructions before repair service is performed by anyone else. In such event, The Kent Company will provide either the location of a closely available Kent Distributor Service Department or Kent Authorized Service Station or other factory instructions.

Upon compliance with the above procedure, all warranted defects will be repaired, at no additional charge or cost to the customer, and the repaired product returned to the customer, with all shipping and delivery charges prepaid.

In following the procedures above set forth, PLEASE MAKE CERTAIN to state the Kent model, type and serial number as shown on the name plate of the equipment.

REPLACEMENT - In the event of a defect, malfunction or failure of your Kent Equipment or any warranted part to conform with this warranty, The Kent Company may, at its sole option and own expense, replace the equipment or any warranted part with another new identical or reasonably equivalent model or part in lieu of repairing the defect.

NO REFUND OF PURCHASE PRICE

The Kent Company will not, as a matter of its warranty policy, refund the customer's purchase price.

WARRANTY REGISTRATION CARD FOR YOUR KENT EQUIPMENT AND REQUESTS FOR INFORMATION

Your Kent Company Distributor from whom you purchased your equipment is responsible for the registration of your warranty with the factory. We ask that you cooperate with your Distributor in supplying the necessary information on the warranty card so that we may better serve you.

Any information or questions you may have concerning your Kent Equipment or this warranty may likewise be secured from the factory.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

THE KENT COMPANY-P.O. BOX 1665-ELKHART, INDIANA 46515