Clarke®

SUBMERSIBLE WATER PUMPS

MODEL NO: CSE2,CSD3,CSV1A,CSV2A

PART NO: 7230560, 7230610, 7230580, 7230600

OPERATION & MAINTENANCE INSTRUCTIONS

CE

ORIGINAL INSTRUCTIONS

GC11/18 - ISS 2

INTRODUCTION

Thank you for purchasing this CLARKE Submersible Water Pump. CSE pumps are designed for pumping clean water only and will pump down to a water level of 20mm.

This pump is designed for pumping clean water or water containing solids in suspension and is ideally suited for draining ponds, pools, sumps etc. It is not designed for pumping slurry, sludge, mud or heavily polluted water, or any water containing chemicals or other acidic contaminants including salt water.

Pumps fitted with float switches are suitable for permanent or semi-permanent installations where it is necessary to maintain water at a particular level.

As the water level rises, the float switch will rise and start the pump. As the water level falls, so will the float switch until it stops the pump. Float switches are factory set to provide the correct on/off switching mode, however, you can adjust the level at which the pump cuts out by sliding the float switch cable in its clip attached to the handle, to either shorten or lengthen as required. The shorter the cable, the earlier it will cut out and therefore, the deeper the water will remain at this point.

PUMP SPECIFICATIONS

	CSE2	CSD3	CSV1A	CSV2A
Dimensions excluding the elbow	140 x 302mm	149 x 400mm	143 x 300mm	143 x 335mm
Weight	4.3kg	8.0 kg	4.6 kg	5.6 kg
Cable Size	10 x 0.75 (m x mm^2)	15 x 1.0 (m x mm^2)	10 x 0.75 (m x mm^2)	10 x 0.75 (m x mm^2)
Max. Capacity	253 L/min	95 L/min	118 L/min	236 L/min
Head Max	10 m	45 m	5 m	9 m
Motor Output	750 W	900 W	330 W	650 W
Outlet Diameter	1¼"/ 32mm	1"/ 25mm	1¼"/ 32mm	1¼"/ 32mm

SAFETY PRECAUTIONS

1. These pumps are designed to pump WATER ONLY. Never use for pumping flammable liquids or chemicals.
2. Never run the pump dry.
3. An approved Residual Current Device (RCD) which has a tripping current of less than 30mA must be used when pumping from ponds or swimming pools.
4. Never carry the pump by the mains lead or float switch.
5. Never pull the mains lead to disconnect the pump from the mains socket.
6. Your submersible pump may only be used for pumping water from a swimming pool when there is no person or animal in the pool.
7. Always disconnect the pump from the electrical supply before placing it into, or removing it from the water and before any cleaning or maintenance.
8. Always use the moulded handle (or lifting eye), with a rope or cable attached when lifting the pump. NEVER lift the pump by the mains cable or, where fitted, the float switch cable.
9. DO NOT run the pump with the body exposed for longer than 10 minutes.
10. DO NOT install the pump on sand or ground which is likely to shift.
11. Do not use the pump if the water is liable to freeze, as this can cause damage to the pump. Remove the pump from the water and store it in a frost free location.
12. If the pump is to be used where there may be silt or mud (for example, garden ponds), keep the pump clear of any sediment by standing it on a platform or brick.
13. Do not allow children to touch the pump, cables or connections.
14. Disconnect the pump from the mains supply when not in use.
15. Have the pump repaired by a qualified person.
16. Keep the mains cable away from heat, oil and sharp edges.
17. Always check the plug, mains cable and float switch cable for damage before use. Do not use the pump if damaged. Refer to qualified service personnel for repair.
18. If you have to use an extension lead with this product, it must be designed for outdoor use and incorporate a cable suitable for use with Class I appliances.

ELECTRICAL CONNECTIONS

WARNING: READ THESE ELECTRICAL SAFETY INSTRUCTIONS THOROUGHLY BEFORE CONNECTING THE PRODUCT TO THE MAINS SUPPLY.

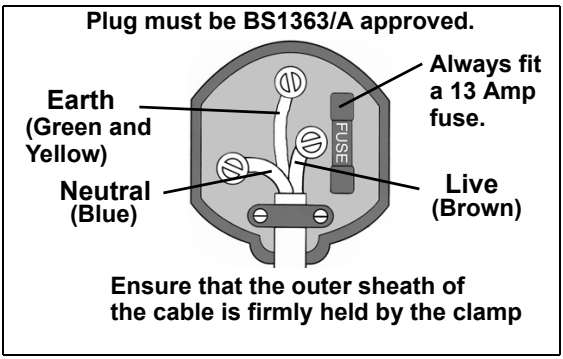
Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

If the plug has to be changed because it is not suitable for your socket, or because of damage, it must be removed and a replacement fitted, following the wiring instructions shown below. The old plug must be discarded safely, as insertion into a power socket could cause an electrical hazard.

WARNING: THE WIRES IN THE POWER CABLE OF THIS PRODUCT ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:
BLUE = NEUTRAL BROWN = LIVE YELLOW AND GREEN = EARTH

If the colours of the wires in the power cable do not agree with the markings on the plug.

- The BLUE wire must be connected to the terminal which is marked N or coloured black.
- The BROWN wire must be connected to the terminal which is marked L or coloured red.
- The YELLOW AND GREEN wire must be connected to the terminal which is marked E or ⏚ or coloured green.



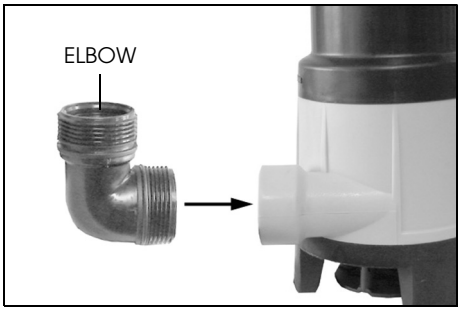
AN APPROVED RESIDUAL CURRENT DEVICE (RCD) WHICH HAS A TRIPPING CURRENT OF LESS THAN 30 mA MUST BE USED.

If you are not sure, consult a qualified electrician. DO NOT try to do any repairs.

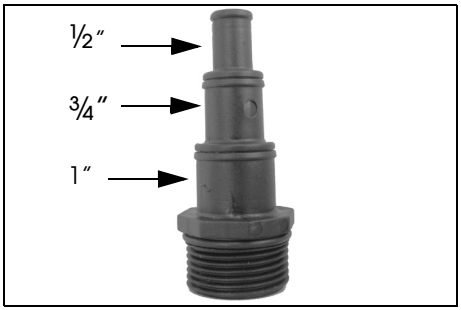
PREPARATION

WARNING: DISCONNECT THE PUMP FROM THE MAINS POWER SUPPLY BEFORE CONNECTING THE MULTI HOSE ADAPTOR.

1. Fit the elbow adaptor to the pump outlet as shown in the diagram opposite.
2. Screw the multi-hose adaptor onto the elbow.
   - The multi hose adaptor is capable of accepting 1", ¾" and ½" hoses.



3. Simply cut the multi hose connector to the required size and attach a suitable hose using with a worm drive clip.
   - For maximum efficiency, we strongly recommend that you connect a 1¼" diameter hose to the multi hose adapter.
   - Alternatively, you may remove the multi adapter altogether, and screw on a 1¼" BSP hose adapter.



The pump is completely submersible and should be placed in a vertical position on a solid flat surface, placing the pump on a couple of house bricks if required.

SUITABLE HOSES AND SPARE/REPLACEMENT MULTI HOSE ADAPTERS ARE AVAILABLE FROM YOUR CLARKE DEALER.

USING THE PUMP

WARNING: CHECK THE PUMP FOR DAMAGE BEFORE USE. DO NOT USE THE PUMP IF IT IS DAMAGED IN ANY WAY.

WARNING: THE WATER BEING PUMPED WILL BE POLLUTED IF THIS PUMP BECOMES DAMAGED AND LUBRICANT WITHIN THE PUMP ESCAPES.

1. Place the pump on a flat surface in the area that you want to drain.
   - If there is sediment in the operating area the pump should be placed on house bricks or similar.
   - Ensure the pump is positioned with adequate space so that the movement of the float switch is not restricted - recommended minimum area of 40 x 40cm.
   - ALWAYS raise and lower the pump using a rope attached to the lifting handle.
   - Take all necessary precautions as described on page 3 before plugging in and switching ON.

WARNING: NEVER CARRY THE PUMP USING THE MAINS POWER CABLE. DAMAGE TO ELECTRICAL CABLES CAN BE HAZARDOUS. ALWAYS USE THE HANDLE WHEN MOVING THE PUMP.

2. Connect the mains plug to a high sensitivity residual current device (RCD) which has a tripping current of less then 30mA.
3. Switch the mains power supply on.
   - The pump incorporates a float switch which automatically switches the pump ON when the water is above a pre-determined level.
   - The pump will begin to drain water.
   - As the water level falls, so will the float switch until it stops the pump.
4. Disconnect the pump from the mains power supply when finished.
   - These pumps are fitted with automatic thermal overload protection. If the pump overheats due to an obstruction in the pump or pumping warm water for example, it will shut off automatically. Switch the pump OFF and disconnect from the mains supply. Check for blockages and allow the motor to cool (at least 5 minutes) before attempting to re-start.

CAUTION: DO NOT ALLOW THE PUMP TO RUN DRY

MAINTENANCE

WARNING: BEFORE CHECKING THE CONDITION OF THE PUMP, ENSURE IT IS UNPLUGGED FROM THE MAINS SUPPLY.

These pumps should require no maintenance other than regular cleaning.

If the pump starts to show signs of wear or damage, contact your CLARKE dealer for advice.

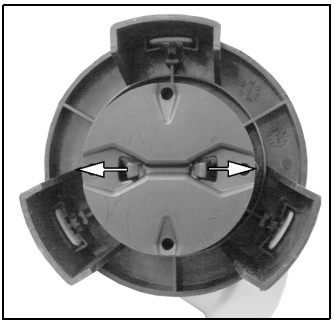
Do not use the pump if there is any damage to the mains supply cable or to the float switch or its cable.

Do not attempt to repair the pump yourself as you may damage the waterproof seal and invalidate your guarantee. Repairs must be carried out by your CLARKE dealer or contact the CLARKE Service Department on 020 8988 7400.

If the troubleshooting on page 8 does not solve your problem please contact the Clarke service department.

CLEANING

1. Check the pump installation regularly to ensure the base inlet is clear of leaves or other debris.



- These pumps have screwless fittings at their base, allowing the removal of the plastic cover by prising the two release clips apart in the direction of the arrows.
- This allows better access to the cavity at the bottom, should the pump become badly clogged. Flush the cavity and the impeller housing with clean water.
- To replace the cover, ensure the release clips line up with the holes on the base of the pump and press the cover home.

NOTE: Do not attempt to strip the pump further as this will invalidate the guarantee.

TROUBLESHOOTING

	SOLUTION
PUMP WILL NOT START	1. Check to ensure power is switched on. 2. Check fuse (consult an electrician if in doubt). 3. If extension lead is fitted, check connections (consult an electrician if in doubt). 4. Internal thermal cut-out has not re-set. Leave for 5 minutes and try again. 5. The impeller may be jammed. Disconnect from the mains supply, remove the bottom strainer and remove any objects that may be obstructing the impeller. Replace the strainer and try again. 6. If the pump still fails to start consult your CLARKE dealer for advice. 7. Floatswitch may be jammed against side wall or prevented from moving. 8. Water level too low - float switch in OFF position - lift float to check switch.
PUMP WILL START BUT NOT PUMP	1. Check to ensure strainer is not blocked. 2. Discharge tube clogged or obstructed. 3. The head may be too great, i.e. you are trying to lift the water too great a distance for the pump to cope with. (See specifications on page 2). 4. Air bubble in the pump, produced during the plunge. Plunge the pump again at an angle and shake it whilst lowering to remove any air trapped in the system. 5. Impeller may be damaged - Consult your CLARKE dealer.
PUMP WILL NOT STOP	1. Float switch may be prevented from moving to the fully down position. 2. Float switch may be faulty. Consult your CLARKE dealer for advice.
PUMP STOPS RUNNING	1. Thermal overload has operated. If this condition persists, investigate the cause. Are you attempting to pump liquid which is too heavy for the pump (mud, slurry etc.) 2. Pump has run dry or float switch has cut in. 3. A foreign object has jammed the impeller.

DECLARATION OF CONFORMITY

CE

Clarke®
INTERNATIONAL
Hemnall Street, Epping, Essex CM16 4LG

DECLARATION OF CONFORMITY

This is an important document and should be retained.

We hereby declare that this product(s) complies with the following directive(s):

2014/30/EU	*Electromagnetic Compatibility Directive.*
2014/35/EU	*Low Voltage Equipment Directive.*
2011/65/EU	*Restriction of Hazardous substances.*

The following standards have been applied to the product(s):

EN 60335-1:2012, EN 60335-1/A11:2014, EN 60335-2-41/A2:2010.

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

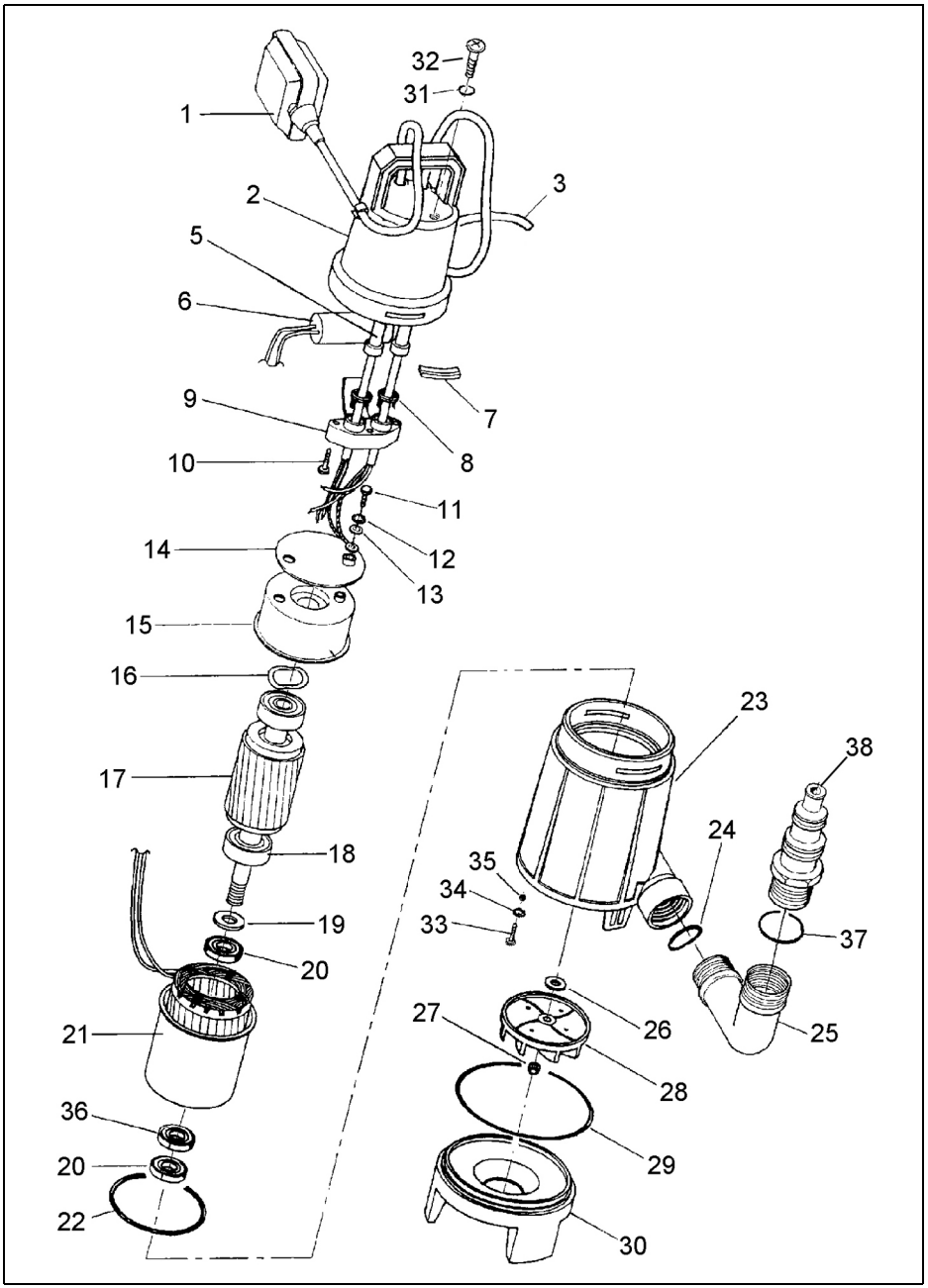
The CE mark was first applied in: 2016

Product Description:	Submersible Water Pumps:
Model number(s):	CSE2, CSD3, CSV1A, CSV2A.
Serial / batch Number:	N/A
Date of Issue:	18/10/2018

Signed:

J.A. Clarke
Director

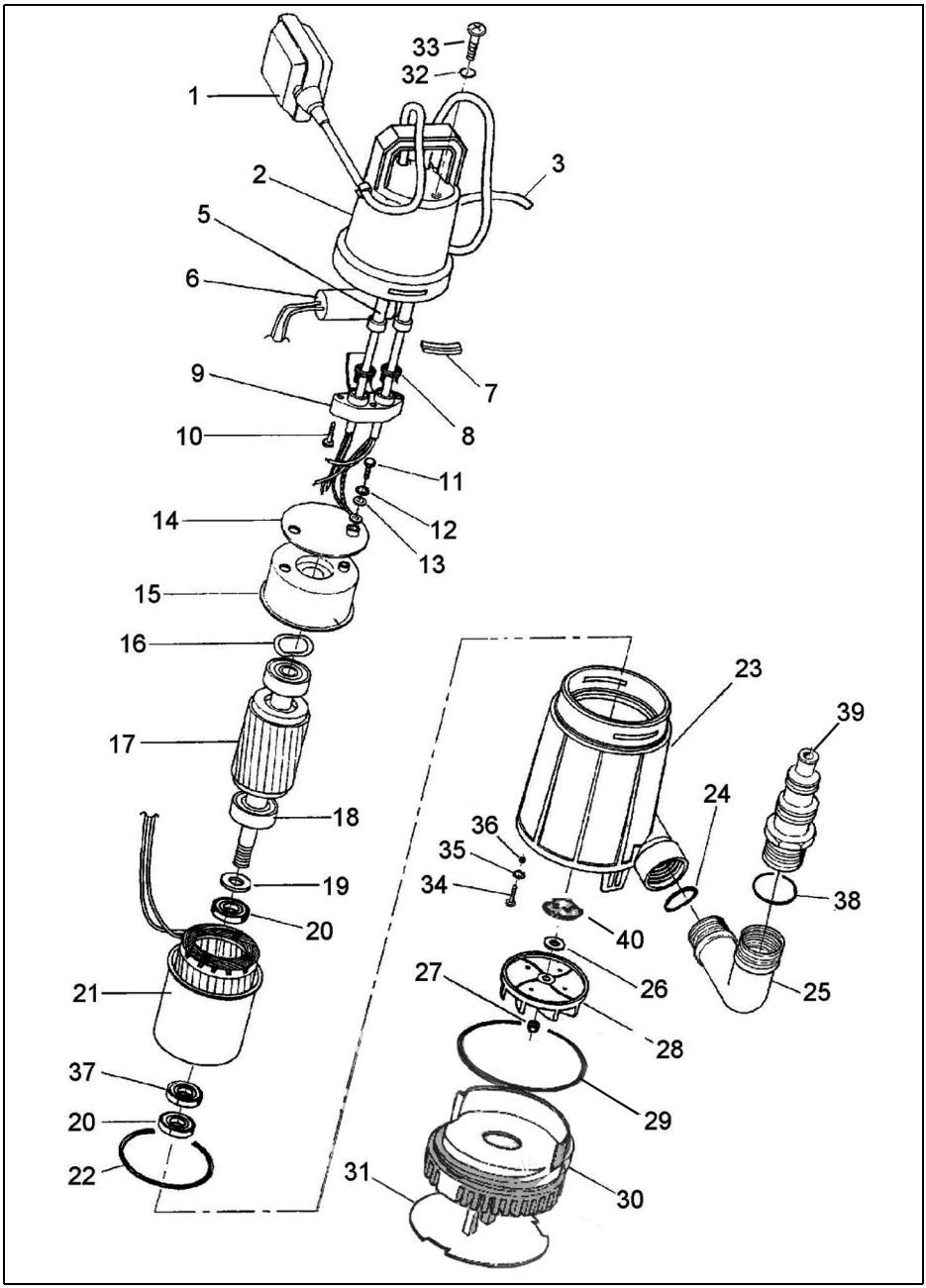
EXPLODED PARTS DIAGRAM - CSV1A/2A



PARTS LIST - CSV1A/CSV2A

	DESCRIPTION	CSV1/A	CSV2/A
1	Floatswitch	LDP1380002	LDP1380002
2	Cap	LDS3600170	LDS3600170
3	Cable 10m	LDP1320016	LDP1320016
4	Grommet	CSV2 ONLY	
5	Grommet	LDP1230003	LDP1230003
6	Flux Capacitor	LDP1360030	LDP1360030
7	Lock	LDS3500011	LDS3500011
8	Anti-tear Ring-piece	LDS3500336	LDS3500336
9	Cable Fastener	LDS3500335	LDS3500335
10	Screw	LDP1100008	LDP1100008
11	Earth Screw	LDP1100003	LDP1100003
12	Spring Washer	LDP1120003	LDP1120003
13	Washer	LDP1120051	LDP1120051
14	Insulation Disc	LDS3500106	LDS3500106
15	Upper Flange	LDS3120005	LDS3120005
16	Wave Washer	LDP1120002	LDP1120002
17	Ceramic Shaft/Bearings	**LDS3101001**	**LDS3101002**
18	Bearing	LDP1180001	LDP1180001
19	Washer	LDP1120007	LDP1120007
20	Lip Seal	LDP1210001	LDP1210001
21	Stator	**LDS3410004**	**LDS3410017**
22	Joint O-ring	LDP1200007	LDP1200007
23	Pump Housing	**LDS3500206**	**LDS3500207**
24	Joint O-ring	LDP1200009	LDP1200009
25	Elbow with O-ring	LDS3600111	LDS3600111
26	Washer	LDP1120006	LDP1120006
27	Nut	LDP1110005	LDP1110005
28	Impellor	**LDS3500013**	**LDS3500014**
29	Joint O-ring	LDP1200008	LDP1200008
30	Pedestal	LDS3500018	LDS3500018
31	Joint O-ring	LDP1200033	LDP1200033
32	Screw	LDP1100090	LDP1100090
33	Screw	LDP1100014	LDP1100014
34	Washer	LDP1120017	LDP1120017
35	Sphere	LDP1180003	LDP1180003
36	Twin Lip Seal	LDP1210004	LDP1210004
37	Joint O-ring	LDP1200002	LDP1200002
38	3-step Fitting with O-ring	LDS3600162	LDS3600162

EXPLODED PARTS DIAGRAM - CSE2



PARTS LIST - CSE2

	DESCRIPTION	PART NO
1	Float-switch	LDP1380002
2	Cap	LDS3600170
3	Cable 10m	LDP1320016
4	Grommet	LDP1230002
5	Grommet	LDP1230003
6	Capacitor	LDP1360030
7	Lock	LDS3500011
8	Anti-tear ring	LDS3500336
9	Cable fastener	LDS3500335
10	Screw	LDP1100008
11	Earth screw	LDP1100003
12	Spring-washer	LDP1120003
13	Washer	LDP1120051
14	Insulation disc	LDS3500106
15	Upper flange	LDS3120005
16	Wave washer	LDP1120002
17	Ceramic shaft with bearings	LDS3101002
18	Bearing	LDP1180001
19	Washer	LDP1120007
20	Lip seal	LDP1210001

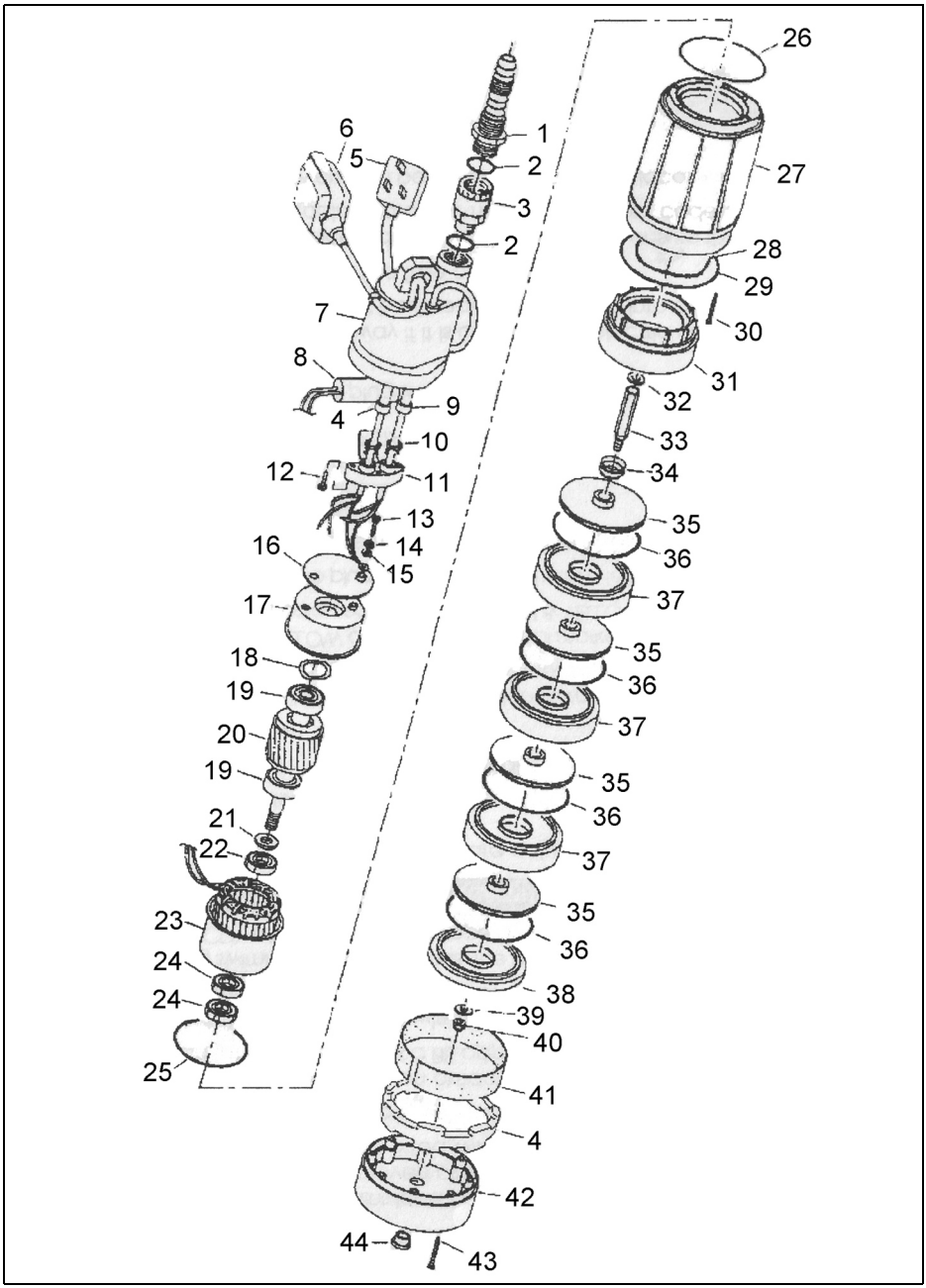
NO	DESCRIPTION	PART NO
21	Stator	LDS3410017
22	Joint O-ring	LDP1200007
23	Pump housing	LDS3600075
24	Joint O-ring	LDP1200009
25	Elbow with O-ring	LDS3600111
26	Washer	LDP1120006
27	Nut	LDP1110005
28	Impeller	LDS3500559
29	Joint O-ring	LDP1200008
30	Filter	LDS3500017
31	Filter Base	LDS3500107
32	Joint O-ring	LDP1200033
33	Screw	LDP1100090
34	Screw	LDP1100014
35	Washer	LDP1120017
36	Ball	LDP1180003
37	Twin Lip Seal	LDP1210004
38	Joint Ring	LDP1200002
39	Step Fitting /O-ring	LDS3600162
40	V-ring Joint	LDP1210002

ENVIRONMENTAL RECYCLING POLICY

Through purchase of this product, the customer is taking on the obligation to deal with the WEEE in accordance with the WEEE regulations in relation to the treatment, recycling & recovery and environmentally sound disposal of the WEEE.

In effect, this means that this product must not be disposed of with general household waste but according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

EXPLODED PARTS DIAGRAM - CSD3



PARTS LIST - CSD3

	DESCRIPTION	PART NO
1	Pipe fitting/O-ring	LDS3600107
2	Joint O-ring	LDP1200002
3	Non-return valve	LDS3600099
4	Spacer	LDP1230003
5	Power cable	LDP1330011
6	Float-switch	LDP1380002
7	Cap	LDS3600186
8	Capacitor	LDP1360003
9	Grommet	LDP1230003
10	Anti-tear ring	LDS3500336
11	Cable fastener	LDS3500335
12	Screw	LDP1100008
13	Earth screw	LDP1100003
14	Spring washer	LDP1120003
15	Washer	LDP1120051
16	Insulation disc	LDS3500106
17	Upper flange	LDS3120005
18	Wave washer	LDP1120002
19	Bearing	LDP1180001
20	Shaft with bearings	LDS3101004
21	Washer	LDP1120007
22	Lip seal	LDP1210001

NO	DESCRIPTION	PART NO
23	Stator	LDS3410014
24	Twin lip seal	LDP1210004
25	Joint O-ring	LDP1200007
26	Joint O-ring	LDP1200012
27	Pump housing	LDS3500737
28	Joint O-ring	LDP1200020
29	Joint O-ring	LDP1200015
30	Screw	LDP1100012
31	Diffuser flange	LDS3600156
32	Washer	LDP1120012
33	Hexagonal shaft	LDS3100019
34	V-ring	LDP1210005
35	Impeller	LDS3250028
36	Joint O-ring	LDP1200014
37	Diffuser	LDS3250006
38	Diffuser cap	LDS3500611
39	Washer	LDP1120014
40	Nut	LDP1110009
41	Filter ring	LDS3220006
42	Filter base	LDS3500743
43	Screw	LDP1100017
44	Cap	LDP1230006

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt which will be required as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission.

This guarantee does not effect your statutory rights.

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