



## 1300W SUBMERSIBLE PUMP

MODEL NO: CSV4A

PART NO: 7230604

# OPERATION & MAINTENANCE INSTRUCTIONS



## INTRODUCTION

Thank you for purchasing this CLARKE 1300W Submersible pump.

This pump is designed for pumping clean water and water containing solid bodies (max 40mm in diameter). 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.

## **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.

### **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. It must be disposed of according to the laws governing Waste Electrical and Electronic Equipment (WEEE) at a recognised disposal facility.

## **OVERLOAD SWITCH**

These pumps are fitted with a thermal overload switch. If the pump overheats for any reason, it will automatically switch the pump OFF. Once the pump has cooled (at least 5-10 minutes), the pump will automatically restart.

## SAFETY INSTRUCTIONS

#### **GENERAL**

- Read all instructions before use and save these instructions for future use.
- An approved residual current device (RCD) which has a tripping current of less then 30mA MUST be used for all operations.
- 3. The electrical supply must be the same as that on the rating plate.
- Always make sure that your hands are dry when connecting or disconnecting from the mains supply.
- Never pull the mains lead to disconnect the pump from the mains socket.
- The mains plug must be kept away from the water at all times.
- Do not allow children or unauthorised people to touch the pump, cables or connections.
- 8. Disconnect the pump from the mains supply when not in use.
- 9. If necessary have the pump repaired by a qualified person.
- 10. Keep the mains lead away from heat, oil and sharp edges.
- 11. 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.
- 12. Disconnect the pump from the electrical supply and wear gloves during servicing or maintenance.

#### **PUMP SPECIFIC**

- 1. Do not pump explosive / flammable liquids or chemicals.
- 2. Never allow the pump to run dry or operate out of the water.
- Submersible pumps should always be submerged and stored vertically.
- Disconnect the pump from the mains supply before placing it into or removing it from the water.
- 5. Always check the plug, and all cables for damage before use.
- Do not use the pump if damaged. Refer to qualified service personnel for repair.
- 7. Never carry or lowerthe pump by the power cable or float switch always use the handle or a rope tied securely to the handle.
- Never insert your fingers into the pump whilst it is connected to the mains.
- Never use the submersible pump in a swimming pool when there are people or animals in the pool.
- 10. Keep the pump clear of any sediment by standing it on a platform or brick or suspending it at a suitable depth.
- 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.

## **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.

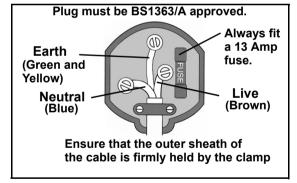
If the plug has to be changed because it is not suitable for your socket, or because of damage, it must be removed and a replacement fitted, following the wiring instructions shown below. The old plug must be discarded safely, as insertion into a power socket could cause an electrical hazard.



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  $\frac{1}{2}$  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.

## **ASSEMBLY**

Remove all packaging and make sure that the unit has no visible damage. Dispose of all packaging appropriately.

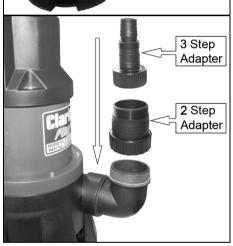
#### FITTING THE ELBOW

- 1. Screw the elbow into the outlet port as shown.
- 2. Connect a suitable hose (not supplied) to the pump outlet.
  - Suitable hoses are available from your local Clarke dealer.

#### FITTING THE HOSE ADAPTER

- 2 step adapter 2" hose, 11/2" BSP
- 3 step adapter 1½" hose, 1" BSP, 1" hose.
- 1. Screw the 2 step adapter onto the elbow.
- The 3 step adapter can then be fitted to the 2 step adapter if required.
- Trim the adaptor to the required size.
  - Reducing the hose diameter will effect the maximum flow rate.
  - Hoses to suit each of the above adaptor sizes are all readily available from your local Clarke dealer.





## **SETTING UP THE PUMP**

#### POSITIONING THE PUMP

- 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 vertically 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 50 x 50cm.
  - ALWAYS raise and lower the pump using a rope attached to the lifting handle.
  - Take all necessary precautions as described on page 3.

## **USING THE PUMP**



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

- 1. Connect the mains plug to the mains supply.
  - Always use a high sensitivity residual current device (RCD) which has a tripping current of less then 30mA.
- 2. Switch the mains power supply on.
  - The pump will begin to drain water.
  - As the water level falls, so will the float switch, until it stops the pump.
  - You can adjust the position at which the float switch lead clips to the side of the pump. Adjusting the length of the float switch lead will change the depth of water at which the pump will turn on or off.
- When pumping is finished, disconnect the pump from the mains power supply.

IMPORTANT: 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. IF THE UNIT IS HARD WIRED, ENSURE THE CIRCUIT BREAKER IS OPEN.

This pump 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.

#### CLEANING

- 1. Check the pump installation regularly to ensure the water inlet is clear of leaves or other debris.
- 2. Take extra care to remove any debris from around the impeller.

NOTE: 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.

#### **STORAGE**

When the pump is not being used for extended periods, clean and dry it thoroughly and store in indoors. If the pump is left in water, it must be run at least once a week to prevent it from seizing up.

## **SPECIFICATIONS**

Voltage	230V~50Hz
Outlet Thread Diameter	2" BSP
Power	1300W
Maximum Head Height	11 m
Maximum Depth	7 m
Maximum Flow	417 I/min
Maximum Water Temperature	35°C
Maximum Particle Size	40 mm
Weight	7.8 kg
Cable Length	10 m
Dimensions (D x W x H)	222 x 218 x 427 mm

## **TROUBLESHOOTING**

PROBLEM	SOLUTION
PUMP WILL NOT START	<ol> <li>Make sure that the power is switched on.</li> <li>Check fuse (consult an electrician if in doubt).</li> <li>If an extension lead is fitted, check connections (consult an electrician if in doubt).</li> <li>Internal thermal cut-out has not re-set. Leave for 5-10 minutes and try again.</li> <li>The impeller may be jammed. Disconnect from the mains supply and remove any objects that may be obstructing the impeller.</li> <li>Float switch may be jammed against side wall, or prevented from moving.</li> <li>If the pump still fails to start, consult your CLARKE dealer for advice.</li> </ol>
PUMP WILL START BUT NOT PUMP	<ol> <li>Check that the inlet is not blocked.</li> <li>Check that the outlet is not clogged or obstructed.</li> <li>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. ("Specifications" on page 7).</li> <li>Air bubble in the pump, produced during immersion. immerse the pump again, at an angle, and shake it whilst lowering to remove any air trapped in the system.</li> <li>Impeller may be damaged - Consult your CLARKE dealer.</li> </ol>
PUMP WILL NOT STOP	<ol> <li>Float switch may be prevented from moving to the fully down position.</li> <li>Float switch may be faulty. Consult your CLARKE dealer for advice.</li> </ol>
PUMP STOPS RUNNING	<ol> <li>Thermal overload has operated. Leave for 5-10 minutes and try again.</li> <li>Pump has run dry, or float switch has cut in.</li> </ol>
	3. A foreign object has jammed the impeller.

If this does not solve your problem, please contact the Clarke service department.

## **PARTS LIST & DIAGRAM** 12, 13 18.2 18.7 18.3, 18.4 18.6

Parts & Service: 020 8988 7400 / E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

## **PARTS LIST**

2Float Switch23Bushing3Handle24Gasket4Customized Self Tapping Screw25Skeleton Seal5Gasket26Aluminium Bushing6Rear Pump Housing27O-ring7Self Tapping Screw28Front Cover8Cable Sheath29O-ring9Cable Gland30Locating Ring1016uf Capacitor31Adjustable Washer11Ground Cover32Impeller12Nylon Secure Pressing Cap33Washer13Nylon Secure Pressing Cap34Nut14Rubber Clip36Self Tapping Screw15Ribbon37Gasket16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring21Rotor48Outlet Connector	1	Power Cable	22	Stator
4Customized Self Tapping Screw25Skeleton Seal5Gasket26Aluminium Bushing6Rear Pump Housing27O-ring7Self Tapping Screw28Front Cover8Cable Sheath29O-ring9Cable Gland30Locating Ring1016uf Capacitor31Adjustable Washer11Ground Cover32Impeller12Nylon Secure Pressing Cap33Washer13Nylon Secure Pressing Cap34Nut14Rubber Clip36Self Tapping Screw15Ribbon37Gasket16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	2	Float Switch	23	Bushing
5Gasket26Aluminium Bushing6Rear Pump Housing27O-ring7Self Tapping Screw28Front Cover8Cable Sheath29O-ring9Cable Gland30Locating Ring1016uf Capacitor31Adjustable Washer11Ground Cover32Impeller12Nylon Secure Pressing Cap34Nut13Nylon Secure Pressing Cap34Nut14Rubber Clip36Self Tapping Screw15Ribbon37Gasket16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	3	Handle	24	Gasket
6 Rear Pump Housing 7 Self Tapping Screw 8 Cable Sheath 9 Cable Gland 10 16uf Capacitor 11 Ground Cover 12 Nylon Secure Pressing Cap 13 Nylon Secure Pressing Cap 14 Rubber Clip 15 Ribbon 16 Cable Block 17 Customized Self Tapping Screw 18 Rear Cover 18 Rear Cover 19 Gasket 19 Wave Washer 19 Wave Washer 20 Bearing 20 Front Cover 20 O-ring 20 Front Cover 20 O-ring 20 O-ring 30 Locating Ring 30 Locating Ring 30 Main Pumpller 31 Nut 32 Frapping Screw 33 Gasket 34 Main Pump Housing 35 O-ring 46 Pump Base 47 Protective Ring	4	Customized Self Tapping Screw	25	Skeleton Seal
7 Self Tapping Screw  8 Cable Sheath  9 Cable Gland  10 16uf Capacitor  11 Ground Cover  12 Nylon Secure Pressing Cap  13 Nylon Secure Pressing Cap  14 Rubber Clip  15 Ribbon  16 Cable Block  17 Customized Self Tapping Screw  18 Rear Cover  18 Rear Cover  19 Gasket  19 Gasket  10 Lug Plate  10 16uf Capacitor  11 Ground Cover  12 Nylon Secure Pressing Cap  13 Nylon Secure Pressing Cap  14 Rubber Clip  15 Ribbon  16 Cable Block  17 Customized Self Tapping Screw  18 Rear Cover  19 Gasket  10 Pump Base  11 Base Plate  12 Self Tapping Screw  13 D-ring  14 Base Plate  15 Ribbon  16 Casket  17 Customized Self Tapping Screw  18 Rear Cover  19 Wave Washer  18 Outlet Connector  19 Wave Washer  18 Mechnical Seal  18 Protective Ring	5	Gasket	26	Aluminium Bushing
8 Cable Sheath 29 O-ring 9 Cable Gland 30 Locating Ring 10 16uf Capacitor 31 Adjustable Washer 11 Ground Cover 32 Impeller 12 Nylon Secure Pressing Cap 33 Washer 13 Nylon Secure Pressing Cap 34 Nut 14 Rubber Clip 36 Self Tapping Screw 15 Ribbon 37 Gasket 16 Cable Block 38 Main Pump Housing 17 Customized Self Tapping Screw 39 O-ring 18 Rear Cover 40 Pump Base 18-2 Gasket 41 Base Plate 18-3 Earth Wire 42 Self Tapping Screw 18-4 Lug Plate 43 O-ring 18-6 Gasket 44 Elbow 18-7 Bolt 45 Outlet Connector 19 Wave Washer 46 Mechnical Seal 20 Bearing 13 Adjustable Washer 13 Adjustable Washer 14 Coring 15 Adjustable Washer 15 O-ring 16 Adjustable Washer 16 Adjustable Washer 17 O-ring 17 Adjustable Washer 18 Adjustable Washer 1	6	Rear Pump Housing	27	O-ring
9 Cable Gland 30 Locating Ring 10 16uf Capacitor 31 Adjustable Washer 11 Ground Cover 32 Impeller 12 Nylon Secure Pressing Cap 33 Washer 13 Nylon Secure Pressing Cap 34 Nut 14 Rubber Clip 36 Self Tapping Screw 15 Ribbon 37 Gasket 16 Cable Block 38 Main Pump Housing 17 Customized Self Tapping Screw 39 O-ring 18 Rear Cover 40 Pump Base 18-2 Gasket 41 Base Plate 18-3 Earth Wire 42 Self Tapping Screw 18-4 Lug Plate 43 O-ring 18-6 Gasket 44 Elbow 18-7 Bolt 45 Outlet Connector 19 Wave Washer 46 Mechnical Seal 20 Bearing 47 Protective Ring	7	Self Tapping Screw	28	Front Cover
10 16uf Capacitor 31 Adjustable Washer 32 Impeller 32 Impeller 33 Washer 33 Washer 33 Washer 34 Nut 34 Rubber Clip 36 Self Tapping Screw 37 Gasket 38 Main Pump Housing 37 Customized Self Tapping Screw 39 O-ring 39 O-ring 39 Pump Base 39 Pump Base 30 Pu	8	Cable Sheath	29	O-ring
11 Ground Cover 12 Nylon Secure Pressing Cap 13 Nylon Secure Pressing Cap 14 Rubber Clip 15 Ribbon 16 Cable Block 17 Customized Self Tapping Screw 18 Rear Cover 18-2 Gasket 18-3 Earth Wire 18-4 Lug Plate 18-6 Gasket 19 Wave Washer 20 Bearing 20 Bearing 32 Impeller 33 Washer 33 Washer 34 Nut 36 Self Tapping Screw 37 Gasket 38 Main Pump Housing 39 O-ring 40 Pump Base 40 Pump Base 41 Base Plate 42 Self Tapping Screw 44 Elbow 45 Outlet Connector 46 Mechnical Seal 47 Protective Ring	9	Cable Gland	30	Locating Ring
12 Nylon Secure Pressing Cap 13 Nylon Secure Pressing Cap 14 Rubber Clip 15 Ribbon 16 Cable Block 17 Customized Self Tapping Screw 18 Rear Cover 18-2 Gasket 18-3 Earth Wire 18-4 Lug Plate 18-6 Gasket 18-7 Bolt 19 Wave Washer 20 Bearing 33 Washer 34 Nut 36 Self Tapping Screw 37 Gasket 38 Main Pump Housing 39 O-ring 40 Pump Base 40 Pump Base 41 Base Plate 42 Self Tapping Screw 42 Self Tapping Screw 43 O-ring 44 Elbow 45 Outlet Connector 46 Mechnical Seal 47 Protective Ring	10	16uf Capacitor	31	Adjustable Washer
13Nylon Secure Pressing Cap34Nut14Rubber Clip36Self Tapping Screw15Ribbon37Gasket16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	11	Ground Cover	32	Impeller
14Rubber Clip36Self Tapping Screw15Ribbon37Gasket16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	12	Nylon Secure Pressing Cap	33	Washer
15 Ribbon 37 Gasket 16 Cable Block 38 Main Pump Housing 17 Customized Self Tapping Screw 39 O-ring 18 Rear Cover 40 Pump Base 18-2 Gasket 41 Base Plate 18-3 Earth Wire 42 Self Tapping Screw 18-4 Lug Plate 43 O-ring 18-6 Gasket 44 Elbow 18-7 Bolt 45 Outlet Connector 19 Wave Washer 46 Mechnical Seal 20 Bearing 79 O-ring 40 Pump Base 41 Base Plate 42 Self Tapping Screw 41 Base Plate 42 Self Tapping Screw 43 O-ring 45 Outlet Connector 46 Mechnical Seal	13	Nylon Secure Pressing Cap	34	Nut
16Cable Block38Main Pump Housing17Customized Self Tapping Screw39O-ring18Rear Cover40Pump Base18-2Gasket41Base Plate18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	14	Rubber Clip	36	Self Tapping Screw
17         Customized Self Tapping Screw         39         O-ring           18         Rear Cover         40         Pump Base           18-2         Gasket         41         Base Plate           18-3         Earth Wire         42         Self Tapping Screw           18-4         Lug Plate         43         O-ring           18-6         Gasket         44         Elbow           18-7         Bolt         45         Outlet Connector           19         Wave Washer         46         Mechnical Seal           20         Bearing         47         Protective Ring	15	Ribbon	37	Gasket
18         Rear Cover         40         Pump Base           18-2         Gasket         41         Base Plate           18-3         Earth Wire         42         Self Tapping Screw           18-4         Lug Plate         43         O-ring           18-6         Gasket         44         Elbow           18-7         Bolt         45         Outlet Connector           19         Wave Washer         46         Mechnical Seal           20         Bearing         47         Protective Ring	16	Cable Block	38	Main Pump Housing
18-2       Gasket       41       Base Plate         18-3       Earth Wire       42       Self Tapping Screw         18-4       Lug Plate       43       O-ring         18-6       Gasket       44       Elbow         18-7       Bolt       45       Outlet Connector         19       Wave Washer       46       Mechnical Seal         20       Bearing       47       Protective Ring	17	Customized Self Tapping Screw	39	O-ring
18-3Earth Wire42Self Tapping Screw18-4Lug Plate43O-ring18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	18	Rear Cover	40	Pump Base
18-4       Lug Plate       43       O-ring         18-6       Gasket       44       Elbow         18-7       Bolt       45       Outlet Connector         19       Wave Washer       46       Mechnical Seal         20       Bearing       47       Protective Ring	18-2	Gasket	41	Base Plate
18-6Gasket44Elbow18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	18-3	Earth Wire	42	Self Tapping Screw
18-7Bolt45Outlet Connector19Wave Washer46Mechnical Seal20Bearing47Protective Ring	18-4	Lug Plate	43	O-ring
19Wave Washer46Mechnical Seal20Bearing47Protective Ring	18-6	Gasket	44	Elbow
20 Bearing 47 Protective Ring	18-7	Bolt	45	Outlet Connector
<u> </u>	19	Wave Washer	46	Mechnical Seal
21 Rotor 48 Outlet Connector	20	Bearing	47	Protective Ring
	21	Rotor	48	Outlet Connector

Part number = (DHCSV4A + the number of the part)

## **DECLARATION OF CONFORMITY**





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):

2004/108/EC Electromagnetic Compatibility Directive.

2006/95/EC 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 60335-2-41:2003 +A1:2004 +A2:2010, EN 62233:2008, EN 61000-3-3:2008,

EN 55014-2:1997 +A1:2001 +A2:2008, EN 61000-3-2:2006 +A1:2009 +A2:2009,

EN 55014-1:2006 +A1:2009.

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: 2012

Product Description: Submersible/ Puddle pump(s)

Model number(s): HIPPO5A, CSV4A, PSP105, PSP125B, PSV6A, PSV7A, PSV5A

Serial / batch Number: N/A

Date of Issue: 24/03/2015

Signed:

I.A. Clarke

Submersible and Puddle pump range D O C rv1

Page 1 of 1



PARTS & SERVICE: 0208 988 7400

E-mail: Parts@clarkeinternational.com or Service@clarkeinternational.com

SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

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