

Ref: Clark Pump Service Options Bulletin

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From: Spectra Watermakers

Spectra’s goal is for every Clark Pump to have the longest possible operating life. This document will cover the factory service options, service kits, and tool kits.

Our Clark Pump currently is manufactured in three sizes:

- 7% for the Ventura 150 (Deluxe, MPC or Connect)
- 10% for the Ventura 200, Cape Horn 330, Catalina 340, Newport 400, All Aquifers and older One-Membrane Spectra models.
- 20% for the Newport 700s and 1000s

Clark Pump percentage represents the approximate product water recovery rate. For every 100 liters fed to the Clark Pump, 6, 9 or 18 liters of product water should be produced.

At spec pressure the product water rate from a system should be the percentage below. This percentage is the amount of product water converted from all water going into the Clark Pump. The percentages can be slightly lower, due to external factors such as friction.

7% Clark Pump	10% Clark Pump	20% Clark Pump
6.5% nominal recovery	9% nominal recovery	18.5% nominal recovery
5.5% Minimum	8% Minimum	17.5% Minimum

These numbers and other helpful pieces of information can be found by performing a flow test as laid out in the user manual.

If the Clark Pump is converting less than the minimum recovery percentage and pressures with an undamaged membrane, we suggest you perform a rebuild. Below are the options for Clark Pump servicing:

Factory Rebuild - Return of Clark Pump through our [RMA program](#)

- Repair and Return **KIT-HP-7U | KIT-HP-10U | KIT-HP-20U**

The factory will replace all internal parts and rebuild the Clark pump to current “like new” factory specifications, extensively bench test it, and return it to you for a rebuild charge plus freight.

Advanced Replacement **KIT-HP-7R | KIT-HP-10R | KIT-HP-20R**

For faster turn-around (please check with the factory for availability) we also offer a Clark Pump Exchange where we will ship you a remanufactured Clark Pump built to the latest factory specifications.

When this request is approved, the dealer’s account will be charged the standard rebuild fee (MSRP for factory rebuild service KIT-HP-#U) plus a deposit of \$2,200 covering external parts.

Upon receipt of the old Clark Pump, our techs will dismantle and evaluate it. If the pump has not been damaged or abused, we will refund the deposit less shipping fees (if not already paid). If the cylinders are scored, end caps are cracked or other main components are not reusable the dealer’s account will be charged for the replacement parts and this will be deducted from the deposit.

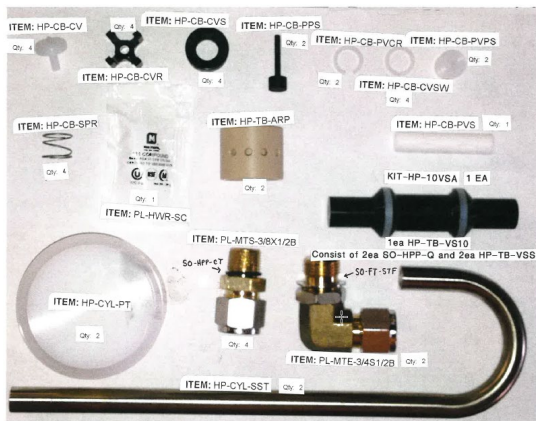
Parts that show chemical damage or misuse will also be replaced.

*****The old Clark Pump can be returned in pieces with no fittings or J-tubes. Shipping water in the pump and the larger size of an assembled unit only adds to the freight costs.*****

Clark Pump Rebuild Kit

KIT-HP-7UD | KIT-HP-10UD | KIT-HP-20UD

This kit contains all the parts required for a factory rebuild and is designed for service partners to rebuild the Clark Pump in their shop. The kit includes all the internal parts within the Clark Pump except the spacer rings and top end Spool Pistons. This kit has a photographic parts map where the parts can be laid out parts next to their corresponding part numbers. It also includes decals for the cylinders and top end. It does not contain instructions or tools. *thumbnail of complete rebuild parts map.



See Clark Pump dealer resources for full sized images.

Offshore Kits

KIT-OFFSH for a 7% or 10% | **KIT-OFFSH1** for a 20%

The Offshore Kit includes a seal and O-ring kit, annular rings, reversing valve spool, a section of nylon high pressure tubing, high pressure fittings, acid and alkaline membrane cleaning solutions, Alan Wrenches, an O-ring Pick, an Annular Ring tool and the Clark Pump rebuild instruction manual. This kit does not include a piston rod(s) or cylinder pistons.



Seal & O-ring Kit - If a full rebuild is not required

KIT-HP-S&O for a 7% and 10% | **KIT-HP-S&OH** for a 20%

If a Clark Pump does not have a history of underperforming but is leaking or has seals older than 5 years, a Seal & O-ring Kit is recommended. For the mechanically-minded individual, this kit replaces all seals in the Clark Pump. This Kit also comes with Parker tube fitting grab rings and O-rings, Filter Housing O-rings, Sea Strainer Seals and a 6-gram packet of Silicone Grease.



Parts and Tool Kits

We also offer two tool kits for the Clark Pump; the **Clark Pump Rebuild Tool Set** and the **Clark Pump Tool Kit-Lite**. The Lite Tool Kit has all the specialty tools that might not be found in your average tool box, while the Clark Pump Rebuild Tool Set contains these tools along with allen and open-ended wrenches, an easy out (extractor) and a spanner wrench. Below is the itemized list of each kit.

Clark Pump Rebuild Tool Set KIT-TL-CPRBTS

No.	Description	Qty
KIT-TL-CPRBTS	CLARK PUMP REBUILD TOOL SET	1
HDW-TL-1/4A	1/4" ALLEN WRENCH	1
HDW-TL-5/16A	5/16" ALLEN WRENCH	2
HDW-TL-AR	SPECTRA ANNULARING REMOVER	1
HDW-TL-CVT	CHECK VALVE SEAT REMOVAL TOOL	1
HDW-TL-CYLT	SPANNER WRENCH FOR CP & 2.5"PV RING	1
HDW-TL-ORT	O-RING PICK	1
HDW-TL-PST	PUMP SHAFT INSERTION TOOL	1
HDW-TL-PST7	PUMP SHAFT INSERTING TOOL 7%	1
HDW-TL-PVOT	PILOT VALVE O-RING TOOL	1
HDW-TL-HEMPLER5	HEMOSTAT PLIERS 5-1/2" SS	1
HDW-TL-1316&78W	13/16" & 7/8" OPEN END WRENCH THIN	2

Clark Pump Tool Kit Lite KIT-TL-CPRBTS

No.	Description	Qty
KIT-TL-CPRBTKL	CLARK PUMP TOOL KIT-LITE	1
HDW-TL-PVOT	PILOT VALVE O-RING TOOL	1
HDW-TL-PST	PUMP SHAFT INSERTION TOOL	1
HDW-TL-PST7	PUMP SHAFT INSERTING TOOL 7%	1
HDW-TL-AR	SPECTRA ANNULARING REMOVER	1
HDW-TL-HEMPLER5	HEMOSTAT PLIERS 5-1/2" SS	1
HDW-TL-ORT	O-RING PICK	1



We also have several YouTube videos covering Clark Pump diagnostic tests and rebuild procedures. Follow the links below for additional information.

[YouTube Channel](#)

[Watermaker Flow Test](#)

[Clark Pump Tools](#)

[Clark Pump Troubleshooting](#)