# GeoSub 12 VDC Purge Pump Manual

Part No. 11200637



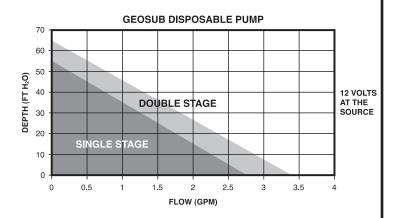
### **System Installation**

NOTE: If Using Geotech's BUuck or BUuck Plus controllers see their manuals for Operating Instructions.

- **1.** Attach tubing and lower the GeoSub to the desired level.
- 2. Connect power cords to power supply.
- **3.** Allow to pump for up to 15 minutes, then disconnect from power supply.
- **4.** Allow to cool for 5 minutes.
- **5.** Reconnect to power supply to continue pumping. Repeat steps 2-5 until job is done.
- **6.** When finished pumping, the GeoSub can be left hanging in the well for dedicated installations or removed and decontaminated according to your site specific protocol, and then used at another location.

## **System Operation**

- The Geotech **GeoSub** was designed for use with water.
   If it is intended for use with any other liquid, it is the user's responsibility to ensure that the materials are fully compatible with the liquids to be used and that a system of safe working practice is applied to installation, use and maintenance.
- The Geotech GeoSub was designed to operate only when it is submerged in water. Do not operate pump when it is out of water. Running the pump dry will destroy the pump and void warranty.
- The Geotech **GeoSub** is not designed to pump silt or sand. Pumping silt or sand will destroy the pump and void any warranty responsibility on the part of Geotech Environmental Equipment.
- The Geotech **GeoSub** should be allowed to cool 5 minutes for every 15 minutes of pumping. Overheating will destroy pump and void warranty.



# **System Maintenance**

Follow standard protocols for a three bucket wash to clean and decontaminate your GeoSub between wells and prior to storage.

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## **System Troubleshooting**

The Geotech GeoSub is a disposable purging pump. There are no repair parts available.

- Pump will not power up:
- Check power connectors (if they do not work, buy new ones, they are disposable).
- ✔ Check power supply for sufficient voltage.
- ✔ Check for kinks, breaks, and splits in motor lead.
- Pump will power up, but minimal or no flow
- ✓ Check tubing between pump stages for breaks
- Check intake screen for blockage and clean as necessary.

### **Replacement Parts List**

The Geotech GeoSub is a disposable purging pump. There are no repair parts available, but you can choose from the following replacement units:

Part Number	Part Description
81200011	Pump, GeoSub, ABS, Pigtail
81200012	Pump, GeoSub, ABS, w/30' (9m) of Cable
81200013	Pump, GeoSub, ABS, w/60' (18m) of Cable
81200025	Pump, GeoSub, ABS, DBL, Pigtail
81200015	Pump, GeoSub, ABS, DBL, w/70' (21m) of Cable
81200028	Controller, BUuck, 12V
81202016	Controller, BUuck Plus, 12V
17200108	Hosebarb, NYL, 3/8", 1/4" FPT
17200109	Hosebarb, NYL, 1/2", 1/4" FPT

# **System Specifications**

	Single Stage	Double Stage
Dimensions	1.75" D x 7" L (4.5 cm D x 18 cm L)	1.75" D x 7" L (4.5 cm D x 36 cm L)
Outlet	1/4" MNPT (accepts 1/2" ID tubing)	1/4" MNPT (accepts 1/2" ID tubing)
<b>Optional Outlet Adapter</b>	Optional fittings 1/4" FNPT x 3/8" barb or 1/4" FNPT x 1/2" barb	Optional fittings 1/4" FNPT x 3/8" barb or 1/4" FNPT x 1/2" barb
Power	Requires an independent 12V DC source	Requires an independent 12V DC source
Current Draw	5.3 amps minimum to 6 amps maximum	7 amps minimum to 8 amps maximum
Voltage Loss	.4 volt/30 feet (9 m)	.6 volt/30 feet (9 m)
Operating Temperature	In water up to 140°F (60°C) do not freeze pump	In water up to 140°F (60°C) do not freeze pump
Flow Rate	Up to 3.0 GPM (13 LPM) dependent on depth (or TDH)	Up to 3.5 GPM (15 LPM) dependent on depth (or TDH)
Maximum Recommended Depth	55 feet (17 m)	65 feet (20 m)
Material of Casing	ABS plastic	ABS plastic
Material of Pump Impeller	ABS plastic	ABS plastic
Material of Seal	EPDM	EPDM
Length of Motor Lead	2 feet, 30 feet, and 60 feet (6 m, and 9 m, and 18 m)	2 feet and 60 feet (6 m and 18 m)
Recommended Duty Cycle	On 15 min., then off for 5 min., then resume operation, etc.	On 15 min., then off for 5 min., then resume operation, etc.

# **The Warranty**

For a period of thirty (30) days from date of first sale, product is warranted to be free from defects in materials and workmanship. Geotech agrees to repair or replace, at Geotech's option, the portion proving defective, or at our option to refund the purchase price thereof. Geotech will have no warranty obligation if the product is subjected to abnormal operating conditions, accident, abuse, misuse, unauthorized modification, alteration, repair, or replacement of wear parts. User assumes all other risk, if any, including the risk of injury, loss, or damage, direct or consequential, arising out of the use, misuse, or inability to use this product. User agrees to use, maintain and install product in accordance with recommendations and instructions. User is responsible for transportation charges connected to the repair or replacement of product under this warranty.