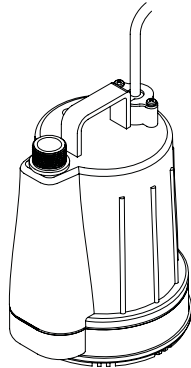


# BARNES®

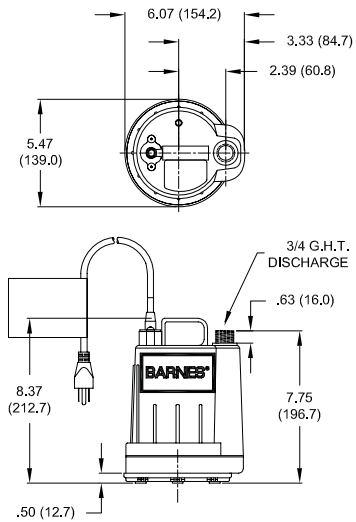
Portable Utility Submersible Pump  
 Model: UT17 - 1/6 Hp, 120 Volt, 60Hz, 1Ph



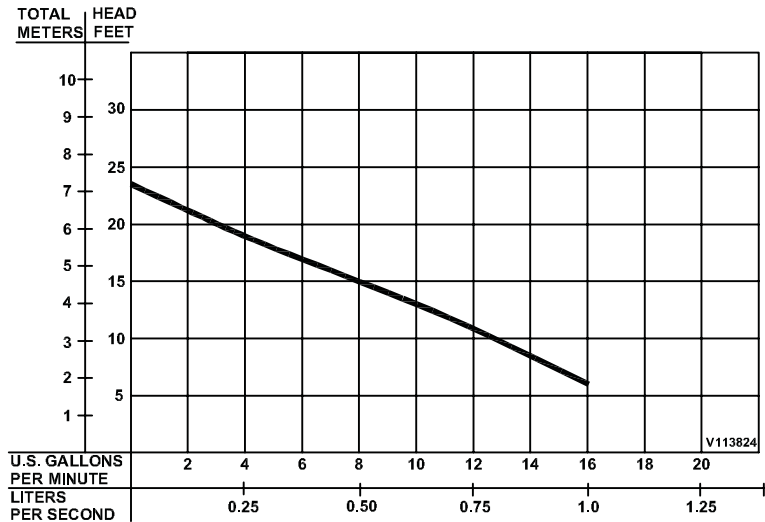
## SPECIFICATIONS

DISCHARGE .....	3/4" G.H.T. Male, Vertical
LIQUID TEMPERATURE .....	77°F (25°C) Continuous
MOTOR HOUSING .....	Thermoplastic
PUMP STRAINER .....	Thermoplastic
IMPELLER .....	2 Vane Semi Open, Thermoplastic
SHAFT .....	Steel
O-RINGS .....	Buna-N
HARDWARE .....	Stainless Steel
CABLE ENTRY .....	15 Ft. (4.5M) Cord with Plug and Pressure Grommet for Sealing and Strain Relief
CABLE TYPE .....	18/3 SJTW
SEAL .....	Single Mechanical
Material .....	Carbon/Ceramic/Buna-N
UPPER BEARING .....	Hardware - 300 Series Stainless
LOWER BEARING .....	Single Row, Ball, Sealed
MOTOR .....	Single Row, Ball, Sealed
SINGLE PHASE .....	Air-Filled. With Class B Insulation
	Permanent Split Capacitor (PSC).
	Includes Thermal Overload Protection in Motor

## DIMENSIONS



## PERFORMANCE



### IMPORTANT!

**Read all instructions in this manual before operating pump.**  
 As a result of Crane Pumps & Systems, Inc., constant product improvement program, product changes may occur. As such Crane Pumps & Systems reserves the right to change product without prior written notification.

**CRANE**

A Crane Co. Company

## PUMPS & SYSTEMS

420 Third Street  
 Piqua, Ohio 45356  
 Phone: (937) 778-8947  
 Fax: (937) 773-7157  
 www.cranepumps.com

83 West Drive, Bramton  
 Ontario, Canada L6T 2J6  
 Phone: (905) 457-6223  
 Fax: (905) 457-2650

Form No. 113829-Rev. F

# SAFETY FIRST!

Please Read This Before Installing Or Operating Pump. This information is provided for **SAFETY** and to **PREVENT EQUIPMENT PROBLEMS**. To help recognize this information, observe the following symbols:



**IMPORTANT!** Warns about hazards that can result in personal injury or indicates factors concerned with assembly, installation, operation, or maintenance which could result in damage to the machine or equipment if ignored.

**CAUTION!** Warns about hazards that can or will cause minor personal injury or property damage if ignored. Used with symbols below.

**WARNING!** Warns about hazards that can or will cause serious personal injury, death, or major property damage if ignored. Used with symbols below.



*Hazardous fluids can cause fire or explosions, burnes or death could result.*



*Biohazard can cause serious personal injury.*



*Rotating machinery Amputation or severe laceration can result.*



*Extremely hot - Severe burnes can occur on contact.*



*Hazardous fluids can Hazardous pressure, eruptions or explosions could cause personal injury or property damage.*



*Hazardous voltage can shock, burn or cause death.*

Only qualified personnel should install, operate and repair pump. Any wiring of pumps should be performed by a qualified electrician.



**WARNING!** To reduce risk of electrical shock, pumps and control panels must be properly grounded in accordance with the National Electric Code (NEC) or the Canadian Electrical Code (CEC) and all applicable state, province, local codes and ordinances. Improper grounding voids warranty.



**WARNING!** To reduce risk of electrical shock, always disconnect the pump from the power source before handling or servicing. Lock out power and tag.

**CAUTION !** Never operate a pump with a plug-in type power cord without a ground fault circuit interrupter.



**CAUTION !** Pumps build up heat and pressure during operation-allow time for pumps to cool before handling or servicing.



**WARNING!** Do not pump hazardous materials (flammable, caustic, etc.) unless the pump is specifically designed and designated to handle them.



**CAUTION!** Do not block or restrict discharge hose, as discharge hose may whip under pressure.



**WARNING!** Do not wear loose clothing that may become entangled in moving parts.



**WARNING!** Keep clear of suction and discharge openings. **DO NOT** insert fingers in pump with power connected.



Always wear eye protection when working on pumps.



Make sure lifting handles are securely fastened each time before lifting. **DO NOT** operate pump without safety devices in place. Always replace safety devices that have been removed during service or repair. Secure the pump in its operating position so it can not tip over, fall or slide.



**DO NOT** exceed manufacturers recommendation for maximum performance, as this could cause the motor to overheat.



**DO NOT** remove cord and strain relief. **DO NOT** connect conduit to pump.



**WARNING!** Cable should be protected at all times to avoid punctures, cut, bruises and abrasions. Inspect frequently. Never handle connected power cords with wet hands.



**WARNING!** To reduce risk of electrical shock, all wiring and junction connections should be made per the NEC or CEC and applicable state or province and local codes. Requirements may vary depending on usage and location.



**WARNING!** Submersible Pumps are not approved for use in swimming pools, recreational water installations decorative fountains or any installation where human contact with the pumped fluid is common.



**WARNING!** Products returned must be cleaned, sanitized, or decontaminated as necessary prior to shipment, to insure that employees will not be exposed to health hazards in handling said material. All Applicable Laws And Regulations Shall Apply.



Bronze/brass and bronze/brass fitted pumps may contain lead levels higher than considered safe for potable water systems. Lead is known to cause cancer and birth defects or other reproductive harm. Various government agencies have determined that leaded copper alloys should not be used in potable water applications. For non-leaded copper alloy materials of construction, please contact factory.



Crane Pumps & Systems, Inc. is not responsible for losses, injury, or death resulting from a failure to observe these safety precautions, misuse or abuse of pumps or equipment.

## GENERAL INFORMATION:

**To The Purchaser** - Congratulations! You are the owner of one of the finest pumps on the market today. Barnes® Pumps are products engineered and manufactured of high quality components. Over one hundred years of pump building experience along with a continuing quality assurance program combine to produce a pump which will stand up to the toughest applications.

The pump is packaged ready for installation and no connections or adjustments are necessary except for attaching a standard 3/4 inch NPT garden hose to the discharge and plugging in service cord.

**Receiving** - Upon receiving the pump, it should be inspected for damage or shortages. If damage has occurred, file a claim immediately with the company that delivered the pump. If the manual is removed from the crating, do not lose or misplace.

### Storage:

**Short Term-** Barnes Pumps are manufactured for efficient performance following long inoperative periods in storage. For best results, pumps can be retained in storage, as factory assembled, in a dry atmosphere with constant temperatures for up to six (6) months.

**Long Term-** Any length of time exceeding six (6) months, but not more than twenty four (24) months. The units should be stored in a temperature controlled area, a roofed over walled enclosure that provides protection from the elements (rain, snow, wind blown dust, etc.), and whose temperature can be maintained between +40 deg. F and +120 deg. F. Pump should be stored in its original shipping container and before initial start up, rotate impeller by hand to assure seal and impeller rotate freely.

**Service Centers** - For the location of the nearest Barnes Service Center, check your catalog, your Barnes representative or Barnes Service Department in Piqua, Ohio, telephone (937) 778-8947, in Bramton, Ontario, Canada, (905) 457-6223 or [www.cranepumps.com](http://www.cranepumps.com).

## INSTALLATION:

**Location** - This product is designed to pump water only and is **NOT** recommended for use in a sump or basin. Product failures due to pumping mud, tar, cement, wood chips, or damage from corrosive materials are **NOT** covered under the manufacturing warranty and will not be accepted as a return. Never install the pump in a trench, ditch, or hole with a dirt bottom where the suction will become plugged.

This unit shall **NOT** be installed in locations classified as hazardous in accordance with the National Electrical Code (NEC), ANSI/NFPA 70 or the Canadian Electrical Code (CEC).

**Submergence** - The minimum liquid level should never be less than 1/8 inch (3.2mm) above the pump bottom. Unplug this unit when water has drained to 1/8 inch (3.2mm).

**Discharge** - Discharge hose should be as short as possible. The installation of a check valve in the discharge piping is recommended for each pump being used. The check valve is used to prevent backflow into the sump.

Other brand and product names are trademarks or registered trademarks of their respective holders.

© Barnes is a registered trademark of Crane Pumps & Systems, Inc.

2002, 8/2004, 5/06, 9/06, 3/07

Alteration Rights Reserved

**Airlocks** - If the pump runs but does not move any water, an airlock has occurred. An airlock will cause pump to overheat. If you suspect an airlock unplug the pump, tip the pump on its side and submerge in water and restart. Never restart the pump in less than 1/2 inch of water.

**ELECTRICAL CONNECTIONS:**

**Power Cable** - The cord assembly mounted to the pump must not be modified in any way. This pump comes complete with a 3 wire cord and 3 prong grounded plug that must be connected into a 3 wire grounded Ground Fault receptacle. **DO NOT** remove ground pin from electrical plug. It is **NOT** recommended to use an extension cord with this pump. Never place pump in water or remove from water while the unit is plugged in. **DO NOT USE THE POWER CABLE TO LIFT PUMP.**

**Overload Protection** - Automatic thermal overload protects the motor. Running dry may overheat the motor and trip the overload. This means that the overload protector will trip out and shut the pump off if the windings become too hot, or the load current passing through them becomes too high. It will then automatically reset and start the pump up after the motor cools to a safe temperature. In the event of an overload, the source of this condition should be determined and rectified immediately. **DO NOT LET THE PUMP CYCLE OR RUN IF AN OVERLOAD CONDITION OCCURS !**

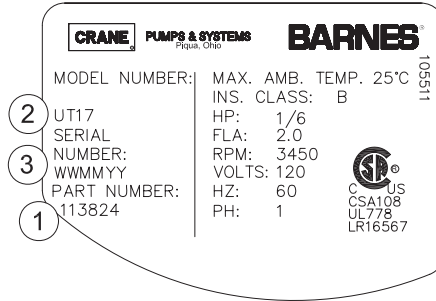
**SERVICE AND REPAIR:**

**Strainer** - Remove screws, and remove strainer from volute and remove volute. Clean and examine impeller. If impeller vanes are clogged, or it is excessively worn or broken, the pump should be replaced.

**WARRANTY:**

Information Needed: Always furnish the following information:

1. Pump Part Number
2. Pump model number
3. Pump Serial number



Typical Name Plate

**IMPORTANT !  
WARRANTY REGISTRATION**

Your product is covered by the enclosed Warranty. Complete the Warranty Registration Form and returned to Crane Pumps & Systems, Inc. Warranty Service Group

**IMPORTANT!** If you have a claim under the provision of the warranty, contact your local Crane Pumps & Systems, Inc. Distributor.

**RETURNED GOODS:**

Return Of Merchandise Requires A **"Returned Goods Authorization"**. Contact Your Local Crane Pumps & Systems, Inc. Distributor.



**Products Returned Must Be Cleaned, Sanitized, Or Decontaminated As Necessary Prior To Shipment, To Insure That Employees Will Not Be Exposed To Health Hazards In Handling Said Material. All Applicable Laws And Regulations Shall Apply.**

**BARNES®**



**burks®**

**WEINMAN®**

**DEMING®**

**PROSSER®**

## *Limited 24 Month Warranty*

Crane Pumps & Systems warrants that products of our manufacture will be free of defects in material and workmanship under normal use and service for twenty-four (24) months after manufacture date, when installed and maintained in accordance with our instructions. This warranty gives you specific legal rights, and there may also be other rights which vary from state to state. In the event the product is covered by the Federal Consumer Product Warranties Law (1) the duration of any implied warranties associated with the product by virtue of said law is limited to the same duration as stated herein, (2) this warranty is a LIMITED WARRANTY, and (3) no claims of any nature whatsoever shall be made against us, until the ultimate consumer, his successor, or assigns, notifies us in writing of the defect, and delivers the product and/or defective part(s) freight prepaid to our factory or nearest authorized service station. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply. **THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF ANY AND ALL WARRANTIES WITH RESPECT TO ANY PRODUCT SHALL BE TO REPLACE OR REPAIR AT OUR ELECTION, F.O.B. POINT OF MANUFACTURE OR AUTHORIZED REPAIR STATION, SUCH PRODUCTS AND/OR PARTS AS PROVEN DEFECTIVE. THERE SHALL BE NO FURTHER LIABILITY, WHETHER BASED ON WARRANTY, NEGLIGENCE OR OTHERWISE.** Unless expressly stated otherwise, guarantees in the nature of performance specifications furnished in addition to the foregoing material and workmanship warranties on a product manufactured by us, if any, are subject to laboratory tests corrected for field performance. Any additional guarantees, in the nature of performance specifications must be in writing and such writing must be signed by our authorized representative. Due to inaccuracies in field testing if a conflict arises between the results of field testing conducted by or for user, and laboratory tests corrected for field performance, the latter shall control. **RECOMMENDATIONS FOR SPECIAL APPLICATIONS OR THOSE RESULTING FROM SYSTEMS ANALYSES AND EVALUATIONS WE CONDUCT WILL BE BASED ON OUR BEST AVAILABLE EXPERIENCE AND PUBLISHED INDUSTRY INFORMATION. SUCH RECOMMENDATIONS DO NOT CONSTITUTE A WARRANTY OF SATISFACTORY PERFORMANCE AND NO SUCH WARRANTY IS GIVEN.**

This warranty shall not apply when damage is caused by (a) improper installation, (b) improper voltage (c) lightning (d) excessive sand or other abrasive material (e) scale or corrosion build-up due to excessive chemical content. Any modification of the original equipment will also void the warranty. We will not be responsible for loss, damage or labor cost due to interruption of service caused by defective parts. Neither will we accept charges incurred by others without our prior written approval.

This warranty is void if our inspection reveals the product was used in a manner inconsistent with normal industry practice and/or our specific recommendations. The purchaser is responsible for communication of all necessary information regarding the application and use of the product. **UNDER NO CIRCUMSTANCES WILL WE BE RESPONSIBLE FOR ANY OTHER DIRECT OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO TRAVEL EXPENSES, RENTED EQUIPMENT, OUTSIDE CONTRACTOR FEES, UNAUTHORIZED REPAIR SHOP EXPENSES, LOST PROFITS, LOST INCOME, LABOR CHARGES, DELAYS IN PRODUCTION, IDLE PRODUCTION, WHICH DAMAGES ARE CAUSED BY ANY DEFECTS IN MATERIAL AND/OR WORKMANSHIP AND/OR DAMAGE OR DELAYS IN SHIPMENT. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER EXPRESS OR IMPLIED WARRANTY, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.**

No rights extended under this warranty shall be assigned to any other person, whether by operation of law or otherwise, without our prior written approval.

**CRANE**

**PUMPS & SYSTEMS**

A Crane Co. Company

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www.cranepumps.com

83 West Drive, Brampton  
Ontario, Canada L6T 2J6  
Phone: (905) 457-6223  
Fax: (905) 457-2650

**IMPORTANT!  
WARRANTY REGISTRATION**

Your product is covered by the enclosed Warranty.  
To complete the Warranty Registration Form go to:

<http://www.cranepumps.com/ProductRegistration/>

If you have a claim under the provision of the warranty, contact your local  
Crane Pumps & Systems, Inc. Distributor.

**RETURNED GOODS**

**RETURN OF MERCHANDISE REQUIRES A "RETURNED GOODS AUTHORIZATION".  
CONTACT YOUR LOCAL CRANE PUMPS & SYSTEMS, INC. DISTRIBUTOR.**



**Products Returned Must Be Cleaned, Sanitized,  
Or Decontaminated As Necessary Prior To Shipment,  
To Insure That Employees Will Not Be Exposed To Health  
Hazards In Handling Said Material. All Applicable Laws  
And Regulations Shall Apply.**

