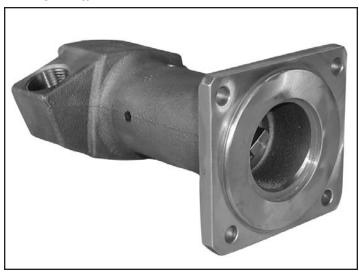
### BRONZE RUBBER IMPELLER PUMP

# FITS ON PHASOR MARINE DIESEL GENERATOR KUBOTA MODELS: V1903-BGE, V2203-BGE, F2803-BGE, D1703-BGE

PIPE SIZE: 3/4"



#### **FEATURES**

- Bronze Construction Corrosion Resistance
- Large Suction and Discharge Ports
- Teflon(R)\* Barrier Seals Protecting Ball Bearings
- Mechanical Seal
- Seal: The Mechanical Seal has a Buna N Elastomer, Stainless Cage & Carbon Graphite/Ceramic Wearface
- Two Sealed Ball Bearings Spaced for Maximum Load Ability
- Large Vent & Drain Openings Separate Seal & Bearing Areas
- Neoprene Impeller
- High Chrome Nickel Stainless Steel Shaft
- Extra Capacity Ball Bearings Plus Rugged Construction for Prolonged Service Life
- Impeller & Mechanical Seal Easily Replaced
- Machined in Cam

#### **ROTATION**

Direction of shaft rotation determines inlet and outlet ports (see line drawing)

#### **MOUNTING**

Pump will operate satisfactorily when mounted in any position. **DO NOT RUN DRY**. Rubber impeller pumps generate high rubbing friction unless lubricated by liquid pumped. Lack of liquid will cause impeller to burn up.

#### **PERFORMANCE**

Capacity Water at 60<sup>o</sup>F

Pump	RPM	Feet Hd.	0	20	40	60	80	
Model		PSI	0	8.7	17.3	26.0	34.6	
	800	GPM	5.3	4.2	2.50			
302M-03		HP	1/4	1/4	1/4			
	1750	GPM	12.0	10.5	9.2	6.7	3	
		HP	1/3	1/3	1/2	1/2	1/2	
	2500	GPM	16.0	14.5	12.5	9.3	6	
		HP	1/2	1/2	3/4	3/4	3/4	
	3000	GPM	19.0	17.8	15.5	12.7	9.3	
		HP	3/4	3/4	3/4	3/4	3/4	
	3450	GPM	20.5	19.5	18.8	17.5	12.5	
		HP	3/4	3/4	1	1	1	

GPM = Gallons Per Minute RPM = Revolutions Per Mintue PSI = Lbs. Per Square Inch Pressure Feet Hd = Feet Head Pressure

HP = Horsepower

#### **DRIVE**

Tang drive shaft extension.

#### **LIQUIDS AND TEMPERATURE**

While primarily intended for engine coolant, other liquids compatible with neoprene can be pumped including fresh and salt water solutions and mild chemicals. Do not pump severe solvents or acids. When possible, flush pump with fresh water after each usage.

Extremes of cold and heat will affect impeller life. Limits of 40° to 140° F should be observed. Do not allow liquid in pump to freeze. Drain pump by loosening cover screws. Fresh water and sea water only.

#### **SUCTION LIFT**

Suction lift of 15 feet is possible when impeller is wet. Suction lines must be air tight in order for pump to self prime. A foot valve at beginning of suction line is recommended.

#### **IMPELLER REPLACEMENT**

The impeller must be replaced if it is worn out or has been damaged by debris or by running the pump dry. Symptoms of a defective impeller are low pumping pressure and low flow causing overheating of the engine.

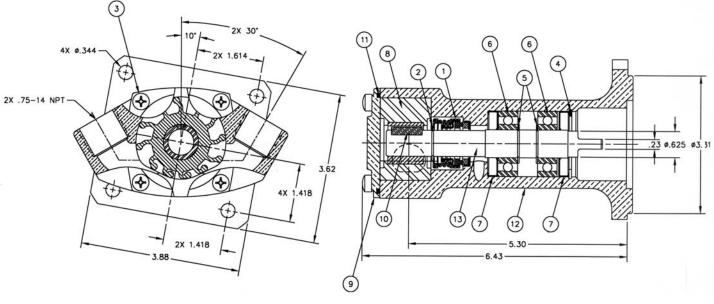
To replace the impeller remove screws and cover. Pull out the impeller with nose pliers or two screwdrivers. Be careful not to dent (continued on back)

\*Teflon(R) is a registered trademark of DuPont. Teflon(R) or equivalent PTFE will be used.



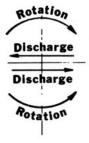
## **BRONZE RUBBER IMPELLER PUMP**

# DIMENSIONS AND PARTS LIST



1	Pump No.	1 <sup>1</sup>	2	3	4	5	6	7	8 <sup>1</sup>	9	10	11 <sup>1</sup>	12	13		
1		Seal	Ret.	Screw	Ret.	Ret.	Bearing,	Lipseal	Impeller	Cover	Key	O-Ring	Body	Shaft	Repair	l
1		Assy.	Ring		Ring	Ring	Ball	Teflon(R)*							Kit <sup>1</sup>	l
1		1 Reqd	1 Reqd	4 Reqd	1 Reqd	2 Reqd	2 Reqd	2 Reqd	1 Reqd	1 Reqd	1 Reqd	1 Reqd	1 Reqd	1 Reqd		l
	302M-03	32886	5382	5504	5925	5926	5928	6609	6620	6736	6739	8231	9962	9963	12137	l

<sup>&</sup>lt;sup>1</sup>Repair Kit contains items 1, 8 & 11.



#### (Continued from front)

the pumping chamber with these tools. When inserting new impeller, line up key slot in impeller with the key in the shaft. Use oil on shaft and avoid forcing the impeller onto the shaft.

The impeller should also be removed for storage periods to prevent the blades from taking a permanent set.

#### **SEAL REPLACEMENT**

If water drips from the weep hole or from the area where the shaft exits the pump, the seal is defective and must be replaced. While the Teflon(R)\* barrier seals provide a first line of defense, prolonged running of the pump with a leaky seal can destroy the ball bearings resulting in catastrophic pump failure and engine shut-down.

For seal replacement, the pump must be removed from the engine and disassembled in order to gain access to the seal area. Both mechanical seal components (stationary and rotating member) must be replaced at the same time.

Refer to drawing above for seal location and part numbers for ordering purposes.

5/06

Specifications are subject to change without notice.