

# 5009 Series Bilge and Circulator Pumps Installation, and Operating Instructions

**The Concept:** 5009 Series bilge pumps were originally built for US Navy and US Coast Guard vessels that demanded the ultimate in construction quality, durability, and reliability.

**BP-5009 Installation:** Fasten the pump securely to the bilge floor with four (4) 1/4" bronze or stainless steel bolts.

**BP-5009 Plumbing:** The pump discharge is threaded 3/4" NPT. For a 3/4" ID hose connection use GROCO PTH-750 or PTHC-750, and for a 1" ID hose connection use FF-750 or FFC-750. Use TFE thread tape on threaded connections and double clamp hose connections.

The through-hull discharge should be as high above the outside waterline as possible to prevent siphoning of water back into the bilge while heeling or while underway or in heavy seas. The discharge hose from the pump should loop upward at least 6" higher than the discharge thru-hull. GROCO offers several models of 90-degree hose thru-hull fittings.

**Electrical:** Proper wire size is essential for proper pump performance. Refer to the wire size selection chart packed with this product. Make watertight electrical connections higher than the highest bilge water level. The black wire is (+) and the red wire is (-).

Protect the pump with a circuit breaker as shown below:

BP-5009 12V	30-amp breaker
BP-5009 24V	15-amp breaker
BP-5009 32V	10-amp breaker



**CP-5009 Installation:** CP-5009 has a 1" NPT inlet and may be installed into a rigid 1" piping system. Do not install CP-5009 directly on top of a 1" seacock. The rubber boot protects the motor, so CP-5009 can be submerged without harm.

**CP-5009 Plumbing:** The pump discharge is threaded 3/4" NPT. For a 3/4" ID hose connection use GROCO PTH-750 or PTHC-750, and for a 1" ID hose connection use FF-750 or FFC-750. Use TFE thread tape on threaded connections and double clamp hose connections.

The inlet is threaded for 1" NPT.

Assure that there are no sags or sharp bends in the discharge hose line.

**Electrical:** Proper wire size is essential for proper pump performance. Refer to the wire size selection chart packed with this product. Make watertight electrical connections higher than the highest bilge water level. The black wire is (+) and the red wire is (-).

Protect the pump with a circuit breaker as shown below:

CP-5009 12V	30-amp breaker
CP-5009 24V	15-amp breaker
CP-5009 32V	10-amp breaker



## Parts and Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY
1	GS-4-SS	Hose Clamp	1
2	CP-5004	Motor Boot	1
3	H-64-SS	Hose Clamp	1
4	(Voltage)-RAE	Motor	1
5	1428X12HS	Bolt	2
6	16S	Washer	2
7	CP-5009	Pump Housing	1
8	CP-5007	Base for CP-5009	1
9	CP-5003-A	Base for BP-5009	1
10 •	CP-5008	Gasket	1
11	14X14Set	Set Screw	1
12	CP-5002-A	Impeller	1
13-16 •	06-037-9	Seal Assembly	1
17 •	037-075-8	Seal	1
18	RAE Brushes	Motor Brush Set	2
•	Service Kit	P-4	

