

## Instructions for Bravo Water Hose Kit No. 47230

Bravo & Blackhawk



GLM No. 47230 OEM No. 32-8M0090859				
Ref.	Description	GLM	OEM	Qty.
a	Hose Assembly	<b>47160</b>	N/A	1
b	Rubber Bushing	<b>86332</b>	N/A	1
c	Bushing Retaining Tool Kit w/ Screws*	<b>90540</b>	91-8M0092758	1
d	Water Inlet Hsg. Gasket	<b>33000</b>	27-44108-1	1
e	Screw (0.25 x 20 x 1.00)	<b>22347</b>	N/A	2
f	Hose End Insert	<b>47131</b>	41674T	1
g	Water Inlet Housing New Style w/ Quick Connect	<b>47221</b>	865470	1
h	Water Inlet Housing Old Style w/o Quick Connect	<b>47220</b>	N/A	1
i	Hose End Insert Driver	<b>47132</b>	N/A	1
*	Kit No. 90540 includes 2 Screws (No. 22347)			

Water Inlet Housing Gasket No. 33000 available individually.  
All other Kit Components Not Sold Separately (N.S.S.)

### IMPORTANT!

This document guides our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. If you have not been trained in the recommended servicing or installation procedures for these or similar GLM products, have the work performed by an authorized marine technician. Improper installation or servicing of the GLM product could result in damage to the product or personal injury to those installing or operating the product.

## Removal

1. Remove the old water hose per the appropriate service manual and clean all orifices and surfaces thoroughly. Retain the water inlet housing screws for reuse on the new water inlet housing.

## Installation

2. Place the rubber bushing into the gimbal housing.
3. Install the bushing retaining tool, supplied with the kit, to hold the bushing in place during the insertion of the water tube.
4. Turn the 25.4 cm (1 in.) screws 1-2 turns maximum. This places the retaining tool at the appropriate location to act as a support for the bushing when inserting the tube from the aft inside of the gimbal housing. If the fasteners are turned in further than two turns, the insertion force will increase significantly. (See Fig. 1)
5. Coat the plastic end of the hose assembly with a good amount of soapy water (liquid dish soap and water) to aid in assembly.
6. With the rubber bushing placed in the housing and held in place by the bushing retaining tool, insert the plastic end of the hose assembly. Push firmly until the rib on the water hose seats in the recessed area of the rubber bushing (See Fig. 2). Proper insertion of the water hose rib into the recessed area of the bushing will be evidenced by the water hose end and the retaining tool surface being flush with each other. (See Fig. 3)
7. With the retaining tool in place, tighten the screws to insert the bushing to its properly seated position. Tighten the screws to the specified torque.

Torque Specifications:	Nm	lb-in.
Bushing Retaining Tool Screws	2.3	20.3

8. Remove the bushing retainer tool from the gimbal housing.
9. Verify that the water hose and the rubber bushing have been installed correctly (See Fig. 4). The plastic portion of the water hose should protrude approximately 6 mm (0.25 in.) beyond the rubber bushing. (See Fig. 5)
10. Remove the paper backing from the inlet gasket and adhere the gasket to the water inlet housing.
11. Install the water inlet housing to the gimbal housing, as shown (See Fig. 6). Tighten the fasteners to the specified torque.

Torque Specifications:	Nm	lb-in.
Water Inlet Housing Fasteners	5	44

12. Complete the rest of the assembly according to the appropriate marine service manual.

