

## BULKHEAD FITTINGS (RAVENS PATENTED DESIGN)

### INSTALLATION INSTRUCTIONS - Fiberglass Tanks

Use a standard hole saw that fits any 1/4" electric drill motor to cut the proper size hole in the fiberglass tank. A 2 1/8" hole is required for 1/2", 3/4", and 1 " threaded fittings. A 3 1/4" hole saw is required for 1 1/4", 1 1/2", and 2" bulkhead fittings.

**Step 1** Place your finger through the fitting and install the body in the hole by placing one lug through the hole first. A slight tap with a hammer will slip the the second lug through the hole.

**Step 2** Flex the back-up washer through the hole and over the fitting body.

**Step 3** Slip the grommet over the fitting body but do not slide it all the way down the body at this point.

**Step 4** While holding the fitting body with your finger, work the grommet down the fitting body until it is in the hole in the tank wall. (The grommet will protrude slightly on both the inside and outside of the tank.)

**Step 5** Place the washer on the fitting, then install the nut. Tighten until snug. (Note that nut is left hand thread!)

Sealing is accomplished by the grommet expanding against the circumference of the hole you cut in the tank.

### INSTALLATION INSTRUCTIONS - Polyethylene Tanks

Use a standard hole sew that fits any 1/4" electric drill motor to cut the proper size hole in a polyethylene tank. A 1 5/8" hole is required for 1/2", 3/4" and 1" threaded fittings. A 2 3/4" hole is required for 1 1/4", 1 1/2", and 2" bulkhead fittings. A 4 1/4" hole is required for the 3" fitting. The hole saw provides the perfectly round hole that is necessary for a positive seal.

**Step 1** Slip the O-Ring over the fitting body and slide until it contacts the shoulder.

**Step 2** Reach through the fillwell and install fitting body through the hole.

**Step 3** Install the nut and tighten until snug. (Note that nut is left hand thread!) It is not necessary to use a washer between the tank exterior and the nut because of the low friction of polyethylene.

Sealing is accomplished by the O-Ring compression between the shoulder of the fitting and the inside wall of the tank.