

**Installation and Maintenance Instructions
For RITCHIE® Compasses
All Models of XP-95, XP-98 & XP-99
Made in U.S.A.**



CAUTION

All Magnetic Compasses are vulnerable to magnetic interference, which will produce errors, called DEVIATION. It is the Owner/Operator and/or Helmsman's responsibility to make sure the compass is properly installed and compensated. COMPENSATION is the act of correcting for deviation. Magnets (speakers, microphones etc.), ferrous metals (steel, iron, etc.) and current carrying devices are common causes of deviation. It is important to understand that magnetic compasses point toward Magnetic North. There is a difference between Magnetic North and True North, and that difference is called VARIATION. Variation differs depending on your geographical location and can be determined by referring to a local chart.

PLEASE READ THE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION.

The XP-95, XP-98 & XP-99 compasses are not equipped with internal compensators. Care should be taken to select a mounting location that causes the least error in the compass readings. External deck magnets will be needed if you intend to compensate your compass.

Selecting the Proper Location

Select a location that has the least amount of deviation on any of the four cardinal points (N, S, E and W).

The compass should be close enough to the helmsman and positioned below the helmsman's line of sight so it is easily read during normal operation.

You will need a flat level surface to mount the compass. If your mounting surface does not meet the requirements for your installation you may be able to rectify the situation with a custom made fairing block.

Testing Your Chosen Location

Use your compass to test a location. Begin your test by holding the compass away from any possible interference and observing the compass reading. Then move the compass into position carefully keeping it pointed in the same direction. If the compass reading is different, without a change in direction, you are observing deviation.

Installation

Great care must be taken to mount the compass so that it is aligned with the keel of the boat. An alignment error is a constant error on all headings caused by the compass not being pointed in the same direction as the boat.

Using the mounting template supplied, drill two (2) 7/64" (2.8mm) pilot holes in the desired mounting location and insert the # 6 fasteners selected. Do not fully tighten. Leave the heads high enough (approx. 1/4") to accept the gasket and compass bezel. Next, remove the movable bezel ring. Remove the peel and stick covering from the foam gasket and apply the sticky surface of the gasket to the bottom of the compass. Be sure to line-up the slots for the fasteners in the gasket with the slots in the base. (Note: The foam gasket can also be applied to the deck or mounting location, however, it may be subject to loss or damage.) To install the compass, simply place the fastener slots of the base over the heads of the fasteners. Push the compass down and turn clockwise to lock on. The fit should be snug enough to hold the compass securely. Tighten or loosen the fasteners as necessary so that the compass can be removed by pushing down and turning counterclockwise. When adjusted, snap the movable bezel back in place.

Important Notes:

- Make sure that there are no wires or objects of any kind behind where you intend to drill.
- Mounting Screw threads should be coated with a marine grade sealant just before installation.

- If you wish to make the installation permanent, drill two more 7/64" pilot holes and install the last 2 screws.
- If you choose to add the Optional Light Kit, the compass must be installed permanently.

XP-98 Operation

To see wind shifts (lifts and headers)

The dial is divided into four sections, two blue and two white with 0 to 8 delineated in 5-degree markings. Sail up wind before the race on port tack and on starboard tack. Write down the median heading (blue 4 e.g.) on each. You should note the reading on port tack goes up when lifted and on starboard the reading goes down when lifted.

The CourseMinder Bezel helps orient you to the racecourse. Dial in the course to the leeward mark and when you round the windward mark you know exactly where to head using the compass section on top. Also downwind you can use the compass portion to see lifts and headers downwind.

Reminders:

- Tack on 5-degree headers and you will see a real improvement in your racing
- Apparent wind forward is good.

XP-99 Operation

The movable bezel is designed to be a visual reminder of the heading to your destination. Turn the bezel ring until the intended heading is lined up with the lubber line. To steer to the destination simply turn the boat until the same heading on the compass dial lines up with the lubber line.

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