

Special Compensation Instructions for the  
**HB-85 & HB-845**

This model is completely equipped with the necessary compensating equipment to provide proper operation on steel hulled boats. Compensating or adjusting a magnetic compass on a steel boat however is quite difficult for anyone who does not have a through knowledge of the various types of deviation. We strongly recommend the use of a professional compass adjusting service for this model. If this cannot be done, the following instruction may be used.

Install the threaded rods until each hits the "stopper" nut. Do not over tighten and drive the rod further into the compass housing. Unscrew the cast Iron cylinders until they are almost to the end of the threaded rod. Proceed to **Compensation as specified in the Installation, Compensation and Maintenance Instructions**. If you are unable to get enough correction from these compensators, remove the booster tray from the bottom of the compass and activate one or two sets of magnets as required. (These magnets are set in a neutral position when shipped from the factory.) For example, if you find that additional compensation is required on a north-South course, you should reverse the direction of the forward deviation or aft magnet. Determining which one to reverse depends on whether your deviation is of an Easterly or Westerly nature. For Westerly deviation, reverse the aft magnet. For Easterly deviation reverse the forward magnet.

On an East or West course you should reverse the port or starboard magnet. For Northerly deviation reverse the port magnet. For Southerly deviation reverse the starboard magnet

After removing as much deviation as possible on all cardinal points (N, S, E and W), you should then proceed to the four inter-cardinal headings. Any deviation found on these headings should be removed by adjusting the cast iron cylinders in or out on the rods. If you find that some deviation remains on one or two inter-cardinal headings while the others seem correct, it may be necessary to change position of one or both cast iron cylinders. This is easily done by unscrewing the rod with the cylinder attached, install this into one of the other holes on the compensator ring and check your deviation again.

When you have removed this quadrantal deviation, recheck all the previous courses for any possible change, secure all check nuts, mounting screws and bolts.

