

Important Notice

Maintenance through **Remote Deviation Adjustment is deemed fraudulent.**

Deviation adjustment necessitates the presence of a qualified individual on board to inspect and maintain the magnetic compass, followed by a sea trial where the ship is turned 360-degree to measure and correct the deviation with a maintenance certificate issued thereafter. Unscrupulous operators claim that a 90-degree turn data sufficiency, or even making stationary adjustments while ship is docked are acceptable. Such improper maintenance cannot guarantee safety. **The magnetic compass is the last important heading device in an emergency.**

The Japan Compass Adjusters' Association is an organization of qualified professionals.

Is your Marine Magnetic Compass properly adjusted ?

The ISO (International Organization for Standardization) published ISO25862 in May 2009 with regard to the construction and performance of marine magnetic compass for navigation and steering purposes. Such compasses now need more careful adjustment and check than before.

Should your ship's condition be as follows then your magnetic compass will need its deviation checked.

Ship's condition and past life history	Reason why the magnetic compass may be influenced	Action that should be taken
A new ship particularly in the first few months and under 2 years old.	There has been a great change in the ship's magnetic field.	Measure the deviation frequently. Fill out the attached table recording on it, the gyro compass course and deviation as requested by Note*1 below. Should you be unable to correct the deviation yourself. Please request the assistance of a trained compass adjuster. See Note *2.
Your ship: has been struck by lightning. has vibrated violently. has been in a fire.	Ship's magnetism might have changed.	Measure the deviation. Should the deviation exceed that in the regulations. Please request assistance. See Note *2.
Large deviations in the direction of east and west only.	B component error compensation may not be possible for your ship. See Note*3	Please complete the attached table so that the present performance of the magnetic compass is known. See Note *1. Should a authorized compass adjuster be required. Please request as stated in Note * 2.
Over 2 years old.	Ship's magnetism changed by the earth magnetic field.	The deviation should be measured and corrected every 1 or 2 years. Please request assistance. See Note * 2.

Note * 1 Measure and record the deviation in the 8 main compass courses (N.NE.E.SE.S.SW.W.NW). Note also the ship's latitude and longitude, magnetic variation and the correctors' data. The information will be required by your compass adjuster.

*2 Make your request for a compass adjuster through the Japan Compass Adjusters' Association (JCAA) or via your agent or shipyard.

*3 Flinders bars and fore-and-aft side correcting magnets are required to reduce the deviation. Note that the coefficient B. will only be minimized if the adjusting has done on the magnetic equator or two positions. If the adjusting has done in only one position it might not be possible to obtain a completely accurate adjusting.

A magnetic compass is not suitable for PSC(Port State Control) requirement (* 4) in the following condition. It should be checked repaired and overhauled as necessary.

Note *4 The following problems have been noted by PSC in the past 5 years.

- It has been not possible to read the information on a magnetic compass due to a broken light bulb.
- In some cases the deviation has not been read in all courses specifically asked for.
- The compass bowl does not maintain the horizontal level.
- There are some bubbles in the compass bowl.

We send this brochure to ship's captains, owners and management companies.

The Japan Compass Adjusters' Association and our compass adjusters are ready to help with the correct and appropriate adjustment of your magnetic compasses. This will lead safer navigation.

Establish your navigation safety with a deviation-corrected magnetic compass together JCAA.

Japan Compass Adjusters' Association mail@jcaa.jp	Fax : +813-6734-0713
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Please complete that table when you find your magnetic compass errors exceed the correct figures and you require the help of a compass adjuster.

This table should be sent via a shipyard company or your agent.

Your name _____

phone number _____

e-mail address _____

Please write in block capital letters.

Ship's name (Gross Tonnage)				(G/T)
Date of last adjustment month/day/year	/	/		Name of adjuster Registered number			

Present condition	Manufacturer & Type	Manu.	Type
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Position at which following measurements were taken. Lat. _____ Long. _____

Date of the following measurements. month/day/year / /

Compass course	Cargo information				Load condition of ship		Full · Half · Empty	
	N	NE	E	SE	S	SW	W	NW
0°	45°	90°	135°	180°	225°	270°	315°	
Variation	↔	↔	↔	↔	↔	↔	↔	↔
Gyro compass course								
Deviation								

Type, number, length, and position of adjustment bars & magnets

Flinders bars (number, length)	number
Example : 3 pieces, 15cm	length

for adjustment Fore & Aft. Magnets	Port (number, insertion position scale(force)*1) ex)3: 15(S),13(M),12(W) Draw a circle to the right to indicate the position of the red end.	magnet red end : Fore / Aft
	Starb'd (number, insertion position scale(force)*1) ex)3: 15(S),13(M),12(W) Draw a circle to the right to indicate the position of the red end.	magnet red end : Fore / Aft

Athwartship magnet for adjustment(number, scale*1) ex)2: 12(S),10(W) Position : Draw a circle to the right to indicate the position of the red end.	Position: magnet red end : Port / Starboard
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*1 S : Strong(dark blue/red) M : Medium (blue/red) W : Weak(light blue/red)

(The shade of indicates the strength of the magnet's magnetic field.)

The content of the work record of the last deviation correction is very effective information for new work.

Please send the last deviation adjusting record to JCAA if it is possible. We wish express our gratitude.

***** **Please copy this sheet before use.** *****

There is same table at our web site. <http://www.jcaa.jp/table-e.html/>

Japan Compass Adjusters' Association
 Send to : mail@jcaa.jp Fax : +813-6734-0713 or Send to the Last Adjuster