

DOMETIC VANCOUVER

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RICHMOND, B.C.
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ISO 10592



FORM NO. 269064 REV. J



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Safety video.



Tools required

- Wrenches 5/8", 5/16", 11/32" • 3/32" Allen key • Torque wrench

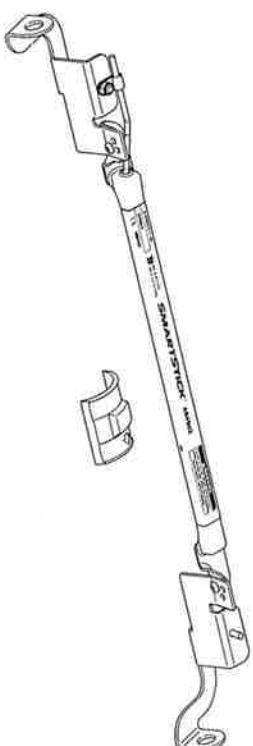


NOTICE!

Correct installation of magnet is important to the overall operation of autopilot.

Installation procedure

1. Remove the nuts and washers (item 1 and 2) from the steering cylinder rod. Discard washers (item 2) as they will not be used in the SmartStick installation.
2. Install brackets (item 3) onto the ends of the cylinder support rod. Re-install the nuts (item 1) and torque to 33 in./lbs (3.82 Nm).
3. Install the sensor (item 4) behind the brackets as shown in figures A and B.
4. Mount the magnet (item 5) to the center of the cylinder body with the arrow pointed in the same direction as the arrow on the sensor.
5. Turn steering cylinder so that the magnet arrow and the sensor decal arrow are nearest each other.
6. Without changing the position along the length of the cylinder, rotate the magnet on the cylinder so that arrows on sensor and magnet are as closely lined up as possible.



Autopilot Rudder Reference

Installation Instructions Supplemental — Book 20

WARNING

Cancer and Reproductive Harm
www.P65Warnings.ca.gov

7. Install band clamps onto rubber bracket after positioning onto barrel, as per figure 1. Each clamp will fit into a recessed gap on either side of magnet. Tighten band clamps to 10 in./lbs to secure rubber bracket in position.



NOTICE!

Do not distort the rubber magnet housing or over-torque the band clamps while tightening.

8. Connect Rudder Reference to auto-pilot as per autopilot installation instructions. Refer to Table 1 to ensure correct application.

9. Move the steering cylinder from hard over to hard over to confirm that the autopilot receives a signal from the sensor at ALL cylinder positions.

10. Install strain relief (item 6).



NOTICE!

Failure to install the strain relief may result in irreparable damage to the sensor.

11. Using an assistant, turn steering wheel hard-over to hard-over while inspecting for interference of the SmartStick with **any** other object. Check steering in **all** engine trim/slit ranges and throughout the entire steering arc. Any interference **must** be corrected prior to use.

NOTICE!
If the SmartStick bracket does not fit around the steering cylinder bracket contact Dometic for replacement brackets.

NOTICE!
Do not install the sensor in front of the mounting bracket. Doing so will result in interference with the steering cylinder (refer to figure 2). Be sure to check for interference at all engine positions before proceeding.

NOTICE!
The SmartStick rudder reference unit may require an HC5358-3 cylinder when installed on Evinrude or Yamaha 4-Stroke engines.

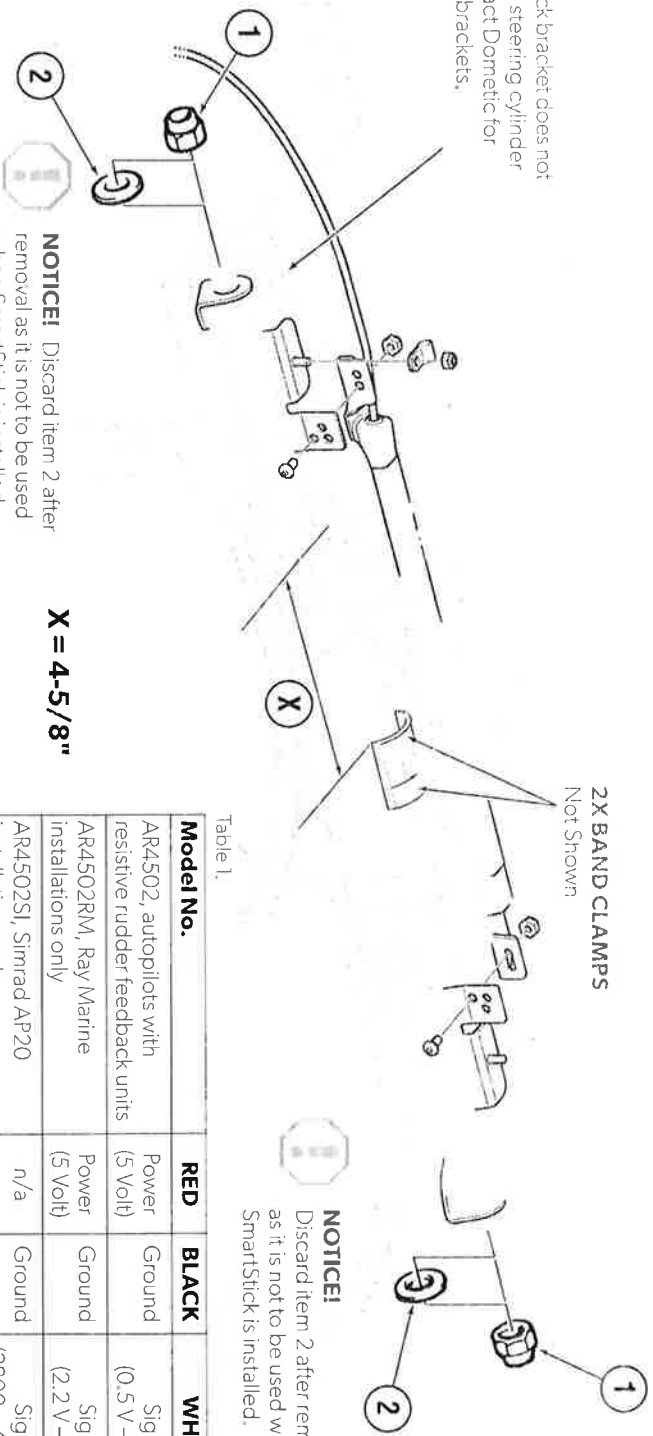


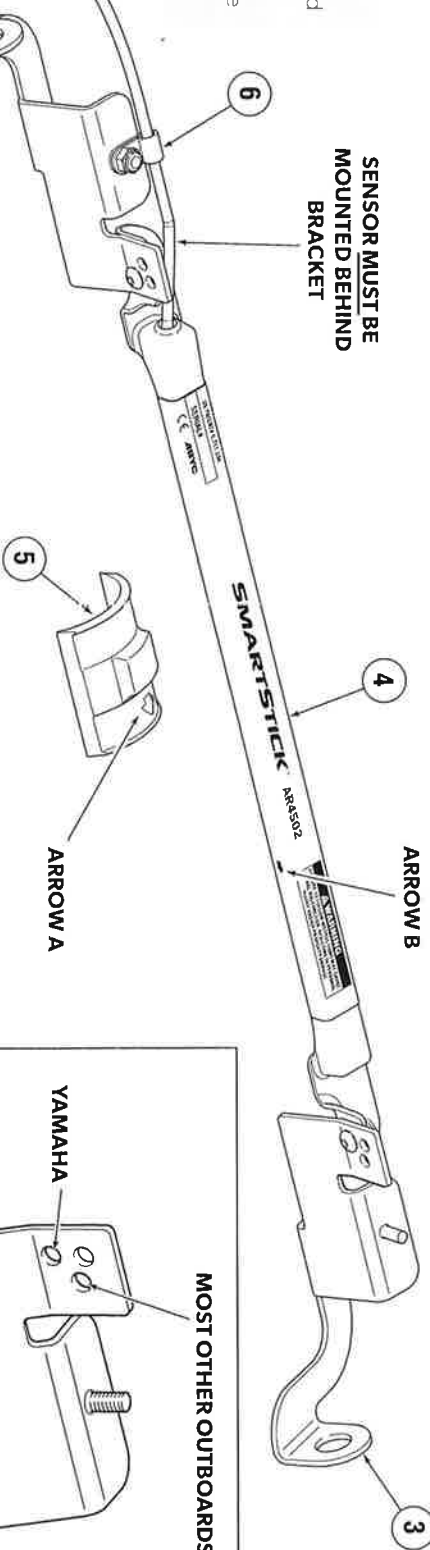
Table 1.

Model No.	RED	BLACK	WHITE
AR4502, autopilots with resistive rudder feedback units	Power (5 Volt)	Ground	Signal (0.5 V - 4.5 V)
AR4502RM, Ray Marine installations only	Power (5 Volt)	Ground	Signal (2.2 V - 2.8 V)
AR4502SI, Simrad AP20 installations only	n/a	Ground	Signal (2800 - 4000 Hz)

2

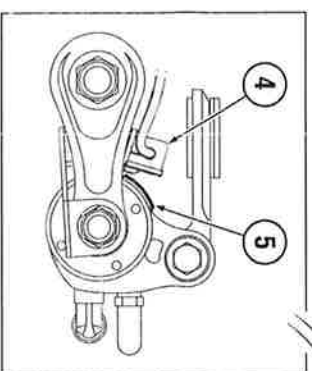
NOTICE!
The sensor (item 4) may be mounted in an inverted/flipped position to allow the cable to exit on the port side. In either case **arrow A** must point in the same direction as **arrow B** (on the decal of the sensor).

SENSOR MUST BE MOUNTED BEHIND BRACKET

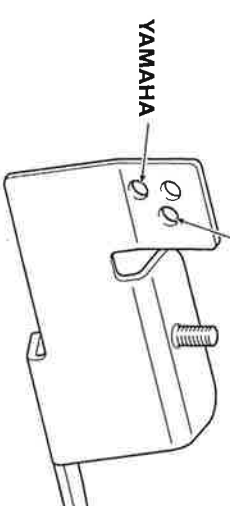


WARNING!

Using an assistant, turn steering wheel hard over to hard over and check for interference of the SmartStick with **any** other object. Confirm that the engine can be steered, unrestricted throughout its steering articulation and in all trim/tilt angles. Failure to check for interference and unrestricted operation may lead to irreparable damage to the SmartStick or cylinder leading to loss of steering control. Loss of steering control may result in unpredictable boat behavior, resulting in property damage, personal injury and/or death.



MOST OTHER OUTBOARDS



NOTICE!
If interference occurs, check fit with other holes.

SMARTSTICK™

MAGNET KIT # HA5479

For use with Yamaha F250-F350 installations & ALL -3 pivot cylinders

⚠ CAUTION

Refer to **ALL** Warnings, Cautions and Notices as shown in the SmartStick Installation Instruction Sheet #269064.

Magnet Installation

1. Mount sensor (Item 1) to steering cylinder following steps 1 – 3 as shown in SmartStick installation instructions included with your SmartStick (Instruction Sheet #269064).

NOTICE

Use the X dimension shown in **THESE** instructions to ensure magnet is centered correctly.

⚠ CAUTION

DO NOT distort the rubber magnet housing when tightening.

2. Mount magnet assembly (Item 2) to the center of the cylinder body and orientate as shown in Figure A. Ensure that arrow (A) is pointing in the same direction as arrow (B) on the SmartStick Sensor. Secure the two hose to the magnet and torque clamp nuts to 10 in.lb. +/-5.

NOTICE

Failure to have arrow (A) pointing in the same direction as arrow (B) will result in an inactive unit.

3. Continue with steps 5 – 11 as shown in the SmartStick Installation Instructions.

