

# 898399K01

## RUDDER SENSOR KIT

### 200/225/250/275 VERADO 4-STROKE

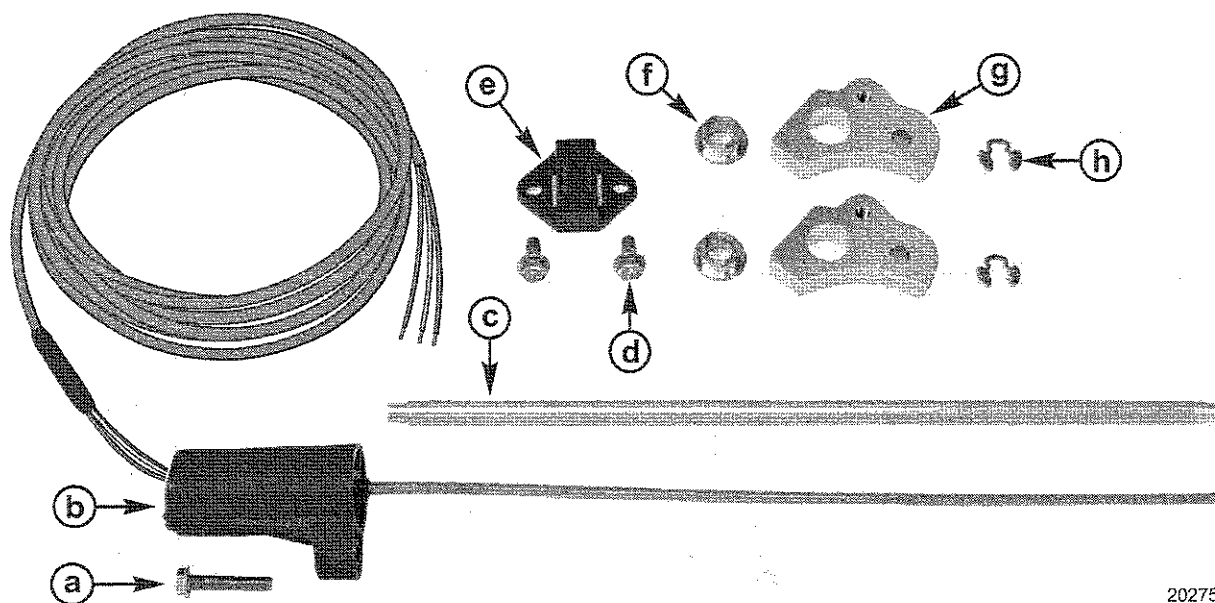
#### NOTICE

After completing installation, these instructions should be placed with the product for the owner's future use.

#### NOTICE

This document is written to aid our dealers, boatbuilders, and company service personnel in the proper installation or service of our products. Persons who are not familiar with these or similar products produced by Mercury Marine, and who have not been trained in the recommended servicing or installation procedures should have the work performed by an authorized Mercury Marine dealer technician. Improper installation or servicing of the Mercury product could result in damage to the product or personal injury to the installer or persons operating the product.

### Components Contained in Kit



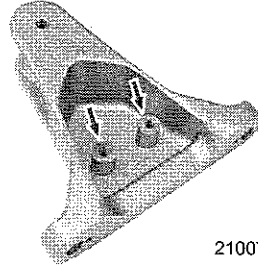
20275

Ref.	Qty.	Description
a	1	Bolt (M5 x 25)
b	1	Rudder sensor assembly
c	1	Auto-pilot tube
d	2	Bolt (M5 x 12)
e	1	Magnet assembly
f	2	Bushing
g	2	Bracket
h	2	Retaining ring

# Rudder Sensor Installation Instructions

## NOTICE

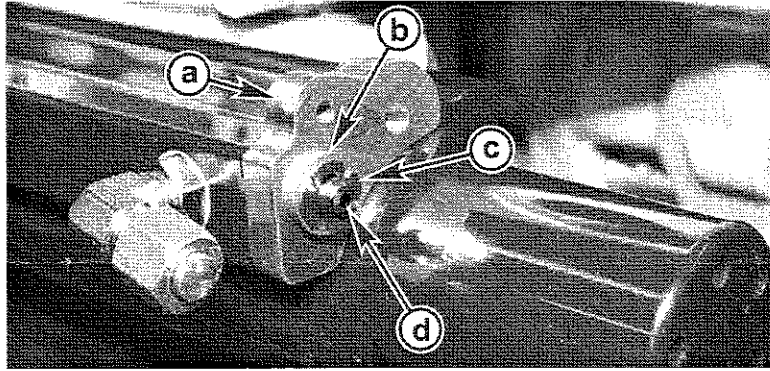
Inspect the steering arm on the outboard. If the steering arm does not have two mounting bosses for the rudder sensor magnet, order steering arm P/N 892367T02.



21007

## Rudder Sensor Installation

1. Install a bushing in one of the brackets.
2. Attach the bracket to the steering cylinder port end cap.
3. Install a retaining ring over the groove on the port bleed valve.

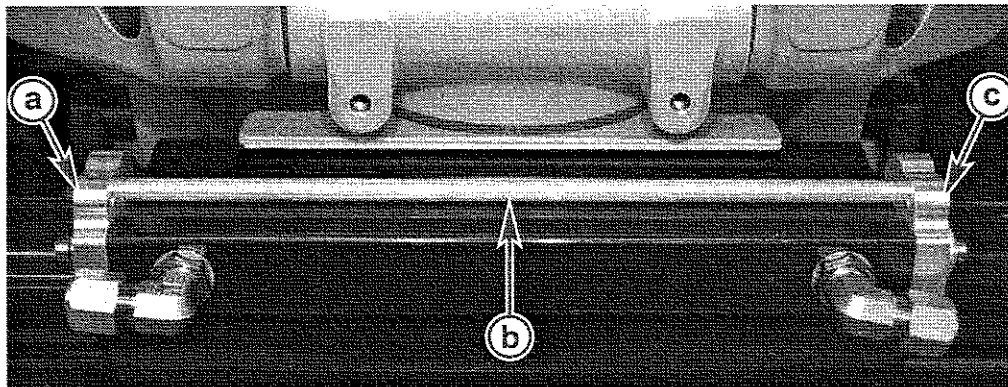


20306

a - Bracket  
b - Bushing

c - Retaining ring  
d - Bleed valve

4. Insert the auto-pilot tube in the hole in the port bracket.
5. Install a bushing in the starboard bracket.
6. Assemble the starboard bracket to the auto-pilot tube and the steering cylinder end cap.

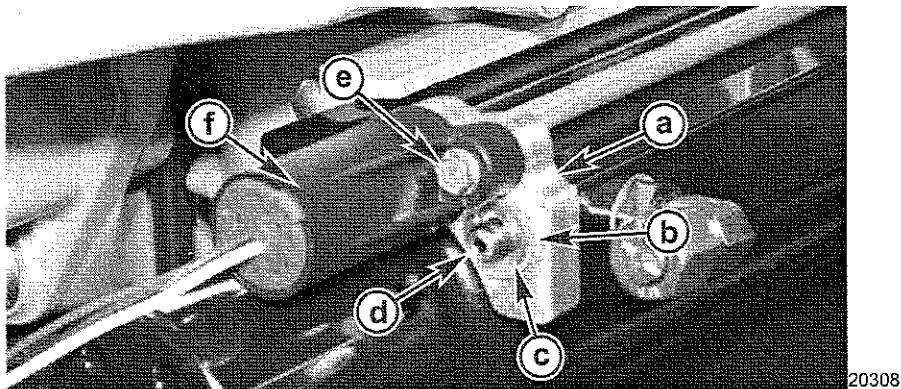


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a - Starboard side bracket  
b - Auto-pilot tube

c - Port side bracket

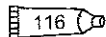
7. Install a retaining ring over the groove on the starboard bleed valve.
8. Insert the rudder sensor into one end of the auto-pilot tube. Ensure that the rudder sensor is flush with the bracket before tightening the bolt.
9. Secure the rudder sensor with a (M5 x 25) bolt. Tighten the bolt to specified torque.



- a - Bracket (starboard side)  
 b - Bushing  
 c - Retaining ring  
 d - Bleed valve  
 e - Bolt (M5 x 25)  
 f - Rudder sensor

Description	Nm	lb. in.	lb. ft.
Rudder sensor attaching bolt (M5 x 25)	4	35	

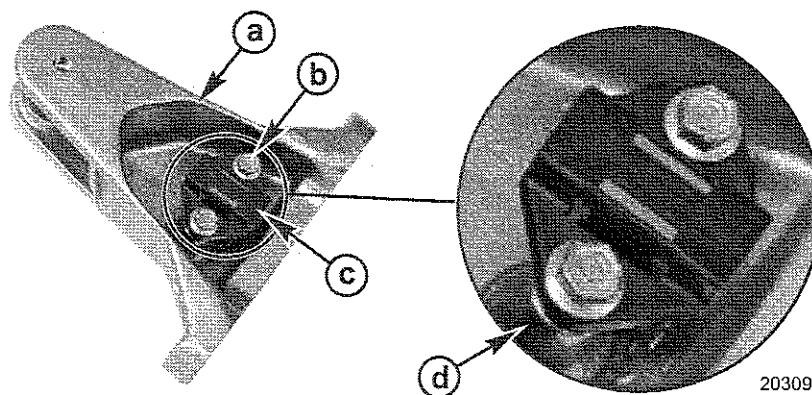
10. Seal the opposite end of the auto-pilot tube with RTV 587 Silicone Sealer.

Tube Ref No.	Description	Where Used	Part No.
 116	RTV 587 Ultra Blue Silicone Sealer	Rudder sensor auto-pilot tube	92-809625

## Magnet Installation

1. Attach the magnet assembly to the underside of the steering arm using two (M5 x 12) bolts. Tighten the bolts to specified torque.

**NOTE:** The magnet assembly must be installed as shown.

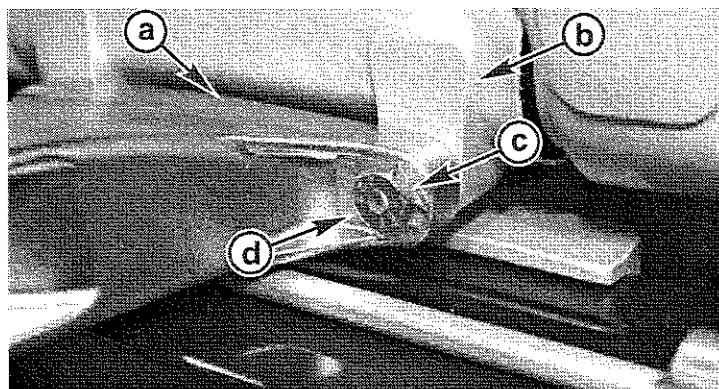


- a - Steering arm  
 b - Bolt (M5 x 12) (2)  
 c - Magnet  
 d - Mounting boss (2)

Description	Nm	lb. in.	lb. ft.
Rudder magnet attaching bolt (M5 x 12)	4	35	


**IMPORTANT:** The steering arm must be fastened to the engine using special bolts. The use of any other unauthorized fastener may result in the steering arm disconnecting from the engine.

2. Install the steering arm to the steering head with two special bolts and two locking retainers with the locking tabs facing up. Apply Loctite 271 Threadlocker to the first four threads of the bolts.
3. While holding the locking retainer in position, torque the bolts to specification. Bend one locking tab of each retainer against a flat of each bolt.



a - Steering arm  
b - Steering head

c - Locking tab bent against bolt (2)  
d - Special bolt (10-896555025) (2)

Tube Ref No.	Description	Where Used	Part No.
 7	Loctite 271 Threadlocker	Special bolt (10-896555025)	92-809819

Description	Nm	lb. in.	lb. ft.
Steering arm attaching bolt (M8 x 25)	55		40.5

## Wire Connections

Rudder Sensor Wire Color	Description
Green	Output
Brown	Supply
White	Ground

Products of Mercury Marine  
W6250 Pioneer Road  
Fond du Lac, WI 54936-1939

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