



SEA-DOO®

Watercraft

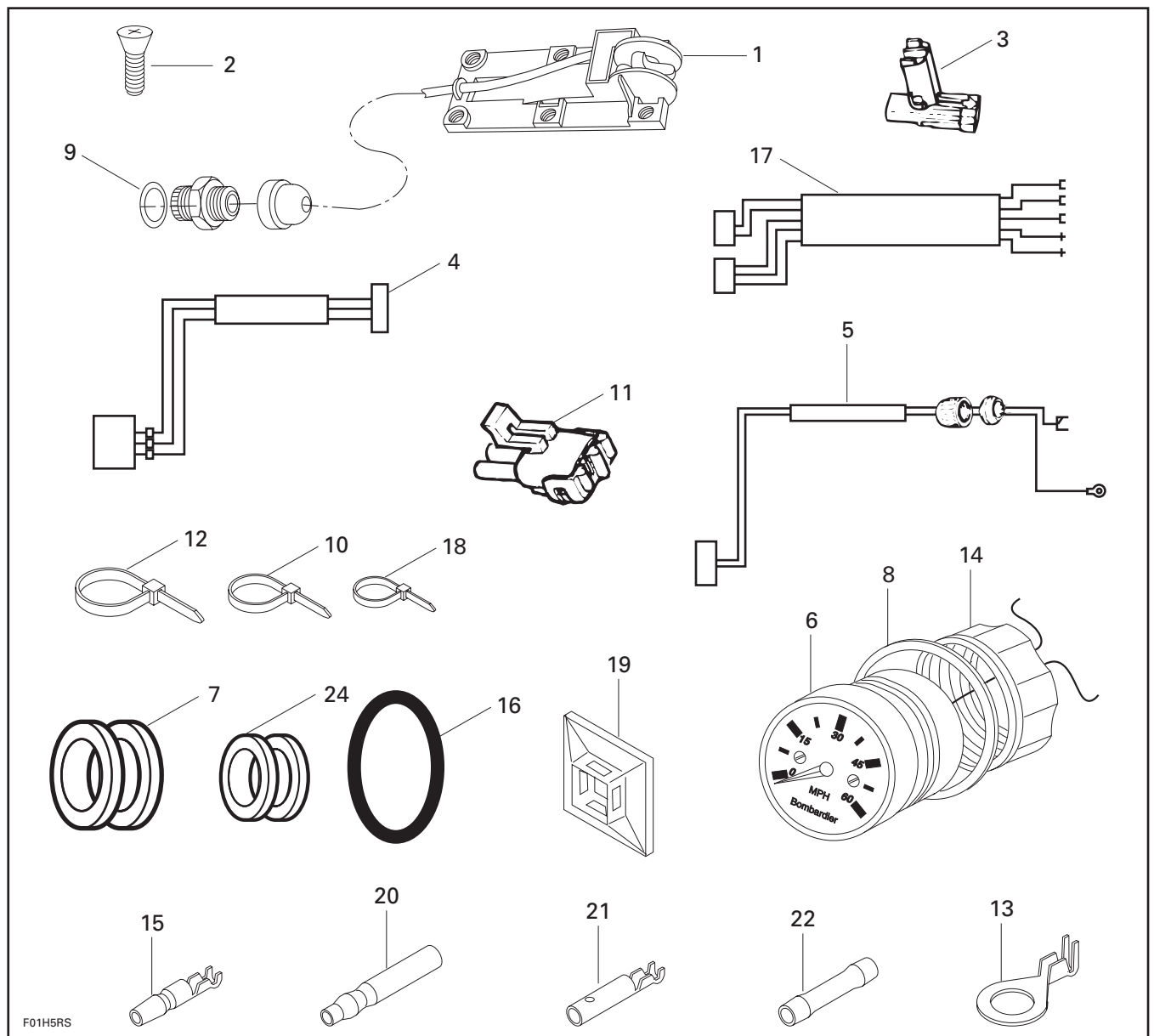
SPEEDOMETER GAUGE KIT (P/N 295 500 337)

◆ WARNING

For safety reasons, this kit must be installed by an authorized Bombardier Sea-Doo watercraft dealer. Should removal of a locking device be required when undergoing disassembly/assembly, always replace with a new one. This instruction sheet should be given to the purchaser after installation. This kit is designed for specific applicable models only. It is not recommended for watercraft other than those for which it was sold.

NOTE: Installation time is approximately 2.5 hours.

PARTS TO BE INSTALLED



1. Speedometer Sensor
2. Screw M5 x 10 (6)
3. Connector, 3-circuit, female (2)
4. 3-wire Sensor Harness
5. 2-wire Harness
6. Speedometer Gauge
7. Grommet
8. Gasket
9. Seal Washer
10. Tie Rap
11. Connector, 2-circuit, male
12. Tie Rap

13. Eyelet Terminal
14. Gauge Nut
15. Male Terminal
16. Neoprene Seal
17. 5-wire Extension Harness
18. Tie Rap (12)
19. Tie-Mount (2)
20. Insulating Sheath (male)
21. Female Terminal
22. Insulating Sheath (female)
23. Tie-Rap (2) (use if necessary)
24. Grommet

INSTRUCTIONS

Preparation

Verify fuel system for leaks.

◆ WARNING

If any leak is found, do not start the engine and wipe off any fuel leakage. Failure to correct a leak could lead to an explosion. Do not use electric power tools on watercraft unless system has passed leakage test.

With engine turned off, remove seat.

◆ WARNING

Always disconnect battery cables exactly in the specified order. Electrolyte or fuel vapors may be present in the engine compartment.

Disconnect battery as follows, BLACK negative cable first then disconnect the RED positive cable last.

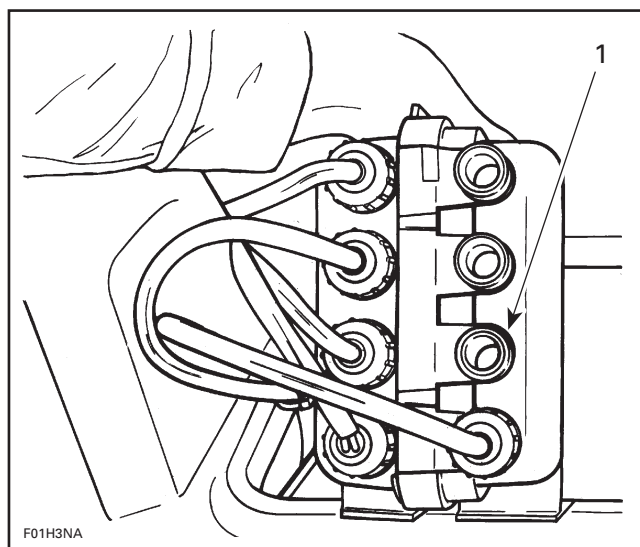
Open storage cover.

Remove storage basket.

Electrical Box Cover Modification

Remove the electrical box from the tray by releasing the clip, lifting the box and sliding it out. Release the existing reusable tie-rap located on the top of the box, then open the box by releasing the four clips holding it together.

Drill a hole in an unused outlet with a 12 mm (1/2 in) drill bit as per the following illustration.



1. Drill hole here

Insert the wire harness **no. 5** into the electrical box through the newly drilled hole.

1995 SPX Model

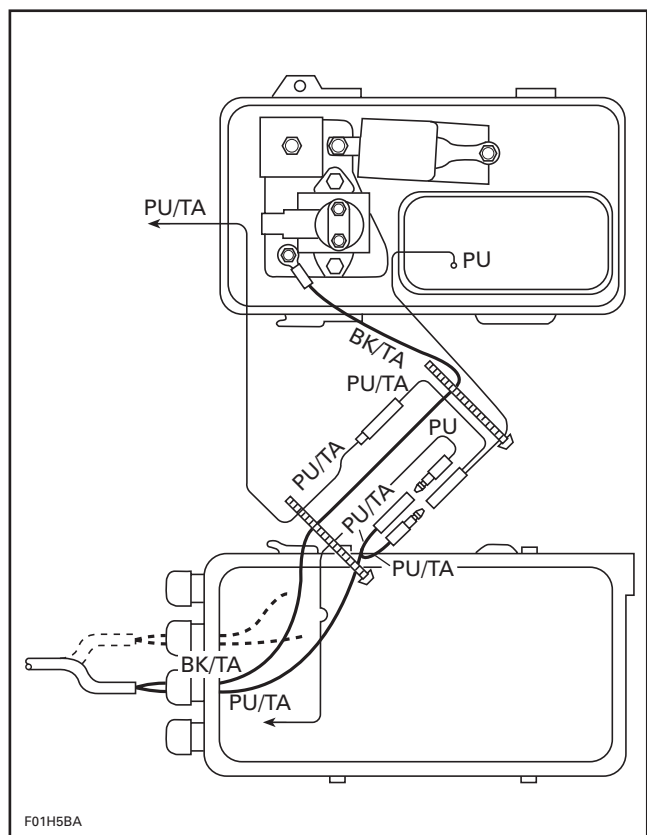
Locate the 2-wire harness coming into the electrical box, loosen the cap nut securing it to the electrical box and pierce the 2 unused holes in the rubber grommet with a sharply pointed tool like a pick or an awl.

Cut the 2-wire terminals from the end of the wire harness **no. 5** and insert the wires through the cap nut and into the spare holes in the grommet.

Wire Connections In Electrical Box

Within the electrical box cut the 2 tie-raps that are holding the wires. Then refer to the diagram on the following page for proper wire/color code connections.

NOTE: Dotted lines on wiring diagram make reference to 1995 SPX model. Use parts **no. 13**, **no. 15**, **no. 20**, **no. 21** and **no. 22** to connect.



WIRING DIAGRAM

COLOR CODES

PU—PURPLE

TA—TAN

BK—BLACK

Install 2 tie-raps **no. 18** replacing the ones that were cut previously.

After leaving sufficient slack in the wires, tighten the cap nut onto the electrical box sealing the grommet to the box.

Close the electrical box tightly being careful not to pinch any wires.

Reinstall the electrical box in the tray.

From the electrical box take harness and run it back along the top of the box then pass it through the existing reusable tie-rap on the electrical box and tighten tie-rap.

Speedometer Sensor Installation

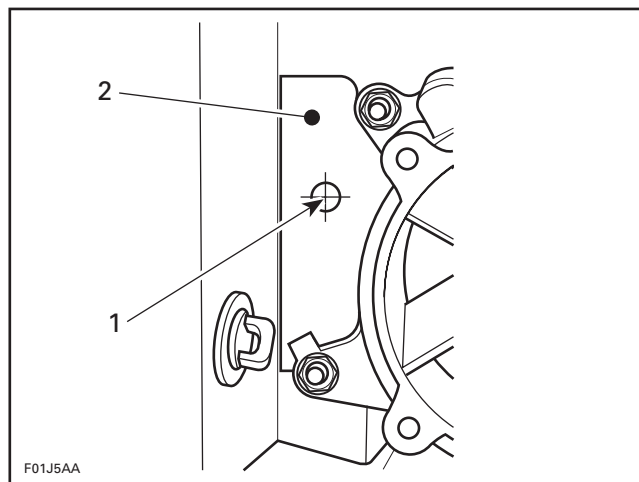
1995 Models

Use template **no. 2** found at the end of these instruction sheets to mark the position of the hole for the wiring harness adapter.

Properly position template on left hand side of jet pump on the hull recess and using tape, stick in place.

NOTE: Use template **no. 3** for 1995 XP model. Use template **no. 4** for 1996 SPX model.

Punch a center mark then remove template.



TYPICAL

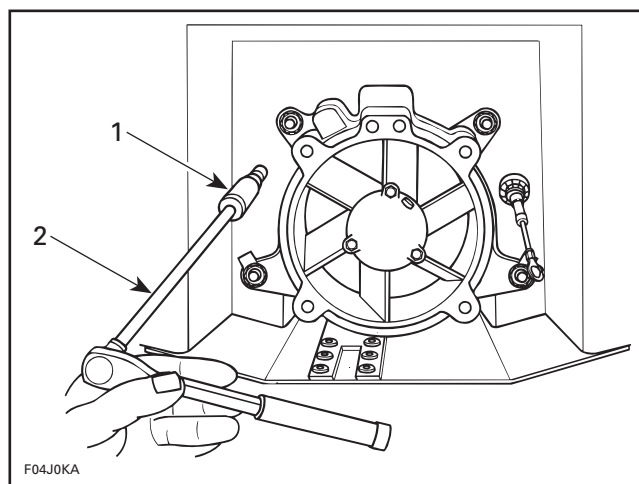
1. Punch a center mark here
2. Template

First drill a pilot hole of 3 mm (1/8 in) then finish with a 14 mm (9/16 in) drill bit.

NOTE: If using a small drill, for example an air drill, there should be enough clearance between the hull and the jet pump to fit the drill between, therefore it may not be necessary to remove the jet pump.

Make 3/8 in NPT 18 pipe threads in hole. Ensure to tap through aluminum insert in hull recess.

NOTE: Use a 12-point 5/8 in deep socket with an extension and ratchet to turn the tap.



TYPICAL

1. 3/8 in NPT 18 threads
2. 12-point 5/8 in deep socket, extension and ratchet.

CAUTION

Make threads about half the length of tap. Test sensor adapter inside hole to feel the threads. Do not rotate the tap too far in to avoid having a loose fit. Retap a little at a time as necessary.

Apply Teflon tape or silicone Ultrablack on threads of adapter.

Secure adapter in the hole.

Insert sensor wires one at a time through seal **no. 9** then through adapter.

Remove plastic insert from ride shoe.

1995 SP Model only

Remove the jet pump as shown in section 09 of the *1995 Sea-Doo Shop Manual*.

Install **no. 1** template found at the end of these instruction sheets on the ride shoe and follow the directions accordingly.

All Models

Install speedometer sensor **no. 1** on ride shoe.

Apply Loctite 242 (blue) on screw threads then tighten screws **no. 2** in a criss-cross sequence.

Route wires properly along the pump to avoid any contact with moving parts.

Pull excess length of wires inside bilge.

Firmly tighten cap of adapter to seal wires.

1995 SP Model only

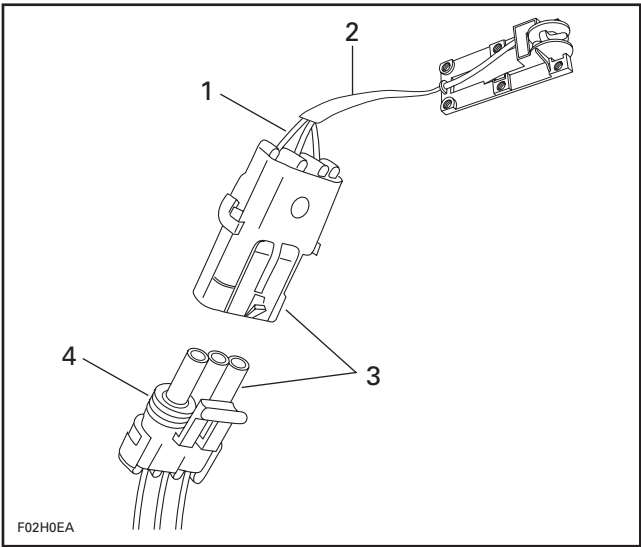
Reinstall jet pump and components as shown in section 09 of the *1995 Sea-Doo Shop Manual*.

All Models

Wire Routing

From inside the bilge, install female connector **no. 3** onto the sensor wires.

Connect 3-wire harness **no. 4** to the speedometer sensor harness.



- 1. Match wire colors on connectors
- 2. Wires from speedometer sensor
- 3. Connect
- 4. Connector in bilge

HOUSING	WIRE
A	BLUE-PURPLE
B	PURPLE-YELLOW
C	BLACK

Apply dielectric grease in connectors then plug connectors. Properly secure wires away from muffler using tie-**rap no. 18**.

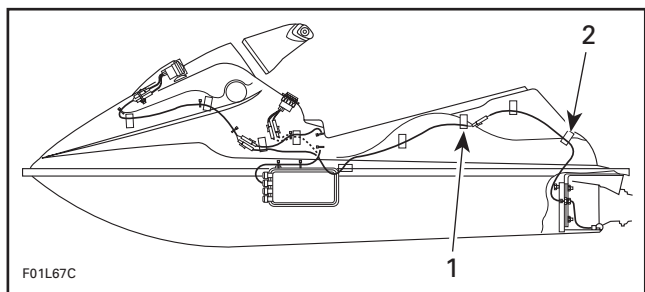
◆ **WARNING**

Ensure all terminals are properly crimped on the wires and that all connector housings are properly fastened. Keep wires away from any rotating, moving, heating and vibrating parts. Use proper fastening devices as required.

From inside bilge apply silicone Ultrablack or a suitable marine adhesive sealant around sensor adapter hole in hull recess.

Check bilge for watertightness.

Install tie-mount **no. 19** inside upper body, see illustration.



SP/SPI/SPX - 1995 MODELS

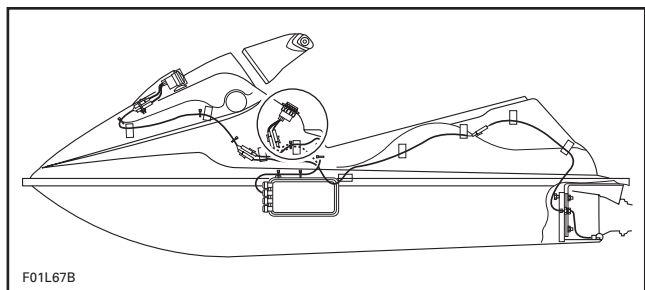
1. Install tie-mount here

XP-1995/SPX-1996

2. Install tie-mount here

NOTE: Use fiberglass resin as an adhesive or a suitable marine bonding agent.

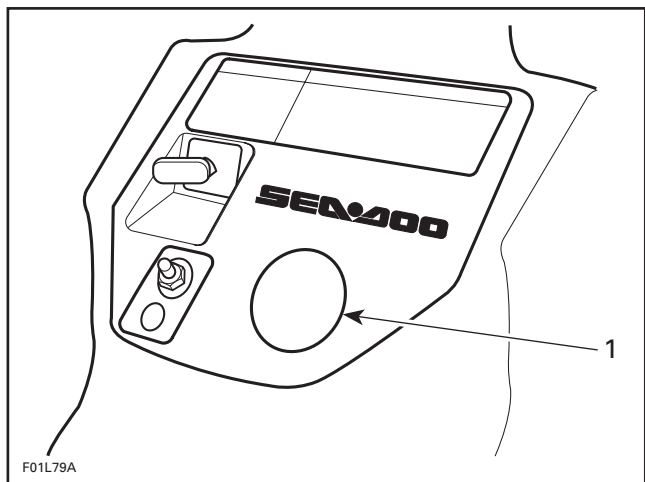
Refer to following illustration for proper wire routing inside the craft.



Gauge Installation for Mounting on Dashboard

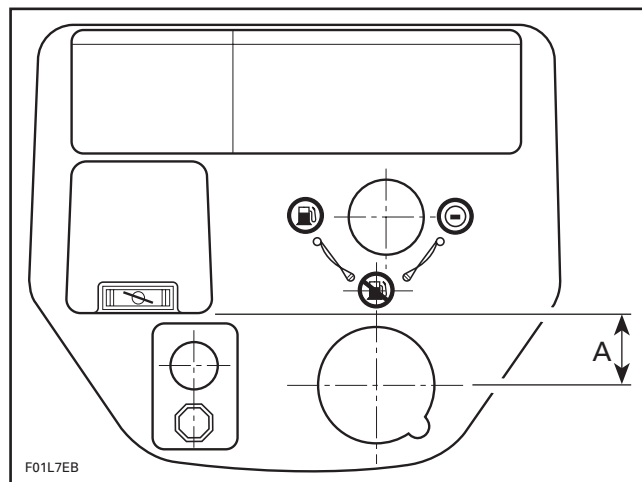
Protect existing dashboard decal with masking tape prior to drilling hole.

Using a 51 mm (2 in) hole saw, drill a hole in the dashboard gauge decal location as per the following illustration.



1. Cut here.

NOTE: For 1995 SPX model only, refer to the following illustration for proper cutting instructions.



A. 31.0 mm (1-7/32 in)

Smooth the hole surface with a round file.

Remove masking tape.

Install the gauge gasket **no. 8** on the gauge **no. 6**.

Install the gauge in the dashboard.

Secure gauge in place with gauge nut **no. 14**.

Connect the 3-wire harness and the 2-wire harness to gauge wires.

▼ CAUTION

Make sure the wire color codes match.

Wire Routing and Gauge Installation for Mounting on Storage Cover

Locate the existing tie-mount under the dash.

Attach harness to tie-mount with tie-**rap no. 12**.

Use 2 tie-raps **no. 18** and attach to existing wiring harnesses also coming from electrical box.

Route the harness along the upper body then forward under the dash.

Refer to illustration showing "proper wire routing inside craft" shown earlier in this instruction sheet.

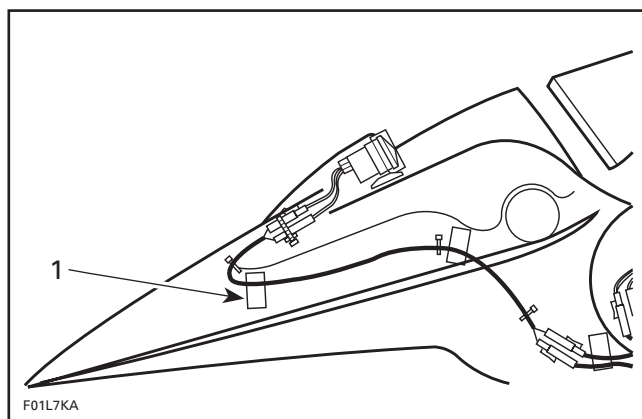
Connect 5-wire extension harness **no. 17** to harness from electrical box and speedometer sensor and continue along the left side. Use existing tie-mounts inside the upper body to retain the harness.

1995-1996 SPI and 1995 SPX Models

Pass wires through existing grommet and fish wires through the storage cover using a steel wire.

1995-1996 SP Model

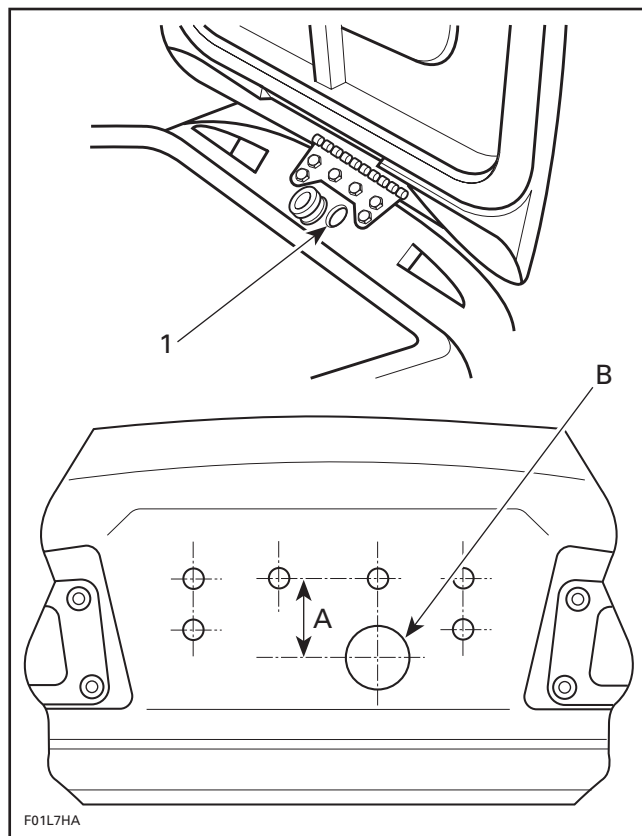
Install tie-mount no. 19 inside upper body, see illustration.



1. Install tie-mount here

NOTE: Use fiberglass resin as an adhesive or a suitable marine bonding agent.

Cut a 16.5 mm (21/32 in) hole in the body below the storage cover hinge as illustrated.



1. Install grommet here

A. 20.5 mm (51/64 in)
B. 16.5 mm (21/32 in)

Install grommet no. 7.

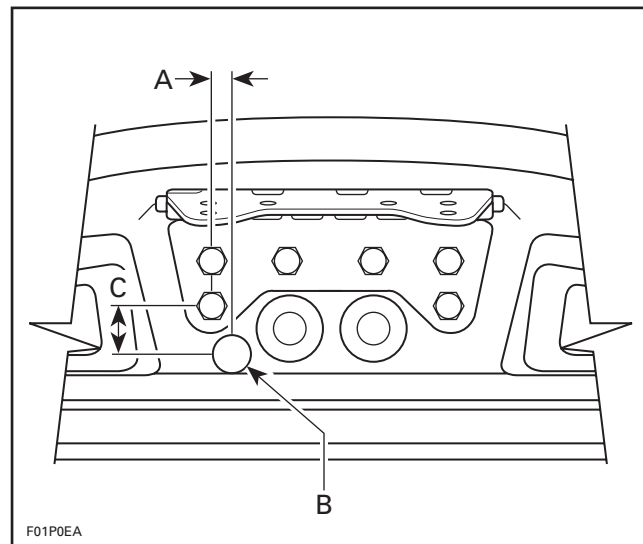
NOTE: make sure grommet is installed to prevent water intrusion in bilge.

Remove protective cap from gauge location.

Pass wires through new grommet and fish wires through the storage cover using a steel wire.

1996 SPX Model

Cut hole in body

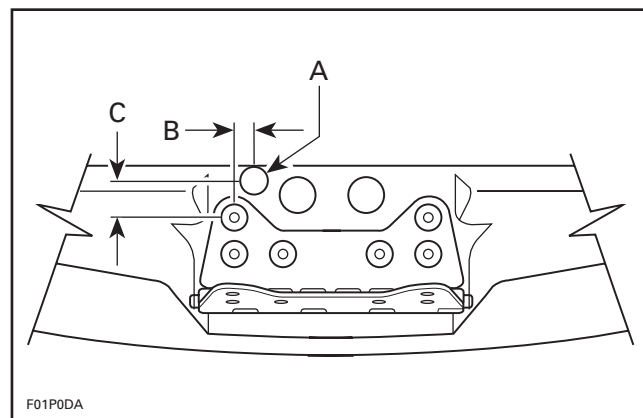


TOP VIEW

A. 6 mm (15/64 in)
B. 12 mm (31/64 in) dia.
C. 13 mm (33/64 in)

Install grommet no. 24.

Cut hole in storage cover.



VIEW FROM BELOW

A. 10 mm (13/32 in) dia.
B. 6 mm (15/64 in)
C. 13 mm (33/64 in)

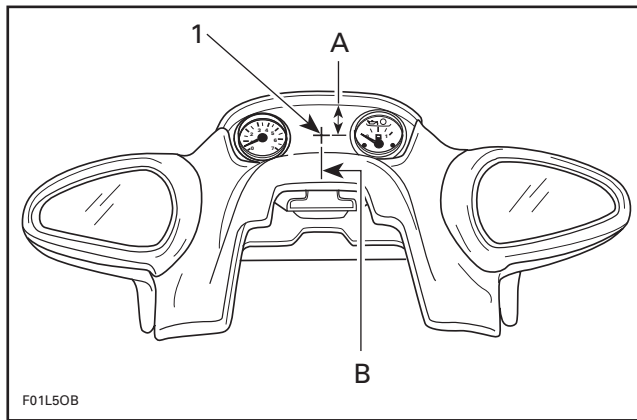
Locate heat shrink on the wiring harness no. 17. Cut the 2 wires protruding from both ends of the heat shrink. Discard cut wires.

Storage Cover Modification

Remove access panel from storage cover.

Remove SPX decal located between VTS gauge and the LCD gauge.

Using a 51 mm (2 in) hole saw, drill a hole in storage cover as per following illustration.



1. Drill 51 mm (2 in) diameter hole
- A. 38 mm (1-1/2 in) from top cover
- B. Center between 2 existing gauges

If necessary, smooth hole surface with a file.

Gauge Installation

Install gasket **no. 8** on gauge **no. 6**.

Install gauge in hole.

Secure gauge with gauge nut **no. 14**.

All Models (Except 1996 SPX)

Install female connector **no. 3** and male connector **no. 11** to the extension harness.

Connect Gauge wires to extension harness.

Attach connectors with tie-rap **no. 10**.

Moisten the gauge support with soapy water.

Install speedometer gauge **no. 6**.

Check speedometer for proper functioning.

1996 SPX Model

Attach 3-circuit female connector **no. 3** to the extension harness.

Connect the 3-circuit connector from gauge to connector on extension harness.

Connect the 2-circuit female connector to unused male connector from the trim gauge.

Attach connectors using tie-rap **no. 10**.

Moisten gauge support with soap water.

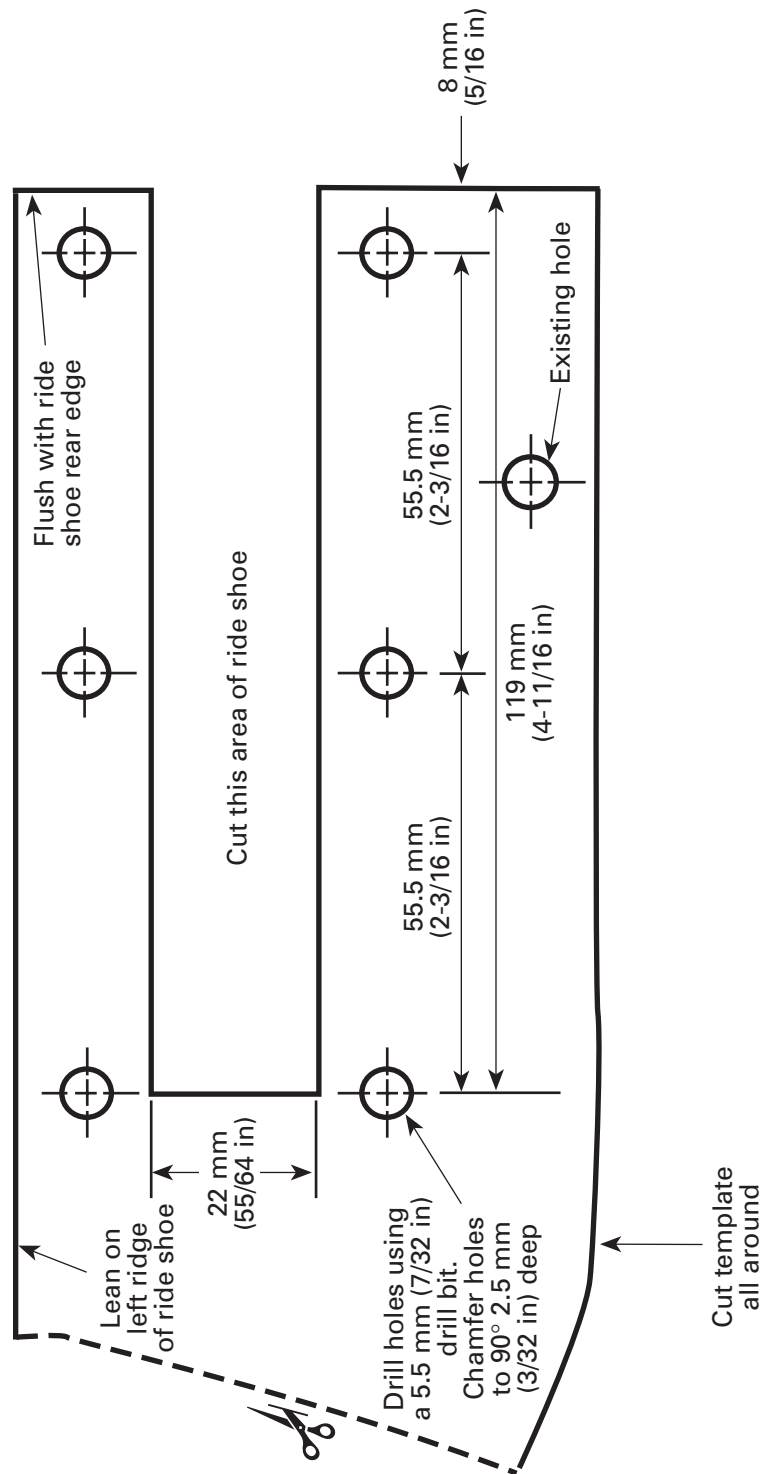
Install speedometer gauge **no. 6**.

Check speedometer for proper functioning.

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TEMPLATE NO. 1

Rest template on inner side of ride shoe

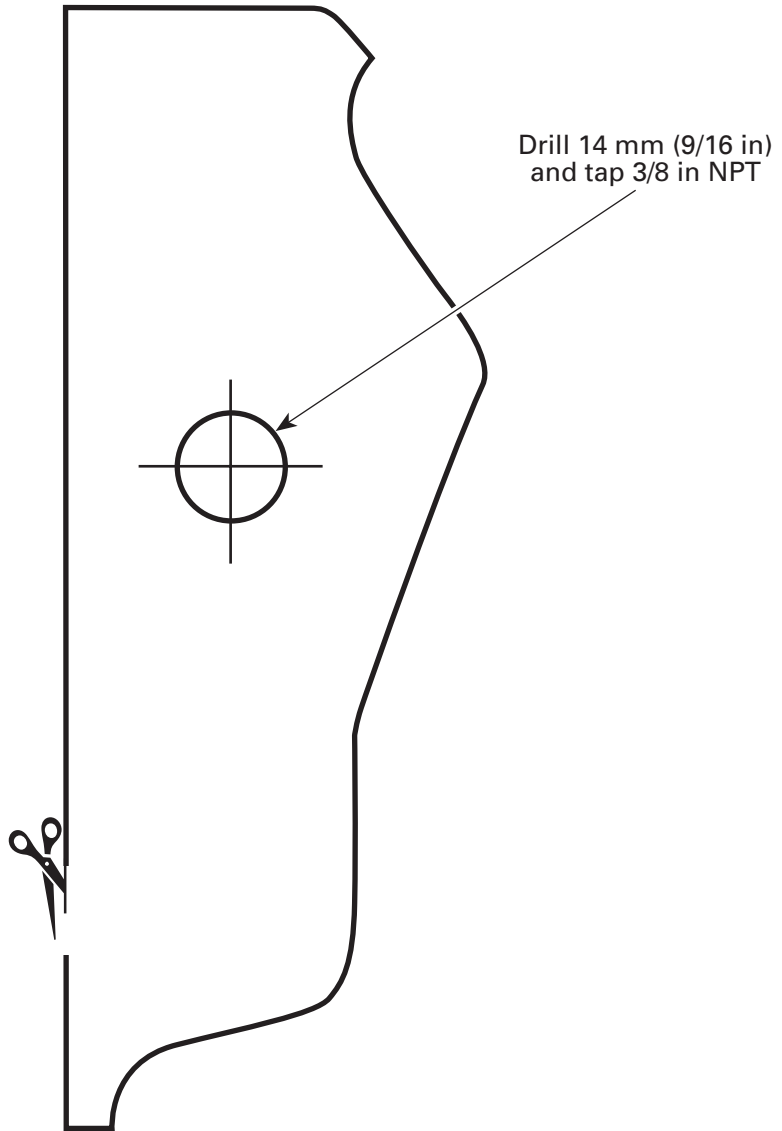


F01H3ZS

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TEMPLATE NO. 2

LEAN ON LEFT SIDE
OF THE PUMP

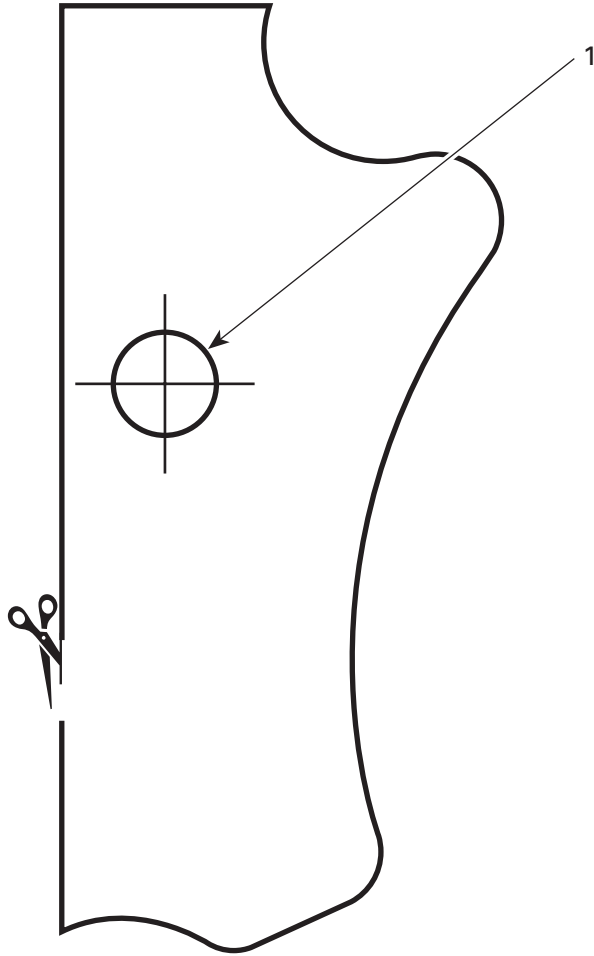


F00P01S

1. Drill 14 mm (9/16 in), tap 3/8 in NPT

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TEMPLATE NO. 3



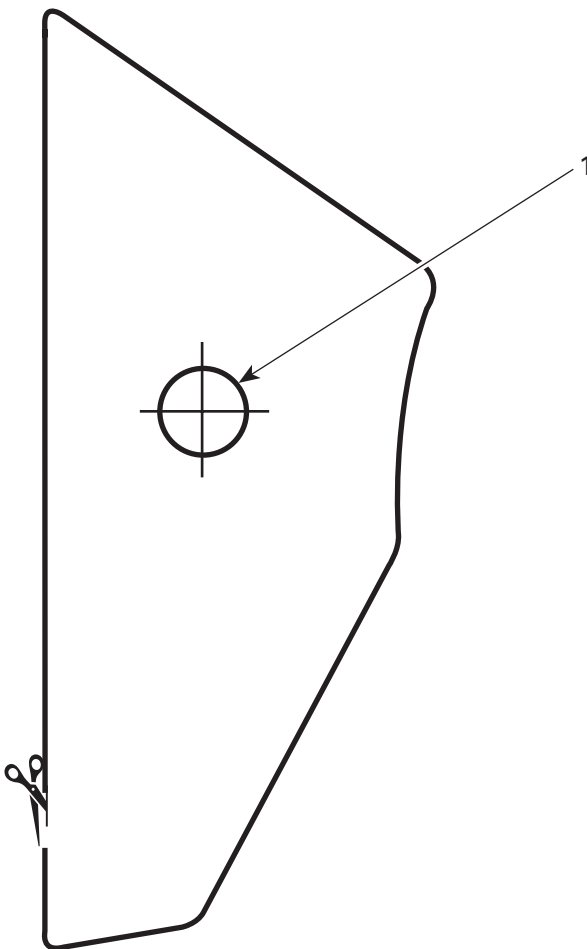
F01P0BS

1995 XP MODEL

1. Drill 14 mm (9/16 in), tap 3/8 in NPT

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TEMPLATE



F01P0FS

1996 SPX MODEL

1. Drill 14 mm (9/16 in), tap 3/8 in NPT

295 500 337

1.	278 000 583	Speedometer Sensor	Capteur d'indicateur de vitesse
2.	216 351 060	Screw M5 x 10 (6)	Vis M5 x 10 (6)
3.	278 000 281	Connector, 3-circuit, female (2)	Logement femelle à 3 circuits (2)
4.	278 000 758	3-wire Sensor Harness	Faisceau à 3 fils du capteur
5.	278 000 759	2-wire Harness	Faisceau à 2 fils
6.	278 000 760	Speedometer Gauge	Indicateur de vitesse
7.	293 720 028	Grommet	Passe-fils
8.	278 000 259	Gasket	Joint étanchéité
9.	278 000 416	Seal Washer	Anneau d'étanchéité
10.	294 000 606	Tie-Rap	Attache
11.	278 000 220	Connector, 2-circuit, male	Logement mâle à 2 circuits
12.	293 750 008	Tie-Rap	Attache
13.	278 000 300	Eyelet Terminal	Cosse à anneau
14.	278 000 085	Gauge Nut	Écrou d'indicateur
15.	278 000 230	Male Terminal	Raccord mâle
16.	293 200 024	Neoprene Seal	Anneau d'étanchéité en néoprène
17.	278 000 885	5-wire Extension Harness	Faisceau de rallonge à 5 fils
18.	293 750 002	Tie-Rap (12)	Attache (12)
19.	293 750 015	Tie-Mount (2)	Support d'attache (2)
20.	278 000 231	Insulating Sheath (male)	Gaine isolante (mâle)
21.	290 964 068	Female Terminal	Raccord femelle
22.	278 000 770	Insulating Sheath (female)	Gaine isolante (femelle)
23.	293 750 001	Tie-Rap (2) (use if necessary)	Attache (2) (utilisée au besoin)
24.	293 720 026	Grommet	Passe-fils