



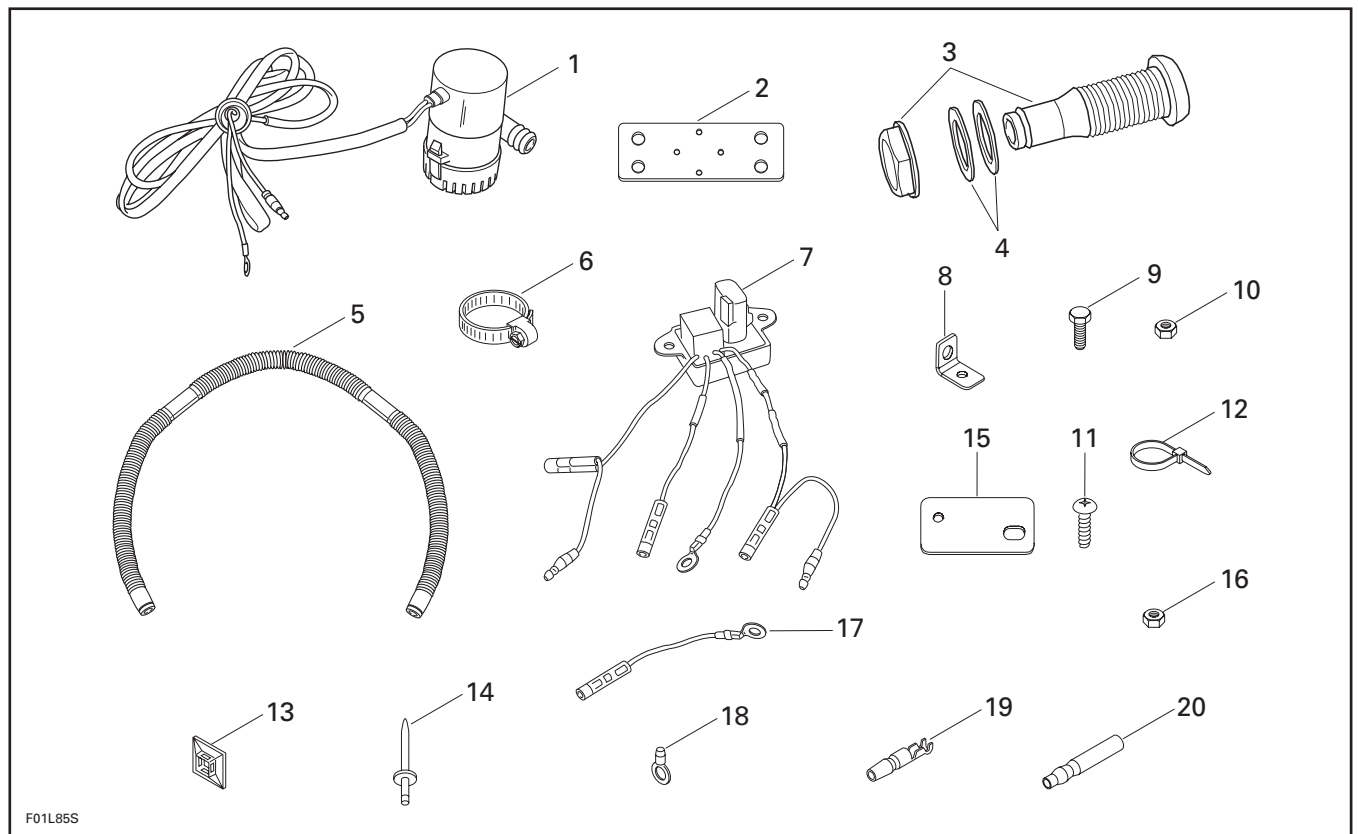
◆ WARNING

For safety reasons, this kit must be installed by an authorized Bombardier Sea-Do 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: Approximate installation time 2 hours.

NOTE: This bilge pump is timer activated. It operates in 2 minute intervals whenever the electrical circuit is activated. If there isn't any water in the bilge, the pump will turn off automatically. When there is water in the bilge the pump will keep operating until it senses that it is no longer pumping water then shut off.

PARTS TO BE INSTALLED



F01L85S

- | | |
|-----------------------------------|------------------------------------|
| 1. Bilge Pump Assembly | 9. Bolt 6.3 x 13 mm |
| 2. Support Plate | 10. Elastic Stop Nut (1/4 x 20) |
| 3. Thru-Hull Fitting and Nut | 11. Screw 3.9 x 9.5 mm (2) |
| 4. Gasket (2) | 12. Locking Tie (9) |
| 5. Flexible Hose | 13. Locking Tie Mount (5) |
| 6. Gear Clamp (2) | 14. 3/16 Rivet (2) |
| 7. Relay Module | 15. Straight Relay Support Bracket |
| 8. 90 ° Relay Support Bracket (2) | 16. Elastic Stop Nut (M6) |

PREPARATION OF THE WATERCRAFT

With the engine turned off remove the seat, on the HX remove the rear hatch cover and prop open the front hood.

◆ WARNING

Test fuel system for leakage if any leak is found, do not start the engine. Clean the leak and correct it. Failure to correct a leak could lead to an explosion. Do not use electric power tools on the watercraft or disconnect or connect the battery unless the fuel system is verified not to have any leaks and there aren't any vapors in the bilge.

Disconnect the **BLACK** (negative) battery cable first.

◆ WARNING

Always disconnect the battery cables in the specified order. **BLACK** negative cable first then the **RED** positive battery cable last.

Disconnect the **RED** (positive) battery cable last and remove the battery from the boat.

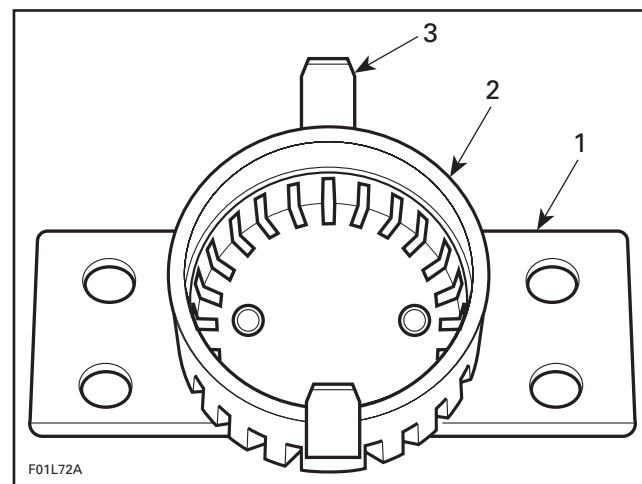
BILGE PUMP INSTALLATION

Temporarily locate the bilge pump in the starboard rear area of the bilge as shown in a later illustration. Check for proper routing of the bilge pump hose and wires.

Make note of this alignment when installing the bilge pump onto the support plate.

Partially disassemble the bilge pump assembly **no. 1** by releasing the latches and removing the base from the motor section.

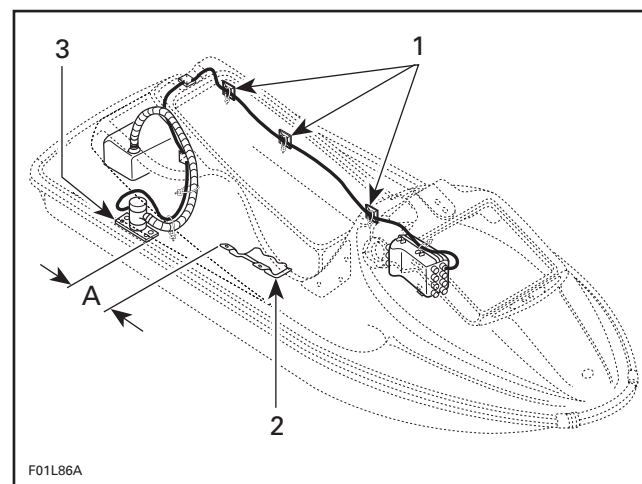
Align the holes in the base with the holes in the support plate **no. 2** as shown in the following illustration, then install the screws **no. 11** through the base into the plate per the following illustration.



1. Support plate
2. Pump base
3. Note tab location

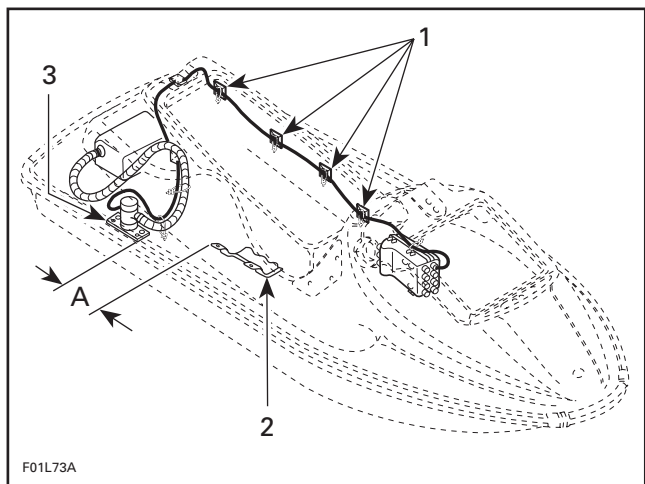
Install 5 locking tie mounts **no. 13** (2 for the hose and 3 for the wire harness) to the inside of the body of the craft with fiberglass resin, per the following illustration.

NOTE: Some craft already have mounts **no. 13** that can be used for the wire harness, 3 additional mounts will not be needed this area.



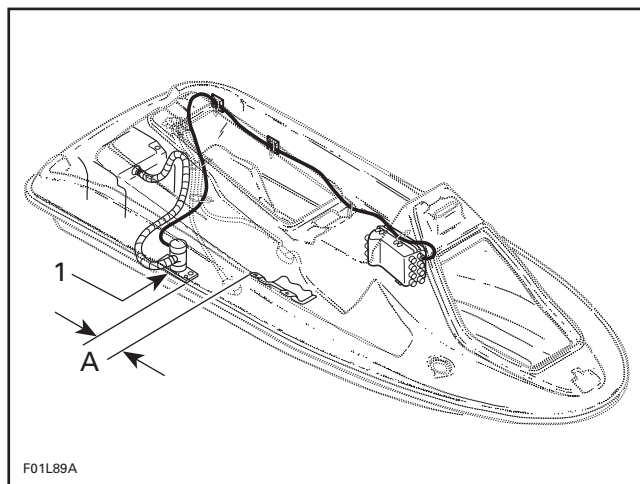
SP/SPI/SPX AND XP/XPI 1992 TO 1994

1. Locking tie mounts
2. Engine support
3. Support plate for bilge pump
- A. 160 mm



SP/SPI/SPX 1995-1996 AND XP 1995

- 1. Locking tie mounts
- 2. Engine support
- 3. Support plate for bilge pump
- A. 240 mm



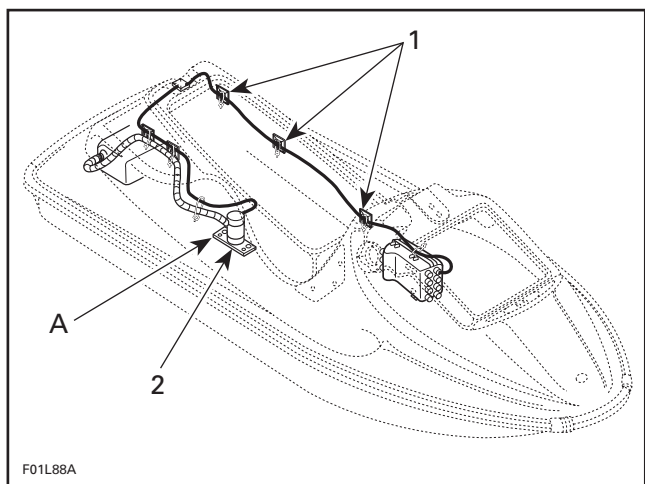
GTS/GTX 1992 TO 1995 AND GTS/GTI 1996

- 1. Support plate for bilge pump
- A. 170 mm

◆ WARNING

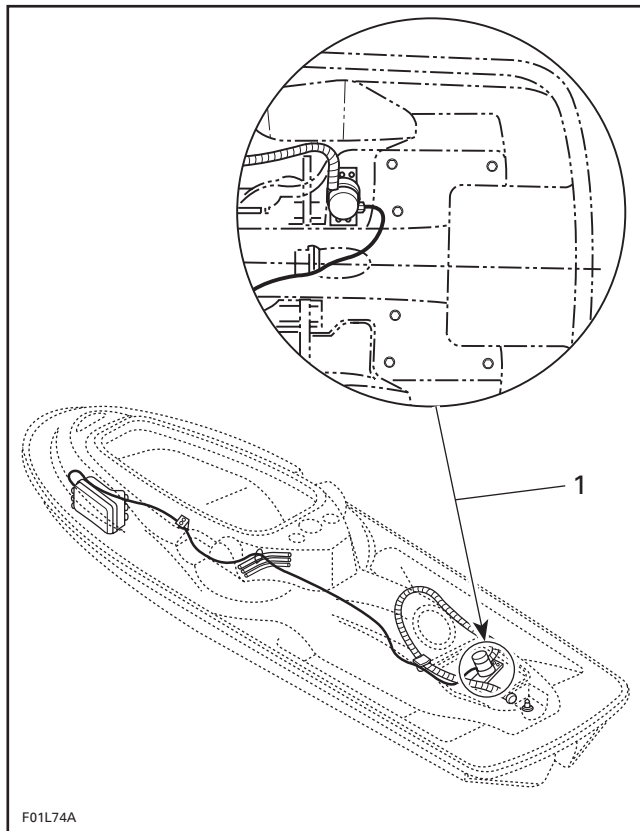
Locate the locking tie mounts so they keep the wires away from any rotating, moving, heating and vibrating parts.

HX Only



XP 800 1995 AND XP 1996

- 1. Locking tie mounts
- 2. Support plate for bilge pump
- A. Open area of bilge next to the rear electrical box and the VTS motor in front of bailers



- 1. Locate the pump in this open area

Secure the bracket with fiberglass resin or a suitable marine bonding agent.

NOTE: This joint is exposed to contaminants found in the bilge, it is important to have a secure bond.

After the resin is cured reinstall the bilge pump onto the base.

DRAIN OUTLET INSTALLATION

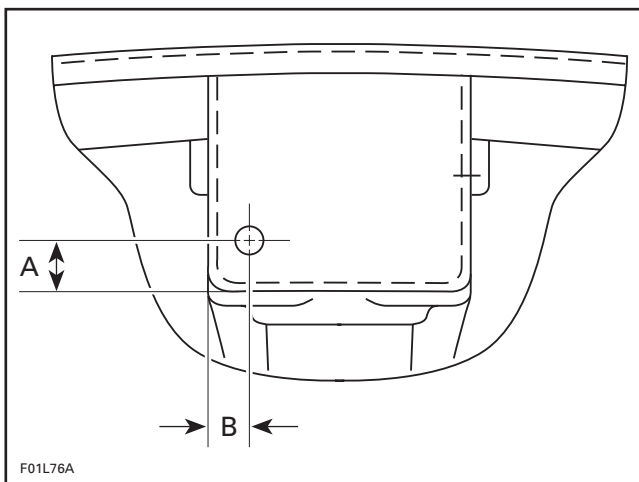
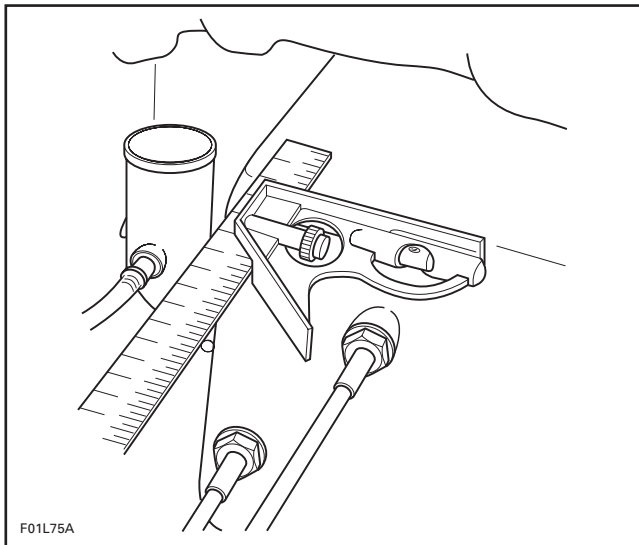
All Models

Disconnect the rubber exhaust hose from the exhaust outlet. This will allow better access to the "B" surface to install the thru-hull fitting.

Refer to the illustrations to determine the appropriate dimensions for the vehicle model that you are working with.

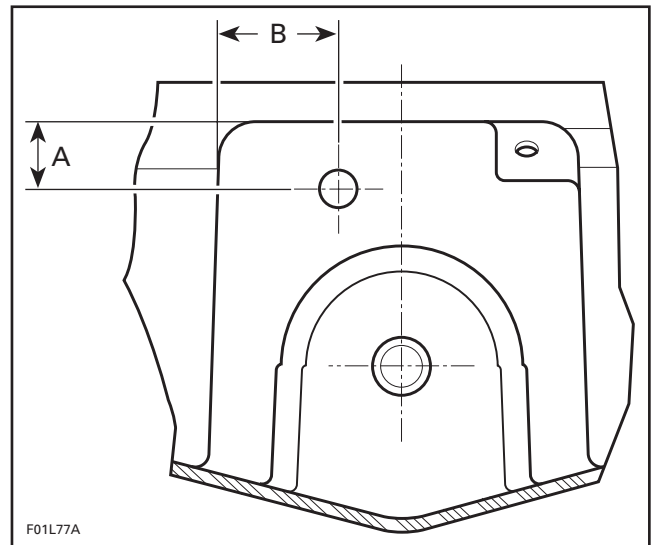
NOTE: The following 3 illustrations are views from inside the hull.

Properly locate the position for the thru-hull fitting **no. 3** using a carpenters square as shown.



SP AND XP/XPI 1992 TO 1994

- A. 50 mm (1-15/16 in)
- B. 40 mm (1-9/16 in)

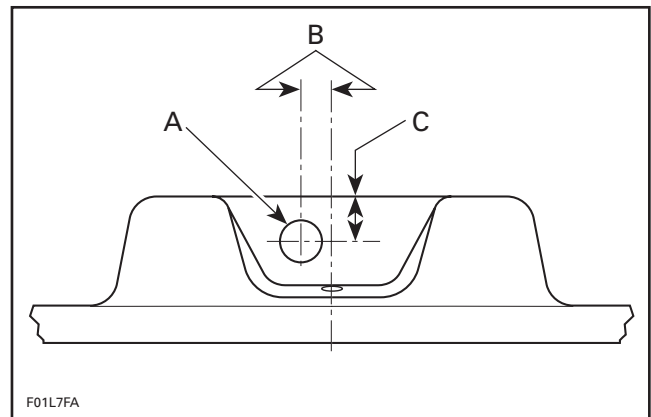


GTS/GTX 1992 TO 1995 AND GTS/GTI 1996

- A. 40 mm (1-9/16 in)
- B. 85 mm (3-5/16 in)

HX

Viewed from outside the hull looking at the stern eyelet on the HX.



REAR VIEW OF HULL

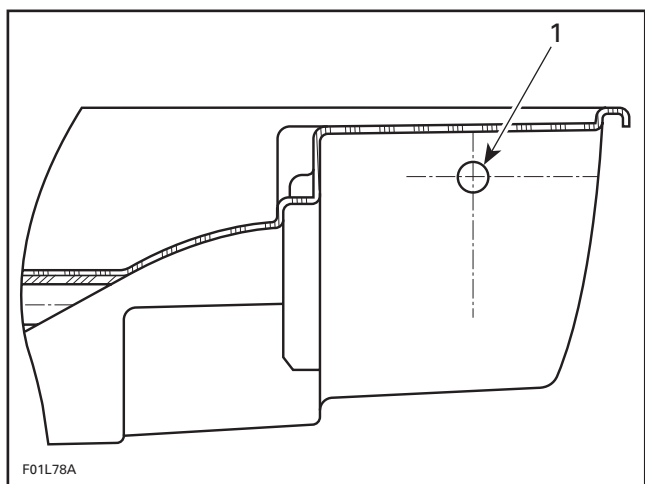
- A. 27 mm (1-1/16 in)
- B. 20 mm (5/16 in)
- C. 30 mm (1-3/16 in)

XP/SP/SPI/SPX 1995-1996 and XP 800 1995

From outside the craft use a 90° drill or remove the jet pump housing and use a conventional drill to drill the hole for the thru-hull fitting.

NOTE: The jet pump housing may need to be removed to install the thru-hull fitting.

Use the template provided at the end of these instructions to properly locate the hole for the fitting.



1. Refer to template at end of these instruction sheets

Drill a pilot hole at the specified location.

Using a 27 mm (1-1/16 in) hole saw drill the final hole for the fitting.



CAUTION

Drill at a low speed to avoid damaging the gelcoat.

Install the gasket **no. 4** under the head of the fitting then insert the fitting through the hull. From inside the boat install another gasket **no. 4** and secure the fitting with the plastic spanner nut.

NOTE: On models equipped with a jet pump extension it may be necessary to remove the jet pump to install the thru-hull fitting.

Attach the flexible hose **no. 5** to the bilge pump outlet and the thru-hull fitting with gear clamps **no. 6**. Route it as shown in the previous illustration for the bilge pump location and locking tie installation.

Secure the bilge pump hose with locking ties **no. 12** to the 2 previously installed mounts.

RELAY MODULE INSTALLATION

Unclip the electrical box from the base. Open the electrical box by releasing the 4 latches.

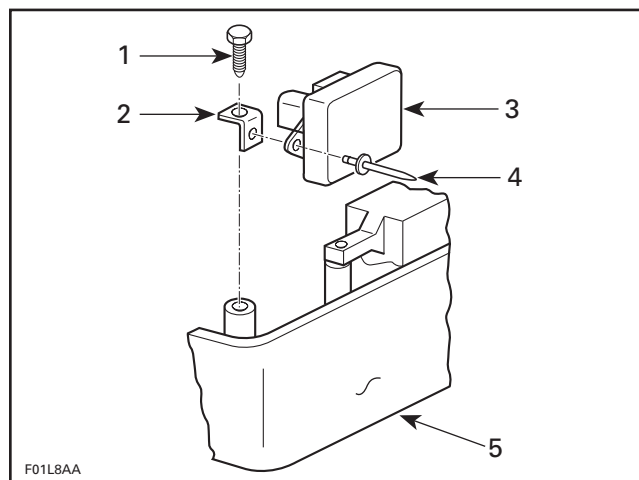
NOTE: Release the locking tie retaining the wiring harness to electrical box. This will make working with the electrical box easier.

All Models Except XP 800 1995 and XP 1996

Install the brackets **no. 8** onto the relay module **no. 7** with rivets **no. 14**.

Inside the electrical box remove the screw retaining the spark plug wire side of the ignition coil.

Install the relay module under the spark plug wires securing it with the previously removed screw and the screw **no. 9** for the other side of the module. Refer to the following illustration.



1. Bolt **no. 9**
2. Support bracket **no. 8**
3. Relay module
4. Rivet (3/16 in)
5. Electrical box

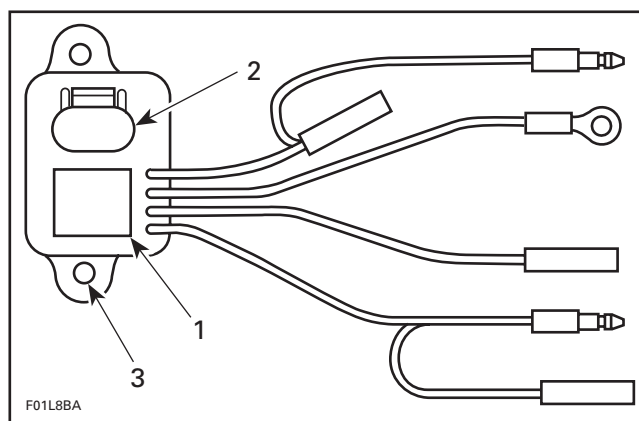
Refer to illustration on page 7 for more details.

1995 XP 800 and XP 1996

Increase the size of one of the holes in the module casing to 6.5 mm (1/4 in).

Install the straight bracket **no. 15** with rivet **no. 14** on the other side of the relay module.

Refer to the following illustration.



1. Relay
2. Fuse assembly
3. Increase the size of this hole

Mount the relay module in the electrical box. Refer to a later illustration for the XP 800 wire connections.

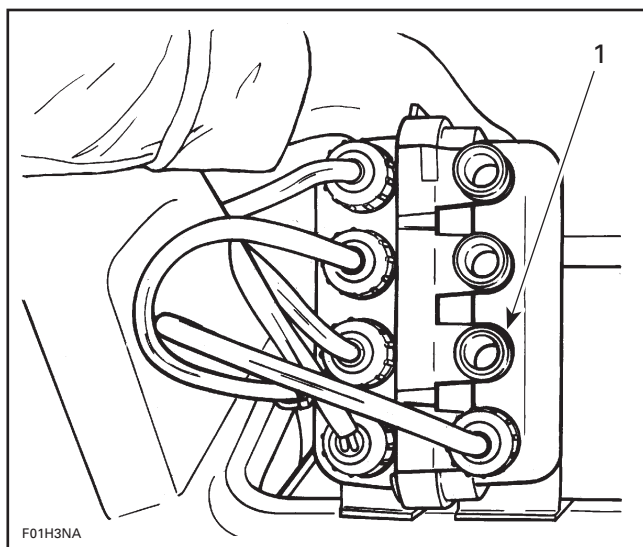
WIRE ROUTING AND CONNECTIONS

Route the bilge pump wiring harness upward across the back of the upper body then forward along the port side towards the electrical box. Refer to the previous illustration for bilge pump location.

Secure the wire harness to the locking tie mounts with locking ties **no. 12**.

ELECTRICAL BOXES WITH AN UNUSED OUTLET

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



1. Drill outlet

Insert the wire harness into the electrical box through the newly drilled hole. Tighten the cap nut sealing the grommet between the wires and electrical box.

1995 SPX and Other Models Without an Available Outlet in the Electrical Box

Locate a 2 wire harness coming into the electrical box.

Remove the cap nut sealing that harness to the electrical box. Closely inspect the grommet for 2 unused wire holes. Pierce the 2 holes through to the other side with a sharply pointed tool like a scratch awl.

Cut the connectors off of the wires coming from the bilge pump.

Insert the wires into the electrical box first passing them through the cap nut and the previously prepared grommet. Refer to the following wire connections illustration.

Install the new male terminal **no. 19** and insulating sheath **no. 20** on the BROWN wire and the new eyelet terminal **no. 18** on the BLACK wire as shown.

NOTE: Use some heat shrink tubing on the eyelet terminal.

WARNING

Make sure 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.

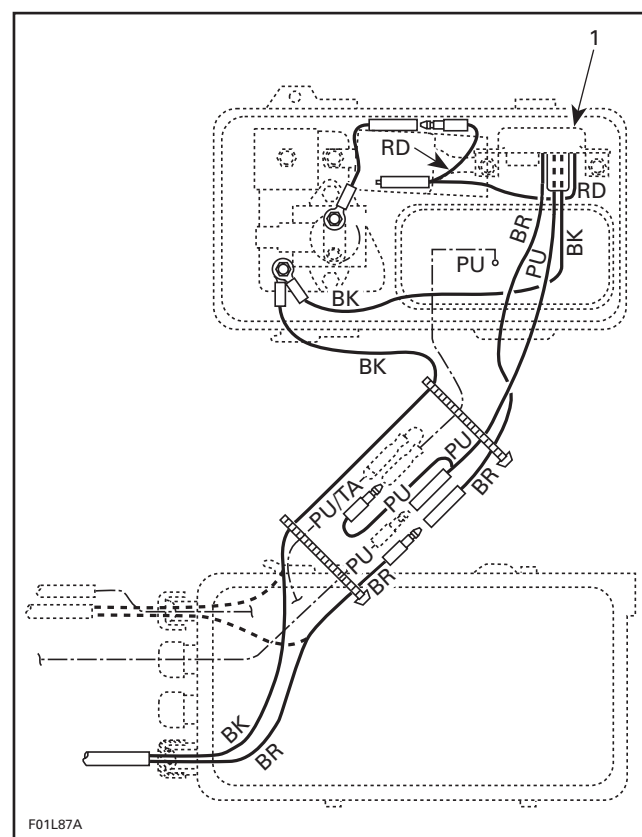
Retighten the cap nut onto the electrical box sealing the wires to the electrical box.

All Models Except XP 800

Connect the wires from the relay module and the bilge pump per the following wire diagrams.

NOTE: When installing the RED wire onto the solenoid post use a new elastic stop nut **no. 10** or **16**. Some applications use a 1/4 x 20 nut and some use a M6 nut, both are supplied with this kit.

Illustration for all models except the XP 800.



COLOR CODES

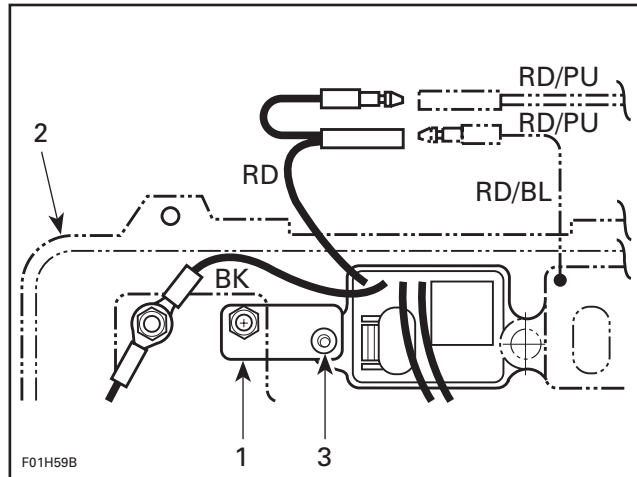
RD - RED
BR - BROWN
BK - BLACK
PU - PURPLE
TA - TAN

1. Relay assembly

Alternate wire routing for '95 SPX and other vehicles without an available outlet is shown as a dotted line.

XP 800 Only

Connect the wires as shown in the following illustration.



1. Straight relay support bracket no. 15
2. Electrical box
3. Rivet no. 14

ADDITIONAL COLOR CODE

BL - BLUE

Close the electrical box making sure all 4 latches are secure.

Reinstall the electrical box into the support tray and refasten all the locking ties.

Reinstall the battery.

Reconnect the **RED** (positive) battery cable **first**, then the **BLACK** (negative) battery cable last.



WARNING

Always reconnect the battery cables exactly in the specified order, RED positive cable first.

CHECKING HOW IT OPERATES

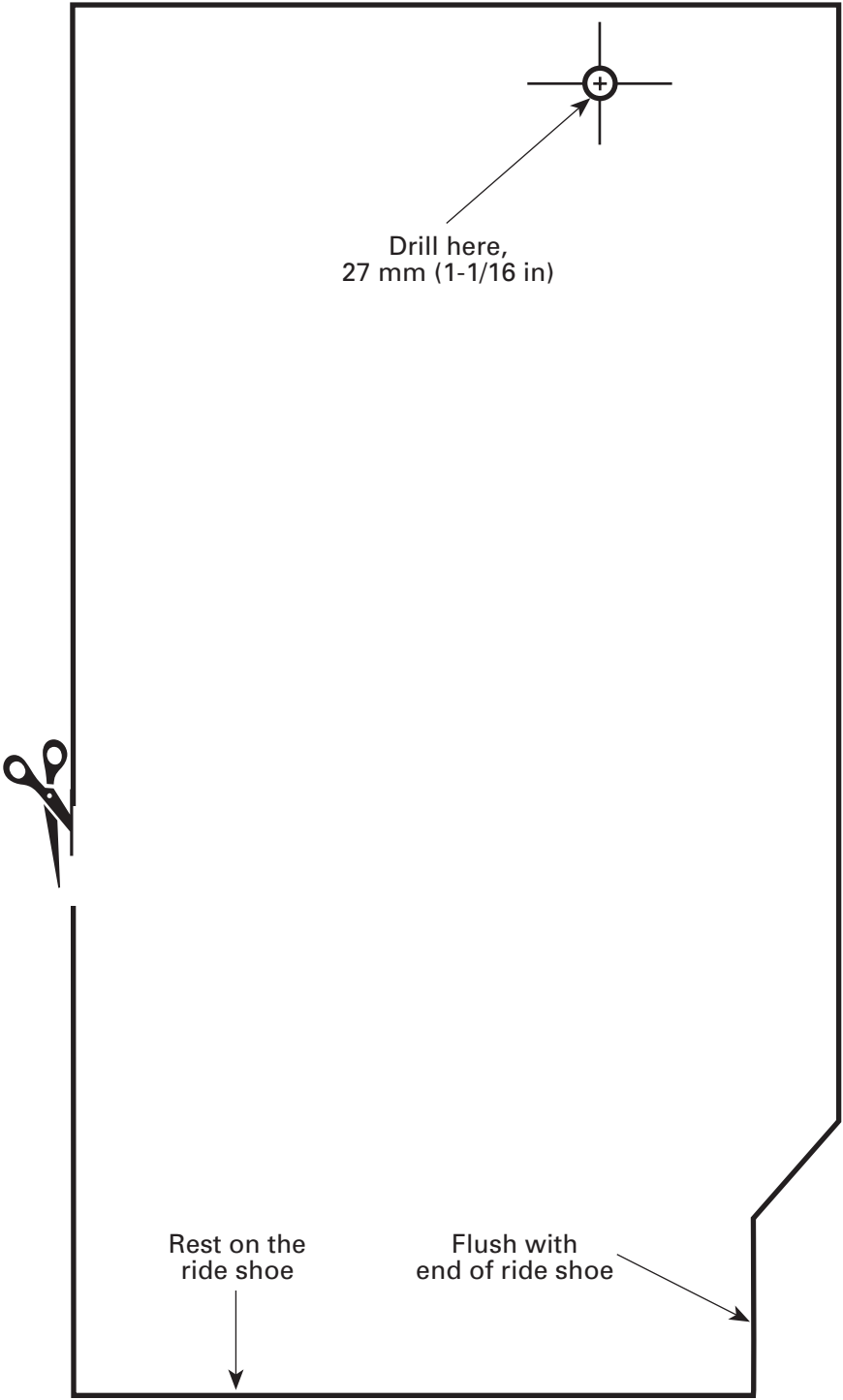
Run the craft either in a test tank or on a flushing attachment. Add a small amount of water into the bilge being careful not to contaminate the engine air intake system with water.

When the bilge pump turns on it should continue to pump water out of the bilge until the water level is no longer up to the base of the pump. Then it should shut off automatically.

While it is pumping water check for any leaks. If any are found correct them before delivering the craft to the customer.

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TEMPLATE



F01L7GS

295 500 339

1.	278 000 692	Bilge Pump Assembly	Pompe de cale
2.	271 000 475	Support Plate	Plaque d'appui
3.	293 710 015	Thru-Hull Fitting and Nut	Raccord de sortie et écrou
4.	293 250 006	Gasket (2)	Joint d'étanchéité (2)
5.	291 000 620	Flexible Hose	Boyau flexible
6.	293 650 016	Gear Clamp (2)	Collier de serrage (2)
7.	278 000 860	Relay Module	Relais
8.	271 000 476	90° Relay Support Bracket (2)	Support de 90° pour relais (2)
9.	215 461 350	Bolt 6.3 x 13 mm	Boulon 6.3 x 13 mm
10.	212 000 005	Elastic Stop Nut (1/4 x 20)	Écrou d'arrêt élastique (1/4 x 20)
11.	211 100 004	Screw 3.9 x 9.5 mm (2)	Vis 3.9 x 9.5 mm (2)
12.	293 750 002	Locking Tie (9)	Attache (9)
13.	293 750 015	Locking Tie Mount (5)	Support d'attache (5)
14.	293 150 008	3/16 Rivet (2)	Rivet 3/16 (2)
15.	278 000 769	Straight Relay Support Bracket	Support droit pour relais
16.	212 000 001	Elastic Stop Nut (M6)	Écrou d'arrêt élastique (M6)
17.	278 000 859	Power Supply Extension	Rallonge de source d'alimentation
18.	278 000 300	Ring Eyelet Terminal	Cosse à anneau
19.	278 000 230	Male Terminal	Cosse mâle
20.	278 000 231	Insulating Sheath	Gaine isolante