

# INSTALLATION INSTRUCTIONS

**ENG** **Installation Instructions**

Fuel Pressure Test Fitting

Kit numbers 3861684

**GER** **Einbauanleitung**

Kraftstoffdruck-TestBefestigung

Satznummer 3861684

**FRE** **Instructions de montage**

Ajustage de précision D'Essai De Pression  
De carburant

N°de kit 3861684

**SPA** **Instrucciones de montaje**

Guarnición De la Prueba De la Presión De  
Carburante

Kits números 3861684

**ITA** **Istruzioni di montaggio**

Montaggio Della Prova Di Pressione Del  
Carburante

Kit numero 3861684

**SWE** **Monteringsanvisning**

bränsle, drivmedel

Tätningssring  
Satsnummer 3861684





**Important!** This batch with its accompanying instructions is produced for Volvo Penta's service workshops, boat-builders, machine manufacturers and other authorized workshops which have personnel with qualified professional training.

The installation instructions are only produced for professional use and are not intended for non-professional use. Volvo Penta will not assume any liability whatsoever for damage incurred, either damage to materials or personal injury, which may result if the installation instructions are not followed or if the work is carried out by non-professional personnel.



**Wichtig!** Dieser Satz mit vorliegender Einbauanleitung ist für Volvo Penta Kundendienst-werkstätten, Werften, Maschinenbauer und für andere ermächtigte Werkstätten mit beruflich geschultem Personal vorgesehen.

Die Einbauanleitung ist nur für den berufsmäßigen Gebrauch vorgesehen und nicht für unprofessionelle Anwendung gedacht. Volvo Penta übernimmt nicht die geringste Haftung für irgendwelchen Schäden an Personen oder Sachen, die als Folge einer Nichtbefolgung der Einbauanleitung oder wegen Ausführung der darin beschriebenen Arbeiten durch nicht beruflich geschulte Personen entstehen.



**Important!** Ce kit, avec instructions de montage, est destiné aux ateliers de service Volvo Penta, aux constructeurs de bateaux et autres ateliers de construction agréés avec un personnel qualifié.

Les instructions de montage sont exclusivement conçues pour une utilisation professionnelle. Volvo Penta se dégage de toute responsabilité pour d'éventuels endommagements, corporels ou matériels, résultant du non respect des instructions ou d'un travail effectué par un personnel non compétent.



**Importante!** El presente juego con las instrucciones de montaje se destina a los talleres de servicio Volvo Penta, constructores de embarcaciones y máquinas y a otros talleres autorizados que cuentan con personal capacitado.

Las instrucciones de montaje están destinadas únicamente para uso profesional, por lo que Volvo Penta no aceptará responsabilidad alguna por cualquier daño, tanto personal como material, resultado de no haber seguido las instrucciones de montaje o de haber sido efectuado el trabajo por personal que no está debidamente capacitado.



**Importante!** Questo kit e le relative istruzioni di montaggio sono stati realizzati per le officine di servizio Volvo Penta, i cantieri, i fabbricanti di macchine e tutte le altre officine autorizzate il cui personale ha ricevuto un addestramento qualificato e specializzato.

Le istruzioni di montaggio sono state redatte esclusivamente per uso professionale e non sono adatte all'uso non professionale. La Volvo Penta non si assume alcuna responsabilità per eventuali danni alle cose o alle persone, derivanti da trascuratezza nel seguire le istruzioni di montaggio oppure dall'esecuzione dei lavori da parte di personale non qualificato.



**Viktigt!** Denna sats med föreliggande monteringsanvisning är framtagen för Volvo Pentas serviceverkstäder, båtbyggare, maskintillverkare och övriga auktoriserade verkstäder som har personal med kvalificerad fackutbildning.

Monteringsanvisningen är enbart framtagen för yrkesbruk och är inte avsedd för icke yrkesmässig användning. Volvo Penta påtager sig inget som helst ansvar för eventuella skador, såväl materiella som personskador, som kan bli följden om monteringsanvisningen ej följs, eller om arbetet utförs av icke yrkeskunnig personal.



**Vigtigt!** Dette sæt med tilhørende monteringsvejledning er blevet udviklet for Volvo Pentas serviceværksteder, bådbyggere, maskinproducenter og andre autoriserede værksteder, som har medarbejdere med kvalificeret, faglig uddannelse.

Monteringsvejledningen er udelukkende beregnet til professionel anvendelse og ikke til hobby- eller fritidsbrug. Volvo Penta påtager sig intet som helst ansvar for eventuelle skader på såvel materiel som personer, som kan være en følge af at monteringsvejledningens anvisninger ikke blev overholdt, eller hvis arbejdet blev udført af ikke-professionelt personale.



**Tärkeää!** Tämä sarja ja asennusohje on tarkoitettu Volvo Pentan huoltokorjaamoille, veneenrakentajille, konevalmistajille ja muille valtuutetuille korjaamoille, joiden henkilökunta on saanut pätevän ammattikoulutuksen.

Asennusohje on tarkoitettu ainoastaan ammattikäyttöön. Volvo Penta ei vastaa mahdollisista materiaali- tai henkilövahingoista, joita asennusohjeen laiminlyöminen tai ammattitaidottoman henkilökunnan suorittama asennustyö voi aiheuttaa.



**Belangrijk!** Deze set met de bijgevoegde montage-aanwijzing is ontwikkeld voor de werkplaatsen van Volvo Penta, botenbouwers, machinefabrikanten en overige bevoegde werkplaatsen, die personeel hebben met een gekwalificeerde vakopleiding.

De montage-aanwijzing is alleen ontwikkeld voor professioneel gebruik en is niet bedoeld voor niet-professioneel gebruik. Volvo Penta neemt geen enkele verantwoordelijkheid op zich voor eventuele schade, zowel materiële schade als persoonlijk letsel, die het gevolg kan zijn als de montage-aanwijzing niet wordt gevolgd, of als het werk wordt uitgevoerd door niet-vakkundig personeel.



**Importante!** Este jogo, juntamente com as respectivas instruções de montagem, foi concebido para as oficinas de serviço da Volvo Penta, construtores navais, construtores de máquinas e outras oficinas autorizadas, com pessoal devidamente formado.

As instruções de montagem foram concebidas unicamente para utilização profissional e não se destinam a utilização não profissional. A Volvo Penta não se responsabiliza por quaisquer danos eventuais, tanto materiais como pessoais, que possam resultar no caso de as instruções de montagem não serem seguidas, ou se os trabalhos forem executados por pessoal não profissional.



**Prosoxq!** To perioxómeno aytoú toy pakétoy mazí me tiw odhgíew synarmológhshw poy to akoloyuóun einai eidiká epilegméno gia synergeía sérbiw thw Volvo Penta, nayphgeía, kataskeyastéw mhxanón kai gia loipá ejoyisiodothména synergeía poy diauétoyn ejeidikeyméno prosvpikó.

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## INTRODUCTION

This installation instruction covers **Volvo Penta** equipment manufactured by **Volvo Penta** to be used on **Volvo Penta** products. Any use other than those specified in these instructions may give unpredictable results.

Proper preparation is extremely helpful for efficient service work. A clean work area at the start of the job will minimize tools and parts becoming misplaced. Obtain tools, instruments and parts needed for the job before work is started. Interrupting a job to locate special tools or repair kits is a needless delay.

## SERVICE POLICY

Whether within or following the warranty period, **Volvo Penta** has a constant interest in our products.

It is **Volvo Penta's** policy to provide dealers with service knowledge so they can give professional service demanded by today's consumer. **Volvo Penta** Service Schools, frequent mailing of Service Bulletins, Letters and Promotions, Special Tools and these instructions represent **Volvo Penta's** efforts in giving consumers the best and most prompt service possible. If a service question does not appear to be answered in these instructions, you are invited to call or write to the **Volvo Penta** Service Department for additional help. Always be sure to give complete information, including engine model and serial number.

Be sure you are familiar with **Volvo Penta's** Warranty. If you have any questions, call or write the **Volvo Penta** Service Department. If other than genuine **Volvo Penta** parts and components are used, **Volvo Penta** may refuse subsequent warranty claims involving that engine.

When a brand-name product or specific tool is specified, another item may be used. However, the substitute must have equivalent characteristics, including type, strength, and material. It is your responsibility to determine if incorrect substitution could result in product malfunction and personal injury to anyone. To avoid hazards, equivalent products which are used must meet all U.S. Coast Guard Safety Regulations and ABYC standards.

## REFERENCES, ILLUSTRATIONS AND SPECIFICATIONS

**Volvo Penta** reserves the right to make changes at anytime, without notice, to specifications, models, and procedures. Also, the right to change any specifications or parts at any time without incurring any obligation to equip same models manufactured prior to date of such change. All information, photographs, illustrations, and specifications, contained in these instructions are based on the latest information available at the time of printing.

Photographs and illustrations used in this instruction may not depict actual models or equipment. The continuing accuracy of this installation instruction cannot be guaranteed.

Use the general torque specification for all fasteners unless otherwise specified in the instructions.

## IMPORTANT SAFETY NOTICES

Carefully observe the safety alert symbols below for dangers, warnings, and cautions. They alert installers and operators of possible dangers or important information contained in this manual.

**HOWEVER: Warnings alone do not eliminate hazards, nor are they a substitute for safe boat handling and proper accident prevention measures!**



**Failure to comply with a danger symbol will result in serious injury or death to boat operator, boat occupants, and/or others.**



**Failure to comply with a warning may result in injury or death to boat operator, boat occupants and/or others.**



**Failure to comply with a caution may result in failure or damage to the equipment.**



**Special attention should be used to prevent incorrect assembly or disassembly.**

## KIT PURPOSE

This kit will allow the technician to check the fuel pressure on the high pressure fuel line that feeds the fuel rails on engines not equipped with a check fitting.

### **CAUTION**

This kit is for a tool that could potentially be installed and removed from several engines. As such, any time the fuel lines are disconnected it is mandatory that a new O-ring be used in each instance. Be sure to have ample supplies of O-ring 3850424 for the fuel feed line and O-ring 3850423 for the fuel return line if the fitting is to be installed and removed in multiple applications..

## KIT CONTENTS

Part No.	Description	Qty
3861683	Fuel pressure test fitting	1
3850424	O-ring	1

## TOOLS REQUIRED

½ in open end wrench  
⅝ in open end wrench  
5/8 in open end wrench  
¾ in open end wrench  
1 in open end wrench  
1 ¼ in open end wrench

## INSTALLATION

### **CAUTION**

Disconnect the battery before attempting any repairs on the fuel system.



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1. Using a 5/8 in open end wrench and a 7/8 in open end wrench on the fuel pump fitting as a counterhold, remove the fuel line fitting from the fuel pump fitting.

### **CAUTION**

Gasoline vapors are explosive. Use a shop towel to capture any fuel that will leak from the fuel lines when disconnected. Dispose of the towel in an approved container.



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2. Using a 9/16 in open end wrench as a counterhold on the fuel pump, loosen and remove the fuel pump adapter fitting from the fuel pump using a 7/8 in open end wrench.



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3. Using a 3/4 in open end wrench as a counterhold, use a 5/8 in open end wrench to remove the fuel return line from the Fuel Cell.





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4. Verify the fuel pressure test fitting has the O-ring inplace and is not damaged. Install the fuel pressure test fitting into the high pressure fuel pump on the fuel cell. Orient the Schrader valve to starboard to prevent damage from the front of engine compartment.



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5. Tighten the fuel pressure test fitting lock nut using a 1/2 in open end wrench and a 9/16 open end wrench on the fuel pump as a counterhold.



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6. Verify the O-ring is not damaged on the fuel return line and reinstall to the fuel cell.



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7. Remove the original O-ring from the fuel feed line and install the new O-ring P/N 3850424 on the fuel line.



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8. Install the fuel feed line into the fuel pressure test fitting and tighten with a 5/8 in open end wrench using a 3/4 in open end wrench on the test fitting as a counterhold.



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9. Install the test fitting protective cap.
10. Verify that there are no gasoline vapors present, reconnect the battery to the vessel's electrical system.
11. Follow the vessels recommended starting procedure and test run the engine to check for fuel leaks. If leaks are found repair as necessary before return the vessel to service.





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