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Sierra 18-35437

Sierra Mechanical Fuel Pump Model 18-35437 Instruction Manual

Model: 18-35437 | Brand: Sierra

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Sierra Mechanical Fuel Pump, Model 18-35437. This fuel pump is designed for reliable fuel delivery in Personal Water Craft (PWC) applications. Please read this manual thoroughly before attempting any installation or maintenance procedures to ensure safe and correct usage.

2. SAFETY INFORMATION

Always prioritize safety when working with fuel systems. Failure to follow these safety guidelines may result in serious injury or property damage.

- Ensure the engine is cool and disconnected from its power source before beginning any work.
- Work in a well-ventilated area to avoid inhaling fuel fumes.
- Keep open flames, sparks, and other ignition sources away from the work area.
- Wear appropriate personal protective equipment, including safety glasses and fuel-resistant gloves.
- Have a fire extinguisher readily available.
- Properly dispose of any spilled fuel or contaminated materials according to local regulations.
- If you are unsure about any step, consult a qualified marine mechanic.

3. PRODUCT OVERVIEW

The Sierra Mechanical Fuel Pump 18-35437 is a critical component for delivering fuel from the tank to the engine's carburetor. It operates mechanically, typically driven by the engine's camshaft.



Figure 1: Sierra Mechanical Fuel Pump Model 18-35437. This image shows the complete fuel pump assembly, including the main body, lever arm, and fuel filter bowl at the bottom.

Components:

- **Pump Body:** The main housing containing the diaphragm and valves.
- **Actuator Lever:** Engages with the engine's camshaft to operate the pump.
- **Fuel Inlet/Outlet Ports:** Connections for fuel lines.
- **Filter Bowl (if applicable):** A removable bowl, often glass or metal, that houses a fuel filter element.
- **Gaskets:** Included for a proper seal during installation.

4. SPECIFICATIONS

| Feature | Detail |
|---|---|
| Brand | Sierra |
| Model Number | 18-35437 |
| Fit Type | Universal Fit (for specified engines) |
| Vehicle Service Type | PWC (Personal Water Craft) |
| Approximate Dimensions (L x W x H) | 0.39 x 0.39 x 0.39 inches (Note: These dimensions seem unusually small and may refer to packaging or a specific component, not the overall pump. Refer to actual product for precise measurements.) |
| Material | Metal Alloy (main body), Glass (filter bowl, if applicable) |
| Item Weight | 2 Pounds |
| Operation Mode | Mechanical |
| Included Components | Fuel Pump, Gaskets |

5. INSTALLATION

Proper installation is crucial for the performance and longevity of your fuel pump. Always refer to your engine's service manual for specific torque specifications and procedures.

Required Tools:

- Wrenches/Sockets (appropriate sizes for fuel line fittings and mounting bolts)
- Screwdriver (if applicable)
- Drain pan for fuel
- Shop rags
- Sealant (fuel-resistant, if recommended by engine manufacturer)

Installation Steps:

1. **Preparation:** Ensure the engine is off and cool. Disconnect the battery. Place a drain pan under the fuel pump to catch any spilled fuel.

- Remove Old Pump:** Carefully disconnect the fuel lines from the old pump. Note the orientation of the inlet and outlet lines. Remove the mounting bolts and detach the old fuel pump.
- Clean Mounting Surface:** Thoroughly clean the engine block's mounting surface, removing any old gasket material or debris.
- Install New Gaskets:** Apply a thin layer of fuel-resistant sealant (if recommended) to both sides of the new gaskets provided with the pump. Position the gaskets on the engine block or the new pump.
- Mount New Pump:** Carefully align the new Sierra 18-35437 fuel pump with the mounting holes. Ensure the actuator lever is correctly positioned to engage with the camshaft. Install the mounting bolts and tighten them evenly to the manufacturer's specified torque.
- Connect Fuel Lines:** Reconnect the fuel inlet and outlet lines to the appropriate ports on the new pump. Ensure all connections are secure and leak-free.
- Final Checks:** Reconnect the battery. Before starting the engine, inspect all fuel connections for leaks. Prime the fuel system if necessary, following your engine manufacturer's guidelines.

6. OPERATION

The Sierra Mechanical Fuel Pump 18-35437 operates automatically once the engine is running. It draws fuel from the tank and delivers it under pressure to the carburetor.

- After installation, start the engine and carefully check for any fuel leaks around the pump and fuel lines.
- Monitor engine performance. A properly functioning fuel pump will ensure consistent fuel delivery, contributing to smooth engine operation.

7. MAINTENANCE

Regular maintenance helps extend the life of your fuel pump and ensures optimal engine performance.

- Visual Inspection:** Periodically inspect the fuel pump and surrounding fuel lines for any signs of leaks, cracks, or damage.
- Fuel Filter:** If your pump includes a removable filter bowl, inspect and clean or replace the fuel filter element as recommended by your engine manufacturer.
- Connections:** Ensure all fuel line connections remain tight and secure.
- Actuator Lever:** Check the actuator lever for excessive wear or damage.

8. TROUBLESHOOTING

If you experience issues with your fuel system, the following table provides common symptoms and potential solutions related to the fuel pump.

| Symptom | Possible Cause | Solution |
|--------------------------------------|---|--|
| Engine Cranks but Won't Start | No fuel delivery, clogged fuel filter, faulty pump diaphragm. | Check fuel level. Inspect fuel lines for blockages. Replace fuel filter. Test fuel pump output pressure. |
| Engine Stalls or Runs Rough | Inconsistent fuel delivery, low fuel pressure. | Check for air leaks in fuel lines. Inspect fuel filter. Verify proper pump operation. |
| Fuel Leaks from Pump | Damaged gaskets, loose fittings, cracked pump housing. | Tighten fittings. Replace gaskets. If housing is cracked, replace the pump. |
| Excessive Noise from Pump | Internal wear, air in fuel system. | Bleed air from fuel system. If noise persists, pump may be failing and require replacement. |

| Symptom | Possible Cause | Solution |
|---------|----------------|----------|
|---------|----------------|----------|

For issues not covered here, or if troubleshooting steps do not resolve the problem, it is recommended to consult a professional marine mechanic.

9. WARRANTY AND SUPPORT

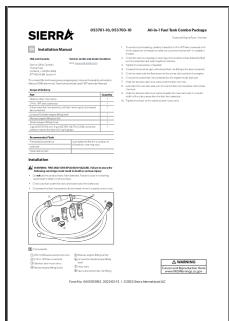
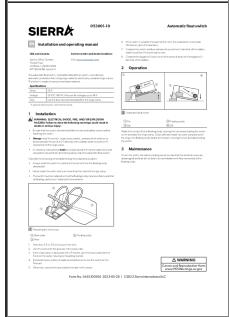
For specific warranty information regarding your Sierra Mechanical Fuel Pump Model 18-35437, please refer to the documentation included with your purchase or contact Sierra customer support directly. Keep your proof of purchase for warranty claims.

Sierra Customer Support:

Visit the official Sierra website for contact details and support resources.

Refer to the product packaging for any specific support phone numbers or email addresses.

Related Documents - 18-35437

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|--|---|
|  | <p><u>Sierra All-in-1 Fuel Tank Combo Package Installation Manual</u> Installation guide for the Sierra All-in-1 Fuel Tank Combo Package (models 053701-10, 053703-10). This document provides detailed instructions, scope of delivery, recommended tools, and component identification for universal outboard engine fuel systems.</p> |
|  | <p><u>Sierra STATS Engine Diagnostics Operating Manual</u> Operating manual for the Sierra STATS diagnostic tool, covering marine engine diagnostics, features, and support for major brands like Mercury, Yamaha, Suzuki, Honda, Volvo, Yanmar, Kawasaki, and BRP.</p> |
|  | <p><u>Sierra Automatic Float Switch 053001-10: Installation and Operating Manual</u> Detailed installation and operating guide for the Sierra Automatic Float Switch (Model 053001-10). Learn how to safely install, operate, and maintain this corrosion-resistant bilge pump switch for reliable boat bilge water management.</p> |



[Leisure Suit Larry Hint Book - Sierra On-Line Game Guide](#)

Comprehensive hint book for Sierra On-Line's Leisure Suit Larry adventure game. Includes walk-throughs, maps, object locations, solutions, and FAQs to help players complete the game.



[Sierra SRSP-18 Stock Pot Range Owner's Manual: Installation & Operation Guide](#)

Comprehensive owner's manual for the Sierra SRSP-18 Stock Pot Range, detailing installation, operation, maintenance, and troubleshooting for commercial kitchens.



[Sierra SRMG Series Manual Griddles Owner's Manual](#)

This owner's manual provides comprehensive instructions for the installation, operation, and maintenance of Sierra SRMG series manual griddles, including models SRMG-12, SRMG-24, SRMG-36, SRMG-48, and SRMG-60. Essential for qualified personnel.