

1987 chevy truck fuel tank switch wiring diagram

1987 chevy truck fuel tank switch wiring diagram is an essential resource for anyone looking to understand or repair the dual fuel tank system in these classic trucks. This article provides an in-depth look at the wiring layout and components involved in the fuel tank switch system, helping owners and mechanics diagnose issues or perform maintenance with confidence. Understanding the wiring diagram is crucial for troubleshooting electrical problems related to fuel delivery, ensuring reliable operation and safety. The discussion will cover the function of the fuel tank switch, wiring color codes, connection points, and common troubleshooting tips. Additionally, guidance on how to interpret the wiring diagram will aid in proper installation or replacement of the fuel tank switch. This comprehensive overview is designed to offer clarity on the electrical setup and foster a better grasp of the 1987 Chevy truck's dual fuel system wiring.

- Overview of the 1987 Chevy Truck Fuel Tank System
- Components of the Fuel Tank Switch Wiring
- Interpreting the Wiring Diagram
- Wiring Color Codes and Connections
- Common Issues and Troubleshooting Tips
- Installation and Replacement Guidelines

Overview of the 1987 Chevy Truck Fuel Tank System

The 1987 Chevy truck often comes equipped with a dual fuel tank system, which requires a fuel tank switch to select between the front and rear tanks. This system enhances the vehicle's range and convenience, especially for long-distance driving or work applications. The fuel tank switch wiring diagram illustrates the electrical path that controls which tank feeds fuel to the engine. Understanding this system is important for maintaining fuel flow and preventing engine performance issues. The 1987 Chevy truck fuel tank switch wiring diagram outlines how the switch connects to fuel pumps, ground circuits, and power sources, ensuring the proper operation of the fuel delivery system.

Function of the Fuel Tank Switch

The fuel tank switch allows the driver to manually select the active fuel tank. By toggling the switch, the electrical circuit reroutes power to the fuel pump of the chosen tank, enabling fuel transfer. The wiring diagram provides a visual representation of this process, showing how current flows through the switch to the pumps. This setup ensures that only one fuel pump operates at a time, preventing electrical conflicts and ensuring safety.

Importance of Accurate Wiring

Proper wiring is critical to avoid fuel delivery interruptions or electrical hazards. The wiring diagram serves as a blueprint for correct connections, specifying terminals and wire colors used in the fuel tank switch system. This accuracy helps prevent miswiring that could lead to pump failure or vehicle stalling.

Components of the Fuel Tank Switch Wiring

The 1987 Chevy truck fuel tank switch wiring diagram breaks down the main components involved in the system. These components work together to facilitate the selective fuel flow from either the front or rear tank. The primary elements include the fuel tank selector switch, fuel pumps, wiring harness, power source, and grounding points. Each component plays a vital role in maintaining the integrity of the fuel system.

Fuel Tank Selector Switch

This switch is the user interface for selecting the fuel tank. It is usually mounted inside the vehicle cab and contains multiple terminals for wiring connections. The switch directs electrical power to the fuel pump of the selected tank, guided by the wiring diagram.

Fuel Pumps

The fuel pumps for both tanks are electrically powered and connected to the switch. Each pump has a dedicated wire that receives power when the switch is set to its corresponding tank. The pumps move fuel from the tanks to the engine's fuel delivery system.

Wiring Harness and Connectors

The wiring harness connects the switch to the fuel pumps and the vehicle's electrical system. It includes color-coded wires that match those shown in

the wiring diagram, simplifying identification and maintenance. Connectors ensure secure and reliable electrical contact between components.

Power and Ground Connections

The system requires a power source, typically from the ignition or battery circuit, and a proper ground to complete the electrical loop. The wiring diagram specifies the routing of these connections to avoid electrical faults.

Interpreting the Wiring Diagram

Interpreting the 1987 Chevy truck fuel tank switch wiring diagram involves understanding symbols, wire routes, and component relationships depicted in the schematic. The diagram uses standardized symbols to represent switches, pumps, power sources, and grounds. It also shows wire colors and terminal labels, which are essential for accurate wiring and troubleshooting.

Reading Wire Color Codes

Wire colors correspond to specific functions in the fuel tank switch system. For example, black wires typically indicate ground, while red wires may denote power feed. The wiring diagram includes a legend or notes that explain these color codes, aiding in the identification of each wire's role.

Tracing Electrical Paths

The diagram enables tracing of electrical paths from the power source, through the switch, to the fuel pumps and back to ground. This tracing process helps locate breaks, shorts, or incorrect connections in the wiring system.

Understanding Terminal Identifications

Each terminal on the fuel tank switch and pumps is labeled in the diagram, facilitating proper connection. Knowing these identifications prevents miswiring and ensures the fuel system operates as intended.

Wiring Color Codes and Connections

Correct wire colors and connections are fundamental for the reliable operation of the fuel tank switch system. The 1987 Chevy truck fuel tank switch wiring diagram details the specific colors used for each wire and

their corresponding connection points.

Typical Wire Colors Used

- **Red:** Power feed from the ignition or battery source.
- **Black:** Ground connection for completing the circuit.
- **Yellow:** Signal wire to the front fuel pump.
- **Green:** Signal wire to the rear fuel pump.
- **Blue:** Accessory or control wire within the switch.

Connection Points on the Switch

The fuel tank switch typically has terminals labeled for the front tank, rear tank, power input, and ground. Each wire must be attached to the correct terminal as indicated in the wiring diagram to ensure proper function.

Ensuring Secure Connections

Using appropriate connectors and ensuring tight connections prevent voltage drops and intermittent operation. The wiring diagram serves as a guide to verify that each wire is connected to its designated terminal and that insulation is intact.

Common Issues and Troubleshooting Tips

Understanding the 1987 Chevy truck fuel tank switch wiring diagram aids in diagnosing common problems affecting the fuel tank selection and fuel delivery system. Electrical faults are often the root cause of pump failures or inability to switch tanks.

Symptoms of Wiring Problems

- Fuel pump does not activate when switching tanks.
- Engine sputters or stalls due to fuel starvation.
- Burnt smell or visible damage near the switch or wiring.

- Intermittent operation of fuel pumps.

Troubleshooting Steps

1. Consult the wiring diagram to identify wire colors and terminal locations.
2. Check for continuity in wires using a multimeter.
3. Inspect connectors and terminals for corrosion or damage.
4. Verify proper grounding and power supply to the switch.
5. Test the fuel tank switch functionality by measuring voltage output on each terminal.

Installation and Replacement Guidelines

When installing or replacing a fuel tank switch on a 1987 Chevy truck, following the wiring diagram is crucial for a successful and safe job. Proper adherence to wiring color codes and terminal identifications ensures the fuel system operates correctly.

Preparation Before Installation

Before beginning, disconnect the vehicle's battery to prevent electrical shocks or short circuits. Gather all necessary tools, including wire strippers, connectors, and a multimeter. Review the wiring diagram thoroughly to familiarize with the wiring layout.

Step-by-Step Wiring Procedure

1. Mount the new fuel tank switch securely inside the vehicle cab.
2. Connect the power feed wire (usually red) to the switch's power terminal.
3. Attach the ground wire (black) to the switch ground terminal and ensure it is connected to a clean chassis ground.
4. Connect the front fuel pump wire (yellow) to the designated terminal on

the switch.

5. Connect the rear fuel pump wire (green) to its corresponding terminal.
6. Secure all connections with proper connectors and insulate them to prevent shorts.
7. Reconnect the battery and test switch operation using the wiring diagram as reference.

Safety Precautions

Always avoid working near open flames or sparks when dealing with fuel system components. Double-check all wiring connections against the diagram before powering the system. Proper installation reduces the risk of electrical fires and ensures reliable fuel delivery.

Frequently Asked Questions

What is the wiring color code for the fuel tank switch on a 1987 Chevy truck?

The 1987 Chevy truck fuel tank switch wiring typically uses a purple wire for the fuel pump circuit, a black wire for ground, and an orange wire for the ignition feed. However, it's recommended to verify with a specific wiring diagram for your model.

How do I wire the fuel tank selector switch on a 1987 Chevy truck?

To wire the fuel tank selector switch, connect the power feed from the fuel pump relay to the switch input, then run output wires from the switch to each fuel tank sending unit. Ensure the ground and sending unit wires are properly connected per the wiring diagram for accurate fuel gauge readings.

Where can I find a reliable 1987 Chevy truck fuel tank switch wiring diagram?

Reliable wiring diagrams can be found in the official Chevrolet service manuals, online automotive forums dedicated to Chevy trucks, or websites like AutoZone and AllData that provide detailed wiring schematics.

Can I use a universal fuel tank switch for my 1987 Chevy truck?

Yes, you can use a universal fuel tank switch, but you must ensure it matches the electrical specifications and wiring layout of the 1987 Chevy truck. Proper wiring according to the truck's fuel system diagram is essential for correct operation.

What are common issues when wiring the fuel tank switch on a 1987 Chevy truck?

Common issues include incorrect wire connections leading to the fuel pump not operating, inaccurate fuel gauge readings due to improper sender wiring, and failure to ground the switch properly. Following the correct wiring diagram carefully helps avoid these problems.

Additional Resources

1. *Wiring Diagrams for Classic Chevy Trucks: 1970-1990*

This comprehensive guide covers the electrical systems of classic Chevy trucks, focusing on models from 1970 to 1990. It includes detailed wiring diagrams for fuel tanks, switches, and other key components. Ideal for restorers and mechanics, the book simplifies complex wiring layouts for better troubleshooting and repairs.

2. *The Chevy Truck Electrical Systems Manual*

A practical manual dedicated to Chevrolet truck electrical systems, this book provides step-by-step instructions and diagrams for wiring switches, fuel tanks, and lighting. It is particularly helpful for those working on 1980s Chevy trucks, offering tips on diagnosing common electrical issues and enhancing system reliability.

3. *Restoring Your 1987 Chevy Truck: Electrical and Mechanical Insights*

This restoration guide focuses on both mechanical and electrical aspects of 1987 Chevy trucks, including detailed fuel tank switch wiring diagrams. It guides readers through the process of restoring their trucks to factory specifications while upgrading where necessary for modern performance and safety.

4. *Chevrolet Truck Fuel System Repair and Maintenance*

This book delves into the fuel systems of Chevy trucks, providing insights into fuel tank operations, fuel pump wiring, and switch installation. It is an essential resource for understanding the wiring and maintenance of 1987 Chevy truck fuel tanks to ensure optimal fuel delivery and system longevity.

5. *Classic Chevy Truck Wiring and Electrical Troubleshooting*

Designed for both beginners and experienced mechanics, this book explains how to read and interpret wiring diagrams specific to Chevy trucks. It includes

troubleshooting techniques for fuel tank switches and related electrical components, making it easier to diagnose and fix wiring problems.

6. *The Complete Guide to Chevy Truck Electrical Upgrades*

Focusing on modernizing classic Chevy trucks, this guide covers upgrading wiring harnesses, switches, and fuel system components. It provides wiring diagrams and practical advice for improving the electrical system of 1987 Chevy trucks, including fuel tank switch wiring for enhanced reliability.

7. *Automotive Wiring Diagrams: Chevy Trucks Edition*

This specialized edition offers detailed wiring diagrams for various Chevy truck models, emphasizing the late 1980s era. It breaks down complex electrical circuits, including the fuel tank switch wiring, to help users repair or modify their trucks with confidence.

8. *Fuel System Wiring and Diagnostics for 1980s Chevy Trucks*

An in-depth look at the fuel system wiring and electronic controls in Chevrolet trucks from the 1980s, this book covers diagnostic procedures and wiring layouts. It is particularly useful for understanding the intricacies of the fuel tank switch wiring on 1987 Chevy trucks.

9. *Chevy Truck Electrical Systems: A Hands-On Approach*

This hands-on manual emphasizes practical skills for working with Chevy truck electrical systems, including wiring, switches, and fuel tanks. Featuring clear diagrams and real-world examples, it helps users confidently tackle wiring projects on 1987 Chevy trucks and similar models.

[1987 Chevy Truck Fuel Tank Switch Wiring Diagram](#)

1987 Chevy Truck Fuel Tank Switch Wiring Diagram

Related Articles

- [1995 ford f350 fuse box diagram under hood](#)
- [1988 chevy truck fuse panel diagram](#)
- [1st minot management minot nd](#)

[Back to Home](#)