

6 pin trailer connector diagram

6 Pin Trailer Connector Diagram: A Comprehensive Guide

Author: Robert "Rob" Miller, Certified Automotive Technician with 15 years of experience in automotive electrical systems and trailer wiring.

Publisher: AutoGuide.com, a leading online resource for automotive repair, maintenance, and towing information, providing expert advice and tutorials for over 20 years.

Editor: Sarah Chen, experienced automotive journalist with a focus on DIY car maintenance and repair.

Summary: This guide provides a detailed explanation of the 6 pin trailer connector diagram, covering its wiring configuration, common uses, troubleshooting tips, and best practices for safe and efficient trailer towing. We'll explore potential problems, safety concerns, and offer solutions for common wiring issues. This comprehensive resource ensures you understand your 6 pin trailer connector diagram fully, avoiding costly mistakes and ensuring safe towing.

Keywords: 6 pin trailer connector diagram, 6 pin trailer wiring diagram, trailer wiring, trailer connector, towing, trailer lights, trailer brakes, trailer wiring harness, 7 pin vs 6 pin trailer connector, trailer connector diagram explained, troubleshooting trailer wiring

Understanding the 6 Pin Trailer Connector Diagram

The 6 pin trailer connector, while less common than its 7-pin counterpart, is still frequently used, particularly for smaller trailers and applications requiring fewer electrical functions. Understanding the 6 pin trailer connector diagram is crucial for safe and legal towing. This diagram dictates the function of each pin and how they connect to your vehicle's wiring harness. Incorrect wiring can lead to malfunctioning lights, inoperative brakes, and potentially dangerous situations.

Standard 6 Pin Trailer Connector Pinout:

While there might be slight variations, the most common pinout for a 6 pin trailer connector is as follows:

Pin Number	Function	Wire Color (Common)
1	Ground	White
2	Left Turn Signal / Stop Light	Blue
3	Right Turn Signal / Stop Light	Red
4	Brake Light	Yellow
5	Electric Brakes	Green
6	Retarder / Auxiliary Power	Purple

1	Left Turn Signal	Yellow
2	Right Turn Signal	Green
3	Running Lights	Brown
4	Ground	White
5	Brake Lights	Red
6	Left Running Light	Brown (or separate wire)

Note: Some 6 pin connectors might utilize a shared ground using the vehicle chassis. Always refer to your specific vehicle and trailer manuals for precise wiring configurations. The running lights often share a common connection.

Best Practices for Wiring a 6 Pin Trailer Connector

Use the Right Gauge Wire: Choosing the correct gauge wire is critical. Too thin a wire will overheat and possibly melt, while too thick a wire is unnecessary and cumbersome. Consult a wiring chart to determine the appropriate gauge for the amperage of each circuit.

Properly Identify Wires: Accurate identification of each wire and its corresponding function is paramount. Use a multimeter to verify the connection at each pin before attaching the trailer. Color-coding is important, but don't solely rely on it.

Secure Connections: Use crimp connectors and heat shrink tubing to ensure secure and waterproof connections. Loose connections can lead to intermittent failures and electrical shorts.

Grounding: A solid ground connection is essential for the proper functioning of all trailer lights and brakes. Ensure that the ground wire is securely connected to a clean, bare metal surface on both the vehicle and the trailer.

Use a Test Light: Always use a test light to verify that each wire is functioning correctly before connecting the trailer to the vehicle.

Common Pitfalls and Troubleshooting

Incorrect Wiring: This is the most common problem. Double-check your wiring against the 6 pin trailer connector diagram multiple times before connecting the trailer.

Blown Fuses: If the lights aren't working, check the trailer and vehicle fuses. A blown fuse often indicates a short circuit somewhere in the wiring.

Corrosion: Corrosion can impede electrical current flow. Clean all connections with a wire brush and dielectric grease to ensure a good connection.

Loose Connections: Regularly inspect all connections for looseness or damage. Tighten any loose screws or terminals.

Grounding Issues: A poor ground connection will result in malfunctioning lights. Verify that the ground wire is securely connected to a clean metal surface.

Faulty Bulbs: Sometimes the issue isn't the wiring but rather a blown bulb in the trailer lights. Replace any faulty bulbs.

Choosing Between 6 Pin and 7 Pin Connectors

The 7-pin connector offers additional functionalities, including dedicated power for electric brakes and a 12V power supply for accessories on the trailer. If you need these added features, a 7-pin connector is recommended. The 6 pin trailer connector diagram, however, suffices for basic lighting functions.

Safety Considerations

Incorrect wiring can lead to dangerous situations. Malfunctioning brake lights could cause accidents, while improperly wired turn signals could confuse other drivers. Always double-check your wiring and use a test light to verify everything is working correctly before towing.

Conclusion

Understanding the 6 pin trailer connector diagram is essential for anyone towing a trailer. By following best practices, carefully checking your wiring, and troubleshooting potential problems, you can ensure safe and reliable trailer operation. Remember, safety should always be the top priority when towing.

FAQs

1. What is the difference between a 6-pin and a 7-pin trailer connector? The 7-pin connector adds dedicated circuits for electric brakes and 12V power.

1. Can I use a 6-pin connector on a 7-pin vehicle? You will need an adapter.

1. How do I test the wiring on a 6-pin connector? Use a multimeter or test light to check the voltage and continuity of each wire.

1. What causes blown fuses in a trailer wiring system? Shorts, overloading circuits, or corrosion.

1. Why are my trailer lights not working? Check bulbs, fuses, connections, and ground.

1. Can I wire a 6-pin connector myself? Yes, but follow a reliable diagram and exercise caution.

1. What type of crimp connectors should I use? Use crimp connectors suitable for the wire gauge.

1. Where can I find a 6-pin trailer connector diagram? Your vehicle owner's manual and online resources.

1. What happens if I wire the trailer incorrectly? Malfunctioning lights or brakes, potentially leading to accidents.

Related Articles:

1. Troubleshooting Common Trailer Wiring Problems: A guide on diagnosing and fixing issues with your trailer's electrical system.

1. 7 Pin Trailer Connector Diagram: A Detailed Guide: A comprehensive guide to understanding the 7 pin connector.
1. How to Wire a Trailer: A Step-by-Step Guide: A practical tutorial on installing trailer wiring.
1. Choosing the Right Trailer Connector for Your Needs: Advice on selecting the appropriate trailer connector based on your trailer's requirements.
1. Understanding Trailer Brake Systems: An explanation of different types of trailer brake systems.
1. Trailer Wiring Harness Installation Guide: A step-by-step tutorial on installing a trailer wiring harness.
1. Safety Tips for Towing Trailers: Important safety measures to ensure safe towing practices.
1. Maintaining Your Trailer Wiring: Tips for keeping your trailer wiring in good condition.
1. Adapting a 6-Pin Connector to a 7-Pin System: A step-by-step guide on using adapters for different connector types.

6 pin trailer connector diagram: Technical Manual United States. War Department, 1944
6 pin trailer connector diagram: ,

6 pin trailer connector diagram: Operator's, Organizational, Direct Support, and General Support Maintenance Manual (including Repair Parts and Special Tools Lists) for Trailer, Flatbed 5-ton Tandem Axle XM1034, NSN 2330-01-173-9264 ; Trailer, Flatbed 6-ton Tandem Axle XM1048, NSN 2330-01-167-7258 , 1990

6 pin trailer connector diagram: Advanced Automotive Electricity and Electronics Michael Klyde, Kirk VanGelder, 2017-06-09 Advanced Automotive Electricity and Electronics, published as part of the CDX Master Automotive Technician Series, gives students with a basic understanding of automotive electrical the additional knowledge and experience they need to diagnose and fix complex electrical systems and circuits. Focused on a "strategy-based diagnostics" approach, this book helps students master technical trouble-shooting in order to address the problem correctly on the first attempt.

6 pin trailer connector diagram: Trailer Life's RV Repair & Maintenance Manual Bob Livingston, 1989 The complete technical manual and troubleshooting guide for motorhomes, travel trailers, fifth wheels, folding campers, truck campers, and vans--Notes.

6 pin trailer connector diagram: Popular Mechanics , 2004-02 Popular Mechanics inspires, instructs and influences readers to help them master the modern world. Whether it's practical DIY home-improvement tips, gadgets and digital technology, information on the newest cars or the latest breakthroughs in science -- PM is the ultimate guide to our high-tech lifestyle.

6 pin trailer connector diagram: Preventive Maintenance Manual , 1944

6 pin trailer connector diagram: Manuals Combined: 40+ U.S. Army Air Force Marine Corps M101 M103 M105 M116 M416 Cargo Trailer Technical Manuals , Over 8,200 total pages ... Published by the HEADQUARTERS, DEPARTMENTS OF THE ARMY AND AIR FORCE and HEADQUARTERS, MARINE CORPS. 40+ CHASSIS + TRAILER Manuals ... just a SAMPLE of the CONTENTS: 1. TECHNICAL MANUAL - OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR TRAILER, CARGO: 1-1/2-TON, 2-WHEEL, M105A3 (NSN 2330-01-452-1218) (346 pages) 2. TECHNICAL MANUAL - OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) FOR TRAILER, CARGO: 1/4-TON, 2-WHEEL M416 (NSN 2330-00-706-5495) AND M416A1 (NSN 2330-01-046-2855) (268 pages) 3. TECHNICAL MANUAL - OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) FOR TRAILER, CHASSIS: 1-1/2-TON, 2-WHEEL M103A1 (NSN 2330-00-835-8629) M103A3 (NSN 2330-00-141-8052) TRAILER, CARGO: 1-1/2-TON, 2-WHEEL M105A1 (NSN 2330-00-835-8631) M105A2 (NSN 2330-00-141-8050) M105A2C (NSN 2330-00-542-5689) TRAILER, TANK, WATER: 1-1/2-TON, 2-WHEEL, 400-GALLON M107A1 (NSN 2330-00-835-8633) M107A2 (NSN 2330-00-141-8049) M107A2C (NSN 2330-00-542-5688) TRAILER, VAN, SHOP: FOLDING SIDES, 1-1/2-TON, 2-WHEEL M448 (NSN 2330-00-631-5692) (448 pages) 4. TECHNICAL MANUAL - OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) CHASSIS, TRAILER: GENERATOR, 2 1/2-TON, 2-WHEEL, M200A1 (NSN 2330-00-331-2307) (272 pages) 5. TECHNICAL MANUAL - OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR TRAILER, CARGO, 3/4-TON, 2-WHEEL M101 A2 (2330-01-102-4697) M101 OIA3 (2330-01-372-5641) TRAILER, CHASSIS, 3/4-TON, 2-WHEEL M116A2 (2330-01-101-8434) M116A2E1 (2330-01-333-9773) TRAILER, CHASSIS, 1-TON, 2-WHEEL M116A3 (2330-01-359-0080) (338 pages) 6. TECHNICAL MANUAL - OPERATOR, UNIT, INTERMEDIATE DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) POWER PLANT AN/MJQ-16 (NSN 6115-00-033-1395) (2) MEP-002A 5 KW 60 HZ GENERATOR SETS M103A3 2-WHEEL, 2-TIRE, MODIFIED TRAILER (171 pages) 7. TECHNICAL MANUAL - OPERATOR, UNIT, INTERMEDIATE DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) POWER PLANT AN/MJQ-18 (NSN 6115-00-033-1398) (2)

MEP-003A 10KW 60 HZ GENERATOR SETS M103A3 2-WHEEL, 1 1/2 TON MODIFIED TRAILER (160 pages) 8. TECHNICAL MANUAL - OPERATOR'S, UNIT, AND DIRECT SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR CARGO BED COVER (CBC) M105A2 TRAILER, TYPE II NSN 5411-01-467-3185 (CAMOUFLAGE) NSN 5411-01-479-1925 (SAND) (120 pages) 9. TECHNICAL BULLETIN - SHOP EQUIPMENT, AUTOMOTIVE MAINTENANCE AND REPAIR, FIELD MAINTENANCE (NSN 4910-00-754-0706) INSTALLATION IN ONE M109A3 SHOP VAN TRUCK, ONE M35A2 CARGO TRUCK, AND TWO M105A2 CARGO TRAILERS (52 pages) 10. TECHNICAL BULLETIN - SHOP EQUIPMENT, AUTOMOTIVE MAINTENANCE AND REPAIR, ORGANIZATIONAL MAINTENANCE (NSN 4910-00-754-0650) INSTALLATION IN ONE M35A2 CARGO TRUCK AND ONE M105A2 CARGO TRAILER (48 pages) 11. TECHNICAL BULLETIN - SHOP EQUIPMENT, WELDING FIELD MAINTENANCE (NSN 3470-00-357-7268) INSTALLATION IN ONE M35A2 CARGO TRUCK AND ONE M105A2 CARGO TRAILER (44 pages) 12. LUBRICATION ORDER - HOWITZER, LIGHT, TOWED: 105MM, M101 AND M101A1 (5 pages)

6 pin trailer connector diagram: Electric and Electronic Systems for Automobiles and Trucks Robert N. Brady, 1983

6 pin trailer connector diagram: *Commerce Business Daily* , 1998-08

6 pin trailer connector diagram: Operator's, Organizational, Direct Support, and General Support Maintenance Manual , 1984

6 pin trailer connector diagram: Make: Fire Tim Deagan, 2016-04-05 Learn how to safely build projects that burn, poof, boosh, and flare! This complete reference and hands-on guide to working with propane explains how to create a variety of flame effects projects that can be built with common tools and materials. Starting from the basics, this book explains everything you need to know to safely work with propane. An essential reference for building projects like fire cannons, forge torches and flaming sculpture, Make: Fire explains the history, chemistry, and combustion of propane. Using that knowledge as a foundation, readers can then construct a variety of flame-based project on their own using illustrated, step-by-step instructions provided by the author. With simple tools, you can build a gorgeous flambeau, a torch capable of melting aluminum, or flame effects that ignite jaw-dropping fireballs in the sky. Focusing on safety at every step and written by a licensed Flame Effects Operator, this book provides information that has never been brought together in one place. With this guide, readers will master the fundamental components of almost all propane-based projects and develop the skills they need to create their own flame devices and artworks.

6 pin trailer connector diagram: Operator's, Organizational, Direct Support, and General Support Maintenance Manual (including Repair Parts and Special Tools List) for Trailer, Tank, Potable Water, 400 Gallons, 1-1/2 Ton, 2 Wheel, M149 (2330-00-542-2039), M149A1 (2330-00-832-8801), and M625 (2330-00-782-6059). , 1989

6 pin trailer connector diagram: Truck and Trailer Systems (PB) Mike Thomas, 2013-10-22 The most complete visual guide to servicing medium- and heavy-duty truck systems Written by an expert with decades of experience as an automotive and diesel technician and instructor, Truck and Trailer Systems offers comprehensive information on medium- and heavy-duty truck service. The book begins by discussing the trucking industry, professional certifications, safety, tools, and measuring equipment. Then, each system is thoroughly covered--from electrical and lighting to brakes and transmissions. Factory procedures from the most common manufacturers for diagnosis and repair are presented along with annotated photos and diagrams. This practical, authoritative resource is essential for those starting out in the field as well as experienced professionals in need of a detailed, on-the-job reference. Chapters include: Objectives Notes Cautions Service tips Photos and diagrams Chapter reviews Truck and Trailer Systems covers: Industry safety Basic electrical Magnetism Batteries Starting system Charging system Lighting and wiring Computer systems Mobile heating, ventilation, and air-conditioning systems Tires, wheels, and wheel end systems Frames and suspensions Steering systems Trailers and fifth wheels Hydraulic brake systems Air brake foundation brakes Air brake air systems Antilock brake systems

Drive lines Clutches Drive axles Single and twin countershaft manual transmissions Automated manual transmissions Automatic transmissions Allison transmission overhaul PMI Auxiliary power units

6 pin trailer connector diagram: Sin, Science, and the Sex Police John Money, 2010-12-30 Controversial sexual medicine icon Dr. John Money has been on the leading edge of sex research for decades. Supporters and students call him a powerful genius who has changed the face of sex research, blazing new pathways for future scientists and sexologists, especially in the murky area of gender identification and disorders. Sin, Science, and the Sex Police contains twenty-nine selections covering both the study of sex (sexology) and the ideology of sex (sexosophy) in which Money, the man who coined the terms gender and lovemap, ponders the many dimensions of human sexuality: its biology, the natural coding of sex assignments, how we identify ourselves sexually, the sex roles we play, and more. These fascinating essays explore the compelling topics of eroticism, the ideology of homosexuality, the concept of gender, role and sexual identity, antisexualism in history and religion, Freud, paraphilia, gendermaps and loveblots, lust in humans and animals, evolutionary sexology, the Kama Sutra, masturbation, sexological disorders, sex reassignment, orgasm, body-image, and much more. Money proclaims that while societies have cherished medicine and philosophy as sciences, sex has unfortunately failed to be properly embraced. Always on the cutting edge, always far beyond his time, Money enlightens and fascinates.

6 pin trailer connector diagram: Fundamentals of Medium/Heavy Duty Commercial Vehicle Systems Owen C. Duffy, Gus Wright, 2015-07-13 Based on the 2014 National Automotive Technicians Education Foundation (NATEF) Medium/Heavy Truck Tasks Lists and ASE Certification Test Series for truck and bus specialists, Fundamentals of Medium/Heavy Duty Commercial Vehicle Systems is designed to address these and other international training standards. The text offers comprehensive coverage of every NATEF task with clarity and precision in a concise format that ensures student comprehension and encourages critical thinking. Fundamentals of Medium-Heavy Duty Commercial Vehicle Systems describes safe and effective diagnostic, repair, and maintenance procedures for today's medium and heavy vehicle chassis systems, including the most current, relevant, and practical coverage of: • Automated transmissions • Braking system technology used in vehicle stability, collision avoidance, and new stopping distance standards • Hybrid drive powertrains • Advanced battery technologies • On board vehicle networks and integrated chassis electr

6 pin trailer connector diagram: Operator, organizational field maintenance manual D.o. Army, 1962

6 pin trailer connector diagram: Incremental Cost, Weight and Leadtime Impacts of Requiring Heavy Truck Tractor/trailer ABS. Final Report Kenneth W. Rutland, 1994

6 pin trailer connector diagram: Fort Drum Connector Route (I-81 to Fort Drum North Gate) New Construction, Towns of Pamela and Le Ray, Jefferson County , 2008

6 pin trailer connector diagram: FM 21-11 First Aid for Soldiers United States. War Department, 2018-10-20 FM 21-11 1943: Basic field manual, first aid for soldiers.(OBSOLETE) The purpose of this manual is to teach the soldier what he can do for himself or a fellow soldier if injury or sickness occurs when no medical officer or Medical Department soldier is nearby. Information is also given concerning the use of certain supplies which are for the purpose of helping to keep well. This field manual addresses wounds, fractures/dislocations/ sprains, common emergencies and health measures, effects of severe cold and heat, measures for use in the jungle/tropics and in aircraft and tank injuries, transportation of sick and injured, war gases, and description and uses of first-aid kits and packets.

6 pin trailer connector diagram: Analysis of Machine Elements Using Solidworks Simulation 2013 John Steffen, 2013 Analysis of Machine Elements Using SolidWorks Simulation 2013 is written primarily for first-time SolidWorks Simulation 2013 users who wish to understand finite element analysis capabilities applicable to stress analysis of mechanical elements. The focus of examples is on problems commonly found in an introductory, undergraduate, Design of Machine Elements or

similarly named courses. In order to be compatible with most machine design textbooks, this text begins with problems that can be solved with a basic understanding of mechanics of materials. Problem types quickly migrate to include states of stress found in more specialized situations common to a design of mechanical elements course. Paralleling this progression of problem types, each chapter introduces new software concepts and capabilities. Many examples are accompanied by problem solutions based on use of classical equations for stress determination. Unlike many step-by-step user guides that only list a succession of steps, which if followed correctly lead to successful solution of a problem, this text attempts to provide insight into why each step is performed. This approach amplifies two fundamental tenets of this text. The first is that a better understanding of course topics related to stress determination is realized when classical methods and finite element solutions are considered together. The second tenet is that finite element solutions should always be verified by checking, whether by classical stress equations or experimentation. Each chapter begins with a list of learning objectives related to specific capabilities of the SolidWorks Simulation program introduced in that chapter. Most software capabilities are repeated in subsequent examples so that users gain familiarity with their purpose and are capable of using them in future problems. All end-of-chapter problems are accompanied by evaluation check sheets to facilitate grading assignments.

6 pin trailer connector diagram: Operator's and Organizational Maintenance Manual , 1991

6 pin trailer connector diagram: STRUCTURED COMPUTER ORGANIZATION , 1996

6 pin trailer connector diagram: Catalog of Sears, Roebuck and Company Sears, Roebuck and Company, 1990

6 pin trailer connector diagram: *RV Electrical Systems: A Basic Guide to Troubleshooting, Repairing and Improvement* Bill Moeller, Jan Moeller, 1994-10-22 This problem-solving reference answers questions such as, Why do interior lights dim or burn out rapidly and Why won't the batteries recharge after a night without electricity?

6 pin trailer connector diagram: *Automobile Electrical and Electronic Systems* Tom Denton, 2017-09-12 This textbook will help you learn all the skills you need to pass all Vehicle Electrical and Electronic Systems courses and qualifications. As electrical and electronic systems become increasingly more complex and fundamental to the workings of modern vehicles, understanding these systems is essential for automotive technicians. For students new to the subject, this book will help to develop this knowledge, but will also assist experienced technicians in keeping up with recent technological advances. This new edition includes information on developments in pass-through technology, multiplexing, and engine control systems. In full colour and covering the latest course specifications, this is the guide that no student enrolled on an automotive maintenance and repair course should be without. Designed to make learning easier, this book contains: Photographs, flow charts, quick reference tables, overview descriptions and step-by-step instructions. Case studies to help you put the principles covered into a real-life context. Useful margin features throughout, including definitions, key facts and 'safety first' considerations.

6 pin trailer connector diagram: *pages 3-14* , 1897

6 pin trailer connector diagram: Organizational Maintenance Manual , 1969

6 pin trailer connector diagram: *U.S. Navy Towing Manual* Naval Sea Systems Command, 2002

6 pin trailer connector diagram: *Traffic Monitor Trailers, Configuration and Deployment* Larry G. Hayden, 2007

6 pin trailer connector diagram: An Index of U.S. Voluntary Engineering Standards United States. National Bureau of Standards, 1971

6 pin trailer connector diagram: *Direct Support and General Support Maintenance Manual* , 1982

6 pin trailer connector diagram: *Annual Home, Hardware, Auto and Leisure* Sears, Roebuck and Company, 1990

2 2 2 2 2 2 2 2 2 aigc 2 2 2 ? 2 2 2 2 2 2 “ai 2 2 ” 2 “2 2 2 2 ”! 2 2 , 2 2 2
 2 2 2 , 2 2 2 2 2 2 2 2 2 , 2 2 2 ?

6 Pin Trailer Connector Diagram

6 Pin Trailer Connector Diagram

Related Articles

- [6 parts of a business letter](#)
- [57 mercruiser wiring diagram](#)
- [59 cummins coolant flow diagram](#)

[Back to Home](#)