ford wiper switch wiring diagram

ford wiper switch wiring diagram is a crucial resource for anyone wishing to repair, replace, or understand the electrical connections behind their Ford vehicle's windshield wiper system. Whether you're a DIY enthusiast, a professional mechanic, or simply a Ford owner curious about how your wipers work, knowing the wiring diagram can make troubleshooting and installation significantly easier. This comprehensive article explores everything you need to know about ford wiper switch wiring diagram, including the fundamental components, how to read and use these diagrams, common wiring configurations across various Ford models, and practical troubleshooting steps. By clearly breaking down each aspect, this guide will help you confidently handle wiring issues, perform upgrades, or simply gain a deeper understanding of your vehicle's electrical system. Read on to discover essential tips, detailed explanations, and expert insights into all things related to ford wiper switch wiring diagram.

- Understanding the Importance of a Ford Wiper Switch Wiring Diagram
- Key Components in Ford Wiper Switch Wiring Diagrams
- How to Read a Ford Wiper Switch Wiring Diagram
- Common Ford Wiper Switch Wiring Configurations
- Troubleshooting Ford Wiper Switch Wiring Problems
- Tips for Repairing and Installing Ford Wiper Switches
- Frequently Asked Questions

Understanding the Importance of a Ford Wiper Switch Wiring Diagram

A ford wiper switch wiring diagram provides a visual representation of the electrical circuit that controls your windshield wipers. These diagrams are essential for diagnosing problems, performing repairs, and ensuring proper installation of new switches or motors. Without a clear diagram, it's easy to misconnect wires, potentially causing electrical failures or even damaging components. Wiring diagrams allow technicians and vehicle owners to trace connections, identify power sources, and understand ground points, which is critical for ensuring safe and efficient operation of the wiper system. In addition, they help avoid costly mistakes, saving both time and money during maintenance or upgrades.

Key Components in Ford Wiper Switch Wiring Diagrams

To interpret a ford wiper switch wiring diagram, it's important to recognize the core components illustrated in these schematics. Each component plays a specific role in the functioning of the wiper system, and understanding them helps in both troubleshooting and repairs.

Wiper Switch

The wiper switch is the primary control unit located on the dashboard or steering column. It allows the driver to select different wiper speeds and, in some cases, activate the washer function. The wiring diagram will show connections from the switch to the rest of the wiper circuit.

Wiper Motor

The wiper motor receives power through the wiring harness and is responsible for moving the wiper arms across the windshield. Diagrams display how the motor connects to the switch and the vehicle's power supply.

Relays and Fuses

Many Ford models include relays and fuses in the wiper circuit for protection and enhanced control. The wiring diagram identifies these safety components and illustrates their placement within the circuit.

Ground Connections

Ground wires complete the electrical circuit. A ford wiper switch wiring diagram shows all ground points, which are critical for the system's operation and safety.

Connectors and Harnesses

Wires in the wiper system are grouped within harnesses and attached using various connectors. Diagrams detail the color codes, connector pin numbers, and paths each wire takes between components.

• Wiper switch: controls speed and activation

- Wiper motor: drives wiper arms
- Relays: manage current flow to motor
- Fuses: protect against short circuits
- Grounds: ensure proper circuit completion
- Connectors: link all parts of the system

How to Read a Ford Wiper Switch Wiring Diagram

Interpreting a ford wiper switch wiring diagram requires understanding the symbols, wire colors, and paths shown on the schematic. These diagrams are designed to simplify complex electrical systems, making it easier to trace circuits and pinpoint issues.

Symbols and Color Codes

Automotive wiring diagrams use standardized symbols to represent switches, motors, relays, and connectors. Color codes indicate the color of each wire, which simplifies identification during repairs. Ford commonly uses abbreviations such as BK for black, WH for white, and RD for red.

Tracing the Circuit

Start by locating the wiper switch on the diagram. Follow the lines representing wires from the switch to the wiper motor, relays, and ground points. Note the direction of current flow and any intersecting circuits such as those for the washer system or intermittent wiper functions.

Identifying Power and Ground

The diagram will show which wires supply power (often marked as "B+" or "IGN") and which are ground (usually connected to the chassis). Ensuring correct power and ground connections is vital for wiper operation.

Understanding Connector Pinouts

Each connector in the system has specific pin numbers or letters. The diagram will indicate which wire connects to each pin, making it easier to test for continuity or voltage when diagnosing issues.

Common Ford Wiper Switch Wiring Configurations

Ford vehicles come with various wiper switch configurations, depending on the model year and trim level. Understanding these differences is essential for accurate repairs and installations.

Single-Speed vs. Multi-Speed Systems

Older Ford vehicles often use a simple single-speed wiper system, with a straightforward wiring diagram. Modern models typically feature multi-speed or variable-speed wiper motors, requiring more complex wiring to accommodate different speeds and intermittent functions.

Integrated Washer Functions

Many wiring diagrams include the washer pump circuit, illustrating how the wiper switch also controls the windshield washer system through shared or separate wiring paths.

Relay-Controlled Systems

Some Ford wiper systems utilize relays to switch high current loads, especially for high-speed settings. The wiring diagram will show the relay's position and the wiring between the switch, relay, and wiper motor.

Typical Wiring Color Codes

• Black (BK): Ground

• Red (RD): Power supply

• White (WH): Signal or switch output

• Green (GN): Motor speed control

• Yellow (YE): Washer circuit

Troubleshooting Ford Wiper Switch Wiring Problems

A ford wiper switch wiring diagram is invaluable when diagnosing electrical faults in your wiper system. Common symptoms of wiring issues include wipers not turning on, operating at the wrong

Diagnosing with a Wiring Diagram

Use the diagram to identify which wires correspond to the malfunctioning function. Test for voltage at the switch, motor, and relay using a multimeter. If a wire is broken or a connector is corroded, the diagram will help pinpoint the exact location for repairs.

Common Wiring Issues

- Blown fuses: Often caused by short circuits or faulty motors
- Broken or loose connectors: Lead to intermittent or complete loss of function
- Corroded grounds: Prevent proper circuit completion
- Damaged wires: Can result in erratic operation or non-functional wipers

Step-by-Step Troubleshooting

- 1. Consult the wiring diagram to understand the circuit layout
- 2. Visually inspect wires and connectors for damage
- 3. Test voltage at the switch and motor terminals
- 4. Check continuity of suspect wires
- 5. Replace or repair faulty components as indicated by your findings

Tips for Repairing and Installing Ford Wiper Switches

Proper use of a ford wiper switch wiring diagram can make repairs and installations straightforward and reliable. Here are some best practices to ensure success.

Prepare and Identify Wires

Before starting, disconnect the battery and label all wires according to the wiring diagram. This will prevent confusion and ensure all connections are restored correctly.

Use Correct Tools and Materials

Always use appropriate crimpers, wire strippers, and electrical tape or heat shrink tubing for insulation. Avoid twisting wires together without proper connectors, as this can lead to unreliable connections.

Double-Check Connections

After making repairs, compare your work to the wiring diagram to confirm all wires are connected to the correct terminals. Test the system before final reassembly.

Maintain Diagram Accessibility

Keep a printed or digital copy of the ford wiper switch wiring diagram for your specific Ford model handy. This resource is invaluable for future troubleshooting or upgrades.

Frequently Asked Questions

Q: What is a ford wiper switch wiring diagram?

A: A ford wiper switch wiring diagram is a schematic that shows the electrical connections and components involved in the operation of a Ford vehicle's windshield wiper system, including switches, motors, relays, fuses, and ground points.

Q: Why do I need a wiper switch wiring diagram for my Ford?

A: The wiring diagram helps you troubleshoot, repair, or replace wiper switch components by providing a clear map of the circuit, making it easier to identify faults and ensure correct installation.

Q: How do I identify wires in a Ford wiper switch wiring diagram?

A: Wires are typically identified by color codes and labels in the diagram, such as BK for black (ground), RD for red (power), and others. The diagram also shows connector pin numbers for precise identification.

Q: What should I do if my wipers aren't working?

A: Begin by consulting the wiring diagram for your Ford model, then check fuses, relays, wiring connections, and the switch itself for faults. Use a multimeter to test voltage and continuity as needed.

Q: Are Ford wiper switch wiring diagrams the same for all models?

A: No, wiring diagrams vary by model, year, and trim level. Always use the diagram specific to your exact vehicle to avoid errors.

Q: Can I repair wiper switch wiring myself?

A: Yes, if you have basic electrical knowledge and use the correct wiring diagram, you can safely repair or replace wiper switch wiring. Always disconnect the battery before starting.

Q: What tools are needed to work with wiper switch wiring?

A: Basic tools include wire strippers, crimpers, a multimeter, electrical tape, and appropriate connectors. Having the proper wiring diagram is also essential.

Q: How do I know if a relay is faulty in the wiper circuit?

A: Use the wiring diagram to locate the relay, then test for voltage at the appropriate terminals or swap the relay with a known good one to confirm its operation.

Q: Where can I find the wiring diagram for my specific Ford model?

A: Wiring diagrams are available in the vehicle's service manual or can be obtained from authorized Ford service centers and reputable automotive repair guides.

Q: What are common symptoms of wiper switch wiring problems?

A: Symptoms include wipers not starting, only working at one speed, failing to park, or the washer function not engaging. Wiring issues often cause intermittent or complete loss of function.

Ford Wiper Switch Wiring Diagram

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Ford Wiper Switch Wiring Diagram: A Comprehensive Guide

Are you battling intermittent wipers, a completely dead system, or perhaps just curious about the electrical wizardry behind your Ford's windshield wipers? Understanding your Ford wiper switch wiring diagram can save you time, money, and frustration. This comprehensive guide will walk you through everything you need to know, from identifying your specific model's diagram to troubleshooting common problems. We'll equip you with the knowledge to diagnose and potentially fix wiper issues yourself, saving you a trip to the mechanic. Let's dive in!

Understanding Your Ford's Wiper System

Before we tackle wiring diagrams, it's essential to grasp the basic components of your Ford's wiper system. This involves more than just the switch itself; the system includes:

The Wiper Switch: This is the control center, sending electrical signals to activate the wipers at different speeds and functions (intermittent, low, high, wash).

The Wiper Motor: The powerhouse that physically moves the wiper blades across the windshield.

The Wiper Linkage: The mechanical connection between the motor and the wiper arms.

The Multifunction Switch (Often Incorporating the Wiper Switch): Many modern Fords integrate the wiper switch within a larger multifunction switch controlling other functions like headlights, turn signals, and cruise control. This adds complexity to the wiring.

Relays (Possibly): Some Ford models utilize relays to manage the high current demands of the wiper motor, protecting the switch itself.

Locating Your Specific Ford Wiper Switch Wiring Diagram

Unfortunately, there isn't one universal Ford wiper switch wiring diagram. The wiring varies significantly depending on:

Year of Manufacture: Wiring harnesses and switch designs changed across model years. Vehicle Model: Different Ford models (Focus, F-150, Escape, etc.) have unique wiring configurations.

Trim Level: Even within the same model year and model, different trim levels might have slightly altered wiring.

Where to Find the Diagram:

- 1. Your Owner's Manual: While not always detailed enough for electrical troubleshooting, your owner's manual might offer a simplified schematic or at least point you towards the fuse box and relay locations.
- 2. Online Repair Manuals: Sites like Haynes and Chilton offer comprehensive repair manuals, often including detailed wiring diagrams. Be sure to select the correct manual for your specific year, make, and model.
- 3. Ford Service Manuals: These are the most detailed diagrams, but often require a subscription or purchase. They provide factory-level accuracy but can be more expensive.
- 4. Online Forums and Communities: Searching online forums specific to your Ford model (e.g., "Ford Focus forums") can uncover user-contributed diagrams and troubleshooting advice. Always verify information from multiple sources.

Deciphering the Ford Wiper Switch Wiring Diagram

Once you've located your diagram, you'll encounter a series of symbols and numbers. These represent:

Wires: Each wire will be labeled with a number or letter code, indicating its function (e.g., power, ground, high-speed wiper).

Connectors: These are points where wires join. The diagram will show how many pins each connector has and which wires connect to each pin.

Color Codes: Often, wires are color-coded for easier identification. Your diagram will likely include a legend explaining these color codes.

Grounds: These points connect wires to the vehicle's chassis, completing the electrical circuit. They're crucial for proper operation.

Remember to always disconnect the battery's negative terminal before working with any electrical components to prevent accidental short circuits.

Troubleshooting Common Ford Wiper Problems

Using your wiring diagram, you can begin troubleshooting common wiper issues:

Intermittent Wiper Malfunction:

Check the connections at the wiper switch and motor. Look for corroded terminals or loose wires. A faulty wiper motor may also be the cause.

No Wiper Function:

Check the fuse related to the wipers. A blown fuse is a common cause. Then, systematically check the wiring from the switch to the motor, using a multimeter to test for continuity and power.

Wiper Motor Runs Constantly:

This suggests a problem with the wiper switch itself or a short circuit in the wiring. Carefully examine the wiring diagram and the switch's internal connections.

Conclusion

Understanding your Ford wiper switch wiring diagram is a valuable skill for any car owner. By carefully locating the correct diagram and systematically troubleshooting, you can often resolve wiper problems yourself, saving time and money. Remember to prioritize safety and always disconnect the battery before working with electrical components. Happy troubleshooting!

FAQs

- 1. Can I use a generic wiper switch in my Ford? Generally no. Ford uses specific switches designed for their vehicles' electrical systems. Using an incorrect switch could damage the vehicle's wiring.
- 2. Where is the wiper motor relay located in my Ford? The location varies by model and year; consult your owner's manual or online repair manuals for its precise location.
- 3. My wiper switch feels loose; is this a wiring issue? Not necessarily. A loose switch could indicate a worn-out switch mechanism, rather than a wiring problem.
- 4. Can I repair a damaged wiper switch? Sometimes, minor repairs are possible (e.g., cleaning corroded contacts). However, major damage often necessitates replacing the entire switch.
- 5. What tools do I need to diagnose wiper issues? You'll likely need a multimeter to test voltages and continuity, screwdrivers for accessing components, and possibly a wire stripper/crimper for repairs.

ford wiper switch wiring diagram: Custom Auto Wiring & Electrical HP1545 Matt Strong, 2009-04-07 This indispensable guide to high performance and OEM automotive electrical systems covers electrical theory, wiring techniques and equipment, custom wiring harnesses for racing, hot

rods and restorations, pre-made wiring harnesses, special electrical systems (navigational, audio, video), troubleshooting common electrical problems, dashboards and instrument, and trailer wiring.

ford wiper switch wiring diagram: How To Diagnose and Repair Automotive Electrical Systems Tracy Martin, 2005

ford wiper switch wiring diagram: Ford Aerostar Mini-vans Automotive Repair Manual Larry Warren, Mark Christman, John Harold Haynes, 1996 Offers step-by-step procedures linked to hundreds of easy-to-follow photos, quick and easy troubleshooting sections, detailed wiring diagram, and color spark plug diagnosis. Every manual based on a complete teardown and rebuild.

ford wiper switch wiring diagram: Model A Ford Restoration Handbook Gordon E. Hopper, 2022-05-31 The Model A Ford, one of the largest successes of the Ford Motor Company, improved upon the style and engineering of the humble Model T and continues to captivate car enthusiasts everywhere. If you are restoring a Model A Ford, this book will guide you through every step of the way. Model A Ford Restoration Handbook provides essential information that you need before you actually start doing any work, including instruction on how you can obtain the car you want. This budget-savvy handbook demystifies the restoration process and explains the step-by-step details of: Disassembly Engine overhaul and installation Restoration of the transmission and differential Rumble seat repair Body repair and reassembly Roof replacement Hydraulic brake valve installation Mechanical brake system maintenance Rewiring the electrical system Reupholstering, refinishing, and much more! Originally published in 1966, Model A Ford Restoration Handbook features 42 photos and 64 illustrations, and it covers the specifications on model data for different systems, colors, and trims. This classic handbook will help you get your Model A in the show or on the road.

ford wiper switch wiring diagram: Automotive Chassis and Accessory Circuits Mathias F. Brejcha, Clifford L. Samuels, 1987

ford wiper switch wiring diagram: Motor Age, 1939

ford wiper switch wiring diagram: Automotive Electrical and Electronic Systems with Shop Manual Frank C. Derato, 1994 Part of the Basic Automotive Series, Automotive Electrical and Electronic Systems can be used in any introductory course in automotive electronics and electricity. The text opens with up-to-date coverage of electricity, magnetism, and semi-conductors. Topics that follow include starting systems, lighting systems, power accessorties, and the latest electronic systems, including speed controls and - new to this edition - automotive micro-computers. Also new to this text are ignition and passive restraint systems. The accompanying shop manual provides detailed coverage of specific repairs and service techniques using step-by-step procedures. The text and its correlated shop manual help prepare students for Automotive Service Excellence (ASE) certification; it also provides end-of-chapter questions that use a format similar to the ASE tests. The contents of both volumes are based on the competencies and standards set by the National Institute for Automotive Service Excellence.

ford wiper switch wiring diagram: Haynes Ford Escort Mercury Lynx 1981-90 Motorbooks International, 1990-07

ford wiper switch wiring diagram: Ford Vans Automotive Repair Manual Ralph Rendina, John Harold Haynes, 1995 Ford Full-Size Vans 1992-95 Shop ManualHaynes32 pgs., 76 ill.

ford wiper switch wiring diagram: Domestic Cars Mitchell Manuals, inc, 1987

ford wiper switch wiring diagram: \1985\nineteen Eighty-five\ Domestic Light Trucks & Vans Tune-up, Mechanical Service & Repair Mitchell Information Services, 1985

ford wiper switch wiring diagram: Ford Dealer and Service Field, 1931

ford wiper switch wiring diagram: The Street Rodder's Handbook Frank Oddo, 2003 A comprehensive guide to designing and building street rods, customs, and lead sleds. Includes hundreds of photographs and practical tips, plus safe working and design factors. It covers all areas of the car, including chassis, suspension, frame, engine, bodywork, paint, and drivetrain. This guide also details how to choose a car and make critical planning decisions. It shows how to properly equip a workshop and lists tool and parts suppliers.

ford wiper switch wiring diagram: Chilton's Auto Air Conditioning & Wiring Diagram Manual Chilton Book Company. Automotive Book Department, 1971

ford wiper switch wiring diagram: Ford Pick-ups & Bronco Automotive Repair Manual John B. Raffa, John Harold Haynes, 1991

ford wiper switch wiring diagram: Flaming Floorboards Steve Tom, 2012-03-12 Are you tired of cleaning spiders out of your gas gauge? Have you driven for miles wondering what that funny smell was, only to discover your seat was on fire? Did your tender first kiss leave your date needing medical attention? If you can answer yes to all three questions, you're probably the author of this book. Flaming Floorboards is a true account of these and many similar adventures which befell the author, a man who ambled through life adopting stray cars the way other people adopt stray cats. He came of automotive age during the 1960's, the golden age of muscle cars. Surrounded by Camaros, Mustangs, Super Birds, and their ilk, his dream car was a Stanley Steamer. (Looking back, the author admits it may not have been a coincidence that he didn't get many dates.) He never did get a Stanley, but over the years he drove thousands of miles in cars such as a Model A Ford, a Jaguar E-Type, a pair of mid-60's Chevy Impalas, a handful of MG's, and other memorable automobiles. These were not shiny classics when he drove them. They were rusted hulks that he rescued from the salvage yard. In his struggles to keep these rolling wrecks on the road he encountered people like Fr. Dupree, a reporter/pool shark turned Episcopal priest; Luis Riccotto, the proprietor of Riccotto and Sons Imported motors; and Otis Swineheart, a man of few words and fewer teeth. Flaming Floorboards is a warm and funny story about an extraordinary cast of cars and characters.

ford wiper switch wiring diagram: Fix Your Ford William King Toboldt, 1967 ford wiper switch wiring diagram: Haynes Ford Aerostar Mini-Vans 1986-94 2 Wheel Drive Models Larry Warren, Mark Christman, John Harold Haynes, 1994 Haynes disassembles every subject vehicle and documents every step with thorough instructions and clear photos. Haynes repair manuals are used by the pros, but written for the do-it-yourselfer.

ford wiper switch wiring diagram: Mustang Restoration Handbook Don Taylor, 1987-01-01 Ground up or section by section, this guide will show you how to restore your 1965-70 Mustang to like-new condition. Packed with dozens of identification charts and more than 450 photos and drawings. the guide covers year-by-year equipment changes and disassembly and assembly. A Mustang suppliers list is a bonus.

ford wiper switch wiring diagram: Chilton's Auto Repair Manual, 1964 Each edition includes information for that year and several previous years.

ford wiper switch wiring diagram: Automotive Electrical Handbook Inkwell Co. Inc., 1987-01-01 When it's time to wire your car, whether it's a restoration project, race car, kit car, trailer, or street rod, don't be intimidated; wire it yourself. Jim Horner shares his years of experience and cuts through the technical jargon to show you how. Learn about basic electrical theory, how various electrical components work and drawing circuit diagrams. Includes tips on using electrical test equipment and troubleshooting electrical circuits. Choose the right components, build your own wiring harness, and install them by following the step-by-step instructions. Profusely illustrated with over 350 photos, drawings, and diagrams. Suppliers list included.

ford wiper switch wiring diagram: Automotive Engine Performance: Practice manual Ken Layne, 1993

ford wiper switch wiring diagram: Popular Mechanics, 1975-05 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.

ford wiper switch wiring diagram: Ford Fiesta 1977 thru 1980 John Haynes, 1965-06-01 Haynes offers the best coverage for cars, trucks, vans, SUVs and motorcycles on the market today. Each manual contains easy to follow step-by-step instructions linked to hundreds of photographs and illustrations. Included in every manual: troubleshooting section to help identify specific problems;

tips that give valuable short cuts to make the job easier and eliminate the need for special tools; notes, cautions and warnings for the home mechanic; color spark plug diagnosis and an easy to use index.

ford wiper switch wiring diagram: Shop Manual Ford Motor Company, 1963

ford wiper switch wiring diagram: Ford Mustang & Mercury Capri, 1979-1985 Kalton C. Lahue, 1985

ford wiper switch wiring diagram: Automotive Principles and Service Frank J. Thiessen, Davis N. Dales, 1994

ford wiper switch wiring diagram: Manual of Engineering Drawing Colin H. Simmons, Dennis E. Maguire, 2003-10-21 The Manual of Engineering Drawing has long been recognised as the student and practising engineer's guide to producing engineering drawings that comply with ISO and British Standards. The information in this book is equally applicable to any CAD application or manual drawing. The second edition is fully in line with the requirements of the new British Standard BS8888: 2002, and will help engineers, lecturers and students with the transition to the new standards.BS8888 is fully based on the relevant ISO standards, so this book is also ideal for an international readership. The comprehensive scope of this book encompasses topics including orthographic, isometric and oblique projections, electric and hydraulic diagrams, welding and adhesive symbols, and guidance on tolerancing. Written by a member of the ISO committee and a former college lecturer, the Manual of Engineering Drawing combines up-to-the-minute technical accuracy with clear, readable explanations and numerous diagrams. This approach makes this an ideal student text for vocational courses in engineering drawing and undergraduates studying engineering design / product design. Colin Simmons is a member of the BSI and ISO Draughting Committees and an Engineering Standards Consultant. He was formerly Standards Engineer at Lucas CAV.* Fully in line with the latest ISO Standards* A textbook and reference guide for students and engineers involved in design engineering and product design* Written by a former lecturer and a current member of the relevant standards committees

ford wiper switch wiring diagram: Ford Field , 1945

ford wiper switch wiring diagram: Diesel Equipment Superintendent, 1939

ford wiper switch wiring diagram: Motor Age, 1923

ford wiper switch wiring diagram: Automotive Electronics and Electrical Equipment William Harry Crouse, 1981

ford wiper switch wiring diagram: Diesel Power & Diesel Transportation, 1939 Vol. 12, no. 6-v. 14, no. 1 (June 1934-Jan. 1936) include the section: Diesel transportation, v. 1-3, no. 1.

ford wiper switch wiring diagram: Diesel Power and Diesel Transportation, 1939

ford wiper switch wiring diagram: I & T Shop Service, 1983

ford wiper switch wiring diagram: Glenn's New Auto Repair Manual, 1960

ford wiper switch wiring diagram: Ford Passenger and Commercial Reference Book \dots Ford Motor Company, 1937

ford wiper switch wiring diagram: Catalogue Montgomery Ward, 1953

ford wiper switch wiring diagram: Electric and Electronic Systems for Automobiles and Trucks Robert N. Brady, 1983

ford wiper switch wiring diagram: Henry's Fabulous Model A. Leslie R. Henry, 1959

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