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American standard furnace installation manual

American standard high efficiency furnace installation manual. American standard furnace manual pdf. American standard freedom 80 furnace installation manual. American standard furnace manual. American standard installation instructions. American standard furnace model numbers. American standard furnace.

To find a comfortable home, consider factors such as climate, temperature, and energy use. Next, connect with a dealer who can provide a customized quote and recommendation for your specific needs. After choosing the right system, the dealer will install it and ensure that you're satisfied. If you have an American Standard system, you can contact their customer care team for assistance with products, warranties, and dealer concerns. You can also reach out to dealers directly via phone or online resources, such as the Dealer Locator tool, to ask questions and get help with your heating system. The text goes on to describe various American Standard gas furnace models, including the Freedom 80 series, which features a two-stage fan-assisted combustion system. The models are certified by the American Gas Association and have features such as solid-state devices for safe operation and multi-port in-shot burners for efficient heat transfer. Some of the key features and benefits of these systems include: * Comfort control options * Two-stage heating/1-stage cooling * Single-stage heating/cooling with horizontal or vertical mounting * Heavy-gauge aluminized steel heat exchanger * Power supply and blower door safety switch * Multi-port in-shot burners for efficient heat transfer Overall, the text provides information on how to find a comfortable home and choose the right American Standard gas furnace system for your specific needs. The provided specifications describe three models of furnaces: AUD2, AUD2B, and AUD2C. The key parameters for each model are listed, including: * Input BTUH (heating output) and capacity * AFUE (Annual Fuel Utilization Efficiency) * Temperature rise range * Blower drive diameter and speed * Centrifugal combustion fan type and drive The models have varying specifications, such as different input and capacity values, airflow rates, and motor horsepower. The table shows performance data for each model at various fan speeds. Some commonalities among the models include: * All have a direct blower drive with 4-speed options * All have centrifugal combustion fans with type-direct drives * All have similar temperature rise ranges (30-60°F) * All have similar airflow rates and external static pressure measurements The specifications suggest that the AUD2 model is designed for high-performance applications, while the AUD2B and AUD2C models are more general-purpose designs. Field Wiring Diagram for Gas Furnaces from Dwg. * AUD2 Schematic Diagrams: A detailed illustration of electrical connections and components. * ADD2 Schematic Diagrams: Additional diagrams providing further insights into field wiring configurations. * Field Wiring Diagram for 2-Stage Furnace: A comprehensive diagram showcasing the connection between thermostats, heating units, and cooling systems. * Twin Outdoors Unit (without transformer): A separate section illustrating the setup for this configuration. * EAC (Electric Air Conditioning) and HUM (Humidistat) Notes: Important information regarding electrical connections and humidistat settings. Dimensions: * Model AUD2A040A9242A, AUD2A060A9362A, and others: Specifications and measurements for various models. Notes: * American Standard Heating & Air Conditioning reserves the right to change product design and specifications without notice. * Important notes regarding field wiring diagrams, EAC/HUM settings, and other technical information are provided throughout the document. Please note that I did not translate any text or remove unnecessary content. The paraphrased version aims to preserve the original message while rephrasing it for easier understanding. 6AUD2B080A9362A 6AUD2B080A9482A 7AUD2B100A9362A 7AUD2C100A9482A 7AUD2C100A9602A 7AUD2D100A9602A 8AUD2D120A9542A 8AUD2D120A9602A 8AUD2D140A9602A 8ADD2A040A9242A 9ADD2A060A9362A 9ADD2B060A9362A 9ADD2B080A9362A 9ADD2B100A9482A 10ADD2C100A9482A 10ADD2C100A9602A 10ADD2D120A9602A 10ADD2D140A9602A American Standard Heating & Air Conditioning has introduced a new range of high-efficiency gas furnaces, featuring advanced technology and improved performance. The FREEDOM 80 series offers enhanced safety features, such as solid-state flame monitoring and dual solenoid combination gas valve and regulator. The Integrated System Control provides total control over furnace operations, including limit sensors, blowers, gas valves, flame control, and self-diagnostic capabilities for ease of service. The multispeed blower motor ensures efficient airflow, while the blower door safety switch prevents furnace operation when the blower door is removed. The furnaces feature a Hot Surface Ignition system, eliminating the need for a constant burning pilot. They also come with a baked-on enamel finish and foil-faced fiberglass insulation, providing excellent acoustic and insulating qualities. Other features include low energy power venting and a vent proving differential switch. The installation manual provides important safety information and compliance guidelines for local codes. The manufacturer recommends following the guidelines outlined in Manual J of the Air Conditioning Installation Instructions Contractors Association (ACCA) or A.R.I. 230 for estimating heating requirements. When installing the furnace, it is essential to ensure that the coil and furnace are fully supported and installed horizontally with screws included with the horizontal position. Cased coils should be attached to the furnace, and a clearance auxiliary drain pan should be installed under the horizontally aligned holes near the bottom of the coil wrapper. Air duct systems should be installed in accordance with standards for air conditioning systems, National Fire Protection Association Pamphlet No. 90. Central furnaces used in connection with cooling units should be installed in parallel or on the upstream side of the cooling coil to avoid condensation in the heat exchanger. The blower deck and lower pin/screw rest against the side of the bottom panel when removing the furnace filter, and the blower door hinge may be removed without creating any problems with the seal of the furnace. The filter should be cut to fit the unit depending on the model and location of the return air filter. It is crucial to vent this furnace outdoors, as improper venting can lead to issues during testing and require correction. The furnaces are shipped direct vent with sealed combustion and may be installed as Direct Vent (sealed combustion) or Nondirect vent (single pipe). The installation guide requires that furnaces be vented outside the house and draw combustion air from an inlet pipe connected to the outside. A table (Table 7) lists PVC vent fitting specifications available from gas furnace distributors. For the combustion air inlet connection, a friction fit is recommended, with the joint sealed using RTV sealant for possible future service. A Vent Length Table on page 16 shows required lengths for installations at various altitudes. An optional high altitude kit can be used for installations above 5000 feet, but installations above 12,000 feet are not allowed. The venting system must maintain a 1/4" per foot pitch upwards to ensure condensate drains back into the furnace. The furnaces may be installed as direct or nondirect vents. For nondirect vent installation, a vent plate and combustion screws are required, maintaining a minimum clearance of 12 inches above the highest anticipated snow level or grade. Specific clearances for non-direct vent terminal installations in Canada and the US are detailed on page 20. To ensure structural integrity, the vent and inlet must be supported at maximum intervals of 3 feet with straps or suitable supports. When penetrating the roof with a PVC vent pipe, a flashing may be used for a weather-tight seal, but the induced draft blower housing and furnace cannot support the electrical connections. The installation guide emphasizes that stainless steel gas and liquid tight single wall metal vent fittings must be used throughout. Electrical connections to the unit should follow the enclosed wiring diagram, noting that the integrated furnace control is polarity sensitive. The black power lead should be connected permanently as indicated on the wiring diagram. The field wiring diagram for variable speed furnaces with 2-stage heating and 1-stage cooling, or 2-stage heating and 2-stage cooling, is provided in the installer's guide. For outdoor units without transformers, note that jumper W14 connects Y1/Ylo. Additionally, a corrosion-resistant condensate pump must be used if a pump is required for a specific drain system. The condensate drain should be installed to prevent winter freeze-up of the condensate drain line. The automatic gas valve has manual shut-off and ground union joints. Gas piping may be left or right-handed, and the downflow (vertical) may be installed on either side. The main manual with manual shut-off valve is also provided. For the White-Rodgers gas valve model 36G, low fire adjustment can be made by removing the regulator cover screw and adjusting the adjust screw clockwise to increase outlet pressure. After making adjustments or replacing components, return all tubing, caps, and plugs to their original positions. To set up the thermostat, turn on the main electrical supply and call for heat above the indicated temperature. The ignitor will automatically close signaling a call for heat, then the gas valve is energized permitting flow for heat. Delay-off settings can be explained using a table and graph provided in the installer's guide. Note that all models are equipped with a manual reset temperature limit located on the burner box. In case of excessive temperature, the limit will open causing the circuit to open which must be manually reset after lockout or furnace shutdown. Installer's Guide for Integrated Furnace Control A Series of LED Lights Indicate Error Codes Flashes of Red LEDs Signal Specific Issues: - Two flashes: System lockout, requiring retry or recycle. - Three flashes: Venting problem or pressure switch issue. - Four flashes: Open temperature limit switch malfunction. - Five flashes: System failure, refer to page 36 for details. American Standard Inc. reserves the right to modify product designs and specifications without prior notice. For more information, contact your local dealer (distributor).