PROGRESS HYBRID MODEL 209a



WOODSTOCK SOAPSTONE STOVES

OWNER'S MANUAL

Tested and Listed by

Tested To UL 1482-2011 7th Edition Listed By PFS Corporation



Woodstock Soapstone Company, Inc. 66 Airpark Road, West Lebanon, NH 03784 Toll Free 1-800-866-4344 • www.woodstove.com

OUR PROMISE

We are sure you will enjoy your new stove. During the first six months that you own it, test its performance and experience the comfortable warmth of soapstone. If you are not thoroughly delighted with the beauty, quality, and energy efficiency of your stove, you may return it for a full refund, including the cost of return freight. This is the best consumer protection plan in the industry.

EPA APPROVAL

This Manual describes the installation and operation of: the **Model 209a Progress Hybrid Catalytic Soapstone Stove**

Model 209a Progress Hybrid Catalytic Soapstone Stove meets the U.S. Environmental Protection Agency's emission limits for wood heaters sold after May 15, 2020. When tested with cord wood, this stove has been shown to deliver heat at rates ranging from 13,149 to 47,220 BTU/hr., and average emissions of 0.63 grams/hr.

The Progress Hybrid contains a catalytic combustor, which needs periodic inspection and replacement for proper operation. It is against the law to operate this woodstove in a manner inconsistent with the operating instructions in this manual, or if the catalytic element is deactivated or removed.

This wood heater has a manufacturer-set minimum low burn rate that must not be altered. It is against federal regulations to alter this setting or otherwise operate this wood heater in a manner inconsistent with operating instructions in this manual.

LISTING TO UL #1482

Tested and Listed by



Model 209a Progress Hybrid Catalytic Soapstone Stove has been tested to UL Standard #1482 7th edition 2011 for safety, and listed by PFS Corporation. UL Standard #1482 is the standard for testing solid fuel heating appliances which is universally recognized by all national building regulatory agencies (SBCC, BOCA, ICBO) and individual states.

Please Note: Tested and Listed for US installations only

LIMITED WARRANTY

Your Woodstock Soapstone Stove will be carefully inspected before shipment. We will replace any part which is defective in material or workmanship, free of cost, for a period one year from the date of purchase. If a defect is discovered, please contact Woodstock Soapstone Company, Inc. for instructions regarding return or replacement of the defective part.

CATALYTIC COMBUSTOR WARRANTY

The catalytic combustor in your Progress Hybrid Woodstove is fully warranted for three years from the date of purchase against any defect in workmanship or materials that prevent the combustor from functioning when installed and operated properly. The catalytic combustor is additionally warranted for three years from the date of purchase for any deterioration in the stainless steel substrate material. For instructions regarding return or replacement of the catalytic combustor, please contact:

Woodstock Soapstone Company, Inc. 66 Airpark Road West Lebanon, NH 03768

Phone: 1-800-866-4344 • Web: www.woodstove.com

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Introduction

In many ways, the Progress Hybrid was inspired by our customers' request for a larger wood stove capable of heating large spaces. Many wanted the choice of top or rear venting and right or left side loading. A large ash pan option also made the list. Of course everyone wanted a grand view of the mesmerizing flames. All of these features made it into the final design, but this was not good enough for us. We wanted this new wood stove to exceed the efficiency of any stove in production and deliver its soul soothing warmth with one of the most efficient burns, and lowest emissions in the industry. How could we achieve these goals? Hybrid technology.

Why is the Progress called a Hybrid? It is a hybrid because it combines two distinct and proven combustion technologies to achieve our goals of high efficiency and low emissions. Government regulations and increased public concern regarding air quality over the past few decades have led the wood stove industry to develop cleaner burning stoves. These stoves have used either catalytic combustors **or** a secondary combustion system- until now. The Progress Hybrid is the first wood stove in the industry to combine these two systems and reap the benefits of both to produce one of the cleanest burning and most efficient stoves available today. Each system on its own has distinct advantages. A brief description is below followed by a more detailed explanation.

Catalytic Combustors:

- Burn wood smoke starting at 500° F
- Operate best at low to moderate burn rates
- Yield clean, efficient, long duration burns
- Add to wood stove efficiency by generating heat from burning wood smoke

Secondary Combustion Systems:

- Burn wood smoke starting around 1000° F
- Operate best at moderate to high burn rates
- Deliver maximum heat output
- Provide a very active fire that is great for viewing

Catalytic combustors are well suited for longer duration, moderate burning. They have the ability to break down the organic compounds in wood smoke at lower temperatures. This leads to a cleaner burn than older stoves that allowed the wood to smolder when choked down for longer burn times. The catalytic reaction reduces harmful combustion by-products to mainly water vapor and carbon dioxide. As the compounds are broken down through this reaction a substantial amount of heat is released as well. This extra heat increases the overall efficiency of a catalytic wood stove. The combustor has the ability to take advantage of the fuel value of the wood smoke before the smoke leaves the stove as pollution and wasted energy.

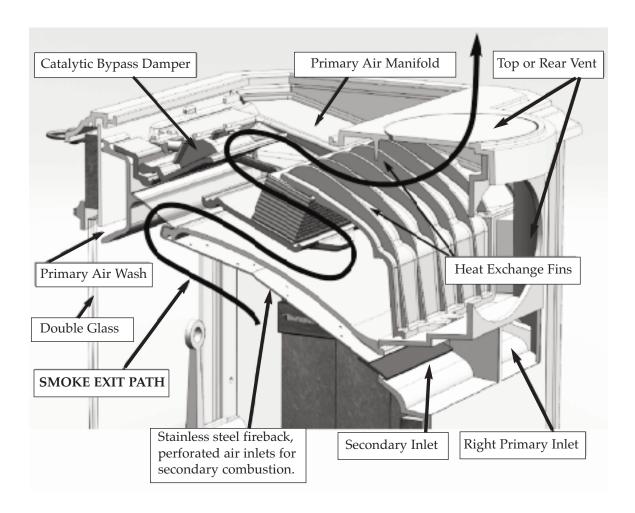
Secondary combustion systems are designed to maximize efficiency and reduce emissions as well, but they operate differently. The secondary combustion system incorporates a secondary air source to ignite the volatile gases produced by the wood burning in the firebox. This reaction requires temperatures over 1000 degrees F to effectively start breaking down the organic compounds in the wood smoke. Secondary combustion systems will work best in a stove that is designed to maintain high firebox temperatures and allow the right amount of secondary combustion air into that high temperature area. The gases burn at very high temperatures as the smoke is broken down into simpler compounds in the firebox.

The Progress Hybrid incorporates a large catalytic combustor as well as a secondary combustion system. It has been designed to deliver the maximum amount of heat from the wood and smoke it burns while minimizing the pollution released to the atmosphere. One simple lever controls the flow of primary as well as secondary air into the firebox. The amount of air, temperature of the firebox, and the

amount of fuel (smoke and gasses) present will dictate which system (or both) is most active. Simply allowing more air into the firebox will generate more heat there, while also increasing the amount of oxygen to light off the secondary combustion process. The result is a spectacular light show as the secondary flames swirl and tumble around the firebox. The entire stove body will radiate warmth for hours. Less air to the firebox will slow the primary combustion, and create the ideal conditions for an effective catalytic reaction. The catalytic combustor will become very active as the smoke and oxygen not consumed in the firebox will provide it with the necessary ingredients to effectively break down the compounds in the smoke, and generate substantial heat at the top of the stove. Heat will be delivered to your home very evenly and moderately for twelve hours or more.

These two systems are not mutually exclusive and have been designed to work together. The Progress Hybrid is designed to utilize each system or both depending on the conditions present in the firebox. This makes operating the Progress as simple as possible while providing a clean and efficient burn over a wider range of heat output.

This hybrid design makes the Progress the perfect marriage of modern combustion technology and the timeless beauty and function of soapstone.



DIMENSIONS & SPECIFICATIONS

H x W x D (10" Standard Legs) 33.5"x30.5"x25"
HxWxD (5" Short Legs)28.5"x30.5"x25" <i>Ash pan unavailable with short legs</i>
EPA 2020 CertifiedYes
Listed to UL 1482Yes
Flue ExitTop or Back
EPA Cordwood Emissions Rating0.63 grams/hr
Flue Size6"
EPA HHV Efficiency
EPA LHV Efficiency84.4%
Flue Height to Center (Standard Legs)27.75"
Catalytic Combustor & Secondary Air Standard
Flue Height to Center (Short Legs)22.75"
Bottom Heat ShieldStandard

Weight700 lbs.
Ash PanOptional
Loading DoorRight or Left
Back Clearance (no protection)36"
Loading Door Size (HxW)11"x9"
Back Clearance (w/Heat Shield Kit)7"
Draft ControlManual
Side Clearance
Wood Length (Maximum)22"
Firebox Size
Viewing Window (HxW)
Burn Time
Heat Output Range13,149-47,220 BTU/hr
Area Heated

