

# CAP SYSTEM KIT

*Combustion  
Air Proving Kit with  
Burner Cut-Off*



***When dealing with combustion  
air/space limitations, the CAP System  
is a superior solution!***

*The CAP System provides direct combustion air to the appliance, combined with the code compliant piece of mind of safe operation due to burner cut-off when a blockage is detected.*

- *Easily Installed*
- *Building Code Compliant\**
- *Preferred by Homeowners*
- *Retrofit on Carlin EZ-Series burners!\*\**

\*Designed to meet NFPA31, section 5.4.3.3, as covered by April 2019 TIA 16-2.

\*\*With compatible Pro-X 70200

Patent No. 11,428,407

***Carlin***<sup>®</sup>  
***Combustion Technology***

# Why CAP System – Smart Technology for Efficiency and Safety!

## No More Space Limitations

The CAP System's patented design safely provides DIRECT COMBUSTION AIR to your appliance, allowing you to reduce the area considered "confined" for ventilation by up to 50%!

## Code Compliance Just Got Easier

Designed to comply with NFPA 31\* requirements for supplying combustion air in confined spaces, the CAP System includes safeguards that shut down burner operation in the event of blockage of the air passage to the oil burner(s)!

\*Designed to meet NFPA31, section 5.4.3.3, as covered by April 2019 TIA 16-2.

## Homeowner Satisfaction, the Win-Win

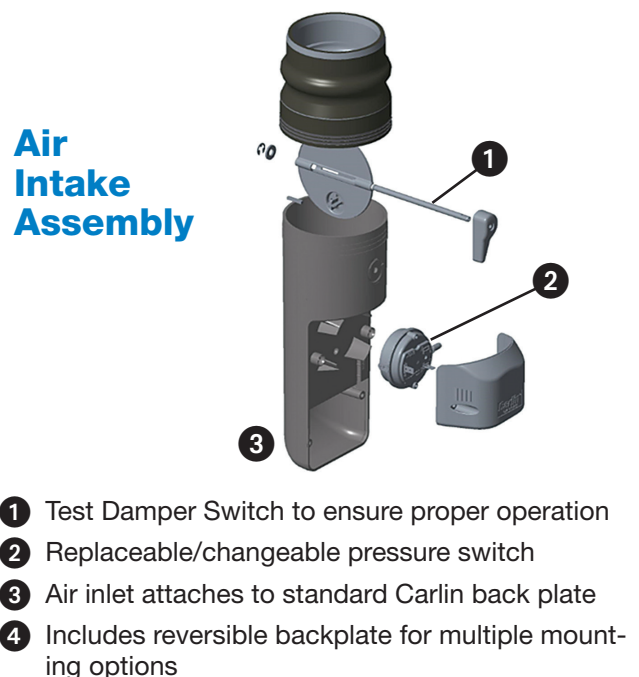
Efficient, effective and easy. Instead of spending hours installing other devices that flood cold or

hot humid air into the home and run up the homeowner's electric bill, go with the CAP System! It's simple to install, requires no additional power for operation and adds to the ALREADY quiet operation of a Carlin Burner.

## How it works

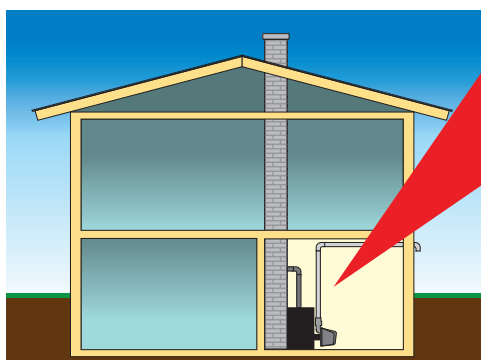
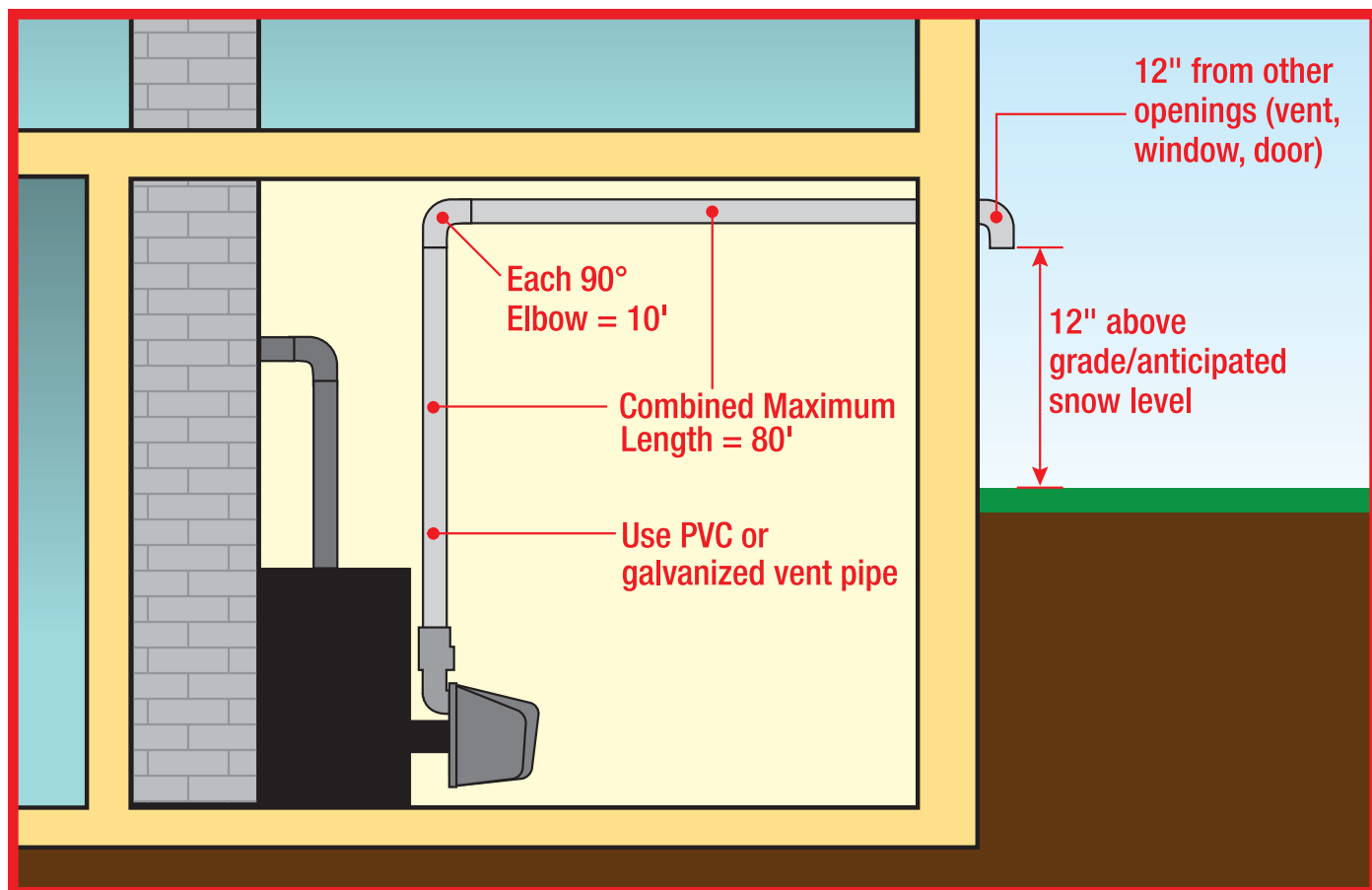
The CAP system runs a combustion air intake test during each Pre-Purge. If there is no blockage, your appliance will proceed with its standard operation. If it senses an air block, the CAP System works with our Pro-X 70200 Oil Primary to abort ignition and shut down the burner, giving you a chance to check out the problem. The CAP System continually monitors your combustion air intake, so even if the burner runs, THEN experiences a blockage, the CAP System will communicate to the burner to cease operation!

## CAP System Design



HORIZONTAL or VERTICAL

# CAP System Installation



**Pro-X 70200 BV**

The Carlin CAP System works in conjunction with the Universal Pro-X 70200's built-in features to help prevent false lockouts and keep air flowing to the burner.

1. Seal back plate/cover and install CAP combustion air inlet.
2. Wire CAP System to Pro-X 70200\* BV contacts. Select "Intake" from Vent Input screen
3. Install PVC or galvanized vent pipe.
4. Use chart to set combustion settings based on current outside temperatures.
5. Mount cover and test CAP System.

\*Manufactured after September 2018.

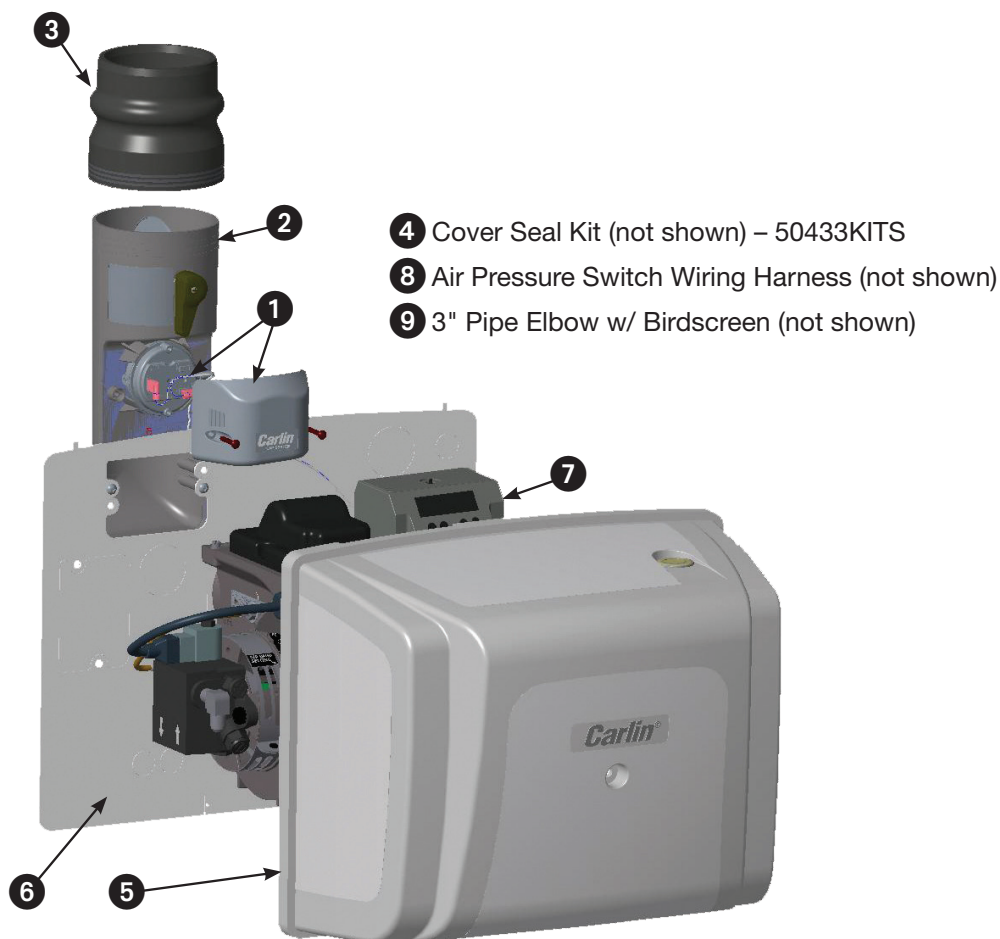
BURNER SETUP CHART				
CAP System utilizes outside air for combustion. Incoming air temperature will fluctuate by season which can significantly impact combustion. Use below chart to ensure proper set-up.				
Incoming combustion air temperature during setup	CO <sub>2</sub> min	CO <sub>2</sub> max	O <sub>2</sub> max	O <sub>2</sub> min
-20°F to 0°F	10.2%	11.0%	7.0%	5.8%
5°F to 30°F	11.0%	11.5%	5.8%	5.5%
35°F to 60°F	11.5%	12.2%	5.5%	4.2%
65°F or higher	12.0%	12.5%	4.6%	3.9%

# How to Order Your CAP System

See chart below to find the kit that's best for you!

CAP Model	Description	Firing Rate (GPH)	Contains
51300AS	Low Rate CAP Kit (for Carlin burners <u>with</u> covers)	0.50 - 1.00	① Air Pressure Switch Assembly with 50806A Switch, ② Combustion Air Inlet, ③ Connecting Flange, ④ Cover Seal Kit, ⑤ Air Pressure Switch Wiring Harness, ⑥ 3" Pipe Elbow w/ Birdscreen
51300BS	Medium Rate CAP Kit (for Carlin burners <u>with</u> covers)	1.05 - 1.45	① Air Pressure Switch Assembly with 50806B Switch, ② Combustion Air Inlet, ③ Connecting Flange, ④ Cover Seal Kit, ⑤ Air Pressure Switch Wiring Harness, ⑥ 3" Pipe Elbow w/ Birdscreen
51300CS	High Rate CAP Kit (for Carlin burners <u>with</u> covers)	1.50 - 2.00	① Air Pressure Switch Assembly with 50806C Switch, ② Combustion Air Inlet, ③ Connecting Flange, ④ Cover Seal Kit, ⑤ Air Pressure Switch Wiring Harness, ⑥ 3" Pipe Elbow w/ Birdscreen
51300S	Complete CAP System Kit (for Carlin burners <u>without</u> covers)	0.50 - 2.00	① Air Pressure Switch Assembly with 50806A, B & C Switches, ② Combustion Air Inlet, ③ Connecting Flange, ④ Cover Seal Kit, ⑤ Cover, ⑥ Reversible Cover Back Plate, ⑦ Air Pressure Switch Wiring Harness, ⑧ 3" Pipe Elbow w/ Birdscreen

Note: All CAP System models require ⑦ Carlin 70200 Primary Control manufactured after Sept. 2018



**Carlin®**  
Combustion Technology

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