

# Cooling Chamber for IDD Detectors

*Flame detector cooling in a compact package with no additional cooling air requirements.*

## Product Overview

The IDD flame detector cooling chamber is an economical, compact method of providing additional detector cooling in higher ambient air temperature applications. The cooling chamber consists of a two piece cast steel housing that encloses the Forney IDD flame detectors.

When an IDD Detector is installed on the burner front without a cooling chamber, the cooling air is connected between the detector and the sight tube with the air directed down the sight tube into the furnace. When installed with a cooling chamber, the cooling chamber air inlet connection allows for the detector to be included in the air stream. The cooling chamber redirects the air over the detector, helping to keep it cool, then continues down the sight tube into the furnace.

The two piece casting is easily opened by hand to allow access to the detector inside. No connections need to be disconnected to gain access to the detector. The design of the cooling chamber also supports and protects the detector and cable connection from possible damage at the boiler front.

## Features & Benefits

- **DETECTOR COOLING**  
Will keep the flame detector cool up to an ambient temperature of 200°F (see specifications section)
- **CABLE SUPPORT**  
Provides total support to the detector cable connection
- **DETECTOR COMPATABILITY**  
Provides additional detector cooling for the IDD II, IDD IIU and IDD IIL detectors.
- **SIMPLIFIED MAINTENANCE**  
Hand operated side clamps allow easy access to the flame detector located inside the cooling chamber.
- **COMPACT & DURABLE**  
Compact size and rugged design will stand up to the harshest burner front conditions.



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## Products and Accessories:

Cooling Chamber		Part #381071-01
IDD-II Infrared Detector	Filtered (#6 Oil & Coal )	Part #38321-21
IDD-IIU Infrared Detector	Unfiltered (#2 Oil, #6 Oil & Coal)	Part #38321-22
IDD-III, Infrared Detector	Lignite Fuel	Part #38321-23

## Specifications:

Dimensions:	9.8" x 5" x 3.5"
Weight:	4 lbs 2oz
Mounting:	1" FNTF sight tube fitting
Cooling air connection:	1" FNTF
Materials	Cast Steel Housing, Silicone Rubber Seal
Electrical	N/A
Cooling capability:	200°F ambient @ 65°F cooling air temp 180°F ambient @ 90°F cooling air temp
Cooling air flow:	15 to 20 scfm @ 6 inwc
Detector temp limits:	32°F to 140°F for all Type IDD detectors except IDD-Ultra
Compatible Flame Detectors:	IDD-II, Filtered Infrared Detector IDD-IIU, Unfiltered Infrared Detector IDD-III, Infrared Detector for Lignite

