

## Safety Accessories

### Flashback Arrestors and Check Valves

Flashback arrestors and reverse flow check valves provide additional protection against flashbacks. Victor recommends the use of these devices whenever possible. Victor add-on flashback arrestors contain both a reverse flow check valve and a flashback arrestor.

Due to the high flow requirements of Victor Heavy Industry torches, it is important to use flashback arrestors that have sufficient flow capacity.

**IT IS IMPORTANT TO UNDERSTAND THE DIFFERENCE BETWEEN REVERSE FLOW CHECK VALVES AND FLASHBACK ARRESTORS.**

#### REVERSE FLOW CHECK VALVES:

Helps to prevent the reverse flow of gases from traveling past the check valve.

#### FLASHBACK ARRESTORS:

Prevents a flame from traveling past the flashback arrestor in the event of a flashback.

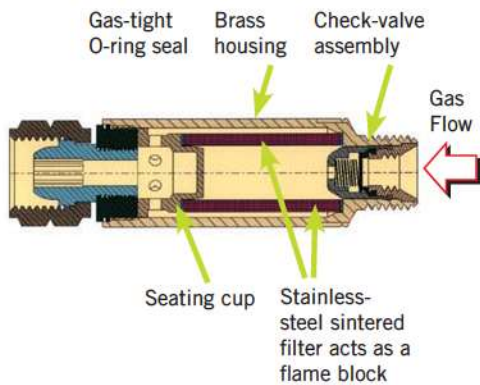
#### Note:

*The use of both regulator and torch mount flashback arrestors with heavy industry equipment requiring high gas volume is not recommended because it may cause excessive flow restriction. It is always better to place the safety devices at the rear of the torch than at the regulator in order to protect the hose.*

SAFETY

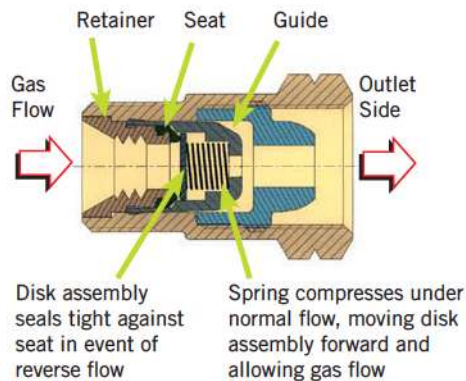
## The Flashback Arrestor

Prevents flashback



## The Check Valve

Prevents the reverse flow of gases



### Conversion Chart

Gas	Conversion Factor	Max. Pressure
Acetylene	1.05	15 psi
Hydrogen	3.79	30 psi
Mapp	0.82	22 psi
Methane	1.34	50 psi
Oxygen	0.95	143 psi
Propane	0.80	50 psi

## FlameBuster™ High Flow

### FBHC-O

High Flow Torch Mount



### FBHC-OR

High Flow Regulator Mount



### FBHC-OC

High Flow Torch Mount

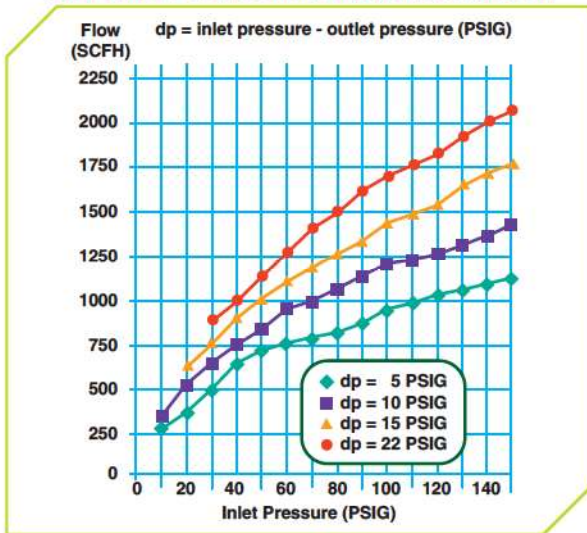


### FBHC-ORC

High Flow Regulator Mount



FLOW CHART - FBHC SERIES FLASHBACK ARRESTOR



Part No.	Model No.	Gas	Description	Connection
<b>OXYGEN - TORCH MOUNT</b>				
<i>(Torch mount models also protect hose)</i>				
0657-0076	FBHC-O	Oxygen	Torch Mount - High Flow	"B" 9/16"-18 RH (CGA 022)
0657-0077	FBHC-OC	Oxygen	Torch Mount - High Flow	"C" 7/8" - 14 RH (CGA 024)
<b>OXYGEN - REGULATOR MOUNT</b>				
0657-0078	FBHC-OR	Oxygen	Regulator Mount - High Flow	"B" 9/16" - 18 RH (CGA 022)
0657-0079	FBHC-ORC	Oxygen	Regulator Mount - High Flow	"C" 7/8" - 14 RH (CGA 024)

Flow rates shown in chart are for air. To convert to other gases, multiply the air flow rate by the conversion factor listed.

Nothing can take the place of proper equipment operation. Always read, understand and follow the instructions provided with each product.

**VICTOR® ADD-ON FLASHBACK ARRESTORS CONTAIN BOTH A REVERSE FLOW CHECK VALVE AND A FLASHBACK ARRESTOR**

## FlameBuster™

### FB-O

Torch Mount - Oxygen



### FB-OR

Regulator Mount - Oxygen



### FB-F

Torch Mount - Fuel

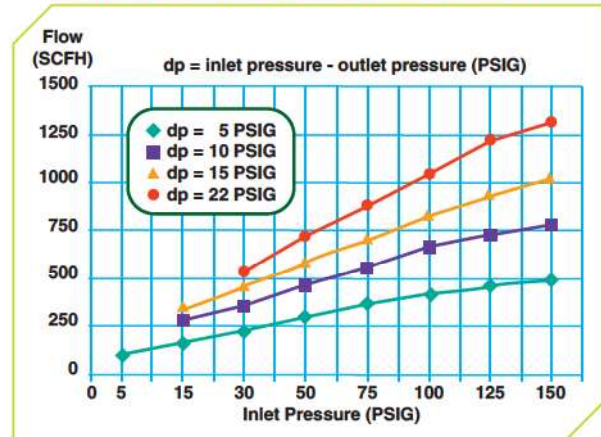


### FB-FR

Regulator Mount - Fuel



FLOW CHART - FB SERIES FLASHBACK ARRESTOR



Part No.	Model No.	Gas	Description	Connection
<b>OXYGEN - TORCH MOUNT</b>				
0657-0010	FB-O	Oxygen	Torch Mount	"B" 9/16"-18 RH (CGA 022)
<b>OXYGEN - REGULATOR MOUNT</b>				
0657-0014	FB-OR	Oxygen	Regulator Mount	"B" 9/16"-18 RH (CGA 022)
<b>FUEL - TORCH MOUNT</b>				
0657-0011	FB-F	Fuel	Torch Mount	"B" 9/16"-18 LH (CGA 023)
<b>FUEL - REGULATOR MOUNT</b>				
0657-0015	FB-FR	Fuel	Regulator Mount	"B" 9/16"-18 LH (CGA 023)
<b>PAIR PACKS</b>				
0656-0001	FB-1	Oxy/Fuel	Torch Mount	"B" 9/16"-18 RH/LH (CGA 022 & 023)
0656-0004	FBR-1	Oxy/Fuel	Regulator	"B" 9/16"-18 RH/LH (CGA 022 & 023)

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SAFETY

## FlameBuster™ Plus

### Flashback Arrestor with Kwik-Connect™ Coupling

Designed to prevent flashback from torch to hose (Not for regulators)



Part No.	Model	Description
0656-0002	FBP-1	FlameBuster Plus Torch - Pair Pack
0657-0002	FBP-0	FlameBuster Plus Torch
0657-0003	FBP-F	FlameBuster Plus Torch

Plug Assemblies available: Oxygen: 0657-0031, Fuel: 0657-0032

### Flashback Arrestor with Kwik-Connect Coupling Components FBP-1

Part No.	Gas	Description
0657-0031	Oxygen	Male End
0657-0032	Fuel Gas	Male End

## Flashback Arrestors

### Pair Packs



Part No.	Model No.	Gas	Description	Connection
0656-0006	FBT-2	Oxy/Fuel	Torch Mount	"B" 9/16"-18 RH/LH (CGA 022 & 023)
0656-0007	FBR-2	Oxy/Fuel	Regulator Mount	"B" 9/16"-18 RH/LH (CGA 022 & 023)

## Reverse Flow Check Valves

### for Torches & Regulators



Part No.	Description
<b>TORCH MODELS</b>	
0690-0011	CTO & CTF Torch - Check Valves Pair Pack (Oxygen & Fuel)
0690-0032	CTO Torch - Check Valve (Oxygen)
0690-0033	CTF Torch - Check Valve (Fuel)
<b>REGULATOR MODELS</b>	
0690-0012	CRO & CRF Regulator - Check Valves Pair Pack (Oxygen & Fuel)
0690-0034	CRO Regulator - Check Valve (Oxygen)
0690-0035	CRF Regulator - Check Valve (Fuel)

## Built-in Flash Arrestor

### Retro-Fit Kit

The retro-fit kit allows replacement of built-in flash arrestors for cutting torches without the use of Loctite® or heat

Part No.	Description
<b>TORCH/HOSE CONNECTIONS</b>	
0656-0046	Includes oxygen and fuel cartridges, retainer plate and screws, hex key, and instructions

Repair of oxy/fuel equipment, including flashback arrestor and check valve replacement, should be done by a qualified technician.

## Vanguard™ Flashback Arrestor

### Replacement Cartridge



Part No.	Description
<b>TORCH/HOSE CONNECTIONS</b>	
0657-0036	Torch and Torch Handle Replacement Cartridge (315FC, 100FC, J 100FC) (CST 800FC) (Both Gases)
0657-0068	Torch & Torch Handle Replacement Cartridge (H 315FC, ST 900FC, ST 1000FC, ST 2600FC) (Oxygen)
0657-0069	Torch & Torch Handle Replacement Cartridge (H 315FC, ST 900FC, ST 1000FC, ST 2600) (Fuel Gas)

Flashback arrestor replacement cartridges include an "O" ring but does not include a replacement reverse flow check valve. Part No. 0690-0027 - 9/16" (pair)

## Kwik-Connect

### Torch/Hose Connections



Part No.	Description
<b>TORCH/HOSE CONNECTIONS</b>	
0656-0000	KC-1 Kwik Connect Pair Pack (Oxygen and Fuel)
0312-0090	KCO Kwik Connect (Oxygen)
0312-0091	KCF Kwik Connect (Fuel)

# Selection & Reference Information

## Cutting Orifice Reference Chart - Cutting Tip Size

For all standard cutting tips except Series MTH high speed models

000	00	0	1	2	3	4	5	6	7	8	10	12
.	.	.	.	.	.	.	.	.	.	.	.	.
0.027	0.033	0.041	0.047	0.060	0.071	0.083	0.100	0.121	0.141	0.162	0.185	0.221

**Orifice Diameter** - inches (Orifice diameters shown actual size)

### Code for Fuel Gases

<b>A</b>	<b>Acetylene</b>
<b>LP</b>	<b>Propane/Natural Gas</b>
<b>P</b>	<b>Propylene</b>

### Preheat Chart for Propylene and LP Tips

Torch Series	Preheat Oxygen (psig)	Preheat Fuel (psig)
MT 200	—	8 oz and up
MT 300	30/35	8 oz and up
ST 2600FC	—	1 psig and up
ST 900FC	—	5 psig and up
ST 1000FC	—	5 psig and up

### Cutting Torches

Handle	Cutting Attachment	Fuel Gas
<b>CUTTING TORCHES</b>		
315FC, H 315FC	CA 2460-90°	All
315FC, H 315FC	CA 2461-75°	All
315FC, H 315FC	CA 2462-180°	All
<b>STRAIGHT TORCHES</b>		
ST 2600FC	—	All
ST 1000FC	—	All
ST 900FC	—	All
*HC 1200C	—	All
<b>MACHINE TORCHES</b>		
MT 200	—	A, LP
MT 300	—	A, LP

### Material Thickness – Tip Size

Material Thickness		Tip Size
Inches	mm	
1/8"	3.2 mm	000
1/4"	6.4 mm	00
3/8" – 1/2"	9.5 - 12.7 mm	0
3/4"	19.1 mm	1
1" – 1 1/2"	25.4 - 38.1 mm	2
2" – 2 1/2"	50.8 - 63.5 mm	3
3"	76.2 mm	4
4" – 5"	102 - 127 mm	5
6" – 8"	152 - 203 mm	6*
10"	254 mm	7*
12"	305 mm	8*

*\*For best results, use "High Flow Handles" and 3/8" hose*

### Gouging Depth Tip Chart

Approximate Gouge Depth				
Depth of gouge will vary due to angle of tip and cutting pressure.				
Type	Tip Size	Depth of Gouge	O <sub>2</sub> psi	C <sub>2</sub> H <sub>2</sub> psi
118	0	1/8"-1/4"	30-45	5-7
	2	1/4"-3/8"	30-45	5-7
	8	1/4"-1/2"	30-55	6-8
218	4	1/4"-3/4"	30-65	8-10
	6	3/8"-1"	30-65	10-12

CUTTING TIPS

## Tip Nut

**0309-0018**

For Series 1 cutting tips



**0309-0003**

For Series 3 cutting tips