

# Heavy-Duty Oxy-Fuel Outfit

## Oxy-Fuel System with Tips for Acetylene



289056  
January 2021

High-capacity flow for cutting, heating, welding and brazing. Finish. Fast.



770974

### Quick Specs

**2-YEAR WARRANTY**

#### Cutting Capacity

Cuts up to 1-1/2 in. (38 mm) thick metal with included tips and up to 8 in. (203 mm) thick metal with optional tips

#### Heating Capacity

Heats up to 117,600 Btu per hour

#### Welding Capacity

Welds up to 1/8 in. (3 mm) metal thickness

**Carrying Weight** 26 lb. (11.8 kg)

#### Accessories

- Flip-front goggle
- Shade 5
- 2 x 4-1/4 in. (51 x 108 mm)
- Carrying case
- 17 x 13.4 x 11.8 in. (45 x 35 x 30 cm)
- 50 lb. (23 kg) maximum load

#### Includes

- Oxygen regulator CGA 540
- Fuel regulator CGA 510
- Torch handle with check valve
- Cutting attachment
- Three cutting tips (#0, 1, 2)
- Heating tip #8
- Welding tip #2
- Flip-front goggle
- Stainless-finish carrying case
- 20-foot T-grade hose with fittings (1/4-inch ID)
- Spark lighter
- Tip cleaner
- Replacement o-ring set

#### Single-Stage Regulators

- Self-reseating relief valve protects seat from pressure surge
- Sintered inlet filter made of electroless nickel-plated bronze prevents contamination
- 3.38-inch (86 mm) stainless steel diaphragm for accurate reading and long service
- Die-forged brass body for extra strength

#### Heavy-Duty Handle

- Greater wall thickness with tube-within-a-tube design
- Massive heavy-ribbed handle for ventilation and sure grip
- Forged brass body for strength and durability
- Control valves with stainless steel ball for smooth gas-tight operation
- Built-in reverse flow check valve for operator safety

#### Heavy-Duty Cutting Attachment

- Compact and balanced length and weight minimizes operator fatigue
- Stainless steel tubes for strength and heat resistance
- In-tube spiral mixer blends oxygen and fuel gases for optimum performance
- Smooth push-type cutting oxygen valve for precise ease-on control
- Brass coupling nut and double o-ring seal for gas-tight seal

#### Cutting Tips

- More tips, more cutting, three cutting tips in the outfit
- All copper for general purpose oxy-acetylene hand or machine cutting

#### Heating Tip

- Built-in spiral mixer designed for each tip size and flame characteristic
- Swaged for proper alignment, flame uniformity and free-flow contour
- For heat treating, straightening and priming

#### Welding Tip

- Swaged one-piece copper elbow for alignment, uniform flame and free-flow contour; 65-degree angle
- Built-in spiral mixer for optimum flame characteristic by tip size
- Double o-ring seal for gas-tight connection without wrench
- For welding, brazing, descaling, hard facing and flame priming



**Underwriters Laboratories (UL) Listed** for torch and regulators.



#### Hobart Welding Products

An ITW Welding Company  
Sales: 800-626-9420  
Service: 800-332-3281

#### HobartWelders.com



## Heavy-Duty Single-Stage Regulators

Hobart No.	Victor Style	Gas	Max. Delivery Pressure		Max. Inlet Pressure	Connections		Gauges (psig) Steel 2.5 in. (63 mm)		Net Weight Pounds (kg)	Dimensions (H x W x D) Inches (mm)
			psig	kPa		psig	Outlet	Inlet	Outlet		
770980	SR 450	Oxygen	145	1,000	2,900	9/16"-RH	CGA 540	200	4,000	5.11 (2.3)	7 x 7.25 x 5.13 (178 x 184 x 130)
770981		Fuel gas	14.5	100	220	9/16"-LH	CGA 510	30	400		

## Heavy-Duty Combination Torch

Hobart No.	Victor Style	Fuel Gas	Description	Hose Connection	Length Inches (mm)	Net Weight Pounds (kg)	Head Angle
770979	300	All	Torch handle	9/16"-18 "B"	9.5 (240)	1.4 (0.64)	—
770978			Cutting attachment	—	10.5 (267)	1.9 (0.87)	90 degrees

Notes: The outfit is safe to use with the factory-installed check valves. Check valves protect against the reverse flow of gas into the hose and regulator of the other gas when there is sudden loss of pressure on one of the gases.

Replace the check valves with the supplied Flashback Arrestors for safer use. Flashback arrestors protect against reverse flow of gas and flashback. Flashback occurs when the flame travels upstream from the torch to the gas source.

Do not use the flashback arrestors with check valves to avoid starving the system. Using both will restrict gas flow needed for thicker metals.

## Cutting Tips

Hobart No.	Victor Style	Tip Size	Metal Thickness		Oxygen Pressure		Acetylene Pressure		Consumption (scfh)		Speed (ipm)	Kerf Width
			Inch	mm	psig	kPa	psig	kPa	Oxygen	Acetylene		
770975*	1-101	0	3/8-1/2	10-13	25-35	172-241	3-5	21-34	55-65	5-10	24	0.06
770163*		1	3/4	19	30-35	207-241	3-5	21-34	80-85	8-13	17-21	0.07
770164*		2	1-1-1/2	25-38	40-45	276-310	3-7	21-48	150-160	12-18	13-17	0.09
770165		3	2-2-1/2	51-64	40-50	276-345	4-10	28-69	210-240	14-26	12-13	0.11
770994		4	3	76	40-50	276-345	5-10	34-69	270-320	18-30	9-12	0.12
Hobart No.	Victor Style	Tip Size	Metal Thickness		Oxygen Pressure		Propane Pressure		Consumption (scfh)		Speed (ipm)	Kerf Width
			Inch	mm	psig	kPa	psig	kPa	Oxygen	Propane		
770166	1-GPN	1	3/4	19	30-35	207-241	4-6	28-41	70-80	10-12	15-20	0.08
770167		2	1-1-1/2	25-38	35-45	241-310	4-9	28-55	115-135	12-15	14-18	0.09

## Heating Tip

Hobart No.	Victor Style	Tip Size	Btu Per Hour	Oxygen Pressure		Acetylene Pressure		Consumption (scfh)		Length Inches (mm)
				psig	kPa	psig	kPa	Oxygen	Acetylene	
770977*	MFA	8	44,100-117,600	20-30	138-207	10-15	69-103	33-88	30-80	12.5 (318)

## Welding Tips

Hobart No.	Victor Style	Tip Size	Metal Thickness		Oxygen Pressure		Acetylene Pressure		Consumption (scfh)		Length Inches (mm)
			Inch	mm	psig	kPa	psig	kPa	Oxygen	Acetylene	
770891	W	1	3/32	2	3-5	21-34	3-5	21-34	3-7	3-6	6.2 (156)
770976*		2	1/8	3	3-5	21-34	3-5	21-34	6-11	5-10	6.9 (175)
770988		3	3/16	5	4-7	28-48	3-6	21-41	9-20	8-18	7.7 (195)

\*Denotes tip included in Heavy-Duty Outfit (770974).