

PROCESS



**5/3/1
INDUSTRIAL
WARRANTY**

New!



Compared to the complexities of an oxy fuel cutting torch system, plasma cutting is easy:

- Cuts faster than oxy fuel
- More precise cut, thinner kerf, less slag to clean up
- Smaller heat-affected zone for less warping
- No gas pressure settings or flame tuning needed
- No preheating of metal prior to cutting

The new HP-50 torch incorporates an ergonomic trigger safety that is more comfortable, efficient and economical. The AirForce™ 500i with MVP and a convenient cable management strap for easy transportation make this the most versatile plasma cutter available.

Comes Complete With:

- HP-50 hand-held torch with 16.5 ft. (5 m) length
- Work clamp with 16.5 ft. (5 m) lead
- Extra consumables (2 electrodes, 2 tips and 1 air fitting)
- 10 ft. (3 m) power cord with 5-15P (115 V, 15 A) and 6-50P (230 V, 50 A) MVP plugs
- Easy-to-connect, built-in gas/air filter and regulator for extra protection

Industrial Applications

- Maintenance
- Light Construction
- Prototyping
- Body Shops
- Fabrication
- HVAC Ductwork

Need to cut steel? Thinking about an oxy acetylene cutting torch to do the job? Consider a plasma cutter. This simple technology uses an electrical arc and compressed air to cut steel, aluminum, and other conductive metals.

Designed to cut up to 5/8 inch mild steel, the AirForce™ 500i is powered by standard household receptacles (115 or 230 VAC) using the MVP™ (multi-voltage plug) designed to change voltage with no tools. With the MVP plug and lightweight inverter power supply make this plasma cutter the most convenient, portable cutting system available with larger cutting capacity. The AirForce™ 500i excels at cutting sheet metal and 3/8 inch mild steel, and can even sever 5/8 inch steel.

FEATURES

HP-50 torch

BENEFITS

The new HP-50 torch is designed for increased comfort, more efficient cooling and economical replacement cutting tips.

MVP™ (Multi-Voltage Plug)

Allows you to connect to common 120 or 230 V power receptacles without the use of any tools — simply choose the plug that fits the receptacle

Power factor correction

Expands operator's work area via extension cords while minimizing nuisance trips caused by voltage drops.

LED indicators

Diagnostic lights for quick troubleshooting of pressure, power and cup situations.

Starts without high frequency

Protects unit by not interfering with or damaging controls or computers.

Full cutting capacity

The AirForce 500i provides excellent cutting capability when powered by most engine-driven welders with 240 VAC receptacles.

Wind Tunnel Technology™

Prevents abrasive dust and particles from damaging internal components.

Fan-On-Demand™

Runs only when needed reducing dust/debris pulled into the unit.

LVC™ line voltage compensation

Provides peak performance power under variable input voltage conditions (±15%) for steady and cleaner ending cuts.

Compatible with engine-driven welders

Complete cutting capability when powered by an engine-driven welder with a 240 V generator power outlet of 6 kW or more.

Cable management strap

Secures torch, work cable and power cord to make transporting easy and convenient.

Internal gas/air filter/regulator

Controls amount of usage and flow of air or gas.

Postflow cooling circuit

Extends life of consumables and torch by cooling them with postflow air after trigger is released.

Hobart's 5/3/1 Warranty

No other manufacturer offers a better warranty than Hobart does. Power source is warranted for three years, parts and labor. Original rectifier parts have a five-year warranty and the HP torches have a one-year parts and labor warranty.



Hobart Welders An Illinois Tool Works Company

Hobart Retail Sales	Phone 800-332-3281	FAX 937-332-4161
U.S. Distributor Sales	Phone 920-735-4576	FAX 800-637-2315
Canadian Sales	Phone 888-489-9353	FAX 519-421-0480
International Sales	Phone 920-735-4509	FAX 920-735-4125

Web Site HobartWelders.com



SPECIFICATIONS (SUBJECT TO CHANGE WITHOUT NOTICE.)

INDUSTRIAL **DC** **1** Phase

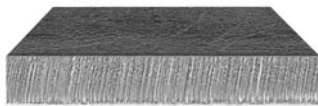
Input Power	Rated Output	Amps Input at Rated Output, 60 Hz, 1-Phase	Max. Open-Circuit Voltage	Plasma Gas Flow/Pressure	Dimensions	Net Weight with torch	Ship Weight
240 V	27 A with 92 VDC, 35% Duty Cycle	13.9	400 VDC	3.0 CFM (85 L/min) at 90–120 PSI (621–827 kPa) recommended	H: 11-1/4 in. (286 mm) W: 8-1/4 in. (210 mm) D: 14-1/4 in. (362 mm)	27.8 lb. (12.6 kg)	32.6 lb. (14.8 kg)
120 V (20 A)	27 A with 92 VDC, 20% Duty Cycle	28.8					
120 V (15 A)	20 A with 88 VDC, 35% Duty Cycle	20.6					

*Recommended 30 A branch circuit for maximum performance. Performance on 20 A branch service may be limited due to breaker/line fuse. Reducing unit output amperage will minimize nuisance breaker/line fuse tripping.

 Certified to both the Canadian and U.S. Standards for welding and plasma cutting equipment.

MILD STEEL CUTTING CAPABILITY (Thickness to scale.)

Cutting at 27 Amps (115 V, 20 A service with 5-20P MVP or 230 V 6-50P MVP)



1/4 in. (6.4 mm) at 25 IPM



3/8 in. (9.5 mm) at 14 IPM

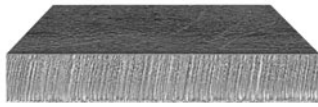
Note: Recommended maximum piercing capacity for hand-held applications is 3/16 in. (4.8 mm). Maximum Sever cut of 5/8 in. (15.9 mm). For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

Maximum Cutting Speeds at 27 Amps Output

Thickness	Approximate Travel Speeds*
16 ga (1.5 mm)	192 IPM (4877 mm/min)
1/8 in. (3.2 mm)	71 IPM (1808 mm/min)
1/4 in. (6.4 mm)	25 IPM (630 mm/min)
3/8 in. (9.5 mm)	14 IPM (345 mm/min)
1/2 in. (12.7 mm)	6 IPM (152 mm/min)

*Travel speeds are approximately 80% of maximum.

Cutting at 20 Amps (115 V, 15 A service with 5-15P MVP)



1/4 in. (6.4 mm) at 16 IPM



5/16 in. (8 mm) at 10 IPM

Note: Recommended maximum piercing capacity for hand-held applications is 1/8 in. (3.2 mm). Maximum Sever cut of 3/8 in. (10 mm). For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

Maximum Cutting Speeds at 20 Amps Output

Thickness	Approximate Travel Speeds*
16 ga (1.5 mm)	134 IPM (3414 mm/min)
1/8 in. (3.2 mm)	44 IPM (1118 mm/min)
1/4 in. (6.4 mm)	16 IPM (406 mm/min)
5/16 in. (8 mm)	10 IPM (254 mm/min)
3/8 in. (9.5 mm)	8 IPM (203 mm/min)

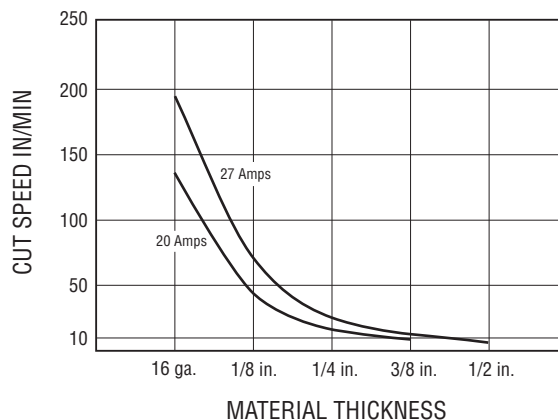
*Travel speeds are approximately 80% of maximum.

Rated cut capacity is based on traveling approximately 10 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements.

CUTTING PERFORMANCE

To determine the maximum rated cutting thickness of mild steel, follow the line from the 10 IPM (inches per minute) point on the cutting chart. The point at which this line intersects the cutting curve determines the maximum recommended production cutting thickness of the unit.

Note: The rating is based on 10 IPM because this is the minimum speed at which the operator achieves a smooth, steady cut when using a hand-held torch.



ACCESSORIES



HP-50 Replacement Torch #244121
16.5 ft. (5 m)



Plastic Consumables Box with Compartments #127493
For storing additional parts and accessories.

The following accessories must be ordered from Miller Service Parts.

MVP™ Adapter Plugs



#219258
For Power Cable 6-50P (230 V/50 A).
Included with machine.



#219261
For Power Cable 5-15P (115 V/15 A).
Included with machine.



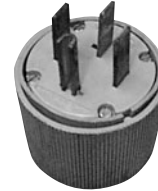
#219259
For Power Cable 5-20P (115 V/20 A). Optional.



In-Line Air Filter Kit #228926
Mounts to the back of the AirForce™ 250ci, 500i and 700i. Includes male and female 1/4 inch NPT quick disconnect fittings and hose for easy on/off connection. The replaceable filter element filters to .85 microns.

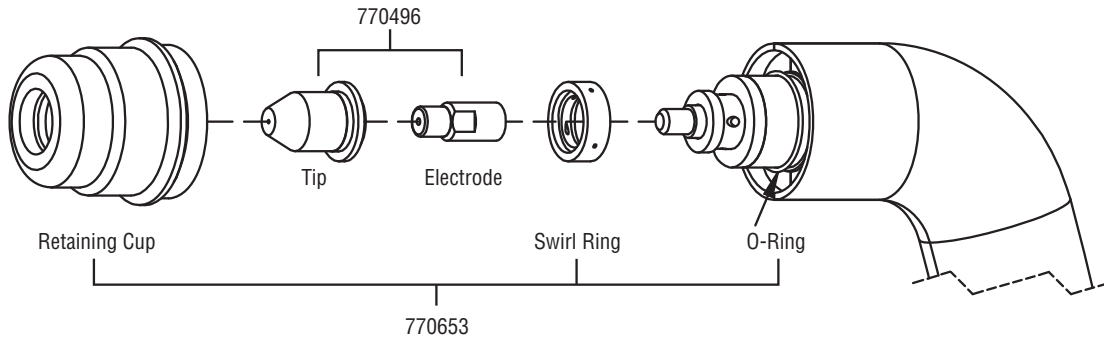
In-Line Air Filter Replacement Element #228928

Includes 1 replacement filter for in-line filter #228926.



Full KVA Plug Kit #119172
240 VAC, 50 amp plug (NEMA 14-50P) to fit full KVA receptacle with a minimum of 8 KVA generator power.

TORCH CONSUMABLES (Order from Hobart Service Parts.)



ORDERING INFORMATION AND SYSTEM CHECKLIST

Power Source	Stock No.	Description	Qty.	Price
AirForce™ 500i	#500548	With 16.5 ft. (5 m) hand-held torch single phase, 115/230 VAC, 60 Hz		
UPC: #715959413268; Shipping Weight: 32.6 lb. (14.8 kg); Carton Dimensions: 18-1/4 x 11-5/8 x 17 in. (464 x 295 x 432 mm); Pallet Qty: 12				
Accessories				
Replacement Torch	#244121	16.5 ft. (5 m) HP-50 hand-held torch		
Plastic Consumables Box	#127493	With compartments		
MVP™ Adapter Plugs	#219258	For power cable 6-50P		
	#219261	For power cable 5-15P		
	#219259	For power cable 5-20P		
In-Line Air Filter Kit	#228926			
In-Line Air Filter Replacement Element	#228928			
Full KVA Plug Kit	#119172	Field		
Torch Consumables		See page 3		
Date:			Total Quoted Price:	

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