

AirForce® 40i

120/240-Volt Portable Air Plasma Cutter



272165
September 2022



500576

Includes

- 12 ft. (3.7 m) XT40R hand-held torch
- 12 ft. (3.7 m) work cable with clamp
- 12 ft. (3.7 m) power cord with 240 V L6-30P twist lock plug for MVP™ adapters
- MVP™ adapters with 5-15P (120 V, 15 A) plug and 6-50P (240 V, 50 A) plug
- Easy-to-connect, built-in gas/air filter and regulator for extra protection
- Extra consumables (2 tips, shield deflector, and electrode)
- Cable management included

Quick Specs

Rated Output

120 V (15 A): 20 A at 88 VDC, 60% duty cycle
120 V (20 A): 27 A at 91 VDC, 35% duty cycle
240 V: 40 A at 140 VDC, 60% duty cycle

Mild Steel Cutting Capacity

Rated: 5/8 in. (15.9 mm)
Max. Cut: 7/8 in. (22 mm)



Powerful performance in a lightweight package.

With up to 40 amps of power, the Airforce 40i can clean cut 5/8-inch and sever cut 7/8-inch steel. It runs on 120-volt or 240-volt power using toolless MVP adapters, so it's excellent for light and heavy industrial users. At 21 pounds, it's easy to transport from one job to another. Setup is easy too; quickly adjust the amperage on the front of the machine with the single knob design.



Applications

- Maintenance
- Prototyping
- Light construction
- Body shops
- Fabrication

Features	Benefits
Small lightweight design	At just 21 pounds (9.5 kg) the shoulder strap allows the end user to easily move from location to location.
MVP adapters	Allow connection to 120 or 240 V receptacles without tools—choose the adapter cord with the right plug that fits the receptacle, and connect it to the power cord with the L6-30R twist lock.
XT40R torch	Increased comfort with an ergonomic trigger safety, more efficient cooling and economical replacement cutting tips.
Pilot arc controller	Allows you to cut expanded/perforated metals, as well as painted or coated surfaces, without retriggering the torch.
Wind Tunnel Technology™	Prevents abrasive dust and particles from damaging internal components.
Fan-On-Demand™	Cooling system operates only when needed, reducing power consumption and contaminants drawn into the machine.
LVC™ line voltage compensation	Provides peak performance power under variable input voltage conditions (±15%) for steady and cleaner-ending cuts.
Internal gas/air filter and 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.
Automatic gouging consumable detection	Adjusts gas pressure to optimize performance, eliminating the need for a manual regulator.
Compatible with engine-driven welders	Complete cutting capability when powered by an engine-driven welder/generator with a 240 V receptacle of 8 kW or more.
Hobart 5/3/1 industrial warranty	Five-year warranty on transformers, stabilizers and main rectifiers; three years on generators, PC boards and drive systems; and one year on guns (MIG, plasma and TIG torches).



Hobart Welding Products

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

HobartWelders.com



Specifications (Subject to change without notice.)



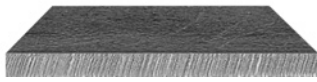
Input Power	Rated Output	Amps Input at Rated Output, 60 Hz	KVA	KW	Max. Open Circuit Voltage	Plasma Gas Flow/Pressure	Dimensions (H x W x D)	Net Weight with Torch
120 V (15 A)	20 A at 88 VDC, 60% duty cycle	17.7	2.2	2.1	400 VDC	6.0 cfm (170 L/min) at 90–120 psi (621–827 kPa) recommended	9 x 5.5 x 13.25 in. (229 x 140 x 337 mm)	21 lb. (9.5 kg)
120 V (20 A)	27 A at 91 VDC, 35% duty cycle	25.0	3.0	2.9				
240 V	40 A at 140 VDC, 60% duty cycle	27.6	6.4	6.3				

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Mild Steel Cutting Capacity (Thickness to scale.)

Cutting at 27 Amps (120 V)

Output amperage is automatically reduced to 27 A for 120 V input.



1/8 in. (3.2 mm) at 88 ipm



3/8 in. (9.5 mm) at 15 ipm

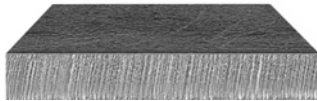
Note: Recommended maximum piercing capacity for hand-held applications is 1/8 inch (3.2 mm). For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

Mild Steel Recommended Cut Speeds at 27 Amps

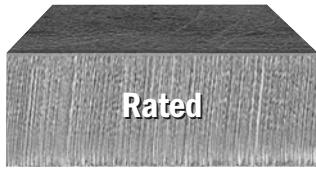
Thickness	Approximate Travel Speeds*
12 ga. (2.8 mm)	115 ipm (2,921 mm/min.)
1/8 in. (3.2 mm)	88 ipm (2,235 mm/min.)
3/16 in. (4.8 mm)	50 ipm (1,280 mm/min.)
1/4 in. (6.4 mm)	28 ipm (711 mm/min.)
3/8 in. (9.5 mm)	15 ipm (386 mm/min.)
1/2 in. (12.7 mm)	8 ipm (203 mm/min.)
5/8 in. (15.9 mm)	5 ipm (126 mm/min.)

* Travel speeds are approximately 80% of maximum.

Cutting at 40 Amps (240 V)



1/4 in. (6.4 mm) at 64 ipm



5/8 in. (15.9 mm) at 13 ipm

Note: Recommended maximum piercing capacity for hand-held applications is 5/16 inch (7.9 mm). Maximum sever cut of 7/8 inch (22.2 mm) at approximately 5 ipm. For aluminum and other metals with high thermal conductivity, cutting capacities may be reduced as much as 30%.

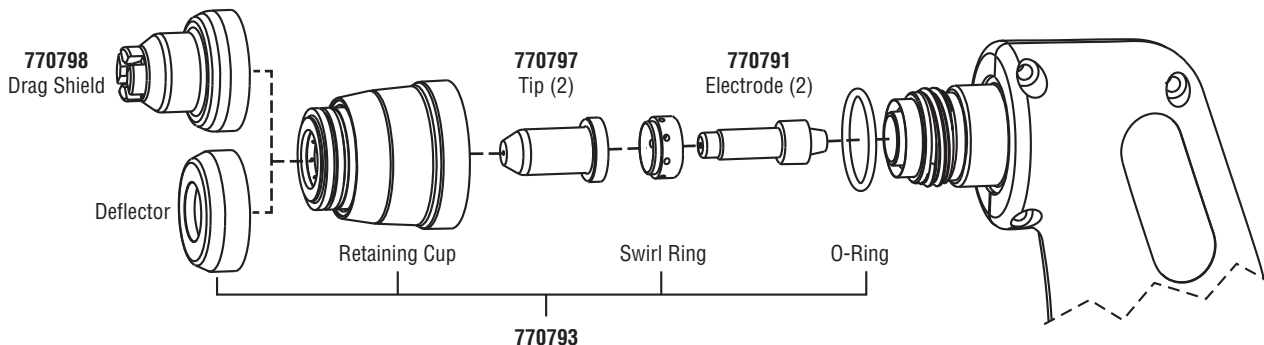
Mild Steel Recommended Cut Speeds at 40 Amps

Thickness	Approximate Travel Speeds*
1/8 in. (3.2 mm)	156 ipm (3,963 mm/min.)
1/4 in. (6.4 mm)	64 ipm (1,626 mm/min.)
3/8 in. (9.5 mm)	36 ipm (915 mm/min.)
1/2 in. (12.7 mm)	22 ipm (559 mm/min.)
5/8 in. (15.9 mm)	13 ipm (330 mm/min.)

* Travel speeds are approximately 80% of maximum.

Rated cut capacity is based on traveling approximately 15 inches per minute to achieve a steady, precise cut. This is the key rating that should meet or exceed your typical cutting thickness requirements.

Torch Consumables



Accessories



XT40R Replacement Torch 284516
12 ft. (3.7 m)



Protective Cover 770966
Weather-resistant nylon resists stains and mildew while protecting the finish of your plasma cutter.



Shade 5.0 Safety Glasses
770726 Mirrored lens with black frame
770727 Black lens with orange frame
Stylish protection that meets ANSI Z87.1 standards.



X-CASE™ 300184
Sturdy case provides ultimate protection for transport and storage. Also features convenient top carrying handle and side recessed hand grips. Store the plasma cutter, accessories and gear in this generous case to be ready to go at any time. Dimensions (H x W x D): 13 x 10.5 x 30.625 in. (330 x 267 x 778 mm).

The following accessories are available through Miller/Hobart Service Distributors.



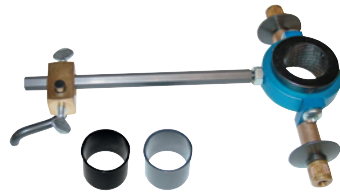
XT40 Consumable Kit 253521
Consumable kit includes 5 electrodes, 5 tips (40 A), 3 tips (30 A), 1 drag shield (40 A), 2 drag shields (30 A), 1 deflector, 1 o-ring, 1 swirl ring, 1 retaining cup, 1 gouge tip (40 A), 1 gouge shield and silicone grease.



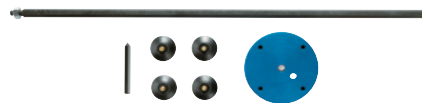
XT30 Consumable Kit 253520
Consumable kit includes 5 electrodes, 5 tips, 1 swirl ring, 1 retaining cup, 1 o-ring and silicone grease.



Plasma Standoff Roller Guide 253054
Helps maintain recommended standoff distance to maximize cutting performance and improve tip life.



Plasma Circle-Cutting Guide 253055
Cut straight lines or circles up to 12-inch diameter with ease.



Suction/Magnetic Pivot Base 195979
Add this to your cutting guide for convenient attachment to all flat surfaces. The extended arm accommodates holes up to 30-inch diameter.



In-Line Air Filter Kit 228926
Mounts to the back of the AirForce® 27i and 40i. 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 one replacement filter for in-line filter kit **228926**.



Full KVA Adapter Cord 300517
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240-volt plug to common AirForce 240-volt plug.

240-Volt Extension Cord 770644
20-foot (6.1 m) NEMA 6-50P to NEMA 6-50R heavy-duty extension cord. 8-gauge cord has lighted ends that show power is on and a molded integrated strain relief.

MVP™ Adapters



Female Receptacle



254328 For connection to 6-50P receptacle (240 V/50 A). Included with machine.



254330 For connection to 5-15P receptacle (120 V/15 A). Included with machine.



254331 For connection to 5-20P receptacle (120 V/20 A). Optional.

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