

AirForce® 27i

120/240-Volt Portable Air Plasma Cutter



272164
September 2022



500575

Includes

- 12 ft. (3.7 m) XT30R hand-held torch
- 12 ft. (3.7 m) work cable with clamp
- 10 ft. (3 m) power cord with 5-15P (120 V, 15 A) and 6-50P (240 V, 50 A) MVP™ plugs
- 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 92 VDC, 35% duty cycle
240 V: 30 A at 92 VDC, 40% duty cycle



Mild Steel Cutting Capacity

Rated: At 20 amps: 1/4 in. (6.4 mm)
Max. Cut: At 20 amps: 3/8 in. (9.5 mm)
Rated: At 30 amps: 3/8 in. (9.5 mm)
Max. Cut: At 30 amps: 5/8 in. (15.9 mm)

Versatile, powerful cutting in a lightweight power source.

Inverter-based design and reliable technology pack a lot of performance into a very portable package. The Airforce 27i features a multi-voltage plug (MVP™) that allows you to connect to common 120- or 240-volt power receptacles without using any tools. You can easily transport this plasma cutter to the job, connect to power and begin cutting up to 5/8-inch material on 240-volt power quickly.



Applications

- Maintenance
- Body shops
- Light construction
- HVAC

Features	Benefits
MVP (multi-voltage plug)	Connect to 120 or 240 V power receptacles without the use of any tools — simply choose the plug that fits the receptacle.
Small lightweight design	At just 19 pounds (8.6 kg), the shoulder strap allows the end user to easily move from location to location.
XT30R torch	Increased comfort with an ergonomic trigger safety, more efficient cooling and economical replacement cutting tips.
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 ($\pm 15\%$) 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.
Compatible with engine-driven welders	Complete cutting capability when powered by an engine-driven welder/generator with a 240 V receptacle of 4 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.)

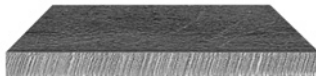


Input Power	Rated Output	Amps Input at Rated Output, 50/60 Hz	Max. Open Circuit Voltage	Plasma Gas Flow/Pressure	Dimensions (H x W x D)	Net Weight with Torch
120 V (15 A)	20 A at 88 VDC, 60% duty cycle	18.3	400 VDC	5.0 cfm (142 L/min.) at 90–120 psi (621–827 kPa) recommended	9 x 5.5 x 13.25 in. (229 x 140 x 337 mm)	19 lb. (8.6 kg)
120 V (20 A)	27 A at 92 VDC, 35% duty cycle	26.1				
240 V	30 A at 92 VDC, 40% duty cycle	14.7				

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

Mild Steel Cutting Capacity (Thickness to scale.)

Cutting at 20 Amps (120 V, 15 A service with 5-15P MVP)



1/8 in. (3.2 mm) at 50 ipm



1/4 in. (6.4 mm) at 17 ipm

Note: Recommended maximum piercing capacity for hand-held applications is 1/8 in. (3.2 mm). Maximum sever cut of 3/8 in. (9.5 mm).

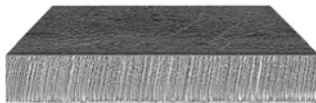
For aluminum and other metals with high thermal conductivity, cutting capabilities will be derated as much as 30%.

Maximum Cutting Speeds at 20 Amps Output

Thickness	Approximate Travel Speeds*
1/16 in. (1.6 mm)	158 ipm (4,014 mm/min.)
1/8 in. (3.2 mm)	50 ipm (1,260 mm/min.)
3/16 in. (4.8 mm)	33 ipm (833 mm/min.)
1/4 in. (6.4 mm)	17 ipm (427 mm/min.)
5/16 in. (7.9 mm)	8 ipm (203 mm/min.)
3/8 in. (9.5 mm)	6 ipm (163 mm/min.)

* Travel speeds are approximately 80% of maximum.

Cutting at 30 Amps (240 V service with 6-50P MVP)



1/4 in. (6.4 mm) at 36 ipm



3/8 in. (9.5 mm) at 18 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%.

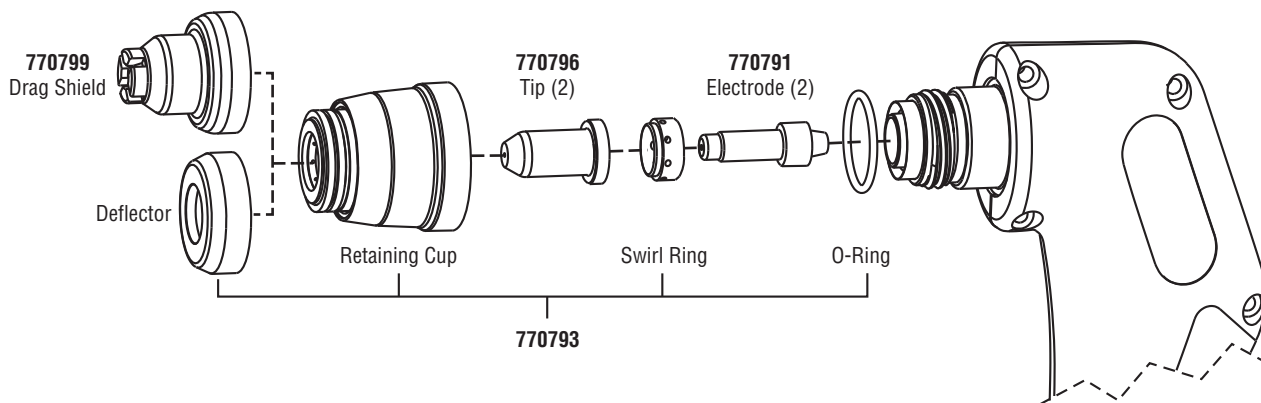
Maximum Cutting Speeds at 30 Amps Output

Thickness	Approximate Travel Speeds*
1/16 in. (1.6 mm)	240+ ipm (6,096+ mm/min.)
1/8 in. (3.2 mm)	100 ipm (2,540 mm/min.)
3/16 in. (4.8 mm)	63 ipm (1,605 mm/min.)
1/4 in. (6.4 mm)	36 ipm (914 mm/min.)
3/8 in. (9.5 mm)	18 ipm (467 mm/min.)
1/2 in. (12.7 mm)	10 ipm (264 mm/min.)
5/8 in. (15.9 mm)	6 ipm (163 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



XT30R Replacement Torch 284514
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).

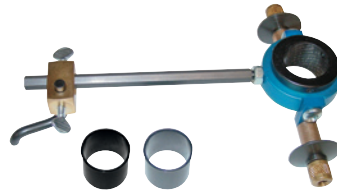
The following accessories are available through Miller/Hobart Service Distributors.



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.

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.



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**.

MVP™ Adapter Plugs



219261
For power cable 5-15P (115 V/15 A).
Included with machine.



219259
For power cable 5-20P (115 V/20 A). Optional.



219258
For power cable 6-50P (230 V/50 A).
Included with machine.

