Tomahawk 625

Processes
Plasma Cutting and Gouging

For These Materials
Mild Steel, Brass, Stainless Steel, Copper, Aluminum

Product Number
K2807-1 Tomahawk® 625 with Hand Torch

Input Power
208/230/1/50/60

Rated Output Current/Duty Cycle
24A/89.6V/100%
29A/91.8V/60%
40A/96.0V/35%

Output Range
10-40A

Air Pressure Required
80-110psi (6-7.5 Bar)

Air Flow Rate Required
70psi @ 125-200 SCFH
(5 bar @ 80 Liters/min)

Weight/Dimensions (H x W x D)
34 lbs. (15.4 kg)
15.2 x 8.5 x 18.9 in.
(385 x 215 x 480 mm)

See back for complete specs

Plasma Cutting - Anywhere, Anytime

Tomahawk plasma cutting systems are portable enough to carry to any jobsite. Hook up the compressed air, grab the torch and start cutting right away.

FEATURES

- **Continuous Output Control** – Focus the arc for different material thickness.
- **Touch Start System** – Reliable plasma arc initiation without high frequency.
- **Rapid Arc Restrike** – Fast cutting through gaps, even expanded metal.
- **Front Panel Purge Control** – Makes it easy to set the air flow rate without initiating the plasma arc.
- **Cool Operation, Long Consumable Life** New electrode and nozzle design save you money in the long run.
- **Added Safety** – Our Parts-in-Place system detects correct installation of consumables and torch.
- **Lightweight and Portable** – Easily carried by one person.
- **Engine Drive Compatible** – Select a Lincoln Electric Ranger® or Vantage® to power your Tomahawk in remote locations.

APPLICATIONS

- **On site maintenance**
- **Small construction sites**
- **Air ducting installation (HVAC)**
- **Demolition work**
- **Rental**

K2807-1 Shown

WHAT'S INCLUDED

K2807-1 Includes:

- Lincoln Electric LC40 hand torch 20 ft. (6 m) cable
- Air regulator and pressure gauge
- Internal water separator
- Work clamp and cable
- Spare consumables
- Shoulder strap
- Input power cord

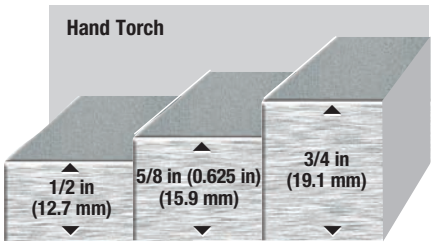
INPUT

1 PHASE
50/60 Hz

OUTPUT

DC

CUT PERFORMANCE - MILD STEEL



Recommended	Maximum	Severance
Rated Cut @ 20 ipm (0.51 m/min)	Maximum Cut @ 12 ipm (0.30 m/min)	Sever Cut @ 5 ipm (0.13 m/min)

LINCOLN ELECTRIC 3 YEAR WARRANTY AÑOS DE GARANTIA ANS DE GARANTIE

Two Year Extended Warranty Available in U.S.A. and Canada

* 3 year warranty on machine
1 year on torch

IP21S

MANUFACTURED AT AN ISO 9001:2000 14001:2004 CERTIFIED FACILITY

Publication E11.200 | Issue Date 09/16

THE LINCOLN ELECTRIC COMPANY
22801 St. Clair Avenue • Cleveland, OH • 44117-1199 • U.S.A.
PH: +1.216-481-8100 • www.lincolnelectric.com

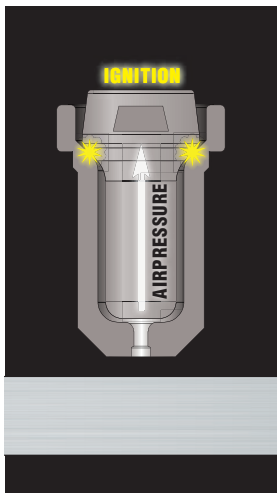
LINCOLN ELECTRIC

KEY CONTROLS

1 Output Current and Air Purge Control
2 Air Pressure Gauge
3 Air Pressure Regulator Adjustment
4 Work Lead Connection
5 Torch Connection
6 Output Status LED Indicator (Red)
7 Power On/Off LED Indicator (Green)
8 Thermal Status LED Indicator (Yellow)
9 Air Inlet For External Compressed Air
10 On/Off Power Switch
11 Input Cable
12 Cooling Fan

LINCOLN LC TORCH HEAD DESIGN

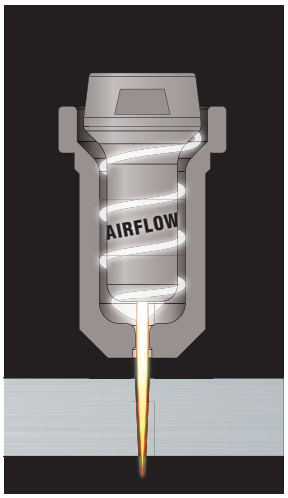
TORCH DESIGN FOR OPTIMAL STARTING AND PERFORMANCE



Starting

- Air pressure pushes the electrode back
- Ignition takes place on the 'shoulder'
- No damage to the tip

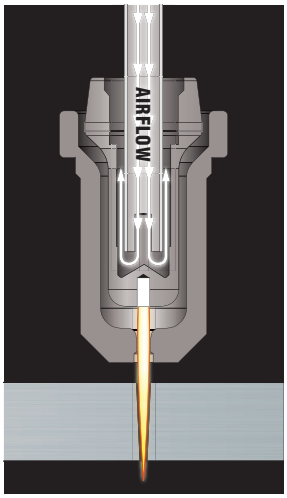
- Extended consumable lifetime
- Consistent starting without High Frequency



Performance

- Enhanced swirling airflow
- Improved radius and electrode/nozzle design

- More concentrated arc
- Faster cutting speeds
- Greater thickness cutting capacity

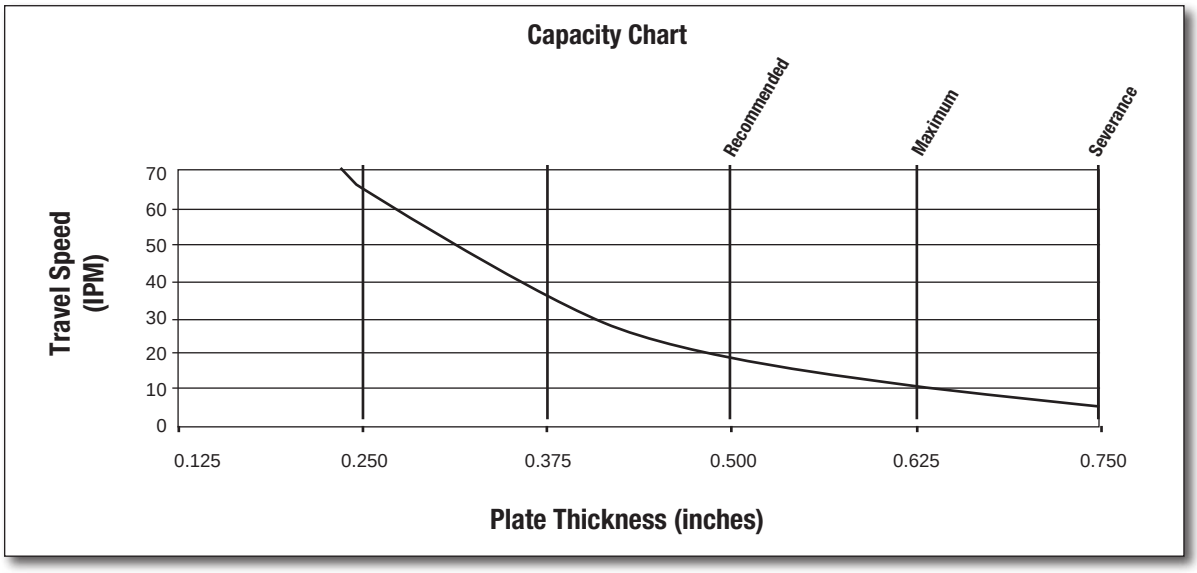


Consumable Life

- Internal airflow keeps the electrode and tip cool
- New torch head and electrode and nozzle design

- Increases life of consumable components
- Lower operating costs

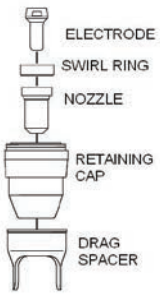
CUTTING PERFORMANCE MILD STEEL



Aluminum cutting speeds are typically 10-20% faster than mild steel.

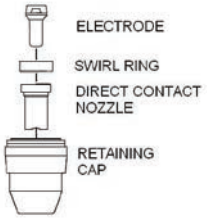
Stainless steel cutting speeds are typically 10-20% slower than mild steel.

CUTTING CONFIGURATIONS



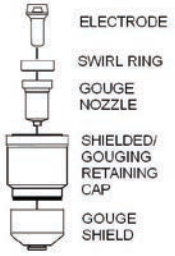
Standard

In the Standard Cutting configuration, the nozzle is designed for a user-maintained gap between the nozzle and the workpiece, unless the drag cup is attached. Standard cutting allows maximum arc visibility and is recommended for higher current levels and thicker plate. Standard cutting parts are included with the torch.



Contact

Contact Cutting uses special expendable parts that allow the torch to touch the work piece. This technique is recommended for low amperages and thinner plate thicknesses. A special optional nozzle is required for Contact Cutting. See consumables.



Gouging

When gouging metal, a special optional gouging nozzle is used in conjunction with a shield to protect the nozzle from molten metal blow back. See consumables.

COMPATIBLE ENGINE DRIVES [1]

Ranger®

Ranger 225

Ranger 250 GXT

Ranger 305 LPG

Ranger 305 G

Ranger 305 D

Vantage®

Vantage 300

Vantage 400

Vantage 500

Vantage 520 SD

Vantage 600 SD

Air Vantage 600 SD

[1] When run in the high idle mode

The Tomahawk 625 can be operated on engine driven generators as long as the 230 volt auxiliary meets the following conditions.

- The AC Waveform peak voltage is below 400 volts.
- The AC waveform frequency is between 45 and 65 Hz.
- The RMS voltage of the AC waveform is always greater than 208VAC.

RECOMMENDED ACCESSORIES

GENERAL OPTIONS

Plasma Circle Cutting Guide Kit
For cutting circles from 3-33 in. (77-838 mm) in diameter. Works with all Lincoln LC series plasma torches.
Order K2886-1

Small Canvas Cover
Protect your Tomahawk when not in use. Made from red canvas that is flame retardant, mildew resistant and water repellent. **Order K2377-1**

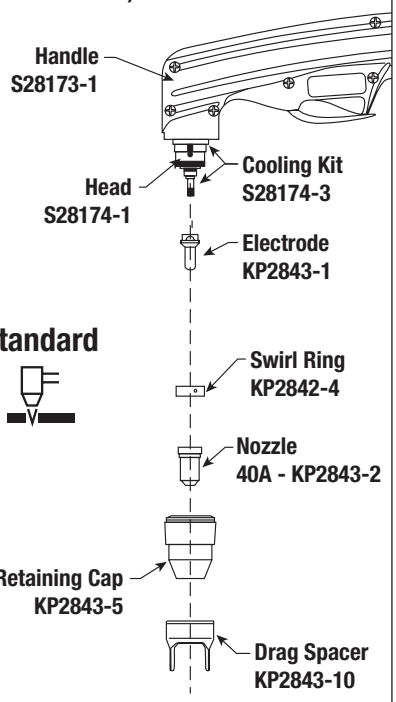
LC40M Plasma Torch 25'
Add this machine torch for use on CNC plasma cutting tables.
K2847-2 20 ft (6.0 m)

Lincoln Electric LC40 Replacement Torch
Includes 20 ft. (6 m) torch cable and one set of all required torch expendable parts.
Order K2847-1

REPLACEMENT TORCH CONSUMABLES

Lincoln Electric LC40 Parts

(Standard Parts)



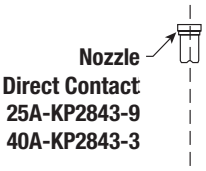
Standard

- It is normal for the electrode and nozzle to wear during operation.
- Electrodes should typically be replaced when erosion reaches 0.025 in. (0.65 mm).
- A green and erratic arc will indicate the end of electrode life. The electrode should be immediately replaced.
- It is recommended that the KP2843-1 Electrode and KP2843-2 Nozzle (40A) be replaced as a complete set.

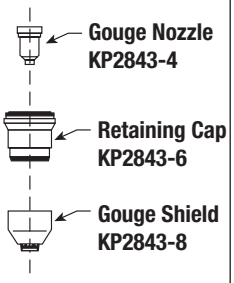
TOMAHAWK 625 TORCH CONSUMABLES

Product Number	Description	
KP2843-1	Electrode	Standard
KP2843-2	Nozzle 40A	Standard
KP2843-3	Nozzle (Contact) 40A	Optional
KP2843-4	Nozzle (Gouging)	Optional
KP2843-5	Retaining Cap	Standard
KP2843-6	Retaining Cap (Gouging)	Optional
KP2843-8	Gouge Shield	Optional
KP2843-9	Nozzle (Contact) - 25A	Optional
KP2843-10	Drag Spacer	Standard
KP2842-4	Swirl Ring	Standard

Contact (Optional Parts)



Gouging (Optional Parts)



PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Pilot Current	Output Range	Air Pressure Required	Air Flow Rate Required	Dimensions H x W x D in. (mm)	Net Weight Without Torch lbs (kg)
Tomahawk 625 with Hand Torch	K2807-1	208/230/1 50/60	24A/89.6V/100% 29A/91.8V/60% 40A/96.0V/35%	36.8A (Max)	17A	10-40A	80-110psi (6-7.5 Bar)	70psi @ 125-200SCFH 5 Bar @ 80 Liters/min.	15.2 (385) 8.5 (215) 18.9 (480)	34 (15.42)

CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

LINCOLN® ELECTRIC