TOMAHAWK® 45

PLASMA CUTTER

Shown:
K5458-1

PLASMA CUTTING - ANYWHERE, ANYTIME

The Tomahawk 45 plasma cutting system is versatile and portable, weighing only 28 lbs. You can easily carry it to any job site and start cutting projects. This system can handle everything, whether cutting through thick metal or working with expanded metal. With its 45A capability, you can tackle even the most challenging cutting tasks. Tomahawk initiates the plasma arc with a simple yet reliable touch-start mechanism that eliminates many failure problems associated with high-frequency start systems. The control system includes a Parts-in-Place™ feature to ensure consumables are in place before initiating the cutting or gouging process. Hook up the compressed air, grab the torch, and you're all set.

Processes »
Plasma Cutting, Grid and Gouging

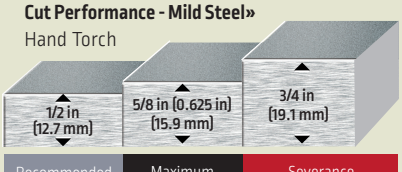
Applications »
On site maintenance, Small construction sites, Air ducting installation (HVAC), Demolition work, Rental

Output »

Input »

Product Numbers »
K5458-1 TOMAHAWK® 45

Cut Performance - Mild Steel»
Hand Torch



Recommended	Maximum	Severance
Rated Cut @ 20 ipm (0.51 m/min)	Maximum Cut @ 12 ipm (0.30 m/min)	Sever Cut @ 8 ipm (0.20 m/min)

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VALUE-ADDED FEATURES

- **2.8" LCD Screen** – For an easier and user friendly interface.
- **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** Numerous torch consumables for a wide range of hand-held applications.
- **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 recommended engine driven welder / generator to power your Tomahawk in remote locations.

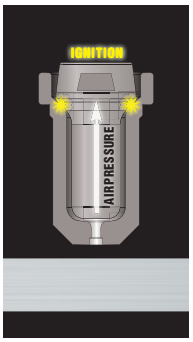
KEY CONTROLS

1. Handle
2. User Interface
3. Back Button
4. Main Control Knob
5. Purge Button
6. Air Pressure Regulator Knob
7. Plasma Torch Connection
8. Workpiece Lead Connection
9. On/Off Switch
10. Input Cord
11. Air Inlet (for external Compressed Air only)
12. Cooling Fan

USER INTERFACE

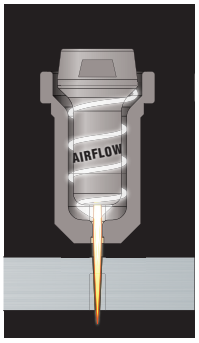
1. Supply Voltage
2. Current Process
3. Plasma Cutting
4. Grid Cutting
5. Plasma Gouging
6. User Setup Menu
7. Air Pressure
8. Set Value Current

TORCH DESIGN FOR OPTIMAL STARTING AND PERFORMANCE



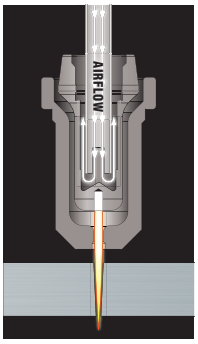
Starting
- Air pressure pushes the electrode back
- Ignition takes place on the 'shoulder'
- No damage to the tip

- Extended consumable lifetime
- Consistent starting without High Frequency



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

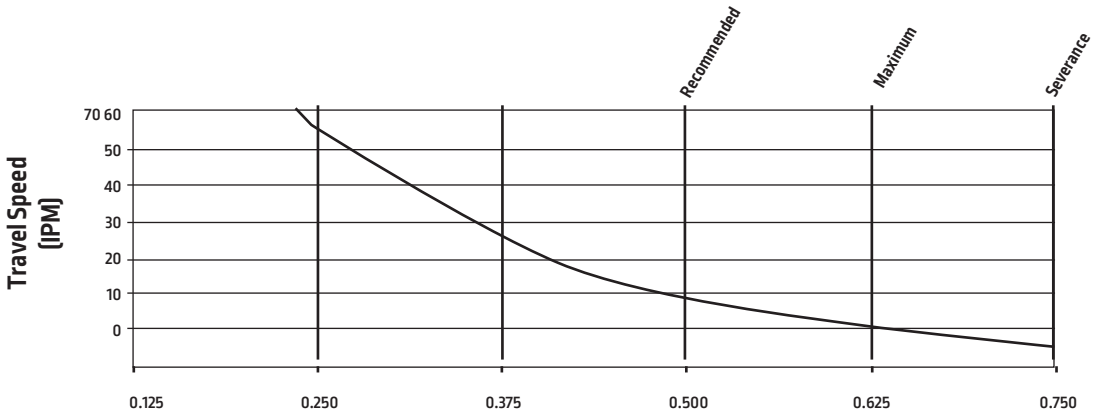
- More concentrated arc
- Faster cutting speeds
- Greater thickness cutting capacity



Consumable Life
- Internal airflow keeps the electrode and tip cool

Increases life of consumable components
- Lower operating costs

CUTTING PERFORMANCE MILD STEEL



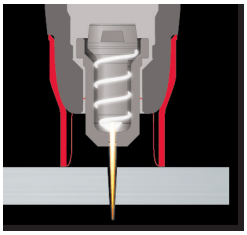
Aluminum cutting speeds are typically 10-20% faster than mild steel.

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

LC40 CUTTING CONFIGURATIONS

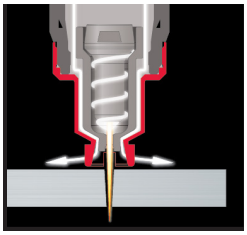
STAND-OFF

In the standard cutting configuration, the nozzle is designed for a user-maintained gap between the nozzle and the workpiece, unless the spacer 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.



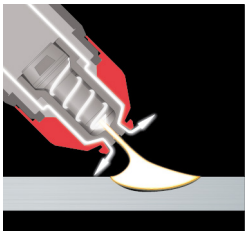
CONTACT

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.



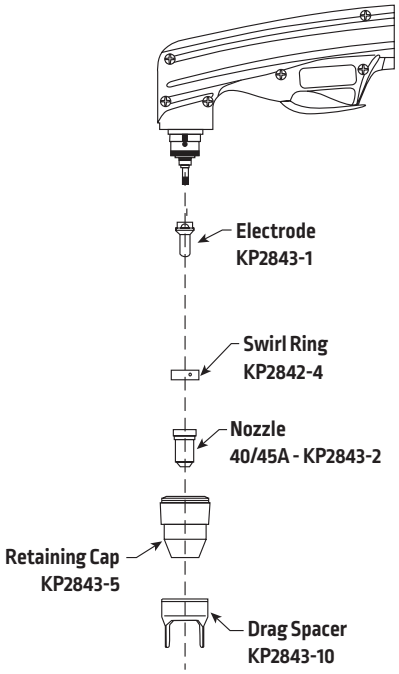
GOUGE

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.



LC40 REPLACEMENT TORCH CONSUMABLES

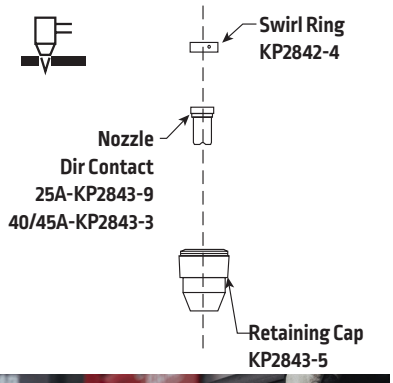
LC40 Parts



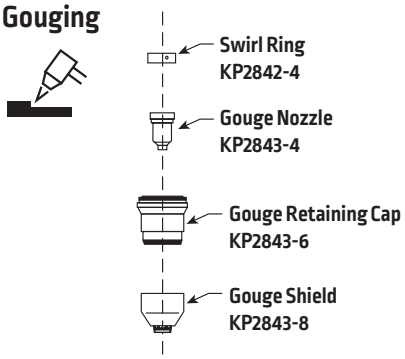
- It is normal for the electrode and nozzle to wear during operation.
- Electrodes should typically be replaced when erosion reaches 0.025 in. (0.65 mm).
- A green and erratic arc will indicate the end of electrode life. The electrode should be immediately replaced.
- It is recommended that the KP2843-1 Electrode and KP2843-2 Nozzle (40/45A) be replaced as a complete set.

TOMAHAWK 45 TORCH CONSUMABLES		
Product Number	Description	
KP2843-1	Electrode	Standard
KP2843-2	Nozzle (40/45A)	Standard
KP2843-3	Nozzle (Contact) (40/45A)	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



Gouging



WHAT'S INCLUDED

	Base Unit (K5458-1
LC40 hand plasma 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	●

RECOMMENDED ACCESSORIES

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

Canvas Accessory Bag
Canvas bag available to store your welding accessories with convenient carrying handle and snaps to attach to your equipment.
Order K3071-1

OMNIShield™ Face Shield
Shade 5 IR lens provides infrared light protection for plasma cutting applications
Order K3754-1

RECOMMENDED ENGINE DRIVES[1]

Ranger® 260 MPX™

Ranger® 330MPX™

Ranger® 330MPX™ EFI

Ranger® AIR 260 MPX™

Vantage® 322

Vantage® 549X

Vantage®566X

Frontier® 400X

Maverick® 325X

[1] When run in the high idle mode.

The Tomahawk® 45 Air 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 55 and 65 Hz.
· The RMS voltage of the AC waveform is always greater than 208VAC.

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power Voltage/Phase/ Hertz	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Output Range	Gas Pressure Required	Gas Flow Rate	Dimensions H x W x D in (mm)	Net Weight lb (kg)
Tomahawk 45	K5458-1	230/1/60	30A/92V/100% 40A/96V/60% 45A/98V/45%	23A (Max)	15-45A	80 to 110 psi (6-7.5 bar)	70psi @ 125-200SCFH (5 Bar @ 80 Liters/min)	15.2 (385) 8.5 (215) 18.9 (480)	28 (12.7)

For best cutting results with Lincoln Electric® equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

The Lincoln Electric Company
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