

# SPEEDCUT™ 50

## QUICK REFERENCE GUIDE

**ERROR**  
When illuminated refer to error code on display and resolve.

**POWER**  
When illuminated the power source is on.

**O.T.**  
When illuminated machine is over temperature, do not turn off and allow to perform cooling cycle.

**CONTROL DIAL FUNCTIONS**  
Amperage control/Press for 2 seconds for air test press to stop.

**DIGITAL DISPLAY**  
Amperage setting, real time amperage display, error codes.

**OPERATORS MANUAL**  
Read operators manual before use - download from [swswelding.com.au](http://swswelding.com.au)

### DISPLAY CODES

- ERROR! Under Pressure**  
Air pressure is below 60 PSI.
- ERROR! Missing Shield Cup**  
Shield cup is damaged or missing; torch lead is not connected securely (Inspect & replace or install).
- ERROR! Missing Electrode or Nozzle**  
Electrode or nozzle is excessively worn or missing (Inspect & replace or install).
- ERROR! Over Temperature**  
Machine has reached duty cycle limit allow to cool.
- ERROR! Over Voltage**  
Incorrect input voltage supplied damage may have been caused. Contact support if persists.



**ON/OFF SWITCH (ON BACK OF MACHINE)**  
**AIR INLET FITTING (ON BACK OF MACHINE)**

**1 Phase 240V +/- 15%  
MIN GENERATOR  
(8.5kVA at 0.8 PF)**

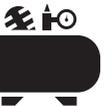


**CAUTION!** If the mains power supply/generator is not sufficient, the machine will not maintain a cutting arc, and it may damage the power source.



Move to different mains power outlet, eliminate or reduce extension lead, use higher output generator, reduce cutting amperage.

**MIN 100 L/m - 75 psi**



**CAUTION!** Ensure compressor/gas regulator pressure is set between 75 - 100 PSI. Exceeding 100 PSI can damage the internal regulator.



**CAUTION!** Only use clean, dry air for optimum cutting performance and to prevent premature servicing of internal regulator filter.

**NEGATIVE CENTRAL TORCH LEAD PORT**

**POSITIVE WORK CLAMP CABLE PORT**

# START UP PROCEDURE

- 1 Plug machine into a suitable mains power supply or generator and turn on using the ON/OFF switch (Located on the back of the machine).
- 2 Connect the plasma torch lead to the torch socket and secure using the retaining nut. (Ensure to tighten)
- 3 Connect the ground cable connector to the positive terminal and turn clockwise to lock in place.
- 4 Secure quick connect fitting to the airline using supplied hose clamp and connect to male inlet fitting (Located on the back of the machine).

 Always turn the machine on and let it perform booting up cycle before connecting pressurised air line.



Push safety switch away with finger and pull trigger.



System will adjust air pressure then start pilot arc after 2 seconds.



Release trigger to stop arc after cut and to start the air cooling cycle (15 seconds).



Pull then release trigger to stop cooling cycle prematurely.

 Always let machine perform cooling cycle after long cuts as you may damage the torch cartridge.



**WARNING!** The pilot arc can cause serious burns - Never engage trigger switch when torch tip is directed towards the eyes, face or body of yourself or others.

Place standoff guide, drag tip, or position torch tip 3-9mm off the metal at 90 degrees and pull the trigger. Once the cutting starts begin to slowly move across the workpiece



Adjust your speed so that sparks are coming from the backside of the metal. If sparks are not visible at the bottom of the metal, you are not penetrating the metal. This can be caused by moving too fast, insufficient amperage or too thick of material for the rated capacity. At the end of the cut angle, your torch past 90 degrees to completely sever the metal.



**i** NOTE: Cut quality is highly dependent on setup and the cutting parameters such as alignment with the workpiece, torch standoff, cutting speed, gas pressures, and operator ability.



Protect your eyes and body. Always use an approved welding helmet/goggles and filter lens shade #5 and wear protective clothing.



Using non-genuine SWS consumables can cause poor cutting performance and may result in damage to the torch or machine.

**FOR CONSUMABLES & SUPPORT GO TO [WWW.SWSWELDING.COM.AU](http://WWW.SWSWELDING.COM.AU)**