

T60, T80 and T100 torch: consumable parts

	Torch part number	T60 Powermax1000	T80 Powermax1250	T100 Powermax1650
Shielded	Shield, 100 Amp	220065		✓
	Shield, 40/60/80 Amp	120929	✓	✓
	Nozzle, 100 Amp	220011		✓
	Nozzle, 80 Amp	120927		✓
	Nozzle, 60 Amp	120931	✓	✓
	Nozzle, 40 Amp	120932	✓	✓
	Electrode, 100 Amp	220037		✓
	Electrode, 40/60/80 Amp	120926	✓	✓
	Swirl Ring, 100 Amp	220051		✓
	Swirl Ring, 40/60/80 Amp	120925	✓	✓
	Retaining Cap, 40/60/80 Amp	120928	✓	✓
Retaining Cap, 100 Amp	220048		✓	
Unshielded	Deflector, 40/60/80/100 Amp	120979	✓	✓
	Retaining Cap, 100 Amp	220048		✓
	Retaining Cap, 40/60/80 Amp	120928	✓	✓
	Nozzle, 100 Amp	220064		✓
	Nozzle, 80 Amp	120980		✓
	Nozzle, 60 Amp	220007	✓	✓
	Nozzle, 40 Amp	220006	✓	✓
	Electrode, 100 Amp	220037		✓
	Electrode, 40/60/80 Amp	120926	✓	✓
	Swirl Ring, 100 Amp	220051		✓
	Swirl Ring, 40/60/80 Amp	120925	✓	✓
Gouging	Shield, 60/80/100 Amp	120977	✓	✓
	Retaining Cap, 100 Amp	220048		✓
	Retaining Cap, 60/80 Amp	120928	✓	✓
	Nozzle, 100 Amp	220063		✓
	Nozzle, 60/80 Amp	220059	✓	✓
	Electrode, 100 Amp	220037		✓
	Electrode, 60/80 Amp	120926	✓	✓
	Swirl Ring, 100 Amp	220051		✓
	Swirl Ring, 60/80 Amp	120925	✓	✓
FineCut	Electrode, 40 Amp	120926	✓	✓
	Retaining Cap, 40 Amp	120928	✓	✓
	Deflector, 40 Amp	120979	✓	✓
	Swirl Ring, FineCut 40 Amp	220327	✓	✓
	Nozzle, FineCut 40 Amp	220329	✓	✓
4 in 1 Powermax Consumable Kit	Powermax1000	850430	✓	
	Powermax1250	850440		✓
	Powermax1650	850450		✓

Mechanized torch parts not included.

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for everyday cutting, Hypertherm's drag-cutting technology makes it easy to follow a line or template.



2 Unshielded consumables

are extended for hard-to-reach areas and when extra clearance is needed during beveling.



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4 FineCut™ consumables

for best quality cuts on thinner plate. Less dross, a narrower kerf and virtually no heat-affected zone.

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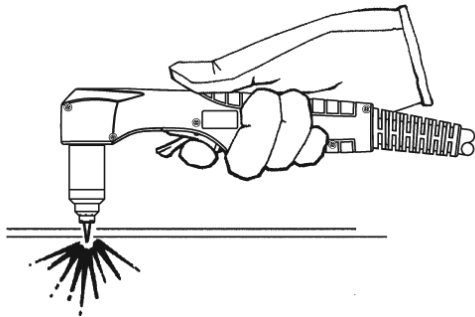


Hand cutting techniques and recommendations

Using the proper techniques will help ensure longer consumable life

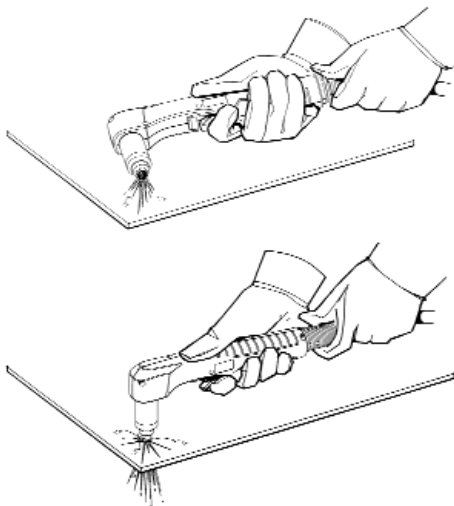
CUTTING

- Sparks should exit from the bottom of the work piece. Upward sparks indicate a torch moving too fast or a torch with insufficient power
- Torch nozzle should be held vertical to the cutting position and the cut monitored with appropriate face/eye protection
- Pulling rather than pushing a torch through a cut enables better control
- For shielded consumables – Lightly drag the torch across the work piece
- For unshielded consumables – Maintain approximately 1/8" (3 mm) torch-to-work distance
- To cut thinner material, reduce the amps until you get the best quality cut. FineCut consumables are recommended for cutting 24 to 10 ga (.5 to 3.5 mm)
- For straight-line cuts, use a straight edge as a guide
- To cut circles, use a template or a Hypertherm circle cut guide, part number 027668



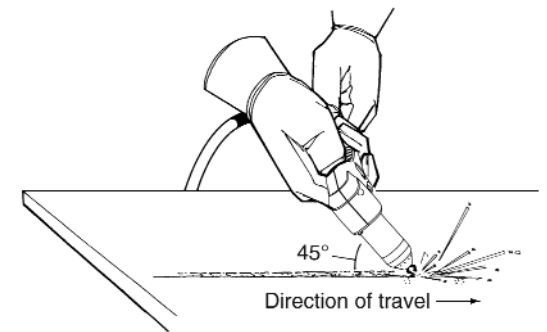
PIERCING

- Torch to work piece distance before firing torch = approximately 1/8" (3 mm)
- Steps:
 1. Fire the torch at a 40-45 degree angle to the work piece – Slowly rotate it to an upright position
 2. When sparks are exiting from the bottom of the work piece, the arc has pierced through the material
 3. When the pierce is complete, proceed with the cut



GOUGING

- Torch to work piece distance before firing torch = approximately 1/16" (1.5 mm)
- Steps:
 1. Hold the torch at a 40-45 degree angle to the work piece – Pull the trigger to obtain a pilot arc. – Transfer the arc to the work piece
 2. Maintain a 45° angle, approximately, from the work piece
 3. Feed into the gouge – the slower the motion, the deeper the gouge. It is better to move faster and make another pass than mistakenly remove more metal than desired on the first pass.
 4. A heat shield is available for added hand and torch protection, part number 220049



OVERTIGHTENING RETAINING CAP WILL DAMAGE TORCH – Finger tighten only!

THICKNESS BY AMPERAGE

Consumables type	Amp setting	Thickness range	
		Inches	mm
FineCut	30 – 50	24 ga – 10 ga	.5 mm – 3.5 mm
40 amp	25 – 40	26 ga – 1/4"	.5 mm – 6.5 mm
60 amp	60	16 ga – 3/4"	1.5 mm – 19 mm
80 amp	80	3/16" – 1"	5 mm – 25 mm
100 amp	100	1/4" – 1 1/4"	6 mm – 32 mm

The above table provides general thickness ranges for shielded cutting of mild and stainless steel. Faster cut speeds are required at the bottom of the range, slower speeds at the top of range. Best edge quality is near the middle of the range. For further detail, and information on all applications, see the cut charts in your operating manual.