1Torch® Consumable Parts Application Guide

For SL60® / SL100® Manual Cutting and Gouging Operations.

Drag Tip Cutting The preferred method of cutting light gauge metal up to 1/4" (6mm) thickness. Produces the best cut quality, narrowest kerf width, fastest cutting speeds, with little to no distortion. Traditional drag cutting was limited to 40 Amps or less, now with Thermal Dynamics® TRUE Cut Drag Tip Series™ technology it is possible to cut up to 60 Amps. For best results, use the Shield Cup with the torch tip in direct contact with the work (up to 60 Amps).

Standoff Cutting The preferred method for cutting metal thicker than 1/4" (6mm) and at current levels above 60 amps. Provides maximum visibility and accessibility. Use the single-piece Shield Cup for 'standoff' cutting (with the torch tip 1/8" to 1/4" from the workpiece). Use the Shield Cup Body together with the Deflector for extended parts life and improved resistance to reflected heat. This combination provides cutting results similar to the single piece Shield Cup, as well as easy changeover to gouging or drag shield cutting.

Drag Shield Cutting This is an operator-friendly method of cutting between 70 to 120 amps while maintaining a constant standoff distance. For metal thicknesses greater than 1/4" (6mm) simply drag the Shield Cap in contact with the workpiece. Use the Shield Cup Body with the appropriate Drag Shield Cap matching the current level being used. This method is not recommended for cutting light-gauge sheetmetal.

Gouging A simple method of metal removal by angling the torch to a lead angle of 35-45 degrees and using a gouging tip. While maintaining a constant standoff distance, this allows for only a partial penetration into the work, thus removing metal from the surface. The amount of current, travel speed, standoff distance, lead angle and tip size will determine the amount of material removed and the profile of the gouge. Can use the Shield Cup Body with either the Gouging Shield Cap or the Shield Deflector. Also, you can use the single piece Shield Cup.

1Torch Consumable Parts Selection Guide

For SL60 / SL100 Manual Cutting and Gouging Operations.
Various front-end parts are available for different applications.
The electrode and start cartridge remain the same for all applications.

Current Range	Mode Of Operation	Amps
20-40 Amps	Drag Tip / Cutting	20A 30A 40A 20A 30A 40A
	Standoff Cutting	40A 40A
	Gouging	Tip A
50-60 Amps	Drag Tip Cutting	60A
	Standoff Cutting	50-55A 60A 50-55A 60A
	Drag Shield Cutting	50-55A 60A
	Gouging	Tip B Tip C Tip D
70-100 Amps	Standoff Cutting	70A 80A 90A-100A 70A 80A 90A-100A
	Drag Shield Cutting	70A 80A 90A-100A
	Gouging	Tip B Tip C Tip D
120 Amps	Standoff Cutting	120A
	Drag Shield Cutting	120A
	Gouging	Tip E

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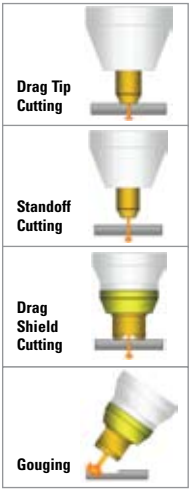
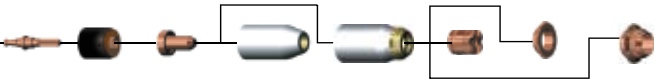


Gouging Profiles

	Output Range	Depth	Width	Profile
Tip A	40 Amps (MAX)	Shallow	Narrow	
Tip B	50-100 Amps	Deep	Narrow	
Tip C	60-120 Amps	Moderate	Moderate	
Tip D	60-120 Amps	Shallow	Wide	



Electrode	Start Cartridge	Tip	Shield Cup	Shield Cup Body	Drag Shield Cap	Deflector	Gouging Shield Cap
9-8215	9-8213	9-8205 9-8206 9-8207 9-8205 9-8206 9-8207	9-8218 9-8218 9-8218	9-8237 9-8237 9-8237		9-8243 9-8243 9-8243	
		9-8208 9-8208	9-8218	9-8237		9-8243	9-8241
		9-8225		9-8237			
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9-8215	9-8213	9-8209 9-8210 9-8209 9-8210	9-8218 9-8218	9-8237 9-8237		9-8243 9-8243	
		9-8209 9-8210		9-8237 9-8237	9-8235 9-8235		
		9-8226 9-8227 9-8228		9-8237 9-8237 9-8237			9-8241 9-8241 9-8241
9-8215	9-8213	9-8231 9-8211 9-8212 9-8231 9-8211 9-8212	9-8218 9-8218 9-8218	9-8237 9-8237 9-8237		9-8243 9-8243 9-8243	
		9-8231 9-8211 9-8212		9-8237 9-8237 9-8237	9-8236 9-8236 9-8236		
		9-8226 9-8227 9-8228		9-8237 9-8237 9-8237			9-8241 9-8241 9-8241
		9-8253		9-8237		9-8243	
9-8215	9-8213	9-8253		9-8237	9-8258	9-8243	
		9-8254		9-8237		9-8243	9-8241