

THERMAL DYNAMICS®



AUTOMATION

1Torch™

with SURELOK® Technology

Pat. Pend.



SL100™

**One Torch
for Virtually Any
Plasma Cutting
System!**

**Total Plasma
Cutting Flexibility**

**Available With Our ATC™
Quick Change Connector!**



Automated Systems Replacement Plasma Cutting Torch

The Revolution in Plasma Torches Has Begun

1Torch™

with SURELOK® Technology

Introducing the First Universal Plasma Torch!

The 1Torch™ RPT torch is the first plasma cutting torch that performs with virtually all plasma cutting power supplies. The 1Torch works with high frequency start systems, CD start systems, touch start systems and moving parts (*blow back*) start systems. Install the 1Torch on your current plasma power supply and you immediately benefit from the latest in high performance torch technology available today.



Important Features Include:

New Phenolic Position Tube

With a new, innovative, easy-to-remove 32 pitch gear rack, the phenolic positioning tube can easily be adapted to any 1-3/8" torch holder. If manual torch position is required, the use of the gear rack will complete the task. Simply remove the gear rack from the positioning tube if not needed.



Precision Engineered Torch Consumable Parts

The 1Torch RPT torch introduces a completely new tip technology. Total gas management is an integral part of the tip design. Each tip is uniquely tuned to optimize cut performance at its rated cutting current, thus there is no longer a requirement for a gas distributor or a swing ring in the torch. The result is precision gas management, longer consumable parts life and better cut performance across the entire range of 1Torch tips.

Extended or Protected Consumable Parts

We designed our consumable parts to adapt to your cutting style. By simply changing the shield cap, you can have either:

- An Extended Tip for greater visibility, improved control and precision cutting at any power level.
- A Protected Tip for improved parts life

New, Improved Leads

1Torch Unshielded Leads on the SL100 mechanized torches are lightweight, extremely flexible and tough – the ideal combination of durability and ease of use. Shielded leads are available for use on dedicated shielded systems.

ATC™ (Advanced Torch Connector) Quick Disconnect Option

Our new quick disconnect design brings extra flexibility to any plasma system.



Imagine being able to change out a damaged plasma cutting torch, easily convert from a machine to a hand torch operation, or simply put on a different size torch all in the matter of a few seconds and not have to use any tools to complete the task!

ATC™ Lead Extensions for Improved Versatility

You can add substantial flexibility and versatility to your cutting operations with the use of Lead Extensions. Quick Disconnect Lead Extensions, in 15 ft., 25 ft. and 50 ft. lengths, make it easy and efficient to add or subtract lead length according to the job requirements.

1Torch™ RPT torch and ATC™ connector are patent pending.

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Selecting the Right Torch Package for Your Needs . . .

1 Torch and Leads Selection

Chart 1 (pg. 4) gives you all the information to select the right torch.

Select the following:

- **Torch** – Standard or Shielded
- **Connection** – RPT (O2B) or ATC
- **Lead Length**
- **ATC Lead Extensions** (optional)
- **Remote Control Options**

Note: Lead extensions can only be used with ATC connections.

2 Adapter Kit Selection

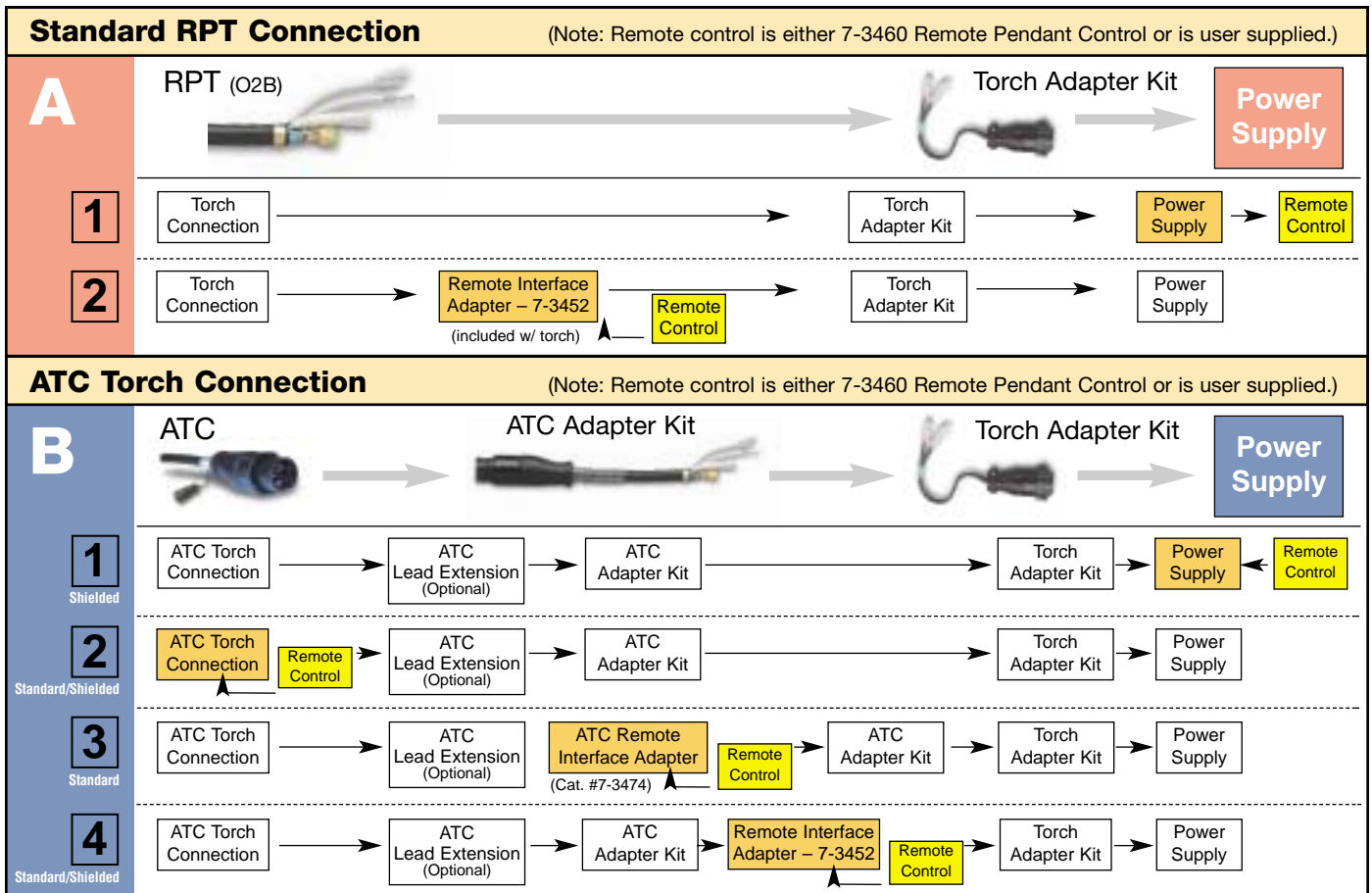
Select the appropriate Adapter Kit from Chart 2 (pg. 5). If you selected a torch with the ATC Connection, you will also need an ATC Receptacle Adapter (see Chart 1).

3 Spare Parts Selection

From Chart 3 (pg. 6), select an RPT Spare Parts Kit or specific consumable parts that best suit your cutting requirements.

Torch Connection Options

The diagrams below show the different torch connections with **remote connection options**.



1Torch™

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Torch and Lead Selection

Listed below are the Torch and Lead selection charts for the SL100™ Machine 1Torch RPT torch.



ORDERING INFORMATION

Machine Torch



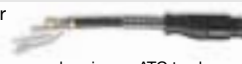
SL100™



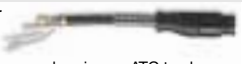
Medium/Heavy Duty Torch
30-100 Amps



Standard

Shielded¹

CAT NO.	DESCRIPTION
A	Standard RPT (O₂B) Torch Connection 
Torch & Leads	
SL100 Machine Torch (Fiberglass Tube w/ Rack)	
7-5209	SL100, 180°, 25' (7.6m) Torch/Leads
7-5210	SL100, 180°, 50' (15.2m) Torch/Leads
Remote Interface Adapter 7-3452 included with torch.	
B	ATC™ Torch Connection 
Torch & Leads	
SL100 Machine Torch w/ ATC (Fiberglass Tube w/ Rack)	
7-5213	SL100, 180°, 5' (1.5m) Torch/Leads
7-5214	SL100, 180°, 10' (3.0m) Torch/Leads
7-5215	SL100, 180°, 25' (7.6m) Torch/Leads
7-5216	SL100, 180°, 50' (15.2m) Torch/Leads
ATC™ Adapter Kit	
ATC Adapter	
7-5207	ATC Receptacle Connector 
* This receptacle adapter is required for each power supply using an ATC torch connection. This is connected to the torch adapter kit specific to each power supply.	
ATC™ Lead Extensions²	
Lead Extensions - Standard	
7-7544	15' (4.5m) Lead Extension
7-7545	25' (7.6m) Lead Extension
7-7552	50' (15.2m) Lead Extension
Mechanized Remote Controls	
Remote Interface Connectors	
7-3474	ATC Remote Interface Adapter Provides an optional remote interface connection to allow the use of any remote control. Can be placed anywhere between the ATC Torch connection or Lead Extension and ATC Adapter.
7-3452	Remote Pendant Interface Kit Interfaces into any torch adapter kit to allow the use of a Remote Pendant (7-3460) on any Mechanized torch system.
7-3460	Remote Pendant Control
9-5651	25 ft. CNC Remote Cable
9-5652	50 ft. CNC Remote Cable

CAT NO.	DESCRIPTION
A	Standard RPT (O₂B) Torch Connection 
Torch & Leads	
SL100 Machine Torch - Shielded (Fiberglass Tube w/ Rack)	
7-5211	SL100, 180°, 25' (7.6m) Torch/Leads
7-5212	SL100, 180°, 50' (15.2m) Torch/Leads
Remote Interface Adapter 7-3452 included with torch.	
B	ATC™ Torch Connection 
Torch & Leads	
SL100 Machine Torch w/ ATC - Shielded (Fiberglass Tube w/ Rack)	
7-5219	SL100 ¹ , 180°, 5' (1.5m) Torch/Leads
7-5220	SL100 ¹ , 180°, 10' (3.0m) Torch/Leads
7-5221	SL100 ¹ , 180°, 25' (7.6m) Torch/Leads
7-5222	SL100 ¹ , 180°, 50' (15.2m) Torch/Leads
ATC™ Adapter Kit	
ATC Adapter - Shielded	
7-3472	ATC Receptacle Connector 
* This receptacle adapter is required for each power supply using an ATC torch connection. This is connected to the torch adapter kit specific to each power supply.	
ATC™ Lead Extensions²	
Lead Extensions - Standard	
7-7854	25' (7.6m) Lead Extension
7-7855	50' (15.2m) Lead Extension
Mechanized Remote Options	
Remote Interface Connectors	
7-3452	Remote Pendant Interface Kit Interfaces into any torch adapter kit to allow the use of a Remote Pendant (7-3460) on any Mechanized torch system.
7-3460	Remote Pendant Control
9-5651	25 ft. CNC Remote Cable
9-5652	50 ft. CNC Remote Cable

NOTES: (1) It is only recommended to install shielded torches onto a shielded ready system. Installation onto a non-shielded system may result in reduced performance. Installing a shielded torch on to a shielded system requires the shield connections to be terminated to a proper shield termination or earth ground point.
 (2) Lead extensions are available for torches with ATC connections. It is suggested that the total lead length including torch and extension(s) not exceed the maximum lead length specified by the power supply manufacturer.

1Torch™

with **SURELOK®** Technology

Adapter Kit Selection

Listed below is the Adapter Kit selection charts for the Machine 1Torch RPT torch.



Torch Adapter Kits

The model of the plasma cutting system must be known to determine the adapter kit required.

Manufacturer Power Supply Model	Catalog Number	Manufacturer Power Supply Model	Catalog Number
AIRCO®/BOC®		LINCOLN®	
PCS-43	7-3425	Pro-Cut 60	7-3431
PCS-53, PCS-80, PCS-90	7-3435	MARQUETTE®	
CEBORA®		12/150	7-3476
50	7-3438	MATCO®	
CENTURY®		2020*, 2050*	7-3476
82020*, 82050*	7-3476	MILLER®	
DAIHEN®		Plazcut 60/Zipcut	7-3432
SC-60P	7-3432	Spectrum® 250D, 500, 750	7-3433
MRAT-70	7-3437	Spectrum® 700, 1000, 1250, PLUS	7-3430
DAYTON®		Spectrum® 3080*	7-3456
3W722A*, 5Z031B*	7-3476	Spectrum® 650*, 701*, 2050*	7-3457
ESAB® (yellow)		Spectrum® 300*	7-3476
PCM-SMi, 500i, 625i, PCS-43	7-3425	Spectrum® 375*	7-3477
PCS-53, 80, 90	7-3435	MULTIQUIP MQ®	
ESP-100i	7-3426	PCX50SS	7-3437
PCM-750i, 875, 1000i, 1125	7-3429	NU-TECSYS®	
Sidewinder 30, 55, 105	7-3434	Omnicut 375	7-3438
Powercut® 650, 875, 1125, 1250, 1500	7-3462	PCA-30/60, 65	7-3441
HARRIS®		OTC	
System 50, 65, 100	7-3439	Panasonic D-5000, D-7000	7-3437
HOBART®		P-TRON®	
Smoothcut 30, 625	7-3425	P-Tron 75, 100	7-3437
Smoothcut 50 (single gas), 100	7-3426	POWCON®	
Smoothcut 50 (dual gas)	7-3428	Starcut	7-3430
Smoothcut II 35A, 60A, 100A	7-3427	SMITH®	
Fab Shop	7-3440	SPC-30, 20-50, 40-80	7-3442
Cybercut 2050*	7-3457	SNAP-ON®	
HYPERTHERM®		YA-2230*, YA-5550*	7-3476
Max® 40, HT® 40 (H/F Start)	7-3430	SOLAR®	
Max® 70, Max® 80, Max® 100 w/wo Q.D.		SOL 2020* (118-009, 118-010), SOL 2050* (118-015, 118-016)	7-3476
Max® 42*, 43*, 40cs*	7-3454	THERMAL DYNAMICS®	
powermax® 600*, 800*, 900*		PAK® 3XR, 5XT, 5XR, 6XR, 7XR, 625XR, 750XR	7-3446
powermax® 1100*	7-3455	PAK® 8XR, 10XR, 1000XR, 1250XR,	7-3434
powermax® 1000*, 1250*	7-3461	PakMaster® 75, 100	
Max® 40cs* (wo/ Q.D.)	7-3476	PakMaster® 50XL/XLP, 75XL/XLP, 100XL/XLP	7-3447
powermax® 380*	7-3477	CUTMASTER™ 50, 75, 80XL, 100	
INNERLOGIC®		PakMaster® 25, 38XL, EconoPAK® 25	7-3443
SR-45i	7-3451	Drag-Gun® 38, PAK® 4Xi, 6Xi	
L TEC® (green)		PAK® 2XT, Dynapak® 110	
PCM-31, SMi, 32i/34i, VPi	7-3425	PakMaster® 50 w/ Smart Torch (Q.D.)	7-3445
PCM-500i, 625i, PCS-80i		EconoPAK® 50	7-3449
PCM-50A, 70, 80, 52i/54i, 82i/84i	7-3426	EconoPAK® 100	7-3450
ESP-100i, PCM-50, PCM-100 (Single Gas)		PAK® 5	7-3444
PCM-50, PCM-100 (Dual Gas)		PAK® 10	7-3436
PCS-40	7-3430		
PCM-750i, 1000i	7-3435		
PCM-101	7-3436		

*Non-HF Systems.

NOTES: Each Adapter Kit includes connection fitting, electrical connectors and installation instruction sheets for the selected power supply.

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ORDERING INFORMATION

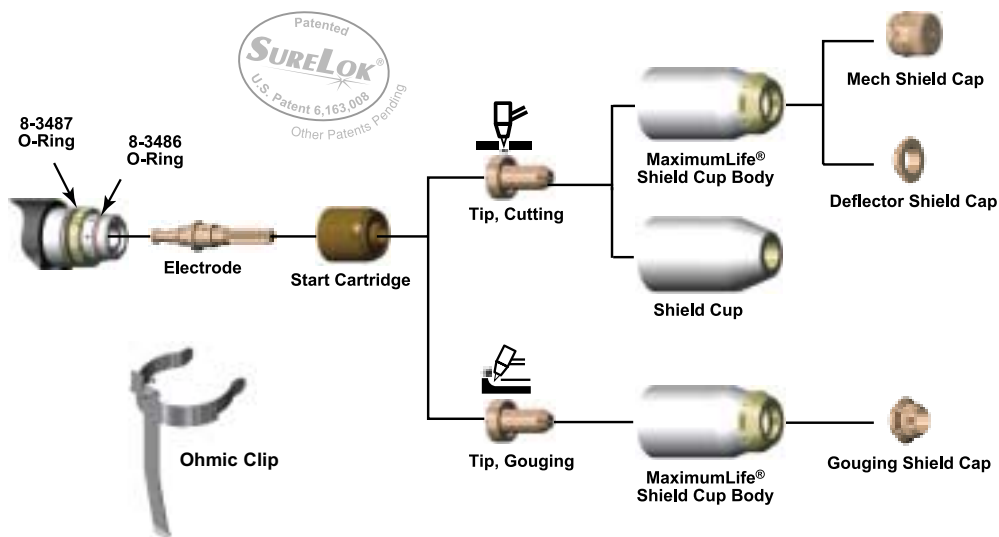
Spare Parts Selection

Description Cat. No.

1TORCH™ CONSUMABLES / PARTS

O-Ring	8-3487
O-Ring	8-3486
Electrode, MaximumLife®	9-8215
Start Cartridge	9-8213
Tip, 40A, Cutting	9-8208
Tip, 50/55A, Cutting	9-8209
Tip, 60A, Cutting	9-8210
Tip, 70A, Cutting	9-8231
Tip, 80A, Cutting	9-8211
Tip, 90/100A, Cutting	9-8212
Tip, A, (40A) Gouging	9-8225
Tip, B, Gouging	9-8226
Tip, C, Gouging	9-8227
Tip, D, Gouging	9-8228
Shield Cup	9-8218
Shield Cup Body, MaximumLife®	9-8237
Shield Cap, Mach, 50-60A	9-8238
Shield Cap, Mach, 70-100A	9-8239
Shield Cap, Deflector	9-8243
Shield Cap, Gouging	9-8241
Ohmic Clip	9-8224
Spare Parts Kit, 40 Amp	5-2551
Spare Parts Kit, 50/55 Amp	5-2552
Spare Parts Kit, 60 Amp	5-2553
Spare Parts Kit, 70 Amp	5-2554
Spare Parts Kit, 80 Amp	5-2555
Spare Parts Kit, 90/100 Amp	5-2556

SL100™ 1Torch Mechanized Torch Parts



(Note: All Spare Parts Kits include ten (10) Tips, five (5) Electrodes and one (1) Start Cartridge.)

Product Description Catalog No.
ACCESSORIES

Single Stage Air Filter 7-7507



Remote Pendant Control, 20 ft. (6.1 m) 7-3460



For use with Machine Torch

Product Description Catalog No.
ACCESSORIES (cont.)

Leather Leads Cover
20 ft. (6.1 m) 9-1260
25 ft. (7.6 m) 9-1270
50 ft. (15.2 m) 9-1280



Straight Line Cutting Guide 7-8911



Product Description Catalog No.
ACCESSORIES (cont.)

Cutting Guide Kits
Circle Guide Kit 7-3291



Roller/Radius Kit 7-7501



Deluxe Kit 7-8910



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