

# **THERMAL DYNAMICS**



## **AUTOMATION**

# **1Torch**<sup>®</sup>

*with SURELOK<sup>®</sup> Technology*

**SL100<sup>®</sup>**

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

***Total Plasma  
Cutting Flexibility***

***Available With Our ATC<sup>®</sup>  
Quick Change Connector!***

***Automated Systems Replacement Plasma Cutting Torch***



## Automated Plasma Cutting Torch

# 1Torch®

with **SURELOK®** Technology



### 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:

#### 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

#### 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 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!



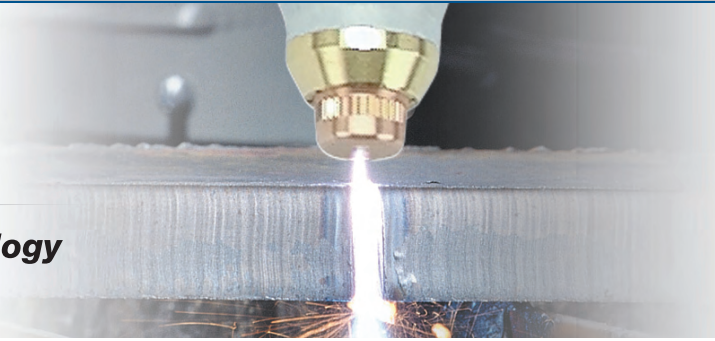
#### ATC Lead Extensions for Improved Versatility

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.*

# 1Torch®

with SURELOK® Technology



## 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

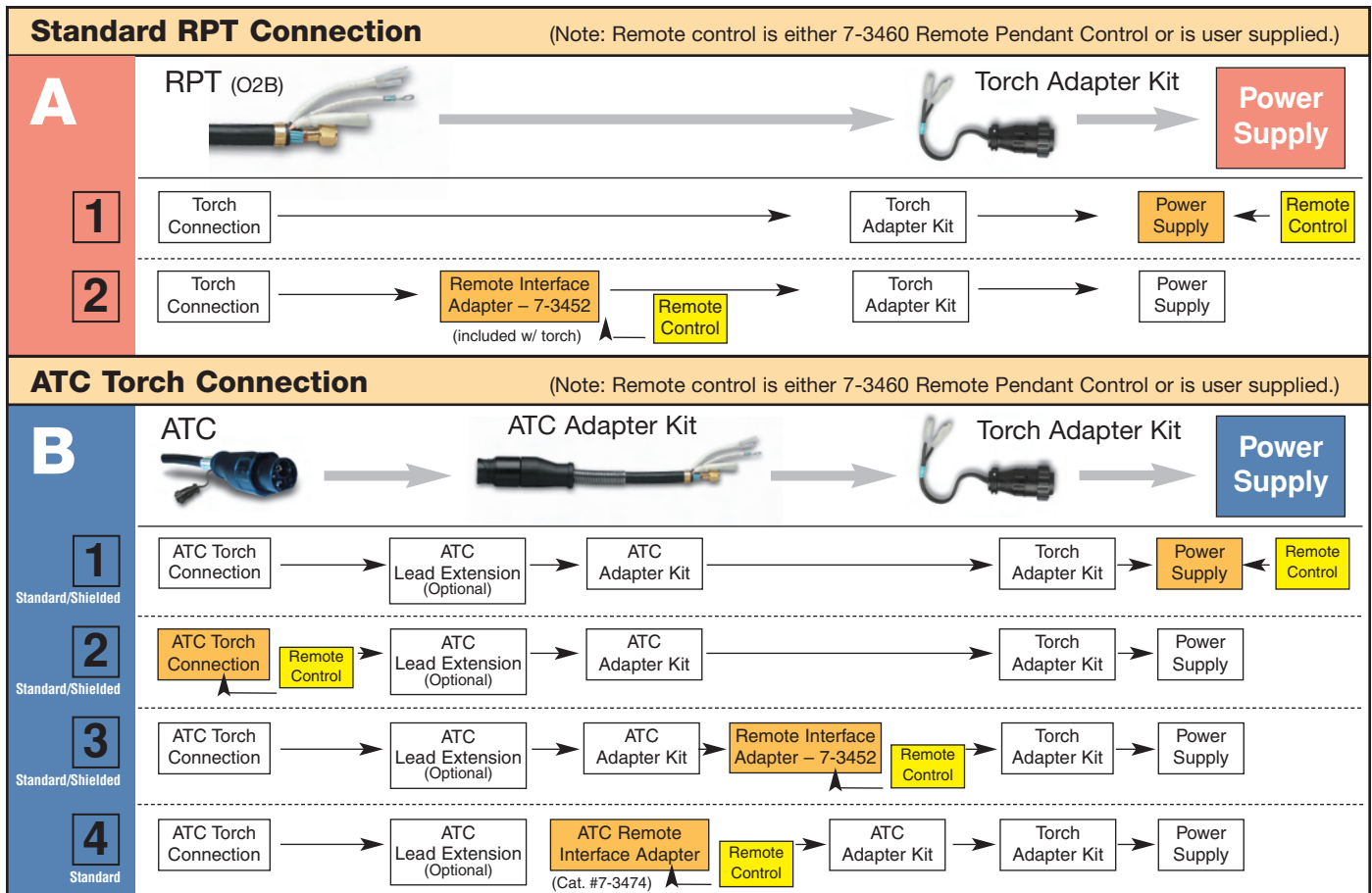
Select the appropriate Adapter Kit from Chart 2 (pg. 5). If you selected a torch with the ATC Connection, you will also need an ATC Receptacle Adapter (see Chart 1).

### 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®

with SURELOK® Technology

## Torch and Lead Selection

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

# 1

## Ordering Information

### Machine Torch

#### SL100

Medium/Heavy Duty Torch  
30-100 Amps



#### Standard

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 Extensions<sup>2</sup>

**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

#### Shielded<sup>1</sup>

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, 180°, 5' (1.5m) Torch/Leads

7-5220 SL100, 180°, 10' (3.0m) Torch/Leads

7-5221 SL100, 180°, 25' (7.6m) Torch/Leads

7-5222 SL100, 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 Extensions<sup>2</sup>

**Lead Extensions - Standard**

4-7854 25' (7.6m) Lead Extension - Shielded

4-7855 50' (15.2m) Lead Extension - Shielded

##### 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 SL100® Machine 1Torch RPT® torch.

# 2

## 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
<b>ESAB®</b> (yellow)		<b>LINCOLN®</b>	
PCS-53, 80, 90	7-3435	Pro-Cut® 60	7-3431
ESP-100i	7-3426	<b>MILLER®</b>	
PCM-750i, 875, 1000i, 1125	7-3429	Spectrum® 750	7-3433
Sidewinder 55, 105	7-3434	Spectrum® 700, 1000, 1250, PLUS	7-3430
Powercut® 650	7-3464	Spectrum® 3080*	7-3456
Powercut® 875, 1125	7-3465	Spectrum® 650*, 701*, 2050*	7-3457
Powercut® 1250, 1500	7-3462	Spectrum® 625*	7-3478
<b>HOBART®</b>		<b>OTC</b>	
Smoothcut 50 (single gas), 100	7-3426	Panasonic® D-5000, D-7000	7-3437
Smoothcut 50 (dual gas)	7-3428	<b>P-TRON®</b>	
Smoothcut II 60A, 100A	7-3427	P-Tron 75, 100	7-3437
Cybercut 2050*	7-3457	<b>SMITH®</b>	
<b>HYPERTHERM®</b>		Powerpro 55, 75	7-3487
Max® 40, HT® 40 (H/F Start)	7-3430	SPC 40-80	7-3442
Max® 70, Max® 80, Max® 100 w/ & w/o Q.D.		<b>SNAP-ON®</b>	
Max® 42*, 43*, 40cs*	7-3454	YA-3440	7-3430
powermax® 600*, 800*, 900* w/ Q.D.		YA-5550*, YA-5550A*	7-3476
powermax® 1100*	7-3455	<b>THERMAL DYNAMICS®</b>	
powermax® 1000*, 1250*	7-3461	PAK® 5XR, 6XR, 7XR, 625XR, 750XR	7-3446
Max® 40cs* (w/o Q.D.)	7-3476	PAK® 8XR, 10XR, 1000XR, 1250XR, PakMaster® 75, 100	7-3434
powermax® 600* w/o Q.D.	7-3480	PakMaster® 50XL/XLP, 75XL/XLP, 100XL/XLP	7-3447
powermax® 800*, 900* w/o Q.D.	7-3481	CUTMASTER® 50, 75, 80XL, 100	
powermax® 1650*	7-3483	EconoPAK® 100	7-3450
<b>L TEC®</b> (green)		PAK® 5	7-3444
PCS-80i	7-3425	PAK® 10	7-3436
PCM-50A, 70, 80, 52i/54i, 82i/84i	7-3426		
ESP-100i, PCM-50, PCM-100 (Single Gas)			
PCM-50, PCM-100 (Dual Gas)			
PCM-750i, 1000i	7-3435		
PCM-101	7-3436		



### WARNING:

Mechanized/Automated torches are rated for 100% Duty Cycle. Many of the power supplies listed have a significantly less duty cycle rating. Operation exceeding the duty cycle rating of the power supply could result in damage to the power supply.

\*Non-HF Systems.

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

ESAB, L-TEC and Power-Cut are registered trademarks of ESAB AB; LINCOLN and Pro-Cut are registered trademarks of Lincoln Electric Co.; HOBART is a registered trademark of Hobart Brothers Co.; HYPERTHERM, Max and powermax are registered trademarks of Hypertherm, Inc.; MILLER and Spectrum are registered trademarks of Illinois Tool Works, Inc.; PANASONIC is a registered trademark of Matsushita Electric Industrial Co., Ltd.; P-TRON is a registered trademark of P-Tron Plasma/Tech Systems; SMITH is a registered trademark of Smith Equipment Co.; SNAP-ON is a registered trademark of Snap-On, Inc.; None of the afore mentioned registered trademarks are in any way affiliated with Thermal Dynamics or Thermadyne Industries, Inc.; THERMAL DYNAMICS, PAK, CUTMASTER, PakMaster and EconoPAK are registered trademarks of Thermal Dynamics Corp.

## Ordering Information

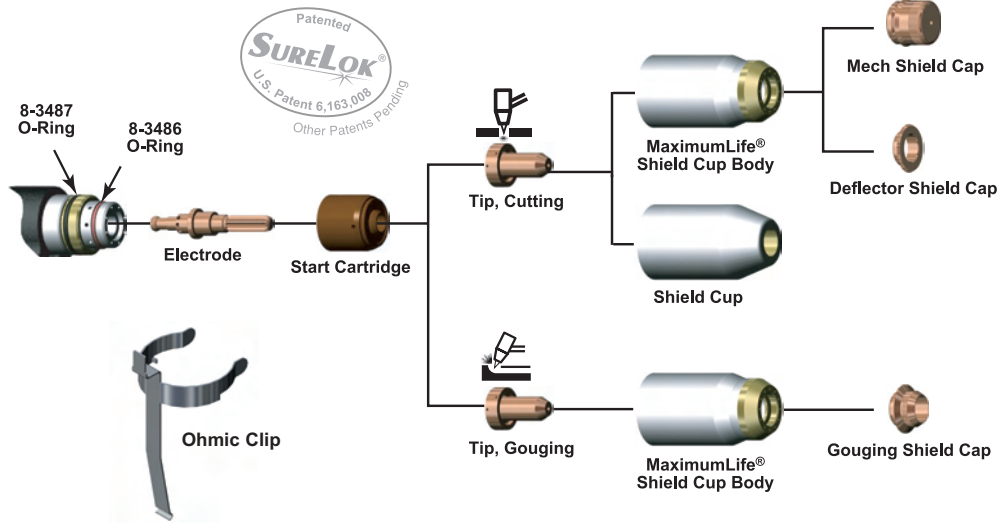
## Spare Parts Selection

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.      Product Description      Catalog No.      Product Description      Catalog No.

### Accessories

**Single Stage Air Filter**      7-7507

**Leather Leads Cover**

20 ft. (6.1m)      9-1260

25 ft. (7.6m)      9-1270

50 ft. (15.2m)      9-1280

**Cutting Guide Kits**

**Circle Guide Kit**      7-3291

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

For use with Machine Torch

**Straight Line Cutting Guide**      7-8911

**Roller/Radius Kit**      7-7501

**Deluxe Kit**      7-8910

1TORCH, ATC, RPT, SL60 and SL100, trademarks of Thermal Dynamics Corporation, are registered with the U.S. Patent and Trademark Office, and are the subject of trademark registrations and pending applications in numerous other countries. For information on trademark registrations of Thermal Dynamics Corporation, contact the local trademark offices in the countries of interest.

**U.S. Plasma Manual Customer Care: 800-752-7621 / FAX 800-221-4401 • International Customer Care: 905-827-9777 / FAX 905-827-9797**  
**U.S. Plasma Automation Customer Care: 866-279-2628 / FAX 316-941-4491 • www.thermal-dynamics.com**

**THERMADYNE**  
 WORLD HEADQUARTERS: 16052 Swingley Ridge Road, Suite 300 • St. Louis, Missouri 63017 U.S.A.

**A Global Cutting & Welding Market Leader™**

#### THE AMERICAS

Denton, TX USA  
 U.S. Customer Care  
 Ph: (1) 800-752-7621  
 Fax: (1) 800-221-4401

West Lebanon, NH USA  
 Customer Care, Plasma  
 Ph: (1) 800-752-7621  
 Fax: (1) 800-221-4401

Miami, FL USA  
 Sales Office, Latin America  
 Ph: (1) 954-727-8371  
 Fax: (1) 954-727-8376

Oakville, Ontario, Canada  
 International Customer Care  
 Ph: (1) 905-827-9777  
 Fax: (1) 905-827-9797

Rio de Janeiro, Brazil  
 Customer Care  
 Ph: (55) 21-2485-8998  
 Fax: (55) 21-2485-8866

#### EUROPE

Chorley, United Kingdom  
 Customer Care  
 Ph: (44) 1257-261755  
 Fax: (44) 1257-224800

Milan, Italy  
 Sales Office  
 Ph: (39) 02-98-80320  
 Fax: (39) 02-98-281773

#### ASIA/PACIFIC

Cikarang, Indonesia  
 Customer Care  
 Ph: 62 21+ 8983-0011 / 0012  
 Fax: 62 21+ 893-6067

Osaka, Japan  
 Sales Office  
 Ph: 816-4809-8411  
 Fax: 816-4809-8412

Melbourne, Australia  
 Customer Care:  
 Ph: 1300-654-674  
 Fax: 613+ 9474-7391

International:  
 Ph: 613+ 9474-7508  
 Fax: 613+ 9474-7488

Rawang, Malaysia  
 Customer Care  
 Ph: 603+ 6092-2988  
 Fax: 603+ 6092-1085

Shanghai, China  
 Sales Office  
 Ph: 86 21+ 6280-1273  
 Fax: 86 21+ 3226-0955

Singapore  
 Sales Office  
 Ph: 65+ 6832-8066  
 Fax: 65+ 6763-5812