



Welding & Cutting Torch Technology

Product Catalogue

Surecut Series



About Us

Uniarc is part of a group of companies specializing in the production of Welding and Cutting torches.

With over 40 years experience, the group is positioned as a global leader at the heart of the welding torch industry.

Originally established in the United Kingdom in the 1980's, the company is now a fully-fledged, vertically integrated Chinese product innovator and manufacturer.

Our customers span a full cross section of the industry, ranging from general distribution to leading global original equipment manufacturers.

Our products are used in a broad cross-section of industrial sectors ranging from auto body repair to ship building.

Whether you need a standard off the shelf product or a customized branded option with your own colours, logos and packaging we have a one stop solution for your requirements.

Our team are here to help, contact us today if you need anymore information.



find out more www.uniarctorchology.com

Surecut Plasma Conents

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Arc Initiation System

Patented arc strike technology initiates the pilot without the use of high frequency

Consumable parts

All wear parts are manufactured to the same specification as the OEM and are fully interchangeable.

Shield caps

Offered in single and 2 piece with a variety of stand off attachments.

Electrodes

Aircraft grade Hafnium ensures stable arc initiation and maximum electrode life.



Cable supports

Cable supports are engineered to provide the correct combination of cable protection and ergonomic balance.

Terminations

Terminations are offered in a "direct to machine" or central connector configuration.



Heads

Plasma torch heads are very sophisticated components. High velocity gases, high voltage, extreme temperature and sometimes less than desirable air quality must all be precisely controlled.

The highest quality raw materials and processing techniques are utilized to use high performance, maximum endurance torch heads.

Safety System

Torch Body

A twin pin safety system ensures the torch cannot be activated if the shield cap is not in place.

Trigger

A patented 2 stage "slide to operate" switch system prevents accidental activation.



off Slide to Operate on

Surecut Plasma Cutting Torch Range

Ratings: 40 Amp to 120 Amp

Range Overview



Technical Data

Cooling Method Air-Cooled
Rating: 40A
Cutting Thickness 8-12mm
Duty Cycle: 60%
Gas Air/N₂
Gas Pressure 4.5-5.0 bar
65-75 psi
Gas Flow 100 l/min
210 scfh
Pilot Electrode to Tip
Ignition Back Striking
Without HF
Post Flow 90 sec

SC40

SC60

Cooling Method Air-Cooled
Rating: 60A
Cutting Thickness 12-20mm
Duty Cycle: 60%
Gas Air/N₂
Gas Pressure 4.5-5.0 bar
65-75 psi
Gas Flow 110 l/min
230 scfh
Pilot Electrode to Tip
Ignition Back Striking
Without HF
Post Flow 90 sec

SC80

Cooling Method Air-Cooled
Rating: 80A
Cutting Thickness 20-25mm
Duty Cycle: 60%
Gas Air/N₂
Gas Pressure 4.5-5.0 bar
65-75 psi
Gas Flow 110 l/min
230 scfh
Pilot Electrode to Tip
Ignition Back Striking
Without HF
Post Flow 90 sec

Order Codes	4mt SC40-40-CF2	SC60-40-CF2	SC80-40-CF4
	6mt SC40-60-CF2	SC60-60-CF2	SC80-60-CF4

Surecut Plasma Cutting Torch Range

Ratings: 40 Amp to 120 Amp



Technical Data

Cooling Method

Rating:

Cutting Thickness

Duty Cycle:

Gas

Gas Pressure

Gas Flow

Pilot

Ignition

Post Flow

SC80R

Air-Cooled

80A

20-25mm

60%

Air/N₂

4.5-5.0 bar

65-75 psi

110 l/min

230 scfh

Electrode to Tip

Back Striking

Without HF

90 sec

SC120

Air-Cooled

120A

30-35mm

60%

Air/N₂

4.5-5.0 bar

65-75 psi

200 l/min

420 scfh

Electrode to Tip

Back Striking

Without HF

90 sec

SC120R

Air-Cooled

120A

30-35mm

60%

Air/N₂

4.5-5.0 bar

65-75 psi

200 l/min

420 scfh

Electrode to Tip

Back Striking

Without HF

90 sec

Order Codes

4mt SC80R-40-CF4

6mt SC80R-60-CF4

SC120-40-CF4

SC120-60-CF4

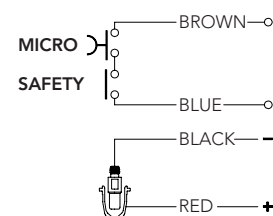
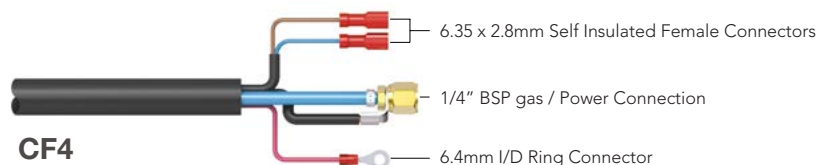
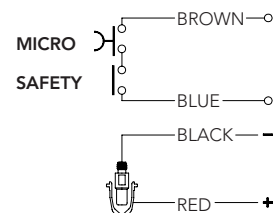
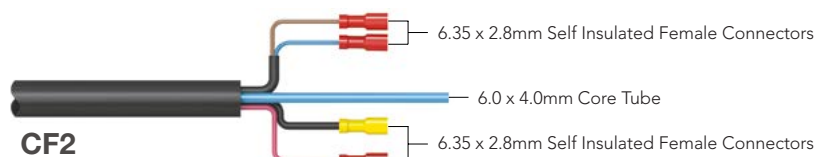
SC120R-40-CF4

SC120R-60-CF4

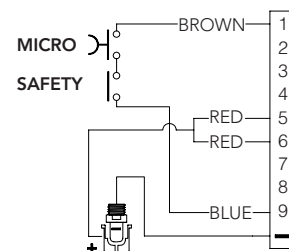
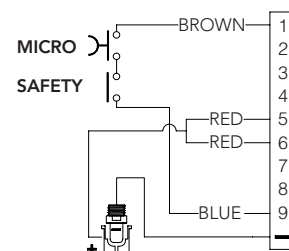
Surecut Plasma Cutting Torch Range

Cable Terminations and Wiring Systems Explained

Cable Fitting Options



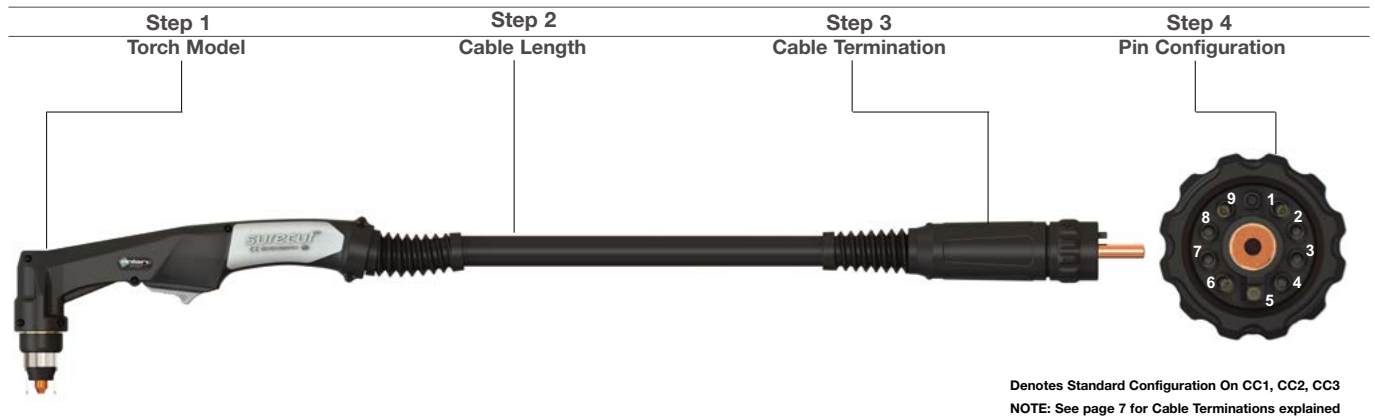
Central Connector Options



	Model	SC40	SC60	SC80	SC80R	SC120	SC120R
Termination	CF2	●	●	●	●	●	●
	CF4	●	●	●	●	●	●
	CC1	●	●	●	●	●	●
	CC2	●	●	●	●	●	●

● Denotes standard termination option

Torch Packages can be configured according to customer requirements. See Page 7.



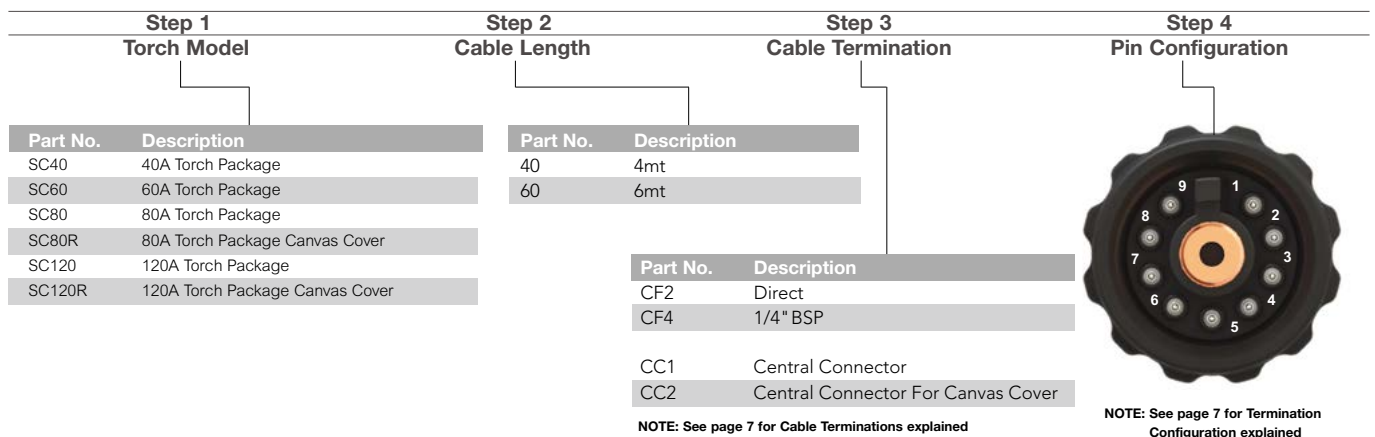
Ordering Information

Torch package part numbering is configured using the simple 4 stage system outlined below

1. Select the correct model of torch
2. Select the cable length required
3. Select the power cable connections required
4. If you have selected a CC style termination, specify the pin numbers for the
 - Switch system
 - Safety system
 - Pilot arc
 - Any other requirements

Example: SC120-40-CF4

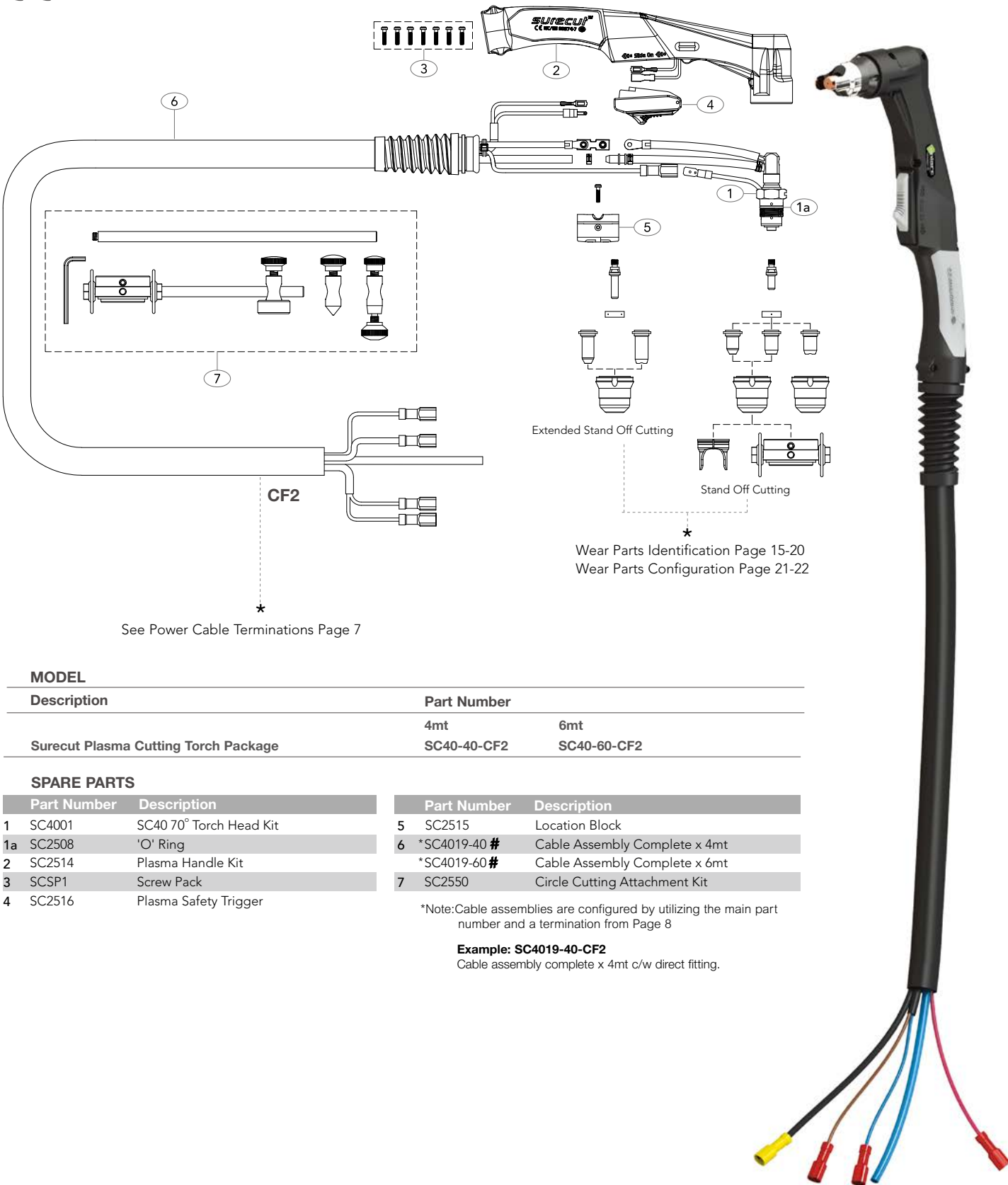
Surecut 120 Torch Package x 4mt c/w separate cables and 1/4" BSP fitting



	Pin No	Pin No
Switch	_____	_____
Safety	_____	_____
Pilot Arc	_____	_____
Others	_____	_____

SC40 Air-Cooled Cutting Torch Range

Rating: 40A Air/N₂ gas, @ 60% duty cycle.



See Power Cable Terminations Page 7

MODEL

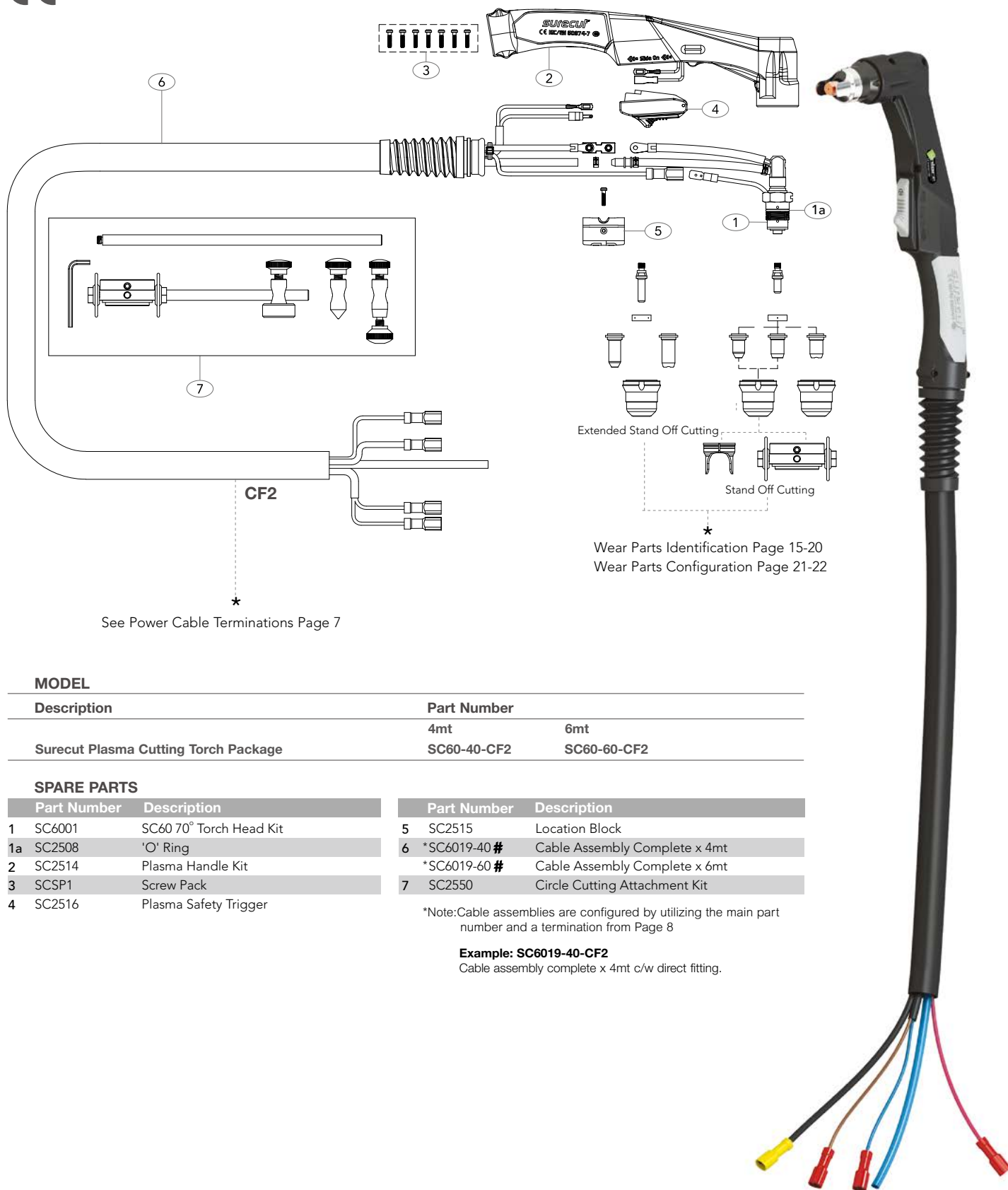
Description	Part Number	
	4mt	6mt
Surecut Plasma Cutting Torch Package	SC40-40-CF2	SC40-60-CF2

SPARE PARTS

	Part Number	Description		Part Number	Description
1	SC4001	SC40 70° Torch Head Kit	5	SC2515	Location Block
1a	SC2508	'O' Ring	6	*SC4019-40 #	Cable Assembly Complete x 4mt
2	SC2514	Plasma Handle Kit		*SC4019-60 #	Cable Assembly Complete x 6mt
3	SCSP1	Screw Pack	7	SC2550	Circle Cutting Attachment Kit

*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC4019-40-CF2
Cable assembly complete x 4mt c/w direct fitting.



MODEL

Description	Part Number	
	4mt	6mt
Surecut Plasma Cutting Torch Package	SC60-40-CF2	SC60-60-CF2

SPARE PARTS

Part Number			Description		
1	SC6001	SC60 70° Torch Head Kit	5	SC2515	Location Block
1a	SC2508	'O' Ring	6	*SC6019-40 #	Cable Assembly Complete x 4mt
2	SC2514	Plasma Handle Kit		*SC6019-60 #	Cable Assembly Complete x 6mt
3	SCSP1	Screw Pack	7	SC2550	Circle Cutting Attachment Kit

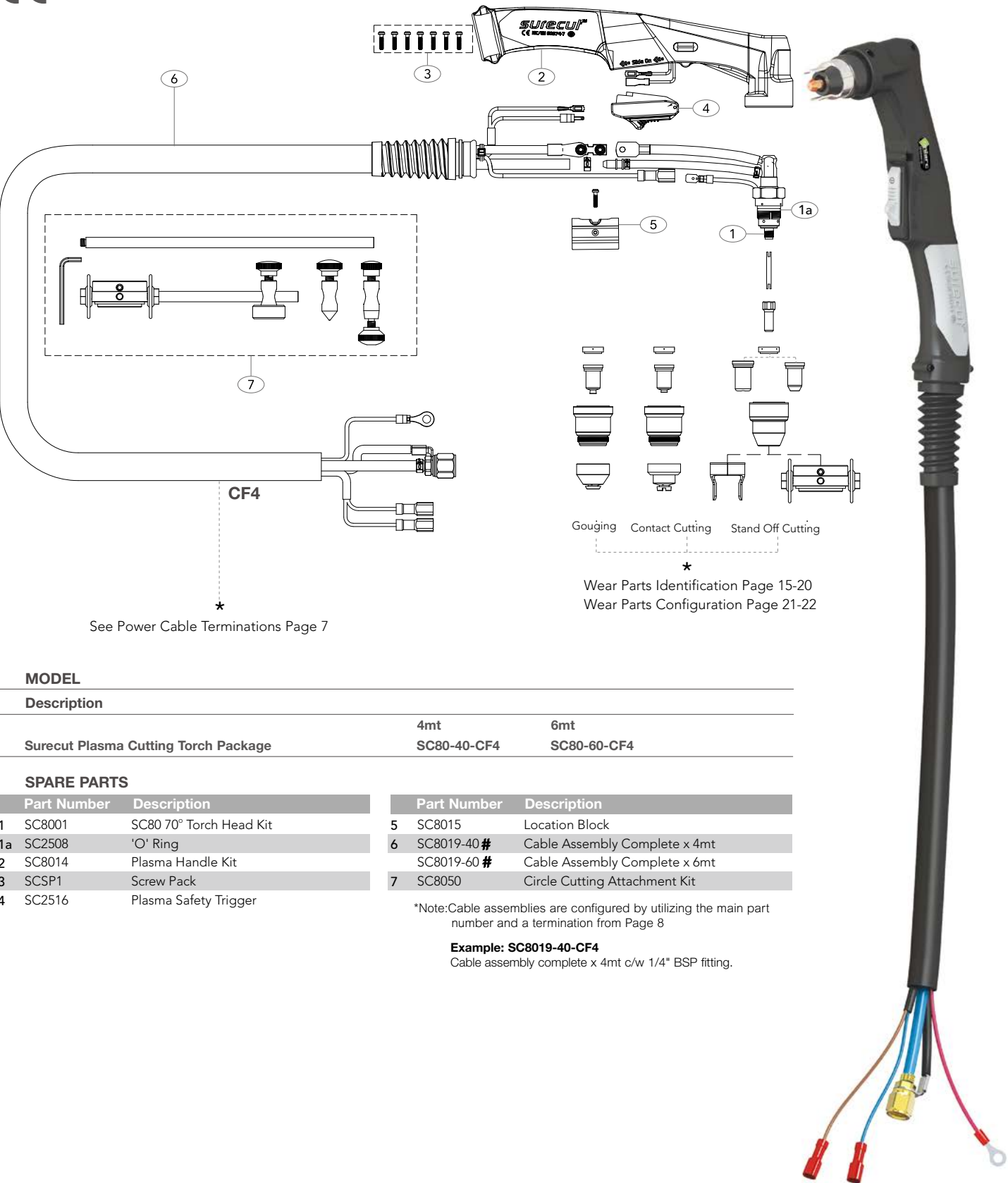
*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC6019-40-CF2

Cable assembly complete x 4mt c/w direct fitting.

SC80 Air-Cooled Cutting Torch Range

Rating: 80A Air/N₂ gas, @ 60% duty cycle.



MODEL		
Description		
	4mt	6mt
Surecut Plasma Cutting Torch Package	SC80-40-CF4	SC80-60-CF4

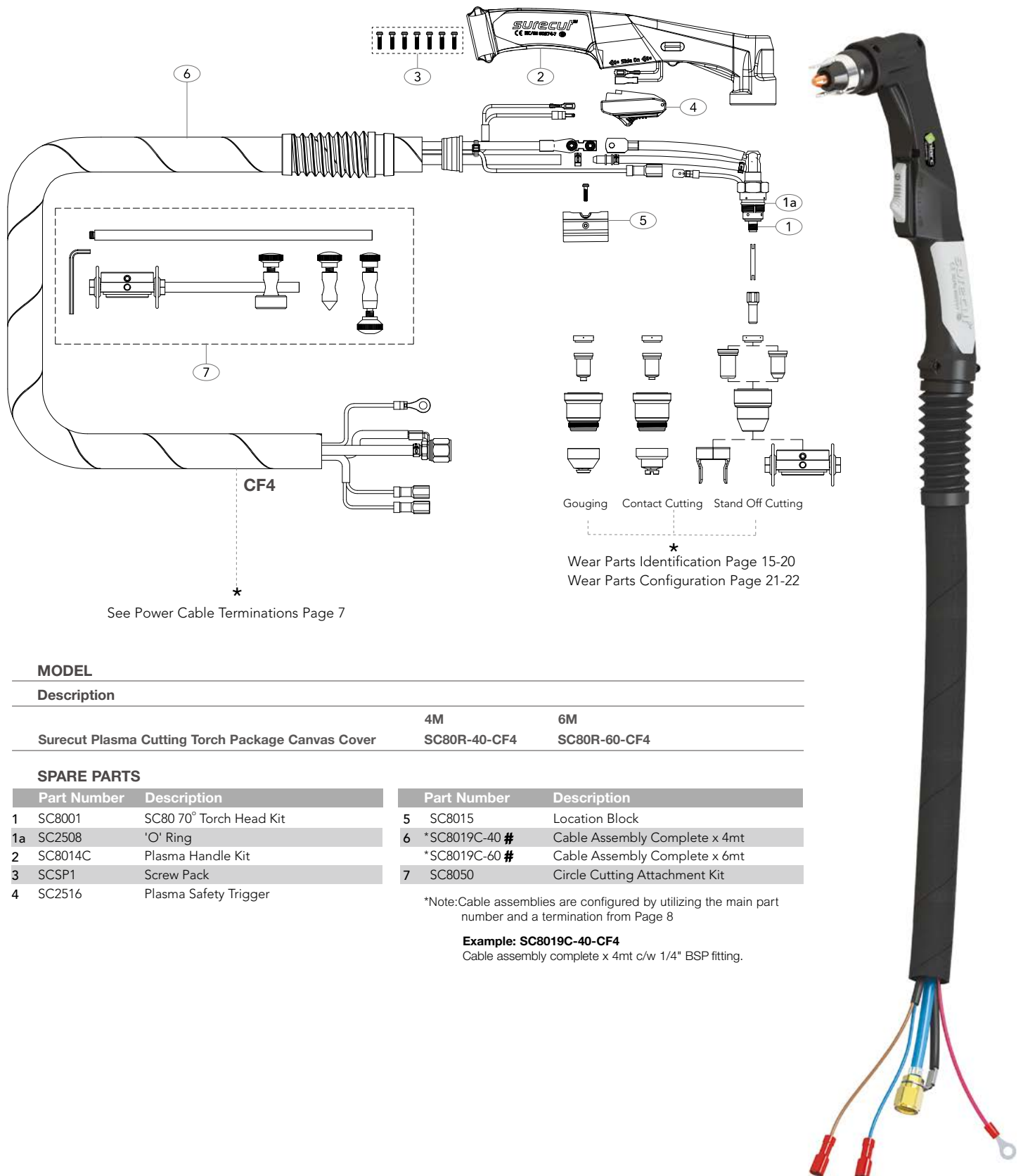
SPARE PARTS		
	Part Number	Description
1	SC8001	SC80 70° Torch Head Kit
1a	SC2508	'O' Ring
2	SC8014	Plasma Handle Kit
3	SCSP1	Screw Pack
4	SC2516	Plasma Safety Trigger

	Part Number	Description
5	SC8015	Location Block
6	SC8019-40 #	Cable Assembly Complete x 4mt
	SC8019-60 #	Cable Assembly Complete x 6mt
7	SC8050	Circle Cutting Attachment Kit

*Note: Cable assemblies are configured by utilizing the main part

*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC8019-40-CF4
Cable assembly complete x 4mt c/w 1/4" BSP fitting.



See Power Cable Terminations Page 7

MODEL

Description

	4M	6M
Surecut Plasma Cutting Torch Package Canvas Cover	SC80R-40-CF4	SC80R-60-CF4

SPARE PARTS

Part Number	Description	Part Number	Description
1 SC8001	SC80 70° Torch Head Kit	5 SC8015	Location Block
1a SC2508	'O' Ring	6 *SC8019C-40 #	Cable Assembly Complete x 4mt
2 SC8014C	Plasma Handle Kit	*SC8019C-60 #	Cable Assembly Complete x 6mt
3 SCSP1	Screw Pack	7 SC8050	Circle Cutting Attachment Kit
4 SC2516	Plasma Safety Trigger		

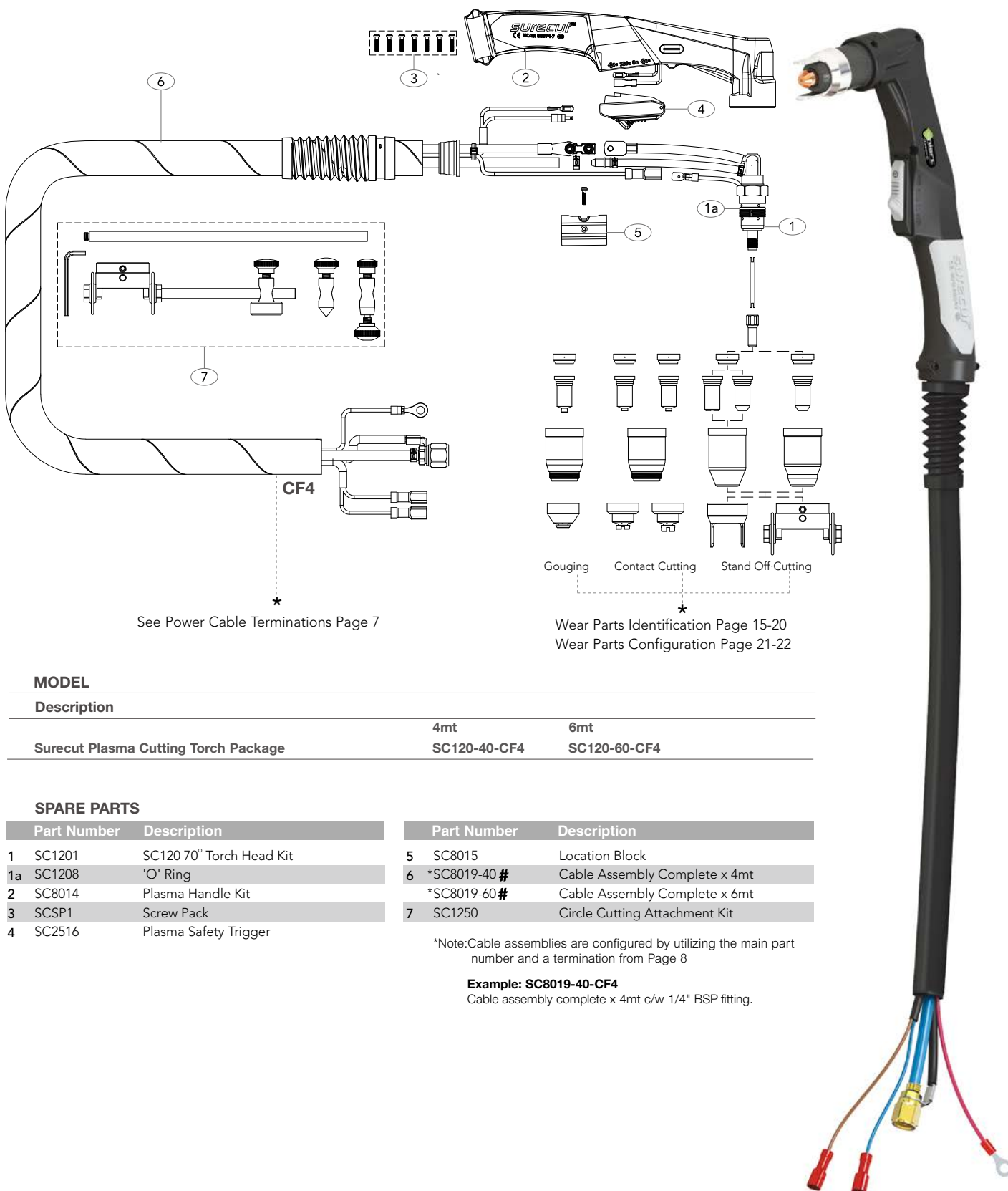
*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC8019C-40-CF4

Cable assembly complete x 4mt c/w 1/4" BSP fitting.

SC120 Air-Cooled Cutting Torch Range

Rating: 120A Air/N₂ gas, @ 60% duty cycle.



MODEL

Description

Surecut Plasma Cutting Torch Package

4mt

SC120-40-CF4

6mt

SC120-60-CF4

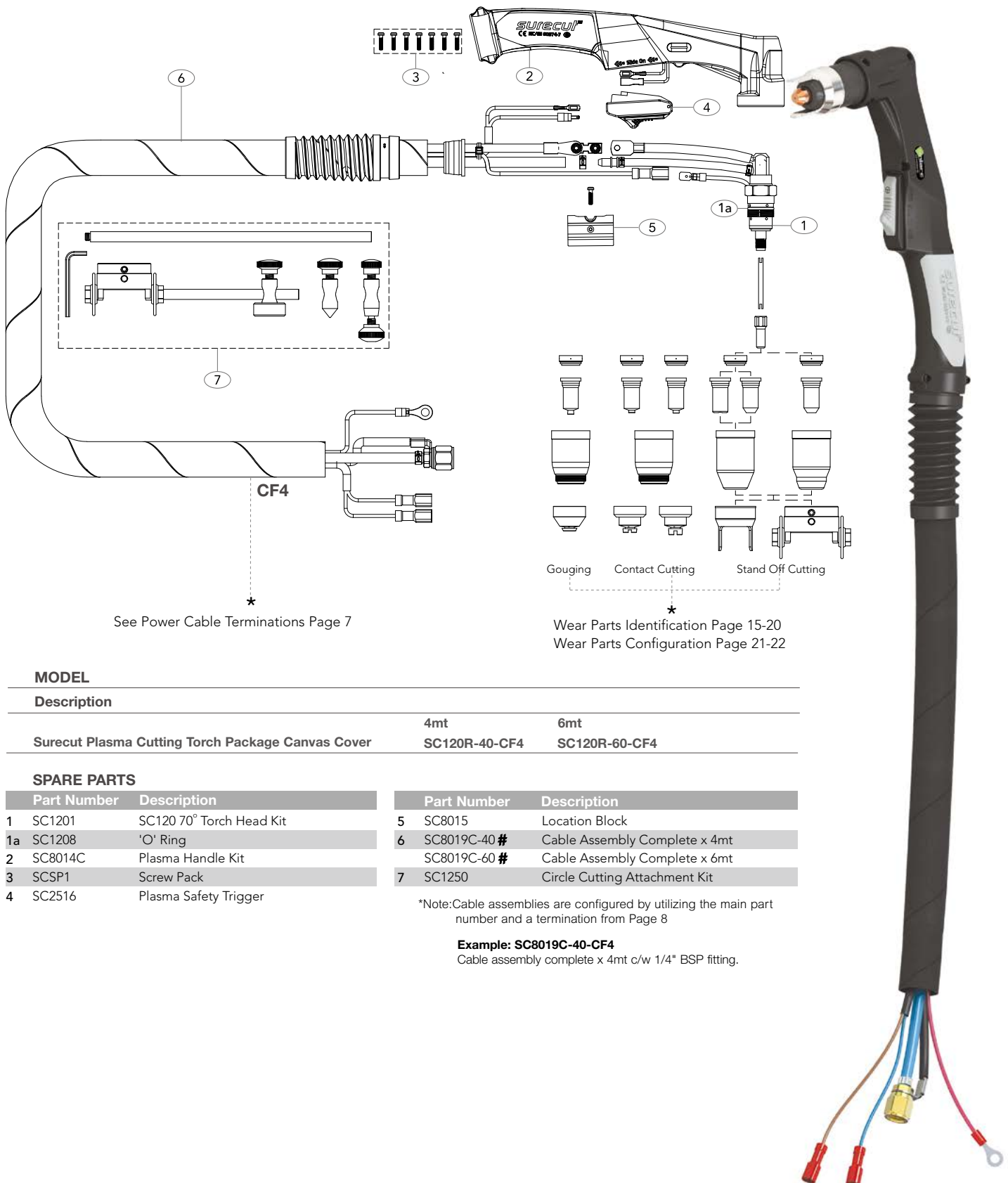
SPARE PARTS

Part Number	Description	Part Number	Description
1	SC1201 SC120 70° Torch Head Kit	5	SC8015 Location Block
1a	SC1208 'O' Ring	6	*SC8019-40 # Cable Assembly Complete x 4mt
2	SC8014 Plasma Handle Kit		*SC8019-60 # Cable Assembly Complete x 6mt
3	SCSP1 Screw Pack	7	SC1250 Circle Cutting Attachment Kit
4	SC2516 Plasma Safety Trigger		

*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC8019-40-CF4

Cable assembly complete x 4mt c/w 1/4" BSP fitting.



MODEL

Description

	4mt	6mt
Surecut Plasma Cutting Torch Package Canvas Cover	SC120R-40-CF4	SC120R-60-CF4

SPARE PARTS

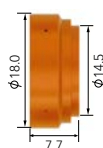
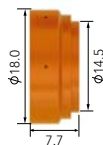
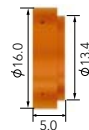
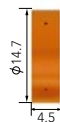
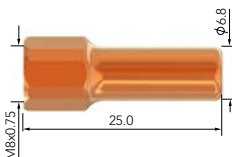
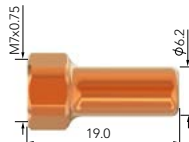
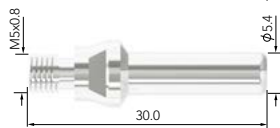
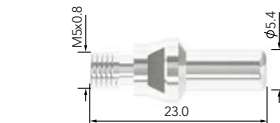
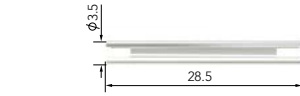
Part Number	Description	Part Number	Description
1 SC1201	SC120 70° Torch Head Kit	5 SC8015	Location Block
1a SC1208	'O' Ring	6 SC8019C-40 #	Cable Assembly Complete x 4mt
2 SC8014C	Plasma Handle Kit	SC8019C-60 #	Cable Assembly Complete x 6mt
3 SCSP1	Screw Pack	7 SC1250	Circle Cutting Attachment Kit
4 SC2516	Plasma Safety Trigger		

*Note: Cable assemblies are configured by utilizing the main part number and a termination from Page 8

Example: SC8019C-40-CF4

Cable assembly complete x 4mt c/w 1/4" BSP fitting.

Wear Parts



Cooling Tubes

Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC8002	Cooling Tube						
SC1202	Cooling Tube						

Electrodes

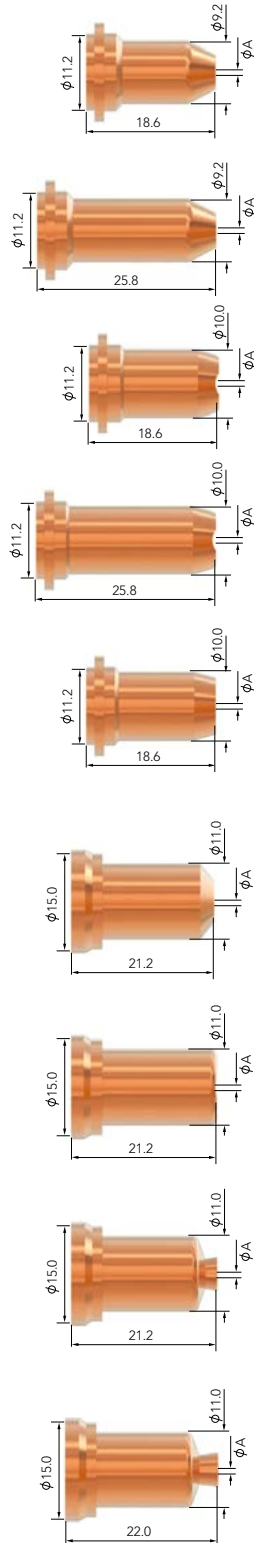
Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2504	Electrode						
SC2504E	Electrode Extended						
SC8004	Electrode						
SC1204	Electrode						

Swirl Rings

Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2506	Swirl Ring						
SC8006	Swirl Ring						
SC1206	Swirl Ring, 6 holes-HD						
SC1207	Swirl Ring, 4 holes						

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts

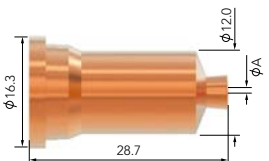
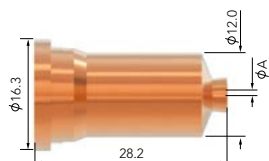
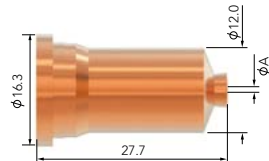
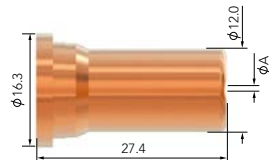
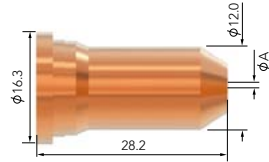
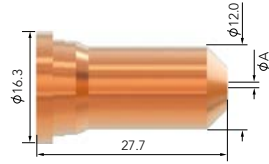


Cutting Tips

Part No.	Description	Bore øA	Amps	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2520-06	Cutting Tip	0.65mm	10-20A	●	●	●	●	●	●
SC2520-08	Cutting Tip	0.8mm	20-30A	●	●	●	●	●	●
SC2520-09	Cutting Tip	0.9mm	30-40A	●	●	●	●	●	●
SC2520-06E	Cutting Tip Extended	0.65mm	10-20A	●	●	●	●	●	●
SC2520-08E	Cutting Tip Extended	0.8mm	20-30A	●	●	●	●	●	●
SC2522-09	Cutting Tip Cross Groove	0.9mm	30-40A	●	●	●	●	●	●
SC2522-09E	Cutting Tip Extended Cross Groove	0.9mm	30-40A	●	●	●	●	●	●
SC2524-09	Cutting Tip Flat	0.9mm	30-40A	●	●	●	●	●	●
SC2524-10	Cutting Tip Flat	1.0mm	40-50A	●	●	●	●	●	●
SC2524-11	Cutting Tip Flat	1.1mm	50-60A	●	●	●	●	●	●
SC8020-10	Cutting Tip	1.0mm	40-50A	●	●	●	●	●	●
SC8020-11	Cutting Tip	1.1mm	50-60A	●	●	●	●	●	●
SC8020-12	Cutting Tip	1.2mm	60-70A	●	●	●	●	●	●
SC8020-13	Cutting Tip	1.3mm	70-80A	●	●	●	●	●	●
SC8022-09	Cutting Tip Cross Groove	0.9mm	30-40A	●	●	●	●	●	●
SC8026-10	Cutting Tip Contact	1.0mm	40-50A	●	●	●	●	●	●
SC8026-11	Cutting Tip Contact	1.1mm	50-60A	●	●	●	●	●	●
SC8026-12	Cutting Tip Contact	1.2mm	60-70A	●	●	●	●	●	●
SC8026-13	Cutting Tip Contact	1.3mm	70-80A	●	●	●	●	●	●
SC8028-16	Gouging Tip	1.6mm	80A	●	●	●	●	●	●

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts



Cutting Tips

Part No.	Description	Bore ϕ A	Amps	SC40	SC60	SC80	SC80R	SC120	SC120R
SC1220-10	Cutting Tip	1.0mm	40-50A	●	●	●	●	●	●
SC1220-11	Cutting Tip	1.1mm	50-60A	●	●	●	●	●	●
SC1220-12	Cutting Tip	1.2mm	60-70A	●	●	●	●	●	●
SC1221-14	Cutting Tip	1.4mm	80-90A	●	●	●	●	●	●
SC1221-15	Cutting Tip	1.5mm	100-110A	●	●	●	●	●	●
SC1221-16	Cutting Tip	1.6mm	110-120A	●	●	●	●	●	●
SC1222-09	Cutting Tip Contact	0.9mm	30-40A	●	●	●	●	●	●
SC1226-10	Cutting Tip Contact	1.0mm	40-50A	●	●	●	●	●	●
SC1226-11	Cutting Tip Contact	1.1mm	50-60A	●	●	●	●	●	●
SC1226-12	Cutting Tip Contact	1.2mm	60-70A	●	●	●	●	●	●
SC1227-14	Cutting Tip Contact	1.4mm	80-90A	●	●	●	●	●	●
SC1227-15	Cutting Tip Contact	1.5mm	100-110A	●	●	●	●	●	●
SC1227-16	Cutting Tip Contact	1.6mm	110-120A	●	●	●	●	●	●
SC1228-22	Gouging Tip	2.2mm	120A	●	●	●	●	●	●

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts



Retaining Caps

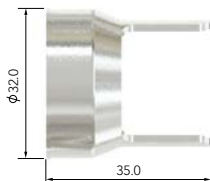
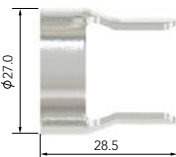
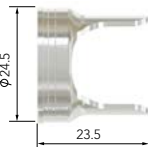
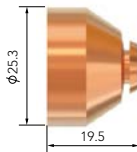
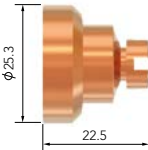
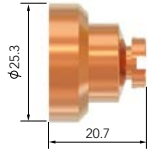
Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2530-6	Retaining Cap, 6 holes	●	●	●	●	●	●
SC2530-6L	Retaining Cap, 6 holes Maximum Life	●	●	●	●	●	●
SC8030	Retaining Cap	●	●	●	●	●	●
SC1230	Retaining Cap, 30~70A	●	●	●	●	●	●
SC1231	Retaining Cap, 80~120A	●	●	●	●	●	●

Shield Cap Bodies

Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC8031	Shield Cap Body	●	●	●	●	●	●
SC1232	Shield Cap Body	●	●	●	●	●	●

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts



Shield Caps

Description		SC40	SC60	SC80	SC80R	SC120	SC120R
SC8041	Shield Cap Hand						
SC1241	Shield Cap Hand						

Shield Cap Gouging

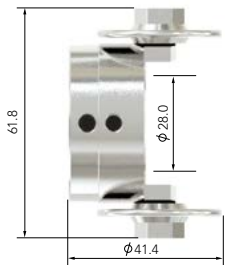
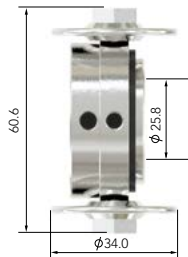
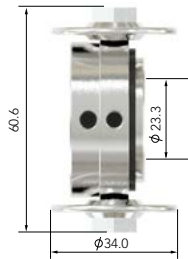
Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC8043	Shield Cap Gouging						

Double Pointed Spacers

Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2540	Double Pointed Spacer						
SC8040	Double Pointed Spacer						
SC1240	Double Pointed Spacer						

● Standard wear part range ● Torch package standard wear part set-up

Wear Parts



Cutting Buggies

Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2551	Cutting Buggy	●	●	●	●	●	●

SC8051	Cutting Buggy	●	●	●	●	●	●
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SC1251	Cutting Buggy	●	●	●	●	●	●
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Circle / Cutting Attachment Kits

Item	Part No.	Description	SC40	SC60	SC80	SC80R	SC120	SC120R
SC2550	Circle / Cutting Attachment Kit		●	●	●	●	●	●
SC8050	Circle / Cutting Attachment Kit		●	●	●	●	●	●
SC1250	Circle / Cutting Attachment Kit		●	●	●	●	●	●

● Standard wear part range ● Torch package standard wear part set-up

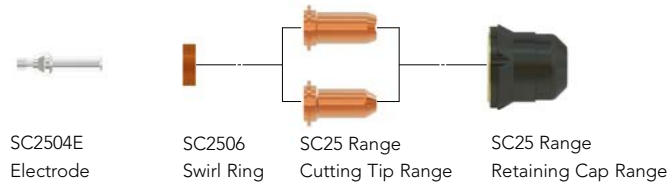
Wear Parts Configuration Tables

SC40 Series

Stand Off Cutting



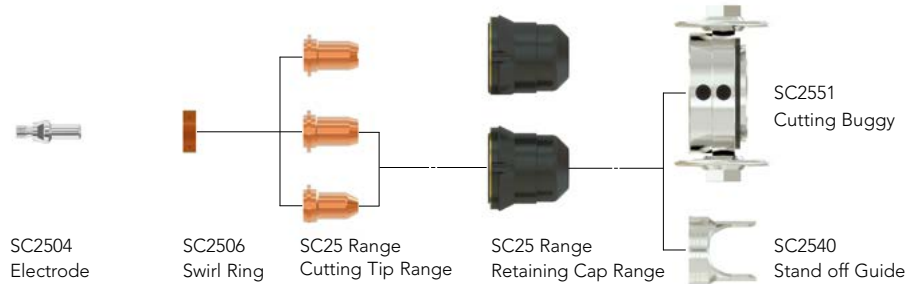
Extended Stand Off Cutting



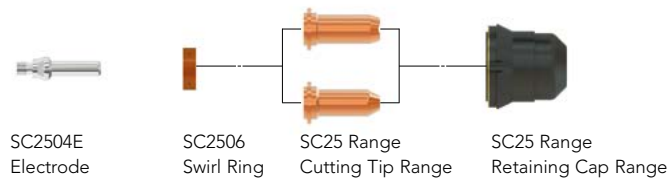
*Wear Parts part number and sizes are available on pages 15-20

SC60 Series

Stand Off Cutting






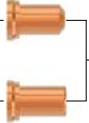



Extended Stand Off Cutting



*Wear Parts part number and sizes are available on pages 15-20








Wear Parts Configuration Tables

SC80/80R Series

						
Stand Off Cutting	SC8002 Cooling Tube	SC8004 Electrode	SC8006 Swirl Ring	SC80 Range Cutting Tip Range	SC80 Range Retaining Cap Range	SC8051 Cutting Buggy
						
						SC8040 Stand off Guide
Contact Cutting	SC8002 Cooling Tube	SC8004 Electrode	SC8006 Swirl Ring	SC80 Range Cutting Tip Range	SC8031 Shield Cap Body	SC8041 Shield Cap
Gouging	SC8002 Cooling Tube	SC8004 Electrode	SC8006 Swirl Ring	SC80 Range Cutting Tip Range	SC8031 Shield Cap Body	SC8043 Shield Cap Gouging

*Wear Parts part number and sizes are available on pages 15-20

SC120/120R Series

						
Stand Off Cutting	SC1202 Cooling Tube	SC1204 Electrode	SC1206 Swirl Ring HD	SC12 Range Cutting Tip Range	SC12 Range Retaining Cap	SC1251 Cutting Buggy
						
						SC1240 Stand off Guide
Contact Cutting	SC1202 Cooling Tube	SC1204 Electrode	SC1206 Swirl Ring HD	SC12 Range Cutting Tip Range	SC1232 Shield Cap Body	SC8041 Shield Cap
						SC1241 Shield Cap
Gouging	SC1202 Cooling Tube	SC1204 Electrode	SC1206 Swirl Ring HD	SC12 Range Cutting Tip Range	SC1232 Shield Cap Body	SC8043 Shield Cap Gouging

*Wear Parts part number and sizes are available on pages 15-20

Welding & Cutting Torch Technology

JINAN UNIARC WELDING TECHNOLOGY CO., LTD

13A Zhangjin Comprehensive Bonded Zone
33688, Jing Shi Dong Road
Jinan Area of China (Shandong) Pilot Free Trade Zone
Jinan 250102, P.R. China

Tel: +86 531 88239823

Website: www.uniarctorchology.com

Email: info@uniarctorchology.com

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