

**REPLACEMENT  
PARTS SUITABLE FOR  
HYPERTHERM® PLASMA  
CUTTING SYSTEMS  
POWERMAX® 65  
POWERMAX® 85  
POWERMAX® 105  
DURAMAX®  
HAND/MACHINE TORCH**

# REPLACEMENT PARTS SUITABLE FOR PLASMA CUTTING SYSTEM HYPERTHERM® POWERMAX® 65 / POWERMAX® 85 / POWERMAX® 105 DURAMAX® HAND/MACHINE TORCH

Thermacut comes with several unique design solutions, which offers effective electrical/heat transfer combined with precise consumables holding. This design offers excellent cut quality and lifetime of the cutting consumables.

## 1ST UNIQUE DESIGN SOLUTION

Unique two piece swirl ring combined with a spring electrode holder design incorporates a two piece swirl ring. The Front piece directs the final stream of gases. The rear piece contains a unique built in spring mechanism, which

assures effective electrical/heat transfer. The two piece swirl ring is matched with a one piece electrode, that has been proven to be better design solution (claim is supported by internal laboratory testing focused on lifetime & cut quality)

### Unique Solution of two piece swirl ring:



The thermacut electrode and the two piece swirl ring must be used only as a set.

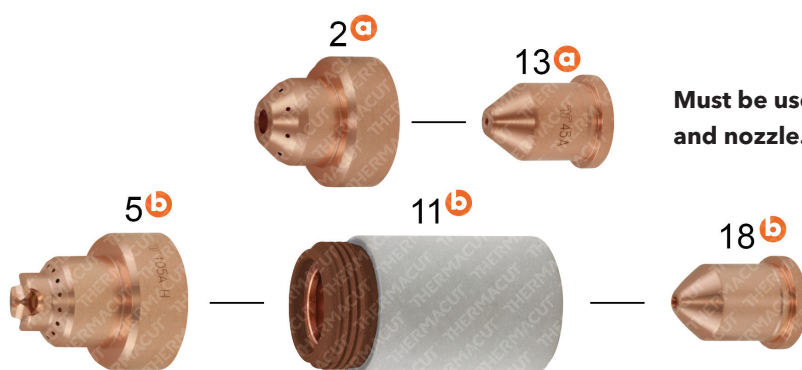
The swirl ring holder (black piece) is included free of charge when purchasing a package of electrodes. (5 electrodes to 1 piece of the swirl ring holder.)

## 2ND UNIQUE ELLIPTICAL DESIGN SOLUTION

The patented elliptical shape of the nozzle combined with shield and retaining cap use a modified gas flow design, which offers improved consumable cooling and focusing of

the plasma arc with a strong gas shielding barrier. This results in improved consumable lifetime & cut quality and resistance against the blowback of melted metal.

### Design of nozzle, shield, retaining cap:



Must be used only as a set of shield and nozzle.

Must be used only as a set of shield, retaining cap and nozzle.

Ⓐ MUST BE USED ONLY AS A SET OF SHIELD AND NOZZLE, THIS COMPLETE SET IS INTERCHANGEABLE AND COMPATIBLE WITH ORIGINAL OEM RETAINING CAP, ELECTRODE AND SWIRL RING.

Ⓑ MUST BE USED ONLY AS A SET OF SHIELD, RETAINING CAP AND NOZZLE, THIS COMPLETE SET IS INTERCHANGEABLE AND COMPATIBLE WITH ORIGINAL OEM ELECTRODE AND SWIRL RING.

Ⓒ MUST BE USED ONLY AS A SET OF ELECTRODE AND SWIRL RING, THIS COMPLETE SET IS INTERCHANGEABLE AND COMPATIBLE WITH ORIGINAL OEM SHIELD NOZZLE AND RETAINING CAP. ELECTRODES ARE PACKED TOGETHER WITH SWIRL RING SPRING HOLDER (BLACK PART) IN RATIO OF 5 ELECTRODES TO 1 HOLDER.

Ⓓ RETAINING CAP UP TO 85A. FOR THE 105A RETAINING CAP PART NUMBER T-11422 OR T-11932 HAS TO BE USED. DIFFERENT RETAINING CAPS HAVE TO BE USED FOR 105A AND FOR 45/65/85A.

\*\* CONTENT: ELECTRODE 5 PCS (PACKED TOGETHER WITH SWIRL RING SPRING HOLDER), NOZZLE 5 PCS, SW. RING 1 PC, RET. CAP 1 PC, SHIELD 2 PCS

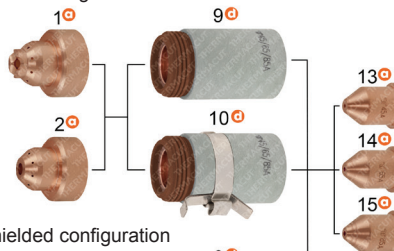
(20Ⓐ), (21Ⓑ) - ALSO POSSIBLE TO USE WITH FINECUT® CONFIGURATION, BUT FOR BEST CUT QUALITY RESULTS - USE 220947-UR

**SMART SOLUTION** - DESIGN IMPROVEMENTS THAT BRINGS ADDED VALUE SUCH AS IMPROVED LIFETIME OF CONSUMABLES, EXCELLENT CUT QUALITY, SPEED OR BETTER COST EFFECTIVENESS OF YOUR SYSTEM.

# REPLACEMENT PARTS SUITABLE FOR PLASMA CUTTING SYSTEM HYPERTHERM® POWERMAX® 65 / POWERMAX® 85 / POWERMAX® 105 DURAMAX® HAND/MACHINE TORCH

## 45/65/85A application

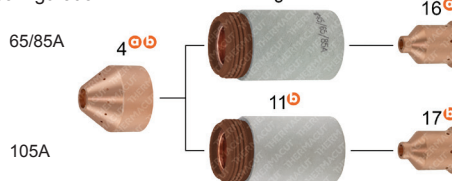
### Shielded configuration



### Unshielded configuration

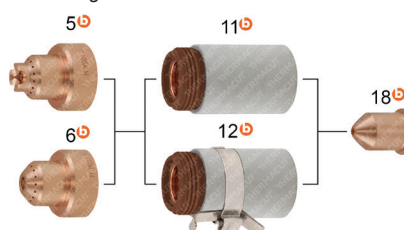


## Gouging configuration

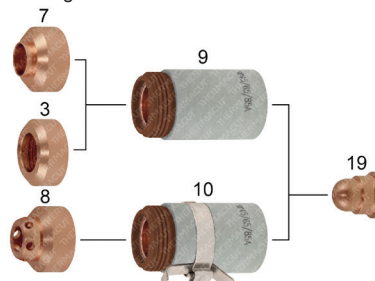


## 105A application

### Shielded configuration



### FineCut® configuration



24



23 (Pkg. 5 pcs + 1 pc)



Item	Part No.	Ref. No.	Description	Std. Pkg.	Item	Part No.	Ref. No.	Description	Std. Pkg.
1.	T-11406	220818-UR	Shield 45/65/85A, Hand	1	18.	T-11840	220990-UR	Nozzle 105A	5
2.	T-11404	220817-UR	Shield 45/65/85A, Machine	1	19.	T-11845	220930	Nozzle 45A, FineCut®	5
3.	T-11407	220955	Deflector 45/65/85/105A	1	20.	T-11861	220857-UR	Swirl Ring 45-85A	1
4.	T-12022	220798-UR	Shield 65/85/105A, Gouging	1	21.	T-11930	220994-UR	Swirl Ring 105A	1
5.	T-11841	220992-UR	Shield 105A, Hand	1	22.	T-12015	220947-UR	Swirl Ring 45A, FineCut®	1
6.	T-11842	220993-UR	Shield 105A, Machine	1	23.	T-11883	220842x5	Electrode 45-105A (Pkg. 5 Pcs.)	1 x 5
7.	T-12013	220931	Deflector 45A, FineCut®	1			220842	Part is available in 5pcs set 220842x5 only	
8.	T-12014	220948	Shield 45A, FineCut®, Ohmic	1	**24.	T-11933**	T-11933	Starter Kit 45A, Hand	1
9.	T-11423	220854-UR	Retaining Cap 45/65/85A	1	**	T-11934**	T-11934	Starter Kit 45A, Machine	1
10.	T-11931	220953-UR	Retaining Cap 45/65/85A, Ohmic	1	**	T-11935**	T-11935	Starter Kit 65A, Hand	1
11.	T-11422	T-11422	Retaining Cap 105A	1	**	T-11936**	T-11936	Starter Kit 65A, Machine	1
12.	T-11932	T-11932	Retaining Cap 105A, Ohmic	1	**	T-11937**	T-11937	Starter Kit 85A, Hand	1
13.	T-11378	220941-UR	Nozzle 45A	5	**	T-11938**	T-11938	Starter Kit 85A, Machine	1
14.	T-11377	220819-UR	Nozzle 65A	5	**	T-11939**	T-11939	Starter Kit 105A, Hand	1
15.	T-11405	220816-UR	Nozzle 85A	5	**	T-11940**	T-11940	Starter Kit 105A, Machine	1
16.	T-12021	220797-UR	Nozzle 65/85A, Gouging	5	**	T-11941**	T-11941	Empty box for Starter Kit, universal	1
17.	T-12023	220991-UR	Nozzle 105A, Gouging	5					

ⓐ, ⓑ, ⓒ, ⓓ SPECIFIED ON THE PREVIOUS PAGE.

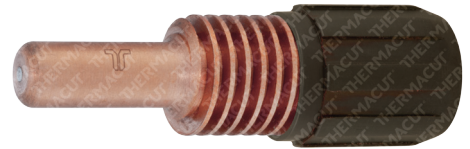
# REPLACEMENT CONSUMABLES SUITABLE FOR HYPERTHERM® POWERMAX® 65, POWERMAX® 85, POWERMAX® 105, DURAMAX® HAND/MACHINE TORCH

THERMACUT ELECTRODE, SWIRL RING AND SWIRL RING HOLDER MUST BE USED AS A SET. IF THESE THREE PARTS ARE USED AS A SET, THE REMAINING CONSUMABLES CAN BE OEM.

220857-UR  
220994-UR

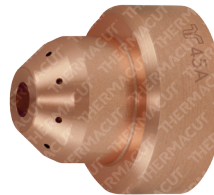


220842X5



THERMACUT 45/65/85A SHIELD AND NOZZLE MUST BE USED AS A SET. IF THESE TWO PARTS ARE USED AS A PAIR, THE REMAINING CONSUMABLES CAN BE OEM.

220817-UR  
220818-UR

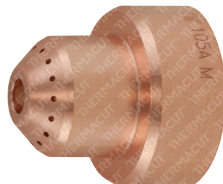


220941-UR  
220819-UR  
220816-UR



THERMACUT 105A SHIELD, NOZZLE AND RETAINING CAP MUST BE USED AS A SET. IF THESE THREE PARTS ARE USED AS A SET, THE REMAINING CONSUMABLES CAN BE OEM.

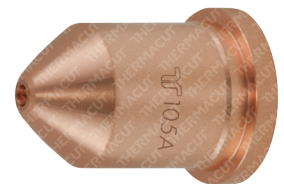
220993-UR  
220992-UR



T-11932  
T-11422



220990-UR



DIFFERENT RETAINING CAPS HAVE TO BE USED FOR 105A AND FOR 45/65/85A!

T-11932  
T-11422



220854-UR  
220953-UR



105 A

UP TO 85 A

## A GLOBAL PROVIDER OF THERMAL CUTTING TECHNOLOGY

**THERMACUT®**  
THE CUTTING COMPANY®

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