



# *CaddyTig HF*



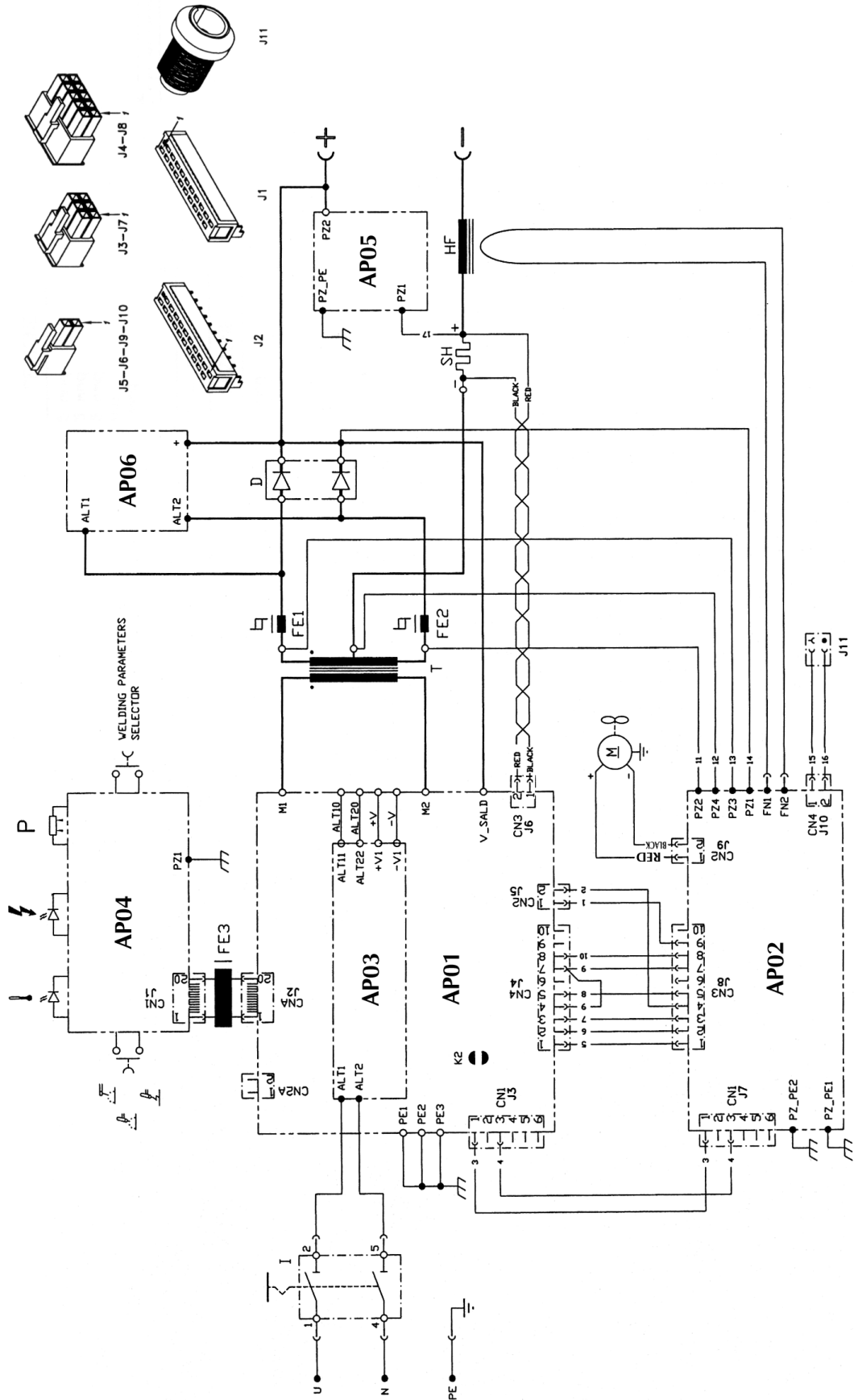
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Brugsanvisning  
Bruksanvisning  
Käyttöohjeet  
Instruction manual  
Betriebsanweisung  
Manuel d'instructions**

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Instrucciones de uso  
Istruzioni per l'uso  
Manual de instruções  
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Rätt till ändring av specifikationer utan avisering förbehålles.  
Ret til ændring af specifikationer uden varsel forbeholdes.  
Rett til å endre spesifikasjoner uten varsel forbeholdes.  
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Schema Skema Skjema Johdotuskaavio Diagram Schaltplan Schéma  
 Esquema Διάταξεις συνδεσης Schemat





Reservdelsförteckning Reservdelsfortegnelse Reservdelsliste Varaosaluettelo  
Spare parts list Ersatzteilliste Liste de pièces détachées Reserveonderdelenlijst  
Lista de repuestos Elenco ricambi Lista de peças sobressalentes  
Πίνακας ανταλλακτικών Części zamiennych

Caddy TIG HF

Edition 0219

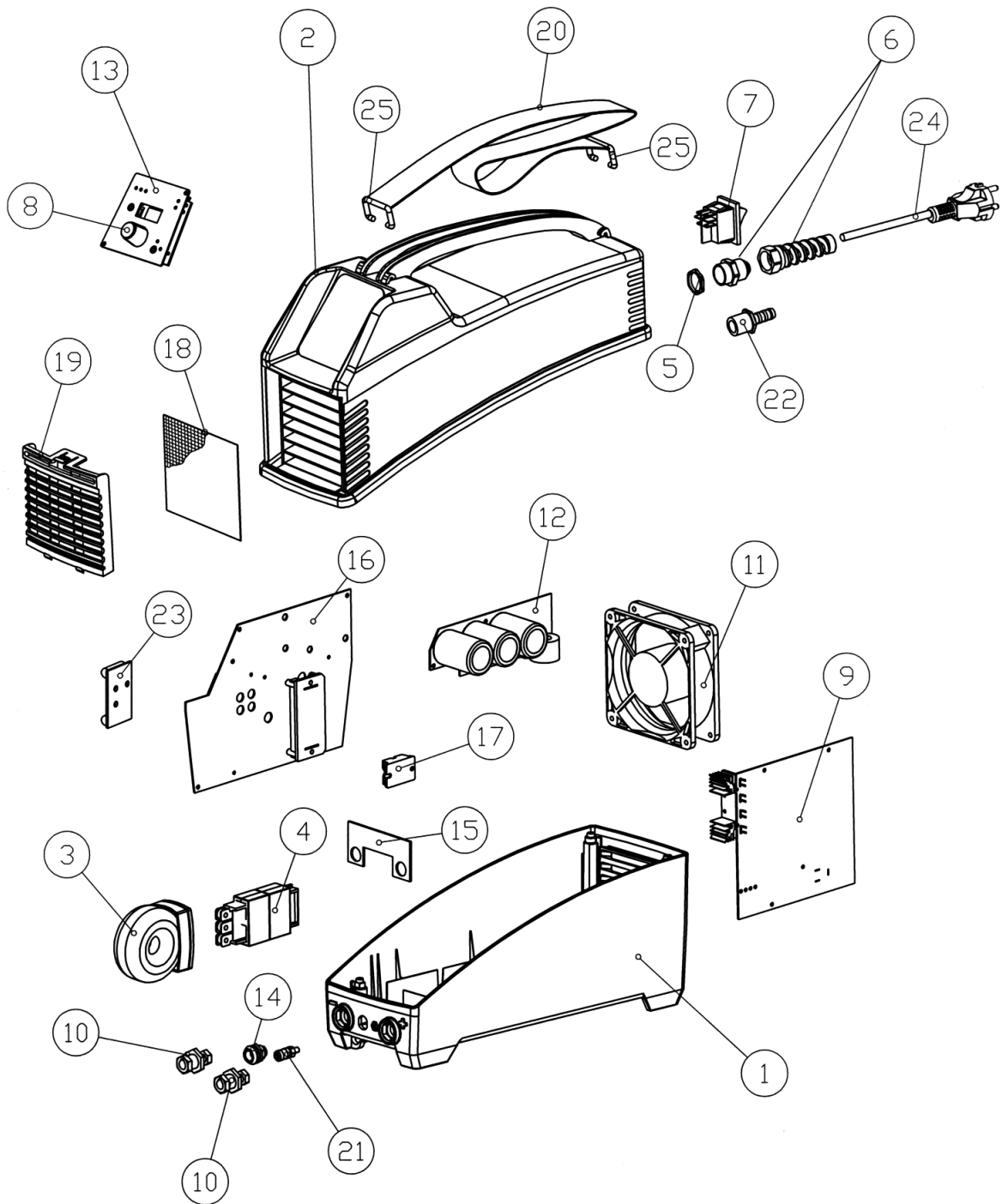


Ordering numbers for Caddy TIG HF

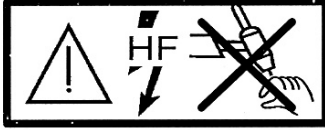
0700 159 880 Caddy TIG HF

C= component designation in the circuit diagram

Item	Caddy TIG HF	Ordering no.	Denomination	Notes	C
1	1	0700 159 001	LOWER COVER		
2	1	0700 159 002	UPPER COVER		
3	1	0700 159 005	HF TRANSFORMER		
4	1	0700 159 004	MAIN TRANSFORMER		
5	1	0212 602 208	NUT		
6	1	0193 307 104	CABLE BUSH		
7	1	0193 317 001	MAIN SWITCH		
8	1	0700 159 003	KNOB		
9	1	0700 159 006	TIG PC-BOARD (AP02)		
10	2	0366 306 881	OKC OUTLET		
11	1	0700 159 016	FAN 24 Vdc		
12	1	0700 159 008	CAPACITOR PC-BOARD (AP03)		
13	1	0700 159 015	FRONT PANEL COMPLETE (AP04)		
14	1	0700 159 010	TORCH TRIGGER CONNECTOR		
15	1	0700 159 013	OUTPUT FILTER PC-BOARD (AP05)		
16	1	0700 159 007	MAIN/POWER PC-BOARD (AP01)		
17	1	0700 159 009	SECONDARY RECTIFIER MODULE		
18	1	0456 574 001	DUST FILTER		
19	1	0456 541 001	FRONT GRID		
20	1	0468 208 001	STRAP		
21	1	0700 159 011	OUTLET QUICK GAS CONNECTOR		
22	1	0700 159 012	INLET GAS CONNECTOR		
23	1	0700 159 014	SECONDARY RECTIFIER FILTER PC-BOARD (AP06)		
24	1	0700 150 031	MAINS CABLE COMPLETE		
25	2	0700 150 016	CLAMP FOR CARRYING STRAP		



## BTF 150 OKC25



## OPERATION

### Choice of electrode

Alloying tungsten with 1% to 2% thorium or cerium increases the electron yield, which ensures better arc ignition and re-ignition, and hence improved arc stability. Alloyed tungsten electrodes have a longer life, withstand higher currents and are less likely to produce tungsten inclusions in the weld.

- **Pure tungsten electrodes (AC)**  
used for welding aluminium alloys. Melting point is around 3400°C.
- **Thoriated tungsten electrodes (DC)**  
normally used for welding of stainless, steel, copper, titanium, etc. Melting point is around 4000°C.
- **Electrodes of tungsten alloyed with cerium (AC/DC)**  
used for welding of light metals such as aluminium and magnesium. Melting point is around 3800°C.
- **Electrodes of tungsten alloyed with lantan (AC/DC)**  
used for welding of aluminium alloys, stainless, steel, copper, titanium, etc.. Melting point is around 4200°C.

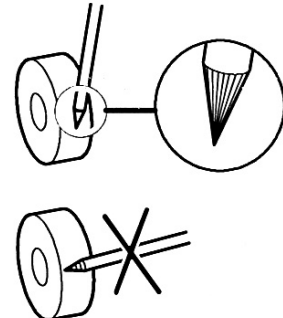
### Grinding

Grind the tungsten electrode as shown in the table below. **NOTE!** the electrode should be ground along its length. If it is ground incorrectly the arc may be unstable.

The angle should be increased as the current is increased.

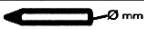
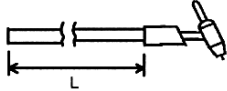

When welding with alternating current the tip of the electrode should be slightly rounded. Grinding the electrode is not necessary. It is enough to bevel the edge slightly as the electrode will shape itself if it is carefully overloaded. If the tip becomes spherical when welding with alternating current, it indicates that the current is too high for the electrode diameter concerned.

Welding current	Electrode angle
20 A	30°
20-100 A	30°-90°
100-200 A	90°-120°
over 200 A	120°


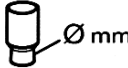




### Technical data

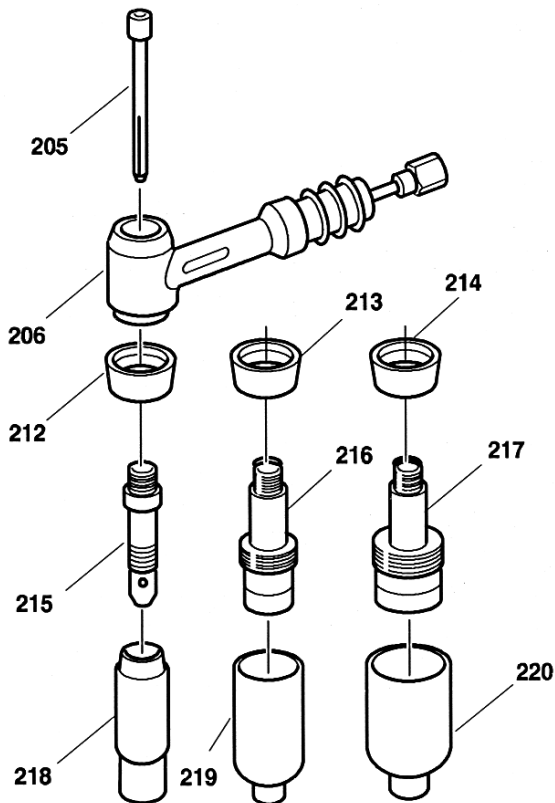
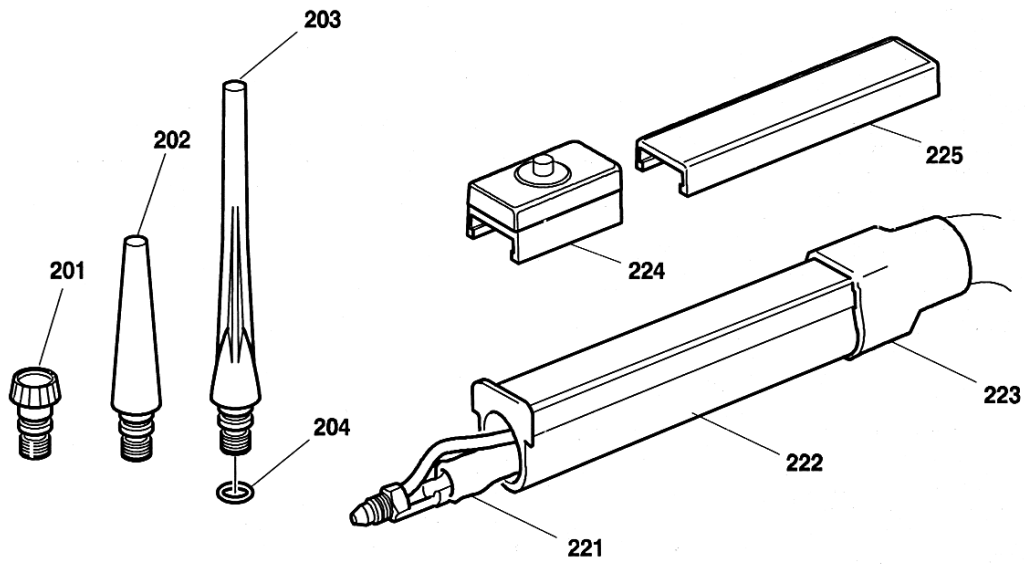
	<b>BTF 150</b>
<b>A / %</b>	150/35 115/60 90/100
	0.5-3.2
	4 & 8 m
	X

### Selection table

		A / AC			A / DC		
		W	CeO <sub>2</sub>	La <sub>2</sub> O <sub>3</sub>	ThO <sub>2</sub>	CeO <sub>2</sub>	La <sub>2</sub> O <sub>3</sub>
1.0	6.4/ 8.0	10-60	-	15-100	20-80	70-80	20-100
1.6	6.4/8.0/9.8	50-100	60-90	70-160	80-150	80-140	80-160
2.4	9.8/11.2 /2.7	100-160	90-130	110-200	120-220	150-210	120-230
3.2	11.2/12.7	130-180	140-190	150-205	200-300	220-320	200-305
4.0	12.7	180-230	200-250	180-270	250-400	330-420	250-420

(W) = wear part (A) = accessory

Item	150 OKC25	Ordering no.	Denomination	Notes
201	x	0157 123 028	Back cup	short (W) (A)
202	x	0588 000 591	Back cup	medium (W) (A)
203	1	0157 123 029	Back cup	long (W) (A)
204	1	0366 960 070	O-ring	
205	x	0157 123 012	Collet	∅ 2.4 (W) (A)
	x	0157 123 009	Collet	∅ 0.5 (W) (A)
	x	0157 123 010	Collet	∅ 1.0 (W) (A)
	1	0157 123 011	Collet	∅ 1.6 (W) (A)
206	1	0366 960 002	Torch head	
212	1	0366 960 016	Heat shield	
213	x	0366 960 020	Heat shield	
214	x	0366 960 021	Heat shield	
215	x	0157 123 017	Collet body	∅ 2.4 (W)
	x	0157 123 080	Collet body	∅ 0.5 (W) (A)
	x	0157 123 015	Collet body	∅ 1.0 (W) (A)
	1	0157 123 016	Collet body	∅ 1.6 (W) (A)
216	x	0157 123 020	Gas lens	∅ 0.5 (W) (A)
	x	0157 123 021	Gas lens	∅ 1.0 (W) (A)
	x	0157 123 022	Gas lens	∅ 1.6 (W) (A)
	x	0157 123 023	Gas lens	∅ 2.4 (W) (A)
217	x	0157 123 083	Gas lens extra large	∅ 0.5 - 1.0 (W) (A)
	x	0157 123 084	Gas lens extra large	∅ 1.6 (W) (A)
	x	0157 123 085	Gas lens extra large	∅ 2.4 (W) (A)
218	1	0157 123 055	Gas nozzle	∅ 11.2 (W)
	x	0157 123 052	Gas nozzle	∅ 6.4 (W) (A)
	x	0157 123 053	Gas nozzle	∅ 8.0 (W) (A)
	x	0157 123 054	Gas nozzle	∅ 9.8 (W) (A)
	x	0157 123 056	Gas nozzle	∅ 12.7 (W) (A)
219	x	0157 123 057	Gas nozzle	∅ 6.4 (W) (A)
	x	0157 123 058	Gas nozzle	∅ 8.0 (W) (A)
	x	0157 123 059	Gas nozzle	∅ 9.8 (W) (A)
	x	0157 123 060	Gas nozzle	∅ 11.2 (W) (A)
	x	0157 123 061	Gas nozzle	∅ 12.7 (W) (A)
220	x	0157 123 088	Gas nozzle	∅ 9.8 (W) (A)
	x	0157 123 089	Gas nozzle	∅ 11.2 (W) (A)
	x	0157 123 098	Gas nozzle	∅ 12.7 (W) (A)
221	1		Cables	See "OKC" on page NO TAG and "central" on page NO TAG.
222	1	0458 288 001	Handle	
-	1	0368 015 881	Handle	Complete, item 222 and 225 included
223	1	0458 283 001	Hose	L= 70 mm
224	1	0457 831 880	Microswitch	
225	1	0367 424 005	Cable chute	



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