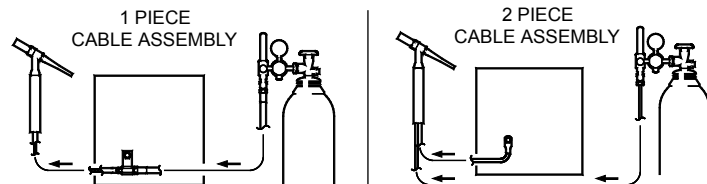


CK WORLDWIDE INC.

WARRANTY: CK Worldwide, Inc. warrants products manufactured by CK Worldwide, Inc. to be free of defects in materials and workmanship. CK Worldwide, Inc. limits this warranty to replacement of the product or parts thereof and excludes liability for injury, property damage or economic loss attributable to product use or misuse. In any event, CK Worldwide, Inc. will only be responsible for its products when used with accessory items manufactured by CK Worldwide, Inc.

INSTALLATION: Before using this torch, - tighten regulator, hose and power cable fittings with proper wrenches. Using small pliers, securely tighten all knurled hose fittings (Slide the torch handle back for access to the torch connections). Purge the regulator and TIG torch with inert gas at 20 cubic feet per hour. Following these steps will ensure contamination free welds. Repeat this procedure whenever torch or regulator fittings have been detached.

CONNECTION DIAGRAM:

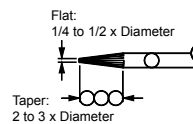


INFORMATION CHART:

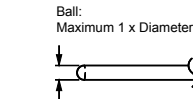
Electrode Diameter in inches (mm)	Cup Size	WELDING CURRENT (AMPS) - TUNGSTEN TYPE				ARGON FLOW - FERROUS METALS		ARGON FLOW - ALUMINUM	
		AC Pure	AC Thoriated	DCSP Pure	DCSP Thoriated	Standard Body (Liters)	Gas Lens Body (Liters)	Standard Body (Liters)	Gas Lens Body (Liters)
.020 (0.50)	4 or 5	5 - 15	5 - 20	5 - 15	5 - 20	5-8 (3-4)	5-8 (3-4)	5-8 (3-4)	5-8 (3-4)
.040 (1.00)	4 or 5	10 - 60	15-80	15 - 70	20 - 80	5-10 (3-5)	5-8 (3-4)	5-12 (3-6)	5-10 (3-5)
1/16 (1.60)	4, 5 or 6	50 - 100	70 - 150	70 - 130	80 - 150	7-12 (4-6)	5-10 (3-5)	8-15 (4-7)	7-12 (4-6)
3/32 (2.40)	6, 7 or 8	100 - 160	140 - 235	150 - 220	150 - 250	10-15 (5-7)	8-10 (4-5)	10-20 (5-10)	10-15 (5-7)
1/8 (3.20)	7, 8 or 10	150 - 210	220 - 325	220 - 330	240 - 350	10-18 (5-9)	8-12 (4-6)	12-25 (6-12)	10-20 (5-10)
5/32 (4.00)	8 or 10	200 - 275	300 - 425	375 - 475	400 - 500	15-25 (7-12)	10-15 (5-7)	15-30 (7-14)	12-25 (6-12)
3/16 (4.80)	8 or 10	250 - 350	400 - 525	475-800	475-800	20-35 (10-17)	12-25 (6-12)	25-40 (12-19)	15-30 (7-14)
1/4 (6.40)	10	325 - 700	500 - 700	750 - 1000	700 - 1100	25-50 (12-24)	20-35 (10-17)	30-55 (14-26)	25-45 (12-21)

TUNGSTEN PREPARATION:

END PREPARATION: DCSP (EN)
General Purpose:

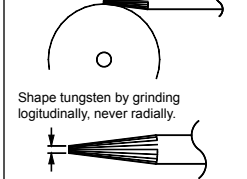


ACHF
General Purpose:



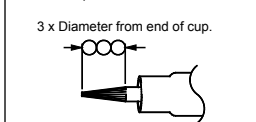
Ball tip by arcing on clean metal at low current DCRP (EP) then slowly increase current to form the desired ball diameter.

GRINDING PREPARATION:
Use a 60 Grit or finer aluminum oxide wheel

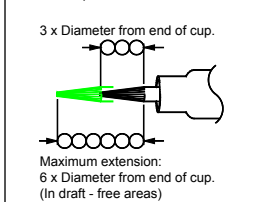


Remove sharp point to leave a truncated point with a flat spot. Diameter of flat spot determines amperage.
The included angle determines weld bead shape and size. Generally, as the included angle increases, penetration increases and bead width decreases.

EXTENSION INSTRUCTION: STANDARD PARTS
General Purpose:



GAS LENS PARTS
General Purpose:



CAUTION: Personal harm will result from touching the hot parts of a TIG torch without insulative protection, or from looking directly or indirectly at an arc or reflected arc. At no time should bare skin be exposed to a welding arc.



TIG TORCH MANUAL



CK210 & CK210V FLEX

TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 200 AMP ACHF OR DCSP
COOLING METHOD: GAS COOLED

ACCESSORY ITEMS REQUIRED FOR COMPLETE INSTALLATION:

HEAD ACCESSORIES: 3 SERIES HEAD ACCESSORIES
POWER CABLE ADAPTOR: 21HPCA

MODEL SELECTOR - TORCH PACKAGES

HEAD STYLE	CABLE STYLE	CABLE LENGTH	STANDARD CABLE	SUPERFLEX CABLE
Flexible Head -w/o valve	2 Piece	12-1/2 ft. (3.8 m)	CK2112N FX	CK2112NSF FX
		25 ft. (7.6 m)	CK2125N FX	CK2125NSF FX
	1 Piece	12-1/2 ft. (3.8 m)	CK2112H FX	CK2112HSF FX
		25 ft. (7.6 m)	CK2125H FX	CK2125HSF FX
Flexible Head -w/ valve	2 Piece	12-1/2 ft. (3.8 m)	CK2112VN FX	CK2112VNSF FX
		25 ft. (7.6 m)	CK2125VN FX	CK2125VNSF FX
	1 Piece	12-1/2 ft. (3.8 m)	CK2112VH FX	CK2112VHSF FX
		25 ft. (7.6 m)	CK2125VH FX	CK2125VHSF FX

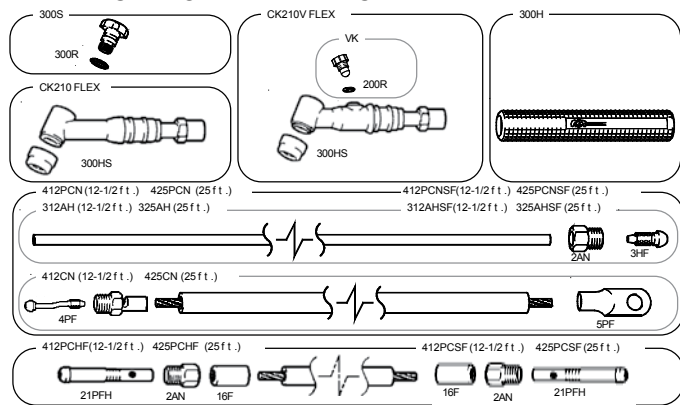
IMPORTANT !!
READ AND UNDERSTAND THE INFORMATION CONTAINED IN THIS MANUAL BEFORE OPERATING THE EQUIPMENT !

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www.ckworldwide.com
ck@ckworldwide.com

PARTS:



PARTS LIST:

PART NUMBER	DESCRIPTION	PART NUMBER	DESCRIPTION
CK210 FLEX	Torch Body, RIGID, 70 degree, 200 Amp	2 AN	Gas Nut
CK210V FLEX	Torch Body with Valve, RIGID, 70 degree, 200 Amp	3 H F	Hose Fitting
VK	Gas Valve, Top Mounted	4 P F	Power Cable Fitting
300H	Handle	5 P F	Power Cable Fitting
412CN	Power Cable with Fittings, 12-1/2 ft.	16 F	Power Fitting
425CN	Power Cable with Fittings, 25 ft.	21 P F H	Power Cable Fitting
412PCHF	Power Cable Assembly, Hi-Flex 1 Piece, 12-1/2 ft.		
412PCSF	Power Cable Assembly, Super Flex 1 Piece, 12-1/2 ft.		
425PCHF	Power Cable Assembly, Hi-Flex 1 Piece, 25 ft.		
425PCSF	Power Cable Assembly, Super Flex 1 Piece, 25 ft.		
412PCN	Power Cable Assembly, Hi-Performance 2 Piece, 12-1/2 ft.		
412PCNSF	Power Cable Assembly, Super Flex 2 Piece, 12-1/2 ft.		
425PCN	Power Cable Assembly, Hi-Performance 2 Piece, 25 ft.		
425PCNSF	Power Cable Assembly, Super Flex 2 Piece, 25 ft.		
200R	O-Ring		
312AH	Gas Hose with Fittings, 12-1/2 ft.		
312AHSF	Gas Hose with Fittings, 12-1/2 ft., Super Flex		
325AH	Gas Hose with Fittings, 25 ft.		
325AHSF	Gas Hose with Fittings, 25 ft., Super Flex		
300HS	Heat Shield, Standard		
300R	O-Ring		
300S	Backcap, Short		

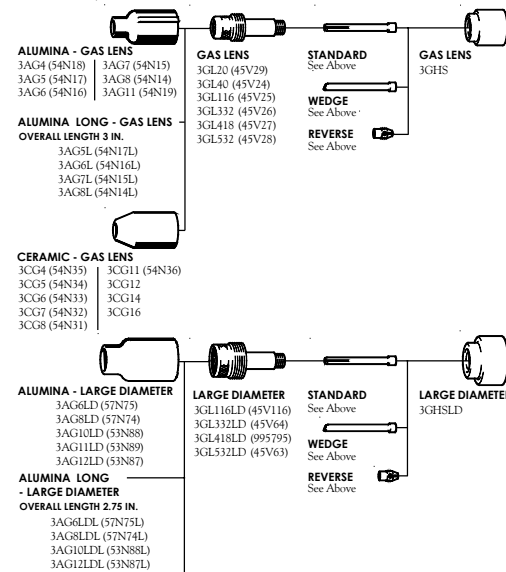
3 SERIES HEAD ACCESSORIES GAS SAVER

CUP	ADAPTER	COLLET BODY	COLLET	HEATSHIELD	TORCH	BACKCAP
ALUMINA 3A4GS 3A5GS 3A6GS 3A7GS 3A8GS	WITH SCREEN TAS040GS TAS116GS TAS332GS TAS418GS TAS532GS	STANDARD 3CBGS	WEDGE 3C040GS 3C116GS 3C332GS 3C418GS 3C532GS	STANDARD 3HSGS	LONG 300L (57Y02)	MEDIUM 300M (34015)
CLEAR 3P8GS	WITHOUT SCREEN TA040GS TA116GS TA332GS TA332GS					SHORT 300S (57Y04)
ALUMINA 2A4GS 2A5GS 2A6GS	WITH SCREEN See Above	SHORT 4CBGS	SHORT WEDGE 4C040GS 4C116GS 4C332GS 4C418GS 4C532GS	SHORT 3HSGS		
CLEAR 2P8GS	WITHOUT SCREEN See Above					
CLEAR 4P18GSLD	LARGE DIAMETER WITH SCREEN TAS040GSLD TAS116GSLD TAS332GSLD TAS418GSLD TAS532GSLD	LARGE DIAMETER 4CBGSLD	SHORT WEDGE 4C040GS 4C116GS 4C332GS 4C418GS 4C532GS	LARGE DIAMETER 4HSGSLD		

2

3 SERIES HEAD ACCESSORIES

CUP	COLLET BODY	COLLET	HEATSHIELD	TORCH	BACKCAP
ALUMINA 3A4 (10N50) 3A5 (10N49) 3A6 (10N48) 3A7 (10N47)	STANDARD 3CB20 (10N29) 3CB40 (10N30) 3CB116 (10N31) 3CB332 (10N32) 3CB418 (10N28) 3CB532 (406488)	STANDARD 3C20 (10N21) 3C40 (10N22) 3C116 (10N23) 3C332 (10N24) 3C418 (10N25) 3C532 (54N20)	STANDARD 300HS	TORCH	BACKCAP LONG 300L (57Y02) MEDIUM 300M (34015) SHORT 300S (57Y04)
ALUMINA - LONG 3A5L (10N49L) 3A6L (10N48L)	STANDARD 3A7L (10N47L)				
CERAMIC 3C4 (10S243) 3C5 (10S242) 3C6 (10S244) 3C7 (10S245)	WEDGE 3C8 (08N78) 3C10 (08N79) 3C12 (08N80)	WEDGE 3C418GS 3C116GS 3C332GS	REVERSE 7C20 7C40 7C116	TORCH	
CERAMIC - LONG 3C4L (12N03) 3C5L (10S260)	WEDGE 3C6L (12N02) 3C7L (10S261)		REVERSE 7C332 7C418 7C532	TORCH	



APPLICATIONS OF:
STANDARD PARTS:
ARE FOR GENERAL PURPOSE USE.
WEDGE COLLETS:
IMPROVE ARC STARTING.
IMPROVE ARC STABILITY.
IMPROVE ARC CONTROL.

CERAMIC (LAVA) CUPS:
ARE USED WHEN REFLECTED HEAT IS HIGH.

ALUMINA CUPS:
ARE USED FOR GENERAL PURPOSE,
AND WHEN IMPACT RESISTANT CUPS
ARE REQUIRED.

GAS LENS PARTS:
ARE USED TO REDUCE TURBULENCE
AND IMPROVE SHIELD GAS COVERAGE
PATTERNS,
INCREASES DUTY CYCLE OF TORCH
AND INCREASES TUNGSTEN STICK
OUT.

SHORT (STUBBY) PARTS:
ARE USED TO SHORTEN THE OVERALL
LENGTH OF THE TORCH HEAD.
REDUCES DUTY CYCLE OF TORCH

GAS SAVER® PARTS:
ARE USED TO SAVE UP TO 40% ON GAS
CONSUMPTION.
ARE USED TO SAVE UP TO 60% ON
CONSUMABLE PARTS.
ARE USED TO CLEARLY SEE THE WELD
PUDDLE.
ARE USED TO ACHIEVE GAS LENS

TUNGSTEN ELECTRODE CONVERSION CHART

Size Suffix	Inches	Millimeters
020	.020"	.5mm
040	.040"	1.0mm
116	1/16"	1.6mm
332	3/32"	2.4mm
418	1/8"	3.2mm
532	5/32"	4.0mm

3