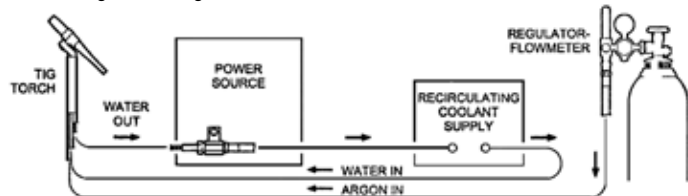


WARRANTY: CK Worldwide, Inc. warrants products manufactured by CK Worldwide, Inc. to be free of defects in materials and workmanship. CK Worldwide, Inc. limits this warranty to replacement of the product or parts thereof and excludes liability for injury, property damage or economic loss attributable 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:

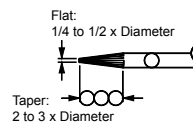


INFORMATION CHART:

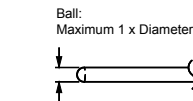
Electrode Diameter in inches (mm)	Cup Size	WELDING CURRENT (AMPS) - TUNGSTEN TYPE				ARGON FLOW - FERROUS METALS		ARGON FLOW - ALUMINUM	
		AC Pure	AC Thoriated	DCSP Pure	DCSP Thoriated	Standard Body (Liters)	Gas Lens Body (Liters)	Standard Body (Liters)	Gas Lens Body (Liters)
.020 (0.50)	4 or 5	5 - 15	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:

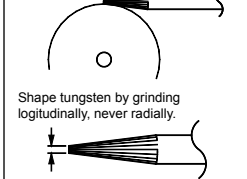


ACHF
General Purpose:

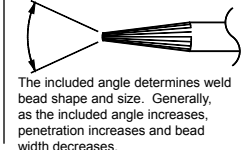


Ball tip by arcing on clean metal at low current DCRP (EP) then slowly increase current to form the desired ball diameter.

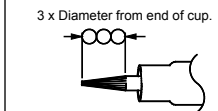
GRINDING PREPARATION:
Use a 60 Grit or finer aluminum oxide wheel



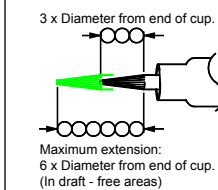
Remove sharp point to leave a truncated point with a flat spot. Diameter of flat spot determines amperage.



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



CK510 & CK510V RIGID

TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 400 AMP ACHF OR DCSP
COOLING METHOD: WATER COOLED

ACCESSORY ITEMS REQUIRED FOR COMPLETE INSTALLATION:

HEAD ACCESSORIES: 3 SERIES HEAD ACCESSORIES
POWER CABLE ADAPTOR: 45V11 (2PCA)

MODEL SELECTOR - TORCH PACKAGES

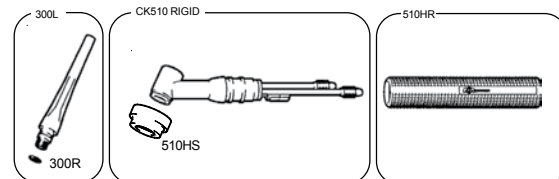
HEAD STYLE	CABLE STYLE	CABLE LENGTH	STANDARD CABLE	SUPERFLEX CABLE
Rigid Head -w/o VALVE	3 Piece Cable	12-1/2 ft. (3.8m)	CK5112	CK5112SF
		25 ft (7.6m)	CK5125	CK5125SF

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

CK WORLDWIDE INC.
3501 "C" ST. N.E.
AUBURN, WA. 98002
USA

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PHONE: (800) 426-0877
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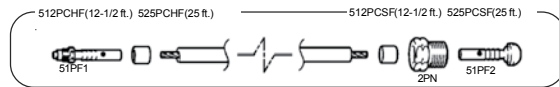
www.ckworldwide.com
ck@ckworldwide.com



PART #	DESCRIPTION
TORCH	
CK510 RIGID.....	TORCH BODY ASSEMBLY
510HR.....	HANDLE

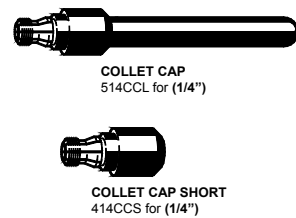
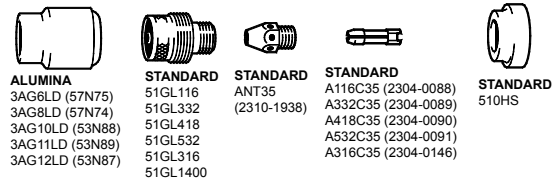
INDIVIDUAL CABLE HOSES

312AH.....	GAS HOSE-12-1/2 FT. (INCLUDES FITTINGS)
312AHSF.....	GAS HOSE-12-1/2 FT. (INCLUDES FITTINGS)
512PC.....	POWER CABLE-12-1/2 FT. (INCLUDES FITTINGS)
512PCSF.....	POWER CABLE-12-1/2 FT. (INCLUDES FITTINGS)
312WH.....	WATER HOSE-12-1/2 FT. (INCLUDES FITTINGS)
312WHSF.....	WATER HOSE-12-1/2 FT. (INCLUDES FITTINGS)
325AH.....	GAS HOSE-25 FT. (INCLUDES FITTINGS)
325AHSF.....	GAS HOSE-25 FT. (INCLUDES FITTINGS)
325WH.....	WATER HOSE-25 FT. (INCLUDES FITTINGS)
325WHSF.....	WATER HOSE-25 FT. (INCLUDES FITTINGS)

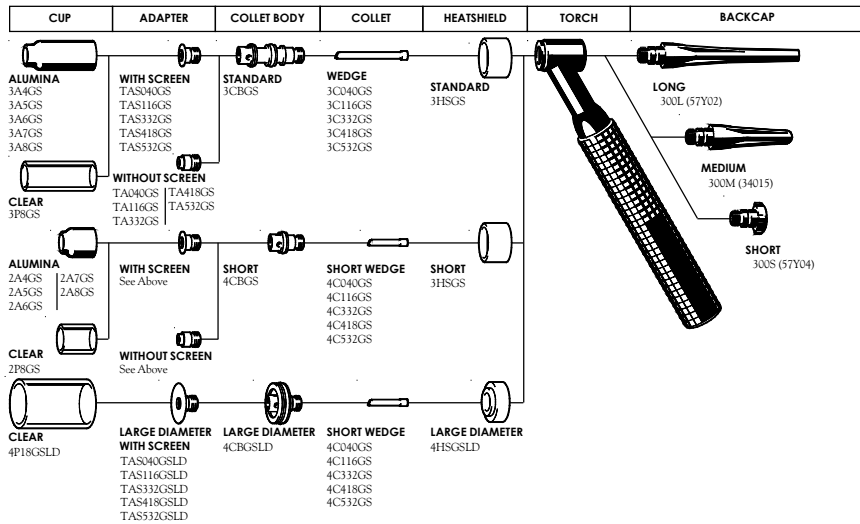


ACCESSORIES	
2PCA (45V11).....	POWER CABLE ADAPTER (ORDER SEPARATELY)
SLWHT-T.....	TWECO POWER CABLE ADAPTER
SLWHT-25.....	DINSE 25 POWER CABLE ADAPTER
SLWHT-35.....	DINSE 35 POWER CABLE ADAPTER
SLWHT-35M.....	DINSE 35 FLOW-THRU GAS POWER CABLE ADAPTER
300R.....	O-RING
300HS.....	HEATSHIELD
300L.....	BACKCAP
2AN.....	GAS NUT
2WN.....	WATER NUT
51PF1.....	POWER CABLE FITTING
51PF2.....	POWER CABLE FITTING
3HF.....	HOSE FITTING

51 SERIES HEAD ACCESSORIES

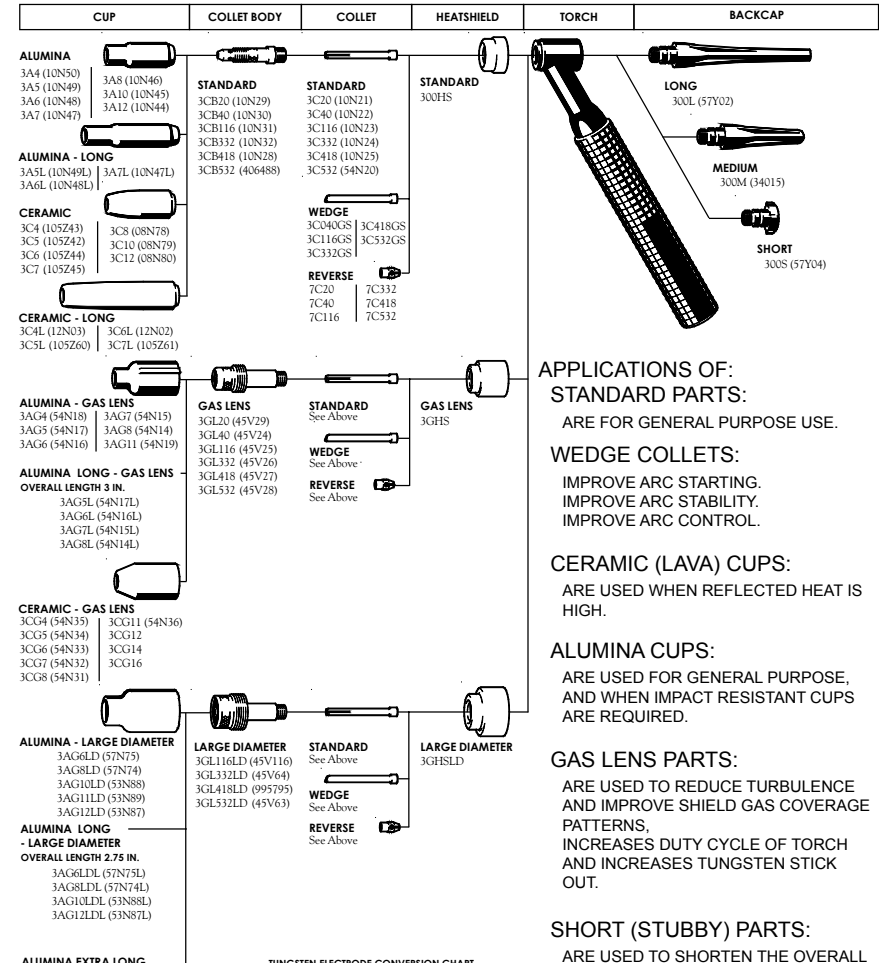


3 SERIES HEAD ACCESSORIES GAS SAVER



2

3 SERIES HEAD ACCESSORIES



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