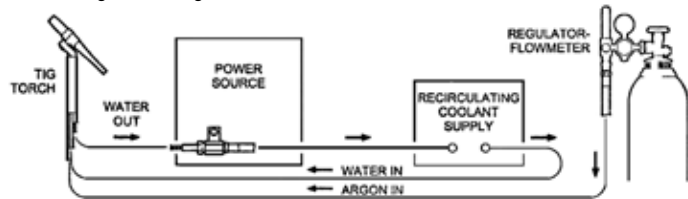


CK WORLDWIDE INC.

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:

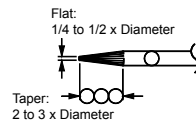


INFORMATION CHART:

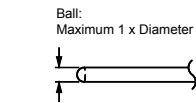
Electrode Diameter in inches (mm)	Cup Size	WELDING CURRENT (AMPS) - TUNGSTEN TYPE				ARGON FLOW - FERROUS METALS		ARGON FLOW - ALUMINUM	
		AC Pure	AC Thoriated	DCSP Pure	DCSP Thoriated	Standard Body (Liters)	Gas Lens Body (Liters)	Standard Body (Liters)	Gas Lens Body (Liters)
.020 (0.50)	4 or 5	5 - 15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

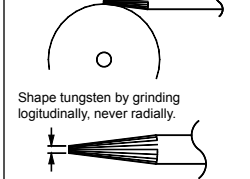


ACHF
General Purpose:



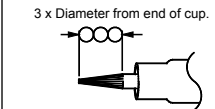
Ball tip by arcing on clean metal at low current DCRP (EP) then slowly increase current to form the desired ball diameter.

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

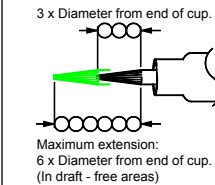


Remove sharp point to leave a truncated point with a flat spot. Diameter of flat spot determines amperage.
The included angle determines weld bead shape and size. Generally, as the included angle increases, penetration increases and bead width decreases.

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.



TL300F

TIG TORCH MANUAL



TL300 & TL300V FLEX

TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 350 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

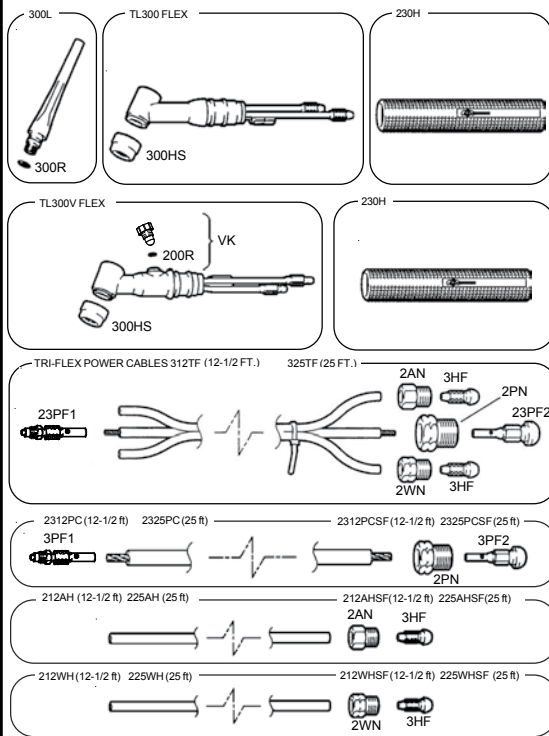
HEAD STYLE	CABLE	LENGTH	STANDARD #	SUPERFLEX #
Rigid Head w/o Valve	TriFlex/ SuperFlex	12½ft (3.8m)	TL312 FX	TL312SF FX
		25ft (7.6m)	TL325 FX	TL325SF FX
Rigid Head with Valve	TriFlex/ SuperFlex	12½ft (3.8m)	TL312V FX	TL312VSF FX
		25ft (7.6m)	TL325V FX	TL325VSF FX

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

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AUBURN, WA. 98002
USA

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



PART #	DESCRIPTION
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TORCH
 TL300 FLEX..... TORCH BODY
 TL300V FLEX..... TORCH BODY w/VALVE
 3 0 0 H HANDLE

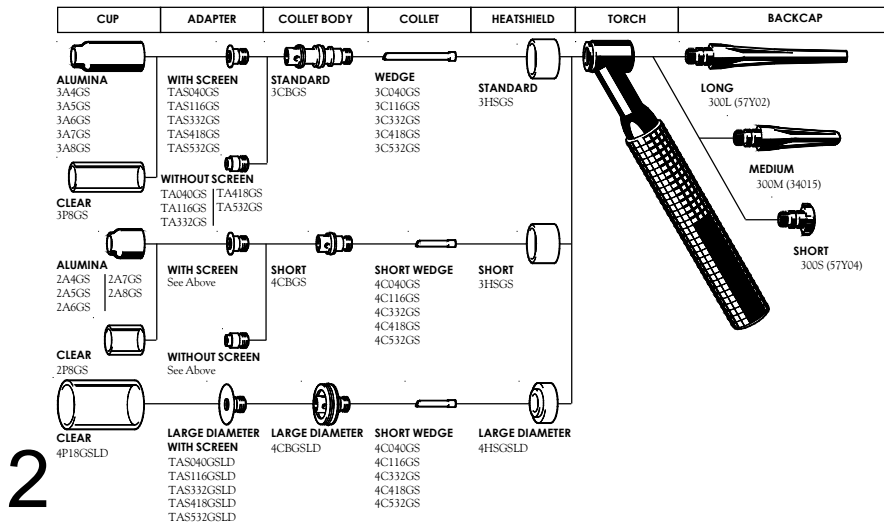
TRI-FLEX POWER CABLE
 2312TF..... TRI-FLEX POWER CABLE & HOSE ASSEMBLY -12-1/2 FT. (INCLUDES FITTINGS)
 2325TF..... TRI-FLEX POWER CABLE & HOSE ASSEMBLY -25 FT. (INCLUDES FITTINGS)
 01-0032..... CABLE TIE
 2AN..... GAS HOSE NUT
 23PF1..... POWER CABLE FITTING
 23PF2..... POWER CABLE FITTING
 2PN..... POWER CABLE NUT
 2WN..... WATER HOSE NUT
 3HF..... HOSE FITTING (2 REQUIRED)

INDIVIDUAL CABLE HOSES
 212AH (45V09)..... GAS HOSE-12-1/2 FT. (INCLUDES FITTINGS)
 212AHSF (45V09SF)..... GAS HOSE-12-1/2 FT. (INCLUDES FITTINGS)
 2312PC (45V03)..... POWER CABLE-12-1/2 FT. (INCLUDES FITTINGS)
 2312PCSF (45V03SF)..... POWER CABLE-12-1/2 FT. (INCLUDES FITTINGS)
 212WH (45V07)..... WATER HOSE-12-1/2 FT. (INCLUDES FITTINGS)
 212WHSF (45V07SF)..... WATER HOSE-12-1/2 FT. (INCLUDES FITTINGS)
 225AH (45V10)..... GAS HOSE-25 FOOT (INCLUDES FITTINGS)
 225AHSF (45V10SF)..... GAS HOSE-25 FOOT (INCLUDES FITTINGS)
 2325PC (45V04)..... POWER CABLE-25 FOOT (INCLUDES FITTINGS)
 2325PCSF (45V04SF)..... POWER CABLE-25 FOOT (INCLUDES FITTINGS)
 225WH (45V08)..... WATER HOSE-25 FOOT (INCLUDES FITTINGS)
 225WHSF (45V08SF)..... WATER HOSE-25 FOOT (INCLUDES FITTINGS)

ACCESSORIES
 2PCA (45V11)..... POWER CABLE ADAPTER (ORDER SEPARATELY)
SAFE-LOC QUICK CONNECT
 SLWHAT-T..... TWECO POWER CABLE ADAPTER
 SLWHAT-25..... DINSE 25 POWER CABLE ADAPTER
 SLWHAT-35..... DINSE 35 POWER CABLE ADAPTER
 SLWHAT-35M..... DINSE 35 FLOW-THRU GAS POWER CABLE ADAPTER
 300R..... O-RING
 300L..... BACKCAP
 300HS..... HEATSHIELD

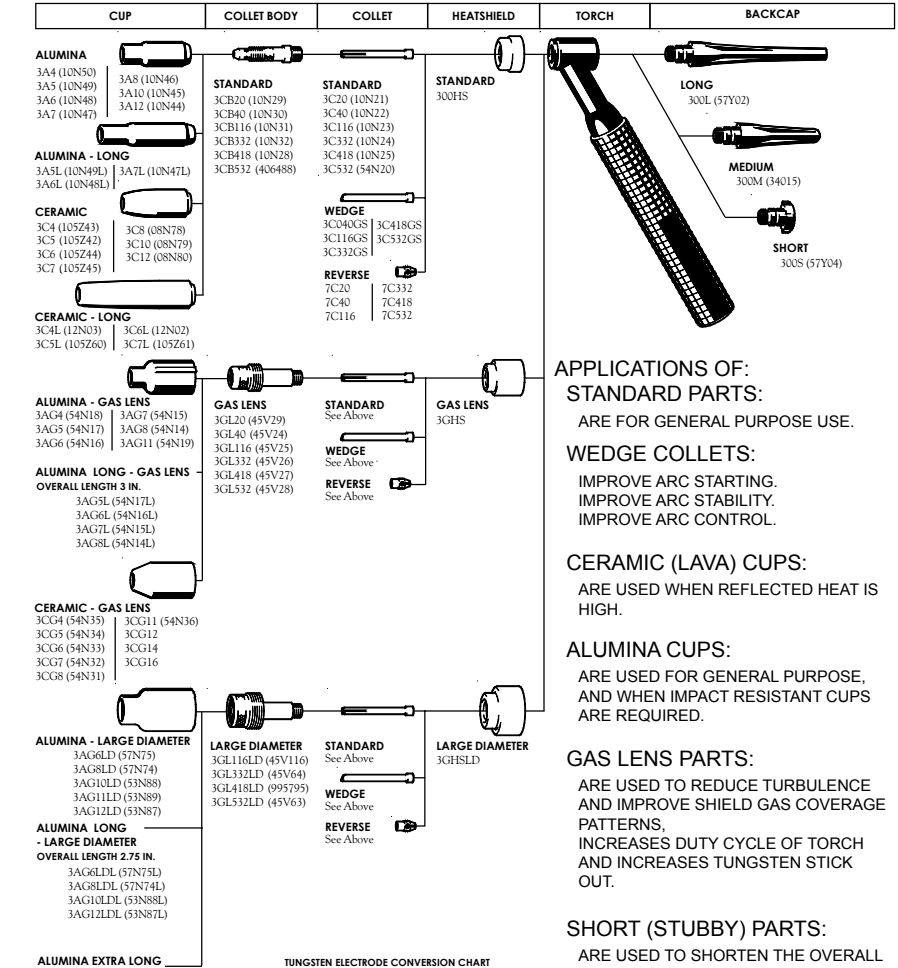
NOTE:
 TRI-FLEX CABLE CAN BE SEPERATED TO REPLACE GAS HOSE, WATER HOSE OR POWER CABLE INDIVIDUALLY

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