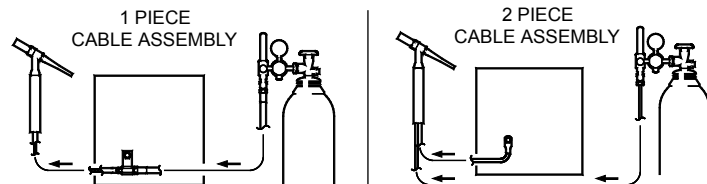


WARRANTY: CK Worldwide, Inc. warrants products manufactured by CK Worldwide, Inc. to be free of defects in materials and workmanship. CK Worldwide, Inc. limits this warranty to replacement of the product or parts thereof and excludes liability for injury, property damage or economic loss attributable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

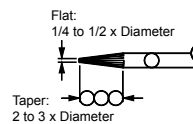


INFORMATION CHART:

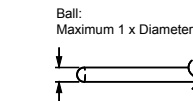
Electrode Diameter in inches (mm)	Cup Size	WELDING CURRENT (AMPS) - TUNGSTEN TYPE				ARGON FLOW - FERROUS METALS		ARGON FLOW - ALUMINUM	
		AC Pure	AC Thoriated	DCSP Pure	DCSP Thoriated	Standard Body (Liters)	Gas Lens Body (Liters)	Standard Body (Liters)	Gas Lens Body (Liters)
.020 (0.50)	4 or 5	5 - 15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

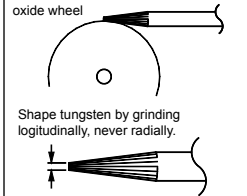


ACHF
General Purpose:



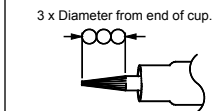
Ball tip by arcing on clean metal at low current DCRP (EP) then slowly increase current to form the desired ball diameter.

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

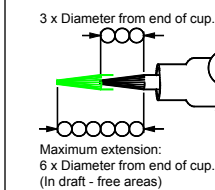


Remove sharp point to leave a truncated point with a flat spot. Diameter of flat spot determines amperage.
The included angle determines weld bead shape and size. Generally, as the included angle increases, penetration increases and bead width decreases.

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



FL150 GAS COOLED

TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 150 AMP ACHF OR DCSP
COOLING METHOD: GAS COOLED

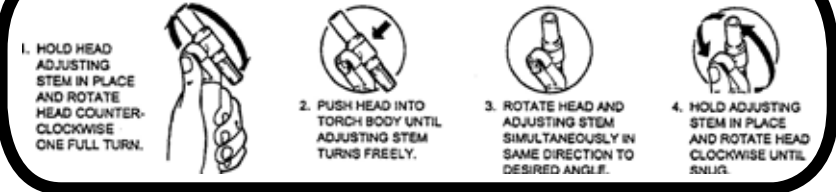
ACCESSORY ITEMS REQUIRED FOR COMPLETE INSTALLATION:

HEAD ACCESSORIES: 3 SERIES HEAD ACCESSORIES
POWER CABLE ADAPTOR: 105Z57 (15PCA)

MODEL SELECTOR - TORCH PACKAGES

BODY STYLE - CABLE STYLE	HEAD	AMP RATING	HEAD ACCESS	CABLE LENGTH	HI-FLEX CABLE	SUPERFLEX CABLE
FL150-NO VALVE 1 PIECE CABLE	FL3L	150	3 SERIES	12-1/2 ft. (3.8m)	FL1512	FL1512SF
				25 ft (7.6m)	FL1525	FL1525SF
FL150-WITH VALVE 1 PIECE CABLE	FL3L	150	3 SERIES	12-1/2 ft. (3.8m)	FL1512V	FL1512VSF
				25 ft (7.6m)	FL1525V	FL1525VSF

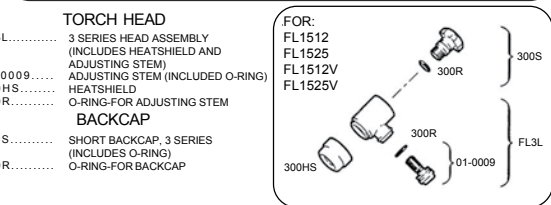
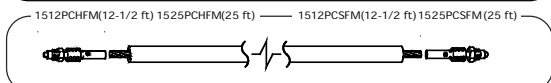
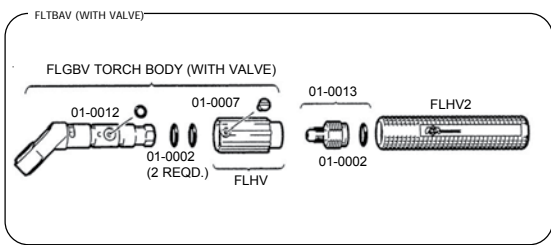
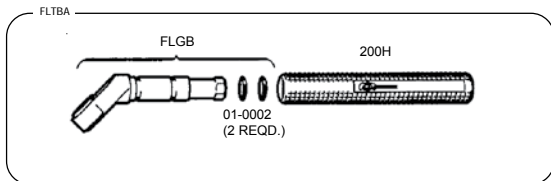
HEAD ADJUSTMENT FOR FLEX-LOC



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USA

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

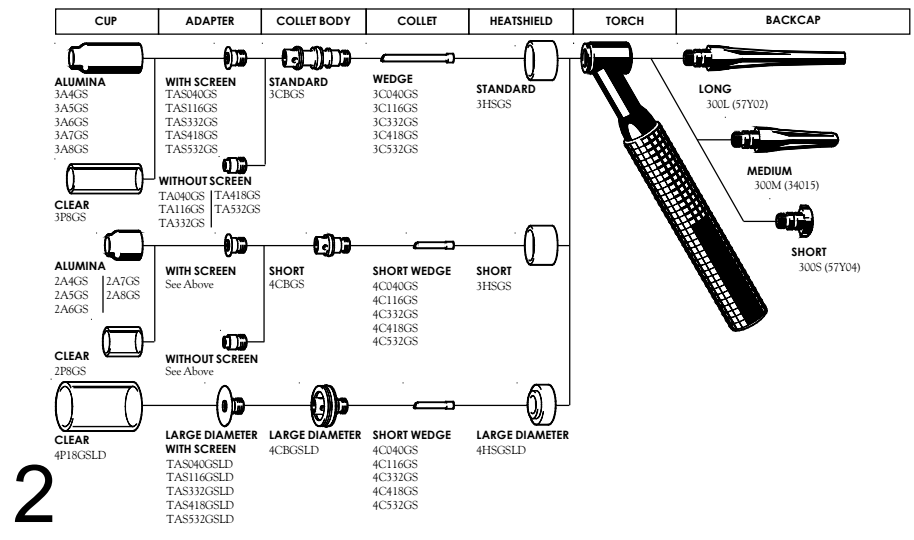


PART #	DESCRIPTION
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- TORCH**
- FLTB TORCH BODY ASSEMBLY (INCL. TORCH BODY, O-RINGS & HANDLE)
 - FLGB TORCH BODY (INCLUDES O-RINGS)
 - 01-0002 O-RING - FOR BODY (2 REQUIRED)
 - 200H HANDLE
 - FLTBV VALVED TORCH BODY ASSEMBLY (INCL. TORCH BODY, O-RINGS, HANDLE VALVE AND HANDLE ADAPTER AND HANDLE)
 - FLTBV VALVED TORCH BODY (INCL. O-RINGS AND HANDLE VALVE)
 - 01-0012 O-RING FOR VALVE
 - 01-0002 O-RING FOR VALVE (2 REQUIRED)
 - FLHV HANDLE VALVE (INCL. NYLON SCREW)
 - 01-0007 NYLON SCREW
 - 01-0013 HANDLE ADAPTER (INCL. O-RING)
 - 01-0002 O-RING
 - FLHV2 HANDLE, THREADED
- POWER CABLES**
- 1512PCHFM POWER CABLE-12-1/2 ft. HI-FLEX (INCLUDES FITTINGS)
 - 1512PCFSM POWER CABLE-12-1/2 ft. SUPER FLEX (INCLUDES FITTINGS)
 - 1525PCHFM POWER CABLE-25 ft. HI-FLEX (INCLUDES FITTINGS)
 - 1525PCFSM POWER CABLE-25 ft. SUPER FLEX (INCLUDES FITTINGS)

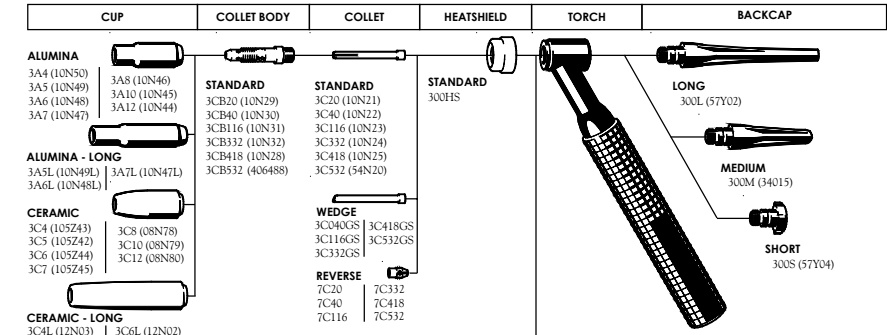
- ACCESSORIES**
- 2PCA (45V11) POWER CABLE ADAPTER SAFE LOCK QUICK CONNECT
 - SL2 TWECO POWER CABLE ADAPTER
 - SL2-25 DINSE 25 POWER CABLE ADAPTER
 - SL2-35 DINSE 35 POWER CABLE ADAPTER
 - SL2-35M DINSE 35 FLOW-THRU GAS POWER CABLE ADAPTER
- NOTE:
TRI-FLEX CABLE CAN BE SEPARATED TO REPLACE GAS HOSE, WATER HOSE OR POWER CABLE INDIVIDUALLY

3 SERIES HEAD ACCESSORIES GAS SAVER



2

3 SERIES HEAD ACCESSORIES



CUP	COLLET BODY	COLLET	HEATSHIELD	TORCH	BACKCAP
ALUMINA 3A4 (10N50) 3A5 (10N49) 3A6 (10N48) 3A7 (10N47)	3A8 (10N46) 3A10 (10N45) 3A12 (10N44)	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	LONG 300L (57Y02) MEDIUM 300M (34015) SHORT 300S (57Y04)
ALUMINA - LONG 3A5L (10N49L) 3A6L (10N48L)	3A7L (10N47L)				
CERAMIC 3C4 (10S243) 3C5 (10S242) 3C6 (10S244) 3C7 (10S245)	3C8 (08N78) 3C10 (08N79) 3C12 (08N80)	WEDGE 3C040GS 3C116GS 3C332GS	REVERSE 7C30 7C40 7C116		
CERAMIC - LONG 3C4L (12N03) 3C5L (10S260)	3C6L (12N02) 3C7L (10S261)				
ALUMINA - GAS LENS 3AG4 (54N18) 3AG5 (54N17) 3AG6 (54N16)	3AG7 (54N15) 3AG8 (54N14) 3AG11 (54N19)	GAS LENS 3GL20 (45V29) 3GL40 (45V24) 3GL116 (45V25) 3GL332 (45V26) 3GL418 (45V27) 3GL532 (45V28)	STANDARD See Above WEDGE See Above REVERSE See Above	GAS LENS 3GHS	
ALUMINA LONG - GAS LENS OVERALL LENGTH 3 IN. 3AG5L (54N17L) 3AG6L (54N16L) 3AG7L (54N15L) 3AG8L (54N14L)					
CERAMIC - GAS LENS 3CG4 (54N35) 3CG5 (54N34) 3CG6 (54N33) 3CG7 (54N32) 3CG8 (54N31)	3CG11 (54N36) 3CG12 3CG14 3CG16				
ALUMINA - LARGE DIAMETER 3AG6LD (57N75) 3AG8LD (57N74) 3AG10LD (53N88) 3AG11LD (53N89) 3AG12LD (53N87)	LARGE DIAMETER 3AG6LDL (57N75L) 3AG8LDL (57N74L) 3AG10LDL (53N88L) 3AG12LDL (53N87L)	STANDARD See Above WEDGE See Above REVERSE See Above	LARGE DIAMETER 3GHSLD		
ALUMINA LONG - LARGE DIAMETER OVERALL LENGTH 2.75 IN. 3AG6LDL (57N75L) 3AG8LDL (57N74L) 3AG10LDL (53N88L) 3AG12LDL (53N87L)					
ALUMINA EXTRA LONG - LARGE DIAMETER OVERALL LENGTH 3.25 IN. 3AG6LDXL (57N75XL) 3AG8LDXL (57N74XL) 3AG10LDXL (53N88XL) 3AG12LDXL (53N87XL)					

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