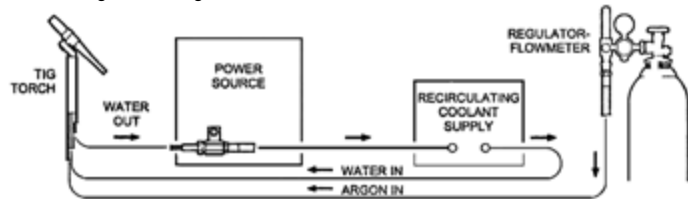


**WARRANTY:** CK Worldwide, Inc. warrants products manufactured by CK Worldwide, Inc. to be free of defects in materials and workmanship. CK Worldwide, Inc. limits this warranty to replacement of the product or parts thereof and excludes liability for injury, property damage or economic loss attributable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

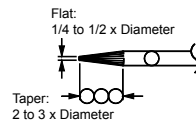


**INFORMATION CHART:**

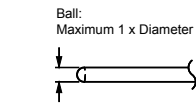
Electrode Diameter in inches (mm)	Cup Size	WELDING CURRENT (AMPS) - TUNGSTEN TYPE				ARGON FLOW - FERROUS METALS		ARGON FLOW - ALUMINUM	
		AC Pure	AC Thoriated	DCSP Pure	DCSP Thoriated	Standard Body (Liters)	Gas Lens Body (Liters)	Standard Body (Liters)	Gas Lens Body (Liters)
.020 (0.50)	4 or 5	5 - 15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

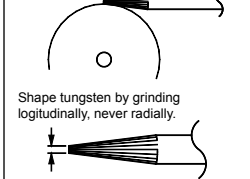


**ACHF**  
General Purpose:



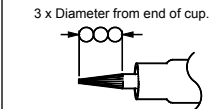
Ball tip by arcing on clean metal at low current DCRP (EP) then slowly increase current to form the desired ball diameter.

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

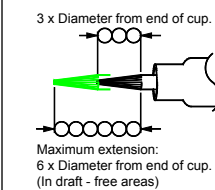


Remove sharp point to leave a truncated point with a flat spot. Diameter of flat spot determines amperage.  
The included angle determines weld bead shape and size. Generally, as the included angle increases, penetration increases and bead width decreases.

**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



### MR140 MICRO TORCH

#### TECHNICAL INFORMATION

RATING @ 100% DUTY CYCLE: 140 AMP ACHF OR DCSP  
COOLING METHOD: WATER COOLED

#### ACCESSORY ITEMS REQUIRED FOR COMPLETE INSTALLATION:

HEAD ACCESSORIES: MICRO TORCH  
POWER CABLE ADAPTOR: 45V11 (2PCA)

#### MODEL SELECTOR - TORCH PACKAGES

HEAD STYLE	CABLE STYLE	CABLE LENGTH	PART #
Rigid Head - w/o valve	3 Piece	12-1/2 ft. (3.8 m)	MR1412SF
		25 ft. (7.6 m)	MR1425SF

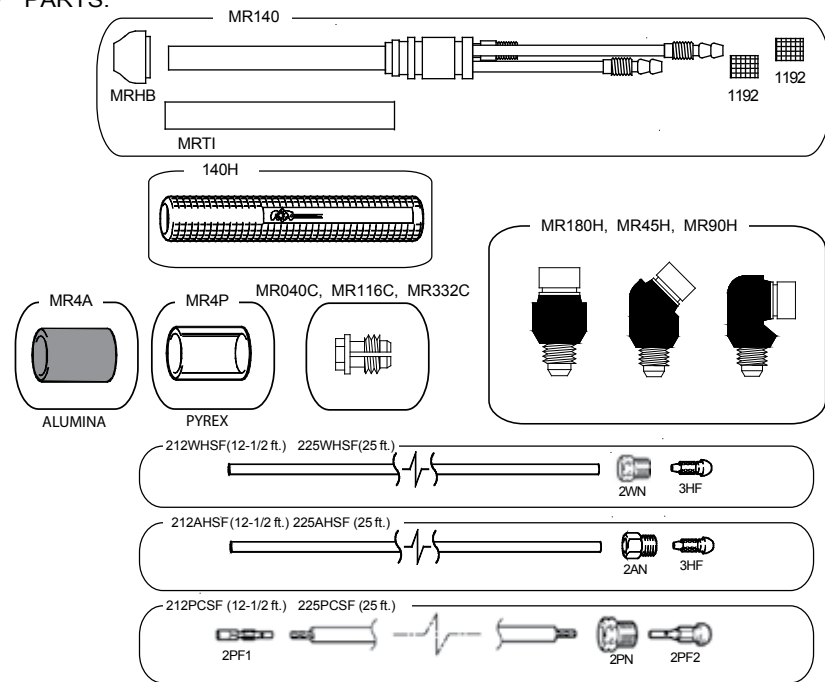
**IMPORTANT !!**  
**READ AND UNDERSTAND THE INFORMATION CONTAINED IN THIS MANUAL BEFORE OPERATING THE EQUIPMENT !**

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www.ckworldwide.com  
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PARTS:



**HEAD INSTALLATION:** The insulating tube(MRTI) extends beyond the torch neck intentionally. Apply pressure when first installing the head. This will create a flair in the insulating tube to make a positive seal to the head.

PARTS LIST:

PART NUMBER	DESCRIPTION
MR140.....	Torch Body, 140 Amp
140H.....	Handle
212WHSF.....	Water Hose, Super Flex, 12-1/2 ft.
225WHSF.....	Water Hose, Super Flex, 25 ft.
212PCSF.....	Power Cable, Super Flex, 12-1/2 ft.
225PCSF.....	Power Cable, Super Flex, 25 ft.
212AHSF.....	Gas Hose, Super Flex, 12-1/2 ft.
225AHSF.....	Gas Hose, Super Flex, 25 ft.
MRHB.....	Handle Bushing
MR4A.....	Cup Pink Alumina
MR4P.....	Cup Clear Pyrex
MR040C.....	Collet .040
MR116C.....	Collet 1/16
MR332C.....	Collet 3/32
MR180H.....	Head 180°
MR45H.....	Head 45°
MR90H.....	Head 90°
MRTI.....	Neck Insulator

ACCESSORIES:

PART NUMBER	DESCRIPTION
T0409S20GC2.....	Tungsten .040" 2% Ceriated
T1169S20GC2.....	Tungsten 1/16" 2% Ceriated
T3329S20GC2.....	Tungsten 3/32" 2% Ceriated
2PCA (45V11).....	Power Cable Adapter
<b>Safe-Loc Quick Connectors</b>	
SLWHAT-T.....	TWECO
SLWHAT-25.....	DINSE 25
SLWHAT-35.....	DINSE 35
SLWHAT-35M.....	DINSE 35 Flow-Thru Gas

2



Part # TG1-24

Tungsten Stick-Out Gauge and Wrench (included in torch package)

# TURBO-SHARP® X



TURBO-eliminates grinding-dust exposure to both the user and the environment.

**TURBO-SHARP® X includes a metal carrying case containing:**

- Standard head for diameters: .040"(1.0mm), 1/16"(1.6mm), 3/32"(2.4mm) and 1/8"(3.2mm)
- Accessory for stationary mounting
- Adapter for vacuum cleaning
- Pen style electrode holder
- Multi-functional cover
- Tools for assembling and replacement of grinding wheel
- User instructions



Consistent Results:

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