# Weldcraft<sup>™</sup> W-180

#### **Hand-Held Water-Cooled TIG Welding Torches**

# **Formerly WP-24W**

Quick **Specs** 

Model W-180

**Applications** 

Aerospace Food/beverage industry Light and heavy manufacturing Maintenance and repair

Petro/chemical Precision fabrication Shipbuilding

**Rated Output** 

DC: 180 A, AC: 115 A

**Duty Cycle** 100%

**Electrode Range** .020-3/32 in. (0.5-2.4 mm)

W-180 TIG torch Formerly known as the WP-24W, the W-180 is one of the smallest water-cooled TIG torches on the market. The W-180 is designed for welding in confined areas that require high amperage with the use of a water-cooled system. Use high amperage in confined areas for efficient welding. Superior maneuverability in limited-access locations with the compact torch body. Excellent weld capacity without increasing torch size, due to the efficient cooling system. W-180 (WP-24W) Comfort and control are increased with the light, well-balanced body design. Note: Torch delivered may vary slightly from image shown.



Miller Electric Mfg. Co.

An ITW Welding Company 1635 West Spencer Street P.O. Box 1079 Appleton, WI 54912-1079 USA **Equipment Sales US and Canada** 

Phone: 866-931-9730 FAX: 800-637-2315 International Phone: 920-735-4554 International FAX: 920-735-4125









# **Torch Packages**

Models		Braided	Braided Rubber		Vinyl		
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)		
WP-24W	W-180	WP-24W-12-R	WP-24W-25-R	WP-24W-12	WP-24W-25		

Torch packages include torch body, handle, power cable, gas hose, water hose, and collet body wrench.

## **Connectors**

#### **Power cable connectors**



**195380** 50 mm Dinse-style gas thru with gas and water return lines for water-cooled torch.



**195377**50 mm Dinse-style with water return line for water-cooled torch.



**45V11** Power cable adapter for water-cooled torch.

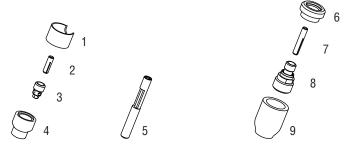


**225028**50 mm thread-lock-style for water-cooled torch.

Machines	Connection Type	1-Piece Power Cable Connectors
TIG Machines		
Syncrowave® 200/210	50 mm Dinse-style gas thru	195380
Syncrowave® 250 DX/350 DX (Dinse)	50 mm Dinse-style	195377
Syncrowave® 250 DX/350 DX (stud)	1/2 in. stud	45V11
Dynasty® 200/210/280/350, Maxstar® 200/210/280/350	50 mm Dinse-style	195377
Dynasty® 700, Maxstar® 700	50 mm thread-lock	225028
Multiprocess Machines		
Dimension™ 302/452/NT 450/652	1/2 in. stud	45V11
PipeWorx	1/2 in. stud	45V11
XMT® 304/350	50 mm Dinse-style	195377
XMT® 450	1/2 in. stud	45V11
Engine-Driven Machines		
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	45V11
Big Blue® 450 Duo CST	50 mm Dinse-style	195377
General Reference		
	50 mm Dinse-style	195377
	50 mm Dinse-style gas thru	195380
	50 mm thread-lock	225028
	1/2 in. stud	45V11
Other Adapter		
	Stud to Dinse-style adapter	232728



### **Consumables** (Refer to Owner's Manual for additional replacement parts.)



Non-Gas Lens				
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)
1 Insulator (required)	53N22	53N22	53N22	53N22
<b>2</b> Collet	53N15	53N16	53N14	24C332
3 Collet Body	53N17	53N18	53N19	24CB332
Nozzle Size — size # (inch)	.165	4 (1/4)	5 (5/16)	6 (3/8)
<b>4</b> Alumina	_	A53N24	A53N25	A53N27
* Lava	53N23	53N24	53N25	53N27
* Long Lava	_	53N28	_	53N26

#### 5 53N20

Gas Lens						
Electrode Size — inch (mm)	.020 (0.5)	.040 (1	.040 (1.0)		1/16 (1.6)	3/32 (2.4)
6 Insulator (required)	ator (required) 53N66		53N66		53N66	53N66
7 Collet	ollet <b>53N62</b>		53N63		53N64	24GLC332
<b>8</b> Gas Lens <b>45V41</b>		45V42	2		45V43	45V44
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3	3/8)	7 (7/16)	8 (1/2)
9 Alumina Gas Lens	53N58	53N59	531	160	53N61	53N61S

<sup>\*</sup>Not shown.



#### **Tungsten**

#### Tungsten for the most demanding TIG welding applications!

Available in four types and industry-standard diameters, our line of Weldcraft™ tungsten electrodes has undergone rigorous testing to ensure the highest quality and durability. Color-coded packages include ten 7-inch (175 mm) tungsten electrodes.

Note: Refer to manufacturer SDS sheets for proper preparation and safety. Use proper ventilation/capture during preparation. Refer to manufacturer warning regarding ventilation.



Туре	Diameter in. (mm)	Part #	Туре	Diameter in. (mm)	Part #	
2% Ceriated (EWCe-2)			Pure (EWP)			
Performs well in	0.040 (1.0)	WC040X7	Forms a clean, balled end when heated and provides good arc stability for AC welding with a balanced or unbalanced	0.040 (1.0)	_	
DC welding and arc	1/16 (1.6)	WC116X7		1/16 (1.6)	WP116X7	
starting at low-current settings, and offers	3/32 (2.4)	WC332X7		3/32 (2.4)	WP332X7	
excellent performance	1/8 (3.2)	WC018X7		1/8 (3.2)	WP018X7	
in AC processes.	5/32 (4.0)	WC532X7	squarewave or sine wave.	5/32 (4.0)	_	
2% Lanthanated (EWLa-	2)		Rare Earth (EWG)			
Provides excellent arc	0.040 (1.0)	WL2040X7	Combines the best of all alloying elements, and provides excellent arc stability in AC or DC welding.	0.040 (1.0)	_	
starting, arc stability	1/16 (1.6)	WL2116X7		1/16 (1.6)	WG116X7	
and re-ignition, and less tip erosion in AC or DC	3/32 (2.4)	WL2332X7		3/32 (2.4)	WG332X7	
welding. Can substitute	1/8 (3.2)	WL2018X7		1/8 (3.2)	WG018X7	
for 2% Thoriated.	5/32 (4.0)	WL2532X7		5/32 (4.0)	_	

### **Replacement Parts**

Torch Body						
W-180	W-180					
Handles						
Ribbed		H100R				
Knurled		H100				
Braided Rubber Power Cables and Hoses						
	12.5 ft. (3.8 m)	25 ft. (7.6 m)				
Power Cable	45V03RR	45V04RR				
Water Hose*	45V07RBB	45V08RBB				
Gas Hose*	45V09R	45V10R				
Vinyl Power Cables and Hoses						
	12.5 ft. (3.8 m)	25 ft. (7.6 m)				
Power Cable	45V03HD	45V04HD				
Water Hose*	45V07HD	45V08HD				
Gas Hose*	45V09	45V10				

<sup>\*</sup>Requires hose clamp 53N04.

### **Genuine Miller® Accessories**

Extension Kit EK-1-25-R 25 ft. (7.6 m), rubber



**Cable Covers WC-3-22** 22 ft. (6.7 m)



Wireless Remote
Foot Control 300429
For remote current
and contactor control.
Receiver plugs
directly into the

14-pin receptacle of Miller machine. 90-foot (27.4 m) operating range.



Wireless Remote
Hand Control 300430
For remote current and

contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine.

300-foot (91.4 m) operating range.



RCC-14 Remote Contactor and Current Control 151086

East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



RCCS-14 Remote Contactor and Current Control 043688

North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



Low-Conductivity TIG
Coolant 043810
Sold in multiples of four in
1-gallon recyclable plastic
bottles. Miller coolants
contains a base of ethylene
glycol and deionized water

to protect against freezing to -37° Fahrenheit (-38°C) or boiling to 227° Fahrenheit (108°C).

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