# 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)





Miller Electric Mfg. LLC

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Phone: 866-931-9730 FAX: 800-637-2315

International Phone: 920-735-4554 International FAX: 920-735-4125











# **Torch Packages**

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

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

# **Connectors**

#### **Power cable connectors**



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



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



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

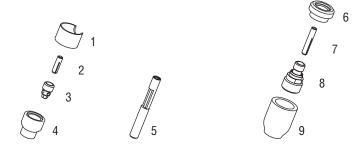


**45V11** Power cable adapter for water-cooled torch.

Machines	Connection Type	1-Piece Power Cable Connectors	
TIG Machines			
CST® 280 (Dinse)	50 mm Dinse-style	195377	
Dynasty® 200/210/280/350/400	50 mm Dinse-style	195377	
Dynasty® 700/800	50 mm thread-lock	225028	
Maxstar® 200/210/280/350/400	50 mm Dinse-style	195377	
Maxstar® 700/800	50 mm thread-lock	225028	
Syncrowave® 200/210	50 mm Dinse-style gas thru	195380	
Syncrowave® 250 DX/300/350 DX (Dinse)	50 mm Dinse-style	195377	
Syncrowave® 250 DX/300/350 DX (stud)	1/2 in. stud	45V11	
Multiprocess Machines			
Dimension™ 302/452/NT 450/650/652	1/2 in. stud	45V11	
Dynasty® 280 DX Multiprocess	50 mm Dinse-style	195377	
Multimatic® 255	50 mm Dinse-style	195377	
PipeWorx	1/2 in. stud	45V11	
XMT® 304/350	50 mm Dinse-style	195377	
XMT <sup>®</sup> 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)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		
1 Insulator (required)	53N22			53N22		53N22	
2 Collet	53N16			53N14		24C332	
3 Collet Body	53N18			53N19		24CB332	
Nozzle Size — size # (inch)	4 (1/4)			5 (5/16)		6 (3/8)	
4 Alumina	A53N24			A53N25		A53N27	
* Lava	_			53N25		_	
Collet Body Wrench							
5 53N2O							
Gas Lens							
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		
6 Insulator (required)	53N66		53N66		53N66		
7 Collet	53N63		53N64		24GLC332		
8 Gas Lens	45V42		45V43		45V44		
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)		6 (3/8)		7 (7/16)	8 (1/2)
<b>9</b> Alumina Gas Lens	53N58	53N59		53N60		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% 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		WP-24W			
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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