

# Weldcraft™ Automation Series

Machine-Held TIG  
Welding Torches



Quick Specs	Models	Type	Rated Output	Duty Cycle	Electrode Range
	A-150 Automation	Air-cooled	DC: 150 A, AC: 120 A	60%	.040–3/32 in. (1.0–2.4 mm)
	W-250 Automation	Water-cooled	DC: 250 A, AC: 180 A	100%	.040–1/8 in. (1.0–3.2 mm)
	W-500 Series Automation	Water-cooled	DC: 500 A, AC: 350 A	100%	.040–1/4 in. (1.0–6.4 mm)

## Automation Series TIG torches

Designed for high- and low-amperage mechanized applications, these air- and water-cooled automation torches are engineered to meet your stringent and continuous demands.



*Note: Torches delivered may vary slightly from images shown.*

**Minimize downtime** associated with tungsten changeover by using the front or back tungsten loading areas.

**Built-in gas lens** improves gas coverage to minimize shielding gas turbulence and improve weld quality (W-500A Automation, W-500B Automation).

**Handle the most demanding high-amperage applications** with the W-500 Series Automation torches.



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An ITW Welding Company  
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**MillerWelds.com**  
f t y i n



## A-150 Automation Torch

**Applications** Automated welding, robots, tube mills, seamers

**Type** Air-cooled  
**Rated Output** DC: 150 A, AC: 120 A  
**Duty Cycle** 60%  
**Electrode Range** .040–3/32 in. (1.0–2.4 mm)



A-150  
Automation  
(WP-23A)

## A-150 Automation Torch Packages

Models		1-Piece Power Cable Rubber	2-Piece Power Cable Rubber
Old Model	New Name	12.5 ft. (3.8 m)	12.5 ft. (3.8 m)
WP-23A	A-150 Automation	WP-23A-12-R	WP-23A-12-2

*Torch packages include torch body and power cable.*

## W-250 Automation Torch

**Applications** Automated welding, robots, tube mills, seamers

**Type** Water-cooled  
**Rated Output** DC: 250 A, AC: 180 A  
**Duty Cycle** 100%  
**Electrode Range** .040–1/8 in. (1.0–3.2 mm)



W-250  
Automation  
(WP-22A)

## W-250 Automation Torch Packages

Models		Rubber		Vinyl	
Old Model	New Name	25 ft. (7.6 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-22A	W-250 Automation	WP-22A-25-R	WP-22A-3	WP-22A-12	WP-22A-25

*Torch packages include torch body, power cable, gas hose and water hose.*

## W-500 Series Automation Torch

**Applications** Automated welding, robots, tube mills, seamers

**Type** Water-cooled  
**Rated Output** DC: 500 A, AC: 350 A  
**Duty Cycle** 100%  
**Electrode Range** .040–1/4 in. (1.0–6.4 mm)



W-500A  
Automation  
(WP-27A)



W-500B  
Automation  
(WP-27B)

## W-500 Series Automation Torch Packages

Models		Rubber	
Old Model	New Name	3 ft. (0.9 m)	12.5 ft. (3.8 m)
WP-27A	W-500A Automation	WP-27A-3	WP-27A-12
WP-27B	W-500B Automation	WP-27B-3	WP-27B-12

*Torch packages include torch body, power cable, gas hose, and water hose. 3-foot cable packages also include bracket assembly.*

# Automation Series Connectors

## Air-cooled torch 1-piece power cable connectors



**273483**  
25 mm (small) Dinse-style gas thru for one-piece air-cooled torch.



**194722**  
50 mm Dinse-style gas thru for one-piece air-cooled torch.



**195378**  
50 mm Dinse-style for one-piece air-cooled torch.



**105257**  
Power cable adapter for one-piece air-cooled torch.

## Air-cooled torch 2-piece power cable connectors



**127836**  
25 mm (small) Dinse-style for two-piece cable air-cooled torch.



**129527**  
50 mm Dinse-style for two-piece cable air-cooled torch.

## Water-cooled torch 1-piece 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.



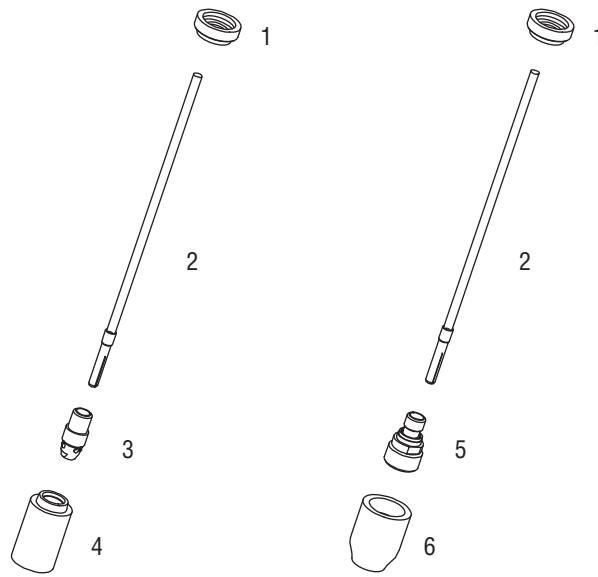
**225028**  
50 mm thread-lock-style for water-cooled torch.



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

Machines	Connection Type	Air-Cooled Torch 1-Piece Power Cable Connectors	Air-Cooled Torch 2-Piece Power Cable Connectors	Water-Cooled Torch 1-Piece Power Cable Connectors
<b>TIG Machines</b>				
CST® 280	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
	Tweco-style	N/A	<b>191981</b>	N/A
CST® 282	Dinse-style	<b>195378</b> (50 mm)	<b>042533</b> (70 mm)	<b>195377</b> (50 mm)
	Tweco-style	N/A	<b>191981</b>	N/A
Dynasty® 200/210/280/300/350/400	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
Dynasty® 700/800	50 mm thread-lock	N/A	N/A	<b>225028</b>
Maxstar® 150 STL/STH, 161 STL/STH	25 mm Dinse-style	<b>273483</b> (gas thru)	<b>127836</b>	N/A
Maxstar® 200/210/280/350/400	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
Maxstar® 700/800	50 mm thread-lock	N/A	N/A	<b>225028</b>
Syncrowave® 200/210	50 mm Dinse-style	<b>194722</b> (gas thru)	<b>129527</b>	<b>195380</b>
Syncrowave® 250 DX/300/350 DX/400	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
	1/2 in. stud	<b>105257</b>	N/A	<b>45V11</b>
<b>Multiprocess Machines</b>				
Dimension™ 302/452/NT 450/650/652	1/2 in. stud	<b>105257</b>	N/A	<b>45V11</b>
Dynasty® 280 DX Multiprocess/ 300 Multiprocess	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
Maxstar® 280 Multiprocess	Tweco-style	N/A	<b>191981</b>	N/A
Multimatic® 200/215/220 AC/DC	25 mm Dinse-style	<b>273483</b> (gas thru)	<b>127836</b>	N/A
Multimatic® 235/255	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
PipeWorx	1/2 in. stud	<b>105257</b>	N/A	<b>45V11</b>
XMT® 304/350	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
XMT® 450	1/2 in. stud	<b>105257</b>	N/A	<b>45V11</b>
<b>Engine-Driven Machines</b>				
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	<b>105257</b>	N/A	<b>45V11</b>
Big Blue® 450 Duo CST	50 mm Dinse-style	<b>195378</b>	<b>129527</b>	<b>195377</b>
<b>Other Adapter</b>				
	Stud to Dinse-style adapter	<b>232728</b>	N/A	<b>232728</b>

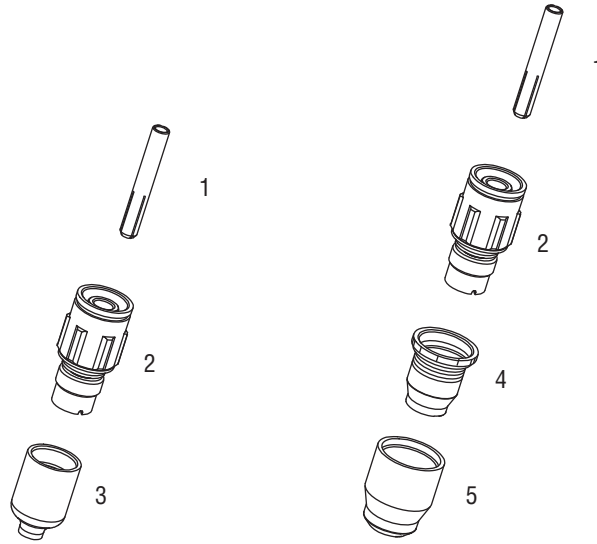
# A-150/W-250 Automation Consumables (Refer to Owner's Manual for additional replacement parts.)



Non-Gas Lens								
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>	
1 Insulator (required)	22-10		22-10		22-10		22-10	
2 Collet & Tube Assembly (WP-22A/23A)	22N21A		22N22A		22N23A		22N24A	
3 Collet Body	13N26		13N27		13N28		13N29	
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>
4 Alumina	13N08	13N09	13N10	13N11	13N12	13N13	—	—
* Lava	13N14	13N15	13N16	13N17	13N18	13N19	—	—
* Long Lava	796F71	796F72	796F73	—	—	—	—	—
* X-Long Lava	796F75	796F76	796F77	—	—	—	—	—
Gas Lens								
<b>Electrode Size — inch (mm)</b>	<b>.040 (1.0)</b>		<b>1/16 (1.6)</b>		<b>3/32 (2.4)</b>		<b>1/8 (3.2)</b>	
1 Insulator (required)	22-10		22-10		22-10		22-10	
2 Collet & Tube Assembly (WP-22A/23A)	22N21A		22N22A		22N23A		22N24A	
5 Gas Lens	45V42		45V43		45V44		45V45	
<b>Nozzle Size — size # (inch)</b>	<b>4 (1/4)</b>	<b>5 (5/16)</b>	<b>6 (3/8)</b>	<b>7 (7/16)</b>	<b>8 (1/2)</b>	<b>10 (5/8)</b>	<b>12 (3/4)</b>	<b>Short</b>
6 Alumina Gas Lens	53N58	53N59	53N60	53N61	53N61S	—	—	—

\*Not shown.

# W-500 Series Automation Consumables (Refer to Owner's Manual for additional replacement parts.)



Gas Lens							
Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)	3/16 (4.8)	1/4 (6.4)
1 Collet	—	57N46	57N47	57N48	57N49	57N50	57N51
2 Gas Lens	—	49V23	49V24	49V25	49V26	49V27	49V28
Nozzle Size — size # (inch)	6 (3/8)		8 (1/2)		12 (3/4)		Short
3 Large Dia. Gas Lens	57N75	57N74	53N88	53N87	53N89	—	—
* Large Dia. Gas Lens-L	57N75L	57N74L	53N88L	53N87L	—	—	—
* Large Dia. Gas Lens-XL	57N75XL	57N74XL	53N88XL	53N87XL	—	—	—
* Large Dia. Gas Lens-XXL	57N75XXL	57N74XXL	53N88XXL	53N87XXL	—	—	—
Gas Lens — Metal Nozzle Setup							
Electrode Size — inch (mm)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)	3/16 (4.8)	1/4 (6.4)
1 Collet	—	57N46	57N47	57N48	57N49	57N50	57N51
2 Gas Lens	—	49V23	49V24	49V25	49V26	49V27	49V28
4 Metal Nozzle Adapter (required)	57N76	57N76	57N76	57N76	57N76	57N76	57N76
Nozzle Size — size # (inch)	6 (3/8)		8 (1/2)		12 (3/4)		Short
5 Metal	—	—	57N78	—	—	—	—

\*Not shown.

## Individual Components

Component	A-150	W-250			W-500	
Torch Body	WP-23A	WP-22A			WP-27A (W-500A) / WP-27B (W-500B)	
Barrel	22-8A	22-8A			27-10A (W-500A) / 27-10B (W-500B)	
Boot	22-9-1	22-9-1			27-12	
Knob	22-7	22-7			27-13A (W-500A) / 27-13B (W-500B)	
Bracket Assembly	—	—			27-18	
Power Cables	12.5 ft. (3.8 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)
Rubber	57Y01R (1-piece) 57Y01-2 (2-piece)	—	—	45V04RR	40V84R-3	40V84R
Vinyl	—	45V03HD-L3	45V03HD	45V04HD	—	—
Water Hoses	12.5 ft. (3.8 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)
Rubber	—	—	—	45V08RBB	40V83R-3	40V83R
Vinyl	—	45V07HD-L3	45V07HD	45V08HD	—	—
Gas Hoses	12.5 ft. (3.8 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)	3 ft. (0.9 m)	12.5 ft. (3.8 m)
Rubber	—	—	—	45V10R	40V82R-3	40V82R
Vinyl	—	45V09-L3	45V09	45V10	—	—

# 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.*



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

# Genuine Miller® Accessories



### Cable Covers

- WC-3-10** 10 ft. (3 m)
- WC-3-22** 22 ft. (6.7 m)
- WC-4-2** 2 ft. (0.6 m)
- WC-4-10** 10 ft. (3 m)
- WC-4-22** 22 ft. (6.7 m)



### 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).

Distributed by:

