

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 Pencil Automation	Water-cooled	DC: 500 A, AC: 350 A	100%	.020–5/32 in. (0.5–4.0 mm)
	W-500 Series Automation	Water-cooled	DC: 500 A, AC: 350 A	100%	.040–1/4 in. (1.0–6.4 mm)
	W-900 Automation	Water-cooled	DC: 900 A, AC: 630 A	100%	.040–1/4 in. (1.0–6.4 mm)

Automation Series TIG torches

The Automation Series is designed for mechanized welding applications. Ready for high- and low-amperage mechanized applications, these 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.

Pencil-style model offers outstanding durability on mechanized applications (W-500 Pencil Automation).

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-900 Automation torch.



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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)	25 ft. (7.6 m)	12.5 ft. (3.8 m)
WP-23A	A-150 Automation	WP-23A-12-R	WP-23A-25-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)	6 ft. (1.8 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-6	WP-22A-12	WP-22A-25

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

W-500 Pencil 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 .020–5/32 in. (0.5–4.0 mm)



W-500 Pencil
Automation
(WP-18P)

W-500 Pencil Automation Torch Packages

Models		Vinyl	
Old Model	New Name	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-18P	W-500 Pencil Automation	WP-18P-12	WP-18P-25

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

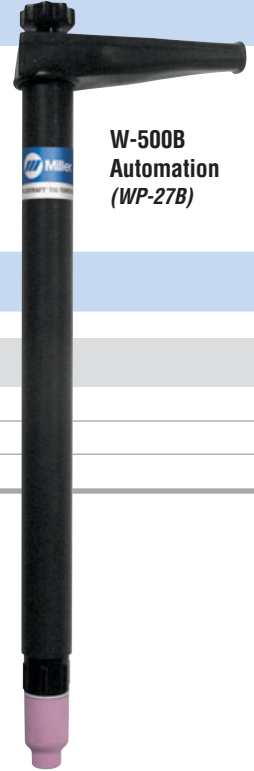
W-500 Series Automation Torch

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

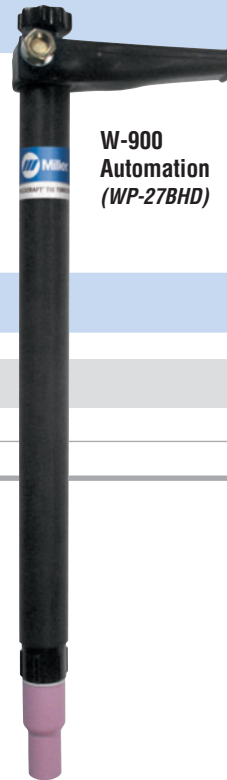
Models		Rubber		
Old Model	New Name	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-27A	W-500A Automation	WP-27A-3	WP-27A-12	WP-27A-25
WP-27B	W-500B Automation	WP-27B-3	WP-27B-12	WP-27B-25

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

W-900 Automation Torch

Applications Automated welding, robots, tube mills, seamers

Type Water-cooled
Rated Output DC: 900 A, AC: 630 A
Duty Cycle 100%
Electrode Range .040–1/4 in. (1.0–6.4 mm)



W-900
Automation
(WP-27BHD)

W-900 Automation Torch Package

Models		Rubber
Old Model	New Name	3 ft. (0.9 m)
WP-27BHD	W-900 Automation	WP-27BHD-3

Torch package includes torch body, gas hose, water hose and bracket assembly. Power cable not included.

Automation Series Connectors

Air-cooled torch 1-piece power cable connectors



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 connector



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

Water-cooled torch 1-piece 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.

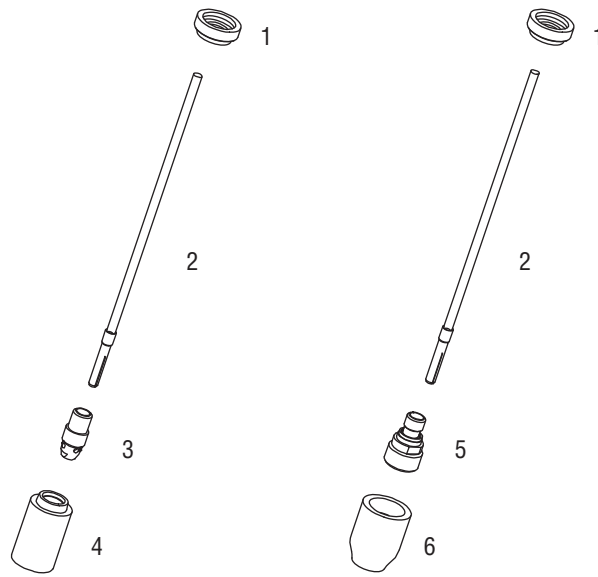


225028
50 mm thread-lock-style for water-cooled torch.

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

*2-piece power cable connector is not gas thru.

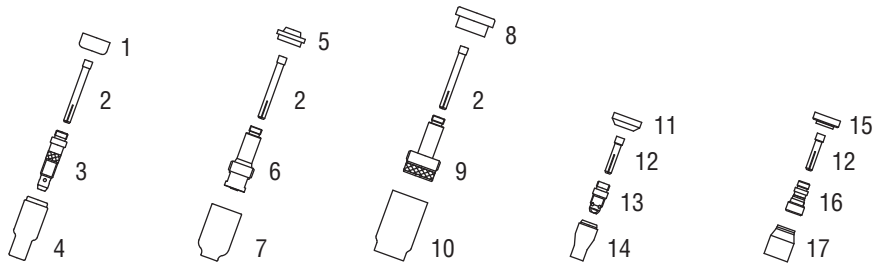
A-150/W-250 Automation Consumables (Refer to Owner's Manual for additional replacement parts.)



Non-Gas Lens								
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)	
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	
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
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								
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)	
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	
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
6 Alumina Gas Lens	53N58	53N59	53N60	53N61	53N61S	—	—	—
Knob								
* 22-7								

*Not shown.

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

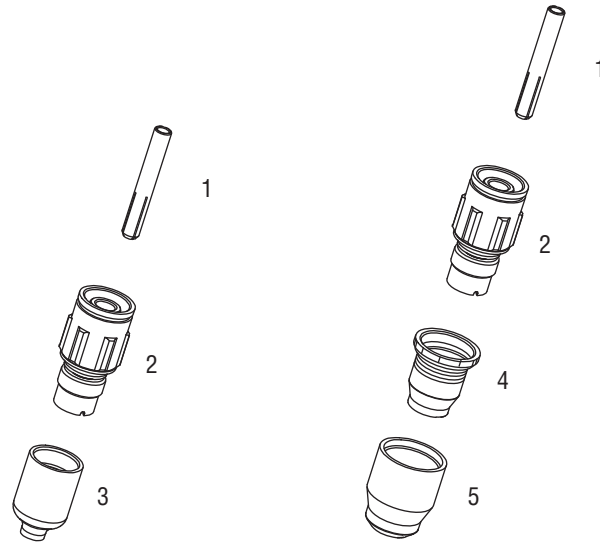


Non-Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)		
1 Insulator (required)	18CG	18CG	18CG	18CG	18CG	18CG		
2 Collet	10N21	10N22	10N23	10N24	10N25	54N20		
3 Collet Body	10N29	10N30	10N31	10N32	10N28	406488		
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
4 Alumina	10N50	10N49	10N48	10N47	10N46	10N45	10N44	—
* Long Alumina	—	10N49L	10N48L	10N47L	—	—	—	—
* Lava	105Z43	105Z42	105Z44	105Z45	08N78	08N79	08N80	—
* Long Lava	12N03	105Z60	12N02	105Z61	—	—	—	—
Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)		
5 Insulator (required)	54N01	54N01	54N01	54N01	54N01	54N01		
2 Collet	10N21	10N22	10N23	10N24	10N25	54N20		
6 Gas Lens	45V29	45V24	45V25	45V26	45V27	45V28		
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
7 Alumina Gas Lens	54N18	54N17	54N16	54N15	54N14	—	—	54N19
* Long Gas Lens	—	54N17L	54N16L	54N15L	—	—	—	—
Large Diameter Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)	5/32 (4.0)		
8 Insulator (required)	54N63	54N63	54N63	54N63	54N63	54N63		
2 Collet	10N21	10N22	10N23	10N24	10N25	54N20		
9 Large Diameter Gas Lens	45V0204	45V0204	45V116	45V64	995795	45V63		
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
10 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	—
Stubby Non-Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)			
11 Insulator (required)	18CG20	18CG20	18CG20	18CG20	18CG20			
12 Stubby Collet	—	10N22S	10N23S	10N24S	10N25S			
13 Stubby Collet Body	17CB20	17CB20	17CB20	17CB20	17CB20			
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
14 Stubby Alumina	13N08	13N09	13N10	13N11	13N12	13N13	—	—
Stubby Gas Lens								
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)			
15 Insulator (required)	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20			
12 Stubby Collet	—	10N22S	10N23S	10N24S	10N25S			
16 Stubby Gas Lens	—	17GL040	17GL116	17GL332	17GL18			
Nozzle Size — size # (inch)	4 (1/4)	5 (5/16)	6 (3/8)	7 (7/16)	8 (1/2)	10 (5/8)	12 (3/4)	Short
17 Alumina Gas Lens	53N58	53N59	53N60	53N61	53N61S	—	—	—

*Not shown.

W-500 Series/W-900 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		53N89
* Large Dia. Gas Lens-L	57N75L		57N74L		53N88L		—
* Large Dia. Gas Lens-XL	57N75XL		57N74XL		53N88XL		—
* Large Dia. Gas Lens-XXL	57N75XXL		57N74XXL		53N88XXL		—
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.

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 #
2% Ceriated (EWCe-2)			Pure (EWP)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	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 squarewave or sine wave.	0.040 (1.0)	—
	1/16 (1.6)	WC116X7		1/16 (1.6)	WP116X7
	3/32 (2.4)	WC332X7		3/32 (2.4)	WP332X7
	1/8 (3.2)	WC018X7		1/8 (3.2)	WP018X7
	5/32 (4.0)	WC532X7	5/32 (4.0)	—	
2% Lanthanated (EWLa-2)			Rare Earth (EWG)		
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)	WL2040X7	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)	WL2116X7		1/16 (1.6)	WG116X7
	3/32 (2.4)	WL2332X7		3/32 (2.4)	WG332X7
	1/8 (3.2)	WL2018X7		1/8 (3.2)	WG018X7
	5/32 (4.0)	WL2532X7	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-4-10** 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:

