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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.

TRUE BLUE® WARRANTY

Miller®

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An ITW Welding Company
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MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM

A-150 Automation Torch

Applications Automated welding, robots, tube mills, seamers

Type	Rated Output	Duty Cycle	Electrode Range
Air-cooled	DC: 150 A, AC: 120 A	60%	.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	Rated Output	Duty Cycle	Electrode Range
Water-cooled	DC: 250 A, AC: 180 A	100%	.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	Rated Output	Duty Cycle	Electrode Range
Water-cooled	DC: 500 A, AC: 350 A	100%	.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.

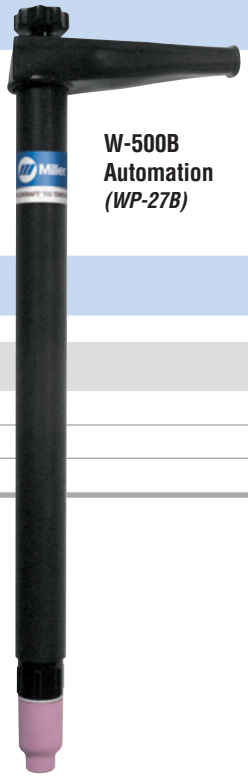
W-500 Series Automation Torch

Applications Automated welding, robots, tube mills, seamers

Type	Rated Output	Duty Cycle	Electrode Range
Water-cooled	DC: 500 A, AC: 350 A	100%	.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

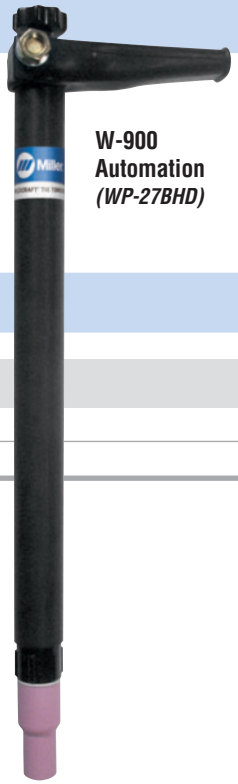
Models		Rubber		
Old Model	New Name	3 ft. (0.9 m)	12.5 ft. (3.8 m)	25 ft. (7.6 m)
WP-27A	W-500A Automation	**WP-27A-3**	**WP-27A-12**	**WP-27A-25**
WP-27B	W-500B Automation	**WP-27B-3**	**WP-27B-12**	**WP-27B-25**

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	Rated Output	Duty Cycle	Electrode Range
Water-cooled	DC: 900 A, AC: 630 A	100%	.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.



105Z57
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.

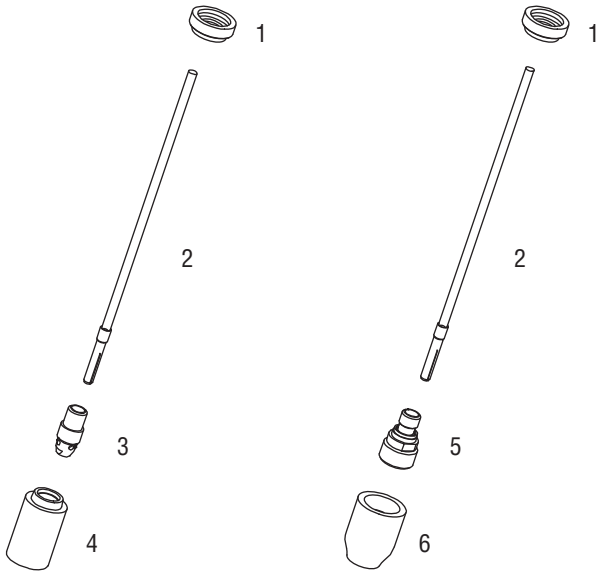


225028
50 mm thread-lock-style
for water-cooled torch.

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	**105Z57**	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	**105Z57**	N/A	**45V11**
PipeWorx	1/2 in. stud	**105Z57**	N/A	**45V11**
XMT® 304/350	50 mm Dinse-style	**195378**	**129527**	**195377**
XMT® 450	1/2 in. stud	**105Z57**	N/A	**45V11**
Engine-Driven Machines				
Most Big Blue®, Trailblazer®, Bobcat™, Blue Star® and Wildcat® models	1/2 in. stud	**105Z57**	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	**105Z57**	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.)



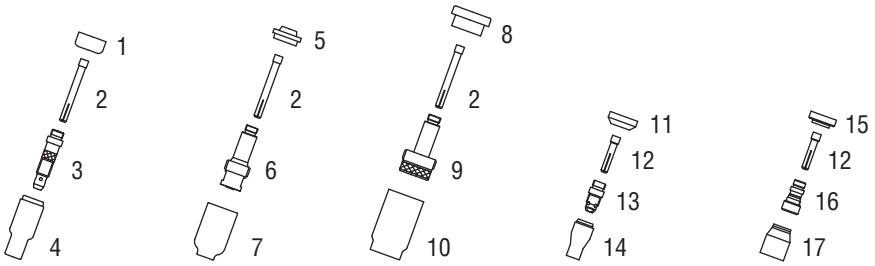
Non-Gas Lens								
Electrode Size — inch (mm)	.040 (1.0)		1/16 (1.6)		3/32 (2.4)		1/8 (3.2)	
1 Insulator (required)	22-10		22-10		22-10		22-10	
2 Collet & Tube Assembly (WP-22A/23A)	22N21A		22N22A		22N23A		22N24A	
3 Collet Body	13N26		13N27		13N28		13N29	
Nozzle Size — size # (inch)	**4 (1/4)**	**5 (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

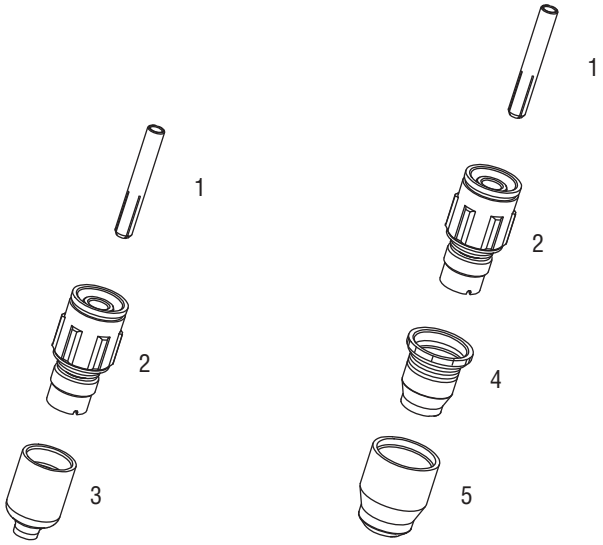
Electrode Size — inch (mm)	.020 (0.5)	.040 (1.0)	1/16 (1.6)	3/32 (2.4)	1/8 (3.2)
15 Insulator (required)	17GLG20	17GLG20	17GLG20	17GLG20	17GLG20
12 Stubby Collet	—	10N22S	10N23S	10N24S	10N25S
16 Stubby Gas Lens	—	17GL040	17GL116	17GL332	17GL18

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)	10 (5/8)	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)	10 (5/8)	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 #
2% Ceriated (EWCe-2)		
Performs well in DC welding and arc starting at low-current settings, and offers excellent performance in AC processes.	0.040 (1.0)	**WC040X7**
	1/16 (1.6)	**WC116X7**
	3/32 (2.4)	**WC332X7**
	1/8 (3.2)	**WC018X7**
	5/32 (4.0)	**WC532X7**
2% Lanthanated (EWLa-2)		
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**
	1/16 (1.6)	**WL2116X7**
	3/32 (2.4)	**WL2332X7**
	1/8 (3.2)	**WL2018X7**
	5/32 (4.0)	**WL2532X7**

Type	Diameter in. (mm)	Part #
Pure (EWP)		
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)	**WP116X7**
	3/32 (2.4)	**WP332X7**
	1/8 (3.2)	**WP018X7**
	5/32 (4.0)	—
Rare Earth (EWG)		
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)	**WG116X7**
	3/32 (2.4)	**WG332X7**
	1/8 (3.2)	**WG018X7**
	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).

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The Power of Blue®

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