

## Features & Benefits

- **Heavy Duty Design** for industrial application environments
- **Ergonomic Handle** for operator comfort and appeal
- **Low Bench Weight** for easy to handle gun reduces operator fatigue
- **Increased Interface** between contact tip & gas diffuser improves performance and electrical conductivity
- **Provides Cooling Benefits** for the front end consumables for maximum efficiency and comfort
- **Heavy Duty Contact Tip and Diffuser** to act as "heat sink" in high heat applications
- **Improved Performance** with longer-life front end consumables
- **Operates @ 100% Duty Cycle** at high amperage applications

# Water-Cooled MIG Gun Series

		<b>PulseMaster</b> 400 Amp	<b>PulseMaster</b> 500 Amp	<b>Supra</b> 450 Amp	<b>Standard</b> 600 Amp
<b>Applications</b>		Light-Medium Duty Fabrication	Heavy Duty Fabrication	Medium-Heavy Duty Fabrication	Medium-Heavy Duty Fabrication
<b>Standard Options</b>	Rear Connector	■	■	■	■
	Standard without "Smart" Capability	■	■		
	"Smart" Capability	■	■		
<b>Output Current</b>		400 Amps	500 Amps	450 Amps	600 Amps
<b>Duty Cycle - Mixed Gases</b>		100%	100%	100%	100%
<b>Wire Diameter</b>		Up to .045" (1.2 mm)	Up to .045" (1.2 mm)	Up to 1/16" (1.6 mm)	Up to 3/32" (2.4 mm)
<b>Process</b>	MIG	■	■	■	■
	Aluminum	■	■	■	■



**PulseMaster™** 500 Amp  
Water-Cooled Smart MIG Gun



**Supra®** 450 Amp  
Water-Cooled MIG Gun



**Standard** 600 Amp  
Water-Cooled MIG Gun

# PulseMaster™ 400 Amp Water-Cooled MIG Gun

MIG GUNS



**100% Duty Cycle - Mixed Gases**  
Suitable for Heavy Duty Fabrication.

**WELDING PROCESSES:**  
MIG (GMAW), Aluminum (GMAW)

**Standard Options Include:**

- Rear Connector
- Standard without “Smart” Capability but available with “Smart” Capability
- Standard Conductor Tube – Part No. PMP64EL-180 (Stock No. 1642-1140);
- Conduit Liner – 44 Series

**FEATURES**

- **“Smart” Capability** with digital display and one-touch, on-the-fly controls to adjust primary parameters such as welding current, material thickness, wire feed speed or arc length trim
- **Heavy Duty Design** for industrial application environments and long-lasting durability
- **Heavy Duty Cablehoz®** designed for pulse welding demands with smooth feed performance to reduce “bird nesting” and provide excellent flexibility for better current capacity
- **Ergonomic Impact-Resistant Handle** to reduce operator fatigue
- **Blade-Style Trigger Design** performs over 2 million cycles without failure
- **Multiple-Position Conductor Tube** for quick tool-free change, rotation and lower heat in the front end
- **Increased Interface** between contact tip & gas diffuser improves electrical conductivity
- **Heavy Duty Contact Tip and Diffuser** to act as “heat sink” in high heat applications

**Smart Gun** *PulseMaster Smart MIG Guns are used only with Tweco® PowerMaster SP machines and are available with “Smart” Capability.*

**Tweco® Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMWS412-3545	1042-1510
	15 ft (4.6 m)	PMWS415-3545	1042-1511

**Euro-Kwik Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMWS412X-3545	1042-1515

**Standard Gun** *PulseMaster MIG Guns are Standard without “Smart” Capability.*

**Tweco® Style Rear Connector**

*Adapter kits are available to fit Tweco rear connection to most wire feeders*

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW412-3545	1042-1500
	15 ft (4.6 m)	PMW415-3545	1042-1501

**Lincoln® Style Rear Connector**

*Fits Lincoln LN7, 8, 9, SP200*

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW412L-3545	1042-1503

Some Lincoln wire feeders are assembled with their K1500-2 gun receiving bushing that will accept Tweco Style MIG Guns direct from the factory. Control wire Part No. MS354-DSLJ (Stock No. 2060-2137) Must be ordered separately.

**Miller® Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	15 ft (4.6 m)	PMW415M-3545	1042-1502

**Euro-Kwik Style Rear Connector**

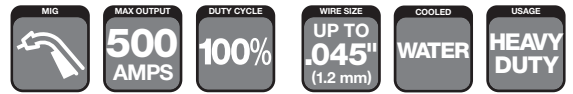
Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW412X-3545	1042-1505
	15 ft (4.6 m)	PMW415X-3545	1042-1506



Rated Output			Wire Size	Cooled	Application Usage
Amps	Duty Cycle	Gas			
400 Amps	100%	Mixed	Up To .045" (1.2 mm)	Water	Heavy Duty Fabrication

**EASY FIND EASY FIND GUIDE**  
See Page 86 for Replacement Parts & Optional Accessories

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# PulseMaster™ 500 Amp Water-Cooled MIG Gun



**WELDING PROCESSES:**  
MIG (GMAW), Aluminum (GMAW)

**Standard Options Include:**

- Rear Connector
- Standard without “Smart” Capability but available with “Smart” Capability
- Standard Conductor Tube – Part No. PMP64EL-180 (Stock No. 1642-1140)
- Conduit Liner – 44 Series

**FEATURES**

- **“Smart” Capability** with digital display and one-touch, on-the-fly controls to adjust primary parameters such as welding current, material thickness, wire feed speed or arc length trim
- **Heavy Duty Design** for industrial application environments and long-lasting durability
- **Heavy Duty Cablehoz®** designed for pulse welding demands with smooth feed performance to reduce “bird nesting” and provide excellent flexibility for better current capacity
- **Improved Performance** with longer-life consumables
- **Twin-Pulse Mode** for the perfect weld bead
- **Multiple-Position Conductor Tube** for quick tool-free change, rotation and lower heat in the front end
- **Increased Interface** between contact tip & gas diffuser improves electrical conductivity

**Smart Gun** *PulseMaster Smart MIG Guns are used only with Tweco® PowerMaster SP machines and are available with “Smart” Capability.*

**Tweco® Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMWS512-3545	1042-1535

**Euro-Kwik Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMWS512X-3545	1042-1540

**Standard Gun** *PulseMaster MIG Guns are Standard without “Smart” Capability.*

**Tweco® Style Rear Connector**

*Adapter kits are available to fit Tweco rear connection to most wire feeders*

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW512-3545	1042-1525
	15 ft (4.6 m)	PMW515-3545	1042-1526

**Lincoln® Style Rear Connector**

*Fits Lincoln LN7, 8, 9, SP200*

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW512L-3545	1042-1528

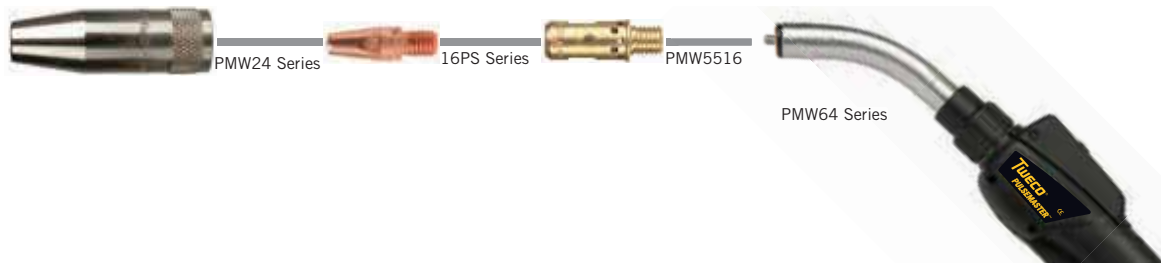
*Some Lincoln wire feeders are assembled with their K1500-2 gun receiving bushing that will accept Tweco Style MIG Guns direct from the factory. Control wire Part No. MS354-DSLJ (Stock No. 2060-2137) Must be ordered separately.*

**Miller® Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW512M-3545	1042-1527

**Euro-Kwik Style Rear Connector**

Wire Size	Length	Part No.	Stock No.
Up To .045" (1.2 mm)	12 ft (3.6 m)	PMW512X-3545	1042-1530
	15 ft (4.6 m)	PMW515X-3545	1042-1531



Rated Output			Wire Size	Cooled	Application Usage
Amps	Duty Cycle	Gas			
500 Amps	100%	Mixed	Up To .045" (1.2 mm)	Water	Heavy Duty Fabrication

**EASY FIND EASY FIND GUIDE**  
See Page 86 for Replacement Parts & Optional Accessories

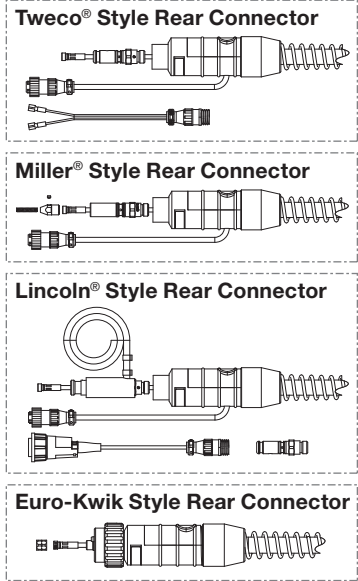
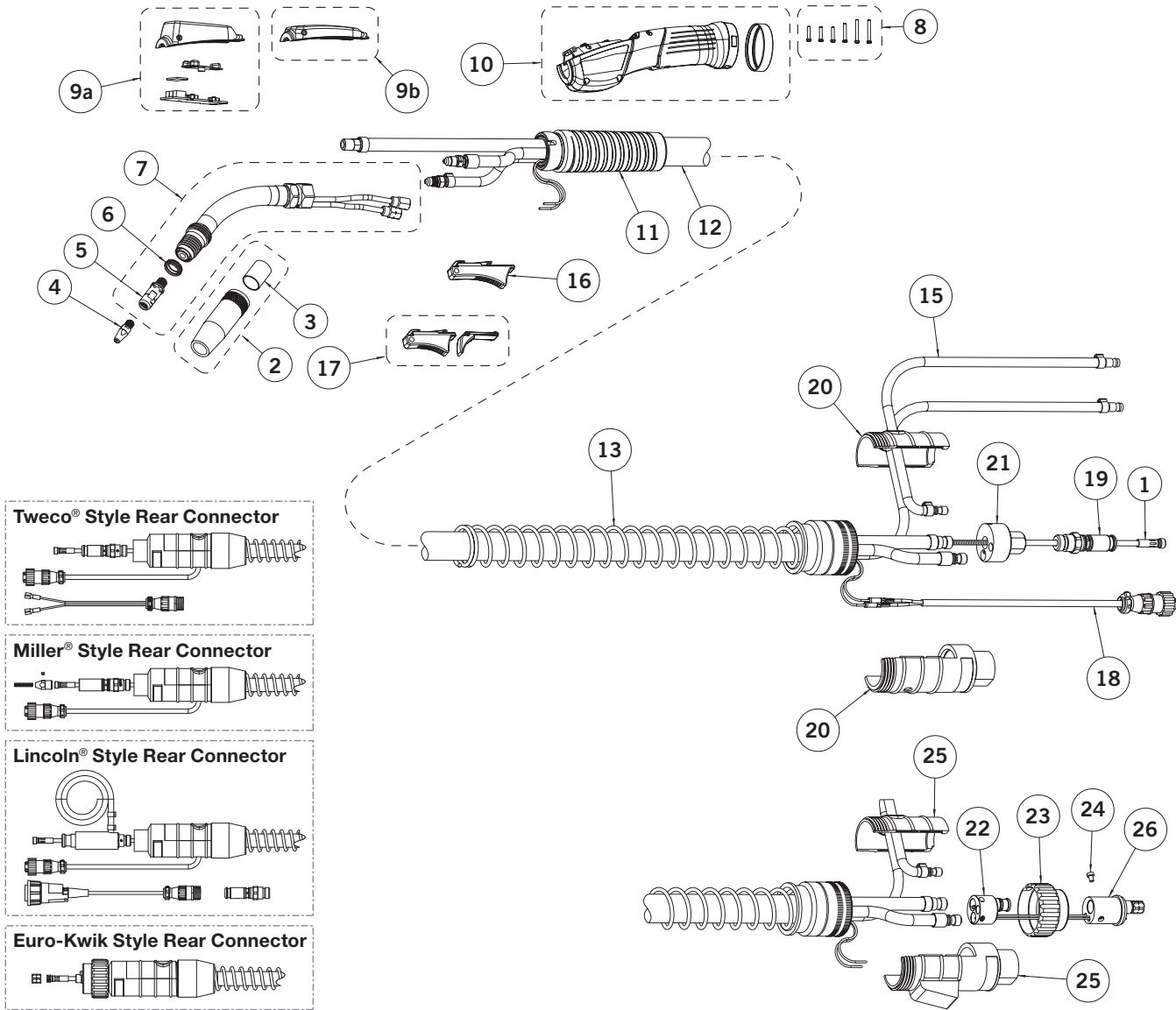
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MIG GUNS

# PulseMaster™ Water-Cooled MIG Gun

## Replacement Parts

MIG GUNS



#	Description	Part No.	Stock No.
1	Conduit Assembly	Refer to Pages 124-127	
2	Nozzle	PMW24 Series	
3	Nozzle Insulator / Spatter Shield	WC23-1	1230-1084
4	Contact Tip	16PS Series	
5	Gas Diffuser used w/16P & 16PS Series Contact Tips	PMW5516	1550-1105
6	Pressure Ring	PMW64-3	1644-2900
7	Conductor Tube	PMW64 Series	
8	Handle Screws w/ T9 Star Head (12 mm, 16 mm, & 20 mm LG)	PMHSK	2060-2705
9a	Handle Housing w/ Smart Control Assembly	PM84-PCB-HK	2060-2706
9b	Handle Housing (Blank)	PM84-H	2060-2707
10	Large Handle Assembly w/ Retaining Ring	PM84	2060-2708
	Small Handle Assembly w/ Retaining Ring	PM83	2060-2715
11	Front Cable Support	PMW-SPS	2060-2720

#	Description	Part No.	Stock No.
12	12 ft (3.6 m) Cable and Hose Assembly	PMW512	2060-2721
13	Strain Relief Spring	QR-SPR	3045-1177
14	Strain Relief Cap	QR-RC	3045-1238
15	Water Hose Assembly	--	--
16	Trigger	PM94	2060-2712
17	Trigger & Guard Assembly	--	-
18	Control Wire Plug	MS354-DSM	2060-2140
19	Heavy Duty Connector Plug Assembly	350-174H	2035-2110
20	Rear Case	--	--
21	Rear Connector Block (Direct Plug)	WC6-170H	2064-2171
22	Rear Connector Block (Euro)	WC174X-B	2044-2182
23	Euro-Kwik Connector Nut	174X-2	2040-2177
24	Euro-Kwik Connector Screw	4M-S	2011-2004
25	Euro-Kwik Rear Case	X6RC	2060-2006
26	Euro-Kwik Connector Assembly	WC174X	2044-2181

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