

Millermatic® 175

Issued March 2002 • Index No. DC/12.44

**MIG Arc Welding Power Source,
Wire Feeder and Gun Package**



Quick Specs

Light Industrial Applications

Light Fabrication
Maintenance and Repair
Auto Body
Farm/Home

Processes

Flux Cored (FCAW)
MIG (GMAW)

Input Power 230 V, 19.5 A, 60 Hz, Single-Phase

Rated Output 130 A at 20 VDC, 30% Duty Cycle

Amperage Range 30–175 A

Max. Open-Circuit Voltage 30

The Power of Blue.®



Infinite Voltage Control with Wire Feed Speed Tracking provides a broader operating range with finer control by automatically increasing or decreasing wire feed speed when voltage is adjusted.

Durable cast aluminum feedhead incorporates dual groove quick-change drive roll and spring-loaded tension arm with calibrated tension knob all designed to make set up easier and faster.

Miller's exclusive "Tip Saver" short circuit protection shuts down output when tip is shorted to the work. Extends contact tip life and protects internal components from damage. **Trigger reset** permits quick reset at torch rather than unit.

Easy access to output studs provides **convenient polarity changeover** when changing from solid or flux cored wires.

Self-resetting motor protection circuit rather than fuses to find and replace.

Thermal overload protection shuts down unit and activates **over temperature light** if airflow is blocked or duty cycle is exceeded. Automatically resets when fault is corrected and unit cools.

Semiautomatic constant voltage wire welding package is capable of welding 24 gauge – 1/4 in (0.8–6.4 mm) mild steel.



Comes Complete With:

- Power source
- Power cord and plug
- 10 ft (3 m), M-10 MIG gun and cable assembly
- 10 ft (3 m) work cable and clamp
- Argon and AR/CO₂ mix regulator/flow gauge with hose
- Sample spool of .024 in (0.6 mm) solid wire
- Two contact tips for .024 in (0.6 mm) wire and two contact tips for .030 in (0.8 mm) wire
- Dual groove quick-change drive roll for .024 in (0.6 mm) or .030/.035 in (0.8/0.9 mm) wire
- Factory-installed contactor and gas solenoid valve
- Information/settings chart

Note: Shielding gas and safety equipment not included.

Standard built-in solid state contactor circuit makes wire electrically "cold" until trigger is pulled. Makes the unit safer, and is easier to position torch to work before starting weld.

Uses 4 or 8 in (102 or 203 mm) spools and can be set up to weld with wire sizes .024–.035 in (0.6–0.9 mm) mild/stainless steel and .030–.045 in (0.8–1.2 mm) flux cored.

Add the Spoolmate™ 3035 spool gun and SGA spool gun adapter for welding with .030–.035 in (0.8–0.9 mm) aluminum wire on 14 gauge to 3/16 in material.



Welder/generator is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.
Gun warranted for 90 days, parts and labor.

MADE IN **USA**



Miller Electric Mfg. Co.
An Illinois Tool Works Company
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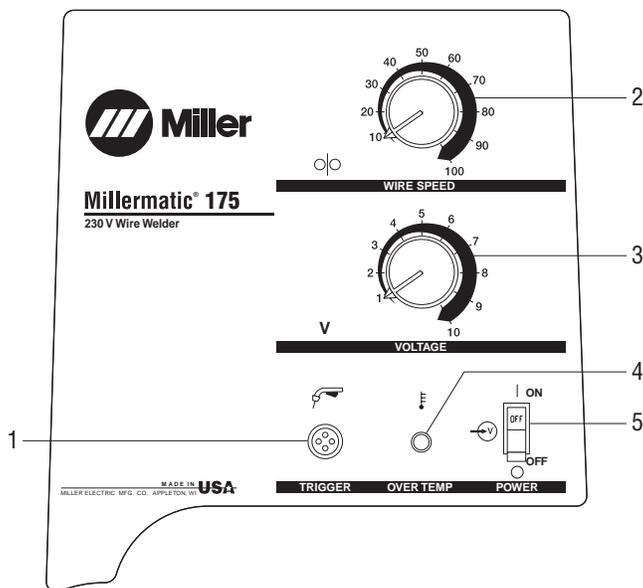
Specifications (Subject to change without notice.)



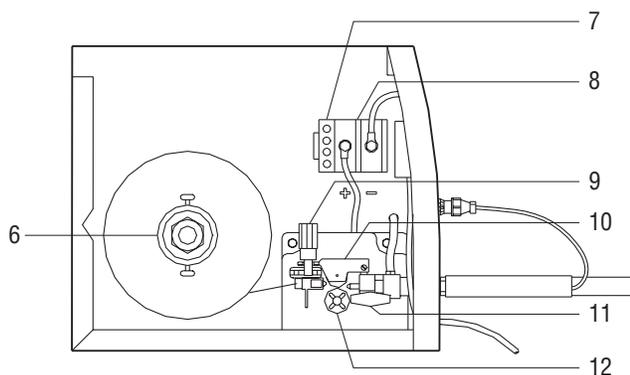
Rated Output	Amperage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz			Wire Feed Speed	Dimensions	Net Weight	Ship Weight
			230 V	KVA	KW				
130 A, 20 VDC at 30% Duty Cycle	30 – 175 A	30	19.5	4.5	3.8	20 – 700 IPM (0.5 – 17.8 m/min); 40 – 720 IPM at no load (1.0 – 18.3 m/min)	H: 17-1/2 in (444 mm) W: 10-5/8 in (273 mm) D: 15-3/4 in (400 mm)	73 lb (33.2 kg)	81 lb (36.4 kg)

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

Control Panel



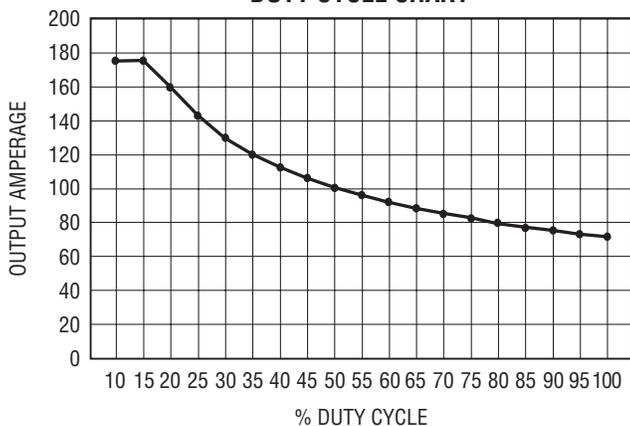
1. Trigger Lead Switch Connection
2. Wire Feed Speed Control
3. Infinite Voltage Control
(with Wire Feed Speed Tracking)
4. Over Temperature Light
5. Power Switch



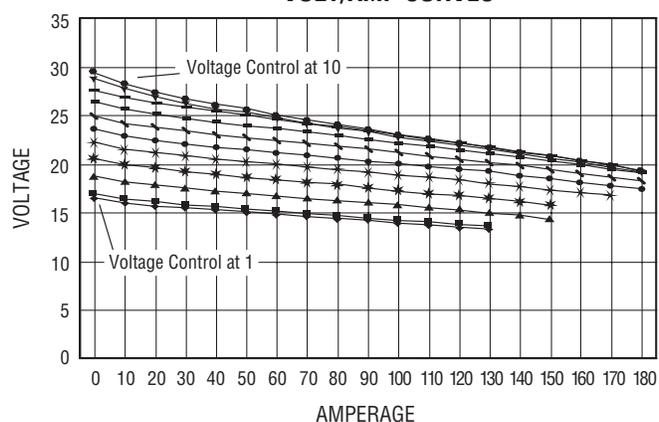
6. Plastic Hub with Retaining Ring for 8 in Spools
(shaft also accepts 4 in spools)
7. Storage Holes for Spare Tips
8. Polarity Changeover Terminals
9. Calibrated Tension Knob
10. Springloaded Tension Arm
11. T-Knob (secures torch)
12. Dual Groove Quick-Change Drive Roll

Performance Data

DUTY CYCLE CHART



VOLT/AMP CURVES



Genuine Miller Accessories

M-10 Replacement Gun #195 605
10 ft (3 m). Shipped with liner #194 011.



**Spoolmate™
3035 Spool Gun
#195 016**

Spool gun for aluminum and other wires.
4 in spools;
.030 – .035 in

(0.8 – 0.9 mm) aluminum, steel and stainless steel. Rated at 150 amps, 60% duty cycle with 20 ft (6 m) cable assembly.



**SGA 100
#043 856**
Miller's exclusive spool gun adapter is dedicated to

the Spoolmate 3035 spool gun and is rated at 150 A at 60% duty cycle. Comes with 10 ft (3 m), 115 VAC power cable and plug, 6 ft (1.8 m) interconnecting cable and 5 ft (1.5 m) gas hose.



**Spoolmate™ Curved Barrel Assembly
#198 371**



**Spoolmate™ 9 in Straight Barrel Assembly
#198 372**



Running Gear/ Cylinder Rack #770 187
Heavy-duty construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 100 lb (45 kg).



**Small Running Gear/Cylinder Rack
#194 776**

Durable construction. For gas cylinders no larger than 7 in (178 mm) diameter, maximum weight 75 lb (34 kg).

Purchase the Millermatic 175 package (#907 049) and receive Millermatic 175 and Small Running Gear/Cylinder Rack (#194 776) packaged together!

Consumables (Order from Miller Service Parts.)

For M-10 Gun



Contact Tips

- #087 299 .023/.025 in (0.6 mm)
- #000 067 .030 in (0.8 mm)
- #000 068 .035 in (0.9 mm)
- #000 069 .045 in (1.2 mm)



Contact Tip Adapter #169 716



Replacement Liners

- #194 010 .023/.025 in
- #194 011 .030–.035 in (standard)
- #194 012 .035–.045 in



Nozzle #169 715

1/2 in (13 mm) diameter orifice. Nozzle flush with contact tip (standard).

Spot Nozzles

- #176 237 Flat
- #176 239 Inside corner
- #176 241 Outside corner

Gun Convenience Kit #193 973

Contains:

- 3 – .025 in (0.6 mm) contact tips (#087 299)
- 5 – .030 in (0.8 mm) contact tips (#000 067)
- 5 – .035 in (0.9 mm) contact tips (#000 068)
- 2 – Tip adapters (#169 716)
- 3 – O-rings (#170 471)
- 2 – Shock washers (#169 717)
- 1 – 1/2 in (13 mm) diameter orifice nozzle (#169 715)



Drive Rolls — Quick Change

Dual Groove, V-Smooth #202 925
For .023/.025, .030 and .035 in (0.6, 0.8 and 0.9 mm) wire.

Dual Groove, V-Knurled #202 926
For .030/.035 in (0.8/0.9 mm) or .045 in (1.2 mm) flux cored wire.

For Spoolmate™ 3035 Gun



Contact Tips (5 per package)

- #199 730 For .023 in (0.6 mm) wire.
- #186 419 For .030 in (0.8 mm) wire.
- #186 409 For .035 in (0.9 mm) wire.



Nozzle #186 405



Drive Roll (1)

#199 731
For .023 in (0.6 mm) wire
#186 413
For .030/.035 in (0.8/0.9 mm) wire.



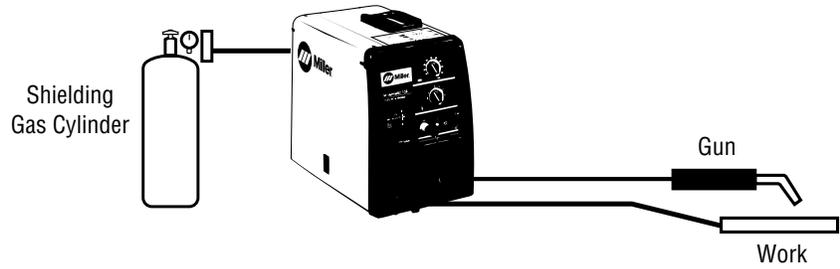
Push Roll (1)

#199 732
For .023 in (0.6 mm) wire
#186 414
For .030/.035 in (0.8/0.9 mm) wire.

Typical Installations



**MIG (GMAW) or Flux Cored (FCAW)
Basic Equipment**



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Millermatic® 175	#907 020	230 V, 60 Hz		
Millermatic® 175 with #194 776 Running Gear	#907 049	Both items packaged together		
Guns				
M-10 Gun	#195 605	10 ft (3 m), .030–.035 in (0.8–0.9 mm)		
Spoolmate™ 3035	#195 016	Spool gun for aluminum		
SGA 100	#043 856	Spool gun adapter for Spoolmate 3035		
Spoolmate™ Curved Barrel Assembly	#198 371			
Spoolmate™ 9 in Straight Barrel Assembly	#198 372			
Consumables (Order from Miller Service Parts.)				
Contact Tips				
Contact Tip Adapter				
Replacement Liners				
Nozzles				
Spot Nozzles				
Gun Convenience Kit	#193 973			
Drive Rolls				
Push Roll				
Accessories				
Running Gear/Cylinder Rack	#770 187			
Small Running Gear/Cylinder Rack	#194 776			
Flux Cored Wire				
Solid Wire				
Shielding Gas Cylinder				
Helmet/Gloves/Scratch Brush				

Date:

Total Quoted Price:

Distributed by:

