

# Miller Legend® 302

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Gas/LP Engine-Driven  
Welder/AC Generator 

## Quick Specs

### Industrial Applications

Fabrication  
Structural Steel Work  
Process Plant Piping  
Maintenance

### Processes (X-Ray Quality)

Stick (SMAW)  
MIG (GMAW)  
with voltage-sensing feeder  
Flux Cored (FCAW)  
with voltage-sensing feeder  
DC TIG (GTAW)  
Air Carbon Arc (CAC-A) Cutting  
and Gouging (3/16 in carbons)

### Output Range

DC Stick 25–300 A  
DC TIG 10–300 A  
MIG/FCAW 13–35 V

Generator Power Output Rated at 104° F (40° C)  
5500 Watts Peak—5000 Watts Continuous

**Accu-Rated™—Not Inflated  
Generator Power**

## The Power of Blue.® Toughest Welders...

**CASE CLOSED**

**Exclusive! Low-speed generator** produces 5500 watts peak, 5000 watts continuous at 1800 RPMs, 2400 watts (60–120 Hz) at all speeds.

**Exclusive! Multi-speed welding** to reduce noise. Up to 240 amps at a quiet 3000 RPMs and powerful 300 amps at 3600 RPMs.

**Increased fuel capacity to 12 gallons** means many hours of run time before refueling. [See page 3 for fuel consumption information.](#)

**Superior arc performance**

- Four preset DIG settings
- Adaptive Hot Start™
- Lift-Arc™ with Auto-Stop™
- MIG/FCAW

[See page 2 for more information.](#)



[See pages 2 and 3 for more machine features/benefits.](#)

**More horsepower** — 23 HP gas/ 20 HP LP Kohler®. Fully enclosed case provides: reduced sound levels, fully protected engine, and utilizes the same hole mounting pattern as past models.

**Reduced sound level** of 75.5 dB (100.5 Lwa) at rated load. Quietest in its class and quieter than most engine drives in the industry!

**Self-calibrating digital weld meters with meter maintenance functions.**

- Preset and actual weld amperage/voltage
- Hour meter function
- Oil change interval

**Exclusive! Digital meters use SunVision™ technology** so they are easy to read in direct sunlight or shade.

**Exclusive! High-Impact Protective Armor**

- Protective armor with receptacle and output stud covers provides a virtually indestructible barrier from damage
- High-impact resistance in all temperatures

Other applications include: automotive bumpers, tractor hoods and panels, lawn mower decks, large structural parts, etc.

**Output stud and receptacle covers** required by OSHA and CSA for job site safety.

**TRUE BLUE**  
3YR. WARRANTY

Welder/generator is warranted for 3 years, parts and labor. Engine is warranted separately by the engine manufacturer.

MADE IN **USA**  
APPLETON, WI **USA**



**Miller Electric Mfg. Co.**  
An Illinois Tool Works Company  
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Appleton, WI 54914 USA

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**Web Site**  
[www.MillerWelds.com](http://www.MillerWelds.com)



# Specifications (Subject to change without notice.)



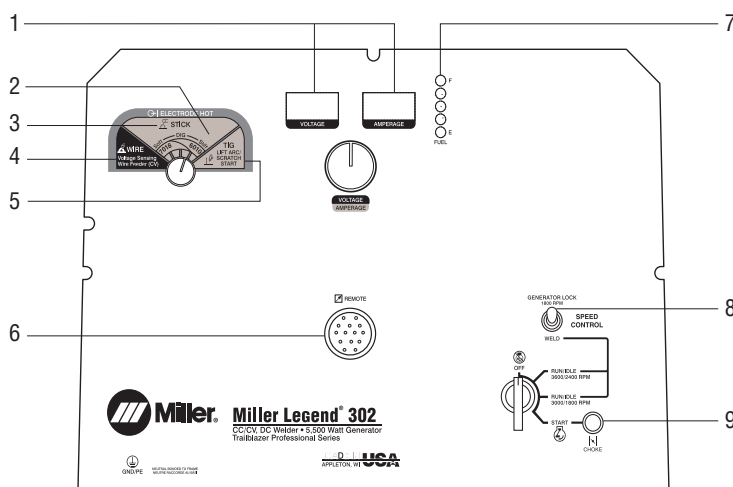
	Weld Speed	Welding Mode	Process	Amp/Volt Ranges	Weld Output Rated at 25 V (at 104°F/40°C)*	Sound Levels at Rated Output, 7 m (23 ft)	Single-Phase Generator Power	Dimensions	Net Weight**
<b>Gasoline</b>	3600 RPM	CV/DC	MIG/FCAW	13–35 V	300 A, 100% Duty Cycle	75.5 dB (100.5 Lwa)	<b>Peak:</b> 5500 watts <b>Continuous:</b> 5000 watts 120/240 VAC, 42/21 A, 60 Hz at 1800 RPM 2400 watts, 120 VAC, 60–120 Hz at all speeds	H: 33 in (838 mm) W: 20 in (508 mm) D: 45-1/2 in (1156 mm)	580 lb (263 kg)
		CC/DC	Stick/TIG	10–300 A	280 A, 100% Duty Cycle				
	3000 RPM	CV/DC	MIG/FCAW	13–27 V	240 A, 100% Duty Cycle	73 dB (98 Lwa)			
		CC/DC	Stick/TIG	10–240 A	240 A, 100% Duty Cycle				
1800 RPM	CV/DC	MIG/FCAW	13–22 V	120 A, 100% Duty Cycle	66 dB (91 Lwa)				
	CC/DC	Stick/TIG	10–120 A	120 A, 100% Duty Cycle					
<b>LP</b>	Derate outputs up to 5% when using LP fuel.								

\*Rated at sea level. \*\*Net weight without fuel.

## Engine Specifications (Engines warranted separately by the engine manufacturer.)

Engine Brand/Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Low Oil Pressure Shutdown
Kohler: 3-year mfg.	23 HP (gas), 20 HP (LP) at 3600 RPM	Twin-cylinder, 4-cycle overhead valve, industrial air-cooled gasoline or LP	3600 RPM 3000 RPM	2400 RPM 1800 RPM	12 gal (45 L)	1.75 qt (1.7 L), 2 qt (1.9 L) with filter	Standard

## Function Guide



### \*Category Exclusive

**1. Digital Meters** display preset amperage or voltage while not welding. Displays actual amperage and voltage while welding and for 5 seconds after welding has stopped.

#### Meter Maintenance Functions\*

- **Hour Meter:** with engine off, place Engine Control switch in the first RUN/IDLE position to view engine hours.
- **Oil Change Interval:** with engine off, place Engine Control switch into the second RUN/IDLE position to see hours before next oil change. Oil hours start at 100 and count down to 0 (oil change due).

*Note: Negative hours indicated when past recommended oil change interval.*

*To Reset: Flip Engine Control switch from the RUN/IDLE to RUN position 3 times.*

**2. Four Preset DIG Settings\*** offer the best arc characteristics for different electrodes and joint designs. The combined DIG and Process switch along with preset DIG settings makes it easy to set without the complication of multiple switches.

#### DIG Settings

- Soft arc and smooth 7018 performance.
- Medium-soft driving arc.
- Medium-stiff driving arc.
- Driving arc such as pipe welding.

**3. Adaptive Hot Start™\* (Stick)** automatically sets starting amperage for great arc starts.

**4. Great MIG/FCAW Performance** with voltage-sensing wire feeders.

**5. Lift-Arc™/Scratch Start TIG\* with Auto-Stop™** provides great DC starts with both starting techniques. Auto-Stop allows the arc to be stopped without the loss of shielding gas.

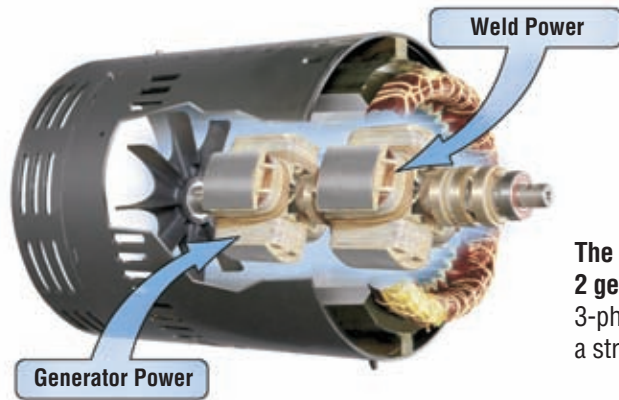
**6. Standard 14-Pin Receptacle** for simple connection of **remote controls** (not for wire feeder usage). It features **Auto Remote Sense™\*** which automatically switches from Panel to Remote Amperage/ Voltage (A/V) control with remote connected. Eliminates confusion of the Panel/Remote A/V switch.

**7. Front Panel Fuel Gauge\*** LEDs indicate fuel level. The “E” LED lights only when fuel is low.

**8. Speed Control Switch** locks engine speed at 1800 RPM for uninterrupted 60 Hz generator power and light welding loads.

**9. Engine Choke Control**

# Performance Data



The Miller Legend has **2 generators** — a 4-pole, 3-phase weld generator and a strong power generator.

## Miller Legend® 2-Generator Advantages

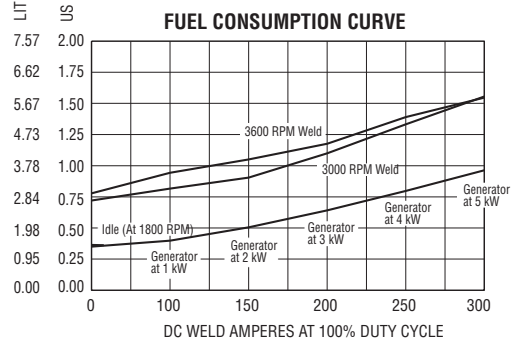
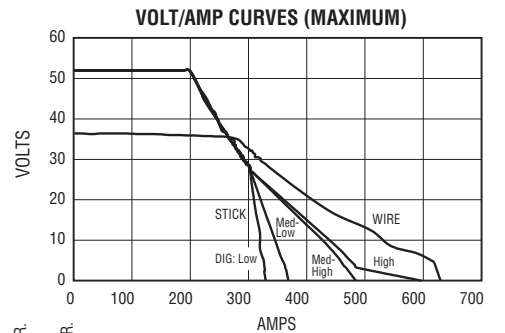
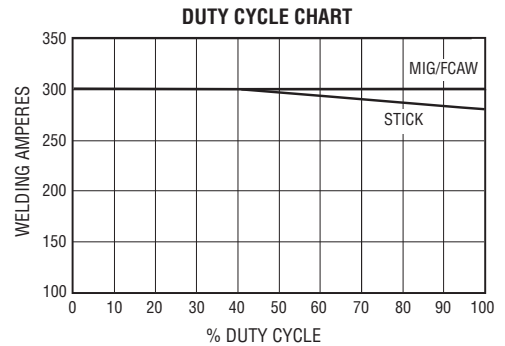
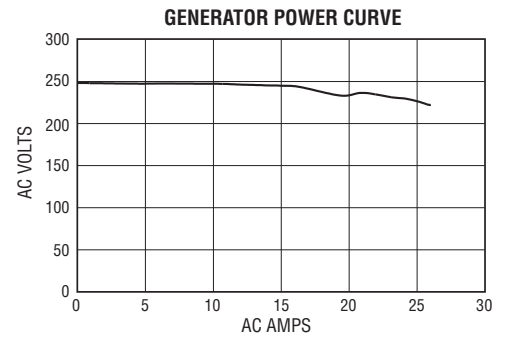
- The Miller Legend is the only gas or LP powered welding generator that produces 60 Hz generator power at 1800 RPM. This provides maximum fuel economy and the lowest sound levels. **More Guts, More Glory!**
- Separate weld and power generators are designed for specific functions. This is why the 4-pole, 3-phase weld generator is the **most efficient and produces the best arc quality** with a precise, yet simple and reliable weld control design.
- **No interaction** between grinders, power tools, etc. and the welding arc.
- Generator **power is independent of weld control settings.**
- Has the industry's **strongest power while welding.**

## Power is in the Numbers

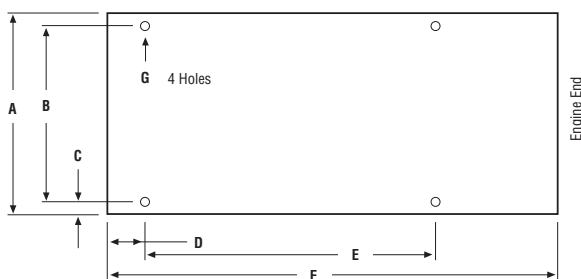
- Tools and motors are designed to operate within 10% of 120/240 VAC. The Miller Legend's power generator provides strong power while keeping the voltage within 10% of 120/240 VAC. **This increases tool/motor performance and life. See Generator Power Curve.**
- **Tested and rated at higher temperatures, 104° F (40° C),** to ensure consistent operation in all climates.
- Patented generator control technology matches the generator's output to engine horsepower. This provides **more weld output and lowers fuel consumption.**

## Fuel Consumption Data

- 12-gallon fuel capacity.
- On a typical job using 1/8-in 7018 electrodes (125 A, 20% duty cycle) you can expect over 20 hours of operation.
- Welding at 150 A at 40% duty cycle, uses approximately 3/4 gallon per hour — over 16 hours of operation.
- A 2 kW generator load at 50% duty cycle uses less than 1/2 gallon per hour — over 24 hours of operation.



# Mounting Specifications



- A. 20 in (508 mm)
- B. 16-1/2 in (419 mm)
- C. 1-3/4 in (44 mm)
- D. 6-1/16 in (154 mm)
- E. 32-3/4 in (832 mm)
- F. 45-3/8 in (1153 mm)
- G. 13/32 in (10 mm) diameter

- Height:** 33-1/2 in (851 mm) (to top of exhaust)
- Width:** 20 in (508 mm)
- Depth:** 45-7/8 in (1164 mm)

# Genuine Miller Accessories (See Trailblazer spec sheet ED/4.77 for additional accessories.)



### Protective Covers #195 333

Heavy-duty, water-resistant and mildew-resistant. Protects and maintains the finish of the welder.

*Note: Not for use with Protective Cage or Running Gear.*



### #195 529

Heavy-duty, water-resistant and mildew-resistant. Protects and maintains the finish of the welder.

*Note: For use with Protective Cage and/or Running Gear.*



### Protective Cage with Cable Holders #195 331

Rugged cage with cable holders protects your investment. Can be used

with running gear, Gas Cylinder Mounting Assembly, LP Tank Mounting Assembly, or with trailer.



### All-Terrain Running Gear #300 457

Two heavy-duty 15 in and two 10 in pneumatic tires with inner tubes and a rugged handle provide maximum maneuverability.

*Note: Cannot be used with Gas Cylinder Mounting Assembly or LP Tank Mounting Assembly.*



### All-Purpose Running Gear #300 396 Gas/LP

Includes two heavy-duty 15 in tires with inner tubes, two 8 in rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications, and is easy to move around the job site.



### LP Tank Mounting Assembly #195 329

For use with All-Purpose Running Gear, Protective Cage,

or by itself. Includes bracket and clamp to mount 33 and 43 lb tanks horizontally, and hose with fittings to converter.

*Note: Cannot be used w/Gas Cylinder Mounting Assembly.*



### Remote Oil Drain/Filter Kits (Kohler) #300 106

Field. Rear Mounted (shown) Oil can be drained from rear of machine.

#300 236 Field. Front/Chassis Truck Mounted Oil can be drained from the front of the machine or below the truck, mounted on the chassis.

Makes servicing easy when engine drive is mounted in tight spots.

Order the following from Miller Service Parts.



### Full KVA Plug Kit #119 172

Field 120/240 VAC, 50 amp plug (NEMA 14-50P) to fit full KVA receptacle.

### Engine Tune-Up Kits

#230 015 Field. Kohler CH23 (Gas)

#180 096 Field. Kohler CH20 (LP) and CH730 (LP)

Tune-up kits include spark plugs (gas/LP models) and engine filters.



### TIG Adapter with Extension #195 350

Field Extension with Power Cable Adapter 45V11. For use with all Bobcats, Legend 302, and Trailblazer 275 DC.

## Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Miller Legend® 302 (23 HP gas, 20 HP LP Kohler)	#907 272	Base machine, CC/CV DC, 5500 watts		
	#907 272-01-1	With GFCI receptacles		
	#907 272-02-1	With GFCI receptacles, and electric fuel pump for high altitudes		
	#907 272-02-2	With GFCI receptacles and LP gas		
Remote Oil Drain and Filter Kit	#300 106	Field. 28-Inch Kit. For Kohler engine only		
	#300 236	Field. 52-Inch Kit. For Kohler engine only		
Full KVA Plug	#119 172	Field. (Order from Miller Service Parts)		
Engine Tune-Up Kits	#230 015	Field. For Kohler CH23 (Gas). (Order from Miller Service Parts)		
	#180 096	Field. For Kohler CH20 (LP) and CH730 (LP). (Order from Miller Service Parts)		
TIG Adapter with Extension	#195 350	Field. Required for Lift-Arc™/Scratch Start TIG welding. (Order from Miller Service Parts)		
<b>Accessories</b>				
Protective Cover	#195 333	Blue with logo. <i>Not for use with protective cage or running gear</i>		
	#195 529	Blue with logo. <i>For use with protective cage or running gear</i>		
Protective Cage with Cable Holders	#195 331			
All-Terrain Running Gear	#300 457			
All-Purpose Running Gear	#300 396			
LP Tank Mounting Assembly	#195 329	Cannot be used with Gas Cylinder Mounting Assembly		

Date:

Total Quoted Price:

Distributed by:

