Trailblazer® 325 Diesel
Diesel Engine-Driven Welder/AC Generator

<table>
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<tr>
<th>Quick Specs</th>
<th>Industrial Applications</th>
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<td></td>
<td>Fabrication</td>
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<td>Maintenance</td>
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<td>Repair</td>
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<td>Structural Steel Work</td>
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<td>Pipe</td>
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<td>Sheet Metal</td>
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<td>Processes (X-Ray Quality)</td>
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<tr>
<td>Stick (SMAW)</td>
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<tr>
<td>MIG (GMAW)</td>
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<tr>
<td>Flux-Cored (FCAW)</td>
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<tr>
<td>DC TIG/Pulsed TIG (GTAW/GTAW-P)</td>
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</tr>
<tr>
<td>Air Carbon Arc (CAC-A) Cutting and Gouging</td>
<td></td>
</tr>
<tr>
<td>Rated: 3/16-inch carbons, Capable: 1/4-inch carbons</td>
<td></td>
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<tr>
<td>Air Plasma Cutting and Gouging with optional Spectrum® models, Rated: 5/8-inch mild steel</td>
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<tr>
<td>Output Range</td>
<td></td>
</tr>
<tr>
<td>DC Stick</td>
<td>30 – 325 A</td>
</tr>
<tr>
<td>MIG/Flux-Cored</td>
<td>10 – 35 V</td>
</tr>
<tr>
<td>DC TIG/Pulsed TIG</td>
<td>10 – 325 A</td>
</tr>
<tr>
<td>Generator Power Output</td>
<td></td>
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<tr>
<td>Rated at 104° F (40° C)</td>
<td>9,600 Watts</td>
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</tbody>
</table>

Designed for the professional welder, our Trailblazer welder/generators deliver unbeatable arc performance in all weld processes, providing the smoothest, most stable arc in the industry. The independent welder and generator power system means no interaction between jobsite tools and the welding arc.

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

Miller Electric Mfg. Co.
An ITW Company
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MillerWelds.com

ISO 9001 REGISTERED QUALITY SYSTEM
Features

**Smart-Cor**™ **Technology**

Smart-Cor technology in our Trailblazer® welder/generators includes a ten-degree skewed rotor and Wave Filter™ technology for a new level of clean generator power. The independent welder and generator power system means no interaction between jobsite tools and the welding arc.

**Wave Filter technology and 10-degree skewed rotor.** The electronics found in some jobsite tools, plastic fusion welders, bore welders and appliances — such as furnaces and air conditioners — are sensitive to “dirty” generator power, which is measured in terms of harmonic frequencies and crest factor.

The ten-degree skewed rotor creates cleaner generator power by eliminating slot harmonics. Slot harmonics make up a portion of the total harmonic frequencies in a generator, and by eliminating them, generator power is smoother power, not spiked power.

The Wave Filter technology has taken total harmonic frequencies to a new low, and has a nearly perfect crest factor — which means that Trailblazer welder/generators will deliver cleaner power in any situation and keep your jobsite tools running without interruption.

**Auto-Speed**™ **Technology**

Traditional high-speed welder/generators always run at maximum speed (3600 RPM) while you’re welding — regardless of whether you need that much power. And when you’re running harder than you need to be, your fuel efficiency drops dramatically.

Auto-Speed technology automatically adjusts the engine speed to match your actual weld load requirements. Need more power? The engine will automatically ramp up. Change processes to something requiring less power, and the Trailblazer will automatically slow the engine down. For example, under low loads — such as welding with a 1/8-inch stick electrode — the engine will run at idle speed (2400 RPM). By automatically varying the engine speed, you can significantly reduce fuel consumption — and cost.

**Improved Arc Performance**

We’ve engineered the Trailblazer to provide high-quality welds across a variety of applications — knowing quality welds begin with a quality arc. That’s why we’ve significantly improved the performance for all welding processes and made it easy to fine-tune the arc to match your personal preferences and welding style.

- Three Stick modes for optimized arc performance — EXX18, EXX10 and Gouge
- Two Wire modes for simplified setup — Solid and Flux-Core
- Three TIG modes for optimized arc performance — Auto-Stop™, Auto-Crater™ and Pulse
- TIG Pulse mode available for out-of-position welding, thin metals and stainless steel where a lower amount of heat is desired while welding
- Infinite arc control available in the Stick and Solid Wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications
**Exceptional Fuel Efficiency**

Trailblazers include innovative Auto-Speed technology, which enhances fuel-efficiency by regulating engine speed.

<table>
<thead>
<tr>
<th></th>
<th>New Trailblazer</th>
<th>Previous Trailblazer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>325 Diesel</strong></td>
<td>$847</td>
<td>$0</td>
</tr>
<tr>
<td><strong>302 Diesel</strong></td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

Annual fuel savings with typical usage of 25 hours per week for 50 weeks at $4 per gallon

**Longest Runtimes**

- **10 hrs.**: 17.8 hrs.
- **15 hrs.**: 23.6 hrs.
- **20 hrs.**:
- **25 hrs.**:

Runtime hours per 12-gallon tank with typical usage

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*Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.

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**Significantly Less Noise**

Trailblazers run as low as 75 decibels — that’s almost 5.5 fewer than previous models.*

On a typical jobsite, it would take three new Trailblazers running simultaneously to equal the sound output of only one of the older model.

*Sound cannot be measured using a linear scale; therefore, the decibel (dB) unit is used. It is a logarithmic unit used to describe a ratio of power, sound pressure, voltage or intensity that gauges the sound output.

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*Based on typical usage — 150 amps welding 40% of the time; 20 amps generator power 30% of the time; and idling without load 30% of the time.
Smaller and Lighter Design
Thanks to Smart-Cor™ technology, the Trailblazer welder/generator takes up less space on trucks and trailers — leaving more room on your truck for other equipment and tools. Plus, they’re easier to move safely around jobsites — even with weld cables and running gear attached.

### Welding Specifications

<table>
<thead>
<tr>
<th>Welding Mode</th>
<th>Process</th>
<th>Amp/Volt Ranges</th>
<th>Rated Weld Output at 104° F (40° C)*</th>
<th>Single-Phase Generator Power</th>
<th>Sound Levels at 7 m (23 ft.)</th>
<th>Dimensions</th>
<th>Net Weight**</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC/DC</td>
<td>Stick/TIG</td>
<td>10–325 A</td>
<td>325 A at 33 V, 100% duty cycle</td>
<td>9,600 watts</td>
<td>Weld 150 A load: 75 dB (100 Lwa), 325 A load: 81.5 dB (106.5 Lwa)</td>
<td>H: 28 in. (711 mm) H: 34.375 in. (873 mm) (to top of exhaust) W: 20 in. (508 mm) D: 45.375 in. (1153 mm)</td>
<td>620 lb. (281 kg)</td>
</tr>
<tr>
<td>CV/DC</td>
<td>MIG/FCAW</td>
<td>10–35 V</td>
<td>325 A at 33 V, 100% duty cycle</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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

### Engine Specifications

<table>
<thead>
<tr>
<th>Engine Brand and Warranty</th>
<th>Horsepower (HP)</th>
<th>Type</th>
<th>Weld Speed</th>
<th>Idle Speed</th>
<th>Fuel Capacity</th>
<th>Oil Capacity</th>
<th>Standard Shutdowns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kubota D902, 1 year/1000 hours</td>
<td>24.8 HP at 3600 RPM</td>
<td>Three-cylinder, industrial liquid-cooled diesel</td>
<td>Auto-Speed™ 2400, 2800, 3200 or 3600 RPM</td>
<td>2400 RPM</td>
<td>12 gal. (45 L)</td>
<td>3.9 qt. (3.7 L)</td>
<td>High Coolant Temperature/Low Oil Pressure/Low Fuel</td>
</tr>
</tbody>
</table>

### Performance Data

**Weld Fuel Consumption**

![Graph showing weld fuel consumption versus DC weld amperes at 100% duty cycle](image)

**Auxiliary Power Fuel Consumption**

![Graph showing auxiliary power fuel consumption versus watts at 100% duty cycle](image)
1. Weld process switch

**Two Wire modes** — Solid and Flux-Core
- Solid: Arc characteristics optimized for steel wires which most commonly use the short circuit transfer. Turn arc control (#3) to “soft” for stainless wires and to “stiff” for aluminum.
- Flux-Core: Arc characteristics optimized for wires commonly used in construction and hard facing applications.

**Three Stick modes** — EXX18, EXX10 and Gouge
- EXX18: Optimized for the majority of Stick welding applications.
- EXX10: Hot start and arc characteristics optimized for pipe applications.
- Gouge: Maximized output for Air Carbon Arc Cutting and Gouging.

**Three Lift-Arc™ TIG modes** — Auto-Stop™, Auto-Crater™, and Pulse
- Auto-Stop™: No Auto-Crater allows full control on pipe welds with short or long arc length. Auto Stop feature allows arc to be broken without loss of shielding gas.
  *Note: Auto-Stop prevents arc flare when the arc breaks.*
- Auto-Crater™: Ideal for most DC TIG applications. Ramps down current at the end of the weld to “crater-out” without use of a remote control.
- Pulse: Ideal for out of position, thin metals, and stainless steels where a lower amount of heat is desired while welding.
  *Note for DC TIG Pulse: background amps = 25 percent of peak, peak time = 40 percent, at 100 PPS.*

2. Front panel fuel gauge with six LEDs to indicate fuel level.
   The amber LED lights when fuel is low.

3. **Arc control** is active in the Stick and Solid Wire processes. It allows the operator to customize arc characteristics to match preference, electrode and joint design from a softer arc with more fluid puddle to a stiffer arc with an often more controllable puddle. The Star setting is optimized for most applications and pointing the control at soft or stiff is optimal for most of those arc preferences. Control is fully adjustable from 0 to 25 Soft or 0 to 25 Stiff.

4. Self-calibrating digital meters
   - Preset and actual amperage/voltage
   - Process settings
   - Maintenance functions: hour meter, oil change interval, RPMs

5. **Standard 14-pin receptacle with Auto Remote Sense™** for simple connection of remote controls and wire feeders.

6. **Engine control.** Auto-Speed™ position adjusts engine to run at lower speeds depending on total power needed for welding.

7. **Glow Plugs** assist in cold weather starting.

8. **Earth Leakage Circuit Breaker (ELCB).** Provides GFCI and overcurrent protection for 240 VAC international receptacle (11).

9. **120 VAC GFCI receptacle.** Also provides GFCI protection for 120 VAC international receptacle (10).

10. **120 VAC international receptacle**

11. **240 VAC international receptacle**

12. **20 A circuit breaker.** Provides overcurrent protection for 120 VAC international receptacle (10).
**Genuine Miller® Options**

**Cold Weather Kit #301 115 Field**
Includes block heater for improved starting, and a fuel heater for optimal filtration in cold temperatures.

**Spark Arrestor #043 579 Field**
Mandatory when operating on California grasslands, brush or forest-covered land, and all National Forests. For other areas, check your state and local laws.

**Diesel Engine Filter Kit #259 935 Field**
Includes air filter, oil filter, fuel pre-filter and primary fuel filter.

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**Genuine Miller® Accessories**

**All-Purpose Running Gear #300 477**
Includes two heavy-duty 15-inch Never Flat™ tires, two 8-inch rubber swivel casters and a heavy-duty handle. Recommended for all surfaces and applications, and is easy to move around the jobsite.

**Gas Cylinder Mounting Assembly #195 330**
Designed for use with Protective Cage, or by itself. Includes base tray with bottle bracket, vertical support rack and safety chain.

- **Note:** Not recommended for use with Protective Cover.

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**Protective Cover #301 099**
Heavy-duty, water-resistant and mildew-resistant covers protect and maintain the finish of the welder.

**Plasma Cutting**

**Spectrum® 375 X-TREME™ #907 529**
See Lit. Index No. PC/9.2.

**Spectrum® 625 X-TREME™ #907 579**
See Lit. Index No. PC/9.6.

**Spectrum® 875 #907 583**
See Lit. Index No. PC/9.8.

The Spectrum 375 X-TREME and 625 X-TREME come complete with protective X-CASE™ (not shown).

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**Stick (SMAW) Welding**

**Weld Leads**

- **#173 851**
  2/0, 350-amp, 100 percent duty cycle. 50-foot stinger and 50-foot work cable.

- **#043 952**
  2/0, 300-amp, 100 percent duty cycle. 100-foot stinger and 50-foot work cable.

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**Protective Cage with Cable Holders #195 331**
Rugged cage with cable holders protects your investment. Can be used with All-Purpose Running Gear, Gas Cylinder Mounting Assembly, or with trailer.

- **Note:** Not for use with Protective Cover.
Multiprocess Welding

**Multimatic™ 200** #907 518
Portable, all-in-one multiprocess package weighs only 29 pounds (13.2 kg), and features excellent arc characteristics. Exclusive Multi-Voltage Plug (MVP™) provides flexibility to plug into 115- or 230-volt power. Take it anywhere you need to MIG, TIG or Stick weld. See Lit. Index No. DC/12.57.

MIG/Flux-Cored Welding

**SuitCase® 12RC Wire Feeder** #951 189
Lightweight, modular design and flexible enough to run a variety of wires up to 5/64-inch diameter. Includes remote voltage control, MIG gun and drive roll kit. See Lit. Index No. M/6.5.

**Spoolmatic® 30A Spool Gun** #130 831
Air-cooled, 200-amp, 1-pound spool gun for aluminum MIG. See Lit. Index No. M/1.73. Requires WC-24 Control (#137 549).

**XR® Wire Feeders and Guns**
Push-pull system designed to handle difficult-to-feed soft alloy wires such as aluminum. See Lit. Index No. M/1.7 – M/1.75

TIG (GTAW) Welding

**Dynasty® 200 Series**
For premium portable AC/DC TIG arc quality. See Lit. Index No. AD/4.8.

Remote Controls

**Wireless Remote Hand Control** #300 430
For remote current, voltage and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.

**RHC-14 Hand Control** #242 211 020
Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes 20-foot (6 m) cord and 14-pin plug.

**RFCS-14 HD Foot Control** #194 744
Heavy-duty foot current and contactor control. Includes 20-foot (6 m) cord and 14-pin plug.

**RMLS-14** #129 337
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20-foot (6 m) cord and 14-pin plug.

**RCC-14 Remote Contactor and Current Control** #151 086
Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 28-foot (8.5 m) control cord and 14-pin plug.

**Extension Cords for 14-Pin Remote Controls**
- #242 208 025 25 ft. (7.6 m)
- #242 208 050 50 ft. (15.2 m)
- #242 208 080 80 ft. (24.4 m)

Note: The Millermatic machines can be operated utilizing generator power.
### Trailers and Hitches
(Note: Trailers are shipped unassembled.)

**HWY-1000 Trailer**  #195 013
A 1000-pound (454 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. The HWY-1000 comes with jack stand, 2-inch (50 mm) ball hitch, fenders and lights.

**Cable Tree**  #195 023
Provides an area to conveniently wrap weld cables and extension cords on the HWY-1000 trailer.

**Dual Hitch**  #300 831
2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.

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### Trailer Specifications (Subject to change without notice.)

<table>
<thead>
<tr>
<th>Model</th>
<th>Gross Axle Weight Rating</th>
<th>Gross Vehicle Weight Rating</th>
<th>Net Payload</th>
<th>Height of Bed</th>
<th>Road Clearance</th>
<th>Track (Center to center of tires)</th>
<th>Standard Tires (Standard rating or P-size rating)</th>
<th>Dimensions</th>
<th>Net Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWY-1000</td>
<td>1500 lb. (680 kg)</td>
<td>1265 lb. (574 kg)</td>
<td>1000 lb. (454 kg)</td>
<td>18.5 in. (470 mm)</td>
<td>6.5 in. (165 mm)</td>
<td>50 in. (1270 mm)</td>
<td>4.8-12</td>
<td>Length: 96 in. (2489 mm)</td>
<td>Width: 57.5 in. (1460 mm)*</td>
</tr>
</tbody>
</table>

* Width at outside of fenders.

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### Ordering Information

#### Equipment and Options

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>#907 566 005</td>
<td>Trailblazer® 325 Diesel, Kubota engine, international receptacles</td>
</tr>
<tr>
<td>#301 115</td>
<td>Cold Weather Kit</td>
</tr>
<tr>
<td>#043 579</td>
<td>Spark Arrestor</td>
</tr>
<tr>
<td>#259 935</td>
<td>Diesel Engine Filter Kit</td>
</tr>
<tr>
<td>#300 477</td>
<td>All-Purpose Running Gear with Never Flat™ tires</td>
</tr>
<tr>
<td>#196 331</td>
<td>Protective Cage with Cable Holders</td>
</tr>
<tr>
<td>#196 330</td>
<td>Gas Cylinder Mounting Assembly</td>
</tr>
<tr>
<td>#301 099</td>
<td>Protective Cover</td>
</tr>
<tr>
<td>#300 831</td>
<td>Stick Weld Leads</td>
</tr>
<tr>
<td>#907 518</td>
<td>Spectrum® Plasma Cutters</td>
</tr>
<tr>
<td>#130 831</td>
<td>Multimatic™ 30A Spool Gun</td>
</tr>
<tr>
<td>#137 549</td>
<td>WC-24 Control</td>
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<tr>
<td>#136 511</td>
<td>XR™ Wire Feeder Control and Guns</td>
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<tr>
<td>#196 513</td>
<td>Dynasty® 200 Series TIG Welders</td>
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<tr>
<td>#300 831</td>
<td>Remote Controls and Cords</td>
</tr>
<tr>
<td>#195 013</td>
<td>HWY-1000 Trailer</td>
</tr>
<tr>
<td>#195 023</td>
<td>Cable Tree</td>
</tr>
<tr>
<td>#300 831</td>
<td>Dual Hitch</td>
</tr>
</tbody>
</table>

#### Date:  Total Quoted Price:

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