

Trailblazer® 325

Gas Engine-Driven Welder 

Quick Specs

Industrial Applications

Fabrication
Maintenance
Repair
Structural steel work
Sheet metal
Pipe

Processes

Stick (SMAW)
MIG (GMAW)*
Flux-cored (FCAW)*
RMD®**
Pulsed MIG (GMAW-P)**
DC TIG (GTAW)
Air carbon arc (CAC-A) cutting and gouging
Rated: 3/16-inch carbons
Capable: 1/4-inch carbons
Air plasma cutting and gouging with optional Spectrum® models

Output Range (gas models) DC stick 20–325 A
MIG/flux-cored 15–40 V
DC TIG 20–325 A

Auxiliary Power Output Rated at 104°F (40°C)

12,000 watts peak, 10,500 watts continuous

Electronic Fuel Injection (EFI) (option)

Uses up to 42 percent less fuel

Excel™ Power (option)

2,400 watts (120 V, 20 A) 60 Hz pure sine power at all speeds

Battery Charge/Crank Assist (option on EFI models)

Battery charge 12/24 V, 75 A **Crank assist** 12/24 V, 350 A

*With wire feeder. **ArcReach models only with ArcReach Smart Feeder.

Trailblazer engine-driven welders deliver unbeatable arc performance providing the smoothest, most stable arc in the industry.

The Trailblazer exclusive technologies — Auto-Speed™ and optional Excel™ power — deliver superior runtimes, increase fuel efficiency, and improve engine-driven welder performance.

No other compact machine in the 300-amp class delivers more welding power or more auxiliary power with better fuel efficiency and less noise — for productive, profitable, quieter jobsites.



Optimized arc control for stick welding applications. See page 2.



WIRELESS
INTERFACE CONTROL



Full control of your machine in the palm of your hand. See page 2.

ArcReach®

Parameter control at the wire feeder or pendant without needing a control cord. See page 2.

Trailblazer 325 EFI with ArcReach and optional wireless interface control and Excel power shown.

TRUE BLUE®
3YR. WARRANTY

Engine-driven welder is warrantied for three years, parts and labor.
Engine is warrantied separately by the engine manufacturer.



Miller Electric Mfg. LLC
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com



Trailblazer® Technologies

Dynamic DIG™ technology



Ultra-adaptive arc control. Unlike conventional DIG that provides a preset amount of short-clearing current, Miller-exclusive Dynamic DIG technology works on a time-based algorithm that automatically

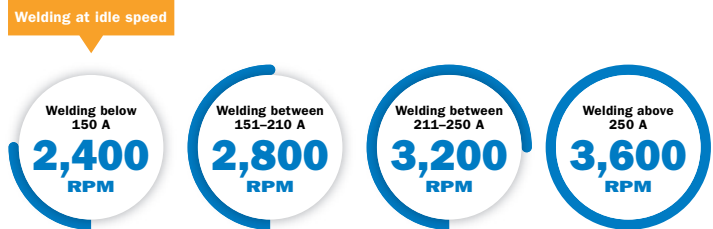
adjusts the amount of current required to clear a short. Delivers a smoother more consistent arc that can be tailored to match application, material, fit-up and welder technique.

Auto-Speed™ technology

Matches engine speed to load — a Miller exclusive. Get the welding power you need — plus reduced fuel consumption and lower noise levels for a more profitable jobsite.

Auto-Speed technology responds to weld requirements by automatically adjusting engine speed to one of four rpm levels so the engine never works harder than necessary.

Refueling time and operating costs are reduced, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered.



Auto-Speed in XX18 mode.

ArcReach® technology



Parameter control at the wire feeder or pendant without needing a control cord.

An ArcReach system allows you to change weld settings from your ArcReach feeder or stick/TIG remote, saving a trip to the power supply. ArcReach technology uses the existing weld cable to communicate

welding control information between the feeder or stick/TIG remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs.

Note: ArcReach is not available on the Battery Charge/Crank Assist model.

Wireless interface control (option)



Get full control of your machine in the palm of your hand so you can work hassle free.

With wireless interface control, you can change welding processes, adjust parameters, select and save preset programs, turn the machine on/off, get service reminders and more from wherever you are on the jobsite. Extend time between fill ups and maintenance intervals while eliminating the need to go back to your machine to make adjustments.

Wireless interface control is a factory-installed option available on select carbureted and EFI models.

VIEW STATUS

View engine status, fuel level, and battery charge level of remote.

SELECT PROCESSES

View and select between all available processes.

CONTACTOR ON/OFF

Turn contactor on/off manually in remote welding mode.

ENGINE ON/OFF

Turn engine on/off with remote.



CUSTOM PROGRAMS

Save custom presets in up to four programs and easily switch between pre-programmed settings.

FINE-TUNE ARC

Quickly adjust and save arc control settings including DIG, DIG range inductance and Auto-Stop.

AMP/VOLT ADJUST

Adjust amperage or voltage, by increments or percentage, while welding.

Excel™ power (option)

Power at idle — a Miller exclusive. Unlike competitive machines that provide auxiliary power only at 3,600 rpm (max), Excel power delivers a full 2,400 watts (20 A) of 120-volt inverter-based, pure sine-wave power at idle. With Excel power you can operate jobsite tools like grinders at quiet, fuel-saving speeds.

Refueling time and operating costs are reduced with Excel power, which means more productivity and profitability. Plus everyone on the jobsite gets a better working environment because noise levels and exhaust emissions are lowered. Excel power — available only from Miller.



UP TO 52% MORE FUEL EFFICIENT WITH EXCEL POWER

Based on auxiliary-power-only use for total runtime.

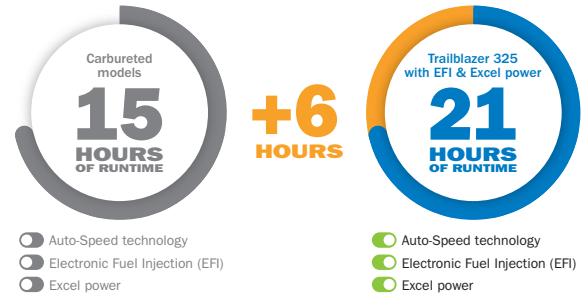
Trailblazer® Technologies

Electronic fuel injection (EFI) (option)

Improve fuel efficiency for maximum productivity and profitability.

Adding EFI to your Trailblazer engine-driven welder adds multiple benefits. With EFI, you'll get faster, more-reliable starts in any weather — no choke adjustments needed. EFI-equipped Trailblazer machines are also up to 42 percent more fuel efficient than standard carbureted models, improving profitability. Plus, refueling less frequently means you'll spend more of your time welding, improving productivity. Add Excel power to your Trailblazer with EFI for maximum fuel efficiency.

Increased performance at high altitude. Electric fuel pumps are now standard on all EFI models, leading to better performance when operating at altitudes of 5,000 feet or greater.



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

Battery charge/crank assist (option on EFI models)

Reduce downtime with battery charge/crank assist capability. Designed and recommended for mechanics or anyone else responsible for a fleet of trucks or equipment. By using your Trailblazer to charge dead batteries or

jump a stubborn engine, you'll keep your crew working and the fleet up and running.

Note: Battery charge/jump cables (300422) must be ordered separately.

Trailblazer® Benefits

Fewer refueling trips

No other gas engine-driven welder in the 300-amp class lets your crews spend more time working and less time refueling — because only Trailblazer engine-driven welders provide Auto-Speed™ technology, plus Excel™ power and electronic fuel injection (EFI) options, to deliver maximum runtime.

With optional wireless interface control, you can instantly turn your machine off when needed to save you even more fuel.

Maximum cost savings

Less money spent on fuel means more profit for you. Every Trailblazer engine-driven welder has fuel-saving Auto-Speed technology; add optional Excel power and EFI to save even more on fuel costs and enjoy a combination of advanced, profit-enhancing features that are only available on a Trailblazer engine-driven welder.

Maximize your savings with optional wireless interface control which allows you to turn your machine off remotely, saving you more money on fuel.



Estimate based on fuel cost of \$2.65 per gallon with machine operating for 25 hours per week for 50 weeks per year under typical usage — 150 amps welding 40% of the time; 20 amps auxiliary power 30% of the time; and idling without load 30% of the time.

Quieter jobsites

Quieter jobsites are more productive because work crews can communicate easier, and work can start earlier and end later — even in noise-sensitive areas. If your jobsite needs an engine-driven welder, it needs a Trailblazer engine-driven welder — because no other gas-fueled choice is as quiet.

Optional wireless interface control makes it easy to shut off the machine remotely when it's not in use, so you can lower noise levels and hear what's going on around you.



IT WOULD TAKE
7 TRAILBLAZERS
TO EQUAL THE
SOUND OUTPUT OF
1 COMPETITOR
MACHINE.

Specifications (Subject to change without notice.)



Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output at 104°F (40°C)*	Single-Phase Auxiliary Power	Sound Levels at 7 m (23 ft.)	Dimensions	Net Weight**
CC/DC	Stick/TIG	20–325 A	325 A at 28 V, 100% duty cycle	Peak 12,000 watts Continuous 10,500 watts Excel™ power (optional) 2,400 watts, 20 A at 120 V, 60 Hz pure auxiliary power at idle speed and while welding	Weld 150 A load: 65 dB (90 Lwa) 325 A load: 73.5 dB (98.5 Lwa) Auxiliary power Excel power: 65 dB (90 Lwa) 12 kW standard power: 73.5 dB (98.5 Lwa)	H: 28 in. (711 mm) H: 32.75 in. (832 mm) (to top of exhaust) W: 20 in. (508 mm) D: 40.5 in. (1,029 mm)	460 lb. (209 kg)
CV/DC	MIG/FCAW	15–40 V					
Battery charge/crank assist (optional)		12/24 V	Charge: 75 A Crank assist: 350 A				

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



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

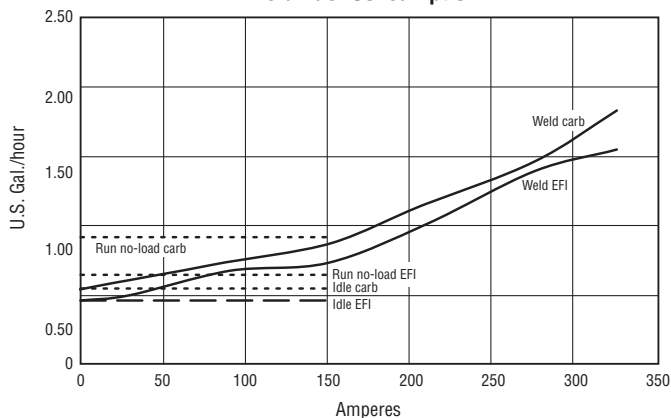
Engine Specifications (Engines warrantied separately by the engine manufacturer.)

Model	Engine Brand and Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Standard Shutdowns
Trailblazer 325*	Kohler CH730, 3-year warranty	23.5 hp at 3,600 rpm	Twin-cylinder, four-cycle overhead valve, air-cooled industrial engine	Auto-Speed™ 2,400, 2,800, 3,200 or 3,600 rpm	2,400 rpm	12 gal. (45 L)	1.5 qt. (1.4 L)	Low oil pressure
Trailblazer 325 EFI*	Kohler ECH730, 3-year warranty	23 hp at 3,600 rpm						

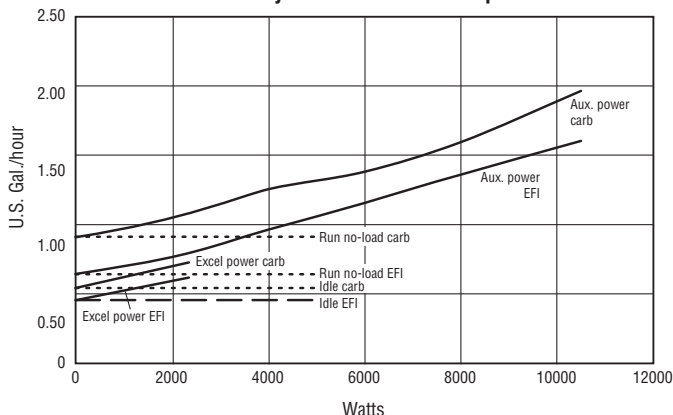
*Fuel stabilizer is recommended for gas engines that are used infrequently.

Performance Data

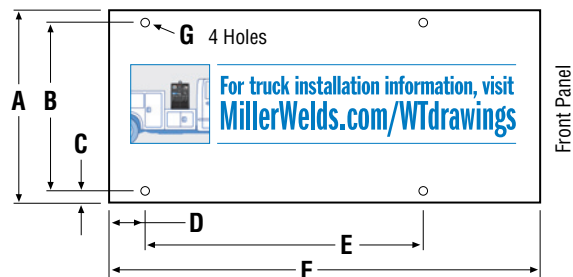
Weld Fuel Consumption



Auxiliary Power Fuel Consumption

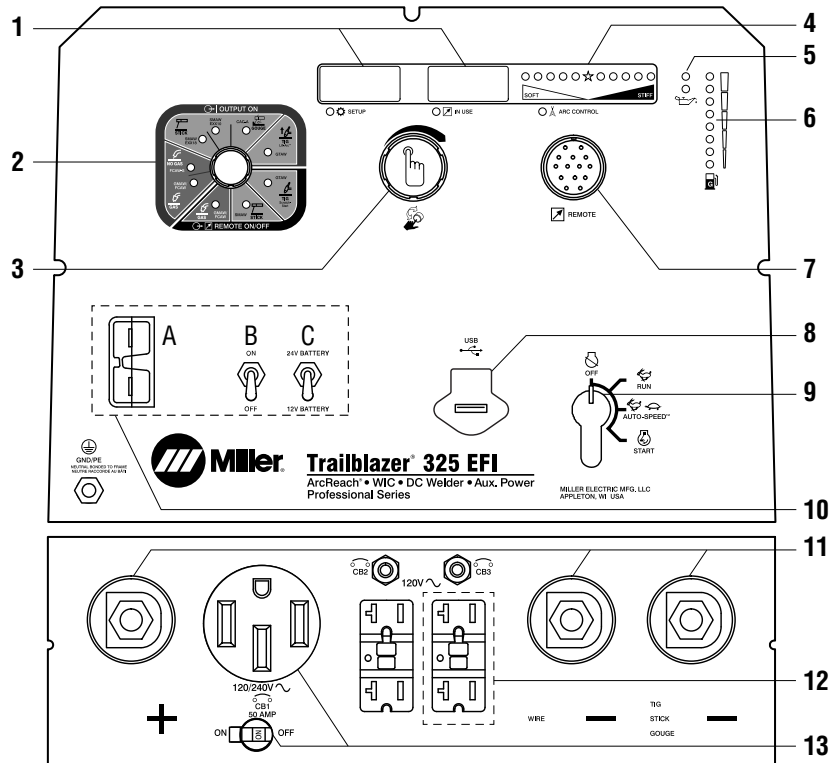


Mounting Specifications



- A. 20 in. (508 mm)
- B. 16.5 in. (419 mm)
- C. 1.75 in. (44.5 mm)
- D. 5.12 in. (130 mm)
- E. 22.3 in. (566 mm)
- F. 40.32 in. (1,024 mm)
- G. .406 in. (10.3 mm) diameter

Function and Benefit Guide



1. Self-calibrating digital meters with SunVision™

- Preset and actual amperage/voltage
- Process settings
- Maintenance functions: hour meter, oil change interval, rpm

2. Weld process selection switch

3. Pushbutton main control knob used for adjusting amperage/voltage, adjusting arc control, and accessing the service menu.

4. Adjustable arc control adjusts DIG when process control is in stick modes and adjusts inductance when process control is in FCAW or MIG modes. The amount of DIG determines how much amperage (heat) varies with stick arc length. Inductance determines the “wetness” of the weld puddle.

5. Maintenance interval reminder. Yellow and red indicator lights let an operator know when the machine is approaching, and finally in need of routine maintenance.

6. Front panel fuel gauge LEDs indicate fuel level.

7. Standard 14-pin receptacle for simple connection of remote controls and wire feeders. Includes **Auto Remote Sense™** which automatically switches from panel to remote amperage/voltage (A/V) control with remote connected. Eliminates confusion of a panel/remote switch.

8. USB port allows software updates from a USB drive. A summary file of recorded data from the unit will be saved to a USB drive that is inserted.

9. Engine control. Run/idle position adjusts engine to run at lower speeds depending on total power needed for welding.

10. Optional battery charge/crank assist (factory option, see page 8)

- A. Receptacle: Provides connection to battery charge/crank assist (12 or 24 volt)
- B. On/off switch: Provides simple control of the battery
- C. Voltage switch: Provides simple selection of battery voltage

11. Weld output terminals

12. Optional Excel™ power (factory option, see page 8) provides pure auxiliary power at idle speed and while welding.

Note: If Trailblazer is ordered without Excel power option, unit is shipped with two 20 A, 120 V duplex receptacles with circuit breakers and ground fault.

13. 50 A, 120/240 V receptacle with circuit breaker

Note: For matching plug, order 119172.

Genuine Miller® Options *Available as factory option. See ordering information on back page.

GFCI Receptacles* 300975 Field
Kit contains two GFCI 120 V duplex receptacles.

Electric Fuel Pump* 300976 Field
Recommended for gas engine operations at altitudes above 5,000 feet. Improves engine starting and high-output performance.

Spark Arrestor 300924 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.



Remote Oil Drain and Filter Kit 300923 Field
Front mount

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



Wireless Interface Control Replacement Kit 288137 Field
Replacement kit for wireless interface control machines. NOT compatible with machines that are not equipped with wireless interface control. Includes replacement remote, magnetic lanyard, USB charger, 110-volt adapter, and two screen protectors.

Wireless Interface Control Protective Covers 287594
Five-pack of screen protectors for wireless interface control remote.



Female Receptacle



Full KVA Adapter Cord 300517 Field
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic® and Spectrum® 240 V plug.



Full KVA Plug 119172 Field
120/240 V, 50 A plug (NEMA 14-50P) to fit full KVA receptacle.

Engine Tune-Up Kits Field
290804 Kohler CH730 (gas)
290805 Kohler ECH730 (EFI gas)
Includes air and fuel filters, and two spark plugs.

Genuine Miller® Accessories



Never Flat™ Tires

Available on Bobcat and Trailblazer running gear.

- Reduce costly jobsite downtime
- Maintain constant tire pressure and will not develop flats
- Protect against punctures
- Preserve maneuverability, even when weighed down with heavy welding cable



Multi-Terrain Running Gear 300913

With inner tubes

300914

With Never Flat tires

Includes two heavy-

duty 15-inch 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.



25-foot Battery Charge/Jump Cables with Plug 300422



Off-Road Running Gear 300909

With inner tubes

300910

With Never Flat tires

Includes four

heavy-duty 15-inch tires and a rugged handle to provide maximum maneuverability.



Protective Cage with Cable Holders 300921

Rugged cage with cable holders protects your investment. Can be

used with running gear, gas cylinder mounting assembly, or trailer.



300919 For gas models **without** protective cage or running gear (shown)

300920 For gas models **with** protective cage and/or running gear

Heavy-duty, water-resistant and mildew-resistant covers protect and maintain the finish of the welder.



Off-Road Running Gear with Protective Cage and Never Flat Tires 300912

Running gear and rugged cage with cable holders

protects your investment and is easy to move around the jobsite.



Gas Cylinder Mounting Assembly 300918

Designed for use with multi-terrain running gear, 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.

MIG/Flux-cored Welding



ArcReach® SuitCase® 8
951726001 With Bernard® BTB Gun 300 A
951727 With Bernard® S-Gun™
951728 With Bernard® Dura-Flux™ gun
ArcReach® SuitCase® 12
951729001 With Bernard® BTB Gun 300 A
951730 With Bernard® S-Gun™
951731 With Bernard® Dura-Flux™ gun
ArcReach® SuitCase® 12 Heavy Duty
301604 Feeder only — for 3/32-inch cored wire
 Portable feeder designed to run off of arc voltage. When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time and money. See literature M/6.55.



ArcReach® Smart Feeder 951733
 For use with ArcReach models only (see page 2 for more information). Includes drive rolls and Bernard® PipeWorx 300-15 MIG gun. For MIG, FCAW, and

advanced RMD® and pulse processes. See literature M/6.55.



SuitCase® 12RC Wire Feeder 951580001
 Lightweight and flexible enough to run wires up to .062-inch diameter. Includes remote voltage control, drive roll kit and

Bernard® BTB Gun 300 A. See literature M/6.5.



Spoolmatic® 30A Spool Gun 130831
 Air-cooled, 200-amp, one-pound spool gun for aluminum MIG. See literature M/1.73. Requires WC-24 Control **137549**.

XR™ Wire Feeders and Guns
 Push-pull system designed to handle difficult-to-feed soft alloy wires such as aluminum. See literature M/1.7 through M/1.74.

Stick (SMAW) Welding

Weld Leads

2/0 Stick Cable Set, 50 ft. (15 m) 173851
 Consists of 50-foot (15 m) 2/0 electrode cable with holder, and 50-foot (15 m) work cable with clamp. 350 A, 100% duty cycle.

2/0 Stick Cable Set, 100/50 ft. (30.5/15 m) 043952

Consists of 100-foot (30.5 m) 2/0 electrode cable with holder, and 50-foot (15 m) work cable with clamp. 300 A, 100% duty cycle.

TIG (GTAW) Welding



Dynasty® 210 Series
 For portable AC/DC TIG. See literature AD/4.81.

Plasma Cutting



Spectrum 375 X-TREME and 625 X-TREME shown.

Spectrum® 375 X-TREME™ 907529
 See literature PC/9.2.

Spectrum® 625 X-TREME™ 907579
 See literature PC/9.6.

Spectrum® 875 907583
 See literature PC/9.8.

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

Remote Solutions



and money. See literature AY/14.5.

ArcReach® Stick/TIG Remote 301325

When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time



Wireless Remote Hand Control 301582

For remote current, voltage and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. Up to 300-foot (91.4 m) operating range.



RHC-14 Hand Control 242211020

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.



PRHC-14 Hand Control 195511

Complete current or voltage control brings 120 volts GFCI power to work area in a single cord. Housed in a durable, light aluminum case and includes 125-foot (38 m) cord with plugs.

Extension Cables for 14-Pin Remote Controls

242208025 25 ft. (7.6 m)
242208050 50 ft. (15.2 m)
242208080 80 ft. (24.4 m)

Remote Output Panel Kit 951850

If your engine-driven welder is mounted on a truck, easily locate the outputs at the point of use with the auxiliary power and weld output remote panel. See literature AY/20.5.

Trailers and Hitches



HWY-Mid Frame Trailer 301438
 1,424-pound (646 kg) capacity highway trailer with welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, fenders, lights, and dual hitch with 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye.

Note: Trailer is shipped unassembled.



Cable Tree 043826

Provides an area to conveniently wrap weld cables and extension cords.



2-In-1 Document/Fire Extinguisher Holder 301236

Stores documents and holds a five-pound fire extinguisher.

Note: Holder shown mounted on trailer. Fire extinguisher not included.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Trailblazer® 325 (Kohler engine)	907797	Base model		
	907797001	With GFCI receptacles		
	907797002	With electric fuel pump and GFCI receptacles		
Trailblazer® 325 EFI (Kohler engine)	907798	With electronic fuel injection		
	907798002	With electronic fuel injection and Excel™ power		
	907798003	With electronic fuel injection, GFCI receptacles, Excel™ power and wireless interface control		
	907798004	With electronic fuel injection, Excel™ power and battery charge/crank assist (<i>No ArcReach</i>)		
	907798005	With EFI, Excel™ power, battery charge/crank assist and wireless interface control (<i>No ArcReach</i>)		
Field Options				
GFCI Receptacles	300975			
Electric Fuel Pump	300976	Recommended for gas engine operations at altitudes above 5,000 feet		
Spark Arrestor	300924			
Remote Oil Drain and Filter Kit	300923	Front mount for Kohler		
Wireless Interface Control Replacement Kit	288137	Includes replacement remote, magnetic lanyard, USB charger, 110-volt adapter, and two screen protectors		
Wireless Interface Control Protective Covers	287594	Five-pack of screen protectors for wireless interface control remote		
Full KVA Adapter Cord	300517			
Full KVA Plug	119172			
Engine Tune-Up Kits		See page 6		
Accessories				
Off-Road Running Gear	300909	With inner tubes		
	300910	With Never Flat™ tires		
Off-Road Running Gear with Protective Cage	300912	With Never Flat™ tires		
Multi-Terrain Running Gear	300913	With inner tubes		
	300914	With Never Flat™ tires		
Protective Cage with Cable Holders	300921			
Gas Cylinder Mounting Assembly	300918	<i>Not recommended for use with protective cover</i>		
25-foot Battery Charge/Jump Cables with Plug	300422			
Protective Covers		See page 6		
MIG/Flux-cored Welding				
Wire Feeders		See page 7		
Spoolmatic® 30A Spool Gun	130831	Requires WC-24 control. See literature M/1.73		
WC-24 Control	137549	See literature M/1.73		
XR™ Wire Feeder Control and Guns		See literature M/1.7 through M/1.74		
Stick/TIG Welding		See page 7		
Plasma Cutting		See page 7		
Remote Solutions/Extension Cables		See page 7		
Trailers and Hitches				
HWY-Mid Frame Trailer	301438	Trailer with lights, fenders and dual hitch. For highway use		
Cable Tree	043826	Trailer-mounted cable holder		
2-In-1 Document/Fire Extinguisher Holder	301236	Stores documents and holds a five-pound fire extinguisher		

Date:

Total Quoted Price:

Distributed by:

