

Trailblazer® 330

Issued Feb. 2025 • Index No. ED/4.76

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)*
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

*With wire feeder.

Output Range DC stick 20–330 A
MIG/flux-cored 15–40 V
DC TIG 20–330 A

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

12,000 watts peak, 10,500 watts continuous

Electronic Fuel Injection (EFI) (option)

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, 150 A Crank assist 12/24 V, 300 A

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

The Trailblazer exclusive technologies — advanced 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.

WIRELESS INTERFACE CONTROL



Full control of your machine in the palm of your hand. See page 3.



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

ArcReach®

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



Trailblazer 330 EFI with ArcReach and optional Excel power shown.



Easy to use

Digital interface speeds machine setup and makes it less complicated.



Exceptional arc performance

Easy arc starts and less spatter.



Easier mobility and uses less truck space and payload

Over 80 pounds lighter and 13 percent smaller than previous model.



Easy maintenance

With its intuitive design, the daily maintenance of our Trailblazer engine-driven welder is fast and easy.



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



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MillerWelds.com
f x y o i n



The Trailblazer® Advantage

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.

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.

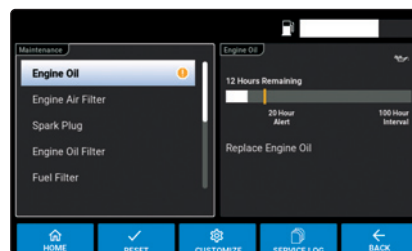
Auto-Set™ technology

Auto-Set offers predefined weld settings to increase ease of use and ensure that the job is done right for operators of all skill levels.



Data visibility

Predictive maintenance information helps you plan necessary service time. Productivity screens make it easier for you to monitor machine use.



Direct spool gun connection

Make it easy to weld aluminum. Expand the types of jobs you can take on. Adapters are no longer required with the integrated 10-pin connection. Optimized for Spoolmate™ and Spoolmatic® spool guns.



Advanced 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.

Advanced Auto-Speed technology automatically varies engine speed from 1,800–3,600 rpm to match compressed air, battery charge and weld demands — reducing fuel consumption, maintenance costs and noise for a safer, more efficient jobsite.

Small, light design

Trailblazer engine-driven welders take up less space on trucks and trailers — leaving more room on your truck for other equipment and tools. Plus, they're easier to move around jobsites — even with weld cables attached.



Long runtimes

Large 11-gallon fuel capacity means many hours of run time before refueling. Improved fuel system design reduces a no-start condition if overfilled.

Auxiliary power quality

Trailblazer 330 engine-driven welders produce auxiliary power with four percent total harmonic distortion.

Typical equipment power usage

Trailblazer engine-driven welders will easily start and run the following:

Equipment	Starting Watts	Running Watts
Barn Cleaner (5 hp)	11,600	3,000
Silo Unloader (5 hp)	12,200	4,300
Portable Conveyor (1/2 hp)	3,400	1,000
Milker (5 hp)	10,500	2,800
Hand Drill (1/2 inch)	600	600
Circular Saw (8-1/4 inch)	1,400	1,400
Air Compressor (1-1/2 hp)	8,200	2,200
Flood Lights (Vapor)	1,250	1,000
Spectrum® 625 X-TREME™ (30 A, 230 V, 1/2-inch cut)	6,900	6,900

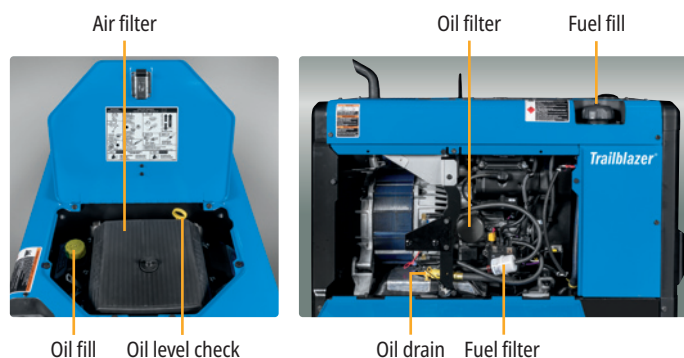
To size a unit that has enough power output in watts, add the watts for the items you want to simultaneously run. Tools with induction motors may require three to seven times the listed wattage when starting. **All data listed is approximate — check your tool for specific wattage requirements.**

The Trailblazer® Advantage

Easy maintenance

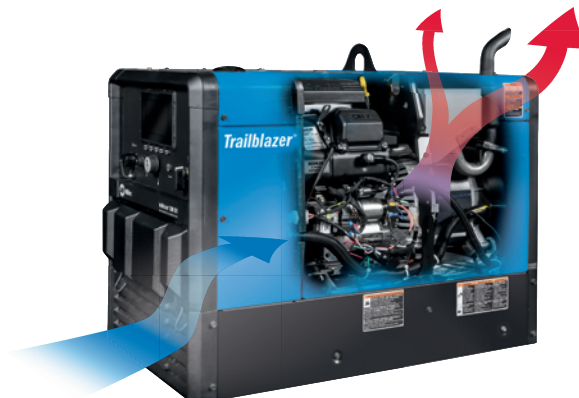
With its intuitive design, the daily maintenance of our Trailblazer engine-driven welders is fast and easy. Front panel maintenance displays help you know when your equipment needs to be serviced. And servicing is simple because of:

- Oil checks that can be performed easily through the top of the machine by the access door
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter



Reversed air flow for optimized cooling

Exclusive engine and interior componentry design operates cooler and more efficiently. The engine is rotated towards the front to create more efficient airflow. More efficient airflow and exclusive engine location are significant contributors to reduced sound level and size reduction. Hot air recirculation is eliminated when machine is mounted in tight spots, and internal parts are kept cool for optimal performance.



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.

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.

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.

Battery charge/crank assist (option)

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.

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	20–330 A	330 A at 30 V, 100% duty cycle	Peak 12,000 watts Continuous 10,500 watts Excel™ power 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) 330 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: 26.5 in. (673 mm) H: 31.2 in. (792 mm) (to top of exhaust) W: 20.13 in. (511 mm) D: 37.06 in. (941 mm)	400 lb. (181 kg)
CV/DC	MIG/FCAW	15–40 V	325 A at 30.25 V, 100% duty cycle				
Battery charge/crank assist		12/24 V	Charge: 150 A Crank assist: 300 A				

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



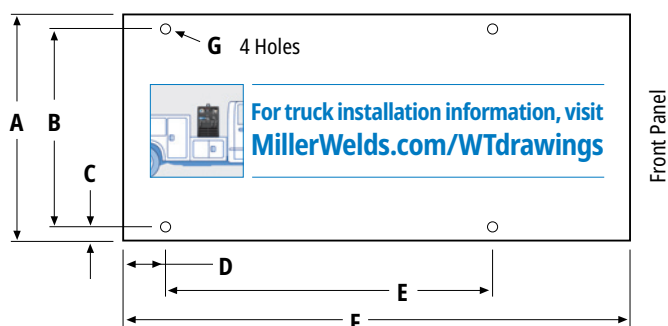
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

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 330*	Kohler CH730, 3-year warranty	23.5 hp at 3,600 rpm	Twin-cylinder, four-cycle overhead valve, air-cooled industrial engine	Advanced Auto-Speed™ 2,400, 2,800, 3,200 or 3,600 rpm	2,400 rpm	11 gal. (41.6 L)	1.4–1.6 qt. (1.3–1.5 L)	Low oil pressure
Trailblazer 330 EFI*	Kohler ECH730, 3-year warranty	23 hp at 3,600 rpm						

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

Mounting Specifications

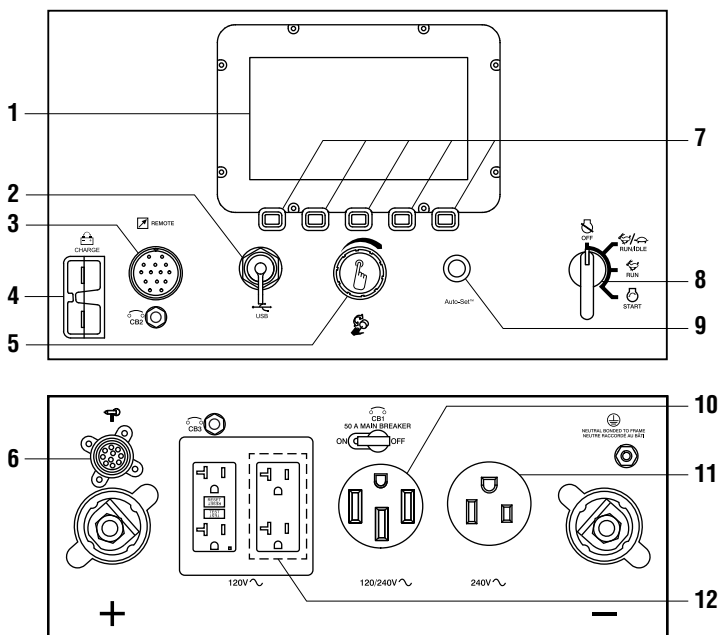


- A. 20 in. (508 mm)
- B. 16.5 in. (419 mm)
- C. 1.75 in. (44.5 mm)
- D. 3.18 in. (81 mm)
- E. 22.3 in. (566 mm)
- F. 37 in. (940 mm)
- G. .406 in. (10.3 mm) diameter

Choose the Right Bobcat™ or Trailblazer® Engine Drive

Fuel System	Bobcat 230	UPGRADE	Bobcat 265	UPGRADE	Trailblazer 330
Fuel Type	Gasoline		Gasoline or LP		Gasoline
Delivery	Carburetor (manual choke)	➔	Carburetor (Gas Kohler: eChoke™ / Gas Vanguard and LP: manual choke)	➔	Carburetor (eChoke™) or EFI
Weld					
Output	DC only, CC/CV		DC only, CC/CV		DC only, CC/CV
Processes	Stick / MIG / FCAW	➔	Stick / TIG / MIG / FCAW / Gouge		Stick / TIG / MIG / FCAW / Gouge
Amperage Range	20–230 A	➔	20–265 A	➔	20–330 A
Voltage Range	14–25 V	➔	14–28 V	➔	15–40 V
Auxiliary Power					
Peak Watts	11,000 watts		11,000 watts	➔	12,000 watts
Continuous Watts	9,500 watts		9,500 watts	➔	10,500 watts
Sound Levels					
Maximum / At Idle	73.1 dB / 64 dB		73.1 dB / 64 dB		73.5 dB / 65 dB
Dimensions					
Size (H x W x D)	26.5 x 20.13 x 37.06 in.		26.5 x 20.13 x 37.06 in.		26.5 x 20.13 x 37.06 in.
Weight	376 lb.		382 lb.		400 lb.
Key Features					
Display	Knob	➔	LCD		LCD
Maintenance	Fuel / hour / oil	➔	Predictive maintenance		Predictive maintenance
Auto-Set™	—	➔	Yes		Yes
Battery Charge / Crank Assist	—	➔	150 A charge / 300 A crank (option)		150 A charge / 300 A crank (option)
ArcReach®	—	➔	Yes (option)	➔	Yes (standard)
Spool Gun	—	➔	Direct connect		Direct connect
Remote Start/Stop	—	➔	Yes (Kohler gas models only)	➔	Wireless interface control (option)

Function and Benefit Guide



- Digital display** provides weld process and parameters, fuel level, maintenance and machine use information.
- 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.
- 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.
- Optional battery charge/crank assist receptacle.**
- Pushbutton main control knob** used for adjusting amperage/voltage and accessing the service menu.
- Standard 10-pin receptacle** for simple connection of spool guns. See page 7.
- Pushbuttons** used for selection of weld process, menu and other machine features.
- Engine control switch** is used to start the engine and then select between auto idle and high speed lock positions.
- Auto-Set™ button** provides process-specific pre-defined parameters.
- 120/240 V receptacle with circuit breaker.**
(For matching plug, order 119172.)
- 240 V receptacle with circuit breaker.**
- 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.

Genuine Miller® Options

*Factory installed on all EFI models. See ordering information on back page.

Electric Fuel Pump* 301741 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.



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

284083 Field. Kohler CH730 (carb)

246115 Field. Kohler ECH730 (EFI)

Kits include air, fuel and oil 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



Off-Road Running Gear with Never Flat Tires 301706

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



Off-Road Running Gear with Protective Cage and Never Flat Tires 301707

Running gear allows easy movement around jobsite

and rugged cage with cable holders protects your investment.



Multi-Terrain Running Gear with Never Flat Tires 301708

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.



Protective Cage with Cable Holders 301709

Rugged cage with cable holders protects your investment. Can be

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



Gas Cylinder Mounting Assembly 301711

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.



25-foot Battery Charge/Jump Cables with Plug 300422



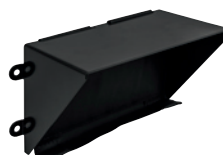
Protective Covers 301712

For use **without** protective cage or running gear (shown)

301713

For use **with** protective cage and/or running gear

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



Sun Shade 301714

Compatible with all Bobcat™ 265 and Trailblazer® 330 engine-driven welders.



Screen Protector Kit 301742

Compatible with all Bobcat™ 265 and Trailblazer® 330 engine-driven welders.



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.

MIG/Flux-cored Welding



Millermatic® 142 907838

See literature DC/12.41

Millermatic® 211 907614

See literature DC/12.58

The Millermatic line of MIG welders are complete arc welding power source, wire feeder and gun packages designed for portability and ease of use.

Note: The Millermatic machines can be operated utilizing auxiliary power.

MIG/Flux-cored Welding (cont.)



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

Portable feeder designed to run off of arc voltage. 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**

Rated at 200 amps, 100 percent duty cycle with 30-foot (9 m) cable. See literature M/1.73.



Spoolmate™ 200 Spool Gun **300497**

Rated at 160 amps, 60 percent duty cycle with 20-foot (6 m) cable. See literature M/1.47.

XR™ Wire Feeder and Guns

Push-pull system designed to handle difficult-to-feed soft alloy wires such as aluminum. See literature DC/34.0 and M/1.71 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.

Multiprocess Welding



Multimatic® 215 **907693**

Portable, all-in-one multiprocess package weighs only 38 pounds (17.2 kg), and features excellent arc characteristics.

Exclusive multi-voltage plug (MVP™) provides flexibility to plug into 120- or 240-volt power. Take it anywhere you need to MIG, TIG or stick weld. See literature DC/12.59.

Remote Solutions



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 and money. See literature AY/14.5.



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.

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).

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® 330 (Kohler engine)	907831 907831001	Base model With Excel™ power		
Trailblazer® 330 EFI (Kohler engine)	907832 907832001 907832002 907832003 907832004 907832005 907832006	Base model With Excel™ power With Excel™ power and wireless interface control With Excel™ power and battery charge/crank assist With Excel™ power, battery charge/crank assist and wireless interface control With Excel™ power and polarity reversing With Excel™ power, polarity reversing and wireless remote control		
Field Options <i>Options listed below can be added to the above packages. Installation is required.</i>				
Electric Fuel Pump	301741	Recommended for gas engine operations at altitudes above 5,000 feet		
Spark Arrestor	300924			
Full KVA Adapter Cord	300517			
Full KVA Plug	119172			
Engine Tune-Up Kits	284083 246115	For Kohler CH730 (carb). Includes air, fuel and oil filters, and two spark plugs For Kohler ECH730 (EFI). Includes air, fuel and oil filters, and two spark plugs		
Accessories				
Off-Road Running Gear	301706	With Never Flat™ tires		
Off-Road Running Gear with Protective Cage	301707	With Never Flat™ tires		
Multi-Terrain Running Gear	301708	With Never Flat™ tires		
Protective Cage with Cable Holders	301709			
Gas Cylinder Mounting Assembly	301711	<i>Not recommended for use with protective cover</i>		
25-foot Battery Charge/Jump Cables w/Plug	300422			
Protective Covers	301712 301713	For use without protective cage or running gear For use with protective cage and/or running gear		
Sun Shade	301714			
Screen Protector Kit	301742			
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		
MIG/Flux-cored Welding				
Millermatic® Series MIG Welders		See page 6		
Wire Feeders		See page 7		
Spool Guns		See page 7		
XR™ Wire Feeder and Guns		See literature DC/34.0 and M/1.71 through M/1.74		
Stick Welding		See page 7		
TIG Welding		See page 7		
Multiprocess Welding		See page 7		
Remote Solutions/Extension Cables		See page 7		
Plasma Cutting		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:

