

Bobcat™ 225 and 250

Gas or LP Engine-Driven
Welder/AC Generator



Quick Specs

Industrial Applications

Maintenance
Repair
Farm/Ranch Applications
Fabrication
Structural Steel Work
Use as a Stand-Alone Generator

Processes

Stick (SMAW)
Flux-Cored (FCAW)
MIG (GMAW)
DC TIG (GTAW)
Non-Critical AC TIG (GTAW)
Air Carbon Arc (CAC-A)
Cutting and Gouging
(250 model only, 3/16-in. carbons)
Air Plasma Cutting and Gouging
with optional Spectrum models

Output Range

	225	250	250 EFI
AC Stick/TIG	70–150 A	40–250 A	40–250 A
DC Stick/TIG*	50–225 A	40–250 A	40–250 A
FCAW/MIG	19–28 V	17–28 V	17–28 V

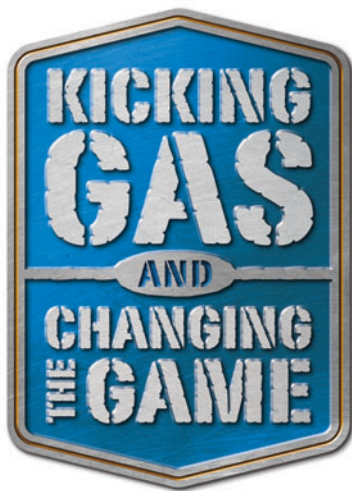
*DC TIG available above 80 amps.

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

225/250 Peak: 11,000 W
225/250 Continuous: 9500 W

250 EFI Peak: 12,000 W
250 EFI Continuous: 10,500 W

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



The most popular welder/generator in the industry is getting better. Building on its exceptional value, the redesigned Bobcats are:

- Quieter to operate
- Smaller and lighter
- More fuel efficient with EFI
- Easier to maintain



Bobcat 250 EFI model shown.



Safer, more productive jobsite



Easier mobility and uses less truck space and payload

Easier Maintenance

With its intuitive design, the daily maintenance of our Bobcat welder/generators is faster and easier.



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
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



The Bobcat™ Advantage

Quieter and Better Sound*

Significant improvements in sound level and quality offer better jobsite communication, which provides a safer, more efficient working environment for you and your crew. Bobcat welder/generators have rotated the engine toward the front to create more efficient airflow, resulting in significantly quieter operation. Now you can start your job earlier in the day and end it later, as well as work around hospitals, businesses, and residential areas.



Smaller and Lighter Design*

Bobcat welder/generators 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 safely around jobsites — even with weld cables and running gear attached.

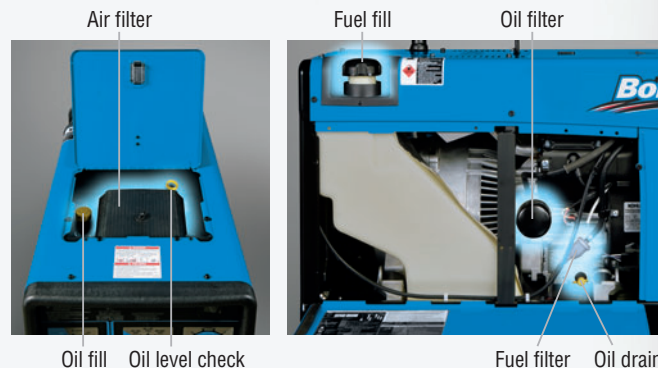


**Compared to previous model*

Easier Maintenance*

With its intuitive design, the daily maintenance of our Bobcat welder/generators is faster and easier. With front panel maintenance displays, you know when your equipment needs to be serviced. And servicing is simple because of:

- Oil checks that can be performed from the top by the front panel
- Toolless panels that allow for quick access
- Single-side fuel fill and oil drain/filter



Designed for Reliability

From Appleton, Wis. USA, our welder/generators are the most rugged, durable and long-lasting in the industry. We manufacture them to exceed requirements for extreme working conditions and they are hard-working from the core:

- Copper windings and iron generator components for a quality-built machine
- Lugged — not soldered — heavy internal leads for better field durability

- Superior cooling technology for maximum performance and engine life
- Super-tough armor to protect the welder/generator from accidental impact
- Protective armor doors to cover the weld studs and receptacles as required by OSHA and CSA for jobsite safety
- Lift hook integrated into the center frame, which bolts to the machine's base for greater durability



Long Runtimes

Large 12-gallon fuel capacity means many hours of run time before refueling.

Versatile AC and DC Weld Output

Provides quality welds on all types of metals. DC is smooth and easy to run while AC Stick is used when arc blow occurs.

Bobcat™ 250 Additional Features

- Front panel fuel and sight gauges provide convenient fuel level indication
- Smoother weld output and better generator power while welding
- More weld output than 225-amp welder generators — 72 percent more power for MIG/FCAW, 67 percent more for AC welding, and 11 percent more for DC Stick



Bobcat 250 recommended option

Electronic Fuel Injection (EFI)

EFI gas engines optimize the air/fuel ratio for all engine speeds and engine loads, resulting in lower operational costs, fewer emissions, longer runtimes and better performance when compared to carbureted models. The payback from fuel savings alone is a matter of months.



EFI Advantages (vs. carburetor models)

- 12,000 watts of generator power
- Up to 27 percent better fuel efficiency — save up to \$1,000 per year in fuel and extend runtimes by as much as 2.5 hours per tank
- Fast, easy starts in all climates — no choke required
- Reliable operation, even with infrequent use — less prone to fuel deterioration
- Fewer emissions — 27 percent less CO and 33 percent lower HC+NOx levels

Reversed Generator Airflow

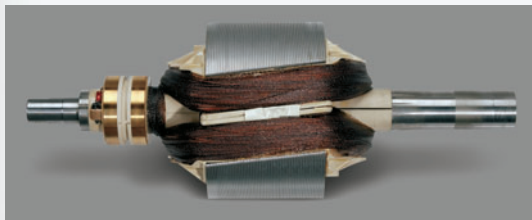


Exclusive engine and generator packaging design operates cooler and more efficiently. The engine is rotated towards the front to create more efficient airflow. More efficient airflow and exclusive engine location are significant contributors to reduced sound level and size reduction. Hot air recirculation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

The Bobcat™ Generator Power Advantage

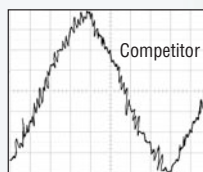
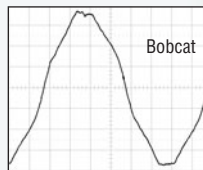
Accu-Rated™ — Not Inflated Generator Power

Our Accu-Rated™ 11,000 watts (**12,000 with EFI**) of *usable* peak power is delivered for a minimum of 30 seconds. Accu-Rated means peak power is usable for maximum generator loads such as plasma cutting, Millermatic® MIG welders and motor starting. Accu-Rated peak power beats the competition's very short-duration peak or surge power. Use your peak power, it's more than a number.

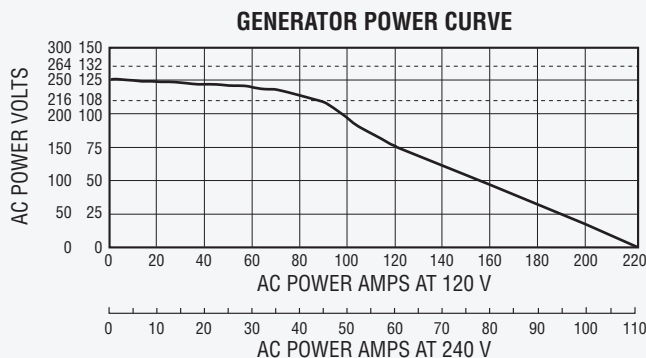


Smooth Power — Not Spike Power

Revolutionary ten-degree skewed-rotor design optimizes generator performance for smoother power — not spiked power found with other brands. Better power — better performance.



Waveform Comparison



Tools and motors are designed to operate within 10 percent of 120/240 VAC. The Bobcat's power generator provides strong power while keeping the voltage within 10 percent of 120/240 VAC. **This increases tool/motor performance and life.**

Typical Equipment Power Usage

Bobcats will easily start and run the following equipment:

Equipment	Starting Watts	Running Watts
Barn Cleaner (5 HP)	11,600	3000
Silo Unloader (5 HP)	12,200	4300
Portable Conveyor (1/2 HP)	3400	1000
Milker (5 HP)	10,500	2800
Hand Drill (1/2 inch)	600	600
Circular Saw (8-1/4 inch)	1400	1400
Air Compressor (1-1/2 HP)	8200	2200
Flood Lights (Vapor)	1250	1000
Refrigerator/Freezer	2200	700
Sump Pump	1300	800
Millermatic® 212 Auto-Set™ MIG Welder (230 V)	6500	6500
Spectrum® 625 X-TREME™ (30 A, 230 V, 1/2-inch cut)	6900	6900

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

Specifications (Subject to change without notice.)



Model	Welding Mode	Process	Amp/Volt Ranges	Rated Output at 100% Duty Cycle (at 104° F/40° C) ²	Single-Phase Generator Power	Sound Levels at Max. Load/ at 150 Amps	Dimensions	Net Weight ³
Bobcat 225	CC/AC	Stick/TIG	70–150 A	150 A at 25 V	Peak: 11,000 watts Continuous: 9500 watts 120/240 VAC, 88/44 A, 60 Hz	73.5 dB/72 dB	H: 28 in. (711 mm) H: 32.75 in. (832 mm) (to top of exhaust) W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	485 lb. (220 kg)
	CC/DC	Stick/TIG ¹	50–110 A 70–170 A 80–225 A	225 A at 25 V				
	CV/DC	MIG/FCAW	19–28 V	200 A at 20 V				
Bobcat 250	CC/AC	Stick/TIG	40–140 A 60–160 A 80–225 A 100–250 A	225 A at 25 V (250 A at 25 V, 60% Duty Cycle)	Peak: 11,000 watts Continuous: 9500 watts 120/240 VAC, 88/44 A, 60 Hz EFI Model Peak: 12,000 watts Continuous: 10,500 watts	72.5 dB/72 dB	H: 28 in. (711 mm) H: 32.75 in. (832 mm) (to top of exhaust) W: 20 in. (508 mm) D: 40.5 in. (1029 mm)	501 lb. (227 kg)
	CC/DC	Stick/TIG ¹		250 A at 25 V				
	CV/DC	MIG/FCAW	17–22 V 20–28 V	250 A at 25 V (275 A at 25 V, 60% Duty Cycle)				

Note: Derate outputs up to five percent when using LP fuel. 1) DC TIG available above 80 amps. 2) Rated at sea level. 3) Net weight without fuel.



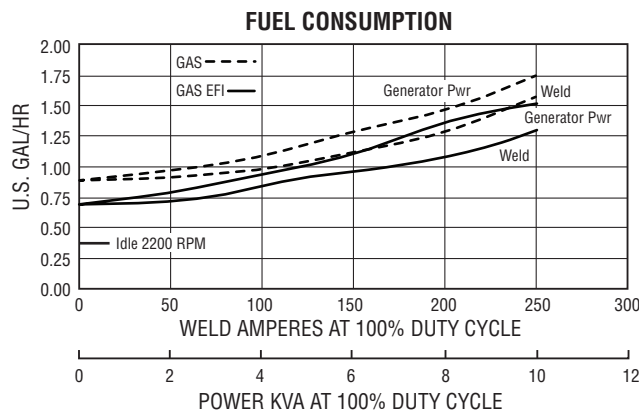
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

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

Model	Engine Brand and Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Standard Shutdowns
Bobcat 225 and 250	Kohler CH730, 3-year warranty	Gas: 23.5 HP at 3600 RPM LP: 21 HP at 3600 RPM	Twin-cylinder, four-cycle overhead valve, industrial air-cooled, gasoline* (carburetor or EFI) or LP	3600 RPM	2300 RPM	12 gal. (45 L)	1.5 qt. (1.4 L)	Low Oil Pressure
Bobcat 250 EFI	Kohler ECH730, 3-year warranty	23 HP at 3600 RPM						

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

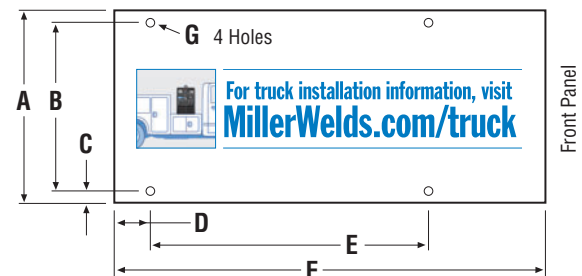
Performance Data



FUEL CONSUMPTION DATA

- 12-gallon fuel capacity.
- On a typical job using 1/8-inch 7018 electrodes (125 A, 20% duty cycle) expect about 20 hours (gas) of operation.
- Welding at 150 A, 40% duty cycle uses approximately 3/4 gallon per hour — about 16 hours of operation (gas).
- Under a continuous load of 4000 watts of generator power, the Bobcat would run for about 14 hours (gas) of operation.

Mounting Specifications



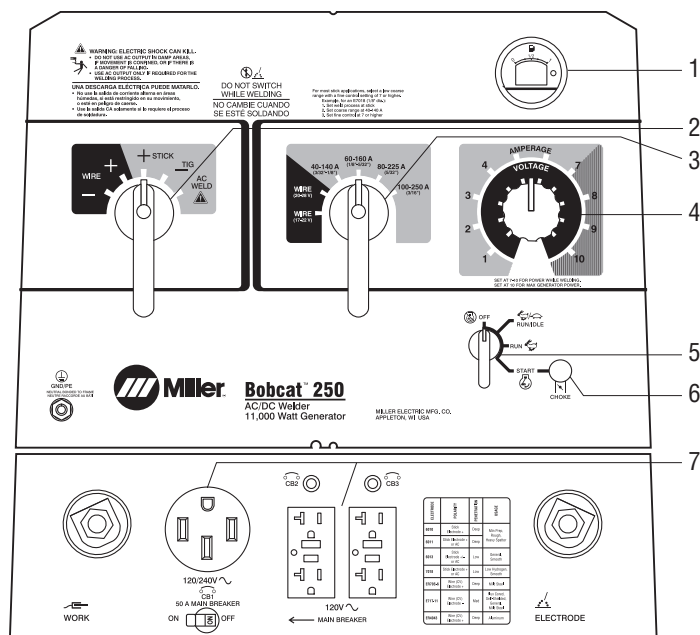
- A. 20 in. (508 mm)
- B. 16.5 in. (419 mm)
- C. 1.75 in. (44.5 mm)
- D. 5.12 in. (130 mm)
- E. 22.3 in. (566 mm)
- F. 40.32 in. (1024 mm)
- G. .406 in. (10.3 mm) diameter

Choose the Right Bobcat™ Engine Drive

Sound Levels	Bobcat 225	UPGRADE	Bobcat 250
At Maximum Load / At 150 Amps	73.5 dB / 72 dB	➡	72.5 dB / 72 dB
Compared to Previous Model	Up to 1/4 Less Noise	➡	Up to 1/3 Less Noise
Sound Quality	Good	➡	Very Good
Fuel System			
Typical Runtime per 12-Gallon Tank	13 hours	➡	13 hours / 15.5 hours with EFI
Efficiency	Good	➡	Good / Very Good
Type	Gasoline		Gasoline or LP
Delivery	Carburetor		Carburetor or EFI
Generator			
Watts	11,000	➡	11,000 / 12,000 with EFI
Clean Power Quality	Very Good		Very Good
Power While Welding	Fair / Good with voltage control set near maximum	➡	Good — easier to fine tune arc with voltage control near maximum
Weld Performance			
Stick	Good / Very Good	➡	Very Good
Wire (Solid/FCAW), Steel	Fair: .035 in.	➡	Good: .035–1/16 in.
Wire, Aluminum with Spool Gun	Fair / Good	➡	Very Good
DC TIG (Steel)	Good	➡	Very Good
AC Weld	70–150 amps	➡	40–250 amps
Carbon Arc Gouging	N/A	➡	Good / Very Good, Carbons: Rated 3/16 in.
Dimensions			
Size (H x W x D)	28 x 20 x 40.5 in.		28 x 20 x 40.5 in.
Weight	485 lb.		501 lb.
Key Features			
Maintenance Displays	Hours / Oil Change	➡	Hours / Oil Change / Fuel

Note: See MillerWelds.com or the Full-line Catalog to compare to Trailblazer models.

Function and Benefit Guide



- Maintenance Displays** provide fuel level (250 models only), engine hours and oil change interval information.
- Weld Process Selector Switch** makes choosing between Stick, Wire and TIG processes easy. Switch also automatically changes polarity with process selection to make sure the machine is easy to set with little effort or knowledge (on 225 model, Weld Process Selector Switch is combined with Coarse Range Control).
- Coarse Range Control**
225 Model — Three DC Stick/TIG, one AC TIG, and one Wire range are available for output control. Stick ranges are designed for electrode diameters (3/32, 1/8 and 5/32 inch) making these models **very easy to set**.
250 Model — Four Stick/TIG and two Wire ranges are available for output control. Stick ranges are designed for electrode diameters (3/32, 1/8, 5/32 and 3/16-inch) making these models **very easy to set**.
- Fine Adjust Control** makes it easy to fine tune amperage within a coarse range. Set control above 7 for best power while welding and to 10 for generator-only use.
- Engine Control Switch** is used to start the engine and then select between Auto Idle and High Speed Lock.
- Engine Choke Control** is used for easy engine starting.
Note: No choke necessary on EFI models.
- 120 VAC and 240 VAC Covered Receptacles with Circuit Breakers.**
Note: For matching plug, order #119 172.

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

GFCI Receptacles* #300 975 Field
Kit contains two GFCI 120 VAC duplex receptacles.

LP Gas*
Liquid withdrawal LP system with vaporizer and regulator. Does not include tanks, brackets, or hose from tank to regulator.

Note: Order #300 917 Hose and LP Tank Mounting Assembly separately.

Electric Fuel Pump* #300 976 Field
For gas models at high altitude. Improves engine starting and high-output performance.

Spark Arrestor #300 924 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
#300 923 Field
Front mount for Kohler. Makes servicing easy when engine drive is mounted in tight spots.



Female Receptacle



Adapter Cord, Full KVA #300 517 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 Kit
#119 172 Field
120/240 VAC, 50 A plug (NEMA 14-50P) to fit full KVA receptacle.

Order the following from Miller Service Parts.

Engine Tune-Up Kits

#230 015 Field. Kohler CH730 (Gas)
#246 115 Field. Kohler ECH730 (EFI Gas)
#252 838 Field. Kohler CH730 (LP)
Includes spark plugs and engine filters.

Genuine Miller® Accessories



Never Flat™ Tires

Available on Bobcat and Trailblazer Running Gear.

- Eliminate 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

#300 913 Gas/LP, with inner tubes
#300 914 Gas/LP, 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.



Hose and LP Tank Mounting Assembly

#300 917 LP

Designed for use with Multi-Terrain Running Gear, Protective Cage, or by itself. Includes bracket and clamp to

mount 33- and 43-pound tanks horizontally, and hose with fittings to convert.

Note: Not for use with Gas Cylinder Mounting Assembly. Not recommended for use with Protective Cover.



Off-Road Running Gear

#300 909 Gas/LP, with inner tubes
#300 910 Gas/LP, with Never Flat™ tires

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



Protective Cage with Cable Holders

#300 921 Gas/LP
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.



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

#300 912 Gas/LP
Running gear and rugged cage with

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



Gas Cylinder Mounting Assembly

#300 918 Gas
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 for use with LP Tank Mounting Assembly. Not recommended for use with Protective Cover.

Protective Covers



#300 919 For Gas models **without** Protective Cage or Running Gear (shown)

#300 920 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.

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.

Plasma Cutting



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

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).

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



Millermatic 211 Auto-Set with MVP shown.

Millermatic® 140 Auto-Set™ #907 335

See Lit. Index No. DC/12.42

Millermatic® 180 Auto-Set™ #907 312

See Lit. Index No. DC/12.44

Millermatic® 211 Auto-Set™ with MVP™ #907 422

See Lit. Index No. DC/12.54

Millermatic® 212 Auto-Set™ #907 405

See Lit. Index No. DC/12.46

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 generator power.



SuitCase® X-TREME™ 8VS Wire Feeder #951 583

SuitCase® X-TREME™ 12VS Wire Feeder #951 543

Lightweight, voltage-sensing wire feeders include secondary contactor, MIG gun, gas valve and drive roll kit. See Lit. Index No. M/6.42.



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-115A Control (#137 546-01-1).

WC-115A Control #137 546-01-1

With contactor. Use with Spoolmatic 30A.



Spoolmate® 3035

Spool Gun #195 016

Use with SGA 100C Control and Heavy-Duty Barrel. Spool gun for aluminum and

other wires. Four-inch spools; .023–.035 inch (0.6–0.9 mm) aluminum, steel and stainless steel. Rated at 150 amps, 60 percent duty cycle with 20-foot (6 m) cable assembly.

SGA 100C Control #043 857

SGA with contactor required to connect Spoolmate 3035 to CV engine drive. Includes 10-foot (3 m) 115 VAC power cable and plug, 6-foot (1.8 m) interconnecting cable, and 5-foot (1.5 m) gas hose.

Heavy-Duty Barrel for Spoolmate™ 3035

#195 375

Use for demanding applications, rated at 200 A, 60 percent duty cycle.

TIG (GTAW) Welding



Dynasty® 200 Series

For premium portable AC/DC TIG arc quality. See Lit. Index No. AD/4.8.



HF-251 Series #042 388

HF-251D-1, 115 VAC High-frequency arc starter and stabilizer. See Lit. Index No. AY/5.0. Requires Secondary Contactor.

Secondary Contactor #041 969

Field Required to use HF-251D-1.

Trailers and Hitches



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.

Note: Trailer is shipped unassembled.

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.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Bobcat™ 225	#907 498-001 #907 498	Base model with Kohler engine Kohler engine, with GFCI Receptacles		
Bobcat™ 250	#907 500-001 #907 500 #907 500-002	Base model with Kohler engine Kohler engine, with GFCI Receptacles Kohler engine, with Electric Fuel Pump		
Bobcat™ 250 EFI	#907 502	Base model with Kohler engine		
Bobcat™ 250 LP	#907 504	Kohler engine, with GFCI Receptacles		
Field Options <i>Options listed below can be added to the above packages. Installation is required.</i>				
GFCI Receptacles	#300 975			
Electric Fuel Pump	#300 976	For gas models at high altitudes		
Spark Arrestor	#300 924			
Remote Oil Drain and Filter Kit	#300 923	Front mount for Kohler		
Adapter Cord, Full KVA	#300 517			
Full KVA Plug Kit	#119 172			
Engine Tune-Up Kits		See page 6. <i>Order from Miller Service Parts</i>		
Accessories				
Off-Road Running Gear	#300 909 #300 910	Gas/LP models, with inner tubes Gas/LP models, with Never Flat™ tires		
Off-Road Running Gear with Protective Cage	#300 912	Gas/LP models, with Never Flat™ tires.		
Multi-Terrain Running Gear	#300 913 #300 914	Gas/LP models, with inner tubes Gas/LP models, with Never Flat™ tires		
Protective Cage w/Cable Holders	#300 921	Gas/LP models		
Gas Cylinder Mounting Assembly	#300 918	Gas models. <i>Not for use with LP Tank Mounting Assembly.</i> <i>Not recommended for use with protective cover</i>		
Hose and LP Tank Mounting Assembly	#300 917	LP models. <i>Not for use with Gas Cylinder Mounting Assembly.</i> <i>Not recommended for use with protective cover</i>		
Protective Covers		See page 6		
Stick Weld Leads		See page 7		
Spectrum® Plasma Cutters		See page 7		
Multimatic™ 200 Welder	#907 518	All-in-one MIG, TIG and Stick welding. See Lit. Index No. DC/12.57		
Millermatic® Series MIG Welders		See page 7		
SuitCase® X-TREME Wire Feeders		See page 7		
Spoolmatic® 30A Spool Gun	#130 831	Requires WC-115A Control. See Lit. Index No. M/1.73		
WC-115A Control	#137 546-01-1	See Lit. Index No. M/1.73		
Spoolmate™ 3035 Spool Gun	#195 016	See Lit. Index No. M/1.5		
SGA 100C Control	#043 857	See Lit. Index No. M/1.5		
Heavy-Duty Barrel for Spoolmate 3035	#195 375	See Lit. Index No. M/1.5		
Dynasty® 200 Series TIG Welders		See Lit. Index No. AD/4.8		
HF-251D-1	#042 388	115 VAC. Requires Secondary Contactor		
Secondary Contactor	#041 969			
HWY-1000 Trailer	#195 013			
Cable Tree	#195 023			
Dual Hitch	#300 831			

Date:

Total Quoted Price:

Distributed by:

