

Bobcat™ 250 Diesel

Issued May 2013 • Index No. ED/4.34

**Diesel 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 (3/16-in. carbons)
Air Plasma Cutting and Gouging with optional Spectrum models

Output Range

AC Stick/TIG	40–250 A
DC Stick/TIG*	40–275 A
FCAW/MIG	17–28 V

*DC TIG available above 80 amps.

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

Peak: 11,000 W, Continuous: 9,500 W

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

The Power of Blue.®

Reliable Bobcat engine-driven welding generators are the industry standard for quality and value. Multiprocess weld output, strong generator power, and most important — rated #1 in reliability, make the Bobcat the welding industry's most popular choice. **Bulletproof inside and out.**

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.

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



Accu-Rated™—Not Inflated Generator Power. Miller's Accu-Rated 11,000 watts of *usable* peak power is delivered for a minimum of 30 seconds. **See page 3 for more information.**

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.

Easy maintenance. With front panel maintenance displays, you know when your equipment needs to be serviced.

Front panel fuel and sight gauges provide convenient fuel level indication. *Note: Diesel engine will shut down before system runs out of fuel making restarts easy.*

 For truck installation information, visit MillerWelds.com/truck

TRUE BLUE
3 YR. WARRANTY

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



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

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

Website
MillerWelds.com



Specifications (Subject to change without notice.)



Welding Mode	Process	Amp/Volt Ranges	Weld Output Rated at 100% Duty Cycle (at 104° F/40° C)*	Single-Phase Generator Power	Sound Levels at Rated Output, 7 m (23 ft.)	Dimensions	Net Weight**
CC/AC CC/DC	Stick/TIG	40–130 A 60–160 A 80–225 A 100–250 A	250 A at 25 V	Peak: 11,000 watts Continuous: 9500 watts 120/240 VAC, 88/44 A, 60 Hz	Kubota: 80 dB (104.9 Lwa)	H: 28 in. (711 mm) H: 34.38 in. (873 mm) to top of exhaust W: 20 in. (508 mm) D: 45.38 in. (1153 mm)	638 lb. (289 kg)
CV/DC	MIG/FCAW	17–22 V 20–28 V	250 A at 28 V (275 A at 25 V, 60% Duty Cycle)				

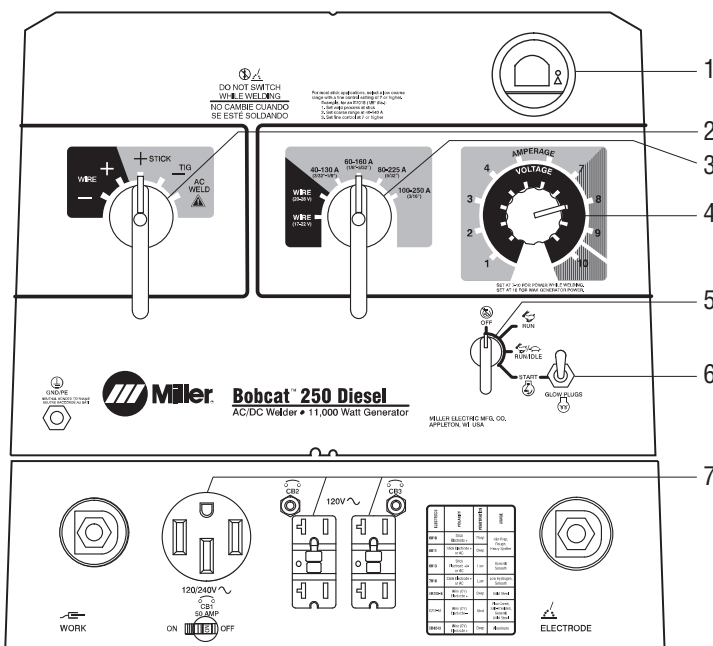
*Rated at sea level. **Net weight without fuel.

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

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

Engine Brand/Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Standard Shutdowns
Kubota: 2-year limited North American mfg.	19 HP at 3600 RPM	Three-cylinder, industrial liquid-cooled, diesel	3600 RPM	2450 RPM	12 gal. (45 L)	3.4 qt. (3.2 L)	High Coolant Temperature/ Low Oil Pressure/Low Fuel

Function and Benefit Guide

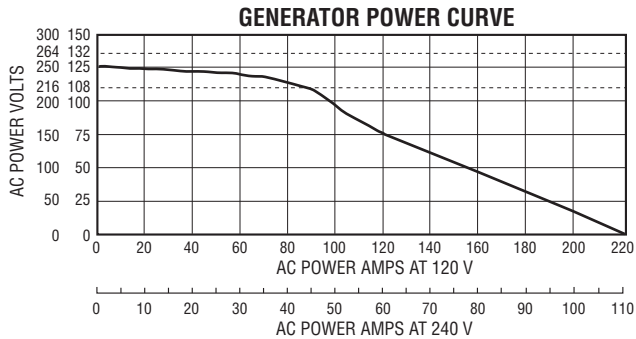


- Maintenance Displays** provide fuel level, engine hours and oil change interval information; plus high coolant temperature and low oil pressure shutdowns.
- Weld Process Selector Switch** makes choosing between Stick, Wire and TIG processes easy. Switch also automatically changes polarity with process selection to make sure the machine is easy to set with little effort or knowledge.
- Coarse Range Control.** Four Stick/TIG and two Wire ranges are available for output control. Stick/TIG ranges are designed to 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 Run/Idle and Run.
- Glow Plugs** assist in cold weather starting.
- 120 VAC and 240 VAC Covered Receptacles with Circuit Breakers.**
Note: For matching plug, order #119 172.

The Bobcat™ Generator Power Advantage

Accu-Rated™ – Not Inflated Generator Power

Miller's Accu-Rated™ 11,000 watts 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.



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.

SIMULTANEOUS WELDING AND POWER

Weld Current in Amperes	Total Power in Watts	120 V Full kVA Receptacle Amperes	240 V Full kVA Receptacle Amperes
0	11,000	88*	44*
90	8000	66*	33
125	5200	43*	21
180	3500	29*	14
250	2200	18	9

For example, if you're welding at 125 amps you also have 5200 watts available for powering lights or tools (either 43 amps from the 120-volt full kVA receptacle or 21 amps from the 240-volt full kVA receptacle).

*50 A, 120/240 VAC receptacle. See Owner's Manual for additional information.

The Bobcat™ Competitive Advantage

Make deadlines, not excuses.

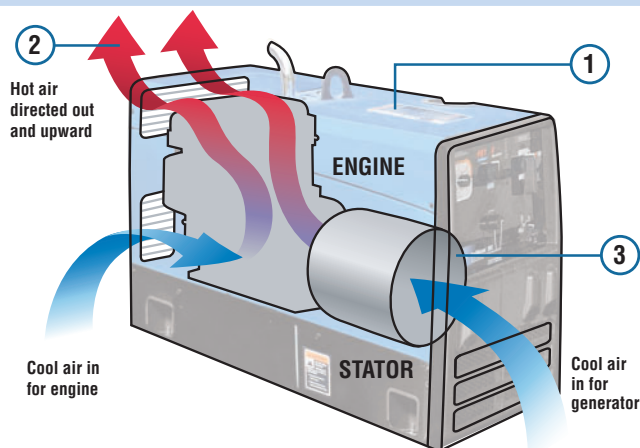
- 68 percent of service technicians, managers and owners, recommend the Bobcat over the competition.



Technician Recommendations

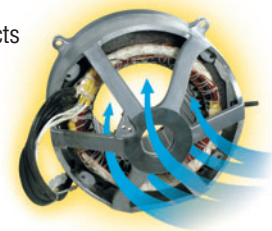
- 98 percent of current owners are "satisfied to very satisfied" with the Bobcat.*

* Based on an independent survey of thousands of Bobcat owners.



Directed airflow improves cooling for long engine and component life.

- 1 The fully enclosed case design virtually eliminates hot air recirculation when machine is mounted in tight spots.
- 2 Louver-directed air flow keeps the temperature of internal parts cool for maximum performance and extended life.
- 3 Self-cooling stator barrel completely encloses and protects its generator from the dirtiest and harshest environments.



All ratings are tested at 104° F (40° C) to maintain tough work schedules, even in hot weather.

Genuine Miller® Options

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

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.



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-amp plug (NEMA 14-50P) to fit full KVA receptacle.

Order the following from Miller Service Parts.

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

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.



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.



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.

Protective Cover



Protective Cover #301 099
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™ #907 531
See Lit. Index No. PC/9.6.

Spectrum® 875 #907 390-01-1
See Lit. Index No. PC/9.8.

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

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 #951 181

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

Lightweight, voltage-sensing wire feeders include secondary contactor, gas valve and drive roll kit. See Lit. Index No. M/6.41 and M/6.42.



Spoolmatic® 30A Spool Gun #130 831

Air-cooled, 200-amp, 1-pound spool gun for aluminum MIG. Includes 30-foot (9.1 m) cable assembly. See Lit. Index No. M/1.73. WC-115A required for hookup.

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 Accessory 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.

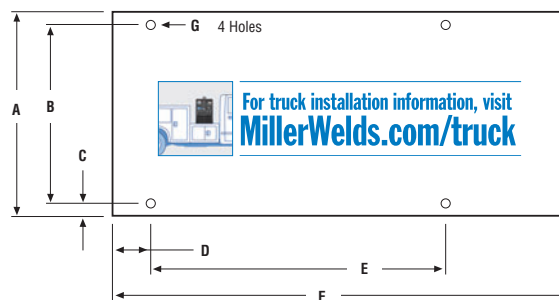
Note: Trailer is shipped unassembled.

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.

Mounting Specifications



- A. 20.5 in. (508 mm)
- B. 16.5 in. (419 mm)
- C. 2 in. (51 mm)
- D. 5.25 in. (133 mm)
- E. 32.75 in. (832 mm)
- F. 44.75 in. (1137 mm)
- G. .406 in. (10 mm) diameter

Height: (to top of exhaust)
34.38 in. (873 mm)
Width: 20 in. (508 mm)
Depth: 45.38 in. (1153 mm)

Typical Installations for Bobcat™ 250



Stick (SMAW) Basic Equipment

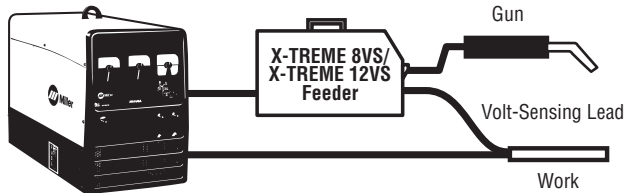
- Four-position range switch provides fine amperage control for typical electrode diameters (3/32, 1/8, 5/32 and 3/16 in.).
- AC weld output for good arc quality with iron powder electrodes without fighting magnetic arc blow.
- Strong auxiliary power while welding — for example, if you are welding at 250 amps the Bobcat delivers 2200 watts of power to run tools, lights etc.



Flux-Cored (FCAW) Basic Equipment

SuitCase® X-TREME™ 8VS #951 181
 SuitCase® X-TREME™ 12VS #951 543

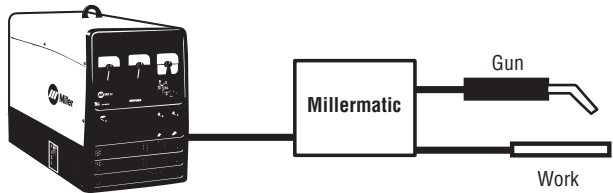
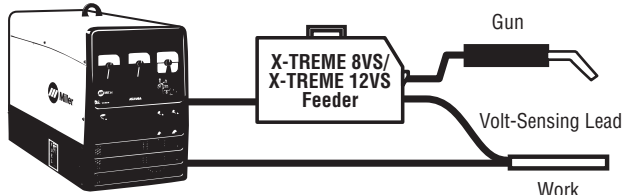
- 275 amps at 25 volts, 60 percent duty cycle (250 amps at 28 volts, 100 percent duty cycle). Strong output allows higher travel speeds and deposition rates than competitive machines.
- High voltage output ratings (28 volts at 250 amps) help to compensate for voltage drop across long weld cables.



MIG (GMAW) Basic Equipment

SuitCase® X-TREME™ 8VS #951 181
 SuitCase® X-TREME™ 12VS #951 543
 Millermatic® 140 Auto-Set™ #907 335
 Millermatic® 180 Auto-Set™ #907 312
 Millermatic® 211 Auto-Set™ with MVP #907 422
 Millermatic® 212 Auto-Set™ #907 405

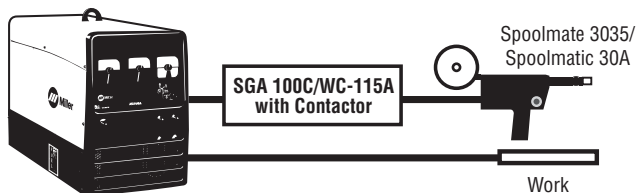
- Use .035-inch solid wire with 75/25 argon mixed gas for welding down to 16-gauge steel.
- Use .045-inch solid wire with a minimum of 80 percent argon gas for spray transfer on 1/8-inch and thicker material (flat and horizontal position).
- Millermatic machines utilize generator power.



Aluminum MIG (GMAW) Basic Equipment

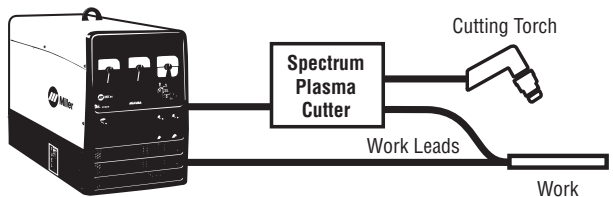
Spoolmate™ 3035 #195 016
 SGA 100C #043 857
 Spoolmatic® 30A #130 831
 WC-115A Control #137 546-01-1

- Excellent results from 1/8–1/2 inch thick fillet welds.



Plasma Basic Equipment

- Spectrum® machines utilize generator power.
- Quality cuts with an optional Spectrum® plasma cutter.
- Replace heavy oxy-fuel cylinders with a lightweight, fast and versatile Spectrum® plasma cutter.
- Most plasma units require a separate air source.

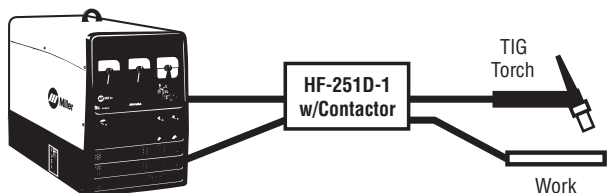


TIG (GTAW) Basic Equipment

TIG Adapter w/Extension #195 350
 • Required for Scratch Start TIG welding.

Dynasty® 200 Series
 HF251D-1 #042 388
 Secondary Contactor #041 969
 RMLS-14 Switch #129 337

- Excellent DC TIG capabilities.
- Non-critical AC TIG welding (no remote amperage control available on the Bobcat).



Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Bobcat™ 250 Diesel	#907 565	Kubota, with GFCI Receptacles		
	#907 565-001	Kubota		
GFCI Protection	#300 975	Field		
Cold Weather Kit	#301 115	Field		
Spark Arrestor	#043 579	Field		
Adapter Cord, Full KVA	#300 517	Field		
Full KVA Plug	#119 172	Field		
Diesel Engine Filter Kit	#259 935	Field. <i>(Order from Miller Service Parts)</i>		
Accessories				
All-Purpose Running Gear	#300 477	With Never Flat™ tires		
Protective Cage with Cable Holders	#195 331	<i>Not for use with Protective Cover</i>		
Gas Cylinder Mounting Assembly	#195 330	<i>Not recommended for use with Protective Cover</i>		
Protective Cover	#301 099			
Stick Weld Leads		See page 4		
Spectrum® Plasma Cutters		See page 4		
Millermatic® Series MIG Welders		See page 5		
SuitCase® X-TREME™ Wire Feeders		See page 5		
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:



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