

# Bobcat™ 225 NT

Issued September 2003 • Index No. ED/4.31

Engine-Driven Welder/  
AC Generator 

## Quick Specs

### Industrial Applications

Structural Steel Work  
General Maintenance  
Farm/Ranch Applications  
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

### Generator Power Output Rated at 104° F

10,000 Watts Peak, 9500 Watts Continuous

### Weld Output Rated at 104° F

For DC Stick 210 Amps at 25 Volts, 100% Duty Cycle  
For AC Stick/TIG 225 Amps at 25 Volts, 100% Duty Cycle  
For FCAW/MIG (CV) 200 Amps at 20 Volts, 100% Duty Cycle

### Output Range

For DC Stick 50–210 Amps  
For FCAW/MIG (CV) 17–28 Volts

Weight 512 lb (232 kg)

## The Power of Blue.®

**20 HP Kohler Command overhead valve engine** provides dependable all-weather starts, exceptional fuel efficiency, pressure lubrication, no valve adjustment, as well as reduced oil consumption and emissions.

**Heavy-duty construction!** Engine, generator barrel, electrical switches and other components are protected against accidental impact while allowing plenty of air to cool and prolong the life of the engine.

**10,000-watt (peak) power output** provides plenty of power to run power tools and lights.

Standard **circuit breaker protection** protects tools and the generator itself.



Rotatable exhaust can rotate a full 360 degrees.



**Fastex™ tool-free oil drain system** combined with **hour meter** makes service a snap.

**Patented 10-gallon “smart” fuel tank** has a reservoir design that minimizes the chance of fuel backflow. Large capacity means more running time before refueling. Standard fuel gauge is accurate and easy to read. Additional fuel sight gauges on both sides.

**Optional No. 27 Hand Running Gear** provides maneuverability.



### Total Parts Coverage

Welder/generator and engine are warranted for 3 years, parts and labor.

Engine is warranted separately by the engine manufacturer.

**MADE IN USA**  
APPLETON, WI 



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

**International Headquarters**  
Phone: 920-735-4505  
USA FAX: 920-735-4134  
Canadian FAX: 920-735-4169  
International FAX: 920-735-4125

**Web Site**  
[www.MillerWelds.com](http://www.MillerWelds.com)



# Specifications (Subject to change without notice.)



| Welding Mode | Max. Open-Circuit Voltage | Amp/Volt Ranges      | Rated Weld Output at 100% Duty Cycle at 104° F | Generator Power   | Dimensions   | Weight*         |
|--------------|---------------------------|----------------------|--|---|--|-----------------|
| CC/AC        | 80                        | 50–100 A<br>70–150 A | 225 A at 25 V                                  | <b>Peak:</b> 10,000 watts<br><b>Continuous:</b> 9500 watts,<br>70/35 A, 120/240 VAC,<br>60 Hz while not welding | H: 33 in (838 mm)<br>W: 18-3/4 in (476 mm)<br>D: 45-1/2 in (1156 mm) | 512 lb (232 kg) |
| CC/DC        | 72                        | 85–225 A (210 DC)    | 210 A at 25 V                                  |   |  |                 |
| CV/DC        | 33                        | 17–28 V              | 200 A at 20 V                                  |   |  |                 |

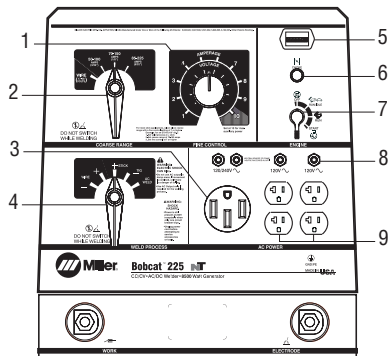
Rated output decreases approximately 3.5% per 1000 ft (305 m) above sea level. The rated output of any engine-driven welder/generator decreases as temperatures rise. \*Net weight without fuel. Add 30 lb for shipping weight.

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

| Engine Brand                 | Horsepower (HP)   | Type  | Weld Speed | Idle Speed | Fuel Capacity | Oil Capacity   |
|------------------------------|-------------------|---|------------|------------|---------------|--|
| Kohler: 3 year mfg. warranty | 20 HP at 3600 RPM | V-Twin cylinder, 4-cycle, OHV, industrial, air-cooled, gasoline | 3600 RPM   | 2250 RPM   | 10 gal (38 L) | 1.75 qt (1.7 L), 2 qt (1.9 L) with filter; every 100 hrs for oil, every 200 hrs for oil filter |

CSA Pending. See ordering information on back.

## Control Panel

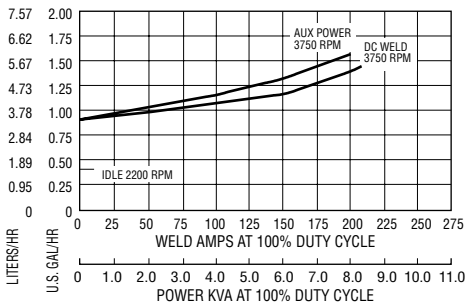


1. Fine Adjust Control
2. Coarse Adjust Switch
3. 50 A, 120/240 VAC Receptacle\*
4. Weld Process Selector Switch
5. Engine Hour Meter
6. Engine Choke Control
7. Engine Control Switch
8. Auxiliary Power Circuit Breakers
9. 20 A, 120 VAC Duplex Receptacles (Optional GFCI Circuit Breakers available)

\*For matching plug, order #119 172

## Performance Data

FUEL CONSUMPTION (Kohler 20 HP Command OHV)



SIMULTANEOUS WELDING AND POWER

| Weld Current In Amperes | Total Power In Watts | 120 V Receptacle Amperes | 240 V Receptacle Amperes |
|-------------------------|----------------------|--------------------------|--------------------------|
| 210                     | 1300                 | 10                       | 5                        |
| 140                     | 5200                 | 42                       | 21                       |
| 90                      | 8400                 | 70                       | 35                       |

See Owner's Manual for additional information.

TYPICAL CONTRACTOR TOOLS POWER USAGE

| Tool                       | Starting Watts | Running Watts |
|----------------------------|----------------|---------------|
| Table Saw, 10 inch         | 6,300          | 1,800         |
| Air Compressor, 1-1/2 HP   | 8,200          | 2,200         |
| <b>Flood Lights</b>        |                |               |
| Metal Halide               | 313            | 250           |
| Mercury                    | 1000           | —             |
| Vapor                      | 1,250          | 1,000         |
| Submersible Pump, 400 gph  | 600            | 200           |
| Centrifugal Pump, 900 gph  | 900            | 500           |
| High Pressure Washer, 1 HP | 6,100          | 1,600         |
| Wet & Dry Vac, 1.7 HP      | 900            | 900           |

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 3–7 times the listed wattage when starting. All data listed is approximate — check your tool/appliance for specific wattage requirements.

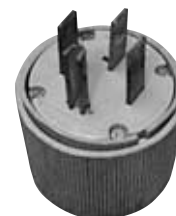
## Genuine Miller Options \*Available as factory option only. See ordering information on back page.

### GFCI Protection\*

Ground Fault Circuit Interrupters are required on some construction sites. Factory option contains two GFCI 120 VAC duplex receptacles. (240 VAC GFCI receptacle not required).

**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.

**FA-7.5 Flame Arrestor Fuel Cap #042 632** Field Gasoline Red. Lockable for added protection.



**Full KVA Plug Kit #119 172** Field 120/240 VAC, 50 amp plug (NEMA 14-50P) to fit full KVA receptacle.

# Genuine Miller Accessories



**No. 27 Hand Running Gear #043 014**  
Rugged, lightweight design provides maximum maneuverability. Comes with standard handle, two large 480/400 x 8 pneumatic tires, two 5 in rubber swivel casters, adjustable axle and easy-to-read instructions.



Shown with optional Cylinder Rack.

**No. 4B Running Gear #041 930**  
Includes two rear 480/400x8 pneumatic tires, two 8 in (203 mm) solid-rubber-tired front wheels and a 32 in (813 mm) handle.

**No. 27CR Cylinder Rack #043 040**  
Designed for use with No. 4B or No. 27RG. Consists of base tray with bottle bracket, and vertical support rack with safety chain.



**Protective Cover #195 136**  
Blue, with logo. Attractive, mildew-resistant, odor-free, waterproof cover protects your machine's finish and includes easy-off handles.

**No. 2WA Stick Accessory Pkg. #040 039**  
Consists of 35 ft (10.7 m) No. 2 electrode cable with insulated electrode holder and lug, 30 ft (9.1 m) No. 2 work cable with clamp and lug, welding helmet, and wire scratch brush.

## Plasma Cutting



**Spectrum® Thunder #903 741**  
See Lit. Index No. PC/13.0

**Spectrum® 375 CutMate™ #903 891**  
See Lit. Index No. PC/9.1

**Spectrum® 625 #907 058**  
See Lit. Index No. PC/9.5

## MIG (GMAW) or Flux Cored (FCAW) Welding



**SuitCase™ 12VS Wire Feeder #194 941**  
Lightweight, portable, voltage-sensing wire feeders include secondary contactor and gas valve. Requires drive roll kit. See Lit. Index No. M/6.4.



**3045 FC #194 919**  
Economical and portable feeder for self-shielding Flux Cored wire welding on 16 ga – 3/8 in steel. See Lit. Index No. M/6.6.



**Spoolmatic® 30A #130 831**  
Rated 200 amps at 100% duty cycle. Extend the weld process range by adding a portable 1 lb spool gun for aluminum and .035–.045 steel wire MIG. Includes 30 ft (9.1 m) cable assembly. WC-115A with contactor required. See Lit. Index No. M/1.5.

**WC-115A Weld Control #137 546-01-1**  
Provides control circuitry to operate spool gun from Miller and competitive engine-driven products. Includes contactor.

*Note: Contactor Kit (#137 548) available for field installation in existing WC-115A Weld Controls having no contactor.*



**Spoolmate™ 3035 #195 016**  
Rated 150 amps at 60% duty cycle. Extend the weld process range by adding a

handy portable system for aluminum and small wire MIG. Includes 20 ft (6.0 m) cable assembly. SGA 100C required. See Lit. Index No. M/1.5.

## SGA 100C #043 857

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

## TIG (GTAW) Welding



**HF-251D-1 High-Frequency Arc Starter and Stabilizer #042 388**  
*Requires Secondary Contactor and RMLS-14 Switch.* A portable 115 volt, 250 amp unit. (No remote amperage control available on the Bobcat.)

**Secondary Contactor #041 969** Field Required to use HF-251D-1 with Bobcat.

## Trailers and Hitches

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

**Cable Tree #195 023**  
Provides an area to conveniently wrap weld cables and extension cords.

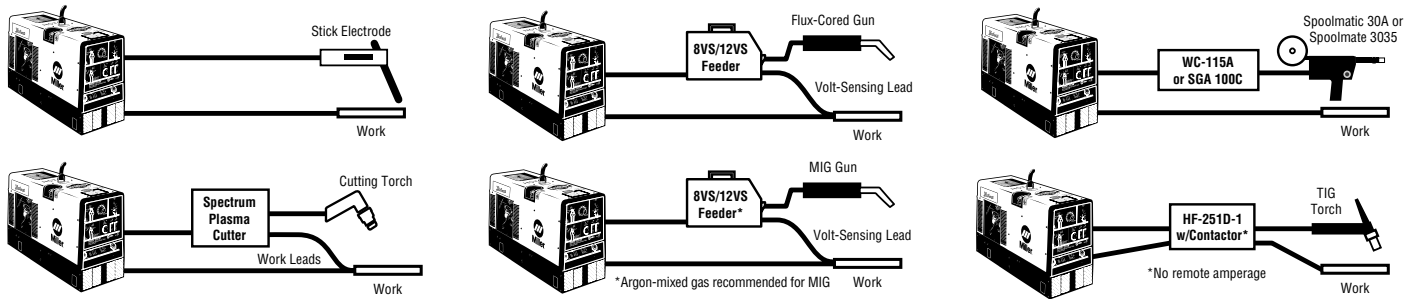
**Lunette Eye 2-1/2 in (64 mm) #043 824**

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

| Model    | Gross Axle Weight Rating | Gross Vehicle Weight Rating | Net Payload      | Height of Bed      | Road Clearance    | Track (Center to center of tires) | Standard Tires (Standard rating or P-size rating) | Dimensions   | Net Weight      |
|----------|--------------------------|-----------------------------|------------------|--------------------|-------------------|-----------------------------------|---|--|-----------------|
| HWY-1000 | 1500 lb (680 kg)         | 1610 lb (730 kg)            | 1000 lb (453 kg) | 18-1/2 in (470 mm) | 6-1/2 in (165 mm) | 50 in (1.27 m)                    | 4.8-12  | Length: 98 in (2489 mm)<br>Width: 57-1/2 in (1461 mm)* | 265 lb (120 kg) |

\* Width at outside of fenders.

# Typical Installations



# Ordering Information

| Equipment and Options             | Stock No.                  | Description  | Qty. | Price |
|-----------------------------------|----------------------------|--|------|-------|
| <b>Power Source</b>               |                            |  |      |       |
| Bobcat™ 225 NT                    | #903 517<br>#903 517-02-21 | Base model w/Kohler engine<br>With GFCI Protection and CSA (pending)   |      |       |
| <b>Field Options</b>              |                            |  |      |       |
| Spark Arrestor                    | #043 579                   | Field  |      |       |
| Flame Arrestor Cap                | #042 632                   | Field  |      |       |
| Full KVA Plug                     | #119 172                   | Field  |      |       |
| <b>General Accessories</b>        |                            |  |      |       |
| No. 27 Running Gear               | #043 014                   |  |      |       |
| No. 4B Running Gear               | #041 930                   |  |      |       |
| No. 27CR Cylinder Rack            | #043 040                   | For use with No.27 or No. 4B Running Gear  |      |       |
| Protective Cover                  | #195 136                   | Blue, with logo  |      |       |
| <b>Stick Accessories</b>          |                            |  |      |       |
| No. 2WA Stick Accessory Package   | #040 039                   | Includes 35 ft (10.7 m) No. 2 electrode cable and holder, 30 ft (9.1 m) work cable with clamp and lug, welding helmet and wire scratch brush |      |       |
| <b>Plasma Cutting Accessories</b> |                            |  |      |       |
| Spectrum® Thunder                 | #903 741                   | 115 V, 20 ft torch. See Lit. Index No. PC/13.0   |      |       |
| Spectrum® 375 CutMate™            | #903 891                   | 115/230 V, 20 ft torch. See Lit. Index No. PC/9.1  |      |       |
| Spectrum® 625                     | #907 058                   | 25 ft torch. See Lit. Index No. PC/9.5   |      |       |
| <b>Flux Cored/MIG Accessories</b> |                            |  |      |       |
| Suitcase™ 12VS                    | #194 941                   | Includes contactor kit and gas valve. Requires drive rolls   |      |       |
| 3045 FC                           | #194 919                   | Includes contactor kit and gas valve. Requires drive rolls   |      |       |
| Spoolmatic® 30A                   | #130 831                   | <b>200 amp</b> , 30 ft (9 m). See Lit. Index No. M/1.5   |      |       |
| WC-115A Control                   | #137 546-01-1              | Includes contactor. See Lit. Index No. M/1.5   |      |       |
| Spoolmate™ 3035                   | #195 016                   | <b>150 amp</b> , 20 ft (6 m). See Lit. Index No. M/1.5   |      |       |
| SGA 100C                          | #043 857                   | Includes contactor. See Lit. Index No. M/1.5   |      |       |
| FC-1260 Flux Cored Gun            | #195 729                   | 350 amp, 15 ft (4.6 m). See Lit. Index No. AY/16.0   |      |       |
| Roughneck® C-3015 MIG Gun         | #194 753                   | 300 amp, 15 ft (4.6 m). See Lit. Index No. AY/17.0   |      |       |
| <b>TIG Accessories</b>            |                            |  |      |       |
| HF-251D-1                         | #042 388                   | Requires Secondary Contactor Kit   |      |       |
| RMLS-14 Contactor Switch          | #129 337                   | Activates HF-251D-1 Contactor  |      |       |
| Secondary Contactor Kit           | #041 969                   |  |      |       |
| Water Coolant Systems             |                            | See Lit. Index No. AY/7.2  |      |       |
| <b>Trailers and Hitches</b>       |                            |  |      |       |
| HWY-1000 Trailer                  | #195 013                   |  |      |       |
| Cable Tree                        | #195 023                   |  |      |       |
| Lunette Eye                       | #043 824                   | 2-1/2 in (64 mm)   |      |       |

Date:

Total Quoted Price:

Distributed by:

