

Bobcat™ 250 Diesel

**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

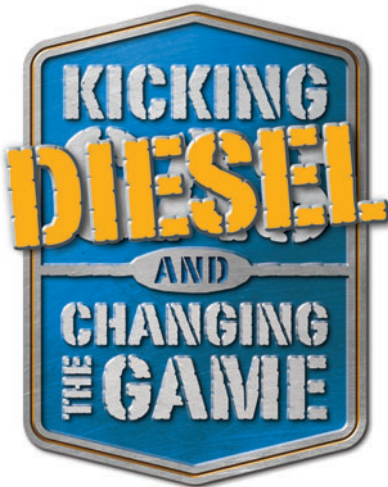
Stick (SMAW)
Flux-Cored (FCAW)
MIG (GMAW)
DC TIG (GTAW)
Non-Critical AC TIG (GTAW)
Air Carbon Arc (CAC-A) Cutting and Gouging (3/16-in. carbons)
Air Plasma Cutting and Gouging with optional Spectrum models

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: 9500 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
- Easier to maintain



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.

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

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.

Accu-Rated™ — not inflated generator power. Our Accu-Rated 11,000 watts of *usable* peak power is delivered for a minimum of 30 seconds. **See page 3 for more information.**

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.

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.



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



Miller Electric Mfg. Co.
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
   



Specifications (Subject to change without notice.)



Welding Mode	Process	Amp/Volt Ranges	Rated Weld Output 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	80 dB (104.9 Lwa)	H: 28 in. (711 mm) H: 34.375 in. (873 mm) (to top of exhaust) W: 20 in. (508 mm) D: 45.375 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)				

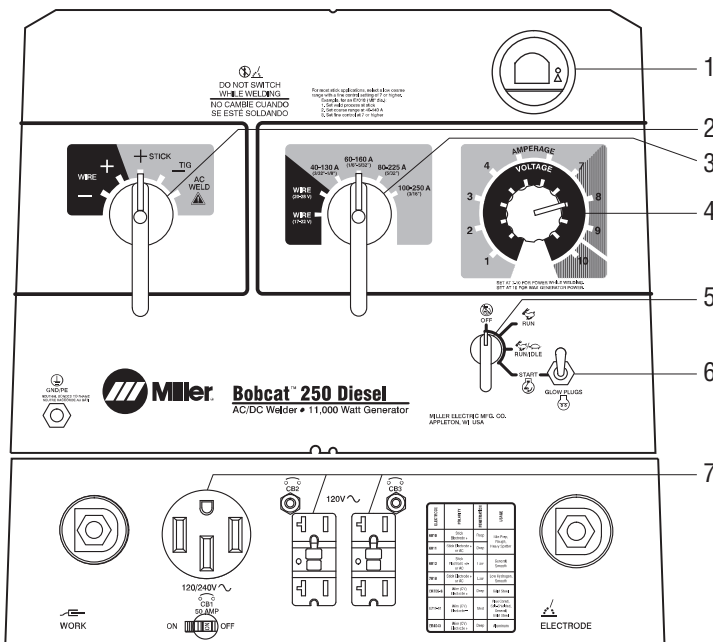
*Rated at sea level. **Net weight without fuel.

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

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

Engine Brand and Warranty	Horsepower (HP)	Type	Weld Speed	Idle Speed	Fuel Capacity	Oil Capacity	Standard Shutdowns
Kubota D722, 2-year limited North American warranty	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

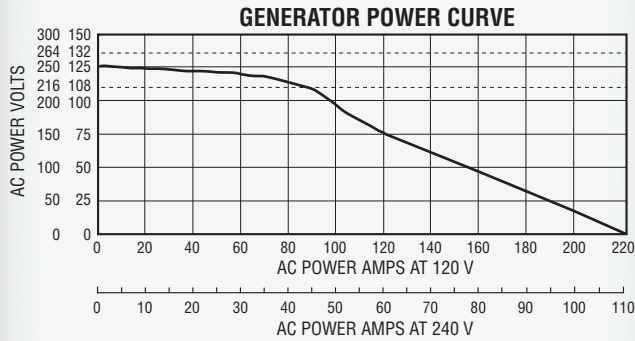


- Maintenance Displays** provide fuel level, engine hours and oil change interval information; plus high coolant temperature and low oil pressure shutdowns.
- Weld Process Selector Switch** makes choosing between Stick, Wire and TIG processes easy. Switch also automatically changes polarity with process 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

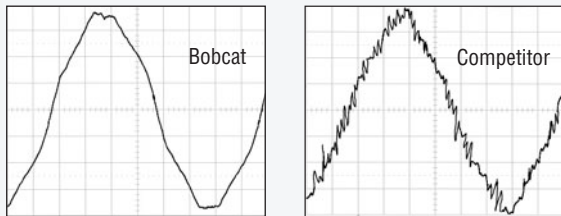
Accu-Rated™ – Not Inflated Generator Power

Our 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.**

Waveform Comparison



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.

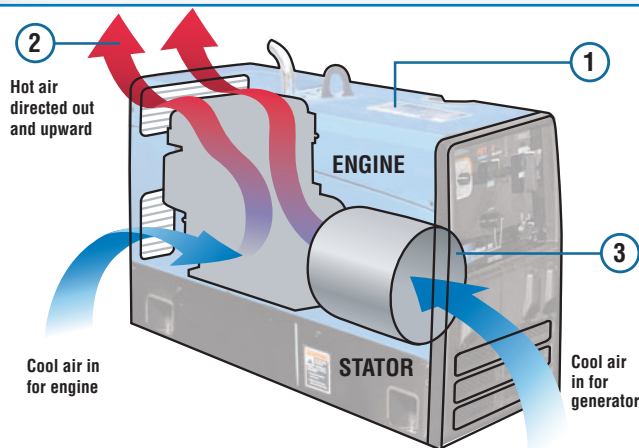
- 68 percent of service technicians, managers and owners, recommend the Bobcat over the competition.



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.

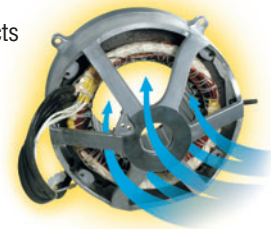


Directed airflow improves cooling for long engine and component life.

- 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 *Available as factory option. See ordering information on back page.

GFCI Receptacles* #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™ #907 579

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).

MIG/Flux-Cored Welding



Millermatic 211 Auto-Set with MVP shown.

Millermatic® 141 #907 612

See Lit. Index No. DC/12.42

Millermatic® 190 #907 613

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 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 (Note: Trailers are shipped unassembled.)



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.

Cable Tree #195 023

Provides an area to conveniently wrap weld cables and extension cords on the HWY-1000 trailer.



Dual Hitch #300 831

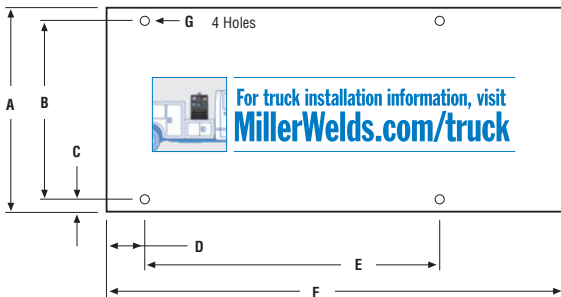
2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.

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)	1265 lb. (574 kg)	1000 lb. (454 kg)	18.5 in. (470 mm)	6.5 in. (165 mm)	50 in. (1270 mm)	4.8-12	Length: 98 in. (2489 mm) Width: 57.5 in. (1460 mm)*	265 lb. (120 kg)

*Width at outside of fenders.

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



Stick (SMAW) Basic Equipment

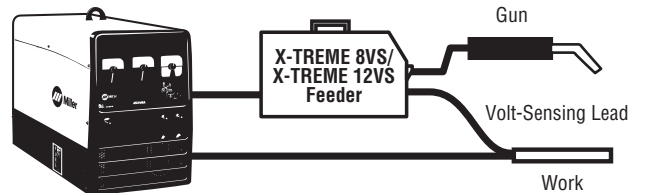
- Four-position range switch provides fine amperage control for typical electrode diameters (3/32, 1/8, 5/32 and 3/16 in.).
- AC weld output for good arc quality with iron powder electrodes without fighting magnetic arc blow.
- Strong auxiliary power while welding — for example, if you are welding at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



Flux-Cored (FCAW) Basic Equipment

SuitCase® X-TREME™ 8VS #951 583
 SuitCase® X-TREME™ 12VS #951 543

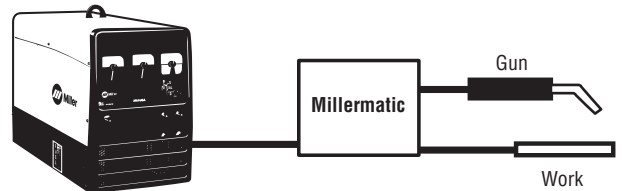
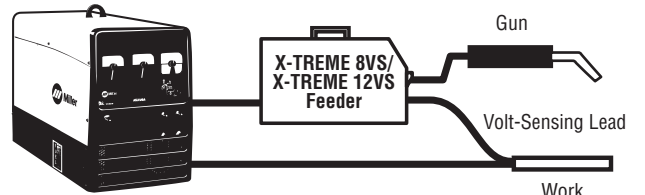
- 275 amps at 25 volts, 60 percent duty cycle (250 amps at 28 volts, 100 percent duty cycle). Strong output allows higher travel speeds and deposition rates than competitive machines.
- High voltage output ratings (28 volts at 250 amps) help to compensate for voltage drop across long weld cables.



MIG (GMAW) Basic Equipment

SuitCase® X-TREME™ 8VS #951 583
 SuitCase® X-TREME™ 12VS #951 543
 Millermatic® 141 #907 612
 Millermatic® 190 #907 613
 Millermatic® 211 Auto-Set™ with MVP #907 422
 Millermatic® 212 Auto-Set™ #907 405

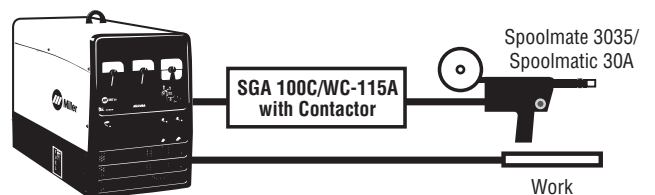
- Use .035-inch solid wire with 75/25 argon mixed gas for welding down to 16-gauge steel.
- Use .045-inch solid wire with a minimum of 80 percent argon gas for spray transfer on 1/8-inch and thicker material (flat and horizontal position).
- Millermatic machines utilize generator power.



Aluminum MIG (GMAW) Basic Equipment

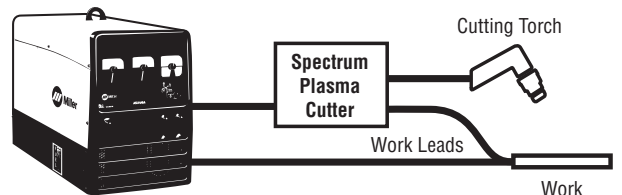
Spoolmate™ 3035 #195 016
 SGA 100C #043 857
 Spoolmatic® 30A #130 831
 WC-115A Control #137 546-01-1

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



Plasma Basic Equipment

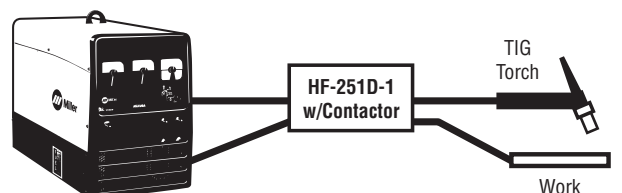
- Spectrum® machines utilize generator power.
- Quality cuts with an optional Spectrum® plasma cutter.
- Replace heavy oxy-fuel cylinders with a lightweight, fast and versatile Spectrum® plasma cutter.
- Most plasma units require a separate air source.



TIG (GTAW) Basic Equipment

TIG Adapter w/Extension #195 350
 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 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			
Cold Weather Kit	#301 115			
Spark Arrestor	#043 579			
Adapter Cord, Full KVA	#300 517			
Full KVA Plug	#119 172			
Diesel Engine Filter Kit	#259 935	<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:

Distributed by:

