Issued Sept. 2019 • Index No. ED/5.7

Big Blue® 400 Pro

Diesel Engine-Driven Welder/AC Generator

Quick Specs

Heavy Industrial Applications
Mechanical contractors
Structural steelwork
Fabrication
Maintenance
Repair
Rental
Construction
Pipe welding

Processes
Stick (SMAW)
MIG (GMAW)*
Flux-cored (FCAW)*
RMD®**
Pulsed MIG (GMAW-P)**
DC TIG (GTAW)
Air carbon arc (CAC-A)
Rated: 3/16-inch (4.8 mm) carbons
Capable: 1/4-inch (6.4 mm) carbons

Output Range **DC stick** 20–400 A
MIG/flux-cored 14–40 V
DC TIG 20–400 A

Generator Output Rated at 104°F (40°C)
12,000 watts peak, 10,000 watts continuous

Accu-Rated™–Not Inflated Generator Power

**With wire feeder.*
***ArcReach models only with ArcReach Smart Feeder.*

The professional welder's choice —

designed with the professional in mind, the Big Blue 400 Pro is the best for ease of use, reliability and fuel economy.

Kubota
Kubota V1505 four-cylinder diesel.

MITSUBISHI ENGINE NORTH AMERICA, INC.
Mitsubishi S4L2 four-cylinder diesel.

CAT Diesel Power
CATERPILLAR C1.5 three-cylinder diesel and C1.5T turbo-charged three-cylinder diesel.

Heavy-duty low-speed T4F and T4i industrial diesel engines designed to operate over 10,000 hours before the first basic overhaul. Backed by worldwide support and service.

ArcReach®
Remote control of the power source without a cord. See pages 2 and 3.

DYNAMIC DIG™
Optimized arc control for stick welding applications. See page 2.



USA model shown is T4F COMPLIANT

DURABLE BUILT TO LAST
Built to last in harsh industrial environments

SUPERIOR ARC PERFORMANCE
New standard for productivity and weld quality

WELDS AROUND THE WORLD
International models available

FLEXIBLE
Easy to add capabilities

TRUE BLUE® 3YR. WARRANTY

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

Miller®

Miller Electric Mfg. LLC
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

Certified System ISO 9001 Quality

Big Blue® 400 Pro Features and Controls

Digital meters with SunVision™ technology enable welding parameters to be viewed with greater clarity than analog meters — at virtually any angle. Meters can be seen clearly even in direct sunlight.

Meters display
- Process settings for quick and easy setup
- Preset and actual amperage

Simple-to-set controls require no elaborate procedure — just select process and weld!



Industrial USB port. Quickly upload the latest software and download machine log files to retrieve in-depth information such as diagnostics and machine statistics.

Low OCV stick (VRD), when enabled, reduces the open-circuit voltage to 30 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

Thermal overload protection prevents machine damage if the duty cycle is exceeded or airflow is blocked.

Dynamic DIG™ technology automatically adjusts the amount of current required to clear a short based on user settings. Delivers a smoother, more consistent arc that can be tailored to match the application, material, fit-up and welder technique.



Standard features include adjustable Hot Start,™ output contactor control, automatic idle, 120-volt block heater and Dynamic DIG™.

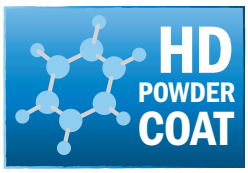


Arc control is beneficial when welding with stick and solid wires for easier fine-tuning of tough-to-weld materials and out-of-position applications.

Standard 14-pin receptacle with Auto-Remote Sense™ for simple connection of remote controls and wire feeders.



10,000 watts of pure generator power. Plug in an extra Miller® inverter-based power source for a second welding arc!



HD powder coat with zinc-rich primer protects sheet metal from rust and corrosion.

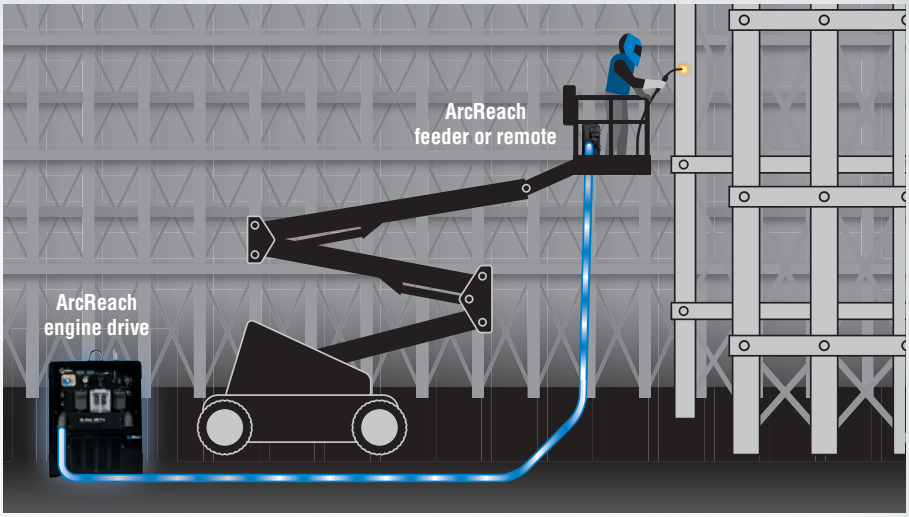
Quiet operation. Improves jobsite communication.

ArcReach® Remote Control Technology

ArcReach®

Remote control of the power source without a control cord.

An ArcReach system allows you to change weld settings from your ArcReach feeder or remote, saving a trip to the power supply. ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or remote and the power source. This technology eliminates the need for control cords, and their associated problems and costs.



Miller

Big Blue® 400 Pro ArcReach® Additional Features

ArcReach provides remote amperage and voltage control at the weld joint without needing a control cord.



Increased productivity

More arc-on time and reduced exposure to workplace hazards for operators can be realized using ArcReach because less time is spent going back to the welding power supply to set process and arc amperage or voltage.

Auto-Process Select.™ Depending on connected accessory, the system automatically changes to stick or MIG/FCAW (with gas) if electrode positive polarity is detected **or** TIG or FCAW (no gas) if electrode negative polarity is detected, when ArcReach communication is established between the accessory and the Big Blue 400 Pro — reducing the need to access the power supply.

Automatic return to panel settings. System automatically returns to Big Blue 400 Pro setting when ArcReach communication is terminated. For example, if the Big Blue is set to gouging at 350 amps and an ArcReach feeder is connected, the Big Blue will go to a MIG/FCAW process. If the feeder is disconnected, the Big Blue will go back to its previous setting (gouging at 350 amps).

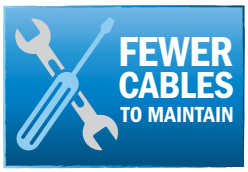
Less operator fatigue by not needing to move or reposition heavy secondary weld leads bundled with control cords on the jobsite. Control cables are not used.



Improved weld quality

Advanced welding processes. RMD® and pulsed MIG welding, without control cords, up to 200 feet away from the power source with the ArcReach Smart Feeder.

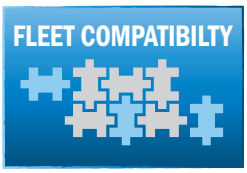
Remote override of Big Blue 400 Pro. When an ArcReach accessory is connected to a Big Blue, the accessory has full control and the Big Blue controls are disabled. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.



Reduced maintenance

Save time by no longer needing to troubleshoot welding system problems that result from damaged control cords.

Eliminate costly control cord repairs because control cords are not used.



Improved flexibilty

Cross platform compatible. The same ArcReach accessories that work on engine-driven equipment can also be used on select ArcReach-equipped XMT® and Dimension™ power sources.

Reverse compatible. ArcReach-equipped power sources work with non-ArcReach accessories; however, the complete ArcReach benefit is only realized with the ArcReach system.

Big Blue® 400 Pro ArcReach® System and Accessories

Big Blue 400 Pro ArcReach system (see page 8 for engine drive models and stock numbers), ArcReach SuitCase® 12 feeder with Bernard® S-Gun™ **(951730)**, ArcReach Stick/TIG Remote **(301325)**, and ArcReach Smart Feeder with Bernard PipeWorx 300-15 MIG gun **(951733)**.



ArcReach SuitCase 8 and 12 feeders for MIG or flux-cored welding
- Remote voltage control
- Polarity indication
- Auto-Process Select™

ArcReach Smart Feeder for advanced wire processes
- RMD® and pulsed MIG processes
- Remote voltage control
- Store and recall weld settings

ArcReach Stick/TIG Remote for stick or TIG welding
- Remote amperage control
- Polarity indication
- Arc control for stick
- Auto-Process Select™

Specifications (Subject to change without notice.)

Weld Mode/ Process	Weld Output Range	Weld Output Rated at 100% Duty Cycle at 104°F (40°C)	Max. Open-Circuit Voltage	Generator Power Output Rated at 104°F (40°C)**	Sound Levels at Rated Output, 23 ft. (7 m)	Dimensions	Net Weight (without fuel)***
CC/DC (TIG)	20–400 A	300 A at 32 VDC 350 A at 27 VDC 400 A at 24 VDC	85 VDC 30 VDC*	12,000 watts peak, 10,000 watts continuous 1-phase, 84/42 A, 120/240 VAC, 60 Hz	**Mitsubishi** Idle: 68.7 dB (93 Lwa) Weld: 72.1 dB (97 Lwa) **Kubota** Idle: 66 dB (91 Lwa) Weld: 71.6 dB (96 Lwa) **CAT** Idle: 65 dB (90 Lwa) Weld: 71.2 dB (96 Lwa)	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	**Mitsubishi** 993 lb. (450 kg) **Kubota** 950 lb. (431 kg) **CAT** 1,010 lb. (458 kg)
CC/DC (Stick)	20–400 A						
CV/DC (FCAW/MIG)	14–40 V						

**Sense voltage for Lift-Arc™ TIG and stick with VRD on.*
***Will operate either 60 Hz or 50/60 Hz power tools, lights, etc.*
****Additional 82 lb. (37 kg) when fuel tank is full.*

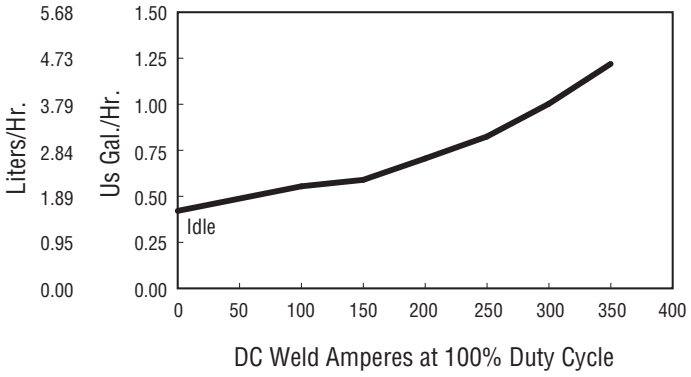
Certified by Canadian Standards Association to both the Canadian and U.S. Standards. Meets NEMA and IEC output ratings.

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

Engine Brand		Features	HP	Type	Engine Speeds	Capacities	Automatic Engine Shutdown
USA	Mitsubishi S4L2	EPA Tier 4 Final compliant, includes 120 V block heater	24.7	Four-cylinder, liquid-cooled industrial diesel	Idle: 1,500 rpm Weld: 1,800 rpm	Fuel: 11.5 gal. (43.5 L) Oil: 6 qt. (5.7 L) Coolant: 6 qt. (5.7 L)	Low oil pressure, high coolant temperature, low fuel level
USA/Int'l	Kubota V1505		20.2	Four-cylinder, liquid-cooled industrial diesel			
USA/Int'l	Caterpillar C1.5T		24.7	Turbo-charged three-cylinder, liquid-cooled industrial diesel		Fuel: 11.5 gal. (43.5 L) Oil: 5.9 qt. (5.6 L) Coolant: 6 qt. (5.7 L)	
Int'l	Caterpillar C1.5	EPA Tier 4i compliant, includes 120 V block heater	21.7	Three-cylinder, liquid-cooled industrial diesel			

Performance Data

Fuel Consumption Curve

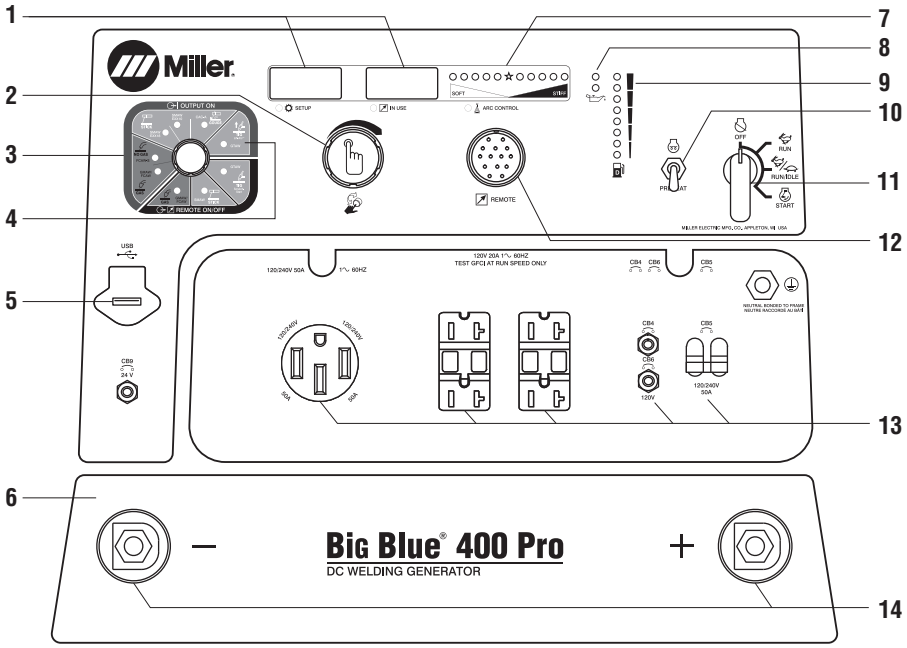


Simultaneous Welding and Power

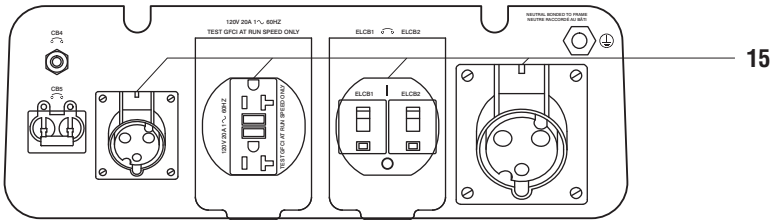
Weld Amperes	Total Aux. Power Available (Watts)
25 A	10,000
75 A	10,000
125 A	10,000
175 A	9,000
225 A	7,500
300 A	4,500
350 A	1,000

Function Guide

1. **Self-calibrating digital weld meters with fault code indication** display preset or actual weld parameters.
2. **Pushbutton main control knob** used for adjusting amperage/voltage, adjusting arc control, and accessing the service menu.
3. **LED process indicator.** Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source.
4. **Lift-Arc™ TIG with Auto-Stop™ and Auto-Crater™.**
5. **USB port** allows software updates from a USB drive. A summary file of recoded data from the unit will be saved to a USB drive that is inserted.
6. **Weatherproof Lexan® nameplate** is super durable and resists cracking and fading.
7. **Adjustable arc control** adjusts DIG when process control is in stick mode and adjusts inductance when process control is in FCAW or MIG mode. The amount of DIG determines how much amperage (heat) varies with stick arc length. Inductance determines the "wetness" of the weld puddle.
8. **Maintenance interval reminder.** Yellow and red indicator lights let an operator know when the machine is approaching and finally in need of routine maintenance.
9. **Fuel indicator gauge.** Low fuel shutdown shuts engine off prior to running out of fuel to prevent loss of fuel in the system, and make restarts easy.
10. **Glow plugs** assist in cold weather starting.
11. **Engine control switch** is used to start the engine and then select between auto idle and high speed lock.
12. **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.
13. **50 A, 120/240 V receptacle and 20 A, 120 V GFCI receptacles with circuit breakers**
    *Note: For matching 240 V plug, order **119172**.*
14. **Weld output terminals**
15. **International receptacle panel with 16 A, 240 V receptacle, 20 A 120 V GFCI receptacle and 32 A, 240 V receptacle with circuit breakers**
    *Note: For matching 240 V, 16 A plug, order **255416** and for matching 240 V, 32 A plug, order **255418**.*

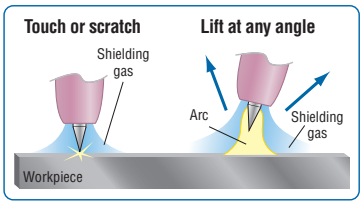


USA Model



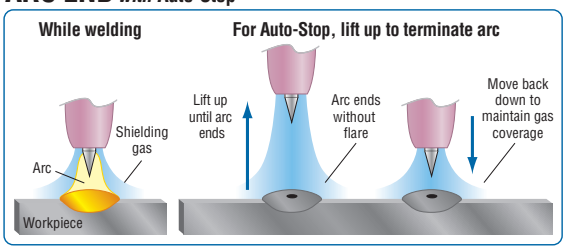
International Model Receptacles

ARC START *with* Lift-Arc™



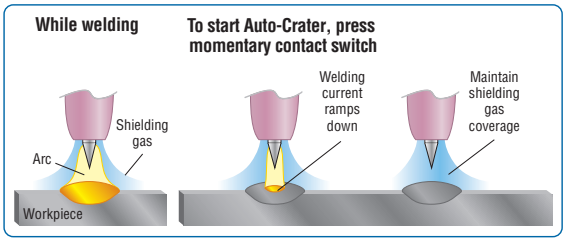
- Reduces or eliminates sticking
- Reduces or eliminates electrode/work contamination
- Low open-circuit voltage

ARC END *with* Auto-Stop™



- Eliminates need for a remote control
- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Eliminates unwanted arc strikes outside the weld area

ARC END *with* Auto-Crater™



- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Auto-Crater time allows for addition of filler
- Eliminates unwanted arc strikes outside the weld area

Genuine Miller® Accessories



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 Kit
119172 Field
120/240 V, 50 A plug (NEMA 14-50P) to fit full KVA receptacle.



International Plug Field
255416 1-phase, 240 V, 16 A plug

Engine Filter Kits
252782 Field. For Mitsubishi (USA)
253901 Field. For Kubota (USA/Int'l)
274427 Field. For CAT Turbo (USA/Int'l)
246987 Field. For CAT (Int'l)
Includes all filters required for proper engine maintenance. Oil filter, primary and secondary fuel filter, and primary air filter.



Spark Arrestor (Muffler) Kit
300585 Field
Prevents particles from leaving the muffler that could potentially start a fire. Mandatory when operating on California grasslands, brush, or forest-covered land, and in all national forests. For other areas, check your state and local laws. Meets U.S. Forest Service Standard 5100-1B.



FA-1D Lockable Flame Arrestor Fuel Cap 043947 Field
Fuel cap can be padlocked to prevent vandalism. A built-in flame arrestor prevents flames or sparks from entering the fuel tank.



Protective Cover 195301 Field
Blue water-resistant cover with Miller logo resists stains and mildew, and protects the finish of your welder.

MIG (GMAW) or Flux-cored (FCAW)



ArcReach® SuitCase® 8
951726 With Bernard® BTB Gun 300 A
951727 With Bernard® S-Gun™
951728 With Bernard® Dura-Flux™ gun

ArcReach® SuitCase® 12
951729 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. When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time and money. See literature M/6.55.



ArcReach® Smart Feeder 951733
For use with ArcReach models only (see pages 2 and 3 for more information). Includes drive rolls and Bernard® PipeWorx 300-15 MIG gun. For MIG, FCAW, and advanced RMD® and pulse processes. See literature M/6.55.



SuitCase® 12RC Wire Feeder 951580
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.

MIG (GMAW)/Flux-cored (FCAW) Guns
See Bernard® literature SP-BTB for BTB air-cooled MIG guns, and SP-DF for Dura-Flux™ self-shielded flux-cored guns.



Spoolmatic® 30A Spool Gun 130831
Air-cooled, 200-amp, one-pound spool gun for aluminum and stainless MIG. See literature M/1.73. Requires **WC-24 Control (137549)**.

XR™ Wire Feeders and Guns
Push-pull system designed to handle difficult-to-feed soft alloy wires such as aluminum. See literature M/1.7 through M/1.74.

AC TIG (GTAW) Welding

The Dynasty 210 power sources can be run off the engine drive's generator to provide two arcs with only one engine.



Dynasty® 210 Series
For portable AC/DC TIG. See literature AD/4.81.

Multiple Operator Welding

The XMT 350 FieldPro and CST 280 power sources can be run off the engine drive's generator to provide two arcs with only one engine.



XMT® 350 FieldPro™
See literature DC/18.96.



CST™ 280
See literature DC/29.55.

Genuine Miller® Accessories (Continued)

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).

Stick/TIG Remote Controls



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.



RHC-14 Hand Control 242211020
Miniature hand control for remote current, voltage and contactor control. Dimensions: 4 x 4 x 3.25 in. (102 x 102 x 82 mm). Includes 20-foot (6 m) cord and 14-pin plug.



Wireless Remote Hand Control 300430
For remote current, voltage and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.

Wireless Antenna Kit 300749
Recommended for improved reception.



RMS-14 On/Off Control 187208
Momentary-contact switch for contactor control. Rubber-covered pushbutton dome switch ideal for repetitive on-off applications. Includes 26.5-foot (8 m) cord and 14-pin plug.



RCC-14 Remote Contactor and Current Control 151086
East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 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 or 24 VAC Wire Feeders
242208025 25 ft. (7.6 m)
242208050 50 ft. (15.2 m)
242208080 80 ft. (24.4 m)

Trailers and Hitches (Note: Trailers are shipped unassembled.)



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.

Cable Tree 043826
Provides an area to conveniently wrap weld cables and extension cords.



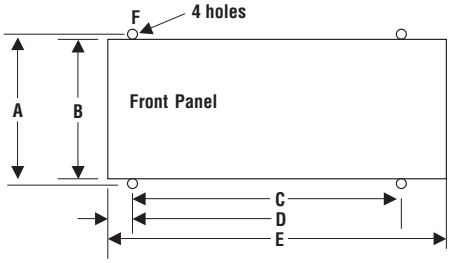
Dual Hitch 301441
Combination 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.



2-In-1 Document/ Fire Extinguisher Holder 301236
Stores documents and holds a 5-pound fire extinguisher.

Note: Holder shown mounted on trailer. Fire extinguisher not included.

Mounting Specifications



A. 27.75 in. (705 mm)
B. 26.25 in. (667 mm)
C. 52.25 in. (1,327 mm)
D. 2 in. (51 mm)
E. 56 in. (1,422 mm)
F. .562 in. (14 mm) diameter

Height: 32 in. (813 mm)
Width: 26.25 in. (667 mm)
Depth: 56 in. (1,422 mm)

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-Mid Frame	1,605 lb. (728 kg)	1,424 lb. (646 kg)	1,424 lb. (646 kg)	19.5 in. (495 mm)	8 in. (203 mm)	46 in. (1,168 mm)	ST175/80D-13 Load Range C	Length: 101 in. (2,565 mm) Width: 55 in. (1,397 mm)*	181 lb. (82 kg)

**Width at outside of fenders.*

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Big Blue® 400 Pro (USA)	**907732** **907733** **907774**	Kubota. USA model Mitsubishi. USA model CAT (turbo charged). USA model		
Big Blue® 400 Pro with ArcReach® (USA)	**907732001** **907733001** **907774001**	Kubota. USA model Mitsubishi. USA model CAT (turbo charged). USA model		
Big Blue® 400X Pro (Int'l)	**907732010** **907732011** **907758** **907774002**	Kubota. International model Kubota. International model with ArcReach® CAT. International model CAT (turbo charged). International model		
Field Accessories				
Full KVA Adapter Cord	**300517**	Field		
Full KVA Plug Kit	**119172**	120/240 V. Field		
International Plug	**255416**	Field		
Engine Filter Kits		Field. See page 6		
Spark Arrestor (Muffler) Kit	**300585**	Field		
FA-1D Lockable Flame Arrestor Fuel Cap	**043947**	Field		
Protective Cover	**195301**	Field		
MIG/Flux-cored Welding				
ArcReach® SuitCase® 8	**951726** **951727** **951728**	With Bernard® BTB Gun 300 A. See literature M/6.55 With Bernard® S-Gun™ With Bernard® Dura-Flux™ gun		
ArcReach® SuitCase® 12	**951729** **951730** **951731**	With Bernard® BTB Gun 300 A. See literature M/6.55 With Bernard® S-Gun™ With Bernard® Dura-Flux™ gun		
ArcReach® Smart Feeder	**951733**	For use with ArcReach models only. MIG/FCAW/RMD®/pulse feeder with Bernard® PipeWorx 300-15 MIG gun. Tweco®-style connectors. See literature M/6.55		
SuitCase® 12RC	**951580**	With Bernard® BTB Gun 300 A. See literature M/6.5		
MIG (GMAW) and Flux-cored (FCAW) Guns		See Bernard® literature SP-BTB and SP-DF		
Spoolmatic® 30A Spool Gun	**130831**	Requires WC-24 Control. See literature M/1.73		
WC-24 Control	**137549**	See literature M/1.73		
XR™ Wire Feeder Control and Guns		See literature M/1.7 through M/1.74		
AC TIG Welding		See page 6		
Multiple Operator Welding		See page 6		
Plasma Cutting		See page 7		
Stick/TIG Remote Controls				
ArcReach® Stick/TIG Remote	**301325**	For use with ArcReach models only		
RHC-14 Hand Control	**242211020**	Hand control with 20 ft. (6 m) cord		
Wireless Remote Hand Control	**300430**	Hand control with wireless 300 ft. (91.4 m) operating range		
Wireless Antenna Kit	**300749**	Recommended for improved reception		
RMS-14 On/Off Control	**187208**	Remote contactor control		
RCC-14 Remote Contactor and Current Control	**151086**	Fingertip control		
PRHC-14 Hand Control	**195511**	Hand control with 120 V GFCI receptacle, 125 ft. (38 m)		
Extension Cables		See page 7		
Trailers and Hitches				
HWY-Mid Frame	**301438**	Trailer with lights, fenders and dual hitch. For highway use		
Cable Tree	**043826**	Trailer-mounted cable holder		
Dual Hitch	**301441**	Combination 2 in. (50 mm) ball hitch and 3 in. (76 mm) lunette eye in one reversible assembly		
2-In-1 Document/Fire Extinguisher Holder	**301236**	Stores documents and holds a 5 lb. fire extinguisher		

Date: **Total Quoted Price:**

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The Power of Blue®

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