

ARM YOURSELF WITH THE RIGHT WELDER

Ranger® 225



Shown:
Ranger 225 (K2857-1)

KEY FEATURES

The Ranger 225 welder/generator is a multi-process, engine-driven welder designed for a variety of processes – stick, TIG, MIG or flux cored. Whatever the process or application, arm yourself to get the job done and get it done right the first time.

- Totally enclosed case protects the engine and limits noise
- Smooth DC welding output
- 10,500 Watts AC generator power

Processes »

Stick, TIG, MIG, Flux-Cored

Output »



Input »



Product Number »

K2857-1 Ranger 225

FEATURES

- » **Totally Enclosed Case**
 - Engine is fully protected.
 - 3 service access doors.
 - Low noise – 76.4 dBA sound level at 23 ft. (7 m). 100.7 dB sound power (Lwa) at rated output.
- » **Versatile DC Welding**
 - Smooth DC welding output for a broad range of stick electrode types.
 - MIG, flux-cored and TIG capable (with optional equipment).
- » **10,500 Watts Peak Single-Phase AC Generator Power**
 - Peak for motor starting.
 - 9,000 watts continuous power for generator, plasma cutter or inverter welder.
 - Lights, grinder, power tools.
- » **23 HP Kohler® Gasoline Engine**
 - 2 cylinder, 4 cycle overhead valve air-cooled design.
 - Oil drain extension for easy oil changes.
 - 12 gallon tank for extended run times.
 - Only 1.5 gallons/hour at 210 amps DC, 25V, 100% duty cycle. Visual fuel level gauge on both sides of unit.
- » **Rugged Reliability**
 - Welding and AC generator outputs rated at 104°F (40°C).

PERFORMANCE

Arc Performance

- Smooth DC welding output for a broad range of stick electrodes, such as Lincoln Excalibur® 7018 (AWS E7018) and Fleetweld® 5P+® (AWS E6010). Also capable of MIG, flux-cored, and TIG welding.
- Choose DC(+) for a deep penetrating arc or DC(-) for less penetration on thin sheet metal.
- Rated 225 amps/25 volts/40% duty cycle and 210 amps/25 volts/100% duty cycle for CC and 200 amps/20 volts for CV. All rated outputs at 104°F (40°C).
- Simple Output Range Selector can be used to select one of three amperage ranges with generous overlap for Stick/TIG welding, or one Wire Feed welding range.
- Fine adjustment control allows you to dial in just the right welding output for each application.
- Add productivity with self-shielded flux-cored CV wire welding. Compatible with Lincoln Electric LN-25 PRO® and Activ8® Across-the-Arc wire feeders for use with a variety of wire electrodes.
- Expand to AC TIG welding with optional Square Wave® TIG 200 (powered by AC generator power from the Ranger 225) for aluminum and other alloy welding.

AC Generator Performance

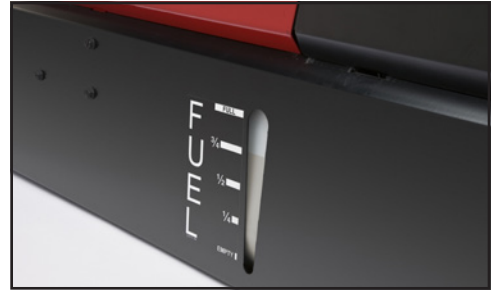
- 10,500 watts peak AC generator power. Most peak power in its class. Use for motor starting.
- 9,000 watts continuous AC generator power. For high capacity needs such as powering a Tomahawk® 1000 plasma cutter, or an Invertec® inverter welder or a Square Wave® TIG 175 welder. Also for lights, a grinder or other power tools.
- Delivers up to 38 amps from the single 120V/240V full-KVA receptacle. Standard circuit breakers protect the machine as well as your power tools.
- Delivers up to 40 amps from two 120V duplex receptacles.
- Optional GFCI (Ground Fault Circuit Interrupter) Kit available for additional protection from electrical shock.
- Simultaneous welding and AC generator power – power up to 3,950 watts while welding at 145 amps (AC generator power is reduced when welding simultaneously per table below).
- Take on more jobs – plug in an optional Tomahawk 1000 plasma cutter to cleanly cut metal.

SIMULTANEOUS WELDING AND POWER LOADS

DC Welding Output (Amps)	Permissible Power (Watts)
0	9,000
90	6,000
145	3,950
225	0

FEATURES

- Top-of-the-line OHV engine: Kohler Command® 23 HP CH730.
- Three engine doors provide machine protection and easy service access.
- Easy to Maintain – Engine requires an oil change only every 100 hours and every 200 hours for the oil filter.
- Electric Start Switch for easy starts. Switch combines OFF, START, and IDLER functions into one simple, compact, easy to use switch.
- Circuit breaker protects battery ignition circuit.
- Convenient truck or trailer mounting with front and rear holes in base.
- Fuel level slots in both sides of the base with a decal to easily read the fuel level in the tank. Helps you avoid running out of fuel during critical jobs.
- Large top fuel filler neck is easily accessed for refueling.
- Oil drain valve (no tools required) with removable extension tube.
- Easy access battery cover.



KEY CONTROLS



1. Engine Hour Meter
2. 4-Position Output Range Selector
3. Circuit Breakers
4. 120 Volt AC Receptacles (NEMA 5-20R)
5. Output Stud Covers
6. Ground Stud
7. 120/240 Volt AC Full KVA Receptacle (NEMA 14-50R)
8. Fine Output Control
9. Engine Choke Control (Stainless Steel Cable)
10. Engine Start Switch with Idler Control

QUALITY AND RELIABILITY

- Oil dip stick, filters, spark plugs, etc. are easily accessed with left, right and top engine doors. Left and right doors are removable, if desired, for service.
- Adjust exhaust direction with top-mounted 360° rotatable exhaust muffler. Muffler made from aluminized steel for long life.
- Red and black powder paint finish offers increased durability with added protection from rust and corrosion. Also ultraviolet resistant to better retain color and gloss.
- Longer engine life, reduced noise emissions and greater fuel economy with automatic engine idler.
- Conveniently located engine maintenance label under top engine door.
- Automatic engine shutdown protection for low oil pressure.
- 435 cold cranking amps with the Group 58 battery for extra starting capacity in cold temperatures.
- Dependability and long life aided by all-copper windings in rotor and stator with high quality insulation.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Canadian Standards Association (CSA) certified.
- Three-year Lincoln Electric warranty (parts and labor) on welder (engine is warranted separately by the manufacturer).
- Backed by Lincoln Electric's Service Parts Commitment—We will ship in-stock parts within 24 hours of receipt of the order to anywhere within the U.S.

MACHINE SPECIFICATIONS

Product Name	Ordering Information	Description	CC Rated Output Current/Voltage/Duty Cycle	CV-Rated Output Current/Voltage/Duty Cycle	Generator AC Power ⁽²⁾⁽³⁾	Dimension H x W x L inches (mm)	Weight lbs. (kg)
Ranger 225	K2857-1	225 Amp DC Arc Welder 10,500 Watts Peak 9,000 Watts Continuous AC Power	DC Constant Current 225A/25V/40% 210A/25V/100% Current Ranges 120-225A 70-145A 50-90A Max OCV @ 3700 RPM 80V RMS	DC Constant Voltage ⁽¹⁾ 200A/20V/100% 15-25V	10,500 Watts Peak 9,000 Watts Continuous 60 Hz Single Phase Two 120V Duplex Receptacles 20A per Duplex 40A Total ⁽⁴⁾ 120V/240V Receptacle 38A Each 120V Branch ⁽⁴⁾ 38A @ 240V	29.9 x 21.5 x 42.3 (759 x 546 x 1074) To top of exhaust tube: 36.2 (920)	514 (233)

⁽¹⁾ DC constant voltage capability provides convenience and added safety when welding in electrically hazardous conditions.

⁽²⁾ When welding, available auxiliary power will be reduced. Output voltage is within +/- 10% at all loads up to rated capacity.

⁽³⁾ 120V will operate either 60 Hz or 50/60 Hz power tools, lights, etc.

⁽⁴⁾ Circuits cannot be wired in parallel to operate the same device.

ENGINE SPECIFICATIONS

Engine Model	Description	Horsepower & Displacement	Ignition	Capacities	Operating Speeds	Fuel Consumption
Kohler OHV ⁽³⁾ Command CH730 (Gasoline)	2 Cylinder, 4 Cycle, OHV Air-Cooled Gasoline Engine Aluminum Alloy with Cast Iron Liners	23 HP @ 3600 RPM 44 cu in (725 cc)	Electric Start 12V Battery 435 Cold Cranking Amps Manual Choke	FUEL: 12 Gals (45 Ltrs) OIL: 2.0 Qts (1.9 Ltrs)	210A DC 3,500 RPM High Idle 3,700 RPM Low Idle 2,200 RPM	1.5 Gals/Hr 5.7 Ltr/Hr 0.9 Gals/Hr 3.5 Ltr/Hr 0.4 Gals/Hr 1.6 Ltr/Hr

⁽³⁾ Kohler warranty is 3 years.

RECOMMENDED ACCESSORIES

GENERAL OPTIONS



Kohler Tune-Up Kit
For routine engine maintenance. Includes (2) spark plugs, (1) fuel filter, (1) air filter, (1) oil filter, (2) 1 Qt. 10W 30 Oil.
Order K3494-1



Power Plug Kit (20 amp)
Provides four 120V plugs rated at 20 amps each, and one dual voltage, full KVA plug rated at 120/240V, 50 amps. 120V plug may not be compatible with common household receptacles.
Order K802N



Full-KVA Power Plug
One dual voltage plug rated at 120/240V, 50 amps. (NEMA 14-50P)
Order T12153-9



Full-KVA Adapter Kit
Provides convenient connection of Lincoln Electric equipment having a 240V AC 1-phase plug (NEMA 14-50P) to the full-KVA receptacle on engine-driven welders.
Order K1816-1



GFCI Receptacle Kit
Includes one UL approved 120V ground fault circuit interrupter duplex type receptacle and installation instructions. Replaces the factory-installed 120V duplex receptacle. Each receptacle of the GFCI duplex is rated at 20 amps. Maximum total current from the GFCI duplex is limited to 20 amps. Two kits required.
Order K1690-1



Spark Arrestor Kit
Attaches to muffler exhaust tube. Virtually eliminates spark emissions.
Order K1898-1



Canvas Cover
To protect the Ranger 225 when not in use. Made from attractive red canvas material that is flame retardant, mildew resistant and water repellent.
Order K886-2



All-Terrain Undercarriage
Portable cart for moving the engine drive by hand over various jobsite surfaces. Heavy-duty design with pneumatic or Flat-Free tires.
Order 1737-4 Pneumatic Tires
Order 1737-3 Flat-Free Tires



Factory Undercarriage
Portable cart for moving the engine drive by hand over smooth surfaces. Heavy-duty design with tires and swivel castors.
Order 1770-2 Pneumatic Tires
Order 1770-3 Flat-Free Tires



Welding Gas Cylinder Holder
Holds welding gas cylinder. Compatible with the following undercarriages: K1770-2 and -3, K1737-3 and -4
Order K1745-1



LPG Tank Holder
Holds LPG tank. Compatible with the following undercarriages: K1770-2 and -3, K1737-3 and -4.
Order K1745-2



Shown with optional K2639-1 Fender & Light Kit

Small Two Wheel Welder Trailer
For heavy-duty road, off-road, plant and yard use. Includes pivoting jack stand, safety chains, and 13 in. (330 mm) wheels. Stiff .120 in. (3.0 mm) welded rectangular steel tube frame construction is phosphate etched and powder coat painted for superior rust and corrosion resistance. Low sway suspension gives outstanding stability with manageable tongue weight. Wheel bearings are packed with high viscosity, high pressure, low washout Lubriplate™ grease. Includes a Duo-Hitch™, a 2 in. (51 mm) ball/lunette eye combination hitch. Overall width 60 in. (1524 mm). Overall length 110 in. (2794 mm).
Order: K2635-1 Trailer
K2639-1 Fender & Light Kit
K2640-1 Cable Rack



STICK OPTIONS

Accessory Kit
For stick welding. Includes 35 ft. (10.7 m) #2/0 electrode cable with lug, 30 ft. (9.1 m) #2/0 work cable with lugs, headshield, filter plate, work clamp and electrode holder. 400 amp capacity.
Order K704



Accessory Kit
For stick welding. Includes 20 ft. (6.1 m) #6 electrode cable with lug, 15 ft. (4.6 m) #6 work cable with lugs, headshield, filter plate, work clamp, electrode holder and sample pack of mild steel electrode. 150 amp capacity.
Order K875

TIG OPTIONS



Pro-Torch™ PTA-26V TIG Torch
Air-cooled 200 amp torch (2 piece) equipped with valve for gas flow control. 25 ft. (7.6 m) length.
Order K1783-9



Magnum® Parts Kit
Provides all the torch accessories you need to start welding. Parts kit provides collets, collet bodies, a back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable pack.
Order KP509 for PTA-26V



Square Wave TIG 200
This 46 lb. (21 kg) TIG and stick welder includes adjustable AC Frequency Control and AC Balance for great results on aluminum, pulse mode and 120V or 230V input power capability.
Order K5126-1

WIRE FEEDER OPTIONS



LN-25X® / Magnum® PRO Curve™ 045C One-Pak®
Includes: LN-25X Feeder with CrossLinc™ Technology (K4267-1); Magnum® Pro Curve™ welding gun Ready-Pak® 15 ft. (4.6 m) (K2951-2-10-45); Drive Roll Kit .040-.045 in (1.0-1.2 mm) Cored Wire (KP1697-045C)
Order K4100-1



LN-25X / K126™ PRO 116-5/64C One-Pak®
Includes: LN-25X Wire Feeder with CrossLinc™ Technology (K4267-1); K126™ PRO Innershield® 350A FCAW-SS Welding Gun 15 ft. (4.6 m) 1/16-5/64 (K126-12); Drive Roll Kit 5/64 in. (2.0 mm) Solid/Cored Wire (KP1697-5/64); Drive Roll Kit 1/16 in. (1.6 mm) Cored Wire (KP1697-1/16C)
Order K4100-2



POWER MIG™ 180C
Premium compact wire feeder with continuous voltage control for MIG and flux-cored welding. 30 to 180 amp output range. Get input power from the AC generator of the engine-driven welder with the K1816-1 Full-KVA Adapter Kit (required). Add the K2532-1 Magnum® 100SG Spool Gun for aluminum MIG welding.
Order K2473-2



WIRE FEEDER OPTIONS
Magnum® 100SG Spool Gun
Designed to easily feed 4 in. (102 mm) diameter 1 lbs. (0.45 kg) spools of .030 in. (0.8 mm) or .035 in. (0.9 mm) diameter SuperGlaze® aluminum MIG wire. Includes gun, adapter kit, .035 in. (0.9 mm) contact tips (qty. 3), gas nozzle, and a 1 lb. (0.45 kg) spool of SuperGlaze® 4043 .035 in. (0.9 mm) MIG wire. Packaged in a convenient carrying case.
Order K3269-1



PLASMA CUTTING
Tomahawk 1000
Cuts metal using the AC generator power from the engine-driven welder. Requires the T12153-9 Full-KVA Power Plug (1-Phase).
Order K2808-1

PRODUCT SPECIFICATIONS

Product Name	Product Number	Rated Output Current/Voltage/Duty Cycle	Output Range	Engine	Number of Cylinders	HP@ Speed (rpm)	H x W x D inches (mm)	Net Weight lbs. (kg)
Ranger 225	K2857-1	225A DC CC/25V/40% 210A DC CC/25V/100% 200A DC CV/20V/100%	50-225A DC 15-25V CV 10,500 watts peak 9,000 watts continuous	Kohler OHV Command CH730	2	23 @ 3600	29.9 x 21.5 x 42.3 (759 x 546 x 1074) To top of exhaust tube: 36.2 (920)	514 (233)

For best welding results with Lincoln Electric equipment, always use Lincoln Electric consumables. Visit www.lincolnelectric.com for more details.

Manufactured at a facility with certified ISO Quality and Environmental Management Systems.

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