

KOHLERengines



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KOHLER QUALITY

Kohler Co. is one of the oldest and largest privately-held companies in the United States. Since 1873, Kohler Co. has pioneered the design and manufacture of plumbing products, generator sets, and technologically-advanced engines. Today, over 12,000 employees continue to craft these products to help people the world over.

ENVIRONMENTAL COMMITMENT

Kohler Co. is dedicated to the preservation of a sound environment. That's why for nearly 20 years the Engine Division has set its own strict standards for fuel efficiency and emissions control... well ahead of meeting 1994 requirements. Noise emissions, too, are tightly controlled to meet worldwide (dB(A)) standards.

PERFORMANCE, DURABILITY, RELIABILITY

When it comes to honest horsepower, outstanding torque, and long life, nothing compares to Kohler's family of COMMAND, MAGNUM and K-SERIES engines.



Kohler engines are the planned result of state-of-the-art CAD/CAM design and development; precision manufacturing; and rigorous testing for heat, cold, vibration, sound and exhaust.

TWO-YEAR WARRANTY

In the field, every COMMAND and MAGNUM engine is backed by a two-year, limited warranty. It is your assurance of Kohler quality, pledged by every Engine Division employee.

WORLDWIDE SERVICE



Kohler Engine Division is supported by a worldwide network of over 10,000 dealers and distributors. Factory-trained technicians and genuine Kohler replacement parts are always available when you need them.

CUSTOMER SALES & SERVICE NUMBER 1-800-544-2444

Anywhere in the U.S.A. and Canada...
24 hours-a-day, 7 days-a-week...
customers may call our "800" number
for literature, sales/service information,
or the names of local Kohler dealers
and distributors.

MAGNUM™ FEATURES

[Key by Model]

ELECTRONIC IGNITION

Generates a stronger spark at lower cranking speeds for dependable first-time starts. Plus, it never needs adjustment.

AUTOMATIC COMPRESSION RELEASE

Makes starting easier by reducing compression during cranking. Full compression automatically returns at operating speed.

STELLITE™ EXHAUST VALVE W/ROTATOR

Resists wear and maintains maximum compression.

POSI-LOCK CONNECTING RODS

Precise rod/cap alignment ensures superior bearing surface lubrication.

FULL-PRESSURE LUBRICATION

Extends engine life by continuously delivering oil under pressure to all bearing surfaces. Spin-on filter extends oil change intervals.

GERCOR™ OIL PUMP

Supplies continuous lubrication to the balance shaft, camshaft, crankshaft and connecting rod.

LARGE CAPACITY DUAL ELEMENT AIR CLEANER

Provides maximum protection from dirt and dust. Maintains smooth air flow for fuel-efficient combustion.

CAST IRON DURABILITY

Heavy-duty cast iron cylinders provide extended life and can be reconditioned if necessary.

HEAVY-DUTY BEARINGS

Splash-lubricated, precision ball bearings or pressure-lubricated sleeve bearings provide smooth performance even under maximum thrust loads.

BALANCE GEARS

Specialty designed for superior engine balance and low vibration.

COMMAND™ FEATURES

(Key by Model)

OVERHEAD VALVE DESIGN

Improves performance by creating greater volumetric efficiency for increased horsepower per in/cu³ displacement...with more complete combustion, less carbon build-up and oil consumption.

HYDRAULIC VALVE LIFTERS

This Kohler exclusive minimizes operational noise and eliminates adjustments, making COMMAND virtually maintenance-free.

FULL-PRESSURE LUBRICATION

Increases engine life by continuously delivering oil under pressure to all bearing surfaces. Spin-on filter extends oil change intervals to 100 hours.

GEROTOR™ OIL PUMP

Supplies continuous lubrication to the balance shaft, camshaft, crankshaft, connecting rod, plus the rocker arm and hydraulic lifters.

EMISSION CONTROLS

Kohler engines are designed to meet strict EPA emission standards.

CAST IRON CYLINDER LINER

Rugged cast iron cylinder liner extends engine life and can be reconditioned if necessary.

AUTOMATIC COMPRESSION RELEASE (ACR)

Makes starting easier by reducing compression during cranking. Full compression automatically returns at operating speeds.

OIL SENTRY™

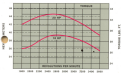
This optional device shuts down the engine or triggers a warning light when oil level is low.

QUIET PLUS™ OPERATION

Engineered-material components and precisely-machined parts significantly reduce operational noise.



MACHIM
18, 20 HP HORIZONTAL TWIN



MODEL SPECIFICATIONS

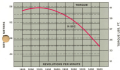
ENGINE TYPE	4 Cyls. Air-Cooled, Diaphragm, Horizontal Dual-Tank Cylinder Design, Inverter Controlled, Removable Cool-Fan Control Switch, 1 Year	
MODEL	18	20
DISPL.	1.7L 10.2 liter	1.9L 11.2 liter
STROKE	3.0 in. 76.2 mm	3.0 in. 76.2 mm
DISPLACEMENT	17.8 cu in. 291.7 cc	19.8 cu in. 323.8 cc
POWER (at 2000 RPM)	18.0 HP 13.2 kW	20.0 HP 14.7 kW
MAX. TORQUE (at 1700 RPM)	25.0 kgm/190	27.0 kgm/207
1/2 INCH BOLT PATTERN	1.0	1.0
WEIGHT (at 2000)	100.0 kg 220.5 lb	105.0 kg 231.5 lb
MAX. HEIGHT (at 2000)	11.0 in. 280 mm	11.0 in. 280 mm
APPLICATION	For Tractor and PTO Use	For Tractor and PTO Use
MANUFACTURED UNDER	© 2014 Kubota Ltd.	© 2014 Kubota Ltd.

*Always use the fan. Operating without fan can damage the engine.

**The manufacturer's warranty is not applicable to any engine used for other than the intended application. For more information, please contact your local distributor.



I-SERIES 23 HP HORIZONTAL TWIN



MODEL SPECIFICATIONS

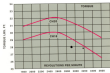
ENGINE TYPE	4-Cycle, Air-Cooled, Single-Cylinder, Horizontal (2300), Twin-Cylinder (2300L), Cast Iron Block, 1-Phase
MODEL	I23E
SIZE	17.0 in. 432 mm
WEIGHT	22.0 lb. 10.0 kg
MODEL NUMBER	375740 3883-0001
POWER (SAE J1995)	23 HP 17.0 kW
NET POWER (SAE J1995)	21.0 HP 15.5 kW
MAXIMUM TORQUE	17.0 ft-lb. 23.0 Nm
MAXIMUM SPEED	3700
MAX. CAPACITY (FUEL)	4.0 gal. 15.1 liter
SUBSTRATE	Cast Iron/Aluminum Alloy Block
MAX. SPEED (LITER)	3700 (3700) (3700)

*Capacities/Weights may vary and include variations. Always use metric.

**In accordance with Society of Automotive Engineers—(SAE) Engine Test Code J1995 product engine information is provided in accordance with SAE J1995 and J1996.



COMMAND 18, 20 HP OHV HORIZONTAL TRIM



MODEL SPECIFICATIONS

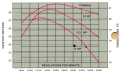
ENGINE TYPE	OHV, Two-Cycle, 4-Stroke, Horizontal Shaft, Air-Cooled, Electric Start, Carburetor, 20:1 Fuel Mix, Full-Flow Oil, 2-Stroke, Full-Flow Oil	
Model	1818	1820
Bar	27 in. 690 mm	30 in. 762 mm
Trimmer	1.25 in. 31.8 mm	1.5 in. 38.1 mm
DISPLACEMENT	30.4 cc 1.85 cu in.	34.4 cc 2.1 cu in.
Stroke (4-stroke only)	1.5 in. 38.1 mm	1.5 in. 38.1 mm
MAX. SPEED (4-stroke only)	3600 RPM	3600 RPM
COOLING FAN	1.0 in. 25.4 mm	1.0 in. 25.4 mm
Weight (w/ fuel)	10.5 lb. 4.8 kg	11.5 lb. 5.2 kg
Oil Capacity (4-stroke only)	1.0 qt. 0.95 l	1.0 qt. 0.95 l
Application	Light to medium duty lawns	Light to medium duty lawns
Warranty (years)*	3 (2/10/1/3/1/1)	3 (2/10/1/3/1/1)

*Warranty on 1818 and 1820 is 3 years.

*Warranty on 1818 and 1820 is 3 years or 4 years with Toro's 4-Stroke Advantage Engine™ — your engine has 4-stroke, 2-stroke, 4-stroke engines when needed and produces at least 50% of its full power when needed.



COMMAND 11, 13.5, 14 HP OHV VERTICAL SINGLE



MODEL SPECIFICATIONS

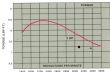
ENGINE TYPE	OHV, Single Cylinder, Overhead Valve, Air Cooled, Vertical, Single Phase, Carburetor, 2600 to 3700 RPM, Vertical Cast Aluminum, Recoil Start, Black with cast iron cylinder head		
MODEL	11 HP	13.5 HP	14 HP
Stroke	1.75 in. (44 mm)	1.75 in. (44 mm)	1.75 in. (44 mm)
Bore	1.75 in. (44 mm)	1.75 in. (44 mm)	1.75 in. (44 mm)
Displacement	14.2 in ³ (232 cm ³)	14.2 in ³ (232 cm ³)	14.2 in ³ (232 cm ³)
Max. RPM (at 3000 rpm)	6000 ¹ 3000 ²	6000 ¹ 3000 ²	6000 ¹ 3000 ²
Max. Torque (at 3000 rpm)	6.5 ft-lbs (8.8 Nm)	6.5 ft-lbs (8.8 Nm)	6.5 ft-lbs (8.8 Nm)
Max. Power (at 3000 rpm)	11.0 hp (8.1 kW)	13.5 hp (10.0 kW)	14.0 hp (10.4 kW)
Idle Speed	1100	1100	1100
Weight	10 lbs. (4.5 kg)	10 lbs. (4.5 kg)	10 lbs. (4.5 kg)
Oil Capacity (with oil filter)	1 quart (0.95 L)	1 quart (0.95 L)	1 quart (0.95 L)
Dimensions	See Dimensions and Fuel Flow	See Dimensions and Fuel Flow	See Dimensions and Fuel Flow
Accessories (2000 ¹)	1000-1000-0000	1000-1000-0000	1000-1000-0000

¹ Torque includes recoil plate to mounting face. Torque increases when plate is fast to base of block including dimensions in inches.

² Maximum speed shown on speed set in accordance with Society of Automotive Engineers - Small Engines Test Code J2000. Production engine when equipped with version of 1000-1000-0000 and 1000-1000-0000.



COMPAQ
5 HP OHV HORIZONTAL SINGLE



0.00 0.02 0.04 0.06 0.08 0.00 0.02 0.04 0.06 0.08

MODEL SPECIFICATIONS

ENGINE TYPE:	4-Cycle, Single Cylinder, Overhead Valve, Air Cooled, Gasoline, Horizontal Shaft, Aluminum Head and Block with Cast-Iron Cylinder Liner
Model:	501
Size:	1.84 in. 47 mm
Stroke:	1.38 in. 35 mm
DISPLACEMENT:	10.0 in. ³ 163 cc
Weight (maximum):	5.0 lb. 2.27 kg
Idle Speed (RPM) (1/4 throttle):	1150-1200
Compression Ratio:	8.1:1
Ignition:	CDI 9.2 Hz
Oil Capacity:	14 oz. 400 ml
Applications:	Generator
Dimensions (L x W x H):	10.0 x 6.0 x 7.0

*Single installation model is 17.0 lbs. Dimensions in inches.

**Always wear safety glasses or goggles or eye protection with lenses of automation engineers or technicians. For Code 2000 Protection engine when operating indoors at least 100 cubic feet per hour for 8.

KOHLER ENGINEERS

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