

kubota d1105 specs

kubota d1105 specs are essential for anyone considering this compact diesel engine for their agricultural, industrial, or construction projects. Known for its durability, efficiency, and reliable performance, the Kubota D1105 has become a popular choice among professionals and hobbyists alike. This article provides a comprehensive overview of the Kubota D1105 specs, covering its engine details, performance metrics, physical dimensions, and additional features to help you make an informed decision.

Overview of Kubota D1105 Engine

The Kubota D1105 is a 3-cylinder, 1.1-liter diesel engine renowned for its robust construction and efficient operation. Designed primarily for compact machinery such as excavators, loaders, and generators, the D1105 offers a balanced combination of power and economy.

Engine Type and Configuration

- Engine Model: Kubota D1105
- Type: 3-cylinder, 4-stroke, diesel engine
- Cooling System: Liquid-cooled
- Injection System: Direct injection
- Fuel System: Common rail direct fuel injection (varies by model version)

Displacement and Bore x Stroke

- Displacement: 1.1 liters (1098 cc)
- Bore: 76 mm
- Stroke: 83 mm

Performance Specifications

Understanding the performance metrics of the Kubota D1105 is crucial for assessing its suitability for your applications.

Power Output and Torque

- Maximum Power: Approximately 24.8 horsepower (18.5 kW) at 3000 rpm
- Rated Power: Typically around 22-24 HP, depending on the specific model and application
- Maximum Torque: About 61.4 Nm (45.3 ft-lb) at 1800 rpm

Fuel Consumption and Efficiency

- Fuel Consumption: Approximately 2.5 liters per hour at rated load
- Fuel Tank Capacity: Varies by equipment but generally around 10-15 liters
- Efficiency: Designed for optimal fuel economy in compact machinery

Governor and Control System

- Type: Mechanical or electronic governor (depending on model)
- Purpose: Maintains constant engine speed under varying load conditions

Physical Dimensions and Weight

The physical size and weight of the Kubota D1105 are critical factors for installation and maintenance.

Dimensions

- Overall Length: Approximately 650 mm (25.6 inches)
- Overall Width: Around 400 mm (15.7 inches)
- Overall Height: About 520 mm (20.5 inches)

Weight

- Dry Weight: Approximately 140 kg (308 lbs)

Lubrication and Cooling System

Proper lubrication and cooling are vital for engine longevity and performance.

Lubrication System

- Type: Forced splash or pressure lubrication system
- Oil Capacity: Around 3.3 liters (3.5 quarts)
- Oil Filter: Spin-on type, easily accessible for maintenance

Cooling System

- Type: Liquid-cooled with radiator
- Coolant Capacity: Approximately 4 liters
- Thermostat Control: Maintains optimal operating temperature

Electrical System and Starting Mechanism

Reliable starting and electrical features enhance engine usability.

Electrical Specifications

- Battery Voltage: 12V
- Starter Motor: Electric
- Alternator Output: Typically 12V, 35A or higher depending on model

Ignition System

- Type: Conventional or electronic ignition system
- Starting Method: Electric start for ease of use

Additional Features and Compatibility

The Kubota D1105 is designed with versatility in mind, making it suitable for various applications.

Mounting and Compatibility

- Mounting: Compatible with standard engine mounts for easy installation
- Applications: Compact excavators, generators, pumps, and other machinery
- Accessories: Options for cooling fan, alternator, and other peripherals

Maintenance and Serviceability

- Ease of Access: Designed for straightforward maintenance tasks

- Service Intervals: Generally every 200-250 hours, depending on usage
- Parts Availability: Widely available through Kubota dealerships and parts suppliers

Summary of Key Kubota D1105 Specs

1. Engine Type: 3-cylinder, 4-stroke diesel
2. Displacement: 1.1 liters (1098 cc)
3. Power Output: ~24.8 HP at 3000 rpm
4. Maximum Torque: 61.4 Nm at 1800 rpm
5. Cooling System: Liquid-cooled
6. Lubrication Capacity: 3.3 liters
7. Weight: Approximately 140 kg
8. Dimensions: Length 650 mm, Width 400 mm, Height 520 mm

Conclusion

The Kubota D1105 specs highlight its status as a dependable, efficient engine suitable for various compact machinery. Its balanced power output, compact size, and ease of maintenance make it an ideal choice for operators seeking durability and performance. Whether powering a mini excavator or a generator set, the D1105 offers a reliable solution with proven Kubota quality. When considering this engine for your project, understanding its detailed specs ensures optimal application and longevity, making it a valuable asset for your machinery needs.

Frequently Asked Questions

What are the key specifications of the Kubota D1105 engine?

The Kubota D1105 engine features a 1.116-liter, 3-cylinder diesel engine with a power output of approximately 23.5 horsepower, a rated RPM of 3000, and a compression ratio of 19.0:1.

What is the cooling system type used in the Kubota D1105?

The Kubota D1105 uses a liquid-cooled system to ensure optimal operating temperature and engine performance.

What is the fuel consumption rate of the Kubota D1105 engine?

The fuel consumption of the Kubota D1105 varies depending on load, but it typically consumes around 2.5-3.0 liters per hour under standard operating conditions.

What are the dimensions and weight of the Kubota D1105 engine?

The engine measures approximately 45 inches in length, 24 inches in width, and 30 inches in height, with a weight of about 370 pounds (168 kg).

Is the Kubota D1105 suitable for use in agricultural machinery?

Yes, the Kubota D1105 is commonly used in agricultural equipment such as compact tractors and generators due to its reliable performance and compact size.

What is the lubrication system type in the Kubota D1105?

The Kubota D1105 uses a splash lubrication system with a spin-on oil filter to maintain proper engine lubrication.

Are there any common issues or maintenance tips for the Kubota D1105?

Regular maintenance such as oil changes, filter replacements, and cooling system checks are essential. Common issues include fuel injector problems and overheating, which can be mitigated with proper maintenance and timely repairs.

Additional Resources

[Kubota D1105 Specs: An In-Depth Review of This Compact Diesel Engine](#)

The Kubota D1105 is a highly regarded small diesel engine, renowned for its reliability, efficiency, and versatility across various agricultural,

industrial, and commercial applications. Whether you're considering this engine for a new project or seeking to understand its detailed specifications, this comprehensive review aims to cover every essential aspect of the Kubota D1105, from technical specs to performance features.

Introduction to the Kubota D1105

The Kubota D1105 is a 1.1-liter, 3-cylinder diesel engine designed primarily for small machinery, including compact tractors, generator sets, and irrigation systems. Known for its robust construction and fuel economy, the D1105 exemplifies Kubota's commitment to producing durable, user-friendly power solutions.

Engine Overview and General Specifications

The foundational specifications of the Kubota D1105 set the tone for its performance capabilities:

- Engine Type: 3-cylinder, water-cooled, direct injection diesel engine
- Displacement: 1.133 liters (1,133 cc)
- Configuration: Inline, vertical
- Cooling System: Liquid-cooled with a radiator
- Lubrication: Full-pressure lubrication with a spin-off oil filter
- Fuel System: Direct injection with a fuel injection pump designed for efficiency and power
- Power Output: Ranges between approximately 15 to 20 horsepower depending on configuration and application
- Maximum Torque: Around 30 Nm (22.1 ft-lb)
- Dry Weight: Approximately 150-180 kg (330-396 lbs), depending on specific model variants

These core specs highlight the D1105's balance between compactness and power, making it suitable for a broad spectrum of small-scale machinery.

Engine Dimensions and Physical Characteristics

Understanding the physical size and weight of the D1105 is crucial for installation and compatibility:

- Overall Length: Approximately 620 mm (24.4 inches)
- Width: About 400 mm (15.7 inches)
- Height: Roughly 620 mm (24.4 inches)
- Mounting Dimensions: Standard flange mounting pattern compatible with various Kubota and third-party equipment
- Weight: 150-180 kg (330-396 lbs), depending on accessories and configuration

The compact size ensures easy integration into small equipment while maintaining sufficient power output.

Performance Specifications and Capabilities

Power and Torque

The D1105's power output varies with the specific model and application but generally falls within:

- Net horsepower: 15-20 HP at 3600 rpm
- Gross horsepower: Slightly higher, often about 17-22 HP
- Peak torque: Achieved at lower RPMs (~1500-2000 rpm), providing good pulling power and efficiency during operation

This power profile makes the D1105 well-suited for applications requiring steady, reliable power without excessive fuel consumption.

Fuel Consumption and Efficiency

One of Kubota's strengths is fuel economy, and the D1105 is no exception:

- Average fuel consumption: Around 0.8-1.2 liters per hour at rated load
- Fuel tank capacity: Typically between 4 to 6 liters, depending on the application
- Efficiency features: Direct injection and a well-designed combustion chamber optimize fuel burn, reducing emissions and operational costs

This efficiency makes the D1105 a cost-effective choice for long-term use.

Cooling and Lubrication Systems

- Cooling system: The water-cooled system maintains optimal operating

temperatures, preventing overheating during extended use. It features a thermostatic control to regulate coolant flow.

- Lubrication system: Full-pressure lubrication with a spin-on oil filter ensures proper oil circulation, reducing wear and extending engine life.

Regular maintenance of these systems is essential to sustain performance and durability.

Technical Features and Innovations

The D1105 incorporates several technological features designed to improve performance, reliability, and ease of maintenance:

- Direct Injection Fuel System: Ensures efficient fuel combustion, better fuel economy, and lower emissions.
- Automatic Decompression System: Simplifies starting, especially in cold conditions.
- Integrated Governor: Provides stable engine speed under varying loads, enhancing operational consistency.
- Removable Cylinder Head: Facilitates maintenance and repairs.
- Simplified Wiring and Control Layout: Designed for ease of service and troubleshooting.

Applications of the Kubota D1105

The versatility of the D1105 engine allows it to be used in various machinery:

- Small Tractors: Ideal for compact farming equipment and landscaping machinery.
- Generator Sets: Powers portable and standby generators for residential and commercial use.
- Irrigation Pumps: Provides reliable power for water pumping stations.
- Air Compressors: Suitable for small to medium industrial compressors.
- Construction Equipment: Used in mini excavators, cement mixers, and other construction tools.

Each application benefits from the engine's durability, fuel efficiency, and ease of maintenance.

Maintenance and Service Considerations

Proper maintenance prolongs engine life and ensures consistent performance:

- Oil Changes: Recommended every 100-200 hours of operation, using the specified engine oil grade.
- Fuel System Checks: Regular inspection of fuel filters and injectors.
- Cooling System Maintenance: Periodic coolant replacement and radiator cleaning.
- Air Filter Replacement: Ensures optimal airflow and combustion efficiency.
- Valve Adjustments: Necessary at scheduled intervals to maintain performance.
- Troubleshooting: The D1105's design simplifies diagnostics, with accessible service points.

Adhering to the manufacturer's maintenance schedule is vital for optimal operation.

Pros and Cons of the Kubota D1105

Pros:

- Compact and lightweight design for easy integration
- Fuel-efficient with low emissions
- Reliable and durable construction
- Easy maintenance and serviceability
- Wide application range

Cons:

- Limited horsepower compared to larger engines
- May require additional cooling capacity for heavy-duty applications
- Availability of parts can vary based on region
- Some models might have limited aftermarket support

Conclusion: Is the Kubota D1105 the Right Choice?

The Kubota D1105 stands out as a dependable, efficient, and versatile small diesel engine. It strikes a fine balance between size and power, making it suitable for a broad array of applications, especially where space

constraints and fuel economy are priorities. Its technological features and thoughtful design contribute to ease of maintenance and long-term durability.

If you are seeking a compact engine capable of delivering consistent performance for small-scale machinery, the D1105 is undoubtedly worth considering. Its proven track record and extensive application base validate its reputation as a reliable workhorse in the diesel engine market.

In summary, the Kubota D1105 offers a compelling package for operators and equipment manufacturers alike, combining efficiency, reliability, and versatility in a compact form factor. With proper maintenance and application, this engine can serve as a core component in various small machinery setups for years to come.

Kubota D1105 Specs

kubota d1105 specs: Popular Science , 1979-11 Popular Science gives our readers the information and tools to improve their technology and their world. The core belief that Popular Science and our readers share: The future is going to be better, and science and technology are the driving forces that will help make it better.

Related to kubota d1105 specs

OrangeTractorTalks - Everything Kubota OrangeTractorTalks, the place for Kubota tractor service tips, classifieds, specs, discussion, news and reviews!

Kubota's Online Illustrated Parts Catalog - OrangeTractorTalks Kubota's Online Parts Catalog For a little while now Kubota has made available on their website a comprehensive illustrated parts list (US) (or click here for the Canadian

OrangeTractorTalks | Kubota Tractor Tips, Classifieds, OrangeTractorTalks, the place to stop in and get the latest service info, tips, classifieds, specs, discussion, news and reviews of Kubota tractors and

Microsoft Word - Kubota Super UDT2 Fluid PI Sheet Kubota® Super UDT2 Universal Trans-Hydraulic Fluid Kubota Super UDT2 is a multi-purpose all-weather tractor hydraulic fluid. This product is specifically recommended for use in the Kubota

Kubota glow plug operation - OrangeTractorTalks In very cold weather, with the block heater plugged in, the glow plug sensor will lock out the glow plugs as it senses a warm engine

Kubota Model Variants Explained - OrangeTractorTalks Knowing how Kubota identifies variants within a model range is very helpful when it comes time to make buying decisions or afterward, when performing regular service and

Kubota's Super Three Engine Series - OrangeTractorTalks An article the gives a quick overview of five engine models in Kubota's Super Three series of engines. Kubota manufacturers these engines in their Tsukuba Japan facility

Service, Repair & Maintenance | OrangeTractorTalks - Everything Offer your Kubota service advice, repair procedures or maintenance tips. Have a service related question? Post here

Kubota Paint - Part Numbers, Where to Apply and How Much In this article we take a look at the correct part numbers for authentic Kubota paint, how much paint you might need for an average sized project and which parts of your Kubota

What's new | OrangeTractorTalks - Everything Kubota Established in 2009, we are the largest online community of Kubota tractor and equipment owners. OrangeTractorTalks brings together Kubota enthusiasts from around the

OrangeTractorTalks - Everything Kubota OrangeTractorTalks, the place for Kubota tractor service tips, classifieds, specs, discussion, news and reviews!

Kubota's Online Illustrated Parts Catalog - OrangeTractorTalks Kubota's Online Parts Catalog For a little while now Kubota has made available on their website a comprehensive illustrated parts list (US) (or click here for the Canadian

OrangeTractorTalks | Kubota Tractor Tips, Classifieds, OrangeTractorTalks, the place to stop in and get the latest service info, tips, classifieds, specs, discussion, news and reviews of Kubota tractors and

Microsoft Word - Kubota Super UDT2 Fluid PI Sheet Kubota® Super UDT2 Universal Trans-Hydraulic Fluid Kubota Super UDT2 is a multi-purpose all-weather tractor hydraulic fluid. This product is specifically recommended for use in the Kubota

Kubota glow plug operation - OrangeTractorTalks In very cold weather, with the block heater plugged in, the glow plug sensor will lock out the glow plugs as it senses a warm engine

Kubota Model Variants Explained - OrangeTractorTalks Knowing how Kubota identifies variants within a model range is very helpful when it comes time to make buying decisions or afterward, when performing regular service and

Kubota's Super Three Engine Series - OrangeTractorTalks An article the gives a quick overview of five engine models in Kubota's Super Three series of engines. Kubota manufacturers these engines in their Tsukuba Japan facility

Service, Repair & Maintenance | OrangeTractorTalks - Everything Offer your Kubota service advice, repair procedures or maintenance tips. Have a service related question? Post here

Kubota Paint - Part Numbers, Where to Apply and How Much In this article we take a look at the correct part numbers for authentic Kubota paint, how much paint you might need for an average sized project and which parts of your Kubota

What's new | OrangeTractorTalks - Everything Kubota Established in 2009, we are the largest online community of Kubota tractor and equipment owners. OrangeTractorTalks brings together Kubota enthusiasts from around the

Related to kubota d1105 specs

Kubota D1105-K Diesel Engine (For Construction Pros2y) Kubota offers the D1105-K diesel engine for construction equipment and machines requiring 24.8 hp of output. Building off the D902-K, the D1105-K engine offers 3,000 rpm, three cylinders and 1.123L

Kubota D1105-K Diesel Engine (For Construction Pros2y) Kubota offers the D1105-K diesel engine for construction equipment and machines requiring 24.8 hp of output. Building off the D902-K, the D1105-K engine offers 3,000 rpm, three cylinders and 1.123L

Kubota DD1105-K Diesel Engine (Construction Equipment2y) The Kubota D1105-K has a rated output of 24.8 horsepower, 3,000 rpm, three cylinders, and a 1.123L displacement. Building off its D902-K, Kubota developed the D1105-K engine as a power source

Kubota DD1105-K Diesel Engine (Construction Equipment2y) The Kubota D1105-K has a rated output of 24.8 horsepower, 3,000 rpm, three cylinders, and a 1.123L displacement. Building off its D902-K, Kubota developed the D1105-K engine as a power source

Related Articles

- [seminole state listening practice](#)
- [daily geography week 29 answer key](#)

- [nys sales tax form st 100](#)

[Back to Home](#)