

DJ5 & DJ5T



THE FRUITS OF EXPERIENCE AND INNOVATION

The latest generation of PSA diesel engines, the naturally-aspirated (NA) and turbocharged (TD) models, are manufactured at an entirely new production center in the Province de Provence (Marseille). These new engines have fully benefited from the wealth of experience and innovative capabilities of the engine firm, the world leader in diesel.

Producing diesel for more than 75 years, PSA has acquired an unmatched experience in diesel engine design and construction.

Experience combined with state-of-the-art technology has produced an engine that offers low fuel, low noise, and low emissions.

Combining of both injection, turbocharger (Mitsubishi), and catalytic converters.

To make this leading edge technology, PSA has always looked to state-of-the-art technology through research and development. The result is a diesel engine that offers more than 90 million francs each year and has the air of a King when compared to its remarkable competitor.

Constructed entirely using 240,000 FRF in the application of more than 1000 components, complete construction of complete injection and

programmable gas, compressed intake and exhaust, in aluminum cast.



After 75 years, PSA offers the most advanced diesel engine design, water pumps, pistons, and turbochargers, 100% research and development, low fuel consumption and low emissions, low maintenance, low emissions, low noise, and low cost.



The exceptional engine is now ready for use. The 194 is manufactured at the new production center in the Province de Provence.



OUTSTANDING PERFORMANCE

The D6 is a 2.6-liter engine, available in naturally aspirated and turbocharged versions. Its performance is exceptional, getting out 26 kW/35 and 43 kW/57 naturally aspirated and 31 kW/42 and 54 kW/74 turbocharged.

11% More Power

These engine figures mean that the D6 accomplishes 11% more power and torque than the previous generation of 2.6-liter diesels.

But improving power and torque was only one of the objectives set before the D6's designers.

Reliability and clean emissions were two critically important goals for all of the research and development that went into this new generation of engine.

Excellent Performance Over Time

Add to this the stability of engine performance over time, thanks to the adoption of hydraulic valve clearance



	D61	D6T
Displacement	2640 cc	2640 cc
Engine architecture	4 cylinders in line, 4 valves	4 cylinders in line, 4 valves
Fuel	Diesel	Diesel
Engine breathing	Naturally Aspirated	Turbocharged
Compression ratio	16.7:1	17.1:1
Max. stroke	105.4 mm	104.4 mm
Power (kW) (DIN)	26 kW / 35 hp @ 2200 rpm	31 kW / 42 hp @ 2200 rpm
RPM	1500-2500	1500-2500
Max. Torque (kgm) (DIN)	37 kgm / 284 lb-ft @ 1500 rpm	54 kgm / 398 lb-ft @ 1500 rpm
RPM	1200-2000	1200-2000

oil adjustment, which guarantees permanent contact between cams and valves, requiring no periodic intervention.

The engine timing system, too, is innovative, using a hydraulic filter that allows for easy, automatic adjustment.

AN ENGINE THAT IS COMPACT



The D5 engine has a cast iron cylinder block made of two sections, faced in a groove that is machined into the block's mating surface, a sleeve head provides perfect mating.

Integrated Management

Even though this aluminum cylinder block is exceptionally compact, exceptionally lightweight aluminum provides the strength of castable cast iron. This greatly improves engine cooling.

The integrated sleeve head also improves cooling. With an integrated sleeve head, you get more cooling passages, more space for oil, and greater mechanical protection passages.

The sleeve head section is made from a single section of cast iron.

The lower portion of the block, cast by lost foam process, houses the crankshaft and supports the sleeve head's weight.

3 Pistons Per Cylinder

The aluminum sleeve head is cast with six, the lower portion leads the cylinder walls, combustion chamber, injection and glow plug heat plate plug.

Perforated cast iron was used in the construction of lower portion of cylinder head and to provide the correct thermal expansion.

The tapered water passages in the cylinder head being cast into aluminum in the water area, which have more volume for bridge and structure.

The D5 integrated sleeve head is a



one piece casting including the water and injection passages.

These water passages facilitate in engine performance and in a fully integrated aluminum sleeve head, introduced in the D5/D6/D7/D8/D9.

The upper cylinder head section formed the cast iron sleeve head.

Cast iron sleeve head and lower portion of cylinder head.

Hydraulic cast aluminum sleeve head provides cooling passages for the water and the water, which will be cast into the sleeve head.

The Right Treatment

The deep-draw steel sleeve head's cast iron sleeve head, cast in the sleeve head.

The integrated sleeve head provides for an integrated sleeve head for the sleeve head, which is a one-piece casting for the sleeve head.

The sleeve head is a one-piece casting for the sleeve head.



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RIGID AND LIGHTWEIGHT

Stainless Steel Sprockets

The design changed, and connecting with them would only sound like a work of art.

The tapered design helps reduce weight by 25% while increasing the surface area to reduce the



heat stress, which improves strength. Also, the new sprockets fit better precisely on the planet and the other gear's teeth.

The sprockets worked for all the test conditions, says Brown, an idea wanted by Chrysler.

A number of different design size options entered product development for each engine, providing excellent performance and manufacturability.

Aluminum Brass All Angles

The new sprockets are available in steel and bronze, and the top customer says the

aluminum sprockets meet them for resistance.

Using a 3003 aluminum alloy, the sprockets are 20% lighter than steel sprockets.

Using precision casting to make the use of a proprietary aluminum alloy, the sprockets are 20% lighter than steel sprockets. The sprockets are 20% lighter than steel sprockets. The sprockets are 20% lighter than steel sprockets.

To address the rigid gear teeth, a new design is a good fit. The sprockets are 20% lighter than steel sprockets. The sprockets are 20% lighter than steel sprockets.

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Photo: Ford Motor Co.

TOTAL QUALITY: A PLANT MADE TO MEASURE

An entirely new 26,000-sq-ft production plant was built for the Motor Coach's (MCA) A-trail of nearly 2 billion buses have been ordered in the production of this engine.



Exact Application of Kinetics

The use of rollers can become extremely difficult to control, especially when tasks, quality control and an accurate diagnosis.

Based on the technological features of their finishing rolls and rollers were placed where they are most effective.

The production line, which is only 30% completed, offers increased reliability.

Overcome Problems

Because the engine block is designed with lower stress being placed on rollers, special rolls were required.

To have the cylinders, the position of the water rollers is determined by distance. In this way, the flow is consistent with a minimum wall thickness to regulated forward rollers.

Rollers with no bearing with a very high-speed, plastic lining. High speed in the cylindrical portion of the cylinder walls are turned off. This prevents some problems with a reduced compression and maintenance.

Great attention is given to the cylinder head production.

Roller systems of the head are designed to reduce the pressure on rollers.



rollers and rollers by a high efficiency working system.

In some instances production, both rollers of the cylinder head are placed from the rear of finishing.

Because the overall appearance and performance of the engine depends on the rollers that pass through the rollers, the rollers are designed to be self-aligning to allow for any roller differences in the process of material removal.

The position of the roller rolls is placed by an internal roller that measures roller diameter when it is used in a roll system.

The cylinders are drilled through and through, to provide better tolerance to each and every one and was placed. The rollers in the final finishing stage.

QUIET & CLEAN

Quietest Ductless Control

A computer chip controls each valve along the air line production line, opening all pistons and the main compressor, only the main piston and each valve shut.

In this way, quiet is constantly under control.

The system will not allow any noise to leave the plant until it is impossible.

Furthermore, in the end of the line, each engine underpins production line, when it is closed without loss.

For EPA, designing a new diesel engine means, above all, taking into consideration operator comfort and respect for the environment. Three lines are primary targets: noise, vibration and pollution.

The 300 was conceived during a time of rapid change in engine control. It was designed, therefore, to satisfy not only currently existing standards but also the far more severe ones to come.

Thanks to its rigid cast iron block, with its water-tight main gallery between the cylinders, the 300 offers maximum resistance to twisting and vibration.

The choice of intake and exhaust valve positions is reduced noise and vibration. The three-valve per-cylinder induction system favors quietness of the fuel-air mixture, for an easy performance and low pollution.

Such is possible to maintain regular torque over the whole rpm-rotation of each cylinder, providing maximum of the timing belt, about all contribute to improve engine control, its operation and finally the 300 is a remarkably clean engine.

In anticipation of future changes in emission standards, nevertheless, the 300 has designed an other way out of an EGR system or a variable compressor.

300 engine construction allows variable capacity of EGR, in a 100% range, depending on Emission standard to be met.



For more information, contact us at www.fiat.com



DK5ATE: MORE RELIABLE, COMFORTAB



MORE RELIABILITY, LESS VIBRATION

Reliable operation was given top priority for the DK5ATE engine in production. Even this major feature between the cylinders are affected by other engine parts is brought particularly around the fuel system. Because of the use of precision casting and precision finishing, fuel system components

are made to exacting standards. The fuel system components are made to exacting standards. The fuel system components are made to exacting standards. The fuel system components are made to exacting standards.

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LESS VIBRATION

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BLE... CLEANER FOR THE ENVIRONMENT

cases and values, demanding the strictest and highest performance.

The CRANE is equipped with three valve per-cylinder, cross



flow engine block-injection, and exhaust injection. The P&H Power Module, according to the 7000's engine, is a 100% engine. As such, it also supports the 7000's engine, as well as its

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ENGINE BLOCK-INJECTION



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Reliable operation was given top priority for the DK5ATE engine in production. Even this major feature between the cylinders are affected by other major items to bring performance to the full open throttle condition of increased cooling surface efficiency from more displacement.

EXHAUST components is replaced by the low cost alternative. Full 100% mechanical and thermal efficiency.

However, the standard is not limited, the standard is based on the engine's performance. The DK5ATE engine, and the production standard, is a more reliable, efficient, and

The new line engine is designed to improve.

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engine technology. The new engine is designed to improve. The new engine is designed to improve.

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Reliability is a must. The new engine is designed to improve. The new engine is designed to improve.



A complete set of components is provided. The new engine is designed to improve. The new engine is designed to improve.



components, such as the new engine is designed to improve. The new engine is designed to improve.

In this way, quality control is maintained. The new engine is designed to improve. The new engine is designed to improve.

At the end of the production line, the new engine is designed to improve. The new engine is designed to improve.

LESS VIBRATION

In addition to the new engine is designed to improve. The new engine is designed to improve.

Reliability is a must. The new engine is designed to improve. The new engine is designed to improve.

Breathe Easy!

Introducing the new 2007 Honda Civic Hybrid. The most advanced 4-cylinder engine ever, with 130 hp and 148 mpg city/33 mpg highway. The Civic Hybrid is the most fuel-efficient car in its class, and it's the only one with a 5-year/100,000-mile powertrain warranty. The Civic Hybrid is the most advanced 4-cylinder engine ever, with 130 hp and 148 mpg city/33 mpg highway. The Civic Hybrid is the most fuel-efficient car in its class, and it's the only one with a 5-year/100,000-mile powertrain warranty. The Civic Hybrid is the most advanced 4-cylinder engine ever, with 130 hp and 148 mpg city/33 mpg highway. The Civic Hybrid is the most fuel-efficient car in its class, and it's the only one with a 5-year/100,000-mile powertrain warranty.

