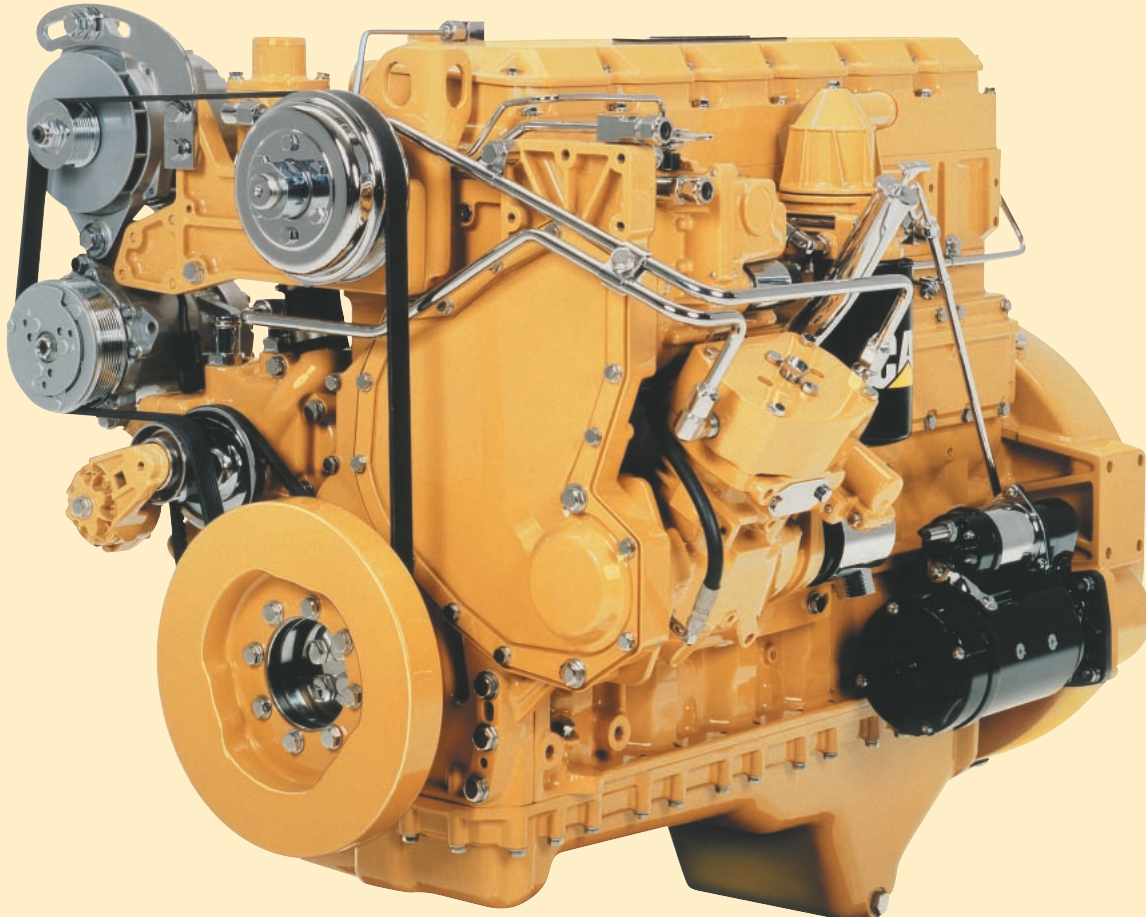


3116COMPETITIVE
COMPARISON**FAST, AFFORDABLE OVERHAUL SOLUTION
SOLIDLY BEATS THE COMPETITION**

- Factory remanufactured to exacting Caterpillar® standards using only Cat® parts, including Cat fuel and oil filters
- Restored to original emission ratings
- Include all critical engineering updates for longer life and improved fuel consumption
- Tested extensively to help ensure same-as-new performance at fraction-of-new prices
- Come fully assembled and ready to install, minimizing downtime and costs
- Backed by a 12-month, 100,000-mile, or 1,800-hour warranty

CAT REMAN 3116 ENGINES BEAT THE COMPETITION

Here's what we found in a recent teardown of a 3116 engine remanufactured by Jasper Engine and Transmissions*:

PARTS

Jasper Remanufactured Engine

\$1,700 worth of missing parts

Numerous parts included as standard equipment on Cat Reman 3116 Engines were not part of the Jasper remanufactured engine. If you purchased this Jasper engine, you'd have to buy these parts as new or scavenge them from existing engines—increasing your costs.

Caterpillar Remanufactured Engine

Complete, fully assembled, and ready to install

A Cat Reman 3116 Engine comes with all the components you need to keep costs low—including a number of parts not included on the Jasper engine: Air compressor · Air inlet heater/housing · Oil fill tube Idler pulley/v-belt · Throttle bracket · Dipstick · Fumes tube

CLEANLINESS

Noticeable contamination and debris

A noticeable amount of contamination and debris was discovered inside the Jasper engine oil sump and oil pump pick-up screen—contamination that could lead to premature component and engine failure.

Contamination- and debris-free

Cat remanufacturing procedures help ensure components and engines are free from contamination, minimizing the chance of premature failure:

- All-new oil pump pick-up screens provide a clean first line of debris protection.
- Oil samples taken during the dynamometer test verify internal engine cleanliness and detect any potential debris-generating failures.
- Cat Reman 3116 Engines aren't shipped until an acceptable oil sample is verified by lab test.

SPECIFICATIONS

Fail to meet Cat standards, limiting performance and life

- 1 Cracks in the 3116 block can cause coolant to enter the head bolt counterbore, leading to corrosion of the bolt and possible failure. The Jasper engine had 12 areas on the top deck pinned to stop cracks, and nine additional cracks were not pinned at all.
- 2 Valve lash, which is critical to engine performance and valve life, was out of specification on three of the Jasper engine cylinders. Fuel timing and rack setting were not within Cat specifications. And Jasper-installed cylinder sleeves and dowels did not meet Cat height specifications, which could lead to premature head gasket failure.
- 3 The Jasper engine was equipped with used fuel lines, increasing the chance for leaks or failure. It also exhibited many oil leaks, and bare metal surfaces were not protected with a rust preventative.

Meet exacting Cat standards for maximum performance and life

- 1 Caterpillar inspects all 3116 core blocks for top deck cracks and will replace with new blocks when cracks in the top deck cannot be properly remanufactured.
- 2 Caterpillar uses state-of-the-art techniques and remanufacturing processes to return each engine to like-new specifications—including valve lash, fuel timing, and rack setting. Cat sleeves all remanufactured 3116 blocks to bring cylinder bores back to original specifications.
- 3 Cat Reman 3116 Engines always feature new fuel lines to minimize the possibility of leakage or failure. And Caterpillar takes steps before shipment to ensure that there are no minor oil leaks around seals, that paint/rust protection coverage is adequate, and that fasteners are torqued correctly. Each Reman 3116 Engine also comes with an S-O-SSM analysis sample tap installed to help in monitoring engine health.

DON'T TAKE A CHANCE—CHOOSE CAT REMAN 3116 ENGINES

Cat Reman 3116 Engines offer an unbeatable combination of quality and value, delivering same-as-new performance at a fraction-of-new price—and they're backed by a 12-month, 100,000-mile, or 1,800-hour warranty to prove it.

Give us a call, stop in soon, or visit the Cat website at www.CAT.com for more information on Cat Reman engines and components. We'll show you how Cat Reman products can help you operate more efficiently at the lowest possible cost.

*The information contained herein was developed by disassembling and inspecting one randomly sampled Jasper Engine and Transmissions 3116 remanufactured engine and comparing it to Caterpillar print and performance specifications. The engine was purchased by a Caterpillar dealer from an authorized Jasper Engine and Transmissions dealer. No implication is intended, and no inference should be drawn, that this engine and its parts are representative of Jasper Engine and Transmissions' overall production.