

# THE POWER OF ORIGINAL

## Ford Remanufactured Long Block Engine Assemblies

### FORD. YOUR TRUSTED SOURCE.

Consumers today are bombarded with information. You want to trust your source to provide you with carefully researched information...especially when it impacts your business.

JASPER claims that Ford engines are susceptible to “certain issues,” and that JASPER has “addressed these issues to improve the reliability.” Sounds good on the surface, until you dig deeper and take a closer look at JASPER’s “solutions.”

JASPER Issue/Concern*	JASPER Solution*	Ford Engineering Response
<b>Spark plug thread concerns.</b>	100% inspection of all spark plug threads.	This is already done for all Ford Remanufactured engine assemblies. Damaged threads on modular 2-valve engines are replaced with Lock-n-Stitch® fully threaded; anodized aluminum inserts which feature exceptional heat transfer capability, minimizing the risk of combustion detonation.
<b>Bearing failure, knocking, holes in block.</b>	Oil tolerances are more precise than OE tolerances.	How can a competitor know if its unit exceeds OE oil tolerance specifications? Ford OE specifications are proprietary to Ford Motor Company. Ford Remanufactured long block engines meet or exceed all OE performance specifications.
	Micro-polished crank.	Ford engine remanufacturing uses an advanced, new generation computer numerical control (CNC) grinder to remanufacture our crankshafts to achieve OE performance specifications and highest product quality. This advanced technology offers tight tolerances, as well as stabilized dimensional accuracy and surface quality.
<b>Bearing failure due to contamination in oil pan.</b>	Cleaned and inspected oil pans and pickup tubes preinstalled.	Every part used in a Ford Remanufactured long block engine has been thoroughly cleaned and inspected before assembly. To help eliminate carryover contamination from the core, the oil pan and pickup tube are preinstalled, as well as the front cover, rear cover, valve covers, caps and plugs. Finished assemblies are wrapped in a special bag to further protect them from contamination during shipping.
<b>Oil pressure.</b>	Updated high-volume oil pump ensures proper pressure to the VVT on 3-valve applications.	Every Ford Modular Remanufactured variable camshaft timing (VCT) long block engine includes new VCT components, which incorporate all Ford Engineering system improvements.
<b>Dry start-up and piston scuffing.</b>	Exclusive JASPER piston design provides stronger ring lands and a graphite coating to prevent dry start-up and piston scuffing.	Ford Remanufactured engines include new pistons and rings made from the same casting as production. Pistons are graphite coated and machined to ensure compatibility with cylinder bore geometry, cylinder wall surface finish, and piston ring materials for quality, durability, and sealing capability. Ford dynamometer testing is performed on all remanufactured engine assemblies to assure that they meet all Ford OE performance specifications defined by Ford Engineering.
<b>Durability and friction.</b>	Nitrided valves improve durability and reduce friction.	Engine testing conducted by Ford Engineering has shown that replacing a Ford-specified valve with a nitride valve could lead to higher wear. Ford Remanufactured modular engines use the same intake and exhaust valves as in our production engines, ensuring all valvetrain components meet OE performance requirements.
<b>Ring sealing.</b>	Torque plate boring and honing provide cylinder wall geometry that matches the cylinder head as a complete running assembly, improving ring sealing.	Ford Remanufacturing utilizes Gehring hone machines which provide a surface finish quality that meets or exceeds OE performance specifications.
<b>Head gasket failure.</b>	<ul style="list-style-type: none"> <li>MLS head gaskets</li> <li>100% new head bolts</li> </ul>	All Ford Remanufactured modular engine assemblies use new head bolts and Multi-Layer Steel (MLS) head gaskets that include all of the latest OE design improvements.
<b>Early models: Restrictive oil pipe.</b>	100% upgrade of early 4.6L DOHC oil pump and screen to high volume pump and large tube oil screen.	This is not recommended. Excessive oil pump pressure may lead to parasitic losses. Ford Remanufactured engine oil pumps include all of the latest OE revisions and meet or exceed OE performance specifications, helping to ensure that oiling systems are optimized for each engine.

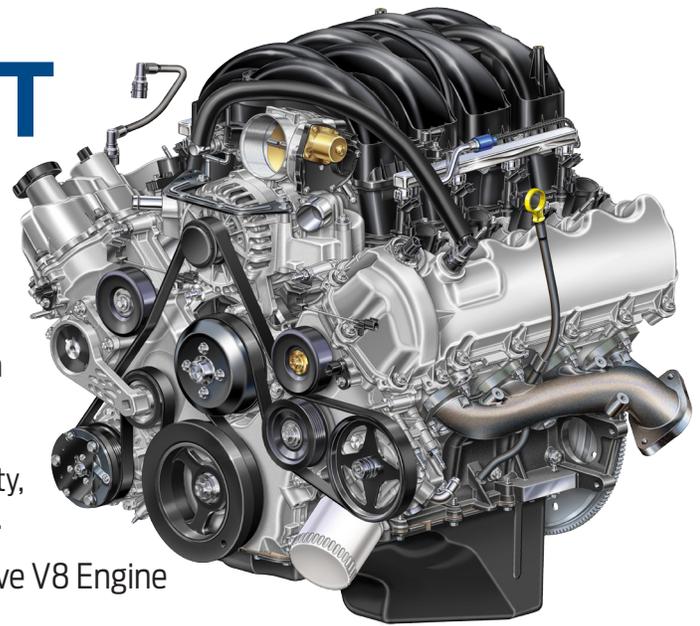
\* JASPER Sources: AD-E06-86-55485, Rev Date: 12/30/13; AD-E06-86-276110 1/14



FORD PARTS

# THEIR CLAIMS JUST DON'T ADD UP

Ford's extensive line of remanufactured long block engine assemblies are vehicle make, model year, and emissions calibration specific. Add to that a 3-year, unlimited mileage warranty with no commercial application exclusions and a no-risk core return policy, and it's easy to see why customers who demand durability, reliability, and performance choose Ford Remanufactured engine assemblies.



2006 4.6L 3-Valve V8 Engine

## Ford vs. JASPER Remanufactured Long Block Engine Assemblies

Ford		JASPER	
✓	Access to proprietary Ford Engineering blueprint data for true OE performance specifications. Assistance Center, Hot Line and Ford Engineering support, plus more than 100 years of engine design, innovation, manufacturing and remanufacturing experience.	✗	No access to proprietary Ford data. Engines are reverse-engineered to speculate original OE specifications.
✓	Same thermal cycling and structural durability testing procedures as used for Ford production engines to validate all sealing systems and structural engine components.	✗	Testing procedures and design validation standards used unknown.
✓	Vehicle make, model-year, and emissions calibration specific engine model numbers (based on fuel type used), to ensure: <ul style="list-style-type: none"> <li>• Ease of installation</li> <li>• All OE fuel economy, emissions, durability, and performance requirements are achieved</li> </ul>	✗	Vehicle make and model year.
✓	3-year, unlimited mileage warranty <ul style="list-style-type: none"> <li>• No commercial application exclusions</li> <li>• No-risk core return credit (no extra charges if the case is damaged)</li> </ul>	✗	3-year, 100,000 mile warranty <ul style="list-style-type: none"> <li>• Commercial applications excluded<sup>1</sup></li> <li>• Full core deposit will be refunded if there are no visible holes or cracks in the block<sup>2</sup></li> </ul>
✓	Warranty claim process:  Simply return the vehicle to the originating place of service or any of the more than 3,000 Ford and Lincoln dealerships nationwide.	✗	Warranty claim process <sup>1</sup> : <ol style="list-style-type: none"> <li>1. The buyer must notify JASPER of any warranty claim prior to repair for assignment of an authorization number.</li> <li>2. The work will be performed either at JASPER's factory or by another selected vendor.</li> <li>3. It is the sole responsibility of the buyer to pay for such work and, in writing, submit a claim with the alleged defective parts shipped prepaid to JASPER for its review and sole determination.</li> </ol>

<sup>1</sup> JASPER Source: AD-E06-86-56940 3-3-15

<sup>2</sup> JASPER Source: SM-E07-97-31287 Rev: 9 Rev Date:02/03/11

Competitors can claim what they want, but the closer you look, the closer it becomes—the smart choice is a Ford Remanufactured long block engine assembly.



FORD PARTS