

## John Deere<sup>®</sup> 6090 PowerTech<sup>™</sup> Coverage featuring POWERFORGED<sup>™</sup> Pistons

FP Diesel cylinder components and gaskets for the John Deere 6090 PowerTech<sup>™</sup> Tier 2, 3, IT4 & FT4 engines. This popular 6-cylinder engine is used in a wide range of John Deere<sup>®</sup> agricultural, construction and industrial applications.

Our cylinder kits contain FP Diesel's exclusive one-piece POWERFORGED<sup>®</sup> friction-welded steel pistons, providing exceptional strength and durability. The patented closed cooling gallery maximizes cooling by allowing a greater volume of oil to reach more of the piston's interior surfaces. The friction-welded cooling gallery results in a box structure that significantly reduces piston deformity and increases support to the ring lands.

FP Diesel POWERFORGED<sup>®</sup> pistons are finished with a proprietary manganese phosphate coating to insure superior break-in and greater resistance to scuffing. The combination of manganese phosphate coating and profiled pin bore allows these pistons to operate without bushings for increased durability.

The FP-R530609 liner used in our cylinder kits is made from a specially formulated ductile cast iron - designed and tested to withstand the high cylinder pressures found within the 6090 engine. Unlike typical wet sleeves, the 6090 liner has considerably thinner wall thickness. A gray iron liner cannot withstand peak firing pressures and could fail prematurely.

FP Diesel's exclusive ML<sup>7™</sup> head gasket complements our 6090 PowerTech<sup>™</sup> cylinder components. This patented multi-layer design provides significantly enhanced combustion and fluid sealing capabilities as well as high-temperature resistance. The reinforced gasket body increases lateral stability and provides a rigid backbone to the combustion seal.

| Part Number | Description   |
|-------------|---|
| FP-DZ10211  | Cylinder Kit w/ Piston FP-RE529264<br>Tiers 2 & 3<br>Contains Pin and Retainers     |
| FP-DZ10207  | Cylinder Kit w/ Piston FP-RE555132<br>Tiers IT4 & FT4<br>Contains Pin and Retainers |
| FP-DZ10083  | Piston Ring Set   |
| FP-R530609  | Liner with Shim   |
| FP-R525541  | ML <sup>7</sup> Cylinder Head Gasket  |
| FP-RE528400 | Complete Overhaul Gasket Set  |



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