



John Deere® 6090 PowerTech™ Coverage featuring POWERFORGED™ Pistons

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

Our cylinder kits contain FP Diesel's exclusive one-piece POWERFORGED® 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[®] 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^{7™} head gasket complements our 6090 PowerTech[™] 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 Tiers 2 & 3 Contains Pin and Retainers
FP-DZ10207	Cylinder Kit w/ Piston FP-RE555132 Tiers IT4 & FT4 Contains Pin and Retainers
FP-DZ10083	Piston Ring Set
FP-R530609	Liner with Shim
FP-R525541	ML ⁷ Cylinder Head Gasket
FP-RE528400	Complete Overhaul Gasket Set

