

IPD Products for Volvo D12 Engines

D12

D12A

D12B

D12C

D12D

The Standard for Quality, Innovation, Service and Support Since 1955

SAVINGS WITHOUT RISK

IPD Value and Performance.....real COST PER MILE savings



The D12 engine series has powered on-highway engines for many decades over millions of miles. IPD's heavy-duty engine components are designed and engineered by one of the most experienced engine parts manufacturers in the world, preferred by discriminating engine rebuilders worldwide, and backed by an industry-leading warranty.

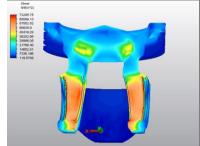
- IPD is the **leading aftermarket supplier** of high quality repair & replacement parts for heavy-duty engines
- IPD parts are designed and engineered in the USA with specifications based on original equipment (OE) parts
 - IPD awarded a **2 pc piston design patent** by United States Patent & Trademark Office (numerous other piston design patents pending)
- <u>60 years</u> of leadership in the aftermarket (technical, engineering, design, manufacturing, and quality)
 IPD is ISO9001-2008 quality process certified
- Worldwide customer service & distribution network
- Industry leading warranty protection
 - o 2 Year / Unlimited Miles (on-highway applications)
 - 1 Year / 3,600 Hours (off-highway applications)

QUALITY CONTROL & ASSURANCE

Machinery and equipment owners worldwide rely on IPD engine parts to provide **cost effective OE-level reliability, quality, and durability.** IPD parts are ready to meet the demands that D12 series engines typically endure. IPD's engineering, manufacturing, and quality processes ensure precision parts that are **cost effective, reliable and durable**. From **precision metrological processes**, to **detailed parts specifications**, to **expert design and engineering**, to **manufacturing**, to **detailed quality systems**, to **premium packaging**, to **industry leading customer and technical support**...<u>IPD parts are your key to success</u>.













IPD PRODUCT AVAILABILITY

IPD provides a wide range of quality/precision-engineered repair parts for the entire D12 series of engines (D12 / D12A / D12B / D12C / D12D), as follows:

Pistons & Pins

- o 2 piece pistons (steel crowns & aluminum skirts)
- Crowns made of made of chromium/molybdenum alloy steel for high temperature and pressure durability
- Crowns and skirts phosphate coated for enhanced corrosion protection and lubricity
- o Skirts include added graphite coating for added lubricity
- Pins engineered to exceed OE tensile and yield strength

Cylinder Liners

- Precision honing to minimize ring wear and oil consumption
- o Induction hardened and roll burnished for strength/durability
- Engineered to the best of the available OE liner specifications (exceeding lesser OE liner specifications)

Engine Bearings & Bushings

- Main & Connecting Rod Bearings made of copper alloy lining for high loads, fatigue strength, and cavitation resistance
- Cam Bushings made of special aluminum alloy high tin content for high load performance and high fatigue properties
- Thrust Washers feature a bronze alloy with oil channels for improved anti-friction properties and high load capability

Cylinder Head Gasket

- o Zinc plated steel for enhanced corrosion resistance
- Stainless inserts with molded fluoroelastomer seals for durability and resistance to high temperatures and engine chemicals.

IPDStyle 1-2-3™ Gasket Sets

- IPD's innovative 1-2-3 sets save time
 - Bagged and marked sub-assemblies (such as Front, Upper, Lower, Fuel, Oil Cooler, Oil & Water Lines, Fuel, Turbo, etc.)
 - Complete contents listing
 - Replaces multiple OEM style sets
- o Premium materials for reliability/longevity/performance
- IPD's configuration experts determine the best parts and materials to complete an entire overhaul



Please consult with IPD's Quick Reference list for specific part number details.

Authorized distributors can obtain access to the **IPD**Net (IPD's on-line catalog and ordering system). Contact IPD for details.



IPD PARTS ENGINE APPLICATIONS

CATERPILLAR®

C-Series (C7, C9,	C10, C12, C13, C15/C15 Acert, C27, C32)
D3500 Series (D3508/D3512/D3516/D3524)	
G3500 Series (G3508/G3512/G3516/G3520)	
D3400E Series (D3406E/D3408E/D3412E)	
D3400 Series (D3406/D3408/D3412)	
G3400 Series (G3406/G3408/G3412)	
D3300 Series (D3304/D3306)	
G3300 Series (G3304/G3306)	
3200 Series (3204/3208)	
3100 Series (3114/3116/3126/3176C/3196)	
3000 Series (3064/3066)	
D300 Series (D333/D339/I)342/D343/D346/D348/D353/D379/D398/D399)
G300 Series (G333/G342/G353/G379/G398/G399)
<u>CUMMINS</u> ®	ISX/QSX, K19 Series (K19/KT19/KTA19/KTTA19)
DETROIT DIESEL®	60 Series
<u>WAUKESHA</u> ®	VHP Series (7042/7044)
<u>VOLVO</u> ®	D12 Series (D12/D12A/D12B/D12C/D12D)

IPD brand quality products distributed by:

IPD[®]

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