



Parts available from IPD for 3406E and C15 applications include:

♦ In & Out of Frame complete Engine Kits

◆ IPDSteel® <u>Articulated Cast</u> <u>Steel Pistons</u> (with aluminum skirt)

- ◆ IPD <u>Induction-Hardened</u> Cylinder Liner for optimum oil control
- ◆ IPD Premium Gasket Materials not "automotive" materials other companies may use.

You can not afford leaks!

 Many other products such as Valve Train Parts, Bearings, Seals, and Water Pump Kits are available from IPD. Pictured: Typical IPD In-Frame overhaul kit with IPDSteel® Articulated Cast Steel Pistons

Please visit the IPD web page at <a href="https://www.ipdparts.com">www.ipdparts.com</a> or your IPD Distributor.

Since 1955, IPD has provided engine owners a cost saving alternative Without risk to engine life or performance

# IPD

www.ipdparts.com

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IPD IS ISO9001:2000 CERTIFIED BY LLOYD'S REGISTER



All manufacturers' names, numbers, symbols and descriptions are for reference only. It is not implied that any part is the product of the manufacturer.

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#### IPD = INNOVATION, NOT JUST IMITATION!

Most aftermarket companies are content with only offering "copy cat" parts by attempting to duplicate the look of the original. IPD has taken the position since its inception to not only offer products that will perform as well as the original, but also to work with our customers world-wide to find ways to improve engine performance or engine life. This can result in greater savings in long-term cost per hour for engine owners. A few examples of IPD innovations are shown below specific to the IPD product range for 3406 / 3408 / 3412 & C15 applications:

### IPDSteel® ARTICULATED PISTONS



Patent pending design, IPDSteel® articulated cast steel pistons for applications such as the Caterpillar® 3400 & C15 series.

#### **IPD GASKET OPTIONS**

IPD offers both the "OEM Modular style" gaskets as well as our innovative IPD 123™ style gasket sets that can reduce your time in determining what sets to use, as well as mechanic's time hunting for parts.

## GROOVED CONNECTING ROD BEARINGS



Since 1993 our IPD "Grooved" bearings (shown on right) have helped reduce bearing cavitation on 3406 B, C & E engines.



IPD offers a wide range of high quality **forged** steel crankshafts that receive multiple quality control checks for hardness, fillet radius specifications and straightness.

#### IPD CREVICE SEAL CYLINDER LINER



The Original IPD Crevice Seal Style Liner for 3406, 3408, 3412 Engines  High strength alloy casting and machining techniques that result in high psi breakage resistance.

Roll burnished radius for increased flange strength.

 Induction-hardened bore completely to the top of the liner for extended liner wear.

Latest honing techniques for optimum oil control.

IPD's unique "Crevice-Seal" to reduce liner movement.

Approximately 7 liner and o-ring changes for these engines between 1982 and 1998 led IPD and our customers to work on ways to

extend the life of the bottom o-rings on 3400 series Caterpillar® engines by reducing liner movement.

#### IPD PACKAGING

Even our packaging is innovative. For example, IPD cylinder liners are put through an ultra-sonic cleaning system before packaging. We

also bag the liner, cover the top and bottom of each liner with a IPD plastic cap to keep the dirt out and protect the flange and liner surfaces.



Exhaust manifold stud kits that include nuts and studs, packaged in convenient kits specific to 3406 engines.



Camshafts and cam followers for popular applications.



Water pump rebuild kits for popular applications.

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