



PI-033 • 01/16

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Installation Instructions



Big Bore Piston Kit for B20 Engines 1974-75 ipd #125186



INTRODUCTION

Thank you for purchasing the ipd big bore piston kit. If the following guidelines are followed, you should have many miles of trouble-free service.

INSTALLATION

Clearance: The recommended skirt clearance is measured at 13/16" (20mm) from the bottom of the piston and should be .0004" to .0012" for best street performance. *The manufacturer recommended bore size is printed on the box.

Warning: These are NOT forged pistons and a large clearance will result in failure!

Final honing should be done with a 280 grit stone. This hone should leave a 20° to 30° crosshatch pattern in the cylinder wall. Be sure to measure all pistons before boring the block. Always double-check as you cannot be too safe when installing new pistons.

Important: Clearance must NOT exceed .0025 (two and a half thousandths).

Wristpins: Check size of pins in rod bushing and hone if needed. Clearance should be about .0005" (one half thousandth).

Rings: Place ring gaps on pistons as follows: The oil ring expander gap should be directly above the centerline of the wristpin hole. The second scraper ring gap should be two inches to the left of the oil ring gap and the top compression ring gap should be two inches to the right of the bottom oil rail gap.

IMPORTANT INFORMATION

Due to poor quality gasoline, it's extremely important to your engine's life that you don't run too high a compression ratio. Detonation or pinging will ruin the pistons faster than any other condition.

The only accurate way to verify what your engine's compression ratio will be is to find out how many CCs are in the combustion chamber. With this information you can determine your engine's compression ratio with the information provided below.

There is positively no warranty on pistons that show any sign of detonation (such as broken ring lands or melted pistons).

Compression Ratios for Volvo B20 Engines with 2130cc Kits:

Ratios are figured from these assumed figures:

Bore = 3.622" (this will vary depending on exact piston size)

Stroke = 3.15"

Cylinder volume = 531.86cc.

Note: For bore size of 3.642, 0.20" over-bore for ipd pistons, multiply compression ratios by 1.001%.

To give you some idea of chamber volume, a stock B20E head has 45cc in its combustion chamber. DON'T ASSUME YOURS IS THE SAME. Stock deck height should be -0.20" (+/- .003").

	Deck Height -020" (12.09cc)	Deck Height -010" (10.4cc)	Deck Height .000" (8.72cc)
43cc =	10.65	10.96	11.28
44cc =	10.48	10.78	11.08
45cc =	10.32	10.60	10.90
46cc =	10.15	10.43	10.72
47cc =	10.00	10.26	10.55
48cc =	9.85	10.11	10.38
49cc =	9.71	9.95	10.21
50cc =	9.57	9.80	10.06
51cc =	9.43	9.66	9.91
52cc =	9.30	9.52	9.76
53cc =	9.17	9.39	9.61
54cc =	9.05	9.26	9.48
55cc =	8.93	9.13	9.35

WARRANTY

One Year Limited Warranty

ipd warrants to the original purchaser that the parts manufactured and/or sold by ipd (the Product) is free from defects in material and workmanship under normal use. ipd warrants that the Product will perform substantially in accordance with the specifications set forth in the documentation provided with it. The above express warranties are made for a period of the lesser of 12,000 miles or 12 months from the date the Product is installed in your vehicle.

Any improper use, operation beyond capacity, substitution of parts not approved by ipd in writing, any alteration or repair by others, or any removal, defacing or altering of the identification shall void this warranty. There is no warranty on high-performance or race related parts due to the nature of usage.

The purchaser shall notify ipd at 1-800-444-6473 of any defect within the warranty period no later than thirty (30) days after purchaser discovers the defect. Should any failure to conform to this warranty appear within the warranty period, ipd shall, on notification, correct the nonconformity at its option, either by repairing any defective part, or by making available, FOB ipd's plant, a repaired or replacement part. The purchaser must insure any defective item being returned because ipd does not assume risk of loss or damage while in transit. No payment or reimbursement shall be made for installation, removal, transportation or other charges. The remedies set forth in this instrument are exclusive, and the liability of ipd with respect to any sale shall not exceed the price of the product on which the liability is based.

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This warranty is governed by the laws of the State of Oregon.

