

Custom Order Piston Kit Specifications

Date: 02/28/2

Available exclusively for:
The Winning Brands - Europe

Part #: ASC-07699
Cust #: WEURO

General Information

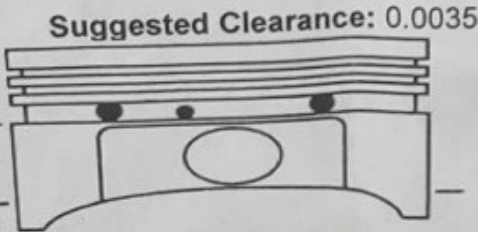
Forging #: F6148XA2

Comp Height: 1.240

Bore Size: 3.7795

(Measured at lowest point of piston skirt, or 1.300" from bottom of oil ring, as shown in sketch.)

1.300"



Suggested Clearance: 0.0035

Shape:

Weight @ Inspection 412.7 - 412.2 g

Piston Pins / Retainer Clips

Piston Pin #: S566
Diameter: .866
Length: 2.500
Retainer Clip #: CW22
Width or Wire Dia: .0490

Rings

Oil Rail Support #:

Ring Type:

	Land Thick	Grv Width	Grv Root Dia
Top Ring	.1800	.0410	3.462
Second Ring	.1400	.0490	3.4315
Third Ring	.0800	.1113	3.5045

Dome and Valve Pockets

Dome Rise: .1490

Dome Volume: .0

Deck Thickness: .280

	Intake	Exhaust
Valve Dia		
Pocket Dia	2.1000	1.8750
Angle	23.00	23.00
Rotation		
Depth from TE	-.2690	-.2440

Specifications and Installation Instructions for Wiseco Automotive Pistons

Piston to Cylinder Wall Clearance - Wiseco pistons are machined with a special cam and barrel design. When measuring for piston to wall clearance, measure at widest point of piston skirt 1.300" from bottom of oil ring groove, 90 degrees from piston pin hole.

Valve to Piston Clearance - Most Wiseco pistons are machined with valve pockets that are deeper and larger than stock. These pockets provide adequate valve clearance under most conditions. It is very important that valve to piston clearance be checked upon piston installation. This is necessary due to many variations in cams, how much a block has been decked or if the heads have been cut or angle milled.

CAUTION: Use only Wiseco Spiro Lox retainer clips in pistons manufactured for Spiro Lox clips and round wire retainer clips for pistons manufactured for round wire clips. Use only Wiseco part number retainer clips in Wiseco pistons. Substitution can result in severe engine damage. Wiseco also recommends that retainer clips are not reused.

WARRANTY DISCLAIMER *

Due to the nature of performance applications, the parts in this kit are sold without any express warranty or any implied warranty of merchantability or fitness for a particular purpose. Wiseco shall not, under any circumstances, be liable for any special, incidental or consequential damages, including, but not limited to, damage, or loss of profits or revenue, cost of purchased or replacement goods, or claims of customers of the purchaser, which may arise and/or result from sale, installation or use of these parts.

Installation of these parts could adversely affect vehicle manufacturer's

WISECO PISTON

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(440) 951-6600 Fax (440)951-6606

4-Cycle/Auto Rings

For use in cast iron, nickel ceramic coatings (Nikasil), Electrofusion and boron composite cylinders.

Do Not Use in chrome plated cylinders.
Engine damage will occur.

Prepare the cylinder
as outlined in Wiseco's recommended cylinder preparation instructions.

We recommend using a high quality ring compressor during installation to avoid damage to the piston, ring, or cylinder.

Check for Proper Ring End Gap

Failure to ensure proper ring end gap may cause ring tips to butt, and engine damage could occur.

1. A torque plate should be attached to the engine block or cylinder (if applicable), and torqued to specifications.
2. Check the end gap by placing the ring into the cylinder. Cylinder bore should be free of taper. Use the piston to square up the ring in the bore, and check the end gap by using a feeler gage.
3. See table below for proper ring end gap for your application.
4. The oil rails may be installed without modifying the end gap. The gap should be a minimum of .010".

Ring Gap Table Instructions

1. This table is in inches. If you are measuring your bore in millimeters, you will need to convert to inches by dividing your bore size by 25.4.
2. Multiply your inch bore size by the "Bore x" column for your application to determine the end gap.

Example: For the top ring of an ATV with a 4.0" bore, multiply $4.0 \times .004 = .016$

Notes:

1. The chart to the right is a general guideline. Each ring should be fitted to the particular cylinder in which they are to be installed.
2. The gap on the second ring should always be larger than the top ring end gap, this will help to reduce top ring flutter or lifting.

Application	Top Ring	2nd Ring
	Bore x	Bore x
Dirt, ATV, Snow, PWC	.0040"	.0050"
High-Performance Street/Strip	.0045"	.0055"
Street-Moderate Turbo/Nitrous	.0050"	.0055"
Late Model Stock	.0050"	.0055"
Circle Track/Drag Race	.0055"	.0060"
Blown Race Only	.0065"	.0070"
Nitrous Race Only	.0070"	.0075"

1. Check each ring in its corresponding piston groove to ensure proper axial and radial clearance. (See *Illust. 2*)

2. **Oil ring expander:** Place the oil ring expander into the oil groove with the butted tips of the expander 90° from either end of the wrist pin. Be sure the tips of the expander are visible and properly butted (See *Illustration 3*). If the expander tips are overlapped, the engine will smoke due to excessive oil use, and engine damage could occur.

3. **Oil rails:** The oil rails can be installed with either side up. Using a ring expander, install the rails into the oil groove, placing the first rail below the expander, and the second rail above the expander. The rail end gaps should be located at least 90° from each other. After the oil rails are installed, double check that the tips of the expander are properly butted.

4. **Second ring:** Using a piston ring expander, install the second ring with the marked side up. If the ring is not marked on one side near the end gap, and does not have a bevel, either side can be up. An unmarked **2nd ring**, with an inner bevel, should be installed **bevel side down**. (See *Illustration 4*)

5. **Top ring:** Using a piston ring expander, install the top ring with the marked side up. If the ring is not marked on one side near the end gap, and does not have a bevel, either side can be up. An unmarked **top ring**, with an inner bevel, should be installed **bevel side up**. (See *Illustration 5*)

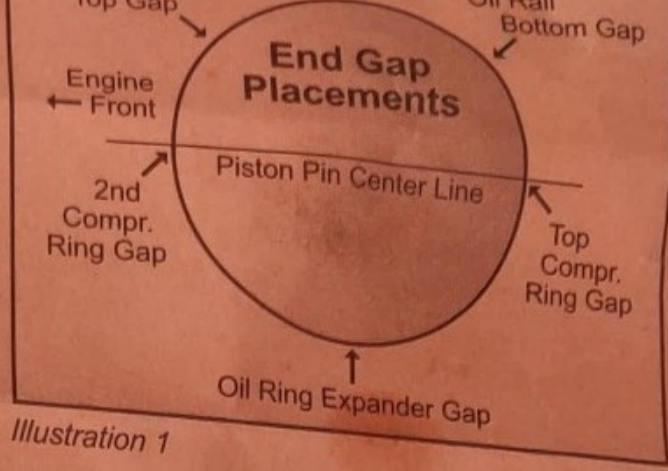


Illustration 1

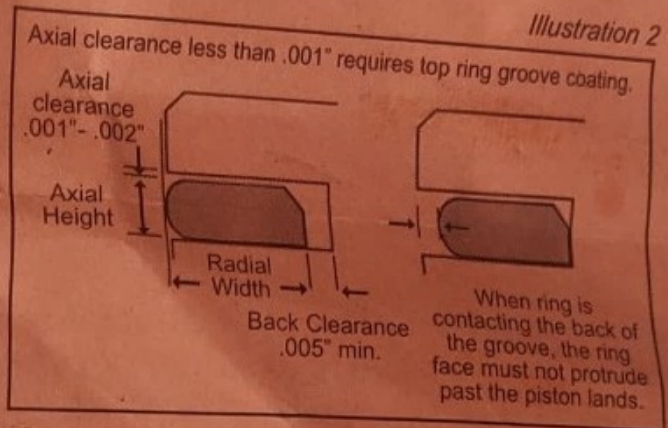


Illustration 2

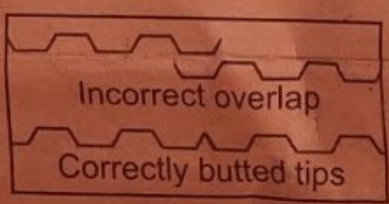


Illustration 3

Illustration 4
2nd Ring



Illustration 5
Top Ring



Filing Gaps

1. Wiseco recommends filing ring end gaps using the proper ring end gap filing tool, either an electric ring grinding machine or manual hand crank style grinder.
2. Always file from the ring face towards the inside diameter to avoid damaging the face coating.
3. File only one end of the ring. Use the unfilled end as a reference.
4. Be sure to keep end gaps square. (See illustration)
5. File until the desired end gap is achieved.

