2 Stroke

After disassembling the cylinder head and the cylinder, it's necessary to measure the actual cylinder diameter **(1)**, using a dial bore gauge. When actual bore size is known then it is time to pick the right VERTEX piston to fit your bore size, respecting the clearance suggested with the cylinder (i.e. CR 125 clearance 0.05 mm).

Open the piston box, take the ring and position it inside the cylinder bore. Measure the gap **(2)** between the two ring ends: it must be between a minimum of 0.25 and a maximum of 0.50 mm; if necessary adjust the ring end gap dimension using a file **(3)**. Take special care when performing this step.

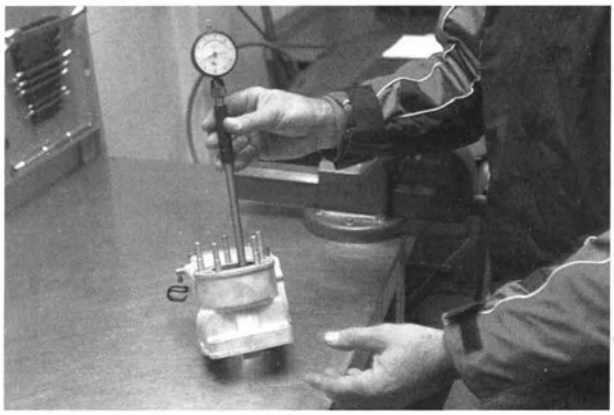
We are now ready to assemble the ring into the piston groove: first of all pay attention to not crush or damage the ring during installation, every precaution should be taken not to compromise the ring integrity with the groove and to not reduce the rings retaining pressure.

Attention must be paid to any markings (i.e. T) on the rings surface: always position the ring with the written part on the top side.

Introduce before the ring from the side opposite to the locating pin and turning it as it was a spring taking care to not damage the groove during the operation. After verifying that the rings do not have strange creeping or binding, position the ring tips around the locating pin.

We are now ready to assemble the piston and cylinder. A light coating of two stroke oil should be applied to the piston with the ring(s) assembled. Position the arrow printed on the piston dome toward the exhaust side, install one circlip on the opposite side you will slide the pin thru and pressing the ring (or the rings) into the groove one by one starting from the top slide the cylinder assembly over the rings. When this is complete carefully lower piston and cylinder onto the connecting rod and slide piston pin thru piston and rod and install circlip. If you prefer you may install piston onto connecting rod first and then compress ring(s) and install cylinder **(4)**.

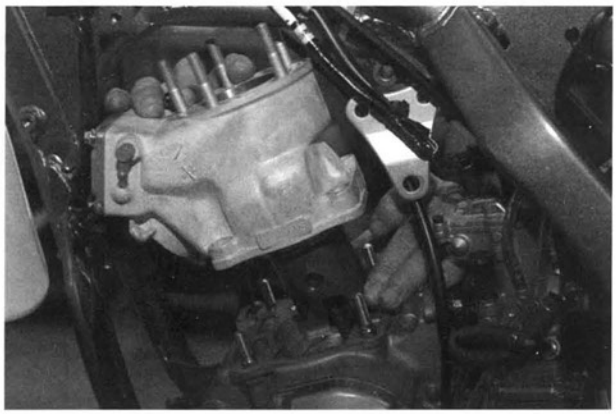
Assemble cylinder onto cases and install cylinder head and torque all fasteners to the recommended specs in your owner's manual.



(1)

(2)

(3)



(4)

4 Stroke

After disassembling the cylinder head and the cylinder, it's necessary to measure the actual cylinder diameter **(1)**, using a dial bore gauge. When actual bore size is known then it is time to pick the right VERTEX piston to fit your bore size, respecting the clearance suggested with the cylinder (i.e. CRF450 clearance 0.05 mm).

Attention must be paid to any markings (i.e. T) on the rings surface: always position the ring with the written part on the top side.

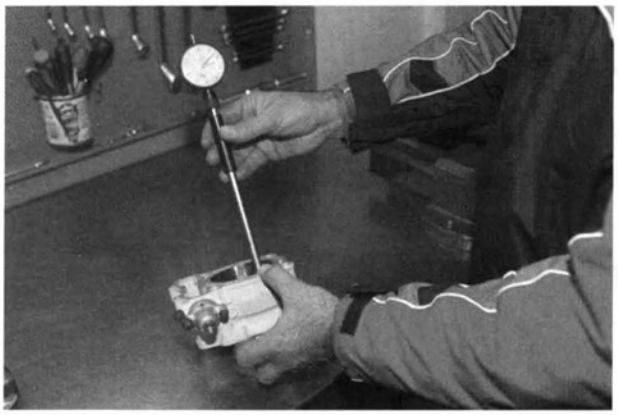
To assemble the rings on the piston you must start from the oil ring and introducing as first the spring **(2)** paying attention to not place one on the top of the other the two extremities. After setting the two foils one up and the other down at direct contact with the groove, taking care that the open tips must be at 120° from the spring open tips.

We are now ready to assemble the compression ring(s) into the piston groove(s): first of all pay attention to not crush or damage the ring during installation, every precaution should be taken not to compromise the ring integrity with the groove and to not reduce the rings retaining pressure.

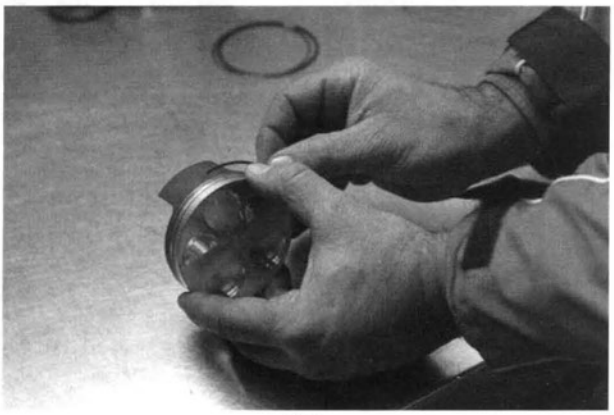
Introduce before the 2nd groove and after the 1st groove ring turning it as it was a spring **(3)** taking care to not damage the groove during the operation. After verifying that the rings do not have strange creeping or binding, position all the rings using the rule of the 120 deg. for each ring tip.

We are now ready to assemble the piston and cylinder. A light coating of two stroke oil should be applied to the piston with the rings assembled. Position the arrow printed on the piston dome toward the exhaust side, install one circlip on the opposite side you will slide the pin thru and pressing the ring (or the rings) into the groove one by one starting from the top slide the cylinder assembly over the rings. When this is complete carefully lower piston and cylinder onto the connecting rod and slide piston pin thru piston and rod and install circlip. If you prefer you may install piston onto connecting rod first and then compress rings and install cylinder **(4)**.

Assemble cylinder onto cases and install cylinder head and torque all fasteners to the recommended specs in your owner's manual.



(1)



(2)

(3)

(4)