LIMORA
Ersatzteile für klassische britische Fahrzeuge

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Piston fitting instructions

WARNING: These Fitting instructions have been prepared to assist you. This company will not accept any responsibility for engine failure or consequential costs due to the failure of components not Fitted as instructed.
This company does not warrant products used for racing or similar purposes.
This company is not responsible for engine failure and consequential losses when the engine block or head heights have been adjusted.
Chrome plated rings MUST NOT be fitted to chrome plated cylinder bores.
Always use new cirlips.

Compression Rings

When fitting comprression rings ensur that:

1. Any ring with an inside chamfer has the chamfer facing the top of the piston and is placed in the top ring groove.
2. Any ring with an outside chamfer or rebate has the chamfer facing the bottom of the piston and is placed in the lowest compression ring groove.
3. Chrome rings (where supplied} must be placed in the top ring groove.
4. When compression rings are marked with a dot, a „T“, or „TOP“, that face must be toward the crown of the piston.
5. Compression rings should be Fitted using either a ring expander of by expanding the ring gap using the thumbs on each hand before placing the ring in the groove.

Note: Do not wind on Compression Rings.

Segmental oil control rings (4 Piece)

1. Place expander in oil ring groove.
2. Install one steel segment (rail).
3. Install spreader above steel segment.
4. Install remaining steel segment above spreader.

ln special cases, where the piston must be passed through the cylinder bore from the bottom before rings are installed, it will be an advantage to install the spreader as the second operation. The segments should be spiralled into position, one below and one above the spreader. This overcomes the tendency for the segments becoming engaged in the oil drain slots of the expander. When more the one oil ring is used, always fit the segmental oil ring in the upper oil groove. With any multiple piece segmental oil control system there should be no extra parts after assembly.

Segmental oil control rings (4 Piece)

1. Place expander in oil ring groove.
2. Hold the expander end in place with the thumb. Wind on the lower rail.
3. Repeat instruction 2 for the top roll.

Oil groove depths for segmental oil control rings

Ensure that when fitting new segmental oil rings to an old piston that the oil groove depths are correct.
All depths are sizes below the diameter of the bore.
The correct depths for a four piece segmental oil ring are below.

Bore Size
2.480“(63mm)-2.874“(73mm)
3.000“(76.2mm)-3.499“(88.88mm)

Depth
0,290“(7.4mm)
0,360“(9.1 mm)

Bore Size
2.875“(73.03mm)-2.999“(76.18mm)
3.500“(88.9mm)4.000“(101.6mm)

Depth
0.320“(8.1 mm)
0.400“ (1 0.2mm)

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Seeger circlips

When fitting Seeger circlips ensure the radiused surface is against the gudgeon pin.

1. Piston assemblies must not be fitted to worn cylinder bores. The bores should be lightly honed so that the glaze is removed from the cylinder surface, and any ridge is removed from the top of the cylinder.
2. lt is advisable to check the connecting rod alignment before reassembling the conrod and piston to an engine.
3. lt is recommended that the piston assembly be thoroughly cleaned. Lubricate the piston assembly, paying particular attemtion to the piston pin. Lubricate each cylinder bore and fit each piston assembly into its cylinder by using a piston ring clamp of the appropriate size.
4. Pistons having a offset pin must be fitted with the offset towards the thrust side of the engine unless otherwise indicated.
5. All pistons which require fitting in a partiuclar position are suitably marked on the crown.

Note: Oil consumption in a newly reconditioned motor can occur from a number of areas. the most common are: incorrect driving techniques during beddingin, incorrectly honed bore not allowing rings to bed in, poor gaskets or seals, oil passing down the valve guides, crankshaft or bearing wear. This is not a complete list of all potential causes of oil consumption.

Minimum recommended clearance

Part No.	Clearance	Part No.	Clearance	Part No.	Clearance
	0,001“(0,025mm)		0,0015“(0,04mm)		0,002“(0,05mm)
	0,003“(0,075mm)		0,004“(0,10mm)		0,005“(0,13mm)
	0,006“(0,15mm)		0,007“(0,18mm)		0,008“(0,20mm)

Piston to bore clearance is measured at the bottom of the skirt at right angles to the gudgeon pin.