

SERVICE BULLETIN

DATE: February 1974

BULLETIN NUMBER: 68

MODEL: Four-107

SUBJECT: Service Replacement of Piston Ring Sets

Replacement piston ring sets have been made available for service use on Four-107 engines, should it become apparent after an appropriate period of service, that piston ring and/or cylinder bore wear may have taken place. These ring sets may only be used where the existing liners are not renewed.

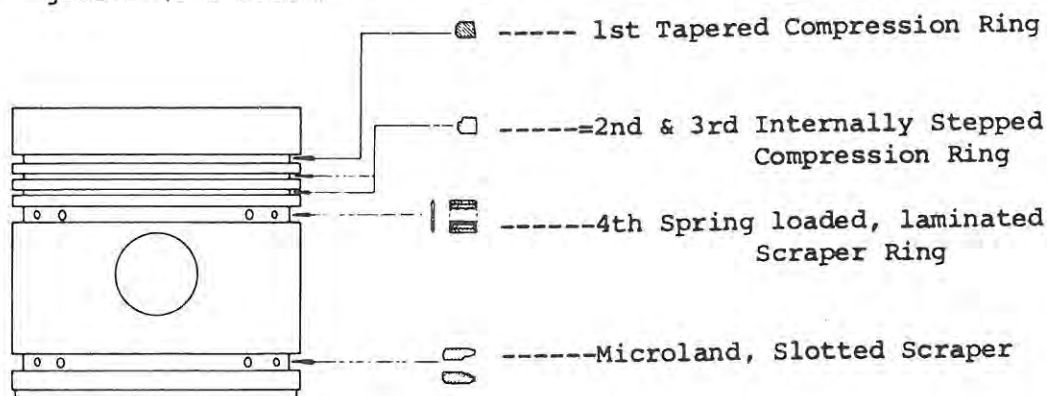
The following instructions are advised for guidance and should be strictly adhered to when undertaking to fit new piston rings to a Four-107 engine:

- (a) After removal of the piston, discard the rings.
- (b) Thoroughly clean the piston (not forgetting the ring grooves)
- (c) Examine the piston for signs of scoring, wear or damage of any kind, paying special attention to the ring grooves.

THE MAXIMUM PERMISSIBLE WORN DIMENSIONS OF THE PISTON RING GROOVE (WIDTH) ARE AS FOLLOWS, THE GROOVES BEING NUMBERED FROM THE CROWN, DOWNWARDS:

<u>PISTON GROOVE</u>	<u>MAXIMUM WORN DIMENSION (WIDTH)</u>
1st	.084 inch
2nd & 3rd	.0695 inch
4th & 5th	.195 inch

- (d) If necessary, replace with a new piston.
- (e) Fit new piston ring set, part number 12906 to engines rated up to 3000 RPM and #12337 to engines rated in excess of 3,000 RPM. The difference being only in the ring fitted to the 4th piston groove (see below)



Piston Ring Arrangement Shown Four-107 Engines Rated up to 3000 RPM
RING SET, PART NUMBER 12906



J. H. WESTERBEKE CORP.

AVON INDUSTRIAL PARK, AVON, MASS. 02322 • (617) 588-7700
CABLE: WESTCORP, AVON • TELEX: 92-4444

NOTE: Ring set, part number 12337, is identical to 12906 with the exception of the ring supplied for the 4th groove. For this groove, the microland slotted scraper ring is supplied as in the 5th groove of both ring sets. Each ring set provides sufficient rings for one piston only. For a complete engine, therefore, four will be required.

FITTING OF PISTON RINGS

With the exception of the laminated ring fitted in the 4th groove of applications rated up to 3,000 RPM, the correct method of fitting will be apparent from the diagram overleaf. Detailed instructions in respect to this type ring are contained below:

IMPORTANT:

- (a) Before re-fitting the pistons, the "glaze" should be removed from the working surface of the liners by means of a medium grade emery cloth, applied in a semi-rotary movement.
- (b) Care must be taken, however, to ensure that no abrasive matter is allowed to fall onto the crankshaft journals and bearings. Also, all traces of abrasive matter must be removed from the engine before re-assembly.

Below are part numbers and pertinent information to ensure ordering proper ring sets. As you will note, the rings used vary with engine rated RPM and whether new or original liners are used.

<u>PART NO.</u>	<u>RING SET</u>	<u>REMARKS</u>
12738	Ring Set (1)	New Liner, 3000 RPM -4.99 To Ser. 7034969
12819	Ring Set (1)	New Liner, 3000 RPM-4-107 From Ser.7034969
12958	Ring Set (1)	WORN Liner,3000 RPM- 4.99 From Ser.7007685
12840	Ring Set (1)	New Liner, 3000 RPM- 4.99 From Ser.7007685
12898	Ring Set (1)	WORN Liner,4000 RPM- 4.99 From Ser.7007685
12905	Ring Set (1)	New Liner, 3000 RPM-4-107
12906	Ring Set (1)	WORN Liner,3000 RPM-4-107
12907	Ring Set (1)	New Liner, 4000 RPM-4-107
12337	Ring Set (1)	WORN Liner,4000 RPM-4-107

